

1. What are Ad utilities?

Ad utilities stand for the application DBA utilities. These are a set of tools used for installing, up gradating, maintaining and patching Oracle Applications. There are around 15 Ad utilities, which are shipped along with Oracle Applications.

2. What is maintenance mode and how to enable/disable the same?

Maintenance mode is a feature which is introduced in 11.5.10. For doing any maintenance activity in the application system like applying patches, the maintenance mode needs to be enabled in the application system. It can be enabled/disabled using the adutility adadmin. In the adadmin main menu, there is an option 'Change Maintenance Mode' which is used for changing the maintenance mode.

3. What is the log file location for all the Ad utilities?

The default log file location for all the Ad utilities is \$APPL_TOP/admin/\$TWO_TASK/log. The log file is in the format <adutility_name>.log. For example the log file of the adadmin will have the name adadmin.log.

4. What is adadmin and why is it used?

Adadmin (Ad administration) is used to perform a number of administrative tasks to maintain the Oracle Applications. Adadmin ensure that Oracle Applications run smoothly.

The Adadmin performs two types of works – one which is performed at database level and other which is performed at the file system level. The users are requires to provided all the inputs at the Adadmin prompt which normally involves choosing from the various options from the Adadmin menu. This doesn't mean that Adadmin can't be used non-interactively. You can run some task non-interactively also and this is really useful for scheduling routine tasks that require little or no user intervention.

5. Can adadmin be scheduled to run in a non-interactive mode?

Yes, adadmin can be scheduled to run at a later time in a non-interactive mode.

6. How is adadmin run in a non-interactive mode?

To run adadmin in non-interactive mode, you must at first create a defaults file. Once the defaults file is created, you can run the adadmin in non-interactive mode using this file. To create a defaults file, specify defaultsfile= <filename> at the Ad Administration command line. The defaults file must be located under APPL_TOP/admin/<SID>.

```
$adadmin defaultsfile=APPL_TOP/admin/emstest/default.txt
```

In order to choose which task the defaults file will run, you add menu_option=<menu choice> to the utility start command. For example,

7. What options are available in the adadmin main menu?

The following options are available in the adadmin main menu.

AD Administration Main Menu

- . Generate Applications Files menu
- . Maintain Applications Files menu
- . Compile/Reload Applications Database Entities menu
- . Maintain Applications Database Entities menu
- . Change Maintenance Mode
- . Exit AD Administration

8. What are the adadmin activities that can be run in a parallel way?

The following adadmin tasks are supported to be run in parallel mode.

- Recreate grants and synonyms
- Compile APPS schema
- Maintain multiple reporting currencies schema
- Convert to Multi-org
- Generate message files
- Generate form files
- Generate report files

9. Which options of adadmin can and cannot be run in a non-interactive way?

Starting from AD.I all the options of the adadmin can be run in non-interactive way.

10. Do Ad utilities support the help option?

Yes, starting from AD.I all Ad utilities support the “help” option. The help can be invoked by typing

<AD Utility name> help=y

The only exception to this is admrgpch that takes –help option.

11. What does the option generate message files do in adadmin?

This is the first option in the menu if adadmin. This option takes care of generating all the Oracle message files. Oracle Application uses these files to display messages. This task generates message binary files (extension .msb) from Oracle Application library tables. Once this option is selected, it asks a couple of questions like the number of workers for

parallel processing and the list of products for which the message files need to be generated.

12. How can you regenerate all the forms files using adadmin and what does it do internally?

The generate forms files option of adadmin takes care of generating the forms files (extension .fmx) from binary forms definition files (extension .fmb). These binary forms definition files are normally located at \$AU_TOP, and the executables files are stored under each product's directory. Oracle Applications use the binary form files to display data entry forms. Like the previous option, this option also asks for a couple of questions before generating the forms. This task should be performed anytime you have issues with a form or a set of forms.

13. You have accidentally deleted the environment file. How can you recreate it?

You can recreate the environment file by using the option create applications file from adadmin. This option creates an environment file that defines your system configuration. It prompts for Oracle Applications environment name.

14. In adadmin there is an option validate APPS schema. What does it mean and what does it do?

Validating APPS schema means verifying the integrity of the APPS schema. It checks whether the apps schema has proper roles and privileges or not. It determines the problems you must fix specific to APPS schema as well as the problems you must fix not specific to the APPS schema. This task produces a report named <APPS schema name>.1st which is located at \$APPL_TOP/admin/\$TWO_TASK/out. Validation of the APPS schema is in turn taken care by a SQL script advrfapp.sql. The location of the same is \$AD_TOP/admin/sql. The same script can also be run from the sql prompt.

15. How do you recreate the grants and the synonyms for the APPS schema?

The recreation of the grants and the synonyms in the APPS schema can be done using the option recreate grants and synonym for the APPS schema available in the adadmin. This task takes care of recreating grants and synonyms for APPLSYSPUB, recreates grants in some packages from SYSTEM to APPS and recreating grants and synonyms for APPS schema.

Each product's data objects are created in its own schema (such as the GL schema) but the user accesses all the data objects through the APPS schema, therefore the APPS schema must have the appropriate grants and synonyms for those objects.

This task runs two SQL files:

- Runs `$FND_top/admin/sql/afpub.sql` to set up grants and synonyms for the Applications Public Schema (APPLSYSPUB by default)
- Runs `$AD_TOP/admin.sql/adapppgs.pls` for every Oracle Applications base product schema

16. What is the significance of the DUAL table? Who owns this table and how many rows it should have?

The DUAL table is created automatically by Oracle along with the data dictionary. It is located in the schema of SYS. It has one column named DUMMY of type VARCHAR2 and contains one row with a value of 'X'. In case it has more than one row, application system may not function properly.

17. What is ad splice? What does it do?

Oracle often releases new products after the base release of Oracle Applications. These products are known as off cycle products. Ad splice is the utility which takes care of incorporating and off cycle product into Oracle Applications so that it is recognized by the ad utilities as a valid Oracle Application product. Ad splice registers off cycle products as active in the system and as a result the ad utilities recognize the off cycle products as valid product for a specific release. Then you can use adpatch to install the product's component file system and database object.

18. What does ad splice set up?

Ad splice sets up the following:

- The product's database account
- The product's physical location `<PRODUCT>_TOP`

- Logical \$<PRODUCT>_TOP – need to run the created environment file afterwards option

19. What are the three files which ad splice requires at the time of splicing?

The three files are newproducts.txt, <prod>prod.txt and <prod>terr.txt, where <prod> refers to the product name.

20. Explain the significance of the ad splice control files.

Ad splice requires two types of control files.

- Product definition file: There are two product definition files per sliced product (prod_name)prod.txt which contains language independent information for product and (prod_name)terr.txt which contains language dependent information for the product. Since both of the files define the product and the associated language, these files must not be edited. The ad splice control files must be copied to the APPL_TOP/admin directory.
- Product configuration file: The product configuration newprods.txt file contains all the parameters which are required to splice a new product.

The following is the given entry from the newprods.txt

The entries are discussed below.

- Product: This is the new product which will be spliced by ad splice. So, this entry should not be edited.
- Base_product_top: This is the base directory which contains the new product which is normally the APPL_TOP.
- Oracle_schema: This identifies the Oracle schema where the database objects for this product are created. This should be the same as product name.
- Sizing factor: This is the sizing factor which the Oracle Applications use when creating the tables and index for this product. The default value of 100 refers to 100% which means that the objects are created with the defaults size as determined by Oracle and the default value is recommended.

- `Main_tspace`: This is the default tablespace for the product.
- `Index_tspace`: This is the default index tablespace for the product.
- `Temp_tspace`: This is the tablespace for the Oracle schema's temporary segments, for example, `TEMP`.
- `Default_tspace`: It specifies the default tablespace where this product's objects are created.

21. What is distributed AD?

Distributed AD is introduced after AD.H which allows workers processing to be distributed across multiple nodes. This can be used only on the application systems that are using a shared application tier file system. For example, to run an AutoPatch session with a total of nine workers, say four workers on the local node and five workers on a remote node, distributed AD can be used.

22. What is the advantage of distributed AD?

With distributed AD, the workers can utilize the additional resources of the remote nodes where they are running apart from the primary node. This capability improves scalability, performance, and resource utilization and completion of worker in a faster time.

23. What is maintaining snapshot information and how can it be done?

Basically, there are two types of snapshots: `APPL_TOP` snapshot and global snapshot. An `APPL_TOP` snapshot lists patches and versions of files in the `APPL_TOP`. A global snapshot lists patches and latest versions of files in the entire applications system (that is across all `APPL_TOP`). Both `APPL_TOP` snapshots and global snapshots may be either current view snapshot is created once and updated to maintain a consistent view. A named view snapshot is a copy of the current view snapshot at a particular time (not necessarily the latest current view snapshot) and is not updated. A complete current view snapshot is required for automatic prerequisite patch checking to operate. During the installation, RapidInstall created a current snapshot as a baseline. And, each time you run AutoPatch; it automatically creates a new (updated) snapshot so that the information is current as of the application of the patch.

The same can be done using the adadmin utility.

24. Which ad utility is used to restart the failed workers?

For restarting the failed workers the utility adctrl is used.

25. What is the hidden option in adctrl?

The eighth and last option in adctrl is the hidden option. It's used for skipping and restarting the failed workers.

26. Explain briefly the different status of the workers.

Following are the different status of workers:

Assigned

The manager assigned a job to the worker.

Completed

The worker completed the job

Failed

The worker has encountered a problem and has failed.

Fixed, Restarted

You fixed the problem and the failed job has restarted.

Restarted

The worker has restarted a job.

Running

The worker is running a job.

Wait

The worker is idle.

27. Can adctrl be run in non-interactive way? If yes, how?

Yes, adctrl can be in a non-interactive way exactly in the same way it runs for adadmin. The same defaults file which is used for the adadmin can also be used for running adctrl in non-interactive manner. Only the menu option needs to be added for running the adctrl in case same defaults file is used. If you want to create a new defaults file then the same can be created exactly in the same way as created for adadmin.

Given below is the example of running adctrl in non-interactive mode:

```
adctrl interactive=n\  
defaultsfile=$APPL_TOP/admin/emstest/ctrldefs.txt\  
menu_option=SHOW_STATUS \  
logfile=adctrl.log
```

The menu option for the defaults file for adctrl is listed below:

ACKNOWLEDGE_QUIT

Tell manager that a worker acknowledges quit

INFORM_FAILURE

Tell manager that a worker failed its job

RESTART_JOB

Tell worker to restart a failed job

SHOW_STATUS

Show worker status

SHUTDOWN_WORKER

Tell worker to quit

START_WORKER

Restart a worker on the current machine

28. What is adrelink and why is it used?

Adrelink is the executable which is used to relink ad executables with Oracle product libraries contained within the Oracle Applications Technology Stack Oracle_Home. All product executables can be linked using the relink application executables menu on the adadmin maintain application files submenu except an ad executable which has to be

manually relinked using ad relink. Normally programs that need to be updated after a patch are automatically relinked by AutoPatch.

29. What is the force=y option while using the adrelink.sh?

The option force=y will relink the executables regardless the status of the libraries or the object files. Force=n will relink only if the libraries or object files are some recent than the current executable program.

30. What is ODF comparison utility and how is it used?

The object description file comparison utility is known as adodfcmp. Each Oracle application product is made up of one or more building blocks. For example, journal entry is one building block of Oracle General Ledger. There is an object descriptor file (ODF) describing the tables, views, indexes, sequences and privilege sets for the particular building block.

The ODF comparison utility compares an ODF with the database objects in an Oracle account, detects any differences in database structure, and runs SQL statements to remove the differences, so that the objects in the account will match the descriptions in the ODF file. The ODF comparison utility is used to compare the data model of a customer's data to a standard set of data model files from the current Oracle application release. It can optionally modify the database to match the standard data model. ODF comparison compares the building block to the ODF.

1. What is cloning and why is cloning of an instance required?

Cloning is the process of creating an identical copy of the Oracle application system. Cloning of application system is required due to following reasons:

- Creating a test copy of your production system before up gradation
- To test some patches
- Periodically refreshing a test system from your production system in order to keep the test system up-to-date
- Creating a development copy of your environment to be used by the developers
- Moving an existing system to a different machine

2. How many types of cloning are available?

There are two types of cloning methods available for Oracle Applications. One is adclone and other is rapidclone.

3. What is the difference between adclone and rapidclone?

Adclone is an Oracle provided utility to clone application system. This utility is used to clone application system for release 11.5.1 to 11.5.5 for system which are not autoconfig enabled, whereas rapidclone is used for those system which are autoconfig enabled.

4. What are the steps involved in adclone?

Adclone involves four simple steps:

- Running rapid install
- Copying the source database
- Copying the source application file system
- Updating the configuration information

5. What is rapidclone?

Rapid clone is the new cloning utility which is used for autoconfig enabled environments. Rapid clone leverages the new installation and configuration technology utilized by RapidInstall.

6. How do I determine if my application system is autoconfig enabled or not?

There are a couple of ways to check if the environment is autoconfig enabled or not. You can check your environment in the following ways:

- Open the environment file APPLSYS.env or APPSORA.env in your APPL_TOP. If the top of the file says that it is maintained by autoconfig, then your system is probably using autoconfig. Apart from those files, opening any other important configuration files gives the information this file is managed by autoconfig if your application system is maintained by autoconfig.

- Check for the applications context file in the APPL_TOP/admin directory. This file will typically be named <SID>.xml or <SID>_<HOSTNAME>.xml. If the application system is autoconfig enabled there will be a corresponding xml file

- Check for the applications context file in the RDBMS ORACLE_HOME under the appsutil directory. This file will typically be named <SID>.xml or <SID>_<HOSTNAME>.xml. If the application system is autoconfig enabled there will be a corresponding xml file

7. I have the context file in the APPL_TOP admin directory and all my configuration files also say that the application system is managed by autoconfig but when I login to the database server I am not able to see the context file. Is my application system really autoconfig enabled?

It means that autoconfig is not enabled in the database tier. You need to enable the autoconfig in the database tier also.

8. Can I clone an application system from one operating system to another?

Yes, you can do a cloning from one platform to another as long as the target application system platform is binary compatible with the source system platform. For example, you can do a cloning from a lower version of Solaris to higher version of Solaris but not from Solaris to Windows. Also with in a same platform, you can clone from a 32bit source system to a 64bit target system.

9. My source and target platforms have different binaries. Say I have AIX platform in the source and I want the target platform in Linux. Is there any way I can clone the environment?

Yes, you can clone or migrate the application system from any platform to Linux or any supported Unix platform. For doing this, you need to refer the metalink note migrating to Linux within Oracle Applications.

10. Is it possible to clone from a single node installation to a multiple node installation?

Yes, you can clone a single node installation to a multiple node installation using the rapid clone.

11. Explain briefly the steps to clone from a single node to a multi-node cloning?

Once the database cloning is over, the next step is to login to the APPL_TOP as the owner of application file system viz, applmgr and run the adcfgclone.pl from the COMMAN_TOP/clone bin. While running adcfgclone.pl, it asks “Does the target system have more than one application tier server node”. Enter yes. Then it prompts for the target system’s concurrent processing node, admin node, forms node and the Web node. Fill in node details from where you want these processes to run. It then prompts for the various mount point details and creates the context file for you. Follow the same process form all the nodes.

12. You have a multi-node shared APPL_TOP. Explain briefly the cloning process for the same.

If you have a shared APPL_TOP then apart from running the adcfgclone.pl you also need to run “adclonctx.pl sharedappltop” for sharing the APPL_TOP from all the nodes. In this case, you need to run adcfgclone.pl only from the first node and you can create the context file using the adclonctx.pl in the other nodes by giving the reference to the XML file of the first node. Then you need to run the txkSOHM.pl form \$FND_TOP/patch/115/bin which will create the 8.0.6 and iAS Config Home for your application system.

13. Can you clone a multi-node APPL_TOP to a single node APPL_TOP? Explain briefly the process for the same.

Yes, you can clone a single node APPL_TOP form a multi-node APPL_TOP. For this, you have to merge multiple APPL_TOP and COMMAN_TOP files system into a single APPL_TOP and COMMAN_TOP. For doing the same, the first step would be to login to each application tier node and run the ‘maintain snapshot task’ from the adadmin. Once

done, login to one of the APPL_TOP and run the adpreclone.pl for merging the APPL_TOP. The same can be run using the command:

```
$ cd <COMMAN_TOP>/admin/scripts/<CONTEXT_NAME>
$ perl adpreclone.pl apps Tier merge
```

Once done, you need to login to the other nodes and run the adpreclone.pl for merging all the APPL_TOP's but from the other nodes the command would be different.

Login as the APPLMGR user to each of the secondary nodes being merged and run:

```
$ cd <COMMAN_TOP>/admin/scripts/<CONTEXT_NAME>

$ perl adpreclone.pl appltop merge
```

For creating a clone of the multi-node APPL_TOP to a single node APPL_TOP you need to merge all the multi-node APPL_TOPs to a single APPL_TOP. You can merge all the APPL_TOPs together in a separate mount point so that the source application system is not affected with the clone.

Copy the following directories from the first node to the place you want to create the merged APPL_TOP.

```
<APPL_TOP>
<OA_HTML> (when this directory exists)
<OA_JAVA>
<COMMAN_TOP>/util
<COMMAN_TOP>/clone
<COMMAN_TOP>/_pages (when this directory exists)
<806 ORACLE_HOME>
<iAS ORACLE_HOME>
```

Form the other APPL_TOPs recursively copy:

Directory <COMMAN_TOP>/clone/appl

-to-

Directory <COMMAN_TOP>/clone/appl on the merged APPL_TOP

Configure the merged APPL_TOP by running the command

```
$ cd <COMMAN_TOP>/clone/bin

$ perl adcfgclone.pl apps Tier
```

It will create the single node APPL_TOP in the regular way.

14. Does rapid cloning take care of updating all the profile options?

Rapidclone only takes care of the site level profile options. All the other profile options need to be manually updated.

15. How do you prepare the template before cloning the application system?

You can prepare the template executing the following commands from the database and the application tier.

- At database tier: Login as Oracle user and run the following `cd < RDBMS ORACLE_HOME>/appsutil/scripts/<CONTEXT_NAME>`

Perl `adpreclone.pl db tier`

- At the Application tier: Login as `applmgr` and run the following:

`cd <COMMAN_TOP>/admin/scripts/<CONTEXT_NAME>perl adpreclone.pl apps tier`

16. From the APPL-TOP, what are the files that you need to copy for creating a clone application system?

You need to copy the following files from the APPL_TOP

- APPL_TOP
- OA_HTML
- OA_JAVA
- OA_JRE_TOP
- `COMMAN_TOP>/util`
- `COMMAN_TOP>/clone`
- `COMMAN_TOP>/_pages` (if this directory exists)

- 806 ORACLE_HOME
- iAS ORACLE_HOME

17. What exactly happens when you run adpreclone.pl? Does it anyway effect the source application system?

Adpreclone.pl prepares the source system to be cloned by collecting information about the database and creates various templates of files containing source specific hardcoded values. It collects all the information about the source application system, the port numbers of the source application system etc. These templates are stored in the appsutil/template directory.

18. If you are told to clone a environment manually without using rapidclone, how will you do it?

For doing a manual clone, you need to change all the configuration files with the correct path of the APPL_TOP, product top, database SID, and port numbers. For doing the same, you need to change the following important configuration files.

```
$APPL_TOP/APPLSYS.env or APPSORA.env
$APPL_TOP/admin/adovars.env
$APPL_TOP/admin/hostname_twotask.xml
$APPL_TOP/admin/topfile.txt
$APPL_TOP/admin/adjborg.txt
$APPL_TOP/admin/adjborg2.txt
$FND_TOP/secure/hostname_twotask.dbc
$OA_HTML/bin/appswab.cfg
```

Once these changes are done, you need to update the FND_PROFILE_OPTIONS value table in the database with the correct values of all the profiles and the FND_NODES with the node information. Here we are assuming that you are keeping the existing technology stack for doing the cloning. If you are bringing the technology stack also from the source env, you also need to change all the apache configuration files with the correct port and then need to link the iAS_ORACLE_HOME and the middle tier ORACLE_HOME and then run the autoconfig. Once done, start all the services.

19. How can you reduce time in cloning? What are the steps you can follow to clone an environment quickly?

These are the steps you can follow to clone an env quickly. If the technology stack of the source and the target environment are at the same patch level then you need not copy the 8.0.6 ORACLE_HOME and the IAS_ORACLE_HOME every time. You can keep the existing technology stack. Before deleting the APPL_TOP, you can take a backup of the existing context file (the xml file in \$APPL_TOP/admin) and then once the APPL_TOP and COMMAN_TOP copy is done then you can revert back the same xml file rather than regenerating the same. If you are using the same XML file, you need not run the rapidclone as simply running of autoconfig will take care of all the things. In case you are using the shared APPL_TOP, you need to run the script txtSOHM.pl from \$FND_TOP/patch/115/bin which will create the 8.0.6 and iAS Config Home for your application system.

20. Can I clone a cloned application system?

Yes, you can clone a cloned application system.

21. Is it possible that I use different set of ports for the cloned application system rather than the one which I am using for the source application system?

Yes, you can choose any port pool for the cloned application system. Adclone prompts for the port pool at that time put the port pool in which you want to run application system.

22. How adcfgclone.pl knows the values for the target application system?

Adcfgclone.pl prompts for the values required to create the new context file used to configure the target system. You need to provide the values for the prompts which adcfgclone.pl uses for creating and configuring the target application system.

23. What are the various questions that adcfgclone.pl prompts for and what should I answer to the prompts?

In the database tier, it prompts for the following:

- Target database SID
- Target system domain name

- Target instance is a Real Application Cluster (RAC) instance (y/n)
- Current node is the first node in an N node RAC Cluster (y/n)

The tool will then ask for the number of nodes that will exist in the final RAC instance and gather, the following information for every node:

- Hostname
- Database Sid
- Instance number
- Listener port
- Private interconnect name
- RDBMS ORACLE_HOME path
- Number of DATA_TOP
- DATA_TOP mount points

In the application tier, it prompts for the following:

- Database server hostname
- Does the target system have more than one application tier server node (y/n)

The tool with them prompt for the hostname of:

- Concurrent processing node
- Administration node
- Forms server node
- Web server node
- Is the target system APPL_TOP divided into multiple mount points (y/n)?

If yes, the tool will then prompt for each auxiliary mount information.

- APPL_TOP mount point

- APPL_TOP aux.1
- APPL_TOP aux.2
- APPL_TOP aux.3
- COMMAN_TOP mount point
- 8.0.6 ORACLE_HOME mount point
- iAS ORACLE_HOME mount point
- Location of JDK 1.3.1
- Port pool number:[0-99]

24. Does clone preserve the patch history?

Yes, Rapid Clone preserves the patch history. The following patch history is preserved even after the clone.

- RDBMS ORACLE_HOME: Preserve the OUI oraInventory.
- iAS ORACLE_HOME: preserve the OUI oraInventory.
- 806 ORACLE_HOME: preserve the patch level and Oracle inventory.
- APPL_TOP and Database: preserve the patch level and history tables.

1. What is concurrent manager?

When an Oracle Application user submits a request to run a program, it's called concurrent request. Concurrent manager are the programs, which are responsible for running the concurrent requests. When a user submits a report to be run as a concurrent request, the job enters in a request queue. Concurrent managers continuously read request from the master queue and run the requests based on the request's schedule, priority, and compatibility rules. Concurrent managers run in background and they take care of initiating and completing the concurrent requests.

2. What are the different types of concurrent manager?

Oracle Applications consist of several types of concurrent managers. The important ones are internal manager, standard manager and conflict resolution manager. Apart from these, you can define your own custom concurrent manager.

3. What is an internal concurrent manager?

The internal manager is the one which is responsible for controlling all other concurrent managers. Its main task is to ensure that all other concurrent managers are up and running. The internal concurrent manager starts, sets the number of active processes, monitors and terminates all other concurrent processes through requests made to the service manager, including restarting any failed processes. The internal concurrent manager also starts and stops, and restarts the service manager for each node.

4. What is conflict resolution manager?

The conflict resolution manager takes care of resolving the program incompatibilities and checks if a request in queue can be run in parallel with the running request. It also takes care of resolving the program incompatibilities. If a program is identified as run alone, then the conflict resolution manager prevents the concurrent managers' from starting other programs in the same conflict domain.

When a program lists other program as being incompatible with it, the conflict resolution manager prevents the program from starting until any incompatible programs in the same domain have completed running.

5. What is a standard manager?

The standard manager is the master concurrent manager. This manager is always running and it can take care of processing any concurrent request. It has no specialization rules. This manager runs 24 hours a day for the whole year. The definition of this manager should never be altered. In case if you alter the definition of the standard manager and you have not defined additional managers to run your requests, some of the programs may not run in a proper way.

6. How do I enable/disable the conflict resolution manager?

There is a system profile option “Concurrent: Use ICM”. The default value of this profile option is No which allows the conflict resolution manager to be started. Setting the same to Yes will cause the conflict resolution manager to be shutdown and the internal concurrent manager will take care of the conflict resolution duties. Using the internal concurrent manager to resolve the conflicts is not recommended.

7. What are the difference ways to start concurrent manager?

Concurrent manager can be started using the script `adcmctl.sh` located at the locations of the scripts or with the `startmgr` utility located at `$FND_TOP/bin`.

8. What are the different ways to stop concurrent manager?

Concurrent manager can be stopped using the script `adcmctl.sh`. It can also be stopped using the `Concsub` utility. From the operating systems, the concurrent manager can be stopped by querying the `FNDLIBR` process and killing the same.

9. In administer concurrent manager form there are two columns labeled as actual and target. What are these columns and what is their significance?

Target column lists the number of processes that should be running for each manager for this particular workshift. Actual column lists the number of processes that are actually running. If the actual column is zero, there are no processes running for this manager. If the target column is zero, then either a workshift has not been assigned to this manager, or the current workshift does not specify any target processes. If the target column is not zero, then the manager processes have either failed to start up, or has gone down.

10. How do I run/schedule a concurrent request from operating system level without logging in to the application?

A concurrent request can be schedule/run from the operating system using the `CONCSUB` utility. `CONCSUB` means Concurrent Submit.

11. What are the different ways to check if concurrent manager (CM) is running or nor?

There are a couple of ways through which one can check if the CM is running or not. From the operating system, it can be checked by querying the FNDLIBR process. From the forms, it can be checked from the Navigation > Concurrent > Manager > Administer. It can be also checked using the scripts admctl.sh status and finally it can also be checked from Oracle Application Manger.

12. What is the default location of the concurrent manger logfiles?

The concurrent manager log files can be located in one of the following places:

1) If the environment variable \$APPLCSF is set, the default location is \$APPLCSF/\$APPLLOG

2) If the environment variable \$APPLCSF is not set, the logs go to \$FND_TOP/\$APPLLOG

13. I have submitted a request and it's showing the status inactive/no manager. Concurrent manager is up and running and the request are being picked after some time. What could be the reason for the same?

If the concurrent manager is up and running and the request goes to the status inactive/no manager for some time it means that cache cycle is less. Cache size is set on the Concurrent> Manager> Define form. Basically, this regulates how many requests a manager will pick up for each sleep cycle. The solution is either to increase the cache size of the manager or increase the actual number of the manager process. The manager could be standard manager or any other manager for which the issue is coming.

14. I have submitted a request; it has gone to pending standby status for a long time whereas other requests are getting completed normally without any issues. What could be the reasons?

If any particular request is going to pending standby status and others are getting completed, it means that either it is waiting for the output of some other request or is conflicting with some other request. If the request is conflicting, check the queue of the conflict resolution manager for troubleshooting.

15. How do I process more concurrent requests in parallel?

If you want to process more requests simultaneously, there are two ways for the same – one, increase the number of the target process for the manager and second, change the cache size of the concurrent manager.

16. When do the tables FND_CONCURRENT_REQUESTS and FND_CONCURRENT_PROCESS need to be purged?

When the tables reach 20,000 rows, the performance begins to diminish. You may want to run purge concurrent request on a regular basis, depending on the amount of requests being run.

17. What are the concurrent request log file and output file naming conventions?

Request log files: l<request id>.req

Output files: If \$APPCPNAM is not set: <username>.
<request id>

If \$APPCPNAM = EQID: o<request id>.out

If \$APPCPNAM = USER: <username>.out

Where: <request id> = The request id of the concurrent request

And: <username> = The id of the user that submitted the request

Manager log files:

ICM log file: Default is std.mgr, can be changed with the mgrname startup parameter

Concurrent manager log: w<XXXXXXX>.mgr

Transaction manager log: t<XXXXXXX>.mgr

Conflict Resolution manager log: c<XXXXXXX>.mgr

Where: <XXXXXXX> is the concurrent process id of the manger.

18. What happens when the internal concurrent manager dies? Are all the managers also killed immediately after it?

No, if the internal manager dies, the request continues to run normally except for the queue control requests.

19. Does the internal manager run or schedule any request for itself?

No, the internal manager does not run or schedule any request. It has nothing to do with scheduling requests, or deciding which manager will run a particular request. Its function is only to run 'queue control' requests, which are requests to startup or shutdown, other managers. It is responsible for startup and shut down of the whole concurrent processing facility, and it also monitors the other managers periodically, and restarts them if they should go down. It can also take over the conflict resolution manager's job, and resolve incompatibilities.

20. If the internal manager goes down, do I need to kill all the managers before restarting the internal manager?

No, if the internal manager goes down you need not kill all the managers. You can simply start the internal manager using startmgr.

21. Can I delete concurrent manager?

Yes, you can delete any concurrent manager. For deleting, query for the manager in the defined concurrent manager form and then delete the row.

Deleting the predefined concurrent managers is not recommended and it should never be done. Deletion may cause instability in the system.

22. What is internal monitor?

This manager is used to implement parallel concurrent processing. It monitors whether the ICM is still running, and if the ICM crashes, it will restart it on another node.

23. How do I clean out concurrent manager tables?

For cleaning concurrent manager tables, Oracle provides a script called cmclean.sql.

24. I hit the restart button to start the standard manager but it still doesn't start?

Asking a manager to restart sets the status to restart. The internal concurrent manager will start in the next process monitor session or the next time internal concurrent manager starts. Use activate, to start a manager immediately. Also, when a manager is deactivated

manually, the internal concurrent manager will not restart it. You will need to set it to restart, or activate it manually.

25. I tried to stop the concurrent manager using the script `adcmctl.sh`. I can still see from the operating system that a few `FNDLIBR` processes are still running and `adcmctl.sh` is not able to stop the concurrent manager completely. What do I do in this situation?

If you are not able to stop the concurrent manager using the script, query for the `FNDLIBR` process using the command

```
Ps -ef | grep FNDLIBR
```

And then kill all the process using the command

```
Kill -9 <process id>
```

If there are more than one process of the `FNDLIBR`, you can kill all them in one go using the command

```
Ps -ef | grep FNDLIBR | awk '{ print $2 }' | xargs kill -9
```

26. What are the circumstances in which you need to bounce the concurrent manager?

The following are the situations in which one may need to bounce the concurrent manager:

- When you modify the definition of the printers
- When you modify the environment variables. Say you have changed the `APPLTMP` and `APPLTMP` variable
- When all the requests are pending or hanging

27. What are the reasons a concurrent manager hangs?

The concurrent manager hangs due to many reasons. A few of them are:

- Long running jobs
- The internal manager was activated by someone other than owner of the application system
- The operating system files system is full

- It's not able to create the log file
- You've shut down the internal manager, but actual has a number in it
- The database is hanging may be because the archive log files have filled
- There could be some ORA error that's coming
- Pending/standby requests are too many

28. How can you stop concurrent manager using the CONSCUB utility?

Concurrent manager can be stopped using the CONSCUB utility by the following command:

```
CONCSUB apps/apps@<dbname> SYSADMIN 'system Administrator' SYSADMIN
CONCURRENT FND SHUTDOWN
```

29. What are the different parameters of the startmgr utility?

The parameters of the startmgr utility is given in the following table.

Parameters	Description	Default
------------	-------------	---------

Sysmgr	Sqlplususername/password that owns the foundation tables	Applsys/<passwd>
--------	--	------------------

Mgrname	The name of the manager	Internal manager
---------	-------------------------	------------------

Log file	The log file of the manager	\$FND_TOP/\$APPLLOG/\$mgr
----------	-----------------------------	---------------------------

name.mgr
or

\$APPLCSF/\$APPLLOG/\$mgrname.mgr

Step

The number of seconds the ICM should wait before checking new request from the table

FND_CONCURRENT_REQUESTS

60 Seconds

Restart

If the CM goes down abnormally it will automatically restart the manager. Y = the number of minutes the ICM waits before restarting the manager

N=not to restart after abnormal termination

mailto

MAILTO is a list of users who should receive mail whenever the manager terminates

Current user

Printer

The default printer for sending the output files

Diag

This is used for diagnosis. If the CM is started with the parameter diag=y then full diagnostic output is produced in the log file

N

Pmon

The number of sleep cycles ICM will wait before checking failed Managers

20

Quesiz

Number of pmon cycles the ICM waits between times it checks for normal changes in concurrent manager operation. Normal changes include the start or end of a work shift and changes to the concurrent manager definitions entered in the Define Concurrent Manager form. (Default 1)

1

30. What exactly happens when a concurrent request is submitted?

Once a concurrent request is submitted by the user, the table FND_CONCURRENT_REQUESTS is automatically updated with the details of the request. The table is also updated with the information about the schedule of the concurrent request whether it's immediately scheduled or scheduled at a fixed

time. Once the request is scheduled to run the concurrent manager checks the FND_CONCURRENT_REQUESTS table to find out if the request is incompatible with any other request. If the request is incompatible then the conflict resolution manager takes care of the request and finds out what are the incompatibilities and resolves them. If there are no incompatibilities, it's checked whether any special manager is there to take care of this request then it goes to the queue of that manager else the standard manager takes care of the same. Once the request is processed, the FND_CONCURRENT_REQUESTS table is updated with the status.

31. In the administer concurrent manager form, what is the significance of the terminate button?

The terminate button is used to terminate any concurrent manager. When you terminate internal manager, all the managers automatically get deactivated and all the running requests are terminated. If you want to terminate a particular manager, select the manager and click the terminate button. The status of the manager changes to deactivate after a few seconds and all the requests processed by that manager are immediately terminated. Once a manager is terminated, it doesn't restart automatically. You have to manually restart it using the restart button.

32. In administer concurrent manager form, what is the significance of the deactivate button and how can you deactivate a manager from there?

For deactivating a particular manager, select the manager and press the deactivate button. In case of deactivation, all the requests processed by the manager are allowed to complete before the manager shuts down. If you deactivated the internal manager, all the managers automatically get deactivated but all the running requests are allowed to complete before the manager is shut down. This is the only difference between termination and deactivation. In termination, all the running requests are terminated immediately whereas in case of deactivation all the running requests are allowed to complete first.

33. In administer concurrent manager form, what is the significance of the verify button and for which managers it's available?

The verify button becomes enable only when you select the internal manager. One of the functions of the internal manager is to monitor the processes of each concurrent manager. The process of monitoring the other concurrent manager by internal manager is known as the PMON cycle. When you click the verify button you can force the process monitoring or the PMON activity to occur. The verify button is also available for the conflict resolution manager which checks for the program incompatibilities.

34. What is parallel concurrent processing and what is the significance of the same?

Parallel concurrent processing is the way to distribute concurrent managers across multiple nodes in a cluster, massively parallel, or networked environment. It helps in distributing the load across multiple nodes thereby fully utilizing the hardware resource. The following are the advantages of the parallel concurrent processing:

Load Distribution Since the concurrent processing is distributed among multiple servers, as a result the load is distributed across various nodes which results in high performance.

Fault Tolerance When a node fails, the concurrent processes continues to run on other nodes, as a result the work is not hampered.

Single Point of Control The ability to administer concurrent managers running on multiple nodes from any node in a cluster, massively parallel, or networked environment.

35. Explain briefly how parallel concurrent processing works?

In case of parallel concurrent processing, all the managers are assigned a primary and a secondary node. The managers are started in their primary node by default. In case of node failure or Oracle instance failure, all the concurrent managers on that node are switched to their secondary nodes. Once the primary node is available again the concurrent managers on the secondary nodes are migrated back to the primary node. During the migration process, a manager may be spread across both primary and secondary nodes.

In case of parallel concurrent processing, it may happen that in a node where parallel concurrent processing is configured; the Oracle instance may or may not be running. The node which is not running Oracle, the concurrent managers connects via Net8 to a node which is running Oracle.

The internal concurrent manager can run on any node, and can activate and deactivate concurrent managers on all nodes. Since the internal concurrent manager must be active at all times, it needs high fault tolerance. To provide this fault tolerance, parallel concurrent processing uses internal monitor processes. The job of the internal monitor process is to constantly monitor the internal manager and start it when it fails. Only one internal monitor process can be active on a single node. You decide which nodes have an internal monitor process when you configure your system. You can also assign each internal monitor process a primary and a secondary node to ensure fail over protection. Internal monitor processes, like concurrent managers, can be assigned work shifts, and are activated and deactivated by the internal concurrent manager.

The concurrent log and output files from requests that run on any node are accessible online from any other node. Users need not log onto a node to view the log and output files form requests running on that node.

36. Where can I define the primary and the secondary nodes for the concurrent manager from?

For defining the primary and secondary nodes of each manager, you need to launch forms with system administrator and need to navigate the Concurrent > Manager > Define form. Query for the manager in which you want to define the primary and secondary node. In this screen, put the values for the primary and the secondary nodes and save.

37. I have defined for nodes of the concurrent manager. Now do I need to start the concurrent manager from all the nodes?

No, even if you have defined the concurrent manager in four different nodes you need not start the concurrent manager from all the nodes. You just need to start the concurrent manager from the primary node and GSM takes care of starting the concurrent manager from all the other nodes.

38. My request is making error out with the error – unable to create temporary files XXXXX.tmp. How do I fix it?

This issue normally comes if the values of \$APPLTMP, \$APPLPTMP in the APPL_TOP and the utl_file_dir parameter of the database are not in sync. All the three variables should be exactly the same. If these issues come, change the values to make all these three in sync. If you change the values in the APPSORA.env, you need to bounce the concurrent manager for the changes to get effected. In case if you change the values of the init.ora, you need to bounce the database to reflect the changes. (Of course you need to bounce the application tier also if you are bouncing the database.)

39. The user comes to you saying that the request is taking a lot of time to complete. What will be your approach for debugging it?

You can do the following to debug the same.

- You can run a trace on the request id to find the expensive sql's and then tell the developer to fix the same.
- You can check the program incompatibilities in the concurrent request.
- You can check the query which the concurrent program is executing and see if it is creating any locks in the database.

- Many times the users schedule the request to run at a later time.

You can check the parameters with which the request is run. (For example, once a user came saying that request is not printing the output. On checking the possible things, it was realized that he scheduled the request with print copies = 0.)

40. How can you know which trace file is created for the particular request?

You can find out the same using the script given below. The trace will be located in the udump location of the database server.

Prompt

Accept request prompt 'please enter the concurrent request id for the appropriate concurrent program.'

Prompt

Column traceid format a8

Column tracename format a80

Column user_concurrent_program_name format a40

Column execname format a15

Column enable_trace format a12

Set lines 80

Set pages 22

Set head off

```
SELECT 'Request id: '|| request_id ,
'Trace id: '|| oracle_process_id,
'Trace Flag: '|| req.enable_trace,
'Trace Name:
'|| dest.value||'
'||lower(dbnm.value)||'_ora_'||oracle_process_id||
'.trc',
'prog.Name:
'||prog.user_concurrent_program_file_name||
Execname.subroutine_name ,
```

```

'Status :
'||decode (phase_code,'R','Running')
||'-'||decode (status_code,'R','Normal'),
"STD Serial: "||ses.sid||",'||
Ses.serial#,
"Module : "||ses.module
From fnd_concurrent_requests req,
V$session ses, v$process proc,
V$parameter dest, v$parameter dbnm,
Fnd_concurrent_program_v1 prog,
Fnd_executables execname
Where req.request_id = &request
And req.oracle_process_id=proc.spid(+)

And proc.addr = ses.paddr(+)
And dest.name='user_dump_dest'
And dbnm.name='db_name'
And req.concurrent_program_id =
Prog.concurrent_program_id
And req.program_application_id =
Execname.application_id
And
Prog.executable_id=execname.executable_id;

```

41. What are the things that need to be taken care when you define a concurrent program?

When defining a concurrent program the following things need to be taken care.

- Selecting an executable file to run the program
- Choosing the execution method for the program (when defining your executable in define concurrent program executable)
- Defining parameters for the program, if any
- Defining printing information
- Specifying any incompatible program that must not run while the program runs
- Choosing whether to allow users to run this report from the run reports form or from within a form. If the latter option is chosen, the form from which you want to kick-off

your program need to be modified. If the first option is chosen, the program needs to be added to a report security group.

42. How do you schedule concurrent requests?

For scheduling the concurrent requests, you need to click the schedule button while submitting the request. The concurrent program can be scheduled only once, periodically or on some specific days. You can also save this schedule for future reference and can use the same schedule for a different concurrent program by using the option apply a saved schedule. If you don't schedule the request then by default the concurrent requests are submitted immediately.

43. What does the completion option mean at the time of submitting a request?

The completion option refers to what Oracle Application will do once the request is completed. It can notify people via email, can save the output in a file, can take a print out of the same or simply won't do anything.

44. What is a work shift?

The work shift defines the time for which the concurrent manager is active. You can define some fixed date or time for manager or can make the manager run 24*7 making it active all the times. The work shifts are defined by using the work shift form from the following navigation > Concurrent > Manager > Work Shifts.

45. What are the important scripts related to the concurrent managers and what are their location?

The following SQL scripts located under \$FND_TOP/sql are useful when diagnosing concurrent manager problems.

1. afimchk.sql Informs about the status of the ICM and PMON method.
2. afcmstat.sql Lists active manager processes.
3. afrqrun.sql Lists all the running, waiting and terminating requests.
4. afrqwait.sql Lists requests that are constrained and waiting for the ICM to release them.

5. `afqscm.sql` Prints log file name of managers that can run a given request. It can be used to check for possible errors when a request stays in pending status. It requires a request id value.
6. `afcmcreq.sql` Prints the log file name of the manager that processed the request.
7. `afqstat.sql` Summary of completed concurrent requests grouped by completion status and execution type. It requires number of days prior to the current date, when to report parameter.
8. `afimlock.sql` Lists locks that the internal concurrent manager is waiting to get.
9. `afcmrrq.sql` Lists managers that currently are running a request.

46. What are the things you need to check if you are not able to view the logs of the concurrent manager?

- You need to cross check the TNS entries.
- You need to check the DBC file.
- You need to check if the Apache/Jserv is running properly.
- You need to check if the connect descriptor is correct.

CRACKING
THE
ORACLE Apps DBA
-by JOYJEET BANERJEE

INTERVIEW 325 Frequently Asked Questions

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1.

ARCHITECTURE

1. Describe the architecture of Oracle Applications.

Oracle Applications follow a three-tier architecture:

- (1) Database-tier containing the RDBMS database,
- (2) Middle-tier containing various servers like forms server, web server, concurrent processing server, admin server, reports server, and discoverer server, and
- (3) Desktop-tier, the client desktop, through which users access Oracle Applications.

2. Does a tier mean a physical machine?

No, a tier does not mean a physical machine. It is basically a logical portioning. Each tier has more than one physical server and each physical server can accommodate more than one different tier. For example, the middle-tier can be configured in 4-5 different servers and any server can be used for hosting database as well as Web server.

3. How is the three-tier architecture different from client server architecture model and which is better model?

In a Client-server architecture, you need to install the application software in all the client's machines. If you are using 100 computers as clients, you need to install the application software in 100 computers. The three-tier architecture eliminates this issue. The application software is hosted centrally in the middle tier and there is no need to install it in all the client's machines.

4. If I am not installing the client software in the desktop PC, then how will I access Oracle Applications?

The Client desktop accesses Oracle Applications through Java enabled Web browser with JInitiator and forms client applet.

5. What is forms client applet?

For running forms from the client computer, the forms client applet must run in the client desktop. It supports all Oracle Application forms including the custom forms. The forms client applet is a collection of JAR (Java Archive) files. These JAR files contain all the classes, required to run the presentation layer of Oracle Applications.

6. What is JInitiator?

Oracle JInitiator enables end-users to run Oracle forms services applications directly within Netscape Navigator or Internet Explorer on Windows 2000, Windows NT4.0, and Windows XP platforms.

Oracle JInitiator is implemented as a plug-in (Netscape Navigator) or ActiveX Object (Microsoft Internet Explorer). It allows you to specify the use of the Oracle-certified java Virtual Machine (JVM) on Web clients instead of relying in the default JVM provided by the browser.

Oracle JInitiator is automatically downloaded to a client machine from the application server for the first time. The client Web browser encounters an HTML file that specifies the use of Oracle JInitiator. The installation and updating of Oracle JInitiator id performed using standard plug-in mechanism provided by the browser.

7. Do I need to download and install JInitiator every time I log in to oracle Applications?

No, the JInitiator needs to be installed only once. After the JInitiator is installed, the client's desktop is configured and nothing needs to be done from the client's machine.

8. What is Oracle Applications technology layer?

Oracle Applications technology layer provides common basic functionality across all Oracle Applications product families. The Oracle Applications technology layer is a collection of product whose functionality is used by all the modules of Oracle Applications.

9. What are the components of Oracle Applications technology layer?

Oracle Applications technology layer comprises the following products:

- Oracle Application DBA (AD)
- Oracle Application Object Library (FND)
- Oracle Common Modules (AK)
- Oracle Application Utilities (AU)
- Oracle Alert (ALR)
- Oracle Workflow(WF)
- Oracle Applications Framework (FWK)

- Oracle XML Publisher (XML)

10. What does database tier consist of?

Database tier consists of Oracle database, which stores all the data. The database server contains Oracle Home and data files.

11. How many Oracle Homes are there in Oracle Applications and what is the importance of each one of them?

Oracle Applications have three Oracle Homes:

I. Database Oracle Home in the database tier that acts as the Oracle Home for the Oracle database.

II. Oracle Home in the applications tier, also known as 8.0.6 Oracle Home. It is called the technology stack Oracle Home and used by forms, reports and discoverer.

III. iAS Oracle Home, used by the Oracle HTTP server. It is used by the Web listener.

12. Can I enable real application clusters in the database tier along with Oracle Applications?

Yes, real application clusters can also be configured with Oracle Applications. In that case, more than one instance of Oracle runs and the data files are stored at a central location accessible from the entire instance.

13. What does the application tier consist of?

The application tier is the place where the application software is located. It also hosts a large number of servers which interact with the database and the client-tier. The application tier architecture shifts software administration from the desktop to the middle tier removing the burden of installing the application software at every client. The

application tier also supports load balancing among multiple forms server, concurrent processing server to provide optimum scalability and performance.

14. Which servers are hosted from the application tier?

The following six servers constitute the application tier:

- Oracle HTTP server (Apache)
- Forms server
- Reports server
- Admin server
- Concurrent processing server
- Discoverer server

15. What is Oracle HTTP server?

Oracle HTTP server is the Web server which is used by Oracle Applications. It processes all the requests received from the clients. The Web server includes a couple of additional components like Web listener, Jserv (Java Servlet Engine) and Java Server Pages.

16. What is the difference between Apache and Oracle HTTP server?

Oracle HTTP server is the customized form of the Apache. Oracle has customized the Apache Web server as per its own requirement which is known as the Oracle HTTP server.

17. What is the function of the Oracle HTTP (Apache) server?

The Web listener accepts the HTTP requests coming from the client browsers, and the Web server services the request. If the URL needs advanced processing then it forwards the same to the servlet engine which in turn contacts the database for processing the

request and returns back to Web listener. If the incoming request needs parsing a JSP file then the following sequence occurs. The client browser makes a request to the Web listener. The Web listener checks the nature of the request and then contacts the Jserv (Servlet Engine) where it runs a JSP. The JSP contacts the database for the information and returns a HTML page which is in turn displayed in the Web browser.

18. How does Oracle HTTP (Apache) server work?

The Web server works in the following way:

- The user clicks a hyperlink on his desktop.
- The browser contacts the web listener with the URL. If possible, the HTTP listener services the request itself by returning a sample HTML page. In case it needs JSP parsing then - the Web listener redirects the same to Servlet Engine (Jserv) for running a JSP;
- the JSP in turn contacts the metadata dictionary in the database where it gets the information from the application table to construct the HTML page;
- the Web server returns the resulting HTML page back to the browser.

19. Where are Apache log files located, and what are these files?

Apache log files are stored in `$IAS_ORACLE_HOME/Apache/Apache/logs`. The log files are `error_log`, `error_log_pls`, `access_log` and `access_log_pls`.

20. Where are Apache configuration files stored and what are the important Apache configuration files?

Apache configuration files are stored in `$IAS_ORACLE_HOME/Apache/Apache/conf` directory. The main configuration files are `httpd.conf`, `apps.conf`, `httpd_pls.conf`, `oprocMgr.conf`, and `oracle_apache.conf`.

21. How do I know which file -`httpd.conf` or `httpds.conf`- is being used by the Apache?

The same can be determined by examining the script `apachectl` which is located at `$IAS_TOP/Oracle/Oracle/bin`. It is internally called by the script `adapctl.sh` which is located at the scripts location. In the script `apachectl`, there is a variable `httpd` defined, which points to either the `httpd` or the `httpds` executable. If the `httpd` variable in the `apachectl` script calls `httpd`, Apache configuration depends on `httpd.conf`. If the `apachectl` script calls `httpds`, Apache configuration depends on `httpds.conf`.

22. In case of a shared `APPL_TOP`, where do I see the configuration files and the log files for the Apache?

In case of a shared `APPL_TOP`, the techstack home is also shared across all the different server so all the Apache and Jserv configuration files are stored in `$IAS_CONFIG_HOME` directory. There will be a separate `$IAS_CONFIG_HOME` directory for each node of the application system.

23. I have done a couple of customizations in `apps.conf`, `jserv.properties` but each time I run the `autoconfig` it is overwriting the customizations. What do I do?

To overcome this problem, go to the `#FND_TOP/admin/template` directory. There also, you will see all those configuration files. Make a directory `custom` in the `$FND_TOP/admin/template` directory and copy all the files where you want to do the customization from `$FND_TOP/admin/template` to `$FND_TOP/admin/template/custom` and do the customizations in the files in `custom` directory. Now run `autoconfig`. To explain this, let's take an example. Say you want to do some customization in the `apps.conf` file. The usual location of the `apps.conf` file is `$IAS_ORACLE_HOME/Oracle/Oracle/conf`. The same file is also available in the `$FND_TOP/admin/template` directory. Copy the `apps.conf` file from `$FND_TOP/admin/template` directory to `custom` directory. Make all the customizations in the `apps.conf` file in the `custom` directory. Now run `autoconfig`. The customization will now be read from the files in `custom` directory.

24. Where are Jserv configuration files stored?

Jserv configuration files are stored in `$IAS_ORACLE_HOME/Oracle/Jserv/etc`.

25. What are the important configuration files which are used for making Apache run along with Jserv?

- \$APACHE_TOP/ Apache/conf/httpd.conf (or httpds.conf, depending on your platform)
- \$APACHE_TOP/Jserv/etc/Jserv.conf
- \$APACHE_TOP/Jserv/etc/Jserv.properties
- \$APACHE_TOP/Jserv/etc/zone.properties
- \$APACHE_TOP/ Apache/conf/oracle_apache.conf
- \$APACHE_TOP/Ojsp/conf/ojsp.conf

Where \$APACHE_TOP refers to the \$IAS_ORACLE_HOME/ Apache directory.

26. Where are Jserv log files located?

The Jserv log files are located in the \$IAS_ORACLE_HOME/ Apache/Jserv/log directory and in the format mod_jserv.log.

27. Where are JVM log files located?

The JVM log files are located in the \$IAS_ORACLE_HOME/ Apache/Jserv/log/jvm directory.

28. How do I check the version of Apache?

The version of the same can be checked using the command
\$IAS_ORACLE_HOME/ Apache /Apache/bin/httpd -v.

The output is given similar to as given below.

```
httpd -v
```

```
Server version: Oracle HTTP Server Powered by Apache/1.3.19 (Unix)
```

```
Server built: Dec 6 2005 13:41:10 (iAS 1.0.2.2.2 rollup 5)
```

29. When I login to the Oracle Applications from the PHP-based applications, login page simply hangs. What approach should I follow for the debugging?

If the login page hangs, the first step would be to check the Apache log files. Go to the Apache log directory and check for the `access_log` and `error_log`. You will get some information there. If you are not able to find anything then check for the Jserv logs from there you will get some information. Also, check the logs of the JVM. Try to analyse all the errors that you are able to debug anything then do as AOL diagnostics test which will tell you where the issue is. You can also enable debug for Apache, Jserv if you are not getting any pointer from the logs.

30. How do I enable debug for Apache?

Edit the `httpd.conf/httpds.conf` file to enable debug for apache. Find the following section in the apache configuration file and set the `Log Level` to `debug`. You may want to make a backup of this file before you edit. Now the Apache log files will be written with debug information. You also need to bounce the Apache after the making the changes.

31. How do I enable debug for Jserv?

Edit the `Jserv.conf` to enable debug for the Jserv module. Find the following section in `Jserv.conf` and set the `LogLevel` to `debug`. Also, edit the `Jserv.properties` to enable debug for the java portion of the Apache Jserv find the following section in `Jserv.properties` and set `log=true`, `log.timestamp=true`, and the logging for the channels to `true` `log.channels=true`. You also need to bounce the apache after making the changes. Now the log files will be written with the debug information.

32. How can I launch AOL diagnostics test?

The AOL diagnostics test can be launched using the following URL.

```
http(s)://<host><domain>:<port>/OA_HTML/jsp/fnd/aoljtest.jsp
```

It prompts for the database hostname, SID, port name, apps userid and apps password. In case of RAC environments, you have to give the JDBC URL.

33. How do I know about the location of JDBC URL?

The JDBC URL is there in the DBC file in the \$FND_TOP/secure directory. Open the file and you will get the JDBC URL from there.

34. How do I test whether my DBC file is valid or not?

You can check the validity of the DBC file using the AdminAppServer utility. Run the following command `java oracle.apps.fnd.security.AdminAppServer appsun/appspw STATUS DBC = [path to dbc]/[dbc_name].dbc`

This should return STATUS: VALID

35. I have accidentally deleted DBC file or my status of the DBC file is invalid, how do I recreate the same?

Run Autoconfig. It will recreate the DBC file else you can also create the same by running the script `adgendbc.sh` located at `$COMMON_TOP/admin/install` directory.

36. What is plsql cache and what is its importance?

The `mod_pls` component of the Apache caches some database content to file. The plsql cache also known as database cache is of the type session and plsql cache. The session cache is used to store the session information and the plsql cache is used to store the plsql cache which is used `mod_pls`. It is stored in the `$IAS_ORACLE_HOME/Apache/modplsql/cache` directory.

37. How do I enable PL/SQL logging?

Edit the file `wdbsvr.app`, which is usually founded in `$ORACLE_HOME/Apache/modplsql/cfg/` and set the following two parameters – `debugModules=all` and `LoggingLevel=Debug`

38. What is admin server?

The admin server is that node of the `APPK_TOP` from which all the maintenance activities for Oracle Applications are performed.

39. What kind of maintenance activities can be performed from admin server?

The following maintenance activities can be performed from the admin server.

- Applying the patches
- Maintaining Oracle Applications
- Applying the ad utilities
- Upgrading Oracle Applications

40. Does admin server also have a process like Apache and forms server?

No, the admin server doesn't have an operating system process like Apache or forms server. It is basically a node of the APPL_TOP.

41. What is concurrent processing server?

When an Oracle Application user submits a request to run a program, it's called concurrent requests. Concurrent manager are the program responsible for running the concurrent requests. Concurrent requests are processed from concurrent processing server.

42. What is forms server?

The forms server is that server from which the forms are hosted. It's component of middle tier. The forms server can be hosted from more than one node and the load balancing can be implemented with the forms. The forms user interface is used in the desktop clients for working in Oracle Applications.

43. Explain briefly, how the connection of the forms server works?

This is how the forms server works.

- Browser sends request (URL) to HTTP Listener (Apache)
- HTML page is retrieved (static) or generated (dynamic)

When the Web server receives the URL, it interprets it. If the URL points to a static file, the file will be retrieved from storage. If the URL points to a CGI script, the file will essentially be the same as the static version, but some pieces of that file will be dynamically generated by the CGI script. If dynamic, CGI script asks load balancing server for least loaded server. If the URL points to a CGI script, the CGI script will poll the load balancing server.

- HTTP Listener sends HTML page back to browser

Browser decodes HTML page, and detects the <APPLET> tag indicating a Java Applet. As the browser decodes the HTML file returned by the Web server, it detects the <APPLET> tag. This is the designator that indicates a java Applet. Specifically, this is the thin client that will connect to the forms server.

The <APPLET> tag contains the name Applet, along with numerous parameters including (a) the name of the form to run, (b) the name of the forms server to use, (c) login information, (d) any other parameters you need to pass to your forms session.

- Browser sends request (URL) to HTTP Listener for Java Applet

The browser asks the Web server to send it to the Java Applet. Java Applets are stored in .class or Java Archive (JAR) files. Oracle Applications use JAR files. JAR files are compressed archives that contain multiple .class files. Oracle Applications use JAR files because they speed up the downloading of the Java Applet. There are many JAR files that Applications must download to run.

- HTTP Listener returns Applet (JAR files) to browser

Browser receives Java Applet (JAR files) and begins to run them in its JVM (JInitiator). The JVM JInitiator checks the version of the files being sent. If the version of the JAR files is newer than the version cached on the client, JInitiator will continue the download. If the version is the same or older, JInitiator will begin to run the cached Java files. Java Applet is now running in the JVM. Browser is no longer part of the equation. The Java

thin client connects to the forms listener via a TCP/IP socket or an HTTP port. The forms listener is already started, and listens for these requests.

- Forms Listener allocates a forms runtime engine

When the Forms Listener gets the request, it starts a new forms runtime engine for this thin client. This started forms runtime engine can either be a newly spawned process, or it can be an allocation of an already running process (which greatly speeds up the connection process).

- Java Applet connection is passed from Forms Listener to forms runtime engine

The Forms Listener hands-off the connection to the thin client, and then has no further role in the process. Forms runtime engine loads module(s) needed to run the requested form. When the thin client connected, it passed a parameter entry, `serverArgs`. In that parameter entry, there was a name of a form to run. At this point, the forms runtime engine loads the form and any libraries and/or menus required by that form.

- Forms runtime engine opens a connection to the database

The details of this connection depend on the whether the Forms Runtime Engine is a newly spawned process, or if it was allocated from a pool of already running processes.

44. What is load balancing?

Load balancing is a server process that monitors loading on all of the forms servers. Each of the forms servers runs a load balancing client which keeps the load balancing server apprised of its load.

45. How can you find how many forms users are connected to the application system from the operating system level?

You can do the same by querying the `f60webmx` process and counting the same. You can use the following command to check this.

```
Ps -ef | grep f60webmx | wc -l
```

46. In my PC, I can see lots of JInitiators are installed. How can I find which JInitiator is being used by the forms process?

When the forms is launched, the Java console displays all the information about the forms process. There it displays which version of the JInitiator the forms is using. Alternatively, you can also open the appsweb.cfg file and check the parameter jinit_ver_name in that file. It will tell which version of the JInitiator is being used.

47. What is reports server?

Reports server is also a component of the middle tier and is hosted in the same node of the concurrent processing server. Report server is used to produce business intelligence reports. Report server is started by executable rwmts60 which is located at \$ORACLE_HOME/bin

48. How can you check from the operating system whether the reports server is up and running?

Reports server can be checked from operating system by querying for the process rwmts60. You can check the same using the following command.

```
Ps -ef | grep rwmts60
```

49. How can you compile a report manually?

You can do the same using the adrepgen utility as shown below.
adrepgen apps/<apps_passwd>source=\$PRODUCT_TOP/srw/filename.rdf
dest=\$PRODUCT_TOP/srw/filename.rdf stypr=rdfile dtype=rdffile
logfile=<path_of_log> overwrite=yes batch=yes dunit=character

50. What is discoverer and why it is used?

Discoverer is an intuitive ad hoc query, reporting, analysis and Web-publishing tool that empowers business users at all levels of the organization to gain immediate access to information from data marts, data ware houses, online transaction processing systems and

Oracle e-business suite. The discoverer server comprises Oracle Discoverer 4i, a key component of the Oracle9i Application server (9iAS). Discoverer 4i is tightly integrated with Oracle Applications which allow users to employ Discoverer to analyze data from selected business area in human resources, purchasing, process manufacturing financials and other products. The discoverer server complements the reports server by allowing performance of ad hoc queries and analysis of the resulting query output. It also allows users to perform projections based on possible changes to the business environment or other strategic factors.

51. How can you start the discoverer server?

Discoverer start script `addisctl.sh` is available in the `$OAD_TOP/admin/scripts/$CONTEXT_NAME` location. Alternatively, you can also use the `startall.sh` script located at `$ORACLE_HOME/discwb4/util` directory.

52. What is the product directory in the `APPL_TOP` and what is the importance of the same?

For each product there is a separate directory in the `APPL_TOP`. There are more than two hundred products in the 11.5.10 release. The product directories are named with the product's standard abbreviation like `bis` for Business Intelligence System, `ec` for e-commerce.

The product files are stored in the product directories.

`<Prod_Top>` refers to `<APPL_TOP> / <prod> / version`. For example `$FND_TOP=$APPL_TOP/fnd/11.5.0`.

Under each product top there are a large number of directories. If we go to `FND_TOP` directory, We will see the following directories.

```
(appmgr01) emstestappl – bash $ cd $FND_TOP
(appmgr01) 11.5.0 – bash $ pwd
/slot01/appmgr/emstestappl/fnd/11.5.0
(appmgr01) 11.5.0 – bash $ ls
3rdparty fndenv.env html lib media patch secure xml
Admin forms include log mesg reports sql driver
Bin help java mds out resource usrxit
(appmgr01) 11.5.0 – bash $
```

53. What are the important configuration files available in APPL_TOP?

Following are the important configuration files available in the APPL_TOP.

APPLSYS.env/APPSORA.env

Adovars.env

SID.xml

Adconfig.txt

Adjareas.txt

Topfile.txt

Appsweb.cfg

Hostname_SID.dbc

Adpltfm.txt

Adjborg.txt

Adjborg2.txt

54. What is the significance of the appsweb.cfg file and where is it located?

This file defines the parameter values used by forms Web CGI. This is the main configuration file used by the forms. This file contains the following details:

- Forms server Name, ServerPort, DomainName
- Database Connection Parameters
- JInitiator Version

This file is located at \$OA_HTML/bin.

55. What is the significance of the DBC file and whether is it located?

The DBC stands for database connection. This is the file which is responsible for establishing a connection between the database and the APPL_TOP. The DBC file stores all the information for successful connection to the database. The DBC file contains the values of GWYUID, FNDNAM, and TWO_TASK & GUEST_USER_PWD.

GWYUID stands for Gateway User ID and should have APPLSYSPUB/PUB as User ID/Password.

The default User ID/Password for Oracle Applications is guest/guest, guest/oracle, oracle/guest. This User ID/Password should match with the record available in the fnd_profile_options table.

The location of this file is \$FND_TOP/secure.

56. What is the significance of GWYUID?

It is used to connect to database by thick clients.

57. What is the difference between GWYUID and GUEST_USER_PWD?

GWYUID is used by thick clients to connect to the database. For example, forms uses the GWYUID to get connected. Whenever a new forms connection is established, it uses APPLSYS/PUB to authenticate the session, whereas GUEST_USER_PWD (Guest/Oracle) is used by JDBC thin client.

58. If you go to FND_TOP/secure directory, you can see lots of DBC files located there. How do you find which one is used by the application system?

To find out which DBC file is used by the application system you can query for the profile Application Database ID. If the profile name is SID then SID.dbc is used by the application.

59. What is the significance of the admin directory in the APPL_TOP?

The \$APPL_TOP/admin directory contains the scripts and the files which are used by the AD utilities. This directory also contains the log and output files created during patching and running of ad utilities. Following are the important files in the \$APPL_TOP/admin directory.

- <sid>.xml – This is the context file which is used by the Oracle Applications

- Adovars.env – This is an important configuration file about which we have already discussed
- <sid>/log – This directory contains all the logfiles which are generating during patching or by the running of Ad utilities
- <sid>/out – This directory contains all the output files
- Text files – This directory contains a large number of text files which contains various information about the application system and are referred during autopatch

60. How can you change the password of the application users?

The password of the application users as well as the password of all the schemas including apps can be changed using the FNDCPASS utility. For running the FNDCPASS, you need to have the system and the apps password. FNDCPASS is run in the following manner.

```
FNDCPASS apps/apps 0 Y system/manager SYSTEM APPLYSYS WELCOME
FNDCPASS apps/apps 0 Y system/manager ORACLE GLGLI
FNDCPASS apps/apps 0 Y system/manager USER VISION WELCOME
```

61. What is ‘0’ and ‘Y’ in flag in FND executables like FNDCPASS, FNDLOAD?

‘0’ means the request id. Since the request is not submitted via the Concurrent Request submission forms, request id zero is assigned to it.

‘Y’ indicates the method of invocation. It’s invoked directly from the operating system and not through the concurrent request.

62. What are the tables which store the information about the various application users and their passwords?

Two tables – FND_USERS and FND_ORACLE_USERID – store the information about the application users and the passwords.

63. How can you delete an application user?

You can't delete an application user but you can put the end date the application user making the user inactive.

64. In case of a multi-node installation, how can you check which service is being run from which node?

There are two ways to find the same information.

You can open the CONTEXT_FILE in the APPL_TOP/admin and check the information.

You can check for the FND_NODES table and check the column, SUPPORT_CP (for Concurrent Manger) SUPPORT_FORMS (for forms server), SUPPORT_WEB (web server), SUPPORT_ADMIN (admin server), and SUPPORT_DB (for database tier).

65. What is OATM and what is its significance?

OATM refers to the Oracle Application tablespace model. In the previous releases of Oracle Applications, there were two tablespace for each product. One was for data and the other was for the index and there user to be a lot of overhead in managing all the tablespaces. The new tablespace model replaces the old tablespace model by 12 tablespaces making it lot easier to manage the tablespaces.

66. Is apps password stored in any flat file outside database?

Yes the apps password file is stored in the file called wdbsvr.app located at \$IAS_ORACLE_HOME/Apahe/modplsql/cfg.

67. Where are all the middle tier start/stop scripts located?

The scripts for managing the middle tiers are located in `COMMON_TOP/admin/scripts/<sid>` directory. For running these scripts, login to the application tier as the owner of the application file system and source the environment using the environment `<sid>.env` located in the `$APPL_TOP`. All the scripts create a log file which shows the status of the server. The log file written in the directory `$COMMON_TOP/admin log/<sid>`. Each component of the middle tier has a separate log file.

68. What is the script for the start/stop of Apache?

The Apache server can be started with the script `adapctl.sh`.

The parameters that accepts is start, stop, and status.

```
Adapctl.sh { start | stop | status }
```

The Apache startup script is customized for the Oracle Applications in such a way that it takes of starting the Jserv, modplsql and the TCF socket server automatically once the apache is started.

The log file which is created by the script is `adapctl.txt` and it is located at the location of the log file.

69. What is the script for starting/stopping the forms server?

The forms server can be controlled with the script `adfrmctl.sh` which is located at the common locations of all the scripts viz `$COMMON_TOP/admin/scripts/<sid>`. The forms server can be started/stopped in the following way.

```
Adfrmctl.sh { stop | start | status }
```

The log file which is created by the scripts is `f60svrm.txt` available at the common location of the log files.

Alternatively, the forms server can also be started manually without using the scripts with the `f60ctl` executable which is located at `$ORACLE_HOME/bin`. This is 8.0.6 Oracle Home and should not be confused with the Oracle Home of the database server.

The forms server can be started manually in the following way.

```
F60ctl start port=<port name> mode=socket exe=f60webmx logfile=/location of logfile.
```

70. How you can start the reports server?

Reports server can be controlled with a script adrepctl.sh. It uses the executable FNDSVCRG which is located at \$FND_TOP/bin. The default name of the reports server log file is rep60_<sid>.txt and is located at same place along with the log files of the other components of the middle tier.

Reports server can be controlled by
Adrepctl.sh { start | stop | status }

71. How you can start/stop all the middle tier components at one go?

For starting and stopping all the middle tiers, Oracle provides two different scripts which take care of starting and stopping all the middle tiers at one go.

For starting all the middle tiers, the script is adstrtal.sh. It takes the apps user id and apps password as parameters.

Adstrtal.sh < appsusername/appspassword >

Similarly, for stopping all the middle tiers at one go, the script is adstpal.sh. This also takes the apps user id and apps password as parameters.

Adstpal.sh <appsusername/appspassword >

Both these scripts create a logfile in which it contains detailed information. The logfile name is in the following format <Month><Date><Hour><Minute>.log

It gives a formatted report in the log file with the details of which components are started, which are already running, which are disabled and which are not running.

1. How do I check from the server if the forms server is running or not?

Check for the process f60cd. If the process is running it means the forms are up and running.

2. How do I change the port of the forms server?

Modify the file appsweb.cfg which is available at \$OA_HTML/bin

3. How do I enable FRD (forms Runtime Diagnostics)?

For enabling FRD, login to forms as sysadmin. Then add “&record=collect&log=” without the quotes to the profile option ICX%FORMS%LAUNCHER.

The FRD can also be enable by appending the same on the forms URL
play=&record=collect&log=/tmp/form l.frd

For example, if the forms URL is

`http://ap6105rt.us.oracle.com:8012/dev60cgi/f60cgi?config=SCMTSTI`

Then add the following in the URL.

`http://ap6105rt.us.oracle.com:8012/dev60cgi/f60cgi?config=SCMTSTI
play=&record=collect&log=/tmp/form l.frd`

4. How do you relink the f60webmx executable?

It can done from the command line by using the syntax `adrelink.sh force=y “fnd
f60webmx”`

5. My forms server is up and running but while connecting to the forms I am getting the error “your connection to the server was interrupted. This can be due to a result of network error, or a failure on the server. You will need to reestablish your session”, what do I do?

Relink the f60webmx and then bounce the forms server.

6. What is FORMS^)_TIMEOUT?

This is an environment setting which refers to the maximum idle time before f60webmx shuts down. This will only terminate an idle middle tier process.

7. How do I generate an FMD file manually?

It can be generated from the command line using the following command:
`F60gen module=form_name.fmb userid=apps/apps outpur_file=form_name.fmx
module_type=form batch=yes compile_all=special`

8. How can I generate a PLL file manually?

It can be generate from the command line using the following command:

```
F60gen module=library_name.pll userid=apps/apps module_type=library batch=yes  
compile_all=special
```

9. How can I generate an MMB file manually?

It can be generated from the command line using the following command:

```
F60gen module=FNDMENU.mmb userid=apps/apps output_file=FNDMENU.mmx  
module_type=menu batch=yes compile_all=special
```

10. What are important files related to forms?

- Adfmcctl.sh – This script starts and stops the forms metric client for apps instance located in \$COMMAN_TOP/admin/scripts. It uses the forms d2lc60 executable to accomplish this.
- Adfmsctl.sh – This script starts and stops the forms metric server for apps instance located in \$COMMAN_TOP/admin/scripts. It uses the forms d2ls60 executable to accomplish this.
- Adfrmctl.sh – This script starts and stops the forms server listener located in \$COMMAN_TOP/admin/scripts. It calls the f60ctl founded in \$ORACLE_HOME/6iserver/bin of IAS.
- Appsweb.cfg – This file defines parameter values used by the forms web CGI located in \$OA_HTML/html/bin. It has the details of the forms server port, host, domain etc.
- Appsbase.html – This is the default HTML file for starting an applet using JInitiator and is located in \$OA_HTML/<language>
- D2lc60.txt – This is the forms metric client log file, located in \$COMMAN_TOP/admin/install
- D2ls60.txt – This is the forms metric server log file, located in \$COMMAN_TOP/admin/install

- F60svrm.txt – This is the adfrmctl.sh log file located in \$COMMAN_TOP/admin/install. This is not the same as the forms server log file which not only logs start up and shut down info but also client connectivity. For example, which client IP is associated with which f60webmx process and debug stack trace info.
- Oracle Applications.dat – This file determines the path Oracle Apps uses to find their icons and is located in \$JAVA_TOP/oracle/fnd/formsClient

11. I am not able to launch the forms through the php. It's simply hanging however I am able to launch the direct forms, how should I fix this?

If you are not able to launch the forms then check for profile ICX: Forms Launcher system profile. Set properly the forms URL here and you should be able to launch the forms.

12. What is the ICX: forms launcher system profile is used for?

This profile option is used by the self service Web application personal home page (also known as ICX) to determine the base URL needed to launch an application, which in this case is a forms application.

13. What should ICX: forms launcher be set to?

ICX: forms launcher is set to `http://hostname:port/dev60cgi/f60cgi?` You can optionally add some parameters to this URL to enable tracing.

14. What is FORMS60_CATCHTERM?

FORM60_CATCHTERM is an environment setting that enables or disable the forms abnormal termination handler which catches middle tier crashes and cleans up by removing temp files, closing db connections and writing diagnostic info to the dump file or the forms server log file.

15. How do you determine version information about a Oracle Applications forms?

Form the Oracle Applications; open the form whose version you want to know. Go to the menu bar, select Help>About Oracle Applications. Near the bottom of the information screen, you will find a heading of “FORMS”. Under this heading you will find the name and version information of the currently selected form.

16. How do you enable tracing for the forms session and where is the trace file located?

You can start the tracing for the particular forms session by the going to the menu bar of the Oracle Applications forms session and by selecting Tools and then Trace Enable. Once you click Enable it will tell you the full path and name of the trace file. It's normally located in the udump location of the database server.

17. I want to launch the direct forms for debugging but when I try to launch the direct forms I get the error, “This application server is not authorized to access this database”. How can I launch the direct forms?

By default the launch of direct forms is not supported in Oracle Applications. Still if you want to launch the forms directory then you must set the security off for doing the same. The direct forms can be accessed using the URL given below.

`http://<Apache hostname>.<domain>:<Web port>/dev60cgi/f60cgi`

The following command is used for turning the authentication off java
`oracle.apps.fnd.security.AdminAppServer apps/apps AUTHENTICATION OFF`
`DBC=<name of dbc file>`

Once the authentication is set to off then the direct forms URL can be accessed.

18. After logging to the forms you are getting the error – the Menu compilation has failed or Oracle Error there is no valid responsibility available. How will you troubleshoot the same?

If you are getting the errors like this it means that the system has not been completely taken out of the maintenance mode or it is still there in the maintenance mode. Once the system is out of the maintenance mode you will be able to login.

19. When the forms are being launched you can see a yellow bar in the bottom. How to fix the same?

Regenerate the JAR file using adadmin. The problem will be fixed.

20. What is the difference between the forms running in socket mode and servlet mode?

If the forms are run in the socket mode, there will be a dedicated connection between the client desktop and the forms server whereas when the forms are started in the servlet mode, the forms request are processed by the Jserv.

21. How do I find whether the forms are running in servlet mode or in socket mode?

For checking the same, query the f60 process. It will reply in which mode the forms is running.

22. How do I change form the socket to servlet mode and vice versa?

For doing the same, login to the Oracle Applications manager and follow the navigation >Site Map> Autoconfig. From there, you will be able to change from socket mode to servlet mode and vice versa. You have to run autoconfig form the backend and bounce the forms server after doing the same.

2

INSTALLATION

1. What is the minimum disk space requirement for installing Oracle Applications?

The approximate file sizes in a single-node installation are:

- Application tier file system – 26 GB (includes iAS/8.0.6 ORACLE_HOME COMMON_TOP, and APPL_TOP)
- Database tier file system (fresh install with a production database) – 31GB
- Database tier file system (fresh install with a Vision Demo database) – 65GB

- Total space for a single node system, not including stage area, is 57GB for a fresh install with a production database, and 91GB for a fresh install with a Vision Demo database.

2. How much stage area is required for RapidInstall?

To run RapidInstall from a stage area, you need at least 24GB to accommodate the files.

3. How much space an additional language needs?

To install an additional language, it needs approximately around 10GB space.

4. Do in need to install any other software before starting the RapidInstall?

Before installing Oracle Applications, the JDK needs to be installed. The version of JDK which needs to be installed depends on which version of Oracle Applications you want to install. The latest 11.5.10 release of Oracle Applications needs JDK1.4.2. Apart from JDK, you must have Perl 5.00.53 installed and which should be there in your PATH. If you don't have Perl installed, download the same from www.perl.com.

5. Can I start the RapidInstall with any user?

RapidInstall needs to be started only with the root user. It can also be started with any other user as well, but that is not recommended as you have two different users – one for database and other for application file system.

6. How many operating system users I need for Installing Oracle Application?

Oracle recommends that you should have two Unix users for Installing Oracle Applications – one Oracle user (Oracle) who owns the file system of the database and one application (applmgr) user who owns the application file system.

7. What are the individual disks included in the Release 11i software Bundle?

The 11.5.10 software comes in DVD format. The individual disks included in the Release 11i software bundle are labeled as follows:

- Start Here – Disk 1
- APPL_TOP – Disk n
- RDBMS – Disk n
- Tools – Disk n
- Database – Disk n

8. Is the NLS software included with the RapidInstall DVD bundle?

No, the NLS software is not included with the RapidInstall bundle. You need to order the NLS supplement software separately for each additional language which you want to install along with Oracle Applications.

9. How do I create the stage area of the RapidInstall?

For creating a stage area, the script `adautostg.pl` needs to be run as follows:

```
$ cd /mnt/cdrom/Disk/rapidwiz
```

```
$ perl adautostg.pl
```

10. How many directories are there in the stage area of Oracle Applications?

The following six directories are there in the stage area of Oracle Applications.

- StartCD
- oraApps

- oraDB
- oraiAS
- oraAppDB
- oraNLS (Optional only if you have a NLS Software)

11. What pre-install checks should I make to ensure a successful installation?

- Verify the correct user and groups have been created, as documented in installing Oracle Applications.
- Verify the required disk space is available, as documented in installing Oracle Applications.
- Verify the file system base install directories have write access granted to the user that will own the software (on UNIX the RapidInstall Wizard may be run as root but the install runs as the user that will own the software, therefore this user must have write access to the base install directories).
- Verify the required ports are available for the installation.
- Verify system parameters are sufficient for the Oracle software (especially the database) to run.
- Verify the all the OS patches have been applied as per Oracle documentation.

12. What is a single node installation?

Single node installations is the one in which all the servers (concurrent processing, forms, Web, reports), the database and all product directories are installed on a single node. In other words, in single node installation the entire Oracle Applications are installed on a single server.

13. Where is a single node installation generally used?

The single node installation is generally used for smaller installations and also used for demonstration purpose.

14. What is an express configuration?

Express configuration installs a fully configured single node system with either a fresh database or Vision Demo database. Only a few basic parameters such as database name, top level install directories and port settings needs to be specified in this and express configuration take care of installing Oracle Applications with out any user intervention.

15. What is configuration file and why is it used?

During installation RapidInstall asks many questions from the user. It saves all the configuration parameters you enter in a new configuration file (config.txt) which it uses to configure the system for the new installation. In case the installation fails the same configuration file can be used for restarting the installation without answering all the questions again from the scratch. For multi-node installation, this configuration file is used for the installation in other nodes.

16. I have started RapidInstall but nothing is coming in the screen. What could be the reason?

The display might not be set properly. Set the display and start RapidInstall again.

17. What is a multi-node installation?

A multi-node installation is the one in which the database tier and the application tier are installed across two or more nodes.

18. In a multi-node installation how do I find what services are running from which node?

The context file sid_hostname.xml in \$APPL_TOP/admin will have the information about the same. It can also be queried from the table FND_NODES. You can query the following columns – SUPPORT_CP for concurrent manager, SUPPORT_FORMS for

forms server, SUPPORT_WEB for the apache host and SUPPORT_ADMIN to know the admin tier.

19. What benefits do I get with multi-node installation?

Multi-node installation distributes the server process across different servers. For example, in a typical example of multiple node, the database is hosted in one physical server, the apache is hosted from some other server, the forms are hosted in some other server, the concurrent manager and reports server is hosted from some other server. This helps in distributing the load across various servers and as a result the overall performance of the application system increases.

20. In case of multi-node installation, I will have multiple APPL_TOP's. How will I manage all the different APPL_TOP's?

In case of multi-node installation, various components of the middle tier are hosted across different physical servers. Shared APPL_TOP means the APPL_TOP will be installed only in one of the physical servers and all the other servers of the application tier will share the file system of the APPL_TOP. Any changes made in the shared APPL_TOP file system are immediately visible on all nodes. This helps a lot in managing the application system. In case of patching, it needs to be done only once as all the servers share the same APPL_TOP. With 11.5.10 release, RapidInstall creates a shared APPL_TOP by default for multi-node installation.

21. What is Shared APPL_TOP and how does it help in case of multi-node installation?

In case of multi-node installation, various components of the middle-tier are hosted across different physical servers. Shared APPL_TOP means the APPL_TOP will be installed only in one of the physical servers and all the other servers of the application tier will share the file system of the APPL_TOP. Any changes made in the shared APPL_TOP file system are immediately visible on all nodes. This helps a lot in managing the application system. In case of patching it needs to be done only once as all the servers share the same APPL_TOP. With 11.5.10 release, RapidInstall creates a shared APPL_TOP by default for multi-node installation.

22. What is a shared application tier file system?

In a shared application tier file system installation, the APPL_TOP, the COMMON_TOP, and the applications technology stack (ORACLE_HOMES) are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services, such as forms, Web and concurrent processing. Any changes made in the shared application tier file system are immediately visible on all nodes.

23. What Operating systems can use the shared APPL_TOP?

All RapidInstall platforms except Windows support a shared application tier infrastructure.

24. Can I share the APPL_TOP across different platforms of operating system?

No, sharing of the APPL_TOP is not possible across different platforms because the binaries and libraries of the application file system are platform specific.

25. As of now I am using two different APPL_TOP. Can I merge the existing APPL_TOPs to go for the shared APPL_TOP model?

Yes, you can merge APPL_TOPs which are spread across different nodes. The metalink document 23428.1. mentions in details about doing the same.

26. What is load balancing?

Load balancing distributes processes for Oracle Applications across multiple nodes. This distribution of the workload improves the performance and enhances scalability. If the load balancing then even if the component is down, the application system continues to work. For example, if Apache load balancing is enabled across two nodes then in case one of the nodes is down, all the incoming connections will automatically be redirected to the other node.

27. In which servers load balancing can be enabled?

The load balancing can be enabled in the forms server, Web server as well as the concurrent processing server.

28. Which products are installed by default along with RapidInstall?

RapidInstall installs all the products automatically regardless of their licensed status. However, you must register products you have licensed so that they are flagged in the system as active. An active flag marks products for inclusion in patching and other tasks that you will perform to update and maintain your system after the initial installation.

29. How can I tell what is installed and licensed after finishing an install?

The script `AD_TOP/sql/adute.sql` against the APPS user schema will generate a detailed file (`adutconf.lst`) with information about the database configuration and what products are installed and licensed after the rapid installation process complete.

30. I have already done the installation but forgot to license a product I want to use. Can I license it after the installation?

Yes, licensing can be done after the installation. You can do in two ways.

1) Go to `AD_TOP` and run the script `adlicmgr.sh`. This will prompt for the additional products to be licensed.

2) From Oracle Applications Manager go to `OAM > License Manger > License additional products`.

31. I have already done the installation. Now I want to add an additional language. Is it possible?

Yes, it's possible to add a separate language after the installation. For this, you need to make the language as active from Oracle Applications Manger and need to download and install the NLS software.

32. I don't want to use the defaults port that's being used by RapidInstall. What options do I have for changing the ports to some other value?

There are two options for assigning different ports rather than using the default ports while running RapidInstall.

1) You can use the port pool option with which you can increment all the port values at one go. Say you choose a port pool of 5 then all your port values will be incremental by 5 from the default value.

2) You can use the Advance Edit button for assigning the ports of your choice but make sure that the ports which you are assigning are not in use.

33. What are the pre-install checks performed by RapidInstall?

The RapidInstall takes care of the following checks.

1) Port availability: The port you have selected is available or clashing with some existing port.

2) Port Uniqueness: There is no duplicate defined port for the processes.

3) File space check: It ensures whether the file system have sufficient space for a smooth installation.

4) OS Patch Check: It ensures that the right operating system patches are there or not.

5) Operating system check: It checks the operating system.

6) File system check: It checks whether the files are mounted properly and have correct permission.

7) Host/domain check: It verifies the hostname and the domain name.

8) System utilities check: It checks whether the linking utilities like make, ld and cc are available or not.

9) OS user and group check: It checks that the OS user exists and the OS user is a part of correct group.

34. How much time does RapidInstall normally take?

RapidInstall approximately takes around 5 – 6 hours to complete in a single node.

35. Once the installation is done, what checks RapidInstall does to ensure that the installation is successful?

RapidInstall checks the following to ensure the installation is successful.

- 1) Database availability check: The database is up and running
- 2) Environment file check: Checks whether the environment file is created properly
- 3) DBC file check: The DBC file has been created (location \$FND_TOP/secure)
- 4) HTTP check: Checks if the apache is up and running
- 5) JSP check: Checks if the JSPs are working fine
- 6) PHP check: Checks if the PHPs are working fine

36. Where are RapidInstall log files written?

RapidInstall log files for Application tier are located under
\$APPL_TOP/admin/<SID>_<hostname>/log.

The Log files for database tier are located under
\$ORACLE_HOME/appsutil/log/<SID>_<hostname>

The log file is of the following format XXXXXXXX.log. Where XXXXXXXX =
MMDDHHMM – date and time of run

37. What information is written in the log files of the RapidInstall of db and application tier?

In the db tier RapidInstall log file contains the following information:

- Rapid wizard version
- Date and time install session started
- Rapid wizard source location

- Command line arguments for this execution

- Location of configuration file

- Install session information

- o Host name

- o Host operating system

- o User running install

- Results of:

- o Host name

- o Port availability check

- o Operating system check

- o Port uniqueness check

- o File system check

- o File space check

- o Host/domain check

- o OS patch checks

- o System utilities check

- Results of the actual installation:

- o Installation drivers

- o XML file creation

- o Control file creation

- o ADX database utility

The application tier log file contains the following information:

- Results of the actual Installation

- Instantiation drivers
- XML creation
- Control file creation
- ADX database utility
- Results of the post install checks
- Database availability check
- Environment file check
- DBC file check
- HTTP check
- JSP check
- PHP check
- 806infrun.log-Windows only-Updating Registry with Tools 8.0.6 ORACLE_HOME information
- Iasinfrun.log-Windows only-Updating Registry with Tools iAS ORACLE_HOME information
- iASInstalling-Information on Unzipping stages for oraIAS-Tools 8.0.6 and iAS Techstack
- installAppl.log-Information on Unzipping stages for oraAPPS-APPS_TOP
- installiasinf.log-Information in creating the Registry update.inf files

1. What is the difference between patch, minipack and maintenance pack?

In simple language,

Patch + Patch = Minipack

Minipack + Minipack = Maintenance Pack

Patches are created and released by Oracle whenever some new enhancements are made in Oracle Applications or if there is some issue with Oracle Applications. A patch may contain a fix for a single issue or a collection of issues.

During a release cycle, a product combines all the individual patches in to a minipack.

When these minipacks are combined together into a single patch, it is called a maintenance pack. In earlier release, these minipacks were referred as patch sets and maintenance packs were referred as release updates.

2. What are the different types of driver a patch can have?

A patch can have the following kinds of driver.

- Copy driver known as C driver
- Database driver known as D driver
- Generation driver known as G driver
- Unified driver known as U driver

3. What is a copy driver (C driver) and what does it do?

The copy driver copies all the files that are there in the patch to the APPL_TOP. The copy driver is named as c<patch number>.drv. Apart from copying the files to the APPL_TOP, the copy driver also does the following tasks.

- Copies the files that are there in the patch to the \$APPL_TOP.
- Extracts the appropriate files from each product's C library.
- Relinks the Oracle Applications products.
- Regenerates the JAR files and compiles the Java Server Pages (JSP) files.
- Compares the files in the patch with the files in the \$APPL_TOP. If the files in the patch are of higher version then only adpatch copies the files from patch to \$APPL_TOP.

4. What is a database driver (D driver) and what does it do?

The database driver contains all the commands to change the database object. Just like the copy driver, the database driver is also named as d<patch number>.drv. The database driver applies all the assorted scripts copied by the copy driver to the database. There are many scripts that make changes to the database which are applied by the D driver. Here is the brief description of all the scripts that are run by the D driver.

- It makes a list of all the invalid objects that are there in the database.
- Runs SQL scripts which make changes to the database objects.
- Compiles all the invalid objects that are there in the database.

5. What is a generate driver (G driver) and what does it do?

Just like the copy driver and database driver, the generate driver is also named as g<patch number>.drv. The generate driver regenerates all the forms, reports and pl/sql libraries that have been affected by the patch.

6. What is unified driver (U driver) and what does it do?

The unified driver is combination of C, D and G drivers. It performed the acts in the order of C, D and G drivers. For unified driver, the same naming convention follows. It's also named as u<patch number>.drv. It requires only a single execution of AutoPatch.

7. How is a patch applied in an application system?

A patch is applied in using the adpatch utility. It's an interactive utility which prompts for the various details like the patch number, driver details, number of workers, apps password and system password. When all the details are provided, adpatch applies the patch.

8. What exactly happens when a patch is applied? What is the sequence of steps adpatch follows?

The AutoPatch extracts the appropriate files from the product library. It compares the extracted object modules with their corresponding files in the patch directory. If a file in the patch directory is a more recent version than the product's current file, AutoPatch backs up the product's current file in to a subdirectory of the patch directory.

Specifically, it backs up

<PROD>_TOP/<subdir(s)>.<old_file_name>

To

<patch_dir>.backup/<env_name>/<appl_top_name>/<prod>/<subdir(s)>/\

<old_file_name>.

Where <patch_dir> is the patch directory, <env_name> is the Applications Environment name, <appl_top_name> is the APPL_TOP name, and <prod> is the name of the product being patched.

It also replaces each product's outdated files with newer files from the patch directory.

It applies changed Java class files and regenerates JAR files as needed.

It loads the new object modules in to the libraries.

It relinks the Oracle Applications products with the Oracle Server.

It runs SQL scripts and exec commands, which change Oracle Applications database objects. By default, AutoPatch does this in parallel.

It copies any specified HTML or media files to their respective destinations.

It generates Oracle Forms files.

It generates Oracle Reports files.

It generates Oracle Graphics files.

It appends a record of how it changed your system to applptch.txt in the \$APPL_TOP/admin/<SID> directory

It records summary information of actions actually performed to applpsum.txt located under APPL_TOP/admin.

It updates the various ad tables like ad_applied_patches, ad_bugs with the status of the patch.

9. I want to apply a couple of patches in my application system. Can I apply all the patches together?

No, you can't apply all the patches together. You can apply only one patch at a time. If you want to apply multiple patches together, then you can merge all the patches together using the merge patch utility and can apply the merged patch at one go.

10. How can I apply a patch in a non-interactive manner?

You can apply a patch in a non-interactive manner using a patch defaults file. The defaults file stores all the information that is normally asked by the adpatch and uses them to apply the patch in a non-interactive manner.

11. How do I create a defaults file for applying a patch in a non-interactive manner?

For creating the defaults file for the first time we need to give the following at the prompt.

```
(appmgr01) bash $ adoatch\ defaultsfile=$APPL_TOP/admin/$TWO_TASK/def.txt
```

This will prompt all the questions that are normally asked during interactive patching. Answer all the questions and when asked for the directory where your patch has been unloaded, enter an abort at the command prompt. This will create a def.txt file at the location specified in the command prompt. Verify whether this defaults file is created properly or not. Once the defaults file is created for the application system, we can run AutoPatch in non-interactive way.

12. What is the test mode of adpatch and why is it used?

The test mode is used to determine the action of the patch without actually applying the patch. When the patch is run in test mode it does not perform any action as such but documents the operations it would have performed. In other words, it lists each file it would have copied, generated, executed or relinked. This is used when you want to know what exactly the patch is going to do and what is going to be the impact of the same.

13. How can you apply a patch in the test mode?

You can apply a patch in the test mode by typing `adpatch apply = no` at the command prompt.

14. Under what circumstances one needs to run a patch in a pre-install mode and how is it run?

Pre-install mode is normally used to update AD utilities before an upgrade to Oracle Applications. This is run from the command prompt by invoking the following command.
`Adpatch preinstall = y`

15. From release 11.5.10 onwards one needs to put his application system into maintenance mode before applying any patch. How can I apply any patch without putting my application system into maintenance mode?

You can apply a patch without putting the application system into maintenance mode by using the hotpatch option. Type the following from the command line.

Adpatch options = hotpatch

16. I was applying a patch and the patch failed. I contacted Oracle support and they advised me to apply one more patch as a fix and then restart my previously failed patch from the point where it had failed. How do I do that?

If you want to restart your patch from the point where it failed then backup the out and restart directories from the \$APPL_TOP/admin/\$TWO_TASK. Also take a backup of the FND_INSTALL_PROCESS and AD_DEFERRED_JOBS table from the database and apply the new patch. Once the new patch is applied, put the files that have taken the backup in the place and revert the old table. You should be able to apply the patch from the point where is failed.

17. How can I determine the effects a patch will have on my application system?

You can do the patch impact analysis through the patch wizard in the Oracle Applications Manger. The patch impact analysis feature of patch wizard will give the following details.

- The total number of files in the patch
- The number of files the patch will install
- The products that will have updated files
- The files that will be introduced by the patch
- The files on the target system that will be changed by the patch
- The files with dependencies on patched files

18. I have a two node APPL_TOP. Do I need to apply adpatch from all the nodes?

If you have a shared APPL_TOP which is mounted across both the nodes then you need not apply patches from both the nodes. But if shared APPL_TOP is not enabled and you are maintaining two different APPL_TOP from two different servers then you have to apply the adpatch from both the nodes.

19. In case of multi-node installation, how do I know which driver file needs to be run from which application server?

In case of a multi-node installation, you need to run the C driver from all the nodes as it copies the files that are there in the patch to the APPL_TOP. The D driver needs to be run only once from the admin tier and the G driver needs to be run from the servers where the forms servers are hosted.

20. How do I know what servers are hosted from which nodes?

You can check the same either from the Oracle Application Manger's dashboard or from the context file or from the FND_NODES table.

21. In my patch only U driver is there. I tried applying the patch earlier but it failed due to some database issue. I have fixed that issue and now I want only the D and G driver's portions to run and I don't want to run the C driver portion of the patch again. Can I do the same?

Yes, you can skip the C driver part from the patch by typing the following at the command prompt

Adpatch options = nocopyportion.

Similarly, you can skip the D and G drivers part also by the option nodatabaseportion and nogenerateportion.

22. While applying patch using adpatch, how can you hide the passwords?

You can use adpatch flags = hidepw while applying patches to hide apps or system password.

23. What happens if I apply the driver in the wrong sequence? Say I apply the G driver before the C and D drivers?

The driver always needs to be applied in the C, D and G sequence. If you try to run the G driver before the C driver the patch won't be able to find the forms which the G driver wants to generate, as the C driver has not copied them in the APPL_TOP and hence the path will fail.

24. What are AutoPatch restart files?

Restart files store information about completed processing in the event of a patch or system failure. They allow AutoPatch, AutoUpgrade, and AD Administration to continue processing at the point where they stopped.

The restart files are located at \$APPL_TOP/admin/<SID>/restart.

25. Where do I find the log files of the patch?

The patch log files are located in the \$APPL_TOP/admin/\$TWO_TASK/log directory. The default name of the patch log file is adpatch.log but it is recommended to change it as patch_driver.log in order to identify the patch log easily.

26. What are all the log files which the patch creates?

Running the patch creates the following log files.

- Adpatch.log : It contains the information about the patch run.
- Adpatch.lgi : It contains the other information about the patch run.

For example, the files which has not been copied by the adpatch.

- Adrelink.log : It contains the relinking information which the patch does.
- Adworkxx.log : it contains the various workers log.

27. How to find if a patch is applied in an instance or not?

You can query the tables `ad_applied_patches` to find out if the patches have been applied to the instance or not. You can also check the `ad_bugs` to find if a patch is applied or not.

28. What is difference between `ad_applied_patches` and `ad_bugs` tables for finding the patch information?

The table `ad_applied_patches` is updated only if the patch is applied by the `adpatch` utility. If the patch is a part of some other big patch then that information won't be there in the `ad_applied_patch` as it is not applied using `adpatch`. But that patch information will be there in `ad_bugs`. Also if all the patches are applied using the `adpatch` utility, that information is also stored in the `ad_bugs` table.

29. While applying patch, it's showing me "tafnw1" as default `APPL_TOP` value. What does it mean?

- "t" stands for "tier"
- "a" stands for the "admin" tier
- "f" stands for the "forms" tier
- "n" stands for the "node" tier
- "w" stands for the "Web" tier

30. I was applying a patch and the workers have failed. How do I skip and restart the failed workers?

For this, you need to open a new terminal and invoke the `adctrl` utility. Choose the eighth options which are generally hidden for skipping and restarting the worker.

31. You were applying a patch and it has failed. What do you do?

If the patch has failed then the first step would be to check the patch log file to find out where exactly it has failed. If the patch fails at D driver or G driver then you should also check the workers log to find out the exact error. Then try to fix the issue. If it is fixed, restart the patching using the adctrl utility.

32. You have applied a patch which brings new files to the APPL_TOP but after applying the patch the users are complaining that they are not able to see the new changes. How do you troubleshoot this?

Check the log file of the patch in the log location. You will get some clue whether adpatch has copied or applied that file or not. Else clear the cache from the server and bounce the apache.

33. How do I clear the cache from the server?

In the COMMON_TOP directory, there will a directory starting with _pages. This is the directory where the files are cached in the server. Delete all the files from there for clearing the cache.

34. You have to apply a multiple number of patches. How can you reduce the downtime?

You can reduce the patching time in a number of ways.

- You can merge all the patches into one single patch using admergepatch admrgpch.
- You can choose the max number of the workers which your CPU permits.
- In case you are applying all the patches one by one, you can choose the options nocompiledb nocompilejsp and nolink so that compilation of the invalids object, jsp's and relinking can be skipped till the last patch is applied. In the last patch you can compile all of them and do the relink.

1. Is the upgrade process same if you want to upgrade to 11.5.10 from 11i and non-11i instances?

No, the upgrade process is different if you are upgrading from an 11i instance to 11.5.10 and from non-11i instance to 11.5.10.

2. What are the pre-upgrade steps that need to be taken for the up gradation of a non-11i instance to 11.5.10?

The important steps that need to be taken before an upgrade are:

- You need to take a complete backup of the application system
- You need to run the TUMS utility
- You need to review the TUMS report
- You need to maintain the multilingual tables
- You need to rename the custom database objects
- You need to check attachment file upload directory
- You need to save the custom.pll

3. What is TUMS? Why is it required to run TUMS before doing an upgrade?

TUMS is a utility to help customers reduce the number of steps necessary in the upgrade. It looks at a customer's specific situation, and identifies which steps are irrelevant for that customer. The output of TUMS can be used to reduce upgrade time. The upgrade manual scripts (TUMS) is used to create a report that lists the upgrade steps that don't apply to Oracle Application installation. You can ignore the steps that are generated with the report of TUMS.

For generating the TUMS report, you need to download and apply the TUMS 3422686 patch from metalink using the adpatch utility. The TUMS patch needs to be applied for both 10.7 and 11.0.x version of Oracle Applications.

Once the patch is applied successfully, the adtums.sql script is used to generate the TUMS report. For the <DIRECTORY> value, enter the full path of the directory that you want the TUMS report to be written to. This directory must be listed in the

UTL_FILE_DIR parameter of your init.ora before TUMS can write the report and must have the appropriate permissions to write the report (tums.html).

4. After the application of the TUMS patch, where does the script adtums.sql need to be run from?

If you are upgrading from release 10.7, the script needs to be run from the following location:

For UNIX users:

```
$ cd $AD_TOP/patches/107/sql
$ sqlplus <APPS username> / < APPS password>
@adtums.sql <DIRECTORY>
```

For Windows users:

```
C:\> cd %AD_TOP%\patches\107\sql
C:\> sqlplus <APPS username>/<APPS password>
@adtums.sql <DIRECTORY>
```

If you are upgrading from release 11.0, the script needs to be run from the following location:

For UNIX users:

```
$ cd $AD_TOP/patches/110/sql
$ sqlplus <APPS username> / < APPS password>
@adtums.sql <DIRECTORY>
```

For Windows users:

```
C:\> cd %AD_TOP%\patches\110\sql
C:\> sqlplus <APPS username>/<APPS password>
@adtums.sql <DIRECTORY>
```

5. What is the significance of custom.pll and what does it contain?

Custom.pll is the custom library. If you have done some customization in Oracle Applications, you must preserve the custom library (custom.pll) which contains the details of the customizations done in the application system. It is used to migrate to 11i.

6. What is the actual upgrade process for doing an upgrade for a non-11i application system?

Once all the pre-upgrade tasks are done, we can start the actual upgrade. The upgrade starts with running RapidInstall. It needs to run twice – one for doing the actual upgrade and secondly, for configuring all application systems once the upgrade is complete. This is the sequence in which the upgrade works from a 10.7 or 11.0.x release to 11.5.10CU2.

- Enter configuration parameters and run RapidInstall
- Run autoUpgrade to upgrade products and database objects
- Run AutoPatch to apply the patches
- Run RapidInstall to configure and start all the servers and services

7. If I run the RapidInstall, does it mean that it creates a new application system for me? What happens to the existing database?

RapidInstall connects to the existing database and creates the new database ORACLE_HOME, APPL_TOP and the Tech stack. Once the RapidInstall is run, you need to migrate the existing database to 9i run AutoUpgrade and then to switch to the new application system. Once this is done, you need to take care of all the customizations in the new APPL_TOP, apply the required patches and then run the RapidInstall again to configure all the servers.

8. What is AutoUpgrade and why do we need to run AutoUpgrade?

Once the RapidInstall is run successfully the next step is to run AutoUpgrade. It is used to upgrade Oracle application product from the earlier version to the base version of the latest release. It can be started from the command prompt by invoking the AutoUpgrade utility by typing adaimgr.

9. Where is the location of the adaimgr log files?

I. If the environment variable \$APPLCSF is set, the default location is \$APPLCSF/\$APPLLOG

II. If the environment variable \$APPLCSF is not set, the logs go to \$FND_TOP/\$APPLLOG

10. Explain briefly the steps in the AutoUpgrade process?

There are three steps in the AutoUpgrade process:

1. Choosing database parameters

The first option is the adaimgr main menu which is used for choosing the database parameters. From this screen, you can do the following:

- Changing the default Oracle user id and password for each product
- Setting the sizing factor for new objects of a product or for new products
- Setting the table spaces for new products
- Changing the table spaces for existing products

2. Choosing overall tasks and their parameters

This is the second option in the AutoUpgrade main menu. It displays the tasks that AutoUpgrade will do during the upgrade processing. You can do the following from this screen.

- Create applications environment file
- Verify files necessary for install/upgrade
- Install or upgrade database objects

3. Running the selected tasks

This is the third step in the AutoUpgrade process. Here it prompts for the following:

- How do you wish to enable parallel concurrent processing
- Do you wish to use the 8.3 file name convention [No]
- Enter the common area for the log and the out files
- Enter the directory for applications temporary files
- Enter the directory for reports temporary files
- Enter the Web server host machine
- Enter the port number

Once all the information is given, the AutoUpgrade starts running and verifies the files for all the products one by one.

11. Explain in details what are the pre-upgrade steps for upgrading to 11.5.10 for 11i application system?

The following are the pre-upgrade steps for the upgrade process for 11i application system.

Announcing downtime

The first step towards an upgrade is announcing a downtime. All the users must be communicated with the downtime well in advance and the downtime should be planned in such a way that it affects the least in terms of revenue. Ideally the upgrade should be planned in weekends or holidays where you can afford to have a downtime.

Backing up application system

A full backup of the database and the APPL_TOP must be taken before starting the upgrade process so that in case of any upgrade failures you can revert back to the existing system. A cold backup of the database should be taken with the normal shutdown.

Running TUMS utility

TUMS is a utility to help customers reduce the number of steps necessary in the upgrade. It looks at a customer's specific situation, and identifies which steps are irrelevant for that customer. The output of TUMS can be used to reduce upgrade time. The upgrade manual script (TUMS) is used to create a report that lists the upgrade steps that don't apply to Oracle Application installation. You can ignore the steps that are generated with the report of TUMS.

The TUMS for 11.5.10 maintenance pack report will be created in the directory UTL_FILE_DIR. So make sure that this directory has proper write permission.

Once the patch is applied successfully, the TUMS report can be generated using the following command:

```
$ cd $AD_TOP/patch/115/sql
$ sqlplus <APPS username>/<APPS password>
@adtums.sql <DIRECTORY>
```

For updating the auto config tech stack components, you need to apply the patch 4489303. Make sure you follow all the steps as mentioned in the readme of the patch.

Running tech stack validation utility

Apply the patch 4318672 in all the nodes of the APPL_TOP to install the utility which verifies the minimum technology stack components version and the other configuration requirements which are associated with the 11.5.10 CU 2 maintenance pack. Once this patch is applied you need to run the technology stack validation utility at the APPL_TOP as well as at the database.

The utility can be run with the following command:

At APPL_TOP

```
$ADPERLPRG $FND_TOP/patch/115/bin/TXKScript/p1
- script=$FND_TOP/patch/115/bin/txkVa111510MP.p1

- txktop=$APPLTMP

- appspass=<apps_password>

- outfile=$APPLTMP/txkVa111510MP.html
```

At Database

```
$ADPERLPRG $ORACLE_HOME/appstil/bin/TXKScript/pl  
- script=$ORACLE_HOME/appsutil/bin/txkVa111510MP.pl  
  
- txktop=$ORACLE_HOME  
  
- appspass=<apps_password>  
  
- outfile=$ORACLE_HOME/appsutil/temp/txkVa111510MP_DB.html  
  
-
```

The utility must return the “[ALLPASS]” status on each application tier server node as well as database server nodes in order for you to be able to continue with the installation of the release 11.5.10 maintenance pack. If the “[FAIL]” status is returned for any test on any node, you must take the specified action to fix the problem, re-run the utility on each node that reported a failure, and ensure that the “[ALLPASS]” status is returned.

Converting to OATM model (optional)

The 11.5.10 release of Oracle Application introduces a new Oracle Application Tablespace Model (OATM) consisting only twelve tablespaces. In this model, each database object is mapped to a tablespace based on its input output characters, which include object size, life span, access methods and locking granularity. This model facilitates easier maintenance, reduced space usage, and run-time performance gains for Oracle applications. The OATM uses locally managed tablespaces. In previous release of 11i, each product was allocated two separate tablespaces – one for index and the other for data. But with OATM the total number of tablespace has been reduced to 12 including temporary tablespace, system tablespace, and undo segments. If your application system is on a previous release then you can switch to OATM model using the Oracle Application Tablespace Migration Utility. This is an optional step.

Configuring database for new products

The database must be configured for the new products, which are added since the release of 11i. For this, you need to apply the patch 3180164 which takes care of adding the new product details in your environment. Follow all the steps as mentioned in the readme of the patch.

Product specific steps

Apart from these steps there are many product specific pre-install steps that need to be done before the application of the maintenance pack. Since these tasks are specifically related to products that are installed so we are not discussing the same here. You must check this with the Oracle manual while doing an upgrade.

12. Explain in details the actual upgrade steps for upgrading to 11.5.10 for an 11i application system.

The following are the actual upgrade steps for upgrading to 11.5.10 for an 11i application system.

Stop middle tier

Shutdown all the components of the middle tiers before starting the patching. For stopping the same, you can use the script `adstpall.sh` which is located in the `$APPLCSF/scripts/<sid>` directory.

Upgrading database

Before applying the 11.5.10 CU2, the database must be upgraded to 9i release 2 or a higher version of Oracle RDBMS. If you are planning to upgrade to 9.2.0 version then you must follow the steps given in the metalink note 216550.1 and if you are planning to upgrade to 10g release 1 then you must follow the steps given in the metalink note 282038.1.

Apply 11.5.10 CU 2 maintenance pack

Apply the 11.5.10 CU 2 patch 3480000. in case you have a multiple node APPL_TOP then the patch should be applied at the admin tier at first and then should be applied in all the other nodes of the APPL_TOP one by one. If you have any other languages installed other than American English then you must apply the NLS patch immediately after the base patch. In case you are upgrading from release 11.5.4 or earlier version, you must run the `adadmin` and choose the option "Maintain multi-lingual tables". The NLS patch also needs to be applied from all the nodes in case of a multiple node installation.

The autopatch also takes care of performing the post-installation steps during the patching itself like compiling Apps schema, compiling the flexfields, maintaining MRC, compiling JSPs, generating JAR files, generating forms etc. which earlier needs to be done manually after patching.

13. What are the post-upgrade steps that need to be followed once the upgrade is done?

The following are the post-upgrade steps.

Start middle tier

Once the 11.5.10 CU 2 patch has been successfully applied, you can start all the middle tiers. You are starting the middle tiers for testing purpose only, so the access to the users to the application system should not be given till you complete all the steps.

Registering new products

The new products, that are added, don't get registered in the database automatically. They need to be done manually. For this, you have to use the license manager which can be invoked using the Oracle Application Manger.

Dropping MRC schema

The Multiple Reporting Currencies (MRC) schema is no longer used anymore. You can safely drop the schema at any time. This can be done online also and no downtime is required for this. The following script needs to run for doing the same.

```
$ cd $APPL_TOP/admin
$ sqlplus SYSTEM/<SYSTEM password>
@addrpmrc.sql <APPLSYS_USERNAME> SAFE
```

Product-specific tasks

Apart from all these tasks, there are a lot many product-specific tasks that need to be done as a part of Oracle Application Upgradation. Consult the Oracle manual for getting a list of all those tasks.

Sanity testing

Once all the product specific tasks are done, do a sanity test to check that the environment is working fine. If you are facing some issue after the upgradation, then contact the Oracle support with full details of the error.

Announce environment to users

Once the sanity testing is done and all the logins are working fine then announce the environment to the users so that they can start using it. Take a complete backup of the environment as soon as possible.

14. How can you upgrade the database or the techstack using the RapidInstall?

For starting the database or techstack upgrade using the RapidInstall, the RapidInstall screen is invoked by typing rapidwiz – techstack from the command prompt. It then gives two options to choose from

Upgradation to 9i ORACLE_HOME

Upgrading to 9iAS 1.0.2.2.2.

Interview questions:

1. What is Location of Jserv configuration files?

Jserv configuration files are located in \$IAS_ORACLE_HOME/Apache/Jserv/etc

2. What is wdbsvr.app file used for? What's full path of this file? What's significance of this file?

I'll again suggest you don't just remember answer & try to solve mystery behind this file. First where this file exists ?

You can find this file under \$IAS_ORACLE_HOME/Apache/modplsql/cfg

Based on file location I am sure you can say this is related to Apache, & looking into modplsql/cfg, I am sure you will say its related to mod_pls (mod plsql component of Apache/Oracle 11i WebServer) configuration file. This file is used by mod_plsql component of Apache to connect to database. So when you type url http://hostname:port/pls/SID , whenever Apache(11i Web Server) finds that request is for /pls/ then Apache delegates this request to mod_pls component which in turn pick this file & check if there is any DAD with name SID (in our example its VISION11I) & Sample entry in wdbsvr.app

```
[DAD_VISION11I]
connect_string = VISION11I
Password = apps
Username = APPS
default_page = fnd_web.ping
```

On typing http://hostname:port/pls/VISION11I, it will connect to database using apps schema & will return you page fnd_web.ping (where fnd_web is package & ping is procedure or vise versa).

3. What are various components in Application/Middle Tier.

In Application Tier various components are Web Server, Forms Server , Reports Server, Concurrent Manager, Admin Server & Discoverer Server.

4. What is APPL_TOP, COMN_TOP, ORA_TOP.....

XXX_TOP is top level directory in Oracle Application 11i for respective Component. To know more about various TOP's Click Here

5. What are issues you encountered during Oracle Applications 11i?

Answer to this question will depend on issues you encountered. Don't lie in front of Interviewer. If you have not installed applications 11i accept it.

6. What's difference between TWO user & single User Apps 11i Install ? What are advantages/disadvantages of two ?

7. What's US directory in \$AD_TOP or under various product TOP's .

US directory is default language directory in Oracle Applications. If you have multiple languages installed in your Applications then you will see other languages directories besides US, that directory will contain reports, fmx and other code in that respective directory like FR for France, AR for arabic, simplifies chinese or spanish.

8. What are main concurrent Manager Types.

ICM - Internal Concurrent Manager Manager which manages concurrent Managers
Standard Managers Which Manage processing of requests?
CRM - Conflict Resolution Managers Resolve conflicts in case of incompatibility.

9. Where is Concurrent Manager log file location.

By default standard location is \$APPLCSF/\$APPLLOG , in some cases it can go to \$FND_TOP/log as well.

10. Where would i find .rf9 file, and what exactly it dose?

These files are used during restart of patch in case of patch failure because of some reason.

11. Where is appsweb.cfg or appsweb_\$CONTEXT.cfg stored & why it's used?

This file is defined by environment variable FORMS60_WEB_CONFIG_FILE This is usually in directory \$OA_HTML/bin on forms tier.

This file is used by any forms client session. When a user try to access forms , f60webmx picks up this file and based on this configuration file creates a forms session to user/client.

12. What is multi node system ?

Multi Node System in Oracle Applications 11i means you have Applications 11i Component on more than one system. Typical example is Database, Concurrent Manager on one machine and forms, Web Server on second machine is example of Two Node System.

13. Can you clone from multi node system to single node system & vice versa ?

Yes, this is now supported via Rapid Clone, Check if your system has all pre-req. patches for Rapid Clone and you are on latest rapid clone patch.

14. Does rapid clone takes care of Updating Global oraInventory or you have to register manually in Global OraInventory after clone?

Rapid Clone will automatically Update Global oraInventory during configuration phase. You don't have to do any thing manually for Global oraInventory.

15. What is .dbc file , where its stored , whats use of .dbc file ?

dbc as name says is database connect descriptor file which stores database connection information used by application tier to connect to database.

This file is in directory \$FND_TOP/secure also called as FND_SECURE

16. What things you do to reduce patch timing? You can take advantage of following -

Merging patches via admrgpch

Use various adpatch options like nocompiledb or nocompilejsp

Use defaults file

Staged APPL_TOP during upgrades

Increase batch size (Might result into negative)

17. How you put Applications 11i in Maintenance mode ?

Use adadmin to change Maintenance mode in Oracle Apps. With AD.I you need to enable maintenance mode in order to apply apps patch via adpatch utility. If you don't want to put apps in maintenance mode you can use adpatch options=hotpatch feature.

18. Can you apply patch without putting Applications 11i in Maintenance mode?

Yes, use options= hotpatch as mentioned above with adpatch.

19. What are various options available with adpatch?

Various options available with adpatch depending on your AD version are Autoconfig, check_exclusive, checkfile, compiledb, compilejsp, copyportion, databaseportion, generateportion, hotpatch, integrity, maintainmrc, parallel, prereq, validate

20. Adident utility is used for what?

Adident utility in oracle apps is used to find version of any file.

AD Identification.

ex. "adident Header <filename>

21. What is adsplice utility?

Adsplice in oracle apps is utility to add a new product.

22. How can you licence a product after installation?

You can use ad utility adlicmgr to licence product in Oracle Apps.

23. What is MRC? What you do as Apps DBA for MRC?

MRC also called as Multiple Reporting Currency in oracle Apps. Default you have currency in US Dollars but if your organization operating books are in other currency then you as apps dba need to enable MRC in Apps.

24. What is JVM (Java Virtual Machine) and which component uses JVM?

JVM stands for Java Virtual Machine,

25. What is access_log in apache, what entries are recorded in access_log? Where is default location of this file?

Access_log in Oracle Application Server records all users accessing oracle applications
11i.

This file location is defined in httpd.conf with default location at
\$IAS_ORACLE_HOME/Apache/Apache/logs.

Entries in this file is defined by directive LogFormat in httpd.conf Typical entry in
access_log is
198.0.0.1 - - [10/Sep/2006:18:37:17 +0100] "POST /OA_HTML/OA.jsp?.... HTTP/1.1"
200 28035
Where 200 is HTTP status code & last digits 28035 is bytes downloaded as this page
(Size of page)

26. Where is Jserv configuration files stored?

Jserv configuration files are stored in \$IAS_ORACLE_HOME/Apache/Jserv/etc

27. What is session time out parameter & where all you define these values?

To know about session time out parameter & location where its defined [Click Here](#)

28. Where is applications start/stop scripts stored ?

Applications start/stop scripts are in directory \$COMMON_TOP/admin/scripts/
\$CONTEXT_NAME

29. What are main configuration files in Web Server (Apache)?

Main configuration files in Oracle Apps Web Server are

httpd.conf, apps.conf, oracle_apache.conf, httpd_pls.conf

jserv.conf, ssp_init.txt, jserv.properties, zone.properties

plsqli.conf, wdbsvr.app, plsqli.conf

30. What is profile option, what are various types of profile options?

31. What is APPS listener? Why is it used?
32. How do you start/stop apps listener?
33. If users complaining Oracle Applications 11i system is running slow, what all things you will check at broad level?
34. What is Autoconfig?
35. What is context file?
36. Why appsutil directory under Database ORACLE_HOME used for?
37. How to create User in Oracle Applications 11i? Can you delete a User?
38. What is Single Sign On? (If you are using portal 3.0.9 or 10G)?
39. How to configure portal with 11i? (If you are using portal 3.0.9 or 10G)?

40. How to check if Apps 11i System is Autoconfig enabled?

Under \$AD_TOP/bin check for file adcfginfo.sh & if this exists use
adcfginfo.sh contextfile=<CONTEXT> show=enabled

If this file is not there, look for any configuration file under APPL_TOP if system is Autoconfig enabled then you will see entry like

```
# AutoConfig automatically generates this file. It will be read and.....
```

41. How to check if Oracle Apps 11i System is Rapid Clone enabled?

For system to be Rapid Clone enabled, it should be Autoconfig enabled (Check above How to confirm if Apps 11i is Autoconfig enabled). You should have Rapid Clone Patches applied, Rapid Clone is part of Rapid Install Product whose Family Pack Name is ADX. By default all Apps 11i Instances 11.5.9 and above are Autoconfig & Rapid Clone enabled.

42. What is the difference between two env files in <CONTEXT>.env and APPS<CONTEXT>.env under \$APPL_TOP?

APPS<CONTEXT>.env is main environment file which in turn calls other environment files like <CONTEXT>.env under \$APPL_TOP, <CONTEXT>.env under 806 ORACLE_HOME and custom<CONTEXT>.env for any Customized environment files.

42. What is access_log in Apache?

access_log file keeps record of users accessing Oracle Apps 11i Webserver.

Typical entry in access_log is like

```
198.0.0.1 - - [25/Aug/2006 :03:15:13 +0100] "GET /OA_JAVA /oracle /forms /registry/Registry.dat HTTP/1.1" 200 4117
```

Which means client with IP 198.0.0.1 requested for file mentioned above on 25 Aug 2006 at 03:15 AM , 200 is status code returned by Apache which means page returned successfully (Status Code 302 means page redirected , 404 page not found, 500+ Internal Server error)

last digit 4117 in above entry of access_log means file size which is 4117 bytes. This file is quite useful in monitoring your Web Server.

Please note above format might defer on your system as this is dependent log_format in Apache configuration file (httpd.conf)

43. What is the location of access_log file?

access_log file by default is located in \$IAS_ORACLE_HOME/ Apache/Apache/logs. Location of this file is defined in httpd.conf by parameter CustomLog or TransferLog

44. What is your Oracle Apps 11i Webserver Version and how to find it?

From 11.5.8 to 11.5.10 Webserver version is iAS 1.0.2.2.2, In order to find version under \$IAS_ORACLE_HOME/Apache/Apache/bin execute ./httpd -version
./httpd -version

Server version: Oracle HTTP Server Powered by Apache/1.3.19

Server built: Dec 6 2005 14:59:13 (iAS 1.0.2.2.2 rollup 5)

45. What is Location of Jserv configuration files?

Jserv configuration files are located in \$IAS_ORACLE_HOME /Apache/Jserv/etc.

46. What is plssql/database cache? In order to improve performance mod_pls (Apache component)

caches some database content to file. This database/plssql cache is usually of type session & plsql cache

session cache is used to store session information.

plsql cache is used to store plsql cache i.e. used by mod_pls

47. Where is database/plssql cache stored?

plssql & session cache are stored under \$IAS_ORACLE_HOME/
Apache/modplsql/cache directory.

48. How to determine Oracle Apps 11i Version?

Select RELEASE_NAME from fnd_product_groups;

You should see output like

```
RELEASE_NAME  
-----  
11.5.9 or 11.5.10.2
```

49. What is *.dbc file & what is the location of dbc file?

dbc as name stands for is database connect descriptor file used to connect to database. This file by default located in \$FND_TOP/secure directory also called as \$FND_SECURE directory.

50. What is content of dbc file & why it's important?

DBC file is quite important as whenever Java or any other program like forms want to connect to database it uses dbc file.

Typical entry in dbc file is
GUEST_USER_PWD
APPS_JDBC_URL
DB_HOST

51. There are lot of dbc file under \$FND_SECURE, How to determined that which dbc file to use from \$FND_SECURE?

This value is determined from profile option "Applications Database ID"

52. What is RRA/FNDFS ?

Report Review Agent(RRA) also referred by executable FNDFS is default text viewer in Oracle Applications 11i for viewing output files & log files. As most of apps dba's are not clear about Report Server & RRA, I'll discuss one on my blog and update link here.

53. What is PCP is Oracle Applications 11i?

PCP is acronym for parallel concurrent processing. Usually you have one Concurrent Manager executing your requests but if you can configure Concurrent Manager running on two machines (Yes you need to do some additional steps in order to configure Parallel Concurrent Processing). So for some of your requests primary CM Node is on machine1 and secondary CM node on machine2 and for some requests primary CM is on machine2 & secondary CM on machine1.

55. Why I need two Concurrent Processing Nodes or in what scenarios PCP is used?

Well if you are running GL Month end reports or taxation reports annually these reports might take couple of days. Some of these requests are very resource intensive so you can have one node running long running; resource intensive requests while other processing your day to day short running request.

Another scenario is when your requests are very critical and you want high resilience for your Concurrent Processing Node, you can configure PCP. So if node1 goes down you still have CM node available processing your requests.

56. Output & Logfiles for requests executed on source Instance not working on cloned Instance

Here is exact problem description - You cloned an Oracle Apps Instance from PRODBOX to another box with Instance name say CLONEBOX on 1st of August. You can any CM logs/output files after 1st of August only because these all are generated on CLONEBOX itself, But unable to view the logs/output files which are prior to 1st August. What will you do & where to check ?

Log , Output file path & location is stored in table FND_CONCURRENT_REQUESTS. Check

```
select logfile_name, logfile_node_name, outfile_name, outfile_node_name from
fnd_concurrent_requests where request_id=&requestid ;
where requestid is id of request for which you are not able to see log or out files. You
should see output like
/u01/PRODBOX/log/1123456.req, host1,/u01/PRODBOX/out/o123456.out, host1
Update it according to your cloned Instance Variables.
```

57. How to confirm if Report Server is Up & Running ?

Report Server is started by executable rwmts60 on concurrent manager Node & this file is under \$ORACLE_HOME/bin .execute command on your server like

```
ps -ef | grep rwmts60
```

You should get output like

```
applmgr ..... rwmts60 name=REP60_VISION
```

where VISION is your Instance name.

Else you can submit a request like "Active Users" with display set to PDF, check output & log file to see if report server can display PDF files.

58. What is difference between ICM, Standard Managers & CRM in Concurrent Manager?

ICM stand for Internal Concurrent Manager, which controls other managers. If it finds other managers down, it checks & try to restart them. You can say it as administrator to other concurrent managers. It has other tasks as well.

Standard Manager these are normal managers which control/action on the requests & does batch or single request processing.

CRM acronym for Conflict Resolution Manager is used to resolve conflicts between managers & request. If a request is submitted whose execution is clashing or it is defined not to run while a particular type of request is running then such requests are actioned/assigned to CRM for Incompatibilities & Conflict resolution.

59. What is use of Apps listener ?

Apps Listener usually running on All Oracle Applications 11i Nodes with listener alias as APPS_\$\$SID is mainly used for listening requests for services like FNDFS & FNDSM.

60. How to start Apps listener ?

In Oracle 11i, you have script adalnctl.sh which will start your apps listener. You can also start it by command

```
lsnrctl start APPS_$$SID (Replace sid by your Instance SID Name)
```

61. How to confirm if Apps Listener is Up & Running ?
execute below command

```
lsnrctl status APPS_$$SID (replcae SID with your Instance Name)  
so If your SID is VISION then use lsnrctl status APPS_VISION out put should be like  
Services Summary...
```

```
FNDFS has 1 service handler(s)  
FNDSM has 1 service handler(s)  
The command completed successfully
```

62. What is Web Listener ?

Web Listener is Web Server listener which is listening for web Services(HTTP) request. This listener is started by adapctl.sh & defined by directive (Listen, Port) in httpd.conf for Web Server. When you initially type request like <http://becomeappsdba.blogspot.com:80> to access application here port number 80 is Web Listener port.

63. How will you find Invalid Objects in database ?

```
using query  
SQLPLUS> select count(*) from dba_objects where status like 'INVALID';
```

64. How to compile Invalid Objects in database ?

You can use adadmin utility to compile or you can use utlrp.sql script shipped with Oracle Database to compile Invalid Database Objects.

65. How to compile JSP in Oracle Apps ?

You can use ojspCompile.pl perl script shipped with Oracle apps to compile JSP files. This script is under \$JTF_TOP/admin/scripts. Sample compilation method is
perl ojspCompile.pl --compile --quiet

66. What is difference between adpatch & opatch ?

adpatch is utility to apply oracle apps Patches whereas
opatch is utility to apply database patches

67. Can you use both adpatch & opatch in Apps ?

Yes you have to use both in apps , for apps patches you will use adpatch utility and for applying database patch in apps you will opatch utility.

68. Where will you find forms configuration details apart from xml file ?

Forms configuration at time of startup is in script adfrmctl.sh and
appsweb_\$CONTEXT_NAME.cfg (defined by environment variable
FORMS60_WEB_CONFIG_FILE) for forms client connection used each time a user
initiates forms connection.

69. What is forms server executable Name ?

f60srm

70. What are different modes of forms in which you can start Forms Server and which one is default ?

You can start forms server in SOCKET or SERVLET by default Forms are configured to start in socket mode.

71. How you will start Discoverer in Oracle Apps 11i ?

In order to start discoverer you can use script addisctl.sh under \$OAD_TOP/admin/scripts/\$CONTEXT_NAME or startall.sh under \$ORACLE_HOME/discwb4/util (under Middle/Application Tier)

72. How many ORACLE HOME are Oracle Apps and whats significance of each ?

There are three \$ORACLE_HOME in Oracle Apps, Two for Application Tier (Middle Tier) and One in Database Tier.

ORACLE_HOME 1 : On Application Tier used to store 8.0.6 techstack software. This is used by forms, reports & discoverer. ORACLE_HOME should point to this ORACLE_HOME which applying Apps Patch.

ORACLE_HOME 2: On Application Tier used by iAS (Web Server) techstack software. This is used by Web Listener & contains Apache.

ORACLE_HOME 3: On Database Tier used by Database Software usually 8i,9i or 10g database.

73. Where is HTML Cache stored in Oracle Apps Server ?

Oracle HTML Cache is available at \$COMMON_TOP/_pages for some previous versions you might find it in \$OA_HTML/_pages

74. Where is plsql cache stored in Oracle Apps ?

Usually two type of cache session & plsql stored under \$IAS_ORACLE_HOME/Apache/modplsql/cache

What happens if the ICM goes down?

1. All the other managers will keep working. ICM only takes care of the queue control requests, which means starting up and shutting down other concurrent managers. How will you speed up the patching process?
2.
 - o You can merge multiple patches.
 - o You can create a response file for non-interactive patching.

- o You can apply patches with options (nocompiledb, nomaintainmrc, nocompilejsp) and run these once after applying all the patches.
How will you handle an error during patching?

3. Look at the log of the failed worker, identify and rectify the error and restart the worker using adctrl utility.

Provide a high-level overview of the cloning process and post-clone manual steps

4. Run pre-clone on the source (all tiers), duplicate the DB using RMAN (or restore the DB from a hot or cold backup), copy the file systems and then run post-clone on the target (all tiers).

Manual steps (there can be many more):

- o Change all non-site profile option values (RapidClone only changes site-level profile options).

- o Modify workflow and concurrent manager tables.

- o Change printers.

Provide an introduction to AutoConfig. How does AutoConfig know which value from the XML file needs to be put in which file?

5. AutoConfig uses a context file to maintain key configuration files. A context file is an XML file in the \$APPL_TOP/admin directory and is the centralized repository. When you run AutoConfig it reads the XML files and creates all the AutoConfig managed configuration files.

For each configuration file maintained by AutoConfig, there exists a template file which determines which values to pick from the XML file.

Can you tell me a few tests you will do to troubleshoot self-service login problems?

Which profile options and files will you check?

6.

- o Check guest user/password in the DBC file, profile option guest user/password, the DB.

- o Check whether apache/jserv is up.

- o Run IsItWorking, FND_WEB.PING, aoljtest, etc.

What could be wrong if you are unable to view concurrent manager log and output files?

7. Most likely the FNDFS listener is down. Look at the value of OUTFILE_NODE_NAME and LOGFILE_NODE_NAME in the FND_CONCURRENT_REQUESTS table. Look at the FND_NODES table. Look at the FNDFS_ entry in tnsnames.ora.

The Oracle Applications FNDFS program, used to retrieve report output from the Concurrent Manager server, can be used to remotely retrieve any file from the server without operating system or application authentication. A mandatory patch from Oracle is required to solve this security issue.

How will you change the location of concurrent manager log and output files?

8. The location of log files is determined by parameter \$APPLCSF/\$APPLLOG and that of output files by \$APPLCSF/\$APPLOUT.

If the user is experiencing performance issues, how will you go about finding the cause?

9.

- o Trace his session (with waits) and use tkprof to analyze the trace file.
- o Take a statspack report and analyze it.
- o O/s monitoring using top/iostat/sar/vmstat.
- o Check for any network bottleneck by using basic tests like ping results.

How will you change the apps password?

10.

- o Use FNDCPASS to change APPS password.
- o Manually modify wdbsvr.app/cgiCMD.dat files.
- o Change any DB links pointing from other instances.

Provide the location of the DBC file and explain its significance and how applications know the name of the DBC file

11.

- o Location: \$FND_TOP/secure directory.
- o Significance: Points to the DB server amongst other things.
- o The application knows the name of the DBC file by using profile option "Applications Database Id."

1. Is 10g certified with E-Business Suite?

Oracle Applications 11i (version 11.5.9 and version 11.5.10) is now certified for use with the Oracle Database 10g Release 2 (minimum version 10.2.0.2) running on Linux x86 and other platforms. Requisite patches and other instructions have been published via MetaLink Note# 362203.1 (Interoperability Notes - Oracle Applications 11i with Oracle Database 10g Release 2). For specific platform versions supported, please check Certify.

Oracle Applications 11i (version 11.5.9 and version 11.5.10) is certified for use with the Oracle Database 10g Release 1 (minimum version 10.1.0.4) running on Linux x86 and other platforms. Requisite patches and other instructions have been published via MetaLink Note# 282038.1 (Interoperability Notes - Oracle Applications 11i with Oracle Database 10g Release 1). For specific platform versions supported, please check Certify.

2. Will there be additional database patches required on top of 10g ?

Yes.

All the required patches for Oracle Database 10g Release1 are documented in MetaLink Note# 282038.1

All the required patches for Oracle Database 10g Release2 are documented in MetaLink Note# 362203.1

3. What are the supported versions for 9i2 Database (9.2.0.x) and E-Business Suite ?
Currently 9.2.0.8 is certified on E-Business Suite 11.5.7 and above. You can refer Metalink Note# 216550.1 for more details..

4. Are the Real Application Clusters (RAC) and Automatic Storage Management (ASM) features also certified with 10g ?

Yes. If 10g certification is announced on a platform, RAC and ASM are also certified on that platform

5. My customer would like to start planning for 10g Real Application Clusters (RAC) and Automated Storage Management (ASM) upgrade immediately, are there any development programs to assist him?

Yes, for customers planning on using 10g RAC or 10g ASM they can avail of the 10g APPSRAP program. This program is available on invitation for all customers. Customers interested in this program can direct their Account Manger or Service Delivery Manager to the Oracle Internal AppsRAP website:

<http://appsrap.us.oracle.com> and contact the Program Manager, Vamsi Mudumba (vamsi.mudumba@oracle.com)

6. What are the supported versions for 9i RAC and E-Business Suite ?

Currently 9.2.0.8 RAC is certified on E-Business Suite 11.5.7 and above. For the latest information on certified combinations ,platform information please go to Certify on MetaLink

7. Which Application Modules in the E-Business Suite support Real Application Clusters (RAC) ?

All E-Business Suite modules work when deployed in a RAC enabled database platform. For specific Application specific best practices, look at the Section on Application Specific Best Practices
Technical Architecture

1. Is it possible to deploy E-Business Suite 11i on an Itanium Database Server ?

Yes. More details regarding supported Itanium platforms and migration process are documented in Metalink Note# 304489.1

2. Is the use of BIG-IP Load Balancer across multiple mid-tiers supported ?

Hardware load balancers are a supported configuration for Application architecture. Now, there is autoconfig support too for this architecture. For more information, see Oracle MetaLink Note 217368.1 , Advanced Configurations and Topologies for Enterprise Deployments of E-Business Suite 11i.

3. Can Oracle Web Cache be used with Oracle iStore 11i implementations?

Oracle Web Cache is certified for use with Oracle iStore 11i. See MetaLink Note# 186981.1 for a more detailed discussion on this topic

4. Is MTS supported for E-Business Suite 11i customers ?

MTS can be used with E-Business Suite 11i. However, it is only useful on 32 bit Windows. It is not recommended for other platforms as the overall performance is worse with MTS, and the shared pool footprint explodes. The dispatcher also increases overall data server CPU with 11i workloads.

5. Are extended clusters with RAC supported for 11i ?

Yes. A few customers are currently live with this architecture (eg: Canon Europa in Netherlands)

6. Is the use of separate Operating Systems supported for Midtier and Database ?

Yes. This is called a split configuration for 11i. For more details on what combinations are certified look at Certify on Metalink
Install

1. Can an OUI based global inventory be recreated ?

If the new XML format inventory is being used, just re-register to the global inventory. If that's not the case then there is no easy way to recover it. It will be a manual effort specific to each scenario and will result in data loss which might not be critical always.

2. What's the impact of setting the column SESSION_COOKIE_NAME in the ICX_PARAMETERS table in a RAC environment ?

The Self-Service infrastructure (ICX), by default, uses the database instance name as part of the cookie name if the cookie name has not been explicitly set by the administrator. In the RAC environment, the database instance name can change based on which instance the users were connected. Hence, you should explicitly set the cookie name (SESSION_COOKIE_NAME) to a constant value in the ICX_PARAMETERS table. Update the ICX_PARAMETERS table from the Apps schema using the following example.

```
SQL> update ICX_PARAMETERS  
set SESSION_COOKIE_NAME='VISRAC1';
```

3. What's the impact of setting the profile option Applications Database Id in a RAC environment ?

Applications Database Id needs to be set in RAC based environments in order to avoid a cookie mismatch. Since RAC environments will have multiple rows in gv\$instance, the profile must be set to avoid mismatches when building the cookie. The difference between setting the column SESSION_COOKIE_NAME in ICX_PARAMETERS table, and Applications Database Id is that SESSION_COOKIE_NAME provides control to override the default cookie naming at the site level, while Applications Database Id, can be implemented at either the site, responsibility, or user levels. It's best to set both of them to the same value at the site level.

Concurrent Processing

1. How should SFM processes be defined in a PCP environment with RAC?

Define a primary and secondary node for all the SFM managers just like the rest of the managers. SFM must run corresponding to every database node that serves fulfillment requests (similar to the transaction managers). Please look at MetaLink Note# 240818.1 for more information

2. Can multiple transaction managers be started on multiple servers serving a difference instance without using PCP ?

No. PCP should be used for all such configurations.

3. Is there a requirement for a NAS device (like NetApp) to store all the output and log files when using PCP ?

No. PCP can be used with files that are stored on local servers. You will have to setup FNDfs appropriately so that files on one node can be accessed by requests from another node. It is also recommended to set the init.ora parameter `max_commit_propagation_delay= 0`. For Compaq Tru64 clusters only, please set `max_commit_propagation_delay= 1`.

4: Does FNDfs support load balancing and failover ?

Yes, if load balancing or failover support is required for FNDfs, then the file system will have to be identical on all the hosts.

5. Should I separate my concurrent processing tier from the database tier ?

Historically, the accepted best practice for concurrent manager deployment has been to run the Concurrent Manager processes on the same server(s) as the database itself, to eliminate network traffic between the managers and their dedicated server processes. However, with the availability of fast LANs between the middle tier servers and database servers, best practice now is to configure the managers to run on separate middle tier servers. This gives you maximum flexibility on choosing hardware platforms (the database tier can be a different platform than the middle tiers) and allows the database servers to be fully available for database processing, with no cycles needed for batch programs.

6. Are virtual hostnames currently supported with Concurrent Processing ?

No. There is no support for virtual hosts with CP

7. We run a huge number of concurrent requests in our environment. What are general tips for better performance ?

1) Check the corresponding concurrent manager parameters and tune them - process, sleep, cache

2) Check the process and session parameters in init.ora or spfile for the database instance

3) Check to see if there are any fnd tables that are frequently locking and increase the freelist parameter (if not using Automatic Segment Space Management, ASSM)

4) Run the purge concurrent request job

8. How do Java concurrent programs work ? Can I direct load for Java concurrent programs to a specific node ?

Java Concurrent Programs and Self-service applications use the connect string specified in DBC file. Currently there is no way to create a separate dbc file for Java Concurrent programs and constrain where they run in a RAC environment if the CP tier and Web tier are shared.

Partitioning

1. Is Partitioning supported with E-Business Suite ?

Yes. Partitioning of Applications standard or custom tables is supported. Oracle Applications utilizes partitioning in the standard product in many modules out-of-the-box.

2. Are there documented best practices for partitioning E-Business Suite objects ?

Currently there are no documented best practices on this topic. Customers intending to partition should understand the data access paths, growth rates, access patterns and modules that the object is used in.

Disaster Recovery

1. Is Logical Standby supported with E-Business Suite 11i ?

No. Logical standby is not supported with E-Business Suite 11i.

2. Is Physical Standby with Real Application Clusters (RAC) supported with E-Business Suite ?

Yes. This is a supported configuration. Best practices are document in Metalink Note# 341437.1

Real Application Clusters (RAC)

Troubleshooting

1. How do I check the IP address / NIC being used for the inter-node traffic ?

To determine the IP address / NIC being used for RAC related traffic, run the following commands in SQL*Plus:

```
SQL> oradebug setmypid
```

```
SQL> oradebug ipc
```

The information written to a trace file in the user_dump_dest will indicate the IP address

2. How can interconnect traffic be monitored ?

1) From the hourly Statspack reports, monitor these statistics (generated every second) from both instances: 'global cache cr blocks served' and 'global cache current blocks served'. This should give the total number of blocks sent across the interconnect per

second during each interval. It would be useful to understand how the interconnect traffic varies over time and what the system is doing when these numbers are high.

2) Run Statspack at level 7 (or higher) to get segment statistics. This should show which segments that contribute to the interconnect traffic. You can also check

gv\$segment_statistics and gv\$cache_transfer.

3) Monitor gv\$session_wait to see which sessions are involved in RAC related waits.

This might give us an idea about which users or modules that are involved in generating the interconnect traffic. It will also give us the specific blocks.

4) Use OS utilities to monitor the interconnect traffic as well. Look for variations over time.

5) Keep an eye on the statistic 'global cache blocks lost' which might indicate problems with the interconnect.

6) Watch for any network errors reported by the OS monitoring utilities.

Database Load Balancing

1. Do I need to do functional partitioning for RAC ?

No.. But you can if you need to push your database servers close to their maximum capacity, and need the small percentage of improved performance provided by distributing the load along functional boundaries. This however does entail more maintenance during failover.

2. How can one achieve functional partitioning for forms modules ?

Set the profile option Database Instance to a specific instance either at the application, responsibility or user level. The internal name for this profile option is INSTANCE_PATH. For more details refer to MetaLink Note# 294652.1 E-Business Suite 11i on RAC : Configuring Database Load balancing & Failover

3. How can one achieve functional partitioning for self-service modules ?

The current method of achieving load partitioning is to redirect self-service users to a specific midtier (using a hardware load balancer) and setting the apps_jdbc_url in the dbc file to be instance specific. Please look at MetaLink Note# 244366.1 for more information.

Cloning

1. Is Cloning supported for a 11i RAC environment ?

Yes. Cloning from RAC to RAC and cloning from RAC to non-RAC systems is supported using Rapid Clone. For a detailed list of steps and best practices, refer to the Advanced Cloning Options Section of MetaLink Note# 230672.1 Cloning Oracle Applications Release 11i with Rapid Clone

2. Is Cloning supported from Raw devices to a cooked file system if an environment needs to be cloned from RAC system to Non-RAC ?

No. This specific scenario is not currently supported with the Rapid Clone infrastructure and is considered a consulting solution. RMAN can be leveraged for the migration from Raw devices to a cooked file system

Application Specific Best Practices

1. What is the recommended value of max_commit_propagation_delay in init.ora for E-Business Suite on RAC ?

It is recommended to set the init.ora parameter max_commit_propagation_delay= 0. For Compaq Tru64 clusters only, please set max_commit_propagation_delay= 1

2. Can I use Advanced Planning and Scheduling (APS) on a separate database that is a RAC cluster ?

Yes, you can. Merging APS into OLTP database and isolating the load to a separate RAC instance is supported. Refer MetaLink Note# 279156.1 and MetaLink Note# 286729.1 for more details.

3. Can I run Email Center in a RAC environment ?

Yes, see MetaLink Note# 272266.1 for RAC related specific instructions.

4. Can I run Oracle Financial Services Applications (OFSA) in a RAC environment ?

Yes, you can. Refer MetaLink Note# 280294.1 for RAC related best practices.

5. Can I run ABM (Activity Based Management) in a RAC environment ?

Yes. ABM is supported in a RAC environment. Refer MetaLink Note# 303542.1 for RAC related best practices.

6. Is patching in a 11i RAC environment difference from a single instance ?

No all best practices that pertain to a single instance environment can be applied for a RAC environment.

Oracle Global Single Instance (GSI)

Configuration

1. What is the configuration of Oracle's GSI Production ?

Database Server:

Hardware: 4 node RAC, 4 Sun F25K , 36 X 1.2GHz CPUs, 144G of Memory

Storage: EMC Disk (6.4 TB)

SGA:

25.0 G total

Buffer Cache 10.0 G

Shared Pool 14.0 G

Middle Tier:

54 Linux middle tier machines

Dell 2650

2 x 3.00 GHz 6G Memory (with hyperthreading)

NetApps Filer Cluster

Hardware Load Balancing:
BigIP
Concurrent Manager

1. What are the issues to be considered during the planning stage for concurrent manager ?
 - a. Are you going to have a shared code tree?
 - b. Are you going to have a shared log/out file system?
 - c. How many middle tier hosts and how are you going to distribute them across the instances?
 - d. Do you have programs that use UTL_FILE_DIR, this is instance specific
 - e. How should failover be setup in the environment ?

2. What strategies are used for managing concurrent queues in production ?

To obtain best throughput for the 100,000 requests run each day, there is a queue framework setup for "critical" workload (approx. 10% of the requests), and "non-critical" workload (approx. 90+% of the requests).

Capacity is always given first to the "critical queues", which should always process with the shortest pending times. The "non-critical" workload is managed by assigning the programs to a queue based upon their expected run-times. This framework prevents long-running requests from clogging up all the queues, which causes very short, fast requests to be stuck up in the queue for a very long time

GSI uses a few workshifts to reduce capacity given to non-critical concurrent workload during the highest on-line peaks of the global day, but all queues have some slots 24 hours / day.

Critical queues: Business determines which programs are assigned to these queues; there is a set of queues for each module (OM, AR, AP/GL, PA, Payroll/HMRS); programs are assigned to the appropriate critical queue using specialization rules to include the specific program name. The critical queue for the application is directed to the database node appropriate to the application (e.g., OM Critical queue runs on node 1)

Non-critical queues: There is a set of 4 queues created for each database node. Programs are assigned to the appropriate queue based upon

- a) the average elapsed time of program, and
- b) the application identifier for the program.

Programs are manually assigned to appropriate queue by "including" the program's "request type" associated with each elapsed time threshold.

o Immediate Queues (request type='IMMEDIATE'): intended for programs whose elapsed time is always < 5 minutes

o Priority Queues (request type='PRIORITY'): intended to include programs whose avg. elapsed time is < 10 minutes (note: the Priority Queues also include the request type for the Immediate Queues)

o Standard Queues (request type='STANDARD'): intended to include programs whose avg. elapsed > 10 minutes and < 10 hours, but can also run Immediate and Priority programs; since this queue is the "default" queue, specialization rules for this queue are "EXCLUDE" only (i.e., exclude Long-running programs)

Long-running, previously called "overnight" (request type='LONGRUN') Queues: intended to include programs whose avg. elapsed > 10 hours, but also includes the request type for Immediate, Priority, and Standard)

3. How are the concurrent queues distributed across multiple instances ?

The concurrent programs are grouped by application with each application group directed to a database instance. This load direction is accomplished by defining a set of queues for each database instance. The instance a concurrent manager connects to is controlled by the environment setup on the associated concurrent processing node. Each set of managers has a set of specialization rules that "include" the request types for the application groups which are associated with the instance the manager assigned to Storage

1. Are you using standard size devices?

Yes.

2. How many sizes do you maintain? Why ?

Three sizes are maintained: 1Gb, 4Gb and 13Gb. We have found that these three sizes are optimal for the growth that we are seeing. 1Gb is for small tablespaces that don't grow much – e.g. system. 4Gb datafiles are used for all everything else apart from the LOB tablespaces and the large tables/indexes that were moved to dedicated tablespace

3. Are there any standards used for naming datafiles and maintaining them ?

The volumes bear the same names as the datafiles so it is quite a clean configuration. We actually refer to the datafiles themselves via links. E.g. filename in dba_datafiles refers to a link, which then points to the datafile. Experience has proven that this approach is very flexible if we need to perform reorganizations and when creating copies (also known as cloning). We use the same approach with our cooked and raw datafile environments

4. How much free space do you maintain?

Tablespace are maintained with at least 5% free space – we get an automatic alert at priority two when there is less than 10% free, at priority 1 when there is less than 5% free.

5. Do you maintain spares, how many, what do you name them?

Spare volumes are created when we have less than 10 left of any size and named extra_size_XXX (XXX being a number). When these are required to be used for new datafiles they are renamed to the datafile name with the lvrename command

6. Are you using volume group striping?

Yes – groups of 8 x 68Gb disks (software striping) , stripe width is 1024 MB. In addition, 8-way striping at hardware level is utilized.

7. What was the process of conversion to raw devices ?

Prior to converting to raw we had established the practices of standard sized datafiles. When it came to the conversion we used dd to relocate the data, dbv to verify the copied files and once they had all been relocated the links were reointed (as described above) to point to the new locations. On large systems this can be parallelized to limit the time taken.

8. Were there any issues faced after converting to raw ?

No – there really isn't any difference between using raw and cooked datafiles aside from the discipline needed to maintain adequate free space, and that is covered by our EM

9. What storage is being used ?

DMX3000

10. Are you using autoextend? What max size? What increment by?

We do not use auto extend as it cannot be used with Raw volumes

11. Do you have multiple dbf's for the same tablespace? Are all autoextend on?

Yes we have multiple datafiles per tablespace, but we don't use autoextend

Monitoring & Troubleshooting

1. What tools are used for monitoring space ?

Enterprise Manager

2. What thresholds are set for monitoring

As above – less than 10% free raises a P2 alert, less that 5% free a P1

3. What set of processes or parameters are monitored ?

Examples are various health points of each node of the database (for example, whether the database is up or down, someone holding a lock which is blocking other users, etc.). Additionally, we monitor on one of the nodes events which are common to the entire database (for example, data storage issues etc.). We can also monitor for concurrent manager events such as long-running and long-pending so that we can investigate the causes of these – they may be legitimate but it may imply issues.

4. What tools are used for troubleshooting RAC?

EM is RAC aware and can be used for both monitoring and administrative tasks. Some checks are performed just for a RAC environment – for example tablespaces filling, extents monitoring etc. We also do per-instance monitoring of session_waits, enqueues, library cache pins etc so that we can quickly start investigating if these start to increase above normal running levels.

RAC

1. How were the number of nodes in the RAC cluster calculated ?

For us this was part of a consolidation exercise. As such we calculated the anticipated load of the consolidated environments and specified two servers that could satisfy the demand.

2. How is the interconnect monitored ? What parameters are watched ?

Measureware tool is used. This collects performance data and PerfView, which reports for network traffic. Multi Router Traffic Grapher (MRTG) is used to show each cluster's interconnect network traffic.

3. How did you implement, phased approach, node at a time? What would you do differently?

Phased approach – a node at a time. This reflects the manner in which the load increased as more and more source environments were migrated into the single instance.

Cloning

1. What sort of cloning mechanism is used ?

We generate a create controlfile script on the source environment. We then create a copy of the source environment from a BCV backup, renaming the volumes if we are doing a raw to cooked datafile conversion. This is usually from one of our nightly hot backups. We edit the create controlfile script to reflect the new instance name and run it to create the controlfiles, and then apply any archived log files as required to open the instance

1.

What are the components of the standalone Oracle Forms product?

The standalone Oracle Forms product is composed of the following:

3.

Is there a difference between the standalone and Apps Forms product?

Technology and components wise it is the same except for some executables (f60webmx); configuration files (appsweb.cfg,etc.) and the directory locations for both.

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4.

Is that really all there is to it?

Well, there are some more subtle differences. In standalone Forms we create the client by loading f60all.jar or f60all_jinit. In apps Forms we load a lot more, you can find a list of these files in the archive= section of your appsweb.cfg. Also since apps Forms is only supported to run from Jinitiator and not native browser mode, cab files (f60all.cab) is not used unlike in standalone Forms.

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5.

What is f60webmx?

The f60webmx is your web forms runtime executable, similar to f60webm except that it has Apps specific user exits linked into it.

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6.

How can you recreate the f60webmx executable?

To do this you issue the following command:

```
adrelink force=y "fnd f60webmx"
```

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7.

What are some of the related Forms/Apps files?

adfmctl.sh - located in \$COMMON_TOP/admin/scripts, this script starts and stops the Forms Metric Client for your Apps instance; it uses the Forms d2lc60 executable to accomplish this.

adfmctl.sh - located in \$COMMON_TOP/admin/scripts, this script starts and stop the Forms Metric Server for our Apps instance; it uses the Forms d2ls60 executable to accomplish this.

adfrmctl.sh - located in \$COMMON_TOP/admin/scripts, this script starts and stops the Forms Server Listener; similar to and actually calls the f60ctl found in \$ORACLE_HOME/6iserver/bin of IAS.

appsweb.cfg - located in \$OA_HTML/html/bin, this file defines parameter values used by the Forms Web CGI, similar to formsweb.cfg found in \$ORACLE_HOME/6iserver/forms60/server of IAS.

appsbase.html - located in \$OA_HTML/<language>, this is the default HTML file for starting an applet using Jinitiator, similar to basejini.htm found in \$ORACLE_HOME/forms60/server of IAS.

d2lc60.txt - located in \$COMMON_TOP/admin/install, this is the Forms metric client log file.

d2ls60.txt - located in \$COMMON_TOP/admin/install, this is the Forms metric server log file.

f60svrm.txt - located in \$COMMON_TOP/admin/install, this is the adfrmctl.sh log file. This is not the same as the Forms server log file which not only logs startup and shutdown info but also client connectivity (which client IP is associated with which f60webm process) and debug stack trace info.

OracleApplications.dat - located in \$JAVA_TOP/oracle/apps/fnd/formsClient, among other things this file determines the path Apps uses to find their icons; its similar to and supplements registry.dat found in \$ORACLE_HOME/forms60/server of IAS.

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8.

Is Forms Builder installed with Apps on Unix and Windows?

Yes it is. Unlike standalone Forms that installs the Forms Builder only as part of the IAS product suite on Unix. On Windows platforms you would have to install the IDS product suite to get Forms Builder.

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9.

What is a Forms Builder node?

A Forms Builder node refers to the leaves and branches of its Object Navigator. The Object Navigator provides a hierarchical display of the objects in a Form modules.

Objects are grouped under their respective nodes. For example, all of the windows defined in a form module appear under the Windows node; all the LOVs defined in the form module appear under the LOVs node and all the program units appear under the Program Units node. It is important to familiarize yourself with this in case you need to navigate within an Apps form during the course of debugging a problem.

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10.

Where can you find Forms/Applications certification information for Apps?

Go to <http://metalink.oracle.com>:

- click on ?Product Lifecycle? ? ?Certifications?.
- click on ?View Certifications by Product?.
- select your ?Product Group? as ?E-Business suite?.
- select your ?Product? as ?E-Business suite?.
- select your ?Platform Selection?.
- check the ?E-Business Suite Versions? and check ?Certified combinations only?.
- under the ?Applications Tier Certifications? table click on the ?other? column.

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11. Where can you find Forms/Jinitiator certification information for Apps?

Same as # 5

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12. Where can you find Forms patch set information for Apps?

Note 125767.1 Upgrading Developer 6i with Oracle Applications 11i is your best source for this info.

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13. Is there a difference between the standalone and Apps Forms patch set?

No there is not. The patch sets are identical but Apps requires an interoperability patch (I/O patch) and pre/post patches to be applied along with the Forms patch set.

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14. What is the ICX: Forms Launcher system profile option for?

This profile option is used by the Self Service Web Applications Personal Home Page (also known as ICX) to determine the base URL needed to launch an application, which in this case is a Forms application.

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15. What should ICX: Forms Launcher be set to?

?ICX: Forms Launcher? is set to ?http://machine_name:port/dev60cgi/f60cgi?. In Apps release 11i you can add some parameters to this URL to enable some Forms features like tracing.

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16. What is FORMS60_CATCHTERM?

FORMS60_CATCHTERM is an environment setting that enables (value = 1 by default) or disables (value = 0) the Forms abnormal termination handler which catches middle tier crashes and cleans up by removing temp files, closing db connections and writing diagnostic info to the dump file or the forms server log file.

The Forms signal handler can be disabled to troubleshoot spinning/hanging f60webmx processes.

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17. What is FORMS60_TIMEOUT?

FORMS60_TIMEOUT is an environment setting that determines the maximum idle time (in minutes) before f60webmx shutdown. Note that it will only terminate an idle middle tier process, i.e. one which is waiting for the "next message" from the client. If the middle tier process is running a transaction or waiting for a query to complete it will not have take effect.

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18. How do you enable Forms Runtime Diagnostics (FRD) in Apps?

To enable Forms Runtime Diagnostics (FRD):

- login to Apps as sysadmin
- click on Profile/System
- query ICX%FORMS%LAUNCHER
- add the following to the end of its value at user level:
?record=collect&log=/tmp/forms_frd.log

Note that like any Apps profiles you can do this on various levels e.g. site, user, etc. so that you target your FRD accordingly. Also be aware that FRD incurs significant overhead to Apps processing so disable it when not in use.

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19. How do you disable direct Forms access through the http://host:port/dev60cgi/f60cgi URL?

You can do this by using the mod_rewrite (the Swiss Army Knife of URL manipulation :) engine of the Apache server. In your httpd.conf file add the following lines at the end:

```
RewriteEngine on
RewriteCond %{QUERY_STRING} !NLS_LANG
RewriteRule ^/dev60cgi/f60cgi$ http://www.oracle.com
```

You'll have to tighten up the code somewhat but here I am taking advantage of the fact that the URL for accessing Apps directly and through the personal home page are not exactly the same i.e. if the URL does not have certain parameters in it then I redirect the user to a different web page of my choice.

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20. How do you get a Stack Trace?

To generate a stack trace for Forms:

- set environment variable `$FORMS60_CATCHTERM=0`
- stop the Forms server
- backup file `f60webmx`
- make sure you are signed in as the user who owns `f60webmx` executable, then run this command to relink this executable with debug symbols:

```
adrelink.sh force=y ranlib=y link_debug=y "fnd f60webmx"
```

- restart the Forms server
- reproduce the issue
- check for a new core file with corresponding timestamp in `$FORMS60_TRACE_PATH` or `$PWD` or `$FND_TOP/bin` directory

References:

Note 353805.1 How To Generate A Stack Trace For Forms With Applications 11i

Note 1812.1 TECH: Getting a Stack Trace from a CORE file

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Architecture

1. Is HTTP connection mode supported in Apps?

Not at this time. There are plans to bring HTTP support back to Apps but it is currently undergoing certification and it would most likely only be supported when using the Forms servlet. Most of the issues have to deal with how to make the various Apps environment settings available to the listener. Bug 1992211 keeps track of this issue.

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2. Is Forms listener servlet supported in Apps?

No its not. Forms listener servlet is currently not supported in Apps.

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3. Do you have to be on a specific Forms patch set to use Forms listener servlet?

For standalone Forms, this feature has been there since patch set 4 and certified against patch set 5. For Apps, a minimum of patch set 6 will be required and it will only work for environments with a single node web forms tier.

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4. Are there any changes to the Forms product components when in Forms listener servlet?

Yes. With Forms Listener Servlet certain Forms components are replaced:

Forms CGI - Forms Servlet (FormsServlet.class)

Forms Server - Forms Listener Servlet (ListenerServlet.class)

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5. How is Forms load balancing accomplished?

Currently Forms load balancing is done through proprietary programs called Metric Server and Metric Clients. The Metric clients are setup on machines with a corresponding Forms server and they constantly report to a Metric Server their load situation. The Metric Server then uses this information to decide which machine to pass a request to run a web form. Note 148516.1 Load Balancing in 11i Note 148155.1 Load balancing implementation and trouble shooting in 11.5.x using metric server are good sources for more info.

[top]

6. How is Forms load balancing accomplished with Forms listener servlet?

Forms servlet is now available for use with eBusiness Suite. Load balancing is enabled using the capability of the HTTP server (Oracle HTTP powered by Apache.)
Reference: Note 201340.1 Using Forms Listener Servlet with Oracle Applications 11i

[top]

7. How to set up Forms to work through a firewall?

In the current Form Services architecture a firewall needs be configured to allow traffic on 2 ports. The listener port of the Oracle HTTP server (usually port 80 or 8002) and the Forms Listener/Server (usually 9000). The Oracle HTTP server handles the initial request, authentication to the server, and presents a list of responsibilities for the end user to choose from. Self Service applications will continue to use only this listener, but if a core application is invoked, the client makes a request to the Forms Listener that then creates a new Forms Server Runtime process. The Oracle HTTP server port will allow http traffic e.g. requests for help files, requests to the TCF servlet, etc. The Forms Listener/Server port will allow socket or https traffic. In the new Forms Servlet architecture the only port that needs to be open is the Oracle HTTP server.

[top]

Issues

1. What is this Forms ?Cancel-Query? issue with Apps?

Being able to cancel a long running query was a much sought after feature in Apps both for queries against data blocks and LOVs. The feature was first introduced in Forms patch set 3 but it subsequently broke many other functionalities. Patch set 9 finally fixes all of these. Note 138159.1 Canceling Long Running Queries in Oracle Applications 11i is your best source for this info.

[top]

2. Why are some Forms files (appsweb.cfg,appsbase.html,etc.) duplicated across an Apps install?

This is because of the way patching is done in Apps. All patches are initially copied to their corresponding products in the \$APPL_TOP directory, because some of these files

are accessed by an external process they will also be copied to directories outside \$APPL_TOP where they can be easily accessed by external processes. Make sure that any changes you make to one copy propagate to all its duplicates.

[top]

3. How do you generate Apps Forms modules or FMB files?

Oftentimes as part of upgrading Forms or modifying a Form module or applying a patch modifying a Form module, you would encounter an issue that would necessitate manually regenerating the Forms module executable or FMX file. To do this you issue the following command:

```
f60gen module=form_name.fmb userid=apps/apps output_file=form_name.fmx  
module_type=form batch=yes compile_all=special
```

[top]

4. How do you generate Apps Forms library modules or PLL files?

To do this you issue the following command:

```
f60gen module=library_name.pll userid=apps/apps module_type=library batch=yes  
compile_all=special
```

[top]

5. How do you generate Apps Forms menu modules or MMB files?

Note that there is only one menu for Apps so it is rare that you need to regenerate the menu. To do this you issue the following command:

```
f60gen module=FNDMENU.mmb userid=apps/apps output_file=FNDMENU.mmx  
module_type=menu batch=yes compile_all=special
```

[top]

6. When do you have to regenerate your Apps Forms modules?

There are many occasions when you have to regenerate (recreate the FMX) your Apps forms or when your Apps forms are regenerated, some are true some are not:

After an operating system upgrade? False

After a database upgrade? False

After applying a Developer patch? False.

After applying an I/O patch? True.

After applying an Apps patch? True, but only if there is a g driver involved.

[top]

7. What is compile_all=special?

For standalone Forms the only valid values for compile_all are ?yes? and ?no?. compile_all=special is similar except that it doesn't attempt to update the source files.

[top]

8. What do you do with a PL/SQL Error 302 and PL/SQL Error 306 when generating a Form module?

This is a generic error message saying your form has attempted to call a program unit, which can be a package (Apps encapsulates all function and procedure calls within packages); a function or a procedure that it cannot find.

Why? Maybe its not defined in the Form itself. Maybe its not defined in the database. Maybe you've misspelled it. The error itself will provide clues for you to debug the where and why of this problem. Here is a typical error that you might get when generating a form:

Compiling WHEN-BUTTON-PRESSED trigger on SUBMIT_REQUEST item in DEPT data block...

ompilation error on WHEN-BUTTON-PRESSED trigger on SUBMIT_REQUEST item in DEPT data block: PL/SQL ERROR 302 at line 4, column 25 component 'SUBMIT_REQUEST' must be declared

PL/SQL ERROR 0 at line 4, column 3 Statement ignored

WHEN-BUTTON-PRESSED is a name of a forms trigger in the form. SUBMIT_REQUEST is the name of a forms item, in this case a button. DEPT is the name of a data block in the form. So far this tells us that the errant code is in a WHEN-

BUTTON-PRESSED trigger attached to a SUBMIT-REQUEST button attached to the DEPT data block and it's on line 4 column 25 of that trigger.

Once you open the form in Forms Builder you can easily track down this trigger and see that there was a misspelling in the name of the function call (SUBMIT_REQUES is missing a T at the end). The code is as follows:

```
DECLARE
  req_id NUMBER;
BEGIN
  req_id := FND_REQUEST.SUBMIT_REQUES(?FND?,?FMDMGEN?,?Message
File?,
                                     ?01-NOV-02 00:00:00',FALSE,'x');
END;
```

Note that the package can reside in the Form under the ?Program Units? node; or as a Forms library attached to the form or as a stored object in the database.

[top]

9. What is the sequence in which Forms resolves program unit calls?

Forms will attempt to resolve a program unit call in the following sequence:

- Program Units node
- Forms Library
- Database

This will give you an idea on where first to look for broken packages in your hunt for the broken package. Oftentimes you might have to dig to the nth level to find the broken root package that has cascaded its problem up to the package where you currently see it. Either your amazing PL/SQL skills will find the problem for you or you can call Oracle Support and use their amazing PL/SQL skills. On occasion the problem in your package is already fixed in a later release.

[top]

10. What do you do when you find the root broken package?

First you have to determine the files that created the package body and spec. To do this you either:

Start Forms Builder (f60desm).
Connect to the database as apps/apps.
Expand the ?Database Objects? node.
Expand the ?APPS? schema node.
Expand the ?Stored Program Units?node.
Locate your package spec and body.
Double click on the icon besides it.

Or

Login to SQL*Plus as APPS/APPS.
Locate your package spec and body.

[top]

11. How do you get the latest package release?

```
SQL> select name,type,text from user_source where name ='FND_REQUEST' and  
line < 3
```

What we're looking for is the name and version number (AFCPREQS.pls 115.4 and AFCPREQB.pls 115.27) of the files that create the package. Support will then determine if it's advisable to apply the latest release of those files.

[top]

12. What is the FORMS60_CATCHTERM issue in Apps?

There was an issue where spinning f60webmx processes are spawned when the Forms abnormal termination handler is enabled. Disabling this handler (or FORMS60_CATCHTERM=0) works around the problem and it is also fixed in Forms v6.0.8.12. This is Bug 1367619,Bug 1394311 and Bug 1396450

[top]

13. What is the AlertBundle issue?

Often times in your jinitiator console, apache error_log and your jserv_log files, you will see the following errors which shouldn't be any cause for concern:

User Interface

1. How do you change the background color of a required item in Apps?

Change the \$OA_JAVA/oracle/apps/fnd/formsClient/OracleApplications.dat file and change the RGB value for app.ui.requiredFieldVABGColor. To turn off the color of the required item you can either change the value of app.ui.requiredFieldVA from true to false (note that this is what the OracleApplications2.dat is for, a requirement for the ADA). You have to restart Jinitiator for this to take effect.

[top]

2. How can you affect the look and feel of your Apps forms?

You can alter the interface look and feel of Apps forms by changing the values of the following variables in the appsweb.cfg file:

```
lookAndFeel=Oracle (or generic)
colorScheme=blue (or (teal, titanium, red, khaki, blue, olive, purple)
background=no
readonlyBackground=automatic
```

The FND.D patch will allow control of some of these settings through the system profile:

```
Java Look and Feel=Oracle (or generic)
Java Color Scheme=blue (or teal, titanium, red, khaki, blue, olive, purple)
```

[top]

Customization

1. Is customizing Apps Forms supported?

Customizing Apps forms can mean many things. Here are some interpretations and whether they are supported or not:

Do you support issues encountered when customizing seed or Apps products forms? Only if it pertains to standalone Forms functionality.

Do you support issues encountered when running customized seed or Apps product forms? No.

Do you support issues encountered when customizing Apps template forms? Only if it pertains to standalone Forms functionality.

Do you support issues encountered when running customized Apps template forms? Only if it pertains to standalone Forms functionality.

Do you support issues encountered when integrating customized Apps template forms with Apps? Yes.

[top]

2. What if you really want to customize Apps forms?

Apps strives to be a very complete product. It presents you with features that preclude the necessity of customizing or building new forms. On top of this it has the added functionality of being able to do internal customization of its forms through the use of flex fields, but if this isn't enough then the following manuals should help you accomplish this Oracle Applications Developer's Guide (A75545-02) and Oracle Applications User Interface Standards for Forms-Based (A75395-01).

[top]

3. How do you integrate custom forms with Apps?

Note 70276.1 HOW TO INTEGRATE APPLICATIONS RELEASE 11 WITH CUSTOM APPLICATIONS would be a good source of info, official documentation can be found in Chapter 2 of the Oracle Applications Developer's Guide (A75545-02).

[top]

4. Can you save Form modules (FMB, MMB, PLL) into the database?

Yes and no. Yes if its standalone and no if its part of Apps, this is because Apps forms are structured so that their dependent modules are all stored as files. In Forms 9i (not yet released) you will not be able to store Forms modules in the database altogether.

[top]

5. Where can you find the source Forms modules for Apps?

Apps places all its source (FMB) files in the \$AU_TOP/forms/<language> directory whereas the FMX files reside in their respective \$PRODUCT_TOP/forms/<language> directory. On the other hand, all menu (MMB, MMX) and library (PLL and PLX) files are copied to the \$AU_TOP/resource directory.

[top]

6. How can you find the version of Forms in Apps?

Once you are in an Apps form ...

click on Help
click on About Oracle Applications

... from the top level menu. The information is under the Forms Server section.

[top]

7. How can you find the version and name of the form you are currently on in Apps?

Same as #6 except that the information is under the Current Form section. The Form Name corresponds to the FMB and FMX file for that form. The Form Version corresponds to the release level of that form.

[top]

8. How can you confirm the version of the FMX or FMB file?

Oftentimes, once you determine the version and name of the current form you want to peek into the internal workings of the actual form itself. To ensure that you are peeking at the right release of the FMB file you can do the following:

\$adident Header FNDSCSGN.fmb

If you do this on the machine where Apps is installed it should be as simple as starting Forms Builder and opening the form.

If you simply copy the form over to a machine that does not have Apps installed, you will run into a lot of FRM-18108: "Failed to load the following objects" errors. This is because an Apps form is usually dependent on a host of other forms, libraries and menus.

If you want to open the TEMPLATE.fmb form, make sure you have the following forms, libraries, copied over as well from the \$AU_TOP/forms/<language> and \$AU_TOP/resource directories:

9. How can I open an Apps form in Forms Builder?

If you want to open a product specific form, make sure you have all its associated forms and libraries copied over. Since it is quite difficult to pinpoint exactly what this is, its best to just copy over the entire contents of \$AU_TOP/forms/<language> and \$AU_TOP/resource.

Questions and Answers

1. What is cloning?

Answer:

Cloning is the process of creating an identical copy of an already existing Oracle Applications system.

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2. How can I clone an Oracle Applications system?

Answer:

There are two cloning methods documented in the following white papers available off of Oracle MetaLink Note 230672.1

- * Cloning Oracle Applications Release 11i
- * Cloning Oracle Applications Release 11i with Rapid Clone

Note: The third Cloning method (Cloning Oracle Applications Release 11i with AutoConfig) has been fully replaced by Cloning with Rapid Clone, and is no longer supported.

[top]

3. What are the differences between the two cloning methods?

Answer:

* Cloning Oracle Applications Release 11i was originally published in conjunction with Release 11.5.5 and is applicable for all 11i releases up to 11.5.5 that are not AutoConfig enabled.

* Cloning Oracle Applications Release 11i with Rapid Clone is applicable for all 11i systems that have migrated to AutoConfig and enabled Rapid Clone. This method contains steps to install AutoConfig and Rapid Clone.

[top]

4. What is the AD Cloning utility?

Answer:

AD Cloning utility (adclone.pl) is the name of the cloning command line utility. This utility is used to preserve and apply configuration information to the cloned target system.

[top]

5. What is Rapid Clone?

Answer:

Rapid Clone is the new cloning utility introduced in Release 11.5.8. Rapid Clone leverages the new installation and configuration technology utilized by Rapid Install. See OracleMetaLink Note 230672.1 (Cloning Oracle Applications 11i with Rapid Clone) for instructions on installing and enabling Rapid Clone.

[top]

6. How do I determine if my system is Rapid Clone enabled?

Answer:

First, verify that your system is AutoConfig enabled. Then, verify that you have applied the latest Rapid Clone patch documented in OracleMetaLink Note 230672.1 (Cloning Oracle Applications 11i with Rapid Clone). See Searching the Patch History Database in the AD Procedures Guide for instructions on searching for patches applied to your system.

[top]

7. What is AutoConfig?

Answer:

AutoConfig is a configuration tool that supports automated configuration of an Oracle Applications Instance. All of the information required for configuring an Applications

instance is collected into a central repository, called the Applications Context. When the AutoConfig tool runs, it uses information from the Applications Context file to generate configuration files and update database profiles. See OracleMetaLink Note 165195.1 for details on installing and migrating to AutoConfig.

[top]

8. How do I determine if my system is AutoConfig enabled?

Answer:

There are several identifiers for when the system is AutoConfig enabled. The following are two common indicators:

- * Open the environment file APPSORA.env in your APPL_TOP. If the top of the file says that it is maintained by AutoConfig, then your system is probably using AutoConfig.

- * Check if there is an Applications Context file in the APPL_TOP/admin directory. This file will typically be named <SID>.xml or <SID>_<HOSTNAME>.xml.

- * Check if there is an Applications Context file in the RDBMS ORACLE_HOME under the appsutil directory. This file will typically be named <SID>.xml or <SID>_<HOSTNAME>.xml.

See OracleMetaLink Note 165195.1 for more details on identifying if your system already uses AutoConfig.

[top]

9. We are running Release 11.5.7 (or any prior release), which cloning method can we use?

Answer:

Due to the advancements in the cloning solution with Rapid Clone, all customers are now recommended to move to using Rapid Clone. If you are on release 11.5.7 or any release before 11.5.7, you will need to first enable AutoConfig on your system, if not already done, before you can use Rapid Clone as documented in the Cloning Oracle Applications Release 11i with Rapid Clone white paper.

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10. We are running Release 11.5.8 (or any later release), which cloning method can we use?

Answer:

In 11.5.8 AutoConfig is enabled on the middle tier out of the box. In 11.5.9 and any later release, AutoConfig is enabled by default on both the database tier and the middle tier. Update AutoConfig and Rapid Clone code to the latest code line and use Rapid Clone to clone your system. Full instructions are in Cloning Oracle Applications Release 11i with Rapid Clone document 230672.1 on OracleMetalink.

[top]

11. Our Oracle Applications system is on Windows, which cloning method can we use?

Answer:

If your system is on a release prior to 11.5.7 and is not AutoConfig enabled, use the method documented in the Cloning Oracle Applications Release 11i white paper. If your system is on any AutoConfig-enabled 11i release, use the method documented in the Cloning Oracle Applications Release 11i with Rapid Clone white paper.

[top]

12. We have a Platinum installation of Oracle Applications. Can we clone our system?

Answer:

Yes, cloning a Platinum system using the Rapid Clone method is no different than cloning a non-Platinum installed system.

[top]

13. Can I clone from one operating system version to another?

Answer:

Yes, if the target system platform is binary compatible with the source system platform. For example, if you have an existing single-node Oracle Applications system on Solaris 2.6, you could clone it to a node running Solaris 8, but not to a node running HP-UX. Note that cloning from a higher version of a platform to a lower version is not supported, for example, from Solaris 8 to Solaris 2.6. Other examples of binary compatibility for Oracle Applications are:

- * AIX 4.3.3 to AIX 5.1 (32-bit)
- * HP-UX 11.0 to HP-UX 11i
- * Windows NT to Windows 2000

Within a same platform you can also clone from a 32bit source system to a 64bit target system.

Note (AIX only): when cloning from AIX 32bit to AIX 64bit, apply patch 2896876 (64bit kernel extension for Oracle) on the target system prior to running adcfgclone.pl.

[top]

14. Can I clone from one platform to a different platform?

Answer:

Yes, you can clone or migrate the Applications middle tier from any platform to Linux or any supported Unix platform using the procedure described in document 238276.1 "Migrating to Linux with Oracle Applications Release 11i".

[top]

15. Can I reclone just the database?

Answer:

Yes, if the source system has changed and you want to update the target system with these changes, you can reclone just the changed database. If Applications patches were

applied to the source system, the APPL_TOP and the database must be cloned to keep the file system and database synchronized. See the Recloning section in the white papers for details.

[top]

16. Can I clone a single-node system to a multi-node system?

Answer:

The Rapid Clone cloning method allows for cloning a single-node system to a multi-node system. See the Cloning Oracle Applications Release 11i with Rapid Clone white paper for details.

[top]

17. Can I clone a multi-node system to a single-node system?

Answer:

You can use Rapid Clone to merge multiple APPL_TOP and COMMON_TOP file systems into a single APPL_TOP and COMMON_TOP file system. For more details about this procedure, see "Section 3: Merging existing APPL_TOPs into a shared APPL_TOP" in document 233428.1 on OracleMetaLink.

[top]

18. What cloning options are available for each cloning method?

Answer:

The table below shows the cloning options that are currently available for each cloning method.

19. Does Rapid Clone modify the source system?

Answer:

No, Rapid Clone does not modify the source system. adpreclone.pl prepares the source system to be cloned by collecting information about the database and creating generic templates of files containing source specific hardcoded values. These templates are stored in the appsutil/template directory leaving the original files untouched. This process usually takes a few minutes to complete the first time.

Migrating to Autoconfig on the database node (pre-req to Rapid Clone), however, will update the RDBMS init.ora and network listener files. See the instructions in the Autoconfig document 165195.1 (Section 4: Migrating to AutoConfig on the Database Tier) on how to preserve customizations to these files.

[top]

20. How does adcfgclone.pl know the target system values?

Answer:

adcfgclone.pl will prompt for the values required to create the new context file used to configure the target system. A few values are calculated from the current target system (hostname, user and group). The rest of the target specific values are prompted for:

Prompt

Comment

database SID Target database SID

domain name Target system domain name

Prompts specific to the DB Tier

Target System database name Target System database name

Target instance is a Real Application Cluster (RAC) instance (y/n) Answer yes if the target system is going to be part of a RAC instance.

Current node is the first node in an N Node RAC Cluster (y/n) This prompt only appears when you answered "yes" to the previous question.

Answer "yes" to this question if the current host is the first node being configured in the target system RAC cluster. The tool will then ask for the number of nodes that will exist in the final RAC instance and gather, the following information for every node:

- Hostname
- Database Sid
- Instance number
- Listener port
- Private interconnect name

Answer "no" to this question if at least one node of the target RAC cluster has already been configured by Rapid Clone (i.e if you already replied "yes" to this question for any other node in the cluster). The tool will then prompt for the following information to connect to a live node (the answers must describe a node that has already been configured):

- Hostname
- Database Sid
- Listener port

RDBMS ORACLE_HOME directory Path to the Target system RDBMS
ORACLE_HOME

Number of DATA_TOP's:

DATA_TOP 1:

DATA_TOP 2:

DATA_TOP 3:

Database mount points. Enter the number of distinct directories containing the target database dbfs, then their paths.

Prompts specific to the Apps Tier

database server node hostname of the machine hosting the database server

Does the target system have more than one applications tier server node (y/n)?

Answer yes if the target system is part of a multi-nodes configuration. The tool with then prompt for the hostnames of:

- concurrent processing node
- administration node

- forms server node
- web server node

Is the target system APPL_TOP divided into multiple mount points (y/n)?

Answer yes if the target system APPL_TOP is divided across multiple mount points. The tool will then prompt for each auxiliary mount (4 mounts):

- APPL_TOP mount point
- APPL_TOP aux.1
- APPL_TOP aux.2
- APPL_TOP aux.3

Note: if your APPL_TOP is divided into 2 or 3 mounts only, you can specify identical mounts to the above prompts.

APPL_TOP mount point APPL_TOP directory
 COMMON_TOP directory COMMON_TOP directory
 8.0.6 ORACLE_HOME directory 8.0.6 ORACLE_HOME directory
 iAS ORACLE_HOME directory iAS ORACLE_HOME directory
 Location of JDK 1.3.1 Location of JDK 1.3.1

Prompt common to DB and Apps Tiers

Port pool number:[0-99] Enter the port pool that you want to use on the target system. Make sure to specify the same port pool on the DBTier and the AppsTier. If the source and target machines are different, you have the option to preserve the source port values on the target system.

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21. What is the port pool? What if I want to give a specific value to a Server Port?

Answer:

If you are cloning on the same machine or want to redefine the server ports , you will be prompted for a port pool. The port pool provides a way to use a set of predefined server ports. There are 100 port pools. For example, if you select 3, the default database port number (1521) becomes 1524.

The following table lists all the server ports. To see how the port pool calculation works,

enter a number between 0 and 99(both inclusive) in the form and click "Get Ports".

Port Name

Autoconfig Variable

(Default) Port Numbers allocated for Port Pool: 0

(Custom) Port Numbers allocated for Port Pool:

Web Listener Port	s_webport	8000	8001
Database Port	s_dbport	1521	1522
RPC Port	s_rpcport	1626	1627
Reports Port	s_repsport	7000	7001

OPROC Manager Port	s_oprocmgr_port	8100	8101
Web PLSQL Port	s_webport_pls	8200	8201
Servlet Port	s_servletport	8800	8801
Forms Listener Port	s_formsport	9000	9001
Metrics Server Data Port	s_metdataport	9100	9101
Metrics Server Req. Port	s_metreqport	9200	9201
JTF Fulfillment Server Port	s_jtfuf_port	9300	9301
iMeeting Collaboration Server Port	s_imtsrvport	9500	9501
iMeeting Recording Server Port	s_imtrecport	9600	9601
iMeeting Monitor (iMon) Port	s_imtimonport	9700	9701
Map Viewer Servlet Port	s_mapviewer_port	9800	9801
OEM Web Utility Port	s_oemweb_port	10000	10001
VisiBroker OrbServer Agent Port	s_osagent_port	10100	10101
MSCA Server Port	s_mwaPortNo	10200	10201
MSCA Dispatcher Port	s_mwaDispatcherPort	10300	10301
TCF Port	s_tcfport	15000	15001
OACORE Servle Port Range	s_oacore_servlet_portrange	16000-16009	16010-16019
Discoverer Servlet Port Range	s_disco_servlet_portrange	17000-17009	17010-17019
Forms Servlet Port Range	s_forms_servlet_portrange	18000-18009	18010-18019
XMLSVCS Servlet Port Range	s_xmlsvcs_servlet_portrange	19000-19009	19010-19019
Forms Start Port	s_frmStartPort	20000	20001
Java Object Cache Port	s_java_object_cache_port	12345	12346

If you want to give a specific value to a port on the target system, independently from the port pool, you must first complete the Target System configuration with `adcfgclone.pl` (temporarily select a value for the port pool). Once `adcfgclone.pl` completes successfully, edit the new target context file with `editcontext` or `OAM` and modify the corresponding Autoconfig variables. Run `Autoconfig` to refresh the system with the new values (see OracleMetaLink document 165195.1).

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22. Does Rapid Clone preserve the patch history?

Answer:

Yes, Rapid Clone preserves the patch history of the complete Applications Stack:

- * RDBMS ORACLE_HOME: preserve the OUI oraInventory.
- * iAS ORACLE_HOME: preserve the OUI oraInventory.
- * 806 ORACLE_HOME: preserve the patch level and ORCA inventory.
- * APPL_TOP and Database: preserve the patch level and history tables.

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23. Can I clone a clone?

Answer:

Yes, a cloned system created with Rapid Clone can then be used as the Source System in the next cloning. RapidInstall itself is now a clone of a clone using the Rapid Clone technology.

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24. Can I change the database dbf files layout while cloning?

Answer:

Yes, Rapid Clone allows to add or remove database mount points or redistribute dbf files among mount points in the target system. As long as all the source system dbf files are present in the target system database mount points specified during the adcfgclone prompts (see question "How does adcfgclone.pl know the target system values?"), Rapid Clone will find them and re-create the database control file accordingly.

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25. What is the oraInventory?

Answer:

The oraInventory is the location for the OUI (Oracle Universal Installer)'s bookkeeping. The inventory stores information about:

- * All Oracle software products installed in all ORACLE_HOMES on a machine
- * Other non-Oracle products, such as the Java Runtime Environment (JRE)

In a 11i Application system the RDBMS and iAS ORACLE_HOMES are registered in the oraInventory. The 806 ORACLE_HOME, which is not managed through OUI, is not.

On Unix/Linux, the location of the oraInventory is defined by the content of oraInst.loc, at:

- /var/opt/oracle/oraInst.loc on Solaris, HP-UX and Tru64
- /etc/oraInst.loc on Linux and AIX

On Windows, the location of the oraInventory is defined by the value of the registry key HKEY_LOCAL_MACHINE\Software\Oracle\INST_LOC or if this value is not defined, at C:\Program Files\Oracle\Inventory

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26. What is a binary oraInventory? Is my Inventory binary?

Answer:

Before OUI 2.X, the oraInventory was binary.

A binary oraInventory centralizes, in a binary format, the location of every Oracle products on the machine and the detail of their patch level. The oraInventory location is defined by the content of oraInst.loc. You will have a binary inventory only if ALL of the following conditions are met:

- * you are on 11.5.7 or earlier (11.5.8+ install XML inventory out of the box)
- * you have never installed OUI 2.X or higher (Install converts the inventory to XML)
- * you have never run Rapid Clone (Rapid Clone converts the inventory to XML)

If the following file exists, the oraInventory is NOT binary:

<oraInventory location as pointed by oraInst.loc>/ContentsXML/inventory.xml

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27. What is a XML oraInventory? Is my Inventory XML?

Answer:

Starting with OUI 2.X and 11.5.8, the information in the inventory is stored in Extensible Markup Language (XML) format. The XML format allows for easier diagnosis of problems and faster loading of data Rapid Clone requires the inventory to be in XML format in order to clone it, and will take care of performing the binary to XML conversion if necessary.

Unlike the binary oraInventory, The XML inventory is divided into 2 distinct components:

- * The Global inventory (or Central inventory)
- * The Local inventory (or Home inventory)

More information about these components is available under other questions in this FAQ

The inventory is XML if the following file exists:

\$ORACLE_HOME/inventory/ContentXML/comps.xml

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28. What is the Global (or Central) Inventory?

Answer:

The Global Inventory is the part of the XML inventory that contains the high level list of all oracle products installed on a machine. There should therefore be only one per machine. Its location is defined by the content of oraInst.loc.

The Global Inventory records the physical location of Oracle products installed on the machine, such as ORACLE_HOMES (RDBMS and IAS) or JRE. It does not have any information about the detail of patches applied to each ORACLE_HOMEs.

The Global Inventory gets updated every time you install or de-install an ORACLE_HOME on the machine, be it through OUI Installer, Rapid Install, or Rapid Clone.

Note: If you need to delete an ORACLE_HOME, you should always do it through the OUI de-installer in order to keep the Global Inventory synchronized.

[top]

29. What is the Local (or Home) Inventory?

Answer:

There is one Local Inventory per ORACLE_HOME. It is physically located inside the ORACLE_HOME at \$ORACLE_HOME/inventory and contains the detail of the patch level for that ORACLE_HOME.

The Local Inventory gets updated whenever a patch is applied to the ORACLE_HOME, using OUI.

[top]

30. How does Rapid Clone deal with the oraInventory?

Answer:

Rapid Clone requires OUI 2.2 to be installed in the ORACLE_HOME as a prerequisite and will perform all the actions necessary to clone the inventory:

- * Converts the Global inventory to xml format when it was binary on either the source system or the target system
- * Registers the cloned ORACLE_HOME in the target system Global Inventory
- * Updates the Local Inventory of the target ORACLE_HOME to reflect the new machine, paths, users, etc.

[top]

31. Why don't I need to manually copy the oraInventory when cloning?

Answer:

The local inventory is automatically copied from the source system to the target system as part of copying the ORACLE_HOME itself.

The Global Inventory is machine specific and therefore should not be copied. If you are cloning from one machine to a different machine, Rapid Clone will simply register the target ORACLE_HOME in the target machine Global Inventory (This action will automatically create the Global Inventory if it did not exist on that machine).

[top]

32. What does OUISetup.pl do?

Answer:

OUISetup.pl is shipped with the OUI patch, listed as a prerequisite to Rapid Clone (see Metalink Node 230672.1). It should be run as part of the OUI patch installation and will perform the following tasks:

- * Register the OUI program in the Global Inventory
- * Register the JRE in the Global Inventory
- * Ensure that the ORACLE_HOME in which the patch is installed is properly registered in the Global Inventory. In doing so, it will attempt to automatically fix Inventory corruptions that are known to cause problems while cloning, such as
 - Home indexes out of sync between the Global and Local Inventory
 - Duplicate Home Names entries
 - Duplicate Home Path entries

1. Oracle Application Server and Oracle E-Business Suite Release 11i

1. What is Oracle Application Server?

Oracle9i Application Server (Oracle9iAS) provides the infrastructure to develop and deploy e-business portals, transactional applications, and Web services. Oracle9iAS provides an integrated development environment for developers to create Internet Applications including J2EE Applications, Web Services, Enterprise Portals, Wireless and Business Intelligence Applications.

Oracle Application Server 10g (OracleAS 10g) is the latest release of Oracle's Application Server, succeeding Oracle9i Application Server (Oracle9iAS) Release 2.0. This suite of products includes Oracle Containers for J2EE (OC4J), Oracle HTTP Server (powered by Apache), Oracle JDeveloper, Oracle Forms, Oracle Identity Management, Oracle Portal, Oracle Business Intelligence, Oracle Business Integration, and Oracle WebCache.

Oracle Application Server is part of the Fusion Middleware Family of products.

2. What are the differences between 9iAS R2 and 9i R2?

9iAS R1 corresponds to Oracle9i Application Server Release 1, which comprises all application server (middle-tier) products (e.g. 9iAS 1.0.2.2.2).

9iAS R2 corresponds to Oracle9i Application Server Release 2, which comprises all application server (middle-tier) products (e.g. 9iAS 9.0.2).

9iR1 corresponds to Oracle9i Database, which comprises all database server products (e.g. 9i Version 9.0.1.3).

9iR2 corresponds to Oracle9i Database, which comprises all database server products (e.g. 9i Version 9.2.0.2).

Certification of one combination (e.g. 9iR2 with Applications 11i) does not imply certification of any others (e.g. 9iAS R2 with Applications 11i). All products must be individually certified with Applications 11i.

3.

What is the difference between Oracle9i Application Server and Oracle Application Server 10g?

These names refer to the Fusion Middleware Family of products, which includes JDeveloper, Forms, Reports, Discoverer, Single Sign-On, Oracle Internet Directory, Portal, WebCache, and other middleware tools.

Oracle9i Application Server (short name: 9iAS) refers to all application server (middle-tier) products up to 9iAS 9.0.3, including:

- * Oracle9i Application Server Release 1 Version 1.0.2.2.2
- * Oracle9i Application Server Release 2 Version 9.0.2
- * Oracle9i Application Server Release 2 Version 9.0.3

Oracle Application Server 10g (short name: OracleAS 10g) refers to all subsequent application server (middle-tier) releases, including:

- * Oracle Application Server 10g Release 1 Version 9.0.4
- * Oracle Application Server 10g Release 1 Version 9.0.4.1
- * Oracle Application Server 10g Release 2 Version 10.1.2.0.0
- * Oracle Application Server 10g Release 2 Version 10.1.2.0.1
- * Oracle Application Server 10g Release 2 Version 10.1.2.0.2
- *

Oracle Application Server 10g Release 2 Version 10.1.3

4.

How is Oracle9i Application Server integrated with Oracle E-Business Suite Release 11i?

The Oracle E-Business Suite Release 11i uses several individual components now delivered as part of the Oracle9i Application Server (9iAS) suite. These individual components include the Oracle HTTP Server (powered by Apache), PL/SQL, Forms Server, Reports Server, Discoverer, Workflow, and many others.

Prior to Oracle E-Business Suite Release 11.5.7, some components originally delivered in 9iAS were installed as part of the Oracle E-Business Suite Rapid Install. Versions of the components included in the Oracle E-Business Suite Release 11i Rapid Install often differed from component versions delivered in the standard 9iAS releases.

The Oracle E-Business Suite Release 11.5.7 and 11.5.8 Rapid Install contains 9iAS 1.0.2.2.2 Enterprise Edition. New installations of these releases will have the 9iAS 1.0.2.2.2 technologies already in place. Note, however, that Applications features that depend on 9iAS 1.0.2.2.2 (e.g. the use of Portal 3i as the default launchpad) are not

enabled by default in these releases. Customers who start with either the 11.5.7 or 11.5.8 Rapid Install will be able to apply additional patches and perform post-install configuration steps to use the features that depend on 9iAS 1.0.2.2.2.

Customers who apply the 11.5.7 Maintenance Pack or later to an existing Oracle E-Business Suite Release 11i environment are not automatically upgraded to 9iAS 1.0.2.2.2 Enterprise Edition. In general, Maintenance Packs used to upgrade to the latest Oracle E-Business Suite release do not include technology stack upgrades. 11i Maintenance and Family Packs generally deliver fixes to Oracle E-Business Suite code. With some exceptions, this general policy ensures that customers can get bug fixes for Oracle E-Business Suite modules without having to upgrade their technology stack.

Customers upgrading originally environments created with the 11.5.1 to 11.5.5 Rapid Installs may follow the migration instructions in Oracle MetaLink Note 146468.1 to migrate their existing technology stacks to 9iAS 1.0.2.2.2 Enterprise Edition and to configure Oracle E-Business Suite features that depend on it.

5.

What are the benefits of integrating an existing Oracle E-Business Suite environment with OracleAS 10g?

Benefits of this configuration are:

Security & Identity Management

Log on with Single Sign-On

Log on with Single Sign-On and access all Oracle E-Business Suite Release 11i modules, Oracle technology products, and custom partner applications.

Log off all applications at once

Log off Release 11i and all partner applications with a single logout or session timeout.

Manage user credentials in Release 11i

Manage user credentials exclusively in the native Oracle E-Business Suite Release 11i (FND_USER) directory. User updates in the E-Business Suite may be automatically synchronized with an external Oracle Internet Directory 10g instance.

Manage user credentials in Oracle Internet Directory

Manage user credentials in Oracle Internet Directory, a standards-based LDAPv3 directory which leverages the scalability, high availability and security features of the Oracle Database. Oracle Internet Directory serves as the central user repository for the Oracle Identity Management infrastructure, simplifying user administration for all products in the Oracle environment. User updates in Oracle Internet Directory may be automatically synchronized with the E-Business Suite.

Synchronize user credentials between Oracle Internet Directory and Release 11i

Manage and synchronize user attributes bidirectionally between Oracle Internet Directory 10g and Release 11i via Oracle Directory Integration & Provisioning. Provision new Oracle E-Business Suite Release 11i user accounts from both Release 11i administration consoles and Oracle Internet Directory via the Delegated Administration Console.

Integrate with third-party single sign-on services

Integrate Oracle E-Business Suite Release 11i with existing third-party single sign-on solutions, including Microsoft Windows Kerberos, CA SiteMinder.

Integrate with third-party LDAP directories

Use Oracle Directory Integration & Provisioning to integrate Oracle E-Business Suite Release 11i with existing third-party directory solutions, including Sun Java System Directory, Microsoft Active Directory, Novell e-Directory, and OpenLDAP.

Single sign-on using digital certificates

Simplify and secure access to Oracle E-Business Suite Release 11i via X.509 v3 PKI digital certificates.

Associate Oracle Internet Directory user accounts with Release 11i user accounts

Associate an Oracle Internet Directory user account with one or more unique Oracle E-Business Suite Release 11i user accounts. Useful for deployments where single sign-on accounts in corporate LDAP directories differ from Oracle E-Business Suite Release 11i user accounts.

Integrate a central Single Sign-On instance with multiple Oracle E-Business Suite Release 11i environments

Integrate a central, enterprise-wide Single Sign-On instance with one or more Oracle E-Business Suite Release 11i environments.

Portal

Integrate Portal with multiple Oracle E-Business Suite Release 11i environments

Integrate Portal with one or more Oracle E-Business Suite Release 11i environments using Portal 10g

Add Oracle E-Business Suite Release 11i portlets to custom portal pages

Use Oracle Portal to build customized corporate portal pages with Oracle E-Business Suite Release 11i portlets, including the Applications Navigator, Applications Favorites, and Workflow Notifications.

Additional Features

Analyze Oracle E-Business Suite Release 11i with Discoverer

Use Discoverer, Oracle's ad hoc query, reporting, analysis, and web publishing tool, to allow business users at all levels of the organization gain immediate access to information from Release 11i. Release 11i users can use Discoverer to analyze data from selected business areas in Financials, Operations, Human Resources, Purchasing, Process Manufacturing, Activity Based Management, and more.

Deploy OracleAS 10g to provide enterprise services for custom applications

Use the stand-alone Oracle Application Server 10g platform for deploying and integrating custom applications. Take advantage of OracleAS 10g middleware services for deploying and managing applications and Web services, delivering personalized applications through enterprise portals and mobile devices, providing real-time business intelligence, integrating applications, and automating business processes.

Accelerate E-Business Suite responsiveness with Web Cache

Use Oracle Web Cache 10g to as a reverse proxy, load-balancer, or cache to improve the responsiveness of the E-Business Suite for your end-users. Performance

improvements from Web Cache are particularly notable in high-latency Wide Area Network (WAN) deployments, where data compression can speed performance significantly.

6.

Is Oracle Application Server 10g certified with Oracle E-Business Suite?

Yes, Oracle Application Server 10g is certified with Oracle E-Business Suite Release 11i for the use of Oracle Internet Directory, Single Sign-On, Portal, Discoverer, Web Cache, and Oracle Integration.

For more details about this certification, see the following Notes on Oracle Metalink (<http://metalink.oracle.com>):

- * 186981.1 : Frequently Asked Questions
- * 293849.1 : Roadmap: Using OracleAS 10g with the Oracle E-Business Suite (Overview Presentation)
- * 233436.1 : OracleAS 10g + E-Business Suite Installation Guide
- * 261914.1 : Integrating Oracle E-Business Suite Release 11i with Oracle Internet Directory and Oracle Single Sign-On
- * 305918.1: Portal 10g + E-Business Suite Installation Guide
- * 313418.1: Discoverer 10g + E-Business Suite Installation Guide
- * 306653.1: Web Cache 10g + E-Business Suite Installation Guide
- * 223927.1 : Oracle Application Server Integration with Oracle E-Business Suite: Statement of Direction

There are currently no plans to certify the upgrade of existing Oracle E-Business Suite Release 11i application tiers to Oracle Application Server 10g.

7.

Is Oracle9i Application Server 1.0.2.2.2 certified with Oracle E-Business Suite Release 11i?

Yes. For new customers wishing to create new, fresh installations of Oracle E-Business Suite Release 11i, the 11.5.7 Rapid Install and higher includes 9iAS 1.0.2.2.2 Enterprise Edition. Customers installing 11.5.7 and higher for the first time may perform additional post-installation steps to enable 9iAS-based functionality, including Portal, Single Sign On, and Discoverer 4i.

Existing Oracle E-Business Suite Release 11i customers may migrate their current technology stack to 9iAS 1.0.2.2.2 Enterprise Edition by following Oracle MetaLink Note 146468.1 and may perform additional post-installation steps to enable 9iAS-based functionality, including Portal, Single Sign On, and Discoverer 4i.

8.

Is Oracle9i Application Server 1.0.2.2.2 certified with Applications 10.7 or 11.0.x?

There are no plans to certify 9iAS 1.0.2.2.2 with Applications 10.7 or 11.0.x. If those customers upgrade to Oracle E-Business Suite Release 11i using the 11.5.7 Rapid Install or higher, they will receive 9iAS 1.0.2.2.2 as part of the standard 11i technology stack.

The only exception applies to Oracle iProcurement 11.0.3. iProcurement customers may upgrade to 9iAS 1.0.2.2.2 by following MetaLink Note 203376.1 . Support for this configuration is available by filing TARs for Oracle iProcurement 11.0.3.

9.

What versions of Oracle9i Application Server Release 1 can be used with Oracle E-Business Suite Release 11i?

The Oracle E-Business Suite Release 11.5.7 Rapid Install and higher contain Oracle9i Application Server Release 1 Version 1.0.2.2.2 Enterprise Edition.

Migration to Oracle9iAS 1.0.2.2.2 Enterprise Edition is certified for environments created with Oracle E-Business Suite Release 11i Rapid Installs prior to 11.5.7. For details on upgrading existing environments to 9iAS 1.0.2.2.2, see Oracle MetaLink Note 146468.1 .

Prior versions of Oracle9iAS, including 1.0, 1.0.2.1, 1.0.2.2, and 1.0.2.2.1 are not certified with Oracle E-Business Suite Release 11i. There are no plans for these certifications.

10.

Can an existing Release 11i application server be upgraded to Oracle Application Server 10g?

No. Oracle has no plans to support the upgrade of the application server of an existing Oracle E-Business Suite Release 11i environment to Oracle Application Server 10g. Existing Release 11i environments will remain at the Oracle9i Application Server 1.0.2.2.2 level, and may be integrated with an Oracle Application Server 10g instance deployed on a standalone server or in a separate ORACLE_HOME. Once integrated, an existing Release 11i environment may take advantage of Oracle Application Server 10g services on the standalone instance, including Single Sign-On, Oracle Internet Directory, Portal, and Discoverer.

The E-Business Suite Release 12 includes Oracle Application Server 10g as part of its Rapid Install. For details, see Oracle Application Server with Oracle E-Business Suite Release 12

Frequently Asked Questions (Metalink Note 415007.1).

11.

Is 9iAS 1.0.2.2.2 certified with Oracle Real Applications Clusters?

Yes, 9iAS 1.0.2.2.2 is certified with Oracle Real Applications Clusters for the 9iR2 and 10gR2 databases. There are no issues with this configuration.

12.

What is the authoritative source for certification information for Oracle products?

Oracle MetaLink (<http://metalink.oracle.com>) is the authoritative source for certifications between all Oracle products. Select "Certify & Availability" to query Oracle product certifications by platform and products.

New certified configurations and technology stack patches for the E-Business Suite are released regularly. For breaking news, updates, and technical discussions about E-Business Suite technology stack topics, you can also monitor or subscribe to the E-Business Suite Technology blog on the Oracle Technology Network.

13.

What is the roadmap for future certifications of Oracle Application Server with the E-Business Suite?

An overview of currently supported architectures, features and benefits, and upcoming certifications is published in Oracle MetaLink Note 293849.1, Using Oracle Application Server 10g with Oracle E-Business Suite Release 11i.

New certified configurations and technology stack patches for the E-Business Suite are released regularly. For breaking news, updates, and technical discussions about E-Business Suite technology stack topics, you can also monitor or subscribe to the E-Business Suite Technology blog on the Oracle Technology Network.

14.

What training is available for migrating Release 11i environments to 9iAS?

Using the Oracle9i Application Server with Applications Release 11i is available on Oracle University .

This self-paced course reviews the process required to migrate an existing Oracle E-Business Suite Release 11i technology stack to Oracle9i Application Server 1.0.2.2.2. It discusses basic and advanced conceptual topics such as 9iAS disk space and operating system requirements and supported systems architectures for Portal 3i and Discoverer 4i, Enterprise Single Sign-On, and Oracle Internet Directory. It includes some discussion of AutoConfig concepts, configuration management best practices, 9iAS migration troubleshooting techniques and advice on how to avoid common problems, with pointers to additional online resources.

15.

What is involved in migrating to 9iAS 1.0.2.2.2?

The following summarises the major components required to migrate an existing Oracle E-Business Suite Release 11i environment to 9iAS 1.0.2.2.2 Enterprise Edition:

1. Upgrade to 8.1.7.4 or higher
2. Implement AutoConfig
3. Use the 11.5.9 RapidWiz -techstack method to install 9iAS 1.0.2.2.2
4. Upgrade to latest certified Developer6i Patchset (optional)
5. Install latest certified Discoverer 4i release (optional)
6. Install latest certified Portal release (optional; required for Portal functionality)

7.

Install latest certified Oracle Internet Directory release (optional)

This is a high-level overview only; see the Related Documentation for detailed instructions.

16.

What is involved in integrating OracleAS 10g with Release 11i?

The following summarises the major steps required to integrate an existing Oracle E-Business Suite Release 11i environment with Oracle Application Server 10g:

1. Upgrade the Release 11i environment to 9iAS 1.0.2.2.2 (if necessary)
2. Install Oracle Application Server 10g on a standalone server or in a separate ORACLE_HOME
3. Implement Single Sign-On and Oracle Internet Directory
4. Install the interoperability patches on the Release 11i environment
5. Register the Release 11i environment with the Oracle Application Server 10g server
6. Implement Portal (optional)
7. Implement Discoverer (optional)

This is a high-level overview only; see the Related Documentation for detailed instructions.

17.

How does one obtain support for 9iAS or OracleAS 10g with the E-Business Suite?

Oracle9i Application Server 1.0.2.2.2: Support for this release is available for all Oracle E-Business Suite Release 11i customers.

File TARs with Oracle Support via MetaLink using the following identifying information to ensure that your issue is routed correctly:

- * Product: Oracle Application Object Library
- * Product Version: 1.0.2.2.2
- * Type of Problem: 9iAS Install and Config

OracleAS 10g: Support for Oracle Application Server 10g + E-Business Suite configurations is available for all customers.

File TARs with Oracle Support via MetaLink using the following identifying information to ensure that your issue is routed correctly:

- * Product: Oracle Applications Technology Stack
- * Type of Problem: Oracle Application Server 10g

2. General Installation Questions

1.

What resources are available to explain patching for Oracle E-Business Suite Release 11i environments?

For general information about patching Oracle E-Business Suite Release 11i environments, including discussions about patch types and minimizing patching downtimes, see:

* Patching Oracle Applications: Frequently Asked Questions (Metalink Note 174436.1)

* Oracle Applications Release 11i - Patching Best Practices and Reducing Downtime (Metalink Note 225165.1)

2.

Why are there two appsweb.cfg files in two different locations?

This is normal. \$FND_TOP/admin/driver/fndtmpl.driv instantiates the template \$FND_TOP/admin/template/appsweb.cfg to both locations - the runtime location \$OA_HTML/bin and the prod_top location \$FND_TOP/resource. Patches will automatically replace files in both locations via AutoConfig. For more information about AutoConfig, see Oracle MetaLink Note 165195.1 , Using AutoConfig to Manage System Configurations with Oracle Applications 11i.

3.

Can adclone be used with 9iAS installations created with ias1022m.sh?

Yes. See Oracle MetaLink Note 216664.1 , Frequently Asked Questions Oracle Applications DBA Cloning Oracle Applications Release 11i.

3. General Configuration Questions

1.

How does one implement load-balancing support for Release 11i environments?

System administrators can implement several different types of load-balancing in Oracle E-Business Suite Release 11i environments: hardware-based HTTP Layer load-balancing, hardware-based DNS layer load-balancing, software-based JServ layer load-balancing, Metric Server-based load-balancing for Forms, load-balancing for Concurrent Processing nodes, and load-balancing via Real Applications Clusters (RAC) for database tiers.

For more information, see Oracle MetaLink Note 217368.1 , Advanced Configurations and Topologies for Enterprise Deployments of E-Business Suite 11i.

E-Business Suite Release 11i environments may be integrated with a stand-alone instance running Oracle Application Server 10g. Oracle Application Server 10g has been separately tested with load balancers, firewalls and stand-alone SSL accelerators ; note that these tests apply to Oracle Application Server 10g and may not be directly applicable to Oracle E-Business Suite Release 11i environments.

2.

What are some potential issues after implementing HTTP Layer load-balancing for Release 11i?

After implementing HTTP Layer load-balancing with certain hardware-based load-balancers (including F5, Cisco, and Alteon hardware), certain Release 11i components such as the Portal Parallel Engine and `jtflogin.jsp` may generate session timeout errors or not work properly. Other services, including the Forms Servlet Listener and Discoverer servlet, may continue to function.

These issues may occur when services running on Release 11i database-tier or application-tier server nodes need to establish a loopback connection to themselves via the hardware-based load-balancer.

For example, to build a Portal page, the Portal Parallel Engine makes a PL/SQL request to the visible host and domain name specified by the AutoConfig Web Server Host and Local Domain Name context values. In order for this loopback connection to be successful, both the application-tier and database-tier servers need to be permitted to access the hardware-based load-balancer. Certain networking security policies enforced by the hardware-based load-balancer may cause the reply to be blocked or routed incorrectly, breaking the TCP session, and causing failures in Portal connectivity.

To resolve these issues, ensure that you have installed the latest AutoConfig templates specified in Oracle MetaLink Note 217368.1 and that the AutoConfig Web Server Host context value is set to the hardware-based load-balancer. Then verify whether an application-tier server node can establish a loopback connection to itself. For example, try to establish a telnet session from the application-tier server node to itself. You should also check whether the database-tier server node can perform the same loopback connection. If the connection is refused, consult your load-balancer documentation for procedures to enable Secure Network Address Translation (SNAT) or Virtual Local Area Network (VLAN) support for your network.

3.

Is Oracle E-Business Suite Release 11i certified with specific third-party networking components?

Use of third-party networking components, including load-balancers, routers, and switches, is supported by Oracle. "Supported" means that Oracle Support will assist with Technical Assistance Requests (TARs) filed via Oracle MetaLink by Release 11i customers for advanced configurations covered by Note 217368.1, Advanced Configurations and Topologies for Enterprise Deployments of E-Business Suite 11i. Instructions in this Note are explicitly designed to work generically with all third-party networking components for the documented configurations.

"Certification" refers to a comprehensive suite of functional tests across all Release 11i applications on all supported operating system platforms. Oracle Support and the Oracle Applications Technology Group do not have testbeds comprising all possible combinations of third-party networking components on all operating system platforms.

As such, the Oracle Applications Technology Group does not certify Oracle E-Business Suite Release 11i with all possible combinations of third-party load-balancers, routers, switches, firewalls, proxies, or other networking hardware.

Oracle Support will provide best-efforts support to isolate networking-related problems or conflicts within Release 11i technology stack configurations (e.g. with AutoConfig). Given limited Oracle resources and expertise with third-party networking components, third-party vendors may need to be engaged to help isolate problems encountered.

If problems are isolated to the third-party hardware, then the third-party vendor may need to be engaged help resolve the issue. Oracle Support will escalate specific cases to the Oracle Applications Technology Group where there are conflicts or issues or with Release 11i configuration issues (e.g. with AutoConfig). Where appropriate, the Oracle Applications Technology Group may work collaboratively with third-party vendors on specific escalations that require coordinated updates from both Oracle and the third-party vendor.

4.

Can Oracle Application Server 10g be installed on an existing Oracle E-Business Suite Release 11i server?

Yes, Oracle Application Server 10g may be installed on the same physical server used for an existing Oracle E-Business Suite Release 11i instance. The OracleAS 10g Infrastructure database may also be installed on that server. There are some restrictions, the most important of which is that Oracle Application Server 10g must be installed in a different ORACLE_HOME than the existing Release 11i ORACLE_HOME.

Other restrictions are noted on Oracle MetaLink > Certify > View Certifications By Product > Product Group: Application Server > Product Selection: Oracle Application Server > Oracle Application Server 10g and Oracle9i Application Server Release 1 (1.0.2.2.x) Coexistence Restrictions. In particular, note that Discoverer 4i and Discoverer 10g have dependencies on different Visibroker versions, preventing the simultaneous operation of both Discoverer versions on the same physical server in some circumstance (Bug 3266454).

Also see the "Compatibility with Earlier Versions" chapter of the Oracle Application Server 10g Installation Guide 10g for your operating system platform.

5.

Can Oracle Application Server 10g be installed on a different operating system platform than Oracle E-Business Suite Release 11i?

Yes. Oracle Application Server 10g may be installed on one or more physical servers, each on different operating system platforms. These servers do not need to be running on the same platform as an existing Release 11i application tier server node.

For example, the following architecture is supported:

- * Release 11i application tier server node on Linux
- * Oracle Application Server 10g Metadata Repository on Hewlett Packard HP-UX
- * Oracle Application Server 10g Identity Management on Sun Solaris
- *

Oracle Application Server 10g on Linux

6.

What are some best practices recommendations for Oracle Application Server 10g configurations?

E-Business Suite Release 11i environments may be integrated with a stand-alone instance running Oracle Application Server 10g. Best practice recommendations for configuring those stand-alone instances may be found in the Core Documentation for Oracle Application Server 10g.

7.

When OracleAS 10g is integrated with the E-Business Suite, where should the OracleAS 10g Infrastructure database be installed?

The Infrastructure database for Oracle Application Server 10g is installed using the "OracleAS Infrastructure 10g" installation option, and may be installed in the default database included with OracleAS 10g. The OracleAS 10g Infrastructure database cannot be installed in an existing E-Business Suite Release 11i database. The Infrastructure database may optionally be installed in a database by using the Repository Creation Assistant (repca) tool. For more information about this tool, see the Oracle Application Server Repository Creation Assistant User's Guide 10g for your operating system platform.

8.

Is it possible to add additional languages to an the E-Business Suite environment that is integrated with Oracle Application Server 10g?

Oracle E-Business Suite Release 11i instances and Oracle Application Server 10g instances use different mechanisms to support NLS languages.

It is possible to add additional languages to an existing Oracle E-Business Suite Release 11i environment; see the following resources:

- * Installing Oracle Applications: A Guide to Using Rapid Install
- * Oracle Applications Maintenance Utilities

It is currently not possible to add additional languages to an existing Oracle Application Server 10g instance after the original installation. This is a known functional limitation in Oracle Application Server 10g. For information on installing additional languages during the initial OracleAS 10g installation, see the "Installing Additional Languages" chapter in the Oracle Application Server 10g Installation Guide 10g for your operating system platform. This functional limitation is expected to be addressed in Oracle Application Server Release 11; this is subject to change.

9.

Can 9iAS be installed in a separate ORACLE_HOME on an existing Oracle E-Business Suite Release 11i application tier server node?

The upgrade process for customers following Oracle MetaLink Note 146468.1 installs the latest version of Oracle9i Application Server 1.0.2.2.2 and associated patches in a separate ORACLE_HOME on a server that may already have an existing installation of Oracle9i Application Server 1.0.2.2.2. At the end of the upgrade process, the E-Business Suite environment is switched from the old ORACLE_HOME to the new ORACLE_HOME.

Although it is possible to switch from one ORACLE_HOME to another, running 9iAS services out of both ORACLE_HOMES at the same time is not a supported or recommended configuration when integrating 9iAS with Oracle E-Business Suite Release 11i .

10.

Can Oracle E-Business Suite Release 11i and Oracle Collaboration Suite integrate with the same Oracle Application Server 10g instance?

Yes. Oracle Collaboration Suite is certified for use with the Identity Management components of Oracle Application Server 10g. See Oracle MetaLink > Certify > View Certifications By Product > Product Group: Collaboration Suite > Oracle Application Server Information.

Oracle E-Business Suite Release 11i is certified with Oracle Application Server 10g .

Both the Release 11i and Oracle Collaboration Suite instances may be registered as partner applications to the same Oracle Application Server 10g instance.

11.

What resources are available for Oracle HTTP Server performance tuning?

See Oracle9i Application Server Best Practices Release 1 (v1.0.2.2) (Part Number A95201-01), available on the Oracle Technology Network .

This documentation may recommend manual changes to configuration files that do not apply to Oracle E-Business Suite Release 11i environments that have been migrated to 9iAS 1.0.2.2.2 and AutoConfig. See Oracle MetaLink Note 165195.1 , titled Using AutoConfig to Manage System Configurations with Oracle Applications 11i and How does AutoConfig handle manual changes to configuration files?

12.

What resources are available for installing and configuring Oracle Application Server 10g?

The Oracle by Example (OBE) series provides hands-on, step-by-step instructions on how to implement various technology solutions to business problems. OBE solutions are built for practical real-world situations, allowing you to gain valuable hands-on

experience as well as use the presented solutions as the foundation for production implementation, dramatically reducing time to deployment.

- * Oracle By Example Viewlets that demonstrate how to do regular and High Availability installs of Oracle Application Server 10g

- * OracleAS 10g High Availability Solutions

13.

Is AutoConfig mandatory for migrating Oracle E-Business Suite Release 11i environments to 9iAS 1.0.2.2.2?

Yes, AutoConfig is required by the Release 11i interoperability patch used in the 9iAS 1.0.2.2.2 migration. The Rapid Wizard-based installation process documented in Oracle MetaLink Note 146468.1 uses AutoConfig to configure the new 9iAS-based components in a Release 11i environment.

14.

How does AutoConfig handle manual changes to configuration files?

AutoConfig is a configuration tool which supports automated configuration of an Applications Instance. See Oracle MetaLink Note 165195.1 , Using AutoConfig to Manage System Configurations with Oracle Applications 11i. All of the information required for configuring an Applications Instance running out of an APPL_TOP is collected into a central repository, called the Applications Context. When the AutoConfig tool runs, it uses information from the Applications Context file to generate all configuration files and update database profiles.

There are several major benefits provided by AutoConfig:

- * Configuration Support - AutoConfig delivers a fully functional, supported configuration of the APPL_TOP and the ORACLE_HOMEs in its supporting technology stack.

- * Configuration Management - AutoConfig provides a mechanism to configure or re-configure an Applications Instance through one centralized procedure.

- * Configuration Delivery and Patching - The uptake of new technology is simplified, as new configurations and configuration changes can be provided in the form of a patch.

The current version of AutoConfig supports manual customizations of configuration files. To ensure that your customizations are not overwritten by AutoConfig, follow the procedures documented in Note 270519.1, Customizing an AutoConfig Environment.

15.

How can Oracle E-Business Suite Release 11i customers upgrade the Oracle HTTP Server without 9iAS 1.0.2.2.2?

Oracle E-Business Suite Release 11.5.1 to 11.5.5 Rapid Installs included Oracle HTTP Server 1.0.0, which corresponds to Apache 1.3.9 with additional Oracle mods. The Oracle HTTP Server (powered by Apache) that was originally installed can optionally be upgraded to Oracle HTTP Server 1.0.2.1s, which corresponds to Apache

1.3.12s with additional Oracle mods. See Metalink Note 161779.1 , "Upgrading Oracle HTTP Server in Applications 11i."

16.

Which security patches should be applied to Oracle HTTP Server for E-Business Suite environments?

Oracle strongly recommends that all E-Business Suite customers install the latest Critical Patch Update. Critical Patch Updates are cumulative updates that contain fixes for multiple security vulnerabilities.

Resources:

- * Oracle Critical Patch Update Program General FAQ (MetaLink Note 290738.1)
- * Oracle Critical Patch Updates and Security Alerts

17.

What versions of Oracle HTTP Server and Apache were shipped with Oracle E-Business Suite Release 11i?

Oracle E-Business Suite Release 11.5.1 to 11.5.5 Rapid Installs included Oracle HTTP Server 1.0.0, which corresponds to Apache 1.3.9 with additional Oracle mods.

There was no Oracle E-Business Suite Release 11.5.6 Rapid Install. Only 11.5.6 Family Packs for ERP and CRM were released, which did not deliver any new technology stack components.

Oracle E-Business Suite Release 11.5.7 Rapid Install and higher include Oracle9i Application Server 1.0.2.2.2, which includes Oracle HTTP Server 1.0.2.2, which corresponds to Apache 1.3.19 with additional Oracle mods.

Customers may have optionally upgraded their 11.5.x environments by following Metalink Note 161779.1 , "Upgrading Oracle HTTP Server in Applications 11i." This upgrade included Oracle HTTP Server 1.0.2.1s, which corresponds to Apache 1.3.12s with additional Oracle mods.

To verify which version of Oracle HTTP Server (Apache) you have installed, issue the following command:

```
$APACHE_TOP/Apache/bin/httpd* -version
```

For a comprehensive summary of all Oracle HTTP Server and Apache versions delivered with all Oracle products, see Metalink Note 260449.1 Everything You Wanted to Know About The Apache-Based OHS Version.

18.

What is the latest Oracle HTTP Server rollup patch certified for Oracle E-Business Suite Release 11i?

A list of all rollup patches for Oracle HTTP Server certified for Oracle E-Business Suite Release 11i environments can be found in MetaLink note 254618.1 , Oracle HTTP Server Patches Certified to be used with E-Business Suite 11i. This Note also lists the latest application server security and AutoConfig template patches certified for Release 11i.

19.

Can reverse proxies, demilitarized zones, and multiple domains be used with the E-Business Suite?

Yes. For more information, see Oracle MetaLink Note 287176.1, DMZ Configuration with Oracle E-Business Suite 11i.

20.

How can Oracle E-Business Suite Release 11i environments be cloned?

Oracle E-Business Suite Release 11i environments can be cloned using two different methods. For details, see Frequently Asked Questions: Cloning Oracle Applications Release 11i.

There are additional implications for Release 11i environments that have been integrated with Oracle Application Server 10g. For a more extensive discussion, see In-Depth: Cloning OracleAS 10g + E-Business Suite Environments.

Cloned Release 11i environments may share a common Oracle Application Server 10g instance. For example, a single Oracle Internet Directory user directory may be shared by multiple Release 11i instances.

Alternately, system administrators may require that each cloned Release 11i instance have its own cloned Oracle Application Server 10g instance. In this scenario, a separate Oracle Application Server 10g instance must be installed, and the appropriate metadata for the standalone Oracle Application Server 10g instance must be transported from the original Oracle Application Server 10g instance to the new Oracle Application Server 10g instance.

Oracle Application Server 10g has a different set of tools for replicating environments than Release 11i. At present, individual OracleAS 10g components such as Oracle Internet Directory and Portal have their own separate tools for copying metadata between OracleAS 10g instances. For example, user information in a given Oracle Internet Directory instance may be copied to a different Oracle Internet Directory instance using the built-in OID replication tools or LDIF files.

System administrators evaluating configuration management approaches for cloning Release 11i environments integrated with Oracle Application Server 10g should review their requirements against the capabilities of the Oracle Application Server 10g utilities. For details, see:

- * Oracle Application Server 10g Documentation Library

- * In-Depth: Cloning OracleAS 10g + E-Business Suite Environments

21.

Which versions of Forms and Reports are used by Oracle E-Business Suite Release 11i after a 9iAS migration?

After an existing Oracle E-Business Suite Release 11i environment has been migrated to 9iAS 1.0.2.2.2, Developer 6i Patchset 6 or higher is required. A complete cross-reference between Developer 6i Patchsets and Forms and Reports version numbers can be found in MetaLink note 125767.1 , Upgrading Developer 6i with Oracle Applications 11i.

Forms and Reports run out of the new 8.0.6 ORACLE_HOME created during the migration to 9iAS 1.0.2.2.2. Release 11i has dependencies on 8.0.6 ORACLE_HOME-based components in the following areas: user exits, charting, and UTF-8.

22.

What ports are used by Oracle E-Business Suite Release 11i application services?

Default ports Oracle E-Business Suite Release 11i environments that have been AutoConfig-enabled are listed in Oracle MetaLink Note 216664.1 , titled Frequently Asked Questions Cloning Oracle Applications Release 11i.

4. Discoverer Questions

1.

What versions of Discoverer are certified with the Oracle E-Business Suite Release 11i?

The following configuration is Generally Available and supported:

* Discoverer 10g (10.1.2.0.2) + Oracle E-Business Suite Release 11i

The certification of Discoverer 10.1.2.2 with the E-Business Suite is currently underway, but firmer release schedules are not yet available. Customers can monitor or subscribe to the E-Business Suite Technology Stack Blog for regular updates on new certifications.

Discoverer 4i was desupported for E-Business Suite users as of October 2006. Discoverer 4i users are encouraged to upgrade to Discoverer 10g at the earliest opportunity.

2.

What are some Single Sign-On-related usage scenarios for Discoverer 10g and the E-Business Suite?

There are four major usage scenarios for Discoverer 10g accessing the E-Business Suite via OracleAS 10g:

SCENARIO A: Invoking Discoverer workbooks from Applications Portlets via Oracle Portal

* Step 1. The system administrator creates a form function for a given Discoverer workbook, assigns the form function to an E-Business Suite menu and responsibility, and grants this responsibility to UserA.

* Step 2. UserA signs on to Single Sign-On and Portal, then uses the Applications Navigator portlet to select the new E-Business Suite responsibility linked to the menu and Discoverer workbook form function.

* Step 3. UserA clicks on the link for the Discoverer workbook. The workbook opens in Discoverer with no additional logins required.

TECHNICAL BACKGROUND

* URLs to the Discoverer form functions shown in the Applications Navigator portlet can also be added as links to the Applications Favorites portlet

* Discoverer is running against an APPS_MODE End-User Layer, which ensures that workbooks can be accessed only by Discoverer users who have been granted the appropriate Applications responsibility to view the workbook data.

* Discoverer does not look up the user in FND_USER. Discoverer receives all Single Sign-On session information for the authenticated user via the Oracle Applications ICX session information, which is passed to Discoverer via the form function invocation through the Applications Navigator and Applications Favorites portlets.

SCENARIO B: Invoking Discoverer workbooks from standalone Discoverer instances

Standalone invocation of Discoverer with E-Business Suite workbooks via Discoverer's Connection Manager feature with Single Sign-On enabled is supported for users whose Applications SSO Login Types profile option is set to SSO. For details, see Using Discoverer 10.1.2 with Oracle E-Business Suite 11i (Metalink Note 313418.1).

SCENARIO C: Use of Discoverer portlets for E-Business Suite workbooks

The Discoverer portlet provider can be used to deliver the contents of any worksheets that have been developed against the E-Business Suite as a "portlet" within Oracle Portal. This makes it easy to collate multiple worksheets into a single Portal page.

To use this feature:

* Step 1. Oracle Portal page designers add the worksheet(s) to the portal page and specify which E-Business Suite userid and responsibility will be used to retrieve the results for each individual portlet ahead of time.

* Step 2. End users sign on to Oracle Portal page via Single Sign-On using their OID username. These users can view the contents of these portlets, the results of which are determined by the choice of Applications userid and responsibility selected by the page designer.

* Step 3. Users can customize the connection details for each portlet if given the appropriate privilege.

SCENARIO D: Use of Discoverer invoked from E-Business Suite menus via E-Business Suite Home Page

* Step 1. The system administrator creates a form function for a given Discoverer workbook, assigns the form function to an E-Business Suite menu and responsibility, and grants this responsibility to UserA.

* Step 2. UserA signs on to Single Sign-On, is shown the E-Business Suite menus via the E-Business Suite Home Page, and uses the Applications Navigator to select the new E-Business Suite responsibility linked to the menu and Discoverer workbook form function.

* Step 3. UserA clicks on the link for the Discoverer workbook. The workbook opens in Discoverer with no additional logins required.

TECHNICAL BACKGROUND

* URLs to the Discoverer form functions shown in the Oracle Applications Framework Applications Navigator can also be added as links to the Applications Favorites portlet

* Discoverer is running against an APPS_MODE End-User Layer, which ensures that workbooks can be accessed only by Discoverer users who have been granted the appropriate Applications responsibility to view the workbook data.

* Discoverer does not look up the user in FND_USER. Discoverer receives all Single Sign-On session information for the authenticated user via the Oracle Applications ICX session information, which is passed to Discoverer via the form function invocation through the Applications Navigator and Applications Favorites regions running on the E-Business Suite Home Page.

3.

What is needed to install the Discoverer .eex files into the End User Layer?

For Discoverer 4i: Discoverer 4i Administration Edition is used to import the Oracle E-Business Suite Release 11i End User Layer export (.eex) files and populate the Discoverer End User Layer. Discoverer 4i Administration Edition is part of the Oracle Internet Developer Suite and is only available on Microsoft Windows. However, the shell scripts shipped to install the .eex files on the Windows platform require a Unix-compatible shell interpreter and support for Perl scripts.

Oracle does not include a shell interpreter with Oracle E-Business Suite Release 11i or Oracle9i Application Server. MKS Toolkit (<http://www.mkssoftware.com>), a third-party set of utilities that includes several UNIX shell interpreters and Perl, is recommended. MKS Toolkit for System Administrators, MKS Toolkit for Developers, and any other MKS Toolkit suites that include UNIX shell interpreters and Perl are sufficient to support installation of Discoverer 4i content for Release 11i.

Other third-party shell interpreters for Windows may also work but have not been tested by Oracle. Cygwin (<http://www.cygwin.com>) has been tested and is NOT compatible with AD utilities due to issues with awk compatibility. Microsoft Services for UNIX has been tested and is NOT compatible with the adupdeul.sh shell script.

Customers are strongly advised to use the certified and recommended MKS Toolkit where possible; unexpected behaviour may result from using uncertified third-party tools.

Discoverer 4i Administration Edition is a resource-intensive program. If you cannot find a PC with 512 MB of RAM (virtual + physical resources), efficiency and results are unpredictable, and .eex import times may increase. Oracle recommends running Discoverer 4i Administration Edition on a PC with a total of at least 512 MB of RAM (virtual + physical resources). Close all unneeded programs, services, and memory-resident utilities (e.g. virus checkers), and ensure that there is enough free disk space for virtual memory page swapping.

Discoverer 4i was desupported for E-Business Suite users as of October 2006. Discoverer 4i users are encouraged to upgrade to Discoverer 10g at the earliest opportunity.

For Discoverer 10g: Discoverer 10g supports the creation of End User Layers from the application-tier server node directly, unlike Discoverer 4i Administration Edition, which could only be run on a Windows PC. Discoverer 10g customers on UNIX platforms (e.g. Solaris, HP-UX, AIX, Linux) may perform .eex imports and EUL administration tasks on directly their UNIX application-tier servers, eliminating the requirement for MKS Toolkit for UNIX platforms.

Windows customers running Release 11i and Discoverer 10g are still required to use MKS Toolkit to run ADPATCH and other AD utilities.

4.

Can the Discoverer tablespace name be customized?

Yes. Oracle recommends that the Discoverer tablespace name where the End User Layer resides be named 'DISCOVERER', but this may be customized if needed. If changed from the default, ensure that you specify the new tablespace name when creating the End User Layer using the `-DEFAULT_TABLESPACE` command line parameter for the `eulapi` utility (Discoverer 10g), or the `/DEFAULT_TABLESPACE` command line parameter for the `DIS4ADM.EXE` utility (Discoverer 4i).

5.

What are the supported Discoverer 4i configurations?

Discoverer 4i was desupported for E-Business Suite users as of October 2006. Discoverer 4i users are encouraged to upgrade to Discoverer 10g at the earliest opportunity.

If the Discoverer 4i Server is installed on a separate physical server from the Oracle E-Business Suite Release 11i applications tier server node, this is a supported configuration. See Oracle MetaLink Note 139516.1 for installation procedures. These "standalone" Discoverer 4i installations require 9iAS 1.0.2.2.2 to be installed in its entirety as a prerequisite. Partial or custom installations are not supported.

If Discoverer 4i is to be installed on the same server and in the same ORACLE_HOME as an existing Oracle E-Business Suite Release 11i application tier server node, then Oracle MetaLink Note 146468.1 must be followed prior to Oracle MetaLink Note 139516.1 .

If Discoverer 4i is to be installed on the same server but in a separate ORACLE_HOME on an existing Oracle E-Business Suite Release 11i application tier server node, then Oracle MetaLink Note 218111.1 must be followed prior to Oracle MetaLink Note 139516.1

For details, see Oracle MetaLink , which is the authoritative source for all certifications between Oracle products.

6.

Can an uncertified version of Discoverer be used with Release 11i?

In general, system administrators are advised to install only Applications-certified Discoverer versions and patches in their Oracle E-Business Suite Release 11i environments using the standard Applications 11i workbooks and End User Layer content; see Oracle MetaLink , which is the authoritative source for all certifications between Oracle products. There may be circumstances that make the installation of uncertified Discoverer patches necessary; consult Oracle Support for guidance based upon your specific circumstances.

"Certification" of Discoverer versions and patches with Oracle E-Business Suite Release 11i involves a coordinated testing effort across all Release 11i products that use Discoverer. Certifications are generally performed for production releases for Discoverer. Oracle does not generally certify small, individual emergency patches against Oracle E-Business Release 11i. Oracle's Discoverer support policy is to respond to bugs filed against both certified, production patch releases as well as emergency patches.

Customers are advised to follow controlled configuration management strategies when working with uncertified emergency patches:

- * Always back up a known working environment before applying patches.
- * Always back up a known working environment at the certified patch level.
- * Refrain from applying uncertified, emergency patches unless it is unfeasible to wait until the next production patch release is certified.
- *

Always test patches thoroughly before applying them to production environments.
7.

What does "Applications Certification" of a Discoverer patchset or release mean?

Oracle periodically certifies the Oracle E-Business Suite Release 11i with specific patchset or release versions of Oracle Discoverer. Specifically, this means that certain versions of Discoverer have been tested by Application product teams against the workbooks and End User Layer that ship with their Applications modules (for example,

Financials Intelligence). A customer using an Oracle E-Business Suite Release 11i module which ships Discoverer content is free to upgrade to the latest certified version and can typically install it in the ORACLE_HOMEs of existing application tier server nodes of Oracle E-Business Suite Release 11i environments.

Independent of this Applications certification process, Oracle Discoverer supports creation of custom workbooks and End User Layers against an Applications instance as a fully supported "stand alone" feature. Regardless of whether or not a given Discoverer patchset or release has been "Applications certified" a customer is free to use any production release of Discoverer against their Applications instance to create custom workbooks and End User Layers through "stand alone" instances of Discoverer (i.e. usage of Discoverer outside of an Applications module which utilizes Discoverer, such as Financials Intelligence). For example, a customer is supported to use 9iAS Discoverer 9.0.2 against Oracle E-Business Suite Release 11i to develop their own custom workbooks and End User Layer in support of an enterprise wide Business Intelligence solution even though this release has not been "Applications certified." Please note that in this case, Discoverer must be installed outside of the the ORACLE_HOMEs of existing application tier server nodes of Oracle E-Business Suite Release 11i environments. For more information, please refer to chapter 17 "Using Discoverer with Oracle Applications" of the Oracle9i Discoverer Administrator Administration Guide 9.0.2 part number A90880-01.

8.

What resources are available on Discoverer benchmarks, performance optimization, and tuning?

* Oracle MetaLink Note 360622.1, Capacity Planning for Discoverer 10g (10.1.2)

* Oracle MetaLink Note 175287.1 , Oracle9iAS Discoverer Version 4i Capacity Planning Guide

This documentation may recommend manual changes to configuration files that do not apply to Oracle E-Business Suite Release 11i environments that have been migrated to 9iAS 1.0.2.2.2 and AutoConfig. For more information about AutoConfig, see Oracle MetaLink Note 165195.1 , Using AutoConfig to Manage System Configurations with Oracle Applications 11i and How does AutoConfig handle manual changes to configuration files?

9.

Can multiple instances of Discoverer be installed on the same physical server?

It is possible to install multiple instances of Discoverer in separate ORACLE_HOMEs on the same physical server on UNIX platforms. This is supported via AutoConfig; see Oracle MetaLink Note 165195.1

Due to limitations in the Windows registry, it is not possible to install multiple instances of Discoverer on the same physical server on Windows platforms.

10.

Can Discoverer be implemented with third-party load-balancers?

Yes, although Oracle does not explicitly certify Discoverer with specific third-party load-balancers, and Oracle Support can provide only best-efforts support for this configuration. Customers with issues that cannot be reproduced in Release 11i environments without the third-party load-balancer are advised to contact the third-party vendor for advanced product-specific assistance. System administrators interested in experimenting with this configuration are advised to configure the load-balancer to handle routing requests for Discoverer services "with affinity" (i.e. "persistent" connections) so that traffic from a given client is routed to the same application-tier server node for Discoverer. This ensures that the existing Discoverer session is reused, rather than being recreated from scratch on another server, a process which may incur additional processing overhead.

11.

Can Discoverer be used with firewalls?

Yes. Some resources for configuring Discoverer with firewalls are available on Oracle MetaLink :

- * DMZ Configuration with Oracle E-Business Suite 11i (Metalink Note 287176.1)
- * Discoverer 4i Plus Firewall Step-by-Step Configuration Information (Metalink Note 183658.1)
- *

Oracle Discoverer 4i Plus Firewall and SSL Tips (Metalink Note 159200.1)

12.

When will Discoverer content in Oracle E-Business Suite Release 11i be translated?

Discoverer content in Oracle E-Business Suite Release 11i includes the End User Layer and workbooks. This content is available in U.S. English only and is not expected to be translated.

13.

Can intranet Discoverer users use Discoverer in SSL?

Yes, this is fully supported. See:

- * How To Configure Discoverer 10g (10.1.2) Plus/Viewer For HTTPS (SSL) Access (Metalink Note 338071.1)
- * Discoverer 4i Plus Firewall Step-by-Step Configuration Information (Metalink Note 183658.1)
- *

Oracle Discoverer 4i Plus Firewall and SSL Tips (Metalink Note 159200.1)

14.

Are all Oracle Applications Framework versions certified with Discoverer?

Discoverer is never called directly from Oracle Applications Framework and there are no specific version dependencies between the two technologies.

5. Portal Questions

1.
What is Oracle Application Server Portal?

Oracle Application Server Portal (OracleAS Portal) is a complete, browser-based environment for the development, deployment, administration, and configuration of enterprise class portals. OracleAS Portal incorporates a complete portal building framework with self-service publishing features to make creating and managing the information accessed within your portal simple and easy. A wide variety of portal interfaces and configurations are possible: from a simple departmental-level publishing portal to an Internet-accessible portal that serves both customers and employees. Tight integration with other components of the Oracle Application Server and with the Oracle database ensures that the solution can scale to an enterprise class audience.

For more information, see the Oracle Portal Center (Oracle Technology Network).

2.
How does an Oracle E-Business Suite Release 11i instance communicate with Portal?

The integration between Oracle E-Business Suite Release 11i and Portal is via the Oracle Applications Framework Web Provider integration. The E-Business Suite Release 11i is a partner application to Single Sign-On. For more information, see:

- * Oracle Application Server Portal Configuration Guide 10g
- *

Oracle Application Server Single Sign-On Administrator's Guide 10g

3.
What versions of Oracle Portal are certified with the Oracle E-Business Suite Release 11i?

Portal 10g (10.1.4) is certified with all Oracle E-Business Suite Release 11.5.8 and higher environments as part of the certification with Oracle Application Server 10g. See Using Oracle Portal 10g with Oracle E-Business Suite 11i (Metalink Note 305918.1).

Environments built with the 11.5.10 Rapid Install may only be used with Portal 10g. This configuration requires the use of Oracle Application Server 10g.

All future certifications of Portal will be for architectures where Portal is installed on a standalone server or a separate ORACLE_HOME distinct from the Release 11i environment.

Oracle Portal 3.0.9.8.4 will be desupported for E-Business Suite users in July 2007. Customers currently using Portal 3.0.9.8.4 should evaluate their plans for migration to Portal 10g at the earliest opportunity. Customers using Portal 3.0.9.8.4 for homepage functionality without custom Portal content may wish to consider using the Oracle Applications Framework-based home page.

4.

Can Oracle E-Business Suite Release 11i be integrated with third-party portals?

This depends on the capabilities of the third-party portal. Oracle does not certify third-party portal products with Oracle E-Business Suite Release 11i.

Uniform Resource Locators (URLs) produced by the Applications Navigator in Release 11i environments can be used as bookmarks in browsers and links in third-party portals. Users will be prompted to log into the E-Business Suite, if necessary, prior to their being redirected to the linked E-Business Suite functionality. Applications Object Library Minipack 11i.FND.G is a minimum prerequisite for bookmarkable URL support.

Portlets released for Release 11i (including the Applications Navigator, Applications Worklist, and Applications Favorites) are designed to run with Oracle Portal. Current versions of the Release 11i portlets are not compatible with third-party portals. It is expected that JSR-168 / WSRP-compliant versions of these portlets will be made available for E-Business Suite Release 12. These Release 12 portlets will be designed to be compatible with standards-compliant third-party portals.

5.

What portlets are released for the Oracle E-Business Suite Release 11i?

The key Oracle E-Business Suite Release 11i portlets are described in Integrate Enterprise Applications Into Oracle Application Server Portal. This whitepaper is also published in the Integration and Collaboration area on the Oracle Technology Network.

6.

Why are there hundreds of new portlets available when customizing a Portal page after upgrading to 11.5.9?

The portlets, such as Profit & Loss and Expense Management KPIs, were part of Daily Business Intelligence 5.0. Daily Business Intelligence 5.0 seed data, such as the portlet names, was inadvertently included in the 11.5.9 maintenance pack. DBI 5.0 used Oracle Portal to render DBI overview pages. DBI 5.0 was previously available under the Early Adopter Program but is no longer available.

All new DBI implementations must start with DBI 6.0 or later. The overview page rendering technology was switched in DBI 6.0 to OA Framework instead of Oracle Portal to simplify the implementation. DBI overview pages and drill-down reports can be accessed from Oracle Portal via the Applications Navigator portlet or the Applications Favorites portlet.

7.

Does Oracle Portal comply with the WSRP and JSR-168 specifications?

Yes. The Organization for the Advancement of Structured Information Standards (OASIS) Web Services for Remote Portlets (WSRP) and the Java Community Process (JCP) Java Specification Request (JSR) 168 standards enable the interoperability of portlets across different portal platforms.

The current architecture for OracleAS Portal 10g already adheres to the design principles of OASIS WSRP and JSR-168; as a result, Oracle has been able to contribute significantly to the WSRP specification. Oracle is also a member of the expert group for JSR-168 and one of the primary advocates in the JSR-168 process for ensuring compatibility with WSRP.

See Oracle Technology Network: WSRP and JSR 168 Standards

8.

Can PortalTools be used with Portal 3.0.9 and Release 11i?

PortalTools is a set of three generic portlets: OmniPortlet, Simple Parameter Form, and WebClipping. These portlets require infrastructure introduced in Oracle9i Application Server Release 2, and are not compatible with Portal 3.0.9 and Oracle E-Business Suite Release 11i.

9.

What resources are available for sizing and performance management for Portal instances?

The Performance & Sizing (Oracle Technology Network) area provides guidance on estimating hardware sizing and optimizing performance of Oracle Portal environments. Release 11i system administrators should be aware that the documents on this site are written for generic environments using Oracle Portal. While all of the general principles for sizing and performance optimization for Oracle Portal apply, specific recommendations for fine-tuning configuration files in Oracle E-Business Suite Release 11i environments must be executed through the Release 11i AutoConfig tool.

10.

Can Release 11i environments with Portal 3.0.9 be migrated to Portal 10g?

Oracle Portal 3.0.9.8.4 will be desupported for E-Business Suite users in July 2007. Customers currently using Portal 3.0.9.8.4 should evaluate their plans for migration to Portal 10g at the earliest opportunity.

Migration instructions for upgrading Portal 3.0.9 to Portal 10g are published on the Oracle Technology Network Portal Center . It is important to note that these instructions will apply to the migration of the Portal metadata repository in standalone configurations; these instructions will not be validated for Oracle E-Business Suite Release 11i environments.

When Portal 3.0.9 is installed with 9iAS 1.0.2.2.2 in a Release 11i environment, the Portal metadata repository resides in the Release 11i database. Due to the complexity of moving the metadata repository out of the Release 11i database safely, Oracle will not be certifying or recommending this upgrade path for Release 11i customers. Release 11i customers with Portal 3.0.9 implementations are advised to install Portal 10g in a standalone environment and manually recreate their existing Portal content in the new environment.

11.

Can Portal be installed on a standalone server?

Yes. Portal 10g from Oracle Application Server 10g may be installed on a separate standalone server, or in a separate ORACLE_HOME on an existing server. See Using Oracle Portal 10g with Oracle E-Business Suite 11i (Metalink Note 305918.1).

Portal 3.0.9 from Oracle9i Application Server 1.0.2.2.2 must be installed on an existing application tier server node when used with Oracle E-Business Suite Release 11i, with the Portal Repository installed into the Applications 11i database.

12.

Is it possible to use Portal to call the Oracle E-Business Suite Release 11i as an external application?

Yes, it is possible to install Oracle Portal on a standalone server that is physically separate from an existing Oracle E-Business Suite Release 11i application tier server node. Portal is able to call the Oracle E-Business Suite Release 11i by passing a userid and password combination; this is called external authentication. However, this is not a recommended or supported configuration as it comes with a number of disadvantages:

- * There is no centralized administration of users and passwords for the various Oracle E-Business Suite Release 11i subsystems, requiring users to login multiple times (e.g. Discoverer users would need to reauthenticate for access to workbooks)

- * There is no supported method of importing existing Oracle E-Business Suite Release 11i usernames and passwords information into the standalone Oracle Single Sign-On server

- * There is no access to Oracle E-Business Suite Release 11i page definitions and portlets

- *

Logging out does not end the overall Oracle E-Business Suite Release 11i session

13.

Can Portal be integrated with multiple Oracle E-Business Suite Release 11i instances?

For Portal 10g: Yes. Integration of Portal with multiple Oracle E-Business Suite Release 11i instances is supported with Portal 10g from Oracle Application Server 10g. See Is Oracle Application Server 10g certified with Oracle E-Business Suite?

Release 11i portlets are instantiated for each instance. For example, if two Release 11i instances are registered with a single Portal 10g instance, there will be two Applications Navigator Portlets - one for each Release 11i instance.

For Portal 3.0.9: No. Portal 3.0.9 from Oracle9i Application Server 1.0.2.2.2 may be integrated with a single Release 11i instance only. There are known issues with integrating multiple Release 11i instances with Portal 3.0.9 that are resolved with the certification of Portal 10g and higher.

14.

Why must Portal 3.0.9.8.4 be installed in a Release 11i environment when integrating with a standalone Portal 10g instance?

An Oracle E-Business Suite Release 11i instance communicates with a standalone Oracle Application Server 10g instance running Portal 10g via the Oracle Applications Framework Web Provider.

The Oracle Applications Framework Web Provider running on the Release 11i instance relies on the Java Portal Development Kit (JPDK) for Single Sign-On integration. JPDK is bundled only as part of the Portal 3.0.9.8.4 installation. To deliver this prerequisite, Portal 3.0.9.8.4 needs to be installed in the filesystem of the Oracle E-Business Suite Release 11i application tier server node.

The Portal 3.0.9 schemas do not need to be installed on the Release 11i database tier, and Portal 3.0.9 is not used for any Portal services. All Portal services are delivered by the Oracle Application Server 10g instance running Portal 10g.

15.

Can Portal 9.0.2 be used with Identity Management 9.0.4 and Oracle E-Business Suite Release 11i?

No. Portal 9.0.2 (released with Oracle9i Application Server Release 2) is not certified with Oracle E-Business Suite Release 11i.

16.

How are non-Applications Portal users authenticated when using FND_USER?

If Login Server 3.0.9 authentication has been configured to use the Oracle E-Business Suite Release 11i's FND_USER user directory to store user information, all Portal 3.0.9 users must be registered in FND_USER and managed with the Applications user administration forms. Do not assign Applications responsibilities to Portal users if they are not authorized to be Release 11i users.

17.

Should the Web Provider and the Application Portal URLs be set to HTTP or HTTPS?

The OAFrameworkWebProvider URL defines how the Web Provider communicates with Release 11i. If the Release 11i environment has been SSL-enabled, then the Web Provider URL should use HTTPS. If the environment is not SSL-enabled, then HTTP should be used. This general principle applies to the Application Portal URLs as well: if SSL is desired and enabled, then the Application Portal URLs should be set to HTTPS, otherwise, it should be set to HTTP.

6. Oracle Internet Directory , Single Sign-On & Security Questions

1.

Where can one get information about security alerts for Oracle products?

Security alerts for all Oracle products can be found on the Oracle Technology Network: <http://otn.oracle.com/deploy/security/alerts.htm> . Please refer to that website for information on contacting Oracle's Security Alert team if you believe that you have identified a security vulnerability, or if you have questions about whether a particular security issue is resolved by a given Critical Patch Update.

2.

What are some security-related resources for Oracle E-Business Suite Release 11i?

- * Critical Patch Updates and Security Alerts (Oracle Technology Network)
- * Best Practices for Securing Oracle E-Business Suite (Metalink Note 189367.1)
- * Enabling Oracle Label Security in Oracle E-Business Suite (Metalink Note

234599.1)

* Encrypting EBS 11i Network Traffic using Advanced Security Option / Advanced Networking Option (Note 391248.1)

*

Using Transparent Data Encryption with the E-Business Suite (Metalink Note 403294.1)

3.

What is required to enable Single Sign-On for Oracle E-Business Suite Release 11i?

By default, E-Business Suite Release 11i authenticates users against its internal user repository (FND_USER).

E-Business Suite Release 11i may optionally be integrated with Oracle Single Sign-On 10g and Oracle Internet Directory 10g, parts of Oracle Identity Management. For integration steps, see Installing Oracle Application Server 10g with Oracle E-Business Suite Release 11i (Metalink Note 233436.1).

When integrated with these components, E-Business Suite Release 11i delegates user authentication to Oracle Single Sign-On 10g. User administration, including password resets, may be managed in Oracle Internet Directory 10g. For conceptual information about the various scenarios for managing users and passwords in this integrated architecture, see the "Oracle Single Sign-On Integration" chapter in Oracle Application System Administrator's Guide - Release 12 (Part No. B31451).

4.

Can Oracle Single Sign-On and Oracle E-Business Suite work with third-party single sign-on products?

Yes. E-Business Suite Release 11i environments may be integrated with Oracle Single Sign-On 10g. Oracle Single Sign-On 10g may be integrated, in turn, with third-party authentication systems.

In this configuration, the E-Business Suite delegates user authentication to Oracle Single Sign-On 10g. Oracle Single Sign-On 10g, in turn, delegates user authentication to the third-party authentication system. A chain of trust is established between all three

systems. End-users who have successfully logged on to the third-party authentication system are recognized by the E-Business Suite and Oracle Single Sign-On 10g as trusted users, and are redirected to the requested E-Business Suite functionality without having to log in again.

Examples of third-party authentication system integrations include:

- * Microsoft Kerberos (Windows Native Authentication)
- * CA Netegrity SiteMinder
- * IBM Tivoli Access Manager
- * Smart-card and Common Access Card (CAC) systems

For information on integrating Oracle Single Sign-On 10g with third-party authentication systems, see the "Integrating with Third-Party Access Management Systems" chapter in Oracle Application Server Single Sign-On Administrator's Guide 10g (Part No. B14078).

For conceptual information about the various scenarios for managing users and passwords in this integrated architecture, see the "Oracle Single Sign-On Integration" chapter in Oracle Application System Administrator's Guide - Release 12 (Part No. B31451).

Oracle provides general support for isolating integration issues between third-party authentication systems and Oracle Single Sign-On 10g. Although Oracle will attempt to resolve third-party integration issues to the best of their ability, users of third-party products may be advised to contact the third-party vendor for detailed support for third-party issues.

5.

Can Oracle Internet Directory and Oracle E-Business Suite work with third-party LDAP directories?

Yes. E-Business Suite Release 11i environments may be integrated with Oracle Internet Directory 10g. Oracle Internet Directory 10g may be integrated, in turn, with third-party LDAP 3/X.500 compliant directories.

In this configuration, the E-Business Suite synchronizes user attributes with Oracle Internet Directory 10g. Oracle Internet Directory 10g, in turn, synchronizes user attributes with the third-party LDAP directory. User attributes may be synchronized:

- * From the E-Business Suite to Oracle Internet Directory 10g to the third-party LDAP
- * From the third-party LDAP to Oracle Internet Directory 10g to the E-Business Suite
- * Bidirectionally

Examples of third-party LDAP directory integrations include:

- * Microsoft Active Directory
- * Microsoft Exchange

- * Sun Java System Directory
- * IBM Tivoli Directory Server
- * Novell e-Directory
- * OpenLDAP

For information on integrating Oracle Internet Directory 10g with third-party LDAP directories, see the Oracle Identity Management 10g Integration Guide (Part No. B14085).

For conceptual information about the various scenarios for managing users and passwords in this integrated architecture, see the "Oracle Single Sign-On Integration" chapter in Oracle Application System Administrator's Guide - Release 12 (Part No. B31451).

Oracle provides general support for isolating integration issues between third-party LDAP directories and Oracle Internet Directory 10g. Although Oracle will attempt to resolve third-party integration issues to the best of their ability, users of third-party products may be advised to contact the third-party vendor for detailed support for third-party issues.

6.

Can Oracle E-Business Suite Release 11i be used directly with a third-party LDAP directory instead of Oracle Internet Directory?

No. Replacing Oracle Internet Directory directly with a third-party LDAP directory for Release 11i is not supported. Release 11i is certified with the Oracle Identity Management services included in Oracle Application Server 10g, which include Oracle Internet Directory and Oracle Single Sign-On. Third-party LDAP directories must be integrated with Oracle Application Server 10g, which in turn may be integrated with Release 11i .

7.

How can Microsoft Active Directory and Windows Native Authentication be used with Oracle Internet Directory and Oracle E-Business Suite Release 11i?

For Oracle Application Server 10g users: Release 11i may be integrated with Oracle Application Server 10g . Once integrated, Oracle Application Server 10g provides multiple methods for integrating Oracle Single Sign-On and Oracle Internet Directory with Microsoft Windows environments and Microsoft Active Directory. Windows Native Authentication is an authentication scheme for those who use Internet Explorer on Microsoft Windows. When this feature is enabled in OracleAS Single Sign-On, users log in to single sign-on partner applications automatically using Kerberos credentials obtained when the user logs in to a Microsoft Windows computer. See:

- * Integration with the Microsoft Active Directory Environment
- * Integration with the Microsoft Windows Environment
- * How To Synchronize Microsoft Active Directory Quick Start Guide
- * Troubleshooting Active Directory to OID Synchronization
- * Understanding DIP Mapping Files

8.

How does the AppsLogin servlet work?

The AppsLogin servlet supercedes older Release 11i login mechanisms and certain product-specific login pages. The AppsLogin servlet detects the login mode by reading the "Applications SSO Type" profile option for the current Oracle E-Business Suite Release 11i instance and transparently redirects to the appropriate login page.

* Scenario 1: AppsLogin running on a Release 11i instance configured for Self-Service Web Applications (SSWA) will authenticate the user via the AppsLocalLogin.jsp page, and then redirect to the configured home page specified in the Self Service Personal Home Page mode profile option.

* Scenario 2: AppsLogin running on a Release 11i instance configured for Single Sign-On will redirect to the Single Sign-On 10g login page for user authentication, and then redirect to the configured home page specified in the Self Service Personal Home Page mode profile option.

*

Scenario 3: AppsLogin running on a Release 11i instance configured for Single Sign-On and Portal will redirect to Single Sign-On 10g login page for user authentication, and then redirect to the default Portal home page.

The AppsLogin servlet may be installed for Release 11i environments running 9iAS 1.0.2.2.2 , or Release 11i environments integrated with Oracle Application Server 10g and Single Sign-On 10g.

9.

Can Oracle Internet Directory groups be mapped to Oracle E-Business Suite Release 11i responsibilities?

Presently, user information in Oracle Internet Directory 10g and Release 11i may be automatically synchronized. Users must still be granted Release 11i responsibilities via the Release 11i security administration forms.

10.

Are passwords synchronized between Oracle Internet Directory and Oracle E-Business Suite Release 11i instances?

No. Oracle E-Business Suite Release 11i uses passwords and credentials stored and managed in Oracle Internet Directory.

11.

What is the difference between Oracle Login Server and Oracle Single Sign-On Server?

Various Oracle documentation may alternately refer to Login Server, Single Sign-On Server, and Single Sign-On. These terms all refer to the same product at different times in its lifecycle:

* Oracle9i Application Server 1.0.2.2.2 uses the term Login Server

*

Oracle9i Application Server 9.0.2 and higher use the term Single Sign-On Server, or simply Single Sign-On

12.

Where can one find more information about the Oracle Workflow Business Event System?

Oracle Internet Directory and Oracle E-Business Suite Release 11i keep user information synchronized by raising events in the Oracle Workflow Business Event System. For details about the business events raised when users are added or modified in either location, see Note 261914.1 Integrating Oracle E-Business Suite Release 11i with Oracle Internet Directory and Oracle Single Sign-On. For more information about the Oracle Workflow Business Event System, see the Oracle Workflow Developer's Guide.

13.

How can new users added to Oracle Internet Directory be automatically added to the E-Business Suite Release 11i instance?

For maximum security in the default configuration, new users added to Oracle Internet Directory must be manually added to the subscription list of a registered E-Business Suite Release 11i instance. In the default configuration, the process of adding a new user requires the following steps:

1. Add user in Oracle Internet Directory using the Delegated Administration Services tool (or equivalent mechanism when OID is integrated with a third-party LDAP directory).
2. Add user to subscription list of a registered 11i instance using the provsubtool.ora tool.
3. User information is automatically propagated via the Directory Integration & Provisioning Platform to the 11i instance's FND_USER table.
4. Grant 11i responsibilities to the newly created user, using the 11i "User Define" forms.

System administrators may optionally enable the APPS_SSO_OID_IDENTITY profile option. Enabling the APPS_SSO_OID_IDENTITY profile option automates Step 2, above: users added to Oracle Internet Directory when the APPS_SSO_OID_IDENTITY profile option is enabled are automatically added to the subscription list for the registered 11i instance and created in FND_USER. System administrators must still manually grant 11i responsibilities to the newly created user.

14.

Can Oracle Internet Directory 10g be used with Oracle E-Business Suite Release 11i?

Yes. See What is required to enable Single Sign-On for Oracle E-Business Suite Release 11i?

15.

What is the master source-of-truth for user information after Oracle Internet Directory is integrated with Release 11i?

The recommended practice is to designate either Oracle Internet Directory or Release 11i's FND_USER as the master source-of-truth for user information after Oracle Application Server 10g has been integrated with Release 11i. This is configurable by the system administrator by following Note 261914.1 and selecting the appropriate provisioning profile template.

Oracle strongly recommends that Oracle Internet Directory be designated as the master source-of-truth for Release 11i environments that have been integrated with Oracle Application Server 10g.

Advanced system administrators with specialized needs may designate both directories as masters for individual attributes. For example, Oracle Internet Directory may be designated the master source-of-truth for the USERNAME attribute, and Release 11i's FND_USER is the master for the DESCRIPTION attribute. This is not recommended but technically possible.

In all scenarios, user information must be synchronized between Oracle Internet Directory and Release 11i. This synchronization is accomplished via the Directory Integration & Provisioning Platform, included with Oracle Internet Directory in Oracle Application Server 10g. In the scenario where Oracle Internet Directory is the master source-of-truth, user information from Oracle Internet Directory must be locally replicated in Release 11i. In the scenario where Release 11i is the master source-of-truth, user information from Release 11i's FND_USER must be locally replicated in Oracle Internet Directory; Oracle does not recommend this latter scenario.

Regardless of which option is selected, Oracle Single Sign-On authenticates users against Oracle Internet Directory.

Note the distinction between user authentication (which validates that the user is whom they claim to be) and user authorization (which validates that the user has access to specific Release 11i functions and data).

For Release 11i environments that have been integrated with Oracle Application Server 10g and Oracle Internet Directory, user authentication is done by Single Sign-On against Oracle Internet Directory, and user authorization is done by Release 11i against FND_USER. FND_USER is still used internally by Release 11i for user authorization, transaction records, audit trails and other internal 11i security management.

Since the user authentication and user authorization functions are tightly integrated but performed by Single Sign-On and Release 11i, respectively, user namespaces in Oracle Internet Directory and Release 11i's FND_USER must always be kept synchronized.

A third-party LDAP directory may be integrated with Oracle Internet Directory. In these configurations, it is expected that the third-party LDAP directory will be designated as the master source-of-truth. In this scenario, user information between all three

repositories must be kept synchronized. Assuming that the third-party LDAP directory has been designated as the master source-of-truth, user information should be synchronized from the third-party LDAP to Oracle Internet Directory to Release 11i's FND_USER. In this configuration, passwords for Single Sign-On-enabled E-Business Suite users are maintained in the third-party LDAP; no passwords are maintained in either Oracle Internet Directory or the E-Business Suite's Release 11i's FND_USER.

16.

Can Oracle Single Sign-On be used with Oracle E-Business Suite Release 11i but without Oracle Internet Directory?

No. Oracle Single Sign-On always authenticates users against Oracle Internet Directory. Oracle Internet Directory is a mandatory requirement when integrating Oracle Application Server 10g with Oracle E-Business Suite Release 11i.

17.

Can Oracle Internet Directory 3.0.1 be used with Oracle E-Business Suite Release 11i?

Effective October, 2003, Oracle suspended distribution of Oracle Internet Directory 3.0.1-based authentication and synchronization for Oracle E-Business Suite Release 11i for new customer deployments of this functionality. Oracle will continue to support existing customers who have already deployed Oracle Internet Directory 3.0.1 in their Release 11i environments.

For all other customers, Single Sign-On support for Oracle E-Business Suite Release 11i will be restricted to user authentication with the native Oracle E-Business Suite Release 11i (FND_USER) repository. Although Note 150832.1 will continue to be available for reference purposes on Oracle Metalink, the corresponding Oracle Internet Directory synchronization patches have been withdrawn from general circulation.

Who will be affected

1. Customers planning to integrate third-party LDAP products with Oracle E-Business Suite Release 11i environments using Oracle Internet Directory 3.0.1.
2. Depending on the deployment, customers planning to integrate third-party single sign-on services with Release 11i environments using Login Server 3.0.9. Customers will have to ensure that user repositories used by third-party single sign-on services are manually synchronized with Release 11i's (FND_USER) user directory.

Recommended alternative

Oracle has certified Oracle Application Server 10g and Oracle Internet Directory with Oracle E-Business Suite Release 11i. For more information, see Is Oracle Application Server 10g certified with Oracle E-Business Suite?

18.

What Oracle database releases can Oracle Internet Directory 3.0.1 run on?

Oracle Internet Directory 3.0.1 is released as part of Oracle9i Release 1. Oracle Internet Directory 3.0.1 is compatible only with Oracle9i Release 1. Customers upgrading their Oracle E-Business Suite Release 11i environments to later database

releases (e.g. Oracle9i 9.2.0.3) must ensure that they maintain OID 3.0.1 on an Oracle9i Release 1 database.

19.

Where can one find more information about Netegrity SiteMinder compatibility with Oracle Application Server?

Computer Associates certifies different versions of SiteMinder on various operating system platforms with Oracle Application Server 10g. Some of these certifications have been completed, and others are underway. This is subject to change, and customers are advised to contact Computer Associates for the latest certification status.

For the platforms on which CA SiteMinder has been certified, Oracle has released MetaLink Note 297880.1, Integrating OracleAS 10G Single Sign-On With Netegrity SiteMinder for Unix Systems: January 2005.

20.

How can PKI X.509 V3 digital certificates be used with Oracle E-Business Suite Release 11i?

Yes. E-Business Suite Release 11i must be integrated with Single Sign-On 10g and Oracle Internet Directory 10g to support the use of Public Key Infrastructure (PKI) X.509 digital certificates. PKI digital certificates are stored in Oracle Internet Directory 10g. Users' browsers present the PKI digital certificates at the authentication stage to Oracle Single Sign-On 10g, which passes them on to Oracle Internet Directory 10g for validation.

For details on integrating E-Business Suite Release 11i with Single Sign-On 10g and Oracle Internet Directory 10g, see Installing Oracle Application Server 10g with Oracle E-Business Suite Release 11i (Metalink Note 233436.1).

For more information about using digital certificates with Single Sign-On 10g, see the "Signing on with Digital Certificates" chapter in Oracle Application Server Single Sign-On Administrator's Guide 10g Release 2 (10.1.2) (Part No. B14078)

21.

What resources are available for load-balancing, sizing, or implementing High Availability for an Identity Management server?

- * Oracle Application Server 10g High Availability (Oracle Technology Network)
- * Highly Available Identity Management Deployment Configurations in OracleAS 10g
- * Deployment Scenarios
- *

Distributed Identity Management with Active Failover Cluster for High Availability

22.

Can the Release 11i user directory be switched between Oracle Internet Directory and Applications FND_USER?

For existing Oracle Internet Directory 3.0.1 users: Switching between the two possible user directories, Oracle Internet Directory 3.0.1 and FND_USER, is supported. One scenario where this may be desirable is where the Release 11i FND_USER directory is initially used for a small-scale Release 11i environment enabled for Single Sign-On support. The same environment may be upgraded later to use Oracle Internet Directory to integrate with third-party LDAP directories in a broader implementation. See Oracle Metalink Note 146469.1 , Installing and Configuring Oracle Login Server and Oracle Portal 3i with Oracle Applications 11i.

To switch from one external authentication method to another, execute the steps corresponding to the desired user directory. For example, if Step 4.1 has already been executed to configure FND_USER as the default external authentication, execute Step 4.2 to switch to Oracle Internet Directory.

For Oracle Internet Directory 10g users: In Release 11i environments that have been configured to delegate user authentication to Oracle Application Server 10g via Single Sign-On and Oracle Internet Directory, individual users may be designated as "local" users or "external" users. "Local" users are authenticated against the native Release 11i FND_USER directory. "External" users are authenticated against the external Oracle Internet Directory user directory.

23.

How can existing user information from Applications FND_USER be uploaded to Oracle Internet Directory?

The Applications Technology Group provides prepackaged tools for synchronizing the E-Business Suite with Oracle Internet Directory 10g. For details, see Integrating Oracle E-Business Suite Release 11i with Oracle Internet Directory and Oracle Single Sign-On (Metalink Note 261914.1).

24.

How are user passwords transferred between third-party LDAP directories and Oracle Internet Directory?

Some capabilities exist for synchronizing passwords, but this is generally not necessary, since these environments typically also include third-party authentication systems that authenticate users against the third-party LDAP directories. For a detailed discussion, see the "Choose Where to Store Passwords" chapter in the Oracle Identity Management 10g Integration Guide (Part No. B14085).

Password hashes from third-party LDAP directories can be included in LDIF-based imports into Oracle Internet Directory. The following hash algorithms are supported: MD4, MD5, SHA, SSHA, and UNIX Crypt. For more details, see Migrating Data from Other LDAP-Compliant Directories in Oracle Internet Directory Administrator's Guide 10g.

Password transfer to Oracle Internet Directory is needed only if migrating from an existing third-party LDAP directory to Oracle Internet Directory. Password transfer is not necessary for configurations where Release 11i is integrated with an existing third-party LDAP via Oracle Application Server 10g, where the third-party LDAP directory remains actively used.

25.

How can CRM environments be upgraded to support Single Sign-On?

For Oracle Internet Directory 3.0.1 users: Earlier documentation and announcements stated that Customer Relationship Management Self-Service Web Applications components are not compatible with Single Sign-On.

Further analysis has been performed, and the list of "Single Sign-On exceptions" has been isolated to a smaller subset applications in Release 11i.

Note 150832.1 , Implementing Single Sign-On for Oracle Applications 11i with Login Server Authentication Using Oracle Internet Directory, has been updated with a preliminary summary of this new information. The "Functional Limitations for Oracle Internet Directory Users" section of this document contains the current list of Release 11i applications that have special requirements for Single Sign-On support.

The Applications Technology Group is preparing a further update with the latest list of Release 11i modules that are not compatible with Oracle Internet Directory 3.0.1. For more information about the availability of the latest list on Metalink, contact Remi Aimsuphanimit.

For Oracle Internet Directory 10g users: The majority of Release 11i modules are compatible with Single Sign-On 10g with the release of 11.5.10; a list of exceptions may be found in MetaLink Note 233436.1. Customers using earlier 11i versions may need to apply product-specific patches to enable Single Sign-On for selected products.

26.

How can one identify the currently installed version of Oracle Internet Directory?

There are at least three possible methods of identifying the currently installed version of Oracle Internet Directory:

1. Select Help > About OID using the Oracle Directory Manager client
2. Point Oracle Directory Manager at one or more Oracle Internet Directory instances. Oracle Directory Manager displays system operational attributes when an instance is selected. One of the attributes shown is Oracle Directory Version.

3.

Each OID instance has a root DSE attribute (entry DN = "") called orclDirectoryVersion.

27.

What user attributes are synchronized between Oracle Internet Directory and Oracle E-Business Suite Release 11i?

For Oracle Internet Directory 10g: The set of user attributes that may be synchronized between Oracle Internet Directory 10g and Oracle E-Business Suite Release 11i differs depending upon the direction of synchronization. For more details, see Oracle MetaLink Note 261914.1 , Integrating Oracle E-Business Suite Release 11i with Oracle Internet Directory and Oracle Single Sign-On.

For Oracle Internet Directory 3.0.1: The following directory information can be synchronized between Oracle Internet Directory and Release 11:

- * User identities from Oracle Human Resources. See Chapter 27, "Synchronizing with Oracle Human Resources" in the Oracle Internet Directory Administrator's Guide Release 3.0.1 (Part Number A90151-01).

- * Attributes synchronized from Oracle Internet Directory 3.0.1 to Oracle E-Business Suite Release 11i FND_USER by patch 2499306 (see Oracle MetaLink Note 150832.1) are:

- * MAIL
- * DESCRIPTION
- * FACSIMILETELEPHONENUMBER
- * EMPLOYEENUMBER
- * CUSTOMER_ID
- * SUPPLIER_ID
- * USER_NAME

28.

Is it possible to prevent multiple concurrent logins for a single user account?

Yes. See Oracle MetaLink Note 375403.1, How Can I Restrict Applications Users To Be Signed In Only Once At Any Time.

Questions and Answers Overview and Terminology

1.

What is AutoConfig?

Answer:

AutoConfig is a configuration tool that automates the configuration of an Oracle Applications system. The information required for configuring an Applications system is collected into a repository, called the Applications Context; there is one Applications Context for each application tier, and one for the database tier. When AutoConfig runs, it uses information from the Applications Context file to generate all configuration files and update database profiles.

Refer to Metalink Note 165195.1 for details on installing, using and updating AutoConfig. The Oracle Applications Maintenance Procedures and the Oracle

Applications Maintenance Utilities provide further information on how to use AutoConfig in the context of maintaining your system.

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2.

What is the difference between the application tier and the database tier?

Answer:

Before we can answer that, let's define a few terms in the context of the Release 11i architecture:

- * A node or machine is a computer.
- * A server is a collection of one or more computer processes that perform a specific function.
- * A tier is a logical grouping of one or more servers or computer processes.

Now let's answer the question.

* The application tier (also called the middle tier) consists of a number of servers, such as the concurrent processing server, web server, forms server, and administration server, that process the transactions of the Release 11i system, as well as provide communication between the desktop tier and the database tier. (Such servers are also referred to as application tier servers. Likewise, the nodes on which such servers run are also referred to as application tier server nodes.)

* The database tier consists of the database server, which stores all the data of the Release 11i system.

The primary location of the files used by the application tier servers is the APPL_TOP, whereas the primary location of the files used by the database server is the Oracle8i or Oracle9i ORACLE_HOME.

For more information about the Release 11i architecture, refer to Oracle Applications Concepts, Release 11i.

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3.

How can I identify the application tier and the database tier in a multi-node system?

Answer:

A node can contain one or more servers, and can therefore belong to one or more tiers.

In a single node system, that node belongs to both the application tier and the database tier, since all servers are contained on that single node.

In a multi-node system, each node contains one or more servers, and therefore belongs to one or both tiers. If the node contains any of the application tier servers, including the web server, forms server, concurrent processing server, or administration server, which means that there is an APPL_TOP on the node, then the node belongs to the application tier, and is considered an application tier server node. If the node contains the database server, which means that there is an Oracle8i or Oracle9i ORACLE_HOME and the Applications database instance on the node, then the node belongs to the database tier, and is considered a database server node.

Let's analyze a common configuration where the database server and the concurrent processing server exist on one node (Node 1), and the other servers exist on a second node (Node 2). Since Node 1 contains both an application tier server (the concurrent processing server) and the database server, Node 1 belongs to both the database tier and the application tier. But since Node 2 contains only application tier servers, Node 2 belongs only to the application tier.

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4.

How do I configure AutoConfig for a multi-node system?

Answer:

The AutoConfig patch is applied using AutoPatch. Therefore, it must be applied to each application tier server node, which means to each node that contains an APPL_TOP.

If the database server node contains only the database server and no other servers, then you would not apply an AutoConfig patch on that node.

Once all the application tier servers have been updated by the AutoConfig patch, there is a separate process for updating the database server, which is documented in Metalink Note 165195.1. This process consists of running the admkappsutil utility on one (only one) application tier, copying the generated appsutil.zip file to the database tier and unzipping the appsutil.zip file into the RDBMS ORACLE HOME.

Example 1:

The system has two nodes.

Node 1 = administration server, concurrent processing server, database server

Node 2 = forms server, web server

Since both nodes are application tier server nodes, the AutoConfig patches need to be applied to both nodes. Once the patches are applied, you have to update the database server Node1 by running the admkappsutil utility from the APPL_TOP on Node1, copying the generated appsutil.zip to your RDBMS ORACLE_HOME on Node1 and unzipping the appsutil.zip file into the RDBMS ORACLE_HOME.

Example 2:

The system has two nodes.

Node 1 = database server

Node 2 = administration server, concurrent processing server, forms server, web server

Since Node 2 is the only application tier server node, the AutoConfig patch needs only be applied to Node 2. Once the patch is applied, you have to update the database server Node1 by running the admkappsutil utility from the APPL_TOP on Node2, copying the generated appsutil.zip to your RDBMS ORACLE_HOME on Node1 and unzipping the appsutil.zip file into the RDBMS ORACLE_HOME.

Example 3:

The system has three nodes.

Node 1 = database server

Node 2 = administration server, concurrent processing server

Node 3 = forms server, web server

Since Node 2 and Node 3 are application tier server nodes, the AutoConfig patch needs to be applied to Node 2 and Node3. Once the patches are applied, you have to update the database server Node1 by running the admkappsutil utility either from the APPL_TOP on Node1 or Node2 (it does not matter on which Node you run the admkappsutil utility), copying the generated appsutil.zip to your RDBMS ORACLE_HOME on Node1 and unzipping the appsutil.zip file into the RDBMS ORACLE_HOME.

Reference:

* Metalink Note 208738.1

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5.

What user do I log in as to use AutoConfig in a typical multi-node system?

Answer:

For nodes running Windows, there is only one user that owns both the application tier servers and the database server, so you would log in as that user.

For nodes running UNIX or Linux, if you want to configure the application tier servers, log in as the user that owns the application tier servers (sometimes referred to as the applmgr user). If you want to configure the database server, log in as the user that owns the database server (sometimes referred to as the oracle user).

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6.

How do I determine if AutoConfig is enabled?

Answer:

Check for the script `adcfginfo.sh` (`adcfginfo.cmd` on Windows) under `<AD_TOP>/bin`. If it exists, use it to check whether AutoConfig is enabled.

For the APPL_TOP:

```
adcfginfo.sh contextfile=<CONTEXT>
```

For products:

```
adcfginfo.sh contextfile=<CONTEXT> show=enabled
```

If `adcfginfo.sh` doesn't exist, look in any configuration file in your APPL_TOP. If the file header contains the following, AutoConfig has been run on your instance :

7.

Is AutoConfig compatible with Oracle Applications 11.5.x?

Answer:

Yes, it is compatible with all 11i releases. You can use AutoConfig to configure and maintain any Oracle Applications 11i environment.

Release 11.5.1 - 11.5.6 (all tiers):

Apply the latest AutoConfig consolidated patch to obtain the AutoConfig utility.

Release 11.5.7 and higher (application tier):

AutoConfig is included in new Applications installations and in the associated maintenance packs.

Release 11.5.9 and higher (database tier):

AutoConfig is included in new Applications installations and in the associated maintenance packs.

Note: If you upgrade from a maintenance pack version that does not include AutoConfig to a maintenance pack version that includes AutoConfig (for example you upgrade from 11.5.3 to 11.5.10), you have to separately migrate to AutoConfig as part of the pre-upgrade process. Follow the instructions of the corresponding maintenance pack.

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8.

What does the term "Context_name" mean?

Answer:

The "Context_name" is the logical name for your Context. The default value for Context_name is `<SID>_<hostname>`. In earlier versions of AutoConfig the default was set to `<SID>`.

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9.
What are the basic components of AutoConfig?

Answer:

10.
What are the different AutoConfig scripts and what do they do?

Answer:

The scripts are listed in the following table.

Note: .sh scripts are for UNIX users and .cmd scripts are for Windows users.

AutoConfig pre-requisites

11.
Do I need to upgrade to Apache 1.3.12s?

Answer:

If you are applying the AutoConfig patch to an instance created with a Rapid Install version lower than Release 11.5.5, upgrade to Apache 1.3.12s.

Refer to Metalink Document 161779.1 on OracleMetalink.

Note: Rapid Install for versions 11i7 and higher installs Oracle HTTP Server 1.3.19 from iAS 1.0.2.2

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The Context file

12.
How will the adbldxml utility name the Applications Context file it generates?

Answer:

When adbldxml generates the Context file, it first checks for the existence of an Applications Context file conforming to specific requirements in the <APPL_TOP>/admin directory on the application tier and in the <RDBMS ORACLE_HOME>/appsutil directory on the database tier.

If an xml file exists, adbldxml creates the Applications Context file using the same name.

Specific requirements are:

- * The Context file refers to the hostname for which we generate the file.
- * The Context file refers to the Database SID for which we generate the file.

The default name for the Context file is <Context_name>.xml.

[top]

13.

How can I make changes to the Applications Context file?

Answer:

Go to the OAM Login page. Sign in and navigate to Site Map. Click on AutoConfig. Use this link to update your Applications Context file.

For additional information see the Oracle Applications Maintenance Procedures.

Note: Manually editing the Applications Context file is not supported. Many context variables have dependencies between each other. The OAM AutoConfig resolves all these dependencies when changing the value of a variable. By manually editing the Applications Context file you will bring the data into an inconsistent state.

[top]

14.

I want to execute the adbldxml utility on a fresh RDBMS Oracle Home. How can I build the Context file, when the database environment file is not present?

Answer:

The adbldxml utility requires the following environment variables to be set:

- * ORACLE_HOME
- * ORACLE_SID (LOCAL on Windows)
- * TNS_ADMIN

Set the variables according to your instance. For example:

* On UNIX
export ORACLE_SID=PROD

* On Windows
set LOCAL=PROD

[top]

15.

I was instructed to change the value of the context variables s_adperlprg and s_perl5lib. How can I achieve that?

Answer:

Apply the latest AutoConfig patch, then perform the following steps depending on your use case:

* You were instructed to use a certain perl version. You have perl and its libraries installed in the perl standard location for your os (e.g. /usr/lib/perl5 on Linux) and perl is in your PATH:

1. unset PERL5LIB
2. perl \$AD_TOP/bin/adconfig.pl
3. Source the environment file (APPS<Context_name>.env)
4. Review your Applications Context file; s_adperlprg and s_perl5lib will now point to your system perl location.

* You were instructed to use a certain perl version. You installed perl and its libraries into a custom - non perl standard location (e.g. perl is installed at /u03/myperl/bin and the perl libraries at /u03/myperl/lib).

1. PERL5LIB=<location of the new PERL5LIB that you want to use>
2. export PERL5LIB
3. <location of the new perl you want to use> <AD_TOP>/bin/adconfig.pl
4. Source the environment file (APPS<Context_name>.env)
5. Review your Applications Context file; s_adperlprg and s_perl5lib will now point to your customized perl location.

AutoConfig will update the context variables in the context file accordingly. After the AutoConfig run subsequent utilities and tools can use the context variables s_adperlprg and s_perl5lib.

[top]

Running AutoConfig

16.

When should I run AutoConfig?

Answer:

You should run AutoConfig in the event of the following cases:

- * You did updates to your Applications Context file.
- * An Oracle Metalink Note instructs you to run AutoConfig as part of an upgrade, migration, cloning and/or configuration process.
- * The Readme of an Oracle patch instructs you to run AutoConfig after the application of the patch.
- * You apply any ADX Product patch.

Note: When you have AD.I or higher applied on your system, then adpatch will automatically invoke AutoConfig if the patch that you apply requires AutoConfig to run.

[top]

17.

Which files / profile options get changed when I run AutoConfig?

Answer:

Run the adchkcfg utility to get an html report that lists all the files and profile options that get changed when you run AutoConfig.

If you have AD.I or higher applied and you want to see the list of files and profile options that will get changed when adpatch is run, then run adpatch with the apply=no option before applying the patch. For more information, refer to Oracle Applications Maintenance Procedures - Section Patching - Testing a Patch before Applying it.

For instructions on how to run the adchkcfg utility and a discussion about the report that the utility generates, see Appendix B of the Metalink Note 165195.1.

[top]

18.

Where is the log file located that AutoConfig creates?

Answer:

The log file that AutoConfig creates is located at:

On the application tier:

<APPL_TOP>/admin/<Context_name>/log/<MMDDhhmm>/adconfig.log

On the database tier:

<RDBMS

ORACLE_HOME>/appsutil/log/<Context_name>/<MMDDhhmm>/adconfig.log

where: <MMDDhhmm> = (month, day, hour, and minute of the AutoConfig run)

[top]

19.

Which directories based on the Context_name will AutoConfig create?

Answer:

AutoConfig creates the following directories based on the Context_name:

Install Scripts : <COMMON_TOP>/admin/install/<Context_name>

Control Scripts : <COMMON_TOP>/admin/scripts/<Context_name>

Log files : <COMMON_TOP>/admin/log/<Context_name>

Beginning with Release 11.5.7, Oracle Applications comes with the modified directory structure.

[top]

20.

I see multiple directories under <COMMON_TOP>/admin/scripts - which one do I use?

Answer:

Previously, AutoConfig generated the directory <SID> in <COMMON_TOP>/admin/scripts. To provide support for a shared APPL_TOP, AutoConfig now creates the directory <SID>_<hostname>.

If your system contains both directory names, use the scripts under <SID>_<hostname>. You can safely delete directories named <SID>, after backing them up.

Refer to Metalink Document 233428.1 on OracleMetalink to learn more about the Shared APPL_TOP configuration.

[top]

21.

How can I roll back an AutoConfig session?

Answer:

All backup configuration files from each AutoConfig session are stored in:

On the application tier:

<APPL_TOP>/admin/<Context_name>/out/<MMDDhhmm>/

On the database tier:

<RDBMS ORACLE_HOME>/appsutil/out/<Context_name>/<MMDDhhmm>/

where: <MMDDhhmm> = (month, day, hour, and minute of the AutoConfig run)

You can run restore.sh (Unix) or restore.cmd (Windows) to roll back an AutoConfig session.

For additional information see Oracle Applications Maintenance Procedures.

[top]

22.

How does AutoConfig know which scripts to create for service controls?

Answer:

The following variables in the Applications Context File let AutoConfig know which scripts to create:

Context Variable Action

s_isAdmin If set to Yes, create administration service scripts

s_isConc If set to Yes, create concurrent processing and reports service scripts

s_isWeb If set to Yes, create web service scripts
s_isForms If set to Yes, create forms service scripts

The variables are set according to your configuration when you create the Applications Context file:

Single-node system: All the service control scripts are present on the same node. Therefore, all variables are set to "YES" in the Applications Context file.

Multi-node system:

Example

Node 1 = forms server, web server

Node 2 = concurrent processing server, administration server, database server

On Node 1 only the forms and web service control scripts are created. On Node 2 only the admin and concurrent processing service control scripts are created. The Applications Context files contain the following values:

Context Variable	Node 1	Node 2
s_isAdmin	NO	YES
s_isConc	NO	YES
s_isWeb	YES	NO
s_isForms	YES	NO

[top]

23.

How does AutoConfig know what application tier node type the APPL_TOP supports?

Answer:

The AD Utilities such as AutoPatch and AD Administration patch and maintain files based on the application tier node type that the APPL_TOP supports. The following variables in the Applications Context file define which files are patched and maintained for the APPL_TOP:

Context Variable	Action
s_isAdAdmin	If set to Yes, the APPL_TOP contains binaries and scripts used to maintain the Applications system.
s_isAdConc	If set to Yes, the APPL_TOP can be used to provide the CP and Reports services. All binaries, scripts, reports and other files related to these services exist in the APPL_TOP.
s_isAdWeb	If set to Yes, the APPL_TOP contains the necessary files to provide Oracle HTTP services

s_isAdForms If set to Yes, the APPL_TOP contains the necessary files to provide Forms services

The variables are set according to your configuration when you create the Applications Context file:

Single-node system: All the application tier types are present on the same node and there is only one APPL_TOP. All variables are set to "YES" in the Applications Context file.

Multi-node system sharing the same APPL_TOP: A shared APPL_TOP contains all the necessary software components to run any service. All variables are set to "YES" in the Applications Context files sharing the APPL_TOP.

Multi-node system, where every node has a separate APPL_TOP:

Example:

Node 1 = forms server, web server

Node 2 = concurrent processing server, administration server, database server

Every node has its own APPL_TOP that only patches and maintains the files specific to the node. The Applications Context files contains the following values:

Context Variable	Node 1	Node 2
s_isAdAdmin	NO	YES
s_isAdConc	NO	YES
s_isAdWeb	YES	NO
s_isAdForms	YES	NO

[top]

Customizations

24.

How do I preserve customizations to an AutoConfig-maintained environment?

Answer:

Refer to Metalink Note 270519.1 for details on how to implement customizations.

[top]

25.

What do I do when a patch or Oracle documentation instructs me to manually modify an AutoConfig-maintained file?

Answer:

Contact Oracle Support to incorporate the necessary changes in the AutoConfig templates:

1. Identify the patch or the note that is requesting the manual change.
2. Log a Service Request with Oracle Support, providing the same information.

[top]

Patching AutoConfig

26.

How do I get the latest changes to AutoConfig?

Answer:

Updates to AutoConfig are delivered in the ADX product patch. The latest patch at the time of this writing are patch number 3453499.

[top]

27.

How do I apply the latest AutoConfig patch?

Answer:

Perform the following steps in the order listed:

- * Review the pre-requisites as documented in Metalink Note 165195.1.

- * Apply the AutoConfig patch

Update the Oracle Applications file system with the AutoConfig files by applying patch 3453499. to all application tier nodes in the Applications instance.

- * Copy AutoConfig to the RDBMS ORACLE_HOME

If you enabled AutoConfig on the Database Tier, update the RDBMS ORACLE_HOME file system with the AutoConfig files by performing the following steps:

- o On the Application Tier (as the APPLMGR user):

- + Log in to the APPL_TOP environment (source the environment file)

- + Create appsutil.zip file

- + perl <AD_TOP>/bin/admkappsutil.pl

- + This will create appsutil.zip in \$APPL_TOP/admin/out .

- o On the Database Tier (as the ORACLE user):

- + Copy or FTP the appsutil.zip file to the <RDBMS ORACLE_HOME>

- + cd <RDBMS ORACLE_HOME>

- + unzip -o appsutil.zip

- * Run AutoConfig on the Database Tier

If you enabled AutoConfig on the Database Tier, run AutoConfig on the database tier node.

Attention: The database server must remain available during the AutoConfig run. All the other database tier services should be shut down.

- * Run AutoConfig on the Application Tiers
Run AutoConfig on all application tier nodes.

Attention: The database server must remain available during the AutoConfig run. Only the application tier servers should be shut down.

[top]

Net Services

28.

What is the Net Services Topology Data Model?

Answer:

The Net Services Topology Data Model stores the entire topological information about a single Oracle Application instance. The data model stores information about each node in the Oracle Applications instance which is then used to generate the Net Service configuration files (for example tnsnames.ora). AutoConfig seeds the data model with relevant data.

The Net Services Topology Data Model stores the following information:

- * On the database tier: Hostname, Database SID, Database Name, Instance Name, TNS Descriptors.....
- * On the application tier: Hostname, FNDFS and FNDSM alias descriptors.....

[top]

29.

When is the Net Services Topology Data Model seeded?

Answer:

The Net Services Topology Data Model is seeded every time you run AutoConfig on the respective tier. Every time you run AutoConfig on the database tier, the relevant data is seeded/updated for the database tier. Respectively, every time you run AutoConfig on the application tier, the relevant data is seeded/updated for the application tier.

[top]

30.

What mechanism is used to generate the tnsnames.ora file?

Answer:

31.

How do I seed the Net Services Topology Data Model?

Answer:

The Net Services Topology Data Model can be seeded/updated by running AutoConfig on the database tier followed by all application tiers.

[top]

32.

When do I need to deregister a database tier or an application tier?

Answer:

You have to deregister a tier from the Net Services Topology Data Model in one of the following cases:

- * You want to delete an application tier
- * Your database is upgraded/migrated resulting in a change in one of the following parameters:

- o Database Host
- o Database Port
- o Database Name
- o Database SID

You should deregister the tier before the tier is decommissioned.

[top]

33.

How do I deregister an application tier from the Net Services Topology Data Model?

Answer:

To deregister the current application tier from the Net Services Topology Data Model, invoke the following command:

```
perl <AD_TOP>/bin/adgentns.pl appspass=<APPSPWD> contextfile=<CONTEXT>  
-removeserver
```

[top]

34.

How do I deregister a database tier from the Net Services Topology Data Model?

Answer:

To deregister the current database tier from the Net Services Topology Data Model, invoke the following command:

```
perl <RDBMS_ORACLE_HOME>/appsutil/bin/adgentns.pl appspass=<APPSPWD> \  
contextfile=<CONTEXT> -removeserver
```

[top]

35.

When do I need to purge the complete Net Services Topology Data Model?

Answer:

You need to purge the complete Net Services Topology Data Model, when the Database Name is changed as a result of a database upgrade/migration.

[top]

36.

How do I purge the complete Net Services Topology Data Model?

Answer:

To purge the complete Net Services Topology Data Model, invoke the following command:

```
perl <AD_TOP>/bin/adgentns.pl appspass=<APPSPWD> contextfile=<CONTEXT>  
-removesystem
```

[top]

37.

How do I seed the Net Services Topology Data Model after purging it?

Answer:

See question "How do I seed the Net Services Topology Data Model".

[top]

38.

I want to deregister an application tier or a database tier from the Net Services Topology Data Model. I can't use the adgentns.pl script because I already decommissioned the tier or removed the context file. How can I deregister the tier?

Answer:

In this case you can use the PL/SQL API. Perform the following steps in the order listed:

- * Locate the System Name:
 - o The System name is the database name
 - o Verify with sql query: `select DB_NAME from FND_DATABASES;`
- * Locate the server name corresponding to the tier in question:
 - o Query on the database tier:

39.

I want to purge the complete Net Services Topology Data Model. I can't use the adgentns.pl script because I removed the relevant context file(s). How can I purge the Data Model?

Answer:

In this case you can use the PL/SQL API. Perform the following steps in the order listed:

- * Locate the System Name:
 - o The System name is the database name
 - o Verify with sql query: select DB_NAME from FND_DATABASES;
- * Run the following PL/SQL block:

```
begin
FND_NET_SERVICES.remove_system(SYSTEM_NAME);
end;
/
commit;
/
```

[top]

40.

How do I configure AutoConfig to generate the failover aliases?

Answer:

To generate the failover aliases use the database tier context variable s_alt_service_instances.

You can specify a comma separated list of "servicename:instance" to use connect time failover management.

For example

'SERVICE_NAME:INSTANCE_NAME1,SERVICE_NAME:INSTANCE_NAME2' will generate a TNS Alias in the tnsnames.ora file that fails over to INSTANCE_NAME1 when the current instance is not available. If INSTANCE_NAME1 is not available it fails over to INSTANCE_NAME2.

To set up the failover listing, perform the following steps in the order listed:

1. Update the context variable s_alt_service_instances in the database tier context file applying the failover rules as described above.
2. Run AutoConfig on all database tiers.
3. Run AutoConfig on all application tiers.

These steps will generate tns aliases <INSTANCE_NAME>_FO with description lists as configured in s_alt_service_instances. These aliases will still not be used anywhere. You will have to set the two task variables like s_tool_twotask to actually use these aliases.

Check the question "For which database versions can I define failover aliases for information about the availability of failover aliases on different database versions.

Note: On database versions that are 8.1.7.4 or higher the generated alias <INSTANCE_NAME>_FO can only be used for failover. On 8.0.6 the generated alias can't be used for failover. However, it can be used for load balancing.

[top]

41.

For which database versions can I define failover aliases?

Answer:

You can generate failover aliases for all database versions that are 8.1.7.4 or higher. Currently, Oracle Applications does not support failover aliases for the 8.0.6 Oracle Home.

[top]

Database connectivity

42.

Should the database server remain available during the AutoConfig run?

Answer:

Yes. The database server and the database listener must remain available during the AutoConfig run. This is true when running AutoConfig on the application tier, as well when running AutoConfig on the database tier. If you run AutoConfig on the application tier, then the 806 database listener must remain available also.

[top]

43.

What is the use of the context variable s_apps_jdbc_connect_descriptor?

Answer:

The s_apps_jdbc_connect_descriptor stores the connect string for jdbc connections. All jdbc connections are done using this context variable. The value for this context variable is generated by AutoConfig.

When the value is reset (empty), AutoConfig tries to connect to the database using the s_dbSid, s_dbhost and s_dbport context variables.

[top]

44.

When do I need to reset (empty) the context variable s_apps_jdbc_connect_descriptor?

Answer:

You should reset the value for s_apps_jdbc_connect_descriptor to an empty value (""), when one of the following value changes:

- * Database Host
- * Database Port

[top]

45.

What steps do I need to follow to maintain my database connectivity when I migrate my database from one host/platform to another?

Answer:

Perform the steps in the order listed:

* Before the migration:

1. Deregister the database tier from the Net Services Topology Data Model.

Refer to the question "How do I deregister a database tier from the Net Services Topology Data Model?"

If you haven't enabled AutoConfig on the database tier, you can ignore this step.

* After the migration:

1. Reset the context variable s_apps_jdbc_connect_descriptor in the context file for the application tier to an empty string.

2. Update the context variables s_dbhost and s_dbport in the context file for the application tier to reflect the new values in the middle tier context file.

[top]

46.

I migrated my database tier to a new host/platform, but the application tier still tries to connect to the old database. How can I fix this situation, so that the application tier connects to the new database?

Answer:

Your old database tier is still registered in the Net Services Topology Data Model. Perform the following steps:

* You have to clean up the data model by following the steps described in the question: "How do I purge the complete Net Services Topology Data Model?".

* Perform the step described in the question: "How do I seed the Net Service Topology Data Model?"

[top]

RAC

47.

My 11i instance is configured with RAC. Now I want to migrate to AutoConfig. How do I achieve that?

Answer:

To migrate to AutoConfig on a RAC instance, follow these steps in the order listed:

1. Enable AutoConfig on all database tiers. Follow the instructions in the AutoConfig Metalink Note 165195.1.
2. AutoConfig will not overwrite your existing init.ora file. However, AutoConfig will generate a RAC conform init.ora file when no init.ora file exists. We recommend that you backup your existing init.ora file and let AutoConfig generate an init.ora file for you. This will ensure that the init.ora file conforms to the Oracle's standards (for example using of DB_Name as the service name or handling local and remote listeners).
3. Run AutoConfig on the database tier.
4. Stop and start the database listener.
5. Enable and run AutoConfig on all your application tiers. Follow the instructions in the AutoConfig Metalink Note 165195.1.

Note: You need to enable and run AutoConfig on the database tiers FIRST! followed by the application tiers. This order is required because the RAC configuration data needs to be uploaded to the Net Services Topology Data Model, so that a correct tnsnames.ora file can be created on the application tier.

[top]

48.

My 11i instance is configured as non-RAC. Now I want to migrate to RAC using AutoConfig. What steps should I follow?

Answer:

To migrate an Oracle Applications 11i instance from non-RAC to RAC, follow the instructions as described in Metalink Note 279956.1.

[top]

49.

I applied all the required RAC patches, but my TWO_TASK variables still point to the instance aliases. How can I point them to load balanced aliases?

Answer:

Update your application tier context file and set the values of the following context variables to the desired load balanced alias names:

- * s_tools_twotask
- * s_weboh_twotask

[top]

Windows specifics

50.

What is the correct setting for MSDEVDIR?

Answer:

Use the path to the VC98 directory, not the MSDev98 directory. The vcvars32.bat file exists only under the VC98 directory. For example:C:\CPP\VC98.

[top]

51.

After running AutoConfig, the Apps.cmd and <CONTEXT_NAME>.cmd contain slashes instead of backslashes on Windows. How do I resolve this issue?

Answer:

Download patch 2690783 from OracleMetaLink and follow the instructions in Readme.

[top]

52.

Can I use the perl shipped by MKS to run adconfig.cmd on Windows?

Answer:

No. The perl shipped by MKS is not certified. Use the perl available in your Applications Environment (iAS for the application tier, 9i for the database tier) or download the ActivePerl from perl.com. Perl has to be in the PATH in order for AutoConfig to run.

[top]

53.

After I run AutoConfig in my 11.5.9 Windows environment I have two Apache services and two forms services. Which ones should I use?

Answer:

- * The two Apache services are:
 - o Oracle Apache Server <SID> (original service)
 - o Oracle Apache Server <Context_name> (new service)
- * The two forms services are:
 - o OracleFormsServer-Forms60<SID> (original service)
 - o OracleFormsServer-Forms60<Context_name> (new service)

Run the rem_srv.cmd script delivered in patch 3197605 to remove the duplicate services.

[top]

54.

After I run AutoConfig in my 11.5.9 Windows environment I have two Apache services, two forms services, two metrics client services, and two metrics server services. Which ones should I use?

Answer:

Run the `rem_srv.cmd` script delivered in patch 3695041 to remove the duplicate services.

[top]

55.

The script `adsvalsn.cmd` fails when I run AutoConfig. How do I resolve this issue?

Answer:

Check in your Service Control Panel to see if the 806 listener service is set to automatic or manual.

If your service is set to automatic, then you hit a known issue, that can be ignored. You can use the following workaround to resolve the issue:

```
copy %AD_TOP%\bin\adstart.exe %COMMON_TOP%\util\SrvStart.exe
```

[top]

Troubleshooting

56.

What should I do if my AutoConfig script exits with non-zero status?

Answer:

If AutoConfig exits with non-zero status, open the `adconfig.log` and check for the reported errors:

* Errors in the instantiation phase: Check to see if the template files listed in the error summary exist in your file system. If they do not exist, the AutoConfig File Driver of the product is faulty. Report the problem to Oracle Support.

If the template files exist, check for permission issues. If you cannot fix the issue, report the problem to Oracle Support.

* Error encountered in the SETUP/PROFILE/APPLY phase: Check the `adconfig.log` file to see the reason for the failure. If you cannot fix the issue, report the problem to Oracle Support.

Note: Refer to the question "Where is the log file located that AutoConfig creates?" for the location of the log file.

[top]

57.

How do I configure AutoConfig to start the TCF servlet?

Answer:

Perform the following steps:

1. Apply the Thin Client Framework (TCF) Servlet Implementation patch.
2. Apply TXK.A or higher.
3. Verify that the s_tcfstatus variable is set to "disabled" in your <Context_name>.xml file.
4. If set to "enabled", use the Context Editor to update the TCF Process Status to "disabled" and save the changes.
5. Stop all application tier services.
6. Run AutoConfig to update the configuration files.
7. Make additional updates based on your system configuration (see Note 164942.1).
8. Restart all application tier services.

References:

- * Oracle Applications 11i - Thin Client Framework (TCF) Servlet Implementation
- * AutoConfig: TCF - View Tree Error - Unable to Establish a Network Connection

[top]

58.

How can I resolve TNS-12500 while trying to start GSM?

Answer:

Change the profile option CONC_GSM_ENABLED to N until GSM is configured. If GSM is configured, check listener.ora located in

<8.0.6 ORACLE_HOME>/network/admin/<Context_name>

AutoConfig depends on the CONC_GSM_ENABLED profile option to create entries for FNDSM in the listener.ora file. If listener.ora contains entries for FNDSM and the corresponding executable is not found, the listener will not to start.

Apply the latest AutoConfig patch. The patch creates the FNDSM entry in listener.ora.

Reference:

- * Cannot Start GSM Service Manager - TNS Errors in listener Log and CCM Log

[top]

59.

My concurrent managers don't start after running AutoConfig? How do I resolve this issue?

Answer:

Look in the file APPLSYS_ux.env (Unix) or APPLSYS_nt.env (Windows) located in <AD_TOP>/admin/template. If the version of the file is 115.15 or lower, your environment file hard codes variables, which prevent the concurrent manager to start. Apply the latest AutoConfig patch to get the templates that use Application Context variables.

[top]

60.

How do I resolve a FileNotFoundException while running adupdts.sh?

Answer:

If the script adupdts.sh fails with a "FileNotFoundException", apply the latest AutoConfig patch.

References:

- * adupdts.sh Fails With Errors During AutoConfig
- * Script adupdts.sh Fails During AutoConfig Migration

[top]

61.

How do I resolve an address in use (could not bind to port) when starting Apache?

Answer:

The error "Address already in use: make_sock could not bind to port" occurs when non-SSL Apache and SSL Apache occupy the same port. The latest AutoConfig patch makes sure, that these ports don't conflict.

Reference:

* AutoConfig Cannot Start Startssl because of Address already in use: make_sock: could not bind to port

[top]

62.

I get the message "You are not authorized to view this page" when I access the application. How do I resolve this problem?

Answer:

After applying TXK AutoConfig Template Rollup F (patch 3104607) or later, the Apache configuration won't allow symbolic links per default. Standard security practice and our strong recommendation is that you don't use symbolic links for E-Business Suite files.

If you want to enable symbolic links, use the Context Editor to change the value of the variable `s_options_symlinks` from "Options -FollowSymLinks" to "# Options -FollowSymLinks". Run AutoConfig to reflect the change and restart the applications services.

The pre-patch report `txkValidateRollup` of TXK AutoConfig Template Rollup G (patch 3239694) or later provides you more detailed instructions.

[top]

63.

On HP/UX Itanium `adconfig.pl` fails because of a missing POSIX module. How do I resolve this problem?

Answer:

When you get the error message "Can't locate loadable object for module POSIX @INC." while running AutoConfig on HP/UX Itanium, then download and apply patch 4261525 .

Questions and Answers

1. What is a "Shared APPL_TOP"?

Answer:

A traditional multi-node installation requires the Applications file system on each node in the system.

In a Shared APPL_TOP installation, the APPL_TOP and the COMMON_TOP file systems are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services, such as Forms, Web, and Concurrent processing. Any changes made in the shared APPL_TOP file system are immediately visible on all nodes.

Note that each node continues to have a separate Applications techstack installation (see also question 2).

[top]

2. What is a "shared application tier file system"?

Answer:

In a shared application tier file system installation, the APPL_TOP, the COMMON_TOP, and the Applications technology stack (ORACLE_HOMEs) are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services, such as Forms, Web, and

Concurrent processing. Any changes made in the shared application tier file system are immediately visible on all nodes.

[top]

3. What operating systems are certified?

Answer:

All Rapid Install platforms except Windows support a shared application tier infrastructure. There is no time estimate for a Windows solution.

[top]

4. I want to migrate my existing Oracle Applications system to a shared application tier file system. What 11i releases are supported?

Answer:

You can migrate any existing Oracle Applications 11i release to a shared application tier file system.

[top]

5. Can I share the application tier file system across nodes with different platforms?

Answer:

No. The nodes sharing the application tier file system need to be binary-compatible.

[top]

6. If the platforms of my nodes are binary-compatible, can I share the application tier file systems? For example, can I share a node using Solaris 2.6 with one using Solaris 8?

Answer:

No, all machines sharing the file system must be configured to run the same Operating System with the same OS patch level.

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7. Are there any restrictions on the type of shared disk resources that can be used for sharing an application tier file system?

Answer:

No, your shared application tier file system can reside on any type of shared disk resource. Examples of shared disk resources include an NFS mounted disk or a disk array. The shared disk resource does not have to be local to the machine, and it can also be a standalone disk array. Usual tuning considerations apply.

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8. Can I merge APPL_TOPs?

Answer:

Yes, you can merge APPL_TOPs that are spread across multiple nodes. Follow the instructions described in the OracleMetaLink document 233428.1.

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9. How can I implement a shared application tier file system during an Oracle Applications installation?

Answer:

You must use the Rapid Install 11.5.10 or higher. Refer to Installing Oracle Applications for more information.

[top]

10. How can I migrate my existing Oracle Applications system to a shared application tier file system?

Answer:

Follow the instructions described in the OracleMetaLink document 233428.1.

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11. When migrating my existing Oracle Applications system to a shared application tier file system, I had to rename the Oracle Applications Context file. Will I still need the original file and its associated context directories/files?

Answer:

The following files/directories can be removed after you back them up:

- * The original Context File <APPL_TOP>/admin/<SID>.xml
- * The file <APPL_TOP>/APPSORA.env
- * The directory <COMMON_TOP>/admin/scripts/<SID>
- * The directory <COMMON_TOP>/admin/install/<SID>

Questions and Answers

GENERAL INFORMATION

Where can I find a list of AutoPatch features and the AD minipacks that introduced them?

The Oracle Applications DBA 11i+ Features Matrix (OracleMetaLink Note 210326.1) contains a list of major AD features in Release 11i and identifies which AD minipack introduced each feature.

What is a patch driver file?

AutoPatch uses a driver file to direct the installation of a patch. This unified driver is named `u<patchnumber>.drv`. It contains all the driver actions (copy, database, and generate) that the patch requires, and it performs these actions in the stated order. Typically, you run the driver on all APPL_TOPs and AutoPatch determines which actions are required for the current APPL_TOP and runs only those actions.

The driver actions are as follows:

- * Copy: Contains commands to change Oracle Applications files. The commands include directives to copy and update files, libraries, and/or Java, and commands for generating JAR files and/or C executables. In a multi-node system, the copy portion runs on all application tier APPL_TOPs.

- * Database: Contains commands to change Oracle Applications database objects, such as PL/SQL and table definitions, or to update or migrate data. In a multi-node system, the database portion runs only on the application tier APPL_TOP that implements the administration server.

- * Generate: Contains commands to generate forms, reports, messages, and/or graphics files. In a multi-node system, the generate portion runs on all application tier APPL_TOPs, unless the APPL_TOP only implements the administration server.

See Oracle Applications Concepts for a definition of administration server and other server types.

Which releases support unified drivers?

All 11i versions of AutoPatch support unified drivers. There is no minimum level. In order to make it easier to turn off entire categories of actions, without having to specify each action type, AD Minipack H introduced simple methods to disable entire categories of actions, for example, `adpatch options=nodatabaseportion`.

See Oracle Applications Maintenance Utilities for a list of available command line options.

What is the AutoPatch checkfile feature?

The checkfile feature reduces patch application downtime by checking to see if a given database action has been performed previously for the associated file contained in the patch. If an action has been performed using the current (or higher) version of a file, AutoPatch omits the action from the current patch application.

What are the Oracle Applications patch types?

All Applications patches are organized by aggregation level.

Standalone (one-off) Patch: Addresses a single fix or enhancement. Standalone patches are released only when there is an immediate need for a fix or enhancement that cannot wait until an aggregate bundling is available. Although standalone patches are intended to be as small as possible, they usually include any dependent files that have changed since the base release in order to form a complete patch that can be applied by any customer. The actual number of files changed will depend on the current code level on the system to which the patch is being applied.

Rollup Patch (RUP): An aggregation of patches that may be at the functional level, or at a specific product/family release level. For example, a Flexfields rollup patch contains all the latest patches related to Flexfields at the time the patch was created. A Marketing Family 11.5.10 rollup patch contains all the latest Marketing patches released since, and applicable to, 11.5.10.

Minipack: An aggregation of patches at the product level. For example, Inventory Minipack G (11i.INV.G) contains all the latest patches for the Inventory product at the time the minipack was created. Minipacks are named in alphabetical sequence such as 11i.INV.E, 11i.INV.F, 11i.INV.G, and so on. Minipacks are cumulative. In other words, 11i.INV.G contains everything in 11i.INV.F, which contains everything in 11i.INV.E, and so on. The terms patchset and minipack are often used interchangeably.

Family Pack: An aggregation of patches at the product family level. For example, Financials Family Pack C (11i.FIN_PF.C) contains all the latest patches for products in the Financials family at the time the family pack was created. Family product codes always end in "_PF" and family packs are given alphabetical sequence such as 11i.HR_PF.B, 11i.HR_PF.C, and 11i.HR_PF.D. Family packs are cumulative. In other words, Discrete Manufacturing Family Pack G (11i.DMF_PF.G) contains everything in 11i.DMF_PF.F, which contains everything in 11i.DMF_PF.E, and so on.

Maintenance Pack: An aggregation of patches for all products in the E-Business Suite. For example, Release 11.5.10 Maintenance Pack contains all the latest code level for all products at the time 11.5.10 was created. Maintenance packs are numbered sequentially such as 11.5.8, 11.5.9, 11.5.10, and are cumulative. In other words, 11.5.10 contains everything in 11.5.9, which contains everything in 11.5.8, and so on.

In addition to the patches in a maintenance pack, Oracle also packages a new Rapid Install at each maintenance pack release level. So Applications Release 11.5.10CU2 Rapid Install contains the same applications code level that a customer would get if they applied the Release 11.5.10CU1 Maintenance Pack on an earlier 11i release level. Note that the technology stack could still be different because Rapid Install includes the latest certified technology stack. The maintenance pack includes only Applications code.

Maintenance packs can be downloaded from OracleMetaLink or ordered as a CD Pack from the Oracle Store.

Patches can also be organized by purpose.

Diagnostic Patch: Used to gather additional information when a product failure cannot be reproduced by Oracle. The additional information assists Oracle Support Services and Oracle Development in resolving the failure.

Interoperability Patch: Allows Oracle Applications to function properly with a newer version of the technology stack. Interoperability patches are typically required with new versions of the database or Applications technology stack.

Translated Patch: A non-English version of a patch. Release 11i supports 30 non-English languages. Customers who are using languages other than English, need to apply the corresponding translated patch(es) for the languages they are using in addition to any base US patch(es).

Merged Translation Patch: Provided in real time (without requiring a translator) in the event a translated patch is not available when a customer needs it. A merged translation patch is applied just like a fully translated patch. The fully translated patch is escalated and is usually available within 24 hours. It can be applied safely on top of a merged translation patch.

Translation Fix: Provided in the event a translation word choice is inappropriate. A translation fix is applied just like a translated patch, except there is no corresponding base US patch.

New Feature Patch: Introduces new functionality and/or products. It is applied using standard patching utilities.

Consolidated Update (CU): Improves and streamlines the upgrade and maintenance processes by consolidating certain post-release patches. Most recommended patches and rollups for a particular maintenance release are consolidated into a single patch that is installed immediately following application of a maintenance pack or a new installation of Rapid Install. Updates in the CU are predominantly error corrections.

Family Consolidated Upgrade Patch: Consolidates all upgrade-related patches from all the products within a product family. Family consolidated upgrade patches are released as needed and are applicable only if you are upgrading to Release 11i from Release 10.7 or 11.0. The Oracle Applications Release Notes, Release 11i (11.5.10.2), Note 316803.1 lists the most recent patches.

Documentation Patch: Updates online help.

What are AutoPatch restart files?

Restart files store information about completed processing in the event of a patch or system failure. They allow AutoPatch and AD Administration to continue processing at the point where they stopped. Do not modify or delete restart files unless specifically told to do so by Oracle Support Services.

The restart files reside in \$APPL_TOP/admin/<SID>/restart (UNIX) or in %APPL_TOP%\admin\<SID>\restart (Windows).

What are the implications of patching a multi-node environment? How do I know what type of server/tier/node I am patching?

In a multi-node environment, you need to apply the patch, in its entirety, first to the node where you have implemented the administration server node. After that, you can apply the patch in any order on the remaining nodes.

In many cases, the terms server, tier, and node are used interchangeably and the exact meaning must be inferred from the context. Officially, the terms are different and have a distinct meaning.

- * A node (or machine) is a computer.
- * A server (or service) is a process or group of processes that runs on a single machine and performs a specific function.
- * A tier is a logical grouping of one or more services potentially spread across more than one physical machine.

In Release 11i there are three tiers: desktop, application, and database.

- * The desktop tier (generally an end-user PC) does not consist of any servers. Rather it consists of a Web browser that makes use of HTML and a Java applet to provide the user interface.

- * The application tier (or middle tier) hosts the various servers that process the business logic and manage communication between the desktop tier and the database tier. Six servers comprise the application tier: web server, forms server, reports server, Discoverer server (optional), concurrent processing server and administration server. The nodes on which such servers run are referred to as application tier server nodes.

- * The database tier consists of the database server, which stores all the data in a Release 11i system.

For example, if a node contains only the database server and no other Release 11i software, it is called the database server node, and is part of the database tier only. However, it is possible for the database server and any of the application tier servers to run on the same node. In this situation, the node can be called the database server node, the forms server node, the Web server node, and so on. Because servers from other tiers are running on one node, the node belongs to more than one tier.

For more information about the Release 11i architecture, see Oracle Applications Concepts.

To determine what application tier servers are on each node, refer to the Applications Dashboard in Oracle Applications Manager (see Oracle Applications Maintenance Utilities for more details).

What is the AD Features matrix displayed on the AutoPatch screen and in the logfiles? AD Feature Versions is a framework created to handle mismatches between the AD code on the file system and the AD objects in the database. Both the version of the feature on the file system and the version of the feature in the database are tracked separately. When the two versions do not match, the feature is disabled, and when the two versions match, the feature is (normally) enabled.

The following table is an example of the information displayed by AD Feature Versions in AD utility log files. The first four columns represent the name of the feature, whether the feature is enabled, the version of the feature in the APPL_TOP, and the version of the feature in the database.

Feature	Active?	APPLTOP	Data Model	Flags
CHECKFILE	Yes	1	1	Y N N Y N Y
PREREQ	Yes	6	6	Y N N Y N Y
CONCURRENT_SESSIONS	No	2	2	Y Y N Y Y N
PATCH_TIMING	Yes	2	2	Y N N Y N Y
PATCH_HIST_IN_DB	Yes	6	6	Y N N Y N Y
SCHEMA_SWAP	Yes	1	1	Y N N Y Y Y

The Flags Column values represent:

- * 1st flag: Is the feature enabled in the APPL_TOP?
- * 2nd flag: Does the feature require an enabling file on the file system?
- * 3rd flag: Does the enabling file exist?
- * 4th flag: Does the feature depend on any database objects?
- * 5th flag: Is the value of the 6th flag relevant?
- * 6th flag: Is the feature enabled in the database?

This message is informational in nature only. The AD Feature Versions framework is only used by AD internally and should not be modified except under explicit instructions from AD Development.

APPLYING PATCHES

How often should I apply minipacks, family packs, and maintenance packs?

You should keep your maintenance level up to date in order to:

- * Receive the latest fixes.
- * Reduce the number of file updates needed for emergency fixes.
- * Reduce the possibility of unfulfilled prerequisite patches when applying an emergency fix.
- * Make it easier for Oracle Support and Oracle Development to assist you.
- * Keep core products such as AD (patches and maintenance fixes), FND (security and technology stack updates), and HR (legislative updates) up to date.

At a minimum, apply maintenance packs to stay within two maintenance releases. For example, since 11.5.10CU2 is currently available, customers at the 11.5.8 (or earlier) level should be planning their upgrade to 11.5.10CU2.

Use minipacks and family packs if you have an immediate need for the latest patch level for a product or product family and cannot wait to apply the corresponding maintenance pack.

How can I find the latest available minipack, family pack, or maintenance pack? On OracleMetaLink, click the Patches & Updates tab. Choose the Quick Links to the Latest Patchsets, Mini Packs, and Maintenance Packs link to see a listing of:

- * Latest Oracle Applications R12 Packs
- * Latest Oracle Applications 11i Packs
- * Latest Oracle Server/Tools Patchsets

A link at the top allows you toggle between the three lists.

Can I apply multiple patches in one operation?

Before you run AutoPatch, use AD Merge Patch to merge multiple patches into a single, integrated patch so that the required patching tasks and processes are performed only once. In general, you can safely merge any Oracle Applications patch with another Oracle Applications patch. Patches should be merged with their listed prerequisite patches to make the application of the patch easier. However, patches that affect the Applications DBA (AD) product may change the AutoPatch utility itself. So, they can be merged only with other AD patches and must be applied separately, before you apply any non-AD patches.

Note: AD Merge Patch cannot merge patches of different releases, different parallel modes, or different platforms. However, it can merge patches for a specific platform with a generic patch, or patches with different source character sets. The utility notifies you if you try to merge incompatible patches.

How do I apply multiple translation patches?

If an Oracle Applications system contains multiple languages other than American English (US), and you are applying multiple patches for each language, the recommended method is to merge all US patches into a single patch and all patches for every non-US language into a single patch. Then, apply the merged US patch followed by the merged language patch.

You can also merge US patches with the additional language patches or merge each language in separate language-specific patches. Depending on your downtime window and your system topology, it may be necessary to keep the US and non-US patches separate.

See Oracle Applications Maintenance Procedures for a more detailed analysis and step-by-step procedures.

Can I run multiple AutoPatch sessions at the same time?

You cannot run multiple sessions simultaneously (concurrently). However, patches can be merged and applied in a single patching session.

Do patches need to be applied in a particular order? What is a prerequisite patch?

AD patches are the only patches that must be applied in a specific order. This is necessary because you may need to patch the patching utility itself so that it works properly when you use it to apply subsequent patches. It is not necessary to apply non-AD patches in a particular order, even though a readme may state a specific order is required.

A prerequisite patch fulfills a dependency for another patch. Strictly speaking, they are co-requisites and can be applied in any order before using the system. We recommend that you merge a patch with its required prerequisites, with the exception of prerequisite patches for the AD product.

Starting with AD Minipack H, AutoPatch has a Prereq feature that, when run with patches containing metadata, automatically determines if prerequisites are not fulfilled and informs you. At this point, you can download the prerequisites, merge them with the patch, restart AutoPatch, and apply the merged patch.

Older patches, or patches whose metadata is missing the prerequisite information, may list prerequisite patches in the patch README.

See Oracle Applications Maintenance Utilities for information.

Can I automate the patching process?

Non-interactive patching allows you to save time by automating the patching process and avoiding some of the prompts. You can store the responses to the patching prompts in a defaults file. Then, when you run AutoPatch, you specify the name of the defaults file, the location of the patch top directory, the name of the driver file and other parameters in the command line.

See Oracle Applications Maintenance Procedures for information on running AutoPatch non-interactively using a defaults file.

How can I track my customizations? What happens to my customizations during patching?

You should apply patches first on a test system. Then, review the changes in the test system and identify the best way to re-integrate customizations affected by the patch.

If you have registered your customized files in \$APPL_TOP/admin/applcust.txt, AutoPatch reviews the files to determine if any of those files will be replaced during the application of the patch.

Note: Registering customized files does not prevent the object or the patch from being applied. It only makes them available to AutoPatch for review. See Customization Standards in Oracle Applications Developer's Guide for more details.

ASSESSING THE EFFECTS OF PATCHING

How do I know what patches or files have been applied to a system? What happened to my applptch.txt file?

Previously, patch history was stored in a text file called applptch.txt in the \$APPL_TOP/admin/<SID> directory. AutoPatch appended information about each applied patch to the applptch.txt file automatically.

Since AD Minipack E, the Patch History feature stores all patch information in database tables. If the information cannot be written to the database, it is stored in the file system,

and is automatically loaded to the database each time AutoPatch is run. In this case, the temporary patch history file was named applptch.txt.

In AD Minipack H (and later), there are two patch history files:

- * javaupdates<timestamp>.txt - records patch history about changes to Java files
- * adpsv<timestamp>.txt - records patch history about changes to all non-Java files.

The best way to review patching history is to use the Applied Patches utility provided by Oracle Applications Manager (OAM). From the Applied Patches interface, you can perform a simple search by querying on the patch number, the number of days or date range during which patches were applied and/or the patch language. An advanced search provides additional search criteria. The search results display useful information including patch name, description, a list of merged patches, location of applied patch, language, files changed or copied, bug fixes in each driver file, whether patch application was successful and timing information. See Oracle Applications Maintenance Utilities for more information.

Can I determine ahead of time how a patch will affect my system?

You can analyze the actions a patch will take by reviewing patch log files without applying a patch to production or you can access a Patch Impact Analysis report through the Patch Wizard in Oracle Applications Manager (OAM) to see how a patch will affect the files on your system.

If you want to review log files, you can apply a patch on a test system. Alternatively, you can apply the patch in production using the AutoPatch test mode. Applying a patch in test mode requires that you use the AutoPatch option apply=no. The resulting log file shows all the actions that AutoPatch will take.

To determine how a patch will affect the files on your system, you can request a Patch Impact Analysis report for a specific patch through the Patch Wizard in OAM version 2.2 and later. The Patch Impact Analysis feature of Patch Wizard provides links to details about a patch including the following information:

- * The total number of files in the patch
- * The number and type of files the patch will install
- * The products that will have updated files
- * The files that will be introduced by the patch
- * The files on the target system that will be changed by the patch

See Oracle Applications Maintenance Utilities for additional information.

TROUBLESHOOTING

If I am applying a patch and it fails, should I simply re-run it from the beginning after fixing the issue?

If a patch driver fails, fix the issue and restart AutoPatch. AutoPatch will allow you to continue where the patch left off. Re-running the patch from the beginning may result in it being applied incorrectly.

What should I do when the Oracle Applications AutoPatch Prerequisite Checking Feature fails?

There are various issues that could cause a failure in the AutoPatch Prerequisite Checking Feature.

Refer to When Oracle Applications Automatic Patch Prerequisite Checking Feature Fails (OracleMetaLink Note 233040.1).

If a worker fails when AutoPatch is running, what should I do?

When a worker fails its job, the AD utility running the worker takes one of several possible actions:

- * Defers the job to the end of the list of jobs to run and assigns the worker another job
- * Sets the worker status to Failed and continues to run jobs in other workers
- * If all other workers are in failed or waiting state, waits for user input (interactive mode) or exits (non-interactive mode)

If the worker remains in a failed state, examine the worker log file and determine the cause of the failure. The worker log files are named adwork<number>.log (for example adwork01.log or adwork001.log). They are located in the same directory as the main AD utility log file. By default this is under \$APPL_TOP/admin/<SID>/log.

Attempt to correct the problem and restart the failed job. If you cannot determine the cause of the failure, try restarting the failed job to see if it works the second time (it may have failed due to a concurrency or resource issue).

To restart a failed job, run AD Controller and choose the option to restart a failed job. Enter the worker number when prompted. You can use AD Controller to see the status of jobs both before and after restarting them. The status before restarting should be Failed, and the status after restarting should be Fixed, Restart. If you are unable to fix the failed job, contact Oracle Support Services for assistance.

If the AD utility exited after the job failed, you must use AD Controller to restart the failed job before you can restart the AD utility. Otherwise, the AD utility will detect the failed job and shut down again.

See Oracle Applications Maintenance Utilities for additional information.

Q1. After you apply a patch, there may be an invalid view. How do you validate the view?

A: Most views are recreated via a new Projects sql script. These scripts would be located in your \$PA_TOP/patchsc/107/sql directory for release 10.7, and in \$PA_TOP/patch/110/sql directory for release 11.0.x, and in \$PA_TOP/patch/115/sql

directory for release 11.5.x. After you run a select statement to locate your invalid view, you can go to one of the above directories and grep for that invalid view name. The following is an example of a select statement to find invalid objects:

```
Login to sql as apps/ [pwd]
```

```
SQL> select object_name, object_type
from user_objects
where status = 'INVALID';
```

```
OBJECT_NAME                                OBJECT_TYPE
-----
PA_EXPENDITURE_TYPES_EXPEND_V    VIEW
```

The following is a grep statement example for release 11.0 in unix to locate a script to recreate a view:

```
Change directory to the corresponding $PA_TOP/patch/110/sql directory.
Type the following command in the $PA_TOP/ .. /sql directory:
```

```
$PA_TOP/patch/110/sql> grep -i PA_EXPENDITURE_TYPES_EXPEND_V *
```

There will be many resulting lines, but only one line has the required information. An example of a resulting line is as follows:

```
pavw110.sql:CREATE OR REPLACE FORCE VIEW
pa_expenditure_types_expend_v
```

The pavw110.sql script is an update script that will recreate the view and validate the invalid view. This is known by the "CREATE OR REPLACE FORCE VIEW" statement from the grep.

You should log an iTAR with Projects if you do not find a current script to recreate a view. Support will resolve any invalid object issue that you have. For additional information, see Note 74660.1, Resolving Invalid Objects in Oracle Applications

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Q2. How do you compile all objects for the APPS schema?

A: You can compile objects using the compile objects selection from the ADADMIN tool. To compile all objects manually for the APPS schema you either need to change directory to the \$AD_TOP/sql directory or verify it is in your path. Login to SQLPlus as system/manager and run the following command to compile all APPS objects:

```
SQL> @adcompsec.pls apps apps %
```

You can replace the "%" sign with an actual object name to compile a single object.

For more information, see Note 104457.1, Invalid Objects FAQ's.

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Q3. How do you generate a form, report, library, or menu from a failed patch application?

A:

1. Find the name for the form that needs regenerating as stated in question number 8 under the FORM heading.
2. Logon to the server as the applmgr that contains the forms, reports, libraries, or menus that need to be regenerated
3. cd \$AU_TOP
4. Run the corresponding command as follows:

Oracle Forms executables used to generate forms depends on platform and Oracle Applications versions:

Q4. How do you determine what patch set you are currently utilizing?

A:

1. If you are on release level 10.7.16.1, patch set level PA.H (784658) or higher, you run the following command in SQLPlus:

```
select pa_server_pkg.get_patch_level from dual;
```

2. For any release level lower than PA.H or release level of 11.0.x or 11.5.x, there is no easy way to determine your patch set level. You will need to retrieve a list of patch set numbers from MetaLink. Using that list, you can utilize the find file utility to search for a file in the APPL_TOP/admin/[SID_NAME] directory for Release 11.0.x or 11.5.x and in the APPL_TOP directory for Release 10.7.16.1 called "applptch.txt". If the file exists, look in the file for patch numbers from your patch set list (start with the latest patch number and work backwards in the list until a hit is made).

You can also run the following grep statement in the directory where the applptch.txt file resides to list all product groups patches:

```
fgrep 'begin bug pa' applptch.txt
```

3. If options a or b from above are not possible, you will have to select a random number of views, forms, and packages. You can determine what version the objects are based on. You will have to contact Oracle Projects Support for an estimated patchset level. (To learn how to get version information go to question 8)

For more information, review the following note:

Note.97398.1, What Patches have been applied to an instance?

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Q5. What are the current mini packs, patchsets or one off patches for the Projects products?

A:

Review Note:108691.1 for the latest patchset/family pack information for the Projects products.

Review Note:108255.1 for the latest Internet Time (formerly Self-Service Time) patching information.

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Q6. There are specific invalid PA% objects in your database that will not compile. What do you do to clean up these objects?

A: There are Oracle Projects objects in the database that may not compile. They are part of Oracle Projects products, but you may not have that product installed or implemented on your system.

The following are common product files that may be affected:

PA_PURGE%

All objects starting with this name are part of the Oracle Projects Archive Purge product.

1. a. If on release 10.7 or 11.0.x then download and install the patch for Oracle Projects Archive Purge. Patch numbers are:

Release 11 - 1235250 Release 10.7 - 982722 (server-side) Release 10.7 - 982724 (client-side)

2. b. If upgrading to release 11i, Oracle Projects Archive Purge is not currently available on that release.

You may complete one of the two options:

1. Drop all of these objects from the database.
2. Keep them in the Database as invalid, which will not affect Projects.

PA_%_UPGRADE%

All objects starting with this name were part of the Oracle Projects upgrade from 9.x., 10.x to 10.7.16.1. You may drop all of these objects from the database with no affect on the Oracle Projects product.

PA_ONLINE%

Objects starting with this name are part of Oracle Projects Online Time and Expense application.

Install the latest patchset or mini pack for Projects on any application version level or drop the objects if you are not planning to use Oracle Projects Online Time and Expense.

PA_ADW%

Objects starting with this name are part of Oracle Projects Data Warehousing product. You should setup Oracle Projects and Oracle Data Warehousing to utilize this new product. Or, you can drop these objects if you are not going to implement Oracle Data Warehousing.

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Q7. The Projects adpatch process may fail while running the database driver. What actions do you need to complete to finish the patch process?

A: You should restart the adpatch process for the database driver using only one worker. There may be a conflict with another patch not completing before the current patch starts.

For more information, see Note:47709.1, AutoInstall Frequently Asked Questions

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Q8. How do you determine version information about a form, view, package or executable?

A:

FORMS:

In the application, open the form you are having a problem with then, from the menu bar, select Help>About Oracle applications. Near the bottom of the information screen you will find a heading of "FORMS". Under this heading you will find the name and version information of the currently selected form.

VIEWS:

Logon to the database using SQLPLUS as apps/ and run the following sql command:

```
SELECT text
FROM user_views
WHERE name LIKE '[ENTER THE NAME OF THE VIEW IN ALL CAPS]'
AND text LIKE '%Header%';
```

PACKAGES:

Logon to the database using SQLPLUS as apps/ and run the following sql command:

```
SELECT text
FROM user_source
WHERE name LIKE '[ENTER THE NAME OF THE PACKAGE IN ALL CAPS]'
AND text LIKE '%Header%';
```

EXECUTABLES:

To find the version of an executable you first must go to the APPL_TOP\PRODUCT_TOP\bin directory where that file is located. Then run the following command:

```
strings [NAME OF EXECUTABLE] | grep -i header > [somefilename.txt]
```

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Q9. What log files are generated with adpatch, and where are they located?

A: The adpatch process will produce a log file which lists the actual process steps and if any workers are spawned, worker logs will be created also. The adpatch process will either use a default log file name, adpatch.log, or you are prompted to create your own unique name. For release 10.7.16.1, the adpatch log file is located in the \$APPL_TOP/install/log directory. For Release 11.0.x or 11.5.x, the adpatch log file is located in the APPL_TOP/admin/[SID_NAME] directory. If you do not create a unique log file name, the adpatch process will append the log file each time you rerun it.

Most patches will utilize workers and each worker will create their own worker log file. These log files are named adwork01.log, adwork02.log, etc. For release 10.7.16.1, the adwork0x.log log file is located in the \$APPL_TOP/install/log directory. For Release 11.0.x or 11.5.x, the adwork0x.log log file is located in the APPL_TOP/admin/[SID_NAME]/log directory.

The adaimgr process will also generate a log file, which is located in the \$APPL_TOP/admin or \$APPL_TOP/install/log directory.

If you are having problems applying a patch, please upload these log files when you log a Service Request with Oracle Support.

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Q10. How do you change a shared install to a full install using the License Manager?

A: To change the status of an install from shared to full do the following:

```
$cd $COMMON_TOP/admin/assistants/licmgr  
$LicenseMgr
```

If you are using 11.5.5 you can do the following:

```
$ cd $AD_TOP/bin  
$adlicmgr.sh
```

[top]

Q11. How do you find any critical high priority/mandatory patches for Oracle Projects?

A:

1. Sign on to MetaLink
2. Select the Patches button from the left Menu bar.
3. Select the Release, Product, Platform and Language based on your configuration. If you would like to see patches for all products, click on the first product, then Shift-Click on the last product to select all. Alternately, you can select several individual products by holding down the Ctrl key while selecting each one.
4. In the Limit Search to field, select High Priority Product Patches or High Priority Product Patches NOT in Latest Mini Pack.

[top]

Q12. How do you receive the enhanced trace options for the forms diagnostics menu?

A: Apply patch:1552649 to enhance the trace capabilities in 11i. This patch provides an enhanced database trace utility for Application forms. A new trace menu is provided that allows a regular trace, trace with binds, trace with waits and trace with binds and waits. Once trace has been enabled, all forms opened after that will also be running with trace enabled. When trace is disabled for a form, all forms running in trace mode will have trace disabled when they gain focus. For additional information, refer to Note:47709.1, AutoInstall Frequently Asked Questions.

FND Concurrent Manager FAQ's

When would one be required to bounce (stop and restart) the Concurrent Manager?

When you modify the Printer Driver you have to restart the Manager which runs the request which is attached to that Printer Driver, however, if you do not know which manager then you have to restart the Internal manager because the printer driver can be used by multiple managers and multiple requests. If only a concurrent program definition is modified, running a verify on the Internal Manager will pick up the changes without the need for bouncing the manager.

Does the Internal manager schedule requests to be run or does it put requests into queues to be run by other managers?

This is a very common misconception. The ICM really does not have any such scheduling responsibilities. It has NOTHING to do with scheduling requests, or deciding which manager will run a particular request. Its function is only to run 'queue control' requests, which are requests to startup or shutdown other managers. It is responsible for startup and shutdown of the whole concurrent processing facility, and it also monitors the other managers periodically, and restarts them if they should go down. It can also take over the Conflict Resolution manager's job, and resolve incompatibilities.

If the ICM itself should go down, requests will continue to run normally, except for 'queue control' requests. You can restart it with 'startmgr', you do not need to kill the other managers first.

How can I check to see if a concurrent manager is running?

One way to see if a manager is running is to use the 'Administer Concurrent Managers' form. Navigate to Concurrent->Managers->Administer. You will see two columns labeled 'Actual' and 'Target'. The Target column lists the number of processes that should be running for each manager for this particular workshift. The Actual column lists the number of processes that are actually running. If the Actual column is zero, there are no processes running for this manager. If the Target column is zero, then either a workshift has not been assigned to this manager, or the current workshift does not specify any target processes. If the target column is not zero, then the manager processes have either failed to start up, or gone down. You should check the manager's logfile and the ICM logfile. You can also search for OS processes using the 'ps' command. It is possible for the form to be inaccurate, i.e. it may show actual processes even though they are not really running. When in doubt, check for processes at the OS level. On NT, you can check to see if the Concurrent Manager service is running using the Services control panel.

Where do concurrent request or manager logfiles and output files go?

The concurrent manager first looks for the environment variable \$APPLCSF. If this is set, it creates a path using two other environment variables: \$APPLLOG and \$APPLOUT. It places log files in \$APPLCSF/\$APPLLOG, output files go in \$APPLCSF/\$APPLOUT.

So for example, if you have this environment set:

\$APPLCSF = /u01/appl/common

\$APPLLOG = log

\$APPLOUT = out

The concurrent manager will place log files in /u01/appl/common/log, and output files in /u01/appl/common/out

Note that \$APPLCSF must be a full, absolute path, and the other two are directory names.

If \$APPLCSF is not set, it places the files under the product top of the application associated with the request. For example, a PO report would go under \$PO_TOP/\$APPLLOG and \$PO_TOP/\$APPLOUT

Logfiles go to: /u01/appl/po/9.0/log

Output files to: /u01/appl/po/9.0/out

All these directories must exist and have the correct permissions.

Note that all concurrent requests produce a log file, but not necessarily an output file.

Concurrent manager logfiles follow the same convention, and will be found in the \$APPLLOG directory

What are the logfile and output file naming conventions?

Request logfiles: l<request id>.req

Output files: If \$APPCPNAM is not set: <username>.<request id>
If \$APPCPNAM = REQID: o<request id>.out
If \$APPCPNAM = USER: <username>.out

Where: <request id> = The request id of the concurrent request

And: <username> = The id of the user that submitted the request

Manager logfiles:

ICM logfile: Default is std.mgr, can be changed with the mgrname startup parameter

Concurrent manager log: w<XXXXXXX>.mgr

Transaction manager log: t<XXXXXXX>.mgr

Conflict Resolution manager log: c<XXXXXXX>.mgr

Where: <XXXXXXX> is the concurrent process id of the manager

Can I delete a concurrent manager?

You can disable the manager by checking the 'Enabled' checkbox, or you can simply Terminate the manager and it will not run again unless you reactivate it.

If it is really necessary, you can query the manager in the 'Define Manager' form, and delete the row. (It is recommended that you DO NOT do this)

What is the function of the 'Conflict Resolution Manager'?

Concurrent managers read requests to start concurrent programs running. The Conflict Resolution Manager checks concurrent program definitions for incompatibility rules.

If a program is identified as Run Alone, then the Conflict Resolution Manager prevents the concurrent managers from starting other programs in the same conflict domain.

When a program lists other programs as being incompatible with it, the Conflict Resolution Manager prevents the program from starting until any incompatible programs in the same domain have completed running.

What is the 'Internal Scheduler/Prereleaser' manager?

The short name for this manager is FNDSCH. It is also known as the Advanced Scheduler/Prereleaser Manager. This manager is intended to implement Advanced Schedules. Its job is to determine when a scheduled request is ready to run. Advanced Schedules were not fully implemented in Release 11.0, they are implemented in Release 11.5, but are not widely used by the various Apps products. General Ledger uses FNDSCH for financial schedules based on different calendars and period types. It is then possible to schedule AutoAllocation sets, Recurring Journals, MassAllocations, Budget Formulas, and MassBudgets to run according to the General Ledger schedules that have been defined.

If financial schedules in GL are not being used then it is not a problem to deactivate this manager.

What is the 'Internal Monitor' manager/service?

This manager/service is used to implement Distributed Concurrent Processing. It monitors whether the ICM is still running, and if the ICM crashes, it will restart it on another node.

You do not need to run this manager/service unless you are using Distributed Concurrent Processing.

See the Installation manual and Sysadmin Guide for more info on DCP.

How do I check/set the PMON method?

To check the PMON method:

- 1) cd \$FND_TOP/sql
- 2) sqlplus apps/apps @afimchk.sql

This will tell whether the internal manager is running, what the PMON method is, and where the log file is.

To set the PMON method:

- 1) first shut the concurrent managers down
- 2) cd \$FND_TOP/sql
- 3) sqlplus apps/apps @afimpmon.sql LOCK (or RDBMS)

How do I enable/disable the Conflict Resolution Manager?

Use the system profile option 'Concurrent: Use ICM'.

Setting this to 'No' (which is the default) allows the CRM to be started.

Setting it to 'Yes' causes the CRM to be shutdown and the Internal Manager (ICM) will take over the conflict resolution duties. If the CRM will not start (it is started automatically by the ICM), check this profile option.

Note that using the ICM to resolve conflicts is not recommended. The CRM's sole purpose is to resolve conflicts, while the ICM has other functions to perform as well. Only set this option to 'YES' if you have a good reason to do so.

How do I clean out the Concurrent Manager tables?

Cleaning out the tables is a useful method of making sure that there are no invalid statuses that can prevent the managers from starting. Previously, this has been done by truncating `fnf_concurrent_processes` and/or `fnf_concurrent_requests`. Truncation of the tables is a little drastic, and can cause problems later when trying to purge requests, not to mention losing all of the request information.

Run the script, `cmclean.sql`, article Note 134007.1 `CMCLEAN.SQL` - Non Destructive Script to Clean Concurrent Manager Tables

It will make sure the relevant status codes are valid without

deleting any information.

How do I tell concurrent manager processes apart at the OS level?

What is the syntax for controlling the concurrent manager using startmgr and concsub in NT?

On NT, the concurrent manager is run as an NT service, you start and stop the managers using the Services control panel.

See the Applications Installation manual for NT, Appendix A for details. See pg. 5-9 of this manual for instructions on creating the concurrent manager service.

Why am I seeing ping entries like this in the ICM logfile?

```
PING (0.0.0.0): 56 data bytes
64 bytes from 192.75.91.2: icmp_seq=0 ttl=255 time=0.705 ms
64 bytes from 192.75.91.2: icmp_seq=1 ttl=255 time=1.120 ms
    Process monitor session ended : 29-FEB-2000 10:38:43
64 bytes from 192.75.91.2: icmp_seq=2 ttl=255 time=0.985 ms
64 bytes from 192.75.91.2: icmp_seq=3 ttl=255 time=1.006 ms
```

Pinging other machines is used in Distributed Concurrent Processing. This means you have DCP turned on, using the environment variable APPLDCP. Set APPLDCP to OFF and restart the managers.

I hit the Restart button to start the Standard manager, but it still did not start?

Telling a manager to restart just sets the status to Restart. The ICM will start it the next process monitor session or the next time the ICM starts. Use Activate to start a manager immediately.

When a manager is deactivated manually, the ICM will not restart it, you will need to set it to Restart, or activate it manually.

How many rows are in FND_CONCURRENT_REQUESTS and FND_CONCURRENT_PROCESSES tables?

Depending on the specification of the system it has been seen that when tables reach above 3000-4000 rows, the performance begins to diminish, however, there could be 30000-40000 rows in the table before the performance begins to degrade.

You may want to run the Purge Concurrent Request and/or Manager Data on a regular basis, dependant on the amount of requests being run.

The Purge Concurrent Requests job can be used to purge: Requests, Mgr logs, and All requests depending on what is chosen.

Use the following options: Enter = All, Mode = AGE, Mode Value = 15

The std.mgr log continuously grows where it may good to archive it regularly.

Any processes pending in Internal or Conflict Resolution Manager?

Best course of action before starting the Concurrent Managers is to cancel any "Deactivate" or "Verify" jobs pending in the Internal Manager and place any other pending jobs on hold.

How do I turn on transaction manager diagnostics?

Set the profile option 'Concurrent:Debug Flags' to 'TCTM1' at the site level. This will cause transactions to make debug entries in the FND_CONCURRENT_DEBUG_INFO table. Truncate this table before running a transaction, then select the entries from the table.

Starting the managers with diag=Y will also produce more information in the transaction manager logfile.

How do transaction managers work?

Briefly:

(See the server documentation for details on the DBMS_PIPE package)

- 1) A transaction manager is started on the concurrent processing server, and periodically reads the pipe for incoming transactions.
- 2) A client program (usually a form) calls the `FND_TRANSACTION.SYNCHRONOUS` function.
- 3) This function writes a message into the pipe containing the program to be run and its parameters.
- 4) `FND_TRANSACTION.SYNCHRONOUS` begins reading a return pipe for the return status.
- 5) The manager sees the message in the pipe, retrieves the program id and parameters.
- 6) The manager runs the program with the specified parameters. The program will be of type 'Immediate', so there will not be a separate concurrent request run.
- 7) The program completes, and the manager packs its return status into the return pipe.
- 8) `FND_TRANSACTION.SYNCHRONOUS` reads the return value and passes it back to its caller.

Note that these events take place essentially simultaneously on the client and server. This is a synchronous transaction because the client waits for the server to return, or times out waiting for it.

Problem....

When you try to submit a request like Active users or Active responsibilities, request gets submitted.

When we view the help requests, you find that it is inactive / nomanager.

Within 12 to 15 seconds, you refresh-it gets completed.

Initially, you could find only inactive and we look at the diagnostic- the concurrent manager assigned is not picking up.

There is no specialization rules in any managers except the include program this source.

Solution....

Most often when this occurs where a request goes "inactive/no manager" and is then processed a short time later, the solution is to either increase the cache size for your Standard manger, or increase the actual number of Standard manager processes.

Cache Size is set on the CONCURRENT/MANAGER/DEFINE form. Basically, this regulates how many requests a manager will pick up for each sleep cycle.

How do I process more concurrent requests concurrently?

The Concurrent Manager parameters, (Query the concurrent manager by Login as Sysadmin, navigate -> Concurrent -> Manager -> Define and Query for the relevant concurrent manager), should be modified to handle more concurrent requests concurrently, this can be done in two steps:

- (i) Increase the Number of Target processes for the manager
- (ii) Change the cache size of the concurrent manager as this determines how many requests will be evaluated by a manager at a time and should match the target (process) value as set above.

Question: How To Delete An Oracle Applications User

Answer: It is not possible. See note 161745.1 for details.

Question: How To Manually Change The APPS, APPLSYS and APPLSYSPUB Passwords in Oracle Applications

Answer: See Oracle Applications Schema Password Change Utility (FNDCPASS) in the System Administrator's Guide - Configuration.

Users monitoring (FNDSCMON):

Question: Can you track terminal name of users using Applications?

Answer: No, the Monitor User form does not display the terminal name of the user that is logged into the application. See Note 109065.1 for more details.

Question: How to Clean Up Inactive Sessions Based on the Information in the Monitor User Form

Answer: Procedure described in Note 98464.1

Responsibilities definition (FNDSCRSP):

Question: How to exclude menu choices from a new SSWA responsibility

Answer: See Note 107816.1

Question: How to delete a responsibility from Oracle Applications?

Answer: The ability to delete responsibilities is not planned.

Responsibilities cannot be deleted since those records are kept for security and monitoring purposes. However, responsibilities can be disabled by assigning an end date to the effective period

Responsibilities ValueSet assignment (FNDRSGRP):

Question: How to Setup Security Rules for an Accounting Flexfield Segment.

Answer: Note 147211.1

Application currency definition (FNDNLDCX):

Question: How to Activate the Predefined Euro Currency in General Ledger

Answer: See Note 148445.1

Question: How to Disable a Currency in Oracle General Ledger

Answer: See Note 147982.1

Application network testin (FNDPMNET):

Question: How to Run Oracle Applications Network Test

Answer : See Note 152508.1

Define profile options (FNDPOMPV):

Question: How can you find the name of a needed profile option?

Answer: See Note 50270.1

Miscellaneous FAQs:

Question: Have some performance issues. What doc can be helpfull?

Answer: Note 15476.1 Resolving Locking / Hanging Scenarios

Note 117129.1 How To Get A Trace For And Begin To Analyze A
Performance Issue

Note 100883.1 How to Create a SQL Trace from another session.

Question: How to Determine Which User Submitted a Request that Completed in Error

Answer: See note Note 151121.1

Question: How do you tell what product is installed Full and Shared within Applications?

Answer: This information can be accessed within Applications from the Alert Manager Responsibility.

Navigation Path: SYSTEM -> INSTALLATIONS

Question: How to compile an Oracle Reports file or PLL?

Answer:

Windows NT:

Oracle Reports

```
R25CON32 userid=apps\<psswd> source=<APPL_TOP>\
<product>\srw\filename.rdf dest=%<PRODUCT_TOP>%\srw\filename.rdf
stype=rdffile dtype=rdffile logfile=x.log overwrite=yes batch=yes
dunit=character
```

PLL File

```
R25CON32 userid=apps\<psswd> source=<APPL_TOP>\<product>\srw\
filename.rdf dest=%<PRODUCT_TOP>%\srw\filename.rdf
stype=pllfile dtype=pllfile logfile=x.log overwrite=yes batch=yes
dunit=character
```

UNIX:

Oracle Reports

```
adrepgen userid=apps\<psswd> source=<$PRODUCT_TOP>\srw\filename.rdf
```

```
dest=<$PRODUCT_TOP\srw\filename.rdf
```

```
stype=rdf file dtype=rdf file logfile=x.log overwrite=yes batch=yes
```

```
dunit=character
```

PLL File

```
adrepgen userid=apps\<psswd> source=<$PRODUCT_TOP>\srw\filename.rdf
```

```
dest=<$PRODUCT_TOP\srw\filename.rdf
```

```
stype=pll file dtype=pll file logfile=x.log overwrite=yes batch=yes
```

```
dunit=character
```

Question: How do you test out the Initialization strings used in Applications Printer Drivers

Answer:

Windows NT

- Create a sample directory and copy a rpt file into that directory.
- Type: FNDPRESC "init_string" > foo (init_string = the exact init string used within applications surrounded by double quotes)
- Edit the report file and insert a line at the top of the report.
- Edit the foo file and copy / paste the init string at the inserted

line of the report file.

- Print the file from the command line.

UNIX

- Create a sample directory and copy a rpt file into that directory.
- Type: FNDPRESC "init_string" > foo (init_string = the exact init string used within applications)
- vi the report file and insert a line at the top of the report.

Shift + o

- vi the foo file and copy / paste the init string at the inserted line of the report file.

- lp -d<printername> l#####.out

Question: How do you get minutes and seconds for the start time of a concurrent request from a SQL*Plus query?

Answer: Issue the following sql statement:

```
select to_char(actual_start_date,'dd-mon-rr' hh:mi:ss')
from fnd_concurrent_requests
where request_id=#####;
```

Question: What is the proper way to change the Applications privileged passwords?

Answer:

- Shutdown the Concurrent Manager

- Change the APPS, APPLSYS and APPLSYSPUB passwords at the Database level
- Change the APPS, APPLSYS and APPLSYSPUB passwords at the Application level
- Change the APPS password in any Concurrent Manager startup scripts
- See Note 1015596.102 (10.7) and Note 159244.1 (11.0) for details!

Question: How do you find out the module versions in a Binary file on Windows NT?

Answer:

```
$ cd product_top\bin  
  
$ find\I "$Header" fndlibr.exe
```

Question: How can I determine the version of a file?

Answer:

oracle apps dba interview questions and answers

February 6, 2009 at 9:43 am | In Oracle Apps | 4 Comments

Tags: apps dba interview questions and answers, restrict apps users, sql to find pending and running concurrent requests, start oracle apps restricted, transaction manager, Transaction Manager Concurrent Manager

1. What happens if the ICM goes down?
2. How will you speed up the patching process?
3. How will you handle an error during patching?
4. Provide a high-level overview of the cloning process and post-clone manual steps.

5. Provide an introduction to AutoConfig. How does AutoConfig know which value from the XML file needs to be put in which file?
6. Can you tell me a few tests you will do to troubleshoot self-service login problems? Which profile options and files will you check?
7. What could be wrong if you are unable to view concurrent manager log and output files?
8. How will you change the location of concurrent manager log and output files?
9. If the user is experiencing performance issues, how will you go about finding the cause?
10. How will you change the apps password?
11. Provide the location of the DBC file and explain its significance and how applications know the name of the DBC file.

Answers

1. All the other managers will keep working. ICM only takes care of the queue control requests, which means starting up and shutting down other concurrent managers.
 2.
 - o You can merge multiple patches.
 - o You can create a response file for non-interactive patching.
 - o You can apply patches with options (nocompiledb, nomaintainmrc, nocompilejsp) and run these once after applying all the patches.
 3. Look at the log of the failed worker, identify and rectify the error and restart the worker using adctrl utility.
 4. Run pre-clone on the source (all tiers), duplicate the DB using RMAN (or restore the DB from a hot or cold backup), copy the file systems and then run post-clone on the target (all tiers).
- Manual steps (there can be many more):
- o Change all non-site profile option values (RapidClone only changes site-level profile options).
 - o Modify workflow and concurrent manager tables.
 - o Change printers.
5. AutoConfig uses a context file to maintain key configuration files. A context file is an XML file in the \$APPL_TOP/admin directory and is the centralized repository. When you run AutoConfig it reads the XML files and creates all the AutoConfig managed configuration files. For each configuration file maintained by AutoConfig, there exists a template file which determines which values to pick from the XML file.
6.
 - o Check guest user/password in the DBC file, profile option guest user/password, the DB.
 - o Check whether apache/jserv is up.
 - o Run IsItWorking, FND_WEB.PING, aoljtest, etc.
 7. Most likely the FNDFS listener is down. Look at the value of OUTFILE_NODE_NAME and LOGFILE_NODE_NAME in the FND_CONCURRENT_REQUESTS table. Look at the FND_NODES table. Look at the FNDFS_ entry in tnsnames.ora.
 8. The location of log files is determined by parameter \$APPLCSF/\$APPLLOG and that of output files by \$APPLCSF/\$APPLOUT.

9.

- o Trace his session (with waits) and use tkprof to analyze the trace file.
- o Take a statspack report and analyze it.
- o O/s monitoring using top/iostat/sar/vmstat.
- o Check for any network bottleneck by using basic tests like ping results.

10.

- o Use FNDCPASS to change APPS password.
- o Manually modify wdbsvr.app/cgiCMD.dat files.
- o Change any DB links pointing from other instances.

11.

- o Location: \$FND_TOP/secure directory.
- o Significance: Points to the DB server amongst other things.
- o The application knows the name of the DBC file by using profile option “Applications Database Id.”

Set # 1 : Compatibility

On which databases can Oracle Applications be installed on (i.e. Oracle, SQL Server, Informix, etc.) ?

Answer :-

Oracle database only.

Set # 2 : FND vs. AOL

What is the difference between “FND” and “AOL” ?

What are they ?

What do they mean ?

Answer:-

FND is the system name of core Application Object Library(AOL).

AOL consists of the entire schema which forms the base layer for Functioning of Oracle Applications(without which the Apps can not work).

Set # 3 : Schemas

What is the difference between the following schemas and when are they being Used by the system :

- 1) Apps
- 2) Appsys
- 3) Appsyspub

Answer :-

Apps is the database schema which used for connecting applications(front end) user It internally uses the Appsyspub user for connecting .It comprises synonyms for all the

individual module's objects. Concurrent Requests also use the apps db schema for executing the requests.

Appsys is a schema in oracle applications which contains the information about the FND or Foundation Tables.

Appsyspub is the schema which used internally in Oracle Applications (Gateway User) by application Users.

Set # 4 : Techstack

What do we mean by Techstack ?
What comprises the Techstack ?

Answer:-

In Oracle Applications the Technical Software Components which comprises of the entire Applications is called Techstack.

They are

1. Db Techstack.—(Database (Oracle RDBMS) Software.
2. Applications Techstack.(in 11i the 8.06 (i.e. for forms ,reports and for PL/SQL and other libraries) and 8.1.7 for Application Server).(in R12 the releases 10.1.2 and 10.1.3).

Set # 5 : “GL” Database User

When does the system logs in as Database user “gl” and why ?

Answer:-

When using the General Ledger Module Responsibilities the system logs in as Database user gl and this is done for database security.

Set # 6 : Password Change

Before changing password for “apps”, what would you say are the top three Precautions to be taken (before doing in Production) ?
Can we change the password for user “guest” ? Why ?

Answer:-

Ensure that downtime is taken for changing the apps password.

Ensure that no application users are connected

Ensure that no concurrent requests are running .

And make the application tier down and change the apps user password. This is best approach.

We can change the Guest user's password. This is done for advanced security.

Set # 7 : “xml” vs. “dbc” files

What’s the difference between the “xml” file and the “dbc” file ? How are they Being used by the system ?

Answer :-

Xml file in oracle Applications is the context file which is maintained by Autoconfig to maintain the Applications configuration in a centralized manner.

Dbc file is the file used to connect the application user to the database.

Set # 8 : TWO_TASK

What is the “TWO_TASK” variable ? How does Oracle Applications uses it ?

Answer:-

Oracle Applications System maintains TWO_TASK variable for the applications to work properly.

It will be common for database tier and application tier. So that from applications tier users can connect to the database without issues.

Set # 9 : \$AD_TOP

What is \$AD_TOP ?

What does “AD” stand for ?

Which type of user mostly uses this directory ?

Answer :-

AD_TOP is the TOP for Application DBA Module which contains all the essential utilities and files used for maintaining the Oracle Applications System.

AD stand for Applications DBA.

Application DBA’s mostly use this directory.

Set # 10: Workflows

What is a workflow?

How does Oracle Applications uses workflows?

What would be the top three things to monitor for workflows ?

What would be the top three typical questions to ask about workflows ?

Does a Workflow have a version ? If so, how can we find out ?

Answer :-

Workflow is a module in Oracle Applications .It is also a Standalone Product. Normally workflow is used to carry out the flow of work by approving system and this is mostly used in Order Management.

The top three things to monitor workflow would be.

- 1.Login as Sysadmin and by using the workflow Administrator web applications monitor for any pending or errored out workflows and correct it.
- 2.Make sure the “Synch workflow tables” concurrent program is running properly without errors and monitoring the Workflow Managers.
- 3.Monitor the health of Workflow Notification Mailers .

The Top three typical questions to ask about workflows are.

- 1.How will you configure a workflow Notification Mailers.
- 2.How will you navigate and troubleshoot for finding out errored workflow notifications.
- 3.How will you troubleshoot that if workflow notification mailer is not working properly(not sending e-mails).

Workflow has a Version, by executing the wfver.sql in FND_TOP/sql we can find this component’s version.

How will you find the pending and running concurrent requests from SQL prompt?

after logging as apps user in sqlplus

run this sql \$FND_TOP/sql/afqrqrun.sql

This will show the pending and running concurrent requests in the instance

Newly Added

What is Transaction Manager(Concurrent Manager) and its purpose?

Ans:-

Transaction Manager is defined so that it has a special pool of database resource to execute concurrent requests.

Its not like other concurrent managers and its not dependent on any concurrent queue tables. i.e when a client submits concurrent request which is assigned to the Transaction Manager then it immediately executes that conc request. This manager is used to run high priority concurrent requests.

How can you restrict application access to only certain users?

Ans :- By editing the apps.conf configuration file in Apache/conf directory and adding the directive and by giving Allow and bouncing the apache.

Other users will get 403 forbidden error. You can also customize the error message in httpd.conf.

Oracle Apps DBA Interview Questions

1. what is the utility to change the password of a dba schema in oracle apps? Ans: FNDCPASS
2. what are mandatory users in oracle apps?
Ans: applsys,applsypub,apps
3. What simplify a oracle Architecture?
Ans: Desktop Tier, Application Tier, Database Tier 5. What are the components in the Application Tier?
Ans: Apache(http)
Jserver(jre)
Forms Server(f60srv)
Metric Server(d2ls)
Metric Client(d2lc)
Report Server(rwm60)
Concurrent Server(FNDLIBR)
Discoverer 6.What are main file systems in Oracle Apps?
Ans: APPL_TOP, COMMON_TOP,
DB_TOP,ORA_TOP 7. What are there in Desktop Tier?
Ans: Internet Browser, JInitiator 8. What is the location of JInitiator in the Desktop Tier?
Ans: c:\program files\oracle\JInitiator 9. What is the location of client cache?
Ans: c:\documents and settings\user\oracle jar Cache 10. What is the location of Server cache?
Ans: \$COMMON_TOP/_pages
11. Which package will be used for the user validation by plsql agent?
Ans: oraclemypage
12. What are adadmin utilities? and Its location?
\$AD_TOP/bin
Ans: 1.adadmin
2.adpatch
3.adsplice
4.adident
5.adrelink
6.adlicmgr
13. What are the location of JaVA Files?
Ans: JAVA_TOP and all PRODUCT_TOP/Java/Jar
14. What is the name of the xml file of Apps and its location?
Ans: Context Name.xml and \$APPL_TOP/admin
15. what is the location of Apps environment file? and its name?
Ans: contextname.env and \$APPL_TOP
16. In how many way Jar files are generated?

Ans: Normal and Force

17. Once Jar files are generated what files get effected?

Ans: All Product_top/java/jar files and Two files in JAVA_TOP they are appsborg.zip
appsborg2.zip

18. How do you see the files in zip file?

Ans: unzip -v

19. How do you generate jar files?

Ans: Using adadmin and option 5

20. How do you start the apps services?

Ans: \$COMMON_TOP\admin\scripts\Contextname\adstrtal.sh apps/appspwd

21. What is the executable to generate jar files?

Ans: adjava

22. How do you relink a executable of a product

Ans: by relinking option in adadmin or adrelink

23. How do you relink AD product executable? and usage?

Ans: adrelink.sh and adrelink.sh force=y "ad adsplce"

24. When do you relinking?

Ans: 1. when you miss a executable file

2. When there is a problem with any executable file

3. When any product executable get corrupted

25. What is DAD?

Ans: It is a file which stores apps passwords in hard coded format. i.e wdbsvr

26. How do you relink OS files and libraries?

Ans: using make command

27. What is compile schan option in adadmin?

Ans: This option is used to compile/resolve the invalid objects

28. Where do you get the info about invalid objects?

Ans: from dba_objects where status=invalid

29. How do you compile an object ?

Ans: alter object_type object_name compile. Eg: alter table fnd_nodes compile

30. How do you see the errors of a table or view?

Ans: select text from dba_errors where name='emp_view'

31. How do you see the errors in the db?

Ans: show error

32. How do you compile a schema?

Ans: using utlrlp.sql (location is ?/rdbms/admin/) or

going adadmin, compile schema option

33. How do you know how many invalid objects are in specific schema?

Ans: select count(*) from dba_objects where status='INVALID' group by owner;

34. How do you know the package version?

Ans: select text from dba_source where name='package name' and type='PACKAGE
BODY' and rownum<10>/rdbms/admin)

41. How do you load java class to database?

Ans: loadjava

42. What are restart files? and its location?

Ans: These files contains the previous session info about adadmin.. location is \$APPL_TOP\admin\sid\restart*.rf9

43. How do you validate apps schema?

Ans: To validate synonyms, missing synonyms and all grant. You can do it in adadmin. after validating it will produce a report in the location \$APPL_TOP\admin\sid\out*.out

44. How do you enable maintenance mode?

Ans: using adadmin or running a script called "adsetmmd.sql ENABLE/DISABLE" (AD_TOP/patch/115/sql)

45. What is APPS_MRC Schema?

Ans: It is used for multi language support. To synchronize APPS schema and APPS_MRC

46. How to see the version of a script or form or report or etc?

Ans: grep Header adsetmmd.sql or adident Header adsetmmd.sql strings -a GLXSTEA.fmx grep Header or adident Header GLXSTEA.fmx

47. What is the location of adadmin log?

Ans: \$APPL_TOP\admin\sid\log

48. What are the oracle homes in Apps?

Ans: 8.0.6ORACLE_HOME(Dev 6i products) and IAS_ORACLE_HOME (Apache)

49. How do you configure you ipaddress at client side? and server side?

Ans: c:\windows\system32\drivers\etc\hosts and \etc\host

50. What is the location of Database server related scripts?

Ans: \$ORACLE_HOME\appsutil\scripts\contextname

51. what is the utility to clean the concurrent manager?

Ans: @cmclean.sql (You have download from metalink)

52. How do you stage the 11.5.10 Apps software?

Ans: using adautostg.pl

53. What is the location of the source files of forms?

Ans: AU_TOP/forms/US/

54. What is the executable to generate forms?

Ans: f60gen

1. How do you Apply a application patch? -> Using adpatch 2. Complete Usage of adpatch? 1. download the patch in three ways.

a) Using OAM-Open Internet Explorer->Select Oracle Application Manager-> Navigate to Patch Wizard -> Select Download Patches -> Give the patch number(more than one patch give patch numbers separated by comma-> Select option download only->Select language and Platform-> Give date and time-> submit ok Note: Before doing this Your oracle apps should be configured with metalink credentials and proxy settings

b) If your unix system is configured with metalink then goto your applmgr account and issue following command

1.ftp updates.oracle.com

2.Give metalink username and password

3.After connecting, cd patch number

4. ls -ltr
5. get patchnumber.zip(select compatible to OS)
- c) Third way is connect to metalink.oracle.com.

1. After logging into metalink with your username and password
2. Goto Quickfind->Select patch number-> Give patch number->Patch will be displayed->Select os type->Select download
3. ftp this patch to your unix environment
2. Apply the patch?

1. unzip downloaded patch using unzip
eg: unzip p6241811_11i_GENERIC.zip
2. Patch directory will be unzip with patch number.
3. Goto that directory read readme.txt completely.
4. Make sure that Middle tier should be down, Oracle apps is in maintainance mode and database and listener is UP
5. Note down invalid objects count before patching
6. Goto patch Directory and type adpatch
7. It will ask you some inputs from you like, is this your appl_top,common_top, logfile name,sytem pwd, apps pwd, patch directory location, u driver name etc. Provide everything
2. During Patch What needs to be done?

1. Goto \$APPL_TOP/admin/SID/log
2. tail -f patchnumber.log(Monitor this file in another session)
3. tail -f patchnumber.lgi(Monitor this file in another session)
4. TOP comand in another session for CPU Usage
3. Adcontroller during patching?

1. During patching if worker fails, restart failed worker using adctrl(You wil find the option when u enter into adctrl)
2. If again worker fails, Goto \$APPL_TOP/admin/SID/log/workernumber.log
3. Check for the error, fix it restart the worker using adctrl
4. If you the issue was not fixed, If oracle recommends if it can e ignorable, skip the worker using adctrl with hidden option 8 and give the worker number
4. Log files during patching?

1. patchnumber.log (\$APPL_TOP/admin/SID/LOG/patchnumber.log)
2. patchnumber.lgi(\$APPL_TOP/admin/SID/LOG/patchnumber.lgi)
3. adworker.log(\$APPL_TOP/admin/SID/LOG/adworker001.log)
4. l.req(\$APPL_TOP/admin/SID/LOG/11248097.req)
5. adrelink.log(\$APPL_TOP/admin/SID/LOG/adrelink.log)
6. adrelink.lsv(\$APPL_TOP/admin/SID/LOG/adrelink.lsv)
- 7.autoconfig.log(\$APPL_TOP/admin/SID/LOG/autoconfig_3307.log)
5. useful tables for patching?

1. ad_applied_patches->T know patches applied
2. ad_bugs->ugs info
3. fnd_installed_processes
4. ad_deferred_jobs
5. fnd_product_installations(patch level)
6. To know patch Info?

1. You can know whether particular patch is applied or not using ad_applied_patches or ad_bugs
2. Using OAM->Patch wizard-> Give patch numer
3. To know mini pack patchest level, family pack patchest level and patch numbers by executing script called patchsets.sh(It has to be downloaded from metalink
7. Reduce patch time?

1. using defaults file
2. Different adpatch options you can get these options by typing adpatch help=y(noautoconfig,nocompiledb,hotpatch,novalidate,nocompilejsp,nocopyportion,nodatabaseportion,nogenerateportion etc)
3. By merging patches into single file
4. Distributed AD if your appl_top is shared
5. Staged APPL_TOP while in production env
8. Usage of Admerging?

1. You can merge number of patches into single patch
2. create two directories like eg: merge_source and merged_dest
3. Copy all patches directories to merge_source
4. admrgpch -s merge_source -d merged_dest -logfile logfile.log
5. merged patch will be generated into merged_dest directory and driver name will be u_merged.drv
8. Usage of Adsplce?

1. Download splice patch, and unzip it
2. Read the readme.txt perfect
3. As per read me, copy following three files to \$APPL_TOP/admin
izuprod.txt
izuterr.txt
newprods.txt
4. open newprods.txt using vi and modify the file by giving correct tablespace names available in your environment
5. run adsplce in appl_top/admin directory

How to apply India Localization Patches

1. How to apply india Localizatin Patches?

1. We have to install India localization Patch Application Tool by downloading patch 6491231

2. Copy the downloaded patch to \$JA_TOP and unzip the same there

3. A directory inpatch will be created after unzipping. In which india localization patch tool available

4. Go to india localization patch directory

5. use following command

```
perl $JA_TOP/inpatch/indpatch.pl drv_file=6355941.drv fnd_patchset=H
```

```
appspwd=apps japwd=ja logfile=6355941.log systempwd=manager
```

```
fnd_patchset= FND PATCHSET LEVEL
```

```
japwd = ja_top password
```

```
drv_file=patchnumber.drv file
```

2. How do you know what are india localization patches applied? Solution : using

JAI_APPLIED_PATCHES

1. what is the utility to change the password of a dba schema in oracle apps? Ans:

FNDCPASS 2. what are mandatory users in oracle apps? Ans: applsys,applsyspub,apps

3. What simplify a oracle Architecture? Ans: Desktop Tier, Application Tier, Database

Tier 5. What are the components in the Application Tier? Ans: Apache(http) Jserver(jre)

Forms Server(f60srv) Metric Server(d2ls) Metric Client(d2lc) Report Server(rwm60)

Concurrent Server(FNDLIBR) Discoverer 6. What are main file systems in Oracle Apps?

Ans: APPL_TOP, COMMON_TOP, DB_TOP, ORA_TOP 7. What are there in Desktop

Tier? Ans: Internet Browser, JInitiator 8. What is the location of JInitiator in the Desktop

Tier? Ans: c:\program files\oracle\JInitiator 9. What is the location of client cache? Ans:

c:\documents and settings\user\oracle jar Cache 10. What is the location of Server cache?

Ans: \$COMMON_TOP/_pages 11. Which package will be used for the user validation

by plsql agent? Ans: oraclemypage 12. What are adadmin utilities? and Its location?

\$AD_TOP/bin Ans: 1.adadmin 2.adpatch 3.adsplce 4.adident 5.adrelink 6.adlicmgr

13. What are the location of Java Files? Ans: JAVA_TOP and all

PRODUCT_TOP/Java/Jar 14. What is the name of the xml file of Apps and its location?

Ans: Context Name.xml and \$APPL_TOP/admin 15. what is the location of Apps

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Ans: unzip -v 19. How do you generate jar files? Ans: Using adadmin and option 5 20.

How do you start the apps services? Ans:

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$COMMON_TOP\admin\scripts\Contextname\adstrtal.sh apps/appspwd 21. What is the
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executable to generate jar files? Ans: adjava 22. How do you relink a executable of a

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oracle apps dba interview questions and answers

February 6, 2009 at 9:43 am | In Oracle Apps | 4 Comments

Tags: apps dba interview questions and answers, restrict apps users, sql to find pending and running concurrent requests, start oracle apps restricted, transaction manager, Transaction Manager Concurrent Manager

1. What happens if the ICM goes down?
2. How will you speed up the patching process?
3. How will you handle an error during patching?
4. Provide a high-level overview of the cloning process and post-clone manual steps.
5. Provide an introduction to AutoConfig. How does AutoConfig know which value from the XML file needs to be put in which file?
6. Can you tell me a few tests you will do to troubleshoot self-service login problems? Which profile options and files will you check?
7. What could be wrong if you are unable to view concurrent manager log and output files?
8. How will you change the location of concurrent manager log and output files?
9. If the user is experiencing performance issues, how will you go about finding the cause?
10. How will you change the apps password?
11. Provide the location of the DBC file and explain its significance and how applications know the name of the DBC file.

Answers

1. All the other managers will keep working. ICM only takes care of the queue control requests, which means starting up and shutting down other concurrent managers.
 2.
 - o You can merge multiple patches.
 - o You can create a response file for non-interactive patching.
 - o You can apply patches with options (nocompiledb, nomaintainmrc, nocompilejsp) and run these once after applying all the patches.
 3. Look at the log of the failed worker, identify and rectify the error and restart the worker using adctrl utility.
 4. Run pre-clone on the source (all tiers), duplicate the DB using RMAN (or restore the DB from a hot or cold backup), copy the file systems and then run post-clone on the target (all tiers).
- Manual steps (there can be many more):
- o Change all non-site profile option values (RapidClone only changes site-level profile options).
 - o Modify workflow and concurrent manager tables.
 - o Change printers.
5. AutoConfig uses a context file to maintain key configuration files. A context file is an XML file in the \$APPL_TOP/admin directory and is the centralized repository. When you run AutoConfig it reads the XML files and creates all the AutoConfig managed configuration files. For each configuration file maintained by AutoConfig, there exists a template file which determines which values to pick from the XML file.
 6.
 - o Check guest user/password in the DBC file, profile option guest user/password, the DB.
 - o Check whether apache/jserv is up.
 - o Run IsItWorking, FND_WEB.PING, aoljtest, etc.
 7. Most likely the FNDFS listener is down. Look at the value of OUTFILE_NODE_NAME and LOGFILE_NODE_NAME in the

FND_CONCURRENT_REQUESTS table. Look at the FND_NODES table. Look at the FNDFS_ entry in tnsnames.ora.

8. The location of log files is determined by parameter \$APPLCSF/\$APPLLOG and that of output files by \$APPLCSF/\$APPLOUT.

9.

- o Trace his session (with waits) and use tkprof to analyze the trace file.
- o Take a statspack report and analyze it.
- o O/s monitoring using top/iostat/sar/vmstat.
- o Check for any network bottleneck by using basic tests like ping results.

10.

- o Use FNDCPASS to change APPS password.
- o Manually modify wdbsvr.app/cgiCMD.dat files.
- o Change any DB links pointing from other instances.

11.

- o Location: \$FND_TOP/secure directory.
- o Significance: Points to the DB server amongst other things.
- o The application knows the name of the DBC file by using profile option "Applications Database Id."

Set # 1 : Compatibility

On which databases can Oracle Applications be installed on (i.e. Oracle, SQL Server, Informix, etc.) ?

Answer :-

Oracle database only.

Set # 2 : FND vs. AOL

What is the difference between "FND" and "AOL" ?

What are they ?

What do they mean ?

Answer:-

FND is the system name of core Application Object Library(AOL).

AOL consists of the entire schema which forms the base layer for Functioning of Oracle Applications(without which the Apps can not work).

Set # 3 : Schemas

What is the difference between the following schemas and when are they being Used by the system :

- 1) Apps
- 2) Applsyst
- 3) Applsystpub

Answer :-

Apps is the database schema which used for connecting applications(front end) user It internally uses the Appsyspub user for connecting .It comprises synonyms for all the individual module's objects. Concurrent Requests also use the apps db schema for executing the requests.

Appsys is a schema in oracle applications which contains the information about the FND or Foundation Tables.

Appsyspub is the schema which used internally in Oracle Applications (Gateway User) by application Users.

Set # 4 : Techstack

What do we mean by Techstack ?

What comprises the Techstack ?

Answer:-

In Oracle Applications the Technical Software Components which comprises of the entire Applications is called Techstack.

They are

1. Db Techstack.—(Database (Oracle RDBMS) Software.
2. Applications Techstack.(in 11i the 8.06 (i.e. for forms ,reports and for PL/SQL and other libraries) and 8.1.7 for Application Server).(in R12 the releases 10.1.2 and 10.1.3).

Set # 5 : “GL” Database User

When does the system logs in as Database user “gl” and why ?

Answer:-

When using the General Ledger Module Responsibilities the system logs in as Database user gl and this is done for database security.

Set # 6 : Password Change

Before changing password for “apps”, what would you say are the top three

Precautions to be taken (before doing in Production) ?

Can we change the password for user “guest” ? Why ?

Answer:-

Ensure that downtime is taken for changing the apps password.

Ensure that no application users are connected

Ensure that no concurrent requests are running .

And make the application tier down and change the apps user password. This is best approach.

We can change the Guest user's password. This is done for advanced security.

Set # 7 : "xml" vs. "dbc" files

What's the difference between the "xml" file and the "dbc" file ? How are they being used by the system ?

Answer :-

Xml file in oracle Applications is the context file which is maintained by Autoconfig to maintain the Applications configuration in a centralized manner.

Dbc file is the file used to connect the application user to the database.

Set # 8 : TWO_TASK

What is the "TWO_TASK" variable ? How does Oracle Applications uses it ?

Answer:-

Oracle Applications System maintains TWO_TASK variable for the applications to work properly.

It will be common for database tier and application tier. So that from applications tier users can connect to the database without issues.

Set # 9 : \$AD_TOP

What is \$AD_TOP ?

What does "AD" stand for ?

Which type of user mostly uses this directory ?

Answer :-

AD_TOP is the TOP for Application DBA Module which contains all the essential utilities and files used for maintaining the Oracle Applications System.

AD stand for Applications DBA.

Application DBA's mostly use this directory.

Set # 10: Workflows

What is a workflow?

How does Oracle Applications uses workflows?

What would be the top three things to monitor for workflows ?

What would be the top three typical questions to ask about workflows ?

Does a Workflow have a version ? If so, how can we find out ?

Answer :-

Workflow is a module in Oracle Applications .It is also a Standalone Product. Normally workflow is used to carry out the flow of work by approving system and this is mostly used in Order Management.

The top three things to monitor workflow would be.

- 1.Login as Sysadmin and by using the workflow Administrator web applications monitor for any pending or errored out workflows and correct it.
- 2.Make sure the “Synch workflow tables” concurrent program is running properly without errors and monitoring the Workflow Managers.
- 3.Monitor the health of Workflow Notification Mailers .

The Top three typical questions to ask about workflows are.

- 1.How will you configure a workflow Notification Mailers.
- 2.How will you navigate and troubleshoot for finding out errored workflow notifications.
- 3.How will you troubleshoot that if workflow notification mailer is not working properly(not sending e-mails).

Workflow has a Version, by executing the wfver.sql in FND_TOP/sql we can find this component’s version.

How will you find the pending and running concurrent requests from SQL prompt?

after logging as apps user in sqlplus

run this sql \$FND_TOP/sql/afrqrun.sql

This will show the pending and running concurrent requests in the instance

Newly Added

What is Transaction Manager(Concurrent Manager) and its purpose?

Ans:-

Transaction Manager is defined so that it has a special pool of database resource to execute concurrent requests.

Its not like other concurrent managers and its not dependent on any concurrent queue tables. i.e when a client submits concurrent request which is assigned to the Transaction Manager then it immediately executes that conc request. This manager is used to run high priority concurrent requests.

How can you restrict application access to only certain users?

Ans :- By editing the apps.conf configuration file in Apache/conf directory and adding the

directive and by giving

Allow and bouncing the apache.

Other users will get 403 forbidden error. You can also customize the error message in httpd.conf.

Oracle Apps DBA - FAQ

?? Explain about Oracle Applications 11i architecture.

Internet Computing Architecture is a framework for three-tiered, distributed computing that supports Oracle Applications products. The three tiers are the database tier, which manages Oracle8i database; the application tier, which manages Oracle Applications and other tools; and the desktop tier, which provides the user interface display. With Internet Computing Architecture, only the presentation layer of Oracle Applications is on the desktop tier in the form of a plug-in to a standard Internet browser.

• What is Technology Stack?

The key components of the technology stack are:

1. Database Server: This is the Oracle Database engine, and hardly needs any introduction. The version being deployed with Applications 11i is 8i (8.1.6.1.0), although as reviewed later on we still need two ORACLE_HOMES on the application stack (8.1.6.1.0, and 8.0.6.0.0).
2. Forms Server: This is a combination of a Apache HTTP listener process and the Oracle Forms 6.0 server. Since Forms 6.0 is certified with Oracle 8.0.6, we need an Oracle 8.0.6 Home on the Forms Server.
3. Reports Server (version 6.i): This normally runs on the database server. At Legerity, we use a mixture of Oracle Discoverer and third-party tools for our reporting requirements. Discoverer is an optional component of the End User Layer and is used for Business Intelligence functions. Oracle Graphics is a component which runs closely with Oracle Reports.
4. Self Service/Web/CRM: In this interface, the end users view HTML pages served by HTTP listeners of the Apache Web Server .
5. Concurrent Processing Server: The concurrent processing server runs each of the jobs submitted by the Oracle Applications software. These may be interactive jobs, such as print a specific invoice, or an automated process such as analyze all database objects. At our implementation we kept concurrent processing on the same physical tier as the database server.
6. Administration Server: Each of the other tech stacks needs an administration component in order to perform tasks such as patching the stack, re-linking executables and re-creating Java Archives. As a consequence, an Administration component is present on the database server, Concurrent Manager server, forms server and Web server. The utilities adpatch and adadmin are part of the Administration tech stack.
7. Thin Client Framework (TCF Server): Since release 11 of Oracle Applications, certain product forms support graphical display of hierarchical data using Java Applets. At Legerity's implementation, our MRP module used the TCF Server process for viewing a tree during "pegging". It comprises of a TCF listener process called SocketServer which can be configured using either HTTP/HTTPS/Socket mode. On Unix, the command jre

oracle.apps.fnd.tcf.ServerControl <port#> status tells you about the status of the listener process.

8. HTTP/Web Listeners: In Apps 11.5.1, WebDb 2.2, WebDB 2.5 and the Apache Server (version 1.3.9) facilitate communication between the above components and the client. From Apps version 11.5.2, WebDb 2.2 and 2.5 have been replaced by the Apache Server (1.3.9).

9. Java: The Java environment is used heavily in Apps 11i. In release 11.5.1, the components are Java Runtime Environment 1.1.8 (JRE 1.1.8), Java Development Kit 1.1.8 (JDK 1.1.8) and Jserv 1.1.

10. JInitiator: This Browser Plug in (version 1.1.7.27) is installed on the client, which in most cases is a PC. The cloning techniques discussed here should obviate the need for any cloning required on the client/PC. Version 1.1.7.27 has been replaced by a higher version, since the original install of 11.5.1.

?? Where are all form objects(.fmbs) will be available?

AU_TOP is the place where all the form objects, jsp of all the modules will be placed. It will place its executable to respective PROD_TOP after compiling the .fmb.

?? What is the utility used when migrating from 11 to 11i?

To upgrade forms, the form can be directly compiled in next release(forms 6i) Form can be compiled by using ifcmp60.exe flint60 batch executable can be used to check whether the form is compatible to apps or not

?? What is an interface ?

Integrating one application to other applications It involves Data file, insertion scripts, loader scripts, Temp tables Data file is a flat file having contents with delimiter insertion scripts are used to insert data into product tables from temp table loader scripts are also called as control files which are used insert data from data file to temp table. Temp tables are used to transfer data from one module to another or application

?? Advantage of Securing Attributes while Creating User & Responsibility?

Securing attributes allow rows (records) of data to be visible to specified users or responsibilities based on the specific data (attribute value) contained in the row. This is basically for Oracle Self-service web application for data security

?? What is Alert in Apps? How to register it? How it supports Different languages

Oracle Alerts allows you to monitor your business information. It enables you to: Be informed of database exceptions as they happen Specify the exception conditions along with frequency Be informed through a single point through email Take actions you specify depending on a recipient's response Perform routine database tasks automatically Integrate email systems

?? What is flex-field?

An Oracle Applications field made up of segments. Each segment has an assigned name and a set of valid values. Oracle Applications uses flexfields to capture information about your organization. There are two types of flexfields: key flexfields and descriptive flexfields.

?? What is Descriptive Flex-Field?

A flexfield is a field made up of segments. Each segment has a name you or your end users assign, and a set of valid values. There are two types of flexfields: key flexfields and descriptive flexfields. Descriptive flexfields let you satisfy different groups of users

without having to reprogram your application, by letting you provide customizable "expansion space" on your forms.

?? Give an example of Key-FlexField.

In another example, Oracle General Ledger uses a key flexfield called the Accounting Flexfield to uniquely identify a general ledger account. At Oracle, we have customized this Accounting Flexfield to include six segments: company code, cost center, account, product, product line, and sub-account.

?? Difference between KFF & DFF?

A flexfield is a field made up of sub fields, or segments. A flexfield appears on your form as a pop up window that contains a prompt for each segment. Each segment has a name and a set of valid values. There are two types of flexfields: key flexfields and descriptive flexfields. Key flexfields are flexible enough to let any organization use the code scheme they want, without programming.

Descriptive flexfields provide customizable expansion space on your forms. You can use descriptive flexfields to track additional information, important and unique to your business, that would not otherwise be captured by the form. Descriptive flexfields can be context sensitive, where the information your application stores depends on other values your users enter in other parts of the form. A descriptive flexfield appears on a form as a single character, unnamed field enclosed in brackets. Just like in a key flexfield, a pop up window appears when you move your cursor into a customized descriptive flexfield. And like a key flexfield, the pop up window has as many fields as your organization needs.

?? How to determine whether the form is AOL compliant or not?

Manually checking the code in certain form events flint60.exe utility can be used to check whether the form is having AOL standard or not

?? Why we have to use Profile options?

A user profile is a collection of changeable options that affect the way your applications run. Oracle Applications establishes a value for each option in a user's profile when the user logs on or changes responsibility. Oracle Applications provides these options so that you can alter the behavior of your applications to suit your own preferences.

?? What are different Handlers in Apps Coding Standards?

Oracle Applications uses groups of packaged procedures, called handlers, to organize PL/SQL code in forms so that it is easier to develop, maintain, and debug. Handlers may reside in program units in the form itself, in form libraries, or in stored packages in the database as appropriate.

Item Handlers An item handler is a PL/SQL procedure that encapsulates all of the code that acts upon an item. Most of the validation, defaulting, and behavior logic for an item is typically in an item handler.

Event Handlers An event handler is a PL/SQL procedure that encapsulates all of the code that acts upon an event. Usually event handlers exist to satisfy -requirements of either Oracle Forms or the Oracle Applications User Interface Standards for Forms-Based Products, as opposed to particular business requirements for a product.

Table Handlers A table handler encapsulates all of the code that manages interactions between a block and its base table. When an updatable block is based on a view, you must supply procedures to manage the insert, update, lock and delete. Referential integrity checks often require additional procedures. Table handlers may reside on either the forms server or the database, depending on their size and the amount of interaction

with the database, but they typically reside in the database.

?? What is Custom.pll ? Restrictions & Advantages?

The CUSTOM library allows extension of Oracle Applications without modification of Oracle Applications code. You can use the CUSTOM library for customizations such as Zoom (such as moving to another form and querying up specific records), enforcing business rules (forexample, vendor name must be in uppercase letters), and disabling fields that do not apply for your site.

?? What is Folder? Use?

A flexible entry and display window in which you can choose the fields you want to see and where each appears in the window.

?? Function Security?

Function security lets you restrict application functionality to authorized users. Application developers register functions when they develop forms. A System Administrator administers function security by creating responsibilities that include or exclude particular functions. A function is a part of an application's functionality that is registered under a unique name for the purpose of assigning it to, or excluding it from, a responsibility. There are two types of functions: form functions, and non-form functions. For clarity, we refer to a form function as a form, and a non-form function as a subfunction, even though both are just instances of functions in the database.

?? What are various Execution methods of concurrent programs

The execution method identifies the concurrent program executable type and the method Oracle Application Object Library uses to execute it. An execution method can be a PL/SQL Stored Procedure, an Oracle Tool such as Oracle Reports or SQL*Plus, a spawned process, or an operating system host language.

?? What is Zoom feature in Apps?

Moving to another form and performing actions querying up specific records) Zoom : The addition of user-invoked logic on a per-block basis. A Zoom typically consists of opening another form and (optionally) passing parameter values to the opened form through the Zoom logic.

?? What is AOL?

Set of Standards and objects used by Oracle Applications to develop and maintain Oracle Applications

?? How can you find out the version of a Oracle Apps System?

The column `RELEAS_NAME` of the table `FND_PRODUCT_GROUPS` gives you the exact version of the Oracle apps like 11.5.8 or 11.5.9. It also has columns that tells us whether Multi-org/MRC is installed.

?? How do you relink Oracle's Executable?

There are two ways of relinking the oracle executable.

- One way is using Oracle Universal Installer – this is recommended.

- Other way is use make command:

```
$make -f ins_rdbms.mk ioracle
```

?? How do you change the Password in Oracle applications:

Use `FNDCPASS` utility to change the password of APPS, Schema Users and Application's Users in an Oracle apps 11i Environment. One should not change by any other means.

```
FNDCPASS apps/apps 0 Y system/manager SYSTEM APPLSYS WELCOME
```

FNDCPASS apps/apps 0 Y system/manager ORACLE GL GL1

FNDCPASS apps/apps 0 Y system/manager USER SYSADMIN WELCOME

However, after changing APPS password, you need to edit the wdbsvr.app file at \$IAS_TOP/Apache/modplsql/cfg

?? How do you set the color and Title at logon screen of the Oracle applications?

The ICXINDEX.htm file at \$OA_HTML will have the color scheme which can be changed with a combination of RBG (against "#FFFFFF"). Similarly you can set title using HTML tags.

?? How do you change the Logo that is displayed at the time of logging with yo Company's logo?

There is a file logo.gif available at \$OA_MEDIA. Copy your company's logo file here and rename it to logo.gif. this is the file read and displayed on the login screen

?? How do you compile a Report:

To Compile a report, use:

```
rwcon60 userid=scott/tiger@bs817 batch=yes source=repport.rdf stype=rdffile  
dtype=repfile overwrite=yes
```

?? How do you compile a form?

To compile a form, Run:

```
f60gen module=.fmb userid=apps/apps compile_All=Special
```

?? How do you compile the JSPs?

Use: perl -x \$APPL_TOP/jpl/jtf/11.5.0/admin/scripts/ojspCompile.pl to compile the JSPs if required to be done manually.

?? What is a "Shared APPL_TOP"?

A traditional multi-node installation requires the Applications file system on each node in the system. In a Shared APPL_TOP installation, the APPL_TOP and the COMMON_TOP file systems are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services, such as Forms, Web, and Concurrent processing. Any changes made in the shared APPL_TOP file system are immediately visible on all nodes.

Notes:

- Sharing is possible across binary compatible platforms. So, APPL_TOP's of Solaris 2.6 and 8 can be shareable where as Solaris and AIX is not possible.

- You can merge two APPL_TOPs only if patch set level is same for both.

?? What is FND CPPUR program?

Whenever a concurrent manager is started, it loads one record into FND_DUAL and also it will load records during run time as well. Also it inserts records into FND_CONCURRENT_REQUESTS and FND_CONCURRENT_PROCESSES tables which also need a purging. FND CPPUR is a concurrent program that purges these tables on a periodical basis.

?? How do you remove Java Cache cache?

Follow the below steps to remove Java Cache at Apache:

1. Stop Apache

2. Delete Apache cache:

```
$ cd $OA_HTML/
```

```
$ cd _pages
```

```
$cd oa__html // there is underscore “_” written twice here. After “oa”
```

\$ rm *

3. Start Apache

?? What is MRC?:

The Multiple Reporting Currencies (MRC) feature in Oracle Applications allows you to report and maintain accounting records at the transaction level in more than one functional currency. The Multiple Reporting Currencies feature is available in Release 11 of Oracle Applications.

You do this by defining one or more reporting sets of books, in addition to your primary set of books. In your reporting sets of books, you maintain records in a functional currency other than your primary functional currency. Primary functional currency is the currency you use to record transactions and maintain your accounting data within Oracle Applications.

?? How do you find out a Unix process ID of a concurrent request?

If you know the Unix process ID and you want to know for which concurrent request, it belongs to:

Select request_id from fnd_concurrent_requests where oracle_process_id=<PID>.

If you know the Request_ID from the concurrent request screen of the Oracle apps, then you can find the PID by:

Select oracle_process_id from fnd_concurrent_requests where request_id=<ID obtained from Apps>

?? How do you know the block size of O/S?

df -g will give you the block size against each mount partition of the devices.

?? How do you collect Statistics in Oracle Apps?

In Oracle we use DBMS_STATS package to compute the statistics required by a CBO. However Oracle recommends to use FND_STATS package and NOT the DBMS_STATS package in Oracle apps environment. The usage is as below:

exec fnd_stats.gather_schema_statistics('ONT') < For a specific schema >

exec fnd_stats.gather_schema_statistics('ALL') < For all schemas >

?? How do you change SID and/or DBID of a Database Instance?

The following steps will lead you to change of Database Name automatically without need of any manual change.

1. Backup the database

2. SHUTDOWN IMMEDIATE of the database

3. STARTUP MOUNT

4. Open one session and run NID with sysdba privileges

% nid TARGET=SYS/password@test_db DBNAME=test_db2 SETNAME=Y

- the value of DBNAME is the new dbname of the database

- SETNAME must be set to Y. The default is N and causes the DBID to be changed also.

5. shutdown IMMEDIATE of the database

6. Set the DB_NAME initialization parameter in the initialization parameter file to the new database name

7. Create a new password file

8. Startup of the database(without resetlogs)

Note: If you want the DBID alone to be changed, the use:

% nid TARGET=SYS/password@test_db

If you dont want Database as well as DBID to be changed, then
% nid TARGET=SYS/password@test_db DBNAME=test_db2
?? What is the difference between request set and Request group?

Request Group:

It is the group of all the requests bundled together and attached to a particular responsibilities. These requests can be of the same application or combination of reports of different applications. When attached to a responsibility, the user will have the access to all the reports of the “Rquest group”

Request Set:

It is the set of all concurrent requests(reports) which are arranged in such a way that when run this set as a single request, all the requests defined under this request set will be executed as per the sequence. This is useful if a set of reports need to be fired sequentially and on regular basis. We need not keep a track of the sequence, but the request set will take care of that.

Release 12 Apps DBA 101

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Presentation Objectives

- Learn about the new features, functionality and utilities available with Release 12
- We will also cover patching strategy and patch nuances that have changed from Release 11i

Release 12 Basics

- Release 12 aka R12
- Each new point release of R12 is packaged in a RUP (Release Update Pack)

- Current R12 RUPs are 12.0.1, 12.0.2, 12.0.3 and

- Oracle releases a new RUP for Release 12 every three months concurrent with the quarterly CPU

- RUPs may include stub applications, performance improvements and new or enhanced functionality

- Read the Release Content Documents (RCDs) on MetaLink to see what changed between RUPs

12.0.4

Release 12 Basics

- Release 12 is constantly changing

- Release 12 RUPs contain the latest Apps CPU patch

- Certain patches should be applied on a regular schedule (e.g. quarterly Critical Patch Updates)

- When you install Release 12, you install all modules, whether you license them or not (200+)

- Quarterly Release 12 upgrade packs (RUPs) can change/add functionality and/or technology

-

Applications Technology (ATG) or pseudo products are an integrated set of modules used by all of the other modules: FND, OAM, OWF, FWK, JTT, JTA, TXK, XDO, ECX, EC, AK, ALR, UMX, BNE, and FRM

Release 11i Architecture Components

User Interface Application Logic Database Logic

User Interface Application Logic Database Logic

R11i and R12 Multi-Tiered Architecture

- Desktop Tier

–

R11i -uses a browser and JInitiator or Sun J2SE Plug-In

–

R12 – uses a browser and Sun J2SE Plug-in

Desktop Tier -The Case for Sun J2SE

-

JInitiator 1.1.8 for R11i desupported Dec 2008

-

JInitiator 1.3 desupport announcement pending

-

Sun J2SE required for R12

-

Sun J2SE includes all features that JInitiator enhanced to support Oracle Forms

- Upgrading directly to Sun J2SE is less disruptive than going from 1.1.8 to 1.3 to Sun J2SE
- Sun J2SE eliminates the need for Oracle to support their patched JInitiator versions of Sun's software

R11i and R12 Multi-Tiered Architecture

- Application (Middle) Tier

– The Application Tier holds the code that users run against the database

– R11i - Web Services, Forms Server, Report Server (optional), Concurrent Processing Server and an Admin Server

– R12 - Web Services, Forms Server, Concurrent Processing Server and an Admin Server

– R11i - uses iAS 1.0.2.2.2 (JServ)

R11i and R12 Multi-Tiered Architecture

- Application (Middle) Tier
 - R12 uses Oracle Application Server 10g
- OracleAS 10g 10.1.2 – Forms – equivalent to the R11i

8.0.6 ORACLE_HOME

- OracleAS 10g 10.1.3 – the Web Server and Oracle Containers for Java (OCJ4) – equivalent to the R11i 8.1.7 ORACLE_HOME

- Note – “Server Partitioned” --> “Split Configuration” --> “Mixed Platform Architecture”

- Oracle JDeveloper 10.1.3
- JDBC 10.2
- Provides more functionality than R11i JServ

JServ versus 10g AS

- Release 11i JServ -a simple Java apps server that supports JSP and Servlets, and little else
- Release 12 Oracle Application Server 10g
 - supports Sun's Java Enterprise Edition version

1.4 (Java EE 1.4) programming standards

- Includes Oracle Identity Management for security
- Supports BPEL in an OC4J Container
- Latest version of OID for E-Business Suite is

10.1.4

JServ versus 10g AS

- Release 12 OAS 10g

– Uses OCJ4 (Oracle Containers for Java)

•

Supports multiple instances of OCJ4, not for scalability (which was why you could have multiple JServ instances), but for division of processing

•

Each instance of OCJ4 is used as a compartment to contain one portion of the OAS 10g functionality

•

This allows the individual instances to be tuned for their actual workload, and helps to prevent them from competing for resources

•

Oracle Process Manager and Notification Server
Administrator's Guide 10g Release 3 (10.1.3)

•

Installed and configured with every Oracle Application Server

•

Essential for running Oracle Application Server

•

An integrated way to manage all Oracle Application Server components including Discoverer, OCJ4, etc.

•

Checks to see if a service has terminated and tries to restart the service automatically (deathdetection)

•

Dynamic Resource Management (DRM) – you can customize process management

–

Spawn an additional OC4J process if average response time exceeds a threshold and if there are less than four processes

—
Start an additional OC4J process every day at 5pm for peak hours

- Resource Management Directive (RMD) tells DRM when and what to do -Directives are configured in opmn.xml
- Creates a file for each managed process and can rotate log files

R11i and R12 Multi-Tiered Architecture

- Database Tier

—
R11i -runs Oracle 9iR2 or Oracle 10g

—
R12 – Oracle 10g

Database Tier – Oracle 10g

- Performance – PL/SQL 2x faster
- Manageability -Automatic Workload Repository (AWR) and Automatic SGA Tuning
- Optimizer Improvements
- Oracle 10.2.0.3 is certified with R12 Version 12.0.2 or higher
- Oracle Database Vault recently certified for R11i, still waiting for certification with Release 12
-

The most important reason for upgrading to Oracle 10g is that it is in Premier Support, and Oracle 9i is in Extended Support = \$\$\$

- Oracle Enterprise Manager (OEM)
- Oracle Applications Manager (OAM)
- Application Management Pack (AMP) -\$\$
- Patching
- Cloning
- AutoConfig
- Diagnostics

Administration and Maintenance Tools

Oracle Enterprise Manager (OEM)

- Oracle Enterprise Manager 10g Grid Control
- Monitor E-Business Suite performance, availability and configuration changes
- Can monitor multiple E-Business systems

- Can drill down into Oracle Applications Manager (OAM)

- MetaLink Note: 394448.1

Oracle Applications Manager (OAM)

- OAM

- Patch Wizard recommends patches, provides details about what a patch will change, and shows what patches have modified a specific file

- Recommended tool for making changes to context_file.xml (AutoConfig)

- License Manager enables licensed E-Business Suite modules

Oracle Applications Manager (OAM)

- OAM

- Administer concurrent managers and workflow components

- Includes Diagnostic Wizards for Concurrent Manager Recovery, Service Infrastructure, GCS and Forms Monitoring, CP Signature and Dashboard Collection Signature

- Provides a menu-driven system to set up, run and view Diagnostics

- MetaLink Note: 225024.1

Applications Management Pack (AMP)

- Oracle Applications Management Pack for Oracle E-Business Suite with EM Grid Control 10gR3 (10.2.0.3)*
- Extends Enterprise Manager 10g Grid Control
- Can purchase for Oracle Applications installation -\$\$
- Integrates OAM with Grid Control to provide a consolidated end-to-end E-Business Suite management solution

Applications Management Pack (AMP)

- Monitors your system for security problems, usage characteristics, configuration changes and performance

• Key Capabilities:

- Automated Cloning *
- Automatic Discovery of E-Business Suite Systems
- Configuration Management
- Service Level Management

Applications Management Pack (AMP)

- AMP monitors Oracle Applications Service, Oracle Applications Infrastructure Service, Concurrent Processing Service, Forms Applications Service, Concurrent Manager, Workflow, Custom Objects, Patch Information

- Use AMP to Clone – but read MetaLink Note: 412044.1 “Application Management Pack for Oracle E-Business Suite Release 1.0 and 2.0.1 Troubleshooting Guide” carefully – Latest AMP Version 2.0.1 addresses many cloning issues

- Clone with Data Scrambling (Data Masking)

- MetaLink Note: 394448.1

Should We Upgrade to R12?

- Release 11.5.10 software is 4 years old

- End of life for 11.5.10.2 is 2009. Why would you upgrade to a release whose support is ending? 10% Cost...

- New/improved modules – the biggest difference for Release 12 is on the functional side; much more so than the technical side

- Swan Interface – enhanced user interface

- If you are planning an upgrade, you should consider upgrading to Release 12

- If the software is stable, always upgrade to the latest release

- Release 12 is stable!

- Fusion Applications Release at the End of 2008

MUST We Upgrade to R12?

Premier, Extended or Sustaining Support?

- Premier Support

– Includes certification with new third party products/versions and Oracle products

- Extended Support

– Costs more than Premium Support

– Certification is with most existing instead of new third party products/versions and Oracle products

– Extended Support may not include certification with some new third-party products/versions

– So if you find a new problem with an existing certified configuration, Oracle Support will help you

– If you're still running Oracle 9i you're on Extended Support (which ends July 2010)

MUST We Upgrade to R12?

- What's the risk to not upgrading?

–

Oracle releases a new CPU every quarter

– The biggest risks -Security / Performance

–

Critical Patch Updates (CPUs)

–

CPUs address security vulnerabilities

–

R12 Apps CPUs are cumulative •

–

Release 12.0.4 includes the Jan 2008 CPU •

MUST We Upgrade to R12?

- What's the risk to not upgrading?

–

Oracle follows strict compliance with ATG_PF RUP policy (N-1)

•

January 2008 CPU will only support ATG RUP 5 and RUP 6

•

To stay current on security, you must stay relatively current on ATG RUPs, which means you must stay relatively current on which Release of the Applications you are running

–

If Sarbanes-Oxley compliance is important to your company, can you afford to fall behind on security updates?

–

If you know there's a Critical Patch Update, and you know what vulnerabilities it fixes, so do hackers

Upgrade Paths

-

Dual Phase Upgrade

–

Earlier releases (< 11.5.7) must upgrade to 11.5.10.2 first, then Release 12.

–

If not on latest certified Oracle 10g, must upgrade to it before upgrading to Release 12.

–

Two phases do not have to occur during the same critical downtime.

–

Use OATM Migration Utility to upgrade to Oracle Applications Tablespace Model (OATM)

-

Single Phase Upgrade

– 11.5.7 and later releases must upgrade to Oracle 10g (should upgrade to latest certified, currently 10gR3) if not there already and Release 12 during the same critical downtime

Which Tool Does What?

Rapid Install Wizard - Fresh Install of E-Business Suite AutoConfig – manages configuration files (httpd.conf, appsweb.cfg) MetaLink Note: 387859.1 Applications Patching - AutoPatch

- Upgrading E-Business Suite from R11i to R12 *

- Applying an R12 RUP, a Family Pack, Mini-Pack, etc. Database and CPU Patching – OPatch and N-apply Diagnostics – a set of non-intrusive programs that can be run to gather information about aspects of the applications Oracle Integration Repository (iRep)
 - Shows all interfaces in the E-Business Suite for R11i

Rapid Install Wizard

- If you are installing the Applications
 - Rapid Install Wizard installs the ORACLE_HOMEs and databases, and the APPL_TOP and COMMON_TOP directories that contain the Applications code

Rapid Install Wizard

- Instance Home

–

New for Release 12

–

\$INST_TOP

–

\$ORACLE_BASE/inst/apps/context_name

–

context_name is the dbsid_host

–

Facilitates shared application file system for multi-node configurations

AutoConfig

- Automatically configures an Oracle Applications Release 12 instance
- All necessary information saved in the Applications context file or the Database context file
- Applications context file is an XML repository in \$INST_TOP with APPL_TOP information

- Database context file is an XML repository in the RDBMS ORACLE_HOME with database tier information

- AutoConfig logfiles are stored under \$INST_TOP/admin/log for Application and \$ORACLE_HOME/apputil/log/<CONTEXT_NAME> for the database

AutoConfig

- AutoConfig Template files have named tags that are replaced with instance-specific information located in <product_top>/admin/template – should not be edited

- Custom Template File – copy the template and edit it, when AutoConfig detects a custom template file, it uses it

- AutoConfig Driver Files – lists the AutoConfig file templates and their destination locations

AutoConfig

- AutoConfig Scripts

–
adchkcfg.sh – run before running AutoConfig to review changes. Generates a report showing differences between current and modified AutoConfig

–
adtmplrpt.sh – provides information about location of AutoConfig templates

–
restore.sh – to roll back an AutoConfig session

Applications Patching

- Patching is Oracle's way of releasing code fixes, functionality enhancements or new functionality
- Patches can update or create new file system objects like forms, reports and sql scripts
- Patches can execute code within the database to change seeded data

R12 Applications Patching Changes

- With Release 12, Oracle keeps major new features and bug fixes separate
- Major new functionality reserved for point releases
- A new maintenance branch will be created for each point release
- New feature introduction into maintenance branches limited and requires executive approval
- Codelevels make checking for prerequisites easier
- Patch Application Assistant (PAA) enhances tracking manual steps
- New Oracle manual "Oracle Applications Patching Procedures"

R12 Applications Patching Changes

- Codelines and Codelevels

—

Patches are grouped into codelines.

—

A codeline begins with a point release and progresses to include all patches required to maintain that point release

—

Release 12.0 -> Codeline A, Release 12.1 -> Codeline B

—

The unique set of product features for a point release or a product family are a codelevel

R12 Applications Patching Changes

-

In Release 11i, patches could require other individual patches as prerequisites, making it difficult to determine if a new patch included all the functionality of an older patch

-

In Release 12, patches can only require a codelevel as a prerequisite

-

MetaLink Note: 459156.1

Types of Applications Patches

-

R11i Consolidated Updates (CUs) and R12 Release UpdatePacks (RUPs)

—

Most thoroughly tested

—

11.5.10.2 is the latest R11i CU

—

12.0.4 is the latest R12 RUP

–
CUs are released after a maintenance pack

–
You must be running an existing Release 12 to apply an R12 RUP

- Maintenance Packs – a collection of the latest product family patchsets – 11.5.10.2 is the latest R11i Maintenance Pack.

- Technology Stack Updates – patchsets or mini-packs that change the underlying services. The latest for Release 11i is 11i.ATG_PF.H

Types of Applications Patches

- Family Packs/Product Family RUP

–
Tested by their product teams

–
Mini-packs for a specific, individual product family for a specific point release

–
Understand the thoroughness of the testing before you plan a Family Pack upgrade

- One-off Patches/Individual Bug Fix – rare – a patch that fixes one issue – a recent example – One-off Patch 6812211 to fix potential data corruption issue in R12 Oracle Assets

- Pre-upgrade patch – upgrade related, high priority patches consolidated from all the products within a product family

Types of Applications Patches

-

If you are trying to decide whether to apply a Family Pack or a Release Update Pack (RUP), the major difference is that RUPs are the most thoroughly tested.

-

If possible, stay current on CPUs and Technology Stack Updates, even if you can't stay current on Family Packs

What's Delivered in R12 RUPs for the DBAs?

New Technology Inventory Report 12.0.2

OC4J Load Balancing – MetaLink Note: 380489.1 12.0.2

Change Base Language Script – adchgbase.pl 12.0.2

Application Object Library: Custom Directory Information Tree (DIT) 12.0.3

Diagnostics Execution Engine and User Interface Enhancements 12.0.3

Applications Framework: Expose HGrid's Record Set Size for Administrator Personalization 12.0.3

Improved Error Notification from XML Gateway 12.0.3

New and Revised Diagnostic Tests – MetaLink Note: 421245.1 for a complete list of R12

Diagnostics Tests 12.0.4

Applications Patching

-

AutoPatch applies Applications patches (not databasepatches, operating system patches, or CPUs)

-

AutoPatch records patch details in the OAM Applied Patches Database

-

OAM includes tools like Applied Patches, Timing Reports and Patch Wizard to help determine what patches have already been applied, how long they may take to apply, and which ones are available

-

Using Patch Wizard, there is no excuse for not knowing exactly what – right down to the SQL code – is being changed by a patch

- MetaLink Note: 225165.1

AutoPatch

- Use AD Merge Patch to group patches together for application, then apply the merged patch using AutoPatch
- Use AutoPatch Non-interactive Mode to automate patch application
- Use a Shared Application Tier File System for multi-node systems to apply patches only once
- MetaLink Note: 181665.1

Patch Application Assistant (PAA)

- Oracle Patch Application Assistant (PAA) helps you track and perform manual steps during patching
- For patches with manual steps, PAA generates a customized set of instructions specific to your installation and displays the relevant manual steps
- For merged patches, PAA automatically merges the contents of the individual patch readme files.
- If you need to use PAA, the patch readme will ask you to run admsi.pl

Database and CPU Patching

- OPatch utility – To apply patches to the RDBMS
- Critical Patch Updates (CPUs) – Quarterly security patches tied to ATG RUPs that patch the ORACLE_HOMEs
- CPU Patching -n-apply CPU (aka n-apply) -To apply a Critical Patch Update (CPU) – n-apply uses OPatch, but provides customized features to make applying CPUs more reliable

Oracle E-Business Suite Diagnostics

- Free utilities
- New diagnostics delivered in a standard Oracle Patch and are applied using AutoPatch
- Diagnostics don't alter data or setup
- Latest patch included in Release 12.0.4
- Oracle Support may ask you to run a Diagnostic when logging an SR
- Stay current on Diagnostic patches, as the Diagnostic programs are useful in troubleshooting -Sept 2007

Oracle Integration Repository (iRep)

- To view all the interfaces in the 11i E-Business Suite in one place

–

PL/SQL

–

Concurrent Programs

–

Open Interfaces

–

Interface Views

–

Electronic Data Interchange (EDI) Message Transactions

–

XML Gateway Message Maps

–

Java Methods

Other Tools, Utilities and Patches

-

Remote Diagnostic Agent (RDA) – comprehensive picture of environment -4.10

-

10g Upgrade Companion Version 2 – for upgrading from Oracle 9i to 10g, MetaLink Note: 466181.1

-

Single Sign-On and Oracle Internet Directory 10g 10.1.4.2

-

New AutoConfig Patchset (R12 TXK.A.Delta.4 Patchset (Patch 6329757)

-

Debugging Tools (MetaLink Note: 373548.1 and 454178.1)

-

Gather Statistics program has Gather Auto option to reduce how much statistics gathering you need to do

Links

- <http://blogs.oracle.com/shan> -Steven Chan, Director of Applications Technology Integration for Oracle – wonderful articles explaining the nuances of the Applications
- www.Integrigy.com – E-Business Suite Security, including CPU vulnerability evaluation
- <http://orclville.blogspot.com> – Floyd Teter’s Fusion perspective from the trenches
- www.OnCallDBA.com – E-Business Suite books and concurrent manager expertise
- www.trioragroup.com –that’s us!

Questions and Answers

Oracle EBusiness Suite
Release 12 Architecture and
Tools Overview

Presenter: Sandra Vucinic VLAD Group, Inc.

Speaker’s Background

- Over 16 years of experience with Oracle database, applications, development and administration tools
- Director, OAUG Database SIG Board

- Director, OAUG SysAdmin SIG and Committee Chair, Oracle Tools and Utilities

Tools and Utilities

- Director, OAUG E-Business Applications Technology SIG Board

- Director, SROAUG Board

- Member, OAUG GEO/SIG Committee

- NCOAUG Distinguished Service Award for 2007

- OAUG Member of the Year for 2008

- Oracle ACE

- Presented at OAUG, NCOAUG, CSOAUG, OVOAUG, SROAUG, Apps World and Open World conferences (70+ sessions)

- Founded VLAD Group, Inc. in March, 2001

Agenda

- New features and enhancements in: •• Applications Object Library
Applications Object Library

- Oracle Applications Manager

- OA Framework

- AD Utilities

- Workflow

- 11g Database

- Tasks to complete to ease R12 upgrade

R12 Architecture –

Web HTTP Servers Application Technology Stack
Middle

R12.1.1 Architecture –

Web HTTP Servers Application Technology Stack
Middle

R12 Architecture –

Components

- New versions of middle tier technology:

- Applications server (J2EE) version 10.1.3.4

- Forms and Reports version 10.1.2.3

- Discoverer Server version 10.1.2.3

- Servlet Container – (OC4J, no longer JServ)

- JDK version 1.5.0_13 – 1.6_03 certified

-

Oracle SOA Suite version 10.1.3

-
- Oracle Business Intelligence version 10.1.3.4
-
- Oracle Enterprise Manager 10g Grid Control Release 3

R12 Architecture –

Components

- New versions of middle tier technology:
- Technologies External to EBS R12
-
- SSO and OID version 10.1.4.3
- Portal version 10 1 4 2
- Portal version 10.1.4.2
-
- Instance Home (INST_TOP) file system:
- \$INST_TOP = \$HOME/inst/apps/<context_name>
-
- JInitiator is not certified or supported in R12
-
- New version of database 10g R2 available with Rapid Install and 11g R1 certified
-
- Tablespace model in R12 OATM
- Applications Object Library
- features and enhancements
-
- Identity Management Integration
- User Name Enhancements
-
- User name changes in EBS are automatically synchronized to Oracle ID
- On Demand User Creation
- On Demand User Creation
-

AOL now supports a mode in which EBS user account is automatically created for SSO users when they first visit a page in EBS

- Mixed Case Passwords

•

EBS now supports casesensitive passwords

- Automatic Linking Of User Accounts

•

EBS accounts are automatically linked to existing accounts with the same user name in OID

Applications Object Library
features and enhancements

- Security

•

New File System Layout

- EBS code tree is free of configuration, log and output files and can be mounted in a readonly mode at runtime (when not patching)

•

Schema Passwords

- The base product schemas are locked except during patching

Applications Object Library
features and enhancements

- User Management
- Proxy User
- Allows a user to specify a proxy who can act ofy p y

p
their behalf

- Integration with Oracle Internal Controls Manager
- Facilitates enforcement of constraints used for preventive separation on duties

Applications Object Library
features and enhancements

- Concurrent Processing
- MultiOrg Support

- MultiOrg Access Control (MOAC) allows a user to access data for a different operating units without

access data for a different operating units without switching responsibilities

- Concurrent Program Definition window is now MOAC enabled. A new field “Operating Unit Mode” allows user to specify the category for a concurrent program

- Standard Request Submission window allows users to execute singleorg or a multiorg concurrent programs

Applications Object Library features and enhancements

- Concurrent Processing
 - Restarting a Request Set
- Restarting a Request Set
 - If concurrent request set fails, once fixed user can restart the request set from the failure point
 - Failover Sensitive Workshift
 - Can specify how many processes for each workshift should run when instance fails over to another PCP node

Applications Object Library

features and enhancements

- Oracle Applications Tablespace Model (OATM)
- includes the the

- New “Tools” tablespace New Tools tablespace includes database schema objects for products such as Oracle Portal (repository), Oracle Discoverer (EUL), Oracle Internet Directory (repository), Oracle Application Sever Single SignOn

- Configurable Default Extent Size allows DBA to specify the default extent size a part of migration process

Oracle Applications

Manager

- Patch Impact Analysis Enhancements

-

The ability to identify and to merge multiple language patches that are applicable to the language patches that are applicable to the environment

-

The ability for users to create a list of patches for analysis as a single set

-

Analysis of patch changes to customized files that are registered with system

Oracle Applications

Manager

- Diagnostics

- Allows to schedule and run diagnostics test as batch programs

pg

- Grid Control Plugin for Oracle EBS

-

Seamless integration with OAM (concurrent manager administration, workflow administration, forms monitoring, configuration and patch management)

-

Clone Automation

OA Framework

features and enhancements

-

Service Interface

- Java interface designed to support both Web services and local Java APIs. Includes support for Service Data Object standard.

-

Service Tester

- User interface used to create unit and integration tests. The tests are recorded in documents as structured XML data.

-

“Swan” User Interface

- EBS will use only “Swan” look and feel for Release 12.

-

Oracle JDeveloper 10g Release 3 (10.1.3)

- R12 leverages Oracle JDeveloper 10g Release 2 (10.1.3).
OA Framework

features and enhancements

-

BI Publisher integration

-

Extensive personalization capability

-

All i if fr

Allows integration of content from
multiple vendors into portal pages

-

Record history

-

Allows EBS content to be exposed in third party Portal server

AD Utilities features and

enhancements

- AutoConfig: Parallel Run Option
- The “Parallel Run” feature enables AutoConfig to be executed simultaneously across multiple nodes EBS instance

- AutoConfig: Profiler

- Consolidated HTML report of an AutoConfig run
- Source and target location of each template
- Time consumed to instantiate/execute individual template scripts
- Execution report for each template script

AD Utilities features and

enhancements

- AutoConfig: Enhanced Check Config Tool
- The Check Config tool (adchkcfg) is used to identify the potential changes that would take effect on an EBS t i t d i t h t A t C f i T h t l customer instance during the next AutoConfig run. The tool has been enhanced to report important database updates, generate a text report for database changes, and offer improved readability of reports.

- AutoConfig: Support for Oracle Database 11g Features

- AutoConfig has been enhanced to support the use of Access Control Lists and other Oracle Database 11g features.

- RapidInstall

AD Utilities features and

enhancements

- Multiple Domain Support for database and middle tier
- ReadOnly Shared File System Support – appl_top, common_top, tech stack homes can be deployed on a readonly shared file system
- Rapid Clone
- Added RAC support for ASM and features to expand RAC system by adding a node to existing RAC cluster

Workflow R12 Features

- Digital Signatures
- Ability to digitally sign the entire notification contents
- Ability to verify the signed documents through an evidence store user interface after the signing process

evidence store user interface after the signing process

- Can exclude purging of a signatureenabled notifications
- Worklist Flexfields a new pages are added:
- Worklist Flexfield Rules a setup page for creating rules to populate worklist flexfield columns

- Worklist Flexfield Rules Simulation test page used to show the effect of multiple worklist flexfield rules on the worklist

- Workflow Notification Mailer

- System Alerts integration

- - Sends a system alert as to the status of mailer server

- SSL Support

Workflow R12 Features

- Mailer service can connect to IMAP and SMTP mail servers using SSL authentication
 - Enhanced error handling for mass failures

- In cases where many users have been setup with invalid email addresses, the workflow directory service is updated to no longer send emails to those users
EBS Release 12 database

support

- 10g R2 database is part of EBS R12 technology stack

- 10g R2 database is certified to run with EBS R12.1.1

- The latest certified 10g R2 database release 10.2.0.4 ith EBS R12
with EBS R12

- Premier Support ends for database version 10g R2 on 7/31/2010
- Extended support fees waived until 7/31/2011
- 10g R2 Terminal Patch Set is 10.2.0.5 (Projected to be released in 2009)
- Oracle Metalink Note 454616.1 Export/Import Process for Oracle EBusiness Suite Release 12 Database Instances Using Oracle Database 10g Release 2

11g Database

- Oracle Database 11g Release 1
(11.1.0.7.0) is certified, on all Certified EBusiness Suite Platforms, on R12 (12.0.4).
- Oracle Database 11g Release 1
(11.1.0.7.0) is part of EBS R12.1.1 technology stack
- Premier support for 11.1.0.6 database ends in October 2009

11g Database

- Oracle Metalink Note 735276.1
Interoperability Notes EBusiness Suite R12 with Oracle Database 11gR1 (11.1.0) (11.1.0)
- Oracle Metalink Note 466649.1 Using Oracle 11g Release 1 Real Application Clusters and Automatic Storage Management with Oracle EBusiness Suite Release 12

- Oracle Metalink Note: 741818.1

Export/Import Process for Oracle E
Business Suite Release 12 Database

11g Database – New
Features

- Access Control List (ACL) : Introduced support for ACL which is a new feature in 11g database
- Oracle Advanced Compression
- Comprehensive set of compression capabilities to help organizations reduce costs, while maintaining or improving performance.
- Reduces the storage footprint of databases through compression of structured data (numbers, characters) as well as unstructured data (documents, spreadsheets, XML and other files).
- Provides enhanced compression for database backups and also includes network compression capabilities for faster synchronization of standby databases.

Tasks to complete to ease R12
upgrade

- Upgrade database to 10g R2 or 11g R1
- Convert tablespaces to OATM model
-

Evaluate impact of R12 on customizations and extensions

- Introduce BI Publisher and JDeveloper
- Integrate Discoverer Server Release 10g with EBS 11i
- Configure Oracle iAS Release 10g for external apps (SSO, OID, Portal) and integrate with EBS 11i
- Position for high availability and scalability
- Evaluate and complete platform change based on ROI

Questions

Thank You

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View Change log
Frequently Asked Questions Cloning Oracle Applications Release 11i
June 2005

Questions

Cloning Concepts

1. What is cloning?
2. How can I clone an Oracle Applications system?

3. What are the differences between the two cloning methods?
4. What is the AD Cloning utility?
5. What is Rapid Clone?
6. How do I determine whether my system is Rapid Clone enabled?
7. What is AutoConfig?
8. How do I determine whether my system is AutoConfig enabled?
9. We are running Release 11.5.7 (or any prior release), which cloning method can we use?
10. We are running Release 11.5.8 (or any later release), which cloning method can we use?
11. Our Oracle Applications system is on Windows, which cloning method can we use?
12. We have a Platinum installation of Oracle Applications. Can we clone our system?
13. Can I clone from one operating system version to another?
14. Can I clone from one platform to a different platform?
15. Can I reclone just the database?
16. Can I clone a single-node system to a multi-node system?
17. Can I clone a multi-node system to a single-node system?
18. What cloning options are available for each cloning method? Rapid Clone concepts
19. Does Rapid Clone modify the source system?
20. How does adcfgclone.pl know the target system values?
21. What is the port pool? What if I want to give a specific value to a Server Port?
22. Does Rapid Clone preserve the patch history?
23. Can I clone a clone ?

24. Can I change the database dbfs layout while cloning? Rapid Clone and the oraInventory

25. What is the oraInventory?

26. What is a binary oraInventory? Is my Inventory binary?

27. What is a XML oraInventory? Is my Inventory XML?

28. What is the Global (or Central) Inventory?

29. What is the Local (or Home) Inventory?

30. How does Rapid Clone deal with the oraInventory?

31. Why don't I need to manually copy the oraInventory when cloning?

32. What does OUISetup.pl do?

Questions and Answers

1. What is cloning? Answer: Cloning is the process of creating an identical copy of an already existing Oracle Applications system.

[top]

2. How can I clone an Oracle Applications system? Answer: There are two cloning methods documented in the following white papers available off of Oracle MetaLink Note 135792.1

o Cloning Oracle Applications Release 11i

o Cloning Oracle Applications Release 11i with Rapid Clone

Note: The third Cloning method (Cloning Oracle Applications Release 11i with AutoConfig) has been fully replaced by Cloning with Rapid Clone, and is no longer supported. [top]

3. What are the differences between the two cloning methods? Answer:

o Cloning Oracle Applications Release 11i was originally published in conjunction with Release 11.5.5 and is applicable for all 11i releases up to 11.5.5 that are not AutoConfig enabled.

o Cloning Oracle Applications Release 11i with Rapid Clone is applicable for all 11i systems that have migrated to AutoConfig and enabled Rapid Clone. This method contains steps to install AutoConfig and Rapid Clone.

[top]

4. What is the AD Cloning utility? Answer: AD Cloning utility (adclone.pl) is the name of the cloning command line utility. This utility is used to preserve and apply configuration information to the cloned target system.

[top]

5. What is Rapid Clone? Answer: Rapid Clone is the new cloning utility introduced in Release 11.5.8. Rapid Clone leverages the new installation and configuration technology utilized by Rapid Install. See OracleMetaLink Note 230672.1 (Cloning Oracle Applications 11i with Rapid Clone) for instructions on installing and enabling Rapid Clone.

[top]

6. How do I determine if my system is Rapid Clone enabled? Answer: First, verify that your system is AutoConfig enabled. Then, verify that you have applied the latest Rapid Clone patch documented in OracleMetaLink Note 230672.1 (Cloning Oracle Applications 11i with Rapid Clone). See Searching the Patch History Database in the AD Procedures Guide for instructions on searching for patches applied to your system.

[top]

7. What is AutoConfig? Answer: AutoConfig is a configuration tool that supports automated configuration of an Oracle Applications Instance. All of the information required for configuring an Applications instance is collected into a central repository, called the Applications Context. When the AutoConfig tool runs, it uses information from the Applications Context file to generate configuration files and update database profiles. See OracleMetaLink Note 165195.1 for details on installing and migrating to AutoConfig.

[top]

8. How do I determine if my system is AutoConfig enabled? Answer: There are several identifiers for when the system is AutoConfig enabled. The following are two common indicators:

o Open the environment file APPSORA.env in your APPL_TOP. If the top of the file says that it is maintained by AutoConfig, then your system is probably using AutoConfig.

o Check if there is an Applications Context file in the APPL_TOP/admin directory. This file will typically be named <SID>.xml or <SID>_<HOSTNAME>.xml.

o Check if there is an Applications Context file in the RDBMS ORACLE_HOME under the appsutil directory. This file will typically be named <SID>.xml or <SID>_<HOSTNAME>.xml.

See OracleMetaLink Note 165195.1 for more details on identifying if your system already uses AutoConfig. [top]

9. We are running Release 11.5.7 (or any prior release), which cloning method can we use? Answer: Due to the advancements in the cloning solution with Rapid Clone, all customers are now recommended to move to using Rapid Clone. If you are on release 11.5.7 or any release before 11.5.7, you will need to first enable AutoConfig on your system, if not already done, before you can use Rapid Clone as documented in the Cloning Oracle Applications Release 11i with Rapid Clone white paper.

[top]

10. We are running Release 11.5.8 (or any later release), which cloning method can we use? Answer: In 11.5.8 AutoConfig is enabled on the middle tier out of the box. In 11.5.9 and any later release, AutoConfig is enabled by default on both the database tier and the middle tier. Update AutoConfig and Rapid Clone code to the latest code line and use Rapid Clone to clone your system. Full instructions are in Cloning Oracle Applications Release 11i with Rapid Clone document 230672.1 on OracleMetalink.

[top]

11. Our Oracle Applications system is on Windows, which cloning method can we use? Answer: If your system is on a release prior to 11.5.7 and is not AutoConfig enabled, use the method documented in the Cloning Oracle Applications Release 11i white paper. If your system is on any AutoConfig-enabled 11i release, use the method documented in the Cloning Oracle Applications Release 11i with Rapid Clone white paper.

[top]

12. We have a Platinum installation of Oracle Applications. Can we clone our system? Answer: Yes, cloning a Platinum system using the Rapid Clone method is no different than cloning a non-Platinum installed system.

[top]

13. Can I clone from one operating system version to another? Answer: Yes, if the target system platform is binary compatible with the source system platform. For example, if you have an existing single-node Oracle Applications system on Solaris 2.6, you could clone it to a node running Solaris 8, but not to a node running HP-UX. Note that cloning from a higher version of a platform to a lower version is not supported, for example, from Solaris 8 to Solaris 2.6. Other examples of binary compatibility for Oracle Applications are:

- o AIX 4.3.3 to AIX 5.1 (32-bit)
- o HP-UX 11.0 to HP-UX 11i
- o Windows NT to Windows 2000

Within a same platform you can also clone from a 32bit source system to a 64bit target system.

Note (AIX only): when cloning from AIX 32bit to AIX 64bit, apply patch 2896876 (64bit kernel extension for Oracle) on the target system prior to running adcfgclone.pl.

[top]

14. Can I clone from one platform to a different platform? Answer: Yes, you can clone or migrate the Applications middle tier from any platform to Linux or any supported Unix platform using the procedure described in document 238276.1 "Migrating to Linux with Oracle Applications Release 11i".

[top]

15. Can I reclone just the database? Answer: Yes, if the source system has changed and you want to update the target system with these changes, you can reclone just the changed database. If Applications patches were applied to the source system, the APPL_TOP and the database must be cloned to keep the file system and database synchronized. See the Recloning section in the white papers for details.

[top]

16. Can I clone a single-node system to a multi-node system? Answer: The Rapid Clone cloning method allows for cloning a single-node system to a multi-node system. See the Cloning Oracle Applications Release 11i with Rapid Clone white paper for details.

[top]

17. Can I clone a multi-node system to a single-node system? Answer: You can use Rapid Clone to merge multiple APPL_TOP and COMMON_TOP file systems into a single APPL_TOP and COMMON_TOP file system. For more details about this procedure, see "Section 3: Merging existing APPL_TOPs into a shared APPL_TOP" in document 233428.1 on OracleMetaLink.

[top]

18. What cloning options are available for each cloning method? Answer: The table below shows the cloning options that are currently available for each cloning method.

Single node to Single node

Recloning

Multi-node to Multi-node

Single node to Multi-node

Multi-node to Single node

With Oracle9i Database

Windows Platform

Cloning Oracle Applications

19. Does Rapid Clone modify the source system? Answer: No, Rapid Clone does not modify the source system. adpreclone.pl prepares the source system to be cloned by collecting information about the database and creating generic templates of files containing source specific hardcoded values. These templates are stored in the appstutil/template directory leaving the original files untouched. This process usually takes a few minutes to complete the first time. Migrating to Autoconfig on the database node (pre-req to Rapid Clone), however, will update the RDBMS init.ora and network listener files. See the instructions in the Autoconfig document 165195.1 (Section 4: Migrating to AutoConfig on the Database Tier) on how to preserve customizations to these files.

[top]

20. How does adcfgclone.pl know the target system values? Answer: adcfgclone.pl will prompt for the values required to create the new context file used to configure the target system. A few values are calculated from the current target system (hostname, user and group). The rest of the target specific values are prompted for:

Prompt

Comment

database SID

Target database SID

domain name

Target system domain name

Prompts specific to the DB Tier

Target System database name

Target System database name

Target instance is a Real Application Cluster (RAC) instance (y/n)

Answer yes if the target system is going to be part of a RAC instance.

Current node is the first node in an N Node RAC Cluster (y/n)

This prompt only appears when you answered "yes" to the previous question. Answer "yes" to this question if the current host is the first node being configured in the target system RAC cluster. The tool will then ask for the number of nodes that will exist in the final RAC instance and gather, the following information for every node: - Hostname - Database Sid - Instance number - Listener port - Private interconnect name Answer "no" to this question if at least one node of the target RAC cluster has already been configured by Rapid Clone (i.e if you already replied "yes" to this question for any other node in the cluster). The tool will then prompt for the following information to connect to a live node (the answers must describe a node that has already been configured): - Hostname - Database Sid - Listener port

RDBMS ORACLE_HOME directory

Path to the Target system RDBMS ORACLE_HOME

Number of DATA_TOP's: DATA_TOP 1: DATA_TOP 2: DATA_TOP 3:

Database mount points. Enter the number of distinct directories containing the target database dbfs, then their paths.

Prompts specific to the Apps Tier

database server node

hostname of the machine hosting the database server

Does the target system have more than one applications tier server node (y/n)?

Answer yes if the target system is part of a multi-nodes configuration. The tool will then prompt for the hostnames of: - concurrent processing node - administration node - forms server node - web server node

Is the target system APPL_TOP divided into multiple mount points (y/n)?

Answer yes if the target system APPL_TOP is divided across multiple mount points. The tool will then prompt for each auxiliary mount (4 mounts): - APPL_TOP mount point - APPL_TOP aux.1 - APPL_TOP aux.2 - APPL_TOP aux.3 Note: if your APPL_TOP is divided into 2 or 3 mounts only, you can specify identical mounts to the above prompts.

APPL_TOP mount point

APPL_TOP directory

COMMON_TOP directory

COMMON_TOP directory

8.0.6 ORACLE_HOME directory

8.0.6 ORACLE_HOME directory

iAS ORACLE_HOME directory

iAS ORACLE_HOME directory

Location of JDK 1.3.1

Location of JDK 1.3.1

Prompt common to DB and Apps Tiers

Port pool number:[0-99]

Enter the port pool that you want to use on the target system. Make sure to specify the same port pool on the DBTier and the AppsTier. If the source and target machines are different, you have the option to preserve the source port values on the target system.

22. Does Rapid Clone preserve the patch history? Answer: Yes, Rapid Clone preserves the patch history of the complete Applications Stack:

o RDBMS ORACLE_HOME: preserve the OUI oraInventory.

o iAS ORACLE_HOME: preserve the OUI oraInventory.

- o 806 ORACLE_HOME: preserve the patch level and ORCA inventory.
- o APPL_TOP and Database: preserve the patch level and history tables.

[top]

23. Can I clone a clone? Answer: Yes, a cloned system created with Rapid Clone can then be used as the Source System in the next cloning. RapidInstall itself is now a clone of a clone using the Rapid Clone technology.

[top]

24. Can I change the database dbf files layout while cloning? Answer: Yes, Rapid Clone allows to add or remove database mount points or redistribute dbf files among mount points in the target system. As long as all the source system dbf files are present in the target system database mount points specified during the adcfgclone prompts (see question "How does adcfgclone.pl know the target system values?"), Rapid Clone will find them and re-create the database control file accordingly.

[top]

25. What is the oraInventory? Answer: The oraInventory is the location for the OUI (Oracle Universal Installer)'s bookkeeping. The inventory stores information about:

- o All Oracle software products installed in all ORACLE_HOMES on a machine
- o Other non-Oracle products, such as the Java Runtime Environment (JRE)

In a 11i Application system the RDBMS and iAS ORACLE_HOMES are registered in the oraInventory. The 806 ORACLE_HOME, which is not managed through OUI, is not. On Unix/Linux, the location of the oraInventory is defined by the content of oraInst.loc, at: - /var/opt/oracle/oraInst.loc on Solaris, HP-UX and Tru64 - /etc/oraInst.loc on Linux and AIX On Windows, the location of the oraInventory is defined by the value of the registry key HKEY_LOCAL_MACHINE\Software\Oracle\INST_LOC or if this value is not defined, at C:\Program Files\Oracle\Inventory

[top]

26. What is a binary oraInventory? Is my Inventory binary? Answer: Before OUI 2.X, the oraInventory was binary. A binary oraInventory centralizes, in a binary format, the location of every Oracle products on the machine and the detail of their patch level. The

oraInventory location is defined by the content of oraInst.loc. You will have a binary inventory only if ALL of the following conditions are met:

- o you are on 11.5.7 or earlier (11.5.8+ install XML inventory out of the box)
- o you have never installed OUI 2.X or higher (Install converts the inventory to XML)
- o you have never run Rapid Clone (Rapid Clone converts the inventory to XML)

If the following file exists, the oraInventory is NOT binary: <oraInventory location as pointed by oraInst.loc>/ContentsXML/inventory.xml [top]

27. What is a XML oraInventory? Is my Inventory XML? Answer: Starting with OUI 2.X and 11.5.8, the information in the inventory is stored in Extensible Markup Language (XML) format. The XML format allows for easier diagnosis of problems and faster loading of data Rapid Clone requires the inventory to be in XML format in order to clone it, and will take care of performing the binary to XML conversion if necessary. Unlike the binary oraInventory, The XML inventory is divided into 2 distinct components:

- o The Global inventory (or Central inventory)
- o The Local inventory (or Home inventory)

More information about these components is available under other questions in this FAQ
The inventory is XML if the following file exists:
\$ORACLE_HOME/inventory/ContentXML/comps.xml [top]

28. What is the Global (or Central) Inventory? Answer: The Global Inventory is the part of the XML inventory that contains the high level list of all oracle products installed on a machine. There should therefore be only one per machine. Its location is defined by the content of oraInst.loc. The Global Inventory records the physical location of Oracle products installed on the machine, such as ORACLE_HOMES (RDBMS and IAS) or JRE. It does not have any information about the detail of patches applied to each ORACLE_HOMEs. The Global Inventory gets updated every time you install or de-install an ORACLE_HOME on the machine, be it through OUI Installer, Rapid Install, or Rapid Clone. Note: If you need to delete an ORACLE_HOME, you should always do it through the OUI de-installer in order to keep the Global Inventory synchronized.
[top]

29. What is the Local (or Home) Inventory? Answer: There is one Local Inventory per ORACLE_HOME. It is physically located inside the ORACLE_HOME at \$ORACLE_HOME/inventory and contains the detail of the patch level for that ORACLE_HOME. The Local Inventory gets updated whenever a patch is applied to the ORACLE_HOME, using OUI.

[top]

30. How does Rapid Clone deal with the oraInventory? Answer: Rapid Clone requires OUI 2.2 to be installed in the ORACLE_HOME as a prerequisite and will perform all the actions necessary to clone the inventory:

- o Converts the Global inventory to xml format when it was binary on either the source system or the target system

- o Registers the cloned ORACLE_HOME in the target system Global Inventory

- o Updates the Local Inventory of the target ORACLE_HOME to reflect the new machine, paths, users, etc.

[top]

31. Why don't I need to manually copy the oraInventory when cloning? Answer: The local inventory is automatically copied from the source system to the target system as part of copying the ORACLE_HOME itself. The Global Inventory is machine specific and therefore should not be copied. If you are cloning from one machine to a different machine, Rapid Clone will simply register the target ORACLE_HOME in the target machine Global Inventory (This action will automatically create the Global Inventory if it did not exist on that machine).

[top]

32. What does OUISetup.pl do? Answer: OUISetup.pl is shipped with the OUI patch, listed as a prerequisite to Rapid Clone (see Metalink Node 230672.1). It should be run as part of the OUI patch installation and will perform the following tasks:

- o Register the OUI program in the Global Inventory

- o Register the JRE in the Global Inventory

- o Ensure that the ORACLE_HOME in which the patch is installed is properly registered in the Global Inventory. In doing so, it will attempt to automatically fix Inventory corruptions that are known to cause problems while cloning, such as - Home indexes out

of sync between the Global and Local Inventory - Duplicate Home Names entries - Duplicate Home Path entries

[top]

* Below script are from metalink and oracle reserved the copyrights. These scripts are mentioned here for information only

For Apps DBA the good place to search for script is within their installation of 11i. The path is \$FND_TOP/sql (Usually on Concurrent Manager Node). The following SQL scripts located under \$FND_TOP/sql are useful when diagnosing concurrent manager problems:

afimchk.sql Tells the status of the ICM and PMON method

afcmstat.sql Lists active manager processes

afrqrun.sql Lists all the running, waiting and Terminating requests

afrqwait.sql Lists requests that are constrained and waiting for the ICM to release them.

afrqscm.sql Prints log file name of managers that can run a given request. It can be used to check for possible errors when a request stays in pending status. It requires a request id value.

afcmcreq.sql Prints the log file name of the manager that processed the request

afrqstat.sql Summary of completed concurrent requests grouped by completion status and execution type. It requires number of days prior to today on which to report parameter.

afimlock.sql Lists locks that the ICM is waiting to get

afcmrrq.sql Lists managers that currently are running a request

APPLSYS schema contains shared APPS foundation objects like FND,AD,WF related data like tables and Indexes.

APPS is the runtime user for E-Business Suite. Owns all the applications code in the database. APPS Schema Contains Synonyms to the objects of All Products (AP,AR, GL etc) and 11i Code (Triggers, views, packages, procedures, functions) but the owner of all GL tables is GL user , AP tables is AP , and AR tables is AR Schema.

Why should Apps & Applsyst passwords always be the same?

The need to have the same password for Apps and Applsyst is because when you sign on to apps, initially it connects to a public schema called APPLSYSPUB. This validates AOL username and password that we enter (operations/welcome using guest user account. Once this is verified we select responsibility, this is validated by APPLSYS schema and then it connects to APPS schema.

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Since it uses both applsyst and apps during signon process this expects both the password to be identical. Try changing apps password to something else and try to login, the validation at the last stage would fail. This would result in failure of application login.

Apps is a universal schema has synonyms to all base product tables and sequences. This also has code objects for all products (triggers, views, packages, synonyms etc.).

Applsyst schema has applications technology layer products like FND and AD etc.

Q How to use the checksum utility for comparing ?

```
$ cd /u01/Stage11i
```

```
$ find oraAppDB oraApps oraDB oraiAS startCD -type f -exec md5sum '{}'\; >  
md5sum_myStage.txt &
```

Metalink Note Id : 316843.1

Q:What scripts can be used to compile apps schema , which one is used in adadmin compile apps schema ?

ANS :

adadmin in-turn calls the procedure UTL_RECOMP.RECOMP_PARALLEL which might be in-turn issues the following commands based on the object types if object is package body

```
alter package <package_name> compile ;
```

```
alter package <packae_ame> compile body;
```

```
alter view <view_name> compile;
```

```
$AD_TOP/sql/adcompse.pls
```

Q : Why DB-CM-ADMIN are always insatllted on the same machine in Oracle Applications in Multi Node Installation ?

ANS: As such there is no restriction to install all of them on a single machine, but if we install them on 3 different machines then when we will run any AD utility on admin node or perform any upgradation it needs to access the database so there will be lot of overhead in accessing the database node on network so to avoid this overhead we install them on same machine. Similar is the case when we run any concurrent request on the CM node as Concurrent manager also updates the database objects.

Q. How will you find discoverer version in Apps ?

2

Version

```
$ORACLE_HOME/Discwb4
```

```
$ string
```

Checking the version of any File

You can use the commands like the following:

```
strings -a $XX_TOP/filename |grep '$Header'
```

B. What URL you use to access Disco viewer & Disco plus .

Viewer-

where hostname & domainname are machine name & domain name on which you installed 10g AS & port number is port you selected at install time default 7777 , though you can change these hostname & port number to your desired value

The location for looking for dis4pr is \$ORACLE_HOME/diswb4/bin

where ORACLE_HOME -> 8.0.6. Oracle Home

Q: I have created EUL using Discoverer 10g Administrator, but my server side is running 9i AS can I still use Discoverer Plus/Viewer to show reports based on 10g EUL?

Ans : Your Discoverer Desktop Admin version is 10g and EUL on server is 9i. As soon as you try to connect to 9i Server it will display message that You are using old version of

EUL kindly upgrade & it will upgrade EUL on server to 10g

Q: The Oracle Applications use Jinitiator. What is a "Jinitiator"?

Jinitiator for the PC is an Oracle implementation of Sun's JavaSoft Plug-In for Solaris. It
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is used for connectivity between a Windows based client and Oracle Applications forms. The Apple Macintosh "MRJ" is an Apple's MAC OS component.

Q: What browsers can be used with Jinitiator?

For PCs, Oracle will support Internet Explorer v 5.5 or lower or Netscape 5.5 or lower. Internet Explorer is Oracle's browser of choice.

Oracle will support Mac OS 8 to 9.21 with Oracle Applications and using the Discoverer 3i viewer. Internet Explorer 5.1 works with the Oracle Applications. Netscape does not.

Q: I'm getting a Yellow Warning Bar. How do I get rid of this?

1. Yellow Warning Banners

a. What Does "Warning: Applet Window" Mean?

Oracle Applications Release 11.5.1 (11i) requires that its code run in a trusted mode, and uses J-Initiator to run Java applets on a desktop client. If an applet is "trusted," however, Java will extend the privileges of the applet. The Yellow Warning Bar is a warning that your applet is not running in a trusted mode. To indicate that an applet is trusted, it must be digitally signed using a digital Certificate, so Oracle Applications requires that all Java archive files must be digitally signed.

b. Who Does This Affect?

This affects all users that try to access Oracle Applications Rel 11i using Jinitiator that have a different identitydb.obj on their client.

Clients have an "identity database" that is maintained by J-Initiator called IDENTITYDB.obj. When a jar file is downloaded, the owner of the digital signature is compared against the entry in the identity databases. If they match, the code contained in the archive is allowed to run in a trusted mode. The users will need to fix their client PC in one of two ways:

i.

a. Uninstall Jinitiator and clear browser cache

b. Log back into Applications to get the new plugin, (oajinit.exe) including the new identitydb.obj

c. Install the Jinitiator on the Client PC and then Log into the Oracle Applications to download the new signed JAR files

OR

ii.

a. Copy the IDENTITYDB.OBJ file to C:\Program

Files\Oracle after saving the old one as IDENTITYDB.old.

When I try to download / install J-Initiator from the web, I get the error: Your current security settings prohibit running ActiveX controls on this page. As a result, the page may not display correctly. I hit OK, and the download stops. What does this mean?

This means that your security settings are too high for the J-Initiator software to download. To fix this problem, go to Tools ' Internet Options and click on the "Security" tab. Click on the Internet icon and then on the button labeled "Custom Level". Enable the following ActiveX controls: "Download unsigned ActiveX controls," "Run ActiveX controls and plug-ins," and "Allow per-session cookies (not stored)." Then hit OK. OR

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simply set the Security Settings to low, and hit the button labeled "Reset" then "Yes" then "Ok." Once the install is complete, you may set your security settings back to what they were originally.

What happens if the ICM goes down?

All the other managers will keep working. ICM only takes care of the queue control requests, which means starting up and shutting down other concurrent managers.

How will you speed up the patching process?

You can merge multiple patches.

You can create a response file for non-interactive patching.

You can apply patches with options (nocompiledb, nomaintainmrc, nocompilejsp) and run these once after applying all the patches.

```
perl -x $JTF_TOP/admin/scripts/ojspCompile.pl --compile  
utrl.sql for database compilation
```

How will you handle an error during patching?

Look at the log of the failed worker, identify and rectify the error and restart the worker using adctrl utility.

Q: if you want to check the URL of the Application in the database in which table you can check ?

Ans : (Method 1)

Q: How to find CPU & Memory detail of linux

ANS :

```
cat /proc/cpuinfo (CPU)
```

```
cat /proc/meminfo (Memory)
```

Q : To check whether the patch is already there or not. For this we query the database:

```
select * from AD_BUGS where bug_number='<patch number>'
```

Q: How to find if any service is listening on particular port or not ?

```
netstat -an | grep {port no}
```

For example if you know that OID is running on 389 port so to check if OID services is listening or not then use

```
netstat -an | grep 389
```

what is the way to find version of installed family packs?

```
Select product_version,patch_level from
```

```
FND_PRODUCT_INSTALLATIONS where patch_level like '%GL%';
```

Replace short name by name of Oracle Apps Minipack for which you want to find out Patch level . ex.

AD - for Applications DBA

GL - for General Ledger

PO - Purchase Order

Another method can be using the patchsets.sh utility which can be downloaded from Metalink.

Provide an introduction to AutoConfig. How does AutoConfig know which value from the XML file needs to be put in which file?

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AutoConfig uses a context file to maintain key configuration files. A context file is an XML file in the \$APPL_TOP/admin directory and is the centralized repository. When you run AutoConfig it reads the XML files and creates all the AutoConfig managed configuration files.

For each configuration file maintained by AutoConfig, there exists a template file which determines which values to pick from the XML file.

Location of Autoconfig Script (ADAUTOCFG.sh)

COMMON_TOP/admin/scripts/<CONTEXT_NAME>

Autoconfig can also be run in test mode with following script which will not update anything in the system (ADCHKCFG.sh)

Location on Application Tier

<AD_TOP>/bin

Location on Database Tier

ORACLE_HOME>/appsutil/bin

The AutoConfig test mode script produces a configuration report that shows the changes the AutoConfig script would have made. The configuration report, cfgcheck.html, is written to <APPL_TOP>/admin/<CONTEXT_NAME>/out/<MMDDhhmm> for the application tier, and for the database tier in

<RDBMS_ORACLE_HOME>/appsutil/out/<CONTEXT_NAME>/<MMDDhhmm>.

MMDDhhmm stands for the month, day, hour, and minute of the AutoConfig test mode script session.

A brief about snapshots ?

There are two types of snapshots: APPL_TOP snapshots and global snapshots. An APPL_TOP snapshot lists patches and versions of files in the APPL_TOP. A global snapshot lists patches and latest versions of files in the entire Applications system (that is, across all APPL_TOPs). Both APPL_TOP snapshots and global snapshots may be either current view snapshots or named view snapshots. A current view snapshot is created once and updated when appropriate to maintain a consistent view. A named view snapshot is a copy of the current view snapshot at a particular time (not necessarily the latest current view snapshot) and is not updated. Patch Wizard uses the information contained in the global current view snapshot to determine which patches have already been applied.

AutoPatch uses the APPL_TOP current view snapshot to determine if all prerequisite

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patches have been applied to that APPL_TOP. Snapshot information is stored in the AD_SNAPSHOTS, AD_SNAPSHOT_FILES, and AD_SNAPSHOT_BUGFIXES tables.

Can you tell me a few tests you will do to troubleshoot self-service login problems?

Which profile options and files will you check?

Check guest user/password in the DBC file, profile option guest user/password, the DB.

Check whether apache/jserv is up. Run IsItWorking, FND_WEB.PING, aoljtest, etc.

What could be wrong if you are unable to view concurrent manager log and output files?

Most likely the FNDFS listener is down. Look at the value of OUTFILE_NODE_NAME and LOGFILE_NODE_NAME in the FND_CONCURRENT_REQUESTS table. Look at the FND_NODES table. Look at the FNDFS_ entry in tnsnames.ora.

How will you change the location of concurrent manager log and output files?

The location of log files is determined by parameter \$APPLCSF/\$APPLLOG and that of

output files by \$APPLCSF/\$APPLOUT.

If the user is experiencing performance issues, how will you go about finding the cause?

Trace his session (with waits) and use tkprof to analyze the trace file.

Take a statspack report and analyze it.

O/s monitoring using top/iostat/sar/vmstat.

Check for any network bottleneck by using basic tests like ping results.

How will you change the apps password?

Use FNDCPASS to change APPS password.

Manually modify wdbsvr.app/cgiCMD.dat files.

Change any DB links pointing from other instances.

If you changed the APPS (and APPLSYS) password, update the password in these files:

- iAS_TOP/Oracle/modplsql/cfg/wdbsvr.app

- ORACLE_HOME/reports60/server/CGIcmd.dat

If you changed the APPLSYSPUB password, update the password in these files:

- FND_TOP/resource/appsweb.cfg

- OA_HTML/bin/appsweb.cfg

- FND_TOP/secure/HOSTNAME_DBNAME.dbc

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Provide the location of the DBC file and explain its significance and how applications know the name of the DBC file.?

Location: \$FND_TOP/secure directory.

Significance: Points to the DB server amongst other things.

The application knows the name of the DBC file by using profile option "Applications Database Id."

How can u change the logfiles location suppose CM logfile location is APPLCSF now if we want to change that to a nother location hw is it possible.

Ans: Change the Configuration File parameters

change s_applcsf,s_appllog,s_applout variables in XML file and run the autoconfig.

Conflict resolution managers resolves the conflicts yes , but hw it knows tht there are conficts?why conflicts occur?

Ans:

Concurrent managers read request to start concurrent programs running. The Conflict Resolution Manager checks concurrent program definitions for incompatibility rules.

If a program is identified as Run Alone, then the Conflict Resolution Manager prevents the concurrent managers from starting other programs in the same conflict domain.

When a program lists other programs as being incompatible with it, the Conflict Resolution Manager prevents the program from starting until any incompatible programs in the same domain have completed running.

What is adovars.env file ?

The adovars.env file, located in \$APPL_TOP/admin, specifies the location of variousfiles such as Java files, HTML files, and JRE (Java Runtime Environment) files. It is called from the main applications environment file.

How to find the wordsize (32-bit or 64-bit) of Oracle Database

If you have access to an Oracle database which is installed on a 64-bit OS, how can you identify whether Oracle is 32 bit or 64 bit ?

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stateful=STATELESS_RESET

On typing `http://hostname:port/pls/VISION11I` , it will connect to database using apps schema & will return you page `find_web.ping` (where `find_web` is package & `ping` is procedure or vice versa).

So story about this file doesn't stop here , this url which I mentioned about is quite useful in troubleshooting so you can check if database connection is working fine or not.

Another thing you want to check about this file is since it stores APPS password you need

to change here whenever you change apps password.

Q. What are various components in Application/Middle Tier.

In Application Tier various components are Web Server, Forms Server , Reports Server, Concurrent Manager, Admin Server & Discoverer Server.

Q. What is APPL_TOP, COMN_TOP, ORA_TOP.....

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<db_name>APPL or APPL_TOP - Contains the product directories and files for Oracle Applications.

<db_name>COMN or COMMON_TOP - Contains directories and files used across products.

<db_name>ORA - Contains ORACLE_HOMEs for the Applications technology stack components.

<db_name>DB - Contains the database ORACLE_HOME.

<db_name>DATA - Contains the Oracle Applications database files.

XXX_TOP is top level directory in Oracle Application 11i for respective Component. To know more about various TOP's you have done 11i or oracle application Installation by now (if not please go though my training for apps dba in my previous posts) Oracle Installer Installs Apps 11i in DB Tier & Application Tier : so lets take Application Tier you will see three directories under your base Installation directory, these directories are APPL, ORA & COMN (Check pic. at left top of this page) so directory APPL is called as APPL_TOP i.e. top appl directory where files & directories related to different Application (like GL General Ledger, PO Purchase Order..) exists. If You are DBA you can correlate it with your Oracle database software installation (I know after reading this example you will say its weird but believe me thats how understood it initially , ORACLE_HOME can be called as ORA_TOP , network directory you can say TNS_TOP)

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Under (ORA_TOP) you will see diretcory related to oracle home , there are two oracle HOME's in Application Tier 8.0.6 for Forms & Reports , iAS for 9iAS acting as web server)

COMN_TOP will contain files & directories which will be used commonly by all components (Isn't this simple to understand)

Similarly IAS_TOP is top files/directory under ORA_TOP/iAS I hope it might be clear to you now if not donot worry it will be more clear once you start working as Apps DBA.

I am attaching few screenshot of other mount points (Courtesy oracle 11i concepts guide , below is location if you want to read .

http://download-uk.oracle.com/docs/cd/B25516_08/current/

[acrobat/11iconcepts.pdf](http://download-uk.oracle.com/docs/cd/B25516_08/current/acrobat/11iconcepts.pdf) (Add these three lines before putting in to browser , I have not

put it in single line as it breaks my page layout)

So In this guide you will find few more screenshot of different TOP's , Go through Chapter 2 , Just 13 Pages (13 unlucky number for someone but if understand this chapter , it can be very lucky for you in your Apps DBA Career.

Q. Whats US directory in \$AD_TOP or under various product TOP's .

US directory is default language directory in Oracle Applications. If you have multiple languages Installed in your Applications then you will see other languages directories besides US, that directory will contain reports, fmx and other code in that respective directory like FR for France, AR for arabic, simplifies chinese or spanish.

Q. Whats main concurrent Manager types.

ICM - Internal Concurrent Manager which manages concurrent Managers

Standard Managers - Which Manage processing of requests.

CRM - Conflict Resolution Managers , resolve conflicts in case of incompatibility.

You can check the Status of the concurrent Managers using this script

```
$FND_TOP/sql/afcmstat.sql
```

Q : What are the different methods as per Metalink for finding which patches are applied in 11i

1) patchsets.sh (Patch Comparison Tool)

2) AD_PATCH_DRIVERS table

3) Two reports adphrept.sql (patch history) and adfhrept.sql(file history) in \$AD_TOP directory

4) Login to Oracle Applications Manager (OAM) => Applied Patches => Simple Search by 'Patch ID)

Q. What is Single user and Multi User Installation.

Single-user UNIX installations

In order to prepare for a single-user installation, you must first create an oracle user
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account and log in as the oracle user to run Rapid Install. The account should be created with a default shell that is compatible with the Bourne shell.

Multi-user UNIX installations

In order to prepare for a multi-user installation, you must first create an oracle user account and an applmgr user account. Both should be created with a default shell that is compatible with a Bourne shell. Log in as root to run Rapid Install. Then specify the oracle user as the Oracle OS user and the applmgr user as the Apps OS user.

The oracle user is the account that owns the database tier technology stack (9.2.0 ORACLE_HOME) and the database files. The default name for the oracle user is ora<SID>. For example, for a production (PROD) environment, the default Oracle OS username might be oraprod.

The applmgr user is the account that owns the application tier technology stack (APPL_TOP, COMMON_TOP, 8.0.6 ORACLE_HOME, and the iAS ORACLE

HOME). The default name is appl<SID>. For example, for a Vision Demonstration (VIS) environment, the default Apps OS username might be applvis.

For a multi-user install, you must install both the database server and one or more application tier servers on the same node. On such nodes, you can assign one user account to be the owner of the database tier file system, and another to be the owner of the application tier file system. If you are installing a system where the database server is on one node and all the application tier servers are on one or more separate nodes, then essentially you will perform a single-user installation on each node.

Q. Where would i find .rf9 file, and what exactly it dose?

These files are used during restart of patch in case of patch failure because of some reason.

Located in \$APPL_TOP/admin/<SID>/restart this folder also contains .bak ,.bk2 files
SAMPLE FILE (adwork012.rf9)

%% restart file format 11.5.A

Location: \$APPL_TOP/admin/<SID>/log contains .req files

Q. Where is appsweb.cfg or appsweb_\$CONTEXT.cfg stored & why its used ?

This file is defined by environment variable FORMS60_WEB_CONFIG_FILE This is usually in

directory \$OA_HTML/bin on forms tier. This file is used by any forms client session.

When a user

try to access forms , f60webmx picks up this file and based on this configuration file creates a

forms session to user/client.

Sometimes also present in \$FNS_TOP/Resource directory

Q. What is multi node system ?

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Multi Node System in Oracle Applications 11i means you have Applications 11i Component on

more than one system. Typical example is Database, Concurrent Manager on one machine and

forms, Web Server on second machine is example of Two Node System.

Q. Explain steps used in cloning oracle Apps 11i Instance at broad level.

Another important & useful utility under AD_TOP which you and me as apps dba perform quite

often i.e. Cloning Oracle Application 11i Instance.

Cloning is process of creating replica of your source apps 11i Instance (lets say you have one

apps Instance with name VISIONTST and you want to create similar instance (including same

patches & user data) like VISIONPRD then you will use adclone utility (Also called as Rapid

Clone these days). In this case source Instance will be VISIONTST and target Instance will be

VISIONPRD. There are lot for scenario in which you wish to clone your E-Business Suite 11i

Instance , like you want to Test if everything is OK in Test & then after testing want to create Production instance or you want to move your Instance from one machine to other machine or if you are highly experienced Apps DAB you can use clone as staged environment during Upgrade to reduce downtime (this concept is called as staged appl_top or staged patching/upgrade , p.s.

this is different from shared APPL_TOP)

So here I am putting broad level steps you will use to clone apps instance .

Step1 . Prerequisites Steps you do before start cloning using rapid clone

1.1 Verify source and target nodes software versions

1.2 Apply the latest AutoConfig Template patch

1.3 Apply the latest Rapid Clone patches

Step2 . Clone Source to Target

2.1 Run preclone on DB tier

2.2 Run preclone on Apps or middle tier

2.3 Copy source file system to target file system

2.4 Configure db tier

2.5 Configure apps/middle tier

Step 3 Finishing Task

3.1 Update profile options

3.2 Update printer settings (If printers are not configured or you don't want to use printer you can

skip this step)

3.3 Update workflow configuration settings (Important)

Location of Scripts :

The PRECLONE script is located in:

`COMMON_TOP/admin/scripts/<SID_HOSTNAME>/adpreclone.pl`

The post clone scripts are located in:

`COMMON_TOP/clone/bin/adclone.pl (ADCLONE.PL)`

Q. Can you clone from multi node system to single node system & vice versa ?

Yes, this is now supported via Rapid Clone, Check if your system has all prereq. patches for

Rapid Clone and you are on latest rapid clone patch.

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Q. Does rapid clone takes care of Updating Global oraInventory or you have to register manually in Global OraInventory after clone ?

Rapid Clone will automatically Update Global oraInventory during configuration phase. You don't

have to do any thing manually for Global oraInventory.

Location of Global OraInventory on SUN Solaris is : `/var/opt/oracle>`

Q. What is .dbc file , where its stored , whats use of .dbc file ?

dbc as name says is database connect descriptor file which stores database connection information used by application tier to connect to database. This file is in directory

`FNDD_TOP/secure` also called as `FNDD_SECURE`

Q. What's things you do to reduce patch timing ? You can take advantage of following -
Merging patches via admrgpch

Use various adpatch options like nocompiledb or nocompilejsp

Use defaults file

Staged APPL_TOP during upgrades

Increase batch size (Might result into negative)

Q. How you put Applications 11i in Maintenance mode ?

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Use adadmin to change Maintenance mode in Oracle Apps. With AD.I you need to enable maintenance mode in order to apply apps patch via adpatch utility. If you don't want to put apps in

maintenance mode you can use adpatch options=hotpatch feature.

Also you can use the script \$AD_TOP/patch/115/sql/ adsetmmd.sql

Q. What are various options available with adpatch ?

Various options available with adpatch depending on your AD version are autoconfig, check_exclusive, checkfile, compiledb, compilejsp, copyportion, databaseprtion,

generateportion, hotpatch, integrity, maintainmrc, parallel, prereq, validate

Q. adident utility is used for what ?

adident utility in oracle apps is used to find version of any file . AD Identification.

for ex. "adident Header <filename>

Q. What is adsplce utility ?

adsplce in oracle apps is utility to add a new product.

Q. How can you licence a product after installation ?

You can use ad utility adlicmgr to licence product in Oracle Apps.

Q. What is MRC ? What you do as Apps DBA for MRC ?

MRC also called as Multiple Reporting Currency in oracle Apps. Default you have currency in US

Dollars but if your organization operating books are in other currency then you as apps dba need

to enable MRC in Apps. How to enable MRC coming soon...

Q. What's JVM(Java Virtual Machine) and which component uses JVM ?

JVM stands for Java Virtual Machine, JVM acronym for Java Virtual Machine which executes

instructions generated by Java compiler. So user click on any Self Service Request or any program which uses Java, then Apache forwards this request to mod_jserv (mod_oc4j in 10g AS)

& mod_jserv caters this request with help of JVM.

How & Where check JVM related configuration in Oracle Apps 11i ?

So let's start with CONTEXT file under \$APPL_TOP/admin (xml file) which is of pattern \$SID_\$HOSTNAME.xml

There are two important lines in CONTEXT file which will help you in understanding JVM

```
jvm_options oa_var="s_jvm_options" osd="Solaris" -verbose:gc -Xmx512M -Xms128M -XX:
```

MaxPermSize=128M -XX:NewRatio=2 -XX:+PrintGCTimeStamps -XX:+UseTLAB
/jvm_options

-Verbose:gc means JVM is configured to print output when gc(Garbage Collector) runs.

Xmx is maximum memory allocated to JVM in above example its 512 MB.

Xms is JVM will start with this much memory i.e. 128 MB.

Now Check another line in 11i Context file like

```
oacore_nprocs oa_var="s_oacore_nprocs"2/oacore_nprocs
```

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Which means that there are two JVM's for OACore Group. Usually default its 1 JVM in my

Instance I changed it to 2, to cater huge Self Service users in my case.

Q: How to increase No. Of JVM's

Since you know place where number of JVM's are stored in Apps 11i in Context File , so you can

change them as per your requirement. There are basically following Groups with their own JVM's.

OACoreGroup, where most of Java request goes

DiscoGroup, which serve your Discoverer related requests

FormsGroup, for Forms (If they are running in Servlet Mode, confirm it again as they run on

Socket)

XmlSvcGroup, for XML Services

In Context File

```
disco_nprocs oa_var="s_disco_nprocs" osd="Solaris" 1 /disco_nprocs Sets 1 JVM
```

Process for

Discoverer.

```
oacore_nprocs oa_var="s_oacore_nprocs" 1 /oacore_nprocs Sets 1 JVM for for
```

OACoreGroup

Similarly , s_forms_servlet_nprocs & s_xmlsvcs_nprocs for Forms & XML Services resp.

These Groups are defined in configuration file for Jserv i.e. jserv.conf under

`$IAS_ORACLE_HOME/Apache/Jserv/etc/jserv.conf`

This dir also contains more files like forms.properties(for forms), xmlsvcs.properties(foe XML),

viewer4i.properties(for Disco)

ApJServGroup OACoreGroup

ApJServGroup DiscoGroup

ApJServGroup FormsGroup

ApJServGroup XmlSvcGrp

Q: Where to find Apps 11i JVM logs ?

JVM log location is defined in java.sh (found in

`$IAS_ORACLE_HOME/Apache/Apache/bin`)

Oracle Apps 11i JVM log file directory is defined by parameter JVMLOGDIR (

`$IAS_ORACLE_HOME/Apache/Jserv/logs/jvm`) and log file are defined by

STDOUTLOG &

STDERRLOG. Example of JVM log files are

OACoreGroup.0.stderr ,OACoreGroup.0.stdout, DiscoGroup.0.stdout,
DiscoGroup.0.stderr,
XmlSvcGrp.0.stderr, XmlSvcGrp.0.stdout
where 0 denotes first JVM & 1 denotes second JVM. stderr records error encountered in
JVM &

stdout records other information like GC ..

Q.Analyzing Oracle Apps 11i JVM logs

In order to analyze Oracle apps 11i JVM, lets open stdout file for one of Group, I have
selected

OACoreGroup here, you know log file location (If not check previous page) , open file
like

OACoreGroup.X.stdout you should see output like below if GC(Grabage Collector) is set
in

Verbose mode.

[Unloading class sun.reflect.GeneratedMethodAccessor74]

Here first entry is time since JVM was started so each time you bounce Apache it will be
reset to

0. So difference between two entries is seconds after which GC (Garbage Collector) was
executed. First entry in bracket [is Heap Size at start of GC & Second entry is Heap Size
after

GC was executed. Number mentioned in round bracket () is heap size currently allocated
in K. If

you see GC running very frequently , you can start thinking of increasing JVM heap size
First three entries were for Minor Garbage Collector & fourth one is FULL GC is for Full
Garbage
Collector.

Q: How to check JDBC Connection ?

connect using apps, sys or system & issue

select count(*),module from v\$session where program like '%JDBC%' group
by module;

How to find JDBC thin driver that your iAS 1.0.2.2.2 is using ?

I am posting a simple java program & procedure to compile it that will give your jdbc
thin driver

Q: How to Monitor Oracle Apps 11i JVM ?

There are some tools available like jvmstst, jconsole .. but I never tried so wait till I
configure one

for my system. For monitoring via jconsole I read wonderful note on my favorite
blogger's (Steven

Chan) site <http://blogs.oracle.com/schan/2006/08/14#a565>

Q.Sizing Apps JVM

As by now you might be aware that there are four JVM Groups,

OACoreGroup,DiscoGroup,

FormsGroup & XMLsvcsGrp (FormsGroup JVM's disabled by default as forms run on
Socket

rather servlets) so thumb rule in Apps is

1 JVM with default settings per 100 Users for OACoreGroup

so if you have 1000 users with five middle tiers you can configure 2 JVM on each middle tier i.e.

2X5X100=1000 Users.

Q. What is access_log in apache , what entries are recored in access_log ? Where is default location of this file ?

access_log in Oracle Application Server records all users accessing oracle applications

11i. This

file location is defined in httpd.conf with default location at

\$IAS_ORACLE_HOME/Apache/Apache/logs. Entries in this file is defined by directive

LogFormat in httpd.conf Typical entry in access_log is

198.0.0.1 - - [10/Sep/2006:18:37:17 +0100] "POST /OA_HTML/OA.jsp?.... HTTP/1.1"

200 28035

where 200 is HTTP status code & last digits 28035 is bytes downloaded as this page(Size of page)

Q. Where is Jserv configuration files stored ?

Jserv configuration files are stored in \$IAS_ORACLE_HOME/Apache/Jserv/etc

Q. Where is applications start/stop scripts stored ?

applications start/stop scripts are in directory \$COMMON_TOP/admin/scripts/
\$CONTEXT_NAME

the following scripts are there :

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adalnctl.sh adcmctl.sh adexecsql.pl adrepctl.sh adstrtal.sh

adautoCfg.sh addisctl.sh adpreclone.pl adstpall.sh gsmstart.sh

Q. What are main configuration files in Web Server (Apache) ?

Main configuration files in Oracle Apps Web Server are

httpd.conf, apps.conf, oracle_apache.conf, httpd_pls.conf

jserv.conf, ssp_init.txt, jserv.properties, zone.properties

plsqli.conf, wdbsvr.app, plsqli.conf

Q. What is session time out parameter & where all you define these values ?

If someone ask Apps DBA to change Session Idle Time out value How & where will you change ?

In order to answer first you have to understand what kind of sessions are in Apps 11i and what is

Idle timeout ?

In Apps there are two broad categories of session

- Self Service Application Session (Server by Web Server iAS Apache & Jserv, like iRecruitment, iProcurement)

-Forms session (served by your form session, like system Administrator)

What is Session Idle time ?

If Oracle Apps client is not doing any activity for some time (when application user goes for coffee

or talks over phone) session during that time is called as Idle Session & because of security

reason, performance issues and to free up system resource Oracle Applications terminates client

session(both forms & self service) after idle time value is reached to the one mentioned in configuration file.

From FND.G or 11.5.9 or with introduction of AppsLocalLogin.jsp to enter into application, profile

option "ICX Session Timeout" is used only to determine Forms Session Idle timeout value . This

might be confusing as earlier this profile option used to control forms as well as self service

application(with session.timeout) session.timeout is used to control Idle session timeout for Self

Service Applications (Served by Jserv via JVM)

From where ICX : Session Timeout & session.timeout get values ?

Autoconfig determines value for profile option "ICX: Session Timeout" and "session.timeout" from

entry in context file (\$APPL_TOP/admin/SID_hostname.xml) with parameter s_sesstimeout

where value mentioned is in milliseconds so profile option ICX: Session Timeout value should be

s_sesstimeout/ (1000 * 60) which means here its 10 Minutes. This value is also set in zone.properties in \$IAS_ORACLE_HOME/Apache/Jserv/etc where number mentioned is in milli

second i.e. 600000 (equal to 10 Minutes)session.timeout = 600000

session.timeout mentioned in zone.properties is in milli seconds ICX Session Time out mentioned

in profile option ICX: Session Timeout is in minutes so ICX session timeout=30 & session.timeout= 1800,000 are same 30 minutes

P.S. ICX Session time out was introduced in FND.D so if your FND version is below D you might

not see this variable.

Important Things Apps DBA should consider while setting session timeout value ?

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1.. If you keep session.timeout value too high , when some oracle application user accessing Self

service application terminates his session, so longer idle session will drain JVM resource & can

result in Java.Lang No Memory available issues .

2. If you keep it too low, users going out for tea or sitting idle for some time have to login again

into application & can be annoying .

Thumb rule is session time out usually set to 30 minutes.

Q. How to check if Apps 11i System is Autoconfig enabled ?

Under \$AD_TOP/bin check for file adcfginfo.sh & if this exists use adcfginfo.sh contextfile=<CONTEXT> show=enabled

If this file is not there , look for any configuration file under APPL_TOP if system is Autoconfig

enabled then you will see entry like

AutoConfig automatically generates this file. It will be read and.....

Q. How to check if Oracle Apps 11i System is Rapid Clone enabled ?

For system to be Rapid Clone enabled , it should be Autoconfig enabled (Check above How to

confirm if Apps 11i is Autoconfig enabled). You should have Rapid Clone Patches applied , Rapid

Clone is part of Rapid Install Product whose Family Pack Name is ADX. By default all Apps 11i

Instances 11.5.9 and above are Autoconfig & Rapid Clone enabled.

Q. Whats is difference between two env files in <CONTEXT>.env and

APPS<CONTEXT>.env under \$APPL_TOP ?

APPS<CONTEXT>.env is main environment file which in turn calls other environment files like

<CONTEXT>.env under \$APPL_TOP, <CONTEXT>.env under 806 ORACLE_HOME and

custom<CONTEXT>.env for any Customized environment files.

Q. What is access_log in Apache ?

access_log file keeps record of users accessing Oracle Apps 11i Webserver.

Typical entry in access_log is like

```
198.0.0.1 - - [25/Aug/2006 :03:15:13 +0100] "GET /OA_JAVA /oracle /forms  
/registry/Registry.dat  
HTTP/1.1" 200 4117
```

Which means client with IP 198.0.0.1 requested for file mentioned above on 25 Aug 2006 at

03:15 AM , 200 is status code returned by Apache which means page returned successfully

(Status Code 302 means page redirected , 404 page not found, 500+ Internal Server error) last digit 4117 in above entry of access_log means file size which is 4117 bytes. This file is quite

useful in monitoring your Web Server.

Please note above format might defer on your system as this is dependent log_format in Apache configuration file (httpd.conf)

Q. Whats is location of access_log file ?

access_log file by default is located in \$IAS_ORACLE_HOME/ Apache/Apache/logs.

Location

of this file is defined in httpd.conf by parameter CustomLog or TransferLog

Q. What is your Oracle Apps 11i Webserver Version and how to find it ?

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From 11.5.8 to 11.5.10 Webserver version is iAS 1.0.2.2.2, In order to find version under \$IAS_ORACLE_HOME/Apache/Apache/bin execute ./httpd -version

./httpd -version

Similarly we can do java -version

Server version: Oracle HTTP Server Powered by Apache/1.3.19

Server built: Dec 6 2005 14:59:13 (iAS 1.0.2.2.2 rollup 5)

Q. What is Location of Jserv configuration files ?

Jserv configuration files are located in \$IAS_ORACLE_HOME /Apache/Jserv/etc.

Q. What is plsql/database cache ?

In order to improve performance mod_pls (Apache component) caches some database content

to file. This database/plsql cache is usually of type session & plsql cache

a) session cache is used to store session information.

b)plsql cache is used to store plsql cache i.e. used by mod_pls

Q. Where is database/plsql cache stored ?

plsql & session cache are stored under \$IAS_ORACLE_HOME/
Apache/modplsql/cache
directory.

Q. How to determine Oracle Apps 11i Version ?

select RELEASE_NAME from fnd_product_groups;

You should see output like

RELEASE_NAME

11.5.9

Q. What is content of dbc file & why its important ?

DBC file is quite important as whenever Java or any other program like forms want to connect to

database it uses dbc file. Typical entry in dbc file is

GUEST_USER_PWD ,APPS_JDBC_URL ,DB_HOST

Q. There are lot of dbc file under \$FND_SECURE, How its determined that which dbc file to

use from \$FND_SECURE ?

This value is determined from profile option "Applications Database ID"

This option can be seen by navigating into Oracle Apps System as System Administrator and

then ?Profile ? System ? Search for %Database% then you can see the parameter defined
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Q. What is RRA/FNDFS ?

Report Review Agent(RRA) also referred by executable FNDFS is default text viewer in Oracle

Applications 11i for viewing output files & log files.

Q. What is PCP is Oracle Applications 11i ?

PCP is acronym for Parallel Concurrent Processing. Usually you have one Concurrent Manager

executing your requests but if you can configure Concurrent Manager running on two machines

(Yes you need to do some additional steps in order to configure Parallel Concurrent Processing) .

So for some of your requests primary CM Node is on machine1 and secondary CM node on

machine2 and for some requests primary CM is on machine2 & secondary CM on machine1.

Q. Why I need two Concurrent Processing Nodes or in what scenarios PCP is used?

Well If you are running GL Month end reports or taxation reports annually these reports might

take couple of days. Some of these requests are very resource intensive so you can have one

node running long running , resource intensive requests while other processing your day to day

short running requests.

Another scenario is when your requests are very critical and you want high resilience for your

Concurrent Processing Node , you can configure PCP. So if node1 goes down you still have CM

node available processing your requests.

Q. Output & Logfiles for requests executed on source Instance not working on cloned Instance?

Here is exact problem description - You cloned an Oracle Apps Instance from PRODBOX to

another box with Instance name say CLONEBOX on 1st of August. You can view any CM

logs/output files after 1st of August only because these all are generated on CLONEBOX itself,

But unable to view the logs/output files which are prior to 1st August. What will you do & where to

check ?

Log , Output file path & location is stored in table FND_CONCURRENT_REQUESTS. Check

select logfile_name, logfile_node_name, outfile_name, outfile_node_name from fnd_concurrent_requests where request_id=&requestid ;

where requestid is id of request for which you are not able to see log or out files. You should see

output like

/u01/PRODBOX/log/1123456.req, host1,/u01/PRODBOX/out/o123456.out, host1

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Update it according to your cloned Instance Variables

Q. How to confirm if Report Server is Up & Running ?

Report Server is started by executable rwmts60 on concurrent manager Node & this file is under

\$ORACLE_HOME/bin .execute command on your server like

ps -ef | grep rwmts60

You should get output like

aplmgr rwmts60 name=REP60_VISION

where VISION is your Instance name.

Else you can submit a request like "Active Users" with display set to PDF, check output & log file

to see if report server can display PDF files

Active Users report lists all the users in the system along with their responsibilities.

Q. What is difference between ICM, Standard Managers & CRM in Concurrent Manager ?

ICM stand for Internal Concurrent Manager, which controls other managers. If it finds other

managers down , it checks & try to restart them. You can say it as administrator to other concurrent managers. It has other tasks as well.

Standard Manager These are normal managers which control/action on the requests & does

batch or single request processing.

CRM acronym for Conflict Resolution Manager is used to resolve conflicts between managers &

request. If a request is submitted whose execution is clashing or it is defined not to run while a

particular type of request is running then such requests are actioned/assigned to CRM for Incompatibilities & Conflict resolution

Q. What is use of Apps listener ?

Apps Listener usually running on All Oracle Applications 11i Nodes with listener alias as

APPS_\$\$SID is mainly used for listening requests for services like FNDFS & FNDSM.

FNDFS – FND File Server also known as RRA Reports Review Agent is used to view text files in

Oracle 11i.

FNDSM – FND Service Manager is a concurrent manager in GSM, and serves requests like CM's

Use : ps -ef | grep APPS_

Q. How to start Apps listener ?

In Oracle 11i, you have script adalnctl.sh which will start your apps listener. You can also start it

by command

lsnrctl start/status/stop SID (Replace sid by your Instance SID Name) OR

lsnrctl start APPS_\$\$SID (Replace sid by your Instance SID Name)

E.G. lsnrctl status APPS_DEV

Q. How to confirm if Apps Listener is Up & Running ?

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execute below command

lsnrctl status APPS_\$\$SID (replcae SID with your Instance Name)

so If your SID is VISION then use lsnrctl status APPS_VISION out put should be like

Services Summary...

FNDFS has 1 service handler(s)

FNDSM has 1 service handler(s)

The command completed successfully

Q. What is Web Listener ?

Web Listener is Web Server listener which is listening for web Services(HTTP) request.

This

listener is started by adapctl.sh & defined by directive (Listen, Port) in httpd.conf for Web

Server. When you initially type request like http://becomeappsdba.blogspot.com:80 to access

application here port number 80 is Web Listener port.

Q. How will you find Invalid Objects in database ?

SQLPLUS> select count(*) from dba_objects where status like 'INVALID';

Q. How to compile Invalid Objects in database ?

You can use adadmin utility to compile or you can use utlrp.sql script shipped with Oracle

Database to compile Invalid Database Objects.

This Script is located in \$IAS_ORACLE_HOME/rdbms/admin directory

Q. How to compile JSP in Oracle Apps ?

You can use ojspCompile.pl perl script shipped with Oracle apps to compile JSP files.

This script

is under \$JTF_TOP/admin/scripts. Sample compilation method is

perl ojspCompile.pl --compile -quiet

Q. What is difference between adpatch & opatch ?

adpatch is utility to apply oracle apps Patches whereas

opatch is utility to apply database patches

Q. Can you use both adpatch & opatch in Apps ?

Yes you have to use both in apps , for apps patches you will use adpatch utility and for applying

database patch in apps you will opatch utility.

Q. Where will you find forms configuration details apart from xml file ?

Forms configuration at time of startup is in script adfrmctl.sh in

\$COMN_TOP/admin/scripts

and appsweb_\$CONTEXT_NAME.cfg (defined by environment variable

FORMS60_WEB_CONFIG_FILE) for forms client connection used each time a user initiates

forms connection.

This file is located in \$FND_TOP/admin/template/appsweb.cfg

Q. What is forms server executable Name ?

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f60srm

Q. What are different modes of forms in which you can start Forms Server and which one is default ?

You can start forms server in SOCKET or SERVLET by default Forms are configured to start in

socket mode

Q. How you will start Discoverer in Oracle Apps 11i ?

In order to start discoverer you can use script addisctl.sh under

\$OAD_TOP/admin/scripts/\$CONTEXT_NAME

OR startall.sh under \$ORACLE_HOME/discwb4/util (under Middle/Application Tier)

OR \$COMMON_TOP/admin/scripts/\$CONTEXT_NAME

Q. How many ORACLE HOME are Oracle Apps and whats significance of each ?

There are three \$ORACLE_HOME in Oracle Apps, Two for Application Tier (Middle Tier) and One in Database Tier.

ORACLE_HOME 1 : On Application Tier used to store 8.0.6 techstack software. This is used by

forms, reports & discoverer. ORACLE_HOME should point to this ORACLE_HOME while

applying Apps Patch.

ORACLE_HOME 2: On Application Tier used by iAS (Web Server) techstack software. This is

used by Web Listener & contains Apache.

ORACLE_HOME 3: On Database Tier used by Database Software usually 8i,9i or 10g database

Q. Where is HTML Cache stored in Oracle Apps Server ?

Oracle HTML Cache is available at \$COMMON_TOP/_pages for some previous versions you

might find it in \$OA_HTML/_pages

Q. Where is pl/sql cache stored in Oracle Apps ?

Usually two type of cache session & plsql stored under

\$IAS_ORACLE_HOME/Apache/modplsql/cache

Q. What happens if you don't give cache size while defining Concurrent Manager ?

Lets first understand what is cache size in Concurrent Manager. When Manager picks request

from FND_CONCURRENT_REQUESTS Queues, it will pick up number of requests defined by

cache size in one shot & will work on them before going to sleep. So in my views if you don't

define cache size while defining CM then it will take default value 1, i.e. picking up one request

per cycle.

Q. What are few profile options which you update after cloning ?

Rapid clone updates profile options specific to site level . If you have any profile option set at

other levels like server, responsibility, user....level then reset them.

Q. What is 0 & Y in FNDCPASS, FNDLOAD or WFLOAD ?

0 & Y are flags for FND Executable like FNDCPASS & FNDLOAD where 40

0 is request id (request ID 0 is assigned to request ID's which are not submitted via Submit

Concurrent Request Form.

'Y' indicates the method of invocation. i.e. it is directly invoked from the command-line not from

the Submit Request Form.

Q. How to retrieve SYSADMIN password ?

If forgot password link is enabled and sysadmin account is configured with mail id user forget

password link else you can reset sysadmin password via FNDCPASS

Example:

```
$ FNDCPASS apps/apps 0 Y system/manager SYSTEM APPLSYS WELCOME
```

```
$ FNDCPASS apps/apps 0 Y system/manager ORACLE GL GL1
```

```
$ FNDCPASS apps/apps 0 Y system/manager USER VISION WELCOME
```

Q. If you have done two node Installation, First machine : Database and concurrent processing server. 2nd machine: form,web Which machine have admin server/node?

Admin Server will be on First machine with concurrent processing server. More on Admin Server

coming soon..

Q. Whats is TWO_TASK in Oracle Database ?

TWO_TASK mocks your tns alias which you are going to use to connect to database.

Lets

assume you have database client with tns alias defined as PROD to connect to Database
PROD

on machine teachmeoracle.com listening on port 1521. Then usual way to connect is sqlplus

username/passwd@PROD ; now if you don't want to use @PROD then you set

TWO_TASK=PROD and then can simply use sqlplus username/passwd then sql will check that it

has to connect to tnsalias define by value PROD i.e. TWO_TASK

Q. What is GWYUID ?

GWYUID , stands for Gateway User ID and password. Usually like APPLSYSPUB/PUB

Q. Where GWYUID defined & what is its used in Oracle Applications ?

GWYUID is defined in dbc i.e. Database Connect Descriptor file . It is used to connect to database by thin clients.

Q. What is difference between GUEST_USER_PWD (GUEST/ORACLE) & GWYUID ?

GUEST_USER_PWD(Guest/Oracle) is used by JDBC Thin Client where as GWYUID is used by

Thick Clients like via Forms Connections.

Q. How to check number of forms users at any time ?

Forms Connections initiate f60webmx connections so you can use

```
ps -ef | grep f60webmx | wc -l
```

Q. What is FNDLOAD and what it is used for ?

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FNDLOAD is a concurrent program that can move Oracle Applications data between database

and text file. FNDLOAD can download data from an application entity into an editable text file,

which can be uploaded to another database. Conversion between database format and text file

format is specified by a configuration file. But i could not find anything regarding upload/download

of an Oracle Alert. So, my conclusion was that i must be possible to use FNDLOAD to transfer

Alerts, but that there is no configuration file provided by Oracle. I had to create a configuration file myself.

We use ldt loader data files for loading.

Oracle currently supports the migration of the following types of data using FNDLOAD

Printers / Print queues / Executables Printers / Print queues / Executables.

Roles / Responsibilities / Forms Roles / Responsibilities / Forms.

Menus / Users / Request Sets Menus / Users / Request Sets.

Request Groups / Request Queues Request Groups / Request Queues.

Work shifts / Programs / Libraries Work shifts / Programs / Libraries.

Attachments / Help Files Attachments / Help Files.

Mime Types Mime Types.

Security Information.

Q. In a Multi Node Installation, How will you find which node is running what Services ?

You can query for table FND_NODES and check for column , SUPPORT_CP (for Concurrent

Manager) SUPPORT_FORMS (for forms server) , SUPPPORT_WEB (Web Server), SUPPORT_ADMIN(Admin Server), and SUPPORT_DB for database tier.

You can also check same from CONTEXT File (xml file under APPL_TOP/admin)

To Check which node is running what service:

```
select * from fnd_nodes
```

Q. If your system has more than one Jinitiator, how will the system know, which one to pick. ?

When client makes a forms connection in Oracle Applications, forms client session uses configuration file defined by environment variable FORMS60_WEB_CONFIG_FILE also called as

appsweb config file. These days this file is of format appsweb_\$CONTEXT.cfg The initiator

version number defined by parameter jinit_ver_name in this file will be used .

jinit_ver_name=Version=1,1,8,13 (tells which Jinit to use if u have multiple)

(\$FND_TOP/admin/template)

Q. While applying Apps patch using adpatch, if you want to hide the apps password, how will that be possible ?

Use adpatch flags=hidepw while applying patches in apps to hide apps or system password

being displayed on Users Screen.

Q. What is importance of IMAP Server in Java Notification Mailer ?

IMAP stands for Internet Message Access Protocol and Java Notification mailer require IMAP

server for Inbound Processing of Notification Mails.

Q. What is difference between Socket & Servlet Mode in Apps Forms ?

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When forms run SOCKET Mode these are dedicated connection between Client Machine & Form

Server (Started by adfrmctl.sh). When Forms run in servlet mode the forms requests are fulfilled

by Jserv in Apache . There will be additional JVM for Forms Request in that case and you won't start form via adfrmctl.sh.

Q. What is make program in Unix ?

make is utility in Unix/Linux to maintain , update & generate an file mainly executable.

Q. If by mistake you/someone deleted FNDLIBR can this executable be restored if Yes, How & if no, what will you do ?

Yes, you can restore FNDLIBR executables run adadmin on concurrent manager node select option 2. Maintain Applications Files menu then select 1. Relink Applications programs

when prompts for Enter list of products to link ('all' for all products) [all]

select FND when prompt for Generate specific executables for each selected product [No] ? YES

select YES & from list of executables select FNDLIBR This will create new FNDLIBR executables

Q. What is .pls files which you see with apps ?

.pls file stands for plsql files. In apps patch these files contain code to create package spec or package body or both.

Q. What are .ldt & .lct files which you see in apps patch or with FNDLOAD ?

.ldt & .lct stands for Loader datafile & Loader configuration files, used frequently in migrating

customization, profile options, configuration data, etc.. across Instances.

Q. What are .odf file in apps patch ?

odf stands for Object Description Files used to create tables & other database objects.

Q. What to find Form Server log files in forms ?

Form Server Start up log file default location is

\$OAD_TOP/admin/log/\$CONTEXT_NAME/f60svrm.txt

Forms Run Time Diagnostics default location is

\$ORACLE_HOME/forms60/log/\$CONTEXT_NAME

Q. How to convert pll to pld file or pld file to pll ?

Pll->Pld f60gen module=MSCOSCW3.pll module_type=library userid=apps/<passwd> module_access=file output_file=MSCOSCW1.pld script=yes

Pld -> pll f60gen module=MSCOSCW3.pld userid=apps/<passwd> module_type=library module_access=file output_file=MSCOSCW1.pll parse=y batch=yes compile_all=special

Q. Is APPS_MRC Schema exists for MRC in 11.5.10 and higher ?

No , apps_mrc schema is dropped with 11.5.10 Upgrade & 11.5.10 new Install. This is replaced

by more Integrated Architecture.

Q. If APPS_MRC schema is not used in 11.5.10 and higher then How MRC is working ?

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For products like Payable, Recievables which uses MRC and if MRC is enabled then each

transaction table in base schema related to currency now has an assoicated MRC Subtables.

Q. When you apply C driver patch does it require database to be Up & Why ?

Yes , database & db listener should be Up when you apply any driver patch in apps. even if driver

is not updating any database object connection is required to validate apps & other schema and

to upload patch history information in database tables.

Q. Can C driver in apps patch create Invalid Object in database ?

No , C driver only copies files in File System. Database Object might be invalidated during D

driver when these objects are created/dropped/modified.

Q. What is dev60cgi & f60cgi ?

cgi stands for Common Gateway Interface and these are Script Alias in Oracle Apps used to

access forms server . Usually Form Server access directly via

<http://hostname:port/dev60cgi/f60cgi>

Q. Why does a worker fails in Oracle Apps Patch and few scenarios in which it failed for you ?

This question sounds stupid but this is asked quite often in Apps DBA Interview. Apps Patch

worker can fail in case it doesn't find expected data, object, files or any thing which driver is trying

to update/edit/modify. Possible symptoms may be underlying tables/objects are invalid, a prereq

patch is missing , login information is incorrect, inconsistency in seeded data...

Q. What is difference between mod_osso & mod_ose in Oracle HTTP Server ?

mod_osso is Oracle Single Sign-On Module where as mod_ose is module for Oracle Servlet

Engine.

mod_osso is module in Oracle's HTTP Server serves as Conduit between Oracle Apache Server

& Singl Sign-On Server where as mod_ose is also another module in Oracle's HTTP Server

serves as conduit between Oracle Apache & Oracle Servlet Engine

mod_osso: Conduit between Oracle Apache Server & Singl Sign-On Server

mod_ose: Conduit between Oracle Apache & Oracle Servlet Engine

Q. What is difference between COMPILE_ALL=SPECIAL and COMPILE_ALL=YES while

compiling Forms ?

Both the options will compile all the PL/SQL in the resultant .FMX, .PLX, or .MMX file but

COMPILE_ALL=YES also changes the cached version in the source .FMB, .PLL, or .MMB file.

This confuses version control and build tools (CVS, Subversion, make, scons); they believe

you've made significant changes to the source. COMPILE_ALL=SPECIAL does not do this.

Q. What is ps -ef or ps command in Unix ?

ps is unix/linux utility or executable to find status of process. Used mainly to find if services/process is running or not.

Q. What is GSM in Oracle application E-Business Suite ?

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GSM stands for Generic Service Management Framework. Oracle E-Business Suite consist of

various compoennts like Forms, Reports, Web Server, Workflow, Concurrent Manager .. Earlier each service used to start at their own but managing these services (given that) they can

be on various machines distributed across network. So Generic Service Management is extension of Concurrent Processing which manages all your services , provide fault tolerance (If

some service is down ICM through FNDSM & other processes will try to start it even on remote

server) With GSM all services are centrally managed via this Framework.

Q. What is FNDSM ?

FNDSM is executable & core component in GSM (Generic Service Management Framework

discussed above). You start FNDSM services via APPS listener on all Nodes in Application Tier in

E-Business Suite.

Q. What is iAS Patch ?

iAS Patch are patches released to fix bugs associated with IAS_ORACLE_HOME (Web Server

Component) Usually these are shipped as Shell scripts & you apply iAS patches by executing

Shell script. Note that by default ORACLE_HOME is pointing to 8.0.6

ORACLE_HOME and if you

are applying iAS patch export ORACLE_HOME to iAS . You can do same by executing environment file under \$IAS_ORACLE_HOME

Ques 1 Where are the front end user details stored?

The front end user details are stored in table fnd_user in database. You can query the database for the details you want to know as follows:

logon as database user apps then

```
sql> desc fnd_user;
```

```
sql> select <Column name> from <table>;
```

you will get the list of details that the table contain from which you can get the further details.

Ques 2 Is “apps” a database user or “application user”?

“apps” is a Database user.All the information about database users is defined in table dba_users so you can query the database to know about users.

```
sql> desc dba_users;
```

```
sql> select * from dba_users where username='APPS';
```

This query will give you all details of apps user.

Ques 3 Where are the database objects stored for the products ‘BEN’ & ‘FND’?

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Database objects for the products like 'BEN' & 'FND' are stored in their own schema like BEN or APPLSYS (for FND), GL for GL objects

Ques 4 Can Middle Tier & DB run on different versions of OS?

Yes, Middle Tier & DB can run on different versions of OS. This type of configuration are known as Split Configuration.

Ques 5 Can different Middle Tier's have different flavours of OS?

Yes different Middle tier's can run on different flavours of OS.

Ques 6 How do we verify the no. of CPU's running on a node?

Proc (/proc) file system provides easy information about CPU and their speed. To display the number of processors in linux you need to use /proc/cpuinfo file. This is a collection of CPU and system architecture dependent items, for each supported architecture a different list. Type the following command:

```
$ cat /proc/cpuinfo
```

Ques 7 How do i identify whether my environment is shared APPL_TOP or not?

To know whether the environment is shared APPL_TOP or not , login to first Middle Tier

& create any file (like abc.txt) in the APPL_TOP. Now logout & login to other Middle Tier. If you can see that respective file in APPL_TOP, this means you are having shared APPL_TOP.

Q. If we run autoconfig which files will get effected ?

In order to check list of files changes during Autoconfig , you can run adchkcfg utility which will generate HTML report. This report will list all files & profile options going to change when you run AutoConfig.

Q. What is difference between .xml file & AutoConfig ?

Autoconfig is Utility to configure your Oracle Application environment. .xml file is repository of all configuration from which AutoConfig picks configuration and populates related files.

Q. What is .lgi files ?

.lgi files are created with patching along with .log files . .lgi files are informative log files containing information related to patch. You can check .lgi files to see what activities patch has done. Usually informative logs.

Q. How will you skip worker during patch ?

If in your adctrl there are six option shown then seventh is hidden option.(If there are seven options visible then 8th option is to Skip worker depending on ad version).

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Q. Which two tables created at start of Apps Patch & drops at end of Patch ?

FND_INSTALL_PROCESSES (Columns :CONTROL_CODE and STATUS) & AD_DEFERRED_JOBS are the tables that get updated while applying a patch mainly (d or u) unified driver

Q. How to compile an Oracle Reports and forms file ?

Utility adrepgen is used to compile Reports. Syntax is given below

```
adrepgen userid=apps\<psswd> source = $PRODUCT_TOP\srw\filename.rdf  
dest=$PRODUCT_TOP\srw\filename.rdf stype=rdffile dtype=rdffile logfile=x.log  
overwrite=yes
```

```
batch=yes dunit=character
```

Utility f60gen is used to compile Forms. Syntax is given below

```
f60gen module=<source form name> userid=APPS/<APPS password>  
output_file=<executable form name>
```

EG : For Instance I want to generate sale order forms in ONT schema using f60gen
syntax would be like

OEXOEORD.fmb form:

```
$cd $AU_TOP/forms/US
```

```
$f60gen module= OEXOEORD.fmb module_type=form \
```

```
output_file=$ONT_TOP/forms/US/OEXOEORD.fmx userid=APPS/APPS
```

```
module_type=form batch=yes compile_all=yes
```

Q. What is difference between AD_BUGS & AD_APPLIED_PATCHES ?

- AD_BUGS: holds information about the various Oracle Applications bugs whose fixes
have been

applied (ie. patched) in the Oracle Applications installation.

- AD_APPLIED_PATCHES: holds information about the "distinct" Oracle Applications
patches that

have been applied. If 2 patches happen to have the same name but are different in content
(eg.

"merged" patches), then they are considered distinct and this table will therefore hold 2
records.

- Patchsets.sh: This program (a unix shell script) was created to help customers evaluate
the

currently installed Oracle Applications patchsets and Family Packs. The program
compares the

currently installed patchsets and family packs to the most recently available ones
generated by

Oracle Development. This program utilizes the the applptch.txt file for 10.7-11.0. For 11i
and R12,

it utilizes a combination of tables such as AD_BUGS and AD_APPLIED_PATCHES to
create the

installed patch list. If the 11i release does not use these AD tables (11.5.4 or lower and
have not

applied 11i.AD.E or higher) it still supports using applptch.txt for 11i.

- adutconf.sql: This script provides a wealth of information, including the following:

Product Group(s)

Multi-Org status

Multi-lingual status

Installed product status

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Registered schemas

Installed languages

Q. What exactly happens when you put an Oracle Apps instance in maintenance mode ?

Maintenance mode provides a clear separation between normal runtime operation of Oracle

Applications and system downtime for maintenance. Enabling the maintenance mode feature

a) Shuts down the Workflow Business Events System and

b) Sets up function security so that no Oracle Applications functions are available to users.

Used only during AutoPatch sessions, maintenance mode ensures optimal performance and

reduces downtime when applying a patch.

(COMPLETED TILL PAGE 29) <http://teachmeoracle.com/interview29.html>

Q: How to find Forms Version in 11i ?

Login to forms from frontend , on top menu bar of forms click on "Help" & Select "About Oracle

Applications" go to "Forms Server " section. You should see entry like below depending on your

forms version

Oracle Forms Version : 6.0.8.26.0

Which mean you are on forms version 6.0.8.26 . If you want to know whats your forms patchset

level then subtract 9 from fourth digit which means for above case form patchset 17 is applied.

Q: How to find Forms Version in Apps from command Line ?

Enter "f60gen" on Forms Server and check for first line in output like

Forms 6.0 (Form Compiler) Version 6.0.8.26.0 (Production)

This confirms that you are on forms server version 6.0.8.26.0 and patch set 17. (Patch Set =

Fourth Digit - 9)

Q: How to find Jinitiator Version ?

Check for file like appsweb_SID_HOSTNAME.cfg under \$OA_HTML/bin defined by environment

variable FORMS60_WEB_CONFIG_FILE & search for entry like jinit_ver_name , you will see

entry like

jinit_ver_name=Version=1,3,1,23

which means Jinitiator version is 1.3.1.23 ; if your version is 1.3.1.18 you will see entry like

1,3,1,18

Q: How to find Version of any file in Oracle Apps 11i ? or

Q: How to find any Reports Version 11i ? or

In Oracle Applications under ad utilities there is utility called as adident Used for Identification

purpose or to find out file version use

adident Header <filename>

for ex. in order to find file version of one AR form i.e. ARXGLCOR.fmx
adident Header ARXGLCOR.fmx

You should see output like

```
$Header APPSTAND.fmb 115.33 2002/04/04 11:13:40 pkm ship
```

```
$Header ARXGLCOR.fmb 115.15 2005/01/31 13:48 mraymond ship
```

Which means above form executable consist of two forms whose version is 115.33 & 115.15 resp.

Similarly you can use adident to find version of any report in 11i.

Q: How to find Operation System Version (Unix/Linux) ?

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For solaris use command

```
uname -a or cat /etc/release
```

You will see output like

```
For Solaris SunOS servername 5.8 Generic_117350-23 sun4u sparc SUNW,Sun-Fire-V240
```

For RedHat Linux use command

```
cat /etc/*release*
```

You will see output like

```
Red Hat Enterprise Linux AS release 3 (Taroon Update 6)
```

Which means you are on Solaris 5.8 or Linux AS 3 resp.

Q: How to find if your Operating System is 32 bit or 64 Bit ?

For solaris use command

```
isainfo -v
```

If you see output like

```
32-bit sparc applications
```

That means your O.S. is only 32 bit but if you see output like

```
64-bit sparcv9 applications
```

```
32-bit sparc applications
```

above means your o.s. is 64 bit & can support both 32 & 64 bit applications

Q: Can I run 64 bit application on 32 bit Operating system ?

You can run 32 bit application (like oracle application server, web server, all oracle application

server are 32 bit) on both 32 /64 bit operating system but a 64 bit application like 64 bit database

can run only on 64 bit operating system.

Q How to find if your database is 32 bit or 64 bit(Useful in applying Patches) ?

execute "file \$ORACLE_HOME/bin/oracle" , you should see output like

```
/u01/db/bin/oracle: ELF 64-bit MSB executable SPARCV9 Version 1
```

which means you are on 64 bit oracle

If your oracle is 32 bit you should see output like

```
oracle: ELF 32-bit MSB executable SPARC Version 1
```

Now you know what should be bit of patch to download

Q: How to find OUI version ?

OUI stands for Oracle Universal Installer. In order to find Installer version you have to execute

```
./runInstaller -help ( From OUI location)
```

You will get output like

Oracle Universal Installer, Version 10.1.0.4.0 Production Copyright (C) 1999, 2005, Oracle. All

rights reserved.

That means OUI version in above case is 10.1.0.4

OUI location is \$ORACLE_HOME/oui/bin

Q: How to find Database version ?

SQL> select * from v\$version;

The command returns the release information, such as the following:

Oracle9i Enterprise Edition Release 9.2.0.7.0 - Production

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PL/SQL Release 9.2.0.7.0 - Production

CORE 9.2.0.7.0 Production

TNS for 32-bit Windows: Version 9.2.0.7.0 - Production

NLSRTL Version 9.2.0.7.0 - Production

Q: How to find Oracle Workflow Cartridge Release Version ?

Log in to the database as the owf_mgr user and issue

select wf_core.translate('WF_VERSION') from dual;

Q: Determining the Current Version of OJSP ?

You may follow these steps to determine which version of OJSP you have on your web server if

you aren't sure:

Change to the OA_JAVA directory on your web server.

Using a text editor, create a file called test.jsp with only the following line:

```
<%= application.getAttribute("oracle.jsp.versionNumber") %>
```

You can also use the echo command, like so:

On Unix:

```
echo '<%= application.getAttribute("oracle.jsp.versionNumber") %>' > test.jsp
```

```
On Windows NT: echo "<%= application.getAttribute("oracle.jsp.versionNumber") %>" > test.jsp
```

Access this JSP from a web browser, using the URL:

```
http://[your web server]:[your port]/OA_JAVA/test.jsp
```

The resulting page will show you which version of OJSP your Oracle HTTP Server is configured

to use.

If the web page displays "1.1.2.0", then you do not need to upgrade your OJSP. If, however, it

displays anything else, such as "1.0.0.6.1", then you are using an older version of OJSP, and you

must upgrade your OJSP, following the directions in the MetaLink Note indicated above.

Q: How to find opatch Version ?

opatch is utility to apply database patch , In order to find opatch version execute

```
"$ORACLE_HOME/OPatch/opatch version"
```

You should see output like OPatch Version: 1.0.0.0.52 which means your opatch version is

1.0.0.0.52

Q. How to find Version of Apps 11i ?

Run following SQL from apps user ;

```
SQL> select RELEASE_NAME from fnd_product_groups;
```

You should see output like

```
RELEASE_NAME
```

```
-----
```

```
11.5.10.2
```

Which means you are on Apps Version 11.5.10.2

Q How to Discoverer Version installed with Apps ?

Discoverer with Apps installed in ORACLE_HOME same as 806 is usually 3i or 4i. To find Version

login to Application Tier & go to \$ORACLE_HOME/discwb4/bin and execute

```
50 strings dis4ws | grep -i 'discoverer version'
```

You should see output like

```
Discoverer Version:Session 4.1.47.09.00
```

Which means you are on discoverer 4i version 4.1.47.09

Q. How to find Workflow Version embedded in Apps 11i ?

Run following SQL from apps user ;

```
SQL>select TEXT from WF_RESOURCES where NAME='WF_VERSION';
```

You should see output like

```
TEXT
```

```
-----
```

```
2.6.0
```

Which means you are on Workflow Version 2.6.0

You can also use script wfver.sql in FND_TOP/sql to find version of workflow in Apps.

Q: How to find version of JDK Installed on Apps ?

There might be multiple JDK installed on Operating System . Like JDK 1.3.1, 1.4.2 or 1.5 but in

order to find which Version of JDK your Apps is using

Open your Context File \$\$SID_\$\$HOSTNAME.xml under \$APPL_TOP/admin and look for variable

```
JDK_TOP oa_var="s_jdktop" what so ever value assigned against that parameter go to that
```

directory & cd bin & execute command

```
./java -version so lets assume entry above is /usr/jdk then cd /usr/jdk/bin & ./java -version , you
```

will see output like

```
java version "1.4.2_10"
```

```
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.2_10-b03)
```

```
Java HotSpot(TM) Client VM (build 1.4.2_10-b03, mixed mode)
```

Which means you are using JDK 1.4.2 in Oracle Applications 11i.

How do we know that particular instance is cloned or normal installed?

Check clone log file . If log file exists this means this is cloned instance

How can you know that how many modules are already implemented in this instance?

check using adlicmgr.sh or OAM

How can we know that whether we already applied latest AUTOCONFIG patch or not at our instance?

find out patch number for Autoconfig and then check from ad_bugs table

Is this possible to clone a database from hotbackup? If yes plz tell how?

Yes, first recover/clone database from hot backup using normal database clone .

Then run adcfgclone.pl with dbTechStack option instead of dbTier (Use Rapid Clone advance

topic metalink note for more info)

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Suppose your database size is 2000GB now you want to clone a particular one datafile or tablespace. Plz tell how to clone a datafile or tablespace?

You can import /export tablespace/datafile but can't clone (Check on this again)

How frequent v have to run Gather Schema Statistics Prog?

and Actually what happens when U run tht Prog?

When ever you have bulk amount of data loaded into the Database, then you have to gather

schema statistics I think when ever want a snapshot of the presents schemas then u need to

run adadmin for gathering statistics of schema and after running this program it maintains

patchset level of oracle_homes and all file versions of executable files

Statistics generated include the following:

Table statistics

Number of rows

Number of blocks

Average row length

Column statistics

Number of distinct values (NDV) in column

Number of nulls in column

Data distribution (histogram)

Index statistics

Number of leaf blocks

Levels

Clustering factor

System statistics

I/O performance and utilization

CPU performance and utilization

what is the difference b/w httpd.conf and https.conf ?

httpd.conf is a http demon configuration file where as https.conf is a http demon secure configuration file.

How to see DB size at os level command.

By Issuing the following command in unix

\$ ipcs -pmb

ipcs: invalid option -- b

usage : ipcs -asmq -tclup

ipcs [-s -m -q] -i id

ipcs -h for help.

Different Shutdown options in database ?

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1) shut (for normal shutdown) --- It will wait until all the users to logout from database.

2) shut transactional --- It will wait until all the transactions to be complete by a commit or

rollback.

3) shut immediate--- It will rollforward the committed data and rollback the uncommitted data.

4) shut abort--- It will not check for users, transactions etc.. just it will aborted from database

by shutting down the instance.

A database is running in NOARCHIVELOG mode which type of backups you can take?

In no archive log mode, you have to take cold backup only...means..your database should be down and

take backup....

For this, you can right shell script in order

(a) shutdown the database

(b) copy all the files

(c) startup the database.....

Which users logged in to the system longer than 6 months ago ?

```
select a.user_id,a.user_name,b.user_id,b.start_time
```

```
from FND_USER a, FND_LOGINS b
```

```
where a.user_id = b.user_id
```

```
and b.start_time = (select max(start_time) from FND_LOGINS where user_id =
```

```
b.user_id)
```

```
and START_TIME < SYSDATE - 180;
```

To see how many distinct users are connected to my system, at particular time ?

```
select distinct fu.user_name User_Name, fr.RESPONSIBILITY_KEY
```

```
Responsibility, fu.LAST_LOGON_DATE from fnd_user fu,
```

```
fnd_responsibility fr, icx_sessions ic
```

```
where fu.user_id = ic.user_id AND
```

```
fr.responsibility_id = ic.responsibility_id AND
```

```
ic.disabled_flag='N' AND
```

```
ic.responsibility_id is not null AND
```

```
ic.last_connect like sysdate;
```

Who uses the OBT_AA schema in Apps ?

OBT_AA is used by ILM (Inventory Management) product. Only objects inside this schema are db

links, functions, packages, procedures and synonyms. No tables in this one.

```
SQL> SELECT DISTINCT OBJECT_TYPE
```

```
2 FROM DBA_OBJECTS
```

```
3 WHERE OWNER='OBT_AA';
```

```
OBJECT_TYPE
```

```
-----
```

DATABASE LINK
FUNCTION
PACKAGE
PACKAGE BODY
PROCEDURE
SYNONYM
VIEW

What is Bolton: AventX: ?

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AventX is a fax and email solution for E-Business Suite from STR software. It works with other ERPs like SAP R/3 via its ERP connectors. Users in a Unix-based environment, including AIX, HP-UX, Intel Linux, Solaris and Tru64, can send information directly from various host ERP applications.

Schemas created by AventX are called: sf and sfgy

SF = STR Software Fax Commander

SFGY= STR Software Fax Commander Gateway

Fax Commander was the original name of the AventX product and internally you will find a lot of

names with SF and SFC.

Insight into AutoConfig

I am going to give you some insight or inner working of this tool. Thanks to Harminder Singh (Try

at your own risk)

For detailed information on AUTOCONFIG refer to the following metalink

Note:165195.1,

Note:218089.1, Note:270519.1 and Note:217368.1.

Wanna create CONTEXT file manually, try this ... and then copy the generated XML to

\$APPL_TOP/admin/host_SID.xml

adbldxml.pl tier=apps appsuser=apps appspass=pswd

log=\$HOME/admin/log/adconfig_`date

'+%m%d%y_%H%M%S'.log out=\$HOME/admin/SID_`date '+%m%d%y_%H%M%S'.xml

servername=nodename

Wanna Update the tags in CONTEXT File, try this to update tag s_appsEnvName to SHYAM

```
java -classpath "${CLASSPATH}:${CMDDIR}/java/adconfig.zip"
```

```
oracle.apps.ad.context.UpdateContext ${HOME}/admin/SID.xml s_appsEnvName
```

```
"SHYAM"
```

Wanna try to instantiate configuration files from custom driver and templates files based on the

values from CONTEXT FILE.

```
java -classpath "${CLASSPATH}:${CMDDIR}/java/adconfig.zip"
```

```
oracle.apps.ad.autoconfig.InstantiateFile -e $HOME/admin/${TWO_TASK}.xml -d
```

```
/d01/sid/admin/custom.driv -log /d01/sid/admin/$CONTEXT_NAME.xxcinstantiate.log  
-bacdir
```

```
/d01/sid/admin/bak/$CONTEXT_NAME -pwd NOP
```

How to Trace Concurrent Programs for a Specific ERP User

1-First get the ERP user login id .

2- Pull up the SYSTEM profile - make sure in the find screen to select the user & add the user, and add the profile value, in one line, at the profile option value called, 'Initialization SQL Statement - Custom', you can put this in your find as well...

3- Now you need to add the value under the user filed, below the user name, copy this in notepad in one line and paste it. You can change the identifier and the dump file size as well. NOTE IF YOU MAKE A MISTAKE USER WILL NOT BE ABLE TO LOGIN.

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```
begin fnd_ctl.fnd_sess_ctl(",','TRUE','TRUE','LOG','ALTER SESSION SET  
EVENTS="10046 TRACE NAME CONTEXT FOREVER, LEVEL 8"  
tracefile_identifier="BENMGL" max_dump_file_size="unlimited"); end;
```

Q. What is profile options, What are various type of profile options ?

Q. What is APPS listener ? Why its used ?

Q. How do you start/stop apps listener ?

Q. If users complaining Oracle Applications 11i system is running slow , what all things you will check at broad level ?

Q. What is Autoconfig ?

Q. What is context file ?

Q. Why appstutil directory under Database ORACLE_HOME used for ?

Q. How to create User in Oracle Applications 11i ? Can you delete a User ?

Q. What is Single Sign On ? (If you are using portal 3.0.9 or 10G)?

Q. How to configure portal with 11i ? (If you are using portal 3.0.9 or 10G)?

SOME USEFUL QUERIES

1)How to check if the partitions of a table are set to LOGGING

```
select partition_name, logging  
from dba_tab_partitions  
where table_name='WF_LOCAL_ROLES';
```

2)How to Correct Session Cookie Name.

a)select session_cookie_name from icx_parameters;

b)update icx_parameters set session_cookie_name = '<hostname_sid>';

c)select session_cookie_name from icx_parameters;

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3) How to find database SID from a Concurrent request.

You need your concurrent request ID as an input.

c.SPID= is the operating system process id

d.sid= is the Oracle process id

4) How to check which object is corrupted.

```
SELECT tablespace_name, segment_type, owner, segment_name  
FROM dba_extents
```

```
WHERE file_id = 64 and 1 between block_id AND block_id + blocks-1;
```

5) How to check whether the product is install,shared and Not installed in Apps.

6) How to check access level when label security feature is installed.

where USER_NAME='APPS';

7) How to find out Summary of Concurrent requests.

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8) How to find out Package Header.

```
select name,text from dba_source where text like '%Header: %'  
and owner = 'APPS' and name = 'INVALID_OBJECT_NAME';
```

9) How to find out version of a package.

```
select text from dba_source  
where line=2
```

```
and name='AP_IMPORT_INVOICES_PKG';
```

10) How to find out which request is handle by which concurrent queue.

a) First find out short_name of a program and then pass it as parameter to below query.

b) The below query will give you output

I - Included - Included in new concurrent queue

E - excluded from Standard Manager

This way you know now this running program (concurrent request) is handled by new manager and not part of standard manager.

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11) How to backup the definition of a View before dropping a view.

```
select dbms_metadata.get_ddl('VIEW','RG_View','APPS') from dual;
```

I will update some more scripts in my next post.

Product installation Information Version of Apps

```
select * from fnd_product_groups
```

Information about concurrent requests

```
select * from fnd_concurrent_requests
```

Information about particular concurrent request

```
select logfile_name, logfile_node_name, outfile_name, outfile_node_name  
from fnd_concurrent_requests
```

```
where request_id =<request id>
```

Finding Invaled Objects

```
select count(*) from dba_objects where status ='INVALID'
```

To Check which node is running what service

```
select * from fnd_nodes
```

Information about the bugs fixed in Installation

```
select * from ad_bugs
```

Information about the applied patches

```
select * from ad_applied_patches
```

Stores values for various profile options

```
select * from FND_PROFILE_OPTION_VALUES
```

Information about various profile options

```
select * from FND_PROFILE_OPTIONS
```

To Find database version
select * from v\$version

As part of Windows to Linux Upgrade/Migrate project. I wrote the following query to pull all the profiles that has a hardcoded

Wanna DUMP JVM threads or check GC size
This scripts will be handy if you wanna check the Garbage Collection Size of OACore JVMs or DUMP them to check for any locking/waiting issue

scripts Check the Garbage Collection Size of OACore JVMs
#

PRINTED TILL HERE

Q) How to check if your system is SSL enabled?

A quick check : If your context file contains the values of s_url_protocol / s_local_url_protocol set to https, then your envt has to be SSLenabled.

If the rest of config is

absent but these are set to https, then URL does not resolve which

is an indirect check of incomplete config.

Also you can use this query to check

```
select PROFILE_OPTION_VALUE  
from applsys.fnd_profile_option_values  
where PROFILE_OPTION_VALUE like 'http%';  
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```

Q) Query to find who and when update an Oracle Application user's profile.

General Information Q: How often should customers apply minipacks, family packs, and maintenance packs? A: You should keep your maintenance level up to date in order to:

- Receive the latest fixes.
- Reduce the number of file updates needed for emergency fixes.
- Reduce the possibility of unfulfilled prerequisite patches when applying an emergency fix.
- Make it easier for Oracle Support and Oracle Development to assist you.
- Keep core products such as AD (patches and maintenance fixes), FND (security and technology stack updates), and HR (legislative updates) up to date.

At a minimum, apply maintenance packs to stay within two maintenance releases. For example, since 11.5.10 is currently available, customers at the 11.5.8 (or earlier) level should be planning their upgrade to 11.5.10. Use minipacks and family packs if you have an immediate need for the latest patch level for a product or product family and cannot wait to apply the corresponding maintenance pack. Top

Q: How do I know what patches or files have been applied to a system? What happened to my applptch.txt? A: Prior to AD Minipack E, patch history was stored in a text file called applptch.txt in the \$APPL_TOP/admin/<SID> directory. AutoPatch appended the applptch.txt file with information about each patch applied. With AD Minipack E, the new Patch History feature stores all patch information in database tables. If the information cannot be written to the database, it is stored in files in the file system, and is automatically loaded to the database the next time AutoPatch is run. In AD Minipack E, the temporary patch history file was named applptch.txt. In AD Minipack H (and later), there are two patch history files: javaupdates<timestamp>.txt to record patch history about changes to Java files, and adpsv<timestamp>.txt to record patch history about changes to all non-Java files. The best way to review patch history information is to use the Applied Patches search pages provided by Oracle Applications Manager. The patch history database feature allows you to query on patches or files applied and filter by patch number or file name, as well as date, product, APPL_TOP name, server type, or language. See Oracle Applications Maintenance Utilities for more information. Top

Q: How can I find the latest available minipack, family pack, or maintenance pack? A: On OracleMetaLink, click the Patches & Updates button on the left-hand side. Choose the Quick Links to the Latest Patchsets, Mini Packs, and Maintenance Packs link to get either:

- A listing of the latest minipacks, family packs, or maintenance pack for the E-Business Suite, or
- A listing of the latest patchsets for Server/Tools products

A link at the top will allow you toggle between the two lists. Top

Q: Where can I find a list of AutoPatch features and the AD minipacks that introduced them? A: The Oracle Applications DBA 11i+ Features Matrix (OracleMetaLink ID: 210326.1) contains a list of major AD features in Release 11i and identifies which AD minipack introduced each feature. Top

Q: What is the AD Features matrix printed on the AutoPatch screen and logfiles? A: AD Feature Versions is a framework created to handle mismatches between the AD code on the file system and the AD objects in the database. Both the version of the feature on the file system and the version of the feature in the database are tracked separately. When the two versions do not match, the feature is disabled, and when the two versions match, the feature is (normally) enabled. The table below is an example of the information displayed by AD Feature Versions in AD utility log files. The first four columns in the table below represent the name of the feature, whether or not the feature is enabled, the version of the feature in the APPL_TOP, and the version of the feature in the database.

Feature
Active?

The Flags Column values represent: - 1st flag: Is the feature enabled in the APPL_TOP? - 2nd flag: Does the feature require an enabling file on the file system? - 3rd flag: Does the enabling file exist? - 4th flag: Does the feature depend on any database objects? - 5th flag: Is the value of the 6th flag relevant? - 6th flag: Is the feature enabled in the database? This message is informational in nature only, the AD Feature Versions framework is only used by AD internally and should not be modified unless under explicit instructions from AD Development. Top

Q: What is a patch driver file? What is the difference between the c driver, d driver, g driver, and u driver? A: Patch driver files contain commands used by AutoPatch to direct the installation of a patch. There are four types of driver files, and a patch can contain more than one driver.

- Copy driver (c driver): Named c<patchnumber>.drv, and contains commands to change Oracle Applications files. The commands include directives to copy/update files, libraries, and/or Java, and commands for generating JAR files and/or C executables. In a multi-node system, run it on all application tier APPL_TOPs.
- Database driver (d driver): Named d<patchnumber>.drv, and contains commands to change Oracle Applications database objects, such as PL/SQL and table definitions, or to update or migrate data. In a multi-node system, run it only on the application tier APPL_TOP that implements the administration server.
- Generate driver (g driver): Named g<patchnumber>.drv, and contains commands to generate forms, reports, and/or graphics files. In a multi-node system, run it on all application tier APPL_TOPs, unless the APPL_TOP only implements the administration server.
- Unified driver (u driver): Named u<patchnumber>.drv, it is a consolidated driver containing all copy, database, and generate actions. Apply this driver to all APPL_TOPs on all application tier servers. AutoPatch knows which commands should be run on each type of application tier. The unified driver requires only a single execution of AutoPatch. If you merge a patch that contains a unified driver with patches that contain other driver types, the resulting merged patch will contain only a merged unified driver. See Oracle Applications Concepts for a definition of administration server and other server types. Top

Q: What releases support unified drivers? A: All 11i versions of AutoPatch support unified drivers. There is no minimum level. In order to make it easier to turn off entire categories of actions, without having to specify each action type, AD Minipack H introduces simple methods to disable entire categories of actions, for example, adpatch options=nodatabaseportion. See Oracle Applications Maintenance Utilities for a list of available command line options. Top

Q: What are the patching implications of a multi-node environment? How do I know what type of server/tier/node I am patching? A: In a multi-node environment, you need to apply the patch, in its entirety, to the node implementing the administration server first. After that you can apply the patch in any order on the remaining nodes. In many cases the terms 'server', 'tier' and 'node' are used interchangeably and the exact meaning must be inferred from the context. Officially, the terms are different and have a distinct meaning.

- A node (or machine) is a computer.
- A server is a collection of one or more computer processes that perform a specific function.
- A tier is a logical grouping of one or more servers or computer processes. In Release 11i there are three tiers: desktop, application, and database.
- The desktop tier (generally an end-user PC) does not consist of any servers. Rather it consists of a Web browser that makes use of HTML and a Java applet to provide the user interface.
- The application tier (also called the middle tier) consists of a number of servers, such as the concurrent processing server, Web server, forms server, and administration server.

These servers are also referred to as application tier servers. Likewise, the nodes on which such servers run are referred to as application tier server nodes.

- The database tier consists of the database server, which stores all the data in a Release 11i system.

For example, if a node contains only the database server and no other Release 11i software, it is called the database server node, and it is part of the database tier only. However, it is possible for the database server and any of the application tier servers to run on the same node. In this situation, the node can be called the database server node, the forms server node, the Web server node, and so on. Because servers from other tiers are running on one node, the node belongs to more than one tier. For more information about the Release 11i architecture, see Oracle Applications Concepts. To determine what application tier servers are on each node, refer to the Applications Dashboard in Oracle Applications Manager (information on using Oracle Applications Manager can be found in the Oracle Applications Maintenance Utilities). Top

Q: What is the AutoPatch checkfile feature? A: This feature reduces patch application downtime by checking to see if a given database action has been performed previously for the associated file contained in the patch. If an action has been performed using the current (or higher) version of a file, AutoPatch omits the action. Top

Q: Can I run multiple AutoPatch sessions at the same time? A: You cannot currently run multiple sessions simultaneously. However, patches can be merged and can be applied in a single patching session. A new AD feature called AD Concurrent Sessions is currently being tested. It uses a system of locks that will prevent incompatible actions from executing at the same time, so compatible actions can be run in parallel. This will allow you to run multiple

AutoPatch sessions concurrently. Top

Q: What are the Oracle Applications patch types? A: All Applications patches are organized by aggregation level.

- Stand-alone (one-off) Patch: Addresses a single fix or enhancement. Stand-alone patches are released only when there is an immediate need for a fix or enhancement that cannot wait until an aggregate bundling is available. Although stand-alone patches are intended to be as small as possible, they usually include any dependent files that have changed since the base release in order to form a complete patch that can be applied by any customer. The actual number of files changed will depend on the current code level on the system to which the patch is being applied.

- Rollup Patch (RUP): An aggregation of patches that may be at the functional level, or at a specific product/family release level. For example, a Flexfields rollup patch contains all the latest patches related to Flexfields at the time the patch was created. A Marketing Family 11.5.10 rollup patch contains all the latest Marketing patches released since, and applicable to, 11.5.10.

- Minipack: An aggregation of patches at the product level. For example, Inventory Minipack G (11i.INV.G) contains all the latest patches for the Inventory product at the time the minipack was created. Minipacks are named in alphabetical sequence such as 11i.INV.E, 11i.INV.F, 11i.INV.G, and so on. Minipacks are cumulative. In other words, 11i.INV.G contains everything in 11i.INV.F, which contains everything in 11i.INV.E, and so on. The terms patchset and minipack are often used interchangeably.

- **Family Pack:** An aggregation of patches at the product family level. For example, Financials Family Pack C (11i.FIN_PF.C) contains all the latest patches for products in the Financials family at the time the family pack was created. Family product codes always end in "_PF" and family packs are given alphabetical sequence such as 11i.HR_PF.B, 11i.HR_PF.C, and 11i.HR_PF.D. Family packs are cumulative. In other words, Discrete Manufacturing Family Pack G (11i.DMF_PF.G) contains everything in 11i.DMF_PF.F, which contains everything in 11i.DMF_PF.E, and so on.

- **Maintenance Pack:** An aggregation of patches for all products in the E-Business Suite. For example, Release 11.5.10 Maintenance Pack contains all the latest code level for all products at the time 11.5.10 was created. Maintenance packs are numbered sequentially such as 11.5.8, 11.5.9, 11.5.10, and are cumulative. In other words, 11.5.10 contains everything in 11.5.9, which contains everything in 11.5.8, and so on.

In addition to releasing a maintenance pack, Oracle also packages a new Rapid Install at each maintenance pack release level. So Applications Release 11.5.10 Rapid Install contains the same applications code level that a customer would get if they applied the Release 11.5.10 Maintenance Pack on an earlier 11i release level. Note that the technology stack could still be different since Rapid Install includes the latest certified technology stack, but the maintenance pack includes only Applications code.

Maintenance packs can be downloaded from OracleMetaLink or ordered as a CD Pack from the Oracle Store.

Patches can also be organized by purpose.

- **Diagnostic Patch:** Used to gather additional information when a product failure cannot be reproduced by Oracle. The additional information will assist Oracle Support Services and Oracle Development in resolving the failure.

- **Interoperability Patch:** Allows Oracle Applications to function properly with a newer version of the technology stack. Interoperability patches are typically required with new versions of the database or Applications technology stack.

- **Translated Patch:** A non-English version of a patch. Release 11i supports 30 non-English languages. Customers who are using languages other than English, need to apply the corresponding translated patch(es) for the languages they are using in addition to any base US patch(es).

- **Merged Translation Patch:** Provided in real time (without requiring a translator) in the event a translated patch is not available when a customer needs it. A merged translation patch is applied just like a fully translated patch. The fully translated patch is escalated and is usually available within 24 hours. It can be applied safely on top of a merged translation patch.

- **Translation Fix:** Provided in the event a translation word choice is inappropriate. A translation fix is applied just like a translated patch, except there is no corresponding base US patch.

- **New Feature Patch:** Introduces new functionality and/or products. It is applied using standard patching utilities.

- **Consolidated Update (CU):** Improves and streamlines the upgrade and maintenance processes by consolidating certain post-release patches. Most recommended patches and rollups for a particular maintenance release are consolidated into a single patch that is installed immediately following the Maintenance Pack or the Rapid Install. Updates in the CU are predominantly error corrections.

- **Family Consolidated Upgrade Patch:** All upgrade-related patches consolidated from all the products within a product family. Family consolidated upgrade patches are released as needed and are only available for upgrading to Release 11i from Release 10.7 or 11.0. The Oracle Applications Release Notes lists the most recent patches.
- **Documentation Patch:** Updates online help. [Top](#)
Help Applying Patches Q: How can I shorten patch application time when applying patches? **A:** There are several tips and tricks for shortening the time it takes to apply patches.
- **Schedule periodic downtime for proactive maintenance.** The more up-to-date your system, the less likely you are to experience known problems, and the easier it is to resolve new issues. Whenever you can test and schedule downtime to apply the latest maintenance or family packs, do so.
- **Keep AD code up-to-date.** Oracle has put tremendous effort in reducing downtime and improving the maintenance experience. Running at the latest AD minipack level allows you to take full advantage of these efforts.
- **Keep your test system current with your production system** (see [Cloning Oracle Applications Release 11i with Rapid Clone - OracleMetaLink ID 230672.1](#)). As you test the application of a patch, it is imperative that the test be realistic in terms of current patch level and transaction data.
- **Consolidate multiple patches into a single, merged patch with AD Merge Patch.** AD Merge Patch is a utility that merges multiple Oracle Applications patches into a single patch. Use it to apply more than one patch during a single downtime. AD Merge Patch reduces patch application time by eliminating redundant patching tasks. All 11i patches can be merged. If you merge translation patches, AD Merge Patch performs necessary character set conversion at merge time. If you merge patches containing both split (c,d,g) drivers and unified drivers, AD Merge Patch creates a single, unified driver for the merged patch allowing the merged patch to be successfully applied.
- **Merge and apply US patches, then merge and apply translation patches.** Although US patches must be applied during system downtime, the translation patches can be applied during uptime, as long as users of the affected languages are not using the system. See [Oracle Applications Maintenance Procedures](#) for information on applying translation patches.
- **Employ sufficient space.** This includes new tablespace for indexes created by the patch. For patches containing large numbers of files, you should also make sure there is sufficient temporary space to contain the unzipped patch and files to be copied into the APPL_TOP.
- **Use a shared application tier file system if you have multiple application tier nodes.** In a shared application tier file system installation, the APPL_TOP, COMMON_TOP, and application tier Oracle homes (8.0.6 and iAS) are installed onto a shared disk resource mounted to each node used in the Oracle Applications system. These nodes can be used to provide standard application tier services, such as forms, Web, and concurrent processing. Refer to [Sharing the Application Tier File System on OracleMetaLink \(Doc ID: 233428.1\)](#) for more information.
- **Use the Distributed AD feature to utilize additional hardware during maintenance.** AD has always used a Parallel Jobs System, where multiple AD workers start and are assigned jobs. Information for the Jobs System is stored in the database, and workers

receive their assignments by monitoring certain tables in the database. AD Minipack H introduces Distributed AD, which allows workers to be started on remote machines as well, where they can utilize the additional resources on those machines when completing their assigned jobs. This capability improves scalability, performance, and resource utilization because workers in the same AD session can be started on additional application tier nodes. Refer to Distributed AD on OracleMetaLink (Doc ID: 236469.1) for more information.

- Use a Staged APPL_TOP to reduce the downtime to just the database update. A staged Applications system represents an exact copy of your Production system including a copy of the database. Patches are applied to this staged test system, while your Production system remains up. When all patches have been successfully applied to the test system, the reduced downtime for the Production system can begin. The staged APPL_TOP is used both to run the database update into the Production database as well as synchronizing the production APPL_TOP.

Refer to Using a Staged Applications System on OracleMetaLink (Doc ID: 242480.1) for more information.

- Perform uptime maintenance, when possible. Examples of maintenance activities that can be accomplished while users are on the system include:

- o Gather Schema Statistics

- o Patch the Online Help

- o Upload patch history information to the database

- o Apply translation patches while users are using different languages (possibly in another time zone)

- o Apply the database update component of a translation patch while using the affected language Top

Q: How do I run AutoPatch non-interactively? A: The AD defaults file allows you to run AutoPatch (or AD Administration) in non-interactive mode. It contains tokens to answer defaults-enabled prompts. Oracle provides a file called adalldefaults.txt that has tokens for all possible default-enabled prompts. This file is maintained by AutoConfig and can be used as a template when creating defaults files. See Oracle Applications Maintenance Procedures for information on running AutoPatch non-interactively using a defaults file.

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Q: Do patches need to be applied in a particular order? What is a prerequisite patch? A: Patches do not need to be applied in a particular order, even though a readme may state a specific order is required, unless one of the patches is an AD patch. This is because you may need to patch the patching utility so that it works properly when you use it to apply subsequent patches. A prerequisite patch fulfills a dependency for another patch. Strictly speaking, they are co-requisites and can be applied in any order before using the system. We recommend that you merge a patch with its required prerequisites, with the exception of prerequisite patches for the AD product.

Starting with AD Minipack H, AutoPatch has a Prereq feature that, when run with patches containing metadata, automatically determines if prerequisites are not fulfilled and informs you. At this point, you can download the prerequisites, merge them with the patch, restart AutoPatch, and apply the merged patch. Older patches, or patches whose metadata is missing the prerequisite information, may list prerequisite patches in the patch README. See Oracle Applications Maintenance Utilities for information Top

Q: How do I apply multiple translation patches? A: If an Oracle Applications system contains multiple languages other than American English (US) and you are applying multiple patches for each language, the recommended method is to merge all US patches into a single patch and all patches for every non-US language into a single patch. Then, apply the merged US patch followed by the merged language patch. You can also merge US patches with the additional language patches or merge each language in separate language-specific patches. Depending on your downtime window and your system topology, it may be necessary to keep the US and non-US patches separate. See Oracle Applications Maintenance Procedures for a more detailed analysis and step-by-step procedures. Top

Q: How can I determine the effects a patch will have on my system? A: You can submit a specific patch impact analysis request through the Patch Wizard in the Oracle Applications Manager (OAM) 2.2 and later to determine the impact of a patch on your system. The Patch Impact Analysis feature of Patch Wizard provides reports on:

- The total number of files in the patch
- The number of files the patch will install
- The products that will have updated files
- The files that will be introduced by the patch
- The files on the target system that will be changed by the patch
- The files with dependencies on patched files

See Oracle Applications Maintenance Utilities for additional information. Top

Q: What happens if I run a driver on the wrong application tier server? A: Because AutoPatch applies only the necessary actions for each type of application tier server, any driver can be applied to any APPL_TOP on any node. However, the sequence is important. Patches without unified drivers must have the drivers applied in the following order: copy driver, database driver, and generate driver. Top

Q: What are AutoPatch restart files? A: Restart files store information about completed processing in the event of a patch or system failure. They allow AutoPatch, AutoUpgrade, and AD Administration to continue processing at the point where they stopped. Do not modify or delete restart files unless specifically told to do so by Oracle Support Services. The restart files reside in \$APPL_TOP/admin/<SID>/restart (UNIX) or in %APPL_TOP%\admin\<SID>\restart (Windows). Top

Q: If I am applying a patch and it fails, should I simply rerun it from the beginning after fixing the issue? A: If a patch driver fails, fix the issue and restart AutoPatch. AutoPatch will allow you to continue where the patch left off. Rerunning the patch from the beginning may result in a patch being applied incorrectly. Top

Q: What should I do when the Oracle Applications AutoPatch Prerequisite Checking Feature fails? A: There are various issues that could cause a failure in the AutoPatch Prerequisite Checking Feature. Please refer to OracleMetaLink Note 233040.1 Top

Q: If a worker fails when AutoPatch is running, what should I do?

A: When a worker fails its job, the AD utility running the worker will take one of several possible actions:

- Defer the job to the end of the list of jobs to run and assign the worker another job
- Set the worker status to Failed and continue to run jobs in other workers

- If all other workers are in failed or waiting state, wait for user input (interactive mode) or exit (non-interactive mode)

If the worker remains in a failed state, examine the worker log file and determine the cause of the failure. The worker log files are named adwork<number>.log (for example adwork01.log or adwork001.log). They are located in the same directory as the main AD utility log file. By default this is under \$APPL_TOP/admin/<SID>/log. Attempt to correct the problem and restart the failed job. If you cannot determine the cause of the failure, try restarting the failed job to see if it works the second time (it may have failed due to a concurrency or resource issue). To restart a failed job, run AD Controller and choose the option to restart a failed job. Enter the worker number when prompted. You can use AD Controller to see the status of jobs both before and after restarting them. The status before restarting should be Failed, and the status after restarting should be Fixed, Restart. If you are unable to fix the failed job, contact Oracle Support Services for assistance. If the AD utility exited after the job failed, you must use AD Controller to restart the failed job before you can restart the AD utility. Otherwise, the AD utility will detect the failed job and shut down again. Top

Questions

1. What is a "shared APPL_TOP"?
2. What is a "shared application tier file system"?
3. What operating systems are certified?
4. I want to migrate my existing Oracle Applications system to a shared application tier file system. What 11i releases are supported?
5. Can I share the application tier file system across nodes with different platforms?
6. If the platforms of my nodes are binary-compatible, can I share application tier file systems? For example, can I share a node using Solaris 2.6 with one using Solaris 8?
7. Are there any restrictions on the type of shared disk resources that can be used for sharing an application tier file system?
8. Can I merge APPL_TOPs?
9. How can I implement a shared application tier file system during an Oracle Applications installation?
10. How can I migrate my existing Oracle Applications system to a shared application tier file system?
11. When migrating my existing Oracle Applications system to a shared application tier file system, I had to rename the Oracle Applications Context file. Will I still need the original file and its associated context directories/files?

Questions and Answers

1. What is a "Shared APPL_TOP"?

Answer: A traditional multi-node installation requires the Applications file system on each node in the system. In a Shared APPL_TOP installation, the APPL_TOP and the COMMON_TOP file systems are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services,

such as Forms, Web, and Concurrent processing. Any changes made in the shared APPL_TOP file system are immediately visible on all nodes. Note that each node continues to have a separate Applications techstack installation (see also question 2).

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2. What is a "shared application tier file system"?

Answer: In a shared application tier file system installation, the APPL_TOP, the COMMON_TOP, and the Applications technology stack (ORACLE_HOMEs) are installed on a shared disk resource mounted to each node in the system. These nodes can be used to provide standard application tier services, such as Forms, Web, and Concurrent processing. Any changes made in the shared application tier file system are immediately visible on all nodes.

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3. What operating systems are certified?

Answer: All Rapid Install platforms except Windows support a shared application tier infrastructure. There is no time estimate for a Windows solution.

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4. I want to migrate my existing Oracle Applications system to a shared application tier file system. What 11i releases are supported?

Answer: You can migrate any existing Oracle Applications 11i release to a shared application tier file system.

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5. Can I share the application tier file system across nodes with different platforms?

Answer: No. The nodes sharing the application tier file system need to be binary-compatible.

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6. If the platforms of my nodes are binary-compatible, can I share the application tier file systems? For example, can I share a node using Solaris 2.6 with one using Solaris 8?

Answer: Yes, you can share application tier file systems across nodes that are binary-compatible.

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7. Are there any restrictions on the type of shared disk resources that can be used for sharing an application tier file system?

Answer: No, your shared application tier file system can reside on any type of shared disk resource. Examples of shared disk resources include an NFS mounted disk or a disk array. The shared disk resource does not have to be local to the machine, and it can also be a standalone disk array. Usual tuning considerations apply.

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8. Can I merge APPL_TOPs?

Answer: Yes, you can merge APPL_TOPs that are spread across multiple nodes. Follow the instructions described in the OracleMetaLink document 233428.1.

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9. How can I implement a shared application tier file system during an Oracle Applications installation?

Answer: You must use the Rapid Install 11.5.10 or higher. Refer to Installing Oracle Applications for more information.

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10. How can I migrate my existing Oracle Applications system to a shared application tier file system?

Answer: Follow the instructions described in the OracleMetaLink document 233428.1.

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11. When migrating my existing Oracle Applications system to a shared application tier file system, I had to rename the Oracle Applications Context file. Will I still need the original file and its associated context directories/files?

Answer: The following files/directories can be removed after you back them up:

- o The original Context File <AD_TOP>/admin/<SID>.xml

- o The file <APPL_TOP>/APPSORA.env>

- o The directory <COMMON_TOP>/admin/scripts/<SID>

- o The directory <COMMON_TOP>/admin/install/<SID>

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Questions and Answers

Overview and Terminology

1. What is AutoConfig?

Answer: AutoConfig is a configuration tool that automates the configuration of an Oracle Applications system. The information required for configuring an Applications system is collected into a repository, called the Applications Context; there is one Applications Context for each application tier, and one for the database tier. When AutoConfig runs, it uses information from the Applications Context file to generate all configuration files and update database profiles. Refer to Metalink Note 165195.1 for details on installing, using and updating AutoConfig. The Oracle Applications Maintenance Procedures and the Oracle Applications Maintenance Utilities provide further information on how to use AutoConfig in the context of maintaining your system.

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2. What is the difference between the application tier and the database tier?

Answer: Before we can answer that, let's define a few terms in the context of the Release 11i architecture:

- o A node or machine is a computer.

- o A server is a collection of one or more computer processes that perform a specific function.

- o A tier is a logical grouping of one or more servers or computer processes.

Now let's answer the question.

- o The application tier (also called the middle tier) consists of a number of servers, such as the concurrent processing

server, web server, forms server, and administration server, that process the transactions of the Release 11i system, as well as provide communication between the desktop tier and the database tier. (Such servers are also referred to as application tier servers.

Likewise, the nodes on which such servers run are also referred to as application tier server nodes.)

- o The database tier consists of the database server, which stores all the data of the Release 11i system.

The primary location of the files used by the application tier servers is the APPL_TOP, whereas the primary location of the files used by the database server is the Oracle8i or Oracle9i ORACLE_HOME.

For more information about the Release 11i architecture, refer to Oracle Applications Concepts, Release 11i.

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3. How can I identify the application tier and the database tier in a multi-node system?

Answer: A node can contain one or more servers, and can therefore belong to one or more tiers.

In a single node system, that node belongs to both the application tier and the database tier, since all servers are contained on that single node.

In a multi-node system, each node contains one or more servers, and therefore belongs to one or both tiers. If the node contains any of the application tier servers, including the web server, forms server, concurrent processing server, or administration server, which means that there is an APPL_TOP on the node, then the node belongs to the application tier, and is considered an application tier server node. If the node contains the database server, which means that there is an Oracle8i or Oracle9i ORACLE_HOME and the Applications database instance on the node, then the node belongs to the database tier, and is considered a database server node.

Let's analyze a common configuration where the database server and the concurrent processing server exist on one node (Node 1), and the other servers exist on a second node (Node 2). Since Node 1 contains both an application tier server (the concurrent processing server) and the database server, Node 1 belongs to both the database tier and the application tier. But since Node 2 contains only application tier servers, Node 2 belongs only to the application tier.

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4. How do I configure AutoConfig for a multi-node system?

Answer: The AutoConfig patch is applied using AutoPatch. Therefore, it must be applied to each application tier server node, which means to each node that contains an APPL_TOP.

If the database server node contains only the database server and no other servers, then you would not apply an AutoConfig patch on that node.

Once all the application tier servers have been updated by the AutoConfig patch, there is a separate process for updating the database server, which is documented in Metalink Note 165195.1. This process consists of running the admkappsutil utility on one (only one) application tier, copying the generated appsutil.zip file to the database tier and unzipping the appsutil.zip file into the RDBMS ORACLE HOME.

Example 1: The system has two nodes. Node 1 = administration server, concurrent processing server, database server Node 2 = forms server, web server

Since both nodes are application tier server nodes, the AutoConfig patches need to be applied to both nodes. Once the patches are applied, you have to update the database server Node1 by running the admkappsutil utility from the APPL_TOP on Node1, copying the generated appsutil.zip to your RDBMS

ORACLE_HOME on Node1 and unzipping the appsutil.zip file into the RDBMS ORACLE_HOME.

Example 2: The system has two nodes. Node 1 = database server Node 2 = administration server, concurrent processing server, forms server, web server

Since Node 2 is the only application tier server node, the AutoConfig patch needs only be applied to Node 2. Once the patch is applied, you have to update the database server Node1 by running the admkappsutil utility from the APPL_TOP on Node2, copying the generated appsutil.zip to your RDBMS ORACLE_HOME on Node1 and unzipping the appsutil.zip file into the RDBMS ORACLE_HOME.

Example 3: The system has three nodes. Node 1 = database server Node 2 = administration server, concurrent processing server Node 3 = forms server, web server Since Node 2 and Node 3 are application tier server nodes, the AutoConfig patch needs to be applied to Node 2 and Node3. Once the patches are applied, you have to update the database server Node1 by running the admkappsutil utility either from the APPL_TOP on Node1 or Node2 (it does not matter on which Node you run the admkappsutil utility), copying the generated appsutil.zip to your RDBMS ORACLE_HOME on Node1 and unzipping the appsutil.zip file into the RDBMS ORACLE_HOME.

Reference:

o Metalink Note 208738.1

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5. What user do I log in as to use AutoConfig in a typical multi-node system?

Answer: For nodes running Windows, there is only one user that owns both the application tier servers and the database server, so you would log in as that user.

For nodes running UNIX or Linux, if you want to configure the application tier servers, log in as the user that owns the application tier servers (sometimes referred to as the applmgr user). If you want to configure the database server, log in as the user that owns the database server (sometimes referred to as the oracle user).

[top]

6. How do I determine if AutoConfig is enabled?

Answer: Check for the script adcfginfo.sh (adcfginfo.cmd on Windows) under <AD_TOP>/bin. If it exists, use it to check whether AutoConfig is enabled. For the APPL_TOP:

```
adcfginfo.sh contextfile=<CONTEXT>
```

For products:

```
adcfginfo.sh contextfile=<CONTEXT> show=enabled
```

If adcfginfo.sh doesn't exist, look in any configuration file in your APPL_TOP. If the file header contains the following, AutoConfig has been run on your instance :

```
#####  
## AutoConfig automatically generates this file. It will be read and # overwritten. If you  
were instructed to edit this file, or if you are not # able to use the settings created by  
AutoConfig, refer to Metalink # document 165195.1 for assistance. #  
#####
```

Note: If you manually changed any file containing this file header, it is no longer considered as officially AutoConfig enabled!

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7. Is AutoConfig compatible with Oracle Applications 11.5.x?

Answer: Yes, it is compatible with all 11i releases. You can use AutoConfig to configure and maintain any Oracle Applications 11i environment.

Release 11.5.1 - 11.5.6 (all tiers): Apply the latest AutoConfig consolidated patch to obtain the AutoConfig utility.

Release 11.5.7 and higher (application tier): AutoConfig is included in new Applications installations and in the associated maintenance packs.

Release 11.5.9 and higher (database tier): AutoConfig is included in new Applications installations and in the associated maintenance packs.

Note: If you upgrade from a maintenance pack version that does not include AutoConfig to a maintenance pack version that includes AutoConfig (for example you upgrade from 11.5.3 to 11.5.10), you have to separately migrate to AutoConfig as part of the pre-

upgrade process. Follow the instructions of the corresponding maintenance pack.

[top]

8. What does the term "Context_name" mean?

Answer: The "Context_name" is the logical name for your Context. The default value for Context_name is <SID>_<hostname>. In earlier versions of AutoConfig the default was set to <SID>.

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9. What are the basic components of AutoConfig?

Answer:

Components

Location

Description

Applications Context

On the application tier: <APPL_TOP>/admin

On the database tier: <RDBMS_ORACLE_HOME>/appsutil

An XML repository (<Context_name>.xml) contains information specific to that Applications instance. Can be updated by running the Context Editor. Do not manually update this file!

AutoConfig Template Files

On the application tier: <PROD_TOP>/admin/template For example:

<AD_TOP>/admin/template <FND_TOP>/admin/template

Include named tags which are replaced within instance-specific information from the Applications Context. There is one template

On the database tier: <RDBMS_ORACLE_HOME>/appsutil/template

file for each configuration file. For example: apps_nt.conf apps_ux.conf

AutoConfig File Driver

On the application tier: <PROD_TOP>/admin/driver For example:

<AD_TOP>/admin/driver/adtmpl.drv <FND_TOP>/admin/driver/fndtmpl.drv

On the database tier: <RDBMS_ORACLE_HOME>/appsutil/template

Used by AutoConfig to list the AutoConfig Template Files, their destination locations, and the commands to be executed, for example, the commands to update profile options.

Every Product Top contains its own AutoConfig File Driver.

AutoConfig Scripts

On the application tier: <AD_TOP>/bin

On the database tier: <RDBMS_ORACLE_HOME>/appsutil/bin

Provide a simplified interface to the AutoConfig APIs. For example: `adautocfg.sh / adautocfg.cmd` `adconfig.sh / adconfig.cmd`

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10. What are the different AutoConfig scripts and what do they do?

Answer: The scripts are listed in the following table.

Note: `.sh` scripts are for UNIX users and `.cmd` scripts are for Windows users.

Scripts

Location

Description

`adautocfg.sh`

`adautocfg.cmd`

On the application tier: `<COMMON_TOP>/admin/scripts/ <Context_name>`

On the database tier: `<RDBMS ORACLE_HOME>/appsutil/ scripts/ <Context_name>`

A wrapper script that calls `adconfig.sh/ adconfig.cmd`. Instantiates template files `wspecific` to the instance (take the Applications Context). Unconfiguration files and profile

`adconfig.sh`

`adconfig.cmd`

On the application tier: `<AD_TOP>/bin`

On the database tier: `<RDBMS ORACLE_HOME>/appsutil/bin/`

A wrapper script that calls an earlier version of `AutoCadconfig.sh/adconfig.cmd` use the Java API to start AutoC

`adconfig.pl`

On the application tier: `<AD_TOP>/bin`

On the database tier: `<RDBMS ORACLE_HOME>/appsutil/bin`

A wrapper script that calls tAPI to start AutoConfig.

`adbldxml.sh`

`adbldxml.cmd`

On the application tier: `<AD_TOP>/bin`

On the database tier: `<RDBMS ORACLE_HOME>/appsutil/bin`

Creates the Applications CoBefore running this script, `ysource` the environment. On the

application tier: Source `APPS<Context_name>APPSORA.env` if

`APPS<Context_name>.env` exist). On the database tier: Source `<Context_name>.e`

`adchkcfg.sh`

`adchkcfg.cmd`

On the application tier: `<AD_TOP>/bin`

On the database tier: `<RDBMS ORACLE_HOME>/appsutil/bin`

Generates a report that highlights differences between the orfiles and AutoConfig-generated files.

The report is named `cfgcheck.html`. It is located On the application tier:

`<APPL_TOP>/admin/ <Context_name>/out/<MMO`

On the database tier:

`<RDBMS ORACLE_HOME>/appsutil/o<Context_name>/<MMDDh`

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AutoConfig pre-requisites

11. Do I need to upgrade to Apache 1.3.12s?

Answer: If you are applying the AutoConfig patch to an instance created with a Rapid Install version lower than Release 11.5.5, upgrade to Apache 1.3.12s.

Refer to Metalink Document 161779.1 on OracleMetalink.

Note: Rapid Install for versions 11i7 and higher installs Oracle HTTP Server 1.3.19 from iAS 1.0.2.2

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The Context file

12. How will the adbdxml utility name the Applications Context file it generates?

Answer: When adbdxml generates the Context file, it first checks for the existence of an Applications Context file conforming to specific requirements in the <APPL_TOP>/admin directory on the application tier and in the <RDBMS ORACLE_HOME>/appsutil directory on the database tier. If an xml file exists, adbdxml creates the Applications Context

file using the same name. Specific requirements are:

- o The Context file refers to the hostname for which we generate the file.
- o The Context file refers to the Database SID for which we generate the file.

The default name for the Context file is <Context_name>.xml.

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13. How can I make changes to the Applications Context file?

Answer: Go to the OAM Login page. Sign in and navigate to Site Map. Click on AutoConfig. Use this link to update your Applications Context file.

For additional information see the Oracle Applications Maintenance Procedures.

Note: Manually editing the Applications Context file is not supported. Many context variables have dependencies between each other. The OAM AutoConfig resolves all these dependencies when changing the value of a variable. By manually editing the Applications Context file you will bring the data into an inconsistent state.

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14. I want to execute the adbdxml utility on a fresh RDBMS Oracle Home. How can I build the Context file, when the database environment file is not present?

Answer: The adbdxml utility requires the following environment variables to be set:

- o ORACLE_HOME
- o ORACLE_SID (LOCAL on Windows)
- o TNS_ADMIN

Set the variables according to your instance. For example:

- o On UNIX export ORACLE_SID=PROD
- o On Windows set LOCAL=PROD

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15. I was instructed to change the value of the context variables s_adperlprg and s_perl5lib. How can I achieve that?

Answer: Apply the latest AutoConfig patch, then perform the following steps depending on your use case:

o You were instructed to use a certain perl version. You have perl and its libraries installed in the perl standard location for your os (e.g. /usr/lib/perl5 on Linux) and perl is in your PATH:

1. unset PERL5LIB
2. perl \$AD_TOP/bin/adconfig.pl
3. Source the environment file (APPS<Context_name>.env)
4. Review your Applications Context file; s_adperlprg and s_perl5lib will now point to your system perl location.

o You were instructed to use a certain perl version. You installed perl and its libraries into a custom - non perl standard location (e.g. perl is installed at /u03/myperl/bin and the perl libraries at /u03/myperl/lib).

1. PERL5LIB=<location of the new PERL5LIB that you want to use>
2. export PERL5LIB
3. <location of the new perl you want to use> <AD_TOP>/bin/adconfig.pl
4. Source the environment file (APPS<Context_name>.env)
5. Review your Applications Context file; s_adperlprg and s_perl5lib will now point to your customized perl location.

Example:

```
?? PERL5LIB=/u03/myperl/lib/5.00503:/u03/myperl/lib/site_perl/5.005
```

```
?? export PERL5LIB
```

```
?? /u03/myperl/bin/perl $AD_TOP/bin/adconfig.pl
```

AutoConfig will update the context variables in the context file accordingly. After the AutoConfig run subsequent utilities and tools can use the context variables s_adperlprg and s_perl5lib.

[top]

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All answers are my own or copied from other sites; I really appreciate if anybody can suggest a better answer

1)My cloning is completed successfully but my apps listener is not getting up?? What is the problem ?

2)I am applying a patch , can I open another session and run adadmin ?

Yes, unless you are running a process where workers are involved

3)I am applying a patch , can I open another session in another node and run adpatch? (not distributed patching)?

No

4)When database is up, listener is up. Listener.ora and tnsnames.ora both are configured properly, still client is not being able to make a connection to the database. What may be the possible issues?

Check sqlnet.ora and see the client IP Address information is available

```
tcp.validnode_checking = yes
```

```
tcp.invited_nodes = (hostname1, hostname2)
```

5)How would take the forms trace?

http://www.appsdba.info/docs/oracle_apps/performance/PerformanceProblemswithform.pdf

6) Can C driver be applied when database is down?

No, for any patch u are applied authentication is mandatory

7)If users complain they cant see the login page , how you will debug the issue?

Check whether apache is running (ps -ef |grep http), u can also apache log file

8)How you will troubleshoot if concurrent request is taking long time ?

9)If your applying a patch, it was started successfully and in the middle you realize

nothing happening and no update in patch log file, worker log file (no updates & no error messages) ... How to troubleshoot?

10) Is it possible to clone a database from hotbackup?

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Yes

11) When you're applying a patch in test mode, does it generate a log file?

Yes, never tried though

12) If the user is experiencing performance issues, then how will you find the cause?

13) Output & logfiles for requests executed on source instance not working on cloned instance??

Check whether apps listener is running

14) What happens if you don't give cache size while defining concurrent manager?

Most often when ... a request goes "inactive/no manager" and is then processed a short time

later, the solution is to either increase the cache size for your Standard manager, or increase

the actual number of Standard Manager processes that can run. Cache Size is set in the Concurrent/Manager/Define form. Basically, this regulates how many requests a manager will pick up for each sleep cycle.

Increasing the cache size within reason allows you to decrease the sleep cycle. In turn, your

managers will wake up and scroll through the tables less frequently, which reduces the amount of work they have to do as well as the amount of system resources utilized. We see

sleep cycles set to 5 seconds at some customer sites and recommend increasing the value, since the managers are waking up and re-reading the same table far too frequently. For reports that for the most part take a minimum of 1 minute to run, the queue wakes up 12 times to check for runnable processes before even one running request completes.

15) If user complaining Oracle applications 11g system is running slow, what things will you check at broad level?

16) How do you determine if Oracle database has corrupt blocks?

17) Are the existing DB connections dropped if the DB listener is restarted?

No, never tried though

18) How do you preserve customizations in a cloned Oracle apps environment?

19) If users are unable to see the output of their concurrent requests, what could be the reason?

Apps listener is not running

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20) Can you start the database from middle tier?

No

Copied from other website

* Below script are from metalink and oracle reserved the copyrights. These scripts are mentioned here for information only

For Apps DBA the good place to search for script is with in their installation of 11i. The path is \$FND_TOP/sql (Usually on Concurrent Manager Node). The following SQL scripts located under \$FND_TOP/sql are useful when diagnosing concurrent manager problems:

afimchk.sql Tells the status of the ICM and PMON method

afcmstat.sql Lists active manager processes

afrqrun.sql Lists all the running, waiting and Terminating requests

afrqwait.sql Lists requests that are constrained and waiting for the ICM to release them.

afrqscm.sql Prints log file name of managers that can run a given request. It can be used to check for possible errors when a request stays in pending status. It requires a request id value.

afcmcreq.sql Prints the log file name of the manager that processed the request

afrqstat.sql Summary of completed concurrent requests grouped by completion status and execution type. It requires number of days prior to today on which to report parameter.

afimlock.sql Lists locks that the ICM is waiting to get

afcmrrq.sql Lists managers that currently are running a request

APPLSYS schema contains shared APPS foundation objects like FND,AD,WF related data like tables and Indexes.

APPS is the runtime user for E-Business Suite. Owns all the applications code in the database. APPS Schema Contains Synonyms to the objects of All Products (AP,AR, GL etc) and 11i Code (Triggers, views, packages, procedures, functions) but the owner of all
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GL tables is GL user , AP tables is AP , and AR tables is AR Schema.

Why should Apps & Applsyst passwords always be the same?

The need to have the same password for Apps and Applsyst is because when you sign on to apps, initially it connects to a public schema called APPLSYSPUB. This validates AOL username and password that we enter (operations/welcome using guest user account. Once this is verified we select responsibility, this is validated by APPLSYS schema and then it connects to APPS schema.

Since it uses both applsyst and apps during signon process this expects both the password to be identical. Try changing apps password to something else and try to login, the validation at the last stage would fail. This would result in failure of application login.

Apps is a universal schema has synonyms to all base product tables and sequences. This also has code objects for all products (triggers, views, packages, synonyms etc.).

Applsyst schema has applications technology layer products like FND and AD etc.

Q How to use the checksum utility for comparing ?

```
$ cd /u01/Stage11i
```

```
$ find oraAppDB oraApps oraDB oraiAS startCD -type f -exec md5sum '{}' \; >  
md5sum_myStage.txt &
```

Metalink Note Id : 316843.1

Q:What scripts can be used to compile apps schema , which one is used in admin compile apps schema ?

ANS :

adadmin in-turn calls the procedure UTL_RECOMP.RECOMP_PARALLEL which might be in-turn issues the following commands based on the object types if object is package body

```
alter package <package_name> compile ;  
alter package <packae_ame> compile body;  
alter view <view_name> compile;  
$AD_TOP/sql/adcompsc.pls
```

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Q : Why DB-CM-ADMIN are always insatlled on the same machine in Oracle Applications in Multi Node Installation ?

ANS: As such there is no restriction to install all of them on a single machine, but if we install them on 3 different machines then when we will run any AD utility on admin node or perform any upgradation it needs to access the database so there will be lot of overhead in accessing the database node on network so to avoid this overhead we install them on same machine. Similar is the case when we run any concurrent request on the CM node as Concurrent manager also updates the database objects.

Q. How will you find discoverer version in Apps ?

Version

```
$ORACLE_HOME/Discwb4
```

```
$ string
```

Checking the version of any File

You can use the commands like the following:

```
strings -a $XX_TOP/filename |grep '$Header'
```

B. What URL you use to access Disco viewer & Disco plus .

where hostname & domainname are machine name & domain name on which you installed 10g AS & port number is port you selected at install time default 7777 , though you can change these hostname & port number to your desired value

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The location for looking for dis4pr is \$ORACLE_HOME/diswb4/bin where ORACLE_HOME -> 8.0.6. Oracle Home

Q: I have created EUL using Discoverer 10g Administrator, but my server side is running 9i AS can I still use Discoverer Plus/Viewer to show reports based on 10g EUL?

Ans : Your Discoverer Desktop Admin version is 10g and EUL on server is 9i. As soon as you try to connect to 9i Server it will display message that You are using old version of EUL kindly upgrade & it will upgrade EUL on server to 10g

Q: The Oracle Applications use Jinitiator. What is a "Jinitiator"?

Jinitiator for the PC is an Oracle implementation of Sun's JavaSoft Plug-In for Solaris. It is used for connectivity between a Windows based client and Oracle Applications forms. The Apple Macintosh "MRJ" is an Apple's MAC OS component.

Q: What browsers can be used with Jinitiator?

For PCs, Oracle will support Internet Explorer v 5.5 or lower or Netscape 5.5 or lower. Internet Explorer is Oracle's browser of choice.

Oracle will support Mac OS 8 to 9.21 with Oracle Applications and using the Discoverer 3i viewer. Internet Explorer 5.1 works with the Oracle Applications. Netscape does not.

Q: I'm getting a Yellow Warning Bar. How do I get rid of this?

1. Yellow Warning Banners

a. What Does "Warning: Applet Window" Mean?

Oracle Applications Release 11.5.1 (11i) requires that its code run in a trusted mode, and uses J-Initiator to run Java applets on a desktop client. If an applet is "trusted," however, Java will extend the privileges of the applet. The Yellow Warning Bar is a warning that your applet is not running in a trusted mode. To indicate that an applet is trusted, it must be digitally signed using a digital Certificate, so Oracle Applications requires that all Java archive files must be digitally signed.

b. Who Does This Affect?

This affects all users that try to access Oracle Applications Rel 11i using Jinitiator that have a different identitydb.obj on their client.

Clients have an "identity database" that is maintained by J-Initiator called IDENTITYDB.obj. When a jar file is downloaded, the owner of the digital signature is compared against the entry in the identity databases. If they match, the code contained in the archive is allowed to run in a trusted mode. The users will need to fix their client PC in one of two ways:

i.

a. Uninstall Jinitiator and clear browser cache

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b. Log back into Applications to get the new plugin, (ojinit.exe) including the new identitydb.obj

c. Install the Jinitiator on the Client PC and then Log into the Oracle Applications to download the new signed JAR files

OR

ii.

a. Copy the IDENTITYDB.OBJ file to C:\Program

Files\Oracle after saving the old one as IDENTITYDB.old.

When I try to download / install J-Initiator from the web, I get the error: Your current security settings prohibit running ActiveX controls on this page. As a result, the page may not display correctly. I hit OK, and the download stops. What does this mean?

This means that your security settings are too high for the J-Initiator software to download. To fix this problem, go to Tools ' Internet Options and click on the "Security" tab. Click on the Internet icon and then on the button labeled "Custom Level". Enable the following ActiveX controls: "Download unsigned ActiveX controls," "Run ActiveX controls and plug-ins," and "Allow per-session cookies (not stored)." Then hit OK. OR simply set the Security Settings to low, and hit the button labeled "Reset" then "Yes" then "Ok." Once the install is complete, you may set your security settings back to what they

were originally.

What happens if the ICM goes down?

All the other managers will keep working. ICM only takes care of the queue control requests, which means starting up and shutting down other concurrent managers.

How will you speed up the patching process?

You can merge multiple patches.

You can create a response file for non-interactive patching.

You can apply patches with options (nocompiledb, nomaintainmrc, nocompilejsp) and run these once after applying all the patches.

```
perl -x $JTF_TOP/admin/scripts/ojspCompile.pl --compile
```

```
utrl.sql for database compilation
```

How will you handle an error during patching?

Look at the log of the failed worker, identify and rectify the error and restart the worker using adctrl utility.

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Q: if you want to check the URL of the Application in the database in which table you can check ?

Ans : (Method 1)

```
select * from icx_parameters
```

Method 2

```
SELECT
```

```
PROFILE_OPTION_VALUE
```

```
FROM
```

```
FND_PROFILE_OPTION_VALUES
```

```
WHERE
```

```
PROFILE_OPTION_ID = (SELECT PROFILE_OPTION_ID FROM
```

```
FND_PROFILE_OPTIONS WHERE PROFILE_OPTION_NAME
```

```
= 'APPS_FRAMEWORK_AGENT') AND
```

```
LEVEL_VALUE=0
```

```
select * from FND_PROFILE_OPTIONS WHERE PROFILE_OPTION_NAME
```

```
= 'APPS_FRAMEWORK_AGENT'
```

```
select * from fnd_profile_option_values
```

```
where PROFILE_OPTION_ID=4532
```

Q: How to find CPU & Memory detail of linux

ANS :

```
cat /proc/cpuinfo (CPU)
```

```
cat /proc/meminfo (Memory)
```

Q : To check whether the patch is already there or not. For this we query the database:

```
select * from AD_BUGS where bug_number='<patch number>'
```

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Q: How to find if any service is listening on particular port or not ?

```
netstat -an | grep {port no}
```

For example if you know that OID is running on 389 port so to check if OID services is listening or not then use

```
netstat -an | grep 389
```

what is the way to find version of installed family packs?

Select product_version,patch_level from

FND_PRODUCT_INSTALLATIONS where patch_level like '%GL%';

Replace short name by name of Oracle Apps Minipack for which you want to find out Patch level . ex.

AD - for Applications DBA

GL - for General Ledger

PO - Purchase Order

Another method can be using the patchsets.sh utility which can be downloaded from Metalink.

Provide an introduction to AutoConfig. How does AutoConfig know which value from the XML file needs to be put in which file?

AutoConfig uses a context file to maintain key configuration files. A context file is an XML file in the \$APPL_TOP/admin directory and is the centralized repository.

When you run AutoConfig it reads the XML files and creates all the AutoConfig managed configuration files.

For each configuration file maintained by AutoConfig, there exists a template file which determines which values to pick from the XML file.

Location of Autoconfig Script (ADAUTOCFG.sh)

COMMON_TOP/admin/scripts/<CONTEXT_NAME>

Autoconfig can also be run in test mode with following script which will not update anything in the system (ADCHKCFG.sh)

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Location on Application Tier

<AD_TOP>/bin

Location on Database Tier

ORACLE_HOME>/appsutil/bin

The AutoConfig test mode script produces a configuration report that shows the changes the AutoConfig script would have made. The configuration report, cfgcheck.html, is written to <APPL_TOP>/admin/<CONTEXT_NAME>/out/<MMDDhhmm> for the application tier, and for the database tier in

<RDBMS_ORACLE_HOME>/appsutil/out/<CONTEXT_NAME>/<MMDDhhmm>.

MMDDhhmm stands for the month, day, hour, and minute of the AutoConfig test mode script session.

A brief about snapshots ?

There are two types of snapshots: APPL_TOP snapshots and global snapshots. An APPL_TOP snapshot lists patches and versions of files in the APPL_TOP. A global snapshot lists patches and latest versions of files in the entire Applications system (that is, across all APPL_TOPs). Both APPL_TOP snapshots and global snapshots may be either current view snapshots or named view snapshots. A current view snapshot is created once

and updated when appropriate to maintain a consistent view. A named view snapshot is a copy of the current view snapshot at a particular time (not necessarily the latest current view snapshot) and is not updated. Patch Wizard uses the information contained in the global current view snapshot to determine which patches have already been applied. AutoPatch uses the APPL_TOP current view snapshot to determine if all prerequisite patches have been applied to that APPL_TOP. Snapshot information is stored in the AD_SNAPSHOTS, AD_SNAPSHOT_FILES, and AD_SNAPSHOT_BUGFIXES tables.

Can you tell me a few tests you will do to troubleshoot self-service login problems?

Which profile options and files will you check?

Check guest user/password in the DBC file, profile option guest user/password, the DB.

Check whether apache/jserv is up. Run IsItWorking, FND_WEB.PING, aoljtest, etc.

What could be wrong if you are unable to view concurrent manager log and output files?

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Most likely the FNDFS listener is down. Look at the value of OUTFILE_NODE_NAME and LOGFILE_NODE_NAME in the FND_CONCURRENT_REQUESTS table. Look at the FND_NODES table. Look at the FNDFS_ entry in tnsnames.ora.

How will you change the location of concurrent manager log and output files?

The location of log files is determined by parameter \$APPLCSF/\$APPLLOG and that of output files by \$APPLCSF/\$APPLOUT.

If the user is experiencing performance issues, how will you go about finding the cause?

Trace his session (with waits) and use tkprof to analyze the trace file.

Take a statspack report and analyze it.

O/s monitoring using top/iostat/sar/vmstat.

Check for any network bottleneck by using basic tests like ping results.

How will you change the apps password?

Use FNDCPASS to change APPS password.

Manually modify wdbsvr.app/cgiCMD.dat files.

Change any DB links pointing from other instances.

If you changed the APPS (and APPLSYS) password, update the password in these files:

- iAS_TOP/Apache/modplsql/cfg/wdbsvr.app
- ORACLE_HOME/reports60/server/CGIcmd.dat

If you changed the APPLSYSPUB password, update the password in these files:

- FND_TOP/resource/appswweb.cfg
- OA_HTML/bin/appswweb.cfg
- FND_TOP/secure/HOSTNAME_DBNAME.dbc

Provide the location of the DBC file and explain its significance and how applications know the name of the DBC file.?

Location: \$FND_TOP/secure directory.

Significance: Points to the DB server amongst other things.

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The application knows the name of the DBC file by using profile option "Applications Database Id."

How can u change the logfiles location suppose CM logfile location is APPLCSF now if we want to change that to a nother location hw is it possible.

Ans: Change the Configuration File parameters

change s_applcsf,s_appllog,s_applout variables in XML file and run the autoconfig. Conflict resolution managers resolves the conflicts yes , but hw it knows tht there are conficts?why conflicts occur?

Ans:

Concurrent managers read request to start concurrent programs running. The Conflict Resolution Manager checks concurrent program definitions for incompatibility rules.

If a program is identified as Run Alone, then the Conflict Resolution Manager prevents the concurrent managers from starting other programs in the same conflict domain.

When a program lists other programs as being incompatible with it, the Conflict Resolution Manager prevents the program from starting until any incompatible programs in the same domain have completed running.

What is adovars.env file ?

The adovars.env file, located in \$APPL_TOP/admin, specifies the location of various files such as Java files, HTML files, and JRE (Java Runtime Environment) files. It is called from the main applications environment file.

How to find the wordsize (32-bit or 64-bit) of Oracle Database

If you have access to an Oracle database which is installed on a 64-bit OS, how can you identify whether Oracle is 32 bit or 64 bit ?

Gary Robinson's oracleadvice.com has very good pointers on how to determine the

WORDSIZE

64-bit Oracle

How to Compile JSP's without using ADADMIN

adpatch options=nocompilejsp

Tue, 2007-07-10 16:44

When you use adpatch options=nocompilejsp, the lengthy time spent in compiling out of date jsps is

saved. The command to compile jsps outside of adpatch is:

```
perl -x $JTF_TOP/admin/scripts/ojspCompile.pl --compile
```

Here's how the output of the above command looks like:

initializing compilation:

eliminating children...12318 (-3091)

searching uncompiled...8677

translating and compiling:

searching untranslated...0

compiling jsps... 12% complete: 1100/8677 ETA: 14m7s

Do not use --quite option, as you would not be able to know the progress.

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-log <file> to override logfile from ojspCompile.conf

You are

recommended to set the log file location

outside of any network file system shared (NFS) area/drive.

-conf <file> to override ojspCompile.conf

--retry retry previously failed compilation attempts

--flush forces recompilation of all parent JSPs

--quiet do not provide an actively running progress meter

--fast instantly fail jsps that are *possibly* invalid

example1: ojspCompile.pl --compile -s 'jtf%' -p 20 --retry

example2: ojspCompile.pl --compile -s 'jtflogin.jsp,jtfavalid.jsp' --flush

example3: ojspCompile.pl --compile --fast --quiet

jsps do compile on the fly, but that affects the application performance. So it is a good idea to

compile them in advance, if you have not done it during adpatch itself.

How to find the ORACLE_HOME path in Oracle Database?

In 9i:

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Q. What is wdbsvr.app file used for? What's full path of this file? What's significance of this file ?

I'll again suggest you don't just remember answer & try to solve mystery behind this file.

First where this file exists ? You can find this file under

\$IAS_ORACLE_HOME/Apache/modplsql/cfg

Based on file location I am sure you can say this is related to Apache, & looking into modplsql/cfg , I say its related to mod_pls (mod pls sql component of Apache/Oracle 11i WebServer) configuration file. This file is used by mod_plsql component of Apache to connect to database. So when you type url http://hostname:port/pls/SID , whenever Apache(11i Web Server) finds that request is for /pls/ then Apache delegates this request to mod_pls component which in turn pick this file & check if there is any DAD with

can correlate it with your Oracle database software installation (I know after reading this example you will say its weird but believe me thats how understood it initially , ORACLE_HOME can be called as ORA_TOP , network directory you can say TNS_TOP)

Under (ORA_TOP) you will see diretcory related to oracle home , there are two oracle HOME's in Application Tier 8.0.6 for Forms & Reports , iAS for 9iAS acting as web server)

COMN_TOP will contain files & directories which will be used commonly by all components (Isn't this simple to understand)

Similarly IAS_TOP is top files/directory under ORA_TOP/iAS I hope it might be clear to you now if not donot worry it will be more clear once you start working as Apps DBA.

I am attaching few screenshot of other mount points (Courtesy oracle 11i concepts guide , below is location if you want to read .

http://download-uk.oracle.com/docs/cd/B25516_08/current/

acrobat/11iconcepts.pdf (Add these three lines before putting in to browser , I have not put it in single line as it breaks my page layout)

So In this guide you will find few more screenshot of different TOP's , Go through Chapter 2 , Just 13 Pages (13 unlucky number for someone but if understand this chapter , it can be very lucky for you in your Apps DBA Career.

Q. Whats US directory in \$AD_TOP or under various product TOP's .

US directory is default language directory in Oracle Applications. If you have multiple languages Installed in your Applications then you will see other languages directories besides US, that directory will contain reports, fmx and other code in that respective directory like FR for France, AR for arabic, simplifies chinese or spanish.

Q. Whats main concurrent Manager types.

ICM - Internal Concurrent Manager which manages concurrent Managers

Standard Managers - Which Manage processsing of requests.

CRM - Conflict Resolution Managers , resolve conflicts in case of incompatibility.

You can check the Status of the concurrent Managers using this script

\$FND_TOP/sql/ afcmstat.sql

Q : What are the different methods as per Metalink for finding which patches are applied in 11i

1) patchsets.sh (Patch Comparison Tool)

2) AD_PATCH_DRIVERS table

3) Two reports adphrept.sql (patch history) and adfhrept.sql(file history) in \$AD_TOP directory

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4) Login to Oracle Applications Manager (OAM) => Applied Patches => Simple Search by 'Patch ID)

Q. What is Single user and Multi User Installation.

Single-user UNIX installations

In order to prepare for a single-user installation, you must first create an oracle user account and log in as the oracle user to run Rapid Install. The account should be created with a default shell that is compatible with the Bourne shell.

Multi-user UNIX installations

In order to prepare for a multi-user installation, you must first create an oracle user account and an applmgr user account. Both should be created with a default shell that is compatible with a Bourne shell. Log in as root to run Rapid Install. Then specify the oracle user as the Oracle OS user and the applmgr user as the Apps OS user.

The oracle user is the account that owns the database tier technology stack (9.2.0 ORACLE_HOME) and the database files. The default name for the oracle user is ora<SID>. For example, for a production (PROD) environment, the default Oracle OS username might be oraprod.

The applmgr user is the account that owns the application tier technology stack (APPL_TOP, COMMON_TOP, 8.0.6 ORACLE_HOME, and the iAS ORACLE

HOME). The default name is appl<SID>. For example, for a Vision Demonstration (VIS) environment, the default Apps OS username might be applvis.

For a multi-user install, you must install both the database server and one or more application tier servers on the same node. On such nodes, you can assign one user account to be the owner of the database tier file system, and another to be the owner of the application tier file system. If you are installing a system where the database server is on one node and all the application tier servers are on one or more separate nodes, then essentially you will perform a single-user installation on each node.

Q. Where would i find .rf9 file, and what exactly it dose?

These files are used during restart of patch in case of patch failure because of some reason.

Located in \$APPL_TOP/admin/<SID>/restart this folder also contains .bak ,.bk2 files
SAMPLE FILE (adwork012.rf9)

%% restart file format 11.5.A

Location: \$APPL_TOP/admin/<SID>/log contains .req files

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Q. Where is appsweb.cfg or appsweb_\$CONTEXT.cfg stored & why its used ?

This file is defined by environment variable FORMS60_WEB_CONFIG_FILE This is usually in

directory \$OA_HTML/bin on forms tier. This file is used by any forms client session.

When a user

try to access forms , f60webmx picks up this file and based on this configuration file creates a

forms session to user/client.

Sometimes also present in \$FNS_TOP/Resource directory

SAMPLE FILE

```
; Forms Web CGI Configuration File for Oracle Applications 11i
```

```
; $Header: appsweb.cfg 115.100 2001/08/16 12:49:06 pkm ship $
```

```
; -----
```

```
; This file defines parameter values used by the Forms Web CGI.
```

```
; These parameter values are defined on install. Customizations
```

```
; are possible by modifying sections at the end of this file.
```

```
; Environment administrators should familiarize themselves with
```

```
; this file and its three sections:
```

```
; - environment specific parameters,
```

```
; - default parameter values,
```

```
; - specific configurations.
```

```
; *****
```

```
; ENVIRONMENT SPECIFIC PARAMETERS
```

```
; *****
```

```
; These parameters describe the main production environment.
```

```
; They have to be updated after every patching of this file.
```

```
;
```

```
; Forms Server Information: port, machine name and domain
```

```

; -----
serverPort=9000
serverName=crmees06
domainName=.us.oracle.com
; If using Oracle Forms load balancing, set your serverName to
; serverName=%LeastLoadedHost%
; The following Metrics Server parameters define where the Forms Web CGI
; cartridge should obtain the name of the least loaded Forms Server.
; The default settings leave these parameters blank.
MetricsServerPort=9020
MetricsServerErrorURL=
; Environment Name is shown in Forms session browser startup window
envName=
; Splash Screen: displayed as a separate window on startup.
; oracle/apps/media/splash.gif is the default Oracle Applications
; splash screen (11.5.2+).
; Customers can customize this parameter by setting it to their
; icon's name and providing the icon in the $JAVA_TOP mapped to
; by the web server's OA_JAVA directory.
splashScreen=oracle/apps/media/splash.gif
;
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; Forms Client-Server Communication Mode: socket, http, or https
; -----
; Oracle Applications is recommending use of socket mode for intranet
; use, and https for internet use. Check Metalink for current issues.
connectMode=socket
;
; Database Connection Parameters
; -----
userid=APPLSYSPUB/PUB@EES06A
fndnam=apps
;
; JInitiator Parameters
; -----
; The following parameters relate to the version of JInitiator.
; !!! IMPORTANT !!!
; When patching this file, you must update these parameters to reflect
; the JInitiator version you are using in you environment. Follow
; Metalink Apps11i Alert "Upgrading the JInitiator version used with
; Oracle Applications 11i" (Note:124606.1)
jinit_ver_name=Version=1,1,8,13 ( tells which Jinit to use if u have multiple)
jinit_mimetype=application/x-jinit-applet;version=1.1.8.13
jinit_classid=clsid:ed54a7b0-6c1c-11d5-b63d-00c04faedb18

```

```

;
; Runform Parameters (NT platform ONLY)
; -----
; For Forms Servers running on NT platforms, the prodTop variable
; needs to be set to a FND_TOP-like value: all backslashes (\) should
; be modified to forward slashes (/).
; For example if FND_TOP is D:\oracle\prodappl\wnd\11.5.0 , then
; prodTop should be set to prodTop=D:/oracle/prodappl/wnd/11.5.0 .
; If using platforms other than NT leave the default:
prodTop=/appltop01/1155/ees06aappl/wnd/11.5.0
; For more details see Runform Arguments section of Default Parameters.
; *****
;
; DEFAULT PARAMETER VALUES
; *****
; It is not recommended to modify these unless requested by Oracle.
; SYSTEM PARAMETERS
; -----
; These parameters have fixed names and give information required by the
; Forms Web CGI in order to function. They cannot be specified in the
; URL query string, but they can be overridden in a named configuration
; (see sections below).
baseHTML=%OA_HTML%/US/appsbase.htm
baseHTMLJInitiator=%OA_HTML%/US/appsbase.htm
HTMLdelimiter=%
; The next parameter (IE50) specifies which JVM is used to execute the
; Forms applet under Microsoft Internet Explorer 5.0.
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IE50=JInitiator
; ORACLE APPLICATIONS PARAMETERS
; -----
; These match variables (e.g. %FORM%) in the baseHTML file. Their values
; may be overridden by specifying them in the URL query string
; (e.g. "http://myhost.mydomain.com/ifcgi60.exe?form=myform&width=700")
; or by overriding them in a specific, named configuration (see below)
; 1) Runform Arguments
; -----
; The module argument defines the first form to be started.
; It is composed from parameters %prodTop%/forms/%lang%/formName%
; The default looks like $APPL_TOP/wnd/<version>/forms/US/FNDSCSGN
; Following parameters and prodTop are used for composing module.
; Note: Personal Home Page modifies the lang setting automatically.
formName=FNDSCSGN
lang=US
;

```

```

; Server Application default is 'OracleApplications'
serverApp=OracleApplications
;
; Registry Path defines the location for .dat file
; default is '/OA_JAVA/oracle/apps/fnd/formsClient'
registryPath=/OA_JAVA/oracle/apps/fnd/formsClient
;
; Other Forms Server Arguments
env=
form_params=
; 2) Java Client Code Parameters
; -----
; Codebase defines the location of Java code top;
; default value is /OA_JAVA
codebase=/OA_JAVA/
;
; Code defines the first Java class to be executed;
; default value is 'oracle.forms.engine.Main'
code=oracle.forms.engine.Main
;

; 8) Special Configurations
; -----
; These configurations separate the JAR files used by CRM and ERP products
; for those users who only use one or the other, but not both.
; If using only CRM applications, JAR files for non-FND ERP products are
; not needed. Similarly, if using only ERP products, JAR files for
; CRM products are not needed.
; When the above holds for all users the following two specific
; configurations could be used as defaults.
[CRM]
archive2=
macarchive2=
[ERP]
archive3=
macarchive3=
;# *****
;#
;# Begin customizations
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;#
;# *****
;# Customizations below this line will be preserved if patching this
;# file via the instantiation utility.

```

```

; *****
; SPECIFIC CONFIGURATIONS
; *****
; You may define your own specific, named configurations (sets of parameters)
; by adding special sections as illustrated in the following examples.
; Note that you need only specify the parameters you want to change. The
; default values (defined above) will be used for all other parameters.
; Use of a specific configuration can be requested by including the text
; "config=<your_config_name>" in the query string of the URL used to run
; a form. For example, to use the sepwin configuration, you could issue
; a URL like "http://myhost.mydomain.com/ifcgi60.exe?config=sepwin".
; Example 1: configuration to run forms in a separate browser window with
; "generic" look and feel (include "config=sepwin" in the URL)
[sepwin]
separateWindow=True
lookandfeel=Generic
; Example 2: configuration affecting users of MicroSoft Internet Explorer 5.0.
; Forms applet will run under the browser's native JVM rather than
; using Oracle JInitiator.
[ie50native]
IE50=native
; Example 3: configuration forcing use of the base.htm base HTML file in all
; cases (means applet-style tags will always be generated and
; JInitiator will never be used).
[applet]
baseHTMLJInitiator=
; Example 4: configuration to run the demos
; PLEASE DO NOT REMOVE THIS EXAMPLE, !
; It is needed to run the Forms demos (if they are installed)
[demo]
pageTitle=Oracle Forms Server Demos
width=700
height=550
form=start60
userid=%Demos_ConnectString%
archive=f60all.jar, oracle_ice-4_03_1.jar
serverApp=/forms60demo/demo
lookAndFeel=oracle
colorScheme=teal
; Example 6: Oracle Applications Debug Configuration
; - logging turned on
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; - network statistics
; - potentially debug jar files

```

```

; - potentially other debug code
; - review JavaScript result for startup page (htmlDebug)
[debug]
envName=DEBUG
htmlDebug=true
record=all
netStats=true
;userjarfile=
; Example 7: Different JAR file configurations
; - All Needed JAR files, a.k.a. cup-of-tea mode
; - no On-Demand-Loading
[alljar]
jarloading=all
; -----
; Example 8: Customizing Oracle Applications
; -----
; - use the same appswb.cfg for multiple environments
; - customize the JAR files' signature & JInitiator
; - customize the browser called from appletviewer
; - use load balancing
;[apps]
;# *****
;#
;# End customizations
;#
;# *****
;# Begin customizations
;#
;# *****
;# Customizations below this line will be preserved if patching this
;# file via the instantiation utility.
; *****
; SPECIFIC CONFIGURATIONS
; *****
; You may define your own specific, named configurations (sets of parameters)
; by adding special sections as illustrated in the following examples.
; Note that you need only specify the parameters you want to change. The
; default values (defined above) will be used for all other parameters.
; Use of a specific configuration can be requested by including the text
; "config=<your_config_name>" in the query string of the URL used to run
; a form. For example, to use the sepwin configuration, you could issue
; a URL like "http://myhost.mydomain.com/ifcgi60.exe?config=sepwin".
; Example 1: configuration to run forms in a separate browser window with
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```

```

; "generic" look and feel (include "config=sepwin" in the URL)
[sepwin]
separateWindow=True
lookandfeel=Generic
; Example 2: configuration affecting users of MicroSoft Internet Explorer 5.0.
; Forms applet will run under the browser's native JVM rather than
; using Oracle JInitiator.
[ie50native]
IE50=native
; Example 3: configuration forcing use of the base.htm base HTML file in all
; cases (means applet-style tags will always be generated and
; JInitiator will never be used).
[applet]
baseHTMLJInitiator=
; Example 4: configuration to run the demos
; PLEASE DO NOT REMOVE THIS EXAMPLE, !
; It is needed to run the Forms demos (if they are installed)

```

;/# End customizations

Q. What is multi node system ?

Multi Node System in Oracle Applications 11i means you have Applications 11i Component on

more than one system. Typical example is Database, Concurrent Manager on one machine and

forms, Web Server on second machine is example of Two Node System.

Q. Explain steps used in cloning oracle Apps 11i Instance at broad level.

Another important & useful utility under AD_TOP which you and me as apps dba perform quite

often i.e. Cloning Oracle Application 11i Instance.

Cloning is process of creating replica of your source apps 11i Instance (lets say you have one

apps Instance with name VISIONTST and you want to create similar instance (including same

patches & user data) like VISIONPRD then you will use adclone utility (Also called as Rapid

Clone these days). In this case source Instance will be VISIONTST and target Instance will be

VISIONPRD. There are lot for scenario in which you wish to clone your E-Business Suite 11i

Instance , like you want to Test if everything is OK in Test & then after testing want to create

Production instance or you want to move your Instance from one machine to other machine or if

you are highly experienced Apps DAB you can use clone as staged environment during Upgrade

to reduce downtime (this concept is called as staged appl_top or staged patching/upgrade , p.s.

this is different from shared APPL_TOP)

So here I am putting broad level steps you will use to clone apps instance .

Step1 . Prerequisites Steps you do before start cloning using rapid clone

1.1 Verify source and target nodes software versions

1.2 Apply the latest AutoConfig Template patch

1.3 Apply the latest Rapid Clone patches

Step2 . Clone Source to Target

2.1 Run preclone on DB tier

2.2 Run preclone on Apps or middle tier

2.3 Copy source file system to target file system

2.4 Configure db tier

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2.5 Configure apps/middle tier

Step 3 Finishing Task

3.1 Update profile options

3.2 Update printer settings (If printers are not configured or you don't want to use printer you can

skip this step)

3.3 Update workflow configuration settings (Important)

Location of Scripts :

The PRECLONE script is located in:

`$COMMON_TOP/admin/scripts/<SID_HOSTNAME>/adpreclone.pl`

The post clone scripts are located in:

`$COMMON_TOP/clone/bin/adclone.pl (ADCLONE.PL)`

Q. Can you clone from multi node system to single node system & vice versa ?

Yes, this is now supported via Rapid Clone, Check if your system has all prereq. patches for

Rapid Clone and you are on latest rapid clone patch.

Q. Does rapid clone takes care of Updating Global oraInventory or you have to register manually in Global OraInventory after clone ?

Rapid Clone will automatically Update Global oraInventory during configuration phase. You don't

have to do any thing manually for Global oraInventory.

Location of Global OraInventory on SUN Solaris is : `/var/opt/oracle>`

Q. What is .dbc file , where its stored , whats use of .dbc file ?

dbc as name says is database connect descriptor file which stores database connection information used by application tier to connect to database. This file is in directory

`$FND_TOP/secure` also called as `FND_SECURE`

`/delphi/applmgr/dev/devappl/fnd/11.5.0/secure`

SAMPLE FILE (bloa40_dev.dbc)

Q. Whats things you do to reduce patch timing ? You can take advantage of following -

Merging patches via admrgpch

Use various adpatch options like nocompiledb or nocompilejsp

Use defaults file

Staged APPL_TOP during upgrades

Increase batch size (Might result into negative)

Q. How you put Applications 11i in Maintenance mode ?

Use adadmin to change Maintenance mode in Oracle Apps. With AD.I you need to enable maintenance mode in order to apply apps patch via adpatch utility. If you don't want to put apps in

maintenance mode you can use adpatch options=hotpatch feature.

Also you can use the script \$AD_TOP/patch/115/sql/ adsetmmd.sql

Q. What are various options available with adpatch ?

Various options available with adpatch depending on your AD version are autoconfig, check_exclusive, checkfile, compiledb, compilejsp, copyportion, databaseprtion,

generateportion, hotpatch, integrity, maintainmrc, parallel, prereq, validate

Q. adident utility is used for what ?

adident utility in oracle apps is used to find version of any file . AD Identification.

for ex. "adident Header <filename>

Q. What is adsplce utility ?

adsplce in oracle apps is utility to add a new product.

Q. How can you licence a product after installation ?

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You can use ad utility adlicmgr to licence product in Oracle Apps.

Q. What is MRC ? What you do as Apps DBA for MRC ?

MRC also called as Multiple Reporting Currency in oracle Apps. Default you have currency in US

Dollars but if your organization operating books are in other currency then you as apps dba need

to enable MRC in Apps. How to enable MRC coming soon...

Q. Whats is JVM(Java Virtual Machine) and which component uses JVM ?

JVM stands for Java Virtual Machine, JVM acronym for Java Virtual Machine which executes

instructions generated by Java compiler. So user click on any Self Service Request or any program which uses Java, then Apache forwards this request to mod_jserv (mod_oc4j in 10g AS)

& mod_jserv caters this request with help of JVM.

How & Where check JVM related configuration in Oracle Apps 11i ?

So lets start with CONTEXT file under \$APPL_TOP/admin (xml file) which is of pattern \$SID_\$HOSTNAME.xml

There are two important lines in CONTEXT file which will help you in understanding JVM

```
jvm_options oa_var="s_jvm_options" osd="Solaris" -verbose:gc -Xmx512M -Xms128M
```

-

XX:MaxPermSize=128M -XX:NewRatio=2 -XX:+PrintGCTimeStamps -XX:
+UseTLAB

/jvm_options

-Verbose:gc means JVM is configured to print output when gc(Garbage Collector) runs.

Xmx is maximum memory allocated to JVM in above example its 512 MB.

Xms is JVM will start with this much memory i.e. 128 MB.

Now Check another line in 11i Context file like

```
oacore_nprocs oa_var="s_oacore_nprocs"2/oacore_nprocs
```

Which means that there are two JVM's for OACore Group. Usually default its 1 JVM in my

Instance I changed it to 2, to cater huge Self Service users in my case.

Q: How to increase No. Of JVM's

Since you know place where number of JVM's are stored in Apps 11i in Context File , so you can

change them as per your requirement. There are basically following Groups with their own JVM's.

OACoreGroup, where most of Java request goes

DiscoGroup, which serve your Discoverer related requests

FormsGroup, for Forms (If they are running in Servlet Mode, confirm it again as they run on

Socket)

XmlSvcsGroup, for XML Services

In Context File

```
disco_nprocs oa_var="s_disco_nprocs" osd="Solaris" 1 /disco_nprocs Sets 1 JVM
```

Process for

Discoverer.

```
oacore_nprocs oa_var="s_oacore_nprocs" 1 /oacore_nprocs Sets 1 JVM for for
```

OACoreGroup

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Similarly , s_forms_servlet_nprocs & s_xmlsvcs_nprocs for Forms & XML Services resp.

These Groups are defined in configuration file for Jserv i.e. jserv.conf under

\$IAS_ORACLE_HOME/Apache/Jserv/etc/jserv.conf

This dir also contains more files like forms.properties(for forms), xmlsvcs.properties(foe XML),

viewer4i.properties(for Disco)

ApJServGroup OACoreGroup

ApJServGroup DiscoGroup

ApJServGroup FormsGroup

ApJServGroup XmlSvcsGrp

Q: Where to find Apps 11i JVM logs ?

JVM log location is defined in java.sh (found in

\$IAS_ORACLE_HOME/Apache/Apache/bin)

Oracle Apps 11i JVM log file directory is defined by parameter JVMLOGDIR (

`$IAS_ORACLE_HOME/Apache/Jserv/logs/jvm`) and log file are defined by `STDOUTLOG` & `STDERRLOG`. Example of JVM log files are `OACoreGroup.0.stderr` ,`OACoreGroup.0.stdout`, `DiscoGroup.0.stdout`, `DiscoGroup.0.stderr`, `XmlSvcsGrp.0.stderr`, `XmlSvcsGrp.0.stdout` where 0 denotes first JVM & 1 denotes second JVM. `stderr` records error encountered in JVM & `stdout` records other information like GC ..

Q.Analyzing Oracle Apps 11i JVM logs

In order to analyze Oracle apps 11i JVM, lets open `stdout` file for one of Group, I have selected

`OACoreGroup` here, you know log file location (If not check previous page) , open file like

`OACoreGroup.X.stdout` you should see output like below if GC(Garbage Collector) is set in `Verbose` mode.

50515.494: [Full GC[Unloading class sun. reflect. Generated Method Accessor 143]

[Unloading class sun. reflect. GeneratedMethodAccessor136]

[Unloading class sun. reflect. GeneratedMethodAccessor74]

Here first entry is time since JVM was started so each time you bounce Apache it will be reset to

0. So difference between two entries is seconds after which GC (Garbage Collector) was executed. First entry in bracket [is Heap Size at start of GC & Second entry is Heap Size after

GC was executed. Number mentioned in round bracket () is heap size currently allocated in K. If

you see GC running very frequently , you can start thinking of increasing JVM heap size First three entries were for Minor Garbage Collector & fourth one is FULL GC is for Full Garbage Collector.

Q: How to check JDBC Connection ?

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connect using `apps`, `sys` or `system` & issue

`select count(*),module from v$session where program like '%JDBC%' group by module;`

How to find JDBC thin driver that your iAS 1.0.2.2.2 is using ?

I am posting a simple java program & procedure to compile it that will give your jdbc thin driver version.

Create a file with name `JDBCVersion.java` in your middle tier (Application Tier)

Replace following parameters

1. <hostname> with your database hostname or IP address
2. <portno> with your database port no.
3. <yoursid> with SID for your database
4. <appspassword> with your apps password

After changing save it with name JDBCVersion.java in your middle tier & execute command

```
javac JDBCVersion.java
```

This will create class file in your workign directory. Include your current directory into your

classpath like

```
export CLASSPATH=$CLASSPATH:./<location where JDBCVersion.class created by above
```

```
program>
```

then execute

```
java JDBCVersion
```

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you should see output like

JDBC driver version is 9.2.0.6.0

Which means you are using jdbc thin driver version 9.2.0.6.0.

Q: How to Monitor Oracle Apps 11i JVM ?

There are some tools available like jvmstst, jconsole .. but I never tried so wait till I configure one

for my system. For monitoring via jconsole I read wonderful note on my favorite blogger's (Steven

Chan) site <http://blogs.oracle.com/schan/2006/08/14#a565>

Q.Sizing Apps JVM

As by now you might be aware that there are four JVM Groups, OACoreGroup,DiscoGroup,

FormsGroup & XMLsvcsGrp (FromsGroup JVM's disabled by default as forms run on Socket

rather servlets) so thumb rule in Apps is

1 JVM with default settings per 100 Users for OACoreGroup

so if you have 1000 users with five middle tiers you can configure 2 JVM on each middle tier i.e.

2X5X100=1000 Users.

Q. What is access_log in apache , what entries are recored in access_log ? Where is default location of this file ?

access_log in Oracle Application Server records all users accessing oracle applications 11i. This

file location is defined in httpd.conf with default location at

\$IAS_ORACLE_HOME/Apache/Apache/logs. Entries in this file is defined by directive

LogFormat in httpd.conf Typical entry in access_log is
198.0.0.1 - - [10/Sep/2006:18:37:17 +0100] "POST /OA_HTML/OA.jsp?... HTTP/1.1"
200 28035

where 200 is HTTP status code & last digits 28035 is bytes downloaded as this page(Size of page)

Q. Where is Jserv configuration files stored ?

Jserv configuration files are stored in \$IAS_ORACLE_HOME/Apache/Jserv/etc

Q. Where is applications start/stop scripts stored ?

applications start/stop scripts are in directory \$COMMON_TOP/admin/scripts/
\$CONTEXT_NAME

the following scripts are there :

adalctl.sh adcmctl.sh adexecsql.pl adrepctl.sh adstrtal.sh

adautoconfig.sh addisctl.sh adpreclone.pl adstpall.sh gsmstart.sh

Q. What are main configuration files in Web Server (Apache) ?

Main configuration files in Oracle Apps Web Server are

httpd.conf, apps.conf, oracle_apache.conf, httpd_pls.conf

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jserv.conf, ssp_init.txt, jserv.properties, zone.properties

plsql.conf, wdbsvr.app, plsql.conf

Q. What is session time out parameter & where all you define these values ?

If someone ask Apps DBA to change Session Idle Time out value How & where will you change ?

In order to answer first you have to understand what kind of sessions are in Apps 11i and what is

Idle timeout ?

In Apps there are two broad categories of session

- Self Service Application Session (Served by Web Server iAS Apache & Jserv, like iRecruitment, iProcurement)

-Forms session (served by your form session, like system Administrator)

What is Session Idle time ?

If Oracle Apps client is not doing any activity for some time (when application user goes for coffee

or talks over phone) session during that time is called as Idle Session & because of security

reason, performance issues and to free up system resource Oracle Applications terminates client

session(both forms & self service) after idle time value is reached to the one mentioned in

configuration file.

From FND.G or 11.5.9 or with introduction of AppsLocalLogin.jsp to enter into

application, profile

option "ICX Session Timeout" is used only to determine Forms Session Idle timeout value . This

might be confusing as earlier this profile option used to control forms as well as self service

application(with session.timeout) session.timeout is used to control Idle session timeout for Self

Service Applications (Served by Jserv via JVM)

From where ICX : Session Timeout & session.timeout get values ?

Autoconfig determines value for profile option "ICX: Session Timeout" and

"session.timeout" from

entry in context file (\$APPL_TOP/admin/SID_hostname.xml) with parameter

s_sesstimeout

where value mentioned is in milliseconds so profile option ICX: Session Timeout value should be

s_sesstimeout/ (1000 * 60) which means here its 10 Minutes. This value is also set in zone.properties in \$IAS_ORACLE_HOME/Apache/Jserv/etc where number mentioned is in milli

second i.e. 600000 (equal to 10 Minutes)session.timeout = 600000

session.timeout mentioned in zone.properties is in milli seconds ICX Session Time out mentioned

in profile option ICX: Session Timeout is in minutes so ICX session timeout=30 &

session.timeout= 1800,000 are same 30 minutes

P.S. ICX Session time out was introduced in FND.D so if your FND version is below D you might

not see this variable.

Important Things Apps DBA should consider while setting session timeout value ?

1.. If you keep session.timeout value too high , when some oracle application user accessing Self

service application terminates his session, so longer idle session will drain JVM resource & can

result in Java.Lang No Memory available issues .

2. If you keep it too low, users going out for tea or sitting idle for some time have to login again

into application & can be annoying .

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Thumb rule is session time out usually set to 30 minutes.

Q. How to check if Apps 11i System is Autoconfig enabled ?

Under \$AD_TOP/bin check for file adcfginfo.sh & if this exists use

adcfginfo.sh contextfile=<CONTEXT> show=enabled

If this file is not there , look for any configuration file under APPL_TOP if system is Autoconfig

enabled then you will see entry like

AutoConfig automatically generates this file. It will be read and.....

Q. How to check if Oracle Apps 11i System is Rapid Clone enabled ?

For syetem to be Rapid Clone enabled , it should be Autoconfig enabled (Check above How to

confirm if Apps 11i is Autoconfig enabled). You should have Rapid Clone Patches applied , Rapid Clone is part of Rapid Install Product whose Family Pack Name is ADX. By default all Apps 11i

Instances 11.5.9 and above are Autoconfig & Rapid Clone enabled.

Q. Whats is difference between two env files in <CONTEXT>.env and APPS<CONTEXT>.env under \$APPL_TOP ?

APPS<CONTEXT>.env is main environment file which in turn calls other environment files like

<CONTEXT>.env under \$APPL_TOP, <CONTEXT>.env under 806 ORACLE_HOME and

custom<CONTEXT>.env for any Customized environment files.

Q. What is access_log in Apache ?

access_log file keeps record of users accessing Oracle Apps 11i Webserver.

Typical entry in access_log is like

```
198.0.0.1 - - [25/Aug/2006 :03:15:13 +0100] "GET /OA_JAVA /oracle /forms /registry/Registry.dat HTTP/1.1" 200 4117
```

Which means client with IP 198.0.0.1 requested for file mentioned above on 25 Aug 2006 at

03:15 AM , 200 is status code returned by Apache which means page returned successfully

(Status Code 302 means page redirected , 404 page not found, 500+ Internal Server error) last digit 4117 in above entry of access_log means file size which is 4117 bytes. This file is quite

useful in monitoring your Web Server.

Please note above format might defer on your system as this is dependent log_format in Apache

configuration file (httpd.conf)

Q. Whats is location of access_log file ?

access_log file by default is located in \$IAS_ORACLE_HOME/ Apache/Apache/logs.

Location

of this file is defined in httpd.conf by parameter CustomLog or TransferLog

Q. What is your Oracle Apps 11i Webserver Version and how to find it ?

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From 11.5.8 to 11.5.10 Webserver version is iAS 1.0.2.2.2, In order to find version under \$IAS_ORACLE_HOME/Apache/Apache/bin execute ./httpd -version

./httpd -version

Similarly we can do java -version

Server version: Oracle HTTP Server Powered by Apache/1.3.19

Server built: Dec 6 2005 14:59:13 (iAS 1.0.2.2.2 rollup 5)

Q. What is Location of Jserv configuration files ?

Jserv configuration files are located in \$IAS_ORACLE_HOME /Apache/Jserv/etc.

Q. What is plssql/database cache ?

In order to improve performance mod_pls (Apache component) caches some database content

to file. This database/plsql cache is usually of type session & plsql cache

a) session cache is used to store session information.

b) plsql cache is used to store plsql cache i.e. used by mod_pls

Q. Where is database/plsql cache stored ?

plsql & session cache are stored under \$IAS_ORACLE_HOME/
Apache/modplsql/cache
directory.

Q. How to determine Oracle Apps 11i Version ?

select RELEASE_NAME from fnd_product_groups;

You should see output like

RELEASE_NAME

11.5.9

Q. What is content of dbc file & why its important ?

DBC file is quite important as whenever Java or any other program like forms want to connect to

database it uses dbc file. Typical entry in dbc file is

GUEST_USER_PWD ,APPS_JDBC_URL ,DB_HOST

Q. There are lot of dbc file under \$FND_SECURE, How its determined that which dbc file to

use from \$FND_SECURE ?

This value is determined from profile option "Applications Database ID"

This option can be seen by navigating into Oracle Apps System as System Administrator and

then àProfile à System à Search for %Database% then you can see the parameter defined

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Q. What is RRA/FNDFS ?

Report Review Agent(RRA) also referred by executable FNDFS is default text viewer in Oracle

Applications 11i for viewing output files & log files.

Q. What is PCP is Oracle Applications 11i ?

PCP is acronym for Parallel Concurrent Processing. Usually you have one Concurrent Manager

executing your requests but if you can configure Concurrent Manager running on two machines

(Yes you need to do some additional steps in order to configure Parallel Concurrent Processing) .

So for some of your requests primary CM Node is on machine1 and secondary CM node on

machine2 and for some requests primary CM is on machine2 & secondary CM on machine1.

Q. Why I need two Concurrent Processing Nodes or in what scenarios PCP is used?

Well If you are running GL Month end reports or taxation reports annually these reports might

take couple of days. Some of these requests are very resource intensive so you can have one

node running long running , resource intensive requests while other processing your day to day

short running requests.

Another scenario is when your requests are very critical and you want high resilience for your

Concurrent Processing Node , you can configure PCP. So if node1 goes down you still have CM

node available processing your requests.

Q. Output & Logfiles for requests executed on source Instance not working on cloned Instance?

Here is exact problem description - You cloned an Oracle Apps Instance from PRODBOX to

another box with Instance name say CLONEBOX on 1st of August. You can view any CM

logs/output files after 1st of August only because these all are generated on CLONEBOX itself,

But unable to view the logs/output files which are prior to 1st August. What will you do & where to

check ?

Log , Output file path & location is stored in table FND_CONCURRENT_REQUESTS. Check

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```
select logfile_name, logfile_node_name, outfile_name, outfile_node_name from  
fnd_concurrent_requests where request_id=&requestid ;
```

where requestid is id of request for which you are not able to see log or out files. You should see

output like

```
/u01/PRODBOX/log/l123456.req, host1,/u01/PRODBOX/out/o123456.out, host1
```

Update it according to your cloned Instance Variables

Q. How to confirm if Report Server is Up & Running ?

Report Server is started by executable rwmts60 on concurrent manager Node & this file is under

\$ORACLE_HOME/bin .execute command on your server like

```
ps -ef | grep rwmts60
```

You should get output like

```
applmgr ..... rwmts60 name=REP60_VISION
```

where VISION is your Instance name.

Else you can submit a request like "Active Users" with display set to PDF, check output & log file

to see if report server can display PDF files

Active Users report lists all the users in the system along with their responsibilities.

Q. What is difference between ICM, Standard Managers & CRM in Concurrent Manager ?

ICM stand for Internal Concurrent Manager, which controls other managers. If it finds other managers down , it checks & try to restart them. You can say it as administrator to other concurrent managers. It has other tasks as well.

Standard Manager These are normal managers which control/action on the requests & does

batch or single request processing.

CRM acronym for Conflict Resolution Manager is used to resolve conflicts between managers &

request. If a request is submitted whose execution is clashing or it is defined not to run while a

particular type of request is running then such requests are actioned/assigned to CRM for Incompatibilities & Conflict resolution

Q. What is use of Apps listener ?

Apps Listener usually running on All Oracle Applications 11i Nodes with listener alias as APPS_\$\$SID is mainly used for listening requests for services like FNDFS & FNDSM.

FNDFS – FND File Server also known as RRA Reports Review Agent is used to view text files in

Oracle 11i.

FNDSM – FND Service Manager is a concurrent manager in GSM, and serves requests like CM's

Use : ps -ef | grep APPS_

Q. How to start Apps listener ?

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In Oracle 11i, you have script adalnctl.sh which will start your apps listener. You can also start it

by command

lsnrctl start/status/stop SID (Replace sid by your Instance SID Name) OR

lsnrctl start APPS_\$\$SID (Replace sid by your Instance SID Name)

E.G. lsnrctl status APPS_DEV

Q. How to confirm if Apps Listener is Up & Running ?

execute below command

lsnrctl status APPS_\$\$SID (replcae SID with your Instance Name)

so If your SID is VISION then use lsnrctl status APPS_VISION out put should be like Services Summary...

FNDFS has 1 service handler(s)

FNDSM has 1 service handler(s)

The command completed successfully

Q. What is Web Listener ?

Web Listener is Web Server listener which is listening for web Services(HTTP) request.

This

listener is started by adapctl.sh & defined by directive (Listen, Port) in httpd.conf for Web

Server. When you initially type request like `http://becomeappsdba.blogspot.com:80` to access

application here port number 80 is Web Listener port.

Q. How will you find Invalid Objects in database ?

SQLPLUS> `select count(*) from dba_objects where status like 'INVALID';`

Q. How to compile Invalid Objects in database ?

You can use adadmin utility to compile or you can use utlrp.sql script shipped with Oracle

Database to compile Invalid Database Objects.

This Script is located in `$IAS_ORACLE_HOME/rdbms/admin` directory

Q. How to compile JSP in Oracle Apps ?

You can use ojspCompile.pl perl script shipped with Oracle apps to compile JSP files.

This

script is under `$JTF_TOP/admin/scripts`. Sample compilation method is

`perl ojspCompile.pl --compile -quiet`

Q. What is difference between adpatch & opatch ?

adpatch is utility to apply oracle apps Patches whereas

opatch is utility to apply database patches

Q. Can you use both adpatch & opatch in Apps ?

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Yes you have to use both in apps , for apps patches you will use adpatch utility and for applying

database patch in apps you will opatch utility.

Q. Where will you find forms configuration details apart from xml file ?

Forms configuration at time of startup is in script adfrmctl.sh in

`$COMN_TOP/admin/scripts`

and `appsweb_$CONTEXT_NAME.cfg` (defined by environment variable

`FORMS60_WEB_CONFIG_FILE`) for forms client connection used each time a user initiates

forms connection.

This file is located in `$FND_TOP/admin/template/appsweb.cfg`

Q. What is forms server executable Name ?

f60srvm

Q. What are different modes of forms in which you can start Forms Server and which one is default ?

You can start forms server in SOCKET or SERVLET by default Forms are configured to start in

socket mode

Q. How you will start Discoverer in Oracle Apps 11i ?

In order to start discoverer you can use script addisctl.sh under

`$OAD_TOP/admin/scripts/$CONTEXT_NAME`

OR startall.sh under `$ORACLE_HOME/discwb4/util` (under Middle/Application Tier)

OR \$COMMON_TOP/admin/scripts/\$CONTEXT_NAME

Q. How many ORACLE HOME are Oracle Apps and what's significance of each ?

There are three \$ORACLE_HOME in Oracle Apps, Two for Application Tier (Middle Tier) and

One in Database Tier.

ORACLE_HOME 1 : On Application Tier used to store 8.0.6 techstack software. This is used by

forms, reports & discoverer. ORACLE_HOME should point to this ORACLE_HOME while

applying Apps Patch.

ORACLE_HOME 2: On Application Tier used by iAS (Web Server) techstack software.

This is

used by Web Listener & contains Apache.

ORACLE_HOME 3: On Database Tier used by Database Software usually 8i,9i or 10g database

Q. Where is HTML Cache stored in Oracle Apps Server ?

Oracle HTML Cache is available at \$COMMON_TOP/_pages for some previous versions you

might find it in \$OA_HTML/_pages

Q. Where is pl/sql cache stored in Oracle Apps ?

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Usually two type of cache session & plsql stored under

\$IAS_ORACLE_HOME/Apache/modplsql/cache

Q. What happens if you don't give cache size while defining Concurrent Manager ?

Lets first understand what is cache size in Concurrent Manager. When Manager picks request

from FND CONCURRENT REQUESTS Queues, it will pick up number of requests defined by

cache size in one shot & will work on them before going to sleep. So in my views if you don't

define cache size while defining CM then it will take default value 1, i.e. picking up one request

per cycle.

Q. What are few profile options which you update after cloning ?

Rapid clone updates profile options specific to site level . If you have any profile option set at

other levels like server, responsibility, user....level then reset them.

Q. What is 0 & Y in FNDCPASS, FNDLOAD or WFLOAD ?

0 & Y are flags for FND Executable like FNDCPASS & FNDLOAD where

0 is request id (request ID 0 is assigned to request ID's which are not submitted via Submit

Concurrent Request Form.

'Y' indicates the method of invocation. i.e. it is directly invoked from the command-line not from

the Submit Request Form.

Q. How to retrieve SYSADMIN password ?

If forgot password link is enabled and sysadmin account is configured with mail id user forget

password link else you can reset sysadmin password via FNDCPASS

Example:

```
$ FNDCPASS apps/apps 0 Y system/manager SYSTEM APPLSYS WELCOME
```

```
$ FNDCPASS apps/apps 0 Y system/manager ORACLE GL GL1
```

```
$ FNDCPASS apps/apps 0 Y system/manager USER VISION WELCOME
```

Q. If you have done two node Installation, First machine : Database and concurrent processing server. 2nd machine: form,web Which machine have admin server/node?

Admin Server will be on First machine with concurrent processing server. More on Admin Server

coming soon..

Q. What is TWO_TASK in Oracle Database ?

TWO_TASK mocks your tns alias which you are going to use to connect to database.

Lets

assume you have database client with tns alias defined as PROD to connect to Database PROD

on machine teachmeoracle.com listening on port 1521. Then usual way to connect is sqlplus

username/passwd@PROD ; now if you don't want to use @PROD then you set

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TWO_TASK=PROD and then can simply use sqlplus username/passwd then sql will check that it

has to connect to tnsalias define by value PROD i.e. TWO_TASK

Q. What is GWYUID ?

GWYUID , stands for Gateway User ID and password. Usually like APPLSYSPUB/PUB

Q. Where GWYUID defined & what is its used in Oracle Applications ?

GWYUID is defined in dbc i.e. Database Connect Descriptor file . It is used to connect to database by thin clients.

Q. What is difference between GUEST_USER_PWD (GUEST/ORACLE) & GWYUID ?
GUEST_USER_PWD(Guest/Oracle) is used by JDBC Thin Client where as GWYUID is used by

Thick Clients like via Forms Connections.

Q. How to check number of forms users at any time ?

Forms Connections initiate f60webmx connections so you can use

```
ps -ef | grep f60webmx | wc -l
```

Q. What is FNDLOAD and what it is used for ?

FNDLOAD is a concurrent program that can move Oracle Applications data between database

and text file. FNDLOAD can download data from an application entity into an editable text file,

which can be uploaded to another database. Conversion between database format and text file

format is specified by a configuration file. But i could not find anything regarding upload/download

of an Oracle Alert. So, my conclusion was that i must be possible to use FNDLOAD to transfer

Alerts, but that there is no configuration file provided by Oracle. I had to create a configuration file myself.

We use ldt loader data files for loading.

Oracle currently supports the migration of the following types of data using FNDLOAD

Printers / Print queues / Executables Printers / Print queues / Executables.

Roles / Responsibilities / Forms Roles / Responsibilities / Forms.

Menus / Users / Request Sets Menus / Users / Request Sets.

Request Groups / Request Queues Request Groups / Request Queues.

Work shifts / Programs / Libraries Work shifts / Programs / Libraries.

Attachments / Help Files Attachments / Help Files.

Mime Types Mime Types.

Security Information.

Q. In a Multi Node Installation, How will you find which node is running what Services ?

You can query for table FND_NODES and check for column , SUPPORT_CP (for Concurrent

Manager) SUPPORT_FORMS (for forms server) , SUPPPORT_WEB (Web Server),

SUPPORT_ADMIN(Admin Server), and SUPPORT_DB for database tier.

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You can also check same from CONTEXT File (xml file under APPL_TOP/admin)

To Check which node is running what service:

```
select * from fnd_nodes
```

Q. If your system has more than one Jinitiator, how will the system know, which one to pick. ?

When client makes a forms connection in Oracle Applications, forms client session uses configuration file defined by environment variable FORMS60_WEB_CONFIG_FILE also called as

appsweb config file. These days this file is of format appsweb_\$CONTEXT.cfg The initiator

version number defined by parameter jinit_ver_name in this file will be used .

jinit_ver_name=Version=1,1,8,13 (tells which Jinit to use if u have multiple)

(\$FND_TOP/admin/template)

Q. While applying Apps patch using adpatch, if you want to hide the apps password, how will that be possible ?

Use adpatch flags=hidepw while applying patches in apps to hide apps or system password

being displayed on Users Screen.

Q. What is importance of IMAP Server in Java Notification Mailer ?

IMAP stands for Internet Message Access Protocol and Java Notification mailer require IMAP

server for Inbound Processing of Notification Mails.

Q. What is difference between Socket & Servlet Mode in Apps Forms ?

When forms run SOCKET Mode these are dedicated connection between Client Machine & Form

Server (Started by adfrmctl.sh). When Forms run in servlet mode the forms requests are fulfilled

by Jserv in Apache . There will be additional JVM for Forms Request in that case and you won't

start form via adfrmctl.sh.

Q. What is make program in Unix ?

make is utility in Unix/Linux to maintain , update & generate an file mainly executable.

Q. If by mistake you/someone deleted FNDLIBR can this executable be restored if Yes, How & if no, what will you do ?

Yes, you can restore FNDLIBR executables run adadmin on concurrent manager node select option 2. Maintain Applications Files menu then select 1. Relink Applications programs

when prompts for Enter list of products to link ('all' for all products) [all]

select FND when prompt for Generate specific executables for each selected product

[No] ? YES

select YES & from list of executables select FNDLIBR This will create new FNDLIBR executables

Q. What is .pls files which you see with apps ?

.pls file stands for plsql files. In apps patch these files contain code to create package spec or

package body or both.

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Q. What are .ldt & .lct files which you see in apps patch or with FNDLOAD ?

.ldt & .lct stands for Loader datafile & Loader configuration files, used frequently in migrating

customization, profile options, configuration data, etc.. across Instances.

Q. What are .odf file in apps patch ?

odf stands for Object Description Files used to create tables & other database objects.

Q. What to find Form Server log files in forms ?

Form Server Start up log file default location is

\$OAD_TOP/admin/log/\$CONTEXT_NAME/f60svrm.txt

Forms Run Time Diagnostics default location is

\$ORACLE_HOME/forms60/log/\$CONTEXT_NAME

Q. How to convert pll to pld file or pld file to pll ?

Pll->Pld f60gen module=MSCOSCW3.pll module_type=library userid=apps/<passwd>
module_access=file output_file=MSCOSCW1.pld script=yes

Pld -> pll f60gen module=MSCOSCW3.pld userid=apps/<passwd> module_type=library

module_access=file output_file=MSCOSCW1.pll parse=y batch=yes
compile_all=special

Q. Is APPS_MRC Schema exists for MRC in 11.5.10 and higher ?

No , apps_mrc schema is dropped with 11.5.10 Upgrade & 11.5.10 new Install. This is replaced
by more Integrated Architecture.

Q. If APPS_MRC schema is not used in 11.5.10 and higher then How MRC is working ?
For products like Payable, Recievables which uses MRC and if MRC is enabled then
each

transaction table in base schema related to currency now has an assoicated MRC
Subtables.

Q. When you apply C driver patch does it require database to be Up & Why ?

Yes , database & db listener should be Up when you apply any driver patch in apps. even
if driver

is not updating any database object connection is required to validate apps & other
schema and

to upload patch history information in database tables.

Q. Can C driver in apps patch create Invalid Object in database ?

No , C driver only copies files in File System. Database Object might be invalidated
during D

driver when these objects are created/dropped/modified.

Q. What is dev60cgi & f60cgi ?

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cgi stands for Common Gateway Interface and these are Script Alias in Oracle Apps used
to

access forms server . Usually Form Server access directly via

<http://hostname:port/dev60cgi/f60cgi>

Q. Why does a worker fails in Oracle Apps Patch and few scenarios in which it failed for
you ?

This question sounds stupid but this is asked quite often in Apps DBA Interview. Apps
Patch

worker can fail in case it doesn't find expected data, object, files or any thing which
driver is trying

to update/edit/modify. Possible symptoms may be underlying tables/objects are invalid, a
prereq

patch is missing , login information is incorrect, inconsistency in seeded data...

Q. What is difference between mod_osso & mod_ose in Oracle HTTP Server ?

mod_osso is Oracle Single Sign-On Module where as mod_ose is module for Oracle
Servlet

Engine.

mod_osso is module in Oracle's HTTP Server serves as Conduit between Oracle Apache
Server

& Singl Sign-On Server where as mod_ose is also another module in Oracle's HTTP
Server

serves as conduit between Oracle Apache & Oracle Servlet Engine
mod_osso: Conduit between Oracle Apache Server & Singl Sign-On Server
mod_ose: Conduit between Oracle Apache & Oracle Servlet Engine

Q. What is difference between COMPILE_ALL=SPECIAL and COMPILE_ALL=YES while compiling Forms ?

Both the options will compile all the PL/SQL in the resultant .FMX, .PLX, or .MMX file but

COMPILE_ALL=YES also changes the cached version in the source .FMB, .PLL, or .MMB file.

This confuses version control and build tools (CVS, Subversion, make, scons); they believe

you've made significant changes to the source. COMPILE_ALL=SPECIAL does not do this.

Q. What is ps -ef or ps command in Unix ?

ps is unix/linux utility or executable to find status of process. Used mainly to find if services/process is running or not.

Q. What is GSM in Oracle application E-Business Suite ?

GSM stands for Generic Service Management Framework. Oracle E-Business Suite consist of

various compoennts like Forms, Reports, Web Server, Workflow, Concurrent Manager .. Earlier each service used to start at their own but managing these services (given that) they can

be on various machines distributed across network. So Generic Service Management is extension of Concurrent Processing which manages all your services , provide fault tolerance (If

some service is down ICM through FNDSM & other processes will try to start it even on remote

server) With GSM all services are centrally managed via this Framework.

Q. What is FNDSM ?

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FNDSM is executable & core component in GSM (Generic Service Management Framework

discussed above). You start FNDSM services via APPS listener on all Nodes in Application Tier

in E-Business Suite.

Q. What is iAS Patch ?

iAS Patch are patches released to fix bugs associated with IAS_ORACLE_HOME (Web Server

Component) Usually these are shiped as Shell scripts & you apply iAS patches by executing

Shell script. Note that by default ORACLE_HOME is pointing to 8.0.6

ORACLE_HOME and if you

are applying iAS patch export ORACLE_HOME to iAS . You can do same by executing

environment file under \$IAS_ORACLE_HOME

Ques 1 Where are the front end user details stored?

The front end user details are stored in table fnd_user in database. You can query the database for the details you want to know as follows:

logon as database user apps then

```
sql> desc fnd_user;
```

```
sql> select <Column name> from <table>;
```

you will get the list of details that the table contain from which you can get the further details.

Ques 2 Is “apps” a database user or “application user”?

“apps” is a Database user. All the information about database users is defined in table dba_users so you can query the database to know about users.

```
sql> desc dba_users;
```

```
sql> select * from dba_users where username='APPS';
```

This query will give you all details of apps user.

Ques 3 Where are the database objects stored for the products ‘BEN’ & ‘FND’?

Database objects for the products like ‘BEN’ & ‘FND’ are stored in their own schema like BEN or APPLSYS (for FND), GL for GL objects

Ques 4 Can Middle Tier & DB run on different versions of OS?

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Yes, Middle Tier & DB can run on different versions of OS. This type of configuration are known as Split Configuration.

Ques 5 Can different Middle Tier’s have different flavours of OS?

Yes different Middle tier’s can run on different flavours of OS.

Ques 6 How do we verify the no. of CPU’s running on a node?

Proc (/proc) file system provides easy information about CPU and their speed. To display the number of processors in linux you need to use /proc/cpuinfo file. This is a collection of CPU and system architecture dependent items, for each supported architecture a different list. Type the following command:

```
$ cat /proc/cpuinfo
```

Ques 7 How do i identify whether my environment is shared APPL_TOP or not?

To know whether the environment is shared APPL_TOP or not , login to first Middle Tier & create any file (like abc.txt) in the APPL_TOP. Now logout & login to other Middle Tier. If you can see that respective file in APPL_TOP, this means you are having shared APPL_TOP.

Q. If we run autoconfig which files will get effected ?

In order to check list of files changes during Autoconfig , you can run adchkcfg utility which will

generate HTML report. This report will list all files & profile options going to change when you run

AutoConfig.

Q. What is difference between .xml file & AutoConfig ?

Autoconfig is Utility to configure your Oracle Application environment. .xml file is repository of all

configuration from which AutoConfig picks configuration and populates related files.

Q. What is .lgi files ?

.lgi files are created with patching along with .log files . .lgi files are informative log files containing

information related to patch. You can check .lgi files to see what activities patch has done.

Usually informative logs.

Q. How will you skip worker during patch ?

If in your adctrl there are six options shown then seventh is hidden option.(If there are seven

options visible then 8th option is to Skip worker depending on ad version).

Q. Which two tables created at start of Apps Patch & drops at end of Patch ?

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FND_INSTALL_PROCESSES (Columns :CONTROL_CODE and STATUS) & AD_DEFERRED_JOBS are the tables that get updated while applying a patch mainly (d

or u

)unified driver

Q. How to compile an Oracle Reports and forms file ?

Utility adrepgen is used to compile Reports. Syntax is given below

```
adrepgen userid=apps\<psswd> source = $PRODUCT_TOP\srw\filename.rdf  
dest=$PRODUCT_TOP\srw\filename.rdf stype=rdffile dtype=rdffile logfile=x.log  
overwrite=yes
```

```
batch=yes dunit=character
```

Utility f60gen is used to compile Forms. Syntax is given below

```
f60gen module=<source form name> userid=APPS/<APPS password>  
output_file=<executable form name>
```

EG : For Instance I want to generate sale order forms in ONT schema using f60gen syntax would be like

OEXOEORD.fmb form:

```
$cd $AU_TOP/forms/US
```

```
$f60gen module= OEXOEORD.fmb module_type=form \
```

```
output_file=$ONT_TOP/forms/US/OEXOEORD.fmx userid=APPS/APPS
```

```
module_type=form batch=yes compile_all=yes
```

Q. What is difference between AD_BUGS & AD_APPLID_PATCHES ?

- AD_BUGS: holds information about the various Oracle Applications bugs whose fixes have

been applied (ie. patched) in the Oracle Applications installation.

- AD_APPLIED_PATCHES: holds information about the "distinct" Oracle Applications patches

that have been applied. If 2 patches happen to have the same name but are different in content

(eg. "merged" patches), then they are considered distinct and this table will therefore hold

2

records.

- Patchsets.sh: This program (a unix shell script) was created to help customers evaluate the currently installed Oracle Applications patchsets and Family Packs. The program compares the currently installed patchsets and family packs to the most recently available ones generated by Oracle Development. This program utilizes the the applptch.txt file for 10.7-11.0. For 11i and R12, it utilizes a combination of tables such as AD_BUGS and AD_APPLIED_PATCHES to create the installed patch list. If the 11i release does not use these AD tables (11.5.4 or lower and have not applied 11i.AD.E or higher) it still supports using applptch.txt for 11i.

- adutconf.sql: This script provides a wealth of information, including the following:

Product Group(s)

Multi-Org status

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Multi-lingual status

Installed product status

Registered schemas

Installed languages

Q. What exactly happens when you put an Oracle Apps instance in maintenance mode ?
Maintenance mode provides a clear separation between normal runtime operation of Oracle

Applications and system downtime for maintenance. Enabling the maintenance mode feature

a) Shuts down the Workflow Business Events System and

b) Sets up function security so that no Oracle Applications functions are available to users.

Used only during AutoPatch sessions, maintenance mode ensures optimal performance and

reduces downtime when applying a patch.

(COMPLETED TILL PAGE 29) <http://teachmeoracle.com/interview29.html>

Q: How to find Forms Version in 11i ?

Login to forms from frontend , on top menu bar of forms click on "Help" & Select "About Oracle

Applications" go to "Forms Server " section. You should see entry like below depending on your

forms version

Oracle Forms Version : 6.0.8.26.0

Which mean you are on forms version 6.0.8.26 . If you want to know whats your forms patchset

level then subtract 9 from fourth digit which means for above case form patchset 17 is applied.

Q: How to find Forms Version in Apps from command Line ?

Enter "f60gen" on Forms Server and check for first line in output like

Forms 6.0 (Form Compiler) Version 6.0.8.26.0 (Production)

This confirms that you are on forms server version 6.0.8.26.0 and patch set 17. (Patch Set =

Fourth Digit - 9)

Q: How to find Jinitiator Version ?

Check for file like appsweb_SID_HOSTNAME.cfg under \$OA_HTML/bin defined by environment

variable FORMS60_WEB_CONFIG_FILE & search for entry like jinit_ver_name , you will see

entry like

jinit_ver_name=Version=1,3,1,23

which means Jinitiator version is 1.3.1.23 ; if your version is 1.3.1.18 you will see entry like

1,3,1,18

Q: How to find Version of any file in Oracle Apps 11i ? or

Q: How to find any Reports Version 11i ? or

In Oracle Applications under ad utilities there is utility called as adident Used for Identification

purpose or to find out file version use

adident Header <filename>

for ex. in order to find file version of one AR form i.e. ARXGLCOR.fmx

adident Header ARXGLCOR.fmx

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You should see output like

\$Header APPSTAND.fmb 115.33 2002/04/04 11:13:40 pkm ship

\$ \$Header ARXGLCOR.fmb 115.15 2005/01/31 13:48 mraymond ship

Which means above form executable consist of two forms whose version is 115.33 & 115.15

resp. Similarly you can use adident to find version of any report in 11i.

Q: How to find Operation System Version (Unix/Linux) ?

For solaris use command

uname -a or cat /etc/release

You will see output like

For Solaris SunOS servername 5.8 Generic_117350-23 sun4u sparcsun4 SUNW,Sun-Fire-V240

For RedHat Linux use command

cat /etc/*release*

You will see output like

Red Hat Enterprise Linux AS release 3 (Taroon Update 6)

Which means you are on Solaris 5.8 or Linux AS 3 resp.

Q: How to find if your Operating System is 32 bit or 64 Bit ?

For solaris use command

isainfo -v

If you see out put like

32-bit sparc applications

That means your O.S. is only 32 bit but if you see output like

64-bit sparcv9 applications

32-bit sparc applications

above means your o.s. is 64 bit & can support both 32 & 64 bit applications

Q: Can I run 64 bit application on 32 bit Operating system ?

You can run 32 bit application (like oracle application server, web server, all oracle application

server are 32 bit) on both 32 /64 bit operating system but a 64 bit application like 64 bit database

can run only on 64 bit operating system.

Q How to find if your database is 32 bit or 64 bit(Useful in applying Patches) ?

execute "file \$ORACLE_HOME/bin/oracle" , you should see output like

/u01/db/bin/oracle: ELF 64-bit MSB executable SPARCV9 Version 1

which means you are on 64 bit oracle

If your oracle is 32 bit you should see output like

oracle: ELF 32-bit MSB executable SPARC Version 1

Now you know what should be bit of patch to download

Q: How to find OUI version ?

OUI stands for Oracle Universal Installer. In order to find Installer version you have to execute

./runInstaller -help (From OUI location)

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You will get output like

Oracle Universal Installer, Version 10.1.0.4.0 Production Copyright (C) 1999, 2005, Oracle. All

rights reserved.

That means OUI version in above case is 10.1.0.4

OUI location is \$ORACLE_HOME/oui/bin

Q: How to find Database version ?

SQL> select * from v\$version;

The command returns the release information, such as the following:

Oracle9i Enterprise Edition Release 9.2.0.7.0 - Production

PL/SQL Release 9.2.0.7.0 - Production

CORE 9.2.0.7.0 Production

TNS for 32-bit Windows: Version 9.2.0.7.0 - Production

NLSRTL Version 9.2.0.7.0 - Production

Q: How to find Oracle Workflow Cartridge Release Version ?

Log in to the database as the owf_mgr user and issue

select wf_core.translate('WF_VERSION') from dual;

Q: Determining the Current Version of OJSP ?

You may follow these steps to determine which version of OJSP you have on your web server if

you aren't sure:

Change to the OA_JAVA directory on your web server.

Using a text editor, create a file called test.jsp with only the following line:

```
<%= application.getAttribute("oracle.jsp.versionNumber") %>
```

You can also use the echo command, like so:

On Unix:

```
echo '<%= application.getAttribute("oracle.jsp.versionNumber") %>' > test.jsp
```

On Windows NT: echo "<%= application.getAttribute("oracle.jsp.versionNumber") %>" > test.jsp

Access this JSP from a web browser, using the URL:

The resulting page will show you which version of OJSP your Oracle HTTP Server is configured

to use.

If the web page displays "1.1.2.0", then you do not need to upgrade your OJSP. If, however, it

displays anything else, such as "1.0.0.6.1", then you are using an older version of OJSP, and you

must upgrade your OJSP, following the directions in the MetaLink Note indicated above.

Q: How to find opatch Version ?

opatch is utility to apply database patch , In order to find opatch version execute "\$ORACLE_HOME/OPatch/opatch version"

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You should see output like OPatch Version: 1.0.0.0.52 which means your opatch version is

1.0.0.0.52

Q. How to find Version of Apps 11i ?

Run following SQL from apps user ;

```
SQL> select RELEASE_NAME from fnd_product_groups;
```

You should see output like

```
RELEASE_NAME
```

```
-----
```

```
11.5.10.2
```

Which means you are on Apps Version 11.5.10.2

Q How to Discoverer Version installed with Apps ?

Discoverer with Apps installed in ORACLE_HOME same as 806 is usually 3i or 4i. To find

Version login to Application Tier & go to \$ORACLE_HOME/discwb4/bin and execute strings dis4ws | grep -i 'discoverer version'

You should see output like

```
Discoverer Version:Session 4.1.47.09.00
```

Which means you are on discoverer 4i version 4.1.47.09

Q. How to find Workflow Version embedded in Apps 11i ?

Run following SQL from apps user ;

```
SQL>select TEXT from WF_RESOURCES where NAME='WF_VERSION';
```

You should see output like

TEXT

2.6.0

Which means you are on Workflow Version 2.6.0

You can also use script wfver.sql in FND_TOP/sql to find version of workflow in Apps.

Q: How to find version of JDK Installed on Apps ?

There might be multiple JDK installed on Operating System . Like JDK 1.3.1, 1.4.2 or 1.5 but in

order to find which Version of JDK your Apps is using

Open your Context File \$SID_\$HOSTNAME.xml under \$APPL_TOP/admin and look for variable

JDK_TOP oa_var="s_jdktop" what so ever value assigned against that parameter go to that

directory & cd bin & execute command

```
./java -version so lets assume entry above is /usr/jdk then cd /usr/jdk/bin & ./java -version
```

, you

will see output like

```
java version "1.4.2_10"
```

```
Java(TM) 2 Runtime Environment, Standard Edition (build 1.4.2_10-b03)
```

```
Java HotSpot(TM) Client VM (build 1.4.2_10-b03, mixed mode)
```

Which means you are using JDK 1.4.2 in Oracle Applications 11i.

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How do we know that particular instance is cloned or normal installed?

Check clone log file . If log file exists this means this is cloned instance

How can you know that how many modules are already implemented in this instance?

check using adlicmgr.sh or OAM

How can we know that whether we already applied latest AUTOCONFIG patch or not at our instance?

find out patch number for Autoconfig and then check from ad_bugs table

Is this possible to clone a database from hotbackup? If yes plz tell how?

Yes, first recover/clone database from hot backup using normal database clone .

Then run adcfgclone.pl with dbTechStack option instead of dbTier (Use Rapid Clone advance

topic metalink note for more info)

Suppose your database size is 2000GB now you want to clone a particular one datafile or tablespace. Plz tell how co clone a datafile or tablespace?

You can import /export tablespace/datafile but can't clone (Check on this again)

How frequent v have to run Gather Schema Statistics Prog?

and Actually wat happens when U run tht Prog?

When ever you have bulk amount of data loaded into the Database, then you have to gather

schema statistics I think when ever want a snapshot of the presents schemas then u need to

run adadmin for gathering statistics of schema and after runnung this program it maintains

patchset level of oracle_homes and all file versions of executable files

Statistics generated include the following:

Table statistics

Number of rows

Number of blocks

Average row length

Column statistics

Number of distinct values (NDV) in column

Number of nulls in column

Data distribution (histogram)

Index statistics

Number of leaf blocks

Levels

Clustering factor

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System statistics

I/O performance and utilization

CPU performance and utilization

what is the differnce b/w httpd.conf and https.conf ?

httpd.conf is a http demon configuration file where as https.conf is a http demon secure configuration file.

How to see DB size at os level command.

By Issuing the following command in unix

```
$ ipcs -pmb
```

```
ipcs: invalid option -- b
```

```
usage : ipcs -asmq -tclup
```

```
ipcs [-s -m -q] -i id
```

```
ipcs -h for help.
```

Different Shutdown options in database ?

1) shut (for normal shutdown) --- It will wait until all the users to logout from database.

2) shut transactional --- It will wait until all the transactions to be complete by a commit or

rollback.

3) shut immediate--- It will rollforward the committed data and rollback the uncommitted data.

4) shut abort--- It will not check for users,transactions etc.. just it will aborted from database

by shutting down the instance.

A database is running in NOARCHIVELOG mode which type of backups you can take?
In no archive log mode, you have to take cold backup only...means..your database should be down and take backup....

For this, you can write shell script in order

- (a) shutdown the database
- (b) copy all the files
- (c) startup the database.....

Which users logged in to the system longer than 6 months ago ?

```
select a.user_id,a.user_name,b.user_id,b.start_time
from FND_USER a, FND_LOGINS b
where a.user_id = b.user_id
and b.start_time = (select max(start_time) from FND_LOGINS where user_id =
b.user_id)
and START_TIME < SYSDATE - 180;
```

To see how many distinct users are connected to my system, at particular time ?

```
select distinct fu.user_name User_Name,fr.RESPONSIBILITY_KEY
Responsibility,fu.LAST_LOGON_DATE from fnd_user fu,
fnd_responsibility fr, icx_sessions ic
```

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```
where fu.user_id = ic.user_id AND
fr.responsibility_id = ic.responsibility_id AND
ic.disabled_flag='N' AND
ic.responsibility_id is not null AND
ic.last_connect like sysdate;
```

Who uses the OBT_AA schema in Apps ?

OBT_AA is used by ILM (Inventory Management) product. Only objects inside this schema are db

links, functions, packages, procedures and synonyms. No tables in this one.

```
SQL> SELECT DISTINCT OBJECT_TYPE
```

```
2 FROM DBA_OBJECTS
```

```
3 WHERE OWNER='OBT_AA';
```

```
OBJECT_TYPE
```

```
-----
```

```
DATABASE LINK
```

```
FUNCTION
```

```
PACKAGE
```

```
PACKAGE BODY
```

```
PROCEDURE
```

```
SYNONYM
```

```
VIEW
```

What is Bolton: AventX: ?

AventX is a fax and email solution for E-Business Suite from STR software. It works with other

ERPs like SAP R/3 via its ERP connectors. Users in a Unix-based environment, including AIX, HP-UX, Intel Linux, Solaris and Tru64, can send information directly from various host ERP applications.

Schemas created by AventX are called: sf and sfgy

SF = STR Software Fax Commander

SFGY= STR Software Fax Commander Gateway

Fax Commander was the original name of the AventX product and internally you will find a lot of

names with SF and SFC.

Insight into AutoConfig

I am going to give you some insight or inner working of this tool. Thanks to Harminder Singh (Try

at your own risk)

For detailed information on AUTOCONFIG refer to the following metalink

Note:165195.1,

Note:218089.1, Note:270519.1 and Note:217368.1.

Wanna create CONTEXT file manually, try this ... and then copy the generated XML to \$APPL_TOP/admin/host_SID.xml

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Wanna Update the tags in CONTEXT File, try this to update tag s_appsEnvName to SHYAM

Wanna try to instantiate configuration files from custom driver and templates files based on the values from CONTEXT FILE.

How to Trace Concurrent Programs for a Specific ERP User

1-First get the ERP user login id .

2- Pull up the SYSTEM profile - make sure in the find screen to select the user & add the user, and add the profile value, in one line, at the profile option value called, 'Initialization SQL Statement - Custom', you can put this in your find as well...

3- Now you need to add the value under the user filed, below the user name, copy this in notepad in one line and paste it. You can change the identifier and the dump file size as well. NOTE IF YOU MAKE A MISTAKE USER WILL NOT BE ABLE TO LOGIN.

```
begin fnd_ctl.fnd_sess_ctl(",','TRUE','TRUE','LOG', 'ALTER SESSION SET  
EVENTS="10046 TRACE NAME CONTEXT FOREVER, LEVEL 8"
```

```
tracefile_identifier="BENMGL" max_dump_file_size="unlimited"); end;
```

Q. What is profile options, What are various type of profile options ?

Q. What is APPS listener ? Why its used ?

Q. How do you start/stop apps listener ?

Q. If users complaining Oracle Applications 11i system is running slow , what all

things you will check at broad level ?

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Q. What is Autoconfig ?

Q. What is context file ?

Q. Why appsutil directory under Database ORACLE_HOME used for ?

Q. How to create User in Oracle Applications 11i ? Can you delete a User ?

Q. What is Single Sign On ? (If you are using portal 3.0.9 or 10G)?

Q. How to configure portal with 11i ? (If you are using portal 3.0.9 or 10G)?

SOME USEFUL QUERIES

1)How to check if the partitions of a table are set to LOGGING

```
select partition_name, logging
```

```
from dba_tab_partitions
```

```
where table_name='WF_LOCAL_ROLES';
```

2)How to Correct Session Cookie Name.

a)select session_cookie_name from icx_parameters;

b)update icx_parameters set session_cookie_name = '<hostname_sid>';

c)select session_cookie_name from icx_parameters;

3) How to find database SID from a Concurrent request.

column process heading “FNDLIBR PID”

```
SELECT a.request_id, d.sid, d.serial#,d.osuser,d.process , c.SPID
```

```
FROM apps.fnd_concurrent_requests a,
```

```
apps.fnd_concurrent_processes b,
```

```
v$process c,
```

```
v$session d
```

```
WHERE a.controlling_manager = b.concurrent_process_id
```

```
AND c.pid = b.oracle_process_id
```

```
AND b.session_id=d.audsid
```

```
AND a.request_id = &Request_ID
```

```
AND a.phase_code = 'R';
```

You need your concurrent request ID as an input.

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c.SPID= is the operating system process id

d.sid= is the Oracle process id

4) How to check which object is corrupted.

```
SELECT tablespace_name, segment_type, owner, segment_name
```

```
FROM dba_extents
```

```
WHERE file_id = 64 and 1 between block_id AND block_id + blocks-1;
```

5) How to check whether the product is install,shared and Not installed in Apps.

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```
–requestor, program, user_concurrent_program_name
```

```
FROM fnd_conc_req_summary_v
```

WHERE (ACTUAL_COMPLETION_DATE- ACTUAL_START_DATE)*24*60 >10

8) How to find out Package Header.

```
select name,text from dba_source where text like '%Header: %'  
and owner = 'APPS' and name = 'INVALID_OBJECT_NAME';
```

9) How to find out version of a package.

```
select text from dba_source  
where line=2  
and name='AP_IMPORT_INVOICES_PKG';
```

10) How to find out which request is handle by which concurrent queue.

a) First find out short_name of a program and then pass it as parameter to below query.

b) The below query will give you output

I - Included - Included in new concurrent queue

E - excluded from Standard Manager

This way you know now this running program (concurrent request) is handled by new manager and not part of standard manager.

11) How to backup the defination of a View before dropping a view.

```
select dbms_metadata.get_ddl('VIEW','RG_View','APPS') from dual;
```

I will update some more scripts in my next post.

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Product installation Information Version of Apps

```
s  
elect * from fnd_product_groups
```

I
nformation about concurrent requests

```
select * from fnd_concurrent_requests
```

I
nformation about particular concurrent request

```
select logfile_name, logfile_node_name, outfile_name, outfile_node_name  
from fnd_concurrent_requests
```

```
where request_id =<request id>
```

Finding Invaled Objects

```
s  
elect count(*) from dba_objects where status ='INVALID'
```

To Check which node is running what service

```
s  
elect * from fnd_nodes
```

I
nformation about the bugs fixed in Installation

```
select * from ad_bugs
```

I
nformation about the applied patches

```
select * from ad_applied_patches
```

Stores values for various profile options

```
s  
elect * from FND_PROFILE_OPTION_VALUES
```

I
nformation about various profile options

```
select * from FND_PROFILE_OPTIONS
```

T
o Find database version

```
select * from v$version
```

T
o find Oracle Workflow Cartridge Release Version

```
select wf_core.translate('WF_VERSION') from dual;
```

```
s  
elect TEXT from WF_RESOURCES where NAME='WF_VERSION';  
/
```

* Query to find out if any patch except localisation patch is applied or not, if applied, that what all drivers it contain and time of it's application*/

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A, AD_PATCH_DRIVERS B where A.APPLIED_PATCH_ID =
B.APPLIED_PATCH_ID and
A.PATCH_NAME = '<patch number>'

/

* To know that if the patch is applied successfully, applied on both node or not, start time of patch application and end time of patch application, patch top location , session id ... patch run id */

* To find the latest application version */

* to find the base application version */

* To find all available application version */

/* To get file version of any application file which is changed through patch application */

* To get information related to how many time driver file is applied for bugs */

/

* To find latest patchset level for module installed */

/* To find what is being done by the patch */

* To find Merged patch Information from database in Oracle Applications

* Second Query to know, what all has been done during application of

* Script to find out Patch level of mini Pack */

S
elect product_version,patch_level from FND_PROUDCT_INSTALLATIONS where
patch_level like '%&shortname%';

R

replace short name by name of Oracle Apps Minipack for which you want to
find out Patch level . ex.

AD - for Applications DBA

GL - for General Ledger

PO - Purchase Order

S

earch FND_PROFILES for Hard-Coded Path

A

s part of Windows to Linux Upgrade/Migrate project. I wrote the
following query to pull all the profiles that has a hard-coded Windows
Path

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-- Start Script

-- End Script

W

anna DUMP JVM threads or check GC size

T

his scripts will be handy if you wanna check the Garbage Collection
Size of OACore JVMs or DUMP them to check for any locking/waiting issue

#

scripts Check the Garbage Collection Size of OACore JVMs

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<http://appsdba.info>

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Q) How to check if your system is SSL enabled?

A quick check : If your context file contains the values of s_url_protocol / s_local_url_protocol set to https, then your envt has to be SSL-enabled. If the rest of config is absent but these are set to https, then URL does not resolve - which is an indirect check of incomplete config.

Also you can use this query to check

```
select PROFILE_OPTION_VALUE
from applsys.fnd_profile_option_values
where PROFILE_OPTION_VALUE like 'http%';
```

Q

) Query to find who and when update an Oracle Application user's profile.

While generating snapshots before patching if we see Integrity Error then we need to remove the following file SNAPSHOT.TXT from \$APPL_TOP/admin/sid/out.

Issue with APPLSYS and APPS password

Scenario 1:

As you know that apps and applsys password should be in synch and should be changed using FNDCPASS.

There can be situation where a novice user changes applsys password from the backend database. In that case when you try to start the services it will show following error

APP-FND-01496: Cannot access application ORACLE password

Cause: Application Object Library was unable access your ORACLE password.

You can even reproduce this issue (ofcourse after taking the backup of FND_USER and FND_ORACLE_USERID table) using the following steps

1. Use the ALTER USER command to change the APPLSYS password
2. Try to run the adstrall.sh script to start Apps services.
3. You will get an error “Cannot complete applications logon. You may have entered an invalid applications password, or there may have been a database connect error.”
4. Then try FNDCPASS to fix password and you will get the error the APP-FND-01496 error.

If this situation happens then you cannot access the application. Infact the services even wont start.

Resolution to such problem is to rollback the 2 tables FND_USER and FND_ORACLE_USERID. Once you rollback the tables, apps and applsys passwords will be in synch and password will be older one. You can then run FNDCPASS and

change the password.

Scenario 2:

Some times when you run FNDCPASS, you get following error

APP-FND-01502: Cannot encrypt application ORACLE password

Cause: Application Object Library was unable encrypt your ORACLE password.

Action: Contact your support representative. (ORACLEUSER=APPS_SERV)

The error comes because the table fnd_oracle_userid contain rows for schemas that does not exist. Those rows must be deleted from the table.

Use the following query to get the details of the schema that does not exists

```
select * from fnd_oracle_userid
```

```
where oracle_username not in
```

```
(select username from all_users);
```

The rows returned by this query can be deleted from FND_ORACLE_USERID table.

This will resolve this issue.

Scenario 3:

There can be situation where users has update APPLSYS password using ALTER command in database directly and also you dont have backup of those tables. Under such situation, it is very difficult to recover the application and make it working. Still following methodology is proposed which might help you to restore the password back and make your application work fine.

For this to work you should have some other application (may be debug or UAT) which is

having the same passwords or default passwords for schemas. If you have such application the following the below steps in the application which is affected by password mismatch.

This method is for resetting apps and applsys passwords. Below are the SQL statements that will help you reset the APPS and APPLSYS passwords to APPS, the APPLSYSPUB password to PUB, and the SYSADMIN password to SYSADMIN.

WARNING: This procedure will cause all user passwords to become invalid. ALL users passwords will need to be reset through the sysadmin responsibility.

Step 1) Reset the Oracle User IDs

Open a SQL*Plus as SYSTEM and reset the passwords for the APPS, APPLSYS, and the APPLSYSPUB Oracle user ID:

```
ALTER USER apps IDENTIFIED BY apps;
```

```
ALTER USER applsys IDENTIFIED BY apps;
```

```
ALTER USER applsyspub IDENTIFIED BY pub;
```

Step 2) Backup the FND_ORACLE_USERID and FND_USER tables (even though these tables are right now corrupted, do take a backup. You can restore the same when ever you want).

Open a SQL*Plus session as APPLSYS and backup the tables:

```
create table FND_ORACLE_USERID_BAK as (select * from FND_ORACLE_USERID);
```

```
create table FND_USER_BAK as (select * from FND_USER);
```

Step 3) Reset the APPS and APPLSYS application encrypted passwords

Open a SQL*Plus session as APPLSYS and update the FND_ORACLE_USERID table.

```
update FND_ORACLE_USERID
set ENCRYPTED_ORACLE_PASSWORD =
'ZGA34EA20B5C4C9726CC95AA9D49EA4DBA8EDB705CB7673E645EED570D5
447161491D78D444554655B87486EF537ED9843C8'
where ORACLE_USERNAME in ('APPS', 'APPLSYS');
commit;
```

This encrypted string we are updating is the default encrypted string for apps. So if your application is having apps password the encrypted string will look like this. We are updating this encrypted string here directly.

Verify the table update:

```
select ENCRYPTED_ORACLE_PASSWORD
from FND_ORACLE_USERID
where ORACLE_USERNAME IN ('APPS', 'APPLSYS');
```

Step 4) Reset the APPLSYSPUB application encrypted password

Open a SQL*Plus session as APPLSYS and update the FND_ORACLE_USERID table.

```
update FND_ORACLE_USERID
set ENCRYPTED_ORACLE_PASSWORD =
'ZG31EC3DD2BD7FB8AD2628CE87DDDF148C1D2F248BE88BE987FDF8283022
8A88EF44BC78BC7A9FAD4BFB8F09DAD49DF7280E'
where ORACLE_USERNAME = ('APPLSYSPUB');
commit;
```

The above encrypted string is the encrypted string for password pub. If your applsyspub password is pub then the encrypted string in FND_ORACLE_USERID will look like this.

Verify the table update:

```
select ENCRYPTED_ORACLE_PASSWORD
from FND_ORACLE_USERID
where ORACLE_USERNAME = 'APPLSYSPUB';
```

Once these updates are done, try your luck by running FNDCPASS and it should work fine.

Hope this help !!!

References

Metalink note ID 445153.1

Metalink note ID 429244.1

Oracle Apps Technology Blog

PATCHING

Error message: ORA-01013: user requested cancel of current operation

Resolution to error: If this error occurs, simply use adctrl to restart the worker on the current machine.

Error message: Patch not applied successfully, adpatch did not cleanup its restart files (*rf9).

Resolution to error: If this error occurs, execute the following as the instance owner:

```
$cd $APPL_TOP/admin/$CONTEXT_NAME
```

```
$mv restart restart_old
```

```
$mkdir restart
```

After cleaning up the restart files, you may then restart the adpatch session using adpatch.

Error message: ERROR: Javakey subcommand exited with status 1

Resolution to error: If this error occurs, the identity.obj file needs to be re-created. See Chapter 2 for steps to recreate the identity.obj file. Then, use adctrl to restart the failed worker.

Error message: No error message is displayed; rather the worker log file states that the worker is complete, yet adctrl indicates that the worker is still running.

Resolution to error: This patching problem occurs when the worker is complete, but did not update patching tables correctly to notify the adpatch session that it has finished. In this scenario, the adpatch session is still waiting for the finish return code from the worker. When this occurs, use adctrl to fail the worker, then restart the worker.

Tip: Any form, library, or report that fails to generate during the patch process can be regenerated manually after all patching and post-patching steps have completed. If the object still fails to compile, open an SR.

Question: I'm upgrading from RDBMS Version 9.2.0.5 to 9.2.0.8, and got the following error:

SQLPLUS fails when the code you are trying to execute contains the

statement "WHENEVER OSERROR EXIT FAILURE ROLLBACK" if you attempt to

connect to the local database instance via sqlplus '/as sysdba'

I researched the problem on MetaLink, and it said to apply patch 5495695. That still didn't resolve the issue.

Answer: Apparently you need to take one more step after applying the patch:

1. Backup \$ORACLE_HOME/bin/sqlplus executable
2. Copy \$ORACLE_HOME/sqlplus/lib/sqlplus to \$ORACLE_HOME/bin

Question: I am looking for a consolidated information point for all changed objects (tables, views, etc.) between Release 11.5.8 and Release 11.5.10.2 for GL, AP, AR, FA, CM, Projects, OM, PO, INV, and Treasury. Do you have any idea where I can get this information?

Answer: Unfortunately, there is no utility or single document provided by Oracle that outlines the various Release deltas. We'd start with the eTRMs for each Release.

Another source for determining the differences is MetaLink Doc. ID: 163400.1, "Release Content Documents and Features Summary Matrices". The top of the note has links to the Release Content Documents (RCDs) for all the Release 11i point releases and Family Packs that supersede Release 11.5.10. The RCDs list new features, but not new/changed components. If you scroll down to the 'About' Documents you will see, by product family, a document for each Family Pack. These "About" documents do have a "New and Changed Modules" section that will help you identify the changes.

This does require knowing which Family Pack you are currently on. For Financials (GL, AP, AR, FA, CM, Treasury), Release 11.5.8 is Family Pack C, so you would need to read about Family Packs D, E, F, and G. For Projects, Release 11.5.8 is Family Pack J, so you would need Family Packs K, L, and M. For Purchasing and Inventory and Order Management, Release 11.5.8 is Family Pack H, so you would need Family Packs I and J (note: Inventory and Purchasing and Order Management (ONT) are rolled into Supply Chain Management for J).

How to Apply a Patch When Already Patching

Occasionally, adpatch will fail on one of the workers and patch installation cannot continue until a different patch is applied. Currently adpatch only supports applying one patch at a time. So, how do you stop a patch, apply another patch, and resume the original patch? The following steps provide a solution for that scenario.

1. Using the adctrl utility, shutdown the workers.

a. adctrl

b. Select option 3 "Tell worker to shutdown/quit"

2. Backup the FND_INSTALL_PROCESSES/AD_DEFERRED_JOBS tables which is owned by the

APPLSYS schema

```
sqlplus applsys/apps
```

```
create table fnd_install_processes_back as select * from
```

```
fnd_install_processes;
```

```
select count(*) from fnd_install_processes_back;
```

```
select count(*) from fnd_install_processes;
```

```
create table AD_DEFERRED_JOBS_back as select * from AD_DEFERRED_JOBS;
```

```
select count(*) from AD_DEFERRED_JOBS_back;
```

```
select count(*) from AD_DEFERRED_JOBS;
```

3. Backup the .rf9 files located in \$APPL_TOP/admin/<SID>/restart directory. At this point, the

adpatch session should have ended and the cursor should be back at the UNIX prompt.

```
cd $APPL_TOP/admin/DEVL
```

```
mv restart restart_back
```

```
mkdir restart
```

4. Drop the FND_INSTALL_PROCESSES table and the AD_DEFERRED_JOBS table.

```
sqlplus applsys/apps
```

```
drop table FND_INSTALL_PROCESSES;
```

```
drop table AD_DEFERRED_JOBS;
```

5. Apply the new patch.

6. Restore the .rf9 files located in \$APPL_TOP/admin/<SID>/restart_back

```
cd $APPL_TOP/admin/DEVL
```

```
mv restart restart_3263588
```

```
mv restart_back restart
```

7. Restore the FND_INSTALL_PROCESSES/AD_DEFERRED_JOBS tables which is owned by the

APPLSYS schema.

```
sqlplus applsys/apps
```

```
create table fnd_install_processes as select * from
```

```
fnd_install_processes_back;
```

```
select count(*) from fnd_install_processes;
```

```
select count(*) from fnd_install_processes_back;
```

```
create table AD_DEFERRED_JOBS as select * from AD_DEFERRED_JOBS_back;
```

```
select count(*) from AD_DEFERRED_JOBS_back;
```

```
select count(*) from AD_DEFERRED_JOBS;
```

8. Re-create synonyms in APPS User

```
sqlplus apps/apps
```

```
create synonym AD_DEFERRED_JOBS for APPLSYS.AD_DEFERRED_JOBS;
```

```
create synonym FND_INSTALL_PROCESSES FOR
```

```
APPLSYS.FND_INSTALL_PROCESSES;
```

9. Start adpatch, it will resume where it stopped previously.

The Case.. The Mess up and The Quick Fix or Re Creating APPS Synonyms

without using ADADMIN

My current post(or a story rather) deals about a real life mess up and the quck solution we did to fix it with the least possible down time.

The content in this post is scritly for informational purposes only. DO NOT try this method even on your TEST or Development environment.

The Case

We all know that the APPS schema in Oracle Applications does not really hold many objects but holds synonyms to all the application objects in various schemas.

Also it is a common practice for the development environment to have a schema similar to the apps schema in Oracle Applications with only read access.

Some of these synonyms had gone invalid after a cloning process and were giving a synonym translation invalid error. It was decided to drop and recreate all the synonyms for the READ ONLY schema.

A dynamic script was crated for dropping all the synonyms form this schema.

```
spool /tmp/dropsynonym.sql
```

```
select 'drop synonym '||SYNONYM_NAME ||';' from user_synonyms;
```

```
spool off
```

This was supposed to be executed in the READ ONLY schema.

After this the synonyms were to be recreated again using another script

```
spool /tmp/synonym.sql
```

```
select distinct 'create synonym '||object_name||' for '||owner||'.'||object_n  
ame||';' from dba_objects where owner = 'APPS' ;
```

```
spool off
```

The above process worked fine always and seemed like a fairly tale.. until one fine day..

The Mess up

It all looked OK that day until a poor soul did this.

The drop synonym script was executed from the APPS schema instead of the APPS read only schema. The result.. All the synonyms from the APPS user got knocked off. Everything in Oracle Applications came crashing down.

(This is the part where my pager starts beeping..)

After we realized what had happened the first thought to strike my mind was to run adadmin and re create the grants and synonyms. But as expected adadmin also refused to work in the absence of the apps synonyms. Classic!!

The Quick Fix

We did have multiple environments of oracle applications at this particular client so we just made up a script to create all the synonyms again from a working similar instance.

We this script in the APPS schema of the working environment.

```
spool fixsynonym.sql
```

```
select 'create synonym '||synonym_name||' for '||table_owner||'.'||table_name||';' from
```

user_synonyms;

spool off

Next we ran the fixsynonym.sql from the apps schema of the environment which had all its synonyms deleted.

Once done we were able to get back almost all of our synonyms and atleast were able to get adadmin working back again.

Next we ran adadmin and selected to recreate the grants and sysnonyms for the APPS Schema.

We did a clean shutdown of the instance and then brought it up again.. and it was back to perfect.

Adpatch Failed With Invalid Applsyst Password

Applying d2673262.drv logfile shows the following error

The ORACLE username specified below for Application Object Library uniquely identifies your existing product group: APPLSYS

Enter the ORACLE password of Application Object Library [APPS] : xxxxxx

AutoPatch is verifying your username/password....Unable to connect.

Error:The given ORACLE password is not the correct password.

Please re-enter the ORACLE username and password.

Enter the ORACLE password of Application Object Library [APPS] :

Cause

APPS and APPLSYS password are not same

or

APPLSYS does not have the create session privilege

Solution

Either the APPS/APPLSYS passwords are different.

The APPLSYS and APPS passwords always have to be the same.

Always change both at the same time. When changing these passwords, it is important to change the APPLSYS password first and the APPS password second (To change the password it is recommended to use the FNDCPASS Utility).

OR

APPLSYS does not have a create session PRIVILEGE.

grant create session privilege to applsys.

Unable to start or stop concurrent manager

· fact: Oracle Application Object Library

·

· symptom: Unable to start or stop concurrent manager

..

symptom: APP-01055 Concurrent Manager cannot connect to database

·

· symptom: APP-00988 Oracle error 1017 in fdusq

..

change: Copied Oracle datafiles from one database to another.

Passwords for SYS and SYTEM were changed. APPS & APPLSYS passwords were reset w/in the application following the same being changed in the client server. System profiles were changed in the copied

instance to reflect the Database Instance, Application Web Agent & Site Name changes needed.

cause: Startup and shutdown scripts were hardcoded with old passwords

fix:

Modify startup and shutdown scripts to use the new passwords.

I am getting this error one of my instance

ORA-01653: unable to extend table APPLSYS.AD_PATCH_RUN_SESS_ATTRIBS
by 16 in

tablespace APPS_TS_TX_DATA

ACTION: u can use ALTER TABLESPACE ADD DATAFILE ..to add one or more
datafile to the

tablespace indicated

Actually i have i applied FP_K RUP2 patch after that it was worked some time fine,
Now suddenly i am getting this error.

ORA-04062: signature of package "APPS.FND_REQUEST" has been changed

FRM-40735: ON-INSERT trigger raised unhandled exception ORA-04062.

Check for the invalid objects related to the patch. If there are no invalids, then regenerate
the

forms(.fmb) and .pll files. It may help u in solving the problem.

I was trying to change the domain name of oracle application 11.5.10.2 , by making
changes in both .xml files . but when i was not success , i return to what i had

changes as i had the backup of old .xml files. but now when i m running
adautocfg.sh in both the tirs, it cant connect to the database .

When You change the domain name in apps u have to change it in both context files (xml
files)

also in hosts file located in etc (/etc/hosts. If your O/S is Linux) and in sysctlconf if u
specified at the time of installation. (/etc/sysctlconf see the parameter
kernel.domainname).

After changing the domain name u restart the listener and database and run autoconfig.

When i login into application and try to open any forms, in status bar i am getting
exception: http://.../fndewt.jar .

and not able to load the form. if i use /dev60cgi/f6cgi then also forms are not
coming up.

It was basically the browser setting in jinitiator.

We complete the refresh prod over test on one week back. After that we are facing one
problem, concurrent managers down every day. How to trouble shoot this issue. Please
guide me.....ASAP. ?

profile option Concurrent:GSM Enabled and make it to 'N' and start the managers
through

adcmctl.sh.

sh adcmctl.sh start apps/apps

Q: I'm getting a Yellow Warning Bar. How do I get rid of this?

1. Yellow Warning Banners

a. What Does "Warning: Applet Window" Mean?

Oracle Applications Release 11.5.1 (11i) requires that its code run in a trusted mode, and

uses J-Initiator to run Java applets on a desktop client. If an applet is "trusted," however, Java will extend the privileges of the applet. The Yellow Warning Bar is a warning that your applet is not running in a trusted mode. To indicate that an applet is trusted, it must be digitally signed using a digital Certificate, so Oracle Applications requires that all Java archive files must be digitally signed.

b. Who Does This Affect?

This affects all users that try to access Oracle Applications Rel 11i using Jinitiator that have a different identitydb.obj on their client.

Clients have an "identity database" that is maintained by J-Initiator called IDENTITYDB.obj. When a jar file is downloaded, the owner of the digital signature is compared against the entry in the identity databases. If they match, the code contained in the archive is allowed to run in a trusted mode. The users will need to fix their client PC in one of two ways:

i.

- a. Uninstall Jinitiator and clear browser cache
- b. Log back into Applications to get the new plugin, (ojjinit.exe) including the new identitydb.obj
- c. Install the Jinitiator on the Client PC and then Log into the Oracle Applications to download the new signed JAR files

OR

ii.

- a. Copy the IDENTITYDB.OBJ file to C:\Program Files\Oracle after saving the old one as IDENTITYDB.old.

Problem....

When you try to submit a request like Active users or Active responsibilities, request gets submitted. When we view the help requests, you find that it is inactive / nomanager. Within 12 to 15 seconds, you refresh-it gets completed. Initially, you could find only inactive and we look

at the diagnostic- the concurrent manager assigned is not picking up. There is no specialization rules in any managers except the include program this source.

Solution....

Most often when this occurs where a request goes "inactive/no manager" and is then processed a short time later, the solution is to either increase the cache size for your Standard

manger, or increase the actual number of Standard manager processes.

Cache Size is set on the CONCURRENT/MANAGER/DEFINE form. Basically, this regulates how

many requests a manager will pick up for each sleep cycle.

Oracle Applications 11i Middle Tiers Linux Migration

We successfully migrated our Oracle Applications 11i (11.5.10.2) middle tiers (forms and web)

from HP-UX to Linux during the weekend. We followed the standard Metalink Note :- 238276.1

for the Linux Migration. Our admin tiers and database instances were on HP-UX and these

were left alone during the migration. Overall it has been a smooth cutover, however we did

face a SEV 1 issue during the GOLIVE activities. We were able to get help within the maintenance window and thereby were able to release the instance on time. The details are

below

ORA-01403: No Data Found...

After completing all the tasks and starting the applications on the target linux servers, none of

the forms were opening. Every click resulted in a "ORA-01403: No Data Found" error.

We

reviewed all the tasks and everything was run fine. However we were convinced that this error

could be a result of just one file or one wrong parameter. Soon after a thorough search on the

Oracle Metalink site, we found an article that says an incorrect custom.pll can cause this error

while trying to open any form or click on any form button. After getting this vital hint, we were

able to demonstrate that its indeed the custom code that is causing the problem. The following

method was used to confirm this.

Login to forms

If "ORA-01403: No Data Found" occurs on every form click or form button click, then escape

the error window, Goto Help menu => Diagnostics => custom code => The option here will

be NORMAL. Choose OFF.

Now navigate forms again. The error no longer showed up after turning off custom code.

After narrowing down to the bottom of the problem, we soon found that a pll file added

along with CUSTOM.pll for some changes was not compiled on linux. The problem went away

after compiling this pll too.

Conclusion

adadmin program compiles only the standard code and hence custom code compilation has to

be taken care of seperately after the standard code compilation. Failure to compile any custom

code files can result in the above problem.

How to Change APPS Password without running ADCONFIG

Any other ORACLE database user password can be changed simply by the 'alter user username identified by xxxxx' command. However the APPS user password change procedure

in an Oracle Applications 11i instance has got a few more additional steps. In this post i will

outline all the steps required without running the adconfig utility as well as the verification process after changing the password

APPS password change procedure WITHOUT running adconfig

Login to any of the admin tiers of the 11i instance

```
FNDCPASS apps/old_pwd 0 Y system/sys_pwd SYSTEM APPLSYS new_pwd
```

Edit \$ORACLE_HOME/reports60/server/CGIcmd.dat and update with the new password

Login to all of the middle tiers of the 11i instance (or just one of them if its a shared appl tier configuration)

Edit the following files and update them with the new password

```
$FND_TOP/bin/appsweb.cfg
$FND_TOP/resource/wfmail.cfg
$ORACLE_HOME/reports60/server/CGIcmd.dat
$IAS_ORACLE_HOME/Apache/modplsql/cfg/wdbsvr.app
```

Recreate any database links that are owned by the apps user

Update any 3rd party tools, interfaces or scripts that have the password hardcoded

APPS password change procedure WITH adconfig

Login to any of the admin tiers of the 11i instance

```
FNDCPASS apps/old_pwd 0 Y system/sys_pwd SYSTEM APPLSYS new_pwd
```

Backup any customizations in the configuration files

```
cd $COMMON_TOP/admin/scripts/$CONTEXT_NAME and run adautocfg.sh
```

Restore the customizations to the configuration files

Login to all of the middle tiers of the 11i instance (or just one of them if its a shared appl tier configuration)

Backup any customizations in the configuration files

```
cd $COMMON_TOP/admin/scripts/$CONTEXT_NAME and run adautocfg.sh
```

Restore the customizations to the configuration files

Recreate any database links that are owned by the apps user

Update any 3rd party tools, interfaces or scripts that have the password hardcoded

Verification

Login to the database as apps user

Complete the AOL/J diagnostic test. This webpage asks for the new apps password and tries to complete a jdbc connection. http://11i_web_URL:port/OA_HTML/jsp/fnd/aoljtest.jsp

Conclusion

There may be lot of customizations in the configuration files that are generated by the adautocfg.sh. Saving and restoring them each and every time adautocfg.sh is run is the key to a successful apps password change procedure when adconfig is run (adautoconfig.sh). If one is not sure about all the customizations in the configuration files, one can choose the first procedure above WITHOUT running adconfig

How to verify whether a patch has been applied in 11i

There are several known ways for checking whether a patch (simple patch, patchset, family pack or minipack or maintenance pack) has been applied in the Oracle 11i E-Business Suite.

However in these "several" ways, what is the best method which is also supported by Oracle

Support ?

Yesterday i was doing patch analysis for installing Oracle Support Diagnostics 2.5 product

(IZU) in our 11.5.10.2 production system. It listed 11i.ATG_PF.H.4 (Rollup 4) as the prerequisite.

So i downloaded patchsets.sh (the Oracle Patch Comparison utility) and ran the script to find

the current Running Versions in our system for patchsets and family packs.

It listed 11i.ATG_PF.H(3438354) as the Running Version and

11i.ATG_PF.H.5(5473858) (Rel-

By_Metalink) as the 'Latest Available' one in the Report_11i.txt output file.

So as per the patchsets.sh tool, there is no 11i.ATG_PF.H.4 (4676589) in our system. I went

ahead with my patch analysis only to know later that '11i.ATG_PF.H.4' has indeed been applied

to our system.

AD_PATCH_DRIVERS shows 4676589, whereas patchsets.sh does not show this is applied !!

though Metalink Note 162524.1 shows either method is OK.

4 Different methods as per Metalink for finding patch information in 11i

-
- 1) patchsets.sh (Patch Comparison Tool)
 - 2) AD_PATCH_DRIVERS table
 - 3) Two reports adphrept.sql (patch history) and adfhrept.sql(file history) in \$AD_TOP directory
 - 4) Login to Oracle Applications Manager (OAM) => Applied Patches => Simple Search by 'Patch ID)

What is the best method out of the 4 above ?

Finding patch history through OAM is the best method. It is easy to use and it has a webbased

interface. AD_PATCH_DRIVERS too is good if you want to write a SQL statement.

What does the Documentation say ?

According to the 'AD Maintenance Utilities' PDF for 11.5.10.2 , OAM is the best method for

finding patch history.

Conclusion

patchsets.sh is not a reliable tool and Oracle Applications Manager (OAM) or querying

AD_PATCH_DRIVERS table is the correct method to determine the current patchset levels.