



Rapid Migration to 12.1.x

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Release 12 Tiers - Graphic



Desktop Tier

Sun J2SE java plug-in

Internet Explorer

Firefox

Netscape



Application
Tier

Web Services => 10.1.3

Forms Services => 10.1.2

Concurrent Processing Server

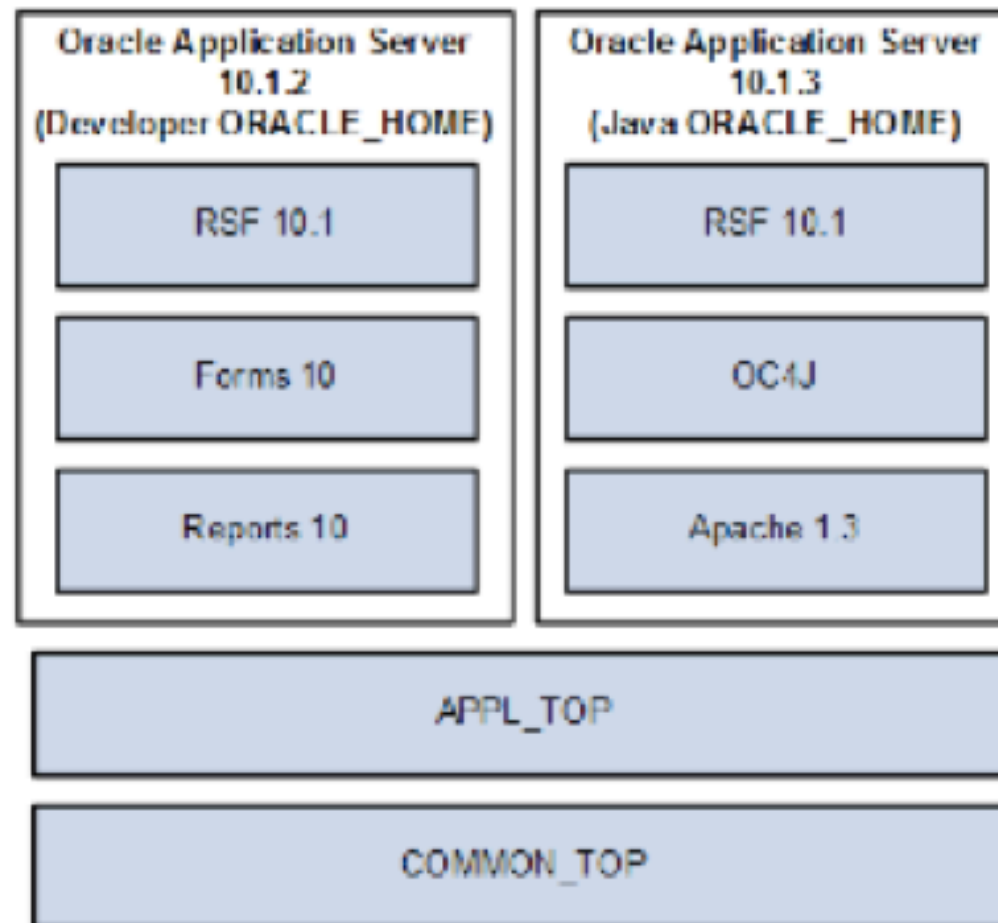
Admin Server



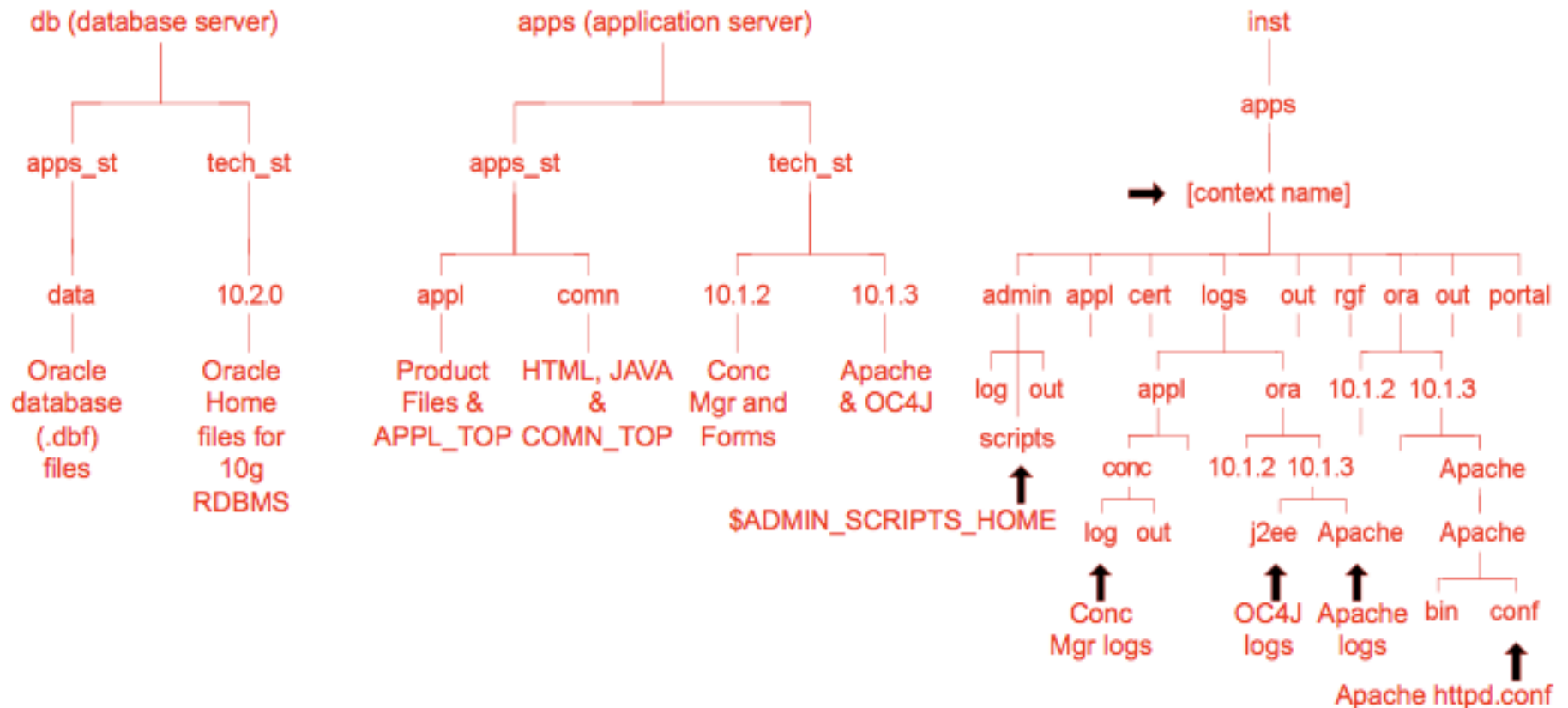
Database
Tier

Oracle RDBMS 11g

Release 12 Tier - Application



Release 12 Directory Structure



R12 Upgrade Overview

- **Assess source E-business version**
 - Release 11.0 must upgrade to 11.5.10.2 (*standard upgrade to 11.5.10.2*) and then 12.1.1
 - Release 11.5.1 – 11.5.8 must upgrade to 11.5.10.2 (*rapid upgrade to 11.5.10.2*) and then 12.1.1
 - 11.5.9 or 11.5.10(base, CU1, CU2) direct upgrade to R12.1.1
 - Finally, upgrade from R12.1.1 to R12.1.3
- **Database considerations**
 - 11.2.0.2 is certified with R12
 - Release 11.5.9 CU2 and 11.5.10 CU2
 - Upgrade to 11g either before or during upgrade downtime
 - Release 11.5.9 base, 11.5.9 CU1, 11.5.10 BASE, and 11.5.10 CU1
 - Upgrade to 11g during downtime window

R12 Upgrade Detail

- 11.5.10.2 to 12.1.1 (*applicable from 11.5.9 as well*)
 - if possible, convert your existing 11i environment to OATM sometime before performing the upgrade. This eliminates OATM work that would be done during the upgrade
 - Obtain 12.1.1 media and install in staging area
 - These are the **recommended and required prep technical steps**. Not shown are optional steps or other steps dependent on given product install
 - apply 11i.AD.I.6 to source 11i env if not there
 - Run TUMS utility – delivered in a patch. Produces a report that lists task that can be omitted from the upgrade
 - Convert to multi-org if you haven't
 - Review sizes of old and new tablespaces
 - Run AD preparation scripts – for OATM
 - Gather schema stats
 - Run rapid install
 - Upgrade database to 11g if 11.5.9(CU2) or 11.5.10 (CU2)

R12 Upgrade Detail

- 11.5.10.2 to 12.1.1 (*applicable from 11.5.9 as well*)
 - **Upgrade Steps**
 - Disable AOL Audit Trail (conditional)
 - Shut down application tier listeners and concurrent managers (required)
 - Migrate database to at 10gR2 or 11g (conditional-see guide, may have done in prep due to 11i version)
 - Update init.ora with upgrade parameters (required)
 - Disable custom triggers, constraints, and indexes (conditional)
 - Drop MRC schema (conditional)
 - Back up the database (recommended)
 - Ensure that Maintenance Mode is enabled (required)
 - Apply AD 12.1.1 upgrade driver (required)
 - Run the American English upgrade patch driver (required)
 - Run the NLS upgrade patch driver (conditional)
 - Apply latest product patches (required)
 - Synchronize NLS and American English product patches (conditional)
 - Disable Maintenance Mode (required)
 - Reset init.ora parameters (required)
 - Back up Oracle Applications (recommended)

R12 Upgrade Detail

- 11.5.10.2 to 12.1.1 (*applicable from 11.5.9 as well*)
 - **Finish 12.1.1 Upgrade and perform sanity check**
 - run rapidwiz to configure and start server processes
 - create new appsutil.zip for dbtier
 - ensure JRE on dbtier matches application tier version
 - generate new context file for dbtier
 - run autoconfig on dbtier
 - configure client software to use J2SE if not already using
 - start apps and perform sanity check AND check results of concurrent manager jobs that were launched by the upgrade

R12 Upgrade Detail

- 12.1.1 to 12.1.3
 - **prep steps**
 - apply and patches or corrective steps that were necessary as a result of iteration 1
 - determine which post 12.1.1 functional steps can be moved to post 12.1.3 steps
 - patch 10.1.2 middle tier (best practice prep step)
 - upgrade 10.1.3 middle tier (best practice prep step)
 - perform other listed prep step for 12.1.3
 - configure client software to use J2SE if not already using
 - **patch current** at this point, if necessary
 - *ensure all relevant **sysadmin and functional tasks** listed in the upgrade have been completed*
 - **restart apps**
 - **complete additional sysadmin and functional post upgrade tasks that required the apps to be running**

R12 Upgrade Detail

- 12.1.1 to 12.1.3
 - **Issues Encountered During Upgrade** – various failures may be encountered during the application of any of the patches that are a part of the upgrade—especially the 12.1.1 patch and the 12.1.3 patch. Search metalink before starting the upgrade with the numbers of the patches to determine if your environment might be likely to encounter the same patch errors.
 - Special considerations
 - platform migration – there will be numerous additional tasks which will be affected by the endian formats of the database which would determine if an export/import or transportable database approach can be used
 - if you elect to try the newer transportable tablespace method, ensure you test thoroughly. There have been issues with some operating systems
 - 32-bit to 64-bit – minor consideration for the database upgrade

Rapid Migration to 11.5.10.2

- what if...
 - if you are release 11.0 or 11.5.1-11.5.8 you must upgrade to 11.5.10.2
 - for release 11.0, follow documented steps for upgrading to 11.5.10.2, NOT rapid migration to 11.5.10.2
 - for releases 11.5.1-11.5.8, consider using the SB rapid migration approach to 11.5.10.2. Ensure you test this thoroughly in your iteration 1 of the approach. Some of the early 11i versions (< 11.5.10.4) may be more challenging
 - here are the general rapid migration steps
 - Perform a Fresh Install of 11.5.10.2
 - Install JDK (Included by RapidWiz for Linux/Solaris)
 - Install UnZip 5.41
 - Test Installation – Validates Environment

Rapid Migration to 11.5.10.2

- Replace Fresh Install Database With Current Database
 - Delete Fresh Install Database
 - Upgrade Fresh Install Database Technology 9.2.0.6 to latest 9i version if not on 10gR2 or optionally upgrade to 10gR2
 - Copy Current Database
 - Recreate Control File
 - Upgrade Current database to 10gR2 (if applicable)
 - Startup Database and Listener
 - Update Database Configuration/Profile Information

Rapid Migration to 11.5.10.2

- Update Codeset – Apply “C” Drivers for any Previous Patches Applied Newer Than Current DVD Release
 - Check Existing Database for Patches Released After DVD Bundle
 - Apply Latest Quarterly Critical Patch Update
- Follow Maintenance Pack Instructions
- Section 1 – Pre-Install Tasks
 - i. Latest AD Minipack
 - ii. ALL Pre/Post Patch Tasks
 - iii. Configure Database for New Products
 - iv. Oracle Install Base / Service / Contracts prerequisites

Rapid Migration to 11.5.10.2

- Section 2 – Applying the Maintenance Pack, 3480000
 - i. Enable maintenance mode
 - ii. C Driver – NA
 - iii. D Driver – Apply – “U”
 - iv. G Driver – NA
- Section 3 – Post-Install Tasks
 - i. Install Help
 - ii. Gather Statistics
- Section 4 – Product Specific Tasks
 - i. Apply HR Global
 - ii. Upgrade to Discoverer 10g if desired

Rapid Migration to 11.5.10.2

- Section 5 – Miscellaneous
 - i. Patch current for Family Packs
 - ii. Upgrade to latest technology Component Versions via ATG RUPs
 - iii. Upgrade Developer 6i to patch set 19
 - iv. Upgrade from jinitiator 1.3.1.x to JRE 1.6
 - v. Convert to OATM if on 10gR2. If not, convert after next step completed
 - vi. Upgrade to 10gR2

Conclusion

- Review Your Current Release
 - note place the database is permitted to be upgraded in process per Oracle documentation
- Is a platform migration involved?
 - this will impact the migration of your database
- don't forget to patch current
 - E-Business suite patches
 - security patches including either CPU or PSU for database
- consider desired architecture
 - typically database on separate tier if multi-tier
 - HA for middle tier involves shared application file system
- browsers?
 - IE, Firefox, Safari
- Sub Ledger Accounting, default is 6 months worth

Conclusion...

- R12 is different
 - file system layout is different
 - some of the utilities that start the E-Business suite are different because fusion middleware (10gAS) is used
- database patches
 - scour metalink for database patches that are required for the 11g / R12 combination...may not be in release notes

Thanks!

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