

# Secrets of Successful Database 11gR2 Upgrades in an E-Business Suite Environment

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# Agenda

- Introduction
- Why
- Assumptions
- Application Base Level
- Daylight Savings
- Preupgrade
- Upgrade
- Post Upgrade



# Why do the Upgrade

- New Features
- Stay on Premier Support
- Postpone further upgrades



# Desupport Dates

## Database Version Premier Support Extended Support Sustaining Support

9.2	July 2007	July 2010	Indefinite (9.2.0.8)
10.1	January 2009	January 2012	Indefinite (10.1.0.5)
10.2	July 2010	July 2013 10.2.0.4 April 2011	Indefinite (10.2.0.5)
11.1	August 2012	August 2015	Indefinite (11.1.0.7)
11.2	January 2015	January 2018	Indefinite
JInitiator for EBS	July 2009	July 2012	N/A
11.5.10 EBS	November 2010	November 2013	Indefinite
12.0	January 2012	January 2015	Indefinite



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# Why do the Upgrade

- New Features
- Stay on Premier Support
- Postpone further upgrades
  - Desupport Dates
- Get on the Latest Technology
  - **Wrong Reason!**



# Assumptions

- Linux
- Nothing Fancy



# Applications Base Level

- 11.5.10.2
  - ATG RUP 6
  - Developer 6i PL 18
  - Sun JRE
- 12.0
  - 12.0.4
- 12.1
  - 12.1.1



# 11.5.10.2

- Main Upgrade MOS 881505.1
- Minimum Baseline MOS 883202.1
  - If you do not meet this level, support may not allow you to
    - log SEV 1 SRs
    - get new password protected patches
    - receive new bug fixes
    - get help on new patches that have issues



# 11.5.10.2

- Upgrade to JRE 1.6.0\_17 from JInitiator
  - MOS 290807.1



# Developer 6i PL 19

- MOS 125767.1
- Apply the PL 19 patch, 6194129
- Apply the interoperability patch, 9935935
- Apply the 6.0.8.28 versions of
  - 9863561
  - 6125732
  - 6857221
  - 5232832
  - 8888184



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# Developer 6i PL 19

- Apply the 6.0.8.28 versions of
  - 9863561
  - 6125732
  - 6857221
  - 5232832
  - 8888184
  - 7329300
  - 6747939
  - 7552880



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# Developer 6i PL 19

- Apply 9094950 to fix an issue introduced in 8888184 which you just applied
- Apply 8826546



# R12.0

- 12.0.4 will work, but you should go to 12.0.6
- R12.AD.A.DELTA.6 (7305220)
  - prerequisites
    - adgrants.sql
    - 676723
- 12.0.6 (6728000)
- Legislative Updates
  - 145837.1 for patches that apply to you



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**ADGRANTS**  
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# R12.0

- Documentation (7109200)
- Post Upgrade
  - 8222387
  - 7653364
- Update Autoconfig on the database tier
  - perl \$AD\_TOP/bin/admkappstutil.pl
  - copy \$INST\_TOP/admin/out/appstutil.zip to the database tier Oracle home
  - on the database tier, unzip the file and autoconfig
- In other words, follow note 743368.1



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# R12.1

- Extra steps if you are using Demand Signal Repository
  - 12.1.2 minimum
  - Oracle Warehouse Builder 11.2.0.1
- Beyond our 'No Bells and Whistles'



# Daylight Savings

- Version 11
- MOS 458452.1 for 11.5.10.2
- MOS 563019.1 for R12
- MOS 840118.1 for the Database
- 10.2.0.5 has a special issue
  - DST 11 is unavailable for JVM



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# Daylight Saving

- Assumption: OS is already patched
- Assumption: You have run the scripts from the notes and know your data.
- Patch Database
  - If you are not already on Version 10 files, apply 7695070
  - Apply 8524113
- Patch Oracle JVM
  - 8603182



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# 11.5.10.2

- Apply the Dev 6i PL 19 patch, 9005247
- FND 5619414 or later
- HZ 5630108 or later
- Mobile Field Service 6476631
- Field Service/Handheld 6453109
- CRM 6456596
- WIP 5744443
- Check the note to see which apply to you



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# R12

- Apply the pre-req patch to the 10.1.2 home, 7695050
  - cd \$ORACLE\_HOME/forms/lib
  - make -f ins\_forms.m install
- Apply the 10.1.0.5 version of 8524113 to all middle tiers



# Daylight Savings

- Version 11
  - OS
  - Database
  - Oracle JVM
  - E-Business Suite
  - JDK



# Preupgrade

- Performance Baselines
  - Clone just prior to upgrade with all stats jobs off
- Dictionary Stats
- Invalid Objects



# Preupgrade

- 11.5.10.2
  - TXK Rollup U, 9535311
    - ./txkprepatchcheck.pl -script=ValidateRollup
    - outfile=\$APPLTMP/txkValidateRollup.html
    - appspass=<apps database password>
      - Autoconfig apps tier
      - admkappsutil.pl and move to db tier
      - 9835302
      - Interoperability 8815204
      - 5644137
      - 6400762



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# Preupprade

- R12
  - 12.0
    - Autoconfig, 9386653
  - 12.1
    - Autoconfig, 8919489
    - 9738085
    - 9852070



# Preupgrade

- R12
  - 12.0
    - Interoperability, 8623536
  - 12.1
    - Interoperability, 9062910
  - Apply 6400501 to 10.1.2 home (apply the 32-bit Linux version)
- 11.2.0 Home



# 11.2.0.1

- Get 11.2.0.1 from OTN



The screenshot shows the Oracle Database Software Downloads page. At the top, there are four tabs: Overview, Downloads, Documentation, and Learn More. Below the tabs, the page title is "Oracle Database Software Downloads". A message states: "You must accept the OTN License Agreement to download this software." There are two radio buttons: "Accept License Agreement" (selected) and "Decline License Agreement". Below this, the text reads: "Oracle Database 11g Release 2 Standard Edition, Standard Edition One, and Enterprise Edition". A note dated 9/13/10 states: "Patch Set 11.2.0.2 for Linux is now available on support.oracle.com. Note: it is a full installation (you do not need to download 11.2.0.1 first). See the README for more info (login to My Oracle Support required)." Under the heading "(11.2.0.1.0)", there are two download options: "Microsoft Windows (32-bit)" and "Microsoft Windows (x64)". To the right of these options, there are links for "File 1", "File 2 (2GB)", "See All", "File 1", "File 2 (7GB)", and "See All".



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# 11.2.0.1

Overview

Downloads

Documentation

Learn More

Community

## Oracle Database 11g Release 2 (11.2.0.1.0) Standard Edition, Standard Edition One, and Enterprise Edition

Thank you for accepting the OTN License Agreement; you may now download this software.

### Oracle Database 11g Release 2 (11.2.0.1.0) for Linux x86-64

- ↳ [linux.x64\\_11gR2\\_database\\_1of2.zip](#) (1,239,269,270 bytes) (cksum - 3152418844)
- ↳ [linux.x64\\_11gR2\\_database\\_2of2.zip](#) (1,111,416,131 bytes) (cksum - 3669256139)

#### Directions

1. All files are in the .zip format. There is an unzip utility [here](#) if you need one.
2. Download and unzip both files to the same directory.
3. Installation guides and general Oracle Database 11g documentation are [here](#).
4. Review the certification matrix for this product [here](#).

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# 11.2.0.1

- Down at the bottom of the page

up a heterogeneous data integration environment

## Oracle Database 11g Release 2 Examples

➔ [linux.x64\\_11gR2\\_examples.zip](#) (555,366,950 bytes) (cksum - 1191529449)

Contains examples of how to use the Oracle Database. Download if you are new to Oracle and want to try some of the examples presented in the Documentation



# 11.2.0.1

- Create nls/data/9idata
  - nls/data/old/cr9idata.pl
  - When you switch to the 11g home, ORA\_NLS10 must point to the nls/data/9idata directory
- One Off Patches
  - Do not do the post install steps, but record them to apply after the database upgrade



# 11.2.0.1

- 11.5.10.2
  - 8570322
  - 8685327
  - 8761974
  - 8771297
  - 8772028
  - 8796511
  - 8897784
  - 8964142
  - 8405205



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# 11.2.0.1

- R12
  - 8328200
  - 8993052
  - 9081430
  - 9218789
  - 9318214
  - 9500046
  - 9535951
  - 9644960
  - 9657344
  - 9719541
  - 9756939



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# Upgrade

- utlu11i.sql
- DROP SYS.ENABLED\$INDEXES
- 32 bit/64 bit conversion in the past
  - 579523.1
- DROP SYS.PLAN\_TABLE
  - 565600.1
- ORA-1408 on system.repcat\$\_audit\_column\_f2\_idx
  - 737400.1



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# Upgrade

- Make sure native compilation is off
- dbua
  - 11.5.10.2
    - dbua
  - R12
    - dbua -initParam “\_disable\_fast\_validate=TRUE”



# Upgrade

- Init.ora
  - 11.5.10.2 note 216205.1
  - R112 note 396009.1
    - `_disable_fast_validate=TRUE` for duration of the upgrade and post upgrade maintenance
- Upgrade the statistics table
  - `DBMS_STATS.UPGRADE_STAT_TABLE('APPLSYS', 'FND_STATTAB')`
- R112
  - Run `catmgdidcode.sql` and `utltp.sql` from the post install instructions in 9218789



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# Upgrade

- 11.5.10.2
  - Install Oracle Data Mining and OLAP
    - select comp\_id from dba\_registry where comp\_id='ODM' or comp\_id='AMD'
    - If ODM is not returned, @@?/rdbms/admin/dminst SYS AUX TEMP
    - If AMD is not returned, @@?/olap/admin/olap SYS AUX TEMP
- Natively compile PL/SQL
- 11.5.10.2
  - If you upgraded from 10.1 or earlier, fix the Korean lexers
    - @@?/ctx/sample/script/drkorean



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# Upgrade

- Migrate TNS\_ADMIN and start from the new home
- adgrants.sql
  - \$APPL\_TOP/admin/adgrants.sql
  - sqlplus '/ as sysdba' @adgrants APPS
- CTXSYS
  - \$AD\_TOP/patch/15/sql/adctxprv.sql
  - sqlplus '/ as sysdba' @adctxprv.sql
  - SYSTEM\_PASSWORD CTXSYS
  - as sysdba, exec ctxsys.ctx\_adm.set\_parameter ('file\_access\_role', 'public');



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# Upgrade

- R12
  - Validate Workflow Ruleset
    - sqlplus apps @\$FND\_TOP/patch/115/sql/wfaqupfix  
APPLSYS APPS
- Implement Autoconfig in 11.2.0.1 home
- Run adstats
  - startup restrict/bounce
  - alter system enable/disable restricted session;



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# Upgrade

- Recreate any custom database links
- 11.5.10.2
  - Apply HRMS Patch 7721754
- adadmin → Recreate Grants and Synonyms
- Concurrent request -< Workflow Directory Services User/Role Validation



# Post Upgrade Support

- Statistics
- Comparison back to baseline



# Questions

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