

Oracle E-Business Suite 11i/12 Cloning (adclone New Features): Permanent Personalizations

ADClone/AutoConfig/ADCfgClone Templates

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*Session ID#
Day/Time*

*3201
Monday, 11:00 AM, Moscone West - 3022*

Agenda

- Brief Introduction
- eBusiness 12.1 Overview / Highlights
- eBusiness 12.1 ADClone/Copy
- eBusiness 12.1 ADClone/Copy Large Systems
- eBusiness 12.1 ADClone Custom Templates
- That's a Wrap ...

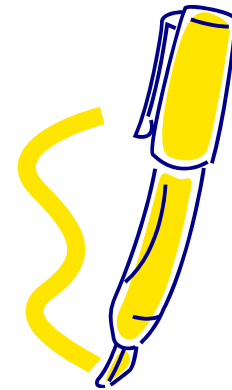
Brief Introduction



Who is OATC?

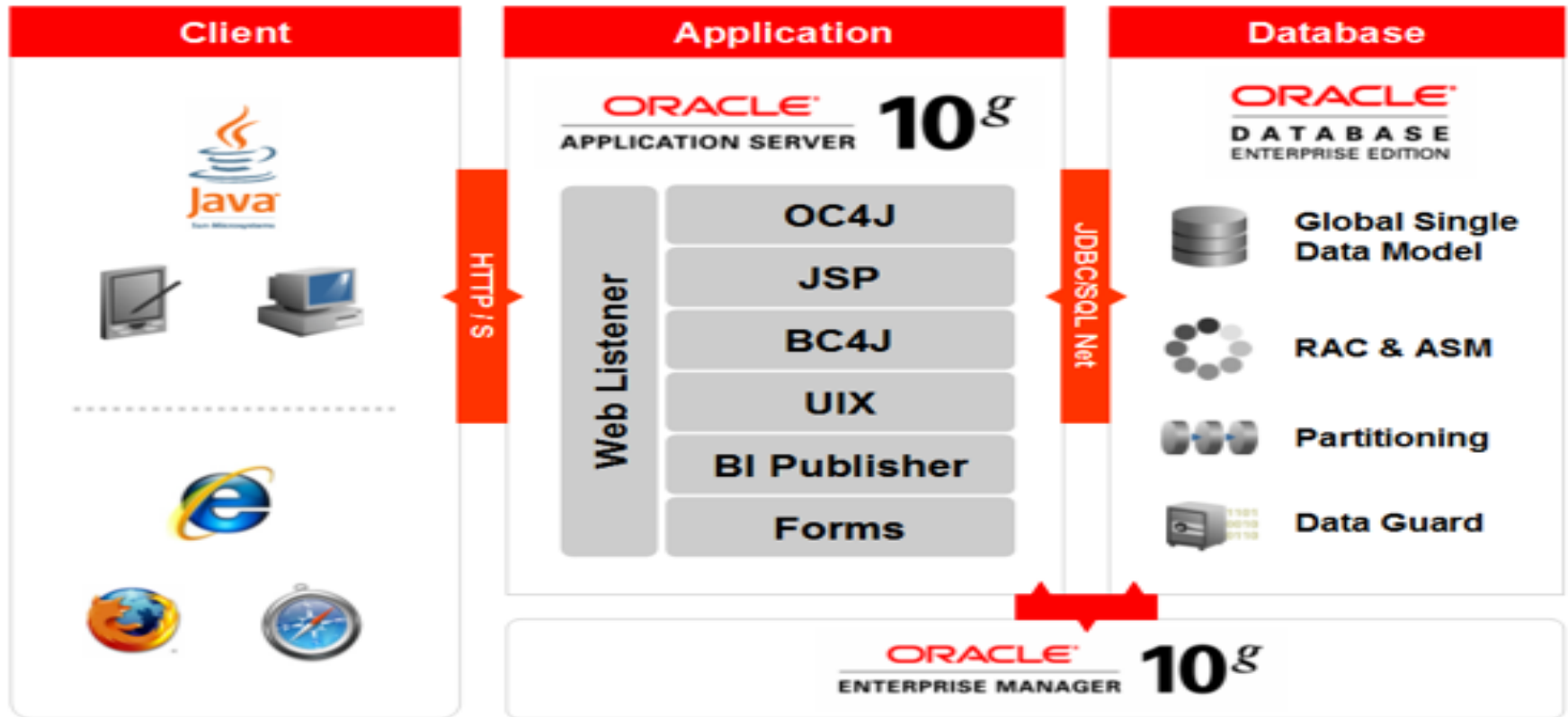
- **“OATC” - Oracle Applications and Technology Consulting based in Raleigh, North Carolina, serving clients worldwide**
- Over 20 years experience with Oracle technology
- Over 20 years experience with Oracle Applications (*starting with Release 7.9*)
 - *Implementations, upgrades, support, remote DBA, functional, technical services*
- Superior Functional, Technical and DBA team members
- Authors of “CRP Method”, project management methodology
- Hundreds of successful 11i/R12 Projects
 - Small Teams, Large Teams; Single Locations to Multiple Locations
- Authors of OATC Web Blink (Binary Links) Quick/Helpful Hotspots
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eBusiness 12.1 Overview / Highlights

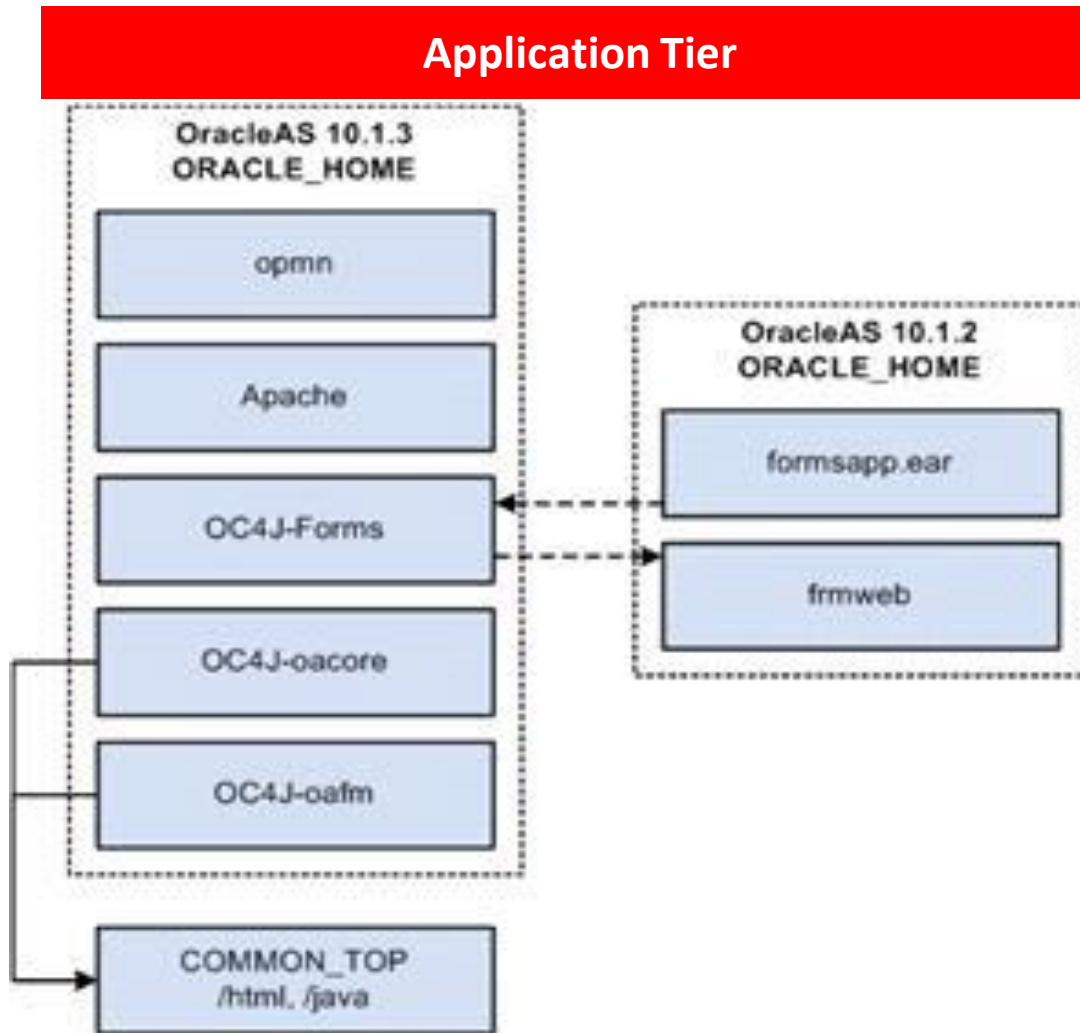


Overview and Highlights

eBusiness 12.1 Three Tier Architecture

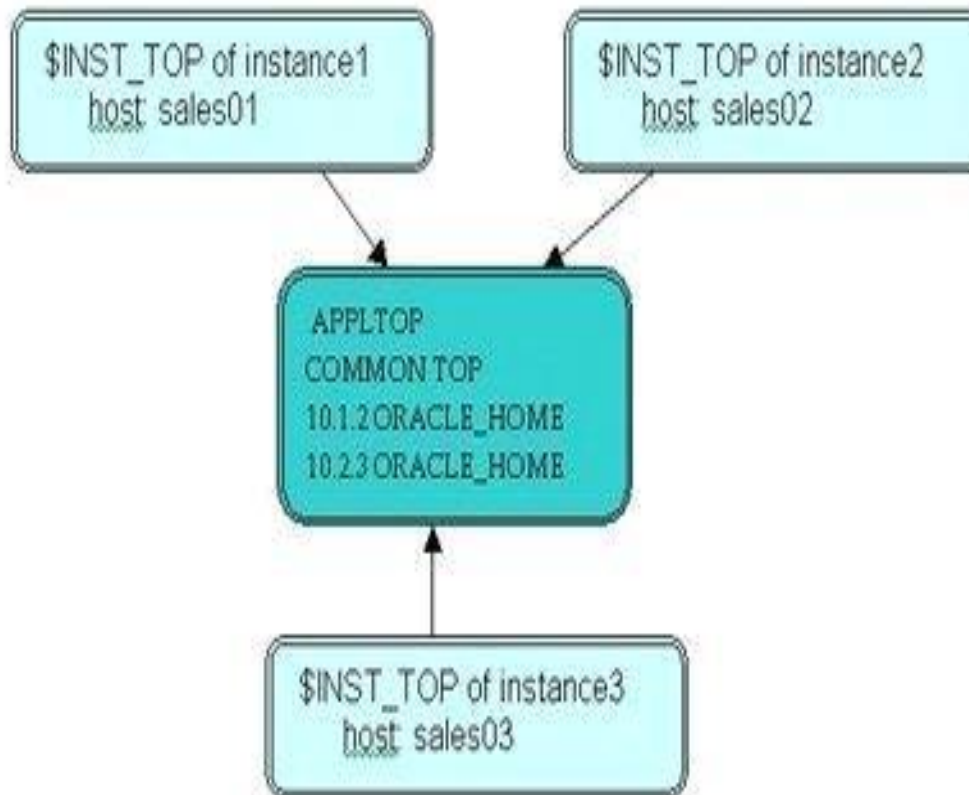


Overview and Highlights



Overview and Highlights

Shared APPL_TOP Application Tier



Overview and Highlights

- **eBusiness 12.1 Installation/Storage Requirement**

- **RapidWiz Stage Area: 47Gb**
- **DBTier 90Gb**
- **ConcMgrTier 40Gb**
- **WebTier 40Gb**
- **Vision-Demo 210Gb**

Overview and Highlights

- **eBusiness 12.1 Technical Versions**

- Oracle Database Executables **11.1.0.7**
- Oracle Home (Forms & Reports) **10.1.2**
- Oracle Home (Apache, HTTP, JDK) **10.1.3.4**
- Oracle Applications Server **10.1.2.3**
- Oracle Discoverer **10.1.2.0.2**
- Oracle Portal **10.1.4**
- Oracle OID **10.1.2.0.2**
- Oracle SSO **10.1.2.0.2**
- RapidWiz (rapidwiz/RapidWizVersion) **12.1.1.10**

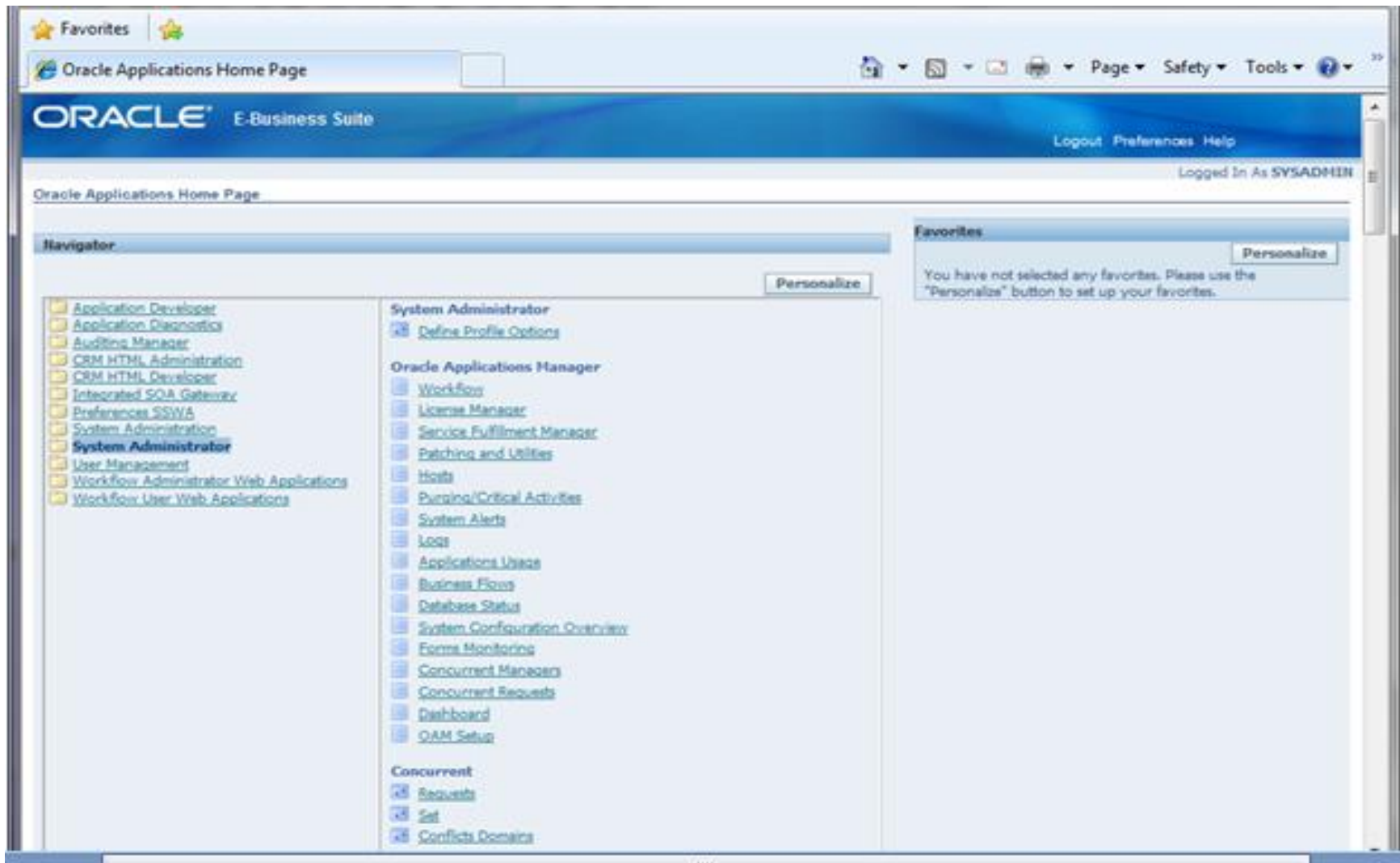
Overview and Highlights

- **eBusiness 12.1: something NEW... as always!!!**
 - OATM Model Database (12-Tablespaces) and AppsTier File System Layout
 - \$ADMIN_SCRIPTS_HOME (Startup/Shutdown Scripts)
 - \$INST_TOP (Instance Specific Top)
 - modplsqli and mod_pls are Obsolete
 - OC4J (Oracle Container for Java) Replaces Jserv
 - SERVLET (Default Forms Connection Mode)
 - \$LOG_HOME/ora/10.1.3 (Log Files)
 - \$OUT_HOME (Output Files)
 - Data Model Comparison Report by Product/Release
 - AppsTier → Fusion Middleware 10g Web Server & 10g Forms & Reports.
 - Unified/Consistent Patches APPL_TOP (SingleNode/MultiNode)
 - vi \$CONTEXT – Edit context file
 - AFPASSWD (Enhanced version of FNDCPASS, 12.1.2)

Overview and Highlights

Environment	eBusiness 11i	eBusiness 12	eBusiness 12 Alternative
DBTier			
ORACLE_HOME	\$HOME/<SID>/10.2.0.4	.. ./apps/tech_st/11.1.0	/p01/<SID>/product/11.1.0
APPSTier			
APPL_TOP	\$HOME/<SID>/appl	.. ./apps/apps_st/appl	/p02/<SID>/appl
COMMON_TOP	\$HOME/<SID>/comn	.. ./apps/apps_st/comn	/p02/<SID>/comn
JAVA_TOP	\$HOME/<SID>/comn/java	.. ./apps/apps_st/comn/java/classes	/p02/<SID>/comn/java/classes
ORACLE_HOME	\$HOME/<SID>/8.0.6	.. ./apps/tech_st/10.1.2	/p02/<SID>/product/10.1.2
IAS_ORACLE_HOME	\$HOME/<SID>/ias	.. ./apps/tech_st/10.1.3	/p02/<SID>/product/10.1.3
INST_TOP		.. ./inst/apps	/p02/<SID>/inst/apps
ADMIN_SCRIPTS_HOME		\$INST_TOP/CONTEXT_NAME/admin/scripts	\$INST_TOP/CONTEXT_NAME/admin/scripts
LOG_HOME			\$INST_TOP/CONTEXT_NAME/logs appl/conc/log appl/conc/out ora/10.1.2/reports/cache (Report-Images) ora/10.1.3/Apache (Errors/User IPAddress) ora/10.1.3/j2ee/forms (Forms/Web Logs) ora/10.1.3/oacore (HTML/OC4J Logs) ora/10.1.3/oafm (ASControl/JMS/Web) ora/10.1.3/javacache ora/10.1.3/opmn
ORACLE_CONFIG_HOME		.. ./apps/tech_st/10.1.2	/p02/<SID>/product/10.1.2
APPL_CONFIG_HOME		.. ./apps/apps_st/appl	/p02/<SID>/appl

Overview and Highlights: 12.1 Main Menu



The screenshot displays the Oracle Applications Home Page interface. At the top, there is a navigation bar with the Oracle logo and 'E-Business Suite' text. The page is titled 'Oracle Applications Home Page' and shows the user is logged in as 'SYSADMIN'. The main content area is divided into a 'Navigator' section on the left and a 'Favorites' section on the right. The 'Navigator' section contains a list of application areas, including 'System Administrator' and 'Oracle Applications Manager'. The 'Favorites' section is currently empty, with a message indicating that no favorites have been selected and a 'Personalize' button is available.

Oracle Applications Home Page

Logged In As SYSADMIN

Navigator

- Application Developer
- Application Diagnostic
- Auditing Manager
- CRM HTML Administration
- CRM HTML Developer
- Integrated SOA Gateway
- Preferences SSWA
- System Administration
- System Administrator**
- User Management
- Workflow Administrator Web Applications
- Workflow User Web Applications

System Administrator

- Define Profile Options

Oracle Applications Manager

- Workflow
- License Manager
- Service Fulfillment Manager
- Patching and Utilities
- Hosts
- Purging/Critical Activities
- System Alerts
- Logs
- Applications Usage
- Business Flows
- Database Status
- System Configuration Overview
- Forms Monitoring
- Concurrent Managers
- Concurrent Requests
- Dashboard
- OAM Setup

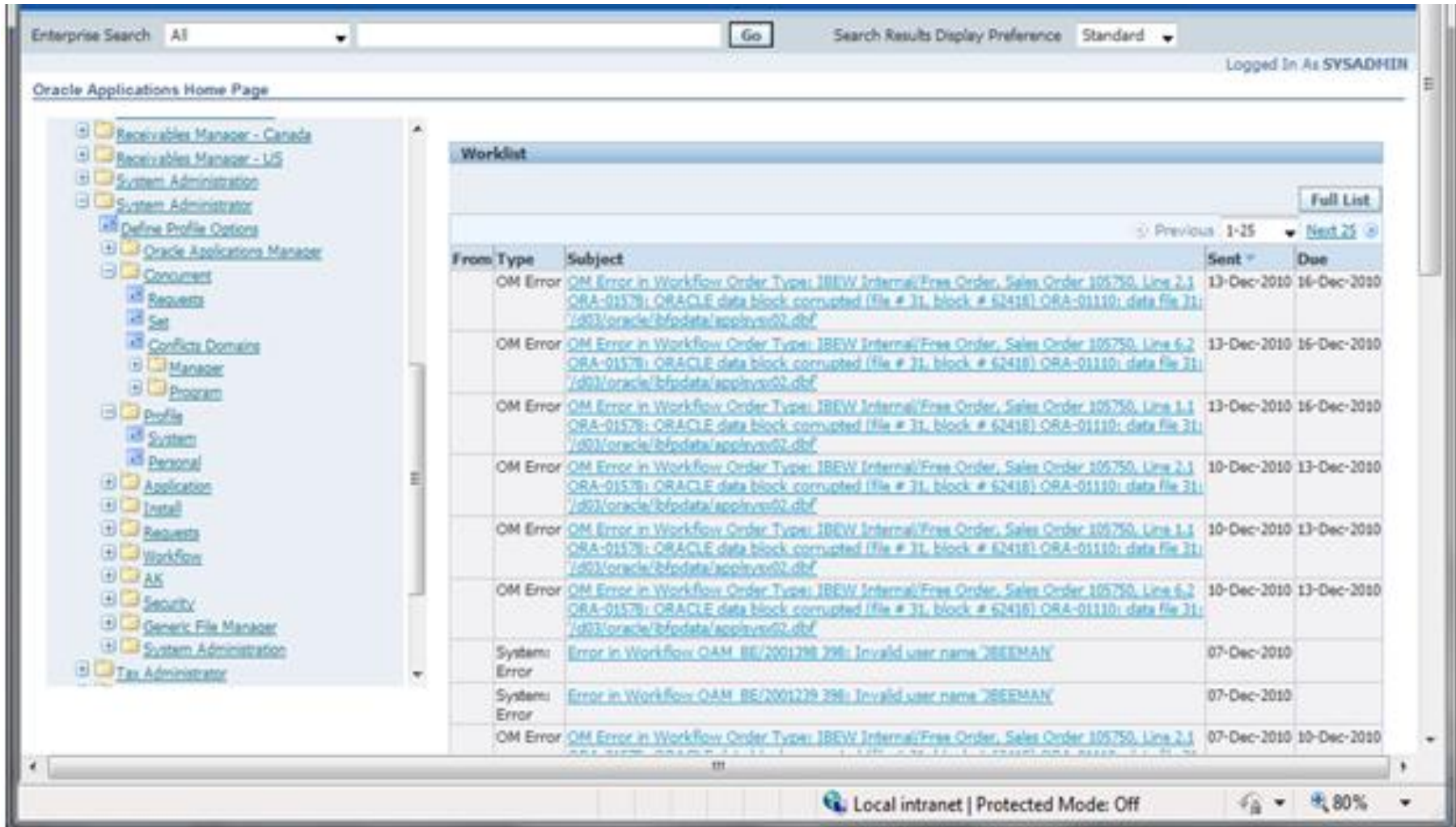
Concurrent

- Requests
- Set
- Conflicts/Domain

Favorites

You have not selected any favorites. Please use the "Personalize" button to set up your favorites.

Overview and Highlights: 12.1.3 Main Menu, new UX



Enterprise Search All Search Results Display Preference Standard Logged In As SYSADMIN

Oracle Applications Home Page

- Receivables Manager - Canada
- Receivables Manager - US
- System Administration
- System Administrator
 - Define Profile Options
 - Oracle Applications Manager
 - Concurrent
 - Requests
 - Set
 - Conflicts/Domain
 - Manager
 - Program
 - Profile
 - System
 - Personal
 - Application
 - Install
 - Requests
 - Workflow
 - AK
 - Security
 - Generic File Manager
 - System Administration
 - Tax Administrator

Worklist

Previous 1-25 Next 25

From	Type	Subject	Sent	Due
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 2,1 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	13-Dec-2010	16-Dec-2010
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 6,2 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	13-Dec-2010	16-Dec-2010
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 1,1 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	13-Dec-2010	16-Dec-2010
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 2,1 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	10-Dec-2010	13-Dec-2010
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 1,1 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	10-Dec-2010	13-Dec-2010
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 6,2 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	10-Dec-2010	13-Dec-2010
	System Error	Error in Workflow OAM_BE/2001298 298: Invalid user name 'BBERMAN'	07-Dec-2010	
	System Error	Error in Workflow OAM_BE/2001298 298: Invalid user name 'BBERMAN'	07-Dec-2010	
	OM Error	OM Error in Workflow Order Type: IBEW Internal/Free Order, Sales Order 105750, Line 2,1 ORA-01578: ORACLE data block corrupted (file # 31, block # 62418) ORA-01110: data file 31: /d03/oracle/bfedata/applvms02.dbf	07-Dec-2010	10-Dec-2010

Local intranet | Protected Mode: Off 80%

Overview and Highlights

- **eBusiness 12.1 Overview / Highlights**
 - **eBusiness 12 (12.0 and 12.1) Functional New Features**
 - **12.0_eBusiness_Release.doc** (Support Note 404152.1)
 - **eBusiness 12.0 New Features**

 - **12.1_eBusiness_ReleaseFeatures.doc** (Support Note 804373.1)
 - **eBusiness 12.1.2 New Features**

 - **12.1_eBusiness_ReleaseContent.doc** (Support Note 561580.1)
 - **eBusiness 12.1.1 vs. eBusiness 12.1.2 Features**

 - **12.1.3 eBusiness_ReleaseContent.doc** (Support Note 1080973.1)

Overview and Highlights

eBusiness 12.1.2 Support Note: 880170.1 (Patch 7303033) Patch (CPU-October-2009 Is Included in eBusiness 12.1.2)	Product Family	Product Family Readme Documents
Oracle Applications Technology Release Update Pack 2 for 12.1 (R12.ATG_PFB.DELTA.2) Patch 7651091	Applications Technology (ATG_PF)	Note 845809.1
Oracle CRM Release Update Pack 2 for 12.1 (R12.CC_PFB.DELTA.2) Patch 8522000	Customer Relationship Management (CC_PF)	Note 949416.1
Oracle Financials Release Update Pack 2 for 12.1 (R12.FIN_PFB.DELTA.2) Patch 8402900	Financials (FIN_PF)	Note 949442.1
Oracle HRMS Release Update Pack 2 for 12.1 (R12.HR_PFB.DELTA.2) Patch 8337373	Human Resources (HR_PF)	Note 949437.1
Oracle E-Business Suite Diagnostics Release Update Pack 2 for 12.1 (R12.IZU_PFB.DELTA.2) Patch 7717707	E-Business Suite Diagnostics (IZU)	Note 949448.1
Oracle PRC Release Update Pack 2 for 12.1 (R12.PRC_PFB.DELTA.2) Patch 8522002	Procurement (PRC_PF)	Note 949451.1
Oracle Projects Release Update Pack 2 for 12.1 (R12.PJ_PFB.DELTA.2) Patch 8504800	Projects (PJ_PF)	Note 949441.1
Oracle Supply Chain Management Release Update Pack 2 for 12.1 (R12.SCM_PFB.DELTA.2) Patch 8506830	Supply Chain Management (SCM_PF)	Note 949465.1
Oracle Value Chain Planning Release Update Pack 2 for 12.1 (R12.SCP_PFB.DELTA.2) Patch 8507592	Oracle Value Chain Planning (SCP_PF)	Note 949467.1

Overview and Highlights

eBusiness 12.1.3 Note: 1080973.1 (Patch 9239090)		
Patch (CPU-July-2010 Is Included in eBusiness 12.1.3)	Product Family	Product Family Readme Documents
Oracle Applications Technology Release 12.1.3 (R12.ATG_PF.B.DELTA.3) Patch 8919491	Applications Technology (ATG_PF)	Document 1066312.1
Oracle Customer Relationship Management Release 12.1.3 (R12.CC_PF.B.DELTA.3) Patch 9249345	Customer Relationship Management (CC_PF)	Document 1081433.1
Oracle Financials Release 12.1.3 (R12.FIN_PF.B.DELTA.3) Patch 9147733	Financials (FIN_PF)	Document 1081425.1
Oracle Human Resource Management System Release 12.1.3 (R12.HR_PF.B.DELTA.3) Patch 9114911	Human Resources (HR_PF)	Document 1081427.1
Oracle E-Business Suite Diagnostics Release 12.1.3 (R12.IZU.B.DELTA.3) Patch 9239092	E-Business Suite Diagnostics (IZU)	Document 1081428.1
Oracle Procurement Release 12.1.3 (R12.PRC_PF.B.DELTA.3) Patch 9249354	Procurement (PRC_PF)	Document 1081431.1
Oracle Projects Release 12.1.3 (R12.PJ_PF.B.DELTA.3) Patch 9147711	Projects (PJ_PF)	Document 1081434.1
Oracle Supply Chain Management Release 12.1.3 (R12.SCM_PF.B.DELTA.3) Patch 9245674	Supply Chain Management (SCM_PF)	Document 1081459.1
Oracle Value Chain Planning Release 12.1.3 (R12.SCP_PF.B.DELTA.3) Patch 9245525	Oracle Value Chain Planning (SCP_PF)	Document 1081461.1

Overview and Highlights

Oracle eBusiness 12.1 Database Certification – Premier Support



Note: For Latest dates follow Oracle this week!

eBusiness 12.1 AD (Rapid) Clone



Cloning

- **eBusiness 12.1 Clone Methods**

- **R12 AD (RAPID) CLONE**

- Refresh Target Instance
 - Single-node to multi node
 - Multi-node to single mode
 - Shared file systems
 - Add or reduce Nodes
 - RAC systems

- **AMP CLONE**

- Clone to an Image
 - Deploy from an Image
 - Clone to target
 - Schedule Clones
 - Automated process
 - Plugin for EM Grid control (Application Management Pack Plug-in Installed)

Cloning

- **R12 ADCLONE - Architecture Dependency**
 - Web & Forms - Load Balancer
 - Parallel Concurrent Processes
 - Shared APPL_TOP/Application Tier File System
 - Spilt/Mixed Platform Configuration
 - RAC
 - SSL
 - 3rd Party Software's

Cloning

- **R12 ADCLONE : New**
 - Option of starting up the services after adcfgclone in R12.1.2 unlike in 11i.
 - Scale up/down of nodes not supported in R12.1.1 /10g/11 with Rapid clone For RAC enabled system but AMP plug-in will be supported in the future
 - \$INST_TOP new in R12
 - AFPASSWD utility new in R12.1.2
 - Location of adpreclone.pl script in R12 changed
 - 11i → \$COMMON_TOP/admin/scripts/\$CONTEXT_NAME
 - R12 → \$INST_TOP/admin/scripts
 - No Formservlet.ini in R12.1,
\$ORA_CONFIG_HOME/10.1.2/forms/server/default.env
 - Hardcoded path's in Development utilities scripts, e.g:- frmf2xml.sh , frmbld.sh etc...

Cloning

- **R12 ADCLONE: Scrimmage**
 - Preclone on all Tiers on source system
 - Backup the necessary files on Target System
 - Copy application Tier, Oracle Database tier from Source to Target system
 - Copy or Restore Database data files from Source to Target system
 - Configure or recover database (adcfgclone dbtier)
 - Customized Init parameters & customTemplates
 - Configure Apps Tiers (adcfgclone appsTiers)
 - Custom Templates
 - configure SSL/Non SSL
 - Configure Load balancers
 - Autoconfig
 - Post Clone Steps
 - FND profiles & Workflow Mailer
 - Fnd_nodes clean-up
 - DBA_DIRECTORIES
 - Custom Stuff
 - 3rd party software/utilities
 - Data scrubbing for PCI, SOX Compliances ...
 - Payment gateway (IBY & JTF)profiles, etc...

Cloning

- **TARGET System: CleanUp/Preparation**

- **APPSTier Servers**

- \$ADMIN_SCRIPTS_HOME/adstpall.sh APPS/APPS-PASSWORD

- REMOVE: APPL_TOP, COMMON_TOP, INST_TOP, ORACLE_HOME, IAS_ORACLE_HOME

- **DBTier Servers**

- Shutdown Database & Database-Listener

- REMOVE: ORACLE_HOME & DBF files

- **Backup Necessary files**

- Context Files, tnsnames, init.ora

- SSL CERTS, Wallets

- Custom Environment-Files

Cloning

- **SOURCE System: PreClone**

DBTier Servers

```
cd ${ORACLE_HOME}/appsutil/scripts/${CONTEXT_NAME}
```

```
perl adpreclone.pl dbTier
```

- Creates \$ORACLE_HOME/appsutil/clone directory
- Collects the Database information
- Creates the adcrdbclone.sql
 pool control file (work around option)

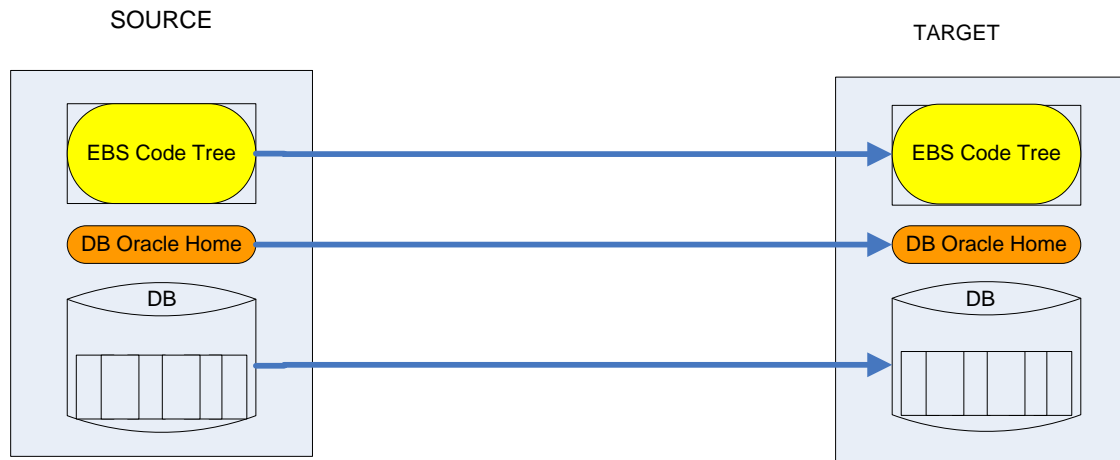
APPSTier Servers

```
perl ${ADMIN_SCRIPTS_HOME}/adpreclone.pl appsTier
```

- Creates \$COMMON_TOP/clone directory

Cloning

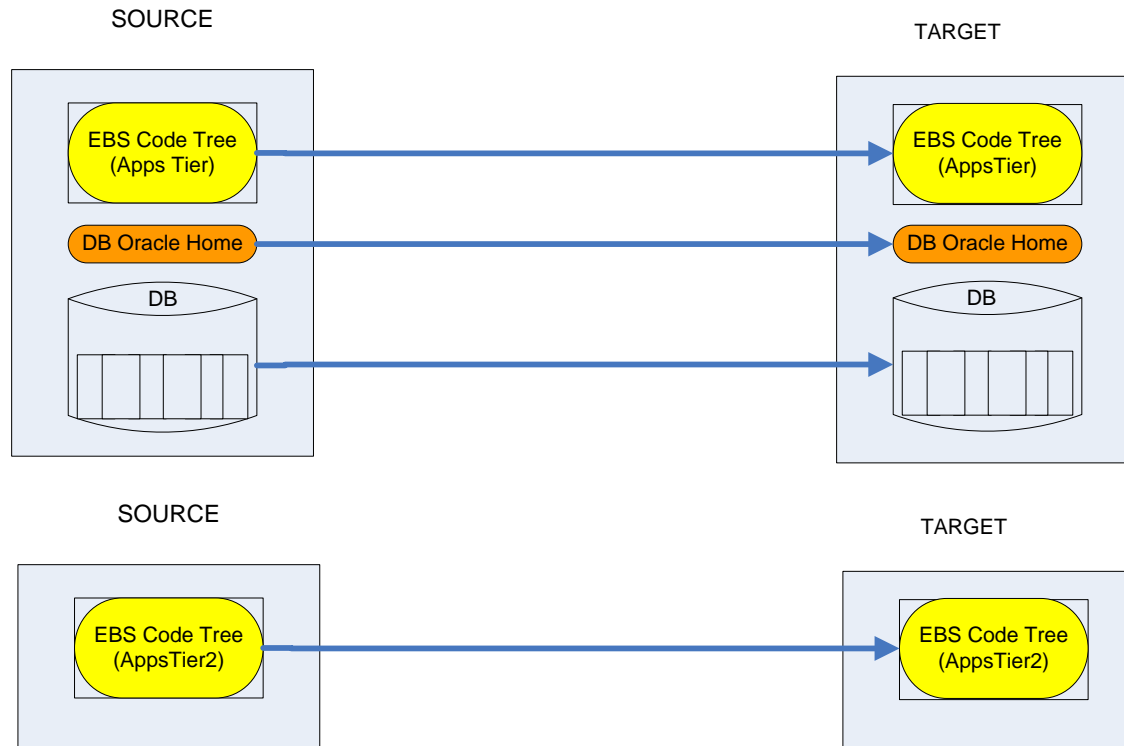
eBusiness 12.1 ADClone



➤ **Single Node to Single Node**

Cloning

eBusiness 12.1 ADClone



➤ **Multi Node to Multi Node**

Cloning

- **TARGET System: Copy DBTier**

DBTier Server: Create ORACLE_HOME Backup/TAR File (TAR-Files Preserve SoftLinks)

```
cd $ORACLE_HOME
```

```
tar -cvf ${BKUPDIR}/${SOURCE_SID}_DBTier_ORACLE_HOME.tar *
```

DBTier Server: Copy Database Files From SOURCE-Server to TARGET-Server

```
cd /p03/${TARGET_SID}/oradata
```

```
scp -rp ${SOURCEServer}:/t03/${SOURCE_SID}/oradata/* ./
```

```
cd /p04/${TARGET_SID}/oradata
```

```
scp -rp ${SOURCEServer}:/t04/${SOURCE_SID}/oradata/* ./
```

Cloning

- **TARGET System : Clone DBTier**
DBTier Server: ADCloneCfg
Navigate to \$ORACLE_HOME/appsutil/clone/bin
perl adcfgclone.pl dbTier
 - Create Context File
 - Register Oracle Home
 - Relink Oracle Home
 - Configure Oracle Home
 - Recreate control file
 - Configure database
 - Start the DB & Listener services

Perform DBTier Server: Personalizations

Cloning

- **TARGET-System Copy AppsTier (Code Tree)**

AppsTier Server:

Create TAR File (TAR-Files Preserve SoftLinks) on Source System for
\$APPL_TOP, \$COMMON_TOP, \$INST_TOP, \$ORACLE_HOME &
\$IAS_ORACLE_HOME

example :- cd \$APPL_TOP

```
tar -cvf ${BACKUP_DIR}/${SOURCE_SID}_AppsTier_APPL_TOP.tar .
```

Copy the Tar files to the Target System

Untar the Tar files ...

Example:

```
tar -xpf ${SOURCE_SID}_AppsTier_APPL_TOP.tar
```

Cloning

- **TARGET System: Clone AppTier**
 - AppTier Server: ADCloneCfg**
 - **Navigate to \$COMMON_TOP/clone/bin**
 - **perl adcfgclone.pl appTier**
 - create Context File
 - Register Oracle Homes
 - Relink Oracle Homes
 - Configure Oracle Homes
 - Create INST_TOP
 - Configure APPL_TOP
 - Start APPS services (prompts for yes or no)

Perform AppTier Server: Personalizations

Cloning

- **AD (RAPID) Clone Optional Commands**
 - adcfgclone.pl dbTechStack
 - adcfgclone.pl dbconfig
 - adcfgclone.pl database
 - adcfgclone.pl atTechStack
 - adcfgclone.pl appltop
 - adclonectx.pl

Cloning

- **Imp Clone Checks (Post):**
 - Passwords: FNDCPASS, AFPASSWD
 - fnd_nodes: AFCPClean.sh
 - Few Profile values
 - APPS_WEB_AGENT
 - APPS_SERVLET_AGENT
 - APPS_FRAMEWORK_AGENT
 - APPS_JSP_AGENT
 - ICX_FORMS_LAUNCHER
 - Conc requests : On hold/Cancel
 - \$FND_SECURE/<sid>.dbc
 - iParyment Properties: http_proxy, iPaymentURL

Cloning



- **AFPASSWD Utility for password changes:**
 - New in R12.1.2
 - Enhance version of well known FNDCPASS
 - Can be used on all tiers unlike FNDCPASS, used only Apps/Mid tiers.

Usage:

- AFPASSWD [-c <APPSUSER> -f <FNDUSER> For Application user
- AFPASSWD [-c <APPSUSER> -o <ORAUSER> For Oracle Apps Database user
- AFPASSWD [-c <APPSUSER> -a For ALL Oracle users
- AFPASSWD [-c <APPSUSER> -l <ORAUSER> {TRUE|FALSE} For Lock|Unlock Oracle APPS DB user
- AFPASSWD [-c <APPSUSER> -L {TRUE|FALSE} For Lock|Unlock Non –Oracle Apps DB user
- AFPASSWD [-c <APPSUSER> -s <APPLSYS> For APPLSYS user

Note:

- Always Backup FND_USER & FND_ORACLE_USERID tables prior to changing passwords

Cloning

- **fnd_nodes Clean up: AFCPClean.sh :**

- Stop All Services
- Execute **\$INST_TOP/admin/install/afpclean.sh APPS APPS-Password**
- Perform Auto Config.

Example:

- **\$ADMIN_SCRIPTS_HOME/adstpall.sh APPS/APPS-Password**
- Check the FND Nodes

```
SELECT node_name "Node Name", node_mode "Mode", support_cp "C",
       support_web "W", support_admin "A", support_forms "F"
FROM   FND_NODES;
```

Node Name	M	C	W	A	F
AUTHENTICATION	O	N	N	N	N
OATCWEBTIER	O	Y	Y	Y	Y
OATCDBTIER	O	N	N	N	N
OATCCCMTIER	O	Y	Y	Y	Y



- **\$INST_TOP/admin/install/afpclean.sh APPS APPS-Password**

```
AFCPClean Performs the Following Tasks
=====
#delete from fnd_profile_option_values
  where (application_id,profile_option_id) in
  (select application_id,profile_option_id
   from fnd_profile_options
   where profile_option_name='NODE_TRUST_LEVEL')
 and level_id=10005;

#FND_CONC_CLONE.setup_clean();
Cleaning up the Database..
PL/SQL procedure successfully completed.
Commit complete.
```

- **Check the FND Nodes**
- **DBTier AutoConfig: \$ORACLE_HOME/appsutil/scripts/\$CONTEXT_NAME/adautoCfg.sh**
- **Apps Tier Auto Config: \$ADMIN_SCRIPTS_HOME/adautoCfg.sh**

Cloning

- **TARGET System (FND_CONCURRENT_REQUESTS) → View OutPut**

```
SELECT    DISTINCT(logfile_node_name)
FROM      fnd_concurrent_requests;
```

```
SELECT    DISTINCT(outfile_node_name)
FROM      fnd_concurrent_requests;
```

- **Update Concurrent Log/Output for New Server Environment Node**

```
UPDATE    fnd_concurrent_requests FCR
SET        FCR.logfile_node_name = UPPER('&NEW_Server')
WHERE     FCR.logfile_node_name = UPPER('&OLD_Server');
```

```
UPDATE    fnd_concurrent_requests FCR
SET        FCR.outfile_node_name = UPPER('&NEW_Server')
WHERE     FCR.outfile_node_name = UPPER('&OLD_Server');
COMMIT;
```

Cloning: Typical Clone Run times

Step Number	Description	Total Time
1.1	TARGET-Server Cleanup	10 Minutes
2.1	SOURCE-Server Pre-Clone	10 Minutes
3.1	ADClone/Copy DBTier	90 Minutes
3.2	Startup Database	10 Minutes
3.3	ADAutoCfg	10 Minutes
3.4	DBTier Personalizations	10 Minutes
4.1	ADClone/Copy AppsTier	90 Minutes
4.2	ADAutoCfg	10 Minutes
	AppsTier Personalizations	10 Minutes
5.1	WorkFlow Notification Setup	10 Minutes
6.1	OPTIONAL: FND_NODE Clenaup	
Total		260 Minutes (4.3 Hours)

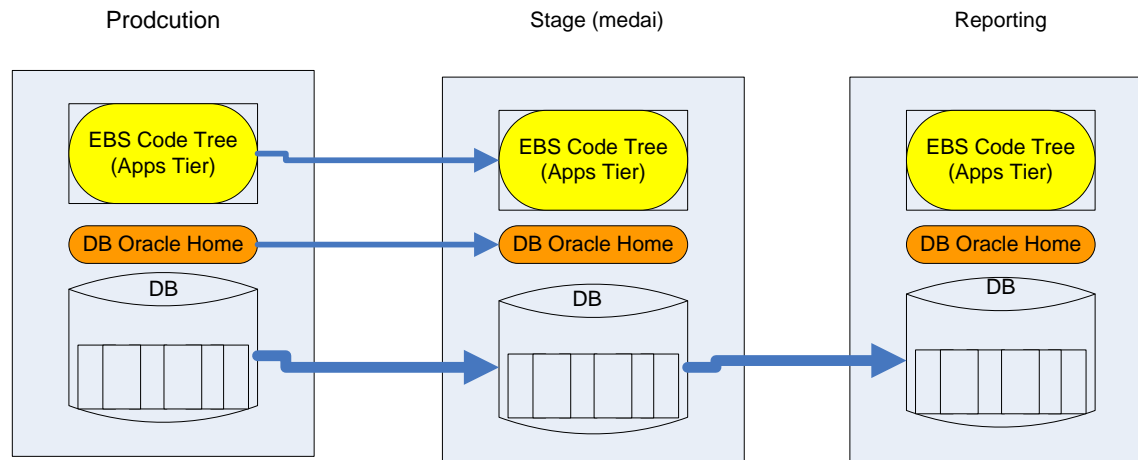
eBusiness 12.1 ADClone

Large Systems & (Daily) Refresh for Reporting



Cloning: ADClone/Refresh

eBusiness 12.1 ADClone/Refresh: Reporting Solutions



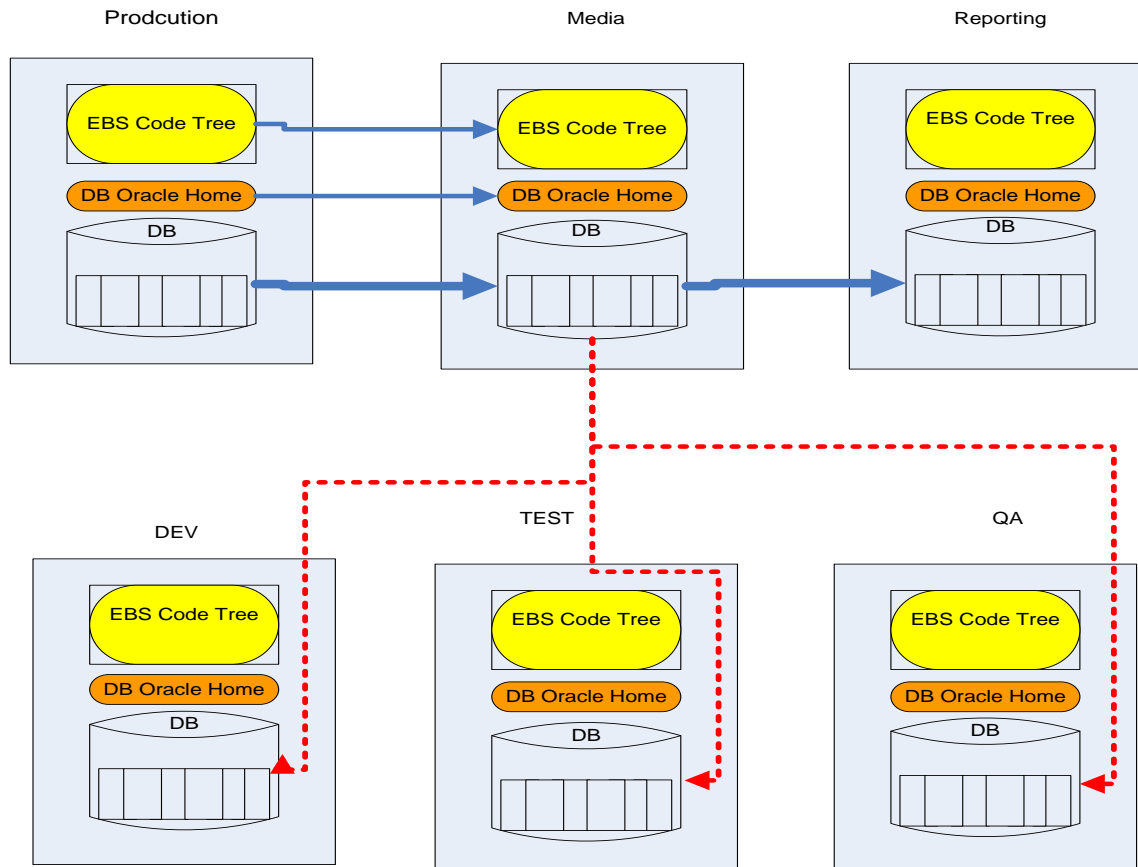
- **Daily Refresh of DB for Reporting**
Database Size : 4 TB+
SLA: x Hrs

Cloning: ADClone/Refresh

- **R12 ADCLONE Large Size Database (Daily DB Refresh for Reporting Instances):**
 - Storage (Disk) Technologies like Shadow Image, Flash Copy...
 - Reduce or minimize the copy or restore time of database
 - Design & Architect the disk mapping at storage array level
 - Perform either Incremental or Full back-ups
 - Sync the 4TB + database in Minutes
 - Automated the Database refresh steps & Custom post clone steps
 - Preserve the Reporting Instance Concurrent Jobs schedule & User Access
 - Preserve Meta-data
- **Total Time : Under 3 Hours ☺**

Cloning: ADClone/Refresh

eBusiness 12.1 ADClone/Refresh:



Cloning: ADClone RAC

R12 ADCLONE in RAC environment (Supported Scenarios)

- RAC 2 RAC cloning
- RAC –2 Single instance cloning
- Add or remove nodes at Target RAC System
- Max 8 RAC Nodes
- Source system data files must be NFS Clustered File Systems, ASM , or OCFS2
- Source system Instance Control files & Archive log files must be located within shared storage area with the datafiles

Cloning: ADClone RAC

- **R12 RAC Clone Steps:**
 - Install Oracle Cluster Manager on Target.
 - Create Source database image.
 - Copy Source ORACLE_HOME to Target initial node.
 - Create context file for initial node.
 - Restore database on Target initial node.
 - Configure Target initial node.
 - Create and configure additional Target nodes.

Cloning: ADClone RAC

- **R12 ADCLONE: Avoid ERRORS:-**

- correct Perl version & Path
- correct unzip & zip23 versions & paths, unzip 6.0 not working
- Central OraInventory
- Avoid IINSTE8 _xxx error s, check the Softlinks has correct path' s
- Hard coded paths e.g:- /d4/R12/ab/apps/RUP4BLV/apps/tech_st/10.1.2

- One of the common AutoConfig Error:RC-50014: Fatal: Execution of AutoConfig was failed

AutoConfig could not successfully execute the following scripts:

...

...

afcpctx.sh	INSTE8_PRF	137
------------	------------	-----

eBusiness 12.1 AD Clone/AutoConfig Custom Templates



Fill out Form

Cloning: Clone and Autoconfig

- **Migrate Existing Autoconfig Customizations**

Database Tier:

```
$ORACLE_HOME/appsutil/bin/ dcustomizer.sh  
contextfile=<CONTEXT_FILE>
```

Apps Tier:

```
$AD_TOP/bin/adcustomizer.sh contextfile=<CONTEXT_FILE>
```

- Detects all configuration files that have "Begin/End customizations" blocks.
- Copies the corresponding AutoConfig template files to custom template files.
- Appends the contents in the "Begin/End customizations" blocks to the end of the custom template files.
- Removes the "Begin/End customizations" blocks from the configuration file.

Cloning: Clone and Autoconfig

DBTier: ADClone Oracle Templates

List Oracle Templates

```
[oracle] cd $ORACLE_HOME/appsutil/bin
[oracle] adtmplreport.sh contextfile=$CONTEXT_FILE
```

```
USAGE: adtmplreport.sh contextfile=<contextfilepath> [log=<logfilepath>]
[listcustom] | [product=<product>[listcustom] ] |
[target=<targetfilepath> | template=<templatefilepath>] [-verbose]
```

```
#####
##      Generating Report                                     ##
#####
$ORACLE_HOME/appsutil/log/$CONTEXT_NAME/MMDDYY*.log
```

```
[oracle] view $(ls -t $ORACLE_HOME/appsutil/log/$CONTEXT_NAME/* | head -1)
TEMPLATE FILE : $ORACLE_HOME/appsutil/template/afinitdb112.ora
TARGET FILE   : $ORACLE_HOME/dbs/init.ora

TEMPLATE FILE : $ORACLE_HOME/appsutil/template/
TARGET FILE   : $ORACLE_HOME/dbs/
```

Cloning: Clone and Autoconfig

DBTier: ADClone Custom Templates

List Customized Templates

```
[oracle] cd $ORACLE_HOME/appsutil/bin
```

```
[oracle] adtmplreport.sh contextfile=$CONTEXT_FILE listcustom
```

```
USAGE: adtmplreport.sh contextfile=<contextfilepath> [log=<logfilepath>]
[listcustom] | [product=<product>[listcustom] ] |
[target=<targetfilepath> | template=<templatefilepath>] [-verbose]
```

```
#####
##      Generating Report                                ##
#####
$ORACLE_HOME/appsutil/log/$CONTEXT_NAME/MMDDYY*.log
```

```
[oracle] view $(ls -t $ORACLE_HOME/appsutil/log/$CONTEXT_NAME/* | head -1)
```

```
=====
Starting Utility to Report on Templates and their Targets
<There are NO DBTier Custom Templates>
```

Cloning: Clone and Autoconfig

DBTier: Updating/Preserving Custom Templates

Update Customized Templates

DBTier: afinitdb112.ora

```
[oracle]      mkdir -p $ORACLE_HOME/appsutil/template/custom
[oracle]      cp -ip $ORACLE_HOME/appsutil/template/afinitdb112.ora \
              $ORACLE_HOME/appsutil/template/custom/.

[oracle]      vi $ORACLE_HOME/appsutil/template/custom/afinitdb112.ora
```

Update Initialization Parameters

```
=====
open_cursors          1000
```

DBTier: ADAutoCFG

```
[oracle]      cd $ORACLE_HOME/appsutil/scripts/${CONTEXT_NAME}
[oracle]      ./adautocfg.sh
```

Cloning: Clone and Autoconfig

Finding Customized/Personalized Templates and Showing the Personalization/Differences

DBTier: Custom Templates

```
[oracle]      cd $ORACLE_HOME/appsutil/template/custom
[oracle]      for FILES in $(ls *)
              do
                echo Examining: Oracle_template/custom/$FILES vs. template/$FILES
                diff $FILES $ORACLE_HOME/appsutil/template/$FILES > $FILES.diff
                echo
                echo
              done
```

DBTier: ADAutoCFG

```
[oracle]      cd $ORACLE_HOME/appsutil/scripts/${CONTEXT_NAME}
[oracle]      ./adautocfg.sh          <Updates $ORACLE_HOME/appsutil/CONTEXT_NAME.xml>
Updating rdbms version in Context file to db102
Updating rdbms type in Context file to 64 bits
Configuring templates from ORACLE_HOME ...
AutoConfig completed successfully.
The log file for this session is located at:
$ORACLE_HOME/appsutil/log/appt_uspeosInx048/MMDDHHMM/adconfig.log
```

Cloning: Oracle Templates

AppsTier: Oracle Templates

List Oracle Templates

```
[oracle]      cd $AD_TOP/bin
```

```
[oracle]      adtmplreport.sh contextfile=$CONTEXT_FILE
```

```
USAGE: adtmplreport.sh contextfile=<contextfilepath> [log=<logfilepath>]
```

```
[listcustom] | [product=<product>[listcustom] ] |
```

```
[target=<targetfilepath> | template=<templatefilepath>] [-verbose]
```

```
#####
##      Generating Report                                     ##
#####
$APPL_TOP/admin/CONTEXT_NAME/log/MMDDYY*.log
```

```
[oracle]      view $(ls -t $APPL_TOP/admin/$CONTEXT_NAME/log/* | head -1)
```

```
=====
TEMPLATE FILE : $FND_TOP/admin/template/xmlsvcs_ux_ias1022.properties
TARGET FILE   : $IAS_ORACLE_HOME/Apache/Jserv/etc/xmlsvcs.properties
```

```
TEMPLATE FILE : $FND_TOP/admin/template/httpd_ux_ias1022.conf
TARGET FILE   : $IAS_ORACLE_HOME/Apache/Apache/conf/httpd.conf
```

Cloning: Custom Templates

AppsTier: Custom Templates

List Customized Templates

```
[oracle]      cd $AD_TOP/bin
```

```
[oracle]      adtmplreport.sh contextfile=$CONTEXT_FILE listcustom
```

```
USAGE: adtmplreport.sh contextfile=<contextfilepath> [log=<logfilepath>]
```

```
[listcustom] | [product=<product>[listcustom] ] |
```

```
[target=<targetfilepath> | template=<templatefilepath>] [-verbose]
```

```
#####
##      Generating Report                                     ##
#####
$APPL_TOP/admin/CONTEXT_NAME/log/MMDDYY*.log
```

```
[oracle]      view $(ls -t $APPL_TOP/admin/$CONTEXT_NAME/log/* | head -1)
```

```
=====
TEMPLATE FILE  : $FND_TOP/admin/template/xmlsvcs_ux_ias1022.properties
CUSTOM TEMPLATE : $FND_TOP/admin/template/custom/xmlsvcs_ux_ias1022.properties
TARGET FILE    : $IAS_ORACLE_HOME/Apache/Jserv/etc/xmlsvcs.properties
```

```
TEMPLATE FILE  : $FND_TOP/admin/template/httpd_ux_ias1022.conf
CUSTOM TEMPLATE : $FND_TOP/admin/template/custom/httpd_ux_ias1022.conf
TARGET FILE    : $IAS_ORACLE_HOME/Apache/Apache/conf/httpd.conf
```

Cloning: Custom Templates

AppsTier: Updating/Preserving Custom Templates

Update Customized Templates

AppsTier: adxmlctx.tmp

```
[oracle] mkdir -p $AD_TOP/admin/template/custom
```

```
[oracle] cp -ip $AD_TOP/admin/template/adxmlctx.tmp \  
          $AD_TOP/admin/template/custom/.
```

```
[oracle] vi $AD_TOP/admin/template/custom/adxmlctx.tmp
```

```
SESSION-TIMEOUT (1800000 = 30 Minutes (30 * 60 * 1000))
```

```
SESSION-TIMEOUT (10800000 = 180 Minutes (180 * 60 * 1000))
```

```
Change: "s_sesstimeout" default="1800000"
```

```
To: "s_sesstimeout" default="10800000"
```

AppsTier: ADAutoCFG

```
[oracle] cd $ORACLE_HOME/appsutil/scripts/${CONTEXT_NAME}
```

```
[oracle] ./adautocfg.sh
```

Cloning: Context File

Jserv (Java) Settings

Parameter	Default
oc4j_sessiontimeout	30
session_timeout	1800000
keepalivetimeout	15
mwaDropConnectionTimeout	5
mwaStaleSessionTimeout	60
mwatimeout	100
ohstimeout	300
opmtimeout	100
apctimeout	100
oacoretimeout	100
formstimeout	100
oafmtimeout	100
tnstimeout	100
conctimeout	1000
icsmtimeout	100
itfcsrvtimeout	100
metcdtimeout	100
timeout	100
opmtimeout	100

Apache HTTP Settings

Parameter	Default
httpd.conf:Timeout	300 (seconds)
httpd.conf:KeepAliveTimeout	15 (seconds)

Forms Environment Variables

Parameter	Default
formserver_timeout	100
s_forms_time	5
forms_maxblocktime	5000
frmsrv_nprocs	1
forms_jvm_start_options	
oacore_nprocs	1

Cloning: Finding Templates

Finding Customized/Personalized Templates and Showing the Personalization/Differences

AppsTier: Custom Templates

```
[oracle]      cd $APPL_TOP
[oracle]      for DIRS in $(find $APPL_TOP/*/*/admin/template/custom -prune -type d)
              do
                cd $DIRS
                for FILES in $(ls *)
                do
                  echo Examining: $DIRS
                  echo template/custom/$FILES vs. template/$FILES
                  diff $FILES $DIRS/../$FILES > $FILES.diff
                  echo
                  echo
                done
              done
              cd -
            done
```

AppsTier: ADAutoCFG

```
[oracle]      cd $ADMIN_SCRIPTS_HOME
[oracle]      ./adautocfg.sh
```

AppsTier: Bounce Node-Services

```
[oracle]      $ADMIN_SCRIPTS_HOME/adstpall.sh APPS/APPS-Password
[oracle]      $ADMIN_SCRIPTS_HOME/adstrtal.sh APPS/APPS-Password
```

Cloning: References

- **References**

- Note 406982.1 - Cloning Oracle Applications Release 12 with Rapid Clone
- Note 559518.1 - Cloning Oracle E-Business Suite Release 12 RAC-Enabled Systems with Rapid Clone
- Note 384248.1 - Sharing The Application Tier File System in Oracle E-Business Suite Release 12
- Note 438086.1 - Application Tier Platform Migration with Oracle E-Business Suite Release 12
- Note 387859.1 - Using AutoConfig to Manage System Configurations in Oracle E-Business Suite 12
- Note 603104.1 - Troubleshooting Rapid Clone issues with Oracle Applications R12
- Note 388577.1 - RAC conversion method supported with Rapid Clone
- Note 834894.1 - How to Create a Clean oraInventory in Release 12
- Note 387859.1 - ADAutoConfig Templates (List/Confirm/Preserve ADAutoConfig Customizations)
- Note 811715.1 - Descriptive Checklist for performing Rapid Clone with 11i/R12
- Note 812315.1 - Oracle Application Management Pack for Oracle E-Business Suite, Release 3.0
- Note 783188.1 - Certified Oracle RAC scenarios for Ebusiness cloning
- Note 437260.1 - How to Change Applications Passwords using Applications Schema Password Change Utility (FNDCPASS or AFPASSWD)

Closing Questions & Comments



Have you handed in your questionnaire?

That's a Wrap ...thank you for attending!

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