

EBS Cloning Panel

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Panel Members

- Elke Phelps – Humana
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Agenda

- Case Study - 11i Cloning at Cummins
- Case Study - 11i Cloning at Humana
- Examples of getting data for the clone
- **Q & A**

Case Study - 11i Cloning at Cummins

- Multiple 11i instances worldwide
- Corporate has two global single instances, one each for Financials and HR
- Finance is 11.5.10 CU2 ATG6, HR is ATG4
- Finance database size is about 350G, HR is about 200G
- Both have multiple languages enabled – Finance has 3 and HR has 14
- Environment is Sun Solaris 9 with DB version 10.2.0.2

Case Study - 11i Cloning at Cummins

- We do not use Oracle's clone methods ☺
- Finance was upgraded from 10.7SC and HR from 11.5.5 – rapidclone from these installs has never worked, despite many patches and SRs
- Our philosophy is to keep similar/equal patch levels on our instances
- Cloning work is reduced to copying over the database and running autoconfig
- Inherent risk that must be accepted

Case Study - 11i Cloning at Cummins

- We use profile options “Java Color Scheme” and “Site Name”, along with message name “FND_SSO_WELCOME” in FND_NEW_MESSAGES to distinguish between instances
- All non-production workflow notifications are directed to a test email box that necessary folks have access to – this email is set as part of the clone process

Case Study - 11i Cloning at Humana

- Utilize disk mirroring to create nightly hot backup
 - EMC BCV Technology
 - IBM Flashcopy
- Cloning with disk mirroring steps
 - Set all tablespaces in hotbackup mode
 - Break disk mirror
 - Set all tablespaces out of hotbackup mode

Case Study - 11i Cloning at Humana

- Run cloning pre-steps
 - Check target filesystem size
 - Shutdown target
 - Remove target filesystem contents
 - Copy filesystem from split disk to target filesystem
- Run `adcfgclone.pl`
 - MetaLink Note 230672.1
 - Run post-steps

Case Study - 11i Cloning at Humana

- **Clean FND_NODES**

- Per MetaLink Note 260887.1 “Steps to Clean Nonexistent Nodes or IP Addresses from FND_NODES”

- Execute following command as apps

```
sql>execute fnd_conc_clone.setup_clean;
```

- Requires executing adconfig to repopulate FND_NODES

- **Put concurrent requests on hold**

- ```
sql>update fnd_concurrent_requests
set hold_flag = 'Y';
```

# Case Study - 11i Cloning at Humana

- **Change Application Passwords**

```
FNDCPASS apps/apps 0 Y system/manager
ORACLE \ GL PASSWORD
```

```
FNDCPASS apps/apps 0 Y system/manager USER
\ VISION PASSWORD
```

```
FNDCPASS apps/apps 0 Y system/manager
SYSTEM \ APPLSYS PASSWORD
```

- Additional steps required for APPS and APPLSYS
- MetaLink Note 159244.1

# Case Study - 11i Cloning at Humana

- **Change Application Passwords**  
 (continued)
  - Patch 4745998 (included in ATG RUP5 and RUP6) update for FNDCPASS
  - Allows a mass change of all E-Biz schemas
  - FNDCPASS apps/apps 0 Y system/manager  
 \ ALLORACLE PASSWORD
- **Changing Database Passwords (SYS, SYSTEM, etc)**
  - `sql>alter user [USERNAME]  
 identified by [PASSWORD];`

# Case Study - 11i Cloning at Humana

- **Un-enddate Application Responsibilities**
  - Easy way to provide additional access to users in test
  - `sql> UPDATE FND_USER_RESP_GROUPS SET  
END_DATE = NULL WHERE  
responsibility_id in  
(RESPONSIBILITY_LIST) AND user_id in  
(ID_LIST)`
- **Grant additional access to development team**
  - `$chmod -R 660 $APPL_TOP`

# Case Study - 11i Cloning at Humana

- Drop database links
  - Required Links
    - APPS APPS\_TO\_APPS.WORLD
    - APPS EDW\_APPS\_TO\_WH.WORLD
  - Other links are subject to removal
    - Links to other production databases
    - `sql>drop [public] database link prod.world;`

# Case Study - 11i Cloning at Humana

- Remove log and output files
  - Concurrent Manager log and output files
    - `rm $APPLCSF/$APPLLOG/*`
    - `rm $APPLCSF/$APPLOUT/*`
  - Apache and JVM log files
    - `rm $APACHE_TOP/Apache/logs/*`
    - `rm $APACHE_TOP/Jserv/logs/*`
    - `rm $APACHE_TOP/Jserv/logs/jvm/*`

# Getting the Data for the Clone

- Several methods for copying data
- Assumption: database is down or tablespaces are in backup mode
- OS Utilities
  - rsync
  - Same host
    - Clone will be on same host
    - Network drive (NFS/CIFS from host or NAS device)
  - Network copy

# Getting the Data for the Clone

- Disk Level
  - Host based split mirror
  - Disk subsystem level
    - Read/Write Snapshots (warning REDO, UNDO and TEMP)
    - Split Mirrors (e.g. BCVs)
- Combination
  - Split mirror is used for backup, use host based commands to copy split mirror to target for clone
- Dataguard as source



# Q & A

# Thank You!

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