\*\*\*\*07/16/2024 – HEPYQA3 from HEPYQA2 active clone via Jenkins\*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYQA3 entries in crontab and suspend Backup jobs in OEM)

Make sure DBA own A/N account P the same in both Source and Target. If not make it the same.

• Run script prior to clone refresh. (See script for details).

Logon to the database server hosting database HEPYQA3 (xhepydbw23q)

. oraenv

HEPYQA3

cd $HOME/tls/refresh/HEPYQA3

./clone\_pre\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA3

Source database to be used for the refresh (target database)

HEPYQA2

**Enter Schema Owner (e.g. PROD)**

PROD

DBA ID (dba id to be used for connecting to the aux and target databases)

Axxxx

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_P\_here – XXX

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and you want to start at the failed step number).

1

The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.

• Drop Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below

**instance\_name: HEPYQA3**

**syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

**rcatpass: HEPYQA3namr**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

• Clone Target Database to Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

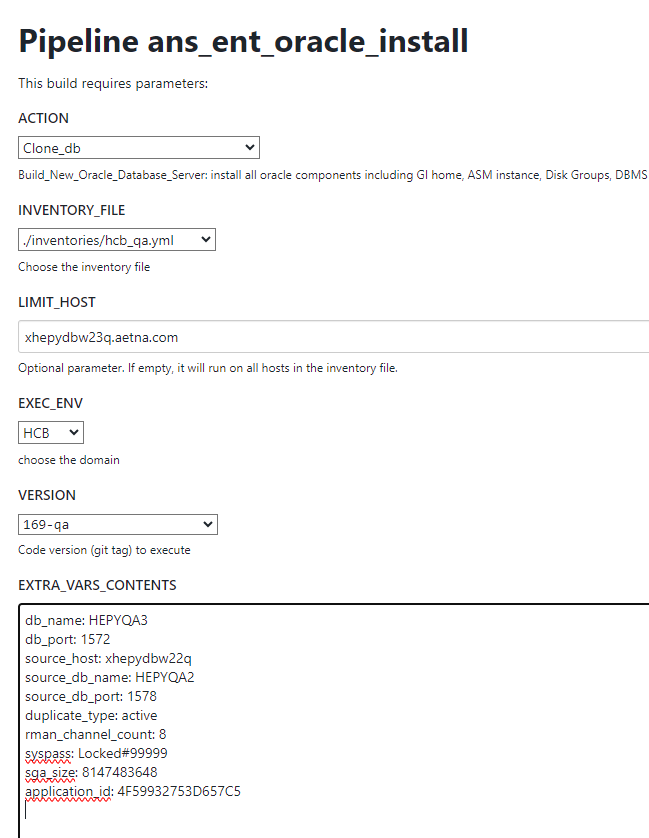
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEPYQA3

db\_port: 1572

source\_host: xhepydbw22q

source\_db\_name: HEPYQA2

source\_db\_port: 1578

duplicate\_type: active

rman\_channel\_count: 8

syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

sga\_size: 8147483648

application\_id: 4F59932753D657C5

**Depends on where It fails (if Jenkins job above failed) do one or more of those things. Figure if each step needed or not**

**1.Shutdown the instance (shutdown abort)**

**2.Remove instance files from $DBS (rm \*HEPYQA3\*)**

**3.Remove the database entry from the /etc/oratab**

**4.Remove the database directories from asm. In asmcmd rm -r \*/HEPYQA3\_XHEPYDBW23Q**

**5. Stop and remove listener**

**srvctl stop listener -l HEPYQA3**

**srvctl remove listener -l HEPYQA3**

## To monitor Open second SSH

cd $SCRIPTS

cd ..

cd logs

tail -f ...

## to monitor rman portion

. oraenv HEPYQA3

cd $SCRIPTS

cd ..

cd rman

tail -f xxxx

or

/orahome/u01/app/oracle/admin/HEPYQA3/rman

tail -f xxxx

• Run script after the clone refresh. (See script for details).

Logon to the database server hosting database HEPYQA3 (xhepydbw23q)

. oraenv

HEPYQA3

cd $HOME/tls/refresh/HEPYQA3

ALTER USER S012030

ACCOUNT LOCK

/

select 'alter system kill session ''' || sid || ',' ||serial#|| ''';' from v$session where username='S012030';

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA3

DBA ID (dba id to be used for connecting to the aux database)

A/N account

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_pasword\_here – xx

Subdirectory name where clone pre run scripts were created (e.g. MON\_DD\_YYYY)

Jul\_17\_2024

Mon\_xx\_XXXX

Note: This directory resides under the directory where this script resides.

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

The script writes to the sub directory created by the pre clone script in the format of Mon\_DD\_YYYY, in this directory will be the scripts created by the pre clone scripts and a log detailing the run activity of the post clone steps that were run.

Below part of post script…

ALTER USER S012030

ACCOUNT UNLOCK

/

Resume all OEM jobs that were disabled prior clone.

Uncomment crontab job that were commented prior the clone

\*\*\*\*07/16/2024 – HEDWQA3 from HEDWQA2 active clone via Jenkins\*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEDWQA3 entries in crontab and suspend Backup jobs in OEM)

Make sure DBA own A/N account P the same in both Source and Target. If not make it the same.

• Run script prior to clone refresh. (See script for details).

Logon to the database server hosting database HEDWQA3 (xhedwdbw23q)

. oraenv

HEDWQA3

cd $HOME/tls/refresh/HEDWQA3

./clone\_pre\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEDWQA3

Source database to be used for the refresh (target database)

HEDWQA2

**Enter Schema Owner (e.g. PROD)**

PROD\_DW

DBA ID (dba id to be used for connecting to the aux and target databases)

A/N account

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_P\_here – XXX

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and you want to start at the failed step number).

1

The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.

• Drop Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below

**instance\_name: HEDWQA3**

**syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

**rcatpass: HEDWQA3namr**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

**\*\*\* Last time got following error \*\*\*\***

**fatal: [xhedwdbw23q.aetna.com]: FAILED! => {"changed": false, "cmd": "set -o pipefail && /orahome/u01/app/oracle/product/19.0.0/grid/bin/srvctl remove database -db \"HEDWQA3\_xhedwdbw23q\" -noprompt | tee -a /orahome/u01/app/oracle/local/logs/drop\_db\_HEDWQA3\_2024-07-17T15:10:36Z\n", "delta": "0:00:00.413652", "end": "2024-07-17 11:17:46.640692", "msg": "non-zero return code", "rc": 1, "start": "2024-07-17 11:17:46.227040", "stderr": "", "stderr\_lines": [], "stdout": "PRKO-3141 : Database HEDWQA3\_xhedwdbw23q could not be removed because it was running", "stdout\_lines": ["PRKO-3141 : Database HEDWQA3\_xhedwdbw23q could not be removed because it was running"]}**

**Work around was manually remove database from HAS**

**+ASM> srvctl remove database -db HEDWQA3\_xhedwdbw23q**

**Remove the database HEDWQA3\_xhedwdbw23q? (y/[n]) y**

**srvctl stop listener -l HEDWQA3**

**srvctl remove listener -l HEDWQA3**

• Clone Target Database to Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

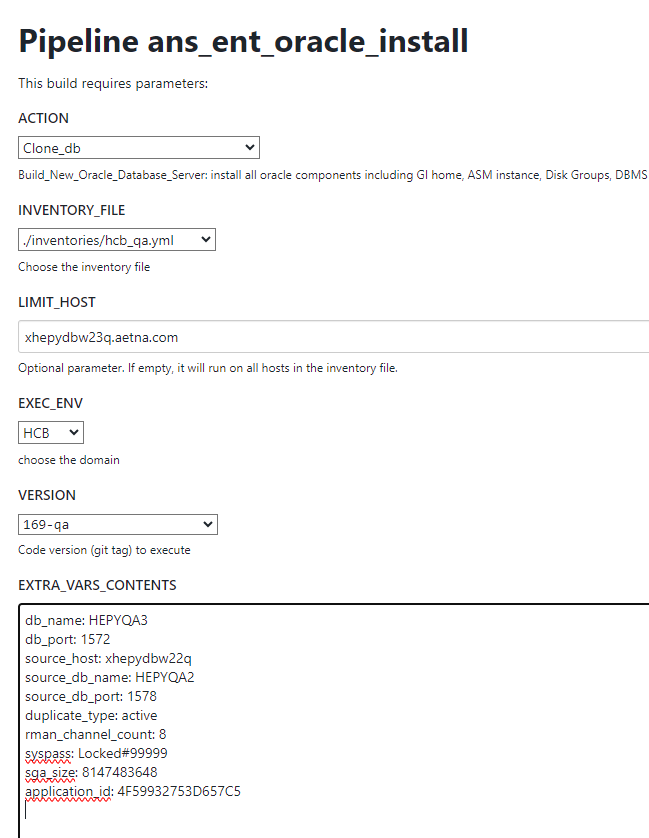
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEDWQA3

db\_port: 1573

source\_host: xhedwdbw22q

source\_db\_name: HEDWQA2

source\_db\_port: 1579

duplicate\_type: active

rman\_channel\_count: 4

syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

application\_id: 4F59932753D657C5

**Depends on where It fails (if Jenkins job above failed) do one or more of those things. Figure if each step needed or not**

**1.Shutdown the instance (shutdown abort)**

**2.Remove instance files from $DBS (rm \*HEDWQA3\*)**

**3.Remove the database entry from the /etc/oratab**

**4.Remove the database directories from asm. In asmcmd rm -r \*/HEDWQA3\_XHEDWDBW23Q**

**5. Stop and remove listener**

**srvctl stop listener -l HEDWQA3**

**srvctl remove listener -l HEDWQA3**

## To monitor Open second SSH

cd $SCRIPTS

cd ..

cd logs

tail -f ...

## to monitor rman portion

. oraenv HEDWQA3

cd $SCRIPTS

cd ..

cd rman

tail -f xxxx

or

/orahome/u01/app/oracle/admin/HEDWQA3/rman

tail -f xxxx

• Run script after the clone refresh. (See script for details).

Logon to the database server hosting database HEDWQA3 (xhedwdbw23q)

. oraenv

HEDWQA3

cd $HOME/tls/refresh/HEDWQA3

ALTER USER S012030

ACCOUNT LOCK

/

select 'alter system kill session ''' || sid || ',' ||serial#|| ''';' from v$session where username='S012030';

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEDWQA3

DBA ID (dba id to be used for connecting to the aux database)

A/N Account

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_pasword\_here – xx

Subdirectory name where clone pre run scripts were created (e.g. MON\_DD\_YYYY)

Jul\_17\_2024

Mon\_xx\_XXXX

Note: This directory resides under the directory where this script resides.

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

The script writes to the sub directory created by the pre clone script in the format of Mon\_DD\_YYYY, in this directory will be the scripts created by the pre clone scripts and a log detailing the run activity of the post clone steps that were run.

Below part of post script…

ALTER USER S012030

ACCOUNT UNLOCK

/

Resume all OEM jobs that were disabled prior clone.

Uncomment crontab job that were commented prior the clone

\*\*\*\*08/06/2024 – HEPYQA2 from HEPYMASK \*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYQA2 entries in crontab and suspend Backup jobs in OEM)

Make sure your A or N Oracle database P in sync in both source and target databases.

• **Run pre clone script prior to clone refresh**

Logon to the database server hosting database HEPYQA2 (xhepydbw22q)

. oraenv

HEPYQA2

cd $HOME/tls/refresh/HEPYQA2

./clone\_pre\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA2

Source database to be used for the refresh (target database)

HEPYMASK

DBA ID (dba id to be used for connecting to the aux and target databases)

A236120

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_P\_here – xxx

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and you want to start at the failed step number).

1

The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.

• **Drop Auxiliary DataBase**

On your computer, open Chrome.

At the top right, click More New Incognito Window.

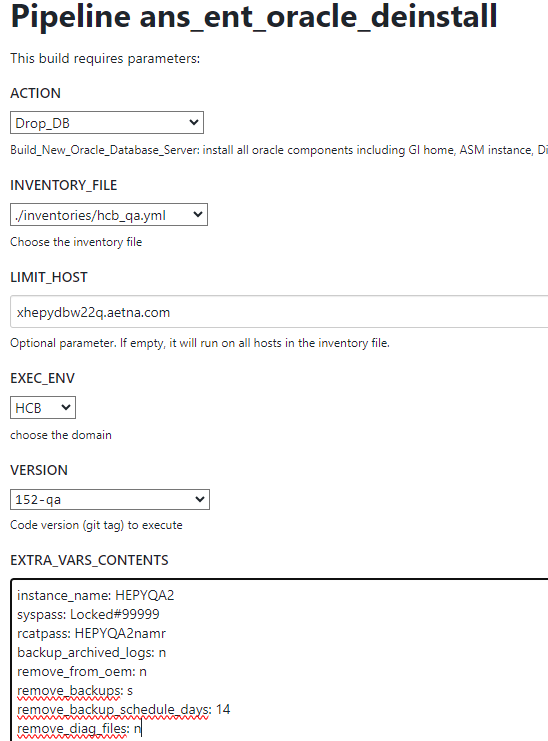
A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below



instance\_name: HEPYQA2

syspass: XXX

rcatpass: HEPYQA2namr

backup\_archived\_logs: n

remove\_from\_oem: n

remove\_backups: s

remove\_backup\_schedule\_days: 14

remove\_diag\_files: n

• **Start clone**

On your computer, open Chrome.

At the top right, click More New Incognito Window.

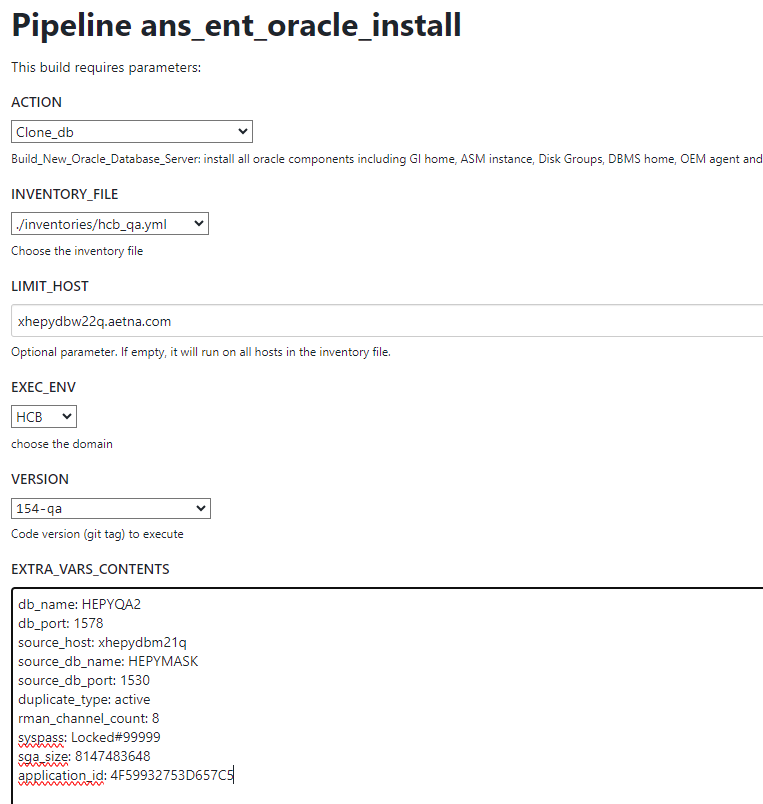
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEPYQA2

db\_port: 1578

source\_host: xhepydbm21q

source\_db\_name: HEPYMASK

source\_db\_port: 1530

duplicate\_type: active

rman\_channel\_count: 8

syspass: XXXX

sga\_size: 8147483648

application\_id: 4F59932753D657C5

In event if above Jenkins Clone DB failed use following manual “cleanup” steps before kicking off next clone db attempt. Also look at step which Jenkins Clone DB failed and take approiate actions before kicking off next attempt.

1.Shutdown the instance (shutdown abort)

2.Remove instance files from $DBS (rm \*HEPYQA2\*)

3.Remove the database entry from the /etc/oratab

4.Remove the database directories from asm. In asmcmd rm -r \*/HEPYQA2\_XHEPYDBW22Q

5.Stop and remove listener

## To monitor clone, SSH to Auxiliary side

cd $LOGS

tail -f xxx

## To monitor rman portion (duplicate) of clone, SSH to Auxiliary side

cd /orahome/u01/app/oracle/admin/HEPYQA2/rman

tail -f xxxx

• **Run post clone script after the clone refresh completed successfully.**

Logon to the database server hosting database HEPYQA2 (xhepydbw22q)

. oraenv

HEPYQA2

cd $HOME/tls/refresh/HEPYQA2

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA2

Enter Schema Owner (e.g. PROD)

PROD

DBA ID (dba id to be used for connecting to the aux database)

A236120

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter p here – xxx

Subdirectory name where clone pre run scripts were created (e.g. MON\_DD\_YYYY)

Aug\_06\_2024

Note: This directory resides under the directory where this script resides.

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

The script writes to the sub directory created by the pre clone script in the format of Mon\_DD\_YYYY, in this directory will be the scripts created by the pre clone scripts and a log detailing the run activity of the post clone steps that were run.

Below part of post script…

Resume all OEM jobs that were disabled prior clone.

Uncomment crontab jobs

Kick off stats job on newly cloned HEPYQA2 database – (check with Matt Kosir if this needed now or later)

\*\* **Steps below to extract custom DW indexes for bootstrap** **(do it prior to bootstrap start) \*\***

**\*\*\* Complete Steps from 1 to 9 (do it prior to bootstrap start) \*\*\***

Log in to HEDWDEV box

cd /home/oracle/tls/idx

1) vi dw\_databases.txt

HEDWQA2

2) get\_custom\_indexes\_ddl.sh

4) Rename file, add following to beginning of the script **set trimspool, spool and alter session**.

mv dw\_custom\_indexes\_ddl\_YYYYMMDD.out dw\_custom\_indexes\_ddl\_HEDWQA2.sql

vi dw\_custom\_indexes\_ddl\_20240521.sql

set trimspool on line 200 echo on feed on

spool create\_dw\_qa2\_custom\_indexes.out

alter session force parallel ddl parallel 4;

…

spool off

5) Copy file to HEDWQA2 box

scp /home/oracle/tls/idx/dw\_custom\_indexes\_ddl\_HEDWQA2.sql xhedwdbw22q:/home/oracle/tls/idx/dw\_custom\_indexes\_ddl\_HEDWQA2.sql

6)Drop 2 synonyms from HEDWQA2(do it prior to bootstrap start) **\*\***

Login to HEDWQA2 box

sqlplus / as sysdba

DROP SYNONYM "PUBLIC".CLAIM\_FACT

/

~~DROP SYNONYM PROD\_DW.CLAIM\_FACT~~

~~/~~

7)Extract DDL for CACHE tables from HEDWQA2(do it prior to bootstrap start) **\*\***

Login to HEDWQA2 box

cd /home/oracle/eb/extract\_ddl

sqlplus / as sysdba

@extract\_cache\_tables\_ddl.sql

(if you get similar errors at the end just ignore it. ORA-31608: specified object of type OBJECT\_GRANT not found)

8) Login to Primary HEDWQA2 box

Suspend OEM backup jobs first

sqlplus / as sysdba

shutdown immediate;

startup mount;

~~alter database flashback off;~~

~~ALTER DATABASE NO FORCE LOGGING;~~

alter database noarchivelog;

alter database open;

archive log list;

9) Lock users

EXECUTE aedba.LOCKUSER;

**\*\*\* Steps from 10 to 11 complete once bootstrap started** (check with HE Admin who running bootstrap when such steps can be completed)

\*\* **Once bootstrap in progress and once bootstrap dropped all PROD\_DW tables add custom indexes back** (check with HE Admin when such step can be completed) **\*\*\***

10) Login to HEDWQA2 box

sqlplus / as sysdba

cd /home/oracle/tls/idx/

@dw\_custom\_indexes\_ddl\_HEDWQA2.sql

11)Check to make sure no parallel indexes out there. If yes change them back to NOPARALLEL by running query below and creating appropriate commands/script to change back to NOPARALLEL. See alter\_custom\_index\_noparallel.sql as example.

select owner, index\_name, degree from dba\_indexes where owner IN ('PROD\_DW','AE\_CUSTOM') and degree > 1

**\*\* Steps from 12 to 15 complete once bootstrap completed** (get confirmation from Matt Kosir)

**\*\*Once Bootstrap completed move database back to archivelog mode + Unlock Users\*\***

Login to HEDWQA2 box

12)

sqlplus / as sysdba

shutdown immediate;

startup mount;

alter database archivelog;

alter database open;

archive log list;

13)

EXECUTE aedba.UNLOCKUSER;

14)

\*\*\* Create cache tables in HEDWQA2 from ddl extract taken prior to bootstrap \*\*\*

\*\*\* Add synonyms that were dropped before bootstrap or wiped out during \*\*

\*\*\*\* recompile objects\*\*\*

Login to HEDWQA2 box

!! Ignore any errors.

cd /home/oracle/eb/extract\_ddl

sqlplus / as sysdba

@create\_cache\_tables.sql

@create\_cache\_synonyms.sql

**\*\*\* Recompile \*\*\***

sqlplus / as sysdba

@?/rdbms/admin/utlrp.sql

select count(\*)

from dba\_objects

where status = 'INVALID';

15)

Resume all OEM Backup jobs that were suspended earlier.

\*\*\*\*09/06/2024 – HEPYMASK from HEPYPRD DDboost Tape backup same Data Center \*\*\*\*

!!!Attempted to kick off clone via Jenkins but got error in TASK [clone\_db : Register storage unit]. Had to go back to script cloning after making change in setup\_ddboost\_for\_clone.rman to point SBT\_LIBRARY to different location. Had to use trick with dummy instance to run it… Sent email to Rich to follow up with Jenkins code..

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYMASK entries in crontab and suspend Backup jobs in OEM)

!! Move HEPYMASK to archivelog mode first if needed

cd /home/oracle/tls/refresh/HEPYMASK

**~~-- Make sure following scripts in place if not copy from another server and rename accordingly~~**

**~~Find from Greg Stewart what is BACKUP\_HOST and STORAGE\_UNIT prior.~~**

~~clone\_db\_fr\_tape.sh~~

~~duplicate\_HEPYPRD\_fr\_tape.rman~~

~~setup\_ddboost\_for\_clone.rman~~

**~~- Make appropriate changes in these scripts prior to clone~~**

**~~!!! Make sure you have correct YEAR in line below~~**

**~~until time "TO\_DATE('XX/X/YYYY 08:01:00', 'MM/DD/YYYY HH24:MI:SS')"~~**

~~### list incarnation of database; ### on target side to get CURRENT DB ID and incarnation~~

cd /home/oracle/tls/refresh/HEPYMASK

~~Run following script prior to db drop and clone~~

~~rmac~~

~~@setup\_ddboost\_for\_clone.rman~~

!! If HEPYMASK exist on xhepydbm21q drop it first.

• Drop Auxiliary DataBase (if exist already)

On your computer, open Chrome.

At the top right, click More New Incognito Window.

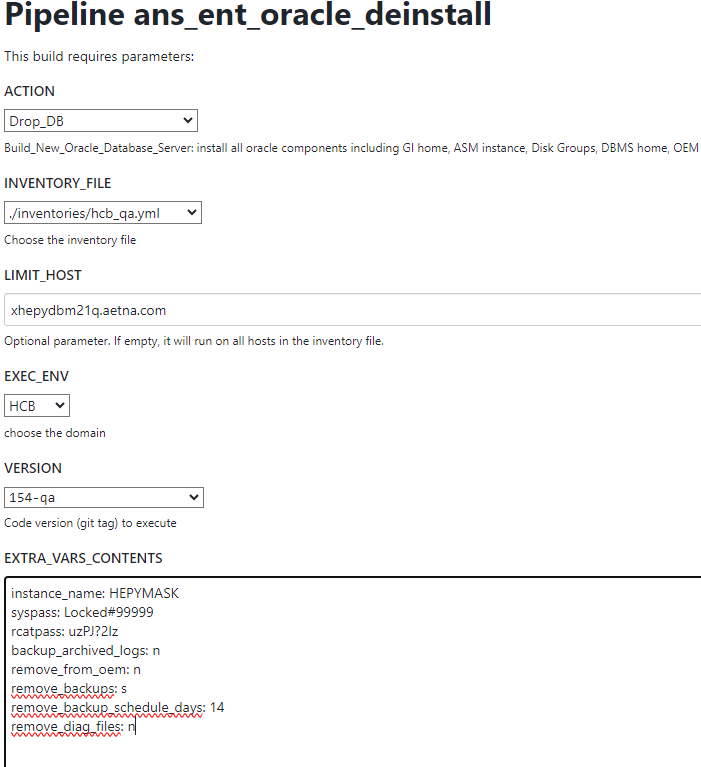
A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below



**instance\_name: HEPYMASK**

**syspass: Zyz#99999**

**rcatpass: uzPJ?2lz**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

~~Logon to the database server hosting database HEPYMASK (xhepydbm21q)~~

~~. oraenv~~

~~HEPYMASK~~

~~cd $SCRIPTS~~

~~!! Say No to all. You’ll want to respond schedule to the rman/tsm cleanup prompt.~~

~~drop\_database.sh HEPYMASK~~

~~None Prod sys: Zyz#99999~~

!! Check if any old arhivelogs dirs. need to be manually removed to free up FLASH space

asmcmd

cd FLASH\_01/

cd ARCHIVELOG/

ls

--If you see old dir dated when clone was taken. Remove it

rm -r 2024\_03\_22/

• Clone Target Database to Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

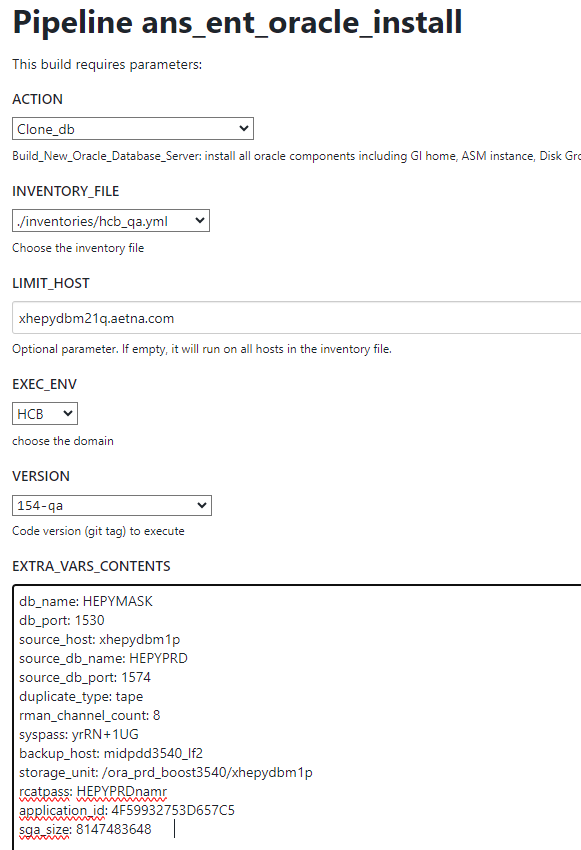
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEPYMASK

db\_port: 1530

source\_host: xhepydbm1p

source\_db\_name: HEPYPRD

source\_db\_port: 1574

duplicate\_type: tape

rman\_channel\_count: 8

syspass: yrRN+1UG

backup\_host: midpdd3540\_lf2

storage\_unit: /ora\_prd\_boost3540/xhepydbm1p

rcatpass: HEPYPRDnamr

application\_id: 4F59932753D657C5

sga\_size: 8147483648

## To monitor main clone log

cd $LOGS

tail -f xxx

## To monitor rman portion log

cd /orahome/u01/app/oracle/admin/HEPYMASK/rman

tail -f xxxx

Steps in case clone failed and needs to be restarted

ps -ef |grep pmon

ps -ef | grep tns

1.Shutdown the instance (shutdown abort) or kill pmon process

2.Remove instance files from $DBS (rm \*HEPYMASK\*)

3.Remove the database entry from the oratab

4.Remove the database directories from asm. In asmcmd rm -r \*/HEPYMASK\_XHEPYDBM21Q

srvctl stop listener -l HEPYMASK

srvctl remove listener -l HEPYMASK

• Run script after the clone refresh.

Logon to the database server hosting database HEPYMASK (xhepydbm21q)

. oraenv

HEPYMASK

cd /home/oracle/tls/refresh/HEPYMASK

!! Change your A/N account HEPYMASK password. Unless you already know the password that came from PROD clone.

cd /home/oracle/tls/refresh/HEPYMASK

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYMASK

Enter Schema Owner (e.g. PROD)

PROD

DBA ID (dba id to be used for connecting to the aux database)

A236120

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter p here – xxx

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

## Enable heartbeat if not already enabled

**\*/5 \* \* \* \* /home/oracle/tls/rman/heartbeat.ksh HEPYMASK AEDBA > /dev/null 2>&1**

~~!! Just in case Prod still under old Oracle Home. Apply latest RU~~

~~!! Use Jenkins PATCH\_DB – to apply 19.22.0 RU~~

Resume all OEM jobs that were disabled prior clone.

Check if backup jobs not there in OEM add them. Schedule archivelog job every hour

Run Level 0 and Archivelog jobs

Once backups completed move database to norachivelog mode. Disable OEM Jobs

sqlplus / as sysdba

shutdown immediate;

startup mount;

alter database flashback off;

ALTER DATABASE NO FORCE LOGGING;

alter database noarchivelog;

alter database open;

archive log list;

**Drop indexes (on demand)**

cd /home/oracle/tls/refresh/HEPYMASK

**@drop\_indexes\_POSTAL\_ADDRESS.sql**

**@drop\_indexes\_CAPITATED\_PAYMENT\_LINE.sql**

**@drop\_indexes\_CONSOLIDATED\_CLAIM.sql**

**@drop\_indexes\_UB92.sql**

**@drop\_indexes\_HCFA1500.sql**

**@drop\_indexes\_MEMBERSHIP.sql**

@drop\_indexes\_PERSON\_NAME.sql

**@drop\_indexes\_INSURANCE\_INFORMATION.sql**

**@drop\_indexes\_LICENSE\_NUMBER.sql**

@drop\_indexes\_ATTRIBUTION\_LINE.sql

**@drop\_indexes\_PAYEE\_BANK\_ACCOUNTS.sql**

**Add indexes back after masking completed for particular table (on demand)**

cd /home/oracle/tls/refresh/HEPYMASK

**nohup add\_indexes\_POSTAL\_ADDRESS.sh HEPYMASK > add\_indexes\_POSTAL\_ADDRESS.stdout 2>&1 &**

**nohup add\_indexes\_CAPITATED\_PAYMENT\_LINE.sh HEPYMASK > add\_indexes\_CAPITATED\_PAYMENT\_LINE.stdout 2>&1 &**

**nohup add\_indexes\_CONSOLIDATED\_CLAIM.sh HEPYMASK > add\_indexes\_CONSOLIDATED\_CLAIM.stdout 2>&1 &**

**nohup add\_indexes\_UB92.sh HEPYMASK > add\_indexes\_UB92.stdout 2>&1 &**

nohup add\_indexes\_ATTRIBUTION\_LINE.sh HEPYMASK > add\_indexes\_ATTRIBUTION\_LINE.stdout 2>&1 &

**nohup add\_indexes\_HCFA1500.sh HEPYMASK > add\_indexes\_HCFA1500.stdout 2>&1 &**

**nohup add\_indexes\_MEMBERSHIP.sh HEPYMASK > add\_indexes\_MEMBERSHIP.stdout 2>&1 &**

nohup add\_indexes\_PERSON\_NAME.sh HEPYMASK > add\_indexes\_PERSON\_NAME.stdout 2>&1 &

**nohup add\_indexes\_INSURANCE\_INFORMATION.sh HEPYMASK > add\_indexes\_INSURANCE\_INFORMATION.stdout 2>&1 &**

**nohup add\_indexes\_LICENSE\_NUMBER.sh HEPYMASK > add\_indexes\_LICENSE\_NUMBER.stdout 2>&1 &**

**nohup add\_indexes\_PAYEE\_BANK\_ACCOUNTS.sh HEPYMASK > add\_indexes\_PAYEE\_BANK\_ACCOUNTS.stdout 2>&1 &**

Once Masking completed move database back to archivelog mode and run Level0 + archivelog backups

sqlplus / as sysdba

shutdown immediate;

startup mount;

alter database archivelog;

alter database open;

archive log list;

\*\*\*\*10/10/2024 – HEPYQA from HEPYQA2 active clone via Jenkins\*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYQA entries in crontab and suspend Backup jobs in OEM)

Make sure DBA own A/N account password the same in both Source and Target. If not make it the same.

• Run script prior to clone refresh. (See script for details).

Logon to the database server hosting database HEPYQA (xhepydbw01q)

. oraenv

HEPYQA

cd $SCRIPTS/refresh/HEPYQA

./clone\_pre\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA

Source database to be used for the refresh (target database)

HEPYQA2

**Enter Schema Owner (e.g. PROD)**

PROD

DBA ID (dba id to be used for connecting to the aux and target databases)

Axxxxxx

DBA Password (P for the dba id being used for connecting to the aux and target databases)

enter\_Password\_here – XXX

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and you want to start at the failed step number).

1

The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.

• Drop Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below

**instance\_name: HEPYQA**

**syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx**

**rcatpass: HEPYQAnamr**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

• Clone Target Database to Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

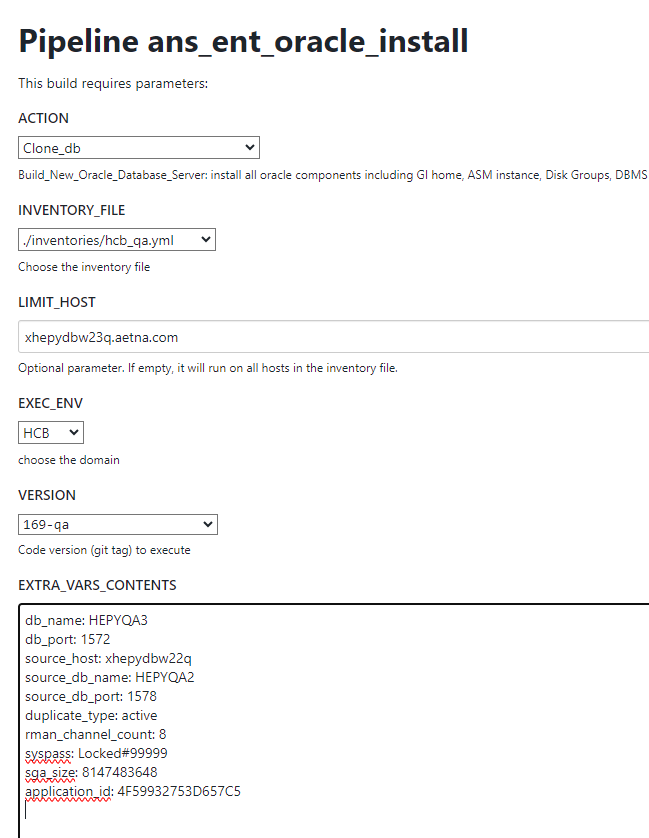
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEPYQA

db\_port: 1559

source\_host: xhepydbw22q

source\_db\_name: HEPYQA2

source\_db\_port: 1578

duplicate\_type: active

rman\_channel\_count: 8

backup\_host: winpdd0821\_v20.aetna.com

storage\_unit: ora\_qa\_boost0821

syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

sga\_size: 8147483648

application\_id: 4F59932753D657C5

Error:

TASK [clone\_db : Bounce listener] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Thursday 10 October 2024 11:48:46 +0000 (0:00:02.167) 0:00:51.458 \*\*\*\*\*\*

changed: [xhepydbw01q.aetna.com] => (item=stop) => {"ansible\_loop\_var": "item", "changed": true, "cmd": ["$ORACLE\_HOME/bin/srvctl", "stop", "listener", "-l", "listener"], "delta": "0:00:00.573552", "end": "2024-10-10 07:48:48.000535", "item": "stop", "msg": "", "rc": 0, "start": "2024-10-10 07:48:47.426983", "stderr": "", "stderr\_lines": [], "stdout": "", "stdout\_lines": []}

failed: [xhepydbw01q.aetna.com] (item=start) => {"ansible\_loop\_var": "item", "changed": true, "cmd": ["$ORACLE\_HOME/bin/srvctl", "start", "listener", "-l", "listener"], "delta": "0:00:00.716470", "end": "2024-10-10 07:48:49.140738", "item": "start", "msg": "non-zero return code", "rc": 1, "start": "2024-10-10 07:48:48.424268", "stderr": "", "stderr\_lines": [], "stdout": "PRCR-1079 : Failed to start resource ora.LISTENER.lsnr\nCRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhepydbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"\nCRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhepydbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"\nCRS-2674: Start of 'ora.LISTENER.lsnr' on 'xhepydbw01q' failed", "stdout\_lines": ["PRCR-1079 : Failed to start resource ora.LISTENER.lsnr", "CRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhepydbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"", "CRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhepydbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"", "CRS-2674: Start of 'ora.LISTENER.lsnr' on 'xhepydbw01q' failed"]}

**Error something to do with extra entry in listener.ora**

**Login as GRID go to $TNS\_ADMIN**

**Remove one extra line and leave what in RED. Same case for “tcp”, “host” and “port”**

LISTENER =

(DESCRIPTION\_LIST =

(DESCRIPTION =

(ADDRESS = (PROTOCOL = TCP)(HOST = xhepydbw01q)(PORT = 1559))

(ADDRESS = (PROTOCOL = IPC)(KEY = HEPYQA\_IPC))

(ADDRESS = (PROTOCOL = TCP)(HOST = xhepydbw01q)(PORT = 1521))

(ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))

)

)

ENABLE\_GLOBAL\_DYNAMIC\_ENDPOINT\_LISTENER=ON # line added by Agent

VALID\_NODE\_CHECKING\_REGISTRATION\_LISTENER=SUBNET # line added by Agent

SECURE\_REGISTER\_LISTENER = (IPC)

SID\_LIST\_LISTENER =

(SID\_LIST =

# HEPYQA Begin ANSIBLE MANAGED BLOCK

(SID\_DESC =

(ORACLE\_HOME = /oradb/app/oracle/product/19.22.0/db\_1)

(SID\_NAME = HEPYQA)

)

# HEPYQA End ANSIBLE MANAGED BLOCK

(SID\_DESC =

(ORACLE\_HOME = /oragrid/app/grid/product/19.23.0/gi)

(SID\_NAME = +ASM)

)

)

Error:

**Recovery Manager: Release 19.0.0.0.0 - Production on Thu Oct 10 08:40:41 202**

**Version 19.22.0.0.0**

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**RMAN-00571: ===========================================================**

**RMAN-00569: =============== ERROR MESSAGE STACK FOLLOWS ===============**

**RMAN-00571: ===========================================================**

**RMAN-00554: initialization of internal recovery manager package failed**

**RMAN-04005: error from target database:**

**ORA-12541: TNS:no listener**

Error below means Source port specified was wrong

Cleanup and kickoff new Jenkings job with correct port

**Error:**

TASK [clone\_db : Setup rman config commands] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Friday 11 October 2024 16:19:07 +0000 (0:00:21.835) 27:20:56.130 \*\*\*\*\*\*\*

An exception occurred during task execution. To see the full traceback, use -vvv. The error was: ansible.errors.AnsibleUndefinedVariable: 'storage\_unit' is undefined. 'storage\_unit' is undefined

fatal: [xhepydbw01q.aetna.com]: FAILED! => {"changed": false, "msg": "AnsibleUndefinedVariable: 'storage\_unit' is undefined. 'storage\_unit' is undefined"}

This mean following parameter were missing from VARS

To get values go to

cd /opt/dpsapps/rmanagent

view RmanStorageInfo.txt

backup\_host: winpdd0821\_v20.aetna.com

storage\_unit: ora\_qa\_boost0821

Start new Jenkins clone job and add those 2 parameters

**Error:**

**If upon clone completion OEM Targets in Red this could be related to issue below.**

Monitoring cred was still sys and sys is locked. changed it to dbsnmp

**Depends on where It fails (if Jenkins job above failed) do one or more of those things. Figure if each step needed or not**

**1.Shutdown the instance (shutdown abort)**

**2. srvctl remove database -d HEPYQA\_xhepydbw01q**

**3.Remove instance files from $DBS (rm \*HEPYQA\*)**

**4.Remove the database entry from the /etc/oratab**

**.oraenv**

**+ASM**

**5.Remove the database directories from asm. In asmcmd rm -r \*/HEPYQA\_** **XHEPYDBW01Q**

**6. Stop and remove listener**

**srvctl stop listener -l HEPYQA**

**srvctl remove listener -l HEPYQA**

## To monitor Open second SSH

cd $SCRIPTS

cd ..

cd logs

tail -f ...

## to monitor rman portion

. oraenv HEPYQA

cd $SCRIPTS

cd ..

cd rman

tail -f xxxx

or

/oradb/app/oracle/admin/HEPYQA/rman

tail -f xxxx

• Run script after the clone refresh. (See script for details).

Logon to the database server hosting database HEPYQA (xhepydbw01q)

. oraenv

HEPYQA

cd $SCRIPTS/refresh/HEPYQA

~~ALTER USER S012030~~

~~ACCOUNT LOCK~~

~~/~~

~~select 'alter system kill session ''' || sid || ',' ||serial#|| ''';' from v$session where username='S012030';~~

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA

DBA ID (dba id to be used for connecting to the aux database)

A/N account

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_pasword\_here – xx

Subdirectory name where clone pre run scripts were created (e.g. MON\_DD\_YYYY)

Oct\_09\_2024

Mon\_xx\_XXXX

Note: This directory resides under the directory where this script resides.

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

The script writes to the sub directory created by the pre clone script in the format of Mon\_DD\_YYYY, in this directory will be the scripts created by the pre clone scripts and a log detailing the run activity of the post clone steps that were run.

Below part of post script…

~~ALTER USER S012030~~

~~ACCOUNT UNLOCK~~

~~/~~

Resume all OEM jobs that were disabled prior clone.

Uncomment crontab job that were commented prior the clone

\*\*\*\*10/10/2024 – HEDWQA from HEDWQA2 active clone via Jenkins\*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEDWQA entries in crontab and suspend Backup jobs in OEM)

Make sure DBA own A/N account P the same in both Source and Target. If not make it the same.

• Run script prior to clone refresh. (See script for details).

Logon to the database server hosting database HEDWQA (xhedwdbw01q)

. oraenv

HEDWQA

cd $SCRIPTS/refresh/HEDWQA

./clone\_pre\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEDWQA

Source database to be used for the refresh (target database)

HEDWQA2

**Enter Schema Owner (e.g. PROD)**

PROD\_DW

DBA ID (dba id to be used for connecting to the aux and target databases)

A/N account

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_P\_here – XXX

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and you want to start at the failed step number).

1

The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.

• Drop Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below

**Drop StandBy first from xhedwdbm01q**

**instance\_name: HEDWQA**

**syspass: qyBS?4sf**

**rcatpass: HEDWQAnamr**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: n**

**remove\_diag\_files: n**

**Drop Primary after from xhedwdbw01q**

**instance\_name: HEDWQA**

**syspass: qyBS?4sf**

**rcatpass: HEDWQAnamr**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

**~~\*\*\* Last time got following error \*\*\*\*~~**

**~~fatal: [xhedwdbw23q.aetna.com]: FAILED! => {"changed": false, "cmd": "set -o pipefail && /orahome/u01/app/oracle/product/19.0.0/grid/bin/srvctl remove database -db \"HEDWQA3\_xhedwdbw23q\" -noprompt | tee -a /orahome/u01/app/oracle/local/logs/drop\_db\_HEDWQA3\_2024-07-17T15:10:36Z\n", "delta": "0:00:00.413652", "end": "2024-07-17 11:17:46.640692", "msg": "non-zero return code", "rc": 1, "start": "2024-07-17 11:17:46.227040", "stderr": "", "stderr\_lines": [], "stdout": "PRKO-3141 : Database HEDWQA3\_xhedwdbw23q could not be removed because it was running", "stdout\_lines": ["PRKO-3141 : Database HEDWQA3\_xhedwdbw23q could not be removed because it was running"]}~~**

**~~Work around was manually remove database from HAS~~**

**~~+ASM> srvctl remove database -db HEDWQA3\_xhedwdbw23q~~**

**~~Remove the database HEDWQA3\_xhedwdbw23q? (y/[n]) y~~**

**~~srvctl stop listener -l HEDWQA3~~**

**~~srvctl remove listener -l HEDWQA3~~**

• Clone Target Database to Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

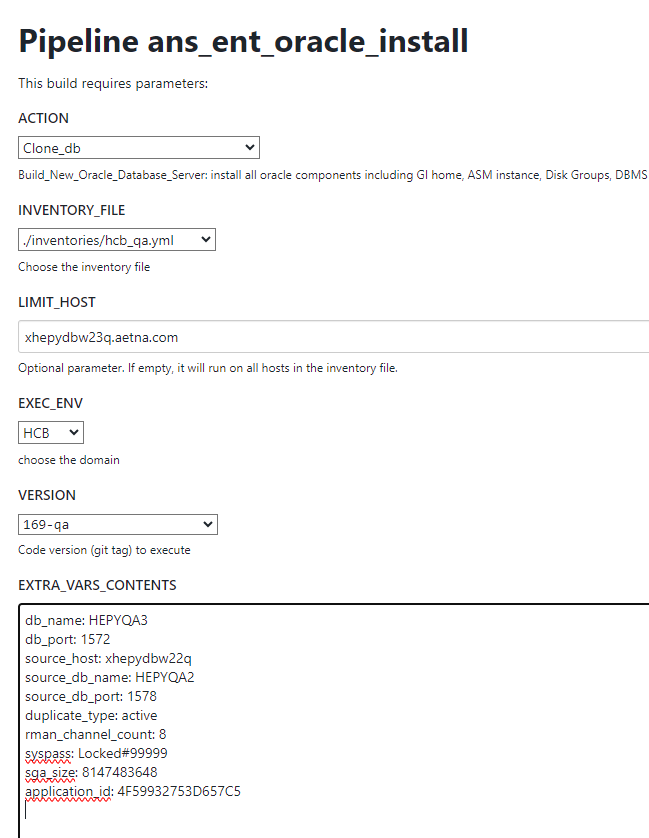
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEDWQA

db\_port: 1560

source\_host: xhedwdbw22q

source\_db\_name: HEDWQA2

source\_db\_port: 1579

duplicate\_type: active

rman\_channel\_count: 4

backup\_host: winpdd0821\_v20.aetna.com

storage\_unit: ora\_qa\_boost0821

syspass: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx

application\_id: 4F59932753D657C5

Error:

**xhedwdbw01q.aetna.com (oracle) +ASM::/oradb/app/oracle/admin/HEDWQA/rman**

**+ASM> tail -f duplicate\_HEDWQA\_from\_HEDWQA2.log**

**RMAN-00569: =============== ERROR MESSAGE STACK FOLLOWS ===============**

**RMAN-00571: ===========================================================**

**RMAN-03002: failure of Duplicate Db command at 10/10/2024 09:04:24**

**RMAN-05501: aborting duplication of target database**

**RMAN-03015: error occurred in stored script Memory Script**

**RMAN-06136: Oracle error from auxiliary database: ORA-17629: Cannot connect to the remote database server**

**ORA-17627: ORA-28002: the password will expire within 7 days**

**ORA-17629: Cannot connect to the remote database server**

**This mean source sys password expired. Just change sys password on Source. Cleanup and start new Jenkins clone job.**

Error:

**TASK [clone\_db : Setup rman config commands] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Thursday 10 October 2024  14:48:15 +0000 (0:00:29.486)       1:33:41.708 \*\*\*\*\*\***

**An exception occurred during task execution. To see the full traceback, use -vvv. The error was: ansible.errors.AnsibleUndefinedVariable: 'storage\_unit' is undefined. 'storage\_unit' is undefined**

**fatal: [xhedwdbw01q.aetna.com]: FAILED! => {"changed": false, "msg": "AnsibleUndefinedVariable: 'storage\_unit' is undefined. 'storage\_unit' is undefined"}**

This mean following parameter were missing from VARS

To get values go to

cd /opt/dpsapps/rmanagent

view RmanStorageInfo.txt

backup\_host: winpdd0821\_v20.aetna.com

storage\_unit: ora\_qa\_boost0821

Start new Jenkins clone job and add those 2 parameters

Error:

**TASK [clone\_db : Bounce listener] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Thursday 10 October 2024 21:08:07 +0000 (0:00:02.156) 0:00:47.622 \*\*\*\*\*\***

**[0;33mchanged: [xhedwdbw01q.aetna.com] => (item=stop) => {"ansible\_loop\_var": "item", "changed": true, "cmd": ["$ORACLE\_HOME/bin/srvctl", "stop", "listener", "-l", "listener"], "delta": "0:00:00.543005", "end": "2024-10-10 17:08:08.940899", "item": "stop", "msg": "", "rc": 0, "start": "2024-10-10 17:08:08.397894", "stderr": "", "stderr\_lines": [], "stdout": "", "stdout\_lines": []}[0m**

**[0;31mfailed: [xhedwdbw01q.aetna.com] (item=start) => {"ansible\_loop\_var": "item", "changed": true, "cmd": ["$ORACLE\_HOME/bin/srvctl", "start", "listener", "-l", "listener"], "delta": "0:00:00.707484", "end": "2024-10-10 17:08:10.069232", "item": "start", "msg": "non-zero return code", "rc": 1, "start": "2024-10-10 17:08:09.361748", "stderr": "", "stderr\_lines": [], "stdout": "PRCR-1079 : Failed to start resource ora.LISTENER.lsnr\nCRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhedwdbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"\nCRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhedwdbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"\nCRS-2674: Start of 'ora.LISTENER.lsnr' on 'xhedwdbw01q' failed", "stdout\_lines": ["PRCR-1079 : Failed to start resource ora.LISTENER.lsnr", "CRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhedwdbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"", "CRS-5016: Process \"/oragrid/app/grid/product/19.23.0/gi/bin/lsnrctl\" spawned by agent \"ORAAGENT\" for action \"start\" failed: details at \"(:CLSN00010:)\" in \"/oragrid/app/base/diag/crs/xhedwdbw01q/crs/trace/ohasd\_oraagent\_grid.trc\"", "CRS-2674: Start of 'ora.LISTENER.lsnr' on 'xhedwdbw01q' failed"]}[0m**

**Error something to do with extra entry in listener.ora**

**Login as GRID go to $TNS\_ADMIN**

**Remove one extra line and leave what in RED. Same case for “tcp”, “host” and “port”**

**LISTENER =**

**(DESCRIPTION\_LIST =**

**(DESCRIPTION =**

**(ADDRESS = (PROTOCOL = tcp)(host = xhedwdbw01q)(port = 1560))**

**(ADDRESS = (PROTOCOL = IPC)(KEY = HEDWQA\_IPC))**

**(ADDRESS = (PROTOCOL = TCP)(HOST = xhedwdbw01q)(PORT = 1521))**

**(ADDRESS = (PROTOCOL = IPC)(KEY = EXTPROC1521))**

**)**

**)**

**ENABLE\_GLOBAL\_DYNAMIC\_ENDPOINT\_LISTENER=ON # line added by Agent**

**VALID\_NODE\_CHECKING\_REGISTRATION\_LISTENER=SUBNET # line added by Agent**

**SECURE\_REGISTER\_LISTENER = (IPC)**

**SID\_LIST\_LISTENER =**

**(SID\_LIST =**

**# HEDWQA Begin ANSIBLE MANAGED BLOCK**

**(SID\_DESC =**

**(ORACLE\_HOME = /oradb/app/oracle/product/19.22.0/db\_1)**

**(SID\_NAME = HEDWQA)**

**)**

**# HEDWQA End ANSIBLE MANAGED BLOCK**

**(SID\_DESC =**

**(ORACLE\_HOME = /oragrid/app/grid/product/19.23.0/gi)**

**(SID\_NAME = +ASM)**

**)**

**)**

**Error:**

TASK [clone\_db : Register Database with HAS] \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Thursday 10 October 2024 23:08:15 +0000 (0:00:00.571) 1:34:16.726 \*\*\*\*\*\*

fatal: [xhedwdbw01q.aetna.com]: FAILED! => {"changed": true, "cmd": ["/oradb/app/oracle/product/19.22.0/db\_1/bin/srvctl", "add", "database", "-db", "HEDWQA\_xhedwdbw01q", "-oraclehome", "/oradb/app/oracle/product/19.22.0/db\_1", "-spfile", "/oradb/app/oracle/product/19.22.0/db\_1/dbs/spfileHEDWQA.ora", "-instance", "HEDWQA", "-diskgroup", "DATA1,REDO1,REDO2"], "delta": "0:00:01.533017", "end": "2024-10-10 19:08:17.114822", "msg": "non-zero return code", "rc": 2, "start": "2024-10-10 19:08:15.581805", "stderr": "", "stderr\_lines": [], "stdout": "PRCD-1119 : Failed to create database HEDWQA\_xhedwdbw01q because the database unique name matches that of database HEDWQA\_xhedwdbw01q in the first 12 characters", "stdout\_lines": ["PRCD-1119 : Failed to create database HEDWQA\_xhedwdbw01q because the database unique name matches that of database HEDWQA\_xhedwdbw01q in the first 12 characters"]}

**This mean it leftover from previous failure. Run command below as part of cleanup**

**srvctl remove database -d HEDWQA\_xhedwdbw01q**

**Error:**

**If upon clone completion OEM Targets in Red this could be related to issue below.**

Monitoring cred was still sys and sys is locked. changed it to dbsnmp

**Depends on where It fails (if Jenkins job above failed) do one or more of those things. Figure if each step needed or not**

**1.Shutdown the instance (shutdown abort)**

**2. srvctl remove database -d HEDWQA\_xhedwdbw01q**

**3.Remove instance files from $DBS**

**rm \*HEDWQA\***

**4.Remove the database entry from the /etc/oratab**

**. oraenv**

**+ASM**

**5.Remove the database directories from asm. In asmcmd rm -r \*/HEDWQA\_XHEDWDBW01Q**

**6. Stop and remove listener**

**srvctl stop listener -l HEDWQA**

**srvctl remove listener -l HEDWQA**

## To monitor Open second SSH

cd $SCRIPTS

cd ..

cd logs

tail -f ...

## to monitor rman portion

. oraenv HEDWQA

cd $SCRIPTS

cd ..

cd rman

tail -f xxxx

or

/oradb/app/oracle/admin/HEDWQA/rman

tail -f xxxx

• Run script after the clone refresh. (See script for details).

Logon to the database server hosting database HEDWQA (xhedwdbw01q)

. oraenv

HEDWQA

cd $SCRIPTS/refresh/HEDWQA

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEDWQA

DBA ID (dba id to be used for connecting to the aux database)

A/N Account

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_pasword\_here – xx

Subdirectory name where clone pre run scripts were created (e.g. MON\_DD\_YYYY)

Oct\_10\_2024

Mon\_xx\_XXXX

Note: This directory resides under the directory where this script resides.

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

The script writes to the sub directory created by the pre clone script in the format of Mon\_DD\_YYYY, in this directory will be the scripts created by the pre clone scripts and a log detailing the run activity of the post clone steps that were run.

Below part of post script…

Resume all OEM jobs that were disabled prior clone.

Uncomment crontab job that were commented prior the clone

• Create HEDWQA StandBy (xhedwdbm01q) vi Jenkins Create Standby Action

**db\_name: HEDWQA**

**primary\_host: xhedwdbw01q**

**db\_port: 1560**

**duplicate\_type: active**

**rman\_channel\_count: 4**

**syspass: xxxxxxxxxxxxxxx**

**application\_id: 4F59932753D657C5**

• Configure HEDWQA Standby as ADG

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Option 2 – effort starts below

This option basically our current process. But it will delay RHEL8 migration for this env to next year potentially.

1. Order extra space to current RHEL7 PY QA2 VM 2 x 6.4 TB (12.8 TB)

2. Run pre Clone steps from current RHEL7 PY QA2 database.

3. Clone HEPYMASK to current RHEL7 PY QA2 VM

4. Run post Clone steps upon clone completion.

5. Order extra space to new RHEL8 PY VM one 6.4 TB Disk

6. Order extra space for new RHEL8 DW VM 2 x 1.1 TB Disks (2.2 TB)

7. Create PY QA2 Standby on new RHEL8 VM

8. Switchover PY QA2

9. Create DW QA2 Standby on new RHEL8 VM

10. Switchover DW QA2

11. Create new Cotivity Standby on new RHEL8 VM

12. Switchover Cotivity QA2

13. Kick off bootstrap pointing to new RHEL8 env.

14. We can start RHEL7 QA2 VM decommission.

\*\*\*\*10/29/2024 – HEPYQA2 from HEPYMASK \*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYQA2 entries in crontab and suspend Backup jobs in OEM)

Make sure your A or N Oracle database P in sync in both source and target databases.

• **Run pre clone script prior to clone refresh**

Logon to the database server hosting database HEPYQA2 (xhepydbw22q)

. oraenv

HEPYQA2

cd $HOME/tls/refresh/HEPYQA2

./clone\_pre\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA2

Source database to be used for the refresh (target database)

HEPYMASK

DBA ID (dba id to be used for connecting to the aux and target databases)

A236120

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter\_P\_here – xxx

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and you want to start at the failed step number).

1

The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.

• **Drop Auxiliary DataBase**

On your computer, open Chrome.

At the top right, click More New Incognito Window.

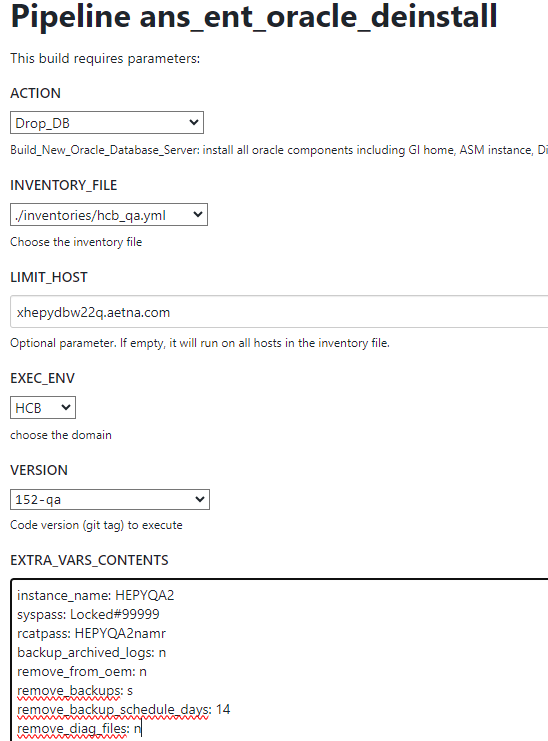
A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below



instance\_name: HEPYQA2

syspass: XXX

rcatpass: HEPYQA2namr

backup\_archived\_logs: n

remove\_from\_oem: n

remove\_backups: s

remove\_backup\_schedule\_days: 14

remove\_diag\_files: n

• **Start clone**

On your computer, open Chrome.

At the top right, click More New Incognito Window.

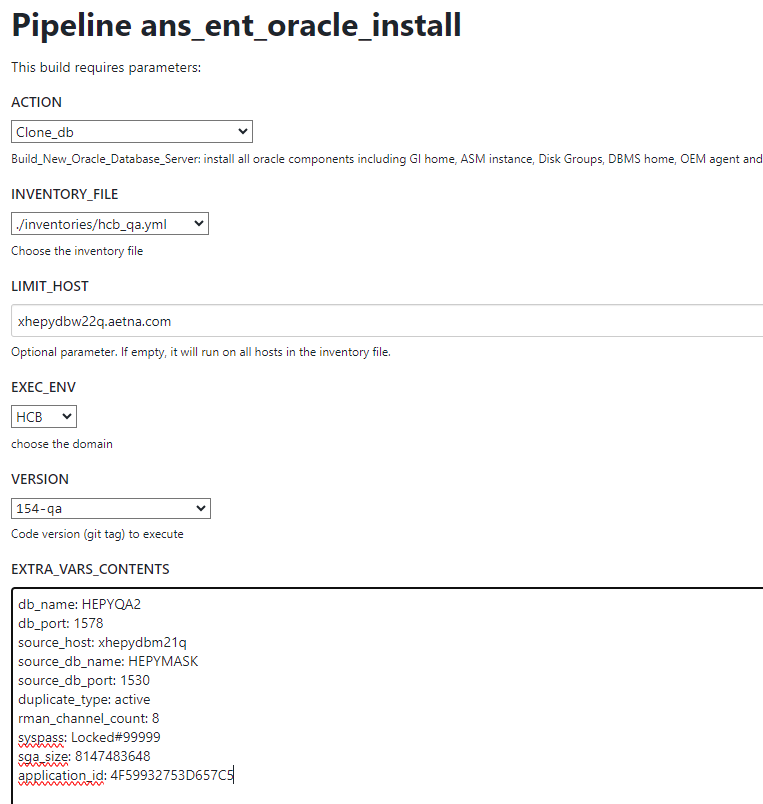
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEPYQA2

db\_port: 1578

source\_host: xhepydbm21q

source\_db\_name: HEPYMASK

source\_db\_port: 1530

duplicate\_type: active

rman\_channel\_count: 8

backup\_host: winpdd0821\_lf2

storage\_unit: /ora\_dev\_boost0821/xhepydbw22q

syspass: XXXX

sga\_size: 8147483648

application\_id: 4F59932753D657C5

In event if above Jenkins Clone DB failed use following manual “cleanup” steps before kicking off next clone db attempt. Also look at step which Jenkins Clone DB failed and take appropriate actions before kicking off next attempt.

1.Shutdown the instance (shutdown abort)

2.Remove instance files from $DBS (rm \*HEPYQA2\*)

3.Remove the database entry from the /etc/oratab

4.Remove the database directories from asm. In asmcmd rm -r \*/HEPYQA2\_XHEPYDBW22Q

5.Stop and remove listener

## To monitor clone, SSH to Auxiliary side

cd $LOGS

tail -f xxx

## To monitor rman portion (duplicate) of clone, SSH to Auxiliary side

cd /orahome/u01/app/oracle/admin/HEPYQA2/rman

tail -f xxxx

• **Run post clone script after the clone refresh completed successfully.**

Logon to the database server hosting database HEPYQA2 (xhepydbw22q)

. oraenv

HEPYQA2

cd $HOME/tls/refresh/HEPYQA2

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYQA2

Enter Schema Owner (e.g. PROD)

PROD

DBA ID (dba id to be used for connecting to the aux database)

A236120

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter p here – xxx

Subdirectory name where clone pre run scripts were created (e.g. MON\_DD\_YYYY)

Oct\_30\_2024

Note: This directory resides under the directory where this script resides.

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

The script writes to the sub directory created by the pre clone script in the format of Mon\_DD\_YYYY, in this directory will be the scripts created by the pre clone scripts and a log detailing the run activity of the post clone steps that were run.

Below part of post script…

Resume all OEM jobs that were disabled prior clone.

Uncomment crontab jobs

Kick off stats job on newly cloned HEPYQA2 database – (check with Matt Kosir if this needed now or later)

\*\* **Steps below to extract custom DW indexes for bootstrap** **(do it prior to bootstrap start) \*\***

**\*\*\* Complete Steps from 1 to 9 (do it prior to bootstrap start) \*\*\***

Log in to HEDWDEV box

cd /home/oracle/tls/idx

1) vi dw\_databases.txt

HEDWQA2

2) get\_custom\_indexes\_ddl.sh

4) Rename file, add following to beginning of the script **set trimspool, spool and alter session**.

mv dw\_custom\_indexes\_ddl\_YYYYMMDD.out dw\_custom\_indexes\_ddl\_HEDWQA2.sql

vi dw\_custom\_indexes\_ddl\_HEDWQA2.sql

set trimspool on line 200 echo on feed on

spool create\_dw\_qa2\_custom\_indexes.out

alter session force parallel ddl parallel 4;

…

spool off

5) Copy file to HEDWQA2 box

scp /home/oracle/tls/idx/dw\_custom\_indexes\_ddl\_HEDWQA2.sql xhedwdbw22q:/home/oracle/tls/idx/dw\_custom\_indexes\_ddl\_HEDWQA2.sql

6)Drop 2 synonyms from HEDWQA2(do it prior to bootstrap start) **\*\***

Login to HEDWQA2 box

sqlplus / as sysdba

DROP SYNONYM "PUBLIC".CLAIM\_FACT

/

~~DROP SYNONYM PROD\_DW.CLAIM\_FACT~~

~~/~~

7)Extract DDL for CACHE tables from HEDWQA2(do it prior to bootstrap start) **\*\***

Login to HEDWQA2 box

cd /home/oracle/eb/extract\_ddl

sqlplus / as sysdba

@extract\_cache\_tables\_ddl.sql

(if you get similar errors at the end just ignore it. ORA-31608: specified object of type OBJECT\_GRANT not found)

8) Login to Primary HEDWQA2 box

Suspend OEM backup jobs first

sqlplus / as sysdba

shutdown immediate;

startup mount;

~~alter database flashback off;~~

~~ALTER DATABASE NO FORCE LOGGING;~~

alter database noarchivelog;

alter database open;

archive log list;

9) Lock users

EXECUTE aedba.LOCKUSER;

**\*\*\* Steps from 10 to 11 complete once bootstrap started** (check with HE Admin who running bootstrap when such steps can be completed)

\*\* **Once bootstrap in progress and once bootstrap dropped all PROD\_DW tables add custom indexes back** (check with HE Admin when such step can be completed) **\*\*\***

10) Login to HEDWQA2 box

sqlplus / as sysdba

cd /home/oracle/tls/idx/

@dw\_custom\_indexes\_ddl\_HEDWQA2.sql

11)Check to make sure no parallel indexes out there. If yes change them back to NOPARALLEL by running query below and creating appropriate commands/script to change back to NOPARALLEL. See alter\_custom\_index\_noparallel.sql as example.

select owner, index\_name, degree from dba\_indexes where owner IN ('PROD\_DW','AE\_CUSTOM') and degree > 1

**\*\* Steps from 12 to 15 complete once bootstrap completed** (get confirmation from Matt Kosir)

**\*\*Once Bootstrap completed move database back to archivelog mode + Unlock Users\*\***

Login to HEDWQA2 box

12)

sqlplus / as sysdba

shutdown immediate;

startup mount;

alter database archivelog;

alter database open;

archive log list;

13)

EXECUTE aedba.UNLOCKUSER;

14)

\*\*\* Create cache tables in HEDWQA2 from ddl extract taken prior to bootstrap \*\*\*

\*\*\* Add synonyms that were dropped before bootstrap or wiped out during \*\*

\*\*\*\* recompile objects\*\*\*

Login to HEDWQA2 box

!! Ignore any errors.

cd /home/oracle/eb/extract\_ddl

sqlplus / as sysdba

@create\_cache\_tables.sql

@create\_cache\_synonyms.sql

**\*\*\* Recompile \*\*\***

sqlplus / as sysdba

@?/rdbms/admin/utlrp.sql

select count(\*)

from dba\_objects

where status = 'INVALID';

15)

Resume all OEM Backup jobs that were suspended earlier.

\*\*\*\*11/11/2024 – HEPYMASK from HEPYPRD DDboost Tape backup same Data Center \*\*\*\*

Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYMASK entries in crontab and suspend Backup jobs in OEM)

!! Move HEPYMASK to archivelog mode first if needed

!! If HEPYMASK exist drop it first.

• Drop Auxiliary DataBase (if exist at that time)

On your computer, open Chrome.

At the top right, click More New Incognito Window.

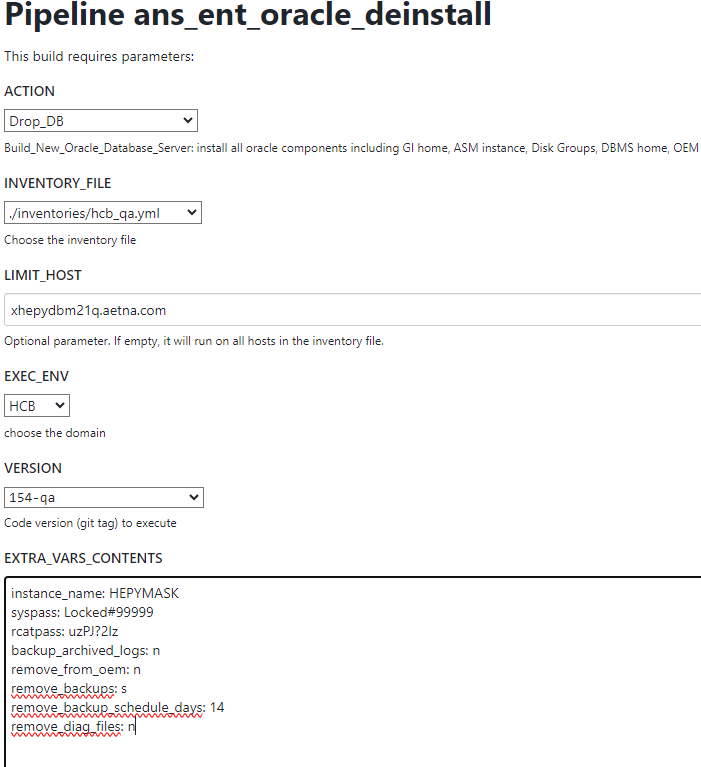
A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below



**instance\_name: HEPYMASK**

**syspass: Locked#99999**

**rcatpass: uzPJ?2lz**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

!! Check if any old arhivelogs dirs. need to be manually removed to free up FLASH space

asmcmd

cd FLASH\_01/

cd ARCHIVELOG/

ls

--If you see old dir dated when clone was taken. Remove it

rm -r 2024\_03\_22/

• Clone Target Database to Auxiliary DataBase

On your computer, open Chrome.

At the top right, click More New Incognito Window.

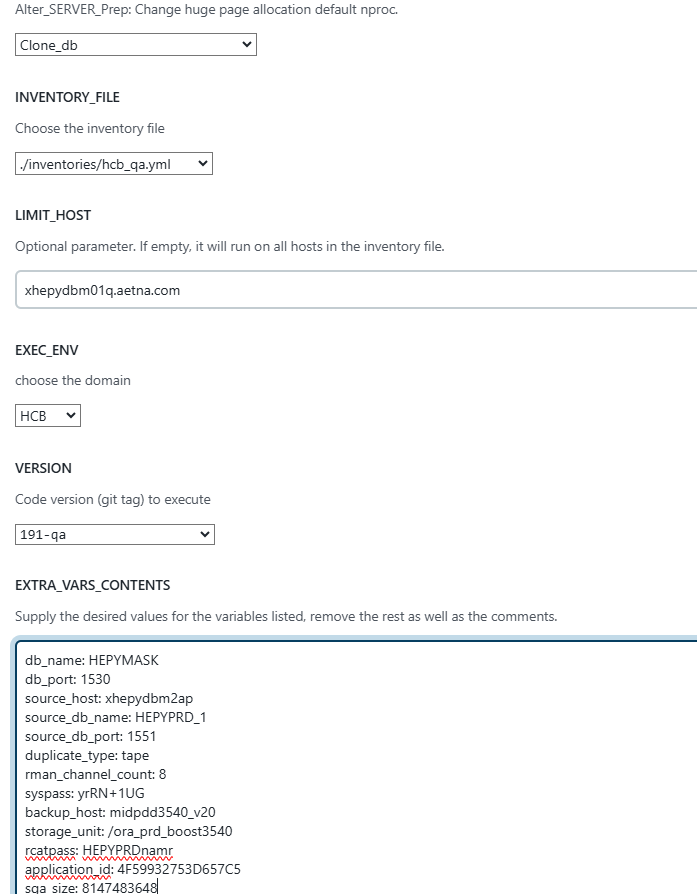
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



GREG

Remember when we set this up back on Sep 15th? It was a problem related to FIPS-enabled Linux using (SHA512); SaiRam update the data domain to use

password-hash          sha512

 and I created a new ddboost user and stgunit, /ora\_prd\_linux\_boost3540, where before you were using /ora\_prd\_boost3540

Rich

right, and that was while creating backups

GREG

Rich, you had to set the ddboost lockbox using the new path and userid

 Rich

could we have a releated issue reading the backups from xhepydbm01q

maybe...

 GREG

allocate channel dd01 type 'sbt\_tape' parms='BLKSIZE=1048576,SBT\_LIBRARY=/opt/dpsapps/rmanagent/lib/libddobk.so,ENV=(STORAGE\_UNIT=ora\_prd\_linux\_boost3540, BACKUP\_HOST=midpdd3540\_v20.aetna.com, ORACLE\_HOME=/oradb/app/oracle/product/19.22.0/db\_1, RMAN\_  
AGENT\_HOME=/opt/dpsapps/rmanagent)';  
set limit channel dd01 maxopenfiles 1;  
send 'set username ddboost\_linux\_ora password ddb00st servername midpdd3540\_v20.aetna.com storageunit ora\_prd\_linux\_boost3540

 Rich

yes, the storage unit and backup server are added to the lockbox

 did that

GREG

with user: ddboost\_linux\_ora?

 Rich

ah

 no

 ok

GREG

 same password as with ddboost\_ora

Rich

 thats a pain

 when it comes to automationi

 such a pain...

GREG

 I really don't like having exceptions like this one-off

 in hindsight we should have probably had the linux team fix it and not change it on our side

 but that was a Sunday and it was an emergency and SaiRam had a fix

RICH

 ok eugene give me a few minutes

I think we are gonna have to add a variable for user that will default to ddboost\_ora and you can override to ddboost\_linux\_ora

ok rebuild and add

ddboost\_user: ddboost\_linux\_ora

GREG

Today’s problem on clone target **xhepydbm019** relates back to the problem server **xhepydbm2ap** on Sunday, 09/15/24, where we had to create a new ddboost user, **ddboost\_linux\_ora**, after SaiRam had set the data domain password-hash to **sha512**, due to changes in the Linux password hash format. A new storage unit, **ora\_prd\_linux\_boost3540**, was created to use the new ddboost user.

Any server that needs to access storage unit **ora\_prd\_linux\_boost3540**, will have to set the lockbox using ddboost user **ddboost\_linux\_ora.** All other oracle ddboost storage units can continue to use user **ddboost\_ora**.

allocate channel dd01 type 'sbt\_tape' parms='BLKSIZE=1048576,SBT\_LIBRARY=/opt/dpsapps/rmanagent/lib/libddobk.so,ENV=(**STORAGE\_UNIT=ora\_prd\_linux\_boost3540**, BACKUP\_HOST=midpdd3540\_v20.aetna.com, ORACLE\_HOME=/oradb/app/oracle/product/19.22.0/db\_1, RMAN\_  
AGENT\_HOME=/opt/dpsapps/rmanagent)';  
set limit channel dd01 maxopenfiles 1;  
send 'set **username ddboost\_linux\_ora** password *<password>* servername midpdd3540\_v20.aetna.com storageunit ora\_prd\_linux\_boost3540

**!!! check next time if following vars still need it log\_size: 6144, log\_count: 6, ddboost\_user: ddboost\_linux\_ora**

db\_name: HEPYMASK

db\_port: 1530

source\_host: xhepydbm2ap

source\_db\_name: HEPYPRD\_1

source\_db\_port: 1551

duplicate\_type: tape

rman\_channel\_count: 8

syspass: yrRN+1UG

backup\_host: midpdd3540\_v20.aetna.com

storage\_unit: /ora\_prd\_linux\_boost3540

rcatpass: HEPYPRDnamr

application\_id: 4F59932753D657C5

sga\_size: 8147483648

log\_size: 6144

log\_count: 6

ddboost\_user: ddboost\_linux\_ora

## To monitor main clone log

cd $LOGS

tail -f xxx

## To monitor rman portion log

cd /oradb/app/oracle/admin/HEPYMASK/rman

tail -f xxxx

Steps in case clone failed and needs to be restarted

ps -ef |grep pmon

ps -ef | grep tns

1.Shutdown the instance (shutdown abort) or kill pmon process

2.Remove instance files from $DBS (rm \*HEPYMASK\*)

3.Remove the database entry from the oratab

4.Remove the database directories from asm. In asmcmd rm -r \*/HEPYMASK\_XHEPYDBM21Q

srvctl stop listener -l HEPYMASK

srvctl remove listener -l HEPYMASK

• Run script after the clone refresh.

Logon to the database server hosting database HEPYMASK (xhepydbm01q)

. oraenv

HEPYMASK

cd $SCRIPTS/refresh/HEPYMASK

!! Change your A/N account HEPYMASK password. Unless you already know the password that came from PROD clone.

. oraenv

HEPYMASK

sqlplus / as sysdba

ALTER USER Axxxxxx

IDENTIFIED BY "xxxx"

/

./clone\_post\_steps.sh

The script will prompt for the following information:

Database to be refreshed (auxiliary database)

HEPYMASK

Enter Schema Owner (e.g. PROD)

PROD

DBA ID (dba id to be used for connecting to the aux database)

A236120

DBA P (P for the dba id being used for connecting to the aux and target databases)

enter p here – xxx

Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run

all steps in the script. Specify a number other than 1 if the script is being run again due to an error

and want to start at the failed step number).

1

## Enable heartbeat if not already enabled

**\*/5 \* \* \* \* /oradb/app/oracle/local/scripts/monitor/rman/heartbeat.ksh HEPYMASK AEDBA > /dev/null 2>&1**

Resume all OEM jobs that were disabled prior clone.

Check if backup jobs not there in OEM add them. Schedule archivelog job every hour

Run Level 0 and Archivelog jobs

Once backups completed move database to norachivelog mode. Disable OEM Jobs

sqlplus / as sysdba

shutdown immediate;

startup mount;

alter database flashback off;

ALTER DATABASE NO FORCE LOGGING;

alter database noarchivelog;

alter database open;

archive log list;

**Drop indexes (on demand)**

cd /home/oracle/tls/refresh/HEPYMASK

**@drop\_indexes\_POSTAL\_ADDRESS.sql**

**@drop\_indexes\_CAPITATED\_PAYMENT\_LINE.sql**

**@drop\_indexes\_CONSOLIDATED\_CLAIM.sql**

**@drop\_indexes\_UB92.sql**

**@drop\_indexes\_HCFA1500.sql**

**@drop\_indexes\_MEMBERSHIP.sql**

@drop\_indexes\_PERSON\_NAME.sql

**@drop\_indexes\_INSURANCE\_INFORMATION.sql**

**@drop\_indexes\_LICENSE\_NUMBER.sql**

@drop\_indexes\_ATTRIBUTION\_LINE.sql

**@drop\_indexes\_PAYEE\_BANK\_ACCOUNTS.sql**

**Add indexes back after masking completed for particular table (on demand)**

cd /home/oracle/tls/refresh/HEPYMASK

**nohup add\_indexes\_POSTAL\_ADDRESS.sh HEPYMASK > add\_indexes\_POSTAL\_ADDRESS.stdout 2>&1 &**

**nohup add\_indexes\_CAPITATED\_PAYMENT\_LINE.sh HEPYMASK > add\_indexes\_CAPITATED\_PAYMENT\_LINE.stdout 2>&1 &**

**nohup add\_indexes\_CONSOLIDATED\_CLAIM.sh HEPYMASK > add\_indexes\_CONSOLIDATED\_CLAIM.stdout 2>&1 &**

**nohup add\_indexes\_UB92.sh HEPYMASK > add\_indexes\_UB92.stdout 2>&1 &**

nohup add\_indexes\_ATTRIBUTION\_LINE.sh HEPYMASK > add\_indexes\_ATTRIBUTION\_LINE.stdout 2>&1 &

**nohup add\_indexes\_HCFA1500.sh HEPYMASK > add\_indexes\_HCFA1500.stdout 2>&1 &**

**nohup add\_indexes\_MEMBERSHIP.sh HEPYMASK > add\_indexes\_MEMBERSHIP.stdout 2>&1 &**

nohup add\_indexes\_PERSON\_NAME.sh HEPYMASK > add\_indexes\_PERSON\_NAME.stdout 2>&1 &

**nohup add\_indexes\_INSURANCE\_INFORMATION.sh HEPYMASK > add\_indexes\_INSURANCE\_INFORMATION.stdout 2>&1 &**

**nohup add\_indexes\_LICENSE\_NUMBER.sh HEPYMASK > add\_indexes\_LICENSE\_NUMBER.stdout 2>&1 &**

**nohup add\_indexes\_PAYEE\_BANK\_ACCOUNTS.sh HEPYMASK > add\_indexes\_PAYEE\_BANK\_ACCOUNTS.stdout 2>&1 &**

Once Masking completed move database back to archivelog mode and run Level0 + archivelog backups

sqlplus / as sysdba

shutdown immediate;

startup mount;

alter database archivelog;

alter database open;

archive log list;

\*\*\*\*01/02/2025 – HEPYMASK from VHEP\_V2P (Virtual to Physical clone test) \*\*\*\*

~~Suspend all applicable OEM and Cron jobs prior to the clone activity (Comment out HEPYQA2 entries in crontab and suspend Backup jobs in OEM)~~

~~Make sure your A or N Oracle database P in sync in both source and target databases.~~

~~•~~ **~~Run pre clone script prior to clone refresh~~**

~~Logon to the database server hosting database HEPYQA2 (xhepydbw22q)~~

~~. oraenv~~

~~HEPYQA2~~

~~cd $HOME/tls/refresh/HEPYQA2~~

~~./clone\_pre\_steps.sh~~

~~The script will prompt for the following information:~~

~~Database to be refreshed (auxiliary database)~~

~~HEPYQA2~~

~~Source database to be used for the refresh (target database)~~

~~HEPYMASK~~

~~DBA ID (dba id to be used for connecting to the aux and target databases)~~

~~A236120~~

~~DBA P (P for the dba id being used for connecting to the aux and target databases)~~

~~enter\_P\_here – xxx~~

~~Starting Number (Step number to begin with in the script as the script is restartable. Specify 1 to run~~

~~all steps in the script. Specify a number other than 1 if the script is being run again due to an error~~

~~and you want to start at the failed step number).~~

~~1~~

~~The above script creates a sub directory underneath where the script resides in the format of Mon\_DD\_YYYY, in this directory will be the scripts to be used in support of the post clone activity and a log detailing the run activity of the pre clone steps that were run.~~

• **Drop Auxiliary DataBase**

• Drop Auxiliary DataBase (if exist at that time)

On your computer, open Chrome.

At the top right, click More New Incognito Window.

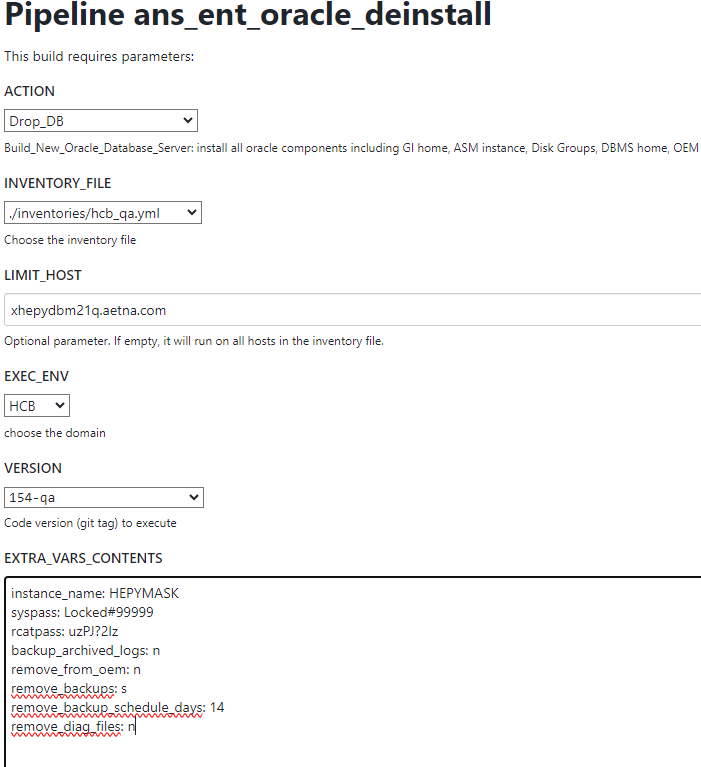
A new window appears. In the top corner, check for the **Incognito** icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracle\_deinstall**

Click **Build with Parameters** and populate as shown below



**instance\_name: HEPYMASK**

**syspass: Locked#99999**

**rcatpass: uzPJ?2lz**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: s**

**remove\_backup\_schedule\_days: 14**

**remove\_diag\_files: n**

**Used below since original HEPYMASK did not have any backups to delete**

**instance\_name: HEPYMASK**

**syspass: Locked#99999**

**rcatpass: uzPJ?2lz**

**backup\_archived\_logs: n**

**remove\_from\_oem: n**

**remove\_backups: n**

**remove\_diag\_files: n**

!! Check if any old arhivelogs dirs. need to be manually removed to free up FLASH space

asmcmd

cd FLASH\_01/

cd ARCHIVELOG/

ls

--If you see old dir dated when clone was taken. Remove it

rm -r 2024\_03\_22/

• **Start clone**

**Prior to start make sure config following on Virtual DB**

**alter system set db\_recovery\_file\_dest\_size = 2G scope=both;**

**orapwd file=orapwVHEP\_V2P password=Locked#99999 entries=20;**

**Make sure Virtual DB in archivelog mode ( Had to use Delphix console to rebuild VHEP\_V2P to move to archivelog mode)**

**archive log list;**

On your computer, open Chrome.

At the top right, click More New Incognito Window.

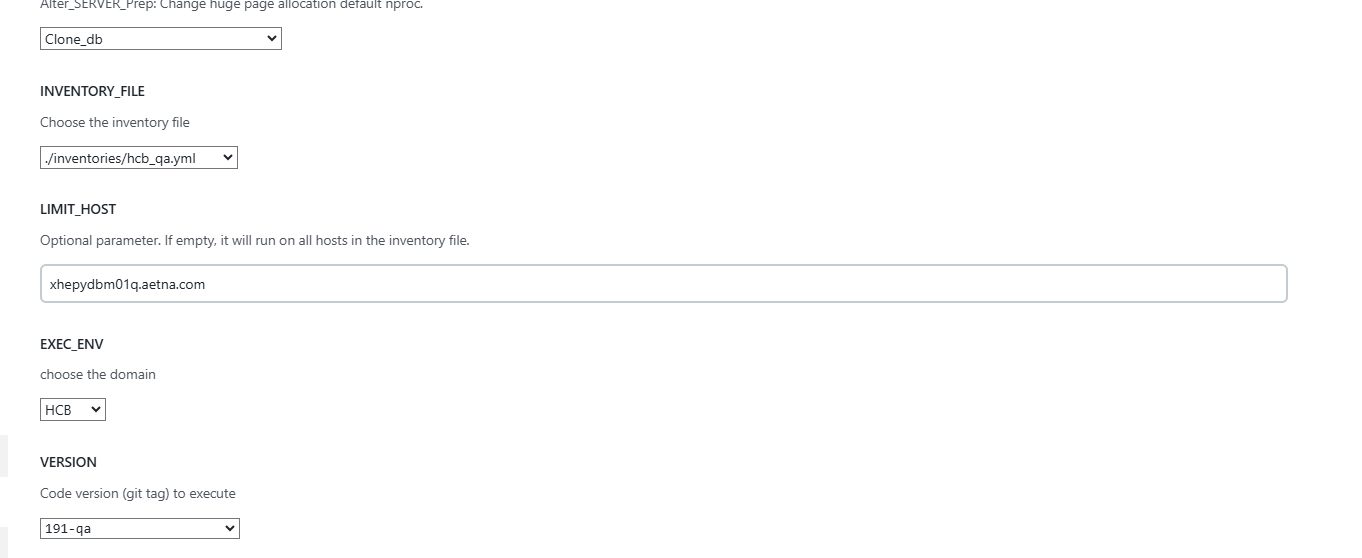
A new window appears. In the top corner, check for the Incognito icon .

Paste following URL: <https://ci-autoeng.cvshealth.com/jenkins/>

Login with your cvshealth.com email

Select **DBEngineering** 🡪 **Oracle** 🡪 **ans\_ent\_oracleinstall**

Click **Build with Parameters** and populate as shown below



db\_name: HEPYMASK

db\_port: 1530

source\_host: xdeldbw01d

source\_db\_name: VHEP\_V2P

source\_db\_port: 1522

duplicate\_type: active

rman\_channel\_count: 8

backup\_host: midpdd3540\_v20.aetna.com

storage\_unit: /ora\_qa\_boost3540

syspass: XXXX

sga\_size: 8147483648

application\_id: 4F59932753D657C5

log\_size: 6144

log\_count: 6

In event if above Jenkins Clone DB failed use following manual “cleanup” steps before kicking off next clone db attempt. Also look at step which Jenkins Clone DB failed and take appropriate actions before kicking off next attempt.

1.Shutdown the instance (shutdown abort)

2.Remove instance files from $DBS (rm \*HEPYQA2\*)

3.Remove the database entry from the /etc/oratab

4.Remove the database directories from asm. In asmcmd rm -r \*/HEPYQA2\_XHEPYDBW22Q

5.Stop and remove listener

## To monitor clone, SSH to Auxiliary side

cd $LOGS

tail -f xxx

## To monitor rman portion (duplicate) of clone, SSH to Auxiliary side

cd /oradb/app/oracle/admin/HEPYMASK/rman

tail -f xxxx