**HPC DME 1.5.x to 1.6.0 Upgrade instructions**

Service User Account:

DEV: ncif-hpcdm-svc

UAT: ncif-hpcdm-svc

Production: ncifhpcdmsvcp

Build Params:

DEV: -Pdev

UAT: -Ppreprod

Production: -Pprod

VM/Hardware:

* 1. DEV: fr-s-hpcdm-gp-d.ncifcrf.gov
  2. UAT: fr-s-hpcdm-uat-p.ncifcrf.gov
  3. Production:
     1. API: fr-s-dmeapi-t-p.ncifcrf.gov
     2. Database: fr-s-dmedb-t-p.ncifcrf.gov
     3. iRODS: fr-s-hpcdm-irods-p.ncifcrf.gov
     4. Web UI: fr-s-hpcdm-web-p.ncifcrf.gov
  4. Production mirror
     1. API: fr-s-hpcdm-api-p.ncifcrf.gov
     2. Database: fr-s-hpcdm-db-p.ncifcrf.gov
  5. Database Backup: fr-s-hpcdm-gp-p

Release Pre-requisites:

1. Database migration scripts – If any
2. Create release branch in GIT repository
3. Setup Globus groups and application accounts.

**Upgrade steps**

1. Stop Apache-tomcat

ssh <Web Server>

sudo su

Go to /opt/apache-tomcat-8.<x>.42

./bin/Catalina stop

1. Stop Apache-ServiceMix

ssh <API Server>

sudo su

su <Service User account>

cd /opt/apache-servicemix-7.0.0/

./bin/stop

1. Checkout Source

**Copy <HPC\_DME\_HOME>/src/hpc-server/hpc-features/src/main/resources/ hpc-server-<Env>.properties to a backup location**

On The API Server:

cd /opt/<HPC\_DME\_ROOT>/src

git status – Make sure no untracked changes

git pull

git reset --hard origin/releases/1.6.0

git checkout releases/1.6.0

**Set property values in <HPC\_DME\_HOME>/src/hpc-server/hpc-features/src/main/resources/ hpc-server-<Env>.properties from the backup file.**

1. Database Migration:

Copy data migration script from API to DB server

scp -r /opt/<HPC\_DME\_ROOT>/src/hpc-server/hpc-dao-impl/src/main/script/migration/release-1.6.0 [<UserId>@fr-s-hpcdm-web-p.ncifcrf.gov:/home/<UserId>/](mailto:konkapv@fr-s-hpcdm-web-p.ncifcrf.gov:/home/konkapv/)

ssh <Database server>

sudo su

su postgres

Take backup of current database:

pg\_dump ICAT > ICAT-<DateTime>.sql

Run following migration scripts:

psql -d ICAT -f /home/<UserId>/hpc\_release\_1.6.0\_main-<ENV>.sql

Open hpc\_update\_file\_size.sql and run the SQL command and collect the output.

psql -d ICAT -f hpc\_update\_file\_size.sql > filesize\_paths.txt

Run following commands to prepare data exported into filesize\_paths.txt

sed 's/^ \*//g' filesize\_paths.txt > filesize\_paths\_t.txt && mv filesize\_paths\_t.txt filesize\_paths.txt

tail -n +3 filesize\_paths.txt | head -n -2 > filesize\_paths\_t.txt && mv filesize\_paths\_t.txt filesize\_paths.txt

sed 's/.\*/"&",/' filesize\_paths.txt > filesize\_paths\_t.txt && mv filesize\_paths\_t.txt filesize\_paths.txt

sed -i '1i { "paths" : [' filesize\_paths.txt

sed -i -e "\$a] }" filesize\_paths.txt

4.1

Run following curl command to update “file\_size” system metadata attribute after starting API Server

curl -k -H "Content-Type: application/json" --user konkapv -X POST -d @filesize\_paths.txt https://<hpcdme-server>:7738/hpc-server/fileSize

1. Build Source

On The API Server:

su <Service User account>

cd /opt/<HPC\_DME\_ROOT>/src

mvn clean install -P<Env>

cd /opt/<HPC\_DME\_ROOT>/src /hpc-web

mvn clean install -P<Env>

Copy file target/hpc-web-1.6.0.war to Web Server

scp -r hpc-web-1.6.0.war [<UserId>@fr-s-hpcdm-web-p.ncifcrf.gov:/home/<UserId>/](mailto:konkapv@fr-s-hpcdm-web-p.ncifcrf.gov:/home/konkapv/)

1. Deploy API Server
   1. vi starthpcserver.sh and update release number
   2. ./starthpcserver.sh
   3. ./bin/stop
   4. ./starthpcserver.sh
   5. Verify the application through Curl or SOAPUI
   6. Run Step 4.1
   7. Register Globus application accounts with HPC DME. These are the accounts created in the Pre-requisites step 3. Please refer to System Admin guide on how to register system accounts.
2. Deploy Web Application

sudo su

cd /opt/apache-tomcat-8.0.42/webapps

rm -rf hpc-web-1.5.0

rm -f hpc-web-1.5.0.war

cp /home/<UserId>/hpc-web-1.6.0.war /opt/apache-tomcat-8.0.42/webapps/hpc-web-1.6.0.war

vi conf/server.xml

<Context path="" docBase="hpc-web-1.6.0" privileged="true"/>

./bin/catalina.sh start

./bin/catalina.sh stop

./bin/catalina.sh start