**MoDaC Deployment Steps**

* **First Step: Build the war file on the DME server:**
* Login into hpc dev server (ssh  [fsdsgl-dmeap01d.ncifcrf.gov](http://fsdsgl-dmeap01d.ncifcrf.gov/)).
* Do *sudo su - ncif-hpcdm-svc*
* Go to the directory /opt/nci-doe/nci-doe-data-sharing/
* Do a git pull and git checkout to the branch needed using the following commands:
* git pull
* git checkout <branch\_name>

* Add the passwords in the config files which are located under the path: /opt/nci-doe/nci-doe-data-sharing/src/main/resources/appconfigs

* + - For DEV: add the passwords in dev-env.conf file
    - For UAT: add the passwords in preprod-env.conf file
    - For PROD: add the passwords in prod-env.conf file
  + The config files back up along with passwords are in the home directory for ncif-hpcdm-svc: /home/NCIF-HPCDM-SVC.
* Do either one depending on the environment.
  + - For DEV: mvn clean install -DskipTests -Pdev
    - For UAT: mvn clean install -DskipTests -Ppreprod
    - For PROD: mvn clean install -DskipTests -Pprod
* Copy the war file to the MoDaC server.
* **For DEV server:**

scp /opt/nci-doe/nci-doe-data-sharing/target/<war\_file> [<user\_name>@fsdsgl-modac01d.ncifcrf.gov:/home/<user\_name>](mailto:gantam2@fsdsgl-modac01p.ncifcrf.gov:/home/gantam2)

* **For UAT server:**

scp /opt/nci-doe/nci-doe-data-sharing/target/<war\_file> [<user\_name>@fsdsgl-modac01t.ncifcrf.gov:/home/<user\_name>](mailto:gantam2@fsdsgl-modac01p.ncifcrf.gov:/home/gantam2)

* **For PROD server:**

scp /opt/nci-doe/nci-doe-data-sharing/target/<war\_file>

[<user\_name>@fsdsgl-modac01p.ncifcrf.gov:/home/<user\_name>](mailto:gantam2@fsdsgl-modac01p.ncifcrf.gov:/home/gantam2)

* **Second step: Deployment on MoDaC server**:

* ssh to the appropriate MoDaC server:
* MoDaC DEV server: ssh fsdsgl-modac01d.ncifcrf.gov
* MoDaC UAT server: ssh fsdsgl-modac01t.ncifcrf.gov
* MoDaC PROD server: ssh fsdsgl-modac01p.ncifcrf.gov
* Stop tomcat using the command: *sudo systemctl stop tomcat.*
* Change the permissions of the war file using the commands:
  + - chmod 777 <war\_file>
    - chmod 770 <war\_file>

* Move the war file to webapps folder using the command:

sudo mv <war\_file> /usr/share/tomcat/webapps

* Go to the directory **/usr/share/tomcat/conf/** and change the server.xml file for the following line. (This step is done as a workaround for schedulers running twice).
* Do sudo su
* In the following line, change **autoDeploy** to true and **deployOnStartUp** to true.

   <Host name="localhost" appBase="webapps"

unpackWARs="true" deployOnStartup=”true" autoDeploy="true">

* Do this step only when doing a first time build for a new branch. Else, skip this step.
* Go to the directory **/usr/share/tomcat/conf/** and edit the server.xml file for the following line:

<Context path="" docBase="web-doe-<war\_file\_version>" privileged="true"/>

* Go to directory **/usr/share/tomcat/webapps/** and add service account group permissions to the war file using the following commands:
* On DEV and UAT:
* *chgrp ncidoesvct2 <war\_file.war>*
* *sudo chown ncidoesvct2 <war\_file.war>*
* On Prod:
* *chgrp ncidoesvcp2 <war\_file.war>*
* *sudo chown ncidoesvcp2 <war\_file.war>*
* Type “exit” and start tomcat using the command:

*sudo systemctl start tomcat*

* Once the app is started and the war file gets expanded in the webapps directory, go to the directory **/usr/share/tomcat/conf/** and change the server.xml file for the following line. (This step is done as a workaround for schedulers running twice).
  + Do sudo su
  + In the following line, change **autoDeploy** to false and **deployOnStartUp** to false.

   <Host name="localhost" appBase="webapps"

unpackWARs="true" deployOnStartup=”false" autoDeploy="false">

* Type “exit” and restart the server using the command:

*sudo systemctl restart tomcat*

* Access the app by using the appropriate URL on the browser:
* DEV: <https://fsdsgl-modac01d.ncifcrf.gov/>
* UAT: <https://fsdsgl-modac01t.ncifcrf.gov/>
* PROD: https://modac.cancer.gov/

**Tomcat and gunicorn commands:**

* To start tomcat: sudo systemctl start tomcat
* To stop tomcat: sudo systemctl stop tomcat
* To restart tomcat: sudo systemctl restart tomcat
* To start gunicorn: sudo systemctl start gunicorn
* To stop gunicorn: sudo systemctl stop gunicorn
* To restart gunicorn: sudo systemctl restart gunicorn

**Steps to change properties directly on the server:**

* Login to the appropriate MoDaC server:
* MoDaC DEV server: ssh fsdsgl-modac01d.ncifcrf.gov
* MoDaC UAT server: ssh fsdsgl-modac01t.ncifcrf.gov
* MoDaC PROD server: ssh fsdsgl-modac01p.ncifcrf.gov
* Do “sudo su”
* Go to the path: /usr/share/tomcat/webapps/web-doe-2.3.0/WEB-INF/classes
* Change the properties under the file “application.properties” using the command:
* vim application.properties
* Change the properties required
* Save the changes
* Type “exit” and restart the server using the command:
* *sudo systemctl restart tomcat*