

# ICD10CM Mapping



xml2claml (1).pl

## Overview

Information on the ICD10CM mapping project.

- ModuleId: 5991000124107
- RefsetId: 6011000124106

## Helpful Admin Commands

### Setting up new ICD10CM Mapping Project

Load ICD10CM

Do xml to claml conversion to create icd10cm file to load.

```
./xml2claml.pl -episode 2018-ICD-10-Table-And-Index/icd10cm_tabular_2018.xml > icd10cm_2018.xml
```

Remove the following line from icd10cm\_2018.xml

```
<!DOCTYPE ClaML SYSTEM "ClaML.dtd">
```

Load icd10cm\_2018.xml to /home/ihtsdo/data/ICD10CM

Change owner of icd10cm\_2018.xml to root

Load icd10cm data

cd /home/ihtsdo/code/admin/loader

mvn clean install -PClaML -Drun.config=/opt/mapping-service/conf/config.properties -Dinput.file=/home/ihtsdo/data/ICD10CM/icd10cm-2018.xml -Dterminology=ICD10CM -Dversion=2018

Load SNOMEDCT\_US

Pre-process the map file to clean up map relations (see code below - examples 109006, 2217001, 2268003)

cd /home/ihtsdo/code/admin/loader

make sure complex\_map\_refset\_members table mapRule field is type longtext, not varchar(255)

make sure enough memory is provided (consider ~/.bash\_profile): export MAVEN\_OPTS="-XX:MaxPermSize=512m -Xmx3300M"

mvn clean install -PRF2-snapshot -Drun.config=/opt/mapping-service/conf/config.properties -Dinput.dir=/home/ihtsdo/data/SNOMEDCT\_US/SnomedCT\_USEditionRF2\_Production\_20170301T120000/Snapshot -Dterminology=SNOMEDCT\_US -Dversion=latest

Make SNOMEDCT\_US to ICD10CM project logged in as Administrator

Confirm refsetId by looking for mapping in the Terminology/..descriptions.. file in the SNOMEDCT\_US release files refsetId (6011000124106)

```
Load Map Records from RF2
cd /home/ihtsdo/code/admin/loader
set file = /home/ihtsdo/data/SNOMEDCT_US/SnomedCT_USEditionRF2_Production_20170301T120000/Snapshot/Refset/Map
/der2_iisssccRefset_ExtendedMapSnapshot_US1000124_20170301.txt
perl -ne '@_split/\t/; print if $_[4] eq "6011000124106"' $file > /tmp/x.txt
mvn install -PMapRecords -Drun.config=/opt/mapping-service/conf/config.properties -Dinput.file=/tmp/x.txt -Dmember.flag=false -Drecord.flag=true
```

```
Load Refset Members from RF2
cd /home/ihtsdo/code/admin/loader
perl -ne '@_split/\t/; print if $_[4] eq "6011000124106" && $_[2] eq "1"' /home/ihtsdo/data/SNOMEDCT_US
/SnomedCT_USEditionRF2_Production_20170301T120000/Snapshot/Refset/Map
/der2_iisssccRefset_ExtendedMapSnapshot_US1000124_20170301.txt > /tmp/x.txt
mvn install -PMapRecords -Drun.config=/opt/mapping-service/conf/config.properties -Dinput.file=/tmp/x.txt -Dmember.flag=true -Drecord.flag=false
```

```
Compute workflow
cd /home/ihtsdo/code/admin/loader
mvn install -PComputeWorkflow -Drun.config=/opt/mapping-service/conf/config.properties -Drefset.id=6011000124106
```

Add advices, map relations, users

```
Recalculate Map Advice
cd /home/ihtsdo/code/admin/release
mvn install -PRecalculateMapAdvice -Drun.config=/opt/mapping-service/conf/config.properties -Drefset.id=6011000124106 > /opt/mapping-service
/logs/recalculateMapAdvice_YYYYMMDD.log
```

## Release process

- Load previous release's maps
  - delete from complex\_map\_refset\_members where terminology = 'SNOMEDCT\_US';
  - perl -ne '@\_split/\t/; print if \$\_[4] eq "6011000124106"' /home/dshapiro
   
/der2\_iisssccRefset\_ExtendedMapSnapshot\_US1000124\_20180901.txt > /home/dshapiro/icd10cm.20180901.txt
  - cd /home/ihtsdo/code/admin/loader
  - mvn install -PMapRecords -Drun.config=/opt/mapping-service/conf/config.properties -Dinput.file=/home/dshapiro/icd10cm.
   
20180901.txt -Dmember.flag=true -Drecord.flag=false > /opt/mapping-service/logs/reloadComplexMapRefsetMembers.log
- Recalculate Map Advice
  - cd /home/ihtsdo/code/admin/release/
  - mvn install -PRecalculateMapAdvice -Drun.config=/opt/mapping-service/conf/config.properties -Drefset.id=6011000124106 > /opt
   
/mapping-service/logs/recalculateMapAdvice.log
  - chmod -R 777 /opt/mapping-service/indexes/\*
  - chown -R mapping-service:mapping-service /opt/mapping-service/indexes/\*

## International Release Update

1. Clone us-mapping to uat-us-mapping. Reindex.
2. Get Rory to confirm when the Member International release has been loaded into the US authoring tool
3. Wait till the drip feed files at [https://release.ihtsdotools.org/api/v1/centers/us/products/snomed\\_ct\\_us\\_daily\\_build/builds/2019-07-{DAY/TIME}/outputfiles/sct2\\_{Component}\\_Delta\\_US1000124\\_20190901.txt](https://release.ihtsdotools.org/api/v1/centers/us/products/snomed_ct_us_daily_build/builds/2019-07-{DAY/TIME}/outputfiles/sct2_{Component}_Delta_US1000124_20190901.txt) have international data in them. (This location may change and should be checked with Rory/Andrew)
4. Have Rory/Terance or systems increase the UAT box to **16 GB / 4 CPU**. Have auto-shutoff turned off temporarily for test load.
5. Run the script on UAT called /opt/mapping-service-admin/config/bin/loadDeltaInternationalOnly.csh. This will likely need to be run step by step. First the international only data needs to be parsed out and files put in a single flat directory. The flat directory should not be a /tmp subdirectory or else it will be deleted before it can be transferred for the prod insertion. Then the delta needs to be loaded, tree positions removed, tree positions reindexed, tree positions loaded and workflow computed.
6. Spot-check concept ids in Available work, that they were all in-scope and mapped on Int'l mapping,
7. Have NLM confirm it looks correct on UAT.
8. Have Rory/Terance revert settings on uat-us-mapping.
9. Get maintenance window for us-mapping and resize box on us-mapping.
10. Put OFF file in /home/ihtsdo/bin directory.
11. Run it there too.

## Deploying on us-mapping

1. supervisorctl stop mapping-service
2. cd /home/ihtsdo/code
3. git pull
4. mvn clean install
5. mvn install package -f pom-us.xml
6. cp /home/ihtsdo/code/rest/target/mapping-rest.war /opt/mapping-service/run/target/tomcat.10002/webapps/expanded/mapping-rest.war
7. supervisorctl start mapping-service