**TMT location:**

1. Log in to TMT (<http://vtest11.wustl.edu:8080/catissuetmt/Home.do>).
2. Select Test cases tab.
3. Expand caTissue product from the tree view.
4. Expand Mater List-v2.0 version
5. Expand Private Public Datastore Component
6. Expand Migrator test area
7. Select Test case ID 4202 with short title MIGRATOR\_Migrate\_private\_db\_to\_public\_db

**Purpose:** Test to ensure that private data can be made available for public use by masking the PHI attributes of the objects. Also if additional masking is required then that can be achieved by running additional masking on Public database.

**Pre-requisites:**

Import latest dump located at

Oracle: https://ncisvn.nci.nih.gov/svn/catissue\_persistent/caTissue Database Dump/v2.0/Oracle

MySQL: https://ncisvn.nci.nih.gov/svn/catissue\_persistent/caTissue Database Dump/v2.0/MySQL and deploy application.

**Procedure:**

1. Navigate to CATISSUE\_HOME/private\_public\_migrator folder.
2. Open file privatePublic.properties in edit mode.
3. Enter data as specified in below table:

|  |  |
| --- | --- |
| **Property** | **Data** |
| databaseType | Database used (oracle or mysql) |
| privateDBName | Database name for private DB instance |
| privateDBHost | Database host name for private instance |
| privateDBUserName | Database username for private instance |
| privateDBPassword | Database password for private instance |
| privateDBPort | Database port for private instance |
| privateDBTablespace | Database tablespace used for private instance. This is required for Oracle only. |
| privateDBIndexTablespace | Database index tablespace of private instance. This is required for oracle only. |
| stagingDBName | Database name for staging database. |
| stagingDBUserName | Database username for staging database. |
| stagingDBPassword | Database password for staging database. |
| stagingDBHost | Database host for staging Database. This should be same as private database. |
| stagingDBPort | Database port for staging database. |
| stagingSystemUserName | Database system user name for staging Database. This is required for Oracle. |
| stagingSystemPassword | Database system password for staging database. This is required for oracle. |
| publicDBName | Database name for public database. |
| publicDBHost | Database host for public database. |
| publicDBUserName | Database username for public database. |
| publicDBPassword | Database password for public database. |
| publicDBPort | Database port for public database. |
| publicSystemUserName | Database system username for public database. This is required for Oracle. |
| publicSystemPassword | Database system password for public database. This is required for Oracle. |
| publicDBTNSName | Database TNS name for public instance. |

Save the properties file.

1. Enter additional masking information in mask.sql file located at CATISSUE\_HOME/private\_public\_migrator/sql folder as specified below:

update catissue\_specimen\_protocol sp set sp.title=’cp\_masked’ where sp.title like '%ACS%';

update catissue\_specimen\_coll\_group scg set scg.name=’scg\_masked’ where scg.name like ‘%Adult Child Study\_122\_116%’;

update CATISSUE\_SPECIMEN sp set sp.COMMENTS='Specimen masked';

update CATISSUE\_SPECIMEN\_EVENT\_PARAM sep set sep.COMMENTS='Specimen Event Masked';

update CATISSUE\_CONTAINER con set con.COMMENTS='Container Masked';

update CATISSUE\_CONTAINER\_TYPE cp set cp.COMMENTS='Container Type Masked';

update CATISSUE\_SPECIMEN\_COLL\_GROUP scg set scg.COMMENTS='SCG Masked';

update CATISSUE\_BIOHAZARD bio set bio.COMMENTS='Biohazard Masked';

commit;

Save the file.

1. Open command prompt. Navigate to CATISSUE\_HOME/private\_public\_migrator folder.
2. Execute “ant –f privatePublic.xml generate\_command\_file” target. (Refer Expected Output)
3. Execute “ant –f privatePublic.xml migrate” target. (Refer Expected Output)
4. Deploy application pointing to public database instance.(Refer Expected Output)

**Expected Output:**

6) commands.properties file will be created in CATISSUE\_HOME/private\_public\_migrator folder. This should contain commands to create Private dump, drop staging database, create staging database, create staging dump, drop public database, create public database and will look as below:

**For MySql:**

#Commands file for public private DB

#properties related to private database

createPrivateDump=cmd /c mysqldump -u <private DB username> -p<private DB password> -h <private DB hostname/IP> -P <Private DB Port> <private DB name>><private dump file name>

dropStagingDB=cmd /c mysql -u <staging DB username> -p<staging DB password> -h <Staging DB hostname/IP> -P <Staging DB port> <./sql/drop\_staging\_db\_mysql.sql

createStagingDB=cmd /c mysql -u <staging DB username> -p<staging DB password> -h <staging DB hostname/IP> -P <staging DB Port> <Staging DB name><<private dump file name>

#properties related to public database

createStagingDump=cmd /c mysqldump -u <staging DB user> -p<staging db password> -h <staging DB hostname/IP> -P <staging DB port> <staging db name><public dump file name>

dropPublicDB=cmd /c mysql -u <public DB user> -p<public DB password> -h <public DB hostname/IP> -P <public DB Port> <./sql/drop\_public\_db\_mysql.sql

createPublicDB=cmd /c mysql -u <public DB username> -p<public DB password> -h <Public DB hostname/IP> -P <public DB port> <public Db name><public dump file name>

**For Oracle:**

#Commands file for public private DB

#properties related to private database

createPrivateDump=expdp <staging system user name>/<staging system password>@<staging db name> schemas=<private db username> directory=data\_pump\_dir dumpfile=<private dump file name> logfile=catissueexp.log

dropStagingDB=sqlplus <staging DB system user>/<staging DB system password>@<staging Db name> @.//sql//drop\_staging\_db\_oracle.sql

createStagingDB=impdp <staging Db system user>/<staging Db system password>@<staging db name> remap\_schema=<private db username>:<staging DB username> directory=data\_pump\_dir dumpfile=<private dump file> logfile=imp parallel=4 transform=oid:n remap\_tablespace=<private Db tablespace>:users

#properties related to public database

createStagingDump=exp <staging DB system user>/<staging Db system password>@<staging Db name> owner=<staging db username> file=<public dump file>

dropPublicDB=sqlplus <public DB system username>/<public DB system password>@<public Db name> @.//sql//drop\_public\_db\_oracle.sql

createPublicDB=imp <Public DB system user>/<public DB system password>@<public DB name> fromuser=s<staging DB user> touser=<public Db username> file=<pubic dump file>

Two sql files will be created in CATISSUE\_HOME/private\_public\_migrator/sql folder for dropping staging and public database. The commands generated will be related to the type of database defined.

7) Verify data in the following columns of the public database:

|  |  |  |
| --- | --- | --- |
| **Static Objects** | | |
| **Table Name** | **Column Name** | **Value** |
| CATISSUE\_AUDIT\_EVENT | IDENTIFIER, IP\_ADDRESS, EVENT\_TIMESTAMP, USER\_ID, COMMENTS, EVENT\_TYPE | Null |
| CATISSUE\_AUDIT\_EVENT\_DETAILS | IDENTIFIER, ELEMENT\_NAME, PREVIOUS\_VALUE, CURRENT\_VALUE, AUDIT\_EVENT\_LOG\_ID | Null |
| CATISSUE\_AUDIT\_EVENT\_LOG | IDENTIFIER, AUDIT\_EVENT\_ID | Null |
| CATISSUE\_AUDIT\_EVENT\_QUERY\_LOG | IDENTIFIER, QUERY\_DETAILS, AUDIT\_EVENT\_ID, QUERY\_ID, TEMP\_TABLE\_NAME, IF\_TEMP\_TABLE\_DELETED, ROOT\_ENTITY\_NAME, COUNT\_OF\_ROOT\_RECORDS | Null |

|  |  |  |
| --- | --- | --- |
| **Table Name** | **Column Name** | **Value** |
| CATISSUE\_BASE\_SHIPMENT | CREATED\_DATE, SEND\_DATE | Random Date |
| CATISSUE\_COLL\_PROT\_REG | REGISTRATION\_DATE | Random Date |
| CATISSUE\_DATA\_AUDIT\_EVENT\_LOG | IDENTIFIER, OBJECT\_IDENTIFIER, OBJECT\_NAME, PARENT\_LOG\_ID | Null |
| CATISSUE\_DISTRIBUTION | EVENT\_TIMESTAMP | Random Date |
| CATISSUE\_ORDER | REQUESTED\_DATE | Random Date |
| CATISSUE\_PART\_MEDICAL\_ID | IDENTIFIER, MEDICAL\_RECORD\_NUMBER, SITE\_ID, PARTICIPANT\_ID | Null |
| CATISSUE\_PARTICIPANT | LAST\_NAME, FIRST\_NAME, MIDDLE\_NAME, BIRTH\_DATE, DEATH\_DATE, SSN | Dates will be updated to a random date whereas the rest data will be nullified. |
| CATISSUE\_PATHOLOGY\_REPORT | COLLECTION\_DATE\_TIME | Random Date |
| CATISSUE\_QUARANTINE\_PARAMS | EVENT\_TIMESTAMP | Random Date |
| CATISSUE\_REVIEW\_PARAMS | EVENT\_TIMESTAMP | Random Date |
| CATISSUE\_SPECIMEN | CREATED\_ON\_DATE, COMMENTS | date will be updated to a random date whereas commenst will be set null |
| CATISSUE\_SPECIMEN\_COLL\_GROUP | COMMENTS | Null |
| CATISSUE\_SPECIMEN\_EVENT\_PARAM | EVENT\_TIMESTAMP | Random Date |
| CATISSUE\_SPECIMEN\_PROTOCOL | START\_DATE, END\_DATE | Random Date |
| CATISSUE\_USER | START\_DATE | Random Date |
| CATISSUE\_REPORT\_CONTENT | REPORT\_DATA | Null (where reports have status as DEIDENTIFIED, DEID\_PROCESS\_FAILED, PENDING\_FOR\_DEID) |

|  |  |  |
| --- | --- | --- |
| **Dynamic Objects** | | |
| **Table Name** | **Column Name** | **Value** |
| DE\_E\_1236 | DE\_AT\_1240, DE\_AT\_1239 | Random Date |
| DE\_E\_1249 | DE\_AT\_1251 | Random Date |
| DE\_E\_1283 | DE\_AT\_1285 | Random Date |

Additional masking should be done as per specified in point 4) above.

**Note:** Masking command can alone be executed to mask private database without creating public database instance using “**maskData**” target instead of “**migrate**” target. For the same only staging database details are provided wherein private data is stored.

8) Application should be successfully deployed using public database instance. All PHI attributes such as Last name, First Name, Middle Name, SSN, MRN for Participant will be nullified; while dates such as created\_on\_date for specimen will be updated to a random date.

**Verification Logic:**

Execute Query “**Search for all Participant their Medical Identifier and CP Registration Date**” from saved query list.

Execute Query “**Search for all Collected Specimens**” from saved query list.

The result should display PHI attributes for Participant, Medical identifier, Registration Date, Specimen, and Collected Date as specified in the table in expected results.