**Document Information**

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|  | Professional Services GDC | |  |  |
| Prepared by | Avijit Chatterjee | **Document version number** | | v1.0 |
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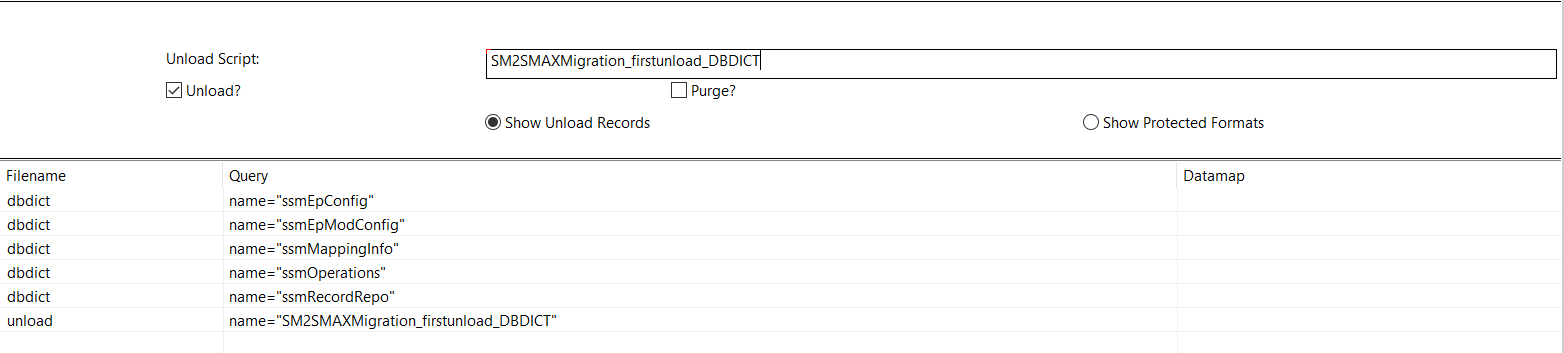
**Version History**

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| **Ver. No.** | **Ver. Date** | **Description** | **Reviewed By** | | **Approved By** | **Status** |
| v1.0 | 13.04.2021 | SM to SMAX Migration Toolkit – Technical Details | |  |  | Completed |

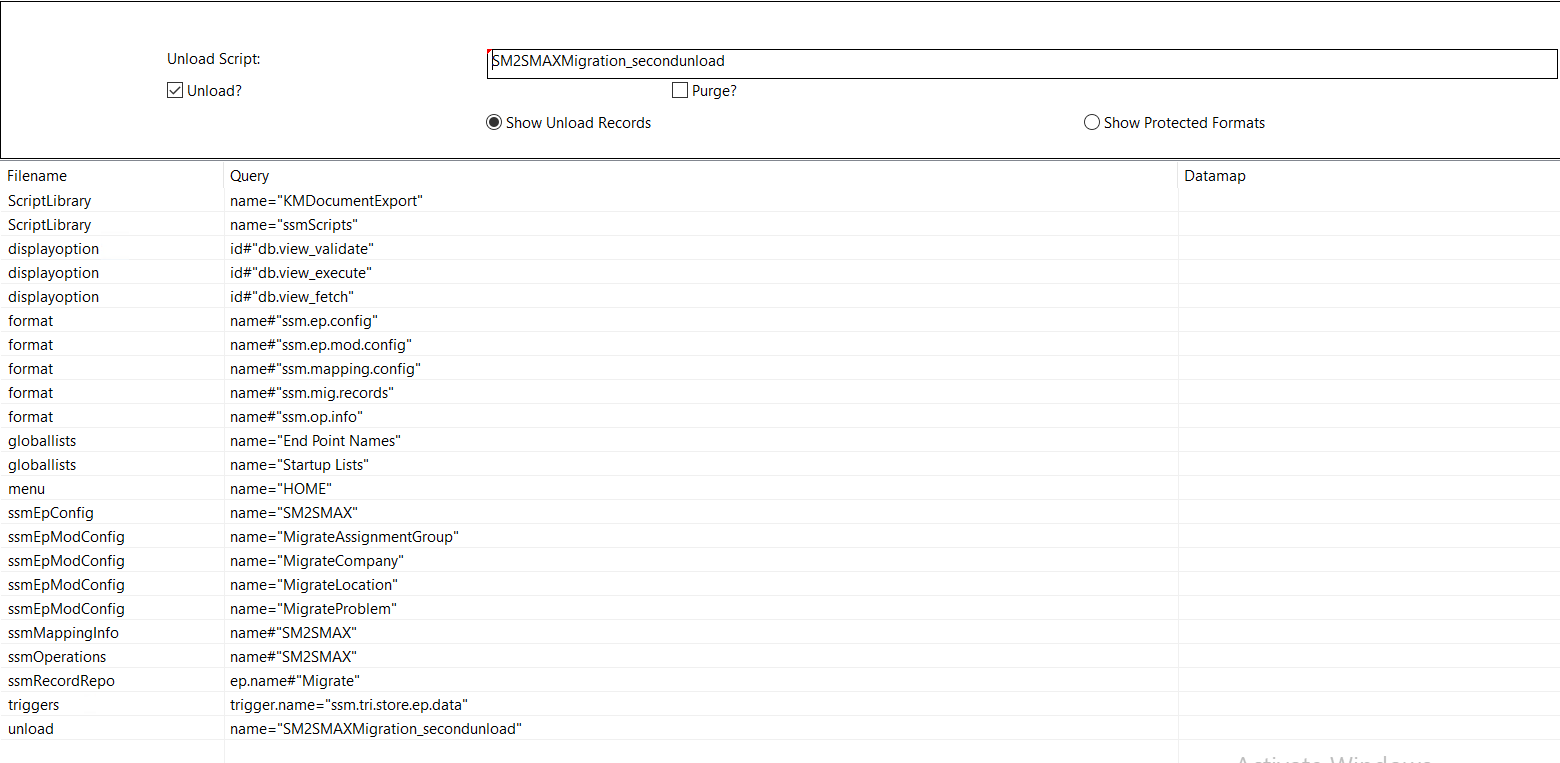
**Unload Package Details:**

2 Nos. of packages (.unl files) are there.

1. *SM2SMAXMigration\_firstunload\_DBDICT.unl*

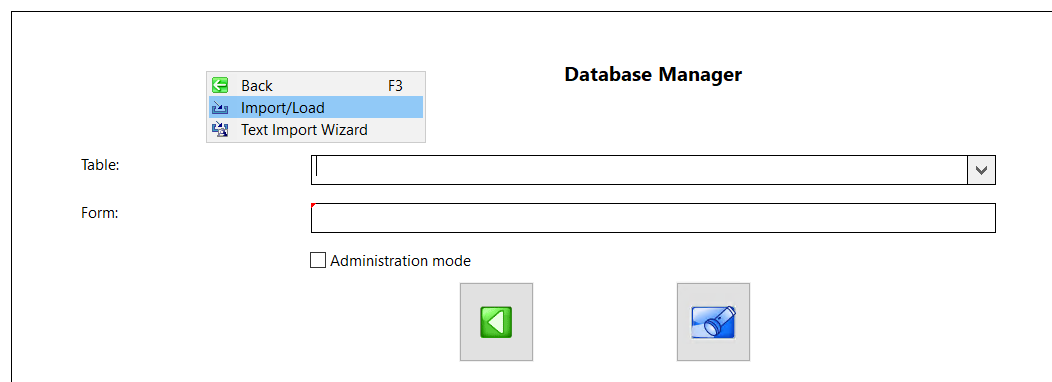


1. *SM2SMAXMigration\_secondunload.unl*



**Load the packages into Service Manager:**

1. Navigate to Service Manager command line on the top-left.
2. Type db and press Enter. Database Manager Utility will be displayed.
3. Right-click anywhere and click on Import/Load.



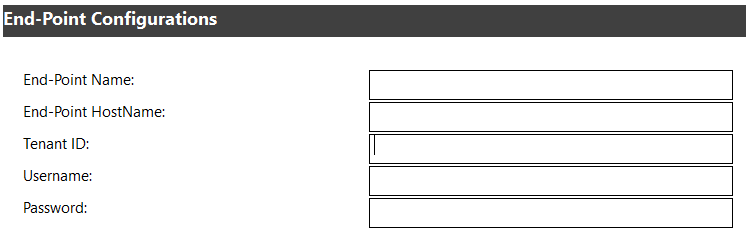
1. Service Manager File Load/Import utility will be opened.
2. First, import the SM2SMAXMigration\_firstunload\_DBDICT.unl package and then import the SM2SMAXMigration\_secondunload.unl package.
3. Once both the packages are imported successfully into Service Manager, you should be able to see SM Migration Utility under System Navigator pane.

**Importing Certificates:**

1. Export SMAX tenant’s Certificate successfully from the browser.
2. Save it to a directory where from it can be selected while importing into Service Manager Server.
3. Open CMD in Administrator mode from the Service Manager Server and navigate to the jre/bin folder where Service Manager is installed. (For Ex., *C:\Program Files\Micro Focus\Service Manager 9.70\Server\RUN\jre\bin*)
4. Run the keytool command to import the SMAX certificate successfully into Service Manager Keystore. (For Ex., *keytool -import -trustcacerts -keystore "C:\Program Files\Micro Focus\Service Manager 9.70\Server\RUN\jre\lib\security\cacerts" -storepass changeit -alias SmaxLabCert07Apr2021Avi -import -file "C:\Program Files\Micro Focus\Service Manager 9.70\Server\RUN\jre\lib\security\SmaxLabCert07Apr2021Avi.cer"*)
5. Once you run the command, you should get the message like *Certificate was added to Keystore*.

**Steps to configure before Migrating data:**

1. Open End Point Config from the navigator pane. End Point Configurations details page will be displayed.



1. Fill the required details like below and click Save and then click on Validate.

End-Point Name: *<Give any name>*

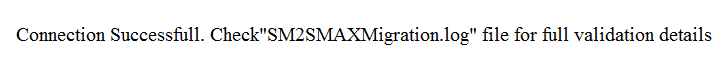
End-Point HostName: *<External Access Host FQDN of SMAX>*

Tenant ID: *<SMAX Tenant Id where migration will be performed from Service manager>*

Username: *<Login Id of the tenant user>*

Password: *<Password of the tenant user>*

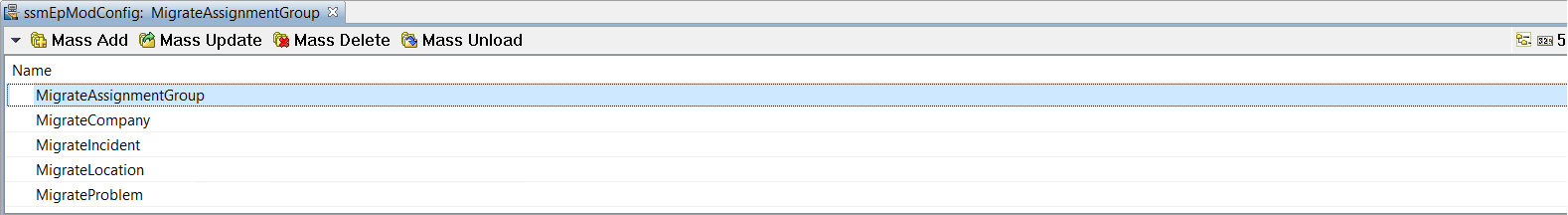
1. Once the connection is properly validated, it should show the message like below:



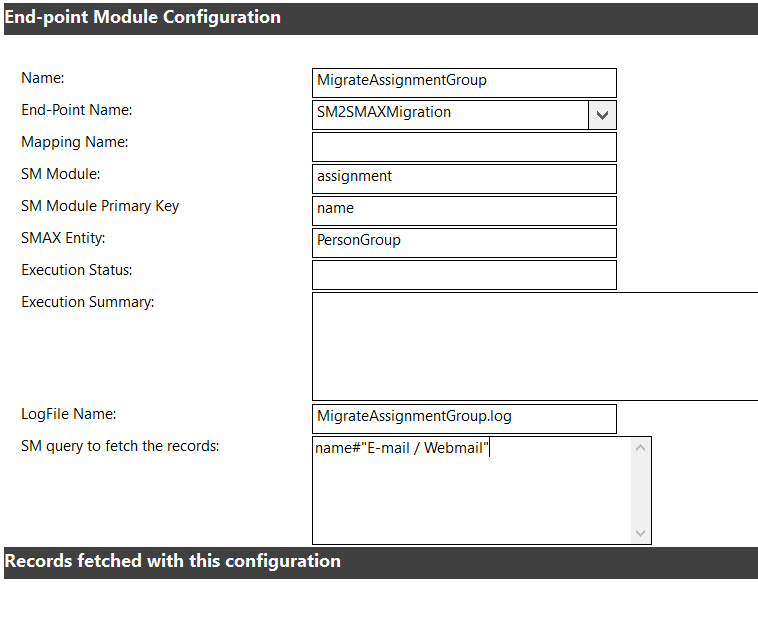
1. If something else other than the above, is being displayed, it means the connection is not successfully established. It’s more likely the Certificate Import error or the tenant’s availability which should be fixed before proceeding to the next step.
2. Once the connection is properly validated, if you navigate to End Point Operations sub-menu under SM Migration Utility, you should be able to see the following End Point Configurations automatically created.

* *SM2SMAXMigration\_create*
* *SM2SMAXMigration\_createAttach*
* *SM2SMAXMigration\_getAG*
* *SM2SMAXMigration\_getAuth*
* *SM2SMAXMigration\_getPerson*
* *SM2SMAXMigration\_getService*
* *SM2SMAXMigration\_managedPersonsAPI*
* *SM2SMAXMigration\_validate*

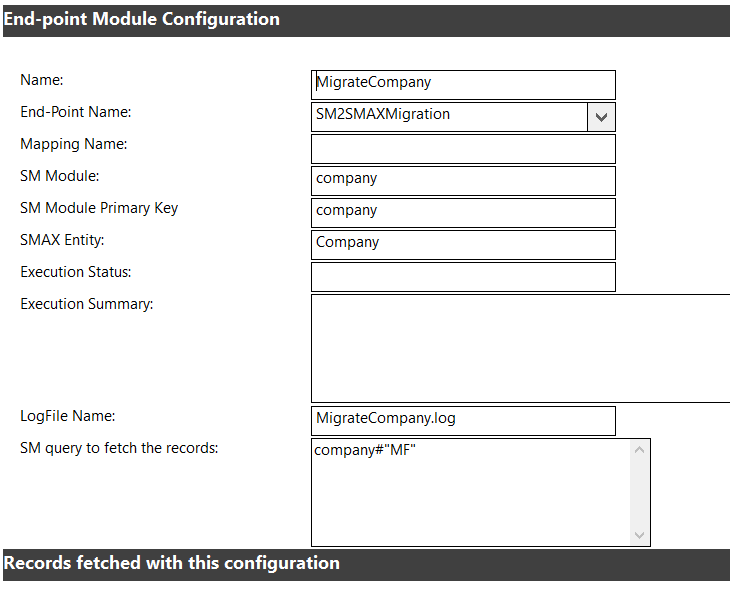
1. Open End Point Module Config from the navigator pane. End-point Module Configurations details page will be displayed.
2. Select SM2SMAXMigration from End-Point Name drop-down list and click Search. 5 Nos. of records will be displayed like below which are coming just by importing the package.



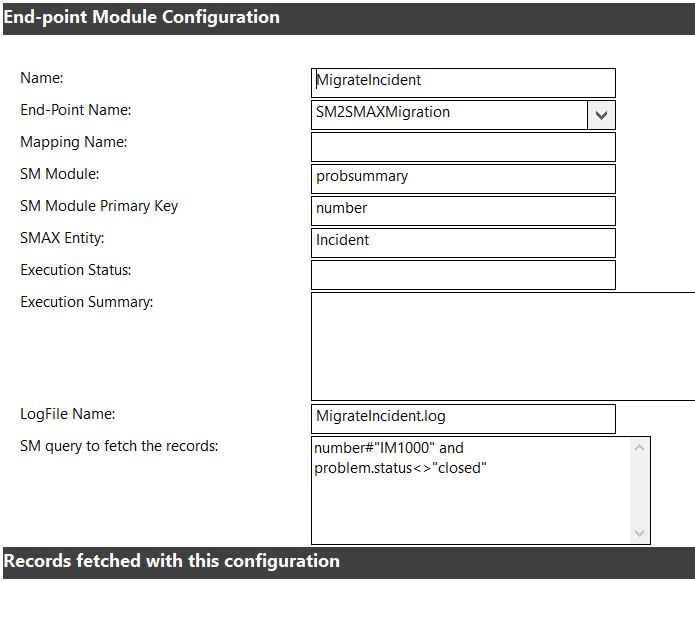
1. Select MigrateAssignment and configure it like below:



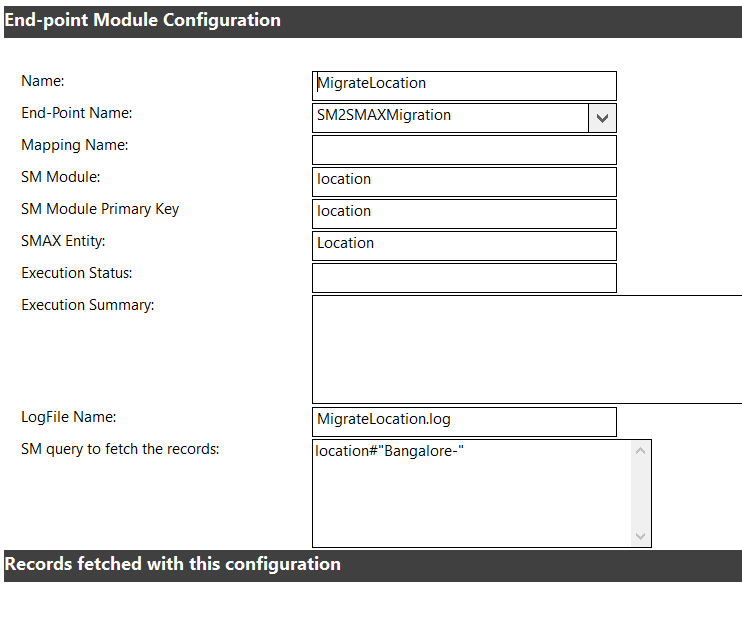
1. Select MigrateCompany and configure it like below:



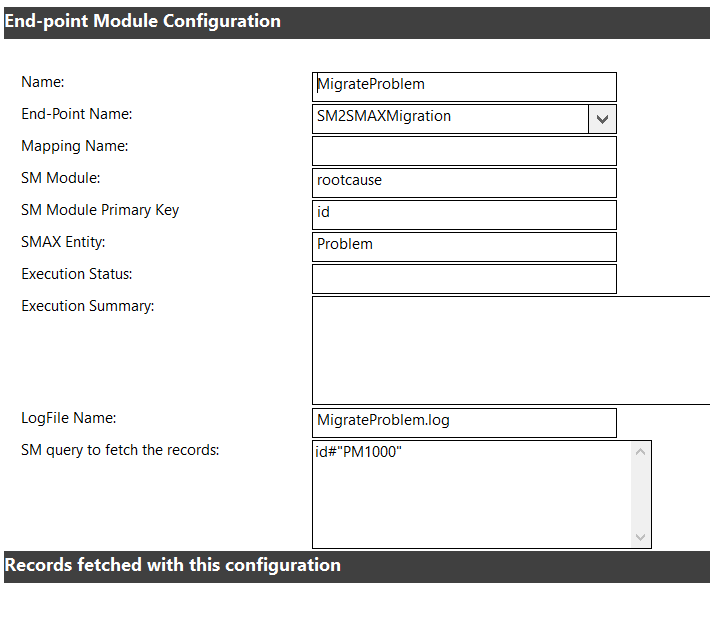
1. Select MigrateIncident and configure it like below:



1. Select MigrateLocation and configure it like below:



1. Select MigrateProblem and configure it like below:



1. For all of the above, maintain the following inputs while configuring:

Name: *<Any name can be given>*

End-Point Name: *<It should be the End-Point name given in End-Point Config utility>*

SM Module: *<Table name in Service Manager>*

SM Module Primary Key: *<Primary key of Service Manager Table used above>*

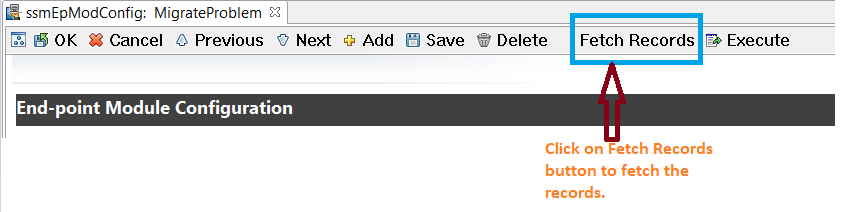
SMAX Entity: *<Entity name in SMAX where the records will be migrated>*

LogFile Name: *<Any understandable log file name can be given>*

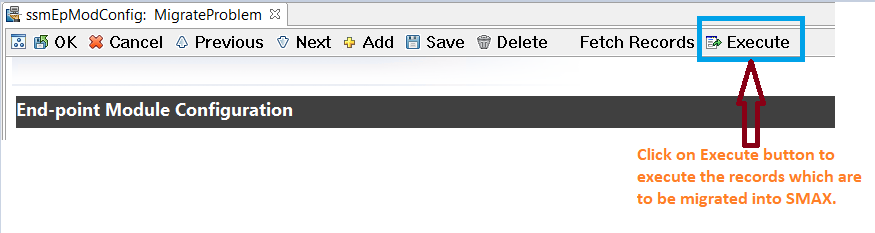
SM query to fetch the records: *<Any valid Service Manager query to fetch the records from the Service Manager table which are considered as Migration candidates>*

**Steps to migrate the records:**

1. Once End-Point Module Configuration records are properly configured, click on Fetch Records button to fetch all the records as per the query defined in SM query to fetch the records field.

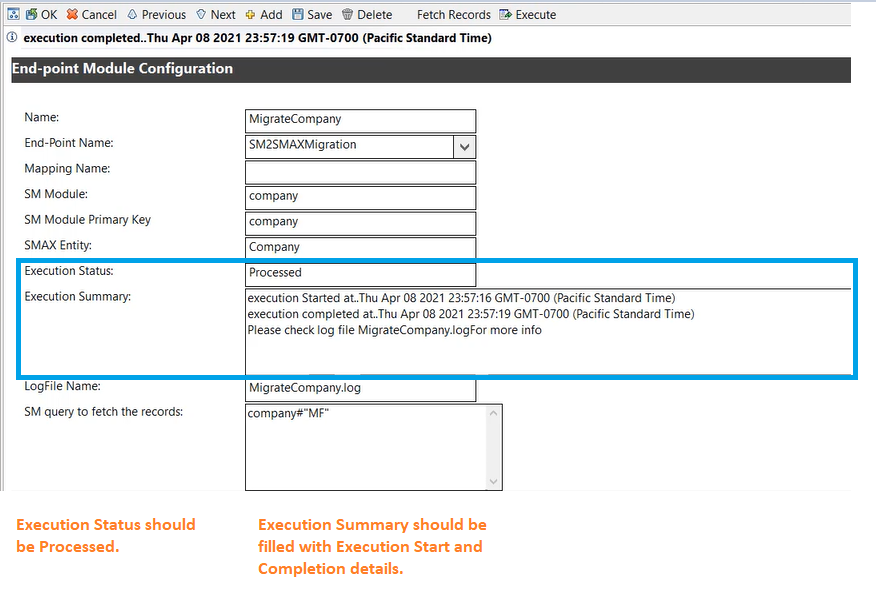


1. Once all the required records are fetched from the tables, navigate to SMAX Record Repo sub-menu under SM Migration Utility from the Navigation pane.
2. Migration candidate records should be visible there with EXE Status as New.
3. Once you are happy with the records to be migrated, click on Execute button under End-point Module Configuration screen.

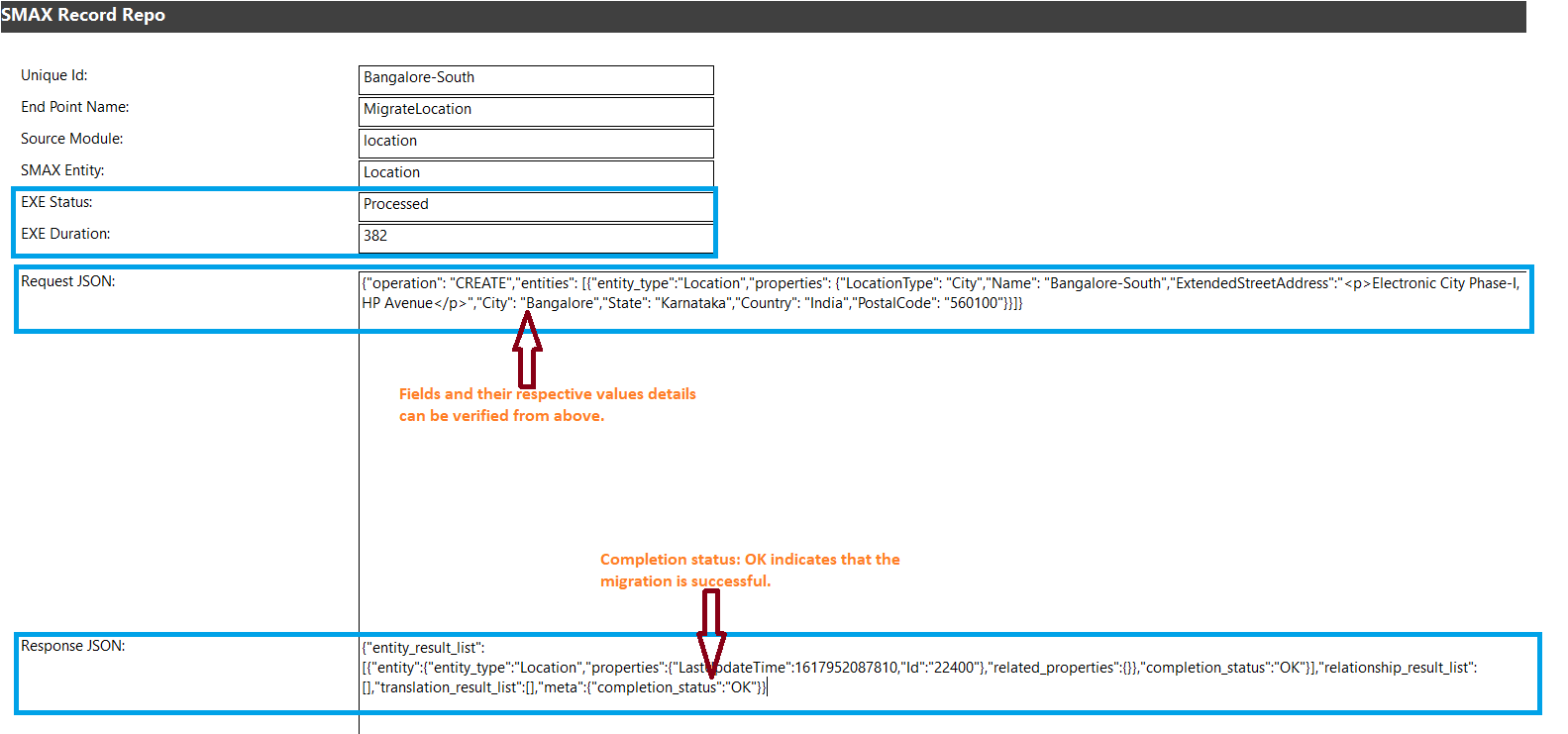


**Verifying the migration results:**

1. Once the records are successfully migrated to SMAX, you should receive the messages like below:



1. Same kind of details should be displayed for all the other End-point module configurations as well.
2. Also, if you navigate to SMAX Record Repo sub-menu under SM Migration Utility from the Navigation pane, you should see like below against each migrated records.



**Code snippet responsible for migrating Master data and Transactional data:**

1. Navigate to Service Manager command line on the top-left.
2. Type sl and press Enter. Script Library Utility will be displayed.
3. Type ssmScripts in the Name field and press enter. Script details will be displayed.
4. This is the main script responsible to migrate the Master and Transactional data from Service manager to SMAX.
5. Scroll down to Line Number 497. Function details are as below:

***function*** *executeMigration(ModuleInfo, epModName, epName, logfile) {*

***switch*** *(ModuleInfo) {*

***case*** *"incidents-km":*

***return*** *executeMigration\_KM(epModName, epName, logfile)*

***break****;*

***case*** *"probsummary-Incident":*

***return*** *executeMigration\_IM(epModName, epName, logfile)*

***break****;*

***case*** *"contacts-managedPersons":*

***return*** *executeMigration\_MP(epModName, epName, logfile)*

***break****;*

***case*** *"incidents-Incident":*

***return*** *executeMigration\_IM(epModName, epName, logfile)*

***case*** *"company-Company":*

***return*** *executeMigration\_Company(epModName, epName, logfile)*

***case*** *"assignment-PersonGroup":*

***return*** *executeMigration\_AssignmentGroup(epModName, epName, logfile)*

***case*** *"location-Location":*

***return*** *executeMigration\_Location(epModName, epName, logfile)*

***case*** *"rootcause-Problem":*

***return*** *executeMigration\_PM(epModName, epName, logfile)*

***case*** *"kmdocument-Article":*

***return*** *executeMigration\_Knowledge(epModName, epName, logfile)*

***break****;*

***default****:*

***return*** *["Error", "Nothing to execute"];*

*}*

*}*

**Code snippet responsible for migrating Knowledge Articles:**

1. Navigate to Service Manager command line on the top-left.
2. Type sl and press Enter. Script Library Utility will be displayed.
3. Type *KMDocumentExport* in the Name field and press enter. Script details will be displayed.
4. This is the main script responsible to migrate the Knowledge Articles (along with images) from Service manager to SMAX.
5. Steps to perform while migrating:

* **[OPTIONAL]** Scroll down till you reach line number 524. Below code snippet, just for reference.

*//step1*

*//this step is optional and it is suggested to run this step when new columns are added to kmdocument table:*

*//if running this step,this tool will create exporting view for each document type and KM articles can be exported with these views in step2.*

*//if not running this step, this tool only supports to export km articles with default format and oob fields.*

*//*

*//how to run this step?*

*//1. uncomment the copyDocTypeTemplateViews() to run this step.*

*//2. the newly created views need to be modified manually following the User Guide.*

*//3. Comment the copyDocTypeTemplateViews() for next running.*

*//*

*//copyDocTypeTemplateViews();*

* Uncomment the “//copyDocTypeTemplateViews();” line, and then save your modifications.
* Click Execute to create the new Auto Created View for KM Export template view which is used to export the KM articles for each document type.
* When the copy process is completed, the system displays the following message as illustrated.



* Comment out the “copyDocTypeTemplateViews();” line if it is uncommented above.
* Click Knowledge Management > Configuration > Document Types, and update the newly created Auto Created View for KM Export view.
  + Remove the highlighted sections (such as title, km id, doctype, summary, creation date, and so on). Keep the knowledge content left.
  + Click OK to return to the Manage Document Types page, and then click Save to save your modifications.
* **[MANDATORY]** Scroll down till you reach line number 538. Below code snippet, just for reference.

*//step2*

*//comment the copyDocTypeTemplateViews() if it is uncommented in step 1*

*//uncomment doExport(path, hasView, exportStatus) and change its arguments following below description:*

*//*

*//path: this argument is used to set the directory for storing output files. The valid path format should be "driver:\\directory";*

*//hasView: if you ran the copyDocTypeTemplateViews() and modified exporting views manually, then set hasView as true,*

*// otherwise set hasView as false. You also can ignore this argument and the default value is false*

*//exportStatus: type a valid KM status value(such as "internal", "external"), then this tool will only export the KM articles which are in specified status.*

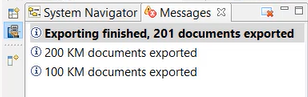
*// if ignoring this argument, this tool will export all KM articles.*

*//*

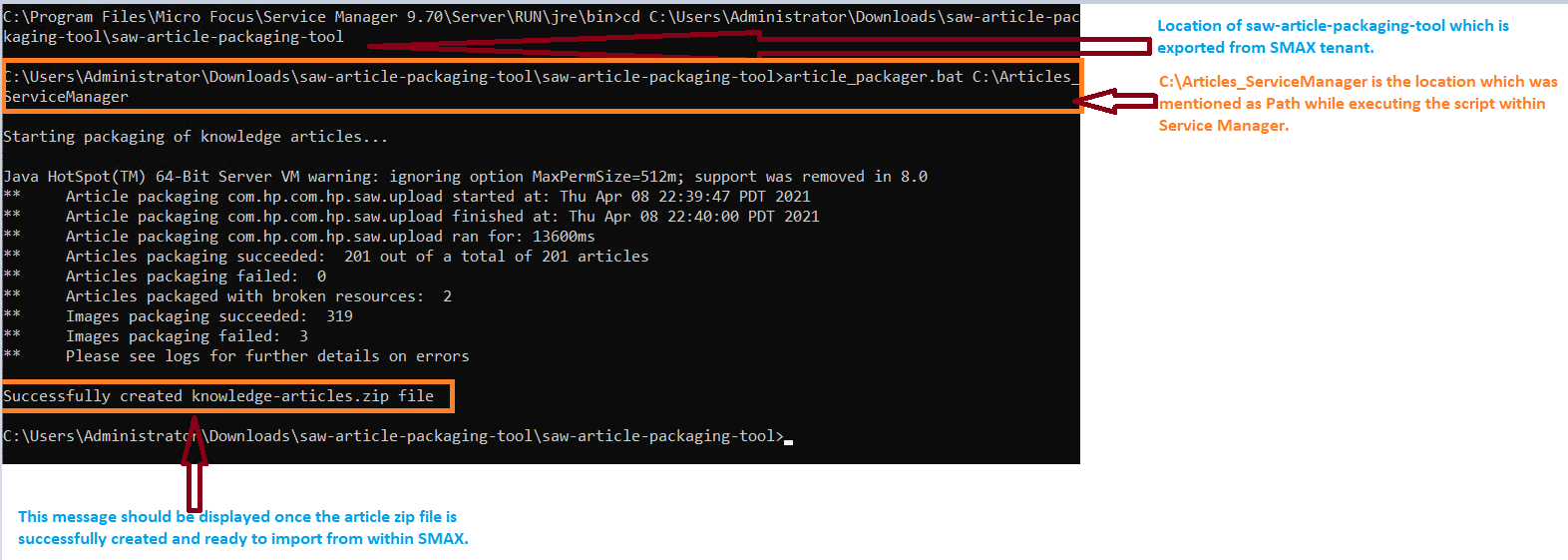
*//doExport(path, hasView, exportStatus);*

*doExport("C:\\Articles\_ServiceManager", "false");*

* Uncomment line number 538 after providing the proper path where the Service Manager Knowledge articles will be exported.
* Once the parameters are set, click Save to save the script. Click Compile to see whether there is any compilation error or not.
* If all set, click Execute to execute the script. Once the execution is completed, below messages should be displayed based on the number of articles.



* Follow the steps mentioned in docs.microfocus.com to export saw-article-migration-tool from SMAX tenant.
* Once done, execute the following steps as mentioned in the screenshot.



**Troubleshooting steps while migrating Knowledge Articles:**

1. **Cannot find KM articles in the expected directory**

Possible causes:

• KM articles are exported in the Service Manager Server side instead of the client side.

• The path argument in “doExport(path, hasView, exportStatus)” is incorrect.

For example, if the path argument is entered as “C:\Work\KMExport” for the Windows server, you cannot find the exported articles in the expected directory because the correct format is “C:\\Work\\KMExport”.

Solution:

Find the exported articles in the <SM\_install\_location>\Server\RUN directory.

1. **The article count in metadata.xml is inconsistent with that in the articles folder**

Possible cause:

The metadata.xml file is overwritten with the latest results after each exporting. However, the files created by previous exporting in both the articles folder and the resources folder are not removed during the next exporting process. This may cause the article count inconsistency issue when comparing the article count in metadata.xml with that in the articles folder.

Solution:

Use a new export path and a new folder each time.

1. **Customized fields cannot be exported to KM articles**

Possible cause:

The hasView argument in “doExport(path, hasView, exportStatus)” is set to false.

If the hasView argument is set to false, only OOB article content fields (such as problem, solution, question, answer, error, cause, fix, summary, and reference) can be exported, whereas other customized fields cannot be exported.

Solution:

Service Manager – Service Anywhere Knowledge Document Migration tool User Guide Page 7

Use the exporting view if any customized fields need to be exported.

Possible cause:

The hasView argument in “doExport(path, hasView, exportStatus)” is set to true, but the template view lacks some customized fields.

Solution:

Check the Auto Created View for KM Export view of the corresponding kmdoc type to make sure that all content fields to be exported are defined in this view.

1. **The exported article displays the “There is no content for this KM Article.” message**

Possible cause:

The hasView argument in “doExport(path, hasView, exportStatus)” is set to false, whereas the OOB article content fields (such as problem, solution, question, answer, error, cause, fix, summary, reference) are all empty.

Solution:

Use the exporting view to export KM articles.

Possible cause:

The hasView argument in “doExport(path, hasView, exportStatus)” is set to true, whereas the fields defined in template view are empty.

Solution:

Check the “Auto Created View for KM Export” view of corresponding kmdoc type to make sure that all content fields to be exported are defined in the view.

**-: End of Document:-**