User Manual

MDCMS Migration Instructions From Turnover

Table of Contents

From MDCMS Version 8.5
Published January 26, 2024

1   Overview

These instructions are intended for MDCMS customers that previously used the Turnover product to manage application changes on the IBM i (AS/400).

MDCMS provides a framework to map and migrate all relevant activity from Turnover to MDCMS. The following entities are migrated:
- Projects
- Tasks
- Subtasks
- Time Entry
- RFPs (Forms)
- Historical Object Deployment information
- Historical Commands for specific Objects
- Archived Source
- Active Checkouts
- Active Commands for specific Objects

2   Preparation

MDCMS must already be installed and fully configured prior to running the migration.

Settings are intentionally not migrated. This is in order to ensure that all of the advantages of MDCMS can be realized going forward. It is recommended to configure the settings based on best practices for all current and future development rather than based on historical processes.
Mapping Tables are generated by MDCMS to properly place the activity within the new MDCMS flow.
MDCMS allows for historical activity to be stored without corresponding settings. This is to limit settings to those applications, levels and attributes that are actively used.

2.1   Allowed State of Turnover

Actively checked out source and objects are permitted and open forms are also allowed. However, no forms should be in the process of being installed during the migration process.

2.2   Allowed State of MDCMS

MDCMS may already be in use for application changes prior to the migration. MDCMS ensures that duplicates are avoided.
Once the backup step of the Migration is started, all activity in MDCMS must cease until the migration is complete (typically less than 20 minutes later) and the decision is made whether or not to roll back the migration. Any activity performed between the backup and roll back will be lost if a roll back is performed.

If the default instance of MDCMS is already being used heavily by developers, it is recommended to first run the migration in a separate instance to verify the results without disrupting development and then running it again for the default instance.

2.3   Legacy Migration License Key

In order to use the Turnover Migration tool, a valid license for the Legacy Migration product must be applied on the development partition(s).

2.4   Loading Reference Information into Table MDDPRJI

If the Turnover Project elements aren't used, but rather only Reference IDs are used, then basic information for each Reference ID needs to be loaded into file MDCMS/MDDPRJI prior to migrating the data (menu option 21). The following columns are defined in MDDPRJI:

Field	Def	Description	Mandatory
MMPROJ	CHAR(12)	Reference ID	Yes
MMAGP	CHAR(4)	Application	No
MMREL	PACKED(2)	Release	No
MMVER	PACKED(2)	Version	No
MMSTS	CHAR(1)	Status. If granulated status not available, use 3 for active and 7 for closed	Yes
MMDSC	CHAR(80)	Reference Short Description or Title	Yes
MMUSER	CHAR(10)	User ID of requester	Yes
MMODAT	PACKED(8)	Open date	Yes
MMOTIM	PACKED(8)	Open time	Yes
MMEDAT	PACKED(8)	Expected completion date	No
MMCDAT	PACKED(8)	Close date	Yes, if closed
MMCTIM	PACKED(8)	Close time	Yes, if closed

If unable to extract reference information from the tool used to track project information, this table can be loaded directly from Turnover Form information with the following SQL statements:

Step 1: Load projects with status "work in progress" from active forms

```
insert into MDCMS/MDDPRJI
select a.fref#, a.fappcd, a.frel, a.fver, '3', a.fdesc, a.fpgmr,
a.fentdt, a.fenttm, 0, 0, 0 from (
select b.*, row_number() over(partition by b.fref#) as rn
from <SOFTTURN_DATA_LIBRARY>/TFORM as b where b.fref# > ' '
and b.fsts = '1'  and b.fref# not in
(select mmproj from  MDCMS/MDDPRJI)
order by b.fentdt, b.fenttm) as a where a.rn = 1
```

Step 2: Load projects with status "closed" from completed forms

```
insert into MDCMS/MDDPRJI
select a.fref#, a.fappcd, a.frel, a.fver, '7', a.fdesc, a.fpgmr,
a.fentdt, a.fenttm, a.fenddt, a.fenddt, a.fendtm from (
select b.*, row_number() over(partition by b.fref#) as rn
from <SOFTTURN_DATA_LIBRARY>/TFORM as b where b.fref# > ' '
and b.fsts <> '1' and b.fenddt > 0 and b.fref# not in
(select mmproj from  MDCMS/MDDPRJI)
order by b.fenddt desc, b.fendtm desc) as a where a.rn = 1
```

Note: Using the data from the forms may result in missing reference information for Reference IDs in checkout records that aren't yet on a Form. After the migration is complete, use the following SQL to list the missing Reference IDs and then use MDCMS to add those IDs as Projects:

```
select distinct mdproj from MDCMS/MDDCMSDM where mdproj not in
(select mmproj from MDCMS/MDDCMSM) order by mdproj
```

3   MDCMS Product Migration Menu (MDMIGTO)

A user with at least change authority to MDCMS and usage authority to Turnover should go to a command line using F21 from the MDCMS Main Menu.
From the command line, type command MDMIGTO and press Enter.

```
MDMIG00                          MD Dev                           26.01.24
SCRN1                   MDCMS Product Migration Menu               15:21:15
From Product: TURNOVER

              Opt Process Step
               1  General Settings              ok
               2  Build/Rebuild Mapping Data     ok
               3  Verify Applications            ok
               4  Verify Levels
               5  Verify Attributes
               6  Verify Project Status Codes
               7  Verify Custom Fields
               8  Verify Task Types
               9  Verify Task Resources
              10  Verify Project Phases

              20  Backup MDCMS
              21  Migrate Data
              22  Migrate Archived Source
              23  Migrate Requesters              31  Rollback Requesters
Selection:  __


F3=Exit    F6=Messages    F8=Submitted Jobs   F11=View Output    F21=Sys Command
```

Opt
The option number for a Migration Process Step. An option is only available if the prior step has been completed (ok).

Option 30 to Rollback MDCMS will display and can be used any time after option 20 to backup MDCMS has completed.

Options 23 and 31, are separate data sets and can be used any time after option 1 is complete.

3.1   General Settings

Parameter	Description
Product Programs Library	The library containing the Turnover Product programs – typically named SOFTTURN
Data Library	The library containing the Turnover Data – typically named SOFTTURND
Language Library	The library containing the Turnover Language-Specific objects – typically named SOFTTURNE
Default Minimum Date	The oldest date of completed or cancelled form data to be migrated. Active data is not filtered by this data. The default minimum date can be overridden by application.
Projects in Product DB	N – Projects were not used in Turnover, but rather only reference IDs. In this case, it is necessary to populate table MDCMS/MDDPRJI with the described columns for each reference ID, since MDCMS requires project information for activity. Y – The Turnover Project/Task/Subtask entities are used. In this case, MDCMS will map the entities directly from the Turnover Data Library.
Requester Based-On User	A user defined in MDSEC that will be used as the authorization template for any users that are migrated into MDSEC from the Turnover Requesters table (TPRJREQ).

3.2   Build/Rebuild Mapping Data

This process collects all necessary settings from Turnover, based on current and historical activity within that product. It then tries to map the settings from Turnover to the settings defined in MDCMS. If, during the verification of the mapping, you find that additional settings need to be added to MDCMS, you can rebuild the Mapping Data. All manually set mappings are left in place when a rebuild occurs.

3.3 Verify Applications

Parameter	Description
Option	M – Migrate all (active and historical) object requests that were for the application A – Migrate only active object requests for the application H – Migrate only historical object requests for the application O – Omit the migration of all object requests for the application The requests can be further restricted by level and attribute
Appl	The Application code in Turnover
Rn	The Release number in Turnover
Vn	The Version number in Turnover
Description	The Turnover Description of the Application code
MDCMS Appl	The Application code to be used in MDCMS – must be valid for active requests Press F4 to select from a list of valid values
Act Usage	Y – Active Requests exist in Turnover for the Application/Release/Version
Hst Usage	Y – Historical Requests exist in Turnover for the Application/Release/Version
Minimum Date	*DFT – the earliest date for historical data is based on the date defined in the General Settings Otherwise, enter the minumum date for the Application/Release/Version. Any completed or cancelled form that is older than the minimum date will not be migrated.

3.4   Verify Levels

Parameter	Description
Option	M – Migrate all (active and historical) object requests that were for the application level
	A – Migrate only active object requests for the application level
	H – Migrate only historical object requests for the application level
	O – Omit the migration of all object requests for the application level
	The requests cannot be less restricted for a level than for the level's application
	The requests can be further restricted by attribute
Appl	The Application code in Turnover
Rn	The Release number in Turnover
Vn	The Version number in Turnover
Lvl	The Level number in Turnover
Description	The Turnover Description of the Application Level
MDCMS Appl	The Application code to be used in MDCMS
MDCMS Lvl	The Application Level number to be used in MDCMS – must be valid for active requests
	Press F4 to select from a list of valid values
Act Usage	Y – Active Requests exist in Turnover for the Application Level
Hst Usage	Y – Historical Requests exist in Turnover for the Application Level

3.5   Verify Attributes

Parameter	Description
Option	M – Migrate all (active and historical) object requests that were for the attribute A – Migrate only active object requests for the attribute H – Migrate only historical object requests for the attribute O – Omit the migration of all object requests for the attribute The requests cannot be less restricted for an attribute than for the attribute's level
Appl	The Application code in Turnover
Rn	The Release number in Turnover
Vn	The Version number in Turnover
Lvl	The Level number in Turnover
Type	The Object Type in Turnover
Attribute	The Type Code in Turnover Press F8 to view the target libraries and last usage of the Type Code
MDCMS Appl	The Application code to be used in MDCMS
MDCMS Lvl	The Application Level number to be used in MDCMS
MDCMS Type	The Object Type in MDCMS
MDCMS Attribute	The Attribute Code to be used in MDCMS – must be valid for active requests Press F4 to select from a list of valid values Press F7 on a row containing a modified valid MDCMS attribute value to repeat that value for every row after that row with the same Turnover Type Code
Act Usage	Y – Active Requests exist in Turnover for the Attribute
Hst Usage	Y – Historical Requests exist in Turnover for the Attribute

3.6   Verify Project Status Codes

Parameter	Description
Option	M – Migrate all Projects and Tasks with the current Status O – Omit the migration of all Projects and Tasks with the current Status
Sts	The Project Status code in Turnover
Description	The Turnover Description of the Status code
Allow Set End Date	Indicating if the Turnover Status is for ending a Project or Task
MDCMS Sts	The MDCMS Status Code to be used. MDCMS comes with a predefined set of Status Codes – MDWorkflow can be used to add additional codes to MDCMS Press F4 to select from a list of valid values

3.7 Verify Custom Fields

Parameter	Description
Option	M – Migrate Custom Task field to MDCMS O – Omit the migration of Custom Task field – the tasks themselves are still migrated
Field	The Custom Field name in Turnover
Description	The Turnover Description of the Custom Field
MDCMS Sts	The MDCMS Custom Field to be used. MDWorkflow can be used to define and use Custom Fields for Projects, Tasks and Subtasks. Press F4 to select from a list of valid values

3.8 Verify Task Type Codes

Parameter	Description
Option	M – Migrate all Tasks with the current Task Type O – Omit the migration of all Tasks with the current Task Type
Type	The Task Type code in Turnover
Description	The Turnover Description of the Task Type code
MDCMS Type	The MDCMS Task Type Code to be used. Press F4 to select from a list of valid values

3.9 Verify Task Resources

Parameter	Description
Option	M – Migrate Resource H – Migrate the Resource for closed tasks and Omit the resource for open tasks – the tasks themselves are still migrated. O – Omit the migration of Resource – the tasks themselves are still migrated
Resource	The Resource code in Turnover
Description	The Turnover Description of the Resource code
MDCMS Assigned to Group	The MDCMS Group assigned to carry out a Project or Task. May be blank, if the Resource refers to a specific person Press F4 to select from a list of valid values
MDCMS Assigned to User	The MDCMS User assigned to carry out a Project or Task. May be blank, if the Resource refers to an entire Group. If the Group and User are entered, the user must be a member of the Group. Press F4 to select from a list of valid values

3.10 Verify Project Phases

Parameter	Description
Option	M – Migrate Phase O – Omit the migration of the Phase – any Time Entry records for the Phase will also be omitted.
Category	The Project Category code in Turnover
Description	The Turnover Description of the Project Category code
MDCMS Phase	The MDCMS Phase used to describe the project phase for which a time entry record is booked. Press F4 to select from a list of valid values

3.11 Backup MDCMS

Once all Data Mapping elements have been verified, it is time for the migration itself.

The backup creates copies of the MDCMS files that are updated by the migration process.

IMPORTANT – do not begin with this step until all users have ceased activity within MDCMS, MDOpen, and MDWorkflow. It is ok to continue using MDXREF. If a rollback of the migration is necessary, the image of MDCMS will be based on the backup created with this step and all activity performed after the backup will be erased.

3.12 Migrate Data

The Data in Turnover is mapped to MDCMS. This step typically takes less than 10 minutes to complete.

Upon completion, it is recommended to view the Projects, Tasks, Subtasks, RFPs and Objects in MDCMS or MDWorkflow to verify that the data is mapped as intended.

If the verification shows issues in the mapping settings, or if an exception occurred during migration, use option 30 to roll back MDCMS to the state it was in when backed up.

3.13 Migrate Archived Source

The historical source is moved from the Turnover Offline Libraries to the MDCMS source archive and the Object History is updated to reflect the existence of the source archives for retrieval, comparison and rollback capabilities. The number of generations migrated for any given source member depends on the MDCMS settings for the given Application Level. If the level is not defined in MDCMS (historical only), then the 30 newest generations will be saved.

This step typically takes less than 1 hour to complete. If this process ends abnormally for some reason prior to completion, it can be restarted and will automatically continue where it had left off.

3.14 Rollback MDCMS

If issues are found with the migration, or if an exception occurred during migration, use option 30 to roll back MDCMS to the state it was in when backed up. All activity that occurred since the backup will be lost.

3.15 Migrate Requesters

Users that are defined as Project Requesters in Turnover can be migrated into MDSEC which can be useful to grant those users access to the MDWorkflow app.

First create a user in MDSEC that will serve as the authorization template for any migrated users. Then, in General Settings, set the value of parameter Requester Based-On User to that user.

When the Requester Migration occurs, any Project Requesters that don't already exist in MDSEC will be added to it and authorities to the MDChange family of products will be granted based on the template user.

3.16 Rollback Requesters

If issues are found with the migration of requesters, option 31 can be used to roll back all migrations that have occurred. Users that were added outside of the Turnover migration will not be affected.

3.17 Reset Migration Process

If, for some reason (such as migrating from multiple instances of Turnover), you would like clear out all previously entered information and completely restart the Migration Process from the first step, take the following steps:

1) Go to a command line from within MDCMS using F21
2) Enter command CLRPFM MDDMIGM
3) Enter command CHGDTAARA DTAARA(MDMIGSTEP *ALL) VALUE(0)