User Manual

MDCMS Express Help

Change and Distribution Management from Midrange Dynamics

Version 7.4

MDCMS Express Help - Table of Contents

1 MDCMS overview

MDCMS is a tool that runs directly on the IBM i (iSeries, AS/400) to handle the modification and distribution of objects.

The life cycle for object modification/distribution is as follows:

1. The objects are requested for modification from the application's test environment. The source code is then copied to the programmer's library.

2. The modifications are made to the source code within the programmer's library.

<div align="center">Or</div>

1. The objects are requested for migration from a delivered library.

2. Any modifications are made within the delivered library.

3. MDCMS compiles the source code and installs the source code/objects into the test environment. The prior source code or objects are archived.

4. If higher-level environments exist on the system, the modification requests are automatically generated.

5. Once testing is complete, the source code and/or objects are installed into the next environment.

6. If working with multiple iSeries machines or partitions, the modification package can be distributed to those systems.

7. The modification package is received on the remote system and installed into the application environments.

2 Starting MDCMS

2.1   From a command line, type MDCMS and press Enter. If there are multiple instances of MDCMS an Environment ID parameter must be passed to the MDCMS command.

3 Request an object for modification

3.1   Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.

3.2   Position cursor to a blank detail line and enter option M (Modify Object) in the Opt field. If the object does not yet exist in the installation library, use option N (New Object). If an existing object is to be deleted, use option D (Delete Object). If an existing object should only be recompiled, use option R (Recompile Object).

3.3   Enter the name of the object in the Object field or press F4 to select the object from a list. Before pressing F4, some, or all, of the Object name may be entered to quickly position to that name in the list.

3.4   Enter the name of the MDCMS attribute for the object or press F4 to select the attribute from a list. If the object has previously been installed via MDCMS, the attribute may be left blank and MDCMS will enter the value automatically.

3.5   Enter the Application code in the Appl field or press F4 to select from list. If the correct application code is entered as the default value in the Appl Group parameter at the top of the panel, the field may be left blank and MDCMS will enter the value automatically.

3.6   Enter the Project ID in the Project field or press F4 to create or select 1 or more Projects, Tasks, or Subtasks. A Project, Task or Subtask may be used as often as needed until the project has been closed. If the correct Project, Task and Subtask value is entered as the default value at the top of the screen, the field may be left blank and MDCMS will enter the value automatically. **Note:** An Object Request may be performed without a Project, Task or Subtask value. However, an Installation is not allowed until every Object is assigned to a Project, Task or Subtask.

3.7   Press Enter. If required, a confirmation screen will be displayed where the programmer library name or from library can be modified. Press Enter. The source will be copied from the application library into the programmer library that was specified, where it can be modified and unit tested by the programmer. Modifications should never be made to source directly in the installation library.

3.8   Enter an S for Source Entry Utility (SEU) in the Opt field to modify the source member directly in the programmer library, or enter P to enter the Programming Development Manager (PDM) for the source member.

3.9   Each MDCMS attribute will already have a default compilation command defined for it, if applicable. If your object requires special compilation handling or other special Pre or Post install-time commands, enter option C (commands) in the Opt field. Add any commands necessary or copy commands that had been used in the past to reactivate them for this modification.

4 Migrate objects from a delivered library

If objects are delivered to your system from a vendor, and they require that they be deployed to your production application, those objects may be quickly requested for migration.

4.1 Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.

4.2 Position cursor to a blank detail line and enter option L (Library Migration) in the Opt field.

4.3 Enter the name of the Library in the Object field or press F4 to select the library from list of all user libraries. Before pressing F4, some, or all, of the Library name may be entered to quickly position to that name in the list. To select IFS Objects from a directory, enter a "/" followed by a full or partial directory name or place a "/" at the beginning of the Object field to view a list of all directories.

4.4 Enter the Application code in the Appl field or press F4 to select from list. If the correct application code is entered as the default value in the Appl Group parameter at the top of the panel, the field may be left blank and MDCMS will enter the value automatically.

4.5 Enter the Project ID in the Project field or press F4 to create or select 1 or more Projects, Tasks, or Subtasks. A Project, Task or Subtask may be used as often as needed until the project has been closed. If the correct Project ID is entered as the default value in the Project, Task/Subtask field at the top of the panel, the field may be left blank and MDCMS will enter the value automatically. **Note:** An Object Request may be performed without a Project, Task or Subtask value. However, an Installation is not allowed until every Object is assigned to a Project.

4.6 Press Enter. All objects in the Library will be displayed. The filters at the top of the panel can be used to limit the objects to work with. Enter option M (Migrate) before each object that is to be migrated. F13 may be used to repeat the option from the last entered M until the end of the list. Enter option S (Source Members) before source files to migrate and compile source.

4.7 MDCMS makes a best guess as to what the MDCMS attribute for each Object should be. If a different attribute should be used, enter it in the attribute field or press F4 to select the attribute from a list. F14 may be used to repeat the attribute from where the cursor is positioned until the end of the list for each object with the same object type.

4.8 Press Enter to request each selected Object for migration. If an Object is flagged as already being reserved, option 5 (view request details) may be entered to get more information about the request.

5 Assign objects to a Promotion Package

Each requested object has an RFP status and RFP number field. If the status is 00, then the object is not yet assigned to an RFP (promotion package). Otherwise, the object is assigned and the RFP is displayed. The RFP is a number used to identify the package and is used only once on a system. There is no limit to the number of objects in a package. The only restriction is that all of the objects must exist in the same ASP(Auxiliary Storage Pool).

5.1 Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.

5.2 **Assign individual objects:** Enter an A in the Opt field for each object to be assigned an RFP number and press Enter. For each object, you will be prompted to select the appropriate RFP from a list. To create a new RFP, press F6=Add on the Request For Promotion Number Listing panel. Select an RFP from the list and press Enter.

5.3 **Assign an RFP to a group of objects:** Press F9 (RFP Control) from the Object Manager panel. On the Request For Promotion Number Listing panel select or create the appropriate RFP from a list. To create a new RFP, press F6. After selecting an RFP and Enter is pressed the RFP number will be returned to the Assign RFP field in Object Manager. Then, press F10 (Assign RFP) and the RFP number will be automatically assigned to all open objects in the list with a matching application and level.

6 Include related objects in Promotion Package

If the MDXREF database has been created for the application, some or all related objects can be requested to be included in installation. For example, if a physical file is modified, all logical files and programs that use the physical file may be requested for modification or recompilation. Or, if the parameters for a program are modified, all programs, commands, menus, etc. that call the program may also be requested for modification.

6.1 Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.

6.2 Enter option I (Include Related Objects) in the Opt field before the requested object and press Enter.

6.3 A list of all related objects is displayed. Enter an M in the Opt field before each object to request the object for modification, an R for each object that only requires a recompile, or a D for each object that needs to be deleted. Press F13 if the same option should be repeated until the end of the list.

6.4 MDCMS makes a best guess as to what the MDCMS attribute for each Object should be. If a different attribute should be used, enter it in the attribute field or press F4 to select the attribute from a list. F14 may be used to repeat the attribute from where the cursor is positioned until the end of the list for each object with the same object type.

6.5 After all options and attributes are entered, press Enter.

6.6   For objects selected for modification, a confirmation screen will be displayed where the library information may be changed. Enter any necessary changes and press Enter. If an Object is flagged as already being reserved, option 5 (view request details) may be entered to get more information about the request. After returning to the Object Manager panel, Press F5 to refresh the listing.

7   Remove objects from a Promotion Package

7.1   Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.

7.2   **Remove individual objects:** Enter an R (remove object from RFP) in the Opt field for each object to be removed from a RFP promotion package and press Enter. A confirmation screen will be displayed, press Enter is confirm.

7.3   **Remove all assigned objects from RFP:** Press F9 (RFP Control). Enter 7 (reset). Press Enter and all Object Requests will be removed from the RFP. A confirmation screen will appear where the user has the option to return all requests to status 00 or to cancel the requests entirely.

8   Cancel the modification of an object

8.1   Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.

8.2   Enter a 4 (Delete request) in the Opt field for each object that should no longer be reserved in MDCMS and press Enter. A confirmation screen will be displayed. If the request is at the lowest level on a machine, you may choose to also delete the source and object from the programmer library. Press Enter.

9   Compile a Promotion Package

9.1   Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter.
        Or, Select option 3 (RFP Manager) from the MDCMS Main Menu and Press Enter.

9.2   Press F7 (Submit RFP).

9.3   Select the desired RFP from the list with option 1=Submit and press Enter.

9.4   The Submit Confirmation and Override panel is displayed where a submission date and time can be entered and the Job Queue parameters can be overridden. Press Enter to submit the RFP.

9.5   A message from MDCMS as to whether or not the **COMPILE run** process of the RFP job could complete successfully will be issued. If an error occurred, the message will briefly state the reason. Detailed error analysis can be performed by working with the submitted job (F8=Submitted Jobs from the MDCMS Main Menu or from the Object Manager) and viewing the spooled files for the compilations and job log.

9.6   If automatic approval and installation is allowed for the promotion level, the objects will be directly installed into the application environment libraries.

10 Approve a Promotion Package

This step is only required for application promotion levels that have the Automatic RFP Approval option set to "N" for promotions.

10.1	Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter. Then, press F9=RFP Manager Or, Select option 3 (RFP Manager) from the MDCMS Main Menu and Press Enter.
10.2	If not in Approve mode, press F8=Approve
10.3	Select the desired RFP from the list with option 1=Approve and press Enter.

11 Install a Promotion Package

This step is only required for application promotion levels that have the Automatic RFP Install option set to "N" for promotions.

11.1	Select option 2 (Object Manager) from the MDCMS Main Menu and press Enter. Then, press F9=RFP Manager Or, Select option 3 (RFP Manager) from the MDCMS Main Menu and Press Enter.
11.2	If not in Install mode, press F9=Install
11.3	Select the desired RFP from the list with option 1=Install and press Enter.
11.4	The Submit Confirmation and Override panel is displayed where a submission date and time can be entered and the Job Queue parameters can be overridden. Press Enter to submit the RFP.

12 Send a Promotion Package to remote system

This step is only required for application promotion levels that have the Automatic RFP Send option set to "N" for promotions.

12.1	Select option 8 (Send Promotion to Remote System) from the MDCMS Main Menu and press Enter.
12.2	If necessary, use option O to add or remove Objects in the Promotion Package.
12.3	Enter option 1 (Send) for the RFP and press Enter. Review parameters in the Send Promotion to Remote System panel and press Enter.
12.4	If a RFP is to be sent, but is not in the list, press F6 (add). Enter the application, level, and RFP number or press F4 to select from list. Press Enter. Now, the RFP will also be in the list. Repeat prior step.
12.5	A message from MDCMS as to whether or not the send could complete successfully will be issued.

13 Receive a Promotion Package from remote system

This step is only required for application promotion levels that have the Automatic RFP Receive option set to "N" for promotions.

13.1 Select option 9 (Receive Promotion from Remote System) from the MDCMS Main Menu and press Enter.

13.2 Ensure that the Transmitted flag is set to the correct value (1 for SNA, 2 for FTP/GoAnywhere, 3 for Tape, or 4 for Optical Device). For SNA transmissions, ensure that the Netfile user is the same user that was entered on the sending machine. If the promotions will continue onto other machines, the Forward flag should be set to Y. Otherwise, the Forward flag should be set to N.

13.3 Press F4 to select a promotion package. Select a package with option 1 and press Enter.

13.4 A message from MDCMS as to whether or not the receipt could complete successfully will be issued. A report will be generated by MDCMS if any objects could not be requested or if dependant objects are missing in the RFP for received files.

14 Roll Back a Promotion Package

Rolling back some or all of the objects in an RFP is only possible if archiving is activated for the application level.

14.1 Select option 4 (RFP History) from the MDCMS Main Menu and press Enter.

14.2 Enter option R (Rollback) for the RFP and press Enter.

14.3 A screen will appear which lists all objects that were on the RFP. Place a 1 before each object to roll back individual objects or press F13 to select all objects in the list. Press Enter.

14.4 The Submit Confirmation and Override panel is displayed where a submission date and time can be entered and the Job Queue parameters can be overridden. Press Enter to submit the RFP to rollback the objects.

The new RFP generated from this process will delete any new objects, restore any deleted objects, and return all modified objects to their previous versions. The additional steps for the Compile, Approval, Installation, Sending and Receiving of an RFP can be found in Section 9.5 of this document.