FORTRA

Halcyon HA-MX Monitor 15.0

Installation Guide

Installation

The following content covers an installation of Halcyon HA-MX Monitor.

Before You Begin

Please read this section before you install Halcyon HA-MX Monitor.

License Keys

In order to use HA-MX Monitor you will need a valid license key.

This can be obtained by sending an HA-MX Monitor license key request to keys@fortra.com.

Important Installation Notes

- The user profile used for installation must have *SECOFR class authority or greater. Additionally, the profile must also have *SECADM, *ALLOBJ and *AUDIT authority in order for the installation to complete successfully.
- To avoid potential conflict when installing Halcyon HA-MX Monitor please search the library list for library DBU10. If found, please remove it from the library list prior to install.
- You must also be enrolled in the System Distribution Directory in order to install the software.
- Please ensure that system value QALWOBJRST is set to *ALL prior to starting and for the duration of the installation otherwise the installation process fails. Once the installation is complete, QALWOBJRST can be reset to its previous value.

System Requirements

Halcyon HA-MX Monitor requires the following:

- A minimum of IBM i Release 7.2

Installation options

HA-MX Monitor can be installed from:

- A remote device such as a CD or DVD Drive
- Installation files held on a file server

> **NOTE:** This documentation provides instructions on how to install from a remote device and not how to copy the files to a CD/DVD or file server.

Installing HA-MX Monitor

Follow these instructions to install Halcyon HA-MX Monitor.

Downloading the software

1. Download the latest version of HA-MX Monitor from the website.
   https://support.fortra.com/ha-mx-monitor/downloads

> NOTE: You must have previously registered with the website and been accepted as a genuine user in order to download software.

2. Depending on your browser, you may be able to access the download direct from the toolbar. If this is not possible, navigate to the directory path to where you downloaded Halcyon HA-MX Monitor software.

> NOTE: Please refer to your browser documentation for assistance with this option.

Copying HA-MX Monitor to the IBM i

1. Double-click **HalcyonSolution.exe** to begin the installation. Ignore any publisher verification warnings and click **Run** to continue.

2. Click **Next** to continue and display the End User License Agreement (EULA). In order to proceed with the installation, the terms of the EULA must be accepted.

3. Once you have scrolled through and read the full license agreement click **Accept** to open the IBM i Components dialog. This display allows you to select the product that you want to install. Select **HA-MX Monitor** and click **Next** to continue.

4. Select the manuals that you want to install (if any) from those listed. (Click **Select All** to install all the manuals listed). Select the **Destination Path** to where you want to save the manuals if you do not want to keep the default path. Click **Next** to continue.

5. Enter the **Host Name/IP Address** for the IBM i onto which HA-MX Monitor is to be installed.

6. Enter the **User Profile** under which the installation is to be actioned.

> IMPORTANT: The user profile must have *SECOFR class authority or greater. Additionally, the profile must also have *SECADM, *ALLOBJ and *AUDIT authority in order for the installation to complete successfully.

7. Enter the **Password** associated with the selected user profile.

8. Unless instructed otherwise, leave the **FTP Port** setting as **21**.

9. Leave the **Verify Connection To Host** setting enabled to ensure that a valid connection is made to the host machine prior to the installation.

10. If using FTPS (FTP-SSL) for the installation, click the **Use FTP Secure** option, confirming whether or not you want to ignore any connection errors.

11. Click **Next** to continue. A summary of the choices made for installation is displayed, in order that they can be reviewed prior to the installation being performed.

> TIP: Use **Back** (available on all dialogs except the Welcome dialog) to revisit any point where you want to amend the current settings.

12. When you are satisfied with the installation options that you have selected, click **Install** to begin the installation process, the progress of which is displayed on the Installation Progress dialog.

13. Click **Finish** to complete this part of the installation process.

Installing HA-MX Monitor on the IBM i

1. Log on to the system onto which the HA-MX Monitor software was copied.

2. From the Command line type: **HALINST/INSTALL**

3. Press **F4** to specify parameters specific to the type of installation option chosen. The following device options are available:

    - ***DIR** Specifies that the installation files are in a directory. Specify the directory path using the **Save File Directory** (DIR) parameter

    - ***FTP** Specifies that the installation files are in a library on a remote system. A valid user ID and password are required for this option

    - ***LIB** Specifies that the installation files are in a library. Specify the library name using the **Save File Library** (LIB) parameter

    - ***OPT** Specifies that the installation files are on a CD inserted in an optical drive on this system

    - ***RMTOPT** Specifies that the installation files are on a CD inserted on an optical drive on a remote IBM i. Specify the remote system using the Remote System (RMTSYS) parameter

Save File Directory (*DIR) option

When Device (*DIR) is selected, this parameter specifies the path of the directory that contains the installation files.

1. Select Device as ***DIR**.

2. Enter the name of the directory that contains the installation files.

3. From within the Products parameter, use ***SELECT** to install with prompts, allowing you to control the installation. *UPGRADE can be used to upgrade an existing installation without further intervention.

4. If required, specify **Product Setup** options. ***CTLEXTPNT** causes the install to remove any registered Primary Exit Point handlers, as shown within 'Work with Exit Point Handlers' (WRKEXTHDL), before the install is performed. The Primary Exit Point handlers are then re-registered against the relevant Exit Points after the install is complete. ***MIGDSKBLD** causes Halcyon Disk Space Manager setup (if in use), to automatically migrate all available builds from the previous release during an upgrade.

5. Specify the product language to use. The default (*DFT) setting is English.

> NOTE: If you select a language that is not supported by all products, English is used as the substitute language in the non-supported products. To determine which products support which languages, use PRODUCTS(*SELECT).

6. Determine whether to notify a user on the local system of any completion and error messages. If PRODUCTS(*SELECT) is specified and **F19=Submit to batch** is used, messages are sent to the user who is running this command. Otherwise, messages are not sent.

7. Press Enter to open the Product Installation display from where you can specify the Environment to which the installation is actioned.

File Transfer Protocol (*FTP) option

When Device(*FTP) is selected, this parameter specifies the path of the library that contains the installation files.

1. Select Device as ***FTP**.

2. Enter the name of the remote system which can either be a TCP/IP host name or a SNA LU 6.2 name.

3. If required, enter the name of the backup system which can either be a TCP/IP host name or a SNA LU 6.2 name. The backup system is used if INSTALL is not able to access the save file library for any reason, typically because the remote system cannot be reached.

> NOTE: All other parameters apply to both systems, therefore the user id, password and save file library must be the same on each system.

4. Enter the User ID required to access the Remote System (use ***CURRENT** to keep the details of the user ID that is being used for the current session).

5. Enter the **Remote Password** associated with the entered user ID. Note that the entry in this parameter is hidden.

6. Configure the **Port** setting to be used for the FTP connection.

   - ***DFT** The default setting uses port 21
   - ***SECURE** Port 990 is used. This port is reserved for secure FTP servers which use Transport Layer Security (TLS) or Secure Sockets Layer (SSL) protocols to encrypt data
   - **1 - 65535** Specify a port number for the FTP connection

7. Specify the type of **Secure connection** used to protect the data (including User ID and password) during the file transfer.

   - ***DFT** Defaults to *NONE, unless *SECURE is specified in the Port parameter
   - ***NONE** No encryption is used when connecting to the FTP Server
   - ***SSL** The connection to the FTP Server is made and a SSL/TLS session is requested. If this type of session is not supported, the connection is closed
   - ***IMPLICIT** Both this and the target system must be running i5/OS v5R3 or higher. The connection is attempted using SSL/TLS. The session is closed if the server does not support this type of connection

8. Specify the type of **Data protection** to be used during the file transfer.

   - ***DFT** Defaults to *PRIVATE if the Secure Connection parameter specifies a secure connection, otherwise it defaults to *CLEAR
   - ***PRIVATE** Data is encrypted during transmission. This option is only available if *SSL or *IMPLICIT is specified as the Secure Connection
   - ***CLEAR** Data is not encrypted during transmission regardless of the Secure Connection parameter setting. Both this and the target system must be running i5/OS v5R3 or higher

9. In the **Save File Library** parameter enter the name of the library that contains the installation files.

10. From within the Products parameter, use ***SELECT** to install with prompts, allowing you to control the installation or *UPGRADE to complete the installation without further intervention.

11. If required, specify **Product Setup** options. ***CTLEXTPNT** causes the install to remove any registered Primary Exit Point handlers, as shown within 'Work with Exit Point Handlers' (`WRKEXTHDL`), before the install is performed. The Primary Exit Point handlers are then re-registered against the relevant Exit Points after the install is complete. ***MIGDSKBLD** causes Halcyon Disk Space Manager setup (if in use), to automatically migrate all available builds from the previous release during an upgrade.

12. Specify the product language to use. The default (*DFT) setting is English.

> **NOTE:** If you select a language that is not supported by all products, English is used as the substitute language in the non-supported products. To determine which products support which languages, use PRODUCTS(*SELECT).
>
> If you set the 'Language option' parameter to 'JPN' then system default `HAL/SYSCCSID` is automatically set to a value of 5026.

13. Determine whether to notify a user on the local system of any completion and error messages. If PRODUCTS(*SELECT) is specified and **F19=Submit to batch** is used, messages are sent to the user who is running this command. Otherwise, messages are not sent.

14. Press Enter to open the Product Installation display from where you can specify the Environment to which the installation is actioned.

> **NOTE:** An *FTP upgrade transfers the INSTALL file from the remote system library specified and uses it to compare PTF levels for the remote system library to the environment to be upgraded. Only FTP save files for Products that require upgrading are transferred. This does not work unless the HALINST library on the source and destination machines are at the same PTF Level.

Save File Library (*LIB) option

When Device (*LIB) is selected, this parameter specifies the name of the library that contains the installation files.

1. Select Device as ***LIB**.

2. In the **Save File Library** parameter, enter the name of the library that contains the installation files.

3. From within the Products parameter, use ***SELECT** to install with prompts, allowing you to control the installation. *UPGRADE can be used to upgrade an existing installation without further intervention.

4. If required, specify **Product Setup** options. ***CTLEXTPNT** causes the install to remove any registered Primary Exit Point handlers, as shown within 'Work with Exit Point Handlers' (`WRKEXTHDL`), before the install is performed. The Primary Exit Point handlers are then re-registered against the relevant Exit Points after the install is complete. ***MIGDSKBLD** causes Halcyon Disk Space Manager setup (if in use), to automatically migrate all available builds from the previous release during an upgrade.

5. Specify the product language to use. The default (*DFT) setting is English.

> NOTE: If you select a language that is not supported by all products, English is used as the substitute language in the non-supported products. To determine which products support which languages, use PRODUCTS(*SELECT).

6. Determine whether to notify a user on the local system of any completion and error messages. If PRODUCTS(*SELECT) is specified and **F19=Submit to batch** is used, messages are sent to the user who is running this command. Otherwise, messages are not sent.

7. Press Enter to open the Product Installation display from where you can specify the Environment to which the installation is actioned.

Local System (*OPT) option

When Device(*OPT) is selected, this parameter specifies the optical volume of the local system to use.

1. Select Device as ***OPT**.

2. Specify the volume as **HALCYON** unless instructed otherwise by Halcyon technical support staff.

3. From within the Products parameter, use ***SELECT** to install with prompts, allowing you to control the installation. *UPGRADE can be used to upgrade an existing installation without further intervention.

4. If required, specify **Product Setup** options. ***CTLEXTPNT** causes the install to remove any registered Primary Exit Point handlers, as shown within 'Work with Exit Point Handlers' (`WRKEXTHDL`), before the install is performed. The Primary Exit Point handlers are then re-registered against the relevant Exit Points after the install is complete. ***MIGDSKBLD** causes Halcyon Disk Space Manager setup (if in use), to automatically migrate all available builds from the previous release during an

upgrade.

5. Specify the product language to use. The default (*DFT) setting is English.

> NOTE: If you select a language that is not supported by all products, English is used as the substitute language in the non-supported products. To determine which products support which languages, use PRODUCTS(*SELECT).

6. Determine whether to notify a user on the local system of any completion and error messages. If PRODUCTS(*SELECT) is specified and **F19=Submit to batch** is used, messages are sent to the user who is running this command. Otherwise, messages are not sent.

7. Press Enter to open the Product Installation display from where you can specify the Environment to which the installation is actioned.

Remote System (*RMTOPT) option

When Device (*RMTOPT) is selected, this parameter specifies the remote system that has an optical drive loaded with an installation CD.

1. Select the Device as ***RMTOPT**.

2. Enter the name of the remote system which can either be a TCP/IP host name or an SNA LU 6.2 name.

3. Specify the volume as **HALCYON** unless instructed otherwise by Halcyon technical support staff.

> NOTE: To access the remote system INSTALL uses QFileSvr.400 file system. If the QFileSvr.400 file system does not contain an entry that matches the value specified for the RMTSYS parameter, INSTALL creates an entry and removes it upon completion.

4. From within the Products parameter, use ***SELECT** to install with prompts, allowing you to control the installation. *UPGRADE can be used to upgrade an existing installation without further intervention.

5. If required, specify **Product Setup** options. ***CTLEXTPNT** causes the install to remove any registered Primary Exit Point handlers, as shown within 'Work with Exit Point Handlers' (`WRKEXTHDL`), before the install is performed. The Primary Exit Point handlers are then re-registered against the relevant Exit Points after the install is complete. ***MIGDSKBLD** causes Halcyon Disk Space Manager setup (if in use), to automatically migrate all available builds from the previous release during an upgrade.

6. Specify the product language to use. The default (*DFT) setting is English.

> NOTE: If you select a language that is not supported by all products, English is used as the substitute language in the non-supported products. To determine which products support which languages, use PRODUCTS(*SELECT).

7. Determine whether to notify a user on the local system of any completion and error messages. If PRODUCTS(*SELECT) is specified and **F19=Submit to batch** is used, messages are sent to the user who is running this command. Otherwise, messages are not sent.

8. Press Enter to open the Product Installation display from where you can specify the Environment to which the installation is actioned.

Product Installation Display

The main installation display is now shown, from where you can enter the details of the environment onto which you want to install the software.

If present, the installation uses the default environment on your IBM i, otherwise the environment 'PROD' is used, leaving you free to complete the environment description.

Installation Display

This display shows all Halcyon products and product suites that have been previously installed or are ready to be installed.

> NOTE: The version and PTF level of the current products planned for installation are shown under the '**Available**' heading. Note that it is possible to both upgrade and downgrade the version and PTF level of the current software.

Halcyon Environments

Prior to installing HA-MX Monitor it is possible to specify the environment to which it is installed.

> **NOTE:** An Environment is an installation of Halcyon products. Multiple copies of Halcyon products can be installed on a system or partition and then run independently of each other. The two main uses for this are:
>
> Allows you to install and evaluate a new version of a Halcyon product in a test environment while still running the existing version in the production environment.
>
> A high availability solution offering both production and backup system, allows you to have separate production and backup environments on both systems, with the appropriate environment active on each machine depending on its current mode and the other dormant.

If no previous installations of Halcyon products or product suites have been undertaken on this IBM i, then the installation routine uses the default environment 'PROD'.

If Halcyon products or suites have been previously installed on this IBM i then the environment displayed is the last one to which an installation was undertaken, with both the '**Environment Name**' and '**Description**' parameters completed.

In either of the above cases, you may change both the '**Environment Name**' and '**Description**' parameters to suit the requirements of your installation.

> **TIP:** Use Change Environment Description (**CHGENVDSC**) to quickly change the description shown for the Halcyon Environment in which the command is run.

Installing HA-MX Monitor To A Specific Environment

The next step depends on the environment to which you are installing:

- If this installation is for the default 'PROD' environment, enter a **Description** for the environment and then go to step 1
- If this installation is for the same environment used for the last install of Halcyon products, leave the **Environment Name** and **Description** parameters as they are and go to Step 1
- If you want to create a new environment or use an environment that has previously been created but is not displayed, either over type the current parameters with the

new environment details or enter an existing **Environment Name** and **Description** and go to step 1

1. Select option **1=Install** against **HAL Halcyon Common Library** and **HMX Halcyon HA-MX Monitor**.

> NOTE: Only the individual products selected to install or upgrade are listed on this display.

2. Press Enter to confirm the installation.

   Further displays are shown during the installation process which prompt the user for input prior to continuing.

> NOTE: It is recommended that an interactive install is used for first time installations. If you want to update the PTF level of a product that has already been installed, use **F19=Submit to Batch** to automate the installation process.

The installation progress of each product is displayed on the next display using the following text color legend:

- **Green**: Pending installation
- **White**: Currently installing
- **Blue**: Installation completed

Once the installation is complete, all the products are displayed in blue text and the message **Installation Complete** is displayed at the bottom of this display.

After You Are Done

Congratulations! HA-MX Monitor is now installed. Read the following for additional information and your next steps.

Authorizing HA-MX Monitor

Once the installation is complete, you are prompted to enter a valid authorization code:

> NOTE: This display is the same regardless of whether a temporary or permanent code is being applied.

To obtain a license key for Halcyon HA-MX Monitor please email: keys@fortra.com.

1. Type your **Authorization Code**.
2. Leave the 'System' parameter set to ***LOCAL** and press Enter.
3. Once the authorization code has been entered, the Halcyon products secured by the code are displayed along with the expiry date.
4. Press Enter to exit this display and open the Change System Default display. This display allows you to set the default system user profile.

Setting the Default User Profile

The default value for the user profile is: QSYSOPR. If required, you may change this user for any other user profile on your system.

> NOTE: For any user profile that is defined, even if you use the system default value of QSYSOPR, you must set user permissions for Halcyon Products using **Configuration - Work with User Authority** option from the Halcyon main menu.

When using GSM terminals for SMS alerting *IOSYSCFG will also be required.

In addition you must manually use the following command to grant all authority to the QAUDJRN journal object:

QSYS/GRTOBJAUT OBJ(QSYS/QAUDJRN)

OBJTYPE(*JRN)

USER(QSYSOPR)

AUT(*ALL)

*If you are not using QSYSOPR then please specify the correct user profile.

Once the User Profile has been selected, press Enter to open the Work with Journal display.

Journaling

Journaling provides an audit trail across Halcyon products allowing you to see what actions have been undertaken at what times and by which users. This can assist you in fault-finding should any issues arise during use of Halcyon HA-MX Monitor.

1. Press **F20** to start journaling for this installation. If you do not want to start journaling at this point, press **<Enter>** to continue.

> NOTE: Journaling can be activated later from within the **Halcyon Utilities - Work with Journal** menu option.

2. Press <**Enter**> to confirm the start of journaling.

Launching HA-MX Monitor

When the software has been installed, display the main menu by entering the following command in the command line:

GO HALPROD (where PROD = the name of the environment entered on installation)

You do not need to add any libraries to your library list if you are using the software via menu options. If you execute any command directly via the command interface provided, you need to prefix the commands with the HRPPROD library name, (however there is still no need to add the library to your library list).

Contacting Fortra

Please contact Fortra for questions or to receive information about Halcyon HA-MX Monitor. You can contact us to receive technical bulletins, updates, program fixes, and other information via electronic mail, Internet, or fax.

Fortra Portal

For additional resources, or to contact Technical Support, visit the Fortra Support Portal at https://support.fortra.com.

For support issues, please provide the following:

- Gather and organize as much information as possible about the problem including job/error logs, screen shots or anything else to document the issue.