halcyon
Software Configuration, Implementation and Training Checklist

Quick Start Guide
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Halcyon Quick Start Guide

Introduction
The content of this document is recommended for reading by new customers of Halcyon monitoring and automation software. These instructions are intended as a guide for quick installation and minimal configuration. Where applicable, the appropriate product installation and user manuals should also be referenced. These can be All manuals can be downloaded at the same time as the Product Download.

The most commonly installed solution is Halcyon Level 2 – Systems Operations Suite so this is referenced in the download and install instructions contained within this guide.

Halcyon product minimum software and network requirements

• All Halcyon IBM i products require V7R1M0 or higher

Halcyon products requiring dedicated Windows Server 2012 R2 Standard or higher (physical or virtual):
  • Enterprise Server *
  • Network Server Suite *
  • Performance Analyzer
  • Disk Explorer

Halcyon products requiring additional Windows Server 2012 R2 Standard or higher (physical or virtual):
  • Advanced Reporting Suite (Data Warehouse)**

* These products require SQL Server 2012 Express to be installed manually prior to Halcyon installation or connection to an existing SQL Server
** Prerequisites can be found in the installation manuals for these products. These products require access to SQL Server 2012 or higher

Further reading
  • Advanced Reporting Suite Installation Guide

Network requirements

• For all Halcyon products, bi-directional communication is required on TCP port 15000 (including gateway access and reverse NAT where applicable)

Pre-requisites for installing Halcyon software (by operating platform)

IBM i
  • i/OS V7R1M0
  • User profile *SECOFR class authority or greater and enrolled in the system directory with special authorities *SECADM, *ALLOBJ & *AUDIT granted
  • System value QALWOBJRST set to *ALL (after install the original value can be restored)
  • 600MB disk space
  • TCP port 15000 available for Halcyon use
By default, QSYSOPR user profile is used to run the monitors. If not to be used an equivalent profile should be created (must have *IOSYSCFG, *JOBCTL & *SPLCTL special authorities).

The IBM PTF's shown below are required for the Halcyon products and should be installed and applied before installation of Halcyon (an IPL is not required). If installed after the monitors have been started, the monitors must be stopped and restarted.

**Job Queue Monitor**
- V7R1 - SI63584
- V7R2 - SI63526
- V7R3 - SI63525

**Message Monitor**
- V5R4 - SI38399
- V6R1 - SI38400
- V7R1 - SI38401

**Message Communicator**
- V7R1 - SI53118
- V7R2 - SI53166

**Output Queue Monitor / Spooled File Manager**
- V7R1 - SI43471

**Auto-upgrade Control Panel**
- V7R3 - SI60339

**Windows Server 2012 R2 Standard**
Windows 2012 (or above) server operating system pre-requisites are suitable for both the Network Server Suite and Enterprise Console (server) systems.
- Network Server Suite (NSS) or Enterprise Console (EntCon) Install:
  - Minimum 4GB (6GB RAM Recommended) RAM
  - 80GB Disk Space
- Enterprise Client Install
  - Minimum 2GB available disk space
- Static IP Address for device on which NSS/EntCon is installed
- TCP port 15000 opened bi-directionally for all systems that will communicate to NSS/EntCon
- Microsoft XML (MSXML) 4.0 Service Pack 3 or above

**Note:** A fresh install of .NET Framework 4.6 requires a reboot of the machine on which it is installed.
AIX
- AIX partition running library bos.rte.libpthreads at level 5.3.0.50 or higher
- User login root to install an rpm package
- TCP port 15000 available for Halcyon use

Linux
- Redhat Enterprise Linux Server V5 or higher
- SUSE Linux Enterprise Server V11 or higher
- openSUSE V11.2 or higher
- CentOS V5.3 or higher
- User login root to install an rpm package
- TCP port 15000 available for Halcyon use

Further reading
All of the following manuals can be downloaded from the HelpSystems Community Portal under the Halcyon brand:
- Halcyon Levels 1 to 4 Product Suite Installation Guides
- Network Server Suite Installation Guide
- Enterprise Console Installation Guide
- Installing SQL Express Editions Guide
- AIX Agent Installation Guide
- Linux Agent Installation Guide

Halcyon Implementation of Enterprise Console & IBM i Monitoring
Use the following instructions to install and configure monitoring of IBM i systems using the Enterprise Console.

Download and install Network Server Suite or Enterprise Console Server
1. Follow the Installing SQL Express Editions Guide to ensure that your version of SQL is configured correctly and is ready for connection by NSS or the EntCon.

Download the latest NSS or EntCon (server) product from: https://www.helpsystems.com/halcyon/halcyon-trial

2. Where applicable, ensure Windows User Account Control (UAC) is turned off before continuing.

3. Run the installer on the dedicated Windows server on which NSS/EntCon is to be installed.

4. During installation, when prompted, activate the SQL Server installation using the ‘halcyon’ login created.

Adding new IBM i Devices
1. Once the installation has successfully completed, go to START | Programs | Halcyon | Device Manager. Create a new device for each of the IBM i system(s) that you are adding for the new customer by using the Add icon.

   Note: Within the Add Device dialog, the ‘Name’ field must be the IBM i system name that is shown in the top right-hand corner of the IBM i sign-on screen. It is highly recommended that you create a new Device Group named ‘IBM i’ using the Device Groups icon and add each system under this group.
2. When you have added all the IBM i devices, close the Device Manager.

3. Add the new devices to your corporate Enterprise Console where applicable (see below)

**Licensing NSS/EntCon and Loading new devices**

1. Go to **START | Programs | Halcyon Enterprise Console | Server Options**. You are prompted to add the NSS/EntCon license code that has been sent to you.

2. Enter the code. Click **OK** and on the Enterprise Server Options dialog click **Apply** to confirm and save the settings.

3. Go to **START | Programs | Halcyon Enterprise Console | Enterprise Console** and log into the Enterprise Console using ‘Administrator’ with password ‘Administrator’.

4. You are prompted to change the current password. Change the password to something memorable (it can be reset later if you forget it).

5. With the Console open, select **Tools | Reload Devices**. When this action is complete, minimize the Enterprise Console application.

**Note:** Please refer to the Network Server Suite or Enterprise Console (server) Installation Guide for more detailed instructions if required.

**Download and Install Halcyon IBM i Product Suite**

1. Download the latest version of the Halcyon Product Suite from: [https://www.helpsystems.com/halcyon/halcyon-trial](https://www.helpsystems.com/halcyon/halcyon-trial)

2. Run the installer on a Windows system and when prompted enter the IBM i system hostname or IP address and QSECOFR logon details or equivalent.

3. Once installation from the Windows system has completed successfully, log-on to the IBM i and sign in as QSECOFR or equivalent.

4. Run command **HALINST/INSTALL** to begin the software installation.

5. On the first install screen ensure the ‘Environment’ field is populated with the word ‘PROD’ and provide the ‘Description’ as ‘Halcyon Production Environment’.

6. Select **LVL2** by using option 1 against this entry.

7. Press **<Enter>** to pass through the installation of the components.

8. Once installation has completed, you are prompted to enter the IBM i license code with which you have been provided. Enter this code and press **<Enter>**.

9. Select the user profile to use for running the Halcyon monitors. By default this is **QSYSOPR**. Change this if required.

10. Press **<Enter>** to continue.

11. The final screen requires confirmation of journaling for the Halcyon product itself. Press **<Enter>** to complete the installation.
Note: Please refer to the Level 2 – Systems Operations Suite Installation Guide for more detailed instructions if required.

Starting the Halcyon Communication Monitors
1. Use command GO HALCYON to access Halcyon Level 2 – Systems Operations

2. From the main menu, take option 3=Work with monitors.

3. Use option 1=Start against the following monitors and press <Enter> to start them:
   • HALACT Primary Action Monitor
   • HALRCV Network Receive Monitor
   • HALSND Network Send Monitor

4. Use F5 to refresh the screen and when the three monitors are showing as ‘Active’ press F3 to return to the main menu.

Product Verification and Connectivity
1. From the main menu take option 42=Configuration Menu.

2. From the Configuration menu take option 1=Work with Authorization Codes. Verify that the Halcyon license that you entered has been accepted as a valid code. Press F3 to exit.

3. Take option 2=Work with User Authority and check that the correct user authorities are set for this installation. Press F3 to exit.

4. Take option 4=Work with Remote Locations and check that the correct IP address has been obtained by Halcyon for communication between systems as shown in the *SYSTEM entry (if incorrect, use option 2=Change to edit the entry).

5. Return to the Windows server and maximize the Enterprise Console. Find the IBM i device in the bottom right hand pane of the Console and double click on this device. You should see the left-hand pane scroll button shorten as information is pulled back from the IBM i. Use the scroll bar to review the system information. Contained within the data you should see the current IBM i PTF level, software group and other relevant product information.

6. Back on the IBM i system, within the remote locations screen, use option 9=Test Comms against the Windows server entry to confirm connectivity and then use option 7=Rename to change the Remote Location name to ‘ENTCON’.

7. Now return to the IBM i and still within the Work with Remote Locations menu, refresh the screen to view the auto-entry.

Note: If you continue to experience issues with the creation of the device, there may be networking issues preventing the communication between the systems. Follow the Connectivity Troubleshooting section below before contacting technical support.

Connectivity Troubleshooting
1. On the Windows server use CMD to run command:

   telnet [IBM i address] 15000

   If the network path is open to the IBM i you should see the cursor jump to the top left of the screen while the rest of the screen remains black. Use CTL+] to exit out of telnet.
If telnet is not available, you receive a message instead and this needs to be investigated by a Network Administrator.

2. If the telnet check in step 1 responds correctly, return to the IBM i system and on the command line type:

```
CALL QCMD <ENTER>
TRACEROUTE (F4)
```

3. In the ‘Remote system’ field, type the hostname/IP address of the Windows server that is hosting the Enterprise Console to which you are trying to connect. Then:
   - Change the ‘Maximum Probe TTL Value’ from ‘30’ to ‘6’
   - Press F10 and then <Page down>
   - In the ‘Source IP Address’ field, enter the IP address of the IBM i system
   - In the ‘Base Remote Port’ field, enter 15000

4. Press <Enter> to run the trace route. The hops show you how the traffic is directed to the Halcyon Enterprise Console system.

5. Take a screenshot of the results once the command has completed.

6. Use F3 to exit back to the Halcyon Level 2 – Systems Operations Suite when testing is complete. **Note:** If the last hop is not the IP Address of the Enterprise Console system, a Network Administrator should review the connectivity.

7. If the connection between the IBM i and Enterprise Console is working, use Halcyon command SNDCONMSG (F4) to send a test message to the Enterprise Console.

8. On the Windows server hosting NSS/EntCon, check the firewall is not blocking bi-directional traffic on TCP port 15000

**Setting System Defaults**

1. From the IBM i Halcyon Level 2 – Systems Operations Suite Configuration menu, take option 7=Work with System Defaults.

2. Review the following specific entries  (suggested changes are shown in green):

<table>
<thead>
<tr>
<th>Entry</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAL ACKNSUSPTIME</td>
<td>0 (30)</td>
</tr>
<tr>
<td>HAL ACTLOGLIFE</td>
<td>7 (14)</td>
</tr>
<tr>
<td>HAL AUTOCLOSE</td>
<td>0 (7)</td>
</tr>
<tr>
<td>HAL ALTAUTOCLOSE</td>
<td>0 (7)</td>
</tr>
<tr>
<td>HAL CONLOGLIFE</td>
<td>*NONE (14)</td>
</tr>
<tr>
<td>HAL DFTPNALTCTION</td>
<td>*NONE (*CLOSE)</td>
</tr>
<tr>
<td>HAL DFTSUSPENDALT</td>
<td>*NONE (30)</td>
</tr>
<tr>
<td>HAL NETXFRMODE</td>
<td>*FTP (*NETMGR)</td>
</tr>
<tr>
<td>HAL TEMPCODEEXPWARN</td>
<td>30 (14)</td>
</tr>
<tr>
<td>HEM SPLSTRTIME</td>
<td>This is date/time stamped on install. To process older spooled files you need to manually update this</td>
</tr>
<tr>
<td>HMC EMAILFROMADDR</td>
<td>Set a valid from email address, such as <a href="mailto:halcyon.alerts@company.com">halcyon.alerts@company.com</a>. For 2-way email support this must be a mailbox created specifically for Halcyon processing</td>
</tr>
</tbody>
</table>
Setting the Action Schedule to Enterprise Console
1. Still within the Configuration menu, take option 10=Work with Action Schedules.

2. From within this display, take option 2=Change against the ‘AS1’ entry.

3. Press <Page Down> and in the ‘System’ field, type ENTCON and press <Enter> twice to complete and save the action schedule.

Reviewing and Releasing Halcyon Rules
1. Return to the Level 2 – Systems Operations Suite main menu and take option 5=Work with Rules.

2. Use F11 against each Rule Type, expanding any queues or groups within each type. (Use F13 to expand all at once).

3. Review all of the rules that are provided by Halcyon on installation. Use option 6=Release to release any rules that may be applicable for this installation.

Business Application Monitoring Templates
If you require specific monitoring for applications such as SAP, Infor M3 and JD Edwards, templates can be applied using the Halcyon CSTENV command. Specific codes may be available for your company and these are provided direct to you. Customization codes that can be used with the CSTENV command can be obtained by contacting halcyon.sales.admin@helpsystems.com.

Note: Individual Business Monitoring Template Guides can be found in the HelpSystems Community Portal under the Halcyon Brand.
Starting the remaining Monitors
Once the rules have been released, modified or created, the Halcyon monitors must be started.

1. From the Level 2 – Systems Operations Suite main menu, use option 3=Work with Monitors.

2. For any rules that have been released or created, use option 9=Supervise against the associated monitor to ensure that supervision is set. For any of the monitor rules that have not been applied, use option 3=Hold to hold the associated monitor.

   **Examples:**
   - Message Queue rules are managed by the **HMMMSG** Message Monitor
   - Performance rules are managed by the **HEMPFM** Performance Monitor

   **Note:** If you are unsure what monitors should be started, we recommend that you leave them all released.

3. To start the monitors, use command **HALPROD/STRMON** and press <Enter>.

   **Note:** From the Level 2 – Systems Operations Suite main menu, take option 41=Utilities, then option 12=Add/Remove Autostart Job Entry, type *ADD in the option field and then press <Enter> to apply.

   **Note:** To gracefully end Halcyon from monitoring for maintenance purposes, use command **HALPROD/ENDMON**.

Connectivity Check
Within Level 2 – Systems Operations Suite, use our **HALPROD/SNDCONMSG** command to test connection from the IBM i to the Enterprise Console.

On the Enterprise Console, double-click on the IBM i device and check that the full system details are returned (recognized by the scroll bar shrinking).
Halcyon Implementation – Windows, AIX & Linux Monitoring

Use the following instructions to install and configure monitoring of Windows, AIX and Linux systems using Network Server Suite.

Download and install Network Server Suite
1. Download the latest Network Server Suite product from:  
   https://www.helpsystems.com/halcyon/halcyon-trial
2. Where applicable, ensure Windows User Account Control (UAC) is turned off before continuing.
3. Run the installer on the dedicated Windows server on which Network Server Suite is to be installed.
4. When prompted, activate the SQL Server installation using the ‘halcyon’ login created.
5. Once the product is installed, navigate to each product folder as listed below and right-click on each of the named application executables in turn. For each executable, choose Properties > Compatibility and allow the executable to run as administrator (see screenshot below).

   ![Properties screenshot]

   Enterprise Console (server)
   C:\Program Files (x86)\Halcyon\Device Manager\DevManager.exe
   C:\Program Files (x86)\Halcyon\Enterprise Console\ECConsole.exe
   C:\Program Files (x86)\Halcyon\Enterprise Console\ECServOpt.exe
   C:\Program Files (x86)\Halcyon\Enterprise Console\ECViewer.exe
   C:\Program Files (x86)\Halcyon\Instant Alert\IABook.exe
   C:\Program Files (x86)\Halcyon\Instant Alert\IAServOpt.exe
Network Server Suite (NSS)
C:\Program Files (x86)\Halcyon\CCM Console\CCMConsole.exe
C:\Program Files (x86)\Halcyon\Device Manager\DevManager.exe
C:\Program Files (x86)\Halcyon\Enterprise Console\ECConsole.exe
C:\Program Files (x86)\Halcyon\Enterprise Console\ECServOpt.exe
C:\Program Files (x86)\Halcyon\Enterprise Console\ECViewer.exe
C:\Program Files (x86)\Halcyon\Instant Alert\IABook.exe
C:\Program Files (x86)\Halcyon\Instant Alert\IAServOpt.exe

Adding new Windows systems
1. When the installation has completed successfully, go to START | Programs | Halcyon | Device Manager. The Windows server on which Network Server Suite has been installed is displayed.

2. Right-click | Edit this system so that the Edit dialog is displayed. From the left navigation panel, click the Advanced tab. From the subsequent menu options, select Connection. Delete the existing entry in the Alternative IP Addresses display. Click OK.

3. Create a copy of this system, using right-click | Copy Device.

4. Edit the copy device and change the ‘Host/Address’ field to the IP Address of the system, and click OK. There are now two entries for the same system, one specified by Hostname and one specified by IP Address (this is as a failsafe to ensure correct handling of alerts from AIX and/or Linux systems where a Hostname might not be recognized).

5. Create a new device for each of the new Windows system(s) that you are adding for the new customer using the Add icon.

   Note: Within the Add Device dialog, the ‘Name’ field should be the hostname of the server. It is highly recommended that you create a new Device Group named ‘Windows’ using the Device Groups icon and add each system under this group.

6. When you have added all the Windows devices, close the Device Manager.

7. Add the new devices to your corporate Enterprise Console where applicable.

Licensing Enterprise Server and Loading new devices
Note: Steps 1 to 4 can be ignored if the software has previously been licensed (see page 7)

1. Go to START | Programs | Halcyon Enterprise Console | Enterprise Server Options where you are prompted to add the Network Server Suite license code that was sent to you by Halcyon Sales Admin.

2. After the code has been added click OK

3. On the Enterprise Server Options dialog click Apply to confirm and save the settings.

4. Go to START | Programs | Halcyon | Enterprise Console and log into the Enterprise Console using ‘Administrator’ with password ‘Administrator’.

5. You are prompted to change the current password. Change the password to something memorable (it can be reset later if you forget it).
6. Once the console is open, go to **Tools | Reload Devices**. When this action is complete, minimize the Enterprise Console application.

**Note:** Please refer to the Network Server Suite Installation Guide for more detailed instructions if required.

**Assigning a Windows licence to the current system**

Although there is only one actual licence code held within Network Server Suite, this contains individual system licences. Whenever a new system is added to the Central Configuration Manager within Network Server Suite, an appropriate licence must be assigned.

1. Go to **START | Programs | Halcyon | Network Server Suite | CCM Console**. There are currently no systems defined.
2. Click the **Add System** icon.
3. Both entries for the system on which Network Server Suite is installed are displayed. Click **Select** and on the subsequent Add System dialog click **OK**. The system is now shown as added but as having no licence assigned.
4. From the License To Use drop-down choice menu select a **Windows** license (the number available licenses remaining are shown. Upon selection, the available license number drops by one.
5. Click **Save Settings** to apply the license.
6. The Save Settings dialog is displayed. When the Save is complete click **Close**.
7. In the top-left corner of the screen, click the first menu tab (highlighted in orange) and select **Options** from the subsequent menu choices.
8. With the current option set as CCM Server, click **Select Server**.
9. From the two identical systems listed, select the entry with the **IP Address defined** and click **Select**.
10. When returned to the CCM Options display, select **Enterprise Server** and repeat steps 8 and 9 above.

11. Finally, select **Instant Alert** and repeat steps 8 and 9 again. Click **OK** to complete.

12. On the CCM home toolbar select **Reload Devices**.

13. Click **Save Settings** and **Close** the dialog once the save is complete.

### Adding further Windows systems to the Central Configuration Manager

1. In the **Systems** view, select **Default** (if you didn’t create a separate Windows Device Group, otherwise select **Windows**) and then right click and choose to **Add System**.

   ![Add System](image)

   **Note:** Only devices that have already been added in the **Device Manager** are available for selection.

2. From the devices listed, select the Windows device(s) to be added to the Central Configuration Manager. These systems are now displayed in the Add System dialog. Click on each new system so they are selected and ensure the **Install Software on System** box is ticked and click **OK**.

3. If prompted, provide an administrative account to use for remote installation (installation is done via the Windows admin share).

4. License the new systems using the instructions provided in the previous section.

   **Note:** See the relevant sections below for AIX & Linux agent installations.

### Assigning Templates to Windows systems

Templates are designed to provide the same level of monitoring across a number of similar devices by applying a set of user-defined filters with a single-click. This greatly reduces set-up time and ensures all systems are covered by at least a basic level of monitoring. Should you need to make a system-wide change at a later date, a single update covers all systems using the template.

1. Begin by selecting the **Templates tab** from the left-hand navigation pane of the Central Configuration Manager.

   ![Templates](image)

   The available templates are displayed in the left-hand navigation pane. Template names are displayed in bold as the parent folder with the Rule Groups contained within displayed as child entries.
2. To assign a template to a system, click on the **template name**. The list of available systems to which the template can be assigned is displayed in the right-hand pane.

3. Click against each **system** to which you want the selected template.

4. When you have finished assigning templates, click **Save Settings**.

   **Note:** By default alerts raised by Halcyon shipped templates are always sent to the Enterprise Console. Templates shipped by Halcyon may need rules to be released before they become active.

**Further reading:**
A full list of templates, the rules they contain and further guidance on assigning, copying, exporting and deleting templates is available in the **Network Server Suite User Guide**.

**Creating a test rule to check connectivity to Enterprise Console**
It is advisable to create a test rule to ensure that the monitoring functionality is working. For this example we will create a simple rule that monitors disk space on the host machine.

1. Select **Start** | **Programs** | **Halcyon** | **Network Server Suite** | **CCM Console**. From the Systems pane, select the system on which Network Server Suite is installed.

2. From the **Performance Monitors**, select **CPU, Disk & Memory**.

3. Click **Add Rule** to display the Add Rule Detail dialog.

4. Enter a Description (for example; Test). Select **Advanced** from the Rule panel and click **Automatically Suspend Rule**. Click **For** and change the default setting from 30 minutes to 60 minutes.

5. Select the **Criteria** tab and click **Add Criteria**.

6. Select **Disk** as the Performance Group criteria. Leave the Performance Type as **Drive Space Available %** and Drive as **C**.

7. Select the Trigger Value as **>=** (greater than or equal to) and enter **1** as the % value. Click **OK**.

8. Back on the Add Rule Detail dialog, select the **Actions** tab and click **Add Action**. From the Select Action dialog, select **Send Enterprise Console Alert** and click **OK**. The Console Action dialog is displayed. Click **OK** to close this dialog. Click **OK** to close the Add Rule Detail dialog.

9. Select **File** | **Save Settings**.

**Checking the test result**
To check that the rule has sent an alert message, launch the Enterprise Server Console and log on as Administrator. The alert raised by the test rule is displayed as the top item in the Inquiry Alerts section of the Enterprise Console. To avoid repetitions of this test being generated every sixty minutes it is important to go back to the CCM Console and delete this test rule.
AIX Agent Installation

Software Download
1. Download the latest AIX agent from: https://www.helpsystems.com/halcyon/halcyon-trial

2. On the product download selection screen choose NSS Managed Server (AIX, Unicode).

3. When the download is completed rename the file to halusm.rpm and FTP to the AIX server. Typically we recommend this is placed in /home/halcyon (create the halcyon directory if it does not already exist – remember AIX is case sensitive!)

Software Installation
1. From a root login command line, run smitty install. This takes you directly to Software Installation and Maintenance.

2. Press <Enter> twice. In the ‘Input Device Name’ field, type: /home/halcyon and press <Enter>.

3. Use F4 to prompt the rpm packages available for installation. If your FTP was successful, then ‘halusm’ is displayed. Use your arrow keys to highlight this package and press <Enter> to select.

4. Using your arrow keys, position to ACCEPT new license agreements and use the tab key to change from ‘no’ to ‘yes’. Without this change the package fails to install.

5. Press <Enter> to accept the settings and press <Enter> again to start the installation.

6. When the agent has been successfully installed, run command startsrc –s halusm to start the halusm subsystem. Once this is active, the CCM Console is able to save the monitoring settings to the AIX system.

Adding new AIX Devices
1. When the installation has completed successfully, go to START | Programs | Halcyon | Device Manager and create a new device for each of the AIX system(s) that you are adding for the new customer using the Add icon.

   Note: Within the Add Device dialog, the ‘Name’ field should be the AIX system name and the Hostname/IP Address field MUST always be an IP Address. It is highly recommended that you create a new Device Group named ‘AIX’ using the Device Groups icon and add each system under this group.

2. When you have added all the AIX devices, close the Device Manager.

3. Add the new devices to your corporate Enterprise Console where applicable.

Assigning an AIX licence to the current system
Licenses are assigned to AIX systems in the same way that they are assigned to Windows systems, although your Network Server Suite license code must include provision to accept AIX systems. Please contact halcyon.sales.admin@helpsystems.com if you are in doubt.

Please refer to the section: Assigning a Windows licence to the current system for details on how to assign a license (substituting Windows with AIX where appropriate).
Assigning a System Monitoring Template to the AIX System

1. Begin by selecting the **Templates tab** from the left-hand navigation pane of the Central Configuration Manager.

Only AIX templates can be assigned to AIX systems so if needed, scroll down through the list of templates until you reach the bottom of the list. (AIX Templates are the last entry).

2. Expand the list of AIX Templates. The System Monitoring (Advanced) and System Monitoring (Standard) templates are displayed.

3. Select the System Monitoring (Standard) template. The list of available AIX systems to which the template can be assigned is displayed in the right-hand pane.

4. Click against each **system** to which you want the selected template.

5. When you have finished assigning this template, click **Save Settings**.

   **Note:** By default alerts raised by Halcyon shipped templates are always sent to the Enterprise Console. Templates shipped by Halcyon may need rules to be released before they become active.

**Further reading:**
For further information on AIX Monitoring, please read AIX Monitoring Guidelines, Network Server Suite User Reference and AIX Agent Installation Guides.

A full list of templates, the rules they contain and further guidance on assigning, copying, exporting and deleting templates is available in both the **Network Server Suite User Guide**.

**Creating a test rule**
It is advisable to create a test rule to ensure that the AIX monitoring functionality is working. Follow the instructions provided in the sections; **Creating a test rule to check connectivity to Enterprise Console** and **Checking the test result**.
**Linux Agent Installation**

**Software Download**
1. Log onto the Linux system and download the latest Linux agent: [https://www.helpsystems.com/halcyon/halcyon-trial](https://www.helpsystems.com/halcyon/halcyon-trial)

2. On the product download selection screen choose **NSS Managed Server (Linux)**, for whichever Linux version you are running.

3. Typically we recommend this is placed in `/home/halcyon` (create the halcyon directory if it does not already exist).

**Software Installation**
1. Run the rpm (ensure you are logged in with a user that has sufficient authority) to install the product.

   **Note**: Please refer to the Linux Agent Installation Guide if you are running a 64bit version of the operating system.

2. When the agent has been successfully installed, run command `/etc/init.d/halusm start` to start the halusm subsystem. Once this is active, the CCM Console will be able to save the monitoring settings to the Linux system.

**Adding new Linux Devices**
1. When the installation has completed successfully, go to **START | Programs | Halcyon | Device Manager** and create a new device for each of the Linux system(s) that you are adding for the new customer using the Add icon.

   **Note**: Within the Add Device dialog, the ‘**Name**’ field should be the Linux system name and the Hostname/IP Address field **MUST** always be an **IP Address**. It is highly recommended that you create a new **Device Group** named ‘**Linux**’ using the Device Groups icon and add each system under this group.

2. When you have added all the Linux devices, close the Device Manager.

3. Add the new devices to your corporate Enterprise Console where applicable.

**Assigning a Linux licence to the current system**
Licenses are assigned to Linux systems in the same way that they are assigned to Windows systems, although your Network Server Suite license code must include provision to accept Linux systems. Please contact halcyon.sales.admin@helpsystems.com if you are in doubt.

Please refer to the section: Assigning a Windows licence to the current system for details on how to assign a license (substituting Windows with Linux where appropriate).

**Assigning a System Monitoring Template to the Linux System**
1. Begin by selecting the Templates tab from the left-hand navigation pane of the Central Configuration Manager.
Only Linux templates can be assigned to Linux systems so if needed, scroll down through the list of templates until you reach the bottom of the list.

2. Expand the list of Linux Templates. The Red Hat System Monitoring (Advanced) and System Monitoring (Standard) and SUSE System Monitoring (Advanced) and System Monitoring (Standard) templates are displayed.

3. Select the appropriate System Monitoring (Standard) template for your Linux installation. The list of available Linux systems to which the template can be assigned is displayed in the right-hand pane.

4. Click against each system to which you want the selected template.

5. When you have finished assigning this template, click Save Settings.

   Note: By default alerts raised by Halcyon shipped templates are always sent to the Enterprise Console. Templates shipped by Halcyon may need rules to be released before they become active.

Further reading:
For further information on Linux Monitoring, please read the Network Server Suite User Guide and Linux Agent Installation Guides.

A full list of templates, the rules they contain and further guidance on assigning, copying, exporting and deleting templates is available in both the Network Server Suite User Guide.

Creating a test rule
It is advisable to create a test rule to ensure that the Linux monitoring functionality is working. Follow the instructions provided in the sections; Creating a test rule to check connectivity to Enterprise Console and Checking the test result.
Receiving SNMP traps

Use the following instructions to set-up the sending and receiving of SNMP Traps through Network Server Suite.

1. In the Device Manager, edit each system on which Halcyon Network Server Suite has been installed. Select the SNMP tab and check the SNMP Capable box.

2. For the device that you want to be able to receive the SNMP information, normally the main system on which Network Server Suite is installed, select the Traps option from with the SNMP tab and check the box to define the Device Is A Trap Target.

3. Within Device Manager, add an entry for each device that will be sending in SNMP traps. Halcyon must be aware of each device sending traps in to the Enterprise Console. When creating the device, ensure that from within the SNMP tab, the box to set SNMP Capable is ticked (as described in Step 1).

4. Open the Enterprise Console.

5. Sign-on and from the menu bar select Tools | Reload Devices. This accepts the changes made in Device Manager so that they are recognized within Enterprise Console.

   Note: Nearly all SNMP devices, and it varies by device, have a SNMP settings menu option within their web-interface configuration options. From within these SNMP settings, you can identify the IP Address of the Enterprise Server, previously set-up in Device Manager, as the Trap Target Device.

6. Configure the SNMP device to send traps to the IP address of the Halcyon Enterprise Console.

Changing SNMP Alert Text

Changes to the rules may be required to manipulate the alert text. For further details on how to use the Mib or OID details, see the Network Server Suite User Guide.
Further Halcyon GUI’s, Mobile Apps, Products and Templates

The following lists define other solutions that Halcyon has developed and may be of interest in solving potential or specific problems that your customers may have:

Graphical User Interfaces (GUI’s)
- Disk Explorer* (A graphical representation of IBM i disk usage and availability)
- Performance Analyzer* (A graphical representation of IBM i performance)
- Advanced Job Scheduler** (A graphical representation of IBM job scheduling)
- Advanced Reporting Suite
- Task Supervisor
- MQ Series Manager
*(Both included with Halcyon Level 3 – Advanced Automation Suite and Level 4 – Operations Center Suite.
** Only included with Halcyon Level 4 – Operations Center Suite

Mobile ‘Apps’
- Enterprise Console for iPhone, iPad, iPod & Android devices
- Performance Analyzer for iPhone & iPod

Value Added Products
- Advanced Reporting Suite with Report Designer
- HA-MX (MIMIX) Monitor
- Record & Playback
- MQ Manager
- Log File Monitor (IBM i)
- Custom Monitor

Templates
- Windows monitoring templates
- AIX standard and advanced templates
- AIX VIOS monitoring templates
- Linux standard and advanced templates
- Advanced reporting template

Specialist ERP & HA Monitoring Templates
- Infor M3 (Movex) monitoring
- Infor XA monitoring
- Infor System21 monitoring
- JD Edwards monitoring
- SAP and SAP2 monitoring
- Misys Equation monitoring
- Misys Midas Plus monitoring
- IBM Services monitoring
- Rocket iCluster monitoring
- Vision OMS/ODS Replication monitoring
- Vision iTERA v6.0 Availability monitoring
- Vision iTERA v6.2 Availability monitoring
- MAXAVA monitoring
- Power HA monitoring
- Quick/EDD monitoring
- Robot HA monitoring
Full details of our application monitoring templates can be found in the HelpSystems Community Portal under the Halcyon brand.
## Installation and Configuration Checklist

<table>
<thead>
<tr>
<th>Task</th>
<th>Detail</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lvl2 – SOS (Lvl2 license)</strong></td>
<td>Install PROD environment &amp; apply license code. Also apply changes to system defaults</td>
<td></td>
</tr>
<tr>
<td><strong>NSS or EntCon</strong></td>
<td>Enterprise Console, Instant Alert, SNMP trap receivers, separate IP address entry for Halcyon server</td>
<td></td>
</tr>
<tr>
<td><strong>Apply CSTENV codes</strong></td>
<td>For application monitoring as required</td>
<td></td>
</tr>
<tr>
<td><strong>Set monitors to be supervised on IBM i &amp; hold monitors that will not be used (Lvl3 &amp; Lvl4)</strong></td>
<td>Ensure that the monitors will look after themselves by use of the supervisor, and monitors not required are prevented from starting</td>
<td></td>
</tr>
<tr>
<td><strong>Release applicable rules</strong></td>
<td>Where example/template rules are required to be activated</td>
<td></td>
</tr>
<tr>
<td><strong>Start monitors</strong></td>
<td>Advise commands for starting and ending Halcyon – to be utilised in QSTRUP or add auto start job entry instead (option 41, option 12)</td>
<td></td>
</tr>
<tr>
<td><strong>Check TCP port 15000 active bi-directionally</strong></td>
<td>Required for communication between the IBM i and Enterprise Console</td>
<td></td>
</tr>
<tr>
<td><strong>Send test alerts to confirm connection</strong></td>
<td>Use SNDCONMSG to send alert in to the Enterprise Console</td>
<td></td>
</tr>
<tr>
<td><strong>Configure system automation and monitoring</strong></td>
<td>Add rules to manage the system as required</td>
<td></td>
</tr>
</tbody>
</table>
## Training Plan

<table>
<thead>
<tr>
<th>Training</th>
<th>Detail</th>
<th>Complete</th>
</tr>
</thead>
<tbody>
<tr>
<td>HelpSystems Community Portal</td>
<td>Access, content, downloads &amp; technical support</td>
<td></td>
</tr>
<tr>
<td>Installations &amp; upgrades</td>
<td>Walkthrough of installation and upgrades</td>
<td></td>
</tr>
<tr>
<td>Level 2 - SOS</td>
<td>Full product overview on IBM i software</td>
<td></td>
</tr>
<tr>
<td>NSS or EntCon</td>
<td>Full product overview on Enterprise Console, Device Manager &amp; Instant Alert</td>
<td></td>
</tr>
<tr>
<td>Schedule and agree next training date</td>
<td>Next training date to be within 7 days of installation</td>
<td></td>
</tr>
<tr>
<td>Follow up training to include:</td>
<td>✓ Managing replication</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Export options</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Automatic Upgrade Solution (AUS)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ Windows, AIX or Linux monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>✓ GUI installation/configuration</td>
<td></td>
</tr>
</tbody>
</table>
Glossary of Terms

Central Configuration Manager
A host framework within Network Server Suite from which other products can be configured and system rules set.

Device Manager

Enterprise Console
Used to view messages and alerts generated by IBM i®, Windows®, AIX® and Linux® servers.

Replies can be given to messages and alerts closed from the central console while color-coded options help identify different servers and/or different types of alerts. Comprehensive filters can escalate actions, change severity and forward alerts.

Enterprise Server
A configurable service (via Enterprise Server Options) that receives alerts from a variety of different sources and allows users to manage them centrally through the Enterprise Console.

Enterprise Server Options
Used to configure the Enterprise Server settings.

Instant Alert
Used to send text messages and emails from the Server Manager or Enterprise Console.

Network Manager
A background service that allows communication between all client and server services and GUI(s).

Network Server Suite
Network Server Suite is a comprehensive network monitoring solution for critical servers, applications, processes, services and network devices across a multi-platform environment including Windows®, AIX® and Linux® operating systems

Server Manager
A configurable service hosted by the Central Configuration Manager that is used to set-up and monitor the server environment.

Trap Receiver
Processes thresholds received from SNMP enabled devices and passes the data to the Enterprise Server.

USM (AIX Agent)
Used to set-up and monitor the AIX server environment.

USM (Linux Agent)
Used to set-up and monitor the Linux server environment.