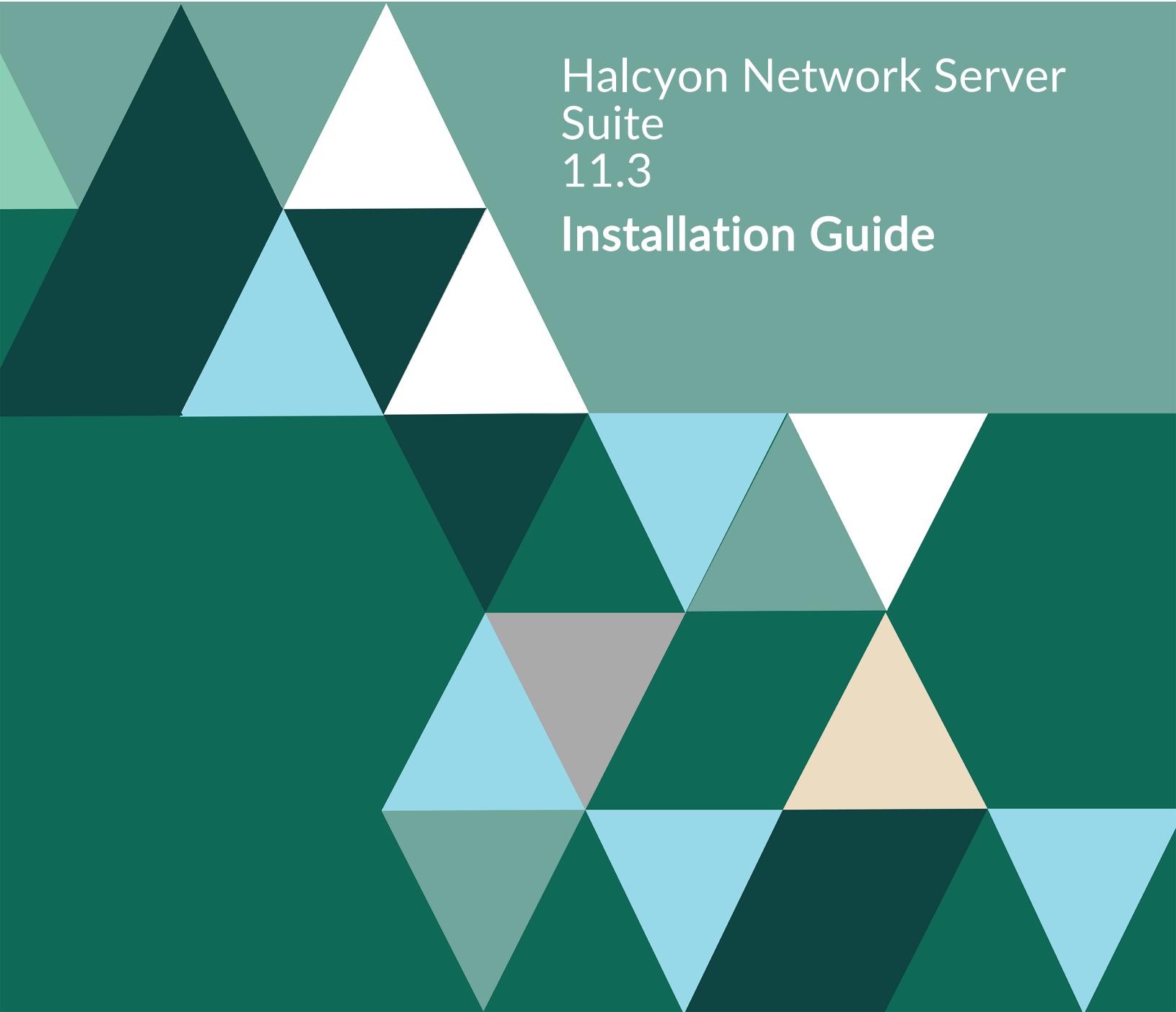


FORTRA



Halcyon Network Server
Suite
11.3
Installation Guide

Copyright Terms and Conditions

Copyright © Fortra, LLC and its group of companies. All trademarks and registered trademarks are the property of their respective owners.

The content in this document is protected by the Copyright Laws of the United States of America and other countries worldwide. The unauthorized use and/or duplication of this material without express and written permission from Fortra is strictly prohibited. Excerpts and links may be used, provided that full and clear credit is given to Fortra with appropriate and specific direction to the original content.

202302210348

Table of Contents

Installation	4
Before You Begin	4
Installing Network Server Suite on Windows	8
Installing Managed Server software on a remote device	10
After You Are Done	13
Contacting Fortra	16
Fortra Portal	16
AIX Agent Installation	17
Configuring the AIX Server for use within Network Server Suite	25
Linux Agent Installation	29
Installing the Linux Agent Server Manager	32
Useful commands and file information	33

Installation

Use the following instructions to install Halcyon Network Server Suite on a Windows server.

WARNING: Upgrading the Enterprise Console version from 10.3 to a later version results in the loss of all open alerts and saved layouts (unless the layouts have been copied elsewhere) at the point of upgrade. There is currently no workaround for these issues. Upgrades from version 11.0 onwards are unaffected.

Before You Begin

Please read this section before you install Halcyon Network Server Suite.

This section covers an installation of Halcyon Network Server Suite on a Windows Server.

- For an installation of Network Server Suite onto an AIX Server see [here](#).
- For an installation of Network Server Suite onto a Linux Server see [here](#).

License Keys

In order to use Network Server Suite you will need a valid license key.

Ensure you have the correct number of licenses (controlled by a unique product code) for each installation. A separate license is required for each Windows, AIX and Linux device that is being monitored.

NOTE: If you require Enterprise Console Reporting to be included so that alert statistics are available with Advanced Reporting Suite, this needs to be requested at the time of license key generation.

To obtain a trial 30 day license key for the components of Network Server Suite please email: keys@fortra.com.

System Requirements

Before installing Network Server Suite v11.3 please refer to the following and ensure that the systems on which you are installing meet at least the minimum hardware and software requirements.

User Access

You must be able to provide administrator or root access to all servers onto which the monitoring software (Server Manager) or Enterprise Server and Console is to be installed.

Minimum Hardware Requirements

Enterprise Server Installation:

- 4GB available disk space
- 2GB RAM (4GB recommended)
- 1.4 GHz processor speed (2.0 GHz or faster recommended)
- Static IP Address for the device on which Enterprise Server is installed

Enterprise Client Installation

- 1GB available disk space

Minimum Operating System Requirements (for evaluation purposes)

- Windows 10 or later with User Account Control (UAC) disabled.
- Windows Server 2019 or later.

Minimum Operating System Requirements (for production)

Main Installation

- Windows Server 2019 or later.

Enterprise Console Client standalone installation:

- Windows 10 or later.

Minimum Database Software Requirements

Database Options

- PostgreSQL - embedded database (optional).

NOTE: The PostgreSQL option does not currently support Enterprise Reporting.

or

- [Microsoft SQL Server 2014](#) and above.

Notes

- If Microsoft SQL Server is installed on a device other than the one on which Network Server Suite is installed, you will also require **Microsoft SQL Server Native Client version 12 - QFE** or later. This software is installed by default as part of the installation process.

NOTE: Microsoft will not be releasing a SQL Server 2014 or later version of the SQL Server Native Client. The SQL Server 2012 Native Client (v11, for example sqlncli11.dll) can continue to be utilized by SQL Server 2014 and later version.

- Standalone Enterprise Client installations do not require an SQL Server database connection.
- **Microsoft .NET Framework v4.6.2 or higher** - in order to run Network Server Suite v11.3, [Microsoft .NET Framework v4.6.2](#) or later must be installed on the server onto which the installation is being implemented. Please see the important note below:

WARNING: After installing Microsoft .NET Framework v4.6.2, you must apply any outstanding Windows updates as there is a required fix that is needed to prevent possible run-time issues.

GSM data terminal

A GSM data terminal allows SMS messages and email to be sent (as an action) from the Enterprise Server and Server Manager. A data SIM card is required for the GSM data terminal. Please contact your external suppliers for a suitable data terminal and SIM card.

Configuring SQL on SQL Server

Network Server Suite does not come with a supplied instance of SQL. Therefore you must specify your own instance and configure it ready for Network Server Suite to use. This is required prior to the installation process. See [Prerequisite SQL Server Software](#) for details.

1. On the server running your instance of SQL Server, using MS SQL Server Management Studio (or equivalent), create a new user of 'halcyon' with sysadmin authority.

- a. Open MS SQL Server Management Studio and logon to the required instance of SQL Server.
- b. From the **Object Explorer** menu panel, expand the **Security** option.
- c. Right-click on **Logins** and select **New Login**.
- d. Enter a **Login name** of 'halcyon' and select **SQL Sever authentication**.
- e. Enter a memorable password and confirm it (see the warning below).
- f. Remove the check mark in the **Enforce password policy** option.
- g. Click **OK**.

WARNING: Do not use a semi-colon ';' character in the password required to access the SQL Server.

2. On the Network Server Suite server, install the version of SQL Native Client that is recommended for use with your installed version of SQL Server.
3. On the Network Server Suite server, create an ODBC connection to check the communication with the SQL database.
4. Install Network Server Suite as per the instructions; [Installing Network Server Suite on a Windows Server](#) and when prompted, specify this instance of SQL.
5. Once the installation is complete, on the SQL Server, update the user mappings for the 'halcyon' SQL user for the following database entries:

HDM
HEC
HIA

with the following database role memberships:

db_datareader ("read" access)
db_datawriter ("write" access)
db_dbladmin ("create/alter" objects)

6. Run the following SQL statement against **each** of the Halcyon database entries:

```
USE [HDM]  
GO  
GRANT EXECUTE TO halcyon
```

*Repeat for the HEC and HIA database entries

7. Once applied, remove the sysadmin authority from the 'halcyon' SQL user.

Installing Network Server Suite on Windows

Downloading the Software

Ensure that you have downloaded the latest version of Network Server Suite from:

For new customers:

<https://www.fortra.com/halcyon/halcyon-trial>

For existing customers (registration and existing product installation of Network Server Suite required):

<https://community.fortra.com/products-and-downloads/downloads/#Halcyon>

Installation

1. Once the download is complete, open the directory in where the download is stored and double-click on **HalWindowsSuite.exe**.
2. To progress with the installation, the End User License Agreement must be accepted. Read the license agreement carefully and if you agree to the terms and conditions set out in the license, select '**I accept the terms of the end user license agreement**' and click **Next** to continue.

TIP: To generate a hard copy of the license agreement for your own records, click **Print**.

3. On the **Welcome to InstallShield Wizard For Halcyon Windows Suite** dialog, click **Next**.
4. On the **Customer Information** dialog enter your **Name** and your **Company Name**. Click **Next**.
5. Choose the destination location for the Network Server Suite installation. It is recommended that you keep the default setting of **%Program Files(x86)%\Halcyon**. Click **Browse** to select an alternative directory path if required. Click **Next**.
6. On the **Setup Type** dialog, select **Network Server Suite** from the listed products. Click **Next**.
7. On the **Microsoft SQL Server Configuration** dialog, set the individual database names for **Device Manager**, **Enterprise Console** and **Instant Alert**. We recommend keeping the default settings of **HDM**, **HEC** and **HIA**.

8. On the **Database Server** dialog, select the **SQL Instance** that you are using for Network Server Suite and supply the associated **SQL Server Authentication Logon ID** and **Password** that you created prior to the installation. See: [Configuring SQL on SQL Server](#)). Alternatively, select [Windows Authentication](#), if applicable. Click **Next**.
9. Providing the SQL Server authentication is accepted, the **Start Copying Files** dialog is displayed. Click **Next** to continue.

WARNING: At this point you may see a reference to a pending reboot – note that Halcyon products don't require a system reboot but this is a warning that there is a pending one (maybe for Windows updates or another application). Click **Yes** to continue.

10. Click **Finish** on the **InstallShield Wizard Complete** dialog to complete the installation.

NOTE: In most cases, you do not need to restart your machine to run this software.

The Network Server Suite components are now accessible from the Windows **Start** menu.

Windows Authentication

If Windows Authentication was selected as part of the installation procedure, the following services must be changed to use the Windows logon account:

Enterprise Console (Server) installation only:

- Halcyon Enterprise Server
- Halcyon Instant Alert
- Halcyon Network Manager

Halcyon Network Server Suite Installation

- Halcyon Enterprise Server
- Halcyon Instant Alert Server
- Halcyon Network Manager
- Halcyon CCM Server

Specifying the Windows Logon Account

1. From Windows Start select **Control Panel | Administrative Tools | Services**.
2. Locate and right-click on the required Halcyon service from those listed above (for example, Halcyon Instant Alert).
3. From the pop-up menu, select **Properties**. Select the **Log On** tab.
4. Select **'This account'** and complete the details with the qualified domain account, which has access to the SQL databases. Enter and confirm the associated password. Click **OK** to confirm.
5. Repeat for the remaining Halcyon services as previously specified.
6. Restart the Halcyon services once the **Account Logon** details have been entered.


Installing Managed Server software on a remote device


Use these instructions to add a managed server to the system via the Device Manager and the Central Configuration Manager and remotely installs the managed server software.

NOTE: A remote upgrade of Network Server Suite requires the ADMIN share to be available and the user must have administrative account authority on the remote system.

NOTE: You must have enough licenses to add additional systems to your enterprise. If in doubt, please contact: halcyon.sales.admin@fortra.com.

NOTE: This option is not currently available for AIX or Linux devices. Please refer to the chapters [AIX Agent Installation](#) and [Linux Agent Installation](#).

1. At the Windows Start menu, select **Start | Programs | Halcyon | Device Manager**.
2. From the menu ribbon select **Devices |  Add Device**.
3. Enter the **Name** and **Description** of the server.
4. Select **Server** as the **Device Type**.
5. Enter the **IP Host/Address** of the server.
6. Click **OK**. The Server is now displayed in the **Defined Devices** pane of the **Device Manager** dialog. Close the Device Manager.

7. At the Windows Start menu, select **Start | Programs | Halcyon | Central Configuration Manager**. Ensure that the **Systems** tab is selected.
8. Select the top level (default) device in the Systems panel.
9. From the menu ribbon select  **Add System**. The **Select System** dialog is displayed.
10. Highlight the required system and click **Select**. The **Add System** dialog is displayed.
11. Select the **System** from those listed. Note that the **Install Software on System** option is enabled as a default (except for AIX and Linux Devices). Click **OK**. The new system is displayed in the **Systems Panel** of the Central Configuration Manager.
12. From the **Home** menu ribbon select **Settings | Save** to save the current settings. The **Saving Settings** dialog is displayed.
13. If you have kept the default setting of installing software onto the new system, you are required to provide valid log-on details for the system. The **User Details** dialog is displayed.
14. Either keep the current user attributes or select a specific user and provide a user name and password. Click **OK** to remotely install the software onto the system and continue saving settings.

Manually installing/upgrading Managed Server software on a remote device

NOTE: If the Managed Server software is manually installed on a remote device, the 'Run as Administrator' option must be taken.

Ensure that you have downloaded the latest version of Network Server Suite from:

For new customers:

<https://www.fortra.com/halcyon/halcyon-trial>

For existing customers (registration and existing product installation of Network Server Suite required):

<https://community.fortra.com/products-and-downloads/downloads/#Halcyon>

Initiating the install procedure

1. Once the download is complete, open the directory in where the download is stored and double-click on **NSSMngSetup.exe**.
2. On the Welcome to the InstallShield Wizard for Halcyon NSS Managed Server dialog, click **Next**.
3. On the Setup Type dialog, select **Complete** (the default selection) and click **Next**.
4. Choose the destination location for this installation. It is recommended that you keep the default setting of **%Program Files(x86)%\Halcyon**. Click **Browse** to select an alternative directory path if required. Click **Next**.
5. Click **Install** to begin the installation.

WARNING: At this point you may see a reference to a pending reboot – note that Halcyon products don't require a system reboot but this is a warning that there is a pending one (maybe for Windows updates or another application). Click **Yes** to continue.

6. Once complete, click **Finish**. NSS Managed Server has now been installed.

WARNING: A manual upgrade of the Managed Server software is not permitted when upgrading to v11.3. The current version of the software on the remote device must be uninstalled and then v11.3 installed using the instructions above.

After You Are Done

Congratulations! Network Server Suite is now installed. Read the following for additional information and your next steps.

Licensing Network Server Suite

You must enter a valid license key before you can start using the Network Server Suite software. A temporary license key can be obtained from keys@fortra.com.

This step licenses Network Server Suite products for use:

NOTE: Before progressing with these instructions, use the copy command from within your email program to extract the license code from the email sent by Fortra as you will need to paste it into the Network Server Suite as part of the licensing process. Alternatively, save the file attachment 'license.hli' to a file path and then import it using the Import facility on the **Edit License** dialog.

1. At the Windows Start menu, select **Start | Programs | Halcyon | CCM Console**. The system is currently displayed as having an 'Invalid License'. Click **OK**.
2. The Central Configuration Manager is displayed at the **Home | Licenses** page which is currently blank. Click **Edit** to display the **Edit Product Code** dialog, which is also empty of information.
3. Click **Paste** to copy your previously copied license code into the **License Code** field. The **Product**, **Machine Reference**, **Product Options** and **License Details** fields change to reflect the terms of the license code entered. Alternatively, click **Import** to import the license directly from the 'license.hli' file that was sent as an attachment with the email.
4. The License Details are now displayed. These fields show the **License Type**, **Expiry Date** (or Permanent if a permanent license has been purchased), the **Monitors** included, the **Operating System** to which the license applies, the **number of used/free licenses** remaining and the **Total Number of Licenses**

Applying Licenses

The next step is to apply a license to the Windows Server onto which you have just installed Network Server Suite.

Automatic assignment of licenses


As part of the licensing process you are given the option to automatically assign a license to all systems.

NOTE: Choosing **No** means that you have to manually assign the licenses to each system individually.

Click **Yes** to automatically assign a license to the system on which this installation of Network Server Suite has been completed.

Manual assignment of licenses

This needs to be undertaken for each new system that is added to Network Server Suite via Device Manager

An unlicensed system is displayed as having **(No License Assigned)** and is identified by a  symbol next to the system name in the **Systems** tab of Central Configuration Manager.-

Systems must be defined within Device Manager before they can be added to Central Configuration Manager.

To apply a license:

NOTE: Spare licenses must be available for the Operating System to which the unlicensed system belongs to be able to assign a new license.

1. Select the **Systems** tab from the left-hand navigation panel of the Central Configuration Manager. Unlicensed systems are displayed with **No License Assigned**.

The **System Details** panel is displayed showing the current configuration, licensing, message log settings and connection check status for this system. In the **Licensing** section of this panel, the **License to Use** field currently displays **Unlicensed Systems**.

2. From the **License To Use** field, use the drop-down menu to select the Operating System license applicable to this system (only licenses that can be applied to this

system are displayed in the drop-down). Once selected, the number of remaining licenses for the Operating System is reduced by one.

The **License To Use** field changes to reflect the assignment of the license, with the number of licenses available being reduced by one, and the monitors are enabled under the system ready for use.

3. From the Central Configuration Manager | **Home** menu ribbon select  **Save** .

The settings are saved and the system is now licensed for use within Network Server Suite.

Further Reading

For more information regarding Network Server Suite please see the following:

- [Network Server Suite Configuration Guide](#)
- [Network Server Suite User Guide](#)

There is also extensive [online help](#) available throughout the product.

Contacting Fortra

Please contact Fortra for questions or to receive information about Halcyon Network Server Suite. 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 Community Portal](https://community.fortra.com) at <https://community.fortra.com>.

For support issues, please provide the following:

- Check this guide's table of contents and index for information that addresses your concern.
- Gather and organize as much information as possible about the problem including job/error logs, screen shots or anything else to document the issue.

AIX Agent Installation

Use the following instructions to install an AIX agent for use with Network Server Suite.

NOTE: The installation can be undertaken using either the RPM or SMIT commands. Both routines are covered in this document.

System Requirements and Prerequisites

Halcyon UNIX Server Manager (HALUSM) can only be installed onto an AIX partition running library bos.rte.libpthreads at level 7.2 or higher.

To check this, run the command:

lslpp -h bos.rte.libpthreads

An entry is displayed as:

```
# lslpp -h bos.rte.libpthreads
Fileset          Level    Action    Status    Date      Time
-----
Path: /usr/lib/objrepos
bos.rte.libpthreads
                7.2.0.1  COMMIT   COMPLETE  03/08/19  13:39:22
                7.2.2.15  APPLY   COMPLETE  03/08/19  14:59:34
Path: /etc/objrepos
bos.rte.libpthreads
                7.2.0.1  COMMIT   COMPLETE  03/08/19  13:39:22
                7.2.2.15  APPLY   COMPLETE  03/08/19  14:59:34
#
```

There may be multiple versions shown. Only one version needs to be level 7.2 or higher for the install to be successful.

IMPORTANT: If your AIX partition is not running at this level, you must upgrade before HALUSM can be installed on this partition.

Ports

Port 15000 must be available on the AIX server on which the agent is installed in order to communicate with the Enterprise Server. See [Porting Requirements](#).

DNS

The agent needs to know the IP address of the Enterprise Console Server. If your AIX/VIOS machine is not configured to use DNS then you must add a static entry into the `/etc/hosts` file for the Enterprise Console prior to installing the agent.

Downloading the AIX Agent software

1. Use the following URL to download the AIX Agent from the Fortra Community Portal. Note that a valid User Id and Password is required to access this URL:
<https://community.fortra.com/products-and-downloads/downloads/>
2. Scroll down until you locate Network Server Suite and click on the link to open a list of available downloads.
3. Scroll down to locate the NSS Managed Server (AIX) download.
4. Click on the associated link and save the file (`halusm-aix.rpm`) to your PC.

FTP the file to the AIX Server

Use FTP to transfer the agent over to the AIX partition/server.

1. Change the directory to the one where you downloaded the agent.
2. Start an FTP session to the AIX server.
3. Log in with an appropriate user/password combination
4. Set the transfer type to binary.
5. Run the following command to transfer the agent:
`put halusm-aix.rpm /tmp/halusm.rpm`

Installing the AIX agent using RPM

1. Run the command: **`rpm -i /tmp/halusm.rpm`**

NOTE: Later versions of rpm require "-f" so the command becomes: **`rpm -i -f /tmp/halusm.rpm`**

VIOS specifics

Login to the VIOS Server and issue the command:

oem_setup_env

to break out of the restricted VIOS shell.

Installing the AIX agent using SMIT

1. Log on to the AIX Server using the root user details.
2. Use the command: `[:/]# smit` to access the AIX System Management Console.
3. From the menu displayed, select **Software Installation and Maintenance**.

```
Move cursor to desired item and press Enter.

Software Installation and Maintenance
Software License Management
Devices
System Storage Management (Physical & Logical Storage)
Security & Users
Communications Applications and Services
Print Spooling
Advanced Accounting
Problem Determination
Performance & Resource Scheduling
System Environments
Processes & Subsystems
Applications
Installation Assistant
Cluster Systems Management
Using SMIT (information only)
```

4. From the next menu, select **Install and Update Software**.

```
Move cursor to desired item and press Enter.

Install and Update Software
List Software and Related Information
Software Maintenance and Utilities
Software Service Management
Network Installation Management
EZ NIM (Easy NIM Tool)
System Backup Manager
Alternate Disk Installation
EFIX Management
Thin Server Maintenance
```

- From the subsequent menu, select **Install Software**.

```

Move cursor to desired item and press Enter.

Install Software
Update Installed Software to Latest Level (Update All)
Install Software Bundle
Update Software by Fix (APAR)
Install and Update from ALL Available Software

```

- Type the name of the directory location that you previously created, for example; '/home/halcyon' and press Enter .

```

Type or select a value for the entry field.
Press Enter AFTER making all desired changes.

* INPUT device / directory for software          [Entry Fields]
                                                    [/home/halcyon]

```

- On the next display, press **F4** to prompt for a list of software available for installation.

```

Type or select values in entry fields.
Press Enter AFTER making all desired changes.

* INPUT device / directory for software          [Entry Fields]
                                                    /home/halcyon
* SOFTWARE to install                            [_all_latest]
PREVIEW only? (install operation will NOT occur)  no
COMMIT software updates?                        yes
SAVE replaced files?                            no
AUTOMATICALLY install requisite software?        yes
EXTEND file systems if space needed?              yes
OVERWRITE same or newer versions?                no
VERIFY install and check file sizes?             no
Include corresponding LANGUAGE filesets?         yes
DETAILED output?                                 no
Process multiple volumes?                        yes
ACCEPT new license agreements?                   no
Preview new LICENSE agreements?                  no

```

8. The display now shows the software available for installation in the specified directory. Position the cursor so that the *halusm* entry is highlighted and press Enter.

```

SOFTWARE to install

Move cursor to desired item and press F7. Use arrow keys to scroll.
ONE OR MORE items can be selected.
Press Enter AFTER making all selections.

halusm-2.0 ALL
  @BR:halusm-2.0 2.0

F1=Help          F2=Refresh       F3=Cancel
F7=Select        F8=Image         F10=Exit
Enter=Do         /=Find           n=Find Next

```

9. When returned to the initial installation screen, use the arrow keys to move between options and the tab key to change the field setting for each option to the following:

Option Setting

PREVIEW only? **no**

COMMIT software updates? **yes**

SAVE replaced files? **no**

AUTOMATICALLY installed requisite software? **yes**

EXTEND file systems if space needed? **yes**

OVERWRITE same or newer versions? **no**

VERIFY install and check file sizes? **no**

Include corresponding LANGUAGE filesets? **yes**

DETAILED output? **no**

Process multiple volumes? **yes**

ACCEPT new license agreements? **yes**

Preview new LICENSE agreements? **no**

10. Press Enter to begin the installation. Press Enter again at the confirmation screen to continue .

```

ARE YOU SURE?

Continuing may delete information you may want
to keep. This is your last chance to stop
before continuing.

Press Enter to continue.
Press Cancel to return to the application.

ARE YOU SURE?

```

11. When the following screen is displayed, installation is complete. Press **F10** to return from **SMIT** to the command line.

```
Command:           stdout: yes          stderr: no

Before command completion, additional instructions may appear below.

#ainstall -I "a -cgNqQeXY -J" -Z -d /hwm/halcyon -f File 2>&1

File:
  halum=2.0

Validating RPM package selections ...

halum          #####0513-071 The halum Subsystem has been added.

File /etc/group has been modified.
File /etc/passwd has been modified.

One or more of the files listed in /etc/check_config.files have changed.
See /var/adm/ras/config.diff for details.
```

What happens during the installation process

During the installation process the following events occur:

- The user profile 'halcyon' is created which has authority to the Halcyon monitor and commands.
- The following commands are added to /etc/rc.d/rc2.d in order that the halusm process is automatically started when the AIX system is started or ended if the AIX run-level is changed.

```
Shalusm (start)  
Khalusm (kill)
```

- The '/etc/group' and '/etc/passwd' files for the halcyon user are modified.
- Active logs are stored in '/tmp/ServerManager.hlf' and '/usr/log/usr'.

Additional folders that are created as part of the installation:

- /etc/rc.d/rc2.d/Shalusm
- /etc/rc.d/rc2.d/Khalusm
- /usr/bin/halusm.sh
- /usr/libexec/halcyon
- /var/lib/halcyon

Porting Requirements

Ensure that the port 15000 is available on the AIX Server as this is used for all communications between this device and the Enterprise Server.

To check if port 15000 is active, enter the command:

```
netstat -na | grep 15000
```

This displays any IP address with port 15000 to any IP address and port on the network in LISTEN status. This is only displayed if the HALUSM subsystem is active.

Checking and controlling the halusm process

Use the command: **lssrc -s halusm** to check the status of the halusm process.

```
[/tmp]#lssrc -s halusm
Subsystem      Group      PID      Status
halusm        halcyon
[/tmp]#
```

If the process is inoperative use the command:

startsrc -s halusm

To stop the process use the command:

stopsrc -s halusm

Configuring the AIX Server for use within Network Server Suite

Adding the AIX Server to the Device Manager

1. At the Windows Start menu, select **Start | Programs | Halcyon Network Server Suite | Device Manager**.
2. From the **Home** menu ribbon click **Add**. The **Add Device** dialog is displayed.
3. At this stage, leave the Group setting as (default). Enter the **Name** and **Description** of the server.
4. Select **AIXServer** as the **Device Type**.
5. Enter the **IP Address** of the AIX server.
6. Click **OK**. The AIX server is now displayed in the **Defined Devices** pane of the Halcyon Device Manager dialog.
7. Close the Device Manager.


Adding a new Enterprise Server entry

This step is only required if the AIX Server is not configured to use local DNS and ensures your existing enterprise server uses the IP Address as identification, rather than the host name so that the Enterprise Server and AIX Server can communicate.

1. At the Windows Start menu, select **Start | Programs | Halcyon Network Server Suite | Device Manager**.
2. From the menu bar select **Devices | Add Device**.
3. Leave the Group setting as (default). Enter the **Name** and **Description** of the enterprise server.
4. Select **Windows Server** as the **Device Type**.
5. Enter the **IP Address** (not the Host Address) of the server.
6. Click **OK**. The server is now displayed in the **Defined Devices** pane of the Halcyon Device Manager dialog.
7. Close the Device Manager.

Adding the AIX Server to Central Configuration Manager

The AIX Server agent must be installed and active prior to these steps being actioned.

1. At the Windows Start menu, select **Start | Programs | Halcyon Network Server Suite | CCM Console**.
2. From the Central Configuration Manager menu bar select **Home | Systems** or press **F5**, to update the changes made within Device Manager.
3. From the left-hand pane, select the top (**default**) group so that it is highlighted and then click  **Add System** from the **Home** menu ribbon. The **Select System** dialog is displayed.
4. Select the AIX Server so that it is highlighted and click **Select**. Confirmation that the system has been added is shown in the **Add System** dialog.
5. Click **OK** to add the AIX Server system to the Central Configuration Manager.
6. Select **File | Save Settings** to send the setting to the AIX Server agent.
7. Close the Central Configuration Manager.

The installation of the AIX Server agent is now complete. Please refer to the section; **Applying Licenses** in the [Network Server Suite Installation Guide](#) for instructions on how to license the system.

Checking the version of the AIX Server Manager

To check which version of AIX Server Manager you are running, please use the command:

```
rpm -qi halusm
```

Upgrading the AIX Server Manager

Use PuTTY to start a Telnet session to the AIX server.

1. Enter the **AIX server name** (or IP address).
2. Select the **Telnet** connection type option.
3. Click **Open**.

VIOS specifics

- a. Login to the VIOS Server and issue the command:

oem_setup_env

to break out of the restricted VIOS shell.

4. Confirm the agent has been transferred successfully by running the command:

ls -dl /tmp/*.*

You should see the halusm.rpm agent present:

```

HALAIX72 - PuTTY
* this release of the AIX Operating System.
*
*
*****
Last unsuccessful login: Mon Sep 16 07:13:05 CDT 2019 on /dev/pts/0 from pratchf
ord0719.helpsystems.com
Last login: Tue Oct 15 08:13:52 CDT 2019 on ftp from pratchford0719.helpsystems.
com

# ls -dl /tmp/*.* 1
-rw-r--r-- 1 halcyon system 593195 Oct 15 08:19 /tmp/ServerManager.hlf
-rw-r--r-- 1 halcyon system 10485590 Oct 15 07:55 /tmp/ServerManager.hlf
.bak
-rw----- 1 root system 0 Oct 21 2016 /tmp/cache_mgt.lock
-rw-r--r-- 1 root system 2116 Mar 08 2019 /tmp/ctimc_MDDr.dbg
-rw-r--r-- 1 root system 8 Mar 08 2019 /tmp/etc_daemon.lock
-rw-r----- 1 halcyon system 30901678 Oct 15 08:15 /tmp/halusm.rpm
-rw-rw-r-- 1 root system 204800 Oct 15 08:18 /tmp/lvmt.log
-rwxr-xr-x 1 root system 28 Mar 08 2019 /tmp/pfcdaemon.out
-rw-r--r-- 1 root system 113 Mar 08 2019 /tmp/rc.net.out
-rw-r--r-- 1 root system 0 Mar 08 2019 /tmp/rc.net.serial.out
-rw----- 1 root system 0 Oct 21 2016 /tmp/rpcbind.file
-rw-r--r-- 1 root system 53 Mar 08 2019 /tmp/uncfgct.dbg
#

```

Upgrade the AIX Agent

Upgrade the AIX agent by running the following commands:

1. Stop the Halcyon agent:
stopsrc -s halusm
2. Remove the existing Halcyon Agent:
rpm -e --noscripts halusm
3. Clear the Halcyon library:
cd /var/lib/halcyon
pwd Check you are in the right directory!
rm * Be very careful with this command!

4. Install the new Halcyon Agent:
rpm -i /tmp/halusm.rpm

You should get the message that the subsystem has been added, and started.

```
# rpm -i /tmp/halusm.rpm
Taking ownership of /tmp/ServerManager.hlf
Taking ownership of /tmp/ServerManager.hlf.bak
Adding User
3004-689 User "halcyon" exists.
User Added
Changing Ownership To Halcyon
Ownership Changed To Halcyon
Adding Service
0513-075 The new subsystem name is already on file.
Service Added
Starting Service
0513-059 The halusm Subsystem has been started. Subsystem PID is 5571058.
Service Started
#
```

Check new version is installed and running

1. Check the version of the agent:
rpm -qi halusm
2. Check the agent is running:
lssrc -s halusm

Re-select the AIX server in CCM and re-save

1. Open the **Central Configuration Manager**.
2. In the **Systems** panel, select the upgraded **AIX Server**.
3. In the **System Details** panel click **CCM Server** and select the **CCM Server** from the listed devices.
4. In the **System Details** panel click **Enterprise Server** and select the **Enterprise Server** from the listed devices.
5. Click **Save Settings** to save the changes.

Linux Agent Installation

The Linux agent can be installed on any of the supported Linux versions listed below.

- Red Hat Enterprise Linux Server v7 or higher
- SUSE Linux Enterprise Server v11 or higher
- SUSE 11 on Power PPC (Big Endian)
- SUSE 12 on Power PPC (Little Endian)
- openSUSE v11.2 or higher
- CentOS v5.3 or higher
- Ubuntu v18.04 or higher (with the exception of v19.xx)

Installation requirements

- User login root to install an rpm or deb package
- TCP port 15000 available for Halcyon use

Prerequisite for Linux Red Hat 64-Bit installations

The system on which the installation is being undertaken must be enrolled in an active Red Hat Network (RHN) registration prior to running the following commands:

```
# yum install glibc.i686
```

```
# yum install compat-db.i686 zlib.i686 libidn.i686 krb5-libs.i686
```

Service controllers

The service controllers are checked in the following order:

- 'systemd' is used first if available.
- 'UpStart' is used if available and 'systemd' is not available.
- 'SysV' is used if either of the above are not available.

The commands to start/stop each type of service are as follows:

Type	Start	Stop
Linux 'systemd'	systemctl start halcyon.halusm	systemctl stop halcyon.halusm
Linux 'upstart'	start halusm	stop halusm
Linux 'SysV'	service halusm start	service halusm stop

IMPORTANT!

Please read the following before you begin the Linux Agent Installation.

HALUSM running as root

For the purpose of monitoring the Linux server, HALUSM runs as root.

Port 15000

As part of the Linux agent installation, port 15000 is automatically opened on the firewall, using the command:

```
iptables -I INPUT -p tcp -m tcp --dport 15000 -j ACCEPT
```

This is done so that the Linux server can communicate with Network Server Suite. Ideally, you should modify the entries within 'iptables' to restrict access via port 15000 to internal network addresses only.

Compatibility

Halcyon Linux Server Manager has been successfully installed and tested on:

CentOS/Red Hat/Oracle

- v7.0 or higher

openSUSE/SUSE

- v11.4
- v13.1
- SUSE 11 on Power PPC (Big Endian)
- SUSE 12 on Power PPC (Little Endian)

Ubuntu

- Ubuntu v18.04 or higher (with the exception of v19.xx)

Installing the Linux Agent Server Manager

The following instructions cover an installation of the Linux Agent Server Manager.

NOTE: You need the root password in order to complete the installation.

Downloading the software and using PuTTY to transfer to Linux Server

1. Download the file: **NSS Managed Server (Linux)**, that matches the Linux version on which you are installing, from:
<https://community.fortra.com/products-and-downloads/downloads/>
2. Using PuTTY (or equivalent program), connect to the system onto which you transferred the installation file.
3. In the open terminal window type the following command, using the location to which you previously transferred the files (Desktop in the example below):

```
[root@Test304 ~]# cd Desktop  
[root@Test304 Desktop]#
```

4. Type the following command using the downloaded file name:

```
rpm -i file name (For example: rpm -i halusm-redhat_oracle_  
32bit.rpm)
```

IMPORTANT: For Ubuntu installations, the downloaded file is .deb so use command:
`dpkg -i *.deb`

5. Press the **TAB** key to auto complete the entry.
6. Press **Enter** to begin installing the Linux Server Manager. A message confirming the saving of firewall rules to /etc/sysconfig/iptables is displayed. Once completed, with a confirmation of **[OK]**, the installation continues.

The HALUSM Installer can now be deleted.

WARNING: Remember. Port 15000 is now open on the firewall following the installation of the Linux Server Manager!

You are now ready to begin monitoring Linux on this system.

Useful commands and file information

The following are all useful commands together with information about where specific files are stored.

To Stop the agent

```
/etc/init.d/halusm stop
```

To Start the agent

```
/etc/init.d/halusm start
```

Location of settings files

```
/var/lib/halcyon
```

Location of log files

```
/tmp/ServerManager.hlf
```

To uninstall the agent

```
rpm -e halusm
```

To uninstall the agent on Ubuntu

```
apt-get remove halusm
```