



IBM System x3550 M4 Management Node with Software Preload

Quick Start Guide

v1.82

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Introduction

The IBM System x3550 M4 Management Node with Software Preload (Machine/Type/Model 7944-DD*) is a pre-built subsystem that is used to manage IBM hardware platforms. The subsystem includes both hardware and software, and it can be used in an assortment of deployments.

For example, in context of IBM Cloud offerings based upon BladeCenter, the x3550 M4 Management Node with Software Preload hosts the platform management tools while the virtualization and cloud management components reside on the blades in the BladeCenter. Figure 1 illustrates such a Cloud environment that includes the x3550 M4 Management Node with Software Preload.

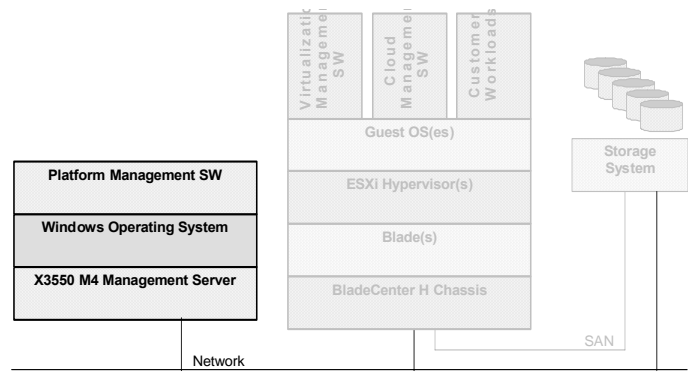


Figure 1 - IBM Cloud Product Overview
The scope of this document is a summary of setup and configuration of the x3550 M4 Management Node with Software Preload. Hardware installation of the x3550 M4 Management Node and other components within the infrastructure are described elsewhere.

Preload Software Components

Figure 2 illustrates the components resident on the x3550 M4 Management Node with Software Preload. The gray symbols represent components that are external to the x3550 M4 Management Node with Software Preload.

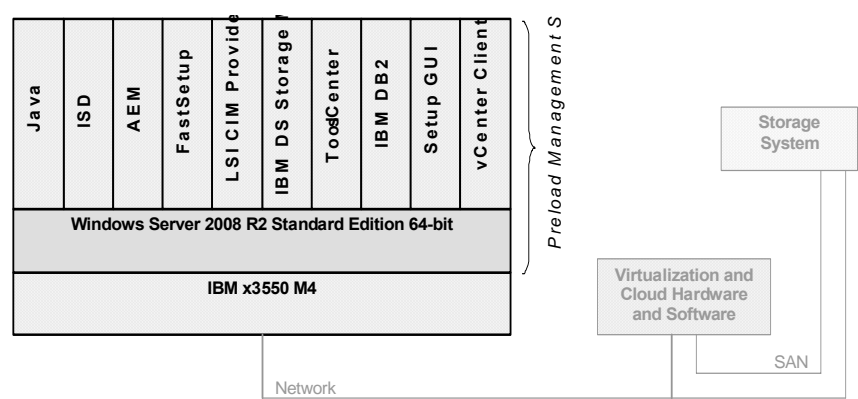


Figure 2 - Management Software Preload Overview

As illustrated in Figure 2, the x3550 M4 Management Node with Software Preload comes preinstalled with the components shown in Table 1. In the table, column 3 cites references at the end of this document. Column 4 describes the function of each component.

This Quick Start Guide describes the steps required to setup the IBM System x3550 M4 Management Node with Software Preload. For additional information not contained here, refer to the documents for each respective component as cited in Table 1 and the reference section.

| Component | Version | Ref | Function |
|--|------------------|---------------------|--|
| Windows Server 2008 R2 64-bit | Std Edition | 26 | Baremetal Operating System |
| Java | 6.0 | 6 | Java Runtime (Java VM) |
| IBM Systems Director (ISD) Server and Console with DB2 for management database | 6.3 Free Edition | 4, 7, 9, 10, 11, 12 | Platform Management Services (i.e., monitoring, inventory, hardware status, update management) – includes DB2 9.7 64-bit Database Server |
| Active Energy Manager | 4.4 | 10 | Power Management ISD plugin (i.e., complements ISD to support monitoring of wattage, with potential for power capping and throttling) |
| ISD Storage Manager | 6.3 | 7 | Storage Management plugin (i.e., a component of base ISD) used to support monitoring of DS 3xxx/4xxx storage systems |
| ISD Update Manager | 6.3 | 7 | Update Management plugin (i.e., a component of base ISD) used to support update of IBM system firmware and software |
| ISD S&SM | 6.3 | 7 | Service and Support Management plugin (i.e., a component of base ISD) used to provide support for IBM systems |
| DS Storage Manager | 10.77.x5.28 | 10, 17 | DS 3xxx/4xxx storage element manager from LSI (NetApp) |
| Dynamic System Analysis | 9.0 (12A) | 18 | System x ToolsCenter System Health |
| Advanced Setup Utility | 9.0 (12A) | 18 | System x ToolsCenter Setup/Configuration |
| Update Express | 9.0 (12A) | 18 | System x ToolsCenter Systems Updates |
| Bootable Media Creator | 9.0 (12A) | 18 | System x ToolsCenter |
| IBM FastSetup | 1.1 | 5 | HS23/BCCH Hardware Setup/Configuration |
| IBM FastSetup System Templates | 1.1 | 5 | HS23/BCCH Hardware profiles for automated, rapid, and simple hardware setup and configuration |
| VMware vCenter Client | 5.0u1 | 25 | VMware Virtualization Management Console |
| QuickStart Guide | 1.82 | N/A | User setup/startup instructions |

Table 1 - x3550 M4 Software Preload Components

Getting Started

This document assumes that the IBM System x3550 M4 Management Node with Software Preload hardware has been installed and cabled.

Perform the following prior to starting the configuration procedure:

1. Identify the Host Name of x3550
2. Identify the Windows Domain
3. Identify the IP address of the x3550 if a static IP address is desired
4. Identify a custom DNS suffix if required
5. Identify user access to the IBM Systems Director Server
6. Identify the IP address and credentials of the vCenter Server and ESX Hypervisor

Before executing any of the procedures that follow, perform these steps:

1. Power On the x3550 platform
2. The preloaded Windows OS is unfinished, so complete the initial "Setup Windows Wizard"
3. Reboot the system as required
4. Update the Windows Server if desired

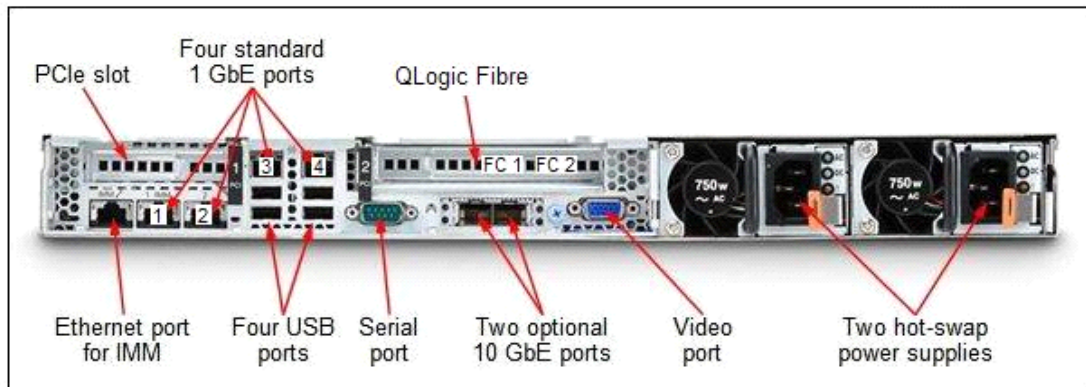
Automatic Setup and Configuration of the x3550 M4 Management Node with Software Preload

The configuration of the x3550 M4 Management Node with Software Preload is performed in manufacturing prior to shipment to the customer.

Setup of the x3550 M4 Management Node with Software Preload is performed during initial boot using the Windows on-site setup/install procedure.

Verify NIC Enumeration

As illustrated here, the x3550 M4 Management Server has four onboard NICs:



To verify that the Windows Server NIC Enumeration translates to the proper Physical NIC Enumeration perform the following steps:

1. Go to **Control Panel** → **Network and Internet** → Select **Network Sharing Center**, then **Change adapter settings**. You should see **five** network connections.

| | | | |
|-------------------------|----------------------------|----------------------------|--|
| Local Area Connection 5 | LAN or High-Speed Internet | Limited or no connectivity | IBM USB Remote NDIS Network Device |
| Local Area Connection 3 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #3 |
| Local Area Connection 4 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #4 |
| Local Area Connection | LAN or High-Speed Internet | Connected | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) |
| Local Area Connection 2 | LAN or High-Speed Internet | Connected | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #2 |

- Go to the rear of the x3550 system. Take note of which Ethernet port is connected.
Unplug the existing connection. In *Network Connections*, **Refresh** the screen and you should see all connections in the **Network cable unplugged** state. (**Note:** Ignore the *IBM USB Remote NDIS Network Device*).

| | | | |
|-------------------------|----------------------------|----------------------------|--|
| Local Area Connection | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) |
| Local Area Connection 2 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #2 |
| Local Area Connection 3 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #3 |
| Local Area Connection 4 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #4 |
| Local Area Connection 5 | LAN or High-Speed Internet | Limited or no connectivity | IBM USB Remote NDIS Network Device |

- Take one Ethernet cable and plug it into the NIC that is labeled **1** on the x3550.
- Go back to Windows Server, and refresh the Network Connections Screen. Notice in our example below, the Windows Enumeration is *not* the same as the Physical NIC enumeration on the back of the x3550. Physical NIC 1 is Windows #3.

| | | | |
|-------------------------|----------------------------|----------------------------|--|
| Local Area Connection | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) |
| Local Area Connection 2 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #2 |
| Local Area Connection 3 | LAN or High-Speed Internet | Connected | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #3 |
| Local Area Connection 4 | LAN or High-Speed Internet | Network cable unplugged | Broadcom BCM5709C NetXtreme II GigE (NDIS VBD Client) #4 |
| Local Area Connection 5 | LAN or High-Speed Internet | Limited or no connectivity | IBM USB Remote NDIS Network Device |

- In Table 2, record what the Physical to Windows Enumeration is for NIC 1. **This is very important. Problems will arise if you do not reference this table in your setup.** Repeat for remaining NICs.

Table 2 – Physical to Windows NIC Enumeration

| Physical NIC Enumeration (on back of x3550) | Windows Enumeration (Network Connections) |
|--|---|
| 1 | |
| 2 | |
| 3 | |
| 4 | |

Caution

The hostname of the x3550 M4 Management Node with Software Preload is defined in manufacturing. A malfunction may occur if the hostname is changed at the site of installation without using the proper procedure.

If the hostname of the x3550 M4 Management Node with Software Preload requires modification at the site of installation, refer to the IBM Retain TIP document at the following location:

- <http://www-304.ibm.com/support/docview.wss?uid=swg21258834>

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