Installation Guide
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AMS Suite: Intelligent Device Manager Version 12.0 Installation Guide

AMS Suite

EMERSON. Process Management

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1 Introduction

To install a standalone AMS Device Manager system

- Read “Before you begin” on page 11.
- Confirm that your system meets AMS Device Manager requirements starting on page 19.
- For a new installation of a standalone AMS Device Manager system, follow the Server Plus installation steps in section 3, “Installing AMS Device Manager” beginning on page 43.
- For upgrading from AMS Device Manager 10.0 or later, review Table 1 on page 13 and follow the appropriate steps.

To install a Distributed AMS Device Manager system

- Read “Before you begin” on page 11.
- Confirm that your system meets AMS Device Manager requirements starting on page 19.
- For a new installation of a distributed AMS Device Manager system, follow the Server Plus and Client SC installation steps in section 3, “Installing AMS Device Manager” beginning on page 43.
- For upgrading from AMS Device Manager 10.0 or later, review Table 1 on page 13 and follow the appropriate steps.

To install AMS Device Manager on a DeltaV system

- Read “Before you begin” on page 11.
- Confirm that your system meets minimum requirements for a co-deployment (refer to the documentation provided with your DeltaV system).
- For a new installation of AMS Device Manager on a DeltaV system, follow the installation steps starting on page 66.

To install AMS Device Manager on an Ovation system

- Read “Before you begin” on page 11.
- Confirm that your system meets minimum requirements for a co-deployment (refer to the documentation provided with your Ovation system).
- For a new installation of AMS Device Manager on an Ovation system, follow the installation steps starting on page 68.

To install AMS Device Manager Web Services

- Read “Before you begin” on page 11.
- Confirm that your system meets AMS Device Manager requirements starting on page 19.
- Follow the installation steps on page 107.

About this guide

This *AMS Suite: Intelligent Device Manager Installation Guide* contains the following information:

- Section 1, “Introduction” — Provides an overview of AMS Device Manager installation and directs you to the appropriate procedures for installing AMS Device Manager for your setup and circumstances.
- Section 2, “System requirements” — Lists the system requirements for AMS Device Manager, including hardware, software, and security requirements. This section also defines additional requirements for system interface networks.
- Section 3, “Installing AMS Device Manager” — Describes the procedures for installing AMS Device Manager software. Installing AMS Device Manager on a DeltaV or Ovation network is also detailed.
- Section 4, “Configuring communication interfaces” — Describes how to configure the AMS Device Manager network and install network communication devices (HART modems, HART multiplexers, Field Communicators, documenting calibrators, and system interface networks).
- Section 5, “Starting to Use AMS Device Manager” — Describes how to start using AMS Device Manager and how to access additional information.
- Section 6, “Troubleshooting installation” — Provides troubleshooting steps you can take if you have problems installing AMS Device Manager.

For more information, refer to AMS Device Manager Books Online or contact your local Emerson Process Management Sales/Service Office.

Before you begin

To install and use AMS Device Manager software effectively, you should be familiar with the basic functions and operation of:

- Microsoft® Windows®
- Your local area network (LAN) configuration and security
- Your communication devices and field devices
- Network components installed in your system
- AMS Device Manager security requirements (see "Starting to Use AMS Device Manager" on page 109)
- Database backup/restore procedures (see "Backing up a database" on page 16 and "Restoring a database" on page 17)

Upgrading an AMS Device Manager system

When you upgrade to a new version of AMS Device Manager, the installation process overwrites all existing files located in the AMS folder (except the database files and license files). **Before you upgrade, you should back up your database as a precaution against loss of data (see page 16).** The backup files are not changed during installation. In the unlikely event that database files are damaged or altered in some way, you can use the backup files to restore the database.

Prior to upgrading your AMS Device Manager application, you should uninstall any SNAP-ON applications on the AMS Device Manager station. You should also stop any programs or processes that access AMS Device Manager Servers (see Table 1 on page 13). You do not need to remove most of the system interfaces, such as RS3, PROVOX, Ovation, and others.

The DeltaV System Interface requires that you re-apply the interface after upgrading AMS Device Manager. To do this, in the Network Configuration utility, display the properties of the DeltaV System Interface, click **OK**, and then click **Close**.

After you have completed the upgrade, start the application and right-click each of the network icons. Select **Rebuild Hierarchy** followed by **Scan > New Devices**.

If you are using the Alert Monitor feature, click the Alert Monitor button  on the AMS Device Manager toolbar to open the Alert List. Click the **Station Monitoring** button in the toolbar and ensure that all the stations you need to monitor are selected.

Install the latest version of the SNAP-ON applications that were removed prior to upgrading; see “Installing SNAP-ON applications” on page 56.

NOTICE

AMS Device Manager does not support automatic upgrading from version 9.x or earlier. Contact customer support for instructions for your situation.

Upgrading from AMS Device Manager 10.0 or later

Table 1 on page 13 provides steps for most AMS Device Manager users upgrading from AMS Device Manager 10.0 and later.

Table 1: Upgrading from AMS Device Manager 10.x or later

Current Setup	Desired 12.0 Setup	
	Server Plus Station	**Client SC Station**
Server Plus Station	• Check in all calibration routes • Back up existing database (page 16) • Uninstall SNAP-ON applications, if installed[2] • Uninstall AMS Suite Calibration Connector application, if installed • Uninstall T+H TACC components, if installed (refer to TACC guides downloaded from T+H) • Remove any configured HART Over PROFIBUS but not HART Over PROFIBUS / Router DTM System Interfaces • Stop any programs or processes that access AMS Device Manager Server[1] • Stop AMS Asset Portal Data Collection or AMS Suite APM, if running • Stop AMS Device Manager Server in system tray if running • Install Server Plus Station software (page 49) • Get new license codes, if required (page 55) • Reapply the DeltaV System Interface, if applicable (page 11) • Install required SNAP-ON applications (page 56)[2] • Install AMS Suite Calibration Connector application, if applicable • Install new T+H TACC components, if applicable (page 99) • Configure HART Over PROFIBUS/ Router DTM System Interfaces, if applicable (page 99) • Install latest version of Web Services, if required (page 107) • Add all Windows Users (local or domain) to the AMSDeviceManager Windows group • If you plan to continue using AMS Asset Portal, restart Data Collection, but if you have purchased AMS Suite APM, contact PlantWeb Services for assistance.	• Check in all calibration routes • Back up existing database (page 16) • Consolidate existing databases, if necessary (page 46) • Uninstall SNAP-ON applications[2] • Uninstall AMS Suite Calibration Connector application, if installed • Uninstall T+H TACC components, if installed (refer to TACC guides downloaded from T+H) • Remove any configured HART Over PROFIBUS but not HART Over PROFIBUS / Router DTM System Interfaces • Stop any programs or processes that access AMS Device Manager Server[1] • Stop AMS Device Manager Server in system tray if running • Uninstall previous AMS Device Manager software (page 18) • Install Client SC Station software (page 52) • Install required SNAP-ON applications (page 56)[2] • Configure required communication interfaces (page 71) • Install new T+H TACC components, if applicable (page 99) • Configure HART Over PROFIBUS/ Router DTM System Interfaces, if applicable (page 99) • Add all Windows Users (local or domain) to the AMSDeviceManager Windows group

Table 1: Upgrading from AMS Device Manager 10.x or later (Continued)

Current Setup	Desired 12.0 Setup	
	Server Plus Station	**Client SC Station**
Client SC Station	• Check in all calibration routes • Back up existing database (page 16) • Uninstall SNAP-ON applications, if installed[2] • Uninstall T+H TACC components, if installed (refer to TACC guides downloaded from T+H) • Remove any configured HART Over PROFIBUS but not HART Over PROFIBUS / Router DTM System Interfaces • Stop any programs or processes that access AMS Device Manager Server[1] • Stop AMS Device Manager Server in system tray if running • Uninstall previous AMS Device Manager software (page 18) • Install Server Plus Station software (page 49) • Get new license codes (page 55) • Configure required communication interfaces (page 71) • Install required SNAP-ON applications (page 56)[2] • Install AMS Suite Calibration Connector application, if applicable • Install new T+H TACC components, if applicable (page 99) • Configure HART Over PROFIBUS/ Router DTM System Interfaces, if applicable (page 99) • Install latest version of Web Services, if required (page 107) • Add all Windows Users (local or domain) to the AMSDeviceManager Windows group • If you plan to use AMS Asset Portal, start Data Collection, but if you have purchased AMS Suite APM, contact PlantWeb Services for assistance.	• Uninstall SNAP-ON applications[2] • Uninstall T+H TACC components, if installed (refer to TACC guides downloaded from T+H) • Remove any configured HART Over PROFIBUS but not HART Over PROFIBUS / Router DTM System Interfaces • Stop any programs or processes that access AMS Device Manager Server[1] • Stop AMS Device Manager Server in system tray if running • Install Client SC Station software (page 52) • Reapply the DeltaV System Interface, if applicable (page 11) • Install required SNAP-ON applications (page 56)[2] • Install new T+H TACC components, if applicable (page 99) • Configure HART Over PROFIBUS/ Router DTM System Interfaces, if applicable (page 99) • Add all Windows Users (local or domain) to the AMSDeviceManager Windows group

Table 1 Notes:

[1] Processes that must be stopped before upgrading include:

- AMSPlantServer
- AMSFileServer

- AMSConnectionServer
- AMSOPC
- AMSGenericExports
- AmsFFServer
- AmsFFAtDeviceBroker
- AMSLicenseServer
- AmsDeviceAlertServer
- AmsHseServer
- AMSDevTypeRemote
- AMSPBServer

[2] SNAP-ON applications must be uninstalled before installing the latest version.

Upgrading from AMS Wireless Configurator

▶ To install an AMS Device Manager Server Plus or Client SC Station on a PC that has AMS Wireless Configurator installed:

1. Open the Windows Control Panel and use Add or Remove Programs (XP) or Programs and Features (Windows 7) to remove AMS Wireless Configurator.
2. Obtain new license codes for AMS Device Manager (see “Licensing a Distributed System” on page 55).
3. Install AMS Device Manager (see “Installing Server Plus Station software” on page 49 or “Installing Client SC Station software” on page 52).
4. If you installed a Server Plus Station in step 3, restore your backed up database (see “Restoring a database” on page 17).

If you installed a Client SC Station in step 3, you may need to consolidate your backed-up AMS Wireless Configurator database with an existing database (if so, refer to “Consolidating databases” on page 46).

Upgrading from AMS Device Configurator

AMS Device Configurator is an unlicensed, limited-feature version of AMS Device Manager provided to DeltaV users. To upgrade to a fully licensed version of AMS Device Manager:

1. Obtain new license codes for AMS Device Manager (see "Licensing a Distributed System" on page 55).
2. Stop AMS Device Manager Servers (**Start > All Programs > AMS Device Manager > Terminate Servers**).
3. Select **Start > All Programs > AMS Device Manager > Licensing > Licensing Wizard**.
4. Follow the instructions in the Licensing Wizard.
5. Start AMS Device Manager to see the changes.

Backing up a database

To back up a database:

1. Run Database Verify/Repair to check the database for duplicate, missing, and corrupt records (select **Start > All Programs > AMS Device Manager > Database Utilities > Database Verify Repair**).

Note

For a very large database, the Verify/Repair operation can take a considerable length of time.

2. Back up your database (select **Start > All Programs > AMS Device Manager > Database Utilities > Database Backup**). Save your backup file in a location on your local drive not in the AMS folder.

Note

If performing a database backup on a Windows 7/Windows 2008 Server PC with User Account Control enabled, log in with a username included in the AmsDeviceManager Windows group to avoid multiple error messages.

Restoring a database

To restore a database:

1. Close AMS Device Manager and any related applications (for example, Alert Monitor, Server Plus Connect), if open.
2. Stop all database connections.
3. Stop AMS Device Manager Servers (**Start > All Programs > AMS Device Manager > Terminate Servers**).
4. If the database backup file is located on a network drive, copy it to a local drive.
5. Select **Start > All Programs > AMS Device Manager > Database Utilities > Database Restore**.
6. Select the database backup file you want to restore and click **Open**.

Note

If you are restoring a database that was created on a different PC and you want to retain the Device Monitor List and Alert Monitor alerts, before you restore the database on the new station, ensure that the names of the PC and system interfaces configured on the new station are the same as the original station.

If performing a database restore on a Windows 7/Windows 2008 Server PC with User Account Control enabled, log in with a username included in the AmsDeviceManager Windows group to avoid multiple error messages.

Uninstalling AMS Device Manager

You must uninstall AMS Device Manager software if you are upgrading from any versions earlier than 10.0. If you are upgrading from any of these versions, contact customer support for instructions for your situation. You do not need to uninstall AMS Device Manager software if you are upgrading from version 10.0 or later. The installation program modifies the earlier version and migrates the existing database to the new version. Table 1 on page 13 provides the steps to upgrade to AMS Device Manager 12.0.

Note

If you have SNAP-ON applications or the Calibration Connector application installed, uninstall them before uninstalling AMS Device Manager. If your applications use an external database, you must back up that database before you uninstall the application (if you want to keep the data).

To uninstall AMS Device Manager:

1. Back up your existing database. Save your backup file in a location outside the AMS folder.
2. Save your license.dat file in a location outside the AMS folder.
3. Stop the AMS Device Manager Server by right-clicking the icon in the system tray and selecting **Stop AMS Device Manager Server**.
4. Open the Windows Control Panel and use Add or Remove Programs (XP) or Programs and Features (Windows 7) to remove AMS Device Manager.

See “Consolidating databases” on page 46 for information about consolidating multiple AMS Device Manager databases.

2 System requirements

Each PC in your system must meet minimum software and hardware requirements to ensure successful installation and operation of AMS Device Manager. System interface networks and SNAP-ON applications may have additional requirements.

Hardware requirements

PC processing speed, memory, and disk space

The recommended *free hard disk space* specified below is the amount needed for AMS Device Manager installation, not the amount needed for daily operation (there are no recommended minimum amounts for daily operation). If you receive a message during installation that you do not have enough hard disk space, free up as much space as possible and then retry the installation.

Station Type	Minimum Requirements w/AMS Device Manager only	Recommended Requirements w/ AMS Suite APM or AMS Asset Portal
Server Plus Station	Intel® Core™2 Quad, 2 GHz or greater 3 GB or more of memory 2 GB or more of free hard disk space	Intel® Core™2 Quad, 3 GHz or greater 3 GB or more of memory 4 GB or more of free hard disk space
Client SC Station	Intel® Core™2 Duo, 2.4GHz or greater 2 GB or more of memory 2 GB or more of free hard disk space	N/A

Notes:

Additional hard disk space is required for migrating the database if you are upgrading from an earlier version of AMS Device Manager. The amount of space required depends on the size of the existing database.

Additional space may be required on the Server Plus Station for the database, depending on the size of your database.

Additional hard disk space is required for SNAP-ON applications.

Set virtual memory to 2–3 times the size of the physical memory.

If you use AMS Asset Portal version 3.2, for optimal performance, it should be installed on a non-AMS Device Manager PC. If you choose to co-deploy with AMS Device Manager, the PC must meet the requirements above.

AMS Suite: Asset Performance Management is a product offering that replaces AMS Asset Portal. The AMS Suite APM Client Framework can be installed on an AMS Device Manager 12.0 station that meets the requirements above. Other components of AMS Suite APM must be installed on additional non-AMS Device Manager PCs. For more information about AMS Suite APM, contact your Emerson Process Management Sales/Service Office.

Serial interfaces

- An RS-232 serial interface is required for a serial HART multiplexer network or documenting calibrator.
- A serial HART modem requires a serial port with a dedicated interrupt.

USB interfaces

- A USB port and USB HART modem drivers are required to use a USB HART modem. See the Release Notes for a list of supported modems.
- A USB port is required to connect a 375 or 475 Field Communicator using a USB Infrared Data Association (IrDA) adapter. In some cases, IrDA drivers may be necessary. See the Release Notes for a list of supported adapters.
- A USB port is required to connect a 475 Field Communicator or Bluetooth modem using a USB Bluetooth adapter. Only Microsoft Bluetooth components are supported (see the Release Notes for more information).

Network requirements

- AMS Device Manager is designed to operate on an Ethernet network running TCP/IP.
- Mobile AMS Device Manager stations are allowed to connect wirelessly using wireless plant network technology. Some communications slowdown can be expected with wireless networking.
- AMS Device Manager supports deployment within a single domain or workgroup or across multiple domains or workgroups. For more information, refer to KBA NA-0800-0113. The Microsoft Windows Management Instrumentation and Workstation services must be running on the PC during installation.
- AMS Device Manager does not support deployment between a network workgroup and a network domain.

For information about working with network firewalls, refer to “Changing Windows Firewall settings” on page 109.

Software requirements

Operating systems

AMS Device Manager supports the following Windows operating systems.

Operating System	Version
Windows XP	Professional Service Pack 3[1]
Windows Server 2003	Standard Edition Service Pack 2[1]
Windows Server 2003 R2	Standard Edition Service Pack 2[1]
Windows 7	Professional Service Pack 1[2]
Windows 7	Enterprise Service Pack 1[2]
Windows Server 2008	Standard Edition Service Pack 2[2]
Windows Server 2008	Enterprise Service Pack 2[2]
Windows Server 2008 R2	Standard Edition[3]
Windows Server 2008 R2	Enterprise[3]

[1]Only 32-bit versions of the operating systems are supported.

[2]32-bit and 64-bit versions of the operating systems are supported.

[3]Only 64-bit versions of the operating systems are supported.

See the Release Notes for additional operating systems support with DeltaV and Ovation co-deployments.

Notes

- Intermixing of operating system families is not supported. You can use combinations of Windows XP and Server 2003 PCs or Windows 7 and Server 2008 PCs. No other combinations are supported.
- A Server operating system (Windows Server 2003/2008) and server-class PC (for example, Dell PowerEdge) are recommended if the database is expected to be greater than 4 GB due to the SQL Server version required (see page 24); or if AMS Device Manager is installed on a DeltaV ProfessionalPLUS Station, Application Station, or Maintenance Station and Batch Historian or VCAT will be used. Contact your hardware vendor for recommendations on server-class PCs and server operating systems.

- The correct operating system service pack (SP) must be installed on your PC before installing AMS Device Manager. If your PC does not have the correct SP installed, or you are unsure, contact your network administrator.
- See “Changing Windows Firewall settings” on page 109 for additional operating system configuration considerations.
- AMS Device Manager is supported on a Hyper-V virtual PC only when co-deployed with DeltaV on the same operating systems supported in non-virtualized environments.

Support for Remote Desktop Services

Remote Desktop Services (also known as Terminal Services) is a component of Microsoft Windows (both server and client versions) that allows you to access applications and data on a remote computer over a network, even from a client computer that is running an earlier version of Windows. AMS Device Manager can be used in Remote Desktop Services environment if the following conditions are met:

- Remote Desktop Services must be set up prior to AMS Device Manager installation.
- Use of Remote Desktop Services is limited to 5 concurrent sessions when AMS Device Manager is installed on Windows server-class computers.

Note

Do not attempt to install AMS Device Manager using Remote Desktop Services; this is not a supported installation method and may produce undesirable results.

- AMS Device Manager is not supported on a Windows Server PC where Remote Desktop Services is set to Relaxed Security.
- If multiple users are running AMS Device Manager in a Remote Desktop session, and one of the users runs Terminate Servers, the AMS Device Manager application and AMS Device Manager Servers shut down for all users.

Note

In a Remote Desktop Services environment, only 1 AMS ValveLink SNAP-ON application session is permitted at any given time. The AMS Wireless SNAP-ON application is not supported in a Remote Desktop Services environment.

Contact Microsoft for Remote Desktop Services licensing information. Questions about AMS Device Manager licensing requirements should be directed to your Emerson Process Management Sales/Service Office.

Other software requirements

Web browser

AMS Device Manager requires Microsoft Internet Explorer (IE) Version 6.0, SP 1 or later. If you do not have a supported version of Internet Explorer, contact your IT department for assistance.

AMS Device Manager Web Services

Microsoft Internet Information Services (IIS) and AMS Device Manager 12.0 Server Plus software must be installed on your system before you can install AMS Device Manager Web Services. AMS Device Manager Web Services is not supported on Client SC stations. If you do not have IIS installed, contact your IT department for assistance.

Note

Some control systems do not allow IIS to be installed on the same PC. Check your control system documentation to determine IIS compatibility.

Note

If you want to install AMS Device Manager Web Services on a DeltaV station, it must be a DeltaV Application or ProfessionalPLUS station.

.NET Framework

AMS Device Manager 12.0 requires and installs Microsoft .NET Framework 4.0 and 3.5 Service Pack 1. Microsoft .NET Framework 3.5 SP1 is a cumulative update that includes the following versions:

- 2.0
- 2.0 SP2
- 3.0
- 3.0 SP2
- 3.5

Database—Microsoft SQL Server 2008

AMS Device Manager 12.0 uses a named instance, Emerson2008, of SQL Server 2008 for its database. The default password for this named instance is 42Emerson42Eme. The size of your database determines which edition of SQL Server 2008 you must use:

- *If your database is less than 4 GB*, you can use SQL Server 2008 Express. The AMS Device Manager setup installs this version.
- *If your database is greater than 4 GB* or will be at some future time, you must install a full version of SQL Server 2008 before you install AMS Device Manager. (You must purchase one of these separately if you do not already have it.) These versions of SQL Server recommend server operating systems.

Note

The AMS Device Manager database must be located on the AMS Device Manager Server Plus Station. Any other location is not supported.

NOTICE

Do not use the Windows compress feature on the PC drive where AMS Device Manager is installed. AMS Device Manager will be unable to open your database information. Reinstallation of AMS Device Manager will be required.

The AMS Device Manager installation program installs or updates SQL Server on your PC as follows:

- If no SQL Server is installed, the AMS Device Manager installation program will install SQL Server 2008 and create an Emerson2008 named instance with a password of 42Emerson42Eme.
- If an instance of SQL 2008 Express is installed, but not the Emerson2008 named instance, the AMS Device Manager installation program will create the Emerson2008 named instance with a password of 42Emerson42Eme.
- If the SQL Server 2008 Emerson2008 named instance is already installed, the AMS Device Manager installation program will continue with the next part of the installation program. Access to the SQL Server system administrator (‘sa’) account is required. If you do not have access, contact your network administrator for more information.
- If you have previously installed a full version of SQL Server 2008, you should create an SQL named instance of Emerson2008 prior to installing AMS Device Manager (refer to your SQL Server documentation). Otherwise, the AMS Device Manager installation will install SQL 2008 Express.

A Microsoft SQL Server 'sa' account password is required for AMS Device Manager operation. Therefore, the AMS Device Manager setup creates a password (42Emerson42Eme) for the Emerson2008 named instance. For security reasons, it is recommended that you change the SQL password.

To change an SQL Server 'sa' account password on your AMS Device Manager station:

1. Insert the AMS Device Manager program DVD in the DVD drive of the target PC.
2. Select **Start > Run** from the Windows taskbar.
3. In the text box, type CMD and click **OK** to open the command prompt.
4. At the command prompt, type:
   D:\TECH_SUPPORT_UTILITIES\CHANGE_SA_PASSWORD\SQLPASWD_SQLSERVER <*oldpassword*> <*newpassword*>

   Where:
   D is the DVD drive letter
   <*oldpassword*> is the default (42Emerson42Eme) or other current SQL password
   <*newpassword*> is the password you want to use
5. Press ENTER. You should see the message "The SA password in SQL has been changed from *oldpassword* to *newpassword*."
6. Close the command prompt.

Note

Your local Windows security policies may prevent you from changing the 'sa' password again until a predetermined length of time has elapsed.

Software supported for Drawings and Notes

- Microsoft Word 2003, 2007, and 2010
- Microsoft Excel 2003, 2007, and 2010
- WordPad

Windows security requirements

AMS Device Manager installation

Installation of AMS Device Manager has these security requirements:

- Local or domain administrator rights for the PC(s) on which AMS Device Manager is to be installed.
- If you are installing AMS Device Manager on a PC that has the correct version of SQL Server and the Emerson2008 named instance (see “Database—Microsoft SQL Server 2008” on page 24), you need to know the SQL Server ‘sa’ account password, if a password other than the default (42Emerson42Eme) has been set.
- During the AMS Device Manager installation, the **Use simple file sharing** (Windows XP) option is automatically disabled. To avoid any AMS Device Manager operational issues, leave this option disabled.

Other network security requirements may also apply to the installation. Contact your network administrator for more information.

AMS Device Manager use

The AMS Device Manager installation creates the **AMSDeviceManager** Windows user group on the PC. Members of this group have all the permissions necessary to operate AMS Device Manager. The Windows user must be a member of this group on all AMS Device Manager stations. Windows users must be members of the **AMSDeviceManager** group before their properties can be changed in User Manager. To add a new user, see the “Usernames and passwords” procedures beginning on page 109.

AmsServiceUser

A Windows user account called **AmsServiceUser** is automatically created on each AMS Device Manager station and added to the **Users** Windows user group unless the station is installed on a Windows domain controller. If AMS Device Manager is installed on a domain controller, all other stations that are part of that domain use the domain account, not a local account.

The AmsServiceUser account is made a member of the AMSDeviceManager Windows group on all AMS Device Manager stations as well as a member of the Users Windows user group on non-domain controller stations. This user account runs the AMS Device Manager Servers. If your AMS Device Manager system is located on a network that requires periodic changing of passwords, the AmsServiceUser account password can be changed using the AMSPasswordUtility.exe utility from the AMS\Bin folder on each AMS Device Manager station. Do not use the Windows User Manager to change this password as AMS Device Manager will no longer launch.

Note

If the AMS Suite Calibration Connector application (page 115) is installed when you change the password for the **AmsServiceUser**, you must also change the password for AmsCalibrationConnectorWS properties. This requires a change in the Windows Services console of your workstation. If you are unsure how to do this, contact your IT department.

Requirements for system interface networks

Requirements for system interface networks are in addition to the hardware and software requirements for AMS Device Manager.

Wireless

The Wireless System Interface requires:

- An Ethernet adapter to connect to the gateway.
- One or more (up to 16) wireless gateways that allow communication between the AMS Device Manager station and a collection of wireless devices.
- *Wireless*HART devices. Refer to the AMS Device Manager Supported Device List for a list of supported *Wireless*HART devices. The Supported Device List can be accessed after AMS Device Manager installation is complete (select **Start > All Programs > AMS Device Manager > Help > Supported Device List**).
- A valid SSL certificate (if using the optional Security Setup utility) allowing the AMS Device Manager station to securely communicate with the gateway. Contact your local Emerson Process Management Sales/Service Office for more information about the Security Setup utility and certificate.

DeltaV

DeltaV System Interface station software requirements:

- AMS Device Manager 12.0 can be installed on the following DeltaV 9.3.1, 10.3.1, 11.3, 11.3.1, 12.3 stations:

DeltaV Workstations	AMS Device Manager Software
ProfessionalPLUS Station	Server Plus or Client SC
ProfessionalPLUS as Remote Client Server	Server Plus or Client SC
Local Application Station	Server Plus or Client SC
Remote Application Station	Server Plus or Client SC
Local "Operate" Station • Professional • Operator • Base • Maintenance	Server Plus or Client SC
Operator Station as Remote Client Server	Client SC only
Remote "Operate" Station • Professional • Operator • Base	Client SC only

- The DeltaV System Interface must be configured on a licensed AMS Device Manager station that is on the DeltaV network.

To install AMS Device Manager on a DeltaV network, see the procedures in “Installing AMS Device Manager 12.0 on DeltaV stations” on page 66.

- For HART support only, AMS Device Manager 12.0 can be installed on a separate PC connected to a DeltaV 9.3.1 or 10.3.1 ProfessionalPLUS Station through a separate Ethernet connection. Contact your local Emerson Process Management Sales/Service Office for more information.
- AMS Device Manager 12.0 supports DeltaV version 11.3 and later in co-deployed installations only.
- If the Server Plus software is not on a DeltaV station, the SI and Simulate dongles cannot be used to license AMS Device Manager – a license.dat file is required.

- Supported HART I/O hardware and software revision:
  - Analog Input HART Module, 8-channel, Series 1, Revision 2.21 or higher
  - Analog Input HART Module, 8-channel, Series 2, Revision 1.26 or higher
  - Analog Input HART Module, 16-channel, Revision 1.17 or higher
  - Analog Output HART Module, Series 1, Revision 2.25 or higher
  - Analog Output HART Module, Series 2, Revision 1.26 or higher
  - HART AI 8 Channel Card, S-Series, Revision 1.26 or higher
  - HART AI 16 Channel Card, S-Series, Revision 1.17 or higher
  - HART AO Card, S-Series, Revision 1.26 or higher
- Supported Intrinsically Safe HART I/O hardware and software revision:
  - Analog Input HART Module, 8-channel, Revision 2.39 or higher
  - Analog Output HART Module, 8-channel, Revision 2.00 or higher
- Supported Zone I/O hardware and software revision:
  - Analog Input or Analog Output, Revision 1.14 or higher
- Supported FOUNDATION fieldbus I/O hardware and software revision:
  - Fieldbus H1, Series 1, Revision 1.8 or higher (does not support fieldbus alerts)
  - Fieldbus H1, Series 2, Revision 2.2 or higher
  - Fieldbus H1 S-Series Integrated Power, Revision 4.87 or higher
  - Fieldbus H1 S-Series, Revision 2.2 or higher
- Supported CHARM I/O hardware and software revision:
  - CHARM I/O Carrier (CIOC), Revision 11.3.1 or higher
  - AI 4-20 mA HART CHARM, Revision 1.18 or higher
  - AO 4-20 mA HART CHARM, Revision 1.18 or higher
  - AI 4-20 mA HART (Intrinsically Safe) IS, Revision TBD (Contact your local Emerson Process Management Sales/Service Office for more information.)
  - AO 4-20 mA HART (Intrinsically Safe) IS, Revision TBD (Contact your local Emerson Process Management Sales/Service Office for more information.)

- Supported PROFIBUS DP I/O hardware and software revision:
  - PROFIBUS Series 2+, Revision 1.36 or higher
  - PROFIBUS S-Series, Revision 1.36 or higher
- Supported Wireless I/O:
  - Wireless I/O card (WIOC), Revision 11.3.1 or higher
  - Smart Wireless Gateway, Revision 3.95 or higher
- Security—The DeltaV password (if not using the default password) must be entered in the AMS Device Manager Network Configuration utility (see "Configuring AMS Device Manager for a DeltaV System Interface" on page 85).

DeltaV supports:

- FOUNDATION fieldbus devices
- Wired HART Rev. 5, Rev. 6, and Rev. 7 devices
- *Wireless*HART Rev. 7 devices
- PROFIBUS DP devices
- PROFIBUS PA devices (supported on DeltaV 11.3 or higher with an S-Series PROFIBUS DP I/O card and a PROFIBUS DP/PA Coupler on a PROFIBUS DP segment. See Release Notes for supported couplers.)
- HART safety devices connected to DeltaV Safety Instrumented System (SIS) logic solvers
- HART safety devices connected to DeltaV 12.3 (SIS) CHARMs logic solvers

Note

Some HART Rev. 6 and Rev. 7 commands are not supported by the DeltaV system. Although AMS Device Manager recognizes additional revisions of HART devices when using other HART communication devices, it will not recognize them when they are connected to DeltaV.

DeltaV versions 9.3.1 and later can access devices connected to RS3 and PROVOX I/O systems through the DeltaV Interface for RS3 I/O and DeltaV Interface for PROVOX I/O, respectively. The devices are displayed in the DeltaV network hierarchy in AMS Device Manager. For installation and setup information, refer to the DeltaV Books Online.

To receive alerts from devices connected to PROVOX and RS3 Migration Controllers in your DeltaV network hierarchy, you must run a utility to properly set the DeltaV alert capability.

To run the utility:

1. Select **Start > Run** from the Windows taskbar.
2. In the text box, type C:\AMS\BIN\DELTAVFASTSCANUTILITY.EXE (where C is the drive containing the AMS folder).
3. Uncheck the box for the appropriate DeltaV network.
4. Click **Save Changes**.

The AMS ValveLink SNAP-ON application is supported for DeltaV I/O and PROVOX I/O cards, but not for RS3 cards. See “PROVOX” on page 35 for I/O requirements.

The DeltaV System Interface supports AMS ValveLink Diagnostics. Analog output modules configured for HART are required on the DeltaV substation for communication with HART FIELDVUE digital valve controllers. FOUNDATION fieldbus FIELDVUE digital valve controllers need only be commissioned and ports downloaded.

Ovation

Ovation System Interface station software requirements:

- AMS Device Manager 12.0 can be installed on the following Ovation 3.3.1, 3.4, and 3.5 stations:

Ovation Workstations	AMS Device Manager Software
Operator Station	Server Plus or Client SC
Database Server	Client SC

Note

To use AMS Device Manager 12.0 with Ovation 3.2 or earlier, contact your Emerson Process Management Sales/Service Office.

If you have FOUNDATION fieldbus devices, it is recommended that a licensed AMS Device Manager Client SC Station be installed on the Ovation Database Server (see “Preparing the Ovation system” on page 92).

To install AMS Device Manager on an Ovation network, see the procedures in “Installing AMS Device Manager 12.0 on Ovation stations” on page 68.

For device support, you can configure AMS Device Manager with an Ovation system as follows:

- For HART devices:
  - If you want to access HART devices on your Ovation system, AMS Device Manager Server Plus software and the Ovation System Interface can be installed on any Ovation Station or on a standalone PC.
  - AMS Device Manager supports burst mode messages from HART devices on Ovation Stations using analog output card 5X000167 only.
- For FOUNDATION fieldbus devices:
  - For Ovation 3.3.1 and 3.4, the AMS Device Manager Server Plus Station must be co-deployed on any Ovation Station with the Ovation fieldbus engineering software installed. Configure the Ovation System Interface on this station.
  - For Ovation 3.5 and later, a licensed Client SC must be installed on the Ovation Database Server. Configure the AMS Device Manager Ovation System Interface with FOUNDATION fieldbus selected on the Ovation Database server to take advantage of the Ovation HSE Server. The AMS Device Manager Server Plus Station can be co-deployed on an Ovation Operator Station but not the Ovation Database Server.

  - To receive FOUNDATION fieldbus device alerts in AMS Device Manager, the Ovation OPC Alarm and Event Server package must be installed on your co-deployed Ovation/AMS Device Manager station. The AMS Device Manager Ovation System Interface must also be installed on this station.

Note

Some FOUNDATION fieldbus devices have a feature known as “reannunciation” (or “multibit”). This feature must be disabled for devices on an Ovation 3.5 system so that AMS Device Manager can receive alerts from these devices. This feature is typically enabled/disabled in the AMS Device Manager device Configure/Setup properties screens (the exact location varies by device).

- For *Wireless*HART devices:
  - If you want to access information for *Wireless*HART devices on an Ovation system, configure an Ovation System Interface in AMS Device Manager with *Wireless*HART support enabled and a connection to a Smart Wireless Gateway configured.
- For PROFIBUS DP devices:
  - If you want to access information for PROFIBUS DP devices on an Ovation 3.3.1 or later system, configure an Ovation System Interface in AMS Device Manager with PROFIBUS DP support enabled.
  - PROFIBUS DP devices will only be supported on Ovation 3.3.1 or later networks. A PROFIBUS DP module can contain up to 2 ports. Each port can be connected to up to 124 PROFIBUS DP devices. For Ovation 3.3.1, a patch (OVA331027) is required.
- For SIS devices:
  - If you want to access SIS HART device information on your Ovation system through AMS Device Manager, AMS Device Manager can be configured on an Ovation Station or on a non-Ovation Station. Use the AMS Device Manager Network Configuration utility to set up an Ovation System Interface.

Note

If you install AMS Device Manager and configure an Ovation System Interface on a PC that is not an Ovation Station and try to access HART devices, performance will be significantly impacted if the hosts file on the AMS Device Manager station is missing specific entries. To improve performance, add the IP address and hostname for each configured Ovation Safety Data Server to the C:\WINDOWS\SYSTEM32\DRIVERS\ETC\HOSTS file on the AMS Device Manager Station.

Each Ovation controller uses a unique TCP/IP address. AMS Device Manager communicates with HART devices, *Wireless*HART devices, FOUNDATION fieldbus devices, and devices connected to Ovation Safety Instrumented System (SIS) logic solvers through I/O modules contained in the Ovation controller chassis, or in remote nodes connected to the Ovation controller.

- Supported HART I/O hardware:
  - Analog Input, 5X00058/5X00059, Version 9 or higher
  - Analog Input High Performance, 5X00106/5X00109, Version 6 or higher
  - Analog Output, 5X00062/5X00063, Version 8 or higher
  - Analog Output High Performance, 5X00167, Version 1 or higher
- Supported FOUNDATION fieldbus I/O:
  - Gateway 5X00151G01 and H1 Series 2 Module 5X00152G01, Version 1 or higher
  - Module 5X00301 with cavity insert 1X00458H01 or Module 5X00301 with Personality Module 5X00327, Version 1 or higher (two each of 5X00301 and 5X00327 may also be configured to provide redundancy)
- Supported Intrinsically Safe controller:
  - Ovation SIS Logic Solver, KJ2201X1-PW1, Version 1 or higher
- Supported PROFIBUS DP I/O (Ovation 3.3.1 and later, with the correct Ovation patch):
  - PROFIBUS module 5X00300/5X00321, Version 1 or higher (two each of 5X00300 and 5X00321 may also be configured to provide redundancy)
- Supported Wireless Gateway (Ovation 3.3.1 and later) with Smart *Wireless*HART adapter (Ovation 3.4 and later):
  - 1X00693H01 through 1X00693H04

PROVOX

The PROVOX System Interface requires:

- I/O type (inputs)—CL6822, CL6825, or CL6827
- I/O type (outputs)—CL6826 (will only support standard HART messaging, it will not support AMS ValveLink Diagnostics); CL6828, P3.1 or greater (will support standard HART messaging and AMS ValveLink Diagnostics)
- Controller options—SR90 P5.4 with I/O Driver P5.5 or higher or SRx P5.5 or higher

- System software options—OWP with P1.2 or higher, PROVUE P5.5 or higher, and ENVOX 3.4 or higher; I/O must be configured as “digital” or “hybrid”
- Dedicated HDL with Ethernet connection (TCP/IP) to AMS Device Manager PC

FF HSE

The FF HSE interface requires:

- One or more (up to 64) commissioned FF HSE Linking Devices that conform to the FOUNDATION fieldbus HSE and H1 specifications (for a list of supported linking devices, see the Release Notes). The Remote Operations Controller for FOUNDATION fieldbus (ROC FF) and the ControlWave linking devices are displayed in AMS Device Manager in the FF HSE hierarchy. For setup and configuration of ROC FF and ControlWave linking devices, refer to the documentation supplied with them.

Note

All linking devices on the same network must have unique tag names. If duplicate tag names are used, the hierarchy will not build properly.

- Commissioning using the device manufacturer’s commissioning/ decommissioning utility.
- FF HSE Linking Device configuration with unique TCP/IP addresses.
- An AMS Device Manager station with 1 or 2 Ethernet network interface cards (NIC). A NIC dedicated to the FF HSE segment is recommended to reduce the amount of competing network communications.

NOTICE

If you have an Ovation network installed, use a different TCP/IP address for the FF HSE network.

RS3

The RS3 System Interface requires:

- I/O hardware—FIC 4.8 or higher I/O cards with smart daughterboard and boot revision supplied with P1R1.4 or MAIO FIM with 2.6 or higher
- Controller hardware—MPC II Controller Processor or higher, CP-IV Coordinator Processor or higher
- System software—P1R3.4 or higher with controller image P1.10 or higher
- Dedicated RNI—The RNI needs to be either version 4.1 (NT) or version 5.0 (XP or Server 2003/2008). A single RNI will support multiple AMS Device Manager connections.

Note

AMS Device Manager and RS3 Operator Station (ROS), or DeltaV Operate for RS3 (DOR) cannot be installed on the same PC.

STAHL

The STAHL HART interface requires:

- RS-232/RS-485 converter for each network (see the Release Notes for supported models)
- STAHL ICS Module—9148 Multiplexer Module installed on a 9161 Module Board with up to 16 HART Transmitter Supply Units (module 9103)
- I.S.1 System—Central Unit Module 9440, Multiplexer Module 9461 (HART analog input) or 9466 (HART analog output)
- IS PAC 9192 HART multiplexer

Note

You may not be able to use AMS Device Manager to communicate with HART devices through a STAHL IS PAC multiplexer at the same time a handheld communicator is communicating with the device loop. See your STAHL representative for details.

The ICS Module is a single HART multiplexer that supports HART transmitter supply units connected to field devices. The I.S.1 System routes messages to their multiplexers with attached HART field devices. For additional information on supported STAHL equipment, see the Release Notes and the manufacturer's documentation.

HART Multiplexer Network

A HART multiplexer network requires:

- One serial communication port for each HART multiplexer network.
- An RS-485 converter (see the Release Notes for supported models).
- One of the following types of multiplexers or I/O:
  - Arcom
  - Elcon
  - 8000 BIM
  - Pepperl+Fuchs
  - Spectrum Controls I/O (this is an I/O module that connects to an Allen-Bradley Programmable Logic Controller - displays as a multiplexer in AMS Device Manager)

See the Release Notes for additional requirements for specific types of multiplexers. For more information about multiplexer networks, refer to KBA NA-0400-0084.

8000 BIM

The physical connection between your AMS Device Manager PC and the 8000 BIM system requires one of the following:

- A serial connection using an RS-485 converter (BIM)
- An Ethernet connection using TCP/IP addressing (eBIM)

Supported analog input modules:

- 8101-HI-TX – 4-20mA, 8 channel, Div. 2/2
- 8201-HI-IS – 4-20mA, 8 channel, Div. 2/1
- 8301-HI-IS – 4-20mA, 8 channel, Div. 1/1

Supported analog output modules:

- 8102-HO-IP – 4-20mA, 8 channel, Div. 2/2
- 8202-HO-IS – 4-20mA, 8 channel, Div. 2/1

HART Over PROFIBUS

Note

Prior to moving to AMS Device Manager 12.0 from previous versions supporting HART Over PROFIBUS, contact your Emerson Process Management Sales/Service Office to ensure your system is fully supported. Additional testing may be required.

The HART Over PROFIBUS System Interface requires that:

- AMS Device Manager is installed on a PC running Windows XP, Windows 7, Windows Server 2003, or Windows Server 2008.
- A control system that supports PROFIBUS DP V1 is configured and operational.
- At least one Trebing & Himstedt (T+H) PROFIBUS Gateway for communications is configured and the current version of the T+H AMS Device Manager Communications Components (TACC) software is installed.
- At least one PROFIBUS DP remote I/O subsystem that supports HART communications is connected to the control system. Contact your Emerson Process Management Sales/Service Office for a list of supported I/O subsystems.
- At least one HART I/O module is installed in the remote I/O subsystem. See the Release Notes for a list of supported HART I/O modules.
- At least one HART instrument is present on a module channel.

Refer to the *TH AMS Device Manager Communication Components HART Over PROFIBUS User Guide* downloaded from T+H for more information.

Kongsberg

The Kongsberg System Interface requires that:

- The version of the Kongsberg Control System is AIM v8.3.
- The Kongsberg System is set up and the Automation Server is accessible from the AMS Device Manager station.
- The URL for the Kongsberg Automation Server is known.

- One or more Remote Control Units (RCUs) are available on the Kongsberg Network where PROFIBUS Masters or HART Masters may be configured.
  - PROFIBUS Masters allow the connection of HART DP Slave and I/O Modules, which connect HART instruments to the network.
  - HART Masters allow the connection of HART Multiplexers, which connect HART instruments to the network.

Only the following PROFIBUS DP and HART I/O modules are supported:

Manufacturer	Description / Module Type	Notes
STAHL	PROFIBUS DP I.S.1 type 9440	Supports up to 16 connected I/O modules
STAHL	HART Analog Input type 9461 HART Analog Output type 9466	Supports up to 8 connected HART instruments
STAHL	ISpac HART Multiplexer type 9192	Configurations possible for up to 32 connected HART devices. Up to 128 RS485 addresses (ISpac multiplexers) are possible on a single RS485 segment

Siemens

The Siemens System Interface lets you use AMS Device Manager to communicate with HART devices on a Siemens PCS 7 Control Network. An AMS Device Manager Server Plus or Client SC station must be installed on the same station as the Siemens PCS 7 ES/MS Station. The AMS Device Manager Network Configuration utility is used to configure the Siemens System Interface.

The Siemens System Interface requires that:

- The Siemens Network is licensed.
- A Siemens System v7 with SP1 or higher is installed on the ES / MS Station and the DeviceCom interface is accessible from the AMS Device Manager.
- Siemens PCS 7 project file is copied from the live system.

ABB

The ABB System Interface lets you use AMS Device Manager to view and configure HART devices connected to I/O modules supported by the ABB System 800xA control system.

AMS Device Manager Client SC or Server Plus software can be installed on an ABB Station assuming PC hardware and software requirements are met, or on a separate PC. The ABB Station must have the 800xA station software installed and configured for AMS Device Manager to communicate with HART instruments connected using the ABB Controller. The ABB System Interface requires:

- That the ABB Network is licensed in AMS Device Manager.
- That the ABB Station software version is 5.1 along with the “Performance Pack” enhancement release from ABB.
- Use of the AC 800M series controllers.
- Use of the following supported HART IO modules
  - AO815
  - AI815
  - AO895
  - AI895
  - AI880
  - AO845
  - AI845
- Use of the following supported multiplexers:
  - Pepperl+Fuchs KFD2-HMM-16
  - MTL4840
  - Elcon Series 2700-F
  - Elcon Series 2700-G

Det-Tronics

The Det-Tronics System Interface is used to monitor fire and gas detectors on the Det-Tronics Eagle Quantum Premier (EQP) fire and gas Safety System with the S3 software application. To install the this system interface, refer to “Det-Tronics” on page 104. Refer to Det-Tronics documentation for EQP setup information.

PROFIBUS

The PROFIBUS System Interface lets you use AMS Device Manager to view and configure PROFIBUS DP or PROFIBUS PA devices connected to a Softing PROFIBUS Ethernet Gateway or a Softing PROFlusb Modem.

Softing FG-100 and FG-300 Ethernet Gateways are supported. The FG-100 supports one PROFIBUS segment while the FG-300 supports up to 3 PROFIBUS DP segments. Each PROFIBUS DP segment can support up to 32 devices.

The Softing PROFlusb Modem is a USB device that can be used as a master in a PROFIBUS segment. It also offers DP-V0 and DP-V1 capabilities.

3 Installing AMS Device Manager

AMS Device Manager can be installed as a single-station system or as a multi-station, distributed system. The single-station system is a Server Plus Station that maintains the AMS Device Manager database, with no associated Client SC Stations. A distributed AMS Device Manager system is a client/server deployment of AMS Device Manager Stations. It allows multiple AMS Device Manager Stations access to a common database and all connected devices in the distributed system.

A distributed system contains a Server Plus Station and one or more Client SC Stations. Each station has access to a common database located on the Server Plus Station.

The procedures in this section are for installing and configuring AMS Device Manager on the following types of stations:

- Server Plus Station
- Client SC Station

For a distributed system to function as intended, all Client SC Stations must have network access to the Server Plus Station. You can install a Client SC Station first if that is required for your network configuration (for example, if installing on domain controllers and non-domain controllers). Otherwise, it is recommended that AMS Device Manager software be installed in the following order:

1. On the PC to be the Server Plus Station, install the Server Plus Station Software (see “Installing Server Plus Station software” on page 49).

2. On each PC to be used as a Client SC Station, install the Client SC Station software (see “Installing Client SC Station software” on page 52).

If you are installing an AMS Device Manager distributed system on domain controller PCs or a mix of domain controllers and non-domain controller PCs, do all the domain controller installations first (see “Installing AMS Device Manager on domain controllers” on page 63.)

If you are installing AMS Device Manager on a DeltaV station, see “Installing AMS Device Manager 12.0 on DeltaV stations” on page 66.

If you are installing AMS Device Manager on an Ovation station, see “Installing AMS Device Manager 12.0 on Ovation stations” on page 68.

If you are installing an AMS Device Manager distributed system and the Server Plus Station is separated from the Client SC Station(s) by a firewall, refer to KBA NA-0400-0046.

If you are installing AMS Device Manager on a PC that has AMS Wireless Configurator installed, refer to “Upgrading from AMS Wireless Configurator” on page 15.

Requirements and constraints

Ensure that all the system requirements specified in Section 2, “System requirements” and stated below are met prior to installing an AMS Device Manager distributed system. If you are installing a distributed system using a domain controller, there are other requirements. See “Installing AMS Device Manager on domain controllers” on page 63.

- Named IP services (how PCs identify each other on a network) must be functioning correctly for stations in an AMS Device Manager distributed system to communicate.
- A user with Windows system administrator rights is required to install and configure a distributed system.
- AMS Device Manager supports deployment within a single domain or workgroup or across multiple domains or across multiple workgroups. For more information, refer to KBA NA-0800-0113.
- All stations must be connected to the network before beginning AMS Device Manager installation. This ensures that all stations can access the AMS Device Manager database. All stations’ computer names should be recorded. See “Determining computer names” on page 48.
- After all station installations are complete, all Windows users that log in to an AMS Device Manager PC must be added to the **AMSDeviceManager** Windows user group on all AMS Device Manager stations in a distributed system (see “Adding a user to the AMSDeviceManager group” on page 54).
- All stations’ PC clocks must be synchronized (many third-party tools are available for this purpose). Clock synchronization is important because the date and time of an event recorded in the database are based on the clock in the PC that generated that event.
- All stations must use like operating systems. That is, you can pair stations using Windows XP Professional and Windows Server 2003 or Windows 7 and Windows Server 2008. No other configurations are supported.
- All stations must use the same application and version for entering Drawings/Notes (such as Microsoft Word 2003, 2007, and 2010 or Microsoft Excel 2003, 2007, and 2010).
- Be sure you have the correct version of SQL Server for your Server Plus Station (based on your database size—see page 24).
- All stations must use the same revision of AMS Device Manager software.

Note

Consult with your network/system administrator about security issues and any other network operation issues or special requirements for your LAN.

During installation, the **AMSDeviceManager** Windows user group is created and given write access to the AMS folder, subfolders, and files with all the permissions necessary to start and operate AMS Device Manager. An administrator is required to add Windows User IDs to this group to allow operation of AMS Device Manager (see “Adding a user to the AMSDeviceManager group” on page 54).

The installation creates a share of the AMS folder which grants the **Everyone** Windows group Full Control permissions. It also allows connected Client SC Stations to use the Drawings/Notes feature of AMS Device Manager. If your situation makes this security configuration undesirable, consult your operating system documentation or your system administrator.

For information on installing AMS Device Manager on domain controllers, see “Installing AMS Device Manager on domain controllers” on page 63.

Upgrading from a previous version of AMS Device Manager

Before you install version 12.0, refer to Table 1 on page 13.

AMS Device Manager version 12.0 supports automatic upgrading from version 9.x and later.

▶ If you are upgrading from version 9.x and later:

1. Back up your database.
2. Install version 12.0.
3. Restore your database, if necessary.

There is no automatic upgrade to AMS Device Manager 12.0 from any versions older than 10.x. If you have a pre-10.x version of AMS Device Manager, one of the following options may be used.

▶ If you are upgrading from version 7.x, 8.x, or 9.x:

1. Back up your database.
2. Uninstall your version 7.x, 8.x,or 9.x application.
3. Install version 12.0.
4. Restore your database.

▶ If you are upgrading from an AMS Device Manager version older than 7.x, or you want to restore a pre-7.x database:

1. Back up your database.
2. Uninstall your old version of AMS Device Manager.

3. Install a newer version of AMS Device Manager that supports both your database and an automatic upgrade to 12.0 (refer to the AMS Device Manager installation guide in a given version for upgrade support).

4. Restore the older database in this AMS Device Manager version.

5. Upgrade to AMS Device Manager 12.0.

If you have any questions or encounter any unexpected issues, contact customer support.

Prior to upgrading your AMS Device Manager application, you should uninstall any SNAP-ON applications on the AMS Device Manager station. After upgrading AMS Device Manager, install the latest versions of any licensed SNAP-ON applications, see “Installing SNAP-ON applications” on page 56.

Configure any required system interface networks and then open AMS Device Manager. Right-click each of the network icons and select **Rebuild Hierarchy** followed by **Scan > New Devices**. If you are using the Alert Monitor feature, click the Alert Monitor button on the AMS Device Manager toolbar to open the Alert List. Click the **Station Monitoring** button in the toolbar and ensure that the station you are monitoring is checked.

Consolidating databases

If you have multiple Server Plus Stations and are consolidating their databases for use in a distributed system, use the following procedures.

▶ To consolidate databases:

1. Back up the current database on all stations containing a database you want to consolidate (see Table 1 on page 13).

2. Select one of the Server Plus Stations to hold the consolidated database. Import the database information from the other Server Plus Stations one at a time. This may be done using one of the following methods.

   ### Method 1

   Use this method when all the stations are connected to the same network and domain and at the same AMS Device Manager revision level.

- Right-click the Plant Database icon on the designated consolidation Server Plus Station, select **Import > From Remote** to import the database from the other stations one at a time. Click **Help** on the Import From Remote System dialog for instructions.

Note

To Import > From Remote, you must have AMS Device Manager System Administration permissions.

Method 2

Use this method when the stations are not connected to a common network.

- From the Plant Database icon on all of the non-consolidation Server Plus Stations, select **Export > To <***type***> Export File** to prepare a database merge file. Click **Help** on the AMS Device Manager Export dialog for instructions.

3. When the databases have been consolidated, perform a database backup of the consolidated database.

4. The AMS Device Manager 12.0 Server Plus Station can be installed using one of the following methods (see “Installing Server Plus Station software” on page 49).

Method 1

Install AMS Device Manager 12.0 as a station upgrade, if upgrading from version 10.0 or later which automatically migrates the consolidated database.

Method 2

Uninstall the current 9.x or earlier station software and install version 12.0 as a new Server Plus Station. Restore the consolidated database.

Consolidating Service Notes

The database backup operation also creates a backup file of service notes. If you would like to consolidate the service notes from multiple AMS Device Manager stations, follow the relevant instructions in the readme file for the Drawings and Notes Management Utility. This information is included in the SNAP-ONS And Tools\Tech_Support_Utilities\DrawingsAndNotesUtility folder on the AMS Device Manager installation DVD.

Determining computer names

Computer names are needed to identify the Server Plus Station and the connected Client SC Stations during distributed system installation and configuration (see “Configuring a Distributed System” on page 56). Due to a Windows networking requirement, station names must be 15 bytes or less. Please note that some languages have characters that use more than 1 byte.

▶ To find and record a computer name (do not use IP addresses):

1. Right-click the Windows desktop **My Computer** icon and select **Properties**.
2. Record the name of each computer that will be part of your distributed system (see the Computer Name Log Example below).

Note

Computer names and DNS names must be the same. “Localhost” cannot be used in a distributed system. Do not include “\\” in any computer names.

Table 1: Computer name log example

Station	Computer Name
Server Plus Station	
Client SC Station # 1	
Client SC Station # 2	
Client SC Station # 3	
Client SC Station # …	
Client SC Station # n	

Installing Server Plus Station software

If you are installing an AMS Device Manager distributed system using a domain controller, there are other requirements. See “Installing AMS Device Manager on domain controllers” on page 63.

Note

If you are upgrading your software and changing the station type, you must uninstall the earlier version of AMS Device Manager before upgrading to 12.0. (See Table 1 on page 13.)

▶ To install software on the Server Plus Station:

1. Exit/close all Windows programs, including any running in the background (including virus scan software).
2. Insert the AMS Device Manager program DVD in the DVD drive of the PC to be used as the Server Plus Station.
3. When the AMS Device Manager setup starts, click **Install AMS Device Manager**.

Note

If the autorun function is disabled on your PC, double-click D:\AMSDEVICEMANAGER_SETUP.EXE (where D is the DVD drive letter) and click OK.

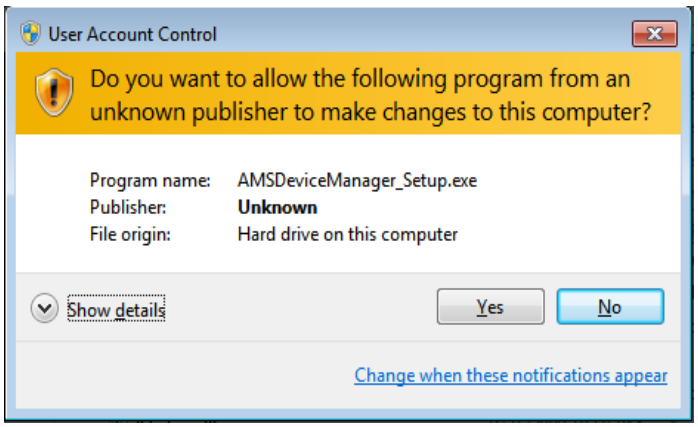
4. Click **Server Plus Station**.
5. Follow the prompts.

NOTICE

Do not interrupt the installation process, or the software will not be fully installed and will malfunction. The installation process includes some system restarts. Do not remove the program DVD until the installation is complete.

Note

If you are installing on a Windows 7 or Windows Server 2008 PC, and User Account Control (UAC) is enabled, the User Account Control dialog (similar to below) displays after rebooting the PC. Select **Yes** to continue with the AMS Device Manager installation.



If you do not click **Yes** within 2 minutes, the dialog closes and to complete the installation you must select **Start > All Programs > AMS Device Manager > Continue the AMS Device Manager installation**.

Note

All licensing for a distributed system is done on the Server Plus Station (see "Licensing a Distributed System" on page 55).

6. Configure the Server Plus Station to recognize each station connected in the system (see "Configuring a Distributed System" on page 56). This step is essential for the other stations to access the Server Plus Station.
7. Set up and configure the system interfaces needed on this station (see "Configuring communication interfaces" on page 71).
8. Install the latest versions of any licensed SNAP-ON applications, if appropriate (see "Installing SNAP-ON applications" on page 56).
9. Open AMS Device Manager, right-click each of the network icons and select **Rebuild Hierarchy** followed by **Scan > New Devices**.
10. If you are using the Alert Monitor feature, click the Alert Monitor button on the AMS Device Manager toolbar to open the Alert List. Click the **Station Monitoring** button in the toolbar and ensure that the station you are monitoring is checked.

During installation, the **AMSDeviceManager** Windows user group is given write access to the AMS folder, subfolders, and files with all the permissions necessary to start and operate AMS Device Manager. An administrator is required to add Windows User IDs to this group to allow operation of AMS Device Manager (see “Adding a user to the AMSDeviceManager group” on page 54).

The installation creates a share of the AMS folder which grants the **Everyone** Windows group Full Control permissions. This allows connected Client SC Stations to access the Server Plus Station. It also allows connected Client SC Stations to use the Drawings/ Notes feature of AMS Device Manager. If your situation makes this security configuration undesirable, consult your operating system documentation or your system administrator.

Note

The AMS Device Manager installation program turns off Windows Automatic Updates. After AMS Device Manager is installed, check to see that the Windows Automatic Updates function is set as desired.

Installing Client SC Station software

The following steps install the Client SC Station software.

Verifying Client SC Station connectivity

Use the ping command to verify that the designated Client SC Station PC responds to communications sent to it by the Server Plus Station:

1. At the AMS Device Manager Server Plus Station, select **Start > Run** from the Windows taskbar.
2. In the text box, type CMD and click **OK** to open a command prompt.
3. At the command prompt, type PING <*Client SC Station Computer Name*>.
4. Press ENTER.
5. Verify that the Client SC Station PC responds to the ping command.

   The ping command should return a reply message. If the ping command fails, verify that you typed the correct PC name in the command line. Also verify that your network is functioning properly. Contact your IT department if you cannot establish connectivity.

To install software on a Client SC Station:

1. Clear all applications from the Windows Startup folder until after installation is finished. Exit/close all Windows programs including any running in the background (such as virus scan software).
2. Insert the AMS Device Manager program DVD in the DVD drive of the PC to be used as a Client SC Station.
3. When the AMS Device Manager setup starts, click **Install AMS Device Manager**.

Note

If the autorun function is disabled on your PC, double-click D:\AMSDEVICEMANAGER_SETUP.EXE (where D is the DVD drive letter) and click OK.

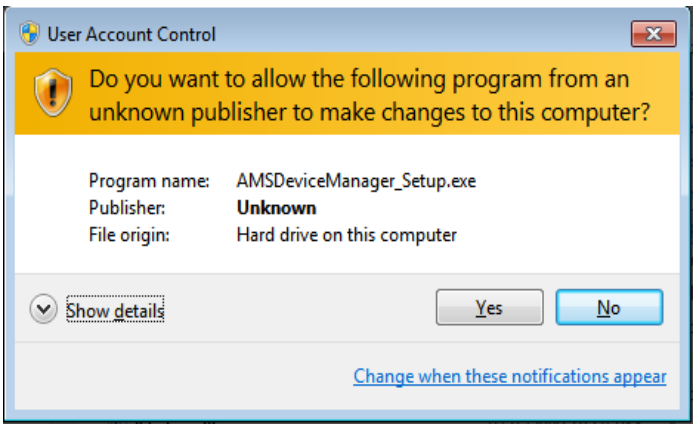
4. Click **Client SC Station**.
5. Follow the prompts.

NOTICE

Do not interrupt the installation process, otherwise the software will not be fully installed and will malfunction. The installation process includes some system restarts. Do not remove the program DVD until the installation is complete.

Note

If you are installing on a Windows 7 or Windows Server 2008 PC, and User Account Control (UAC) is enabled, the User Account Control dialog (similar to below) displays after rebooting the PC. Select **Yes** to continue with the AMS Device Manager installation.



If you do not click **Yes** within 2 minutes, the dialog closes and to complete the installation you must select **Start > All Programs > AMS Device Manager > Continue the AMS Device Manager installation**.

6. Set up and configure the communication interfaces needed on this station (see “Configuring communication interfaces” on page 71).
7. Install the latest versions of any licensed SNAP-ON applications, if appropriate (see “Installing SNAP-ON applications” on page 56).
8. Open AMS Device Manager, right-click each locally configured network icon and select **Rebuild Hierarchy** and then **Scan > New Devices**.
9. If you are using the Alert Monitor feature, click the Alert Monitor button on the AMS Device Manager toolbar to open the Alert List. Click the **Station Monitoring** button in the toolbar and ensure that the station you are monitoring is checked.

Note

The AMS Device Manager installation program turns off Windows Automatic Updates. After AMS Device Manager is installed, check to see that the Windows Automatic Updates function is set as desired.

Adding a user to the AMSDeviceManager group

To launch and run AMS Device Manager, you must be a member of the **AMSDeviceManager** user group.

Note

The following procedure requires Local or Domain Administrator permissions.

▶ To add a user to the **AMSDeviceManager** group:

1. (XP) Right-click the **My Computer** desktop icon.
   (Windows 7) Click Start and right-click **Computer**.
2. Select **Manage** from the context menu.
3. Select **Computer Management (Local) > System Tools > Local Users and Groups > Groups**.
4. Double-click the **AMSDeviceManager** group.
5. Click **Add**.
6. Enter the Windows User ID you want to add to the group and click **OK**. Note whether this is a local or domain user.
7. Click **OK**.
8. Windows 7/2008 Server requires that you log out of Windows and log back in to make the change effective.

This process is different when using a domain controller (see “Adding a user to the AMSDeviceManager group on a domain controller” on page 64).

Licensing a Distributed System

All licensing for an AMS Device Manager Distributed System is done on the Server Plus Station. After installation, start the Licensing Wizard and follow the prompts to gather registration information.

Note

To gather the registration information, you need to know your Customer Access Code (supplied with your AMS Device Manager software).

After you register your software, the Registration Center returns your license codes and checksums by downloading from the AMS Device Manager registration website at:

http://www.emersonprocess.com/systems/support/ams_register/10.c.survey.login.asp

When you receive your license codes, run the Licensing Wizard on the Server Plus Station to enter your license codes and checksums, which enables your system.

Note

During the licensing process, you must have read access to the PC disk drive you installed on (C: drive by default) so that the Licensing Wizard can verify the hard disk serial number.

▶ To run the Licensing Wizard:

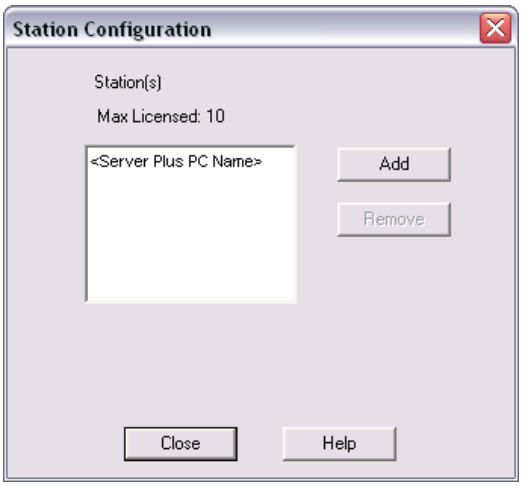
1. Select **Start > All Programs > AMS Device Manager > Licensing > Licensing Wizard**.
2. Follow the instructions in the Licensing Wizard.
3. If you are installing new license information on an existing station, start AMS Device Manager to see the changes.

Configuring a Distributed System

Before you can use your distributed system, you must configure the Server Plus Station so the Client SC Stations can access the Server Plus Station.

▶ To configure your distributed system:

1. On the Server Plus Station, select **Start > All Programs > AMS Device Manager > Station Configuration** from the Windows taskbar.
2. In the Station Configuration dialog, click **Add**.
3. Enter the computer name of the Client SC Station PC (see "Determining computer names" on page 48), and click **OK**. The station name is not case-sensitive. Do not include a domain name or any other characters that are not part of the computer name. Use station names of 15 ISO Latin-1 characters or less.



4. Repeat steps 2 and 3 for each licensed Client SC Station, and click **Close** when done.

Installing SNAP-ON applications

After you have installed and licensed your AMS Device Manager software, you can install SNAP-ON applications. Each SNAP-ON application is licensed separately and will not run if your station is not licensed for it.

Additional installation requirements may apply to a SNAP-ON application. Before you install a SNAP-ON application, check its documentation to confirm that all installation requirements are satisfied.

▶ To install a SNAP-ON application:

1. Make sure the Windows Control Panel is not open and exit all Windows programs, including any programs that may be running in the background such as virus protection software.
2. Insert the AMS Device Manager program DVD in the DVD drive of the PC.
3. Browse to D:\SNAP_ONS\<*Folder Name*> (where D is the DVD drive letter and <*Folder Name*> is the name of the folder for the SNAP-ON application to be installed).
4. Click **OK**.

5. Follow the prompts.

Note

Most SNAP-ON applications need to be installed on each station in a distributed system. Calibration Assistant is enabled through licensing—no separate installation is required.

Note

All SNAP-ON applications, with the exception of AMS ValveLink and AMS Wireless, use the Windows user account name to determine the user privileges. Therefore, the AMS Device Manager user must have a user account configured with the same name as the Windows user account. For all SNAP-ON applications except AMS ValveLink and AMS Wireless, this user must also have Device Write permission (see “Logging in to User Manager” on page 110).

AMS ValveLink SNAP-ON application user privileges must be enabled in AMS Device Manager User Manager.

Note

If a SNAP-ON application is not installed in the C:\Program Files folder, the **AMSDeviceManager** Windows user group must be given access to the location.

Modifying a Distributed System

Once your distributed system is installed, any changes to its physical configuration may require special procedures in AMS Device Manager. To change station types in an existing system, see “Changing station types” on page 58. For other types of changes, see the following:

- Changing station types (page 58).
- Changing a Client SC Station to access a different Server Plus Station (page 58).
- Adding a PC (Client SC Station) to an existing distributed system (page 59).
- Replacing a PC (page 59).
- Renaming a PC (page 61).
- Adding a new communication interface (page 62).
- Adding more tags than currently licensed (page 63).
- Installing on domain controllers (page 63).

Changing station types

If you are changing station types, perform the following appropriate procedures. You may also need to reset your users’ permissions (see “Changing rights and

permissions" on page 112).

▶ To change an AMS Device Manager Server Plus Station to a Client SC Station:

1. Back up the database (page 16).
2. Uninstall the previous Server Plus Station software (page 18).
3. Ensure that a connection can be made to an available Server Plus Station.
4. Install the Client SC Station software (page 52).
5. Restore or combine the database on another Server Plus Station (page 17).

▶ To change an AMS Device Manager Client SC Station to a Server Plus Station:

1. Get new license codes (page 55).
2. Uninstall the previous Client SC Station software (page 18).
3. Install the Server Plus Station software (page 49).

Changing a Client SC Station to access a different Server Plus Station

▶ To change a Client SC Station to access a different Server Plus Station:

1. In Network Configuration on the Client SC Station, remove any configured system interfaces (other than HART Modem).
2. Select **Start > All Programs > AMS Device Manager > Server Plus Connect**.
3. In the **Server Plus Connect** dialog, select a Server Plus Station PC from the drop-down list or enter the name of the PC where the desired Server Plus Station is installed.
4. Click **Connect**.

Note

For more information about the Server Plus Connect utility, refer to AMS Device Manager Books Online.

The Server Plus Connect utility cannot be used on Client SC Stations installed on DeltaV or Ovation workstations. In these configurations, to change a Client SC Station to access a different Server Plus Station:

1. Uninstall AMS Device Manager on the Client SC Station (see page 18).
2. Reinstall AMS Device Manager on the Client SC Station and indicate the new Server Plus Station, see “Installing Client SC Station software” on page 52.

Adding Client SC Stations

▶ To expand an existing distributed system:

1. Determine the number of stations covered by your current license (select **Help > About** from the AMS Device Manager toolbar).
   - To add stations that will be covered by your current license, continue with step 2.
   - To add more stations than currently licensed, obtain new license codes. After you receive your new license codes, run the Licensing Wizard on the Server Plus Station (see “Licensing a Distributed System” on page 55) and then continue with step 2.
2. To install AMS Device Manager on the added Client SC Stations, see “Installing Client SC Station software” on page 52.
3. Update the Client SC Station configuration on the Server Plus Station (see “Configuring a Distributed System” on page 56).
4. To enable the stations in the distributed system to recognize the added Client SC Station, shut down and restart AMS Device Manager on all the stations.

Replacing an AMS Device Manager Station PC

Replacing a Server Plus Station PC

▶ To replace a Server Plus Station PC:

1. Obtain new license codes, see “Licensing a Distributed System” on page 55. (License codes are assigned to a single hard disk serial number.)
2. Back up the database (see page 16) and save the backup file in a secure location.
3. Uninstall AMS Device Manager from the old PC (see page 18). Rename or disconnect the PC from the network.

4. Connect the new PC to the network and give it the same computer name as the old PC.

Note

If the new Server Plus Station PC has a different computer name, all active alerts that were in the Alert Viewer on the old PC will be lost. In addition, you will be required to run the Server Plus Connect utility on all Client SC Stations to connect to the new Server Plus Station (see "Changing a Client SC Station to access a different Server Plus Station" on page 58).

5. Install Server Plus Station software on the new PC (see "Installing Server Plus Station software" on page 49).
6. Launch the License Wizard (Start > All Programs > AMS Device Manager > Licensing > Licensing Wizard) and enter the new license codes.
7. Set up the server configuration to recognize each Client SC Station connected in the system (see "Configuring a Distributed System" on page 56).
8. Restore the database using the backup file you saved in step 2 (see "Restoring a database" on page 17).

Replacing a Client SC Station PC

▶ To replace a Client SC Station with a new PC:

1. Uninstall AMS Device Manager from the old PC (see "Uninstalling AMS Device Manager" on page 18). Disconnect the PC from the network, if appropriate.
2. Connect the new PC to the network.
3. On the Server Plus Station, select **Start > All Programs > AMS Device Manager > Station Configuration** from the Windows taskbar.
4. In the Station Configuration dialog, select the name of the old PC and click **Remove**.
5. In the Station Configuration dialog, click **Add**.
6. Enter the computer name of the new Client SC Station PC (see "Determining computer names" on page 48), and click **OK**. The station name is not case-sensitive. Do not include a domain name or any other characters that are not part of the computer name.
7. On the new Client SC Station PC, install the Client SC Station software (see "Installing Client SC Station software" on page 52).

Renaming an AMS Device Manager PC

To rename a Server Plus Station PC:

1. Back up your AMS Device Manager database (see “Backing up a database” on page 16).
2. Renaming the PC clears the Device Monitor List, so record all devices contained in the Device Monitor List. Uninstall AMS Device Manager on the Server Plus Station and all Client SC Stations in a distributed system (see “Uninstalling AMS Device Manager” on page 18).
3. Rename the Server Plus Station PC:
   - Right-click the Windows desktop **My Computer** icon.
   - Select **Properties**.
   - Click **Change Settings** (Windows 7 only).
   - On the **Computer Name** tab, click **Change**.
   - Enter a new computer name and click **OK**.
   - Click **OK**.
4. Install AMS Device Manager on the Server Plus Station and all Client SC Stations in a distributed system (see “Installing Server Plus Station software” on page 49 and “Installing Client SC Station software” on page 52).
5. Restore the database backed up in step 1 (see “Restoring a database” on page 17).
6. Reinstall the required system interfaces (see “Configuring communication interfaces” on page 71) and SNAP-ON applications (see “Installing SNAP-ON applications” on page 56).
7. Open AMS Device Manager, right-click each network icon and select **Rebuild Hierarchy** and then **Scan > New Devices**.
8. Add the devices recorded in step 2 to the Device Monitor List (refer to AMS Device Manager Books Online).

To rename a Client SC Station PC:

1. Renaming the PC clears the Device Monitor List, so record all devices contained in the Device Monitor List.
2. Uninstall AMS Device Manager on the Client SC Station PC (see “Uninstalling AMS Device Manager” on page 18).

3. Rename the Client SC Station PC:
   - Right-click the Windows desktop **My Computer** icon.
   - Select **Properties**.
   - Click **Change Settings** (Windows 7 only).
   - On the **Computer Name** tab, click **Change**.
   - Enter a new Computer Name and click **OK**.
   - Click **OK**.
4. On the Server Plus Station, open Station Configuration and remove the old name of the Client SC Station PC and add the new name (see "Configuring a Distributed System" on page 56).
5. Install AMS Device Manager on the Client SC Station PC (see "Installing Client SC Station software" on page 52).
6. Reinstall the required system interfaces (see "Configuring communication interfaces" on page 71) and SNAP-ON applications (see "Installing SNAP-ON applications" on page 56).
7. Open AMS Device Manager, right-click each network icon and select **Rebuild Hierarchy** and then **Scan > New Devices**.
8. Add the devices recorded in step 1 to the Device Monitor List on the Client SC Station (refer to AMS Device Manager Books Online).

Adding a new communication interface

▶ To add a new communication interface (for example, an additional system interface):

1. Contact your Emerson Process Management Sales/Service Office to obtain a new license code for the desired communication interface.
2. Run the Licensing Wizard on the Server Plus Station (see "Licensing a Distributed System" on page 55).
3. Configure the new communication interface (see "Configuring communication interfaces" on page 71).

Adding more tags than currently licensed

To add more tags than currently licensed:

1. Contact your Emerson Process Management Sales/Service Office to obtain new license codes to cover the number of tags needed.
2. Run the Licensing Wizard on the Server Plus Station (see “Licensing a Distributed System” on page 55).
3. Start AMS Device Manager.
4. Install and configure the additional devices.

Installing AMS Device Manager on domain controllers

AMS Device Manager creates a Windows user account (AmsServiceUser) on each station in a distributed system. When AMS Device Manager is installed on a domain controller, this account is created as a domain user. Communication failures will result if installation is not done correctly as follows:

- If you install an AMS Device Manager distributed system on domain controller stations and non-domain controller stations on the same network, install either the AMS Device Manager Server Plus or Client SC on a domain controller first, and then the other stations on other domain controllers or non-domain controllers.

Note

If a Server Plus is installed on a domain controller, all Client SC Stations that are part of that domain must be clients of this Server Plus. Only one AMS Device Manager distributed system is allowed on a single domain.

- If AMS Device Manager will be used in a cross-domain configuration and AMS Device Manager will not be installed on a domain controller, create the AmsServiceUser account on any domain-resident PCs prior to installing AMS Device Manager on them. Refer to KBA NA-0800-0113.

Note

AMS Device Manager is not supported on a Windows Server 2008 read-only domain controller.

Domain controller security requirements

To launch and run AMS Device Manager, you must be a member of the **AMSDeviceManager** user group.

Adding a user to the AMSDeviceManager group on a domain controller

Note

The following procedure requires network administrator permissions.

To add a user to the **AMSDeviceManager** group:

1. Select **Start > Settings > Control Panel > Administrative Tools > Active Directory Users and Computers**.
2. Select <*Domain Name*> **> Users**.
3. Double-click the **AMSDeviceManager** group.
4. Click **Add**.
5. Enter the Windows User ID you want to add to the group and click **OK**.
6. Click **OK**.

Mobile workstation

A mobile workstation is an AMS Device Manager Client SC Station connected wirelessly to a LAN. As long as the PC meets the AMS Device Manager requirements (see “Hardware requirements” on page 19), it functions like a station connected to a wired Ethernet LAN. However, no system interfaces should be configured on a mobile workstation, as this can cause database issues regarding the path of the connected device. If at any time the mobile workstation wireless network connection is lost, you may have to restart AMS Device Manager to reestablish network connectivity.

Licensing AMS Device Manager 12.0 on DeltaV stations

If you have licensed your AMS Device Manager 12.0 software, you see a full-function application when you launch the product. If not licensed, you can use a limited AMS Device Manager feature set provided with each DeltaV installation. If this is your situation, refer to the DeltaV Online for information.

When you install AMS Device Manager on a DeltaV Simulate Multi-node system, the installation program checks for the presence of a DeltaV Simulate ID key (VX dongle). If the Simulate ID key is found, AMS Device Manager licensing is enabled. Otherwise, the installation program looks for an AMS Device Manager license.dat file. If the license.dat file is found, you are granted the permissions associated with the license. If no license.dat file is found, a subset of AMS Device Manager functionality is available.

There are a number of licensing considerations when you install AMS Device Manager on a DeltaV station. To ensure that your installation functions as you expect, please contact your Emerson Process Management Sales/Service Office. After you have received the appropriate licensing information and AMS Device Manager setup instructions for your situation, install AMS Device Manager as described beginning on page 66.

Installing AMS Device Manager 12.0 on DeltaV stations

AMS Device Manager 12.0 can only be co-deployed on DeltaV 9.3.1 and newer stations. To ensure a proper installation, DeltaV must be installed before AMS Device Manager.

Note

Any AMS Device Manager station (either Server Plus or Client SC) installed on a DeltaV 11.3 or later ProfessionalPLUS workstation must be licensed to ensure proper licensing functionality, proper security, proper user synchronization between DeltaV and AMS Device Manager, and proper Device Description (DD) installation.

Before you install AMS Device Manager on your DeltaV stations, ensure that you have all the proper AMS Device Manager and DeltaV licensing and installation instructions (see “Licensing AMS Device Manager 12.0 on DeltaV stations” on page 62). In addition, ensure that USB has been enabled in DeltaV Easy Security (see your DeltaV documentation for more information).

Note

If you are installing AMS Device Manager on any domain controller stations, refer to “Installing AMS Device Manager on domain controllers” on page 63.

To install Server Plus software on a supported DeltaV station, see“Installing Server Plus Station software” on page 49. To install Client SC software on a supported DeltaV station, see “Installing Client SC Station software” on page 52.

DeltaV actions

Note

Do not configure a DeltaV Network System Interface for the same DeltaV system on more than one AMS Device Manager station.

After installing AMS Device Manager on a DeltaV Station, you must perform a download of the DeltaV workstation (refer to DeltaV Books Online). Downloading a DeltaV 10.x or later workstation adds DeltaV database account users to the AMS Device Manager database. Creating a new Windows user in DeltaV User Manager also adds that user to the **AMSDeviceManager** Windows user group.

Downloading a DeltaV 9.x workstation adds DeltaV users to the AMS Device Manager database, but the users must be manually added to the **AMSDeviceManager** Windows group. Contact your IT department for assistance.

Note

Each time a ProfessionalPLUS Station is downloaded, some DeltaV user permissions overwrite AMS Device Manager user permissions (System Administrator, Device Write, Device SIS Write, Device Assignment).

DeltaV Upgrade Wizard

The DeltaV Upgrade Wizard automates the process of upgrading a DeltaV Station from an earlier version and ensures that crucial steps are performed. Do not run the DeltaV Upgrade Wizard before uninstalling AMS Device Manager. If you run the DeltaV Upgrade Wizard first, AMS Device Manager will not function as expected and a PC restart may be needed before AMS Device Manager can be uninstalled.

Uninstalling DeltaV software

To uninstall DeltaV on a station that has AMS Device Manager co-deployed, you must uninstall AMS Device Manager first and then DeltaV. You can then reinstall AMS Device Manager. If you uninstall DeltaV first, AMS Device Manager will not function as expected.

If you have co-deployed AMS Device Manager on domain controllers and non-domain controllers, you must remove AMS Device Manager from all non-domain controllers first, then from all backup/secondary domain controllers, and then from the primary domain controller. Uninstall DeltaV only after AMS Device Manager has been uninstalled on all PCs.

Licensing AMS Device Manager 12.0 on Ovation stations

When you install AMS Device Manager on an Ovation station, the installation program checks for the presence of an AMS Device Manager license.dat file. If the license.dat file is found, you are granted all the permissions associated with the license. If you do not have a license.dat file, see “Licensing a Distributed System” on page 55. After you have received the appropriate licensing information, install AMS Device Manager as described beginning on page 68.

Installing AMS Device Manager 12.0 on Ovation stations

AMS Device Manager 12.0 can be installed on Ovation 3.3.1 and newer stations as outlined on page 33. AMS Device Manager stations can also be installed on separate PCs and access Ovation information through the Ovation System Interface. To ensure a properly co-deployed installation, Ovation must be installed before AMS Device Manager.

In a typical Ovation 3.3.1 or 3.4 deployment using FOUNDATION fieldbus devices, the AMS Device Manager Server Plus software would be installed on the Ovation station that also has the fieldbus engineering software installed. AMS Device Manager Client SC software would be installed on other supported Ovation station types in the network. This deployment gives all connected stations access to both AMS Device Manager and Ovation databases.

In a typical Ovation 3.5 deployment using FOUNDATION fieldbus devices, the AMS Device Manager Client SC software would be installed on the Ovation Database Server. Other AMS Device Manager Client SC station and the Server Plus station software would be installed on Ovation Operator stations in the network. This deployment gives all connected stations access to both AMS Device Manager and Ovation databases.

Before you install AMS Device Manager on your Ovation stations, ensure that you have all the proper AMS Device Manager and Ovation licensing and installation instructions (see “Licensing AMS Device Manager 12.0 on Ovation stations” on page 68).

Note

If you are installing AMS Device Manager on any domain controller stations, refer to “Installing AMS Device Manager on domain controllers” on page 63.

To install Server Plus software on a supported Ovation station, see“Installing Server Plus Station software” on page 49. To install Client SC software on a supported Ovation station, see “Installing Client SC Station software” on page 52.

Configure the Ovation Network System Interface (see “Configuring AMS Device Manager for an Ovation System Interface” on page 88) so that AMS Device Manager can detect and work with devices on the Ovation network.

Note

Do not configure an Ovation Network System Interface for the same Ovation system on more than one AMS Device Manager station.

Note

If you install a Client SC Station on an Ovation station running on a Windows Server PC, add the Client SC Station PC name to the DNS forward lookup zones list. Contact your IT department for assistance.

Configure any other required communication interfaces (see “Configuring communication interfaces” on page 71).

Uninstalling Ovation software

To uninstall Ovation on a station that has AMS Device Manager co-deployed, you must uninstall AMS Device Manager first and then Ovation. You can then reinstall AMS Device Manager. If you uninstall Ovation first, AMS Device Manager will not function as expected.

If you have co-deployed AMS Device Manager on domain controllers and non-domain controllers, you must remove AMS Device Manager from all non-domain controllers first, then from all backup/secondary domain controllers, and then from the primary domain controller. Uninstall Ovation only after AMS Device Manager has been uninstalled on all PCs.

4 Configuring communication interfaces

AMS Device Manager communicates with HART, *Wireless*HART, FOUNDATION fieldbus, PROFIBUS DP and PROFIBUS PA devices through various communication interfaces. If this is a new installation or you are adding interfaces to an existing system, you need to configure the network after you have installed the software.

You need to configure the network interfaces that are relevant to each station. You should only configure a particular physical network on one station within the distributed network to avoid the potential for simultaneous device configuration.

This section describes how to configure for:

- HART modems (page 71)
- Field Communicators (page 75)
- Documenting calibrators (page 77)
- HART multiplexer networks (page 78)
- System interfaces (page 81)

This section provides general information about installing these interfaces. For specific information, refer to the manufacturers' documentation.

HART modems

HART modems let AMS Device Manager communicate with HART devices using a PC serial port, PC USB port, or Bluetooth connectivity. Serial and USB HART modems attach directly to a PC or laptop computer and do not require an external power supply. Bluetooth HART modems require a self-contained power source (AAA batteries) as well as a Bluetooth-ready workstation PC. The PC can have Bluetooth capability built-in or use a Bluetooth adapter and Microsoft Bluetooth software components. HART modems are not supported with USB to RS-232 converters or with Ethernet converters.

You must configure AMS Device Manager to send and receive data to and from the PC serial communications port or USB port (USB HART modem software is required). If a Bluetooth HART modem is used, you must prepare the PC for its use. Contact your IT department for assistance. HART modems also allow multidropping up to 16 HART devices (see "Configuration notes" below).

Configuring AMS Device Manager for a HART modem

To configure for a HART modem:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **HART Modem** and click **Install**.
4. Follow the prompts in the Add HART Modem Wizard.
5. Connect a HART modem, see "Connecting a HART modem" on page 72.
6. See "After a modem is installed" on page 74.

Configuration notes

- If you select a multidrop installation, you can connect up to 16 devices on the same modem. However, if you intend to use only one device at a time, it will speed performance if you do not select the multidrop option and if you set all devices to a configurable polling address of 0.
- If any devices use a *Wireless*HART adapter, select the checkbox and enter the polling address of the adapter.
- Changes will take effect when AMS Device Manager is started.

Connecting a HART modem

NOTICE

If you are working with a modem on a workbench, ground your device to avoid possible damage to your PC.

To connect a HART modem:

1. Establish a communication connection between the HART modem and your PC. Be sure you attach it to the port that you configured for it (see page 72).

2. Attach the HART devices. For many HART input devices (such as transmitters), you need to connect a 250Ω to 300Ω resistor in series with the power source. Be very careful when connecting an output device in a non-DCS loop configuration to avoid device damage. Always consult the device product manual for detailed connection information.

Note

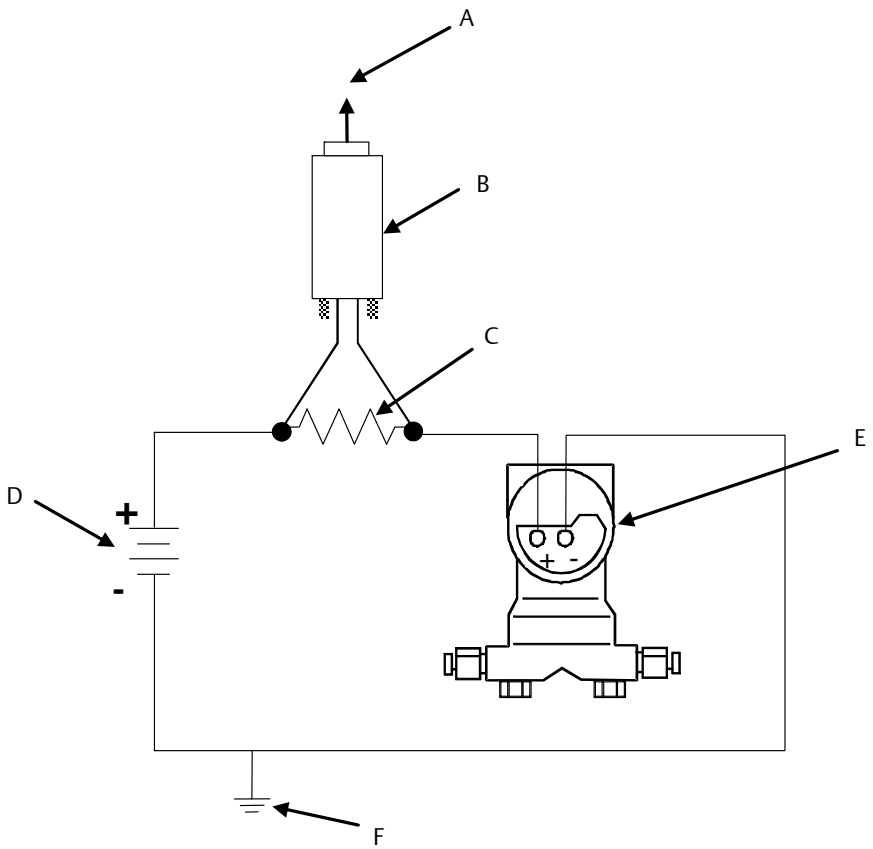
Follow output device manufacturers' recommendations for loop wiring.

3. Attach the modem leads across the resistor, if required.
4. Attach a power supply to the HART device, if necessary. Figure 1 shows how a HART device should typically be wired to a modem.
5. Verify that the transmitter has power.
6. After configuring the modem, reboot the PC to complete the installation.

Note

If a device is connected to the modem but its icon is not displayed, see "After a modem is installed" on page 74.

Figure 1. Device Wiring Diagram



A *To PC COMM port connection*
B *HART modem*
C *250 ohm resistor*
D *24vDC power source*
E *Transmitter*
F *Optional ground connection*

After a modem is installed

AMS Device Manager continuously polls the modem connection and automatically recognizes a device once the device and modem are installed.

AMS Device Manager shows the installed device connected to the modem after you have completed the procedure on page 72. If you do not see the device, do the following:

- Check your connections again.
- Make sure the modem is properly installed.

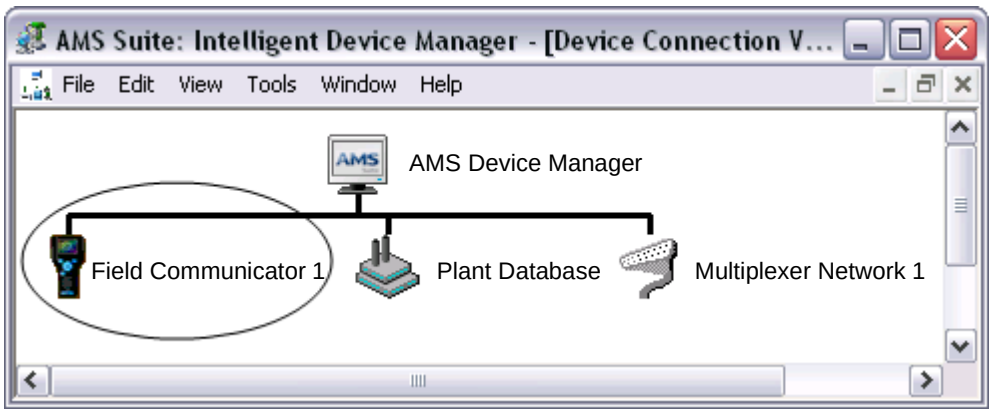
- Make sure the modem is properly configured in AMS Device Manager.
- Make sure the device loop wiring is correct with the required resistance for input devices (nominal 250 - 300 ohms).
- Verify that the field device is working.
- Verify polling address.

Field Communicators

The 475 and 375 Field Communicators are portable, handheld communicators from Emerson Process Management used in the field or in the shop to configure, test, and diagnose HART and FOUNDATION fieldbus devices. For information on using the 475 or 375, refer to the user's manual that came with your Field Communicator.

The Handheld Communicator Interface is a licensable option that lets you use a Field Communicator and AMS Device Manager together to transfer HART and FOUNDATION fieldbus data. The 475 communicates with an AMS Device Manager station using a USB IrDA adapter (ordered separately) or the Microsoft Windows Bluetooth interface on a Bluetooth-enabled PC. The 375 communicates with an AMS Device Manager station using a USB IrDA adapter (ordered separately). You can communicate with only one Field Communicator at a time on a PC. Communication between AMS Device Manager and a connected Field Communicator is initiated by the AMS Device Manager software. Once the Field Communicator is configured in the network, you can see its icon (Figure 2).

Figure 2. Field Communicator icon in Device Connection View



Configuring AMS Device Manager for a Field Communicator

▶ To configure AMS Device Manager for a Field Communicator:

1. Close AMS Device Manager if it is running.
2. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
3. In the Network Configuration dialog, click **Add**.
4. In the Select Network Component dialog, select **Field Communicator** and click **Install**.
5. Follow the prompts in the Add Field Communicator Network Wizard.
6. In the Connection dialog, select the appropriate Field Communicator connection option.

The IrDA adapter is a plug-and-play interface, so you do not need to specify a communications port. The Bluetooth interface requires use of the Microsoft Bluetooth components and an adapter if your PC is not Bluetooth-ready (see the Release Notes for a list of supported Bluetooth adapters). If you have Bluetooth components from another provider installed, you will be instructed to use Microsoft Bluetooth components. For more information, refer to AMS Device Manager Books Online. Bluetooth is not natively supported in Windows Server 2003/2008.

Connecting a Field Communicator

▶ To connect a Field Communicator:

1. Ensure that your network has been configured for a Field Communicator (see page 76).
2. Ensure that an IrDA adapter (and drivers, if necessary) or Bluetooth components (and adapter, if necessary) are installed on the PC. Refer to your IrDA interface operating instructions. See the Release Notes for a list of supported IrDA and Bluetooth adapters.
3. If using an IrDA adapter align it with the IrDA interface on the field communicator. If using Bluetooth connectivity, follow the instructions supplied with your PC or Bluetooth adapter hardware.
4. Turn on the Field Communicator.

5. From the Field Communicator Main Menu, select **Listen For PC** mode and the correct connection type and tap **OK**. After making these selections, AMS Device Manager will conduct all interaction between the Field Communicator and the PC.
6. Launch AMS Device Manager.
7. Double-click the Field Communicator icon in AMS Device Manager or right-click the icon and select **Open** from the context menu.

Note

You cannot access live device data through a Field Communicator connected to AMS Device Manager.

Refer to AMS Device Manager Books Online for more information about connecting and using a Field Communicator with AMS Device Manager. For general information on using the 375 or 475 Field Communicators, refer to the user's manual that came with your Field Communicator.

Documenting calibrators

With the optional Calibration Assistant SNAP-ON application, a documenting calibrator can be used to automate the collection of device calibration data.

When the documenting calibrator is connected to AMS Device Manager, test definitions can be checked out (downloaded) to the calibrator. The calibrator is then attached to the corresponding field device, tests are run, and data is collected. This data can then be checked in (uploaded) to AMS Device Manager for electronic record keeping and report generation.

Refer to the current Release Notes for a list of supported documenting calibrators and pertinent information about individual calibrators. Refer to the AMS Device Manager Supported Device List to determine if a device supports calibration.

Configuring AMS Device Manager for a documenting calibrator

▶ To configure AMS Device Manager for a documenting calibrator:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **Calibrator** and click **Install**.

4. Follow the prompts in the Add Calibrator Wizard.
5. When finished, verify that the correct COM port is assigned by selecting the calibrator name in the Network Configuration dialog and clicking **Properties**. If necessary, change the COM Port on the Properties for the Calibrator dialog.

Connecting a documenting calibrator

For instructions on how to connect the calibrator to the PC, see the calibrator documentation.

Connecting devices to a documenting calibrator

For instructions on how to connect devices to the documenting calibrator, see the calibrator documentation.

HART Multiplexer Network Interface

With the optional HART Multiplexer Network Interface, AMS Device Manager can communicate with HART devices through a HART multiplexer. HART multiplexers can link many installed HART field devices to an AMS Device Manager PC, providing the capability to remotely configure, troubleshoot, and monitor those devices. A typical HART multiplexer network enables one PC COM port to communicate with up to 63 addressable HART multiplexers.

AMS Device Manager supports a variety of multiplexers, each with different capabilities and requirements. Supported multiplexer types can have between 32 and 256 device connections. For a list of supported multiplexers, see the Release Notes. For specific information about a supported multiplexer, see the manufacturer's documentation.

Note

This information refers to Arcom, Elcon, 8000 BIM, Spectrum Controls, Honeywell, and Pepperl+Fuchs multiplexers. STAHL multiplexer interfaces are described on page 37.

NOTICE

For the PC to communicate with a HART multiplexer, you must place either an RS-232 to RS-485 converter or a supported Ethernet serial hub between the multiplexer and the PC. For supported peripherals, see the Release Notes.

Preparing a HART Multiplexer Network Interface

Preparing a HART multiplexer interface includes:

- Connecting the multiplexer(s) to the PC
- Configuring AMS Device Manager for a multiplexer network
- Setting the HART master mode and the multiplexer gender settings
- Connecting the field devices to the multiplexers

Connecting a HART multiplexer to a PC

To connect a HART multiplexer to AMS Device Manager, refer to the multiplexer documentation.

Configuring AMS Device Manager for a HART Multiplexer Network

▶ To configure AMS Device Manager for a HART multiplexer network:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **Multiplexer Network** and click **Install**.
4. Follow the Multiplexer Network Wizard instructions to add the HART multiplexer network.

Configuration notes

- Select the appropriate PC communications port.
- If necessary, adjust the Baud Rate, Network Timeout, Communication Retries, HART Busy Retries, and Multiplexer address range. Refer to AMS Device Manager Books Online for the Connection dialog for more information.

- Select the appropriate HART Master Mode setting. This parameter setting must be the same for all multiplexers on the network.

Note

You can connect up to 63 multiplexers on the same network. You can improve network performance by limiting the range to the minimum value that includes the multiplexer addresses and configuring the multiplexers to use a range of consecutive addresses.

NOTICE

After completing the configuration, verify that the baud rates match in AMS Device Manager, the multiplexer, and the RS-232 to RS-485 converter. To change the baud rate for a multiplexer network in AMS Device Manager, select its name in the Network Configuration dialog and click Properties. Enter the correct baud rate and click Apply.

For more information about multiplexer networks, refer to KBA NA-0400-0084.

System interfaces

With an optional system interface, AMS Device Manager can communicate with devices through existing plant wiring. Each system interface is licensed and installed separately, and each has unique characteristics and works somewhat differently with AMS Device Manager.

AMS Device Manager provides system interfaces for the following systems:

- Wireless (see page 82)
- DeltaV™ (see page 84)
- Ovation™ (see page 87)
- FF HSE (see page 90)
- PROVOX (see page 91)
- RS3™ (see page 93)
- STAHL (see page 96)
- 8000 BIM (see page 98)
- HART Over PROFIBUS (see page 99)
- Kongsberg Maritime (see page 101)
- Siemens (see page 102)
- ABB (see page 102)
- Det-Tronics (see page 104)
- PROFIBUS (see page 105)

Wireless

The Wireless System Interface allows you to view and configure *Wireless*HART devices in a Wireless Network. A Wireless Network is made up of one or more wireless gateways and *Wireless*HART devices.

Configuring AMS Device Manager for a Wireless Network

To configure AMS Device Manager for a Wireless Network:

Note

Before installing a Wireless System Interface, ensure that the Security Setup Utility is not running.

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **Wireless Network** and click **Install**.
4. Follow the Add Wireless Network Wizard instructions. Enter the DNS Name or IP address of a gateway and click **Add**.
5. If this is the first time a gateway has been configured, a Certificate Form is displayed. The Certificate Form is required to set up SSL secure communications. After the Certificate Form is completed, the gateway will be added to the Connections Properties page.
6. If required, enter the username and password to access the gateway setup utility. Enter information to allow the gateway and AMS Device Manager to exchange encrypted data.
7. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.
8. For more information about using a Wireless Network, refer to AMS Device Manager Books Online.

Adding a gateway

For a list of supported wireless gateways, refer to the AMS Device Manager Release Notes. Do not configure a Wireless System Interface if a DeltaV or Ovation System Interface will be using the same wireless gateway.

Note

The same wireless gateway cannot be configured in two different Wireless Networks on a single workstation.

▶ To add a wireless gateway to a Wireless Network:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Select a Wireless Network and click **Properties**.
3. Click the **Connection** tab.
4. Enter the name or IP address of the gateway and click **Add**.
5. If required, enter the username and password to access the gateway's setup utility. Then enter information to allow the gateway and AMS Device Manager to exchange encrypted data.
6. Click **OK**.
7. Click **Close**.
8. Start AMS Device Manager. See "Determining the system interface structure and device data" on page 106.

Note

Optional SSL encryption software is available from Emerson to secure wireless communication with the gateway.

Removing a gateway

▶ To remove a wireless gateway from a Wireless Network:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Select a Wireless Network and click **Properties**.
3. Click the **Connection** tab.
4. Select the appropriate gateway in the list and click **Delete**.

5. Click **Yes**.
6. Click **Close**.
7. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.

DeltaV

A DeltaV control network is an isolated Ethernet local area network (LAN) that provides communication between the controllers and the stations. It uses one or more Ethernet hubs for communication.

Note

Do not configure an AMS Device Manager Wireless System Interface if a DeltaV System Interface will be using the same wireless gateway.

For information about AMS Device Manager compatibility with DeltaV, refer to page 29.

DeltaV can access devices in RS3 and PROVOX I/O systems through the DeltaV Interface for RS3 I/O and DeltaV Interface for PROVOX I/O, respectively. The devices are displayed in the DeltaV network hierarchy in AMS Device Manager. For more information, refer to the DeltaV Books Online and documentation.

To receive alerts from devices connected to PROVOX and RS3 Migration Controllers in your DeltaV network hierarchy, you must run a utility to properly set the DeltaV alert capability.

▶ To run the utility:

1. Select **Start > Run** from the Windows taskbar.
2. In the text box, type C:\AMS\BIN\DELTAVFASTSCANUTILITY.EXE (where C is the drive containing the AMS folder).
3. Uncheck the box for the appropriate DeltaV network.
4. Click **Save Changes**.

The AMS ValveLink SNAP-ON application is supported for DeltaV and PROVOX I/O cards, but not for RS3 I/O cards.

Preparing the DeltaV system

To prepare a DeltaV control system to communicate with a standalone AMS Device Manager station, you need to:

- Know the node name of the DeltaV ProfessionalPLUS Station you are connecting to. If you do not know this name, see your system administrator.
- Know the password associated with the DeltaVAdmin account on the ProfessionalPLUS Station, if it has been changed from the default password.
- Configure a HART-Enabled Channel so that AMS Device Manager knows where to look for a HART field device. If an I/O channel is enabled for HART but it does not have an associated DeltaV device signal tag, it will not appear in AMS Device Manager.
- Commission any FOUNDATION fieldbus devices you want to be displayed in AMS Device Manager.

Configuring AMS Device Manager for a DeltaV System Interface

▶ To configure AMS Device Manager for a DeltaV System Interface:

Note

You must only configure the DeltaV Interface on a licensed AMS Device Manager station. Computer administrator privileges are required to install a DeltaV Interface.

Do not configure a DeltaV Interface to the same DeltaV ProfessionalPLUS on more than one AMS Device Manager station in a distributed system.

Ensure that all stations in the AMS Device Manager distributed system are running when you configure the DeltaV System Interface.

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **DeltaV Network** and click **Install**.
4. Click **Next**.
5. On the **General** dialog, enter a name for the DeltaV Network. Click **Next**.
6. On the **Connection** dialog, enter the computer name of the DeltaV ProfessionalPLUS Station.

7. Enter the DeltaVAdmin password and password confirmation, if it has been changed from the default.

Note

The DeltaVAdmin password is an administrative password given to each DeltaV system. The same password must be used to access all DeltaV networks configured on this station. If no password is entered, a connection will be attempted using the default DeltaV password.

8. Select the options to enable HART, FOUNDATION fieldbus, *Wireless*HART and PROFIBUS DP device support, as needed.
9. Click **Next**.
10. On the **Advanced** tab, enter a high address for the PROVOX I/O Scan Range if your DeltaV system uses a PROVOX migration controller.
11. Click **Finish** to save the configuration.
12. Click **Close**.
13. Start AMS Device Manager to set up the network structure. See “Determining the system interface structure and device data” on page 106.

If you have multiple DeltaV Zones or networks which include additional Server Plus Stations, the Server Plus Connect utility lets you access those other Server Plus Stations from a Client SC Station. For more information, refer to AMS Device Manager Books Online.

To install AMS Device Manager on a DeltaV network, refer to “Installing AMS Device Manager 12.0 on DeltaV stations” on page 66.

Ovation

The Ovation System Interface lets AMS Device Manager communicate with HART, FOUNDATION fieldbus, PROFIBUS DP, and *Wireless*HART devices through an existing Ovation network. The Ovation network communicates with devices through one or more Ovation controllers. HART devices communicate with the Ovation controller through I/O modules specifically designed to communicate with HART equipment. FOUNDATION fieldbus devices communicate with the Ovation controller through I/O modules designed to communicate with FOUNDATION fieldbus devices. PROFIBUS DP devices communicate using I/O modules designed for PROFIBUS. *Wireless*HART devices communicate through the Smart Wireless Gateway. Device information is passed through the Ovation controller to a Windows-based Ovation Station from which AMS Device Manager accesses device data. See “Ovation” on page 33 for supported I/O modules.

FOUNDATION fieldbus device commissioning and decommissioning is accomplished through the Ovation fieldbus engineering software used by the Ovation system. AMS Device Manager is not part of this process. A FOUNDATION fieldbus device must be commissioned before AMS Device Manager can communicate with it.

Preparing the Ovation system

Refer to your Ovation documentation for device connection and network setup instructions.

For Ovation 3.3.1 and 3.4, the AMS Device Manager Server Plus Station must be co-deployed on an Ovation Station with the Ovation fieldbus engineering software installed for FOUNDATION fieldbus device support. Configure the Ovation System Interface on this station.

For Ovation 3.5, the fieldbus engineering software is located on the Ovation Database Server. Therefore, it is recommended to install AMS Device Manager Client SC software on this station type. To install and register this software on an Ovation Operator station type, you must run an Ovation batch file on the Ovation Operator station.

▶ To run the batch file on the Ovation Operator station:

1. Select **Start > Run** from the Windows taskbar.
2. In the text box, type CMD and click **OK** to open a command prompt.
3. At the command prompt, type:
   CD C:\OVATION\OVATIONBASE
4. Press ENTER.
5. At the command prompt, type:
   INSTALLHSESERVER -I

6. Press ENTER.

Configuring AMS Device Manager for an Ovation System Interface

At least 1 AMS Device Manager station must installed on the Ovation network, though not necessarily on an Ovation station. To access HART and PROFIBUS DP devices, you can configure the AMS Device Manager Ovation System Interface on a standalone AMS Device Manager station (that is, without Ovation software). For all device protocols, you can install AMS Device Manager Client SC software on an Ovation Database Server and set up the Ovation System Interface using AMS Device Manager Network Configuration utility. If AMS Device Manager is installed on an Ovation Station that also has fieldbus engineering software installed, you can right-click a HART or FOUNDATION fieldbus device and select from a set of AMS Device Manager commands. See “Ovation” on page 33 for station and version compatibility information. Your Ovation username must also be an AMS Device Manager user with Device Write and Device SIS Write permissions.

When you configure the Ovation System Interface on an AMS Device Manager Client SC station co-deployed on an Ovation Database Server, HART, *Wireless*HART, PROFIBUS DP, and FOUNDATION fieldbus devices are supported. You must use the Ovation Database Server as your network gateway to access HART devices. Communication with *Wireless*HART devices is enabled through a Smart Wireless Gateway. For communicating with FOUNDATION fieldbus devices, the fieldbus engineering software must be installed locally on the same machine as AMS Device Manager (see “Preparing the Ovation system” on page 87).

▶ To configure AMS Device Manager for an Ovation interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **Ovation Network** and click **Install**.
4. Click **Next**.
5. In the General dialog, enter a name for the Ovation Network. Click **Next**.
6. In the Connection dialog, enter the name of the computer on the Ovation Network that contains the Ovation system Oracle database.
7. In the Connection Properties dialog, select the Ovation System Parameters you will be using.
   - FOUNDATION fieldbus device support
   - FOUNDATION fieldbus device alert support

- PROFIBUS DP device support
- *Wireless*HART device support

If you select WirelessHART device support, you must also identify the Smart Wireless Gateway name and IP address, as well as enable secure communications with the Wireless Gateway if you have installed the Security Setup utility for the Smart Wireless Gateway.

Note

Do not configure an AMS Device Manager Wireless System Interface if an Ovation System Interface will be using the same wireless gateway.

8. The data fields in the Timings dialog contain default values which you cannot change. Click **Help** for more information about the fields on this dialog.
9. Click **Finish** to complete the Ovation Network interface setup.
10. Click **Close**.
11. Start AMS Device Manager to set up the network structure. See “Determining the system interface structure and device data” on page 106.

Note

You must have computer administrator privileges to install an Ovation network.

Note

If you install both the Ovation System Interface and the FF HSE Interface on the same PC, you must configure each on a unique IP address.

NOTICE

If an Ovation System Interface is removed and later re-added, any PROFIBUS DP devices will need to be reidentified. To avoid this, back up your database before removing the Ovation System Interface. After re-adding the interface, import the backed up database.

FF HSE

The FF HSE Interface lets you use AMS Device Manager to configure and view alerts for FOUNDATION fieldbus devices connected to FOUNDATION fieldbus linking devices.

Your AMS Device Manager distributed system can be configured to access FF HSE linking devices in a dedicated network environment. This configuration is recommended and requires a dedicated network interface card (NIC) for connecting to the FF HSE linking devices. This arrangement provides best performance because the FF HSE linking devices are not required to share the network with other network traffic. In this case, you manually assign the TCP/IP address of the linking device.

The alternative is to configure your AMS Device Manager distributed system to access FF HSE linking devices from an Ethernet network that assigns TCP/IP addresses using DHCP.

Note

If you assign a static TCP/IP address to a linking device, a valid gateway address must also be provided. The gateway address is usually the TCP/IP address of the dedicated NIC. If the gateway address is invalid, you will see a delay in AMS Device Manager when rebuilding the hierarchy. In addition, no links or FOUNDATION fieldbus devices will be displayed after performing the Rebuild Hierarchy operation.

Configuring AMS Device Manager for an FF HSE Interface

To configure AMS Device Manager for an FF HSE Interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **FF HSE Network** and click **Install**.
4. Click **Next**.
5. Follow the HSE Network Wizard instructions. Choose the network interface card that will be connected to the same network as the HSE linking device.
6. Select the **Enable processing and acknowledgement of FF device alerts** checkbox to display device alerts in Alert Monitor and record alerts in Audit Trail.
7. Click **Finish** to save the configuration.
8. Click **Close**.

Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.

Note

If you install both the FF HSE Interface and the Ovation System Interface (with fieldbus devices enabled) on the same PC, you must configure each interface on a separate NIC on a unique IP address.

PROVOX

A PROVOX system controls field devices linked together by a communication network called a *highway.* All communicating PROVOX field devices, including the SRx Controller Family products, are connected to this network.

Field devices are grouped into communication highways in the PROVOX Data Highway or PROVOX Highway II. Both systems are multi-drop, half-duplex type. A traffic controller supervises the communication on a PROVOX Data Highway; a token-passing technique controls communication on a PROVOX Highway II.

Preparing the PROVOX system

To prepare a PROVOX control system to communicate with AMS Device Manager, you need to:

- Know the TCP/IP address and DNS name of your dedicated HDL (Highway Data Link). If you do not know these, see your system administrator.
- Generate and transfer the PROVOX hierarchy information to AMS Device Manager (see below).
- Verify that the HDL responds (see page 92).

Generating and transferring the HLT file

The PROVOX system uses the HART Instrument Locator Tool (HILT) to create a comma-delimited value (CDV) file that defines the addresses of field devices connected to the SRx/SR90 controller. The file name can be anything that is meaningful, as long as it uses an “hlt” extension (such as Provox1.hlt). After you create the HLT file, transfer it to the AMS folder on the AMS Device Manager PC and identify the HLT file in the **Connection** tab of Network Configuration Properties (see “Configuring AMS Device Manager for a PROVOX Interface” on page 93).

AMS Device Manager reads the HLT file and attempts to communicate with devices at every defined address, which can cause unpredictable results if the file is built using "all devices" as the default setting. The HLT file should hold only the device addresses that are relevant to AMS Device Manager.

Note

For AMS Device Manager to recognize the change when you add or delete a device in PROVOX, you must regenerate the HLT file on the ENVOX PC and transfer it to the AMS folder on the AMS Device Manager PC, replacing the old HLT file.

▶ To provide AMS Device Manager with the PROVOX HLT file information:

1. At the ENVOX PC, generate the HLT file by running the HART Instrument Locator Tool (HILT) utility.

   For information about using the HILT utility, see "Using the HART Instrument Locator Tool (HILT) Version P3.0" (Readhilt.rtf). This RTF file is located in the HILT folder on the AMS Device Manager program DVD.

2. Copy the HLT file from the ENVOX PC to the AMS folder on your AMS Device Manager PC, using file transfer protocol (FTP).

Verifying HDL response

▶ Use the ping command to verify that the HDL responds to communications sent to it by AMS Device Manager:

1. At the AMS Device Manager PC, select **Start > Run** from the Windows taskbar.
2. In the text box, type CMD and click **OK** to open a command prompt.
3. At the command prompt, type PING <*HDL DNS Name*>.

   If your network does not support DNS, replace the DNS name with the IP address of your HDL in the ping command.

4. Press ENTER.
5. Verify that the HDL responds to the ping command.

   The ping command should return a reply message. If the ping command fails, verify that you typed the correct address in the command line. Also verify that your network is functioning properly.

Installation is complete only after you receive a valid ping reply.

Configuring AMS Device Manager for a PROVOX Interface

▶ To configure AMS Device Manager for a PROVOX network interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **PROVOX Network** and click **Install**.
4. Follow the PROVOX Network Wizard instructions.
5. Start AMS Device Manager to set up the network structure. See “Determining the system interface structure and device data” on page 106.

RS3

A Rosemount System 3 (RS3) system controls field devices linked together through Controller cards connected to a PeerWay through ControlFiles. A PeerWay can accommodate up to 32 system devices, called nodes, to allow each control system device to communicate through the PeerWay and the RS3 Network Interface (RNI).

Preparing the RS3 system

To prepare an RS3 control system to communicate with AMS Device Manager, you must:

- Know the TCP/IP address and DNS name of your RNI. If you do not know these, see your system administrator.
- Set up a username and password for the system interface on your RNI (see “Verifying communication with the RNI” on page 94).
- Verify that the RNI responds.

Setting RNI username and password

▶ To set up a username and password for the system interface on your RNI:

1. On your RNI, open the RNI user configuration file, \\RNIBOOT\CONFIG\USERFILE.CFG. You can open it with the Notepad utility, or any other text editor.

2. Create a user account for AMS Device Manager, ensuring that *FMSPassthrough* is enabled and that KeyLevel is set to Console.

   The following example shows the system interface user entry in the USERFILE.CFG file. The user entry in bold is an example of an RS3 user entry. You can create the system interface user entry by copying and pasting an existing user entry in USERFILE.CFG and editing the entry for system interface.

```
<User
  <Name RS3OpStation>
  <Password RS3Performance>
  <KeyLevel CONSOLE>
  <Attributes
     <ReadUsers ON>
     <SendAlarms ON>
     <FMSPassthrough ON>
     <RemoteBoot ON>
  >
>
<User
  <Name AMS>
  <Password Passthrough>
  <KeyLevel CONSOLE>
  <Attributes
     <ReadUsers ON>
     <SendAlarms ON>
     <FMSPassthrough ON>
     <RemoteBoot ON>
  >
>
```

Note

The username and password are case-sensitive in the USERFILE.CFG file. When entering them in the AMS Device Manager Network Configuration utility, be sure to match the case.

Note

AMS ValveLink SNAP-ON application is not supported.

3. Save and close USERFILE.CFG.

Verifying communication with the RNI

▶ Use the ping command to verify that the RNI is responding:

1. At the AMS Device Manager PC, open a command prompt (**Start > All Programs > Accessories > Command Prompt**).

2. At the command prompt, type PING <*RNI DNS Name*>. (If your network does not support DNS, replace the DNS name with the IP address of your RNI in the ping command.)
3. Press ENTER.
4. Verify that the RNI responds to the ping command. The ping command should return a reply message.
5. If the ping command fails, verify that you typed the correct address in the command line. Also verify that your network is functioning properly.

Note

Your installation is complete only after you receive a valid ping reply.

Configuring AMS Device Manager for an RS3 Interface

To configure AMS Device Manager for an RS3 interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **RS3 Network** and click **Install**.
4. Follow the RS3 Network Wizard instructions.
5. Start AMS Device Manager to set up the network structure. See “Determining the system interface structure and device data” on page 106.

STAHL HART

A STAHL HART Interface supports STAHL systems that communicate with HART field devices. AMS Device Manager can read and write device information through existing plant wiring by communicating with multiple devices through the STAHL network. Various STAHL systems can coexist on a single STAHL network.

Preparing the STAHL system

No additional steps are needed to prepare the STAHL network for communication with AMS Device Manager. After configuring the STAHL HART interface, AMS Device Manager scans the STAHL network to determine its configuration and connected HART devices. Refer to the STAHL documentation for device connection and network setup instructions.

Configuring AMS Device Manager for a STAHL HART Interface

To configure AMS Device Manager for a STAHL network interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **Stahl Network** and click **Install**.
4. Follow the prompts in the Add Stahl Network Wizard (see “Configuration notes” on page 96).
5. Start AMS Device Manager to determine the network structure. See “Determining the system interface structure and device data” on page 106.

Configuration notes

- The STAHL network may need to be set to Secondary HART Master if the control system is set to Primary HART Master.

Note

The HART master selection for HART multiplexers, as shown in their Configuration Properties, must match this setting.

NOTICE

Do not configure two HART primary masters (such as AMS Device Manager and a control system)—this is an invalid setting and can produce unpredictable results.

- In the Connection dialog, select the communications port of the PC to which you are going to attach the STAHL Network. If necessary, adjust the Baud Rate and Device timeout value. Refer to AMS Device Manager Books Online for details. Click **Next**.
- In the Advanced dialog, adjust the RS-485 scan address range. To optimize performance, set the address range to include only the addresses where systems are located.
- To verify the baud rate or other information, select the STAHL Network name in the Network Configuration dialog and click **Properties**. If necessary, change the information shown on the three tabs.
- Changes will take effect when AMS Device Manager is restarted.

8000 BIM

The 8000 BIM interface displays HART field devices connected to an 8000 BIM by means of either:

- A serial connection using an RS-485 converter (BIM)
- An Ethernet connection using TCP/IP addressing (eBIM)

Configuring AMS Device Manager for an 8000 BIM Interface

▶ To configure AMS Device Manager for an 8000 BIM interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. In the Network Configuration dialog, click **Add**.
3. In the Select Network Component Type dialog, select **8000 BIM Network** and click **Install**.
4. Follow the 8000 BIM Network Wizard instructions.
5. Start AMS Device Manager to set up the network structure. See “Determining the system interface structure and device data” on page 106.

If no icons are displayed under the 8000 BIM network icon after a Rebuild Hierarchy operation, perform the appropriate procedure for your operating system:

▶ For Windows XP/Windows 7 or Windows Server 2003/2008:

1. (XP/2003) Select **Start > All Programs > Accessories > Communications > Network Connections**.
   (Windows 7/2008) Select **Start > Settings > Network Connections**.
2. Select **Advanced > Advanced Settings** from the Network Connections toolbar menu.
3. Under Connections, move the Ethernet card connected to the 8000 BIM network to the first spot in the network connection order.
4. Click **OK**.
5. Restart the PC.

Note

If AMS Device Manager is unable to detect the eBIMs, change the order of the network adapters in the station Network Properties so the Network Interface Card (NIC) connected to the 8000 BIM system is listed first. Then restart the PC.

HART Over PROFIBUS

The HART Over PROFIBUS System Interface lets you use AMS Device Manager to view and configure HART Rev. 5 or HART Rev. 6 field devices that are connected to PROFIBUS remote I/O subsystems via the T+H Ethernet PROFIBUS Interface (xEPI) PROFIBUS Gateway. The interface addresses the gateway by either its DNS or IP address.

The HART Over PROFIBUS System Interface supports the AMS ValveLink SNAP-ON application if using a compatible PROFIBUS remote I/O subsystem.

Preparing the PROFIBUS remote system

Refer to the documentation specific to your PROFIBUS remote I/O subsystem for device connection and network setup instructions.

Configuring AMS Device Manager for a HART Over PROFIBUS Interface

▶ To configure AMS Device Manager for a HART Over PROFIBUS Interface:

1. Close AMS Device Manager if it is running.
2. Download and install the TACC components from T+H (http://www.t-h.de/en/support-and-service/industrial-communication/products/tacc/downloads/software-documentation.html).
3. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
4. Click **Add**.
5. From the Select Network Component Type dialog, select **HART Over PROFIBUS** and click **Install**.
6. Follow the HART Over PROFIBUS Network Wizard instructions.

7. Start AMS Device Manager to set up the network structure. See “Determining the system interface structure and device data” on page 106.

Note

Refer to the Release Notes if all your devices are not displayed after performing a Rebuild Hierarchy and Scan New/All operation.

Refer to the *TH AMS Device Manager Communication Components HART Over PROFIBUS User Guide* downloaded from T+H for more information.

Kongsberg Maritime

The Kongsberg System Interface lets you use AMS Device Manager to communicate with HART devices using I/O modules supported by the Kongsberg Maritime System. The Kongsberg Network communicates with HART devices using the Kongsberg Automation Server which is an application with a Web Service interface.

The Kongsberg Network is deployed where there is access to the Kongsberg Automation Server with IIS. It is not necessary to install the Kongsberg Automation Server on an AMS Device Manager station, however, communications performance is better with this deployment type. For deployment scenarios that require AMS Device Manager Client Stations to cross External Firewalls, refer to KBA NA-0400-0046.

If you install additional Kongsberg Networks, they must be linked to unique Automation Server URLs. The Kongsberg Network supports communications with HART instruments connected to STAHL ISPac HART Multiplexers and STAHL PROFIBUS DP Remote I/O modules for HART. The Kongsberg Interface supports Advanced Valve Diagnostics using the AMS ValveLink SNAP-ON application.

Configuring AMS Device Manager for a Kongsberg System Interface

▶ To configure AMS Device Manager for a Kongsberg System Interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Click **Add**.
3. In the Select Network Component Type dialog, select **Kongsberg Network** and click **Install**.
4. Follow the Kongsberg Network Wizard instructions.
5. Choose the Kongsberg Automation Server URL. The URL connection to the Automation Server is tested and if not found, a corresponding message is displayed.
6. If the URL connection is found, click **Finish**.
7. Close the Network Configuration dialog.
8. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.

Preparing the Kongsberg control system

Refer to the Kongsberg Maritime system documentation for setup instructions.

Siemens

The Siemens System Interface lets you use AMS Device Manager to communicate with HART devices on a Siemens PCS 7 Control Network. An AMS Device Manager Server Plus Station or Client SC Station must be installed on the same station as the Siemens PCS 7 ES/MS Station. The AMS Device Manager Network Configuration utility is used to configure the Siemens network interface.

Configuring AMS Device Manager for a Siemens System Interface

▶ To configure AMS Device Manager for a Siemens System Interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Click **Add**.
3. In the Select Network Component Type dialog, select **Siemens Network** and click **Install**.
4. Follow the Siemens Network Wizard instructions.
5. Choose the **Rebuild Hierarchy Timeout** and **HART Response Timeout** values.
6. Close the Network Configuration dialog.
7. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.

For additional information, refer to the Siemens Control Network documentation.

ABB

The ABB System Interface lets you use AMS Device Manager to view and configure HART devices connected to I/O modules supported by the ABB System 800xA control system.

Configuring AMS Device Manager for an ABB System Interface

To configure AMS Device Manager for an ABB System Interface:

Note

If you are configuring the ABB System Interface on a Windows XP or Server 2003 PC, you must install the ABB security certificate on your AMS Device Manager station before performing the following steps. The certificate installation procedure is in the ABBSystemInterface-WindowsXP2003-Readme.txt file located in the SNAP-ONS And Tools/ABB HPT Certificate folder on the AMS Device Manager installation DVD.

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Click **Add**.
3. In the Select Network Component Type dialog, select **ABB Network** and click **Install**.
4. Follow the ABB Network Wizard instructions.
5. Enter the computer name or IP address of the ABB Station.
6. Enter the User name and Password for the ABB Station.
7. Enter a HART Response Timeout value in the range of 5000 to 60000 milliseconds.
8. Select the Local IP Address from the drop-down list. This is where messages from the ABB Station will be sent. The address selected must be accessible from the ABB Station.
9. Select Enable Diagnostic Logging to evaluate performance and verify communications. If Enable Diagnostic Logging is enabled, the appropriate log files for Hierarchy and Communications are created and uniquely named for the network when AMS Device Manager is running. The log files are located in the AMS\Log folder.
10. Click **Finish** to save the changes and close the Network Configuration dialog.
11. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.

For additional information, refer to the ABB system documentation.

Det-Tronics

The Det-Tronics System Interface is used to monitor fire and gas detectors on the Det-Tronics Eagle Quantum Premier system. Like other system interfaces, you use Network Configuration to install it on your AMS Device Manager Server Plus Station. You must install the Det-Tronics Safety System Software application prior to configuring the system interface. For additional information about the Det-Tronics System Interface, refer to AMS Device Manager Books Online.

Configuring AMS Device Manager for a Det-Tronics System Interface

To configure AMS Device Manager for a Det-Tronics System Interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Click **Add**.
3. In the Select Network Component Type dialog, select **Det-Tronics Network** and click **Install**.
4. Follow the Det-Tronics Network Wizard instructions.
5. Click **Finish** to save the changes and close the Network Configuration dialog.
6. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106.

For additional information, refer to the Det-Tronics system documentation.

PROFIBUS

The PROFIBUS System Interface lets you use AMS Device Manager to view and configure PROFIBUS DP or PROFIBUS PA devices connected to a Softing PROFIBUS Ethernet Gateway or a Softing PROFlusb Modem.

Configuring AMS Device Manager for a PROFIBUS System Interface

To configure AMS Device Manager for a PROFIBUS System Interface:

1. Select **Start > All Programs > AMS Device Manager > Network Configuration** from the Windows taskbar.
2. Click **Add**.
3. Select **PROFIBUS Network** from the list of networks in the Select Network Component Type dialog, and click **Install**.
4. Follow the instructions on the PROFIBUS Network wizard.
5. Start the AMS Device Manager application by selecting Start > All Programs > AMS Device Manager > AMS Device Manager.
6. Start AMS Device Manager. See “Determining the system interface structure and device data” on page 106. Perform a Rebuild Hierarchy operation on the network by right-clicking the PROFIBUS network icon in Device Connection View or Device Explorer and selecting Rebuild Hierarchy.

Determining the system interface structure and device data

Rebuilding the hierarchy

At the first AMS Device Manager startup following the addition of a system interface, AMS Device Manager displays an icon representing the highest level of the system network hierarchy. When you double-click this icon, AMS Device Manager will direct you to initiate a **Rebuild Hierarchy** operation to populate the hierarchy with the appropriate levels and icons.

Reading device parameter data

After the initial Rebuild Hierarchy operation, AMS Device Manager displays the system interface hierarchy. The structure, however, does not yet contain parameter data for the connected devices. You must manually initiate a **Scan > New Devices** operation to read the device parameter data into the database.

▶ To initiate a scan for device data:

1. Right-click the top-level icon of the system interface hierarchy.
2. Select **Scan > New Devices** from the context menu.

Note

The scan operation can take a long time, especially when performed at the highest level of the hierarchy.

During the initial **Scan > New Devices** operation, AMS Device Manager surveys the network to identify the devices it can communicate with. The operation also reads parameter data and updates the database.

AMS Device Manager Web Services

AMS Device Manager Web Services provide the ability to import AMS Device Manager data, in XML format, into business applications such as Microsoft Excel. In addition, Computerized Maintenance Management Systems (CMMS) and Enterprise Resource Planning (ERP) systems can use AMS Device Manager Web Services to retrieve data from AMS Device Manager. AMS Device Manager Web Services can only be installed on a Server Plus Station. For more information, refer to AMS Device Manager Books Online.

Installing AMS Device Manager Web Services on a station

Note

Microsoft Internet Information Services (IIS) and AMS Device Manager 12.0 must be installed on your system before you can install AMS Device Manager Web Services. Some control systems do not allow IIS to be installed on the same PC. Check your control system documentation to determine IIS compatibility.

Note

If you want to install AMS Device Manager Web Services on a DeltaV station, it must be a DeltaV Application or ProfessionalPLUS station.

▶ To install AMS Device Manager Web Services (installation is only supported on a Server Plus Station):

Note

Local administrator permission is required for installation of AMS Device Manager Web Services.

1. Ensure that appropriate Windows Firewall security settings have been made according to “Changing Windows Firewall settings” on page 109.
2. Exit/close all Windows programs, including any running in the background (including virus scan software).
3. Insert the AMS Device Manager program DVD in the DVD drive of the PC.
4. Browse to D:\AMSWEBSERVICES.
   (where D is the DVD drive letter)
5. Double-click SETUP.EXE.
6. Follow the prompts.

AMS Device Manager Web Services and AMS Asset Portal 3.2

AMS Asset Portal acquires device data as it is connecting to AMS Device Manager Web Services. To use AMS Device Manager Web Services with AMS Asset Portal for devices, the following requirements must be met:

- Server Plus software must be installed on the PC.
- Microsoft Internet Information Services (IIS) must be installed on the PC prior to installing AMS Device Manager Web Services. Use the Windows **Add or Remove Programs** and **Add/Remove Windows Components** functions to install IIS (see the Windows operating system documentation or Windows online Help for more information).
- The Data Provider Web Service is required to use AMS Asset Portal. The URL to find the Web Service is: http://<PCname>/amsdevicemanagerws/amsdataproviderservice.asmx

AMS Suite: Asset Performance Management

AMS Suite: Asset Performance Management is a new product offering that replaces AMS Asset Portal. The AMS Suite: Asset Performance Management Client Framework can be installed on an AMS Device Manager 12.0 station. Other components of AMS Suite APM must be installed on additional non-AMS Device Manager PCs. For more information about AMS Suite APM, contact your Emerson Process Management Sales/Service Office.

5 Starting to Use AMS Device Manager

After installation

There are several configuration steps you must take prior to using AMS Device Manager. If you do not configure your PC as described, AMS Device Manager will not function as expected.

Changing Windows Firewall settings

When operating AMS Device Manager on a Windows PC, some changes to Windows Firewall settings may be required. If your PC is adequately protected by a corporate firewall, you may be able to turn off the Windows Firewall protection on your AMS Device Manager PC.

If your AMS Device Manager PC is not protected by a corporate firewall and you have enabled the Windows Firewall, you must change the firewall settings on your PC to allow program and port exceptions that enable AMS Device Manager operation. For more information, refer to KBA NA-0500-0085 and KBA NA-0400-0046. For assistance configuring your Windows Firewall, contact your IT department.

Note

On a Windows 7 PC, all entered firewall exceptions display as “AMS Suite: Intelligent Device Manager” in the firewall exceptions list. You must view the properties of each entry to see what was added.

Usernames and passwords

Each user needs a unique login consisting of a username and a password. Ask your system administrator for your login. The User Login dialog appears when you start AMS Device Manager. You must enter a valid username and password and select the appropriate Login Type from the drop-down list. For more information about the User Login dialog, refer to AMS Device Manager Books Online.

Note

When AMS Device Manager is co-deployed with DeltaV, your DeltaV username and password also provide AMS Device Manager access.

The AMS Device Manager application allows an initial login with the username “admin” and no password, which has AMS Device Manager System Administration rights.

NOTICE

To protect your data, assign a password to the admin username after you install AMS Device Manager. See “Assigning an “admin” password” on page 110.

User permissions are set up and maintained in User Manager. You need AMS Device Manager System Administration rights to log in to User Manager. The sections that follow provide guidance in managing usernames and passwords.

Logging in to User Manager

▶ To log in to the User Manager:

1. From the Windows taskbar, select **Start > All Programs > AMS Device Manager > User Manager**.
2. In the User Manager Login dialog, enter the “admin” username (or any other username with AMS Device Manager System Administration rights) and password.
3. Select a **Login Type** from the drop-down list.
4. Click **OK**.

Assigning an “admin” password

▶ To assign a password to the admin username:

1. Log in to User Manager.
2. Select **admin** and click **Edit User**.
3. Enter a password and confirm it.
4. Click **OK**.

Note

The admin username cannot be deleted or disabled, but the password can be changed.

Adding a username

To add a username at any time:

For a Standard User (see below for a Windows User):

1. Log in to AMS Device Manager User Manager (see above) and click **Add User**.
2. Select the **Standard User** option and click **Next**.
3. Enter a username and password and confirm the password.
4. Select the appropriate General and AMS ValveLink SNAP-ON application permissions for this user. Refer to AMS Device Manager Books Online for more information.
5. Click **Next**.
6. Verify the new user information and click **Finish** to add the new username to the list of users.
7. Repeat for each additional Standard User.
8. Click **Close**.

For a Windows User:

1. Add the Windows Username to the **AMSDeviceManage**r group (see your network administrator).
2. Log in to AMS Device Manager User Manager (see above) and click **Add User**.
3. Select the **Windows User** option and click **Next**.
4. Select the username from the list of users, and click **Next**.
5. Select the appropriate General and AMS ValveLink SNAP-ON application permissions for this user. Refer to AMS Device Manager Books Online for more information.
6. Click **Next**.
7. Verify the new user information and click **Finish** to add the new username to the list of users.
8. Repeat for each additional Windows User.

Note

Once added, usernames cannot be deleted, but they can be disabled and the users' permissions can be changed (see "Changing rights and permissions" on page 112).

9. Click **Close**.

Changing passwords

To change the password for a **Standard User**:

1. Launch AMS Device Manager.
2. On the User Login dialog, enter a valid username and password.
3. Click the **Change Password** button.
4. Enter a new password, confirm it, and click **OK**.

Note

You can also change the password of a Standard User in User Manager.

To change the password for a Windows User:

1. Simultaneously press the CTRL, ALT, and DEL keys.
2. In the Windows Security dialog, click **Change Password**.
3. Enter your existing password and a new password with confirmation.
4. Click **OK**.

Changing rights and permissions

NOTICE

If you upgraded your system from AMS Device Manager 10.0 or later, the previous usernames, passwords, and permissions were migrated but the new AMS Device Manager 12.0 user permissions are not set. You may need to reset the user permissions.

To change user rights and permissions:

1. Log in to User Manager.
2. Select the desired username.
3. Click **Edit User**.
4. Select or clear the rights and permissions for this user as desired.
5. To enable or disable the username, click **Enable/Disable User**.

6. Click **OK**.
7. Click **Close**.

Using AMS Device Manager

After AMS Device Manager is installed, the following user information tools are available to you by selecting **Start > All Programs > AMS Device Manager > Help**:

- AMS Device Manager Books Online
- AMS Suite: Intelligent Device Manager Installation Guide
- Work Processes Guide
- Release Notes

These files are copied to your PC during AMS Device Manager installation.

AMS Device Manager Books Online

AMS Device Manager Books Online provides detailed reference and procedural information for using AMS Device Manager. AMS Device Manager Books Online explains the features and functions of AMS Device Manager. You should become familiar with AMS Device Manager Books Online and refer to it regularly as you use AMS Device Manager.

AMS Device Manager Books Online is accessed in two ways:

- Click the **Help** menu on the AMS Device Manager toolbar and select **AMS Device Manager Books Online**.

  -OR-

- Select **Start > All Programs > AMS Device Manager > Help > Books Online**.

Use the **Contents**, **Index**, or **Search** tab in the left pane to locate specific topics. You can save shortcuts to frequently used topics and access them on the **Favorites** tab.

What's This? Help

You can get help for device parameters on most AMS Device Manager supported devices by clicking the  button and then clicking on a field. The help is displayed in a window that you can dismiss by simply clicking anywhere on the screen. This help is provided by the device manufacturer and can also be viewed by clicking in a field and pressing the F1 key.

Electronic documentation

Two user documents are placed on your station when AMS Device Manager is installed. These documents are available as Portable Document Format (PDF) files, and include the *AMS Suite: Intelligent Device Manager Installation Guide* and the *Work Processes Guide*.

You need Adobe® Reader® to view these files. If you do not have a compatible version of Adobe Reader on your PC already, you can download Adobe Reader from www.adobe.com.

▶ To access an electronic document after Adobe Reader is installed:

- Select **Start > All Programs > AMS Device Manager > Help >** <*document*> from the Windows taskbar.

Release Notes

The Release Notes provide the most up-to-date information about the current release of AMS Device Manager, including supported devices, compatibility issues, and known discrepancies and workarounds.

The Release Notes are provided in text (.TXT) format. You can access the Release Notes in two ways:

- From the Start menu (**Start > All Programs > AMS Device Manager > Help > Release Notes**)
- By double-clicking the RELNOTES.TXT file located in the AMS folder after installation or on DVD

We recommend that you read the Release Notes prior to using AMS Device Manager and print a copy for future reference.

Device manuals

Many device manufacturers provide manuals for their devices in PDF format. Run the AMS_PDF_Installer utility to copy relevant manuals to your hard drive. The utility is located in the Device Documentation Installer folder on the AMS Device Manager installation DVD. After installing device manuals, you access them in AMS Device Manager by right-clicking a device and selecting **Help** from the context menu. If a device manual is available, it opens in Adobe Reader. If no manual exists for the selected device, AMS Device Manager Books Online opens. To see a list of device manuals installed on your station, select **Help > Device** from the AMS Device Manager toolbar. Double-click a device to open the associated manual.

Adding devices to an AMS Device Manager installation

All available information for supported field devices (other than device manuals) is included and installed with the AMS Device Manager application. If it is necessary to install additional devices after the initial installation, refer to Device Type Installation in AMS Device Manager Books Online. Additional device descriptions can be downloaded from the Internet. Copy this URL into your Internet browser: http://www2.emersonprocess.com/en-US/documentation/deviceinstallkits/Pages/deviceinstallkitsearch.aspx and enter device search information.

DTM Launcher

The DTM Launcher application is an AMS Device Manager application installed as part of the AMS Device Manager installation. It enables users to install and use certain HART, *Wireless*HART, and FOUNDATION fieldbus Device Type Manager (DTM) drivers with AMS Device Manager. DTMs are an alternative to the traditional Device Descriptions (DDs) supported in AMS Device Manager. DTMs are provided by various device manufacturers and are configured using the DTM Catalog Manager. For more information, refer to AMS Device Manager Books Online.

AMS Suite Calibration Connector

AMS Suite Calibration Connector is a separately licensed and installed application that integrates with Beamex CMX or AMS Suite APM/Meridium software to provide full-featured calibration management capabilities beyond the basic features available in AMS Device Manager calibration management. AMS Suite Calibration Connector provides a solution for users to take advantage of the functionality of other calibration management applications while maintaining the benefits of device configuration and calibration management data synchronization.

AMS Suite Calibration Connector supports:

- AMS Suite APM version 3.5
- Beamex CMX version 2.7

AMS Suite Calibration Connector can only be installed on a Server Plus Station. You must have Windows Administrator permissions to install AMS Suite Calibration Connector.

▶ To install AMS Suite Calibration Connector:

1. Insert the AMS Device Manager DVD in the CD/DVD drive of your PC.
2. Double-click **AMSSuiteCalibrationConnector_Setup.exe**.

3. Follow the prompts on the installation window.
4. Click **Finish** when done.

For additional information about using AMS Suite Calibration Connector, refer to AMS Device Manager Books Online. Also, refer to your AMS Suite APM or Beamex CMX documentation for more information on these products.

Note

Refer to the AMS Device Manager Supported Device List to determine if a device supports calibration.

Device Description Update Manager

The purpose of Device Description Update Manager is to automate the installation of device descriptions from Guardian Support into AMS Device Manager, DeltaV, and Ovation through the Add Device Type utility. These device descriptions can be new or updates to previously installed devices.The Device Description Update Manager provides 2 ways to install device descriptions:

- Scheduled/fully automated
- User-initiated/interactive

There are 3 ways that this feature can be installed:

- Server Station
- Client Station
- Server/Client Station

The Server Station can be installed with or without an AMS Device Manager station already installed but it must be installed on the same PC as the Guardian Software Update Delivery Service download folder.

The Client Station must be installed on an AMS Device Manager 12.0 Server Plus Station that can access the Server Station to initiate Guardian downloads. The Client Station will be supported on an AMS Device Manager 12.0 Server Plus Station co-deployed on either a DeltaV 9.3 or later or an Ovation 3.5 workstation.

In a Server/Client Station installation, both the Server Station and Client Station are installed on the same Server Plus Station.

▶ To install Device Description Update Manager:

1. Insert the AMS Device Manager DVD in the CD/DVD drive of your PC.
2. Double-click **DDUMInstall_Setup.exe**.
3. Follow the prompts on the installation window.

4. Click **Finish** when done.

Attaching a Roving Station to a Server Plus Station

A Roving Station is a portable PC (laptop or notebook computer) with AMS Device Manager Server Plus Station software installed. A Roving Station is configured as such in the Options for AMS Device Manager dialog (**Tools > Options**). A Roving Station can be temporarily connected to a stationary Server Plus Station to enable uploading of AMS Device Manager information from the Roving Station. For more information about Roving Stations, refer to AMS Device Manager Books Online.

6 Troubleshooting installation

If you get error messages during the installation or startup of AMS Device Manager, you may be able to resolve these errors using the troubleshooting procedures in this section.

If you are unable to resolve installation problems after carefully following the installation steps outlined in this guide and using these troubleshooting suggestions, contact your local Emerson Process Management Sales/Service Office. Additional Support Center Contact Information can be found on the Internet at:

http://www.emersonprocess.com/systems/support/ratecard.htm

For more information about multiplexer networks, refer to KBA NA-0400-0084.

Error messages

ERROR MESSAGE / INDICATION:	Bluetooth adapter stops working.
POSSIBLE SOLUTION:	If an approved USB Bluetooth adapter is removed or disabled while AMS Device Manager is running, reinsert the adapter and reboot your workstation. After your PC restarts, try to re-establish Bluetooth communications with your Field Communicator.

ERROR MESSAGE / INDICATION:	If the SQL Server installation fails.
POSSIBLE SOLUTION:	Manually install the required SQL Server version and/or service pack (SP) located on the AMS Device Manager DVD in the SQL2008Express folder as follows: • If SQL 2008 with the Emerson2008 named instance is not installed on your PC, install SQL2008. The SQL Server manual installation process requires user input that you must provide. After you install SQL Server, restart the AMS Device Manager installation process.
POSSIBLE SOLUTION:	There could be a mismatch between versions of SQL and Windows XP. If your PC is running Windows XP SP2 or earlier, upgrade it to Windows XP SP3 before running the SQL Server installation.

ERROR MESSAGE / INDICATION:	AMS Device Manager has detected an incorrect version of the database. The version detected is x.x, the correct version should be y.y.
POSSIBLE CAUSE:	Database Verify/Repair was not run prior to upgrading AMS Device Manager to the current release or AMS Device Manager has detected a fault that occurred during the Verify/Repair operation.
POSSIBLE SOLUTION:	Run the database conversion utility (AmsConvertDb.exe) from the AMS\Bin folder: • Open the AMS\Bin folder • Double-click AmsConvertDb.exe. If the database conversion utility does not complete successfully, contact your local Emerson Process Management Sales/Service Office.

ERROR MESSAGE / INDICATION:	Cannot find server or DNS Error.
POSSIBLE SOLUTION:	Open port 80 on the Server Plus Station where AMS Device Manager Web Services is configured. See “Changing Windows Firewall settings” on page 109.

ERROR MESSAGE / INDICATION:	Unable to connect to live device.
POSSIBLE SOLUTION:	Add AmsFFServer.exe to the exception list. See “Changing Windows Firewall settings” on page 109.

ERROR MESSAGE / INDICATION:	Unable to launch the AMS Device Manager application from the Client SC Station.
POSSIBLE SOLUTION:	Open port 135. See “Changing Windows Firewall settings” on page 109.

ERROR MESSAGE / INDICATION:	“Connecting to OPC Server Failed” when attempting to launch the OPC Client application.
POSSIBLE SOLUTION:	Add AMSOPC.exe to the exception list. See “Changing Windows Firewall settings” on page 109.

ERROR MESSAGE / INDICATION:	Unable to launch the AMS Device Manager application from the Client SC Station.
POSSIBLE SOLUTION:	Add sqlserver.exe and sqlbrowser.exe to the exception list. See “Changing Windows Firewall settings” on page 109.

ERROR MESSAGE / INDICATION:	AMS Device Manager may be slow to start when launched from the Windows Start menu. The following messages are displayed in the Application event log: Unable to retrieve the current configuration information for server, <PC name>. Error calling GetServersAsXml.
POSSIBLE SOLUTION:	Add AMSServicesHoster.exe to the exception list. See “Changing Windows Firewall settings” on page 109.

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Comment Form

AMS Suite: Intelligent Device Manager Installation Guide

The *AMS Suite: Intelligent Device Manager Installation Guide* is intended to provide the basic information you need to install AMS Device Manager software and configure your system. Detailed information about AMS Device Manager is provided in AMS Device Manager Books Online.

Please give us your feedback to help us improve this manual.

Did you use this manual to:	Yes	No
Help you install AMS Device Manager?	____	____
Help you configure AMS Device Manager?	____	____
Troubleshoot your AMS Device Manager installation?	____	____
Can you easily find answers to your questions about AMS Device Manager installation in this manual?	____	____
If "No," can you easily find the answers to your questions in AMS Device Manager Books Online?	____	____

How could we make this manual more useful to you?_____

Identify any errors you found in this manual:

Identify any areas that you found difficult to understand:

Other comments:

May we contact you about your comments? Yes ____ No ____

Name _____

Company _____

Phone _____

Date _____

Thank you for your comments.
Fold and mail this form to Emerson Process Management or fax it to 1-952-828-3299.

Name _____

Company _____

Address _____

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