AMS Suite: Machinery Health™ Manager

Version 5.61 Software Installation Guide

AMS
Suite

EMERSON™
Process Management

Contents

Appendices and reference

1 Getting started

Topics covered in this chapter:

•   *Customized installation media*
•   *Where to get help*
•   *Installation Types*
•   *Operating Requirements*

Thank you for choosing AMS Machinery Manager. Let's get started!

Your AMS Machinery Manager package includes:

☐   Quick Start Guide
☐   Software Installation DVD
☐   Manuals DVD

1.1 Customized installation media

Based on your order, the Software Installation DVD contains the following:

•   Standalone (Single User) or Network installation
•   AMS Machinery Manager technologies
•   Number of licensed users

To add a technology or more licensed users, contact your Emerson Process Management Sales Representative.

1.2 Where to get help

AMS Machinery Manager Help

Launch AMS Machinery Manager and select Help from the main menu.

AMS Machinery Manager Manuals DVD

Your AMS Machinery Manager package includes a disc with user manuals in PDF format.

Software Registration

Phone:	Toll free 888.367.3774, option 2 (U.S. and Canada)
	+63.2.702.1111 (Rest of world)
Email:	wwcs.custserv@AP.EmersonProcess.com
Web:	http://www.mhm.assetweb.com/reg

Product Support

Emerson provides a variety of ways to reach your Product Support team to get the answers you need when you need them:

Phone	Toll free 800.833.8314 (U.S. and Canada)
	+65.6770.8711 (Europe and Middle East)
	+63.2.702.1111 (Asia Pacific)
Email	mhm.custserv@emerson.com
Web	http://www.assetweb.com/mhm and select **Product Support**

For additional contact information for specific countries, visit http://www.SureService.com and select **Technical Support and Customer Service**.

For Machinery Health experts in your area, visit http://www.assetweb.com/mhm and select **Contacts For Your Area**.

1.3 Installation Types

There are two main types of AMS Machinery Manager installations:

- Standalone (or Single-user standalone)
- Network (or Single-user network and Multiple-user network).

1.3.1 Standalone installation

A Standalone system allows you to use periodic technology with one computer and CSI Machinery Health Analyzers. A standalone installation indicates you have a single copy of AMS Machinery Manager with a single serial number on one computer.

You can install these components:

- AMS Machinery Manager
- AMS Standalone Data Transfer (on a different computer)
- AMS Machinery Manager ODBC Driver

Figure 1-1: Standalone system example

This example does not attempt to show all supported hardware options.
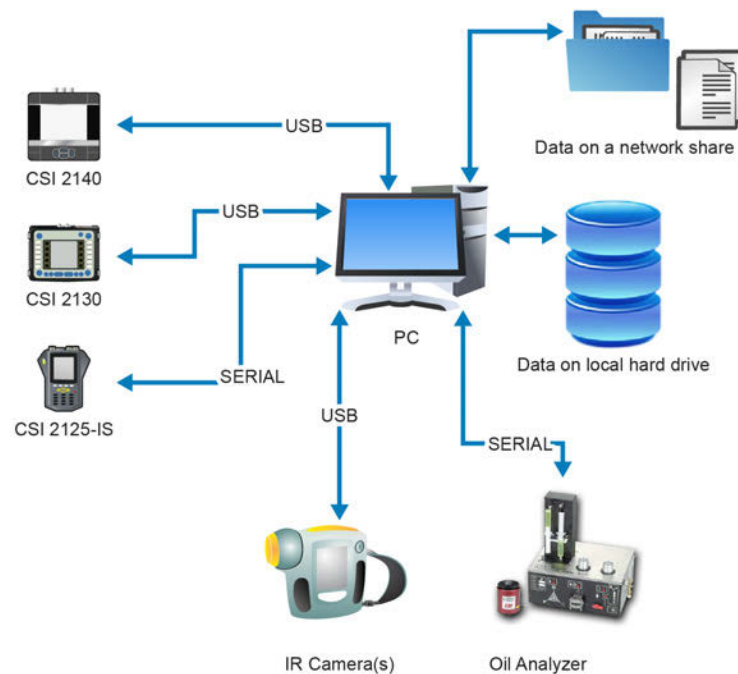
1.3.2 Network installations

A network system allows you to use online technology and periodic technology. AMS Machinery Manager communicates with a CSI Machinery Health Monitor using a network connection. A network system is deployed on a local area network (LAN) or a wide area network (WAN).

You can install these components:

- AMS Machinery Manager
- Online Server
- Secondary Database Server
- Data Import Server
- AMS Machinery Manager Data Import Client
- AMS Standalone Data Transfer (on a different computer)
- AMS Machinery Manager ODBC Driver
- Machine History Viewer
- Collaboration Tool
- CSI Data Provider

Single-user and multiple-user LAN

A Single-user network indicates you have a Network Server and a Client installed on one computer and have one serial number. Single-user network allows the Client to be installed on other computers in the network. However, only one user can log in at a time. This installation is used for single user customers with an online system.

A Multiple-user network indicates you have a Network Server and a Client installed on a server-class computer, and the Client installed on other computers in the network. Multiple users can log in at the same time.

Figure 1-2: Local area network system example

This example does not attempt to show all supported hardware or configuration options.
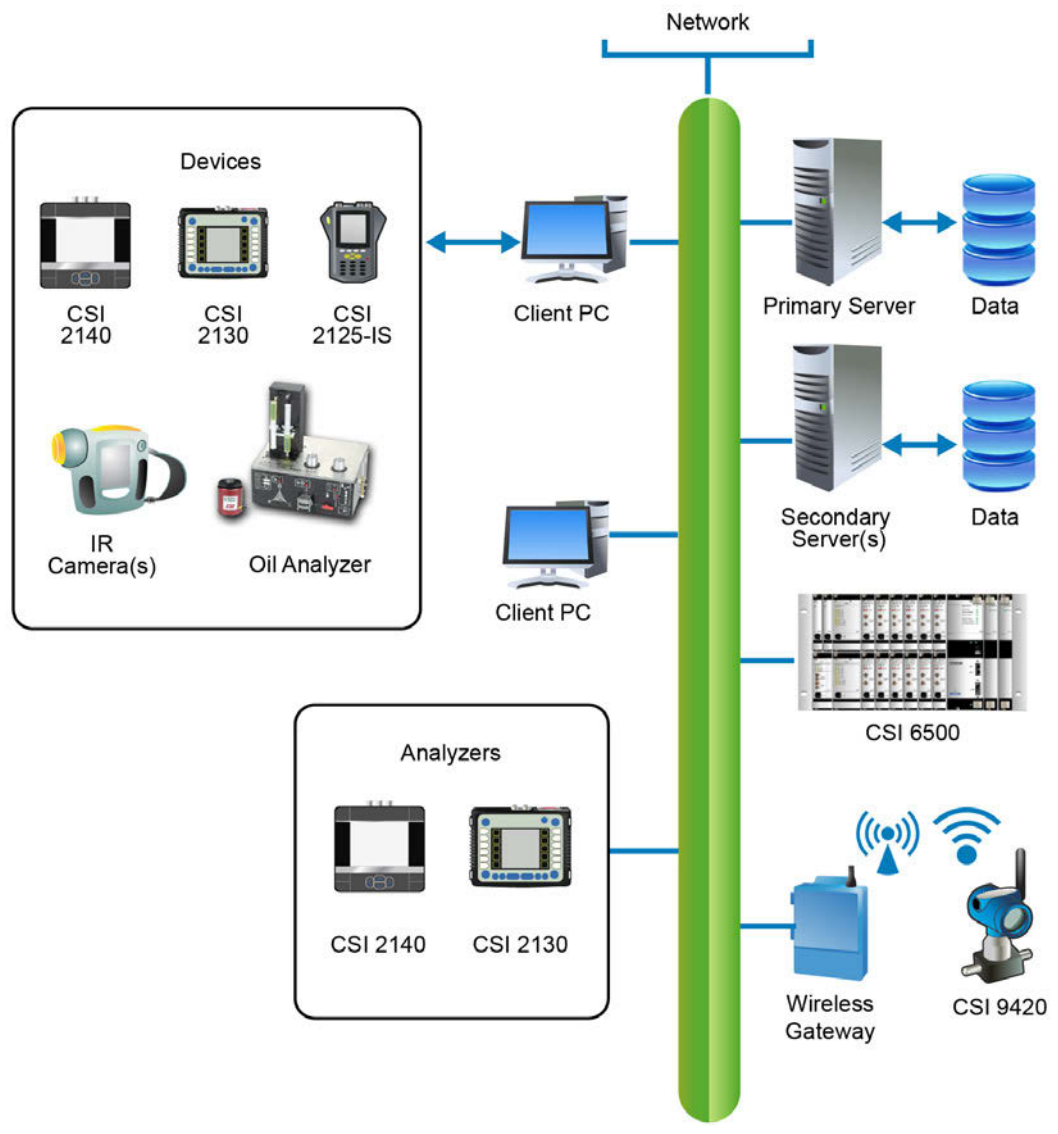
Multiple-user WAN

The WAN system is designed to allow remote AMS Machinery Manager users to load, dump, and view data over wide area networks, such as private networks, virtual private networks[1], or the Internet.

Figure 1-3: Wide area network system example

This example does not attempt to show all supported hardware or configuration options.

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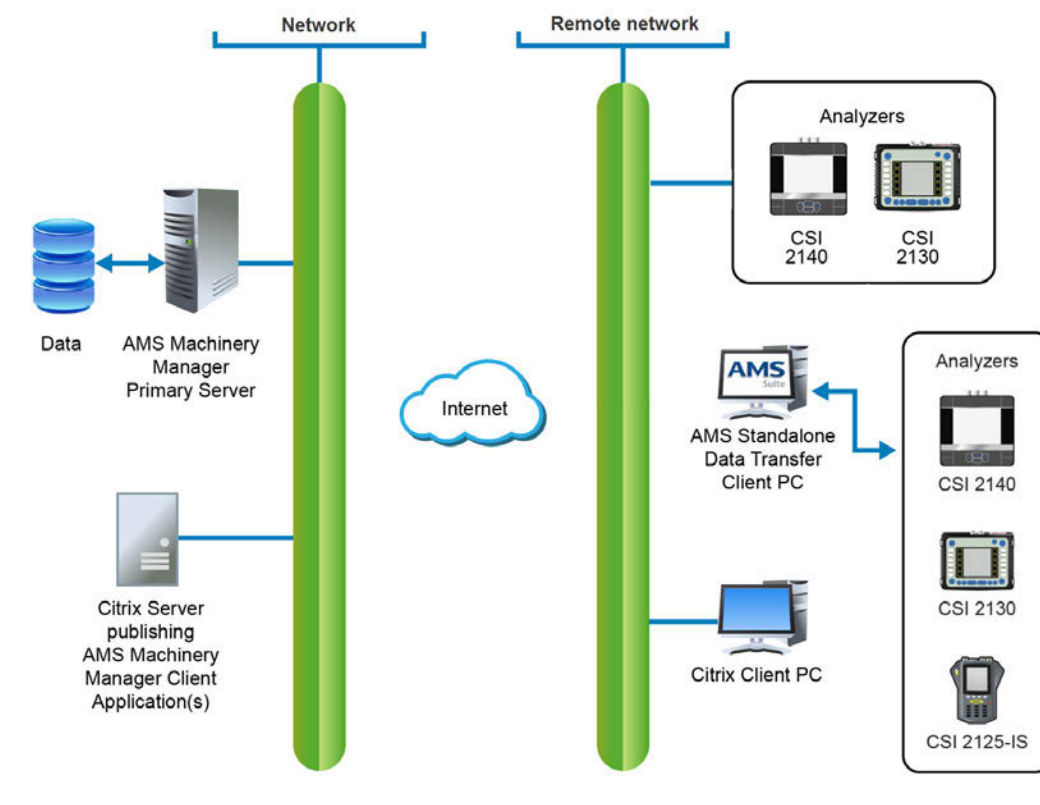
(1)   Use AMS Standalone Data Transfer

1.4 Operating Requirements

Emerson Process Management recommends the following resources for AMS Suite: Machinery Health™ Manager 5.61:

1.4.1 Servers

Minimum requirements		
Supported Operating Systems		Windows Server 2012 R2 Standard Edition[1], Windows Server 2008 SP2 Standard Edition, Windows Server 2008 R2, or Windows Server 2003 R2 SP2
Processor/ Memory	Portable Systems	1.83 GHz Dual Core or better, 2 GB of RAM or more
	Online Systems	Server-class 2.33 GHz Dual Core or better, 2 GB of RAM or more
Network		Ethernet (TCP/IP protocol)
Browser		Internet Explorer 7 or later
Screen Resolution		XGA (1024 x 768) or better
Requirements for laptops used with CSI 2600 systems		
Supported Operating Systems		Windows 8.1 Professional[1], Windows 8 Pro, Windows 7 Professional SP1, Windows 7 Ultimate, or Windows 7 Enterprise
Processor/Memory		1.5 GHz or better, 2 GB of RAM or more
Hard drive capacity		250 GB or greater
RS232		One available RS232 interface
Network		Ethernet (TCP/IP protocol)
Browser		Internet Explorer 7 or later
Screen Resolution		XGA (1024 x 768) or better
Additional recommendations		
Media		DVD drive required for installation
Virtualization System		• Remote Desktop Services (Windows Server 2012, Windows Server 2008) • Terminal Server (Windows Server 2003) • Citrix XenApp 6.5 (Windows Server 2008) • Citrix XenApp 5.0 (Windows Server 2003) • VMware ESXi 5.5 (Windows Server 2012) • VMSphere 5.5 (Windows Server 2012) • Hyper-V (Microsoft System Center 2012 R2 Virtual Machine Manager)

Antivirus	• AVG® Network Security 2014 • Symantec™ Endpoint Protection 12.1 RU4 • McAfee™ All Access 2014 —Refer to Knowledge Base Article (KBA) NK-1400-0342 for antivirus configuration. • Trend Micro™ Premium Security — Refer to KBA AK-1400-0080 for antivirus configuration. • Norton 360 Version 2014 — Refer to KBA AK-1400-0079 for antivirus configuration.

(1) *Requires Microsoft .NET Framework 3.5 SP1, available from the Microsoft web site. Because AMS Machinery Manager does not require an Internet connection for installation, Emerson recommends installing .NET Framework 3.5 SP1 before AMS Machinery Manager.*

Important

If you intend to install Machine History Viewer or CSI Data Provider, you must install Internet Information Services before installing AMS Machinery Manager. The AMS Machinery Manager installation makes important changes to the IIS setup that you would otherwise have to configure manually with the assistance of Product Support.

1.4.2   Workstations

Minimum requirements	
Supported Operating Systems	Windows 8.1 Professional(1), Windows 8 Pro, Windows 7 Professional SP1, Windows 7 Ultimate, or Windows 7 Enterprise
Processor/Memory	1.5 GHz or better, 2 GB of RAM or more
Network	Ethernet (TCP/IP protocol)
Browser	Internet Explorer 7 or later
Screen Resolution	XGA (1024 x 768) or better
Communication requirements	
RS232	• For communications with analyzers **prior** to the CSI 2130 Machinery Health Analyzer, a PC must have an RS232 serial port, or use a serial-to-USB cable. • For communication with the Spectro 5200 Trivector™ Analyzer, a PC must have an RS232 serial port, or use a serial-to-USB cable.
USB	• A USB 2.0 port is required for communications with the CSI 2140 Machinery Health Analyzer and CSI 2130 Machinery Health Analyzer. • A USB 2.0 port is required for communication with the WDA Image Capture Kit.
Additional recommendations	
Media	DVD drive required for installation

Antivirus	- AVG® Network Security 2014 - Symantec™ Endpoint Protection 12.1 RU4 - McAfee™ All Access 2014 —Refer to Knowledge Base Article (KBA) NK-1400-0342 for antivirus configuration. - Trend Micro™ Premium Security — Refer to KBA AK-1400-0080 for antivirus configuration. - Norton 360 Version 2014 — Refer to KBA AK-1400-0079 for antivirus configuration.

(1)   Requires Microsoft .NET Framework 3.5 SP1, available from the Microsoft web site. Because AMS Machinery Manager does not require an Internet connection for installation, Emerson recommends installing .NET Framework 3.5 SP1 before AMS Machinery Manager.

1.4.3   Localization considerations

You may license AMS Machinery Manager software in English or a localized (translated) version. You must specify a language at the time you purchase your software licenses. Only the language you license will be on your software installation DVD. Follow these guidelines when preparing to install a localized version of AMS Machinery Manager.

Note

You may need to change your computer name before installing AMS Machinery Manager. A valid computer name can have numbers 0-9, uppercase and lowercase letters A-Z, and the hyphen (-). Special characters (< > ; : " * + = \ | ? ,), accented characters, and other multibyte characters in a computer name can cause problems and interfere with a successful installation of AMS Machinery Manager software. Computer names cannot have only numbers, nor can they contain spaces.

Windows 7 Professional, Windows 7 Enterprise, Windows Server 2008, and Windows Server 2012

Recommendations for Windows without Multilingual User Interface (MUI) support, for example: Microsoft Windows 7 Professional, Windows 7 Enterprise, Windows Server 2008, and Windows Server 2012.

*   Installing localized AMS Machinery Manager is supported on a Windows system of the same language with default regional settings. For example, install AMS Machinery Manager (German) on Windows (German).

*   Installing localized AMS Machinery Manager on an English Windows system is not recommended. If you install localized AMS Machinery Manager on Windows (English), text may not display properly.

*   When you upgrade AMS Machinery Manager, the language must match the currently installed AMS Machinery Manager language. For example, update AMS Machinery Manager v5.51 (German) to AMS Machinery Manager v5.6 (German). To change the AMS Machinery Manager language you need a full installation instead of an upgrade.

*   Avoid changing Windows regional settings. Changes may cause unexpected behavior in AMS Machinery Manager.

*   Installing English AMS Machinery Manager on a non-English Windows system is supported for Windows (Japanese) only.

AMS Machinery Manager language	Windows language edition	Windows regional settings	Supported
Localized version	Native language	Default (Native language)	Yes (preferred)
English	English	Default	Yes
Localized version	English	Default	Not recommended
English	Native language	Default (Native language)	Japanese only
English	English	Changed to non-default, non-English	No

Windows 8.1, Windows 8, and Windows 7 Ultimate

Recommendations for Windows with Multilingual User Interface (MUI) support, for example: Microsoft Windows 8.1, Windows 8, and Windows 7 Ultimate.

- Installing localized AMS Machinery Manager on a Windows system where the matching language pack and regional settings have already been installed. For example, install AMS Machinery Manager (German) on Windows after installing the German language pack.

- When you upgrade AMS Machinery Manager, the language must match the currently installed AMS Machinery Manager language. For example, update AMS Machinery Manager v5.51 (German) to AMS Machinery Manager v5.6 (German). To change the AMS Machinery Manager language you need a full installation instead of an upgrade.

- One language of AMS Machinery Manager is available per installation. If you change your regional settings or language pack after installing AMS Machinery Manager, strings may not display properly. Use the regional settings and language pack that match the language you licensed for AMS Machinery Manager.

AMS Machinery Manager language	Windows language edition	Windows regional settings	Supported
Localized version	MUI with language pack	settings match language pack	Yes (preferred)
Localized version	MUI with language pack	English	No (translated strings may not display correctly)

2   Standalone installation

Topics covered in this chapter:

- *Install AMS Machinery Manager*
- *Launch AMS Machinery Manager*
- *Update or repair the installation*

2.1   Install AMS Machinery Manager

Prerequisites

Verify the client computer meets the operating requirements for a workstation.

If you are upgrading your software, back up your database before completing the software update. Your databases require reindexing to work with the new software. If you need to reinstall the previous version of software, be aware that any database you open with the new software will be reindexed and will no longer work with any previous version.

Procedure

1. Log on to the computer as a user with administrator rights.
2. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.
3. Run RBMsetup.exe.

   Important
   On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.
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4. If a prompt to install Microsoft .NET Framework 4.0 appears, choose to install this software and allow the system to reboot, (if required).

   The AMS Machinery Manager installation begins automatically after reboot.

5. Accept the license agreement and click Next.
6. At the ATTENTION!! dialog, click Yes if you are installing the software for the first time. If you are upgrading your software, this is a reminder to stop the installation and back up your database first. Click No to stop the installation.
7. The setup program verifies that your system meets the minimum requirements. If they are met, the Options page dialog appears. If they are not met, a message displays more information. Update the computer to meet the requirements or contact Product Support.
8. (Optional) At the Select Features to Install pane, you can change defaults for your installation.
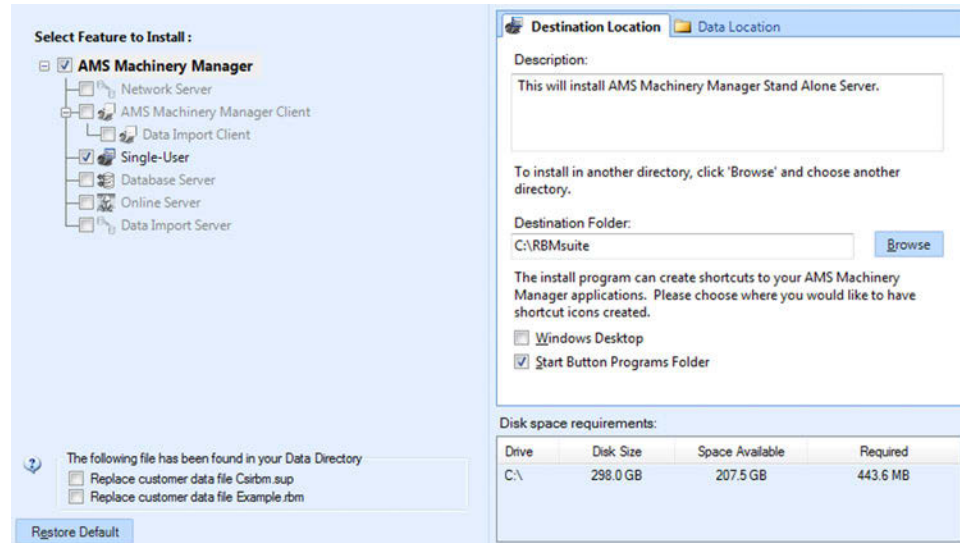
Notes

- Use the default settings and directory names unless there is a particular reason to change them. Using the defaults results in a trouble-free installation and streamlined interaction with Emerson Product Support, should a problem ever arise.

- If you are updating the software, this screen also displays the message, "The following file has been found in your Data Directory" followed by file names. You can check the box by the file to overwrite the file.

- If you are updating your software, some fields may be disabled. If you want to update your software and move to a different computer, contact Emerson Product Support.

9. Click Install to start the installation.

    The Installing Components screen displays and shows the status of the installation.

    Note
    Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Product Support.

10. If you are using Windows Firewall, grant access to programs published by Emerson Process Management when prompted.

11. Continue through the installation steps and follow prompts.

12. When the Serial dialog appears, click Register Product to register the software now, or click Close to skip registration.
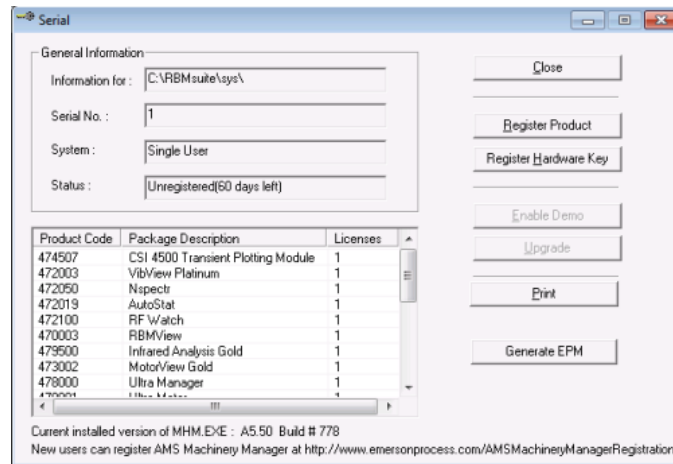
Note
To register later, open Windows Explorer, go to C:\RBMsuite\sys and double-click Serial.exe.

a. In the Serial dialog, click Register Product.

The Register Product dialog appears. You need the Serial No. and Request No. during registration.

b. Contact Product Support to register.

Phone:	Toll free 888.367.3774, option 2 (U.S. and Canada)
	+63.2.702.1111 (Rest of world)
Email:	wwcs.custserv@AP.EmersonProcess.com
Web:	http://www.mhm.assetweb.com/reg

c. Enter the Response code given to you by a Product Support representative.

d. Click OK.

The Register Product dialog closes.

e. In the Serial dialog, verify the Status is "Registered."

f. Click Close.

Your software is registered.

The installation automatically continues.

13. On the Finish page, click Finish to complete the installation.

If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

2.2 Launch AMS Machinery Manager

Now that you have installed and registered AMS Machinery Manager, you are ready to launch AMS Machinery Manager.

Procedure

1. Go to Start > Programs (All Programs) > AMS Machinery Manager.
2. Select AMS Machinery Manager.
3. Log in when prompted.

   a. Initially, Administrator is the default user. Leave the password blank and click OK.

   b. If you use a different user, enter the username and password and click OK.

   See the Administration topics in AMS Machinery Manager Help to set the Administrator password and create a new user.

2.3 Update or repair the installation

Note
You must register the software when you update the software.

Prerequisites

Close all AMS Machinery Manager programs.

Stop AMS Machinery Manager services.

Procedure

1. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.
2. Run RBMsetup.exe.

   Important
   On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

3. At the startup screen choose Add/Update or Repair and click Next.
4. At the Options pane, choose the features to install or leave the defaults selected for an update.
5. In the list labeled The following files have been found in your Data Directory, check the box by a file to replace the file on your computer with the file from the installation.
6. Click Install to start the installation.

The Installing Components screen displays the status of the installation.

Note

Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

7.	Continue through the installation steps and follow prompts.

8.	On the Finish page, click Finish to complete the installation.

	If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

3 Network installation

Topics covered in this chapter:

- *Network installation overview*
- *Install the Network Server*
- *Install the AMS Machinery Manager Client*
- *Launch AMS Machinery Manager Client*
- *Install a Secondary Database Server*
- *Install an Online Server*
- *Install Data Import Server and Data Import Client*
- *Install Collaboration Tool*
- *Update or install new features on the Network Server*

3.1 Network installation overview

Important

- If you intend to install Machine History Viewer or CSI Data Provider, you must install Internet Information Services before installing AMS Machinery Manager. The AMS Machinery Manager installation makes important changes to the IIS setup that you would otherwise have to configure manually with the assistance of Product Support.

- If you are upgrading your software, back up your database before completing the software update. Your databases require reindexing to work with the new software. If you need to reinstall the previous version of software, be aware that any database you open with the new software will be reindexed and will no longer work with any previous version.

Prerequisites

Ensure each computer meets the minimum system operating requirements.

Procedure

1. Install the Network Server on the server first.

2. Install the AMS Machinery Manager Client on a workstation.

3. Install secondary servers and clients on other computers on the network.

   You can install Online Server, Secondary Database Server, Data Import Server, Data Import Client, and AMS Machinery Manager Client on other computers in the network.

Postrequisites

- Configure service accounts and firewall settings for each computer, if necessary.

  Refer to *Chapter 6* for more information.

- Network installations require further configuration for each CSI Machinery Health Monitor.

  For more information, open Help in AMS Machinery Manager and choose Administration > Online Server.

3.2 Install the Network Server

The Network Server installation procedure installs and configures the programs and services required for the primary server. You can choose to install additional features.

The installation creates a shared folder from which you install the Client or other licensed components on other machines on this network. By default, the folder is C:\RBMnet\ and is shared as \\Servername\RBMnet where *Servername* is the network computer name.

Prerequisites

Ensure the computer meets the minimum system operating requirements.

If you are upgrading your software, back up your database before completing the software update. Your databases require reindexing to work with the new software. If you need to reinstall the previous version of software, be aware that any database you open with the new software will be reindexed and will no longer work with any previous version.

To install AMS Machinery Manager on a drive other than C, create a shared folder named RBMnet on the drive where you want to install the software, prior to starting the installation. After installation is complete, an administrator may need to modify the shared folder's security permissions to allow access from other computers.

Important

If you intend to install Machine History Viewer or CSI Data Provider, you must install Internet Information Services before installing AMS Machinery Manager. The AMS Machinery Manager installation makes important changes to the IIS setup that you would otherwise have to configure manually with the assistance of Product Support.

Procedure

1. Log on to the computer as a user with administrator rights.
2. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.
3. Run RBMsetup.exe.

   Important

   On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

   ---

4. Accept the license agreement and click Next.

5.   If a prompt to install Microsoft .NET Framework 4.0 appears, choose to install this software and allow the system to reboot, (if required).

The AMS Machinery Manager installation begins automatically after reboot.

6.   At the ATTENTION!! dialog, click Yes if you are installing the software for the first time. If you are upgrading your software, this is a reminder to stop the installation and back up your database first. Click No to stop the installation.

7.   The setup program verifies that your system meets the minimum requirements. If they are met, the Options page dialog appears. If they are not met, a message displays more information. Update the computer to meet the requirements or contact Product Support.

8.   At the Options page dialog, make changes to the Select Features to Install list, if desired.

Network Server and Client are checked as the preferred defaults. You can select other features, if available. Refer to corresponding sections for more information about additional features.
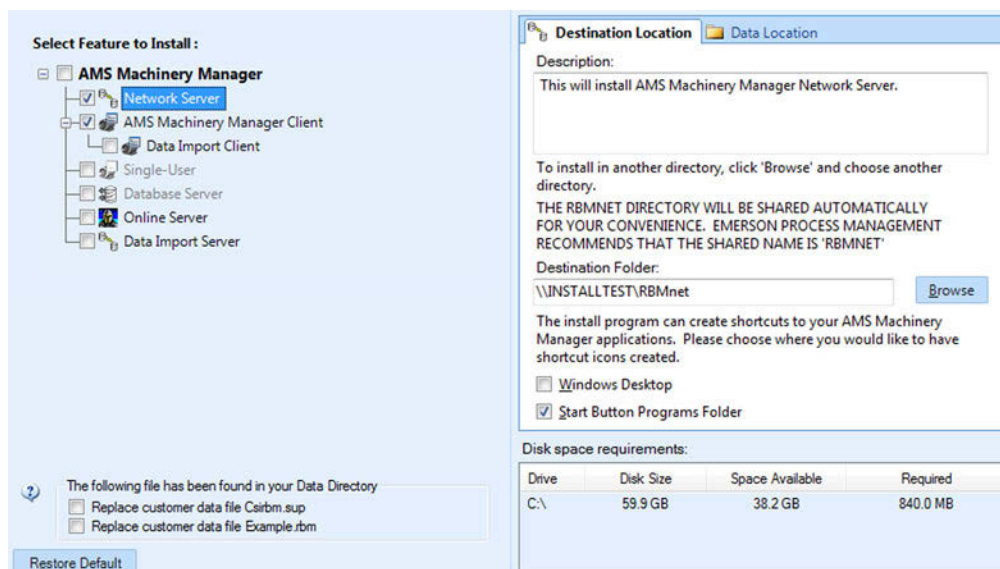
- Database Server, *Section 3.5*
- Online Server, *Section 3.6*
- Data Import Server, *Section 3.7*
- Data Import Client, *Section 3.7*

Notes

- Use the default settings and directory names unless there is a particular reason to change them. Using the defaults results in a trouble-free installation and streamlined interaction with Emerson Product Support, should a problem ever arise.

- If you are updating the software, this screen also displays the message, "The following file has been found in your Data Directory" followed by file names. You can check the box by the file to overwrite the file.

- If you are updating your software, some fields may be disabled. If you want to update your software and move to a different computer, contact Emerson Product Support.

Follow these steps if you need to change the default locations:

a. If you need to change the installation directory, select Network Server in the features list and open the Destination Location tab.

   Browse to the location. The Destination Folder is in Universal Naming Convention (UNC) format. A red error icon flashes if the path is invalid.

b. If you need to change where your data is stored, select Network Server in the features list and open the Data Location tab.

   Browse to the location. The path is in Universal Naming Convention (UNC) format. A red error icon flashes if the path is invalid.

9. Click Install to start the installation.

   The Installing Components screen displays the status of the installation.

Note

Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

10. If you are using Windows Firewall, grant access to programs published by Emerson Process Management when prompted.

11. When the Serial dialog appears, click Register Product to register the software now, or click Close to skip registration.

Note

To register later, on the Network Server, go to C:\RBMnet\RBMsuite\sys and double-click Serial.exe.

a. In the Serial dialog, click Register Product.

The Register Product dialog appears. You need the Serial No. and Request No. during registration.

b. Contact Product Support to register.

Phone:	Toll free 888.367.3774, option 2 (U.S. and Canada)
	+63.2.702.1111 (Rest of world)
Email:	wwcs.custserv@AP.EmersonProcess.com
Web:	http://www.mhm.assetweb.com/reg

c. Enter the Response code given to you by a Product Support representative.

The code is only valid for your computer.

d. Click OK.

The Register Product dialog closes.

e. In the Serial dialog, verify the Status is "Registered."

f. Click Close.

Your software is registered.

The installation automatically continues, installing the Client and any other selected features.

12. Continue through the installation steps and follow prompts.

13. On the Finish page, click Finish to complete the installation.

If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

Postrequisites

Install AMS Machinery Manager Client on a workstation.

3.3   Install the AMS Machinery Manager Client

Run the AMS Machinery Manager installation program (RBMsetup.exe) on a computer in the AMS Machinery Manager network. Choose the Client option.

Prerequisites

- Install the AMS Machinery Manager Network Server on the server first.
- Verify the client computer meets the operating requirements for a workstation.
- Verify the workgroup or domain settings match on the Network Server computer and Database Server computer.

Procedure

1. Log on to the computer as a user with administrator rights.

2. Browse to the shared folder on the Network Server. For example, \\Servername \RBMnet, where *Servername* is the computer's name.

Important

Do NOT use a mapped drive path.

---

3. Run RBMsetup.exe.

Important

On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

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4. At the Options page dialog, make changes to the Select Features to Install list, if desired.

You can install certain additional features on other computers in the AMS Machinery Manager network. The Network Server option is disabled here since only one network server is allowed on an AMS Machinery Manager network.

The Client is selected and default locations are set. If desired, select the Shortcuts tab and select Add shortcuts to desktop
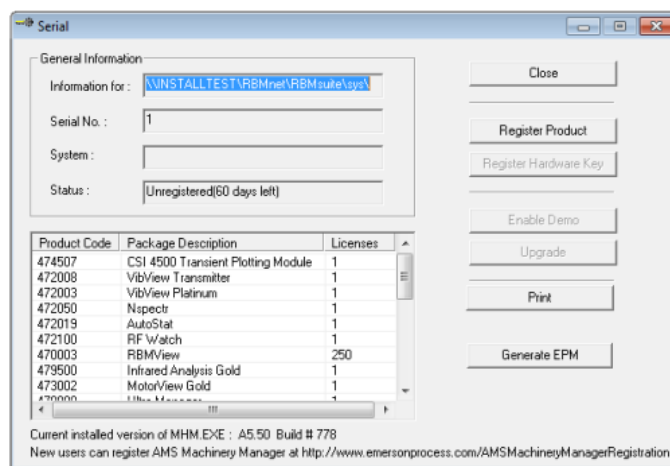
5. Click Install to start the installation.

The Installing Components screen displays the status of the installation.

Note

Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

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6. Continue through the installation steps and follow prompts.
7. On the Finish page, click Finish to complete the installation.

If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

3.4 Launch AMS Machinery Manager Client

Now that you have installed and registered AMS Machinery Manager, you are ready to launch the AMS Machinery Manager Client.

Procedure

1. Go to Start > Programs (All Programs) > AMS Machinery Manager.
2. Select AMS Machinery Manager Client.

3. Log in when prompted.

a. Initially, Administrator is the default user. Leave the password blank and click OK.

b. If you use a different user, type in the username and password and click OK.

See the Administration topics in AMS Machinery Manager Help to set the Administrator password and create a new user.

3.5   Install a Secondary Database Server

Prerequisites

*   Install the AMS Machinery Manager Network Server on the server first.
*   Verify the workgroup or domain settings match on the Network Server computer and Database Server computer.

Procedure

1. Log on to the computer as a user with administrator rights.
2. Browse to the shared folder on the Network Server. For example, \\Servername \RBMnet, where *Servername* is the computer's name.

    Important
    Do NOT use a mapped drive path.

3. Run RBMsetup.exe.

    Important
    On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

4. Follow instructions presented by the installation program.
5. Accept the license agreement and click Next.
6. At the ATTENTION!! dialog, click Yes if you are installing the software for the first time. If you are upgrading your software, this is a reminder to stop the installation and back up your database first. Click No to stop the installation.
7. At the Options page dialog, make changes to the Select Features to Install list, if desired.

    You can install certain additional features on other computers in the AMS Machinery Manager network. The Network Server option is disabled here since only one network server is allowed on an AMS Machinery Manager network.

    *   To install a Secondary Database server, select Database Server.
    *   (Optional) To install the Client, select Client.
    *   Uncheck features you do not want to install on this computer.

You can change the default destination location and configuration location on your database server. These tabs are disabled for updates.

8. Click Install to start the installation.

   The Installing Components screen displays the status of the installation.

   Note

   Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

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9. Continue through the installation steps and follow prompts.

10. On the Finish page, click Finish to complete the installation.

    If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

The secondary database server can be accessed through the Network Server. The files are installed in C:\RBMDBSRV by default.

Postrequisites

- In Windows Explorer, browse to C:\RBMDBSRV and create new folder named CustData. Share the CustData folder so it is available on the AMS Machinery Manager network.

- Add the database server in RBM Network Administration. Refer to the *Administration* topics in AMS Machinery Manager Help for more information.

3.6 Install an Online Server

Note

Unless otherwise specified, a CSI Machinery Health Monitor is pre-configured with a database created according to customer specifications. The Online Server has been set up during commissioning.

You can install additional Online Servers and commission additional CSI Machinery Health Monitors on your AMS Machinery Manager network. If you install an additional Online Server, select Database Server as well.

Prerequisites

- Install the AMS Machinery Manager Network Server on the server first.

- Verify the workgroup or domain settings match on the Network Server computer and Database Server computer.

Procedure

1. Log on to the computer as a user with administrator rights.

2.   Browse to the shared folder on the Network Server. For example, \\Servername \RBMnet, where *Servername* is the computer's name.

> **Important**
>
> Do NOT use a mapped drive path.

3.   Run RBMsetup.exe.

> **Important**
>
> On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

4.   Follow instructions presented by the installation program.

5.   At the AMS Machinery Manager Setup - Options page, select Online Server and Database Server.

   - (Optional) To install the Client, select Client.
   - Uncheck features you do not want to install on this computer.

6.   Continue through the installation steps and follow prompts.

7.   In Windows Services, verify the following services are started.

   - CsiO_Server
   - CsiMtdbMgr
   - CSI_MhmRemote

Postrequisites

- In Windows Explorer, browse to C:\RBMDBSRV and create new folder named CustData. Share the CustData folder so it is available on the AMS Machinery Manager network.

- Set up the Online Server in RBM Network Administration. Refer to the *Administration* topics in AMS Machinery Manager Help for more information.

3.7   Install Data Import Server and Data Import Client

The Data Import Server and Data Import Client are only available if you license the Data Import functionality (included with network systems). You can install Data Import Server and Data Import Client together or separately on the Network Server or on other computers in the AMS Machinery Manager network.

3.7.1 Install Data Import Server or Client on an existing Network Server

Follow instructions to update or install new features on the Network Server. See *Section 3.9*. At the Options pane, choose the Data Import Server and/or Data Import Client. If you choose Data Import Client, AMS Machinery Manager Client is automatically selected. Data Import Client is required to be installed in the same directory as the AMS Machinery Manager Client.

3.7.2 Install Data Import or Client on a Secondary Server or Workstation

Prerequisites

- Ensure the computer meets the minimum system operating requirements.
- Verify the workgroup or domain settings match on the Network Server computer and Database Server computer.

Procedure

1. Log on to the computer as a user with administrator rights.
2. Browse to the shared folder on the Network Server. For example, \\Servername \RBMnet, where *Servername* is the computer's name.

   Important
   Do NOT use a mapped drive path.

   ---

3. Run RBMsetup.exe.

   Important
   On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

   ---

4. Accept the license agreement and click Next.
5. At the Options pane, choose the Data Import Server and/or Data Import Client.

   If you choose Data Import Client, AMS Machinery Manager Client is automatically selected. Data Import Client is required to be installed in the same directory as the AMS Machinery Manager Client.

6. Click Install to start the installation.

   The Installing Components screen displays the status of the installation.

Note
Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

7.   On the Finish page, click Finish to complete the installation.

   If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

3.8   Install Collaboration Tool

When Collaboration Tool is installed with AMS Machinery Manager Network Server and Clients, users logged into the Clients using the same Network Server can communicate with one another and share multiple types of information with other Collaboration Tool users.

3.8.1   Install Collaboration Tool on the Network Server

When you install Collaboration Tool on the Network Server the MHM Peer Resolver Service (MHMPeerResolverService.exe) is installed.

Prerequisites

*   Install the AMS Machinery Manager Network Server on the server first.
*   Install AMS Machinery Manager Client on the Client computer.

Procedure

1.   On the Network Server, use Windows Explorer to browse to the RBMnet folder. For example, C:\RBMnet.
2.   Browse to Install\CollaborationTool.
3.   Double-click setup.exe and continue through the installation.

   Important
   On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

4.   Accept the license agreement and click Next.
5.   Click Install to start the installation.

   The Installing Components screen displays the status of the installation.

   Note
   Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

6. On the Finish page, click Finish to complete the installation.

3.8.2 Install Collaboration Tool on the Client

Prerequisites

- Install the AMS Machinery Manager Network Server on the server first.
- Install AMS Machinery Manager Client on the Client computer.

Procedure

1. Log on to the computer as a user with administrator rights.
2. Browse to the shared folder on the Network Server. For example, \\Servername \RBMnet, where *Servername* is the computer's name.

    Important
    Do NOT use a mapped drive path.

3. Browse to Install\CollaborationTool.
4. Double-click setup.exe and continue through the installation.

    Important
    On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

5. Accept the license agreement and click Next.
6. Follow instructions presented by the installation program.

3.8.3 Launch Collaboration Tool

1. Launch AMS Machinery Manager Client.
2. From the main menu, select View > Collaboration Tool.

Initially, Collaboration Tool opens on the right side of the AMS Machinery Manager Client screen.

Refer to Collaboration Tool topics in AMS Machinery Manager Help for more information.

3.9 Update or install new features on the Network Server

When you install the Network Server, you can choose which features to install. You can install the additional features on the Network Server later, by running the installation program on the server where you have AMS Machinery Manager installed.

Note

You must register the software when you update the software.

Prerequisites

- Close all AMS Machinery Manager programs.
- Stop AMS Machinery Manager services.

Procedure

1. Log onto the Network Server as a user with administrator rights.
2. Close AMS Machinery Manager and stop any AMS Machinery Manager services.
3. Browse to the Network Server's installation folder, for example C:\RBMnet.
4. Run RBMsetup.exe.

    Important

    On Windows 7 and Windows Server 2008, right-click RBMsetup.exe and select Run as administrator. Click Cancel if the installation launches automatically when you insert the DVD. You must run the installation manually.

5. At the maintenance screen, select Add/Update and click Next.
6. At the Options pane, choose the features to install or leave the defaults selected for an update.
7. Click Install to start the installation.

    The Installing Components screen displays the status of the installation.

    Note

    Once the install is underway, there will be a point where the Cancel button is disabled. Do not try to end the install if the Cancel button is disabled. If the install aborts after this point, you may need to contact Emerson Process Management Product Support.

8. On the Finish page, click Finish to complete the installation.

    If the computer requires a reboot, Restart Now is selected on the Finish page. Allow the system to reboot before attempting to run the software.

4   Additional installations

Topics covered in this chapter:

4.1   Install Machine History Viewer

Machine History Viewer works in conjunction with AMS Machinery Manager and other AMS Suite software programs to allow you to view and analyze the operating history of a facility's rotating machinery. Machine History Viewer is a browser-based application that can be accessed from any network computer.

4.1.1   Install Internet Information Services (IIS)

Install Internet Information Services (IIS) with the following features:

- IIS Management Console
- IIS Application Development Features (World-wide Web Services)
    - .NET Extensibility
    - ASP
    - ASP.NET
    - ISAPI Extensions
    - ISAPI Filters
    - Server-side Includes

Tip

In Windows 7, open Control Panel, select Turn Windows Features On or Off and select the features from Internet Information Services and World Wide Web Services.

In Windows Server 2008, use the Add Roles Wizard to install the Web Server (IIS) role.

4.1.2   Install Machine History Viewer on the Network Server

Machine History Viewer installation includes the following components:

- AMS Machinery Manager Network Server
- Machine History Viewer Web Service

- Machine History Viewer Client User Interface
- Microsoft SQL Server 2005 or Microsoft SQL Server 2005 Express

Machine History Viewer can be installed in three configurations:

1. Compact configuration: Install Machine History Viewer on the same server-class computer as AMS Machinery Manager Network Server and Microsoft SQL Server 2005 for a compact configuration.

2. Recommended configuration: Install Network Server on one server-class machine and install Machine History Viewer and Microsoft SQL Server 2005 on a separate server-class computer.

3. Distributed configuration: Install each required component of Machine History Viewer on separate server-class computers.

The instructions describe how to install either the compact configuration and recommended configuration.

Prerequisites

- Install the AMS Machinery Manager Network Server on the server first.
- The Machine History Viewer version must match Network Server.
- Install IIS 5.2 or newer first. (Install IIS before the .NET Framework, available during installation).

Note

- Microsoft SQL Server 2005 is required by and installed with Machine History Viewer.
- Microsoft .NET Framework 2.0 is required by and installed with Microsoft SQL Server 2005 Express.
- Microsoft .NET Framework 4.0 is required by and installed with Machine History Viewer Web Service and the Machine History Viewer Client User Interface.

Procedure

1. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.

2. Browse to the Install\MachineHistoryViewer folder.

3. Double-click setup.exe and continue through the installation.

Important

On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

4. Accept the license agreement.

5. The Configuration window displays. Choose the components to install on this computer and click Next.

   - For the compact configuration and the recommended configuration, check both Web Service and Client UI.

- For the distributed configuration, launch the installation on each computer; choose only the Web Service feature on one computer, and only the Client UI feature on the other computer.

6. Click Yes if prompted to install the Microsoft .NET Framework.

   It may take several minutes to complete the installation. This step applies if Microsoft .NET Framework is not already installed.

   A dialog may display the process of the Microsoft Report Viewer redistributable files installation.

7. In the Select Computer for SQL Server 2005 dialog, choose where to install the SQL server and click Next.

   - For a compact configuration and the recommended configuration, select This computer (maximizes performance).

   - For the distributed configuration, select A separate computer (may degrade performance). A dialog displays additional instructions for this setup.

   Note

   If Microsoft SQL Server 2005 is already installed, this installation process creates new instance named "EPM2005". If you run the installer again, the Microsoft SQL Server 2005 does not need to install additional instances.

   ---

8. When prompted, type a password to be used as part of the SQL connection string and click Next. The SQL server installs automatically.

   A summary of the SQL configuration displays. Make a note of this information for future reference.

Computer Name:	
SQL Server Instance Name:	EPM2005
Strong Password:	

9. (Distributed configuration only.) If you chose to install the SQL server on a separate computer, the Database Server Login dialog appears. Provide the information to connect to the SQL server on the separate computer.

10. Review the Disk Space Requirements for Local and Mapped Drives dialog to determine where you want to install the selected Machine History Viewer components. Click OK.

11. In the Choose Destination Location dialog, click Next to accept the default location (recommended), or click Browse and select a different location for the selected Machine History Viewer components.

12. When prompted, enter the network name of the computer where the Network Server is installed.

   You must specify the computer name if the installation is not on the same computer as the Network Server.

13. (Distributed configuration only.) When prompted, enter the network name of the computer hosting the Machine History Viewer Web Service.

Note

You must specify the computer name where the Machine History Viewer Web Service is installed, if you are installing only the Machine History Viewer Client User Interface.

14. On the Start Copying Files screen, click Next to install the software components listed.

The Setup Status screen displays a progress bar.

15. When the URL displays, make a note of the address so you can access Machine History Viewer.

Example: http://Servername/MachineHistory where Servername is the name of the computer where Machine History Viewer is installed.

Machine History Viewer URL:	

Note

If you are unable to log in, follow the instructions in Internet Explorer Help to enable cookies for this URL.

16. On the Finish page, click Finish to complete the installation.

4.1.3 Launch Machine History Viewer

Prerequisites

- Verify the client computer meets the operating requirements for a workstation.
- Use Internet Explorer 7.0 or newer with cookies enabled for the URL displayed during installation.
- In RBM Network Administration, create an AMS Machinery Manager username and password to use with Machine History Viewer.
- In RBM Network Administration, add a database to the user's database list, or allow the user to access the master database list. If the user does not have a database, no data will be visible to this user through Machine History Viewer.

Procedure

1. Launch Internet Explorer and enter the URL address you recorded during installation.
2. Log in with a user name and password.

More information about using Machine History Viewer is provided in Online Help available after you log in.

4.2 Install AMS Standalone Data Transfer

AMS Standalone Data Transfer allows you to transfer route files between an analyzer and a folder on the computer or network. You do not need direct access to an AMS Machinery Manager client or database. When you receive a route definition file, load it to your analyzer with AMS Standalone Data Transfer. After you collect data, dump the route using AMS Standalone Data Transfer and return the route data file.

Note

Only install AMS Standalone Data Transfer on a computer where AMS Machinery Manager is NOT installed.

Procedure

1. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.

2. Browse to Install/StandaloneDataTransfer.

3. Double-click setup.exe and continue through the installation.

   Important

   On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

4. Accept the license agreement.

5. Follow instructions presented by the installation program.

   Windows Device Driver Installation Wizard prompts you to install the CSI USB Drivers.

6. Install the CSI USB Drivers.

7. Follow instructions presented by the installation program.

8. At the Windows Security prompt, click Install to install the drivers.

   The drivers install automatically.

9. Click Finish.

   The CSI USB Drivers installation wizard closes.

10. Click Finish.

4.3 Install AMS Machinery Manager ODBC Driver

You can install the AMS Machinery Manager ODBC driver in order to access your information from third party software such as Microsoft Access™, Crystal Reports™, or ORACLE®.

Note

This installation is optional and not required by AMS Machinery Manager.

Procedure

1. Go to the computer where you want the driver installed.

   You can install the driver on any computer where the AMS Machinery Manager Client is installed.

2. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.

3. Browse to the Install\csiODBC folder.

4. Double-click setup.exe and continue through the installation.

   Important

   On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

   ---

5. Accept the license agreement.

6. When the Choose Destination Location screen appears, use the default location, and click Next.

7. In the Ready to Install Program screen, click Next to begin the installation.

   The Setup Status screen displays the status of the installation.

8. When the Installation Complete screen appears, click Finish.

   If the screen displays a message to restart the computer, you must restart the computer before attempting to use the software.

4.4 Install AMS Machinery Manager CSI Data Provider

The AMS Machinery Manager CSI Data Provider works with AMS Machinery Manager Network Server to supply information to applications such as AMS Asset Portal and AMS Suite: Asset Performance Management. AMS Machinery Manager sends Assets, Active Alerts and Event History. The Alert details are generated from alarms that are set in the databases, such as the Vibration alarms for Export. Event details are generated from RBMview when a new problem is created.

Verify you have a version of AMS Machinery Manager that supports your application:

- AMS Machinery Manager version 4.81 or later is required to support AMS Asset Portal 1.0 or newer.

- AMS Machinery Manager 5.5 or later is required to support AMS Suite: Asset Performance Management.

4.4.1 Install Internet Information Services (IIS)

Install Internet Information Services (IIS) with the following features:

- IIS Management Console
- IIS Application Development Features (World-wide Web Services)
    - .NET Extensibility
    - ASP
    - ASP.NET
    - ISAPI Extensions
    - ISAPI Filters
    - Server-side Includes

Tip

In Windows 7, open Control Panel, select Turn Windows Features On or Off and select the features from Internet Information Services and World Wide Web Services.

In Windows Server 2008, use the Add Roles Wizard to install the Web Server (IIS) role.

4.4.2 Install CSI Data Provider

Install the CSI Data Provider on the same computer as the AMS Machinery Manager Network Server or on a different computer with network access to the Network Server.

Prerequisites

An AMS Machinery Manager Client must be installed on the Network Server computer.

The CSI Data Provider version must match the Network Server.

CSI Data Provider requires the Microsoft .NET Framework 4.0, available during the installation. IIS must be installed before Microsoft .NET Framework 4.0.

Procedure

1. Go to the computer where the AMS Machinery Manager Network Server is installed, or a computer with network access to the Network Server.
2. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.
3. Browse to Install\CSIDataProvider.
4. Double-click setup.exe and continue through the installation.

    Important

    On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

5. Accept the license agreement and click Next.
6. Continue through the installation steps and follow prompts.

The installation program checks the minimum system requirements for the software. If the computer is missing any required software, you will be prompted to install the necessary software.

7. On the Disk Space Requirements screen, review this information and click OK.

8. On the Choose Destination Location page, use the default location and click Next.

9. When prompted, enter the name of the computer running Network Server and click Next.

    The Data Provider must be able to locate the Network Server to function properly.

10. When prompted, install and start the CsiRVWmgr service on the Network Server.

    Complete the following steps on the Network Server.

    a. On the Network Server, launch the Windows Command Prompt as Administrator.

    Tip

    On Windows 7, Click Start > Accessories > Command Prompt, right-click Command Prompt and select Run as Administrator.

    ---

    b. In the Command Prompt window, type the command C:\RBMnet\RBMsuite\sys\RVWmgr.exe -i and press Enter.

    Example:

    ```
    Microsoft Windows [Version 6.1.7601]
    Copyright (c) 2009 Microsoft Corporation.  All rights reserved.

    C:\Windows\system32>C:\RBMnet\RBMsuite\sys\RVwMgr.exe -i

    C:\Windows\system32>
    ```

    The CsiRVWmgr service is installed as a Windows Service.

    c. On the Network Server, launch Windows Services.

    d. Right-click the service named CsiRVWmgr and select Properties.

    e. In the Properties dialog, choose Automatic from the Startup type menu.

    This setting ensures the service restarts automatically if it is ever stopped, such as after a reboot.

    f. Click Start to start the CsiRVWmgr service.

    The CsiRVWmgr service is installed and started.

11. Click OK to continue the installation.

12. When the URL displays, make a note of the address.

    Example: http://Servername/CSIDataProvider/CSIDataProvider.asmx, where Servername is the name of the computer where CSI Data Provider is installed.

You will need to use the URL to access the CSIDataProvider web service and register the AMS Machinery Manager user.

Table 4-1:   CSI Data Provider URL

CSI Data Provider URL:	

13. Click Finish when the Installation Complete page displays.

4.4.3   Create a user for CSI Data Provider

See *Create a new user* in AMS Machinery Manager Help for details.

Procedure

1. In RBM Network Administration, create a new user with guest access mode.

   Important
   Only use this username and password with CSI Data Provider. If these credentials are used by some other user or application, the CSI Data Provider cannot access the system.

2. In RBM Network Administration, right-click the new user and select Edit User.

3. Click User Database List.

   The Database List dialog appears.

4. To add a database, select the database from the System Databases pane and click Add.

5. Click OK.

4.4.4   Register the user for CSI Data Provider

1. Launch Internet Explorer and type the web address displayed during installation.

   Example: http://Servername/CSIDataProvider/CSIDataProvider.asmx, where Servername is the name of the computer where CSI Data Provider is installed.

   The CSI Data Provider web interface appears.
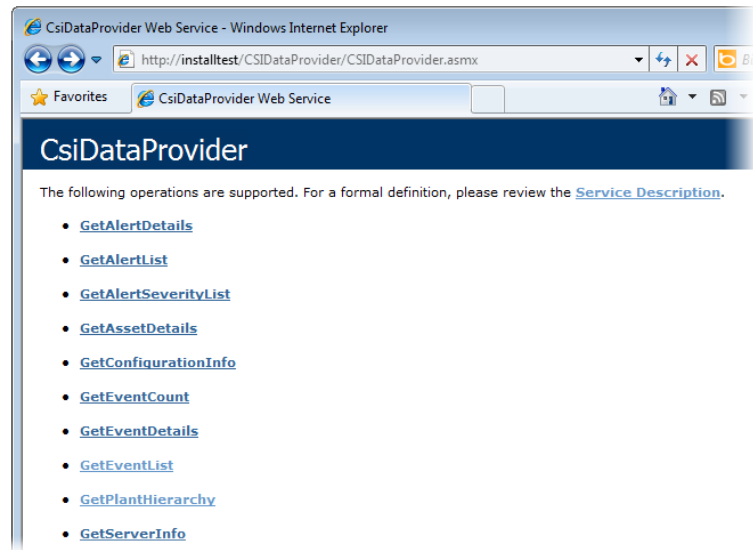
2.   Click the GetPlantHierarchy link.

3.   On the GetPlantHiearchy page, enter the AMS Machinery Manager user name and password in the format: username|password

For example, if "AOXS" is the user name and "aoxspwd1" is the password, enter: AOXS|aoxspwd1.

4.   Click Invoke.

A window displays a stream of XML statements. This is proof that you successfully registered the user and CSI Data Provider is functioning properly.

Note

If you get an error message, ensure that the CsiRVWmgr service is started and the user name has been created with the password you entered.

4.4.5 Create a data source

Use the AMS Suite: Asset Performance Management (or Asset Portal Manager for use with AMS Asset Portal) to create a data source. Refer to the respective product documentation for more information.

4.4.6 Configure Web Server settings

In order for the CSI Data Provider to work correctly, the World Wide Web Publishing service must be configured correctly.

Procedure

1. Open Windows Services and start the service named World Wide Web Publishing Service.

   When you install the World Wide Web Publishing Service with Windows Server, it may not be started by default. You must start the service in order to run a web service.

2. (Windows Server 2003 only) Install ASP.NET as a Windows Service.

   a. Launch the Windows Command Prompt as Administrator.

Tip

On Windows Server 2003, go to Start > Accessories > Command Prompt, right-click Command Prompt and select Run as Administrator.

---

b. In the Command Prompt window, type the command aspnet_regiis.exe -s W3SVC/1/ROOT/CsiDataProvider and press Enter.

Example:

Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Windows\system32>**aspnet_regiis.exe -s W3SVC/1/ROOT/CsiDataProvider**

c. If ASP.NET is NOT installed, type the command aspnet_regiis.exe -i and press Enter.

Important

Only use this command with the -i argument if ASP.NET is NOT already on the computer; it has the intrusive effect of updating all scriptmaps, both at and below the metabase root.

By default, ASP.NET is not installed.

3. Enable ASP.NET to execute.

By default, the Web Service Extension status for ASP.NET is Prohibited. In IIS Manager, change the status to Allowed.

Follow instructions for your version of IIS to enable ASP.NET. For example, follow these instructions in IIS 7.0.

a. Launch IIS Manager.

b. Select the computer name node in the Connections pane.

c. In the Features view, select ISAPI and CGI Restrictions.

d. Select the ASP.NET service and change the status to Allowed.

4. Add CSIDataProvider to the Trusted Sites.

The first time the CSIDataProvider service runs, a security warning may appear. Add this website to the computer's trusted sites.

From this point, the CSIDataProvider will be granted access to this site.

4.5   Install CSI USB drivers

The USB drivers for the CSI 2140 or CSI 2130 analyzer are installed automatically with AMS Machinery Manager or AMS Standalone Data Transfer. You can install the USB drivers on any computer where you need to connect a CSI 2140 or CSI 2130 analyzer.

Procedure

1. Insert the AMS Machinery Manager Software Installation DVD and open it in Windows Explorer.

2. Browse to Install\CSI USB Drivers.

3. Double-click setup.exe and continue through the installation.

Important

On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

---

4. Accept the license agreement.

5. Follow instructions presented by the installation program.

6. At the Windows Security prompt, click Install to install the drivers.

    The drivers install automatically.

7. Click Finish.

5   AMS Machinery Manager services

Topics covered in this chapter:

- *Primary server features and services*
- *Secondary server features and services*
- *Client installation features*

5.1   Primary server features and services

The Primary server is the computer hosting the Network Server.

Feature installed	Service installed	Description	Purpose
Standalone or Network Server	CsiNetAdmin	Network Server	Licensing
	CSI_MhmRemote	AMS Remote Machinery Health Manager	Manages connections between AMS Machinery Manager Clients and the Network Server.
	CSI Data Transfer Service	Data Transfer Service	Enables CSI Machinery Health Analyzer to connect and transfer data to AMS Machinery Manager over an Ethernet connection.
	CSIMtDbMgr Service	Database Server	Database read/write/indexing
AMS Machinery Manager Client	n/a		AMS Machinery Manager user interface.
Collaboration Tool (optional)	MHM Peer Resolver Service	Collaboration Tool communication management	When installed on the Network Server, this service enables communication between AMS Machinery Manager users with Collaboration Tool installed on their workstation.

5.2   Secondary server features and services

One or more of these features can be installed on a computer in the AMS Machinery Manager network after a Network Server has been installed.

Feature installed	Service installed	Purpose
Database Server	CSIMtDbMgr Service	Database read/write/indexing
Data Import Server	CSI Data Import Service	Enables AMS Machinery Manager to read MODBUS data from other systems.

Feature installed	Service installed	Purpose
Online Server	CsiO_Server	Enables AMS Machinery Manager to manage and collect data from CSI Machinery Health Monitors.
AMS Machinery Manager Client	n/a	AMS Machinery Manager user interface.

5.3   Client installation features

One or more of these features can be installed after the Primary server has been installed.

Additional installation	Service installed	Purpose
Collaboration Tool	n/a	Available with network client installations to allow AMS Machinery Manager users to communicate.
Online Watch	n/a	A client application provides a read-only view of online system status. Can also be configured to allow a user to acknowledge or modify alarms and request data acquisitions.
Machine History Viewer	n/a	Provides a read-only view of periodic data and equipment case history through a web browser.
AMS Standalone Data Transfer	n/a	Allows users of a CSI Machinery Health Analyzer at a location without access to a database to load and dump routes and route data as files.

6   Configure network computer communication

Topics covered in this chapter:

- *Configure firewall settings*
- *Service accounts*

If services running on secondary servers have trouble establishing a connection with the primary server, you can change firewall settings to allow the services to communicate with one another. You can also create service accounts to assign to each AMS Machinery Manager program and service.

6.1   Configure firewall settings

AMS Machinery Manager programs communicate with each other using communication ports. If you have a firewall, the ports used by the AMS Machinery Manager programs are often blocked (or disallowed) by default. During installation, Windows may prompt you to allow access for certain AMS Machinery Manager programs on the server. If you choose to allow access, Windows creates firewall exceptions. You may need to configure other firewall rules manually. Configure your firewall program to allow communication between AMS Machinery Manager programs and the ports they use on each computer in the AMS Machinery Manager network.

Note

Each AMS Machinery Manager program needs a firewall exception to access the primary server, even if all the programs are installed on the primary server.

6.1.1   Primary server ports

These services make up the core programs installed as a Standalone or Network installation.

Table 6-1:   Primary server ports

Port name	Port	Type	Service	Executable	Connection	Purpose
CSIDB_SERVER	10045	TCP	CsiMtdbMgr	mtdbmgr.exe	server services, client programs	Database read/write/indexing
CSIDB_ADMIN	10046	TCP	CsiMtdbMgr	mtdbmgr.exe	server services, client programs	CsiMtdbMgr
CSINA_SERVER	10047	TCP	CsiNetAdmin	NetAdmin.exe	server services, client programs	Licensing

Table 6-1: Primary server ports *(continued)*

Port name	Port	Type	Service	Executable	Connection	Purpose
CSINA_ADMIN	10048	TCP	CsiNetAdmin	NetAdmin.exe	server services, client programs	Licensing
CSINA_PEER	10049	TCP	CsiNetAdmin	NetAdmin.exe	server services, client programs	Licensing
CSIMHMREMOTE	10052	TCP	CSI_MhmRemote	MhmRemote.exe	server services, client programs	Manage AMS Machinery Manager Client connections.
CSIRBMCOMSR	10077	TCP	CSI Data Transfer Service	DeviceServer.exe	CSI analyzers using Ethernet	Enable data transfer over Ethernet.

6.1.2   Ports for Data Import server

Table 6-2: Ports for Data Import server

Port name	Port	Type	Service	Executable	Connection	Purpose
CSIDISERVER	10060	TCP	CSI Data Import Service	DataImport.exe		Provides Machinery Health Manager MODBUS Data Import.

6.1.3   Database Server ports

Firewall ports required for additional database servers installed on the AMS Machinery Manager network.

Table 6-3: Database Server ports

Port name	Port	Type	Service	Executable	Connection	Purpose
CSIDB_SERVER	10045	TCP	CsiMtdbMgr	mtdbmgr.exe	server services, client programs	Database read/write/indexing
CSIDB_ADMIN	10046	TCP	CsiMtdbMgr	mtdbmgr.exe	server services, client programs	Database read/write/indexing
CSIMHMREMOTE	10053	TCP	CSI_MhmRemote	MhmRemote.exe	server services, client programs	Manage AMS Machinery Manager Client connections.

6.1.4 Ports for Collaboration Tool server

Table 6-4: Ports for Collaboration Tool server

Port name	Port	Type	Service	Executable	Connection	Purpose
HTTP	8090	TCP	MHM Peer Resolver Service	MHMPeerResolver Service.exe	client programs	Handles registration of Collaboration Tool clients to communicate with one another.

6.1.5 CSI Data Provider ports

Table 6-5: CSI Data Provider ports

Port name	Port	Type	Service	Executable	Connection	Purpose
CSIVW_SERVER	10050	TCP	CsiRVWmgr	RVWmgr.exe	Asset Portal, external programs	Provides alert information.
CSIVW_ADMIN	10051	TCP	CsiRVWmgr	RVWmgr.exe	Asset Portal, external programs	Provides alert information.
HTTP	80	TCP	IIS	inetinfo.exe	Asset Portal, external programs	Provides alert information.

6.1.6 Ports for Machine History Viewer server

Table 6-6: Ports for Machine History Viewer server

Port name	Port	Type	Service	Executable	Connection	Purpose
HTTP	80	TCP	IIS	inetinfo.exe	external programs	Provides web access to case histories.

6.1.7 Ports required for servers hosting a shared Custdata folder

Table 6-7: Ports required for servers hosting a shared Custdata folder

Port name	Port	Type	Service	Executable	Connection	Purpose
epmap	135	TCP	DCE endpoint resolution	SYSTEM	external programs	Windows File Sharing
epmap	135	UDP	DCE endpoint resolution	SYSTEM	external programs	Windows File Sharing
netbios-ns	137	TCP	NETBIOS Name Service	SYSTEM	external programs	Windows File Sharing
netbios-ns	137	UDP	NETBIOS Name Service	SYSTEM	external programs	Windows File Sharing
netbios-dgm	138	UDP	NETBIOS Datagram Service	SYSTEM	external programs	Windows File Sharing
netbios-ssn	139	TCP	NETBIOS Session Service	SYSTEM	external programs	Windows File Sharing
microsoft-ds	445	TCP	Microsoft Directory Service	SYSTEM	external programs	Windows File Sharing
microsoft-ds	445	UDP	Microsoft Directory Service	SYSTEM	external programs	Windows File Sharing

6.1.8 Ports required for AMS Machinery Manager Clients and Data Import Clients

Table 6-8: Ports required for AMS Machinery Manager Clients and Data Import Clients

Port name	Port	Type	Service	Executable	Connection	Purpose
*.exe	varies	TCP	MHM client programs	C:\RBMclient\sys*.exe C:\RBMsuite\sys*.exe	server services, online systems	Each AMS Machinery Manager program.

6.1.9 Online Server ports

Table 6-9: Online Server ports

Port name	Port	Type	Service	Executable	Connection	Purpose
odh_4500T	19788	TCP	CsiO_Server	O_Server.exe	online systems	Online system communication.

Table 6-9: Online Server ports *(continued)*

Port name	Port	Type	Service	Executable	Connection	Purpose
odh_4500su	19798	TCP	CsiO_Server	O_Server.exe	online systems	Online system communication
odh_4500_tcp	19799	TCP	CsiO_Server	O_Server.exe	online systems	Online system communication
odh_4500_udp	19799	UDP	CsiO_Server	O_Server.exe	online systems	Online system communication
odh_admin-tcp	19800	TCP	CsiO_Server	O_Server.exe	online systems	Online system communication
odh_config-tcp	19801	TCP	CsiO_Server	O_Server.exe	online systems	Online system communication
odh_status-tcp	19802	TCP	CsiO_Server	O_Server.exe	online systems	Online system communication
odh_status-udp	19802	UDP	CsiO_Server	O_Server.exe	online systems	Gross Scan broadcast
odh_fallback-tcp	19803	TCP	CsiO_Server	O_Server.exe	Fallback server	Fallback server (legacy, no longer used)

6.1.10   Ports for OPC data

Online Systems can be configured to provide data to control systems using OPC (Object Linking and Embedding for Process Control). The ports used by the Online Server to provide OPC data are assigned dynamically from the range of DCOM ports Windows is configured to use. These ports are not required to be open if tunneling software is used.

Table 6-10: Ports for OPC data

Port name	Port	Type	Service	Executable	Connection	Purpose
epmap	135	TCP	DCE endpoint resolution	SYSTEM	external programs	Windows File Sharing
epmap	135	UDP	DCE endpoint resolution	SYSTEM	external programs	Windows File Sharing
-	varies	TCP	CsiO_Server	O_Server.exe	external programs	Provides OPC information

6.1.11   FTP ports

Servers set up to provide firmware updates to online systems use FTP ports.

Table 6-11: FTP ports

Port name	Port	Type	Service	Executable	Connection	Purpose
FTPDATA	20	TCP	FTP data connection	inetinfo.exe	external programs, online systems	FTP data transfer
FTP	21	TCP	FTP control connection	inetinfo.exe	external programs, online systems	FTP data transfer

6.1.12   Optional ports for troubleshooting

Table 6-12: Optional ports for troubleshooting

Port name	Port	Type	Service	Executable	Connection	Purpose
Telnet	23	TCP	Telnet client	varies	external systems	Telnet
ICMP	-	-	Ping	SYSTEM	external systems	Ping

6.2   Service accounts

Service accounts are not required, but can be useful on a network system if services running on secondary servers have trouble establishing a connection with the primary server. Try updating the firewall settings first. If changing the firewall settings does not resolve the issue, you can create service accounts to assign to each AMS Machinery Manager program and service.

After you install AMS Machinery Manager on the server, create a service account on the server and assign it to each AMS Machinery Manager service. Then create an identical account on each computer where AMS Machinery Manager services are installed. This includes any computer where you install any AMS Machinery Manager features, but not computers where you install only the AMS Machinery Manager Client. The Client does not have a service.

6.2.1   Create a service account

Create a service account after installing AMS Machinery Manager.

Prerequisites

Verify you can launch the AMS Machinery Manager Client.

Procedure

1. Follow your operating system's instructions to create a new user account with the following information:

- • User name: MHMSERVICE

- • Password: *********

- • Clear the check box User must change password at next logon.

- • Select User cannot change password.

2. Add the MHMSERVICE user as a member of the computer's Administrators group.

Postrequisites

Assign this services account to all AMS Machinery Manager services on the computer.

6.2.2 Assign the services account to each AMS Machinery Manager service

Assign the services account to each AMS Machinery Manager service on the computer.

Procedure

1. Launch Windows Services on a computer where AMS Machinery Manager programs are installed.

2. Identify the AMS Machinery Manager services to be updated.

3. Right-click the service and select Properties.

4. In the Properties dialog, select the Log On tab, and update the log on information so the service operates using the services account.

- • This account: .\MHMSERVICE (The dot and backslash are required before the username.)

- • Password: *********

Note

The password you enter must match the password assigned to the account.

---

5. Restart the service.

6. Repeat this procedure for each AMS Machinery Manager service.

Postrequisites

You can test the services account by launching the AMS Machinery Manager Client. If the Client launches, the accounts have been created and assigned correctly. If it does not launch, there may be a problem with one of the users. If you do not have a Client installed, test the specific service by verifying its functionality works.

Appendix A
File locations

File locations depend on the type of installation.

- Standalone systems use absolute paths (for example, C:\RBMsuite), because all the AMS Machinery Manager applications that use this path are installed on the same computer.

- Network systems use network paths (UNC format) (for example \\ServerName\RBMnet\RBMsuite), so applications on all AMS Machinery Manager Client workstations can access the files.

Standalone installation

All of the AMS Machinery Manager files are located in the installation directory, C:\RBMsuite, by default.

Table A-1: Standalone installation file types and locations

Category	Type	Location
Installation Directory	Folder	C:\RBMsuite
AMS Machinery Manager System Files	Executable	C:\RBMSuite\Sys
	Dynamic Linked Library	C:\RBMSuite\Sys\Plugins
	Error Messages	C:\RBMSuite\Sys\HelpMsg
	Help Files	C:\RBMSuite\Sys\HelpMsg
Drivers	Drivers	C:\RBMSuite\Sys\Drivers
System Data Files	System Data Files	C:\RBMSuite\SysData
	Template Files	C:\RBMSuite\SysData\Template
	Oil Instrument Files	C:\RBMSuite\SysData\Instrmnt
	Report Templates	C:\RBMSuite\SysData\Report
Customer Data Files	Shared Data Files	C:\RBMSuite\CustData
User Data Files	User Data Files	C:\RBMSuite\Users

Network installations

Table A-2 and *Table A-3* show where to find files on each installation. The Network Server files are located in C:\RBMnet. The Network Server shared files are listed by UNC path (for example, \\Servername\RBMnet\RBMsuite\ where Servername is the network name of the Network Server computer). Each Client workstation has some files stored locally in C:\RBMclient\.

Table A-2: Network Single- or Multiple-License Server file types and locations

Category	Type	Location
Installation Directory	Folder	C:\RBMnet
Network Server Shared Folder	UNC Path	\\Servername\RBMnet
AMS Machinery Manager System Files	Executables	\\Servername\RBMnet\RBMSuite\Sys
	Dynamic Link Library	\\Servername\RBMnet\RBMSuite\Sys\Plugins
	Error Messages	\\Servername\RBMnet\RBMSuite\Sys\HelpMsg
	Help Files	\\Servername\RBMnet\RBMSuite\Sys\HelpMsg
Drivers	Drivers	\\Servername\RBMnet\RBMSuite\Sys\Drivers
System Data Files	System Data Files	\\Servername\RBMnet\RBMSuite\SysData
	Template Files	\\Servername\RBMnet\RBMSuite\SysData\Template
	Oil Instrument Files	\\Servername\RBMnet\RBMSuite\SysData\Instrmnt
	Report Templates	\\Servername\RBMnet\RBMSuite\SysData\Report
Customer Data Files	Databases	\\Servername\RBMnet\RBMSuite\CustData
User Data Files	User Data Files	\\Servername\RBMnet\RBMSuite\Users
	User Preferences	\\Servername\RBMnet\RBMSuite\Sys\AMS_Preferences\AMS_UserPreferences
CMMS Data Files	CMMS Shared Files	\\Servername\RBMnet\CMMSData

Table A-3: Network Client file types and locations

Category	Type	Location
Installation Directory	Folder	C:\RBMclient\
AMS Machinery Manager System Files	Executable	C:\RBMclient\Sys
	Dynamic Link Library	C:\RBMclient\Sys\Plugins
	Error Messages	C:\RBMclient\Sys\HelpMsg
	Help Files	C:\RBMclient\Sys\HelpMsg
Drivers	Drivers	C:\RBMclient\Sys\Drivers
System Data Files	System Data Files	C:\RBMclient\Sys\SysData
	Template Files	C:\RBMclient\Sys\SysData\Template
	Oil Instrument Files	C:\RBMclient\Sys\SysData\Instmnt
	Report Templates	C:\RBMclient\Sys\SysData\Report
Customer Data Files	Databases	\\Servername\RBMnet\RBMSuite\CustData
User Data Files	User Data Files	\\Servername\RBMnet\RBMSuite\Users

Table A-3:   Network Client file types and locations *(continued)*

Category	Type	Location
	User Preferences	C:\RBMclient\Sys\AMS_Preferences\AMS_UserPreferences
CMMS Data Files	CMMS Shared Files	\\Servername\RBMnet\CMMSData

File Descriptions

Table A-4:   File category and type descriptions

Category	Type	Description
System Files	Executables (*.exe)	AMS Machinery Manager applications.
	Dynamic Link Libraries (*.dll)	Shared AMS Machinery Manager run-time libraries.
	OCX files (*.ocx)	Shared AMS Machinery Manager object libraries.
	Compressed help files (*.chm)	The help files and manuals.
System Data Files	CSI Component Files (*.wh)	Warehouse files store reusable components and equipment configurations.
	Report Templates (*.rpt)	Report templates for RBMview.
User Data Files	Program Configuration Files (*.def, *.ini)	Configuration files that store user options and preferences for the applications.
CMMS Data Files	CMMSLink Files (*.mdb)	Define the interface to CMMS systems and facilitate the exchange of information to and from CMMS systems.
Customer Data Files	AMS Machinery Manager 4.xx and 5.xx Databases (*.rbm)	AMS Machinery Manager databases.
	Writable DbLookup Files	These provide global reference information such as fault codes and severity descriptions. If used in a Network Multiple-License installation, these files are located on the Enterprise data directory.
	NetAdmin Files	These files are used for user access administration.
	RBMwizard Answers Files/Equipment Configuration Files (*.dbz)	RBMwizard databases that store database setup and equipment configuration information.
	Oil Reference Files (*.ref)	Oil reference information.
	Database Files (*.mdb)	AMS Machinery Manager database files.
	External Envelope Files (*.env)	Generated by Autostat and contain mainly statistical envelope alarms created by Autostat. Plotdata, Export, and Nspectr retrieve the alarms from the file during analysis.

Table A-4: File category and type descriptions *(continued)*

Category	Type	Description
	User Component Files (*.wh)	User-defined warehouse files that store reusable components and equipment configurations.
	Images (*.bmp, *.pcx, *.tga, *.ann, *.eif, *.jpg, *.tiff)	Images used for plot captures, IR thermography images, etc.
	Diagrams (*.bmp)	Images used for equipment diagrams.
	Log Files (*.log)	Log files store information about applications and operations helpful for troubleshooting.
	Database Archives (*.zip)	Databases archived using the AutoZip utility.
	Online Database Template (*.cvb)	Template of a database for Online technology for use with Online Configuration.
	Online Transient Archive (*.bin)	Archive files for transient data collected with a CSI Machinery Health Monitor. These files are saved in a database's Archive folder.
	Portable Transient Archive (*.wfv *.ttt)	Archive files for transient data collected with a CSI Machinery Health Analyzer. These files are saved in a database's TransWF folder.
Additional Files	csi.ini	Configuration file for AMS Machinery Manager applications in the Tools tab.
	csiports.ini	Defines the TCP/IP port numbers on which the database server and network administration server communicate.
	DBLookup.mdb	Quick reference file that stores the fault framework, component types, and other lists used by the applications.
	enable.tbl	Determines the number of users allowed and other factors that are license-dependent.
	mhm.exe	Launches the AMS Machinery Manager Client.
	mhm.exe.config	Main configuration file for AMS Machinery Manager applications and settings.
	rbm.exe	Main menu application for AMS Machinery Manager.
	RBMadmin.exe	AMS Machinery Manager Network Administration.

Appendix B
Register AMS Machinery Manager

Topics covered in this appendix:

- *Register AMS Machinery Manager - Standalone system*
- *Register AMS Machinery Manager - Network system*

You can register the software when prompted during installation. Or, you can cancel the registration process, continue the installation, and register later.

Note
You must also register the software during a software update or repair.

B.1   Register AMS Machinery Manager - Standalone system

Prerequisites

Log on as a Windows administrator user on the computer where you installed AMS Machinery Manager.

Close AMS Machinery Manager Client.

In Windows Services, stop AMS Machinery Manager services, CsiNetAdmin and CSIMtDbMgr Service.

Procedure

1. In Windows Explorer, go to C:\RBMsuite\sys and double-click Serial.exe.
2. In the Serial dialog, click Register Product.

   The Register Product dialog appears. You need the Serial No. and Request No. during registration.

3. Contact Product Support to register.

Phone:	Toll free 888.367.3774, option 2 (U.S. and Canada)
	+63.2.702.1111 (Rest of world)
Email:	wwcs.custserv@AP.EmersonProcess.com
Web:	http://www.mhm.assetweb.com/reg

4. Enter the Response code given to you by a Product Support representative.

   The code is only valid for your computer.

5. Click OK.

The Register Product dialog closes.

6. In the Serial dialog, verify the Status is "Registered."

7. Click Close.

Your software is registered.

Postrequisites

Launch AMS Machinery Manager.

B.2   Register AMS Machinery Manager - Network system

Prerequisites

Log on as a Windows administrator user on the computer where you installed AMS Machinery Manager Network Server.

Close AMS Machinery Manager Client.

In Windows Services, stop AMS Machinery Manager services, CsiNetAdmin and CSIMtDbMgr Service.

Procedure

1. In Windows Explorer, go to C:\RBMnet\RBMsuite\sys and double click Serial.exe.

2. In the Serial dialog, click Register Product.

The Register Product dialog appears. You need the Serial No. and Request No. during registration.

3. Contact Product Support to register.

Phone:	Toll free 888.367.3774, option 2 (U.S. and Canada)
	+63.2.702.1111 (Rest of world)
Email:	wwcs.custserv@AP.EmersonProcess.com
Web:	http://www.mhm.assetweb.com/reg

4. Enter the Response code given to you by a Product Support representative.

The code is only valid for your computer.

5. Click OK.

The Register Product dialog closes.

6. In the Serial dialog, verify the Status is "Registered."

7. Click Close.

Your software is registered.

Postrequisites

Restart the services and launch AMS Machinery Manager.

Appendix C
Update CSI Machinery Health Monitor firmware

Topics covered in this appendix:

- *Install the firmware on the FTP server*
- *Reboot the CSI Machinery Health Monitor*
- *Check the firmware version in AMS Machinery Manager*

Emerson Process Management periodically releases updates to firmware. When you update your AMS Machinery Manager software, it is a good practice to update the firmware if a new version is available. Refer to the Readme file (Readme.rtf) on the Software Installation DVD for information about the current firmware version. These instructions apply to the following CSI Machinery Health Monitor systems:

- CSI 6500 Machinery Health Monitor
- CSI 2600 Machinery Health Expert
- CSI 4500 Machinery Health Monitor

C.1 Install the firmware on the FTP server

Prerequisites

You need the AMS Machinery Manager Software Installation DVD.

Procedure

1. Log on to the computer that hosts the FTP Server for your CSI Machinery Health Monitor.
2. Insert the AMS Machinery Manager Software Installation DVD.
3. Open the DVD in Windows Explorer and browse to Install/Online Firmware.
4. Double-click setup.exe and continue through the installation.

Important
On Windows 7 and Windows Server 2008, right click setup.exe and select Run as administrator.

---

5. Accept the license agreement.
6. Select the type of installation.

   - Select Typical to install the firmware and tools.
   - Select Custom to choose to install either the firmware or the tools.

7.   Follow instructions presented by the installation program.

The online firmware is installed in C:\Inetpub\ftproot\bin\.

Postrequisites

Cycle the power on each CSI Machinery Health Monitor that uses this FTP server.

C.2   Reboot the CSI Machinery Health Monitor

Cycle power on the CSI Machinery Health Monitor and verify the system is in good status after it boots.

Procedure

1.   Cycle the power on each CSI Machinery Health Monitor that needs to get the new firmware update from the FTP server.

2.   Wait approximately 5 minutes for the system to complete the boot process.

3.   Verify the system is powered on and in good status.

Refer to the Installation Manual for your specific hardware model for more information.

C.3   Check the firmware version in AMS Machinery Manager

1.   Log on to AMS Machinery Manager Client with the Administrator user account or a user that has permission to use online technology.

2.   Go to Tools > Setup/Communications > Online Configuration.

The Online Config window appears.

3.   Go to File > Online Server > Open.

The Select Online Server Host Computer dialog appears.

4.   Choose a server name from the menu and click OK.

The Online Server opens and a tree structure appears in the left pane of the Online Config window.

5.   In the tree structure, expand Units folder, and right-click the icon next to the CSI Machinery Health Monitor you want to check and select Properties.

The Unit Properties screen appears in the right pane and displays the State, Firmware Revision, DSP Revision, Total RAM, and Unit Type.

Figure C-1: Unit properties

6.   In the Unit Properties pane, verify State is Node(Unit)UP and Firmware Revision matches the version you installed.

Contact Product Support for help if the firmware version does NOT match.

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