INSTALLATION MANUAL

RMS ENTERPRISE TRANSPORTER V1.2.16

FIRMWARE FILE TRANSFER UTILITY FOR RMS ENTERPRISE V4.6 (OR HIGHER)

AV FOR AN IT WORLD

COPYRIGHT NOTICE

AMX© 2018, all rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of AMX. Copyright protection claimed extends to AMX hardware and software and includes all forms and matters copyrightable material and information now allowed by statutory or judicial law or herein after granted, including without limitation, material generated from the software programs which are displayed on the screen such as icons, screen display looks, etc. Reproduction or disassembly of embodied computer programs or algorithms is expressly prohibited.

LIABILITY NOTICE

No patent liability is assumed with respect to the use of information contained herein. While every precaution has been taken in the preparation of this publication, AMX assumes no responsibility for error or omissions. No liability is assumed for damages resulting from the use of the information contained herein. Further, this publication and features described herein are subject to change without notice.

AMX WARRANTY AND RETURN POLICY

The AMX Warranty and Return Policy and related documents can be viewed/downloaded at www.amx.com.

Table of Contents

RMS Enterprise Transporter 4
Overview 4
RMS Enterprise System Requirements 4
RMS Transporter Server Hardware Recommendations 4
Installation and Configuration Steps - Overview 5
Upgrading From an Earlier Version of RMS Transporter 5
Using RMS Update Manager and RMS Transporter 5
Installing RMS Enterprise File Transporter 6
Overview 6
Before You Start 6
Installing RMS Transporter 6
RMS Transporter Configuration 9
Overview 9
Upgrading File Transporter v1.x/v1.2.x to v1.2.16 11
Overview 11
1) Stop the RMS Enterprise Transporter Process 11
2)Uninstall Java 7/Java 8 12
3)Install Java SE9 (Windows 64 bit version) 12
Disabling Auto-Update For Java 13
5) Upgrade RMS Transporter 14
6) Configure RMS Transporter 14

RMS Enterprise Transporter

Overview

RMS Enterprise Transporter is a file transfer agent that allows the simultaneous transfer of firmware to multiple AMX devices on your system's network. This ensures that all devices are updated to the latest version at one time rather than making multiple trips to perform system upgrades. This tool also allows viewing of transfers to all devices in real time, so you can see at a glimpse the status of all file transfers, as well as the status of files that were transferred in previous sessions. Detailed log files are also available which allow viewing of historical data for each system or installation, whether it be one small room, or a campus wide system.

- RMS Transporter is installed separately from RMS Enterprise, and has it's own versioning (independent of RMS Enterprise). In order to use the Update Manager functionality in RMS, RMS Transporter must be installed according to the instructions in this guide.
- The RMS Transporter installation file (*RMSTransporter.exe*) is available to download from www.amx.com.

In the RMS Enterprise (v4.6.13 or higher) HTML interface , transporter functionality is presented in the *Update Manager* menu (FIG. 1):

FIG. 1 RMS Enterprise HTML UI (v4.6.13 or higher) menu bar

Note that the *Update Manager* menu is present in the menu bar, even if RMS Transporter has not been installed.

NOTE: *To ensure optimal performance of the RMS Enterprise UI, the RMS Transporter application should not be installed on the Primary RMS Enterprise Server. Install the RMS Transporter application on a separate server.*

RMS Enterprise System Requirements

• **RMS Enterprise Server:** Version 4.6.13 • **RMS SDK v4.6** (or higher) • **Java SE:** Java SE v9	• **RMS Enterprise Server:** Version 4.6 or higher. • **RMS SDK v4.6** (or higher) • **Java SE:** Java SE v8

NOTE: *Use RMS SDK v4.6 (or higher) with RMS Server v4.6.13 (or higher). If an earlier version of the RMS SDK is used with RMS v4.6.X, a manual reboot of the target master or client gateway may be necessary after the firmware transfers are complete.*

RMS Transporter Server Hardware Recommendations

NOTE: *The RMS Transporter application should not be installed on the primary RMS Enterprise Server, as this can lead to performance issues on the RMS Enterprise UI (including potentially sluggish response times during transfer operations). To ensure optimal performance, always install RMS Transporter on a separate dedicated server.*

Verify that each server that will run RMS Transporter meets or exceeds the following minimum requirements (check the appropriate boxes below):

RMS Transporter Server Hardware Recommendations			
Does your RMS Transporter server meet the following minimum hardware recommendations?		**Yes**	**No**
• Processor	Dual core Intel Xeon processor @ 2.67GHz (or equivalent)		
• Memory	4 GB		
• Display	1280 x 1024 resolution		
• Hard Disk	12 GB available space for RMS Transporter application files. *Note: AMX firmware files will be stored locally on the Transporter. These files are automatically removed from the Transporter after 90 days since their last use.*		
Yes to all	Please continue to the next step.		
No to any	You must obtain a server that meets these minimum requirements to install RMS Transporter.		

NOTE: *RMS Transporter uses port 8081 for HTTP communications. Verify that port 8081 is open (see FIG. 2).*

RMS Transporter Operating System (OS)		
Do you have a compatible server OS installed?	**Yes**	**No**
Supported Microsoft Server Operating Systems: • Microsoft Windows Server 2012: R2 (64-bit): Standard Edition • Microsoft Windows Server 2008 R2 (64-bit): Web Edition / Standard Edition / Enterprise Edition • The Windows *Desktop Experience* feature may be required in order for the RMS Scheduling Configuration Tool to work properly.		
Yes	Please continue to the next step.	
No	You must obtain a compatible server OS to install RMS.	
Do you have an administrative account to the server on which RMS Transporter will be installed?	**Yes**	**No**
Note: RMS Enterprise Troller is a system level application and requires administrative access to install and configure RMS, including RMS Transporter.		
Yes	Please continue to the next step.	
No	You must obtain an administrative logon account, or logon to the server with a user account that has administrative access to the server.	

NOTE: *RMS Transporter v1.2.16 is only supported on 64-bit systems.*

FIG. 2 illustrates the basic layout of an RMS Enterprise System that uses two RMS Transporter servers to update firmware files on AMX devices in the RMS system:

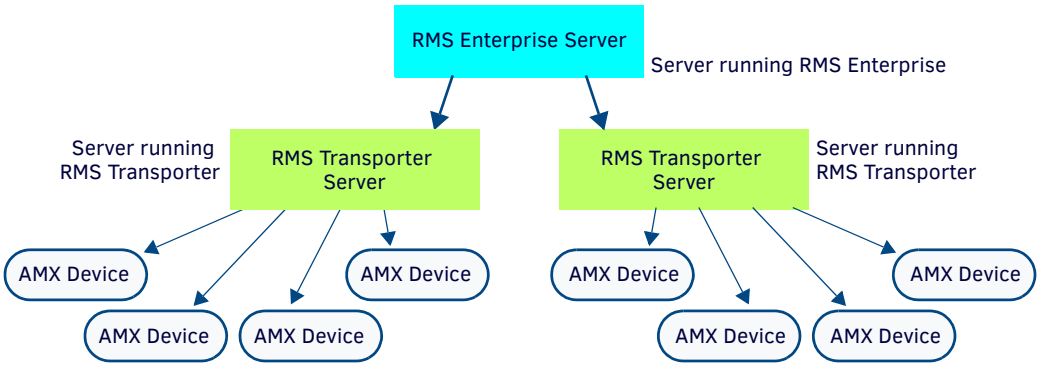

FIG. 2 RMS Transporter - basic system layout

As indicated, multiple RMS Transporter servers can communicate with the RMS Enterprise Server.

- Each RMS Transporter server communicates with the RMS Enterprise Server over Port **80**.
- Each RMS Transporter Server communicates with AMX devices over port **1319**.
- Each RMS Transporter Server communicates with AMX devices via HTTP over port **8081** (default). This port can be changed in the RMS Transporter Configuration tool (see page 10).

Installation and Configuration Steps - Overview

1. **Gather RMS Server and RMS Transporter Server Information:** To install and configure RMS Update Manager, the following information will be required:
   - **RMS Server URL, User Name and Password:** the URL or IP address of the primary RMS (the server that runs RMS Enterprise), and the required login credentials (if applicable).
   - **RMS Transporter Server URL, User Name and Password:** the URL or IP address of the server that will run RMS Transporter, and the required login credentials (if applicable).
2. **Install RMS Transporter**: Refer to the *Installing RMS Enterprise File Transporter* section on page 6 for instructions.
3. **Configure RMS Update Manager:** Refer to the *RMS Transporter Configuration* section on page 9 for instructions.

Upgrading From an Earlier Version of RMS Transporter

The latest version of RMS Transporter (v1.2.16) requires an update to Java SE v9. For details on upgrading to RMS Transporter v1.2.16 from an earlier version, refer to the *Upgrading File Transporter v1.x/v1.2.x to v1.2.16* section on page 11.

Using RMS Update Manager and RMS Transporter

For instructions on using RMS Update Manager (in conjunction with RMS Transporter) to manage firmware on AMX system devices, refer to the **RMS Update Manager** section of the *RMS Enterprise System Administrator's Manual*.

Installing RMS Enterprise File Transporter

Overview

To add RMS Enterprise File Transporter functionality to RMS Enterprise, install the *RMS Enterprise Transporter* application (as described below), and then run the *RMS Update Manager Configuration* utility (see *RMS Transporter Configuration* on page 9).

- To ensure optimal performance of the RMS Enterprise UI, the RMS Transporter application should not be installed on the Primary RMS Enterprise Server. Install RMS Enterprise Transporter on a separate server.
- The RMS Enterprise Transporter installation file (*RMSTransporter.exe*) is available to download from www.amx.com.
- Verify that the server that will run RMS Enterprise Transporter meets or exceeds the minimum OS and hardware requirements on page 4.
- The latest version of RMS Transporter (v1.2.16) requires an update to Java SE v9. For details on upgrading to RMS Transporter v1.2.16 from an earlier version, refer to the *Upgrading File Transporter v1.x /v1.2.x to v1.2.16* section on page 11.

Before You Start

- Verify that the Primary RMS Server is running.
- Have the IP Address and login credentials for the RMS Enterprise Server.
- Have the IP Address and login credentials for the RMS Enterprise Transport Server.

Installing RMS Transporter

1. Double-click the *RMSTransporter.exe* installation file to begin the installation. This opens the *Welcome to the RMS Enterprise Transporter Setup Wizard* screen (FIG. 3):

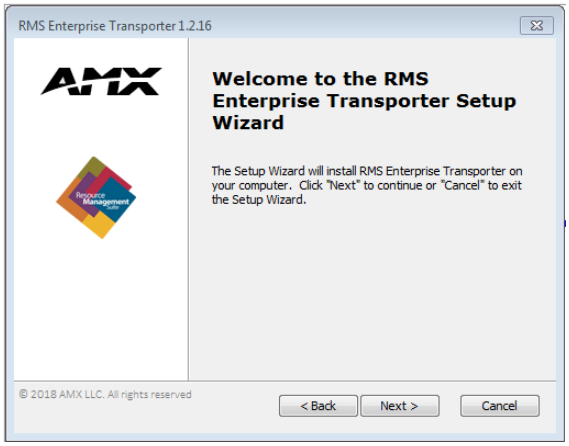

FIG. 3 Welcome to the RMS Enterprise Transporter Setup Wizard screen

2. Click **Next** to proceed to the *End-User License Agreement* screen (FIG. 4):

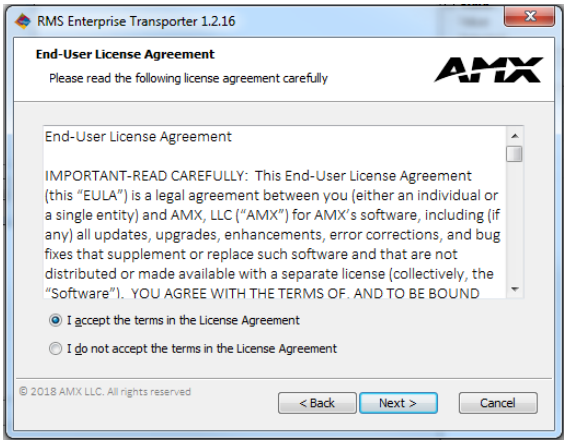

FIG. 4 End User License Agreement

3. Review the *End-User License Agreement, and* click **I accept the terms in the license agreement** to enable the *Next* button. Click **Next** to proceed to the *Select Installation Folder* screen (FIG. 5):

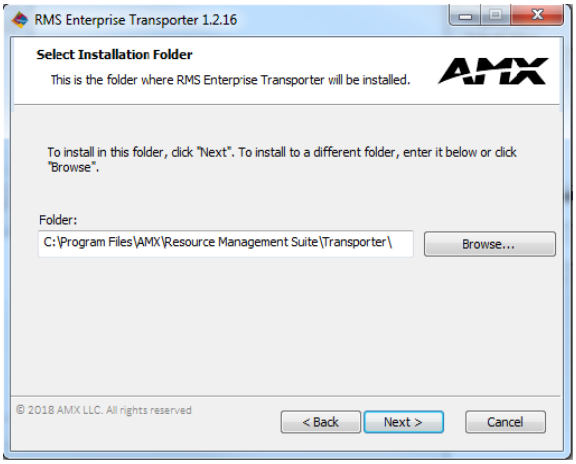

FIG. 5 Select Installation Folder

The default target directory for the Interface installation is indicated in the text field on this screen:

C:\Program Files\AMX\Resource Management Suite\Transporter

4. Click **Next** to proceed to the *Ready To Install* screen (FIG. 6):

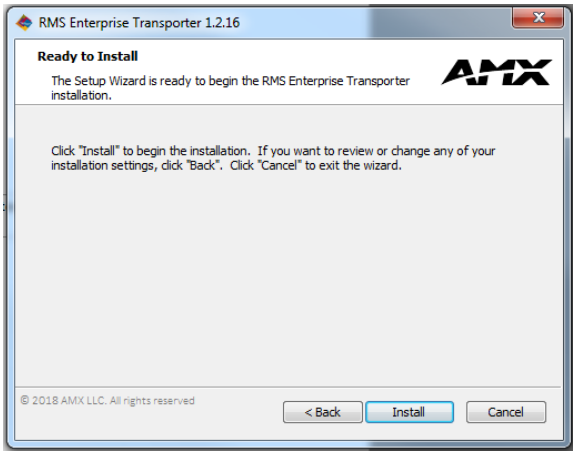

FIG. 6 Ready To Install screen

5. Click **Install** to begin installing RMS Enterprise Transporter to the target directory on the specified server. Installation progress is indicated in the *Installing RMS Enterprise Transporter* screen (FIG. 7):

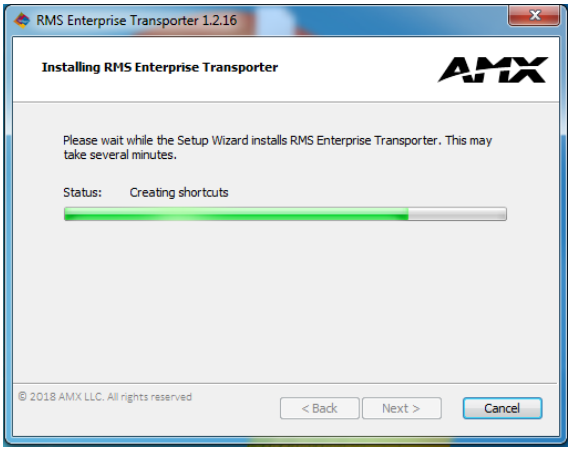

FIG. 7 Installing RMS Enterprise Transporter

- If you wish to review or change any of your installation settings, click *Back*.
- Click *Cancel* to exit the wizard.

6. When the installation is complete, the *Completed the RMS Enterprise Transporter Setup Wizard* screen is displayed (FIG. 8):

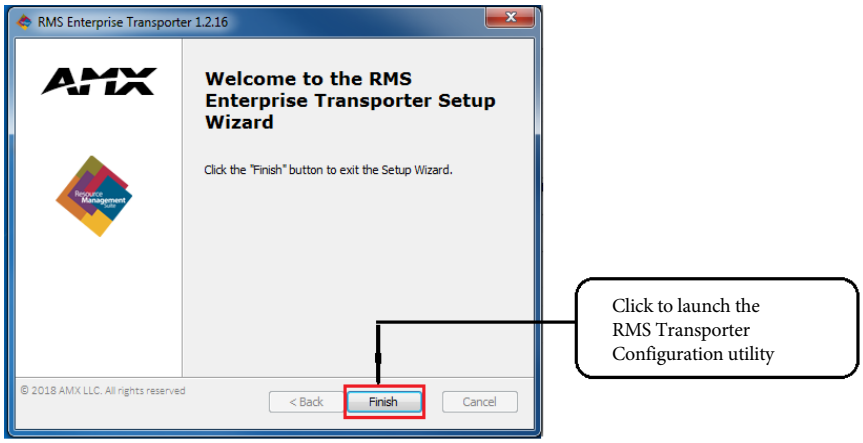

FIG. 8 Completed the RMS Enterprise Transporter Setup Wizard screen

7. Click **Finish** to close the *RMS Enterprise Trnsporter Setup Wizard*.

At this point, RMS Enterprise Transporter application and the *RMS Update Manager Configuration* utility are both installed. The next step is to configure the RMS Enterprise Transporter tool. This process will invoke the *RMS Update Manager Configuration* utility, as described in the following section.

RMS Transporter Configuration

Overview

At the end of the *RMS Enterprise Transporter Setup Wizard*, click **Finish** to launch the *RMS Transporter Configuration* utility. This utility allows you to configure the RMS Enterprise Transporter interface to communicate with RMS Enterprise.

The initial view is of the *RMS Server* tab (FIG. 9):

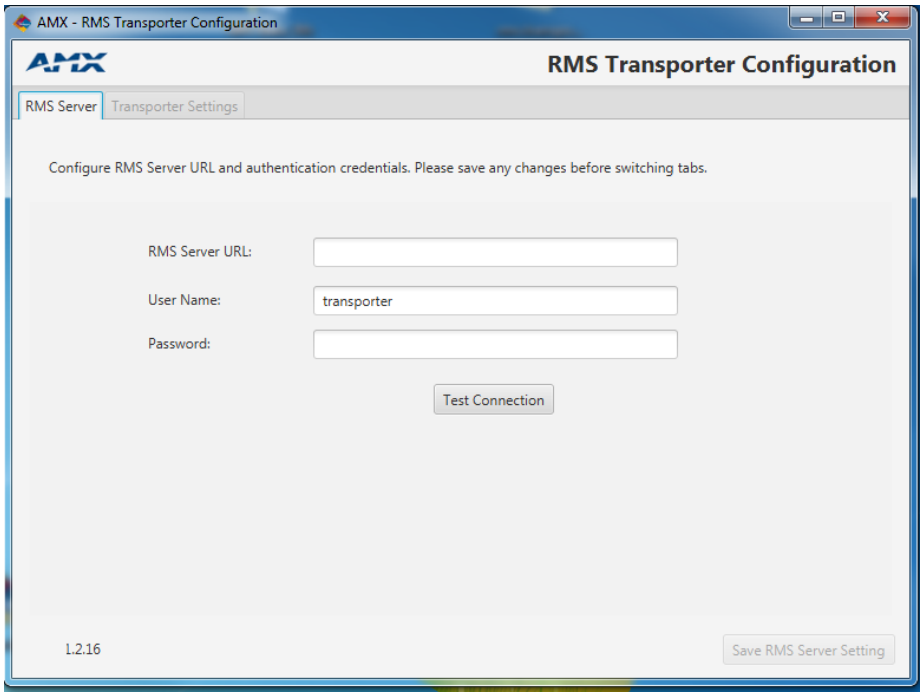

FIG. 9 RMS Transporter Configuration - RMS Server tab

1. Enter the appropriate connection information for your RMS Enterprise server:

RMS Transporter Configuration - RMS Server tab options	
RMS Server URL:	Enter the URL of the RMS Server that will run RMS Enterprise Transporter. URL must be in the form: **http://<server>:<port>/rms** If the port is 80, then it can be omitted.
User Name:	Enter the user name as required by the server (default = "*transporter*")
Password:	Enter the password as required by the server (default = "*password*")

NOTE: *RMS Transporter uses port 80 to communicate with the RMS Server, and uses port 1319 to communicate with system devices.*

2. Click the **Test Connection** button to verify this information. The program will indicate that the connection was successful or not. If the connection attempt fails, re-enter the server information. You cannot proceed until you have successfully connected to the server.
3. Click **Save RMS Server Setting** to save these settings, register the RMS Enterprise Transporter Interface with the server, and enable the *File Transporter Settings* tab (see FIG. 11 on page 10):

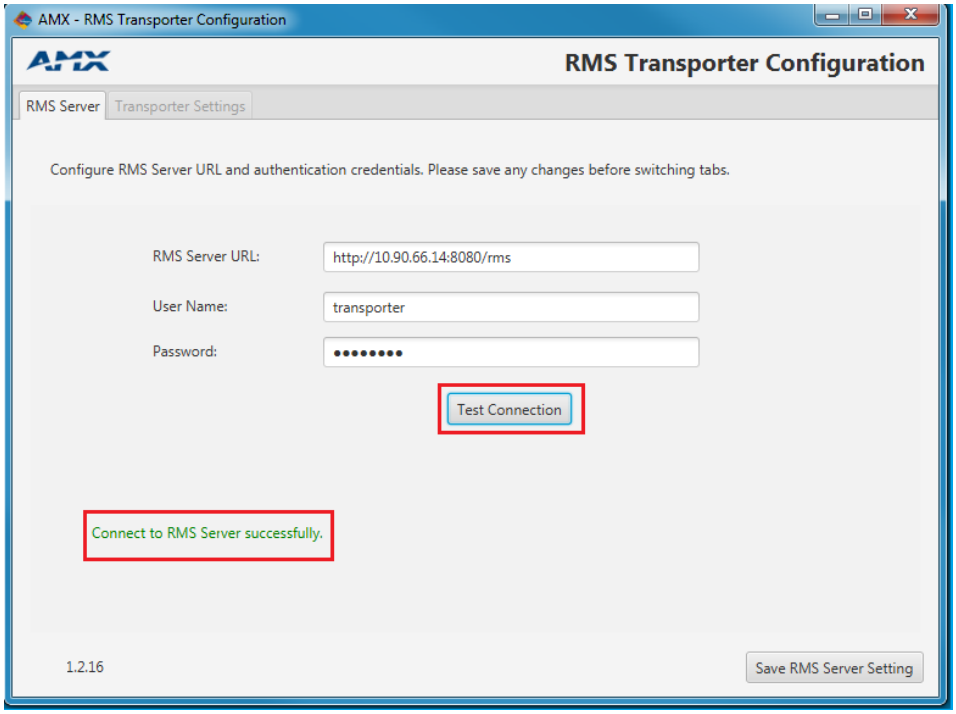

FIG. 10 RMS Transporter Configuration - RMS Server tab (Connected)

4. Open the *Transporter Settings* tab (FIG. 11):

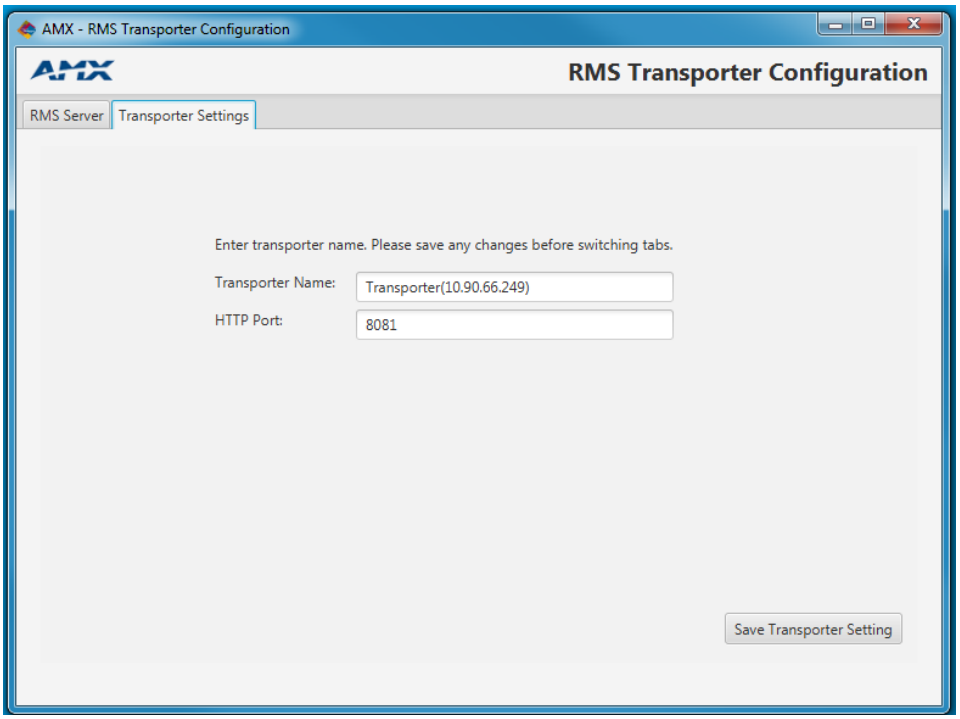

FIG. 11 RMS Transporter Configuration - Transporter Settings tab

5. In the **Transporter Name** field, enter a unique, friendly name for the RMS Enterprise Transporter.

   NOTE: *Transporter names must be unique - if an existing transporter name is entered, an error is invoked. In this event, re-name the Transporter with a unique name and re-save.*

6. By default, each RMS Transporter Server communicates with AMX devices via HTTP over port **8081**. This port assignment can be changed if necessary.
7. Click **Save Transporter Setting** to save changes. The dialog will indicate that the setting has been saved.
8. Close the *RMS File Transfer Configuration* utility.

Upgrading File Transporter v1.x/v1.2.x to v1.2.16

Overview

If you have upgraded your RMS Server to v4.6.13, it is necessary to also upgrade RMS Enterprise File Transporter to v1.2.16, as described in this section.

NOTE: *For instructions on on upgrading RMS Enterprise Server to v4.6.13, refer to the RMS Enterprise Installation Manual.*

1) Stop the RMS Enterprise Transporter Process

The first step in upgrading to RMS Enterprise Transporter v1.2.16 is to stop the current (v1.x/v1.2.x) RMS Enterprise Transporter process: 1. Open Windows Computer Management (**Start > Administrative Tools > Computer Management**):

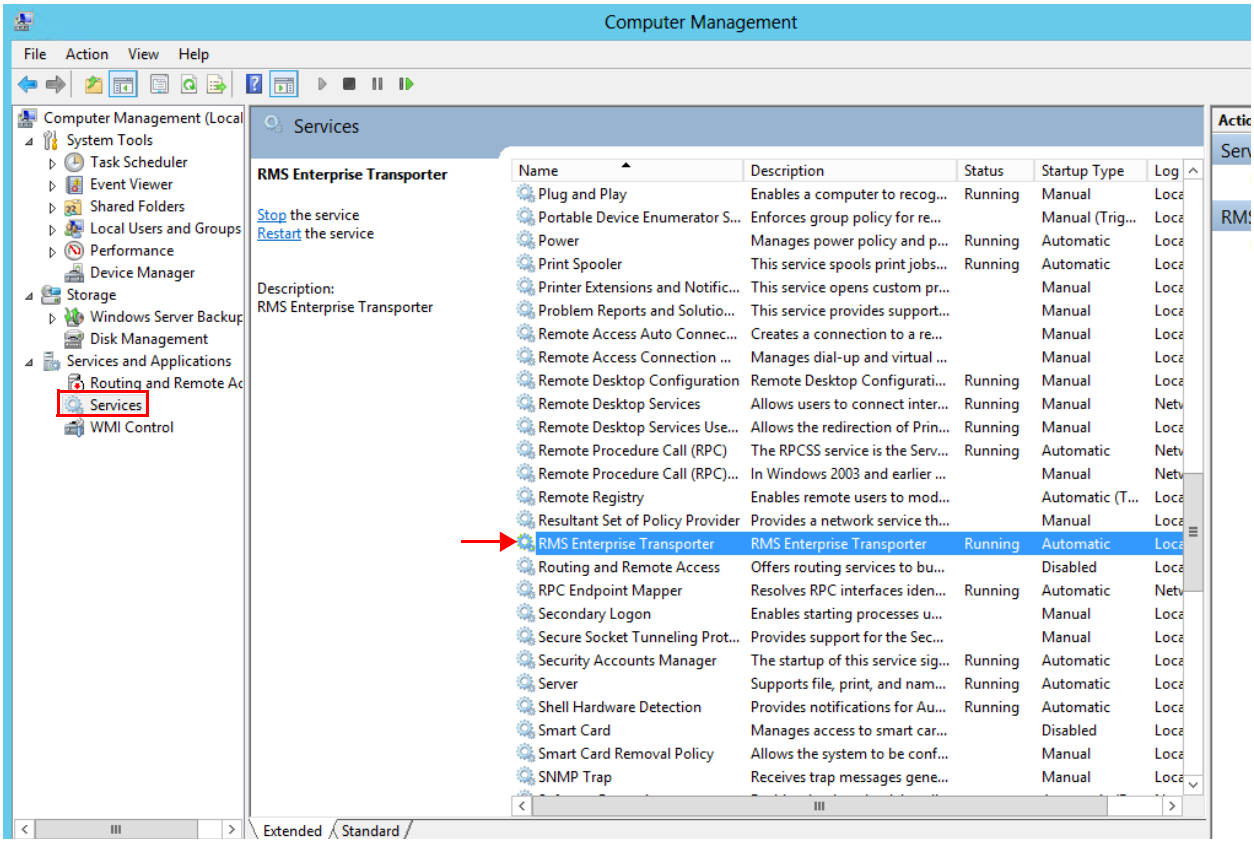

FIG. 12 Windows Computer Management - RMS Enterprise Transporter service

2. In the Computer Management navigation bar, select **Services and Applications > Services.**
3. In the *Services* window, select the **RMS Enterprise Transporter** service.
4. Right-click and select **Stop** (FIG. 13):

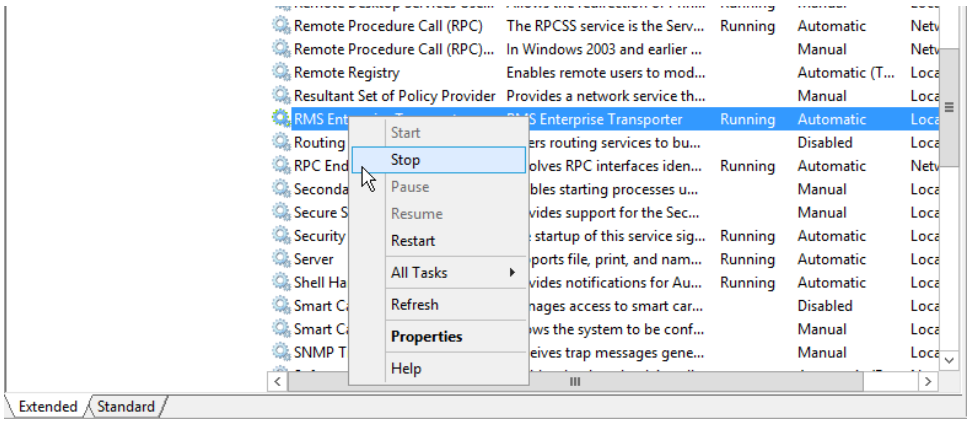

FIG. 13 RMS Enterprise Transporter service Context Menu

2) Uninstall Java 7 /Java 8

1. Open Windows Control Panel (**Start > Control Panel**).
2. Select **Programs and Features.**
3. In the *Uninstall or change a program* window, select Java 7, and click **Uninstall** (FIG. 14):

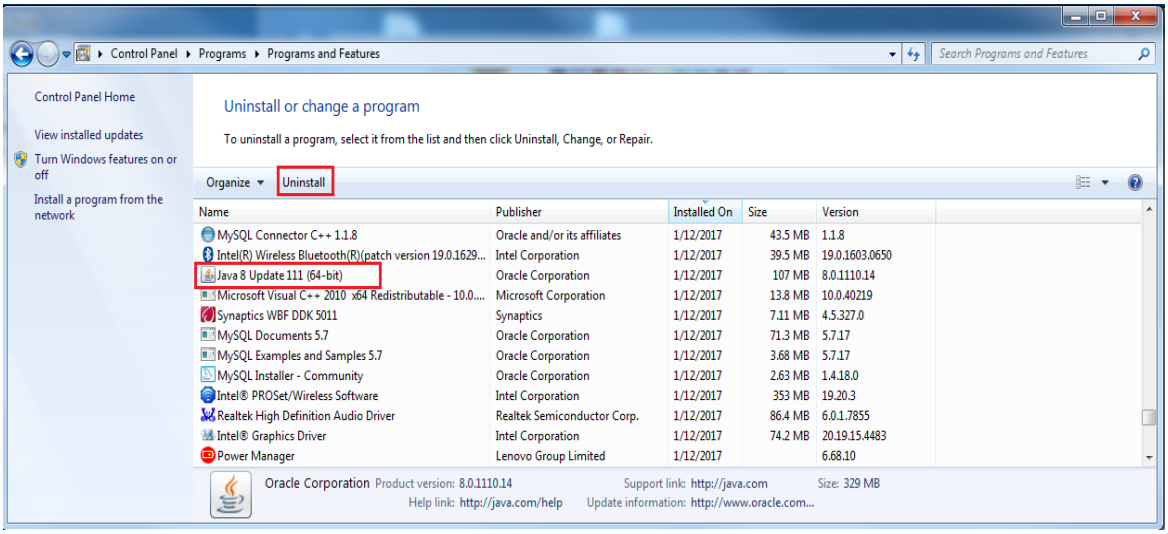

FIG. 14 Programs and Features > Uninstall or change a program (Java 7 /Java 8 selected to uninstall)

4. The program will prompt you to verify this action - click **Yes** to proceed.

3) Install Java SE9 (Windows 64 bit version)

Java SE9 (**Standard Edition version 9.0.4**) installation files are available to download from

http://www.oracle.com/technetwork/java/javase/downloads/java-archive-javase9-3934878.html

NOTE: *The minimum requirement for **Java SE9.0.4** is the JRE (Java Runtime Environment). RMS Enterprise Transporter will also work with the JDK (Java Development Kit), since it includes the JRE.*

1. Download and launch the Java SE9.0.4 JRE installer. FIG. 15 shows the Java SE9.0.4 installer Welcome Screen.

FIG. 15 Java SE9.0.4 installer - Welcome screen

2. Click **Install** to begin the installation. Progress is indicated in the Installing Java dialog.
3. When complete, close the Java SE8 installer (FIG. 16).

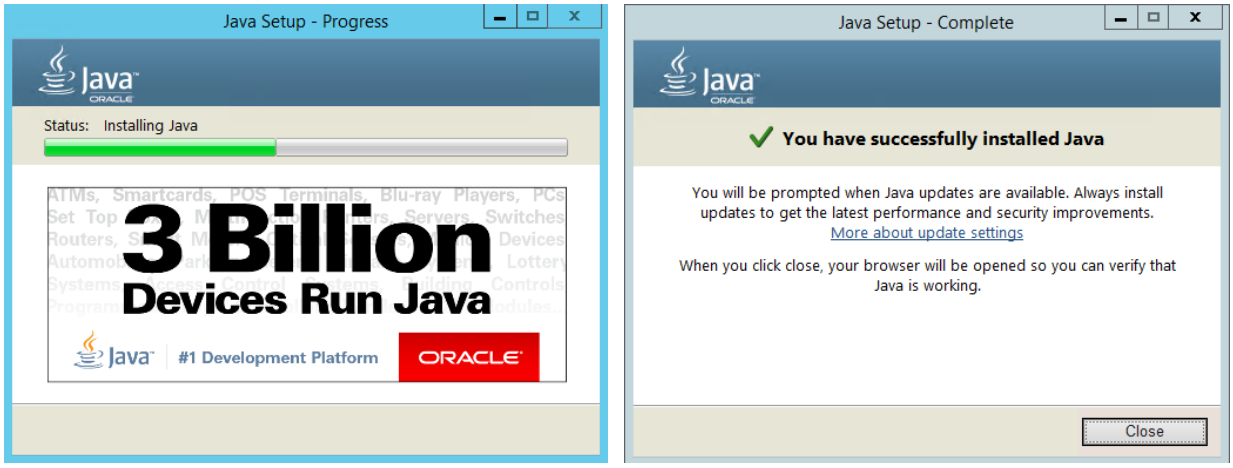

FIG. 16 Java SE9.0.4 installer

Disabling Auto-Update For Java

Because RMS Enterprise Transporter requires a specific version of Java, it is important that Java's auto-update feature is disabled, to avoid compatibility issues in the future:

1. On the main *Control Panel Page*, select **Java**. This opens the *Java Control Panel* (FIG. 17):

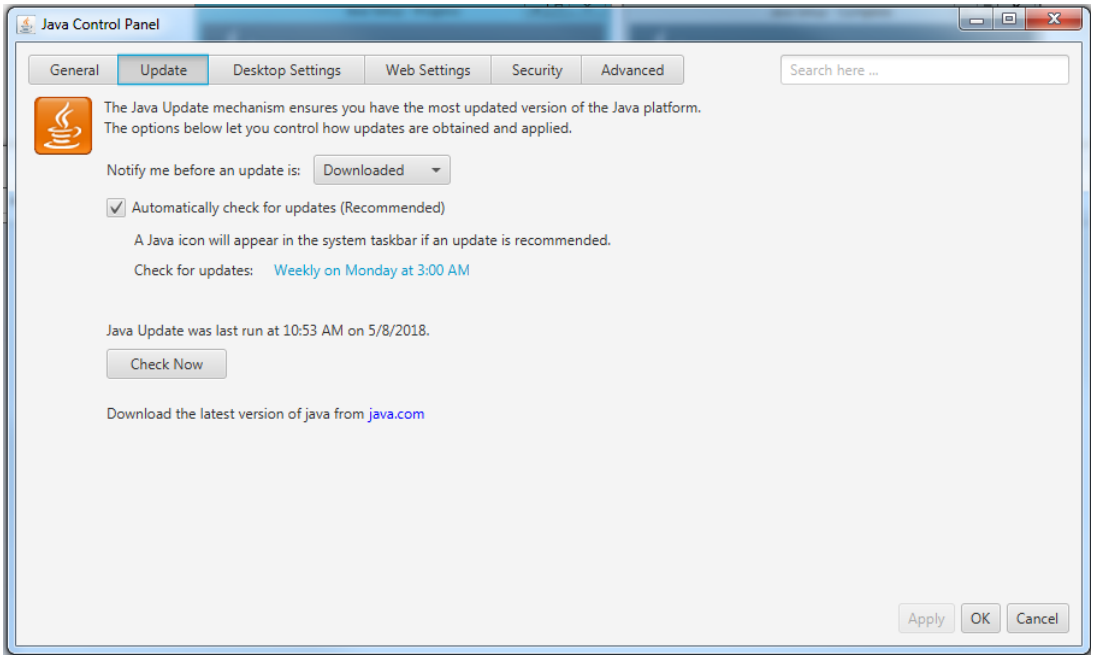

FIG. 17 Java Control Panel

2. Un-check the **Check for Updates Automatically** option.
3. Java will prompt you to verify this action - click **Never Check** to proceed (FIG. 18):

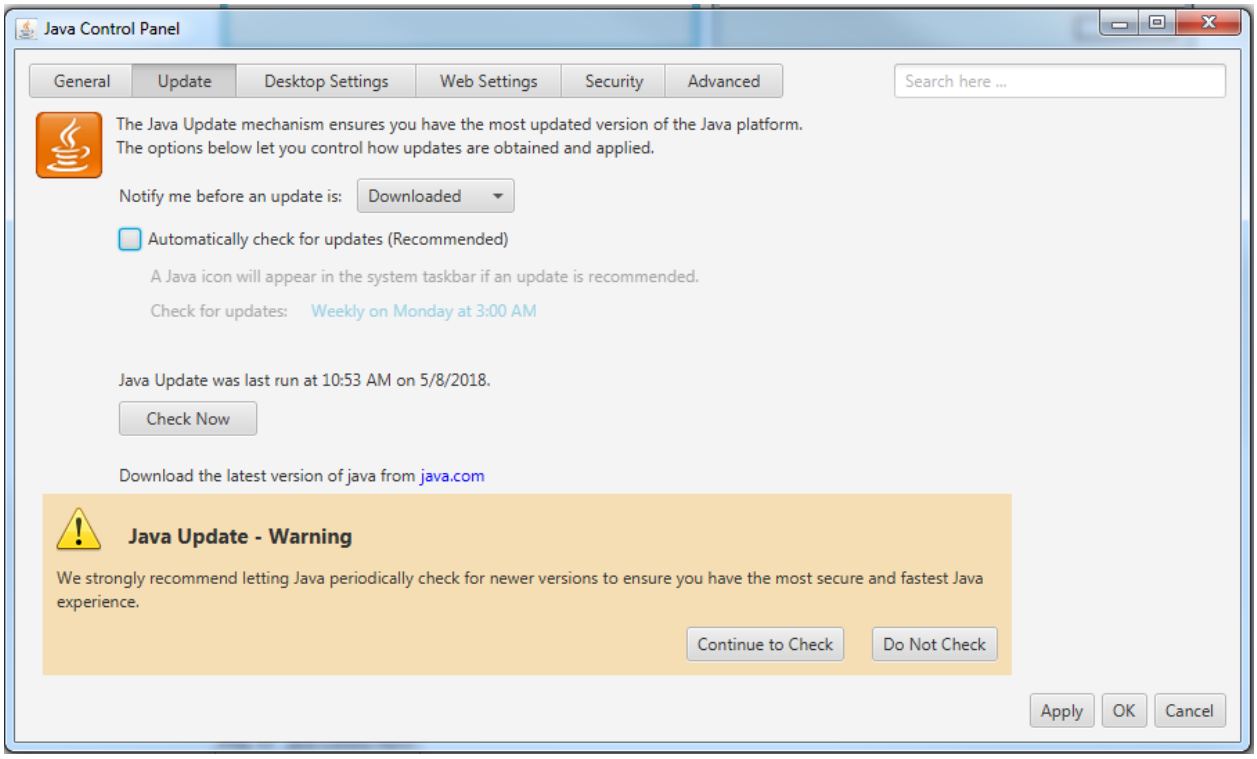

FIG. 18 Java Update - Warning

4. Click **OK** to close this dialog.

5) Upgrade RMS Transporter

With Java v9.0.4 installed and configured, the system is ready to install RMS Enterprise Transporter v1.2.16. Before you start:

- Verify that the Primary RMS Server is running.
- Have the IP Address and login credentials for the RMS Enterprise Server.
- Have the IP Address and login credentials for the RMS Enterprise Transport Server.

Double-click the *RMSTransporter.exe* installation file to begin the installation. This process is described in the *Installing RMS Enterprise File Transporter* section on page 6.

6) Configure RMS Transporter

When the **Finish** button is clicked in the last dialog of the RMS Enterprise Transporter Setup Wizard, the *RMS Update Manager Configuration* utility is launched automatically.

When upgrading from an earlier version of RMS Transporter, the configuration settings should be retained. However, it is recommended that you review the RMS Configuration settings.

1. Verify that the information in both the *RMS Server* and *Transporter Settings* tabs is correct.
2. Click **Save Transporter Setting** to save changes. The dialog will indicate that the setting has been saved.
3. Close the *RMS File Transfer Configuration* utility.

Refer to the *RMS Transporter Configuration* section on page 9 for details on using the RMS Transporter Configuration tool.

© 2018 Harman. All rights reserved. Resource Management Suite and RMS, AMX, AV FOR AN IT WORLD, and HARMAN, and their respective logos are registered trademarks of HARMAN. Oracle, Java and any other company or brand name referenced may be trademarks/registered trademarks of their respective companies.
AMX does not assume responsibility for errors or omissions. AMX also reserves the right to alter specifications without prior notice at any time.
The AMX Warranty and Return Policy and related documents can be viewed/downloaded at www.amx.com.
3000 RESEARCH DRIVE, RICHARDSON, TX 75082 AMX.com | 800.222.0193 | 469.624.8000 | +1.469.624.7400 | fax 469.624.7153
AMX (UK) LTD, AMX by HARMAN - Unit C, Auster Road, Clifton Moor, York, YO30 4GD United Kingdom • +44 1904-343-100 • www.amx.com/eu/

Last Revised:
5/10/2018