The Avocent® HMX High Performance KVM Extender System, Next Generation, and the Avocent® HMX Advanced Manager Release Notes Version 4.5 April 12, 2017

This document outlines:

- 1. Upgrade Instructions
- 2. Package Version Information
- 3. Features, Enhancements and Resolved Issues (By Version)
- 4. Known Issues

1. Upgrade Instructions

NOTE: For additional product information, please refer to the Avocent® HMX High Performance KVM Extender System Next Generation Installer/User Guide and the Avocent® HMX Advanced Manager Installer/User Guide.

Transmitters and receivers are flash upgradable at any time to ensure that your system is running the most current version available. If your system is running the most current firmware version and is managed by the Avocent® HMX Advanced Manager software, then that same version must be used across all units in your system. Firmware versions can be mixed in configurations not using the Advanced Manager software, but it is always recommended to use the most current version. The Advanced Manager software On-Board Web Interface (OBWI) provides a central location for you to perform a firmware upgrade on any linked unit.

Pre-requisites

A mixed system where the Advanced Manager software is at version 4.4 and the HMX extender system transmitters and receivers are at version 4.5 is not supported. If the Avocent® HMX Advanced Manager software is upgraded to version 4.5, then the connected transmitters and receivers (endpoints) must also be upgraded to version 4.5 in order to maintain compatibility. While the HMX Advanced Manager can be upgraded straight to version 4.5, the transmitters and receivers must be upgraded to version 4.4 first and then upgraded to version 4.5.

NOTE: It is also not possible to downgrade the extenders to version 4.1, 4.2 or 4.3. If your HMX Advanced Manager software is at version 4.1, 4.2 or 4.3, then it must be upgraded to the same version as the endpoints.

If your HMX Advanced Manager software server is being used in a backup configuration, then you must upgrade all of the HMX Advanced Manager software servers before upgrading the transmitters and receivers. See the Avocent[®] HMX Advanced Manager Installer/User Guide for additional information.

For Systems Running Versions earlier than 4.4

As soon as you upgrade the Avocent® HMX Advanced Manager software to version 4.5, you will be prompted to upgrade the transmitters and receivers since the minimum hardware version has been set for version 4.5.

To upgrade the firmware on the Avocent® HMX Advanced Manager server:

- 1. In the user interface (OBWI) of the HMX Advanced Manager server, or the primary server, select *Dashboard- Settings- Managers* and ensure that the Require Authentication radio button is set to No. If it is not set to No, change it and click *Save*.
- 2. Select *Dashboard- Backups* and ensure the backup option to Download to your computer is selected. Click *Backup Now*.
- 3. Using the HMX Advanced Manager software server, verify that all transmitters and receivers are connected and online.
- 4. Navigate to Dashboard- Updates and browse to the location of the software update file.
- 5. Select the file and click Open.
- 6. Click Upload. Do not restart or turn the Advanced Manager software server off until the upgrade is complete.
- 7. After the upgrade is complete, click Restart Now.

NOTE: While the update is applied, the primary server temporarily loses communication. During this time, the backup server acts as the primary server. You are redirected to the backup server's web interface and automatically logged in. When the primary server becomes available, you are redirected back to that web interface.

- 8. If you have an Avocent® HMX Advanced Manager backup server, repeat the steps above to upgrade the backup server. Then, proceed to the next step.
- 9. The upgrade should now be complete. To verify, select *Dashboard- Settings- Managers* on the primary HMX Advanced Manager software server and confirm both servers are upgraded and synchronized.

To upgrade the firmware on the transmitters and receivers:

- 1. In the user interface (OBWI) of the HMX Advanced Manager server, select Dashboard- Updates.
- 2. In the Upload new TX/RX Firmware section, click Browse.
- 3. Select the firmware file and click Open.
- 4. Click Upload.
- 5. For each transmitter and receiver to be upgraded, select the corresponding checkbox.

-or-

Select the Upgrade All checkbox.

6. Click Upgrade Selected Transmitters.

-or-

Click Upgrade Selected Receivers.

2. Package Version Information

Appliance/Product	Image/Code Version
Avocent® HMX High Performance KVM Extender System Transmitters and Receivers	V4.5.40863
Avocent® HMX Advanced Manager	V4.5.40890

3. Features, Enhancements and Resolved Issues (By Version)

This section highlights features and/or enhancements available since the last version/update of the Avocent® HMX extender system and/or the Avocent® HMX Advanced Manager software.

Version 4.5 (This Release)

- This release covers version V4.5.40863 for the Avocent® HMX 5100, 5200, and 6200 transmitters and receivers as well as the HMX 6210 transmitter. This release also covers version V4.5.40890 of the Avocent® HMX Advanced Manager software.
- Along with maintaining the existing code base and resolving customer issues, the 4.5 code release of the extender system and the Advanced Manager also adds in packet loss monitoring and C-USB-LAN integration.
 - For the packet loss monitoring, there are two new configuration options: an alert threshold expressed as a percent of packets that are dropped and an alert window (in Minutes).
 - Packet loss monitoring occurs if statistics are enabled on at least one receiver and alerts are enabled.
 - When packets being dropped exceed a certain threshold within the specified time window, the HMX Advanced Manager software will send an alert (an SNMP notification/trap and/or an email). An SNMP trap and an email can be set up at the same time.
- The following new features have been added to the OSD:
 - Hotkeys can be disabled.
 - The admin can select text to be displayed in the login screen.
 - Channels can be marked as sensitive.
 - \circ $\,$ $\,$ The channel name can be presented as an on-screen overlay.

Implemented After Version 4.4.40349 of the HMX Transmitter/Receiver Code

- Support was added for card readers using the "Clear endpoint halt" USB method, including the Lenovo/Gem Plus CT40 card reader.
- The issue of USB access being lost when the host is rebooted has been fixed.
- Support has been added to disable OSD interaction. This feature must be enabled for an AXIS joystick.

- The rolling banner message requesting the reconnection of USB devices has been fixed.
- A statistics graph was fixed on the receivers.

Implemented After Version 4.4.40323 of the HMX Advanced Manager Software Code

- Channels have been added to the transmitters page. You are now able to see the number of channels associated with an individual transmitter, and clicking on the value opens a new page where channel configuration can be done.
- A new 500mS value was added for the hot plug signal detect period.
- Previously, when a channel name exceeded eight Chinese characters, it was not displayed. Now, channel names can support up to 15 Chinese characters.
- In an earlier release, the OSD on a primary HMX Advanced Manager software server was slowed down if a backup software server failed. This has been resolved.
- The mail server has been improved so that emails can be sent to multiple recipients as well as a server without authentication. Email alert subjects are also now more informative.

4. Known issues

Unit	Issue
Avocent® HMX Advanced Manager software server	In some versions of Chrome that have the option to save passwords enabled, the OSD login message and cluster password is auto-filled. As a result, the backup server being set up in the cluster will not be allowed to join because the password is unknown. Before adding a backup server, ensure the cluster password has not been auto-filled, or just use another browser.
Avocent® HMX Advanced Manager software server	Because the maximum number of AD users that can be a member of an AD group is 1499, the group is returned as empty if there are 1500 or more users in a group.
Avocent® HMX Advanced Manager software server	The create_channel API call returns an error if the method contains information about the second video head for transmitters without the second video head.
Avocent® HMX High Performance KVM Transmitters and Receivers	Occasionally, when the channel overlay is in the middle of the screen and the OSD menu is brought up, there is video corruption to the right-hand side of the OSD menu (where a scroll bar would be on a low video resolution)
Avocent® HMX High Performance KVM Transmitters and Receivers	At times, the new OSD channel reminder banner is mispositioned in the center of the screen. This has been observed if the pop-up messages have been disabled because the positioning image is not sent if video resolution changes without the pop-up message box enabled. Opening the OSD menu and reconnecting the channel brings the reminder banner into the correct position (top-left of the screen). Enabling pop-up messages also fixes this issue.
Avocent® HMX High Performance KVM Transmitters and Receivers	When using hotkey switching to change channels (ALT key), some hotkeys have been left in the down state, leading to mistyped keyboard characters. Pressing the hotkey again should release the key and correct the issue.

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