Vertiv™ Avocent® HMX Advanced Manager
Release Notes

VERSION 5.8, AUGUST 2023

Release Notes Section Outline

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1. Upgrade Instructions

NOTE: For additional product information, please see the Vertiv™ Avocent® HMX Advanced Manager Installer/User Guide.

Important Prerequisites

Prior to upgrading your firmware, please ensure you have verified the following information:

- Ensure you make a backup of the Vertiv™ Avocent® HMX Advanced Manager before upgrading.

- Ensure you are using Chrome, Firefox or Safari for upgrading; Vertiv does not recommend using Microsoft IE or non-Chromium based Edge browsers.

- Check your Vertiv™ Avocent® HMX Advanced Manager factory firmware version. If it is below 4.1.36651, you MUST upgrade to version 4.15 before upgrading to firmware version 5.3 or higher.

- Ensure your Vertiv™ Avocent® HMX 5100, 5200, 6200 and 6210 extender firmware is version 4.9 or higher. (Version 4.9 is the minimum endpoint firmware requirement for those extenders to be listed in the Vertiv™ Avocent® HMX Advanced Manager software Transmitter and Receiver tabs.) After upgrading the Vertiv™ Avocent® HMX Advanced Manager, a warning message with a link to the list of endpoints not meeting the minimum firmware requirement will appear in the Transmitter and Receiver tabs.

- Check your Vertiv™ Avocent® HMX 6500 receiver firmware version. If it is a version lower than 1.1.0.16, it MUST be upgraded before upgrading the Vertiv™ Avocent® HMX Advanced Manager to version 4.15. or 5.5.
  NOTE: When upgrading the Vertiv™ Avocent® HMX 6500 receiver, do not select the *Reboot before Upgrade* option.

- If upgrading multiple Vertiv™ Avocent® HMX Advanced Manager servers, ensure you upgrade the primary first and then the backup.
  NOTE: Do not upgrade the primary and backup concurrently.

Upgrading the Firmware

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

1. In the user interface (OBWI) of the Vertiv™ Avocent® 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 Vertiv™ Avocent® 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 Vertiv™ Avocent® HMX 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 User Interface (UI) and automatically logged in. When the primary server becomes available, you are redirected back to that web UI.

8. If you have a Vertiv™ 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 Vertiv™ Avocent® HMX Advanced Manager software server and confirm both servers are upgraded and synchronized.

2. Package Version Information

APPLIANCE/PRODUCT	IMAGE/CODE VERSION
Vertiv™ Avocent® HMX Advanced Manager	V5.8.10017

3. Features, Enhancements and Resolved Issues

NOTE: This release requires Vertiv™ Avocent® HMX Advanced Manager software version 4.12 or higher.

Features and Enhancements

This version of the Vertiv™ Avocent® HMX Advanced Manager introduces the following features and/or enhancements:

- Added Auto-Login feature – The ability to enable or disable the OSD has been added to this release while having the Autologin enabled.

- Added Auto-Logout feature – In conjunction with release v7 for the Vertiv™ Avocent® HMX 8000 series and the Vertiv™ Avocent® HMX 6200 DP extenders or v5.1 for the Vertiv™ Avocent HMX 5000/6000 series, this feature will disconnect and log out the user at a receiver unit if no HID USB activity is spotted within a specified period.

- Added OSD access to Auto-Logout feature – Users can enable or disable OSD access for the Auto-Logout feature, as desired.

- Added Last Frame Frozen feature – In conjunction with release v7 for the Vertiv™ Avocent® HMX8000 series and the Vertiv™ Avocent® HMX 6200 DP extenders, this feature will hold the last frame on screen with a warning indication if the communications to the transmitter or video to the transmitter is lost.

- Added Save Monitors EDID feature – The ability to read and store the monitors EDID on the transmitter. Only available on the Vertiv™ Avocent® HMX8000 series and Vertiv™ Avocent® HMX6200 DP extenders and requires firmware v7 or above.

- Added endpoint serial numbers – In addition to being visible on the API page, the endpoint serial numbers have been added to the Configurations page.

- Added support for the Windows hotkey - The Windows hotkey can now be used as part of the 3 key hotkey activation to raise the OSD.

   NOTE: This is for the Vertiv™ Avocent® HMX 8000 and HMX 6200 DP series endpoints only.

- Added a filter for endpoints – On the Upgrades page, endpoints can now be filtered by name, description and location.

- Added improvements/features to API page –

   - The following button state and hotkeys have been improved: Favorites, View, Shared, Exclusive and Private.

   - The following features have been added: 'disk usage' command, reports logs, firmware, database size, and disk used.

- Added View and Private icons for HTML VDI.

- Added total number of licensed devices – The total number of licensed devices can now be found in the License section on the *Settings – General* page.

- Added more logs in download debug file for Vertiv Technical Support.
- Added UTC Time Zone feature to options.

Resolved Issues

This version of the Vertiv™ Avocent® HMX Advanced Manager resolves the following issues.

AREA	ISSUE DESCRIPTION
Active Directory	The Active Directory is failing to synchronize.
API	- API channels are not retrieving device IDs for Video2 and Serial streams. - Video Head 2 is not reporting the device ID. - Discrepancies are present in the total number of devices listed. - Messages are appearing in the Error log. - Changed Channel response to incorrect invalid connection mode parameter as shared mode. - The API continues to function even if the user executes an outdated version number of the API on a newer version. - Changed Connection end time in log following replacement of a Vertiv™ Avocent® HMX Advanced Manager extender system device. - Channel consistency displayed as present after replacing a Vertiv™ Avocent® HMX Advanced Manager extender system device via the REST API.
Backup	- Some endpoints were lost once the Vertiv™ Avocent® HMX Advanced Manager was promoted. - Users are unable to synchronize with Vertiv™ Avocent® HMX Advanced Manager backup servers.
Firmware	Due to insufficient space, users are unable to update firmware on the Factory reset unit.
VDI Session	- HTML certificates are not being cleared correctly from the BLOB store for Vertiv™ Avocent® HMX 6500 receivers. - Despite displaying a success message, HTML VDI was not successfully added. - Updated the VDI transmitter text that appears when changing credentials to provide more clarity.
Language	A change was made to the French language option.
Logs	To see the Vertiv™ Avocent® HMX Advanced Manager backup and satellite server deletion logs, go to the *Dashboard – Event Log* page on the Vertiv™ Avocent® HMX Advanced Manager web UI.
Network	The eth2 IP address assigned to the Vertiv™ Avocent® HMX Advanced Manager backup server is not reflected on the OLED of the product.
OSD (On-Screen Display)	- The Channel hotkey on the Vertiv™ Avocent® HMX 6500 receiver cannot be set in the OSD. - The OSD shows the incorrect session time for the connected channel after Network Time Protocol (NTP) syncs up to the Vertiv™ Avocent® HMX Advanced Manager. - The Vertiv™ Avocent® HMX Advanced Manager backup server OSD indicates an incorrect user connection. - The OSD is too big for the window, requiring users to use scrolls bars that are not working properly. - The OSD of the Vertiv™ Avocent® HMX Advanced Manager satellite server should show the device handover status similar to the backup server.
Passwords	Vertiv™ Avocent® HMX Advanced Manager security Issue – configuration passwords are now encrypted in html text.
Primary/Backup	- The Vertiv™ Avocent® HMX Advanced Manager backup server exhibits instability when the Active-Backup mode is switched from the bonded mode of the primary server to 802.3ad. - Once the primary server has been upgraded, the backup server is not relinquishing control.
Receiver	When two receivers are connected to the same channel, the Vertiv™ Avocent® HMX Advanced Manager is unable to hide the channel banner as per the timeout.

AREA	ISSUE DESCRIPTION
SNMP	SNMP B client fails to show the server MAC2 address for the Vertiv™ Avocent® HMX Advanced Manager primary server.
SMTP	The Vertiv™ Avocent® HMX Advanced Manager continues to send email data after disabling the SMTP feature.
Syslog	MySQL error is seen in syslog when logging in to the OSD.
USB	For the Vertiv™ Avocent® HMX Advanced Manager receivers, users are unable to configure the reserved USB ports with the comma symbol in the description.
Web UI	• HTTPS is not working on the link-local address. • The backup server has reported that replication has failed and has been marked as 'offline.' The following message appears in the Event Viewer: *Attempting to restart…* • On the backup and satellite servers, there are missing links for the endpoint license(s) and license features. • The backup server web UI shows the different status with eth1 and eth2 for assigned IPs. • Changed Failed Manager pop-up message to *The server is currently offline*. • For the *Disconnect All* misunderstanding, a disconnect filtered pop-up has been added.

4. Known Issues

The following issues apply to the Vertiv™ Avocent® HMX Advanced Manager.

AREA	ISSUE DESCRIPTION	WORKAROUND
Network	On the eth2 port, new DHCP IP assignments will not take effect until the ethernet cable is re-plugged.	From the Vertiv™ Avocent® HMX Advanced Manager web UI, enable/disable the eth1 interface. Essentially, this restarts the DHCP service.
	The DHCP server does not automatically update if you change the IP pool range.	If you change the DHCP IP scope/range. from 192.168.1.10-192.168.1.20 to 192.168.1.30-192.168,1.40, the config is updated correctly. However, the DHCP server continues to lease the original range. To resolve this issue, reboot the Vertiv™ Avocent® HMX Advanced Manager.
	The MAC address for eth2 port on the Vertiv™ Avocent® HMX Advanced Manager backup server displays as *Currently unconfigured*.	This is a web page error that will be addressed in a future release.
	An error occurs when attempting to disable the eth2 port on the satellite server via the primary server.	From the Vertiv™ Avocent® HMX Advanced Manager web UI, disable the eth1 interface for the satellite server. Then, revert the setting of the eth2 interface for the satellite server.
	Bonded mode is removed from the Vertiv™ Avocent® HMX Advanced Manager satellite software after downgrading or upgrading to V5.7	This issue is resolved in V5.8, so it will not be present from the next version back to v5.8
	Enabling the eth2 port and DHCP on the Vertiv™ Avocent® HMX Advanced Manager satellite server causes the Vertiv™ Avocent® HMX Advanced Manager to be reported as Failed after four to five minutes.	Disable the eth2 port and DHCP for the satellite server. As a solution, the next Vertiv™ Avocent® HMX Advanced Manager release will include the ability to add static routes.

AREA	ISSUE DESCRIPTION	WORKAROUND
Network (continued)	The DHCP server does NOT check if an IP address is available before its issued.	To allow for the replacement of Vertiv™ Avocent® HMX Advanced Manager servers, ensure the pool of IP addresses for the endpoints are separated away from the IP addresses for the manager.
	Communication between the satellite and primary servers stops when the eth1 port is set to DHCP on the primary server.	To resolve this issue, use a static route, which is available on the primary server's web UI.
	Occasionally, when adding a satellite server to a primary server, the satellite server gets stuck on the link-local IP address.	Reset the satellite server.
OSD	Channel names have been truncated in the OSD.	The OSD can only support 25 characters, whereas in the Vertiv™ Avocent® HMX Advanced Manager menu 45 characters are allowed. **NOTE: Some Japanese, Korean and Chinese characters are considered as two or more characters.**
SNMP	SNMP only works on Primary or Acting primary in builds v5.5 and above.	This issue will be considered for change in a future release.
Language Packs	Accents on letters go missing when upgrading from v4 to v5.	This issue is being investigated and will be resolved in the next release, if possible.
VDI Sessions	Even after adding a second head to the Remote Desktop Protocol (RDP) channel, it still connects as a single head.	For the change to take effect, log out of the Vertiv™ Avocent® HMX 6500 receiver and log back in again.
	RDP passwords were lost after upgrading from v4 to v5 software.	Unfortunately, due to the nature of the new version, this is not possible to solve.
	The Configure channel allows VNC, SSH and HTML channels to select two heads even though only one head (monitor) is supported for these modes.	Ensure Video 2 is set to OFF.
Web UI	Occasionally, the Hostname and DNS Domain fields are not populated upon upgrading to upgrading from Vertiv™ Avocent® HMX Advanced Manager v4.12 to v5.5, Hostname and DNS Domain are not populated.	Check the settings to ensure they have transferred.
	When using "replace function" for Vertiv™ Avocent® HMX 5000/6000 extender system devices with the Vertiv™ Avocent® HMX 6200 DP extenders, the Channel does not reconnect.	A manual re-connect must be initiated. This only happens when it is not directly a like-for-like model replacement.
	Secure SSL access has moved to https://<AIMIP>:4433.	None at this time.
	Users are unable to add a backup server if an HTTPS connection is set.	Turn off HTTPS when adding a new backup server.

AREA	ISSUE DESCRIPTION	WORKAROUND
Video	In the General setting for Fixed EDID, Generic modes have no effect on either the Vertiv™ Avocent® HMX 8000 or 6200 DP extenders.	The modes do not appear in the specific pages for each transmitter, but if selected via the General setting, the Vertiv™ Avocent® HMX 8000/6200 DP series devices will work with the connected monitors EDID.
Upgrade	Do not select *reboot before upgrade* when upgrading the Vertiv™ Avocent® HMX 6500 receiver.	The reboot is not strictly necessary on any Vertiv™ Avocent® HMX unit. It can introduce an issue on the Vertiv™ Avocent® HMX 6500 receiver where if multiple upgrades are put in progress, only the first unit is upgraded. The solution is to ensure the reboot is not selected.
	Due to incompatibility in versions of underlying OS and DB between v4 and v5, not all information is transferred when upgrading from v4.x to v5.x.	Please make notes of the following settings before you upgrade to new version: • Active Directory (all settings) • Email (Domain/IP, Username, Password) • NTP (NTP Key) • SNMP (Authentication & Privacy Password) • RDP (Passwords)

5. Important Virtual Machine Information

In order to access a virtual machine via the Vertiv™ Avocent® HMX 6500 high performance KVM receiver, your system must be set up in a specific configuration where the receiver is connected to two separate networks. Then, through the Vertiv™ Avocent® HMX Advanced Manager software, you are able to configure the receiver, access hosts connected with Vertiv™ Avocent® HMX transmitters and access virtual machines running RDP hosts on a corporate network. For instructions on configuring access to a virtual machine, see the Vertiv™ Avocent® HMX 6500 High Performance KVM Receiver Configuring Access to a Virtual Machine Technical Note available on the product page at Vertiv.com.