

Vertiv™ Avocent® HMX 6500

High Performance KVM Receiver

Release Notes

VERSION 1.3.1.7, AUGUST 2024

Release Notes Section Outline

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IMPORTANT NOTE: In August 2024, Vertiv identified a critical update, referred to as Address Assignment Timeout, which is required for all Vertiv™ Avocent® HMX products. The sole purpose of this release is to address and resolve the Address Assignment Timeout. No new updates, enhancements or other fixes are included in this updated release patch.

To mitigate the timeout, you must upgrade the Vertiv™ Avocent® HMX 6500 receiver firmware from version 1.3.0.1 to this version (1.3.1.7). Follow the instructions detailed in section 1 of these release notes to upgrade the firmware. For additional assistance, contact Vertiv Technical Support.

1. Upgrade Instructions (Extender System)

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

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 interface and automatically logged in. When the primary server becomes available, you are redirected back to that web interface.

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.

To upgrade the firmware on the transmitters and receivers:

1. In the user interface (OBWI) of the Vertiv™ Avocent® 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
Vertiv™ Avocent® HMX 6500 Receivers	V1.3.1.7

3. Features and Enhancements

This version of the Vertiv™ Avocent® HMX 6500 high performance KVM receiver adds the following features and enhancements:

NOTE: This release requires Vertiv™ Avocent® HMX Advanced Manager software version 5.10 or higher.

- Added support for the VMware Horizon Viewer, including both PCoIP and Blast protocols. Only a single head view is supported at this time.
- Implemented a new Factory Reset procedure. See below.

To reset the unit to factory settings:

1. Power on the receiver unit.
2. Press and hold the button located next to the front panel OLED screen for 10 seconds until the indicator turns blue and the OLED screen displays the message *Factory resetting device*.

NOTE: Do NOT power off the unit at this time.

3. After the reset is complete, the LED continue to flash blue and the OLED screen displays the message *Factory Reset Complete. Now Reboot*. You can reboot the device using one of the following methods:
 - a. Using a straighted paper clip, press the recessed power button next to the front left fan cover to turn it off. Wait for a minute and then press the power button once more to turn it back on.

-or-

- b. Power cycle the unit.

The device reboots into the other partition with a clean image.

4. Resolved Issues

- Fixed issue with adding VMware Horizon Client.
- Fixed issue with the Horizon broker KVM sub system.
- Fixed issue with installing VMware-Horizon pacgae.

5. Known Issues

The following issues apply to the Vertiv™ Avocent® HMX 6500 high performance KVM receiver.

AREA	ISSUE DESCRIPTION	WORKAROUND
Audio	The microphone audio does not work if the microphone is not connected at boot up.	Connect and reboot the unit.
On-Screen Display (OSD) Login	Users cannot log into the OSD if the third network port (RJ45) is connected to the Vertiv™ Avocent® HMX Advanced Manager.	No workaround. This is by design. The RJ45 port is only intended for connecting to a separate network where Virtual Machines (VMs) may reside.
Password / Security	When connecting to the Vertiv™ Avocent® HMX 6210 transmitter via VNC, password hashing needs to be disabled on the unit.	Please see the Vertiv™ Avocent® HMX High Performance KVM Extender System Installer/User Guide for instructions. NOTE: After disabling password hashing, ensure that you re-enter the passwords.
Time	Time mismatch between the Vertiv™ Avocent® HMX Advanced Manager and the Vertiv™ Avocent® HMX 6500 receiver is preventing firmware upgrades.	This only occurs if Network Time Protocol (NTP) is enabled on the Vertiv™ Avocent® HMX Advanced Manager. Sometimes, the Vertiv™ Avocent® HMX 6500 receiver does not update. This is a Vertiv™ Avocent® HMX Advanced Manager issue and will be resolved in a future build.
UBS-KeyBoard	The Apple A1243 keyboard does not have complete support.	No workaround at this time. Not all the functions are currently supported. Additionally, the default English keyboard mapping does not match, so some characters, such as \$, " and @, are not in the correct key. This does not affect the channels for the Vertiv™ Avocent® HMX extender system or Remote Desktop Protocol (RDP) as the Windows host determines the mapping in those cases. The OSD, VNC, SSH and HTML channels use the Keyboard Country Code setting on Vertiv™ Avocent® HMX Advanced Manager to determine the character mapping, for which there is currently no option for a Mac map in English or any other language.
USB – General	The Vertiv™ Avocent® HMX 6500 receiver cannot be used for headless operation.	No workaround at this time. Unlike other Vertiv™ Avocent® HMX receivers, the Vertiv™ Avocent® HMX 6500 receiver USB system does not work without monitors being plugged in.
	Only nine unique USB devices can be connected at once to the Vertiv™ Avocent® HMX receiver.	No workaround. This is by design. While a normal USB hub can support 13 endpoints, we have reserved ports for internal operations.

AREA	ISSUE DESCRIPTION	WORKAROUND
USB- Mouse	Dell MS111/116/M105 mice need to have USB merging turned off to work.	See the user instructions that accompany your mouse for information on how to turn off merging.
	Mouse buttons cannot be used for any Vertiv™ Avocent® HMX Advanced Manager hotkey functions.	No workaround at this time. This is currently not supported on the Vertiv™ Avocent® HMX 6500 receiver.
	VNC: The VNC view only supports absolute pointing modes.	No workaround.
VDI Sessions	VNC: When the server is using the VNCAuth authentication method, passwords of up to 8 characters are supported for VNC.	It is possible to enter more characters, but the server will ignore them when it validates the password. This is common for all VNC setups using VNCAuth.
	VNC/SSH: Backtick (`) key is not behaving properly.	VNC into Windows / SSH into Ubuntu - The backtick key (left of the 1 key) acts as a grave accent diacritic “dead” key, so it is the only output when another key is pressed. With certain keys (such as E), it will output the accented character (È). VNC into Ubuntu - The backtick key only outputs when the Shift button is simultaneously pressed (outputting ~). The unshifted backtick key and AltGr , which is labelled as a split pipe, can't be produced.
	HTML: Right-clicking a hyperlink presents the option for downloading linked files. This is not supported by design; however, it does stop the channel from working.	The page still updates (Vertiv™ Avocent® HMX Advanced Manager periodically updates) but cannot be interacted with until the channel is disconnected and reconnected.
	HTML: Clicking on links that want to open another tab do not work.	No workaround. This is by design. To work around it, load the link as a separate channel.
	HTML: It is not possible to download files from a website.	No workaround. This is by design.
	Error occurs when the session disconnects and reconnects quickly to the same Horizon channel.	Do not disconnect and reconnect to the same channel quickly. Wait a few seconds between connection requests.
	Video	When decoding UHD content from the Vertiv™ Avocent® HMX 8000 transmitters, occasional decode errors and low frame rates occur.
Unable to support dual head Horizon video.		Our implementation of the Horizon VDI only supports single head video
Unable to hot swap monitors when connected to a Horizon channel.		If the monitor is disconnected from the Vertiv™ Avocent® HMX6500R while connected to a Horizon channel, the connection to the Horizon VDI will drop and you will need to re-connect to the channel to recover it.

AREA	ISSUE DESCRIPTION	WORKAROUND
Video (continued)	Maximum Resolution does not work on Horizon transmitters.	When configuring the VDI transmitter, the option to set a Maximum Resolution does not affect Horizon transmitters. It will use the connected monitors preferred resolution.
Web UI	.CRT certificates are not working for HTML channels.	This issue has been resolved by Vertiv™ Avocent® HMX Advanced Manager V5.8 and above. Only .pem files should be used.

6. 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](https://www.vertiv.com).