

HiveOS and HiveManager 6.5r1 Release Notes

Release date: March 6, 2015

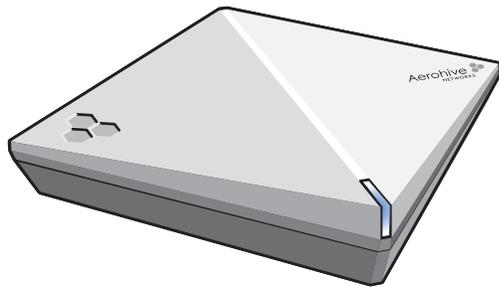
Release versions: HiveOS and HiveManager 6.5r1

HiveOS 6.5r1 platform introduced: AP130

HiveManager platforms supported for 6.5r1: HiveManager Online, and all HiveManager Physical and Virtual Appliances.

These are the release notes for HiveOS 6.5r1 firmware and HiveManager 6.5r1 software. Known issues are described in "[Known Issues](#)" on page 5 and "[Addressed Issues](#)" on page 6 near the end of this document.

New Hardware in the 6.5r1 Release



This release introduces the AP130 wireless access point. The AP130 provides dual concurrent 2.4 GHz 802.11b/g/n and 5 GHz 802.11a/n/ac radios for 2x2:2 MIMO (multiple input multiple output) antennas, with data rates up to 867 Mbps in the 5-GHz band. These devices have built-in mounting hardware that allows you to install them on a ceiling track or a wall.

The AP130 supports complete application visibility and control functionality, including reporting, stateful firewall, and powerful Aerohive Quality of Service (QoS) to prioritize traffic and data rate limits for individual users, groups of

users, and devices. Location and presence services provide detailed information about clients and rogue devices. The device is small, lightweight, and easy to deploy.

HiveManager Feature Enhancement

The following feature enhancement was added with HiveManager 6.5r1:

802.11w protected management frames: This release adds support for 802.11w (protected management frames) for AP130 devices.

Two new Aerohive OUIs: Aerohive has added the following new OUIs: D8:54:A2, C4:13:E2.

Change in Behavior

To ensure that all beta versions of HiveOS 6.5r1 on all AP130 devices are upgraded to a general availability version, HiveManager has implemented a new feature. All HiveManager platforms, by default, reach out to the License Server to download the latest versions of HiveOS. To take advantage of this behavior, effective with HiveManager 6.5r1, it is now a default, non-configurable setting in the update process to push a

generally available version of HiveOS 6.5r1 to all connected AP130 devices. This upgrade is not activated automatically, so the devices are not rebooted automatically, which does not cause any service interruption. After you make the first complete configuration push to these devices, the upgrade will be activated and when the devices reboot, the running version will be 6.5r1.

ⓘ If you have an on-premises HiveManager for which the license key was imported without connecting to the license server, you must upload the 6.5r1 HiveOS image manually. You can download all of the latest HiveOS versions after logging into the Support Portal at <https://support.aerohive.com/login>. If you do not have a Support Portal login, you can request one [here](#).

GHOST Vulnerability Addressed

This release addresses the GHOST vulnerability (CVE-2015-05235). GHOST is caused by a buffer overflow in a system library that is used in many, if not most, Linux systems. HiveManager 6.5r1 neutralizes this vulnerability via updated libraries.

Upgrading HiveManager Software

Aerohive supports upgrading to the 6.5r1 HiveManager software from the HiveManager 5.1r2 releases or later. If your system is running an image earlier than 5.1r2, follow the steps in the 5.1r2 Aerohive release notes to upgrade HiveManager to 5.1r2 first before upgrading them to 6.5r1

Memory Increase Required before Upgrading to HiveManager 6.0 or Later

Before upgrading HiveManager software on existing 32-bit HiveManager physical appliances and HiveManager Virtual Appliances to 6.0r1 or later, you must first increase their memory to 3 gigabytes. For 64-bit HiveManager Virtual Appliances, you must increase the memory to 8 gigabytes. For instructions about increasing the memory for a physical HiveManager appliance, see the instructions in [Memory Upgrade for 1U HiveManager Appliances](#). For instructions about increasing the memory for a HiveManager Virtual Appliance, see ["Increasing Memory, CPU, and VM Param Settings for the HiveManager Virtual Appliance" on page 3](#).

Upgrade HiveManager 5.1r2 or later to 6.5r1

Use the following procedure to up grade a HiveManager standalone or HA pair.

From	Action	To
HiveManager 5.1r2 or later	Upgrade to HiveManager 6.5r1.	HiveManager 6.5r1
HiveOS 5.1r2 or later	Use HiveManager running HiveManager 6.5r1 to manually upgrade managed devices to HiveOS 6.5r1	HiveOS 6.5r1

Upgrading the HiveManager Appliance

1	Back up your database as a safety precaution (Home > Administration > HiveManager Operations > Back Up Database).
2	Save the 6.5r1 HiveManager software file to a directory on your management system or SCP server. (Log in and download the 6.5r1 HiveManager software file from the Aerohive Support page.)

Upgrading the HiveManager Appliance

- 3 Log in to HiveManager running 5.1r2 or later and then upload the 6.5r1 HiveManager software file.
To update HiveManager, click **Home > HiveManager Operations > Update Software**, select the method to upload the HiveManager software, and then click **OK**. When the upload is complete, HiveManager automatically reboots to activate its new software.
- 4 HiveManager periodically checks for new HiveOS firmware releases that it can download to itself for distribution to managed devices. If HiveManager is connected to the Internet, it automatically obtains HiveOS firmware image files for every type of managed device from the Aerohive update server and makes the image files available in about 15-30 minutes, depending on how many image files it is downloading and its connection speed to the server.

To update the HiveOS firmware image files manually, log back in to HiveManager, select the device or devices of the same type for which you want to update the HiveOS firmware, click **Update > Advanced > Upload and Activate HiveOS Firmware**, select the appropriate HiveOS image from the list for the selected device type, and then click **Upload**. If the firmware is not available in the list of HiveOS images, click **Add/Remove** and obtain the HiveOS image you want from the update server, your local directory, or SCP server. If you are managing various Aerohive device types, repeat the upload process for all your managed devices, and then reboot them to activate their new firmware.

Increasing Memory, CPU, and VM Param Settings for the HiveManager Virtual Appliance

Before you can upgrade a 32-bit HiveManager Virtual Appliance to 6.0 or later, you must increase the memory for it within the ESXi hypervisor to 3 gigabytes, set the number of virtual sockets for its CPU to 2, and change VM params to 1024 megabytes.

(i) *Upgrading the 64-bit HiveManager Virtual Appliance to 6.0 or later does not require any changes to its default memory (4 GB), CPU (4 virtual sockets), and VM param settings (1480 MB). A new 6.5r1 installation of a 64-bit HiveManager Virtual Appliance .ova file has a new default memory size of 8 GB.*

1. From the vSphere Client on your management system, log in to the ESXi hypervisor hosting the HiveManager Virtual Appliance whose memory you want to increase.
2. To check which type of system you have, select the name of the HiveManager Virtual Appliance, click **Summary**, and check whether the Guest OS indicates that it is 32 or 64 bits.

(i) *You can also check the system type in the HiveManager GUI. In the HiveManager 5.0 and 5.1 releases, click **Home > Dashboard**, and view the model number in the HiveManager System Information widget. The VM 1U model is 32 bits, and the VM 2U model is 64.*



32-bit HiveManager Virtual Appliance



64-bit HiveManager Virtual Appliance

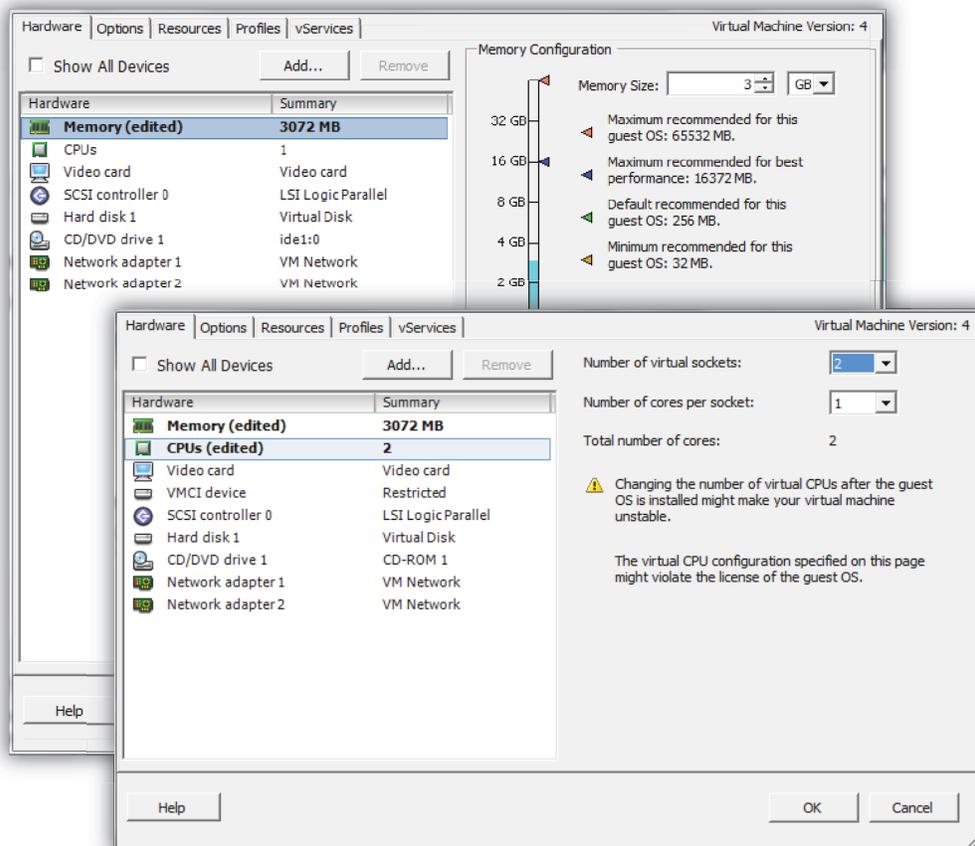
- If it is a 32-bit system, keep the name of the HiveManager Virtual Appliance selected, click the **Console** tab, click in the console window, and then log in to the HiveManager CLI shell. If it is a 64-bit system and is still using the default settings, you are not required to change them. However, if you want to, you can increase the memory from 4 GB to 8 GB by performing the following steps.

```

1) Network Settings and Tools
2) Display System Information
3) Advanced Product Configuration
4) Reboot Appliance
5) Shut down the System
6) Change CLI Shell Password
7) Logout of shell
Please make a choice:

```

- To shut down the virtual appliance, enter **5** (Shut down the system) and then enter **Y** when prompted to confirm the action.
- In the vSphere Client GUI, right-click the HiveManager Virtual Appliance name in the left navigation panel, and then click **Edit Settings**.
- On the *Hardware* tab, click **Memory**, change the value in the Memory Size field to **3 GB** for a 32-bit system or up to **8 GB** for a 64-bit system, and then click **OK**. (For a 64-bit system using its default values, there is no need to change any other settings.)
- For a 32-bit system, select **CPUs**, from the Number of virtual sockets drop-down list, choose **2**, and then click **OK**.



- With the name of the HiveManager Virtual Appliance still selected, click **Power on the virtual machine**.
- After the HiveManager Virtual Appliance is powered back on, click the **Console** tab, click in the console window, and log in to the HiveManager CLI shell.

10. Enter **3 - 2 - 2** to navigate to Advanced Product Configuration > Configure VM Params > Change VM Params, and then enter **1024** (for 1 GB).
11. Reboot the HiveManager Virtual Appliance to apply this setting. (You can navigate back to the home menu, and enter **4** for Reboot Appliance.)
12. After the HiveManager Virtual Appliance finishes rebooting, check that it recognizes its increased memory size by returning to the console window, logging back in to the HiveManager CLI shell, and entering **2 - 4** (Display System Information > Display Hardware Information). To complete the memory upgrade procedure, check that the MemTotal value for a 32-bit system is approximately 3,000,000 KB. (The MemTotal value for a 64-bit system is approximately 8,000,000 KB.)

Documentation

Product documentation is still in progress at the time of these releases and is not yet available. However, the Help for HiveOS CLI commands are ready. To use the CLI Help, enter "keyword-SPACE-?" (for example: **gos ?**). In addition, there are online CLI reference guides that provide the syntax and explanations for every command in the CLI. They also include information on accessing the CLI through console, Telnet, and SSH connections, tips on using the CLI, and some keyboard shortcuts.

To access hardware specifications and installation instructions for the AP130, visit www.aerohive.com/quick and click the AP130 image.

Help System for Mobile Devices

Aerohive allows you to link directly to a mobile version of the HiveManager 6.5r1 Help system. When viewing the Help system in a browser is inconvenient or impossible, you can view Help content on your smart phone, or on phones that do not support some of the advanced mobile web technologies. HiveManager does this by detecting and identifying your device and forwarding your request to one of two independent versions of the mobile Help system.

Known Issues

The following are known issues in the HiveOS and HiveManager 6.5r1 releases.

Known Issues in HiveOS 6.5r1

35576	Energy and channel usage rates are high for the AP130 when spectrum analysis is enabled.
35609	Although a watchdog assertion may be generated during bootup, this does not affect the operation of the device.
35627	When running a remote sniffer under a heavy traffic load, multiple abnormal logs are generated.

Known Issues in HiveManager 6.5r1

35719	Under certain conditions, spectrum analysis charts are displayed incorrectly for the AP130 and AP230.
-------	---

Addressed Issues

The following issues were addressed in the HiveOS and HiveManager 6.5r1 releases.

Addressed Issues in HiveOS 6.5r1

There were no addressed issues in HiveOS 6.5r1.

Addressed Issues in HiveManager 6.5r1

CFD-295	The location-based report displayed information for all locations regardless of the filter settings.
CFD-892	Incorrect information was appearing in the csv file for the Client Report.
CFD-924	Planner Map reports were not generating correctly.

2015 ©Aerohive Networks, Inc.
Aerohive is a U.S. registered trademark of Aerohive Networks, Inc.
P/N 330138-01, Rev. A