



Aerohive Release Notes

Release Versions: HiveOS and HiveManager 6.1r2, ID Manager (September 2013), and StudentManager 1.1r4

Platforms: All AP, BR, and SR series devices; HiveOS Virtual Appliance; ID Manager, and all HiveManager appliances

Release Date: September 17, 2013

These are the release notes for HiveOS 6.1r2 firmware, HiveManager 6.1r2 software, ID Manager September 2013, and StudentManager 1.1r4 software. These releases contain numerous new and enhanced features, summaries of which are described in the following section. For more detailed descriptions, see the [Aerohive New Features Guide for HiveOS and HiveManager 6.1r2](#). Known issues are described in the ["Known Issues" on page 12](#) section and ["Addressed Issues" on page 14](#) section near the end of this document.

Although HiveOS 3.4r4 was the last release for the HiveAP 20 series, HiveManager 6.1r2 can continue to manage all HiveAP platforms running releases from HiveOS 3.4r1 to 3.4r4. However, you must push full configuration updates to them because some commands have been removed which would cause delta configuration updates to fail. HiveManager can support full and delta configuration updates to APs and BRs running HiveOS 5.0 and 5.1, switches running HiveOS 6.0r1, and all devices running HiveOS 6.1r2.

The features introduced in the 6.1r2 release are summarized in the following section below. For more detailed descriptions of these features, see the [Aerohive New Features Guide for HiveOS and HiveManager 6.1r2](#).

Memory Increase Required before Upgrading to HiveManager 6.0 or Later

Before upgrading HiveManager software on existing HiveManager physical appliances and HiveManager Virtual Appliances to 6.0r1 or later, you must first increase their memory to 3 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 10](#).

Before upgrading HiveManager, it is always a good precaution to do a full backup of the database.

New Hardware Platform

SR2024P: This release introduces the SR2024P switch to the Aerohive SR2000 series switches that provide wired network access. The SR2024P model features PoE support on all 24 ports using the same power budget as the SR2024 plus four 1 Gigabit SFP/SFP+ uplink ports. The SR2024P switch can also operate as a router with full Aerohive router functionality.

New Features and Enhancements in the 6.1 Releases

The following are the new features and feature enhancements in the HiveOS and HiveManager 6.1 releases.

New and Enhanced HiveOS and HiveManager 6.1r2 Features

The following are the new features and feature enhancements in the HiveOS and HiveManager 6.1r2 releases. For more information about these new and enhanced features, see the *Aerohive 6.1 New Features Guide*.

Support of IEEE 802.11ac: Aerohive supports the first wave of IEEE 802.11ac technologies, features, and data rates.

Enhancements to Applications Visibility and Control (AVC): A number of enhancements have been made to the Applications Visibility and Control (AVC) feature including auto discovery of applications by usage, the ability to create custom applications, the ability to disable AVC, and support for the Microsoft Lync application:

Auto Discovery of Applications: This release adds an Application Auto Discovery feature that enables HiveManager to automatically discover applications in your network. In addition, you can add up to seven applications to an applications watchlist as well as create individual watch lists for each virtual HiveManager.

Custom Applications: In addition to the more than 700 system defined applications, in 6.1r2 you can define custom applications that can be detected with the auto discovery feature and that you can add to the applications watchlist or to QoS and firewall policies. These custom applications incorporate rules that are defined by IP addresses, TCP or UDP ports as well as by HTTP and HTTPS host names. In addition, these custom applications can be viewed from the Dashboard.

Disabling AVC: Administrators with super user privileges in on-premises HiveManager appliances now have a system-wide way to disable or enable the Application Visibility and Control Settings for all VHM.

Support for Microsoft Lync: This release adds support of the Microsoft Lync suite of products as a system-defined application.

Enhancements to Captive Web Portals: In this release, the captive web portals include the collection of client information during authentication and information to determine the Aerohive device to which a captive web portal client is associated:

Collecting Client Information from Captive Web Portal: You can now collect information submitted by the user as part of the authentication and acceptance of the terms of use when a user authenticates to a captive web portal.

NAS-ID for External Captive Web Portals: Aerohive devices now include the NAS-ID in the redirected HTTP headers sent to external captive web portals so that you can use the information to determine the Aerohive device to which a captive web portal client is associated. You can configure an Aerohive device to use its host name as the NAS-ID, or to use a custom NAS-ID that you configure consisting of 1-64 characters.

Using External DNS Servers in DHCP Offers: You no longer need routers to act as DNS proxies and can specify that DNS services be supplied from external DNS proxies or servers to obtain IP addresses in DHCP offers. You can now specify DNS services directly from external DNS proxies or servers through the enabled DHCP connection of the router.

Specifying an Ethernet Port for Switch Netdump File: You can now specify an Ethernet port on an Aerohive switch for saving the netdump file to a TFTP server on the network automatically the next time the switch boots up. When bootloader boots up and detects a need to upload the netdump file, only the specified netdump port is enabled to upload the netdump file.

Enabling or Disabling DHCP Server ARP Validation by Routers: There is now an option to enable or disable Dynamic Host Configuration Protocol (DHCP) server Address Resolution Protocol (ARP) verification by Aerohive routers. When there are many clients that require IP addresses at the same time, this option prevents the DHCP server from sending gratuitous ARP requests and waiting to validate that the IP address is usable.

Switch PSE Support for Legacy Devices: This release adds the ability to configure Aerohive switches to provide PoE support for legacy powered devices that do not comply with the current 802.3at standard.

New HiveManager Graphical User Interface Appearance: The graphical user interface has a new look and feel in this release of HiveManager. It has a new, user-friendly look and feel, a brighter color theme that is more aesthetically pleasing, new icons and buttons that promote more harmonious interaction, and customized elements that are easier to use.

Enhancements to Configuration and Monitoring Pages: Changes were made to both the *Configuration* and *Monitoring* pages and commands in this release of HiveManager. They are now called *Unconfigured Devices* and *Configured Devices* (formerly, they were *New Devices* and *Managed Devices*, respectively) and the difference depends on whether the network policy configuration was pushed to the devices.

Simplified Device Updates: The Device Update drop-down menu has been updated to make it easier to push configuration changes to a device (or devices).

Support for RADIUS Proxy and ID Manager Proxy on the Same Device: You can now configure a RADIUS proxy server for authentication and an ID Manager RAD Sec proxy server to operate simultaneously on a single Aerohive device.

HiveManager Online Configuration and Monitoring Changes: Two new tabs have been added to the Configuration and Monitor pages: *Managed Devices* and *Unmanaged Devices*. With these tabs, you can add devices to and remove devices from the Aerohive cloud and a VHM.

Enhanced ID Manager Features: The following improvements are included in the new ID Manager (September 2013):

ID Manager Print Customization: ID Manager administrators now have the ability to customize the print template from the ID Manager kiosk to accommodate small-factor printers to print guest credentials on badges. Administrators can choose from two default templates, or can create and save their own templates. The default templates accommodate 8.5 x 11" standard paper and 2.4 x 4" thermal print paper. Templates can be customized for fonts, graphics, and the information that is provided on the badge or printed page.

Text Message Customization: ID Manager provides branding and personalization of text messages by enabling you to edit the body of the text message that is sent to customers.

Customization of the Guest Management Portal: We now provide the ability to have a uniquely branded URL for use with ID Manager. Previously, one URL was used, <http://idmanager.aerohive.com>. In this release, you can prepend your company name to the previous URL, for example, <http://yourcompanyname.idmanager.aerohive.com>.

Guest Approval Process Enhancements: Employees of the host company can now approve a request from a guest for Internet access before the guest receives access to the network. This feature applies to guests requesting access through the kiosk and requires configuration to enable it.

ID Manager Print Customization: ID Manager administrators now have the ability to customize the print template from the ID Manager kiosk to accommodate small-factor printers to print guest credentials on badges.

New and Enhanced HiveOS and HiveManager 6.1r1 Features

The following are the new features and feature enhancements in the HiveOS and HiveManager 6.1r1 releases.

Presence Analytics (Retail Analytics): Aerohive and Euclid have formed a partnership to give physical retailers a free *Retail Analytics* function that is integrated directly into their HiveManager online or on-premises accounts. Presence Analytics allows you to monitor an unlimited number of retail stores, browse visitor traffic, collect data about shopper engagement and loyalty, compare retail activity across stores, view historical information, and share data with fellow retailers. You can also choose to upgrade to a premium Euclid account for access to more detailed metrics, greater historical data collection, and other capabilities, such as custom analysis.

Anonymous Access and Self-Registration with ID Manager: This release adds Anonymous Access and Self-Registration to ID Manager. Anonymous Access allows businesses to offer Internet access to visiting guests using mobile devices as a courtesy so that they do not have to pay for this service through their Internet providers. Self-Registration allows businesses to configure a captive web portal where a guest asks for and receives a user name and password, uses these credentials to log in at first use, and then has ongoing access without the need to log in as long as they are in range, or until the ID Manager admin disables their account.

Client Management (Trial Version): With this feature, you can automatically provision and manage Apple mobile devices running iOS 5 or later and Apple computers running Mac OS X v10.7 or later as they connect to the wireless network. The Aerohive AP with which the client connects checks if the client is currently enrolled and, if not, a Wi-Fi configuration and an enrollment profile (with client and CA certificates and a mobile device management profile) are installed on the client to apply device security controls such as permitted applications and behavior. These profiles can differ based on whether the device matches a list of MAC addresses of corporate-issued devices or if it is a personally owned device.

Manual Private PSK Activation Timeout: This is a performance enhancement for private PSK activation which makes activation much faster. There is no direct customer impact.

StudentManager Enhancements: StudentManager can now integrate with Aeries SIS (Student Information System) natively. Natively integrating with Aeries allows you to import and manage classes and schedules, along with the access of students to school network and Internet resources using StudentManager. After you configure StudentManager and Aeries SIS to work together and synchronize the school data, you can view and manipulate data through StudentManager.

StudentManager and TeacherView Website Redirection: Teachers now have improved website redirection. When the teacher redirects students to a specified website, StudentManager and TeacherView can now redirect students to websites that access external content, including those that use content delivery networks to supply content and that subsequently redirect to another site. Also, students can be redirected to websites whose URL has changed and that are optimized for mobile devices.

New and Enhanced HiveManager 6.1r1 Features

ID Manager GUI Enhancements: This release introduces a new look for the ID Manager administration interface. The new home page is divided into three clearly defined sections that provide at-a-glance visibility into critical information about your ID Manager account, and clear pointers to ID Manager configuration processes. HiveManager Online customers can now request a free 30-day trial of ID Manager.

MyHive and HiveManager Initial Login Experience. This release introduces a new user experience for system administrators logging into a new version of HiveManager. The experience differs for system administrators of on-premises HiveManager, HiveManager Online, and on-premises HiveManager with the Redirection Server (also called the Redirector). Three new screens have been added to the on-premises HiveManager and HiveManager Online login experience. The *Review Inventory* page provides a list of Aerohive devices. For on-premises HiveManager, this page displays the total number of Aerohive devices connected to HiveManager at login. For HiveManager Online, this page displays a list

of Aerohive devices that have been licensed to your organization, including the device type, as well as the total number of Aerohive devices. The *Activate License* page displays license and entitlement key information and allows you to activate your license. The *Management Settings* page requires you to change the default password, choose the Express or Enterprise mode, and select a time zone. (If you delete a HiveManager database, the *Review Inventory* and *Management Settings* pages are displayed. However, the *Activate License* page is not displayed in this case.) After you have completed these changes, a *Congratulations!* page is displayed. When you exit this page, the HiveManager Configuration panel is displayed.

In addition to the changes described above, existing HiveManager Online system administrators will notice a new welcome screen in MyHive and that there is no longer a separate Redirector that is visible from this page. Instead of an external Redirector, you can use the HiveManager Online interface to add and remove devices.

Changes to Behavior and Appearance

The following changes to behavior and appearance have been introduced in the 6.1r2 release:

- The HiveManager graphical user interface has a new, user-friendly look and feel in this release that better fosters ease of use when configuring and monitoring Aerohive devices.
- AVC (Application Visibility and Control) Watchlist Changes:
 - The role of the watchlist has shifted from being a list of all the applications that you want to track to just the key applications that you want to ensure are being tracked regardless of how much they appear on the network. Due to its new role, the maximum number of applications in the watchlist has been reduced from 30 to 7. After upgrading HiveManager to 6.1r2, HiveManager starts prompting you to reduce the watchlist, although devices that are still running HiveOS 6.0 or 6.1r1 will continue to operate as normal whether or not you make the reduction. However, after you upgrade devices to HiveOS 6.1r2, the entire watchlist will automatically be removed from the devices. Furthermore, if you try to push a configuration with a watchlist in excess of 7 applications to a device running HiveOS 6.1r2, the configuration upload will fail until you reduce it to 7 or fewer applications.
 - In releases before 6.1r2, applications do not begin to appear in the applications widgets in the dashboard until after midnight or until you create a watchlist and upload it to devices. From 6.1r2, applications begin appearing in these widgets within a few minutes after a client connects to an AP and starts generating traffic.
 - There are four new widgets for tracking only the applications on the watchlist: Watchlist Applications by Clients, Watchlist Applications by Usage, Watchlist Applications by Usage - Summary, and Watchlist Application Usage over Time.
- In releases before 6.1r2, you can apply a device template to multiple device models as long as they have the same number of ports and the same function. For example, you can apply a five-port device template to a BR200-WP, BR200, and BR100 functioning as a router. From 6.1r2, you can only create a device template for a single device model. For example, in 6.1r2 you must create three unique device templates for a BR200-WP, BR200, and BR100.
- In the HiveManager GUI, devices that are called "New" in releases before 6.1r2 are referred to as "Unconfigured" in 6.1r2. Similarly, devices that are called "Managed" in previous releases are referred to as "Configured" in 6.1r2. In HiveManager Online, there are two further terms to classify devices: "Unmanaged" refers to devices that have entries in the redirector but that have not yet connected to their VHM, and "Managed" refers to devices that have successfully connected.

- The maximum number of characters for a user name in the roaming cache has been increased from 31 to 127. Because Aerohive devices truncate user names that are longer than the maximum, it is now less probable for the roaming cache to contain identical user name strings. (Note that there is an issue with truncating user names longer than 31 characters when submitting them to RADIUS accounting servers. For a description of this issue, see 29054 in *Known Issues in HiveOS 6.1r2*.)
- This release increases the timeframe for which drilldown information is available on the dashboard perspectives from 15 days to 30 days. When drilldown information is available from a perspective report, there is a clickable link. Previously, the information available through this link was only archived for a time period of 15 days. This release increases that timeframe to 30 days. When there has been no new information collected within the 30-day timeframe, the link does not appear.
- In the Network Summary perspective on the Dashboard page, the Current Aerohive Device Status (Network Wide) and Active Client Status (Network Wide) widgets have been combined to form the Current Client and Device Status (Network Wide) widget.

The following changes to behavior and appearance have been introduced in the 6.1r1 releases:

- Only an admin with super user privileges can allow HiveManager to display the following option in 11na radio profiles: Enable radar detection without changing channels. The place where the admin can enable this is in the *Update DFS (Dynamic Frequency Selection) Settings* section on the *HiveManager Settings* page.
- HiveManager Online system administrators will notice that there is no longer a separate Redirector that is visible from the *MyHive* page. Instead of an external redirector, you can use the HiveManager Online interface to add and remove devices. In conjunction with this change, a new *Remove* button, available from the *Monitor* and *Configuration* pages, permits you to remove a device from your HiveManager network, the serial number of the device from the HiveManager database, and the configuration from the device. The device does not automatically reconnect to the HiveManager network. Also, a new option in the *Utilities* drop-down menu, *Reset Device to Default*, is available from the *Monitor* and *Configuration* pages. This option allows you to reset APs, branch routers, switches, and VPN gateways. The *Reset Device to Default* option removes the device configuration from the device and from HiveManager. (However, the bootstrap configuration remains unchanged.) Then the device reconnects to the HiveManager network automatically.
- Another new option in the *Utilities* drop-down menu of HiveManager Online, *Aerohive Device Inventory*, permits you to access the Redirector to check the inventory list of devices as well as add devices to your network. The Redirector is displayed in a separate tab of the same browser window with which you used to open HiveManager Online. You could use this option to view your inventory of Aerohive devices and understand which devices have successfully been able to connect to the Redirector.
- In this release, QuickStart network policies, SSID objects, user profile objects, and port type objects have been removed. However, QuickStart policy templates that you created in previous releases are supported in 6.1r1.
- The tracking timeout setting has been removed from the track IP feature. Instead the timeout value is always the same as that of the tracking interval value.
- APs can provide MAC authentication on their Ethernet ports in access mode.
- PCI compliance reports can be scheduled.
- An SR2024 switch in router mode can now receive its WAN interface network settings through PPPoE.
- TeacherView resource maps have been returned to HiveManager.
- In ID Manager, an SSID that is created using an on-premises HiveManager does not appear in the drop-down list for guest types in the ID Manager administration GUI.

Upgrading HiveManager Software and HiveOS Firmware

Aerohive supports upgrading to the 6.1 HiveManager software and HiveOS firmware from the HiveManager and HiveOS 5.1r2 releases or later. If your systems are running images earlier than 5.1r2, follow the steps in the 5.1r2 Aerohive release notes to upgrade HiveManager software and HiveOS firmware to 5.1r2 first before upgrading them to 6.1.

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 10.

Step 1: Upgrade 5.1r2 or later to 6.1r2

When upgrading HiveManager software and HiveOS firmware to 6.1r2, upgrade HiveManager first and then the Aerohive devices second. The upgrade procedures for HiveManager in standalone and HA modes are outlined below.

From	Action	To
HiveManager 5.1r2 or later	Upgrade to HiveManager 6.1r2.	HiveManager 6.1r2
HiveOS 5.1r2 or later	Use HiveManager running HiveManager 6.1r2 to upgrade managed devices to HiveOS 6.1r2.	HiveOS 6.1r2

Upgrading a Standalone HiveManager Appliance		Upgrading an HA Pair of HiveManager Physical or Virtual Appliances	
1	Back up your database as a safety precaution (Home > Administration > HiveManager Operations > Back Up Database).		
2	Save the following files to a directory on your management system or SCP server: (Log in and download these files from the Aerohive Support page.) <ul style="list-style-type: none"> 6.1r2 HiveManager software file 6.1r2 HiveOS firmware files for all the managed device platforms being updated 	2	Save the following files to a directory on your management system or SCP server: (Log in and download these files from the Aerohive Support page.) <ul style="list-style-type: none"> 6.1r2 HiveManager software file 6.1r2 HiveOS firmware files for all the managed device platforms being updated

Upgrading a Standalone HiveManager Appliance	Upgrading an HA Pair of HiveManager Physical or Virtual Appliances
<p>3 Log in to HiveManager running 5.1r2 or later, upload 6.1r2 HiveOS firmware files to the managed devices, and then upload the 6.1r2 HiveManager software file.</p> <p>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.</p> <p>To update the HiveOS firmware files of the managed devices, click on the device or devices of the same type for which you want to update the HiveOS firmware, click Update > Advanced > Upload and Activate HiveOS Software, and then click Upload. If the firmware is not available in the list of HiveOS images, click Add/Remove and obtain the image from its source location.</p>	<p>3 Log in to HiveManager running 5.1r2 or later, and convert the two HA nodes back to standalone appliances.</p> <p>Click Home > HiveManager Settings > Current Network Settings and clear the Enable HA check box to return the HA nodes to standalone appliances.</p>
<p>4 Log back in to HiveManager, which is now running 6.1r2, and upload HiveOS 6.1r2 from HiveManager to all managed devices, and then reboot them to activate their new firmware.</p>	<p>4 Upload the 6.1r2 HiveManager and 6.1r2 HiveOS image files to the HiveManager appliance that was the former primary node.</p> <p>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.</p> <p>To update the HiveOS firmware files of the managed devices, click on the device or devices of the same type for which you want to update the HiveOS firmware, click Update > Advanced > Upload and Activate HiveOS Software, and then click Upload. If the firmware is not available in the list of HiveOS images, click Add/Remove and obtain the image from its source location.</p> <p>When the upload is complete, HiveManager automatically reboots to activate its new software.</p>

Upgrading a Standalone HiveManager Appliance	Upgrading an HA Pair of HiveManager Physical or Virtual Appliances
	<p>5 Log in to the GUI on the former secondary HA node, and update it to HiveManager 6.1r2 (see Step 4).</p>
	<p>6 Make an SSH console connection to the HiveManager appliance that was formerly the secondary node, and enter the following in the CLI shell (within 30 days of disabling HA):</p> <p style="padding-left: 40px;">3 Advanced Product Configuration</p> <p style="padding-left: 80px;">1 Configure HiveManager</p> <p style="padding-left: 80px;">3 Re-initialize HM Database; and then enter Y when asked to continue with the re-initialization</p>
	<p>7 Log back in to the HiveManager appliance that was the primary HA node and reform the HA pair.</p> <p>Click Home > HiveManager Settings > Current Network Settings and select the Enable HA check box to reform the HA pair.</p>
	<p>8 Upload HiveOS 6.1r2 from HiveManager to all managed devices, and then reboot them to activate their new firmware (see Step 4).</p>

Step 2: Reload the HiveOS Configurations

1. Check that the firmware upgrade is complete (see Monitor > Devices > Device Update Results).
2. Upload the full configurations from HiveManager to the devices, and then reboot them to activate the 6.1r2-compatible configurations.

To update the HiveOS firmware files to the managed devices, click on the device for which you want to update the HiveOS firmware, click **Update > Advanced > Update and Activate HiveOS Software**, select the *Host Name* of the device you want to update, and then click **Upload**. If the firmware is not available in the list of HiveOS images, click **Add/Remove** and obtain the image from its source location.

(((1))) HiveManager running HiveManager 6.1r2 can support hives running HiveOS 5.1r2-6.1r2. Based on the HiveOS version that the members of each hive use, HiveManager generates different configurations. Therefore, it is necessary to activate the HiveOS 6.1r2 firmware on managed devices before updating their configurations so that the updated configurations use the new 6.1r2 format.

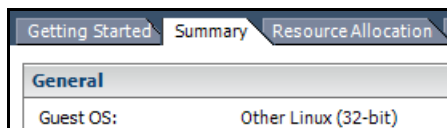
Increasing Memory, CPU, and VM Param Settings for the HiveManager Virtual Appliance

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.

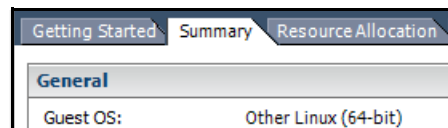
(((i))) Upgrading the 64-bit HiveManager Virtual Appliance to 6.0 or later does not require any changes to its default memory (4 GB), CPU (4 virtual sockets), and VM param settings (1480 MB). A new 6.1r1 installation of a 64-bit HiveManager Virtual Appliance .ova file has a new default memory size of 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

3. 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.

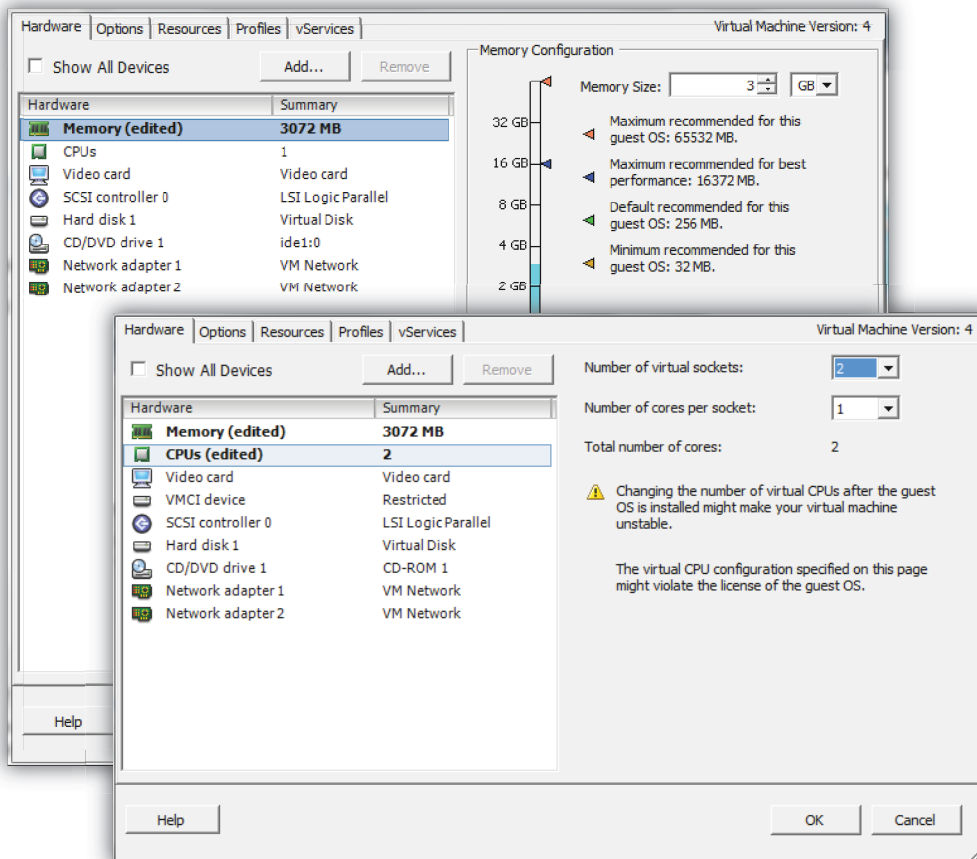
```

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:

```

4. To shut down the virtual appliance, enter **5** (Shut down the system) and then enter **Y** when prompted to confirm the action.
5. In the vSphere Client GUI, right-click the HiveManager Virtual Appliance name in the left navigation panel, and then click **Edit Settings**.
6. 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.
- Enter **3 - 2 - 2** to navigate to Advanced Product Configuration > Configure VM Params > Change VM Params, and then enter **1024** (for 1 GB).
- Reboot the HiveManager Virtual Appliance to apply this setting. (You can navigate back to the home menu, and enter **4** for Reboot Appliance.)
- 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 *Aerohive New Features Guide*, the instructions for increasing the memory for physical HiveManager appliances, as well as Help for HiveOS CLI commands are ready. To use the CLI Help, enter "keyword-SPACE-?" for example: `qos ?` 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.

Known Issues

The following are known issues at the time of the HiveManager 6.1r2 release.

Known Issues in HiveOS 6.1r2

29054	HiveOS truncates local RADIUS user names that are more than 31 characters long so that only the remaining characters are presented in HiveManager and in RADIUS accounting packets. For example: "first.middle.last@some.exampledomain.com" appears in accounting messages as "omain.com". The initial RADIUS Access-Requests are correct, but subsequent accounting messages are affected by the truncation.
28822	When the JSS (JAMF Software Server) is upgraded to version 9.0, the MDM (mobile device management) client appears as enrolled in the JSS server, but appears as not enrolled on the Aerohive AP.
25625	Application reporting is affected when a topology consists of a HiveManager connected to a BR200 that is, in turn, connected to one or more APs. When an AP receives client traffic that contains application reporting, it reports this traffic to HiveManager. Then the BR200 reports this same application reporting traffic to HiveManager. This results in HiveManager reporting duplicate application traffic in the widgets on the Application tab.
25193	After an AP320 or AP340 reboots, it can occasionally take 3-5 minutes to begin providing wireless services.
23364	Application Visibility and Control does not differentiate the Google Calendar application from other Google applications due to changes made by Google.
20139	Although an SR2024 in router mode marks outbound traffic so that upstream devices can apply QoS, it does not apply QoS itself to the traffic it routes.
18080	An Aerohive router does not apply the same user profile to traffic that an AP forwards to it from a client connected to one of its Ethernet ports in bridge-access mode.
14603	If you enable OSPF route advertisements on both the eth0 and eth1 interfaces of the CVG, traffic from hosts in the corporate site might be routed through the CVG to the public network instead of taking a different path. WA: Only advertise routes on one interface, either eth0 or eth1.

Known Issues in HiveManager 6.1r2

28938	<p>HiveManager Online: Erasing the database causes the Device Inventory button and <i>Unmanaged Devices</i> tab to disappear, making it impossible to synchronize the inventory list in the VHM with that in the redirector.</p> <p>WA: Approximately five minutes after erasing the database, log out of the VHM and then log back in. Click Monitor > Devices > All Devices > Unmanaged Devices > Refresh.</p>
28836	<p>When the USB port is configured as backup WAN interface on a BR100, there is no CLI available to configure its WAN priority.</p>
28834	<p>When the Chrome browser is used to view the HiveManager Dashboard data and memory usage is high, the <i>Application Usage over Time</i> widget does not display any data.</p>
28817	<p>When a device configuration is successfully updated to version 6.1r2, and the device image is rolled back to a previous version, a warning message appears in the Update Result column of the <i>Device Update Results</i> page.</p>
28790	<p>After the HiveManager Online administrator logs in to a VHM (virtual HiveManager) and adds or removes a device using the <i>Device Inventory</i> drop-down menu (Monitor > All Devices), the login session expires due to inactivity, and you log in again to add or remove another device, the <i>Device Inventory</i> drop-down menu no longer appears.</p> <p>WA: Log out of HiveManager Online, and then log in again.</p>
28770	<p>When the LED brightness is changed from Bright to Soft, an error is generated during a delta configuration upload, and the upload fails.</p> <p>WA: Do not change the LED brightness setting or use a full configuration upload.</p>
28736	<p>If the number of characters in the URL of the mobile device management and captive web portal is greater than 32 characters, the configuration upload fails.</p> <p>WA: Ensure that the number of characters in the URL are 32 characters or less.</p>
28720	<p>The Aerohive Application Visibility and Control Feature might only be able to recognize the "Facebook" and "Facebook Messages" applications in the applications watchlist due to a recent change by Facebook, Inc which makes HTTPS the default connection protocol. The other six Facebook applications, "Facebook Apps", "Facebook Event", "Facebook Post", "Facebook Search", "Facebook Video", and "Facebook Video Chat", might be recognized if the Facebook user connects to Facebook using HTTP instead of HTTPS, which is the new default secure connection protocol. These applications are available from the Reports > Report Settings page, from the System Defined Applications tab in the section.</p>
27123	<p>In ID Manager, the email and phone fields on the <i>Self Registration</i> page accept special characters that are not related to email or phone numbers, and then return illegible data because of these characters.</p> <p>WA: Make sure to enter only the characters that are valid for email and phone numbers.</p>
25962	<p>In the <i>Applications</i> perspective on the Dashboard, the "All Applications by Usage" widget displays "failed to request date" for the first twenty-four hours after the initial installation or upgrade of HiveManager. The first roll up of information to this widget occurs twenty-four hours after installation.</p>
25410	<p>After disabling client learning on an SR2024 Ethernet port, HiveManager continues displaying previously learned MAC addresses instead of removing them from the client list for that port.</p>
24332	<p>In the <i>Monitor</i> section, you cannot distinguish between ports that are available (but not configured) and ports that are shut down because both port states are shown in red.</p>

22897	A device configured as a Bonjour Gateway does not retain any realm name previously defined for it after a reboot.
20947	In Bonjour Gateway, you cannot set a static VLAN when you create a wireless network policy. WA: Configure a device as a DHCP server instead of configuring a static VLAN.
15225	For a VHM on a physical HiveManager appliance or HiveManager Virtual Appliance, it is not possible to auto provision devices by specifying their subnetworks. WA: Use device serial numbers.
15162	Although Wi-Fi statistical reports show data at one-minute intervals accurately, they do not normalize the data for ten-minute intervals, which causes the data to appear exaggerated in the charts.

Known Issues in ID Manager (September 2013)

28503	When a guest user is revoked in ID Manager, the connection of that guest user is not disassociated from the network if the guest is still connected to an AP.
27111	If you renew an ID Manager account before the existing account expires, the new account begins from the time that the renewal order is placed, not from the time that the previous account expires, so you lose the overlapping time. WA: When the Aerohive order entry team enters a renewal or expansion for an ID Manager order, they need to manually set the start time and end time correctly in NetSuite before saving the order.

Known Issue in StudentManager 1.1r4

27295	Teacher names in StudentManager are not currently case-sensitive. StudentManager cannot distinguish between two teacher names that are spelled the same but that have different case treatments. WA: No current workaround. Names must be unique.
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Addressed Issues

The following issues were addressed in the HiveOS and HiveManager 6.1 releases, and StudentManager 1.1r releases.

Addressed Issues in HiveOS 6.1r2

27208	Websense could not properly filter anonymous traffic, such as that of unauthenticated guest users, because Aerohive devices did not forward default user names.
27140	When a user with a Samsung Galaxy tablet roams among APs enforcing airtime-based load balancing, the user will be prompted to re-enter a password. WA: Disable load balancing.

27038	In TeacherView, an issue could arise with the list of permitted URLs in the Follow Me list when a teacher and students used different types of devices (mobile devices and PCs). The URLs expected by mobile devices and PCs for the same web site could have differed. For instance, when a teacher permitted the Wikipedia website using a mobile device, the URL was m.wikipedia.org. However, the URL for the same website on a PC was www.wikipedia.org. As a result, a student using a PC was not able to access Wikipedia, even when it was included in the Follow Me list.
26979	When a LAN port on a BR200-WP received a tagged VLAN 1 packet, it treated the packet as an untagged packet and instead matched the packet to the native VLAN configured on that port.
26921	In TeacherView, there was an issue with Internet Explorer not displaying the entire TeacherView Class web page.
26844	When using 802.1x or Private PSK authentication with the Websense service, some Aerohive devices did not forward user credentials correctly, which resulted in reports that did not account for users whose credentials were omitted.
26626	When Bonjour Gateway is enabled, there was an issue with client TCP traffic (sent using Telnet, HTTP, HTTPS, SSH, or Web UI) not reaching an AP when the client and AP were assigned to different VLANs.
25703	RADIUS proxy and ID Manager proxy could not function on an AP at the same time. If ID Manager was enabled on an AP that was already acting as the RADIUS proxy, authentications were automatically sent to ID Manager instead.
25698	There was an issue with HiveManager losing track of user names when reporting application data from the Applications perspective on the Dashboard. This issue has been addressed in 6.1r2.
25055	Band steering with the safety net enabled did not distribute clients between the 2.4 GHz and 5 GHz radio bands as expected.
25054	Although iOS devices were able to detect iTunes Home Sharing services that were shared by Bonjour Gateways in different VLANs, the devices were unable to connect to their iTunes libraries because the Bonjour Gateways did not share service subtypes.
23985	Mesh points sometimes lost their wireless backhaul link to their portals as a result of background scanning for WIPS protection.
22975	The AP330 did not auto negotiate or connect at Gigabit speeds with a Cisco 2950 switch unless 802.3az was disabled.
17970	A BR100 in AP mode could not process 802.1X authentication for a new client connected to a LAN port for five minutes after a previously authenticated client disconnects.
16266	The application of an HTTP ALG on an Aerohive device was incompatible with any Websense solution except the web security feature that you can set on Aerohive routers and disrupted HTTP traffic proxied to a Websense server.
15523	If you defined an SSID with private PSK self-registration and the wireless + routing network policy did not contain a network object using VLAN 1 with a subnetwork that had a DHCP server enabled, the clients of unregistered users were unable to get network settings through DHCP.

Addressed Issue in HiveOS 6.1r1a

27542	SR series: Under certain conditions, ports 25-28 were unable to detect a link.
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Addressed Issues in HiveOS 6.1r1

25376	After upgrading an Aerohive device to HiveOS 6.0r2, the device did not apply policy-based routing commands properly.
25358	Application Visibility and Control did not always detect and report Netflix video streams.

Addressed Issues in HiveManager 6.1r2

28891	HiveManager Online: It was not possible to upload a delta or complete configuration if the VHM name contained "view" in it.
28541	When the BR100 configuration was changed from a router to an AP during the auto provisioning process, the same static IP address that was used for the new AP did not match the IP network. This caused the AP to lose connection with HiveManager and, after 15 minutes, the configuration was rolled back to that of a router.
27483	A user assigned to only have access to the Redirector could not access the Redirector or HiveManager.
27249	When the HiveManager web-based SSH client was used to establish an SSH session with an Aerohive device, the connection attempt failed and an error message appeared.
26922	In HiveManager Express Mode with ID Manager enabled, there was an issue with creating and adding a Captive Web Portal Use Policy Acceptance to an SSID. This setting could be changed in the GUI, but it was not saved.
26738	If the HiveManager database was too large (over 1G, for example), performance was degraded, and the AP locked and required a reboot. This fix added the maximum size limitations for performance data and client history in the HiveManager database.
26737	When users authenticated to a network through a captive web portals using Use Policy Acceptance, the use policy text did not appear in the use policy area.
25698	User names associated with wireless clients that APs reported correctly to HiveManager were changed to "unknown" when the switch to which the APs connected sent client update events.
25272, 24281	In the <i>System Details</i> section of the Monitor > Devices > Routers > <i>router_name</i> page, HiveManager displayed the external WAN IP address that an upstream NAT device applied to an SR2024 instead of the IP address of the WAN interface itself.
25407	Wi-Fi client mode (Wi-Fi as a WAN interface) was not supported in HiveManager auto provisioning.
24768	AP330 and AP350: Performing off-channel rogue mitigation sometimes caused the AP to become unresponsive.
24309	An HTTP Status 500 error appeared on the primary HiveManager Virtual Appliance running in high-availability mode, and the primary HiveManager needed to be restarted using an SSH connection to recover.
24294	You were not able to create a new TeacherView account in HiveManager when you also had an ID Manager account. In the <i>TeacherView > Classes > New</i> page, clicking the New (+) icon launches the <i>New Teacher Account</i> dialog box. With the implementation of centralized user management through MyHive, the <i>New Teacher Account</i> dialog box did not appear in VHMs that were linked to ID Manager.
23205	HiveManager was unable to manage APs using UDP, and uploading configurations failed because there is an SSH key mismatch between HiveManager and the APs.

23008	Under certain conditions, there were delays when generating a PDF report from the Maps GUI section.
19295	When a client whose OS type was determined through DHCP snooping to be "unknown" roams to another AP, HiveManager changed the OS type it displayed from "unknown" to blank because APs did not include DHCP option 55 information in their roaming cache updates.
19081	You could not import a list of client OS types into one VHM if it contained an OS type that already existed in another VHM.
18618	HiveManager allowed you to upload a network policy that had the Bonjour Gateway feature enabled to a BR100 although that platform did not support Bonjour Gateway functionality.
18067	A HiveManager operating in Express mode could not manage a CVG functioning as a Layer 2 VPN gateway and erroneously displayed any CVG that had formed a CAPWAP connection with it as an AP110.

Addressed Issues in HiveManager 6.1r1

25784	When you upgraded HiveManager from 5.1 to 6.0r2 or later, upgraded the managed devices, and then uploaded a complete configuration to the devices, reported data might not have appeared in the widgets in the Network Summary and Troubleshooting perspectives. However, the data was displayed in the System Summary perspective.
25701	When attempting to perform an LDAP lookup from the HiveManager GUI against an Aerohive RADIUS server joined to Active Directory, the request kept processing and never completed.
25368	When a VHM admin created an application watchlist and then an admin with super user privileges logged in to that VHM from the home system, the admin with super user privileges could not see the previously added applications in the watchlist.
25351	When upgrading the software from 5.1r5 to 6.0r2 or later, a network policy did not reference any policy-based routing profile that was a part of the policy before the upgrade. This issue has been addressed.
24942	In the "Channel Usage over Time" and "Errors over Time" graphs that appear on drill-down pages in the dashboard, HiveManager displayed the 2.4 GHz and 5 GHz data averaged together instead of separately. In the "Airtime Usage over Time" graphs, HiveManager displayed the 2.4 GHz and 5 GHz data combined together instead of separately.

Addressed Issue in ID Manager (September 2013)

27239	Actions taken on ID Manager admin accounts were only reflected in the audit log of the system where the action occurred, not on both ID Manager and the portal.
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Addressed Issue in StudentManager 1.1r4

27423	A problem existed with the "Follow Me" function. After a period of time, students might have been denied access to sites visited by the teacher. The <i>Follow Me</i> function did not redirect students to websites, instead it was a dynamic whitelist that allowed students to visit sites visited by the teacher.
26834	There was confusion about the difference between the Add and Edit functions in StudentManager when adding a new period schedule to an existing school. To add a schedule to an existing school, use the Edit icon instead of the New (+) icon.

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