HP MSM7xx Controllers and MSM Access Points Version 6.6.4.0 Release Notes

Abstract

These release notes provide important release-related information for MSM software Version 6.6.4.0.

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Acknowledgments

Contents

MSM software V6.6.4.0

Description

This document provides important V6.6.4.0 release information.

Products supported

This document applies to these HP products:

Product number	Model
J9693A	MSM720 Access Controller
J9694A	MSM720 Premium Mobility Controller
J9695A	MSM720 Access Controller (TAA)
J9696A	MSM720 Premium Mobility Controller (TAA)
J9421A	MSM760 Access Controller
J9420A	MSM760 Premium Mobility Controller
J9370A	MSM765 zl Premium Mobility Controller
J9840A	MSM775 zl Premium Controller

Product number					Model
WW[1]	Americas	TAA	Japan	Israel	
J9846A	J9845A	—	J9847A	J9848A	HP 560 802.11ac Dual Radio AP
J9842A	J9841A	—	J9843A	J9844A	HP 517 802.11ac Unified Walljack
JG654A	JG653A	—	JG655A	JG656A	HP 425 802.11n Dual Radio AP
J9651A	J9650A	J9654A	J9652A	J9653A	MSM430 802.11n Dual Radio AP
J9591A	J9590A	J9655A	J9589A	J9618A	MSM460 802.11n Dual Radio AP
J9622A	J9621A	J9656A	J9620A	J9619A	MSM466 802.11n Dual Radio AP
J9716A	J9715A	—	J9717A	J9718A	MSM466-R 802.11n Dual Radio Outdoor AP

[1] Identifies worldwide regions not otherwise explicitly named.

Product number				Model
WW[1]	USA	Japan	Israel	
J9427A/B/C	J9426A/B	J9529A/B	J9616A	MSM410 802.11n AP
J9359A/B	J9358A/B	J9530A/B	J9617A	MSM422 802.11n AP
J9379A/B	J9374A/B	J9524A/B	—	MSM310 AP
J9383A/B	J9380A/B	—	—	MSM310-R AP
J9423A	J9422A	—	—	MSM317 Access Device
J9364A/B	J9360A/B	J9527A/B	—	MSM320 AP

Product number				Model
WW[1]	USA	Japan	Israel	
J9368A/B	J9365A/B	J9528A/B	—	MSM320-R AP
J9373A/B	J9369A/B	—	—	MSM325 AP

[1] Identifies worldwide regions not otherwise explicitly named.

NOTE: As of Version 6.4.0.0 software release, the MSM310, MSM320, and MSM325 APs work in controlled mode only. Autonomous mode is no longer supported.

Support for the discontinued MSM335 AP is available in software versions prior to V6.4.0.0.

Upgrade information

Prerequisites

IMPORTANT: If your controller is not already running Version 5.7.5.0 or 6.0.3.0 or later, a two-step upgrade must be performed. First upgrade your controller to Version 5.7.5.0 or 6.2.1.1, and then as a second step, upgrade the controller to V6.6.4.0.

Mandatory channel change required prior to software upgrade; discontinue use of channel 132

Applies to these Americas/USA models: MSM410 (J9426A/B), MSM422 (J9358A/B), MSM430 (J9650A), MSM460 (J9590A), MSM466 (J9621A), MSM466-R (J9715A), MSM310 (J9374A/B), MSM310-R (J9380A/B), MSM320 (J9360A/B), MSM320-R (J9365A/B), and MSM325 (J9369A/B).

IMPORTANT: Prior to upgrading to MSM software Version 6.6.4.0, all applicable APs (autonomous or controlled) that are manually configured to use channel 132 must be either reconfigured to use a different channel or be reconfigured to use auto channel. This is required because channel 132 is no longer available for use.

NOTE: Due to a problem with AP channel use validation, a banner similar to this may appear at the top of the Home screen:

```
AP CNxxxxxxxx, Radio 1 channel configuration has been set to autochannel
because the previously configured channel is not supported by this
version of software.
```

The same message is added to the system log. These messages can be safely ignored.

Software configuration change might be required prior to upgrade

If the MSM7xx Controller is configured with the NAT feature enabled (default setting) and with the **Extend VSC egress subnet to VSC ingress subnet** feature enabled (disabled by default), the MSM software V6.2.x and higher will disable the NAT feature. HP recommends that you review your existing settings and disable one of these features before upgrading to V6.2.x or higher.

Software Updates and Licensing portal

The Software Updates and Licensing portal provides access to the latest software updates to customers with a support contract. An HP Passport is required to access the Software Updates and Licensing portal at www.hp.com/go/hpsoftwareupdatesupport and it is available to customers who have purchased a maintenance and support agreement.

Upgrading restrictions and guidelines

(Not applicable to HP 425, HP 517, and MSM317.) For autonomous APs, update the software as described in the "Software updates" section of the *MSM APs Configuration Guide*.

Otherwise, update the controller software as described in the "Software updates" section of the *MSM7xx Controllers Configuration Guide*. After the controller update is complete, it automatically updates all of its controlled devices to the same software version.

Transitioning APs from Unified controllers to use MSM software

Applies to these APs that have been used with any Unified controller (HP 10500/7500, HP 830, HP 850, HP 870, or HP WX5002/WX5004 Controller):

- HP 425
- HP 560
- MSM430
- MSM460
- MSM466
- MSM466-R

IMPORTANT: If any of these APs have ever been adopted by a Unified controller, it is mandatory to follow the procedures in the separate document *Instructions for Converting an Access Point from Unified-Controlled to Using MSM Software* before you can use these APs with MSM software (controlled or autonomous).

HP 560 autonomous mode

IMPORTANT: The *HP 560 802.11ac Access Point Quickstart* instructs you to select the **Switch to Autonomous Mode** button. This however, may not be possible. If you do not see the **Switch to Autonomous Mode** button, it is mandatory to follow the procedures relevant to autonomous mode in the separate document *Instructions for Converting an Access Point from Unified-Controlled to Using MSM Software*.

Downgrading software

If you upgrade to Version 6.6.4.0 and then want to return to the version (older than V6.6.0.0) that you had been running prior to upgrading, the configuration that you used originally with that version will still be available.

If you have made configuration changes while using Version 6.6.4.0, those changes will not be present when you downgrade to the previous version.

If you factory reset your device after upgrading to Version 6.6.4.0, your previous configuration will be lost, and when you downgrade to any previous version you will be in a factory reset state.

Compatibility/interoperability

Internet connection required

The computer running the MSM7xx Controller web-based user interface must have an Internet connection to complete product registration or display the new Simplified UI web-based online help.

SSLv3 support

Support for the SSLv3 cryptographic protocol has been removed as of Version 6.2.1.2.

RF Manager software and MSM software version compatibility

RF Manager Versions 6.0.x, and 6.7.x work with MSM software Version 5.7.x or later. However, to use the WLAN Integration feature in RF Manager 6.0.x or 6.7.x, the RF Manager and MSM software versions must be matched as follows:

MSM7xx software version	Compatible RF Manager versions	Sensor devices version	
		Sensor-only devices (MSM415)	AP/Sensor combo devices (MSM320[1], MSM325, HP 425[2])
6.6.4.0, 6.6.3.0, 6.6.2.0, 6.6.0.0, 6.5.2.0, 6.5.1.0, 6.5.0.x, 6.4.1.0, 6.4.0.0, 6.3.0.0, 6.0.3.0, 5.7.5.0	6.7.769 or later	Upgraded automatically by RF Manager.	Upgraded automatically by MSM7xx Controller.
6.2.0.0	6.0.185, 6.7.769 or later		
5.7.4.0	6.0.185 or later		
5.7.1.x, 5.7.2.0, 6.0.0.1, 6.0.1.x	6.0.177 or later		
5.7.0.2, 5.7.0.3, 5.7.0.4	6.0.162 or later		

[1] MSM320 APs that have been upgraded to MSM325 RF sensor via HP MSM320 RF Sensor License J9384A.

[2] HP 425 requires RF Manager V6.7.769.42 or later.

NOTE: Software Versions 6.2.0.0 and later are compatible with RF Manager versions listed above, but the MSM320 and MSM325 sensors may appear orange and indicate that there is a version mismatch. This is expected and the sensors will function normally. Note also, that with RF Manager 6.7.769, these sensors will function at an RF Manager 6.0.x feature level.

NOTE: If you choose to use mismatched software versions with RF Manager 6.0.177 or later, you should first turn off the WLAN Integration in RF Manager.

NOTE: Upgrading an MSM7xx Controller to V6.6.4.0 also automatically upgrades any MSM320 and MSM325 Sensors it manages to MSM software V6.6.4.0.

NOTE: The MSM415 Sensor has no MSM software dependency. It is managed and upgraded directly by RF Manager.

Local mesh

HP strongly recommends that the same AP model be used for nodes of the mesh. If for local mesh, recent APs (MSM430, MSM46x, HP 425, HP 560) are mixed with older APs (MSM3xx, MSM422), the local mesh connectivity might be unstable.

GMS (Guest Management Software) for controllers

△ **CAUTION:** The Simplified UI and GMS: If you will be using the Guest Management Software (GMS) Microsoft Windows application, and the MSM7xx Controllers Simplified UI, you must NOT import user accounts when prompted to do so when navigating to the Users page in the Simplified UI. Instead, when GMS will be used, manage all subscription plans and account profiles from the Advanced UI only. Failure to heed this caution will result in the user accounts being migrated to the user account model used in the Simplified UI, and such "new model" user accounts cannot be seen in GMS.

IMPORTANT: As of October 2015, GMS version numbering has changed. GMS version 2.0 is the version to use with MSM software version 6.6.4.0.

HP GMS simplifies centralized guest-account creation from any Microsoft Windows-based computer. It provides centralized, real-time management of visitor accounts and sessions with a configurable visitor session duration per account. Working with HP MSM7xx Controllers, secure login prevents unauthorized account creation, and the reporting feature records all account management activity.

For details and download instructions, consult the *Guest Management Software Release Notes*. Search for "Guest Management Software" at www.hp.com/support/manuals.

Enhancements introduced in V6.6.0.0

See also the *New in release 6.6.0.0* section in the *HP MSM Controllers Configuration Guide*. The key new features in release 6.6.0.0 include:

New user interface

This release features a new Simplified UI that provides access to the most commonly configured controller options, and features wizards to make configuration tasks easy. The old management tool interface, now called the Advanced UI, is still available.

Support for communication with a Property Management System (PMS)

This release adds support for communication with a property management system, which enables guests to send connectivity charges to their accounts using a Bill to room feature. See *Configuring PMS support* in the *HP MSM Controllers Configuration Guide*.

New public access feature for account sharing

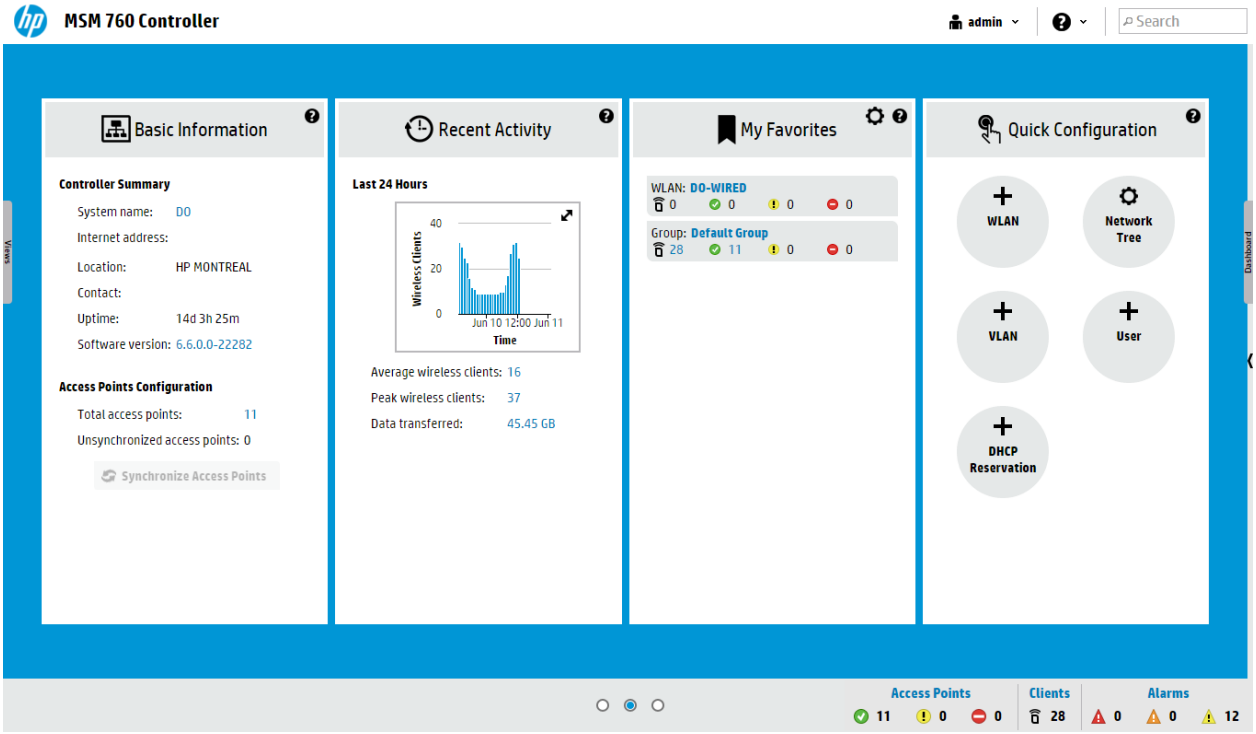
A new setting, called **Local users share limits and quotas,** has been added to the public access interface, which allows multiple logins with the same user account name. All logins share bandwidth limits and data transfer quotas on a first-come, first-served basis. See *User authentication* in the *HP MSM Controllers Configuration Guide*.

About the Simplified UI and Advanced UI

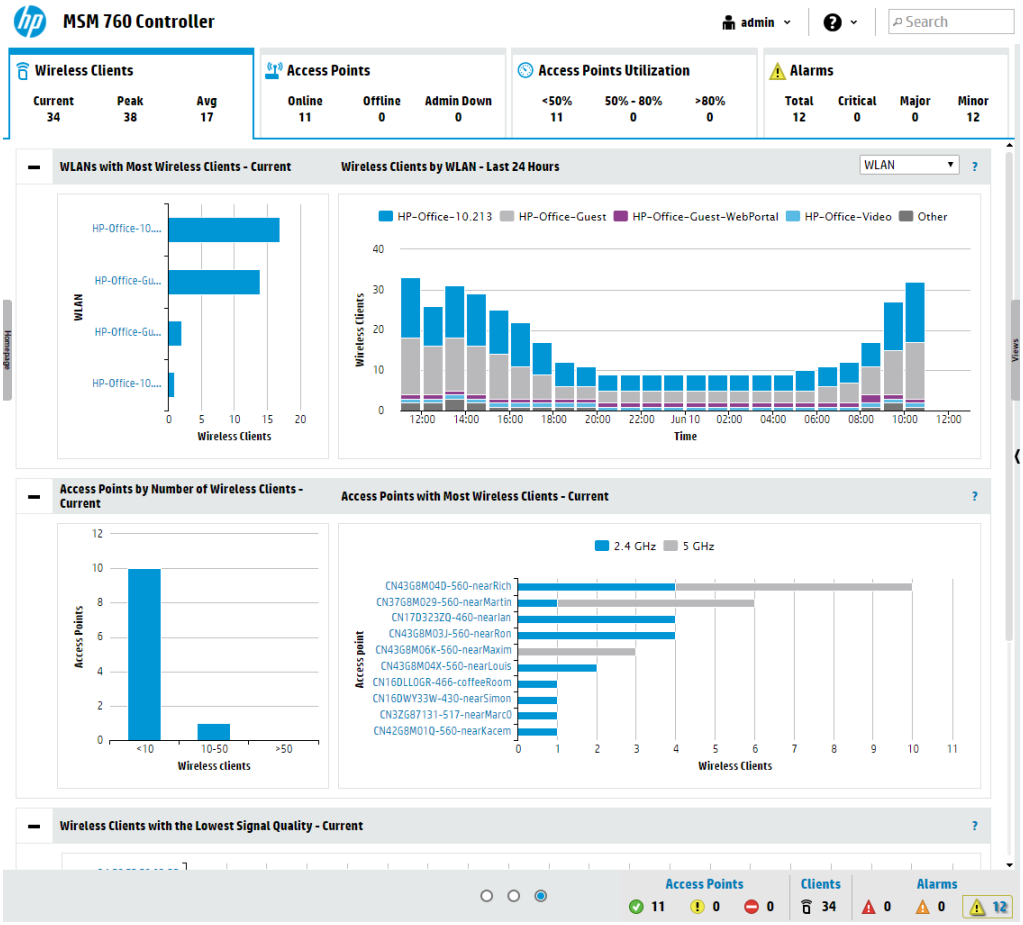
The Simplified UI makes it quicker and easier to configure and manage a controller and its controlled APs. Many configuration options have been simplified through the use of wizards. If you are deploying a new installation, HP recommends using the Simplified UI (except in the specific cases listed below). In most cases, the Simplified UI will also let you manage any existing installations.

The Simplified UI is organized into three sections:

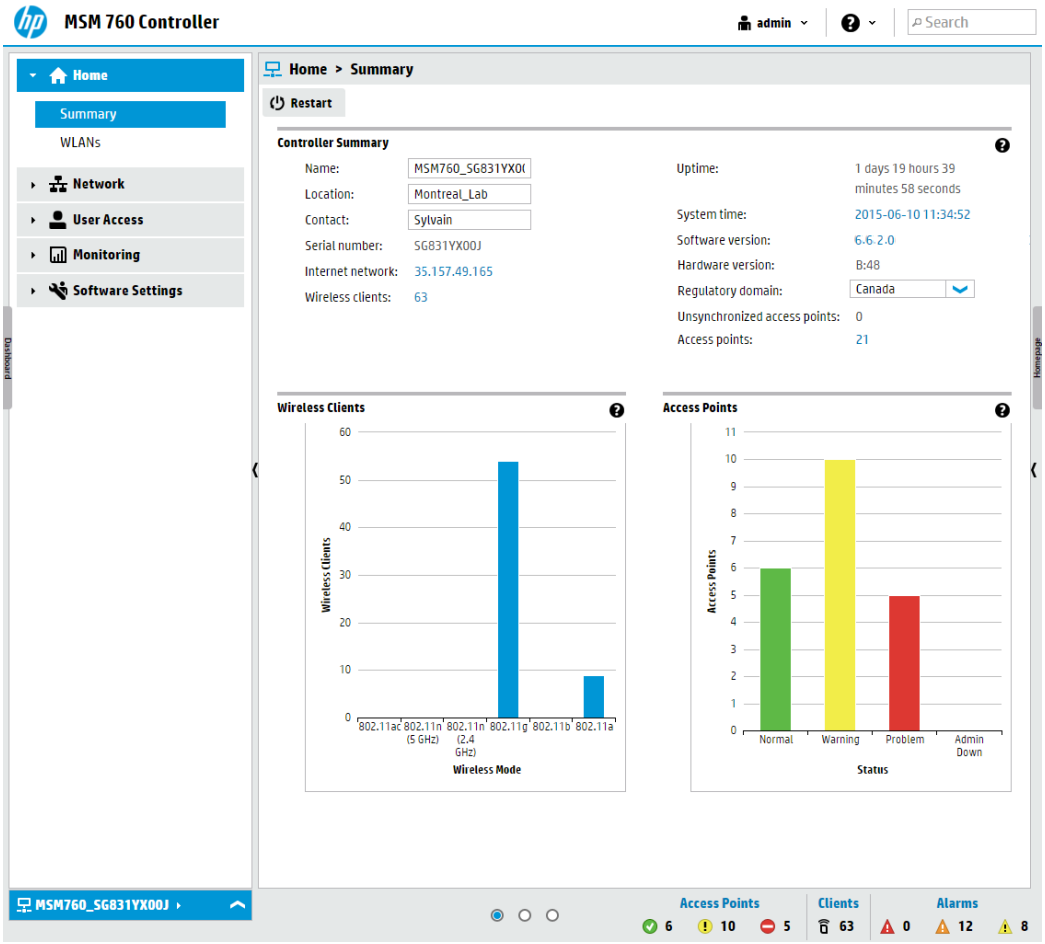
- **Homepage:** Displays key information about the controller and its APs.



- **Dashboard:** Displays status information about the controller, APs, and wireless clients.



- **Views:** This is where you define configuration settings and manage controlled APs.



The first time you start the Simplified UI, a product tour opens which provides an overview of key features.

For the Simplified UI, use Microsoft Internet Explorer 9.0+, Mozilla Firefox 15+, or Google Chrome 23+.

The Advanced UI enables you to configure advanced features on the controller, and to fine tune its operation for specific network topologies.

For the Advanced UI, use Microsoft Internet Explorer 9.0+, or Mozilla Firefox 15+.

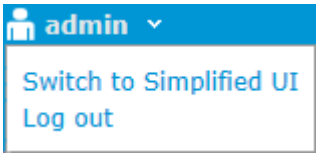
If you are creating a deployment that requires one of the following features, configuration of the controller must be performed with the Advanced UI:

- Mobility traffic manager (MTM) with distributed traffic distribution to specific home networks.
- Discovery of APs on layer 3 networks.
- Authentication of APs.
- Using the radio resource management (RRM) feature to optimize wireless capacity, coverage, and usage across all the AP radios on a network.
- Using the intrusion detection system (IDS) to proactively detect potential threats to the wireless network.
- Controller teaming. (When teaming is enabled, the simplified UI cannot be used.)
- Configuring trunk ports on an MSM720.
- Extensive customization of the captive portal (public access interface). Once customized in the Advanced UI, the captive portal cannot be edited in the Simplified UI.

- Using a payment service system (PMS) with the public access interface for the bill to room feature.
- Exposing devices with static NAT mappings.
- Creating a WLAN to support wired users, except when using switch ports on the MSM317 and HP 517.

To switch to the Simplified UI

- Click the administrator icon at the top of the management tool and select **Switch to Simplified UI**. For example, if you logged in using the default username **admin**:



To switch back to the Advanced UI

- Click the administrator icon in the title bar and select **Switch to Advanced UI**. For example, if you logged in using the default username **admin**:

IMPORTANT: If the IP address of the controller is in the restricted sites list of your browser, you will not be able to access the controller web interface.

Changes

NOTE: The numbers that precede the change description are used for tracking purposes.

Version 6.6.4.0 includes the following change:

- [**192798**] Software for radio 1 on the HP 560 (FCCID: RTP-MRLBB1303) has been enhanced to comply with new FCC requirements that go into effect in the United States on June 1, 2016.

Version 6.5.0.0 and later includes the following change:

- [**153332**, **155783**] The MSM software has been updated to support the new ETSI (European Telecommunications Standards Institute) EN 300 328 V1.8.1 and EN 301 893 V1.7.1 requirements.

Fixes

NOTE: The numbers that precede the fix description are used for tracking purposes.

Version 6.6.4.0

The following fixes are included in release 6.6.4.0:

Access points

[**199405**] (Applies to MSM430, MSM460, MSM466, MSM466-R, and HP 560.) Fixed an issue in which, when an AP previously used with a Unified controller was converted for use with an MSM controller, the message *err kernel ecc unrecoverable error* was displayed in the system log, even though the AP was functioning properly.

[**197061**] (Applies to MSM430, MSM460, MSM466, MSM466-R and HP 560.) Fixed an issue in which, when an AP was running MSM software version 6.6.0.0 to 6.6.3.0, it was not able to convert to HP Unified mode and connect to a Unified controller.

Authentication

[**193514, 182944**] (Applies to non access-controlled VSCs that are using 802.1X or MAC-based authentication.) Fixed an issue in which, when a VSC was configured to support authentication and accounting on different RADIUS servers, if the accounting server was unreachable, wireless clients were not able to connect to the VSC and authenticate for the amount of time configured for **Retry timeout** under the RADIUS profile used for accounting.

[**192622**] Fixed an issue in which, when Opportunistic Key Caching was enabled and the controller was used for 802.1X authentication, a warning message similar to the following may have been logged when a client roamed from one AP to another:

iprulesmgr: Discarding RADIUS Accounting Request (id='111') from RADIUS Client (ip-address='169.254.0.5',port='33919') because of missing username. (Check your RADIUS Secret configuration.)

The message repeated every 10 seconds, but client connectivity and traffic was not impacted. The message stopped being logged when the client roamed back to the original AP, or the AP was rebooted.

Controller teaming

[**197524**] Fixed an issue in which wireless clients were disconnected or dropped when a large controller team with many APs was handling a heavy traffic load. For example, a team with five controllers and 800 APs handling 2000 wireless client stations.

[**190902**] Fixed an issue in which, when a controller team was handling a heavy traffic load, a controller sometimes stopped transmitting on one of its network ports.

[**184019**] Fixed an issue in which, when an AP was initially discovered on a team member and then moved from one AP group to another group, the team member reported a validation error when synchronizing the AP, then reset itself to factory defaults and took 15 minutes to resynchronize with the team manager.

[**183563**] Fixed an issue in which, when a controller team was upgraded to version 6.6.x.x from any earlier release, team synchronization failed if a VSC configured with WPA (TKIP) wireless protection was bound to an AP radio which was configured to only allow 802.11n and/or 802.11ac wireless clients.

[**179997**] (Applies to access-controlled VSCs.) Fixed an issue in which, when a wireless client roamed from an AP connected to a team member to an AP connected to the team manager, it was not authorized and did not receive an IP address.

Documentation / online help

- [**200360**] (Applies to MSM720.) The following note has been added to the online help and the *MSM7xx Controllers Configuration Guide* in the section *About the default network profiles*: To avoid connectivity issues on the MSM720, do not configure the Internet network profile with an IP address on the subnet 192.168.1.0/24.
- [**199401**] The following note has been added to the online help and the *MSM7xx Controllers Configuration Guide* in the section *Configuring a RADIUS server profile*: After editing a RADIUS server profile, it is recommended that you restart all APs that are bound to the VSC that is using the edited profile.

Miscellaneous

[**201223**] Fixed an issue in which, when running a trace on any network interface on a controller (using **Tools > Network Trace**), if the trace ended with the message *Trace too big, trace stopped*, any subsequent traces on controlled AP interfaces also failed to capture packets.

[**191150**] (Applies to MSM430, MSM460, MSM466, and MSM466-R.) Fixed an issue in which an AP was not synchronizing with a controller after it was upgraded from 5.7.x.x to 6.6.x.x, downgraded back to 5.7.x.x, and then upgraded again to 6.6.x.x.

Wireless connectivity

[**190800**] (Applies to HP 560.) Fixed an issue in which, when radio 1 was configured to operate on channels 36-64, some wireless clients experienced poor performance and kept disconnecting from the AP.

[**183583**] Fixed an issue in which, when a controller was configured with many VLANs, wired client stations might not receive an IP address when connecting to an AP. This issue occurred when an AP discovered a controller on a certain VLAN, and then reconnected on the default VLAN after being restarted or losing the connection to the controller.

Version 6.6.3.0

The following fixes were included in release 6.6.3.0:

Authentication

[**174692**] Fixed an issue in which wireless clients were unable to authenticate when connected to a VSC configured to use the controller for authentication, when the controller was configured to act as a RADIUS proxy. If the **Always try primary server first** option was enabled, and the primary RADIUS server was down or inaccessible, the controller did not reissue the authentication request to the secondary RADIUS server.

Controller teaming

[**190569**] Fixed an issue in which synchronization of team members failed after editing or deleting a VSC that had user accounts referencing the VSC (in the **Restrict this account to these VSCs** field). Synchronization also failed when the controller software was updated.

[**183761**] Fixed an issue in which synchronization of team members took a long time after changes were made to a VSC profile.

[**161693**] Fixed an issue in which the RADIUS profile setting **Override NAS ID when acting as a RADIUS proxy** was not properly synchronized on team members.

Miscellaneous

[**182212**] Fixed an issue in which a controller could occasionally restart when handling a heavy load of MTM traffic.

[**177758**] (Applies to the HP 560 only.) Fixed an issue that caused the HP 560 to intermittently reboot when receiving frames larger than the Ethernet MTU.

[**170865**] Fixed an issue in which, when a user was connected to a VSC with a VSC egress mapping configured, the egress VLAN ID value for the user was displayed as 0, instead of the VLAN value configured for the network profile.

Performance

[**175921**] Fixed an issue in which wireless clients experienced delays or timeouts connecting to secure web sites via HTTPS when the controller was configured as an HTTP proxy.

Ports and interfaces

[**178161**] (Applies to the MSM720 controller only.) Fixed an issue in which if port trunking was configured, and the controller was restarted, a temporary network loop (lasting several seconds) was present until the port trunk configuration was applied.

Radio features and configuration

[**183562**] (Applies to HP 425, HP 517, and HP 560.) Fixed an issue in which changes made to radio settings for these APs in the controlled APs base group were not inherited by AP groups that were created before the introduction of these APs.

SNMP

[**184023**] (Applies to MSM720.) Fixed an issue in which SNMP traps were not sent for Ethernet port Up/Down events.

Web interface

[**190847**] (Applies to the Simplified UI.) Fixed an issue in which the dashboard failed to display historical data when the time zone configured on the controller ended with **:30**.

Wireless connectivity

[**179867**] (Applies to dual-radio APs.) Fixed an issue that resulted in wireless clients losing network connectivity when roaming between radios on an AP with many active wireless clients. (Apple MacBook clients were particularly sensitive to this issue.)

Version 6.6.2.0

The following fixes were included in release 6.6.2.0:

Authentication

[**171524, 172352**] (Applies to all supported APs.) Fixed an issue in which, on some wireless clients, 802.1X authentication might take several seconds to complete.

[**169813**] (Applies to Active Directory.) Fixed an issue where if you attempted to use a single quote character (') in an Active Directory group name, the controller displayed a blank error message (banner across the top of the page).

[**162454, 172726**] (Applies to MSM422 radio 1 with any encryption set (WPA2, WPA, WEP).) Fixed an issue in which wireless clients with a MAC address with the first digit equal to 0x8 or higher force the clients to always use software encryption, causing high CPU utilization on the AP and possible AP reboot.

CLI

[**159942**, **174968**] Fixed an issue in which during an SSH session, CLI command `disassociate controlled-ap wireless client` sometimes failed to work properly, resulting in the client not being disassociated and the SSH session being prematurely terminated.

Controller teaming

[**176861**] Fixed an issue in which a controller team failed to form after upgrading from a version older than 6.5.0.0, when using the following configuration for a radio:

- Channel exclusion list preventing the use of any 40 MHz wide channel.
- Channel width set to auto.
- Short guard interval.

[**173386**, **173622**] Fixed an issue in which, if a remote syslog server was configured with a name longer than 25 characters, team synchronization would not complete successfully.

[**171643, 172703**] Fixed an issue in which RADIUS communications might be adversely affected because the 802.1X Called-station-id values were not properly synchronized with all team member controllers when a configuration change was made.

[**169843**] Fixed an issue in which controller serial port settings configured on a team manager controller were not propagated to team member controllers.

[**169836, 173372**] Fixed an issue in which, if any controller in a team failed to provide system information, an error was logged, and no system information was returned for any of the controllers in the team.

[**168815**, **172365**] (Applies to the MSM317 and HP 517 with **Send Network Policy TLV** enabled on their switch ports.) Fixed an issue in which controller teams failed to synchronize if the primary VLAN IDs of the AP switch ports were the same as the VLAN ID configured in the LLDP profile.

[**149596, 151901**] Fixed an issue in which, if the team manager failed, the interim team manager would enable RRM severe interference mitigation and AP load balancing, even if these options were disabled by the administrator.

DHCP

[**170785, 174245**] Fixed an issue in which, whenever a wireless client roamed from one AP to another using MAC Authentication, the client session was terminated and did not restart until the client issued a new DHCP request.

IDS (Intrusion Detection System)

[**131182**] Fixed an issue in which re-deploying an AP from one controller to another controller generated false attacks reported by IDS on the original controller.

IMC (Intelligent Management Center)

[**172388**] Fixed an issue in which IMC triggered log messages similar to the following. These log messages no longer appear.

```
2015... [ERROR (0)] [THREAD(1636)] [CWlanHPDevAccessor::convertErrorCode](Error)Device return error msg:
2015... [ERROR (0)] [THREAD(1636)] [CWlanHPDevAccessor::convertErrorCode](Error)Device return error code:8
2015... [INFO (0)] [THREAD(1636)] [CWlanHPDevAccessor::convertErrorCode](Info)Dev return error.
2015... [INFO (0)] [THREAD(1636)] [CWlanHPDevAccessor::convertErrorCode](Info)responses {
 op_id: 1
 opControlledNetworkGetNeighborhoodScanningSettings {
   error {
     errorCode: COMMAND_NOT_SUPPORTED
     errorMessage: ""
     errorLevel: FATAL
```

[**157935**] Fixed an issue in which a controller would not communicate with an IMC server when the IMC server was identified with a FQDN (fully-qualified domain name).

Local mesh

[**174365**] Fixed an issue on the local mesh profile page where duplicate nodes might be displayed for radios not operating in local mesh mode.

[**168569**] (Applies to autonomous-mode APs with auto channel.) Fixed an issue in which a slave AP in a local mesh configuration might transmit incorrect channel information in the beacon when using auto channel. When this occurred, client devices could not associate with the slave AP.

[**130021**] (Applies to MSM410, MSM430, MSM460, MSM466, and MSM466-R in controlled and autonomous mode, and the HP 425 in controlled mode.) Fixed an issue where a Dynamic Local Mesh Slave configured in Promiscuous Mode will not establish a link even in the presence of multiple Masters.

Logging

[**153280**] (Applies to HP 560.) Fixed an issue in which, when **Protected Management Frames (802.11w)** were enabled on an AP, invalid management frames were dropped as required by the 802.11w standard, but log messages were not generated to indicate that this had occurred.

Miscellaneous

[**173309, 178218**] (Applicable to MSM4xx and HP 560) Fixed an issue related to the OBSS (Overlapping BSS) that can result in connectivity issues for some older wireless client devices operating in the 2.4 GHz band. The OBSS IE is no longer included in the beacon unless the AP is operating in 802.11b/g/n in Auto 20/40.

[**173065**, **180885**] (Applies to HP 425, MSM410, MSM430, MSM460, MSM466, MSM466-R.) Fixed an issue where, under certain conditions, an AP could sometimes restart when changing channels.

[**158997**, **169509**] Fixed an issue in which, if a controller was configured as an access gateway rather than an AP controller, and the number of user connections exceeded 500, users would be disconnected with *host not found* messages displayed in their browsers.

[**126170**] (Applies to all controllers.) Fixed an issue in which APs that were flagged as Admin Down were not excluded when determining whether an RRM analysis could be run.

Ports and interfaces

[**175833**] Fixed an issue in which the MSM controller firewall was not blocking incoming DNS requests on the Internet port.

Radio features and configuration

[**169632**] (Applies to MSM422 in controlled mode.) Fixed an issue in which, moving an AP configured for a non-802.11n radio mode into a group to which a WEP-enabled VSC is bound, falsely triggered an error similar to the following:

```
Invalid AP configuration: VSC x is configured with WEP security and a
radio is configured for 802.11n
```

RADIUS

[**169808**] Fixed an issue in which public access attributes (defined on the **Controller** >> **Public access** > **Attributes** page) did not support inclusion of the double quote character (") and the right-angle bracket (**>**) (in this order) anywhere within the same attribute, regardless of whether there are intervening characters between the double quote and the right-angle bracket. Attribute definitions containing these two characters (in this order) did not function properly and were displayed incorrectly.

[**168716**] Fixed an issue in which, as indicated in the documentation, RADIUS accounting is not supported when WPA opportunistic key caching is enabled. However, the user interface did not

prevent these two options from being activated at the same time. The symptom of this unsupported configuration attempt was client devices appearing as "N/A" in the client name list.

[**162460**, **173302**] Fixed an issue in which, under certain circumstances, RADIUS accounting packets might have contained incorrect information. This might have occurred when an initial authentication was terminated abnormally and a subsequent authentication by the client device completed successfully.

SNMP

[**127299**] Fixed an issue in which the SNMP OIDs that report information about the configuration of the Autochannel feature `COLUBRIS-DEVICE-WIRELESS-MIB` `coDevWirIfStaAutoChannelEnabled` and `coDevWirIfStaAutoChannelInterval` may have reported incorrect information.

SOAP

[**172362, 173104**] Fixed an issue in which the SOAP command `UpdateLEDsOperatingMode` was not functional.

Synchronization and discovery

[**172302**] (Applies to all controllers for AP provisioning with controller-based provisioning settings.) Fixed an issue in which AP discovery could fail when entering "names to search for" to discover APs using DNS.

Upgrades

[**177203, 181304**] (Applies to HP560) Fixed an issue in which, if certain data rates were disabled on radio 1 of the HP560, the AP would sometimes reboot unexpectedly.

VSC (virtual service community)

[**174058**, **176390**] (Applies to DHCP relay on the non-default port 68.) Fixed an issue in which, when a client moved between two 802.1X access controlled VSCs, the user session would show the IP address of the previous session and the client could not reach the gateway. This did not occur on the default port 67.

[**173721, 181425**] Fixed an issue in which a message similar to the following might have been logged for the AP if the first VSC in an AP group was deleted from the group:

```
AP is not associated with any VSC
```

[**171654**, **172282**] Fixed an issue in which, when a VSC is configured for 802.1X authentication using an external RADIUS server, the RADIUS Accounting STOP packets sent to the RADIUS server were missing the Acct-Session-ID.

Web interface

[**172189**] Fixed an issue in which, when upgrading from software version 6.4.x (or earlier) to version 6.6.x, the **Controlled APs** and the **Wireless clients** tables might not display properly due to web browser cache content.

Wireless connectivity

[**172677**, **176492**] (Applies to MSM422.) Fixed an issue in which the AP radio signal power level would decrease so much that the wireless client had to be in very close proximity to the AP to remain connected.

[**110393**] Fixed an issue in which Windows 7 wireless clients using WPA2 and a session timeout would be disconnected during the key exchange after re-authentication.

Version 6.6.0.0

The following fixes were included in release 6.6.0.0:

CLI

[**161583**, **162366**] (Applies to MSM760.) Fixed an issue in which the **Serial** port access section in the management tool under **Controller** >> **Management** > **CLI** was not displayed. Note that you could still log in to the controller and access the CLI using the serial port.

Controller teaming

[**162994**, **169518**] Fixed an issue in which wireless users authenticated by Active Directory could be restricted to a VSC subset according to the Active Directory group in which they belonged. If such wireless users were connected through an AP that was managed by a team member controller, the users were not properly restricted to the VSC subset.

[**162373**] Fixed an issue in which, when the team manager went down, the alarm (`ALARM_CS_CONTROLLER_DOWN, ID39`) was not shown on the team member controller that took over for the former team manager controller.

[**158228**] Fixed an issue in which, if an SNMPv3 user was configured in an SNMP Trap receiver on the team member controller, and the SNMPv3 user account was then deleted from the team manager controller, after a software upgrade, the team member controller could get stuck in a loop resetting and downloading a configuration.

[**151409**, **168447**] Fixed an issue in which, after a team was formed and working properly, changing the regulatory domain to some countries caused team synchronization failures to occur after an upgrade from 5.3.x.x to 5.7.x.x, followed by an upgrade to 6.0.x.x.

IDS (Intrusion Detection System)

[**166610**, **168110**] Fixed an issue in which IDS reported false positive “honeypot/evil twin AP IDS” alarms in the following two scenarios:

- When IDS was not enabled and the user imported an IDS csv file that manually authorized APs, the problem occurred upon IDS enable.
- When a Controlled AP radio MAC address was missing in the configuration file of a team manager controller (which could occur when some APs were discovered by the team member controller).

[**160516**] (Applies to HP 560.) Fixed an issue in which, when used as an IDS sensor, radio 1 could not detect ad-hoc cells and update misassociated client station and ad-hoc cells pages.

IMC (Intelligent Management Center)

[**137197**] When IMC establishes a connection to the MSM7xx Controller, the following error messages are displayed on the system log. These messages can be safely ignored.

err pmmclient: setVLANSubsectionIndexFromVLANNetworkProfileName: Unknown vlan name 'Internet port network'.

err pmmclient: setVLANSubsectionIndexFromVLANNetworkProfileName: Unknown vlan name 'LAN port network'.

err pmmclient: DB: Unable to prepare the SQL statement.

err pmmclient: Could not get data from the database.

Local mesh

[**166401**, **169412**] (Applies to autonomous APs with dynamic local mesh links.) Fixed an issue in which a VLAN created and mapped to a dynamic wireless mesh link, with the IP address mapped to that link, although correctly configured (and existing), was not listed in the interface list (**Network** > **IP Interface** page).

[**163761**] (Applies to HP 560 APs configured with 802.11ac, 80 MHz channel width, with local mesh on radio 1; and radio 2 of the slave AP configured with 802.11n/b/g, 20 MHz channel

width, access point only.) Fixed an issue in which, in this configuration, clients were unable to connect to the slave AP (radio 2) VSC.

Logging

[**157808**, **167620**] Fixed an issue in which excess system log messages similar to the following were appearing:

```
Aug 21 12:27:54.738 warn A0:48:1C:56:7D:A7 kernel:

hp_ieee80211_rrm_probereq_allow_send: Radio table is full, respond to
probe request
```

[**153466**] Fixed an issue in which unneeded warning messages appeared in the system log when an AP was configured to use channel 11 or 13, and the AP was changed from n/b/g 20 MHz channel width to 40 MHz channel width.

Miscellaneous

[**170640**] (Applies to MSM7xx Controllers.) Fixed an internal issue related to the apparent exposure of a database-related port (TCP port 5432) that could falsely lead to a PCI compliance audit failure.

[**159609**, **161063**] (Applies to HP 425, MSM430, MSM460, MSM466, and HP 517.) Fixed an issue in which the survivability feature did not work after an AP reboot. An AP that had synchronized to a controller continued to work even if the controller went down. However, if the AP rebooted and the controller continued to stay down, clients that were connected before and should have been able to re-connect, could not.

MTM (Mobility Traffic Manager)

[**153105**, **163787**] (Applies to VSCs with Opportunistic Key caching and MTM enabled.) Fixed an issue that caused roaming clients to end up on a VLAN different than the one assigned by the RADIUS server.

[**147065**, **167617**] Fixed an issue in which broadcast and multicast traffic was blocked between MTM clients.

Performance

[**152755**, **152753**] (Applies to MSM310, MSM317, MSM320, MSM325, and MSM422.) Improved RRM performance for these APs and eliminated related connectivity loss and a possible grayed out antenna that could occur when CPU utilization reached 100%.

Public access interface

[**160318**] Fixed an issue in which the use of a domain name or IP address in the wrong format as part of a DNAT rule parameter, caused the controller to reboot.

Radio features and configuration

[**167467**, **168669**] (Applies to RRM with DFS channels (5 GHz).) Fixed an issue in which, when an AP was operating on a DFS channel under high RF interference and a new plan was applied, the radio would go to the planned channel but, due to the high interference, might have requested another channel. If the channel assigned was different from the plan, wireless client connection was no longer allowed on the 5 GHz radio.

[**166184**, **171400**] (Applies to 802.11b/g radio modes.) Fixed an issue in which, when **Local Auto-Channel** with **Interval** was configured, APs might not have accepted wireless connections.

[**131154**] (Applies to MSM410, MSM430, MSM460, MSM466, and MSM466-R in autonomous mode.) Fixed an issue in which, after a reboot or a modification of the radio configuration, some error messages might have been generated by `rfmgr_ap`. These messages did not indicate a malfunction and could be ignored. The services offered by the radio worked properly.

[**128028**] (Applies to MSM320 and MSM325 in autonomous mode.) Fixed an issue in which, after upgrading to firmware 6.0, MSM320 and MSM325 sensors working in autonomous mode might have presented GUI instability when a radio or radios were setup to work in Network Detector mode.

RADIUS

[**162146**, **169531**] Fixed an issue in which, when there was heavy RADIUS traffic load (authentication and accounting) going through the controller, the controller might have experienced higher than usual CPU utilization, and performance sluggishness might have been experienced.

Regional specifics

[**159549**] (Applies to HP 425.) Fixed an issue in which, although the management tool allowed countries **Sri Lanka** or **Papua New Guinea** to be selected, these countries should not have been selected because they were not supported by the AP.

Routing

[**160371**, **172300**] Fixed an issue in which, on occasion, a client device would lose connectivity by getting assigned an IP address on the wrong subnet (due to incorrect egress from a controller), making it necessary to reassociate or reconnect.

SNMP

[**160932**, **167623**] Fixed an issue in which these two SNMP trap descriptions displayed in the web management tool were not fully descriptive:
`AP Rebooting` should be `AP rebooting due to config changes`
`AP not responding` should be `AP cannot complete discovery in time`

Synchronization and discovery

[**167266**, **169497**] Fixed an issue in which, when configuring static IP addresses in provisioning mode (**AP** > **Provisioning** with **Static** under **Assign IP address Via**), upon AP restart, it could not be synchronized by the controller. Symptoms included display of the message `resetting AP` and all LEDs blinked simultaneously.

VSC (virtual service community)

[**159792**, **171987**] (Applies to HP 517, MSM460, MSM466, and MSM466-R in controlled mode.) Fixed an issue in which APs being synchronized might have gotten stuck in the **Uploading** configuration state.

[**159082**] Fixed an issue in which some clients might not have been able to connect to a particular wireless network if the VSC had both **Protected Management Frames** (802.11w) and **Terminate WPA at the Controller** enabled. These were mutually exclusive options, even though the V6.6.x.x software did not enforce mutual exclusivity.

VPN

[**129915**] Fixed an issue in which clients using the PPTP VPN server might have experienced connectivity issues when sending large packets.

Web interface

[**159677**, **171914**] Fixed an issue in which the management tool might have restarted when attempting to sort a list of user sessions by **VSC**, **Idle time**, or **VLAN**, when the list included non-Access Controlled clients.

Wireless connectivity

[**144472**, **151253**] (Applies to MSM430, MSM460, MSM466, and MSM466-R.) Fixed an issue in which the AP could not send large multicast packets to wireless clients.

Issues and workarounds

NOTE: The number that precedes the issue description is used for tracking purposes.

Version 6.6.4.0

The following issues are present in release 6.6.4.0:

Authentication

Controller teaming

[**148260**] (Applies to MSM720.) A timeout can occur when attempting to obtain the `Sysinfo` file from a controller team manager when the team manager is under heavy load.

As a workaround, disable restriction of 802.11n and/or 802.11ac wireless clients on all APs bound to VSCs configured to support WPA (TKIP).

IDS (Intrusion Detection System)

[**140224**] (Applies to MSM410, HP 425, MSM430, MSM460, MSM466, and MSM466-R.) When **Intrusion Detection System** (IDS) is enabled, AP radios on that (team of) controller(s) should not be configured in **Access Point and Local Mesh** or **Local Mesh only**. As a workaround, disable IDS on the controller if the **Access Point and Local Mesh** or **Local Mesh only** operation is required.

Miscellaneous

[**149463**] (Applies to HP 517.) sFlow is not supported on the AP.

Performance

[**156546**] (Applies to HP 560.) Some Broadcom-based 802.11ac client devices experience reduced throughput performance when associated with an AP with **Protected Management Frames (802.11w)** enabled in the VSC.

Radio features and configuration

[**156664**] (Applies to HP 560.) When radio 1 is configured as an IDS sensor, special UDP packets (for rogue AP identification) are not generated and therefore, rogue detection is not possible on radio 1.

[**124010**] (Applies to MSM410, MSM430, MSM460, MSM466, and MSM466-R in autonomous mode.) The Neighborhood Scanning feature configured to scan on all channels only scans on channels within the regulatory domain's approved channel list rather than all channels in the respective band. For example, with the location set to the **United States**, **Neighborhood Scanning** will not scan channels 12 or 13 since they are not part of the U.S. regulatory domain. This is true in both the 2.4 GHz and 5 GHz bands. There is no workaround.

RADIUS

[**131693**] (Applies to MSM410, HP 425, MSM430, MSM460, MSM466, and MSM466-R.) iPads/iPods/iPhones cannot authenticate using the secondary RADIUS server with the default configuration. As a workaround, reduce the retry interval in the RADIUS Profile configuration to 5 seconds.

VLANs

[**161352, 164799**] If a VLAN is mapped to a wired port, and is also used as the management VLAN, access to an AP is lost when removing the VLAN assignment from the port. As a workaround, after removing the VLAN assignment from the port, reboot the AP to restore connectivity.

Web interface

[**169799**] The Payment URL validity check is not performed sufficiently. As a workaround, for the Payment URL, enter only characters that are valid in a URL.

Wireless connectivity

[**172357**] (Applies to the HP 560.) Some Android phones (observed on Android 4.1.2) that roam between the AP (configured for WPA2 with 802.11w (protected management frames)) and another AP that does not support 802.11w, might experience temporary connectivity problems as they roam between APs. Upgrading your phone to the latest supported Android version, might solve the problem.

SOAP function limitations for controller teaming environment

The functions discussed in this section may be of interest to developers who make use of SOAP to communicate and configure devices, especially when creating and managing user accounts on a controller. The following SOAP function calls that were not available in previous versions are re-enabled in MSM software Version 6.2.0.0 or later.

The following limitations apply to controller teams only:

- `UpdateUserAccountMaxConcurrentSession`: The user account limit is per controller instead of being applied globally to the team.
- `UpdateUserAccountValidity`: This function will return an error if subscription plans are selected to set the account validity.
- `ExecuteUserAccountLogout`: The action of logging out a user will only take effect if the user is logged in on the team manager.
- `UpdateUserAccountRemovalSettings`

NOTE: The **Removal due to invalidity** option of the `UpdateUserAccountRemovalSettings` function works in a teaming environment. However, do not use the **Removal due to inactivity** option when teaming because it could cause the controllers to wrongly remove active accounts.

Although enabled in MSM software release 6.2.0.0 or later, the following SOAP functions should not be used on a controller team. If you attempt to use any of these functions when teaming is enabled, an error is returned.

- `ExecuteBackupUserAccountsPersistentData`
- `ExecuteUserAccountRenewPlan`
- `AddSubscriptionPlan`
- `DeleteSubscriptionPlan`
- `DeleteAllSubscriptionPlans`
- `UpdateSubscriptionPlanName`
- `UpdateSubscriptionPlanOnlineTimeState`
- `UpdateSubscriptionPlanValidityPeriodState`
- `UpdateSubscriptionPlanOnlineTime`
- `UpdateSubscriptionPlanValidityPeriodMethodState`

- UpdateSubscriptionPlanValidityPeriodFor
- UpdateSubscriptionPlanValidityPeriodBetween
- UpdateSubscriptionPlanValidityPeriodFrom
- UpdateSubscriptionPlanValidityPeriodUntil
- UpdateSubscriptionPlanBooleanAttribute
- UpdateSubscriptionPlanIntAttribute
- UpdateSubscriptionPlanBandwidthLevelAttribute

Documentation updates and corrections

Online help

- Although referenced in the online help, the MSM335 AP is not supported in release 6.4.0.0 or later.

HP MSM SNMP MIB Reference Guide

The following objects in the COLUBRIS-VIRTUAL-AP-MIB are obsolete:

- coVirtualApAuthenMode
- coVirtualApAuthenProfileIndex
- coVirtualApUserAccountingEnabled
- coVirtualApUserAccountingProfileIndex
- coVirtualApDefaultUserRateLimitationEnabled
- coVirtualApDefaultUserMaxTransmitRate
- coVirtualApDefaultUserMaxReceiveRate
- coVirtualApDefaultUserBandwidthLevel

Contacting HP

For additional information or assistance, contact HP Networking Support:

www.hp.com/networking/support

Before contacting HP, collect the following information:

- Product model names and numbers
- Technical support registration number (if applicable)
- Product serial numbers
- Error messages
- Operating system type and revision level
- Detailed questions

HP security policy

A Security Bulletin is the first published notification of security vulnerabilities and is the only communication vehicle for security vulnerabilities.

- Fixes for security vulnerabilities are not documented in manuals, release notes, or other forms of product documentation.
- A Security Bulletin is released when all vulnerable products still in support life have publicly available images that contain the fix for the security vulnerability.

To find security bulletins:

1. Go to the HP Support Center website at www.hp.com/go/hpsc.
2. Enter your product name or number and click **Go**.
3. Select your product from the list of results.
4. Click the **Top issues & solutions** tab.
5. Click the **Advisories, bulletins & notices** link.

To initiate a subscription to receive future HP Security Bulletin alerts via email, sign up at:

h41183.www4.hp.com/signup_alerts.php?jumpid=hpsc_secbulletins

Related information

Documents

To find related documents, see the HP Support Center website:

www.hp.com/support/manuals

Enter your product name or number, and then click **Go**. If necessary, select your product from the resulting list.

Websites

- Official HP Home page: www.hp.com
- HP Networking: www.hp.com/go/networking
- HP product manuals: www.hp.com/support/manuals
- HP download drivers and software: www.hp.com/s
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