IMC

Wireless Service Manager 5.1 (E0302)

Table of Contents

Terminology

AC   Access Controller

Fat   Refers to Autonomous Access Points

Fit   Refers to MSM Controlled Access Points

What's New in this Release

This release includes v 5.1 SP1, but can not upgrade from v 5.1 SP1, You can install IMC WSM 5.1 (E0302) directly or upgrade IMC WSM 5.0 (E0101), IMC WSM 5.0 (E0101H01), IMC WSM 5.0 (E0101L02), IMC WSM 5.0.1 (E0102), IMC WSM 5.0.1 (E0102H01), IMC WSM 5.1 (E0201) to IMC WSM 5.1 (E0302). The following lists all features released after IMC WSM 5.0 (E0101).

Features released in IMC WSM 5.1 (E0302)

- **Home**
  - Added Radio Type List.
  - Added WLAN List.

- Added Channel List.
- Support AP Bandwidth - Today, Radio Type List, WLAN List, Channel List, AC, Fat AP, Fit AP, TopN AP Traffic - Today, TopN Location Traffic - Today, TopN Locations by Clients, TopN AP by Clients, Client Count - Today.
- **Resource Management**
  - Supports displaying HP wireless devices in Teams.
  - Supports displaying HP AC, fit AP, and fat AP real-time monitoring information.
  - Provides WLAN lists and supports configuring a single WLAN or multiple WLANs in batches.
  - Provides radio lists and supports configuring a single radio or multiple radios in batches.
- **Wireless service reports**
  - Added Site Access Points and Neighbors report.
  - Added HP device support for traffic and rate statistics in reports.
- **View Management**
  - Added a scale in inch in Location View and added displaying signal coverage by SSID.
- **Configuration Management**
  - Threshold Configuration: Client Count and Radio Rate.
  - Supports AC Group configuration.
  - Supports AC WLAN configuration.
  - Supports AC Radio batch configuration.
  - Supports Fat AP WLAN configuration.
  - Supports Fat AP Radio batch configuration.

Features released in IMC WSM 5.1 (E0201)

- **HP MSM device support**
  - Supports managing HP MSM devices, including ACs, Fit APs, and Fat APs, and supports displaying topologies and reports.
- **Wireless service reports**
  - Added the Hotspot Statistics Report by Hotspot in *Reports >> My Reports >> Report Template List*.
  - Added the SSID Statistics Report in *Reports >> My Reports >> Report Template List*.
  - Added the AC Statistics Report in *Reports >> My Reports >> Report Template List*.
  - Added the AP Statistics Report in *Reports >> My Reports >> Report Template List*.
- **Performance statistics**
  - Supports displaying history trend graphs on the first page.
  - Supports displaying history information for ACs.
  - Supports displaying history information for Fit APs.
  - Supports displaying history information based on SSIDs.
  - Supports displaying history information in location views.
- **Querying WLAN information**
  - Supports querying WLAN information.
- **User-defined License display**
  - You can customize License display. This feature is configurable under *About*.

Features released in IMC WSM 5.0.1 (E0102)

- **Resource Management**
  - Added the Total Traffic and Current Online User fields in the Client Online History page in *WLAN Manager >> Resource Management >> Clients*.
- **Wireless Service Reports**
  - Added the Received Traffic, Sent Traffic and Total Traffic fields in the Current Associated Client Statistics Report in *Reports >> My Reports >> Report Template List*.
  - Added the Received Traffic, Sent Traffic and Total Traffic fields in the Client Summary Report in *Reports >> My Reports >> Report Template List*.

- Added the Received Traffic, Sent Traffic and Total Traffic fields in the Client Detail Report in *Reports >> My Reports >> Report Template List*.
        - Added the Dropping Rate, Success Rate, and Relevant Blocking Rate fields in the AP Association Summary Report in *Reports >> My Reports >> Report Template List*.
        - Added the Dropping Rate, Success Rate, and Relevant Blocking Rate fields in the AP Association Detail Report in *Reports >> My Reports >> Report Template List*.
        - Added the AP Peak Utilization and AP Average Utilization fields in the Client Number Trendline Report in *Reports >> My Reports >> Report Template List*.
        - Added the Busy AP Statistics Report in *Reports >> My Reports >> Report Template List*.
        - Added the Idle AP Statistics Report in *Reports >> My Reports >> Report Template List*.
        - Added the Worst AP Statistics Report in *Reports >> My Reports >> Report Template List*.
- **Configuration Management**
    - Added an AP Priority setting option in *WLAN Manager >> Configuration Management >> AP Configuration*.
- **Energy policy management**
    - Automatically disables and enables APs and radios in a WLAN to save energy and reduce radiation. This feature is configurable under ***WLAN Manager >> Energy Policy Management***.
- **Network planning**
    - Supports adding, modifying, and deleting AP models and viewing AP basic information. This feature is configurable under ***WLAN Manager >> Configuration Management >> AP Model Management***.
    - Supports managing antennas in the system by adding, modifying, deleting, and viewing antenna information. This feature is configurable under ***WLAN Manager >> Configuration Management >> Antenna Management***.
    - Supports adding a virtual AP to a location topology and displaying the signal coverage so that you can get the number of APs and signal coverage in the WLAN before purchasing APs, ensuring good investment utilization. This feature is configurable under ***WLAN Manager >> Wireless Topology.***
- **Other**
    - Supports Linux operating system plus Oracle database.
    - Supports Linux operating system plus MySQL database.
    - Supports Windows operating system plus MySQL database in the HP version.
    - Support the fast match function when query by location view.

Features released in IMC WSM 5.0 (E0101L02)

- **Resource Management**
    - Added the Total Traffic and Current Online User fields in the Client Online History page in *WLAN Manager >> Resource Management >> Clients*.
- **Wireless Service Reports**
    - Added the Received Traffic, Sent Traffic and Total Traffic fields in the Current Associated Client Statistics Report in *Reports >> My Reports >> Report Template List*.
    - Added the Received Traffic, Sent Traffic and Total Traffic fields in the Client Summary Report in *Reports >> My Reports >> Report Template List*.
    - Added the Received Traffic, Sent Traffic and Total Traffic fields in the Client Detail Report in *Reports >> My Reports >> Report Template List*.
    - Added the Dropping Rate, Success Rate, and Relevant Blocking Rate fields in the AP Association Summary Report in *Reports >> My Reports >> Report Template List*.
    - Added the Dropping Rate, Success Rate, and Relevant Blocking Rate fields in the AP Association Detail Report in *Reports >> My Reports >> Report Template List*.
    - Added the AP Peak Utilization and AP Average Utilization fields in the Client Number Trendline Report in *Reports >> My Reports >> Report Template List*.
    - Added the Busy AP Statistics Report in *Reports >> My Reports >> Report Template List*.
    - Added the Idle AP Statistics Report in *Reports >> My Reports >> Report Template List*.
    - Added the Worst AP Statistics Report in *Reports >> My Reports >> Report Template List*.

Configuration Management
- Added an AP Priority setting option in *WLAN Manager >> Configuration Management >> AP Configuration*.

- **Other**
  - Support the fast match function when query by location view.

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Problems Fixed in this Release

IMC WSM 5.1 (E0302) fixes the following problems, including all bugs fixed after IMC WSM 5.0 (E0101).

Resolved Problems in IMC WSM 5.1 (E0302)

1. The operator has not right to access WSM, but can still access WSM from the device details page.
2. After devices are added or deleted in Location View Topology.
3. In active/standby AC mode, when an AP goes offline, the location of the AP in the topology might be incorrect.
4. The AP status in the location topology is not refreshed in time when AP offline alarms are generated by IMC polling.

Resolved Problems in IMC WSM 5.1 (E0201)

1. In an **AP Traffic Detail Report**, the X coordinate represents IP addresses, and the Y coordinate represents bytes. After modification, the X coordinate represents AP names, and the Y coordinate represents MB.
2. The value in the **Max Clients** field on the **Add Service Policy** or **Add Radio Policy** page is 64. After modification, the value in the **Max Clients** field is 124.
3. On the client details page, VLAN ID is displayed as Vlan ID.
4. Open a location topology, create an access policy, and click **Draw Area** to draw an area. Then click **Show iNode clients**, and drag the area. Two areas are displayed in the topology.
5. Enter the **Modify Fat AP Radio Parameters** page. The service policy list is displayed only when the **Mesh Profile ID** is **None**. Otherwise, no service policy is displayed.
6. Use a registered license with out GIS right to log into the WSM. The GIS view can still be accessed from the navigation tree or top menu.

Resolved Problems in IMC WSM 5.0.1 (E0102H01)

1. Add wireless service-related performance monitoring indexes in the performance monitor settings of the iMC platform, and then upgrade the WSM module from 5.0 (E0101) to 5.0.1 (E0102). These monitoring indexes are not monitored after the upgrade.
2. Open the AP traffic details report or summary report. The report does not include the wired service data of the 802.11n APs.
3. The **Radio Frames Reception** item in the wireless report should show the number of data packets received, instead of all types of packets received. The MIB node of the item must be changed from **hh3cDot11RxFrameCnt 1.3.6.1.4.1.25506.2.75.2.2.1.1.2** to **hh3cDot11RxDataFrameCnt 1.3.6.1.4.1.25506.2.75.2.2.1.1.16**.
4. The WSM system is optimized. The memory and other resources consumed by the imcwlandm process drop by 20%. The memory used by Jserver drops by 10%.

Resolved Problems in IMC WSM 5.0.1 (E0102)

1. On the page for adding an energy policy, click **Add**, select offline APs in the popup window, and click **OK**. The

page cannot be displayed normally.
2. Resume a suspended task that has been expired. The system does not change the status of the task from **Suspended** to **Expired**.
3. On the **WLAN Manager** page, view the TopN(AP Traffic - Today). No fat AP traffic statistics are available.
4. Enter the **Fit AP Group List** page, and sort out fit AP groups by sequence number. Database access error occurs.
5. Click **Export** on the **AP Access Ports** page, and then click the **Exported Result** link. After you perform the save or close operation, you cannot perform any operation on the **Access Ports** page.
6. View detailed information about an AP by entering the Fit AP list page. The page sometimes is displayed abnormally.
7. Enter the client detailed information page, and click the **Client Online History** link to the view the client online history. The data displayed on the page is not the same as the data obtained by directly entering the **Client Online History** page from the **Client List** page.
8. Log in to IMC as a viewer, view the shortcut menu of an AP in the **Location view** topology. The **Modify AP** item that should not be displayed iappears in the menu.
9. Delete multiple APs in the topology corresponding to a location view, and load the topology again. The removed APs appear in the location view.
10. Click **Add** on the **Service Policy Management** page. In the popup window, select or type a location view that does not contain any AP from the **Location** list, and click **Query**. There should be no results, but data of all radios is displayed.

Resolved Problems in IMC WSM 5.0 (E0101L02)

1. Upgrade the software from V3 to IMC WSM 5.0 (E0101) and then view the operation menu on the Fit AP List interface. The Locate to Map menu disappears.
2. Set a new scale on a location topology, and then zoom in or out the topology. The scale cannot be changed again.
3. The Performance Monitor page wrongly displays apTemplateName as apSerialID.
4. On the AP Monitor page, the Transmission Rate and Receiving Rate are zero.
5. Adding or modifying an AP template fails if the input AP name exceeds 15 bytes.
6. No reason is provided for the h3cDot11StationAuthorFailTrap alarm.
7. The Export All function of the fit AP list is unavailable.
8. Error-level logs related to WSM are contained in front ground logs.
9. User switch between different SSIDs of the same AP is not recorded in detail in the user online history.
10. The data in the AP traffic report is incorrect.

Resolved Problems in IMC WSM 5.0 (E0101H01)

1. History records about inter-AC roaming of a user had overlapping time periods.
2. TopNs for wireless widget on the IMC homepage could not be set to any value other than 5.
3. When you displayed GIS view on the View Management page, operate and save, an error page appeared.
4. The Location Traffic TopN list in TopN Traffic did not reflect the actual traffic information.
5. Upgraded the software from V3 to IMC WSM 5.0 (E0101), and then viewed speed related information in the data reports. The displayed information was incorrect.

[Table of Contents]

WSM Software Distribution Contents

The WSM distribution list contains the following files and folders:

1. **WSM\manual\readme_wsm_5.1 (E0302).html** - this file

2. **WSM\install** - the WSM installation program

Installation Prerequisites

Server Requirements

The following are the minimum hardware requirements for running WSM on a server:

- Minimum hardware requirements
    - Pentium 4 3.0 GHz processor
    - 4096 MB of RAM
    - 50 GB hard disk space

- Operating system:
    - Windows Server 2003 X64 with Service Pack 2 and KB942288
    - Windows Server 2003 R2 with Service Pack 2
    - Windows Server 2003 R2 X64 with Service Pack 2 with KB942288
    - Windows Server 2008 with Service Pack 2
    - Windows Server 2008 X64 with Service Pack 2
    - Windows Server 2008 R2 with Service Pack 1
    - Windows Server 2008 R2 X64 with Service Pack 1
    - Red Hat Enterprise Linux 5
    - Red Hat Enterprise Linux 5 X64
    - Red Hat Enterprise Linux 5.5
    - Red Hat Enterprise Linux 5.5 X64
    - Red Hat Enterprise Linux 6.1 X64

- VMware
    - VMware Workstation 6.5.x
    - VMware ESX Server 4.x

- Hyper-V:
    - Windows Server 2008 R2 Hyper-V

- Database
    - Microsoft SQL Server 2005 Service Pack 3 (Windows only)
    - Microsoft SQL Server 2008 Service Pack 3 (Windows only)
    - Microsoft SQL Server 2008 Service Pack 3 (64-bit) (Windows 64-bit only)
    - Microsoft SQL Server 2008 R2 Service Pack 1 (Windows only)
    - Microsoft SQL Server 2008 R2 Service Pack 1 (64-bit) (Windows 64-bit only)
    - Oracle 11g Release 1 (Linux only)
    - Oracle 11g Release 2 (Linux only)
    - Oracle 11g Release 2 (64-bit) (Linux only)
    - MySQL Enterprise Server 5.1 (Linux and Windows)(Up to 1000 devices are supported)
    - MySQL Enterprise Server 5.5 (Linux and Windows)(Up to 1000 devices are supported)

- IMC Platform Compatibility
    - HP IMC Platform version: HP IMC PLAT 5.1 (E0202P05) or later

Note: WSM should be installed on a 64-bit operating system platform as memory on 32-bit platforms is restricted..

Note: Optimal hardware requirements vary with scale, other management factors, and are specific to each infrastructure. Please consult HP, or your local account teams and precise requirements can be provided.

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Client Prerequisites

PC Requirements

- Minimum hardware requirements
    - Pentium 4 2.0 GHz processor
    - 2048 MB of RAM
    - 50 GB hard disk space

- Operating system
    - Windows

- Browser
    - IE 8.0 or later is recommended.
    - Firefox 3.6 or later is recommended.
    - Turn off the blocking settings in the browser.
    - Add the WSM website to the trusted sites of the browser.
    - The client resolution is 1024*768 at least.
    - JRE 1.6.0_update10 or later is recommended.

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Typical Installation

You can install IMC WSM 5.1 (E0302) directly. Before installing WSM, make sure the IMC is installed correctly. To install WSM, click **Install** button on the **Monitor** tab of the Intelligent Deployment Monitoring Agent, then select the *components* sub-directory of the install package, and click **OK** button to launch the installation wizard.

For more information about installation instructions, see the *IMC Installation Guide*.

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Upgrade

This release includes v 5.1 SP1, but can not upgrade from v 5.1 SP1. The upgrade package applies to IMC WSM 5.0 (E0101), IMC WSM 5.0 (E0101H01), IMC WSM 5.0 (E0101L02), IMC WSM 5.0.1 (E0102), IMC WSM 5.0.1 (E0102H01), IMC WSM 5.1 (E0201).

Follow these instructions to upgrade IMC:

1. Back up the IMC database on the **Environment** tab in the Intelligent Deployment Monitoring Agent.
2. Stop the IMC system in the Intelligent Deployment Monitoring Agent.
3. Click **Install** on the **Monitor** tab of the Intelligent Deployment Monitoring Agent.

4. Select the *install/components* subdirectory of the upgrade package, and click **OK**.
5. After the installation is complete, the Intelligent Deployment Monitoring Agent lists the components that need to be upgraded. Click **OK** to start upgrading the components.
6. If this is a distributed deployment, upgrade the components deployed on the slave servers separately.
7. After the update is complete, start all processes in the Intelligent Deployment Monitoring Agent window.

For more information about installation instructions, see the *IMC Installation Guide*.

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Un-Installation

You can remove WSM component through the intelligent deployment monitoring agent. To do this, follow these steps:

1. In the Intelligent Deployment Monitoring Agent window, click **Stop IMC** on the **Monitor** tab to stop all processes of IMC.
2. On the **Deploy** tab, right-click the WSM component, and select **Uninstall the Component** from the shortcut menu.
3. When an un-installation success dialog box appears, click **OK**.

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Running the Deployment Monitoring Agent

The Deployment Monitoring Agent is a GUI program to manage the deployment of the IMC modules and monitor the performance and the state of processes of the IMC Server. After the installation finished, the Deployment Monitoring Agent is started automatically to guide the user through deployment.

On Windows, you can select "Start/All Programs/Intelligent Management Center/Deployment Monitoring Agent" on the desktop to run the Deployment Monitoring Agent. On Linux, you can execute the dma.sh file in the "deploy" sub-directory of original directory IMC was installed to run the Deployment Monitoring Agent.

If Deployment Monitoring Agent fails to start, please ensure the "HP IMC Server" service is running. This service is automatically started when the OS starts up and runs as a daemon/background process. On Windows, you can start/stop it in Windows Services; on Linux, you can start/stop it with command "service imcdmsd start" or "service imcdmsd stop".

The IMC Server will not run unless the IMC Server is started from the Deployment Monitoring Agent (see next section).

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Running the IMC Server

To run the IMC server, click the "Start IMC" button in "Monitor" tab of Deployment Monitoring Agent.

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Using IMC with Web Browser

Once the server is running, you can access the IMC user interface using a web browser. Enter the following address in the Address Bar of a browser:

```
http://hostname:port/imc
```

Where *hostname* is the host name or IP address of the IMC Server (the default is localhost if you launch web browser on the IMC Server machine), and *port* is the Web Server Port (the default is 8080) used by the IMC.

You can also access the IMC user interface with web browser through HTTPS protocol. Enter the following address in the Address Bar of a browser:

```
https://hostname:port/imc
```

Where *hostname* is the host name or IP address of the IMC Server (the default is localhost if you launch web browser on the IMC Server machine), and *port* is the Web Server Port for HTTPS protocol (the default is 8443) used by the IMC.

When the IMC login page appears, use the username "admin" and password "admin" to log into the IMC.

Refer to the IMC Online Help for details on how to add operators, and add your devices to the IMC.

The default security level in the IE properties is High. If you try to log in to IMC with this default, the system will prompt "Content from the Web site listed below is being blocked by the Internet Explorer Enhanced Security Configuration." Click Add to add the IMC website to the trusted sites. If you do not add the IMC website to the trusted sites and determine not to display the prompt any more, you may fail to log in to IMC. To solve the problem, use either of the following methods:

1. Set the security level to **Medium**.
    - Start IE and select **Tools > Internet Options**.
    - Select the **Security** tab, and then click **Custom Level**.
    - In the popup dialog box, set the security level to **Medium**.
2. Add the website of the IMC system to the trusted sites.
    - Start IE and select **Tools > Internet Options**.
    - Select the **Security** tab, Select **Trusted sites**, and the click **Sites**.
    - Add the website of the IMC system in the popup dialog box.

On your first access to IMC, the browser prompts "The application's digital signature cannot be verified. Do you want to run the application?" Below are the name "topo", and the publisher "IMC Development Team". Select the "Always trust content from this publisher" checkbox, and click **Run**.

On your first access to the realtime performance view, the system prompts you to install **Adobe Flash Player Installer**. Click **Install** to download the installer package and install the application. Without this application, the realtime performance view is not available.

Note: *For centralized installation, when the "User Access Manager - User SelfService" is deployed, if you input http://hostname:port/ in the address bar, you will enter the home page of the Self-Service login page rather than the login page of the IMC platform. To enter the login page of the IMC platform in this case, change the content of file index.jsp in directory "\client\web\apps\ROOT" to <% response.sendRedirect("/imc/index.jsp"); %>.*

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Monitoring the Server

On the "Monitor" tab of the Deployment Monitoring Agent, you can see the Disk Usage, CPU Usage and Physical Memory Usage of the IMC Server. On the "Process" tab of the Deployment Monitoring Agent, you can see all IMC processes and their running states. On the "Environment" tab of the Deployment Monitoring Agent, you can see the OS information and database usage.

The monitoring data is available only after the IMC Server is started. Refer to the section "Running the IMC Server" for details on how to start the IMC Server.

[Table of Contents]

Distributed Deployment

The IMC modules may be installed on more than one server to meet specific performance requirements. A typical scenario is where the system has one Master server with IMC Platform deployed and multiple Slave servers with other modules deployed.

To install the IMC on a Slave Server, execute the installslave.bat file on Windows OS (or installslave.sh on Linux OS) by either double-clicking the file or running the command in the folder where installslave.bat (or installslave.sh) is located in.

For detailed distributed deployment instructions, please refer to the IMC Installation Guide.

[Table of Contents]

Platform Specific Issues

Windows - General Issues

- Please be especially careful about how filenames are capitalized, and used. This is essential in order to ensure consistent behavior across platforms which may have case sensitive file systems.

LINUX - General Issues

- The IMC Server must be run from a "root" account in order to receive SNMP traps, accept syslog messages, and facilitate ftp file transfers.
- UNIX filenames are case sensitive. Care must be taken when references are made to python scripts and xml files.

[Table of Contents]

TCP Port Usage

The WSM Server will BIND to and use the following TCP/IP Ports.

Port	Usage
UDP 162	Used to accept SNMP Traps from network elements.

TCP 22	SSH/SFTP port, which the configuration center uses to back up and restore the device software and configuration file through SSH/SFTP.
TCP 20/21	FTP port, which the configuration center uses to back up and restore the device software and configuration file through FTP.
TCP 23	Telnet port, which the resource management module, ACL management module, and configuration center use to access the device through Telnet.
ICMP	ICMP port, which the resource management module uses to discover devices and check the reachability of the devices.
UDP 69	IMC-specific TFTP daemon.
TCP 80	Used to launch the web network management system of the device.
TCP 443	HTTPS port, which the virtual network management module uses to obtain VMware virtual network data in SSL.
TCP 8080	IMC-specific web server for HTTP protocol (can be changed when installation).
TCP 8443	IMC-specific web server for HTTPS protocol (can be changed when installation).
TCP 8800	IMF listening port.
TCP 1433	SQL Server database listening port (Windows only).
UDP 6666	iNode location listening port.
TCP 7668	Used to manage HP Wireless device.

Note: *On Linux systems, the IMC Server must be run with root privileges to bind to the TCP/IP ports (69, 162,514).*

Note: *The IMC Server might not be able to bind to the TCP/IP ports (69, 162, 514) if other SNMP, TFTP or syslog applications are running and accessing them.*

[Table of Contents]

Memory Allocation

The amount of memory allocated to the IMC jserver can be adjusted by a script. The memory size should be tuned to make use of as much memory as required by your particular IMC server. Move to the "client\bin" (or "client/bin" on Linux OS) sub-directory of the original IMC installation directory (using the "cd" command), and use the setmem.bat (or setmem.sh on Linux OS) script.
For example, to allocate 1024 MB RAM, move to the "installation directory\client\bin" (or "installation directory/client/bin" on Linux OS) directory, and run the script:

    setmem.bat *1024*   (Windows OS)

    setmem.sh *1024*   (Linux OS)

The default and maximum memory that can be allocated to the IMC jserver is listed below:

OS Type	Default allocable memory	Maximum allocable memory
Windows 32-bit	512MB	1024MB
Windows 64-bit	2048MB	Up to the physical memory
Linux 32-bit	512MB	1280MB
Linux 64-bit	2048MB	Up to the physical memory

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Known Problems

Installation/Upgrade/Patch

- For a correct installation, the installation path can contain letters, digits, underlines, and spaces, but cannot other special characters.
- The serial number of offline APs that never goes online cannot be displayed due to implementation.
- The radio information of offline APs cannot be displayed due to implementation.
- HP devices are not supported for location view history information.
- PB connection(configured via management >> management console on MSM device) failure between WSM and MSM device could cause the failure of configuration on MSM device.

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Feature Support Matrix

This section describes the features that are supported by the device model types.

MSM Models NOT Supported by WSM: WSM does not support 5.4 or lower. These MSM devices can only run on MSM 5.2 and therefore are not supported by WSM: MSM 313,323.313R,323R.

Feature Note: WSM does not support MSM versions 5.4 or lower.	HP MSM v5.5 to 5.7	HP WA and WX
Topology management		
Displaying ACs and Fat APs in IP view	Y	Y
Wireless device topology	Y	Y
Location view topology	Y	Y
Wireless custom view topology	Y	Y
Physical connection between Fit APs and ACs in the Fit AP topology	N	Y
Operation about user management from online clients that attached to the AP	Y	Y
Resource group management		
WSM Home	Parital	Y
Category view	Y	Y
Wireless custom view	Y	Y
Location view	Y	Y

AC Group (batch configuration profile deployed to a group of controllers) Only H3C supports	N	Y
AP uplink POE switch management -- used to managed the link between switch and the AP	N	Y
Fit AP group	Y	Y
AC Team - This is for 700 and 720, see the list of the controllers working as a team, # of the controller team, and data on it. (Team status)	Y	N
Wireless location management		
Sampling point management	N	Y
Add sampling point	N	Y
Delete sampling point	N	Y
Update sampling point	N	Y
Wireless location	N	Y
Wireless real-time locating	N	Y
Position-based wireless access control - for Location Based Access Control. Requires UAM v7/inode client v7		
Wireless access area management	N	Y
Position-based access control	N	Y
GIS management		
Displaying hotspots detail	N	Y
Set default display position	N	Y
Add hotspot	N	Y
Update hotspot	N	Y
Delete hotspot	N	Y
GIS locating	N	Y
Muti-key support	N	Y
WIDS management		
Displaying lists of Rogue APs and Rogue clients	N	Y
Displaying details of Rogue APs and Rogue clients	N	Y
Setting rogue devices as friendly devices	N	Y
Configuring Wireless Intrusion Detection System policies	N	Y
Rouge AP counterwork	N	Y
Web Service Interface		
Query basic information of device	Y	Y
Query fault information of device	Y	Y
Query performance information of device	Y	Y

Wireless service reports		
Service Report	Not all reports	Y
Subordinate summary Report (NO LONGER IN WSM)	N	Y
Performance monitoring of wireless devices		
Displaying monitoring data in the form of graph and table	N	Y
Select performances of wireless devices that you want to monitor as your mind	N	Y
AC statistics	N	Y
AP statistics	N	Y
Fit AP statistics	N	Y
Fit AP Ethernet interface statistics	N	Y
Station Traffic statistics	N	Y
Radio rate statistics	N	Y
Radio traffic statistics	N	Y
Radio performance statistics	N	Y
Radio statistics (SSID)	N	Y
Wireless service alarms		
802.11 AC	Y	Y
802.11 AP	Y	Y
802.11 Client	Y	Y
802.11 WIDS (Wireless Intrusion Detection System)	N	Y
NMS (IMC) Access Point: provides traps for the AP (lets you see if AP is online/offline)	Y	Y
Wireless device management		
AC management	Y	Y
Fat AP management	Y	Y
Fit AP management	Y	Y
Client management	Y	Y
WLAN management(SSID)	Y	Y
Radio management	Y	Y
Configuration wizard		
AC configuration wizard	Y	Y
Fat AP configuration wizar	Y	Y
Policy configuration		
Radio Policy	N	Y

Service Policy	N	Y
Template management		
Creating Radio policy templates manually	N	Y
Displaying Radio policy template information	N	Y
Creating service policy templates manually	N	Y
Displaying service policy template information	N	Y
Mesh management		
MP policy management	N	Y
Mesh profile management	N	Y
Mesh interface configuration	N	Y
Configure peer MAC address	N	Y
Energy policy management		
Energy Policy Management	N	Y
Network planning		
AP Model Management	Y	Y
Antenna Management	Y	Y
AP Add Virtual AP	Y	Y
Performance statistics		
displaying history trend graphs	Y	Y
displaying history information for Acs	Y	Y
displaying history information for Fit Aps	Y	Y
displaying history information based on SSIDs	N	Y
displaying history information in location views	Y	Y
Querying WLAN information		
Querying WLAN information	Y	Y
User-defined License display		
User-defined License display	Y	Y
Operating system		
Windows	Y	Y
Linux	Y	Y

DataBase		
Windows+SqlServer Windows+Mysql	Y	Y
Linux+Oracle Linux+Mysql	Y	Y

[ ]

Report Support

This section list specifies which reports are or are not supported.

Report Name	Support	Field
AC Statistics Report	Parital	AC Name, IP Address, AP Number, Availability, Transmitted Traffic, Received Traffic, Max Transmit Speed, Avg Transmit Speed, Max Receive Speed, Avg Receive Speed, Max Online Client Number, Avg Online Client Number, AP Average Utilization, AP Peak Utilization, Total Client Online Duration, Avg Client Online Duration
AP Association Summary Report	N	None
AP Association Detail Report	N	None
AP Availability Detail Report	Y	All
AP Availability Summary Report	Y	All
Site Access Points and Neighbors	Y	All
Idle AP Statistics Report	N	None
Busy AP Statistics Report	N	None
Worst AP Statistics Report	N	None
AP Logoff Summary Report	Y	All
AP Logoff Detail Report	Y	All
AP Statistics Report	Parital	AP Name, AP Location, Availability, Transmitted Core Traffic, Received Core Traffic, Transmitted Radio Traffic, Received Radio Traffic, Max Transmit Speed, Avg Transmit Speed, Max Receive Speed, Avg Receive Speed, Max Online Client Number, Avg Online Client Number, AP Average Utilization, AP Peak Utilization, Total Client Online Duration, Avg Client Online Duration
Radio Error Report	Parital	AP Name, Radio ID, AP Location, FCS Error Frames
Radio Speed Report	Y	All
AP Traffic Summary Report	Y	All
AP Traffic Detail Report	Y	All
Radio Traffic Report	Y	All
AP Speed Report	Y	All
Radio Resource Usage Report	N	None
Rogue AP History Report	N	None

Rogue AP Report	N	None
Rogue Client History Report	N	None
Rogue Client Report	N	None
Current Associated Client Statistics Report	Y	All
SSID Statistics Report	Y	All
Hotspot Statistics Report by AP	Y	All
Hotspot Statistics Report by Hotspot	Parital	Hotspot Name, AP Number, Online AP Number, Availability, Transmitted Traffic, Received Traffic, Max Transmit Speed, Avg Transmit Speed, Max Receive Speed, Avg Receive Speed, Max Online Client Number, Avg Online Client Number, AP Average Utilization, AP Peak Utilization, Total Client Online Duration, Avg Client Online Duration
Wireless Asset Statistics Report	Parital	exclude Max APs, Max Clients, Radios/Clients
Client Summary Report	Y	All
Client Detail Report	Y	All
Client Number Trendline Report	Y	All

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