AP-51XX v2.3.0.0-019R – Release Notes
Part Number 72E-126383-01

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Introduction – AP-5131 Indoor AP & AP-5181 Outdoor AP

Designed to address the wireless and wired connectivity needs of the small office or retail outlet, the AP-5131 provides a single-box solution which integrates all services required to extend secure broadband access to mobile users. With the ability to connect local users to a remote private network via a secured IPSec link, the AP-5131 is ideal for deployment in branch offices or at telecommuter sites for enterprise-class WLAN performance and secure connectivity of wired clients. The AP-5131 integrates a Router and DHCP Server for local LAN connectivity; a configurable stateful inspection firewall for LAN isolation; a VPN endpoint for secure backhaul connectivity; a QoS Engine for superior performance of real time video and voice applications; and a AAA server with Hotspot Gateway for security and public access management. With v1.1 or newer, the AP-5131 offers a self-assembling, self-healing Mesh Networking architecture designed to extend the reach of the wireless network via wireless communication between Access Points.

Customers are only entitled to convert to this release of the software if they have a valid Motorola service agreement or are covered under warranty. Customers who currently have a support contract in place will be able to download the software from a protected Web site (this requires registering and requesting the software, as well as verifying the service contract). Customers who do not have a support agreement will be provided options to purchase a Motorola service contract.

Note: Beginning with version 2.2, all access point releases will be split between the standalone AP and the Adaptive AP firmware. Adaptive code will be released as part of the switch Wi-NG release process. This document only refers to the standalone AP code release.

New Features in version 2.3.0.0-019R

Release 2.3 adds the following feature:

- Reliable Multicast - Delivers reliable 802.11 multicast data by leveraging unicast data transmissions. This is useful in locations where the RF environment is prone to interference / noise. Converting a multicast packet to unicast packets will greatly improve the reliability of delivery (using 802.11 positive acknowledgement and retransmissions).

AP-51XX Hardware/ Software Compatibility Matrix

	v1.0.0.0 v1.0.1.0 v1.1.0.0	v1.1.1.0	v1.1.2.0	v2.0.0.0-045R	v2.1.0.0-030R, v2.1.1.0-001R	v2.2.0.0-022R, v2.2.1.0-07	**v2.3.0.0-019R**
AP-5131	Supported	Supported	Supported	Supported	Supported	Supported	Supported
AP-5181	Not-Supported	Supported	Supported	Supported	Supported	Supported	Supported
AP-5131 & AP-5181 with new processor revision (July 2007)	Not-Supported	Not-Supported	Supported	Supported	Supported	Supported	Supported
AP-5131 Dependent Mode AP-5131-40020-D-WR AP-5131-13040-D-WR	Not-Supported	Not-Supported	Not-Supported	Supported	Supported	Not Supported	Not Supported

AP-51XX Default Configurations

	v1.0.0.0 v1.0.1.0	v1.1.0.0	v1.1.1.0 v1.1.2.0 v2.0.0.0-045R v2.1.0.0-030R V2.2.0.0-022R V2.2.1.0-007R **V2.3.0.0-019R**
WAN	DHCP client Auto-update enabled	Static IP: 10.1.1.1 Static Mask: 255.0.0.0	Static IP: 10.1.1.1 Static Mask: 255.0.0.0
LAN1 (a.k.a LAN)	Static IP: 192.168.0.1 Static Mask: 255.255.255.0 DHCP Server enabled	DHCP Client Auto-update enabled Default Gateway***** Ethernet Port Enabled	DHCP Client Auto-update enabled Default Gateway* Ethernet Port Enabled
LAN2	n/a	Static IP: 192.168.1.1 Static Mask: 255.255.255.0 DHCP Server Enabled	Disabled
Access via WAN Port	HTTPS, SSH, SNMP: enabled	HTTP, HTTPS, Telnet, SSH, SNMP: enabled	HTTP, HTTPS, Telnet, SSH, SNMP: enabled

*DNS and Domain Name parameters take effect on the Default Gateway Interface.

Firmware Update

Note: Upgrading from 1.0 to 2.X is a two step process which requires the same upgrade procedure to be repeated twice. The first upgrade will result in a bootloader change and the second upgrade will result in a firmware change. For subsequent upgrades a single download will suffice. Using Auto Update, the AP will automatically update itself twice when upgrading to v2.X

Note: Upgrading from 1.0/1.1/1.1.1/1.1.2 to 2.X retains the existing settings. It is recommended, however, that users export their 1.0/1.1/1.1.1/1.1.2 configuration for backup purposes prior to upgrading.

Note: When downgrading from v1.1.2 to v1.0, all configuration settings are lost and the AP will return to factory defaults.

Note: Dependent Mode AP-5131's (with a D in the Part Number) cannot be downgraded to any software version below 2.0.0.0-045R.

To conduct a firmware update on the AP-51XX from 1.X to 2.X:

1. Select 'System Configuration' → 'Firmware Update' from the AP-51XX menu tree of the GUI.
2. Specify the name of the target firmware file within the 'Filename' field.
3. If the target firmware file resides within a directory, specify a complete path for the file within the 'Filepath (optional)' field.
4. Enter an IP address for the FTP or TFTP server used for the update.
5. Use the drop-down menu to specify the FTP or TFTP server's location. Select the appropriate button, FTP or TFTP, for the server's location. The server can reside on the WAN or on the LAN.
6. Select either the FTP or TFTP button to define whether the firmware file resides on a FTP or TFTP server.
7. Set the following FTP parameters if applicable:
   - Username - Specify a username for the FTP server login.
   - Password - Specify a password for FTP server login.
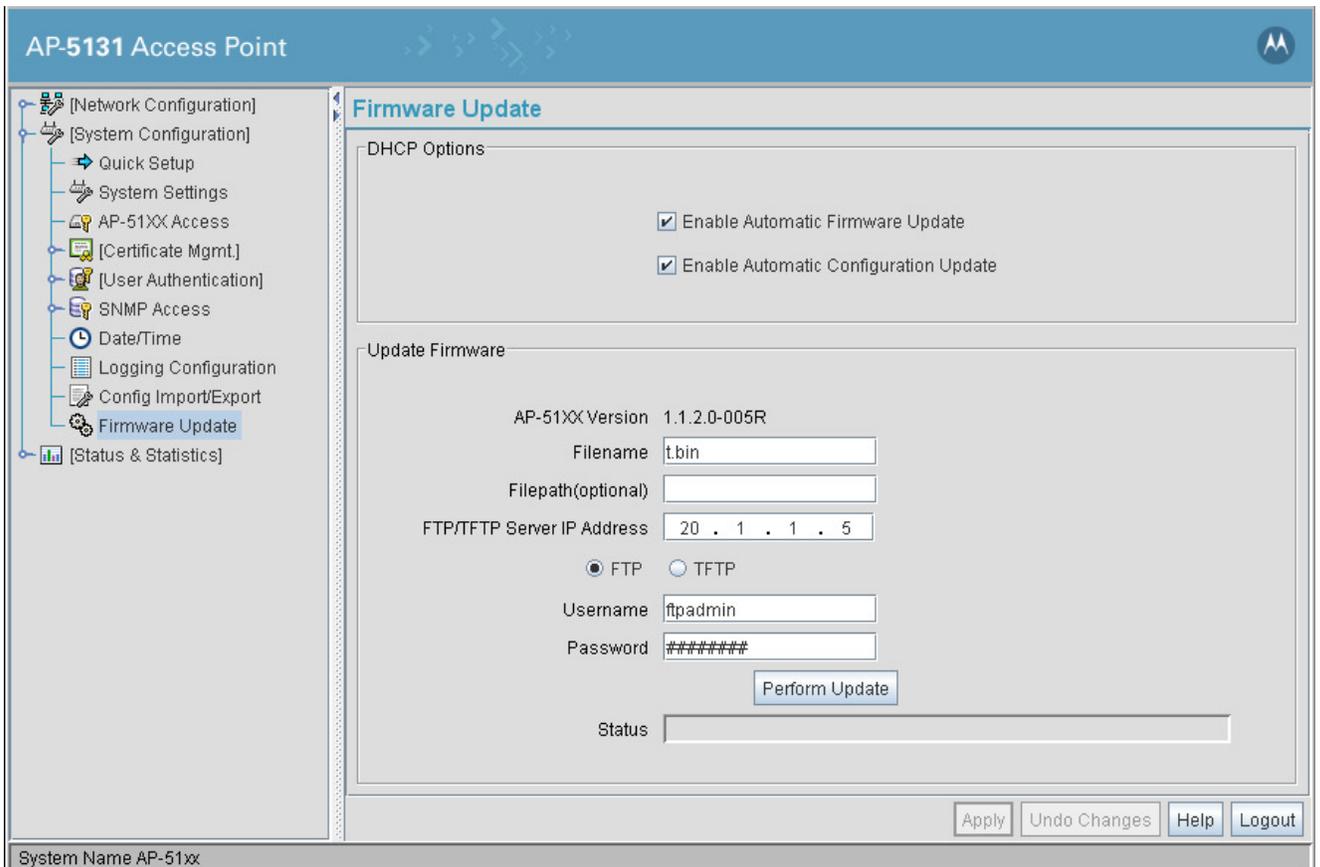
8. Click 'Apply'.
9. Click the 'Perform Update' button to initiate the update. Upon confirming the firmware update, the AP reboots and completes the update. This step may take several minutes.
10. After the AP reboots, return to the 'Firmware Update' screen.
11. Repeat Step #9.
12. After the AP reboots, clear the browser cache and return to the 'Firmware Update' screen. Check the Status field to verify whether the firmware update was successful.

Resetting the AP-51XX Password

The AP-51XX *Command Line Interface* (CLI) enables users who forget their password to reset it to the factory default. Only an installation professional should reset the access point's password and promptly define a new restrictive password.
To contact Motorola Support in the event of a password reset requirement, go to www.symbol.com/contactsupport.

AP-51XX MAC Addresses

The AP-51XX has one MAC address for each LAN, which are displayed in 'LAN Stats' and 'WAN Stats', under the 'Status and Statistics' page in the Web User Interface.

Each radio on an AP-51XX supports four Basic Service Sets (BSS). Each BSS, has a corresponding MAC address. The MAC address, which is displayed in the Web Interface, under the Radio Settings screen, corresponds to that of BSS #1. The MAC addresses for the other three BSS's (BSS #2, #3, #4) are derived by adding 1, 2, 3, respectively, to the radio MAC address (same as BSS #1).

For example: If the radio MAC address displayed under the Radio Settings screen (Network Configuration → Wireless → Radio Configuration → Radio<n>) is 00:A0:F8:72:20:DC, then the BSSs for that radio will have the following MAC addresses:

BSSID	MAC Address	Hexadecimal Addition
BSSID#1	00:A0:F8:72:20:DC	Same as Radio MAC Address
BSSID#2	00:A0:F8:72:20:DD	Radio MAC Address + 1
BSSID#3	00:A0:F8:72:20:DE	Radio MAC Address + 2
BSSID#4	00:A0:F8:72:20:DF	Radio MAC Address + 3