Cisco Unified Wireless Network Software Release 7.2.110.0 (7.2 Maintenance Release 1)

PB707629

Overview

Cisco® Unified Wireless Network Software Release 7.2.110.0 (7.2MR1) addresses key enterprise IT challenges related to Bring Your-Own-Device (BYOD) wireless as primary access and architectural complexity. Release 7.2.110.0 delivers 802.11r fast roaming with BYOD enhancements for onboarding personal devices to allow users to connect, register and provision their own personal devices on the corporate network. This release also introduces the Cisco Aironet® 1552i and 1552s Access Points, the newest members of the 1550 Series 802.11n outdoor access points.

New Features

A number of new features are included in Cisco Unified Wireless Network Software Release 7.2.110.0. The features are supported in the following platforms:

- Cisco Aironet access points running Control and Provisioning of Wireless Access Points (CAPWAP) Protocol
- Cisco 2500 and 5500 Series Wireless LAN Controllers
- Cisco 7500 Series FlexConnect Wireless LAN Controller
- Cisco Catalyst® 6500 Series Wireless Services Module 2 (WiSM2)
- Cisco Wireless LAN Controller Module for Integrated Services Routers G2 (WLCM2) (Cisco Wireless LAN Controller on Cisco Services Ready Engine)
- Cisco 3300 Series Mobility Services Engine (MSE)
- Cisco Network Control System (NCS) 1.1

Cisco Wireless LAN Controllers: New Features

In Software Release 7.2.110.0, Cisco Wireless LAN Controllers continue to provide solutions with architectural flexibility to enable wireless as primary access and simplify deployments for BYOD. Table 1 describes the new features of the wireless controller in this release.

Table 1. New Controller Features in Cisco Unified Wireless Network Release 7.2.110.0

Feature	Description	Benefit
IEEE Standard for fast roaming (802.11r) in local mode	Introduces a new concept of roaming where the handshake with the new access point is done even before the client roams to the target access point.	Fast roaming with 802.11r can allow clients to move between access points without breaking a session, a critical requirement for many applications. Cisco led the effort to evolve Cisco Centralized Key Management into the 802.11r standard and is now leading again by being first to support this standard.

Feature	Description	Benefit
BYOD enhancements in conjunction with Cisco Identity Services Engine (ISE)	Local mode and FlexConnect support for device registration and supplicant provisioning, and provisioning and onboarding of personal devices.	These enhancements allow users to connect, register, and provision their own personal devices on the corporate network.
Device profiling with Cisco Dynamic Host Control Protocol (DHCP) sensor	The WLC will act as the ”collector” of DHCP options in DHCP packets and feed the external “analyzer” (the Cisco ISE) with the required data via an interim accounting message.	Device profiling makes it possible to determine a device’s type from the information received from the device during its connection to the network.
External web authentication for FlexConnect local switched clients	Web authentication is a Layer 3 security feature that causes the controller to not allow IP traffic (except DHCP and DNS -related packets) from a particular client until that client has been validated. Web authentication is a simple authentication method that does not require the use of a supplicant or client utility. The login page used for web authentication is stored on an external web server.	Web authentication provides architectural flexibility by extending web authentication mechanisms available in local mode to FlexConnect local switched clients.
Platform support for Cisco Integrated Services Router Generation 2 (ISR G2) and embedded access point router	Support for Cisco WLCM2 on SRE for ISR G2 and the embedded Cisco 802.11n access point router with built-in a/g/n access point.	This feature helps to maintain architectural flexibility with ISR integrated wireless in the branch.

Cisco Aironet Access Points: New Features

Table 2 describes the new features of Cisco Aironet access points in this software release.

Table 2. New Access Point Features in Cisco Unified Wireless Network Release 7.2.110.0

Feature	Description	Benefit
Cisco Aironet 1552i 802.11n Outdoor Access Point	The Cisco Aironet 1552i comes with internal antennas (2.4 GHz at 2 dBi or 5 GHz at 4 dBi).	The 1552I provides an economical and esthetically pleasing option for outdoor access point deployments.
Cisco Aironet 1552s 802.11n Outdoor Access Point	The Cisco Aironet 1552s integrates an ISA100.11a gateway for sensor network data transport over 802.11n wireless network	The 1552s combines two separate wireless networks into a single, integrated solution, reducing installation costs for industrial deployments.
Additional modes for supporting outdoor wired root access points (RAP)	Prior to Release 7.2.110.0, outdoor access points, including Cisco Aironet 1520 and 1550 Series, could work only in bridge mode as RAP or mesh access points MAP. With this release, the 1520 and 1550 Series support local, bridge, and FlexConnect modes.	This release enhances the features and deployment flexibility available for outdoor access points with support for nonbridged modes.

Mobility Services

Cisco Mobility Services Engine (MSE) offers service plane separation for scalable services delivery and a single point of interface to securely expose network intelligence to third-party applications. In Release 7.2.110.0, a larger number of MSEs can be managed per instance of Cisco Prime™ Network Control System (NCS).

Table 3 describes the new features specific to the Cisco Mobility Services Engine with Cisco Unified Wireless Network Software Release 7.2.110.0.

Table 3. New Cisco Mobile Services Engine Features in Cisco Unified Wireless Network Release 7.2.110.0

Feature	Description	Benefit
Enhanced scale for managing MSE deployments via Cisco Prime Network Control System (NCS)	Previous to Release 7.2.110.0, the maximum number of MSEs per instance of NCS was 10. The maximum has now increased to 25 MSEs per NCS.	Ease of MSE management for large deployments.

Cisco Prime Network Control System

Cisco Prime NCS is a key component of Cisco Prime portfolio of management products from Cisco. Cisco Prime management products are based on a service-centric foundation and support integrated lifecycle management of Cisco architectures and technologies. Cisco Prime products are built on an intuitive, workflow-oriented user experience.

Benefits of Cisco Prime products include:

- Simplified and predictable network management through a set of common attributes that deliver operational advantages and control across architectures, networks, and services
- Increased operations efficiencies through reduced network errors, faster troubleshooting, and improved delivery of services
- Lowered total cost of ownership by maximizing the value of the existing network investment and integrating with existing operational systems and processes

Cisco Prime NCS provides a single pane of glass view of converged user and access management for wired and wireless networks, with complete wireless lifecycle management.

Cisco Prime NCS 1.1 with Cisco Unified Wireless Network Software Release 7.2.110.0 adds support for additional new features described above and in Table 4.

Table 4. New Cisco Prime Features in Cisco Unified Wireless Network Software Release 7.2.110.0

Feature	Description	Benefit
IEEE standard for fast roaming (802.11r) for local mode	NCS support for streamlined 802.11r configuration.	The new release provides operational simplicity to rollout 802.11r fast roaming in wireless deployments.
BYOD enhancements for profiling and provisioning of devices	Simplified management across FlexConnect and local mode architectures in conjunction with Cisco ISE.	The new release supports converged user and access workflow for rollout of personal devices onto the corporate network.

Limited Lifetime Hardware Warranty

Cisco Aironet 1550 Series Access Points come with a 90-day Limited Hardware Warranty.

For comprehensive support that can help maximize network performance and efficiency, we offer a range of services. Choose support capabilities that meet your needs including direct, anytime access to Cisco engineers, flexible device-by-device coverage, and premium OS software updates. For more information, visit: http://www.cisco.com/go/warranty.

Service and Support

Services from Cisco and our partners can help you assess, design, tune and operate your wireless LAN to seamlessly integrate mobility services and take advantage of the systemwide capabilities of the Cisco Unified Wireless Network.

Our professional services help you align your interference management, performance, and security needs with your technical requirements to better utilize the self-healing, self-optimizing features built into the silicon-level intelligence of Cisco CleanAir® technology and the increased performance of the 802.11n standard. These services can enhance deployment and operational efficiencies to reduce the cost and complexities of transitioning to new technologies.

Our technical support services help you maintain network availability and reduce risk. Optimization services provide ongoing assistance with performance, secure access, and maintaining a strong foundation for business evolution and innovation.

For More Information

- For more information about planning, building, and running services for Cisco CleanAir technology, Cisco 802.11n, and the Cisco Unified Wireless Network, visit: Cisco Technical Support Services or Cisco Professional Services http://www.cisco.com/go/services.
- For more information about Cisco wireless products, visit: http://www.cisco.com/go/wireless.
- For more information about the Cisco Unified Wireless Network, visit: http://www.cisco.com/go/unifiedwireless.

Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Printed in USA C25-707629-00 06/12