



Preface

This preface provides an overview of the *Cisco Wireless LAN Controller Configuration Guide, Release 5.0*, references related publications, and explains how to obtain other documentation and technical assistance, if necessary. It contains these sections:

- [Audience, page xx](#)
- [Purpose, page xx](#)
- [Organization, page xx](#)
- [Conventions, page xxi](#)
- [Related Publications, page xxiii](#)
- [Obtaining Documentation, Support, and Security Guidelines, page xxiii](#)

Audience

This guide describes Cisco Wireless LAN Controllers and Cisco Lightweight Access Points. This guide is for the networking professional who installs and manages these devices. To use this guide, you should be familiar with the concepts and terminology of wireless LANs.

Purpose

This guide provides the information you need to set up and configure wireless LAN controllers.

**Note**

This version of the *Cisco Wireless LAN Controller Configuration Guide* pertains specifically to controller software release 5.0. If you are using an earlier version of software, you will notice differences in features, functionality, and GUI pages.

Organization

This guide is organized into these chapters:

[Chapter 1, “Overview,”](#) provides an overview of the network roles and features of wireless LAN controllers.

[Chapter 2, “Using the Web-Browser and CLI Interfaces,”](#) describes how to use the controller GUI and CLI.

[Chapter 3, “Configuring Ports and Interfaces,”](#) describes the controller’s physical ports and interfaces and provides instructions for configuring them.

[Chapter 4, “Configuring Controller Settings,”](#) describes how to configure settings on the controllers.

[Chapter 5, “Configuring Security Solutions,”](#) describes application-specific solutions for wireless LANs.

[Chapter 6, “Configuring WLANs,”](#) describes how to configure wireless LANs and SSIDs on your system.

[Chapter 7, “Controlling Lightweight Access Points,”](#) explains how to connect access points to the controller and manage access point settings.

[Chapter 8, “Managing Controller Software and Configurations,”](#) describes how to upgrade and manage controller software and configurations.

[Chapter 9, “Managing User Accounts,”](#) explains how to create and manage guest user accounts, describes the web authentication process, and provides instructions for customizing the web authentication login.

[Chapter 10, “Configuring Radio Resource Management,”](#) describes radio resource management (RRM) and explains how to configure it on the controllers.

[Chapter 11, “Configuring Mobility Groups,”](#) describes mobility groups and explains how to configure them on the controllers.

[Chapter 12, “Configuring Hybrid REAP,”](#) describes hybrid REAP and explains how to configure this feature on controllers and access points.

[Appendix A, “Safety Considerations and Translated Safety Warnings,”](#) lists safety considerations and translations of the safety warnings that apply to the Cisco Unified Wireless Network Solution products.

[Appendix B, “Declarations of Conformity and Regulatory Information,”](#) provides declarations of conformity and regulatory information for the products in the Cisco Unified Wireless Network Solution.

[Appendix C, “End User License and Warranty,”](#) describes the end user license and warranty that apply to the Cisco Unified Wireless Network Solution products.

[Appendix D, “Troubleshooting,”](#) describes the LED patterns on controllers and lightweight access points, lists system messages that can appear on the Cisco Unified Wireless Network Solution interfaces, and provides CLI commands that can be used to troubleshoot problems on the controller.

[Appendix E, “Logical Connectivity Diagrams,”](#) provides logical connectivity diagrams and related software commands for controllers that are integrated into other Cisco products.

Conventions

This publication uses these conventions to convey instructions and information:

Command descriptions use these conventions:

- Commands and keywords are in boldface text.
- Arguments for which you supply values are in italic.
- Square brackets ([]) mean optional elements.
- Braces ({ }) group required choices, and vertical bars (|) separate the alternative elements.
- Braces and vertical bars within square brackets ([{ | }]) mean a required choice within an optional element.

Interactive examples use these conventions:

- Terminal sessions and system displays are in screen font.
- Information you enter is in **boldface**.
- Nonprinting characters, such as passwords or tabs, are in angle brackets (< >).

Notes, cautions, and timesavers use these conventions and symbols:



Note

Means reader take note. Notes contain helpful suggestions or references to materials not contained in this manual.



Caution

Means reader be careful. In this situation, you might do something that could result equipment damage or loss of data.

**Warning**

This warning symbol means danger. You are in a situation that could cause bodily injury. Before you work on any equipment, be aware of the hazards involved with electrical circuitry and be familiar with standard practices for preventing accidents. (To see translations of the warnings that appear in this publication, refer to the appendix "Translated Safety Warnings.")

Waarschuwing

Dit waarschuwingssymbool betekent gevaar. U verkeert in een situatie die lichamelijk letsel kan veroorzaken. Voordat u aan enige apparatuur gaat werken, dient u zich bewust te zijn van de bij elektrische schakelingen betrokken risico's en dient u op de hoogte te zijn van standaard maatregelen om ongelukken te voorkomen. (Voor vertalingen van de waarschuwingen die in deze publicatie verschijnen, kunt u het aanhangsel "Translated Safety Warnings" (Vertalingen van veiligheidsvoorschriften) raadplegen.)

Varoitus

Tämä varoitusmerkki merkitsee vaaraa. Olet tilanteessa, joka voi johtaa ruumiinvammaan. Ennen kuin työskentelet minkään laitteiston parissa, ota selvää sähkökytkentöihin liittyvistä vaaroista ja tavanomaisista onnettomuuksien ehkäisykeinoista. (Tässä julkaisussa esiintyvien varoitusten käännökset löydät liitteestä "Translated Safety Warnings" (käännetty turvallisuutta koskevat varoitukset).)

Attention

Ce symbole d'avertissement indique un danger. Vous vous trouvez dans une situation pouvant entraîner des blessures. Avant d'accéder à cet équipement, soyez conscient des dangers posés par les circuits électriques et familiarisez-vous avec les procédures courantes de prévention des accidents. Pour obtenir les traductions des mises en garde figurant dans cette publication, veuillez consulter l'annexe intitulée « Translated Safety Warnings » (Traduction des avis de sécurité).

Warnung

Dieses Warnsymbol bedeutet Gefahr. Sie befinden sich in einer Situation, die zu einer Körperverletzung führen könnte. Bevor Sie mit der Arbeit an irgendeinem Gerät beginnen, seien Sie sich der mit elektrischen Stromkreisen verbundenen Gefahren und der Standardpraktiken zur Vermeidung von Unfällen bewusst. (Übersetzungen der in dieser Veröffentlichung enthaltenen Warnhinweise finden Sie im Anhang mit dem Titel "Translated Safety Warnings" (Übersetzung der Warnhinweise).)

Avvertenza

Questo simbolo di avvertenza indica un pericolo. Si è in una situazione che può causare infortuni. Prima di lavorare su qualsiasi apparecchiatura, occorre conoscere i pericoli relativi ai circuiti elettrici ed essere al corrente delle pratiche standard per la prevenzione di incidenti. La traduzione delle avvertenze riportate in questa pubblicazione si trova nell'appendice, "Translated Safety Warnings" (Traduzione delle avvertenze di sicurezza).

Advarsel

Dette varselsymbolet betyr fare. Du befinner deg i en situasjon som kan føre til personskade. Før du utfører arbeid på utstyr, må du være oppmerksom på de faremomentene som elektriske kretser innebærer, samt gjøre deg kjent med vanlig praksis når det gjelder å unngå ulykker. (Hvis du vil se oversettelser av de advarslene som finnes i denne publikasjonen, kan du se i vedlegget "Translated Safety Warnings" [Oversatte sikkerhetsadvarslar].)

Aviso

Este símbolo de aviso indica perigo. Encontra-se numa situação que lhe poderá causar danos físicos. Antes de começar a trabalhar com qualquer equipamento, familiarize-se com os perigos relacionados com circuitos eléctricos, e com quaisquer práticas comuns que possam prevenir possíveis acidentes. (Para ver as traduções dos avisos que constam desta publicação, consulte o apêndice "Translated Safety Warnings" - "Traduções dos Avisos de Segurança").

¡Advertencia!	Este símbolo de aviso significa peligro. Existe riesgo para su integridad física. Antes de manipular cualquier equipo, considerar los riesgos que entraña la corriente eléctrica y familiarizarse con los procedimientos estándar de prevención de accidentes. (Para ver traducciones de las advertencias que aparecen en esta publicación, consultar el apéndice titulado "Translated Safety Warnings.")
Varning!	Denna varningssymbol signalerar fara. Du befinner dig i en situation som kan leda till personskada. Innan du utför arbete på någon utrustning måste du vara medveten om farorna med elkretsar och känna till vanligt förfarande för att förebygga skador. (Se förklaringar av de varningar som förekommer i denna publikation i appendix "Translated Safety Warnings" [Översatta säkerhetsvarningar].)

Related Publications

These documents provide complete information about the Cisco Unified Wireless Network Solution:

- *Quick Start Guide: Cisco 2100 Series Wireless LAN Controllers*
- *Quick Start Guide: Cisco 4400 Series Wireless LAN Controllers*
- *Cisco Wireless LAN Controller Command Reference*
- *Cisco Wireless Control System Configuration Guide*
- *Quick Start Guide: Cisco Wireless Control System*
- Quick start guide and hardware installation guide for your specific lightweight access point

Click this link to browse to user documentation for the Cisco Unified Wireless Network Solution:

http://www.cisco.com/en/US/products/hw/wireless/tsd_products_support_category_home.html

Obtaining Documentation, Support, and Security Guidelines

For information on obtaining documentation, obtaining support, providing documentation feedback, security guidelines, and also recommended aliases and general Cisco documents, see the monthly *What's New in Cisco Product Documentation*, which also lists all new and revised Cisco technical documentation, at:

<http://www.cisco.com/en/US/docs/general/whatsnew/whatsnew.html>

