



Preface

Audience

This guide is for the networking professional who installs and manages Cisco Aironet 1400 Series Bridges. To use this guide, you should have experience working with the Cisco IOS and be familiar with the concepts and terminology of wireless local area networks.

Purpose

This guide provides the information you need to install and configure your bridge. This guide provides procedures for using the IOS commands that have been created or changed for use with the bridge. It does not provide detailed information about these commands. For detailed information about these commands, refer to the *Cisco IOS Command Reference for Cisco Aironet Access Points and Bridges* for this release. For information about the standard IOS Release 12.2 commands, refer to the IOS documentation set available from the Cisco.com home page at **Service and Support > Technical Documents**. On the Cisco Product Documentation home page, select **Release 12.2** from the Cisco IOS Software drop-down list.

This guide also includes an overview of the bridge web-based interface, which contains all the functionality of the command-line interface (CLI). This guide does not provide field-level descriptions of the web-based windows nor does it provide the procedures for configuring the bridge from the web-based interface. For all window descriptions and procedures, refer to the bridge online help, which is available from the Help buttons on the web-based interface pages.

Organization

This guide is organized into these chapters:

[Chapter 1, “Overview,”](#) lists the software and hardware features of the bridge and describes the bridge’s role in your network.

[Chapter 2, “Configuring the Bridge for the First Time,”](#) describes how to configure basic settings on a new bridge.

[Chapter 3, “Using the Web-Browser Interface,”](#) describes how to use the web-browser interface to configure the bridge.

[Chapter 4, “Using the Command-Line Interface,”](#) describes how to use the command-line interface (CLI) to configure the bridge.

[Chapter 5, “Administering the Bridge,”](#) describes how to perform one-time operations to administer your bridge, such as preventing unauthorized access to the bridge, setting the system date and time, and setting the system name and prompt.

[Chapter 6, “Configuring Radio Settings,”](#) describes how to configure settings for the bridge radio such as the role in the radio network, data rates, transmit power, channel settings, and others.

[Chapter 7, “Configuring SSIDs,”](#) describes how to configure and manage multiple service set identifiers (SSIDs) on your bridge. You can configure up to 16 SSIDs on your bridge and assign different configuration settings to each SSID.

[Chapter 8, “Configuring Spanning Tree Protocol,”](#) describes how to configure Spanning Tree Protocol (STP) on your bridge. STP prevents bridge loops in your network.

[Chapter 9, “Configuring WEP and WEP Features,”](#) describes how to configure the cipher suites required to use authenticated key management, Wired Equivalent Privacy (WEP), and WEP features including MIC, CMIC, TKIP, CKIP, and broadcast key rotation.

[Chapter 10, “Configuring Authentication Types,”](#) describes how to configure authentication types on the bridge. Client devices use these authentication methods to join your network.

[Chapter 11, “Configuring RADIUS and TACACS+ Servers,”](#) describes how to enable and configure the Remote Authentication Dial-In User Service (RADIUS) and Terminal Access Controller Access Control System Plus (TACACS+), which provide detailed accounting information and flexible administrative control over authentication and authorization processes.

[Chapter 12, “Configuring VLANs,”](#) describes how to configure your bridge to interoperate with the VLANs set up on your wired LAN.

[Chapter 13, “Configuring QoS,”](#) describes how to configure quality of service (QoS) on your bridge. With this feature, you can provide preferential treatment to certain traffic at the expense of others.

[Chapter 14, “Configuring Filters,”](#) describes how to configure and manage MAC address, IP, and Ethertype filters on the bridge using the web-browser interface.

[Chapter 15, “Configuring CDP,”](#) describes how to configure Cisco Discovery Protocol (CDP) on your bridge. CDP is a device-discovery protocol that runs on all Cisco network equipment.

[Chapter 16, “Configuring SNMP,”](#) describes how to configure the Simple Network Management Protocol (SNMP) on your bridge.

[Chapter 17, “Managing Firmware and Configurations,”](#) describes how to manipulate the Flash file system, how to copy configuration files, and how to archive (upload and download) software images.

[Chapter 18, “Configuring System Message Logging,”](#) describes how to configure system message logging on your bridge.

[Chapter 19, “Troubleshooting,”](#) describes how to troubleshoot common problems with your bridge.

[Appendix A, “Channels and Antenna Settings,”](#) lists the bridge radio channels and the maximum power levels supported by the world’s regulatory domains.

[Appendix B, “Protocol Filters,”](#) lists some of the protocols that you can filter on the bridge.

[Appendix C, “Supported MIBs,”](#) lists the Simple Network Management Protocol (SNMP) Management Information Bases (MIBs) that the bridge supports for this software release.

[Appendix D, “Error and Event Messages,”](#) lists the CLI error and event messages and provides an explanation and recommended action for each message.

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 screen** font.
- Nonprinting characters, such as passwords or tabs, are in angle brackets (< >).

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



Tip

Means the following will help you solve a problem. The tips information might not be troubleshooting or even an action, but could be useful information.



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" (käännetyt 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 advarelsene som finnes i denne publikasjonen, kan du se i vedlegget "Translated Safety Warnings" [Oversatte sikkerhetsadvarsler].)
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 bridge:

- *Release Notes for 1400 Series Bridges*
- *Cisco IOS Command Reference for Cisco Aironet Access Points and Bridges*

Click this link to browse the available documentation:

<http://www.cisco.com/cisco/web/psa/default.html>

To browse to the 1400 series bridge documentation, choose **Wireless > Outdoor Wireless > Cisco Aironet 1400 Series**.

Obtaining Documentation and Submitting a Service Request

For information on obtaining documentation, submitting a service request, and gathering additional information, 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>

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