Preface

Document Purpose

The purpose of this document is to describe the design and implementation of the Cisco Unified Wireless Network solution for the enterprise, using the features incorporated in the Wireless LAN Controller software Release 4.1.

Intended Audience

This publication is for experienced network administrators who are responsible for design and implementation of wireless networks.

Document Organization

The following table lists and briefly describes the chapters of this guide.

Section	Description
Chapter 1, "Cisco Unified Wireless Network Solution Overview."	Summarizes the benefits and characteristics of the Cisco Unified Wireless Network for the enterprise.
Chapter 2, "Cisco Unified Wireless Technology and Architecture."	Discusses the key design and operational considerations in an enterprise Cisco Unified Wireless Deployment.
Chapter 3, "WLAN Radio Frequency Design Considerations."	Describes the basic radio frequency (RF) information necessary to understand RF considerations in various wireless local area network (WLAN) environments.
Chapter 4, "Cisco Unified Wireless Network Architecture—Base Security Features."	Describes the natively available 802.11 security options and the advanced security features in the Cisco Unified Wireless solution, and how these can be combined to create an optimal WLAN solution.
Chapter 5, "Cisco Unified Wireless QoS."	Describes quality-of-service (QoS) in the context of WLAN implementations.

Section	Description
Chapter 6, "Cisco Unified Wireless Multicast Design."	Describes the improvements that have been made in IP multicast forwarding and provides information on how to deploy multicast in a wireless environment.
Chapter 7, "Cisco Unified Wireless Hybrid REAP."	Describes the Cisco Centralized WLAN architecture and its use of H-REAP.
Chapter 8, "Cisco Wireless Mesh Networking."	Describes the use of wireless mesh.
Chapter 9, "VoWLAN Design Recommendations."	Provide design considerations when deploying voice over WLAN (VoWLAN) solutions.
Chapter 10, "Cisco Unified Wireless Guest Access Services."	Describes the use of guest access services in the centralized WLAN architecture.
Chapter 11, "Mobile Access Router, Universal Bridge Client, and Cisco Unified Wireless."	Describes the use of the mobile access router, universal bridge client, and mesh networks.
Chapter 12, "Cisco Unified Wireless and Mobile IP."	Describes the inter-workings of the Cisco Mobile Client (CMC) over a Cisco Unified Wireless Network (WiSM).
Chapter 13, "Cisco Unified Wireless Location-Based Services."	Discusses the Cisco Location-Based Service (LBS) solution and the areas that merit special consideration involving design, configuration, installation, and deployment.
Glossary	Lists and defines key terms used in the guide.