

## Preface

This preface describes the purpose, audience, and document organization.

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#### **Purpose**

The *Real-Time Traffic over Wireless LAN Solution Reference Network Design Guide* provides a design reference for wireless solutions that provide connectivity for endpoints and clients that send and receive real-time traffic, and utilize real-time traffic applications and services. Wireless network deployments that support real-time traffic capable endpoints and enable real-time traffic applications and services are referred to as Real-Time Traffic over WLAN (RToWLAN) deployments.

Real-time traffic endpoints and applications generate and consume real-time network traffic. This network traffic includes packetized voice and video, as well as other traffic consumed as near to the moment it is generated as possible. Because the value of real-time network traffic drops to zero almost instantly, there is no retransmission, and limited tolerance for delay, variation in delay (jitter), or packet loss. The network must deliver real-time traffic between transmitters and receivers with negligible delay and packet loss; otherwise retransmission and delayed traffic may traverse the network only to be discarded at the far end by the receiver.

A well-planned RToWLAN deployment design not only provides high-quality voice and video communications but also provides sufficient delivery times for other real-time traffic applications and services like desktop virtualization and presence. This design guide focuses on solution-level planning-and design-related aspects of RToWLAN deployments rather than on specific hardware and software requirements.

The *Real-Time Traffic over Wireless LAN Solution Reference Network Design Guide* supersedes and deprecates the previous *Voice over Wireless LAN Design Guide* that is available at http://www.cisco.com/.

### Audience

This guide is intended for systems design and deployment engineers who are responsible for planning and designing the Cisco Unified Wireless LAN deployments for real-time traffic endpoints and clients.

# Organization

The following table lists the chapters of this guide:

#### Table 1: Guide Overview

Chapter	Description
Preface, on page ?	Describes the purpose, audience, and document organization.
Real-time Traffic over WLAN Overview	Provides an overview of RToWLAN solution, the solution architecture, high-level design information related to wireless, collaboration, endpoints, and network management including the various components and considerations for RToWLAN deployments.
Real-Time Traffic over WLAN Radio Frequency Design	Provides an overview of the radio frequency (RF) network requirements of RToWLAN deployments and RF deployment issues.
Real-Time Traffic over WLAN Quality of Service	Provides an overview of WLAN QoS and its implementation in the Cisco Unified Wireless Network.
Real-time Traffic over WLAN Security	Provides an overview of WLAN security.
Real-time Traffic over WLAN Roaming	Provides an overview of WLAN roaming and implications for RToWLAN deployments.