



# Preface

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**Revised: 1/18/17, OL-26134-01**

This preface explains the objectives, intended audience, and organization of the *Cisco Identity Services Engine API Reference Guide, Release 1.4*. The preface also describes the conventions that provide instructions and provides other types of information in the following sections:

- [Overview of Cisco Identity Services Engine, page vii](#)
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## Overview of Cisco Identity Services Engine

Cisco Identity Services Engine (ISE), as a next-generation identity and access control policy platform enables enterprises to enforce compliance, enhance infrastructure security, and streamline their service operations. The unique architecture of Cisco ISE allows enterprises to gather real-time contextual information from networks, users, and devices in order to make proactive governance decisions by tying identity to various network elements including access switches, wireless LAN controllers (WLCs), virtual private network (VPN) gateways, and data center switches.

Cisco ISE is a key component of the Cisco Security Group Access Solution. Cisco ISE is a consolidated policy-based access control solution that:

- Combines authentication, authorization, accounting (AAA), posture, profiler, and guest management services into one appliance
- Enforces endpoint compliance by checking the device posture of all endpoints accessing the network, including 802.1X environments
- Provides support for discovery, profiling, policy-based placement, and monitoring of endpoint devices on the network
- Enables consistent policy in centralized and distributed deployments allowing services to be delivered where they are needed

- Employs advanced enforcement capabilities including Security Group Access (SGA) through the use of Security Group Tags (SGTs) and Security Group (SG) Access Control Lists (ACLs)
- Supports scalability to support a number of deployment scenarios from small office to large enterprise environments

The Cisco ISE architecture supports standalone and distributed deployments, allowing you to configure and manage your network from a centralized portal. For more information on the capabilities of Cisco ISE, see the [Cisco Identity Services Engine Admin Guide, Release 1.3](#).

## Purpose

This application programming interface (API) reference guide provides only a brief high-level overview of the capabilities afforded by the supported APIs. The purpose of this API reference guide is to provide a developer, system or network administrator, or system integrator with basic guidelines for using the outlined APIs within the Cisco ISE deployment.

The REST API calls use queries to determine the following types of data:

- Number of active sessions
- Types of active sessions
- Authentication status of active session
- MAC addresses in use
- NAS IP addresses in use
- Node versions and types
- Reasons for node session failures

The External RESTful Services APIs and related API calls can be used to perform CRUD (Create, Read, Update, Delete) operations on Cisco ISE resources. External RESTful Services is based on HTTP protocol and REST methodology.



### Note

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For more information about the Cisco ISE network, its nodes and personas, concepts of operation or usage, or how to use the Cisco ISE user interface, see the [Cisco Identity Services Engine Admin Guide, Release 1.3](#).

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## Audience

This API reference guide is intended for experienced system administrators who administer Cisco ISE appliances within a network environment, system integrators who may want to make use of the APIs, or third-party partners who have with the responsibility for managing or troubleshooting Cisco ISE deployments. As a prerequisite to using this API reference guide, you should have a basic understanding of troubleshooting and diagnostic practices and how to make and interpret API calls.

# Document Organization

This guide is organized as follows:

- [Part 1](#) — Cisco ISE Monitoring REST APIs
  - [Chapter 1, “Introduction to the Monitoring REST API”](#)
  - [Chapter 2, “Session Management Query APIs”](#)
  - [Chapter 3, “Query APIs for Troubleshooting”](#)
  - [Chapter 4, “Change of Authorization REST APIs”](#)
- [Part 2](#) — Cisco ISE External RESTful Services APIs
  - [Chapter 5, “Introduction to ERS APIs”](#)
  - [Chapter 7, “External RESTful Services API Operations”](#)
- [Part 3](#) — Cisco pxGrid APIs
  - [Appendix A, “Cisco ISE Failure Reasons Report”](#)

# Document Conventions

This section outlines the conventions used throughout this document.



## Caution

Means *reader be careful*. You are capable of doing something that might result in equipment damage or loss of data.



## Note

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

This API reference guide uses the following conventions to convey instructions and information.

Item	Convention
Commands, keywords, special terminology, and options that should be chosen during procedures	<b>boldface font</b>
Variables for which you supply values and new or important terminology	<i>italic font</i>
Displayed session and system information, paths, and file names	screen font
Information you enter	<b>boldface screen font</b>
Variables you enter	<i>italic screen font</i>
Menu items and button names	<b>boldface font</b>
Indicates menu items to choose, in the order in which you choose them.	<b>Option &gt; Network Preferences</b>

# Documentation Updates

Table 1 lists the updates made to this document since its inception, with the most recent update featured first in the list.

**Table 1** Updates for Cisco Identity Services Engine API Reference Guide, Release 1.4

Date	Description
8-25-2014	Cisco Identity Services Engine (ISE) Release 1.3

## Product Documentation



### Note

We sometimes update the printed and electronic documentation after original publication. Therefore, you should also review the documentation on <http://www.cisco.com> for any updates.

Table 2 lists the related product documentation that is available for Cisco ISE Release 1.3 on [www.cisco.com](http://www.cisco.com). To find end-user documentation for all products on [www.cisco.com](http://www.cisco.com), go to: <http://www.cisco.com/go/techdocs>

## Related Documentation

This section provides information on release-specific documentation, as well as platform-specific documentation.

## Release-Specific Documentation

Table 2 lists the product documentation available for the Cisco ISE Release. General product information for Cisco ISE is available at <http://www.cisco.com/go/ise>. End-user documentation is available on Cisco.com at [http://www.cisco.com/en/US/products/ps11640/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps11640/tsd_products_support_series_home.html).

**Table 2** Product Documentation for Cisco Identity Services Engine

Document Title	Location
<i>Release Notes for the Cisco Identity Services Engine, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_release_notes_list.html">http://www.cisco.com/en/US/products/ps11640/prod_release_notes_list.html</a>
<i>Cisco Identity Services Engine Network Component Compatibility, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/products_device_support_tables_list.html">http://www.cisco.com/en/US/products/ps11640/products_device_support_tables_list.html</a>
<i>Cisco Identity Services Engine Admin Guide, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/products_user_guide_list.html">http://www.cisco.com/en/US/products/ps11640/products_user_guide_list.html</a>
<i>Cisco Identity Services Engine Hardware Installation Guide, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html</a>

**Table 2**      **Product Documentation for Cisco Identity Services Engine (continued)**

<b>Document Title</b>	<b>Location</b>
<i>Cisco Identity Services Engine Migration Guide for Cisco Secure ACS 5.5 to Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html</a>
<i>Cisco Identity Services Engine Sponsor Portal User Guide, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/products_user_guide_list.html">http://www.cisco.com/en/US/products/ps11640/products_user_guide_list.html</a>
<i>Cisco Identity Services Engine CLI Reference Guide, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_command_reference_list.html">http://www.cisco.com/en/US/products/ps11640/prod_command_reference_list.html</a>
<i>Cisco Identity Services Engine API Reference Guide, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_command_reference_list.html">http://www.cisco.com/en/US/products/ps11640/prod_command_reference_list.html</a>
<i>Cisco Identity Services Engine Troubleshooting Guide, Release 1.3</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_troubleshooting_guides_list.html">http://www.cisco.com/en/US/products/ps11640/prod_troubleshooting_guides_list.html</a>
<i>Regulatory Compliance and Safety Information for Cisco Identity Services Engine, Cisco 1121 Secure Access Control System, Cisco NAC Appliance, Cisco NAC Guest Server, and Cisco NAC Profiler</i>	<a href="http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html">http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html</a>
<i>Cisco Identity Services Engine In-Box Documentation and China RoHS Pointer Card</i>	<a href="http://www.cisco.com/en/US/products/ps11640/products_documentation_roadmaps_list.html">http://www.cisco.com/en/US/products/ps11640/products_documentation_roadmaps_list.html</a>

## Platform-Specific Documentation

Links to Policy Management Business Unit documentation are available on <http://www.cisco.com> at the following locations:

- Cisco ISE  
[http://www.cisco.com/en/US/products/ps11640/prod\\_installation\\_guides\\_list.html](http://www.cisco.com/en/US/products/ps11640/prod_installation_guides_list.html)
- Cisco Secure ACS  
[http://www.cisco.com/en/US/products/ps9911/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps9911/tsd_products_support_series_home.html)
- Cisco NAC Appliance  
[http://www.cisco.com/en/US/products/ps6128/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps6128/tsd_products_support_series_home.html)
- Cisco NAC Profiler  
[http://www.cisco.com/en/US/products/ps8464/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps8464/tsd_products_support_series_home.html)
- Cisco NAC Guest Server  
[http://www.cisco.com/en/US/products/ps10160/tsd\\_products\\_support\\_series\\_home.html](http://www.cisco.com/en/US/products/ps10160/tsd_products_support_series_home.html)

## Obtaining Documentation and Submitting a Service Request

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

Subscribe to the *What's New in Cisco Product Documentation* as a Really Simple Syndication (RSS) feed and set content to be delivered directly to your desktop using a reader application. The RSS feeds are a free service and Cisco currently supports RSS version 2.0.

