



Preface

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This preface provides the following information about the Cisco Identity Services Engine (ISE) 3300 Series appliance:

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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. Cisco ISE's unique architecture 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 software comes preinstalled on a range of physical appliances with various performance characterizations. The inherent scalability of Cisco ISE allows you to add appliances to a deployment and increase performance and resiliency, as needed. The Cisco ISE architecture supports standalone and distributed deployments, along with high-availability options. Cisco ISE allows you to configure and manage your network from a centralized portal for efficiency and ease of use.

Cisco ISE also incorporates distinct configurable roles and services, so that you can create and apply Cisco ISE services where they are needed in the network. The result being a comprehensive Cisco ISE deployment that operates as an fully functional and integrated system.

Purpose

This installation guide provides the following types of information about the Cisco ISE Release 1.0:

- Prerequisites for installation
- Procedures for installing the Cisco ISE software on a supported Cisco ISE appliance
- Procedures for installing the Cisco ISE software on a supported VMware virtual machine
- Procedures for installing the Cisco ISE software on a supported Cisco Network Admission Control (NAC) appliance or Cisco Secure Access Control System (ACS) appliance

Cisco ISE Release 1.0 offers a choice of three appliance platforms, depending upon the size of your deployment:

- Small network—Cisco ISE 3315
- Medium network—Cisco ISE 3355
- Large network—Cisco ISE 3395

The Cisco ISE software runs on the Cisco Application Deployment Engine (ADE) Release 2.0 operating system (ADE-OS). The Cisco ADE-OS and Cisco ISE software run on either a dedicated Cisco ISE 3300 Series appliance or on a VMware server (Cisco ISE VM).

For VMware-based installations, configure the VMware environment to meet a specific set of minimal system requirements and install the Cisco ISE Release 1.0 software. The supported VMware versions include:

- VMware Elastic Sky X (ESX), version 4.x
- VMware ESXi, version 4.x



Note

For more information about VMware-based installations, see [Chapter 4, “Installing Cisco ISE 3300 Series Software in a VMware Virtual Machine”](#).



Note

VMware server, version 2.0, is only supported for demonstrating the features of Cisco ISE Release 1.0, and is not supported for production environments.

Audience

This guide is designed for network administrators, system integrators, or network deployment personnel who install and configure the Cisco ISE software on Cisco ISE 3300 Series appliances or on VMware servers. As a prerequisite to using this hardware installation guide, you should be familiar with networking equipment and cabling and have a basic knowledge of electronic circuitry, wiring practices, and equipment rack installations.



Warning

Only trained and qualified personnel should be allowed to install, replace, or service this equipment.
Statement 1030

Document Organization

Table 1 lists the organization of the Cisco Identity Services Engine Hardware Installation Guide, Release 1.0.

Table 1 Cisco ISE Hardware Installation Guide Organization

Chapter/Appendix and Title	Description
Chapter 1, “Understanding the Cisco ISE Network Deployment”	Provides an overview of the Cisco ISE 3300 Series appliance deployments and their components. Read this chapter before planning a new Cisco ISE 3300 Series deployment.
Chapter 2, “Introducing the Cisco ISE 3300 Series Hardware”	Provides an overview of the Cisco ISE 3300 Series hardware.
Chapter 3, “Configuring the Cisco ISE 3300 Series Appliance”	Describes how to perform an initial installation of the Cisco ISE software on the Cisco ISE 3300 Series hardware.
Chapter 4, “Installing Cisco ISE 3300 Series Software in a VMware Virtual Machine”	Describes how to install Cisco ISE software on the VMware ESX or ESXi virtual machines.
Chapter 5, “Performing Post-Installation Tasks”	Provides information on installing a Cisco ISE 3300 Series license and lists the configuration tasks that you need to perform following installation.
Appendix A, “Preparing to Install the Cisco ISE 3300 Series Hardware”	Describes the necessary safety instructions, site requirements, and tasks that you need to perform before installing the Cisco ISE 3300 Series hardware.
Appendix B, “Installing the Cisco ISE 3300 Series Hardware”	Provides detailed instructions on performing the rack-mounting of a Cisco ISE 3300 Series appliance, connecting all cables, powering up the appliance, and removing or replacing the appliance.
Appendix C, “Troubleshooting the Cisco ISE 3300 Series Appliance”	Provides techniques for troubleshooting the initial start up of a Cisco ISE 3300 Series appliance.
Appendix D, “Maintaining the Cisco ISE 3300 Series Appliance”	Provides recommendations for maintaining the Cisco ISE 3300 Series appliance following installation.

Table 1 Cisco ISE Hardware Installation Guide Organization (continued)

Chapter/Appendix and Title	Description
Appendix E, “Cisco ISE 3300 Series Appliance Ports Reference”	Provides a reference list of ports that are used by the Cisco ISE 3300 Series appliance services, applications, and devices.
Appendix F, “Installing Cisco ISE 3300 Series Software on Cisco NAC and Cisco Secure ACS Appliances”	Describes how to install Cisco ISE software on a supported Cisco NAC appliance or a Cisco Secure ACS appliance.

Installation Reference

[Table 2](#) lists reference material that may be useful to review before attempting to install the Cisco ISE 3300 Series Release 1.0 software. For each of the installation processes, see the corresponding chapter, appendix, or guide.

Table 2 Cisco ISE 3300 Series Installation Scenarios

Installation Process	Reference
Introducing the Cisco ISE appliance and predeployment requirements	<ol style="list-style-type: none"> Chapter 2, “Introducing the Cisco ISE 3300 Series Hardware” Appendix A, “Preparing to Install the Cisco ISE 3300 Series Hardware”
Installing the initial Cisco ISE appliance and configuring the Cisco ISE software	<ol style="list-style-type: none"> Appendix B, “Installing the Cisco ISE 3300 Series Hardware” Chapter 3, “Configuring the Cisco ISE 3300 Series Appliance”
Installing the initial Cisco ISE software on the VMware server	<ol style="list-style-type: none"> Chapter 4, “Installing Cisco ISE 3300 Series Software in a VMware Virtual Machine”
Licensing and using the web interface to login	<ol style="list-style-type: none"> Chapter 5, “Performing Post-Installation Tasks”
Installing Cisco ISE software on a Cisco NAC appliance or on a Cisco Secure ACS appliance	<ol style="list-style-type: none"> Appendix F, “Installing Cisco ISE 3300 Series Software on Cisco NAC and Cisco Secure ACS Appliances”

Document Conventions

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

Item	Convention
Commands, keywords, special terminology, and options that should be chosen during procedures	boldface font
Variables for which you supply values and new or important terminology	<i>italic</i> font
Displayed session and system information, paths, and file names	screen font
Information you enter	boldface screen font
Variables you enter	<i>italic screen</i> font

Item	Convention
Menu items and button names	boldface font
Indicates menu items to choose, in the order in which you choose them.	Option > Network Preferences

**Note**

Means *reader take note*. Notes contain helpful suggestions or references to material that is not covered in this guide

**Caution**

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

Related Documentation

Release-Specific Documents

Table 3 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.

Table 3 **Product Documentation for Cisco Identity Services Engine**

Document Title	Location
<i>Release Notes for the Cisco Identity Services Engine, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/release_notes/ise10_rn.html
<i>Cisco Identity Services Engine Network Component Compatibility</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/compatibility/ise-sdt.html
<i>Cisco Identity Services Engine User Guide, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/user_guide/ise10_user_guide.html
<i>Cisco Identity Services Engine Hardware Installation Guide, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/install_guide/ise10_ig.html
<i>Cisco Identity Services Engine Migration Guide for Cisco Secure ACS 5.1 and 5.2, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/migration_guide/ise10_mig_book.html
<i>Cisco Identity Services Engine Sponsor Portal User Guide, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/sponsor_guide/ise10_sponsor_book.html
<i>Cisco Identity Services Engine CLI Reference Guide, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/cli_ref_guide/ise10_cli.html
<i>Cisco Identity Services Engine API Reference Guide, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/api_ref_guide/ise10_api_ref_guide.html
<i>Cisco Identity Services Engine Troubleshooting Guide, Release 1.0</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/troubleshooting_guide/ise10_tsg.html

Table 3 Product Documentation for Cisco Identity Services Engine (continued)

Document Title	Location
<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>	http://www.cisco.com/en/US/docs/net_mgmt/cisco_secure_access_control_system/5.1/regulatory/compliance/csacsrcsi.html
<i>Cisco Identity Services Engine In-Box Documentation and China RoHS Pointer Card</i>	http://www.cisco.com/en/US/docs/security/ise/1.0/roadmap/ise10_5x5Card_ChinaRoHS.html

Platform-Specific Documents

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

- Cisco ISE
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
- Cisco NAC Appliance
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
- Cisco NAC Guest Server
http://www.cisco.com/en/US/products/ps10160/tsd_products_support_series_home.html

Documentation Updates

Table 4 lists the documentation updates for this Cisco ISE product release.

Table 4 Updates for Cisco Identity Services Engine Hardware Installation Guide, Release 1.0

Date	Description
June 2, 2011	Added Resetting the Existing RAID Configuration on a Cisco NAC Appliance, page 3
May 25, 2011	Added a security advisory regarding the serial console connection to Ethernet Connector and Console Port Guidelines, page 15 and Connecting the Console, page 11
June 20, 2011	Cisco Identity Services Engine (ISE) Release 1.0

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>

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 by using a reader application. The RSS feeds are a free service, and Cisco currently supports RSS Version 2.0.

