ISE Security Ecosystem Integration Guides

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Introduction

This document describes the lists of resources for information on how to integrate Cisco Identity Services Engine (ISE) with various products from Cisco and other partners or vendors. You can refer to ISE Compatibility Information for supported protocols and validated products or the Network Access Device (NAD) Capabilities for hardware and software. Refer to the official list of Cisco Security Technical Alliance Program Partners for additional product integrations that are not documented here.

ISE Third Party Vendor Support

These are general support and standards-based integration information relevant to all third-party networking vendors for RADIUS and TACACS.

- Does ISE Support My Network Access Device?
- ISE Compatibility Information RADIUS, TACACS, protocols and services
- <u>Network Access Device (NAD) Capabilities</u> network access control capabilities of Cisco network access devices
- <u>Cisco ISE NAD Configuration Templates</u>
- <u>Cisco Technical Alliance Partners (CSTA)</u> Official list of Technology Partners
- <u>Cisco ISE Ecosystem Partner Integration Details</u> Lists vendor support for ERS, pxGrid v1/v2, MDM, SIEM, TC-NAC, and others
- How To: Create Network Access Device Profiles with Cisco ISE
- ISE RADIUS Network Access Attributes
- <u>RADIUS Vendor Dictionaries for 3rd Parties</u>

Vendors and Products

AirWatch

Consult with the partner for their documentation about how to integrate with ISE. Also refer to <u>Cisco Technical Alliance Partners</u>.

Acalvio (pxGrid, ANC)

Please ask vendor for guides

Alef (pxGrid)

• Identity Bridge - a configuration guide is posted at the bottom of their marketing page.

Amazon Web Services (AWS)

- Cisco ISE Amazon Machine Image (AMI)
- Deploy Cisco ISE Natively on Cloud Platforms
- <u>Configure ISE 3.1 Through AWS Marketplace</u>
- Install Cisco ISE on AWS []

- ISE in AWS Webinar [] Configure AWS Load Balancer for Cisco ISE []
- TechFieldDay: Cisco Identity Services Engine (ISE) in AWS with Ansible Automation
- <u>Cisco ISE with Meraki Webinar</u> ISE and Meraki vMX in AWS | <u>ISE_with_Meraki_in_AWS</u> GitHub Repository

Ansible

- <u>cisco.ise</u> Ansible Modules
- <u>cisco.ise Ansible Modules Documentation</u>
- <u>cisco.ise Ansible Module GitHub Repository</u>
- <u>ISE APIs, Ansible, and Automation DevNet Learning Lab</u> free lab for REST APIs, OpenAPIs, Postman, and Ansible for Automation
- ISE 3.1 with Ansible Automation Cisco DevNet Sandbox
- ISE 3.1 APIs, Ansible, and Automation Webinar and GitHub Repository
- TechFieldDay: Cisco Identity Services Engine (ISE) in AWS with Ansible Automation
- Automated ISE Setup with Infrastructure as Code Tools

Arista

• Integration with Cisco ISE [Arista]

Armis (pxGrid - ERS API)

- <u>Configuration Guide</u> requires login to view
- Marketing information & Solution Brief
- <u>Armis + Cisco ISE Integration Solution Brief Devnet</u>

Aruba

- Does ISE Support My Network Access Device?
- How To Confgure Cisco ISE Captive Portals with Aruba Wireless
- Configure ISE 2.0 3rd Party Integration with Aruba Wireless
- Configure Guest Flow with ISE 2.0 and Aruba WLC Cisco

Asimily

Please request guides from the vendor directly.

Avaya

- ISE Compatibility Information
- How To: Create Network Access Device Profiles with Cisco ISE
- <u>802.1X Authentication, Link Layer Discovery Protocol (LLDP), and Avaya IP Telephones</u> [Avaya]

Bayshore

Also see Cisco Technical Alliance Partners

Blusapphire (pxGrid)

Integration Docs

Brocade

Brocade with ISE 2.0+ Configuration Guide

Certego

- Breach Detection & Incident Response Service
- <u>Tactical Response Overview Slides</u>
- <u>Tactical Response ISE Configuration</u>

Certificates / Private Key Infrastructure (PKI)

- How To Implement Digital Certificates in ISE includes wildcard certificates
- Install a Third-Party CA-Signed Certificate in ISE
- Configure ISE 2.0 Certificate Provisioning Portal 23/Apr/2018
- ISE 2.1: How to Install Wildcard Certificates YouTube []
- Configure Certificate or Smartcard Based authentication for ISE Administration 04/Mar/2020
- <u>Configure LSC Certificate on Cisco IP Phone with CUCM</u>
- TLS/SSL Certificates in ISE 04/Jun/2020
- <u>Configuration Guide to Certificate Renewal on ISE</u>
- <u>Configure ISE SFTP with Certificate-based Authentication</u>
- Configure Microsoft CA Server to Publish the Certificate Revocation Lists for ISE
- ISE RADIUS Network Access Attributes
- <u>Configure Server 2012 AD, DNS, DHCP, CA, Certificate Templates, GPO Networking fun</u>
 []
- <u>Cisco ISE Custom Certificate Installation</u> <u>WirelesslyWired</u> []
- Deploy Certificates with Cisco pxGrid Self-Signed Certificates Updates to Cisco ISE 2.0/2.1/2.2
- Deploy Certificates with Cisco pxGrid External CA with updates to Cisco ISE 2.0/2.1/2.2
- Use ISE 2.2 Internal Certificate Authority (CA) to Deploy Certificates to Cisco pxGrid Clients
- ISE 2.0: Certificate Provisioning Portal Cisco [CCO/TechNotes] 22/Jun/2016
- ISE SCEP Support for BYOD Configuration Example Cisco [CCO/TechNotes] 09/Jun/2014
- <u>Configure HTTPS Support for ISE SCEP Integration</u> [CCO/<u>TechNotes</u>] 31/Jul/2013
- <u>Configure SCEP Support for BYOD</u> [CCO/<u>TechNotes</u>] 11/Apr/2013
- Publish Certificate Revocation Lists for ISE on a Microsoft CA Server Configuration Example
 [CCO/<u>TechNotes</u>] 15/Feb/2013

Checkpoint

- <u>Checkpoint Identity Collector Support for Cisco ISE with pxGrid feature overview</u>
- <u>Cisco ISE pxGrid Checkpoint Identity Collector Administration Guide</u>

Cisco

Cisco Adaptive Security Appliance (ASA)

- Also see <u>Cisco Adaptive Security Appliance (ASA) Software Configuration Examples and</u>
 <u>TechNotes</u>
- Also see <u>Cisco AnyConnect Secure Mobility Client Configuration Examples and TechNotes</u>
- <u>Cisco ISE Device Administration Prescriptive Deployment Guide</u>
- Configure ISE 2.2 IPSEC to Secure NAD (ASA) Communication Cisco
- How To Configure Posture with AnyConnect Compliance Module and ISE 2.0
- How To Integrate ISE and ASA with CoA for Posture
- ISE RADIUS Network Access Attributes
- ISE 2.0: ASA CLI TACACS+ Authentication and Command Authorization Configuration
 Example [CCO/TechNotes] 23/Oct/2015
- Differentiate Authentication Types on ASA Platforms for Policy Decisions on ISE
 [CCO/<u>TechNotes</u>] 03/Mar/2013

Cisco AI Endpoint Analytics

- <u>Cisco AI Endpoint Analytics and Cisco ISE Integration</u>
- <u>Cisco Al Endpoint Analytics Deployment Guide</u>
- IoT Visibility and Endpoint Analytics Webinar [] 2021/06/02

Cisco Secure Client (formerly AnyConnect)

- Also see <u>Cisco AnyConnect Secure Mobility Client Configuration Examples and TechNotes</u>
- Also see <u>Cisco Adaptive Security Appliance (ASA) Software Configuration Examples and</u>
 <u>TechNotes</u>
- AnyConnect SSL With ISE Authentication and Class Attribute for Group-Policy Mapping []
- ISE 2.1 How to Configure Posture with NAC Agent and AnyConnect Posture Module []
- How To Configure Posture with AnyConnect Compliance Module and ISE 2.0
- How To Implement iOS AnyConnect Per-App with MobileIron
- How To Configure ISE and ASA Integration with CoA for Posture
- Understand EAP-FAST and Chaining implementations on AnyConnect NAM and ISE
- <u>Configure ASA AnyConnect VPN with Microsoft Azure MFA through SAML</u>
- AnyConnect 4.2 Network Visibility Module (NVM) Demo []
- Configure ISE 2.1 and AnyConnect 4.3 Posture USB check Cisco [CCO/TechNotes] 07/Jun/2016
- ISE 2.0 and AnyConnect 4.2 Posture BitLocker encryption configuration example
 [CCO/<u>TechNotes</u>] 21/Nov/2015
- <u>AnyConnect Version 4.0 and NAC Posture Agent Does Not Pop Up on ISE Troubleshoot</u> <u>Guide</u> 20/Mar/2015
- <u>AnyConnect 4.0 Integration with ISE Version 1.3 Configuration Example</u> [CCO/<u>TechNotes</u>] 16/Jan/2015

Cisco Catalyst Wireless

- Also see <u>Cisco Meraki</u>
- ISE Compatibility Information
- <u>Network Access Device Capabilities</u>
- ISE and Catalyst 9800 Series Integration Guide
- ISE Guest Access Prescriptive Deployment Guide
- <u>Cisco ISE Device Administration Prescriptive Deployment Guide</u>
- ISE Guest & Web Authentication
- <u>Configure EAP-TLS Authentication with ISE</u>
- Understand and Configure EAP-TLS with WLC and ISE
- <u>Configure Easy Wireless Setup ISE 2.2 Cisco</u>
- Cisco Identity PSK (iPSK) Demo []
- <u>8.5 Identity PSK Feature Deployment Guide Cisco</u>
- <u>Top Six Important Cisco WLC settings for ISE integration</u>
- WLC Installation and Setup Networking fun []
- Wireless SSID Creation with ISE 2.2 Networking fun []
- <u>Central Web Authentication on the WLC and ISE Configuration Example</u> [CCO/<u>TechNotes</u>]
 10/Mar/2015
- Central Web Authentication with FlexConnect APs on a WLC with ISE Configuration Example
 [CCO/TechNotes] 19/Feb/2015
- <u>Central Web Authentication on Converged Access and Unified Access WLCs Configuration</u>
 <u>Example</u> [CCO/<u>TechNotes</u>] 27/May/2014
- ISE Guest Portal Local Web Authentication (LWA) Configuration Example [CCO/TechNotes]
 21/Jun/2013

Cisco Cognitive Threat Analytics (CTA)

- ISE Adds Cisco Cognitive Threat Analytics to Its Growing Intelligence Ecosystem []
- How-To Integrate Cognitive Threat Analysis (CTA) and ISE with STIX Technology
- <u>Cisco ISE 2.2 and Cisco Cognitive Threat Analysis (CTA) VOD
 </u>

Cisco CyberVision

- Integrate Cisco Cyber Vision with Cisco Identity Services Engine (ISE) via pxGrid 09/Sep/20
- Configure ISE 2.7 pxGrid CCV 3.1.0 Integration 20/Jul/2020

Cisco DNA Center (DNAC)

- Policy Enforcement Within SDA Border
- <u>Cisco DNAC ISE Collector Keystores Generation Utility</u>

Cisco Industrial Network Director (IND)

Deploy Cisco Industrial Network Director (IND) with Cisco ISE and pxGrid [CCO]

Cisco IP Phones

Phone & Collaboration Authentication Capabilities

- <u>Configure LSC Certificate on Cisco IP Phone with CUCM</u>
- IP Telephony for 802.1X Design Guide Cisco

Cisco Meraki

- Also see Cisco Meraki Documentation
- Meraki WiFi in a Box Design Guide (CVD)
- Network Access Device (NAD) Capabilities
- How To: Integrate Meraki Networks with ISE
- How To: Meraki EMM / MDM Integration with ISE
- <u>Cisco ISE with Meraki Webinar</u>: ISE and Meraki vMX in AWS | <u>ISE_with_Meraki_in_AWS</u> GitHub Repository
- How to Configure Central Web Auth with Meraki Wireless and ISE
- Meraki Wireless + ISE: How to Configure Central Web Auth []
- <u>TrustSec with Meraki MS320 switch.pdf</u>
- Put Your Untrusted Clients on ISE Meraki Blog, April 26 2016

Cisco pxGrid (Platform Exchange Grid)

- <u>Cisco ISE Ecosystem Partner Integration Details</u> Lists vendor support for ERS, pxGrid v1/v2, MDM, SIEM, TC-NAC, ...
- <u>cisco-pxgrid</u> GitHub Repositories <u>pxgrid-rest-wspython-advanced-examples</u>
- Get Answers Faster with pxGrid []
- <u>How To: Create a pxGrid Virtual Hosting Environment</u> Old but useful use as a reference with your ISE version
- How To: Configure and Test Integration with Cisco pxGrid (ISE 2.0)
- Deploy pxGrid 1.0 in ISE Production Environments Deprecated in ISE 3.1
- How To: Deploy Certificates with pxGrid: CA-signed ISE pxGrid Node and CA-signed pxGrid
 <u>Client</u>
- Deploy Certificates with Cisco pxGrid Self-Signed Certificates Updates to Cisco ISE 2.0/2.1/2.2
- Deploy Certificates with Cisco pxGrid External CA with updates to Cisco ISE 2.0/2.1/2.2
- ISE 2.2 Internal Certificate Authority (CA) to Deploy Certificates to Cisco pxGrid Clients

Cisco pxGrid Cloud

- <u>Cisco Platform Exchange Grid Cloud on DevNet</u>
- <u>cisco-pxgrid</u> > <u>cloud-sdk-go</u> pxGrid Cloud SDK for the Go programming language

Cisco Prime Infrastructure

- ISE Compatibility Information
- Prime Infrastructure and ISE (2.2)— Networking fun []

Cisco Secure Access by Duo - formerly Cisco Duo

Integrate Duo SAML SSO with Anyconnect Secure Remote Access with ISE Posture

25/Jun/2020

- <u>Configure Duo Two Factor Authentication for ISE Management Access</u> 20/Jan/2020
- How to Deploy ISE Device Admin with Duo MFA
- Duo MFA Integration with ISE for TACACS+ Device Administration with Microsoft Active Directory Users
- Duo LDAP Proxy for RBAC Admin Access with MFA to ISE
- Network Access and Segmentation with DUO MFA and ISE Configuration Guide
- Protect Access to Network devices with ISE TACACS+ and DUO MFA
- <u>RADIUS Integration</u> [Duo Security]

<u>Cisco Secure Endpoint</u> - formerly Advanced Malware Protection (AMP)

- AMP For Endpoints Overview and Integration with ISE 2.2 Networking fun []
- Threat Centric Network Access Control ISE and Advanced Malware Protection (AMP) []
- <u>Threat-Centric Network Access Control (NAC) with ISE 2.1</u>
- How To Integrate ISE and Cisco AMP for Endpoints in Cloud for Threat-Centric NAC with <u>STIX Technology</u>
- Configure ISE 2.1 Threat-Centric NAC (TC-NAC) with AMP and Posture Services Cisco [CCO/<u>TechNotes</u>] 01/Jul/2016

<u>Cisco Secure Firewall</u> - formerly NGFW or Firepower Management Center (FMC)

- FDM External Authentication and Authorization with ISE with RADIUS
- Firepower & ISE 2.2 integration and Rapid Threat Containment Networking fun []
- How To: Integrate Firepower Management Center (FMC) 6.0 (ASA SFR) with ISE and <u>TrustSec through pxGrid</u>
- Firepower eXtensible Operating System (FXOS) TACACS+ Device Administration with ISE
- Rapid Threat Containment: Configure Quarantine Rules in Cisco Firepower and ISE []
- <u>Configure Firepower 6.1 pxGrid remediation with ISE Cisco</u>
- Firepower Management Center (FMC) Remediation / Rapid Threat Containment (RTC)
- Identity Awareness and control on Cisco Firepower NGFW Guide (whitepaper)
- FMC User Identity Mapping Scale up to 300k []
- Firepower Management Center (FMC) User Agent transition to ISE-PIC []
- FMC Source and Destination SGT Tagging []
- FMC/FTD integration with ISE []
- FMC 6.7: Migration from EPS to ANC Remediation []

<u>Cisco Secure Network Analytics</u> - formerly Cisco Stealthwatch

- <u>General configuration guides</u>
- <u>Cisco Secure Analytics Integration with ISE 2.4+</u>
- Deploy Cisco Stealthwatch 7.0 with Cisco ISE 2.4 with Cisco pxGrid
- Deploy Cisco Stealthwatch 6.9 with Cisco ISE 2.2 with Cisco pxGrid
- <u>Network as a Security Sensor (NaaS)</u> for NetFlow and Lancope StealthWatch Integration

<u>Cisco Secure Workload</u> - formerly Cisco Tetration

- <u>Cisco Tetration and Cisco ISE Integration Use Cases and Benefits Solution Overview</u>
- Internal Configuration Guide (for Cisco Tetration Team and Cisco Field) Ask your Cisco Account team for access.

Cisco Security Manager (CSM)

<u>CSM TACACS Integration with ISE</u>

Cisco Catalyst Switches

- ISE Compatibility Information
- <u>Cisco ISE Secure Wired Access Prescriptive Deployment Guide</u>
- <u>Cisco ISE Device Administration Prescriptive Deployment Guide</u>
- <u>Top Ten mis-configured Cisco IOS® Switch settings for ISE integration</u>
- <u>Configure RADIUS DTLS on Identity Services Engine (for Cisco IOS® & Cisco IOS-XE®)</u>
- Switch Configuration Networking fun []
- <u>Troubleshoot Identity-Based Networking Services (IBNS) 2.0 Cisco</u>
- <u>Configure Device Sensor for ISE Profiling</u> [CCO/<u>TechNotes</u>] 15/Jan/2016
- Network as a Security Sensor (NaaS) for NetFlow and Lancope StealthWatch Integration
- <u>Configure ISE 2.0: Cisco IOS® TACACS+ Authentication and Command Authorization based</u> on AD group membership [CCO/<u>TechNotes</u>] 20/Jan/2016
- Configure MACsec Switch to Host with Cat9k & ISE
- MACsec Switch-host Encryption with Cisco AnyConnect and ISE Configuration Example [CCO/<u>TechNotes</u>] 31/Jan/2014
- ISE Traffic Redirection on the Catalyst 3750 Series Switch [CCO/TechNotes] 30/Jan/2014
- Central Web Authentication with a Switch and Identity Services Engine Configuration Example
 [CCO/TechNotes] 16/Dec/2013
- <u>Catalyst 3850 Series Switch Session Aware Networking with a Service Template on the ISE</u> <u>Configuration Example</u> [CCO/<u>TechNotes</u>] 26/Nov/2013
- <u>NEAT Configuration Example with Cisco Identity Services Engine</u> [CCO/<u>TechNotes</u>] 05/Nov/2013

Cisco TrustSec

- TrustSec Capabilities on Wireless 8.4 Configuration Guide [PDF]
- <u>Segmentation Policy: SGT in PBR.pdf</u>
- <u>SXP and SXP Reflectors</u>
- <u>TrustSec for Collaboration</u>
- <u>Configure TrustSec Multiple Matrices on ISE 2.2 Cisco</u>
- <u>Cisco TrustSec Platform Support Cisco</u>
- <u>TechWiseTV: Software-Defined Segmentation with Cisco TrustSec</u>
- <u>Cisco TrustSec-ACI Integration</u> []
- <u>TechWise TV TrustSec</u> []
- <u>Cisco TrustSec User to DC Access</u> []
- <u>TrustSec User to Data Center Access Control Design Guide</u>
- Data Center VM Policy Provisioning with Cisco TrustSec []
- <u>Trustsec Data Center Segmentation Design Guide</u>

- TrustSec Campus & Branch Segmentation Design Guide
- <u>Configure ISE 2.0 TrustSec SXP Listener and Speaker [CCO/TechNotes]</u> 01/Dec/2015

Cisco UCS / Cisco Integrated Management Center (CIMC)

- Install and Setup ISE with Zero Touch Provisioning (ZTP)
- Create the ISE Zero Touch Provisioning (ZTP) Image File []
- Install ISE on Cisco SNS through the CIMC with ZTP []

Cisco Umbrella

Cisco ISE does not currently have any special integrations with Cisco Umbrella.

Cisco Web Security Appliance (WSA)

- <u>AsyncOS External Authentication with Cisco ISE (RADIUS)</u>
- Deploy Cisco WSA 11.7 with ISE 2.4 with Cisco Platform Exchange Grid (pxGrid)
- ISE 2.2 and WSA Integration []
- ISE 2.1 and WSA via pxGrid and CA-Signed Certificates
- <u>Configure WSA Integration with ISE for TrustSec Aware Services [CCO/TechNotes]</u> 30/Jul/2015
- How To: Integrate Cisco WSA with ISE and TrustSec via pxGrid

Cisco Webex Room Navigator

<u>Configure 802.1x Authentication on the Webex Room Navigator</u>

Citrix XenMobile

Consult with the partner for their documentation about how to integrate with ISE. Also refer to <u>Cisco Technical Alliance Partners</u>.

- <u>Citrix XenMobile Product Documentation Network Access Control</u>
- Integrate MDM and UEM Servers with Cisco ISE

Compliance

- ISE Posture
- ISE Posture Prescriptive Deployment Guide

CyberArk (API)

<u>CyberArk Integrations - Cisco ISE</u>

Cyber Observer (API)

Solution Brief

• Cyber Observer Registered User - Internal Configuration Guide - requires login

Cylera (pxGrid)

- Integration Solutions Brief
- ISE Quick Start Guide (Cylera login required; contact Cylera for access)

Cynerio (pxGrid)

- <u>Collector Installation Guide</u>
- <u>Getting Started Guide</u>

Digital Defense by Help Systems

• Help Systems Configuration Guide

DFLabs - Incman - (SOAR)

- SOAR Platform Brief Cyber Incident Under Control with ISE
- <u>Configuration Guide</u>

EAP (Extensible Authentication Protocol)

ISE supports many EAP-based protocols and some have specific deployment guides.

- EAP-FAST EAP-FAST Authentication with Wireless LAN Controllers and Identity Services
 Engine 22/Feb/2019Understand EAP-FAST and Chaining implementations on AnyConnect
 NAM and ISE
- EAP-TLS <u>Understand and configure EAP-TLS with WLC and ISE</u> 27/Aug/2020<u>Configure EAP-TLS Authentication with ISE</u> 17/Oct/2019
- TEAP (Tunneled EAP) <u>TEAP for Windows 10 with Group Policy and ISE TEAP</u> <u>ConfigurationEAP Chaining with TEAP</u>

Envoy (Guest)

• Envoy Help Center: Cisco ISE integration - Guest Access Management

ExtraHop (pxGrid)

<u>Cisco ISE Integration with Rapid Threat Containment (RTC)</u>

Extreme Networks

- Extreme Switch Configuration for 802.1X
- ISE 2.4 Posture with SNMP COA on Extreme switches

- ISE Deployment with Load Balancing
- How To: Cisco & F5 Deployment Guide: ISE Load Balancing with BIG-IP
- Create a RADIUS authentication profile and policy for virtual server authentication

Forescout

• pxGrid Plugin Configuration Guide

Fortinet FortiManager/FortiGate - pxGrid

- <u>FortiManager (pxGrid)</u>
- SDN connector integration with Cisco ACI

Good (MDM)

Consult with the partner for their documentation about how to integrate with ISE. Also refer to <u>Cisco Technical Alliance Partners</u>.

Google

Google Android

- ISE 2.2 Android Provisioning with EST Authentication (Certificate Generation Failed) []
- ISE: Android 6 Single SSID Client Provisioning []
- ISE: Android Provisioning with EST Authentication (Certificate Generation Failed) []

Google Chromebook

- Google Suite Guest SSO (Single Sign On) with ISE via SAML for Chromebooks
- ISE 2.1 How to Onboard Chromebook Devices []
- Configure ISE 2.1 for Chromebook Onboarding Cisco
- <u>Chromebook SSO and BYOD</u>

HashiCorp

Terraform

- isegosdk Go SDK
- isegosdk GitHub Repository
- <u>ciscoise Terraform Registry</u>
- <u>ciscoise Terraform Provider Repository</u>
- Automated ISE Setup with Infrastructure as Code Tools

HP

See ISE Third Party Vendor Support

Huawei

- See ISE Third Party Vendor Support
- Huawei Switch Interoperability
- Huawei S1720, S2700, S3700, S5700, S6700, S7700, and S9700 Series Switches
 Interoperation Configuration Guide

IBM

IBM MaaS360

- Cisco ISE and IBM Maas360 Integration Video []
- How to Integrate Cisco Identity Services Engine with IBM MaaS 360 (MDM)

IBM QRadar (Syslog & pxGrid)

- <u>Cisco ISE pxGrid App for QRadar Updates</u>
- IBM QRadar pxGrid App Install, Configure & Troubleshooting Guide

InfoBlox (pxGrid)

- How the Cisco ISE and Infoblox Integration Works []
- How-to Integrate Infoblox and Cisco Identity Services Engine (ISE) with Cisco Platform
 Exchange Grid (pxGrid)
- InfoBlox Integration with ISE and pxGrid VOD: Rapid Threat Containment (RTC)
- InfoBlox integration with ISE and pxGrid VOD: Update InfoBlox IPAM Table with ISE Session
 Information

Ivanti (formerly MobileIron)

Consult with the partner for their documentation about how to integrate with ISE. Also refer to <u>Cisco Technical Alliance Partners</u>.

- Integrate MDM and UEM Servers with Cisco ISE
- How To Implement Apple iOS AnyConnect Per-App with MobileIron

Juniper

- Juniper EX Network Device Profile with CoA
- <u>Cisco ISE Device Administration Prescriptive Deployment Guide</u>
- Configure and Troubleshoot External TACACS Servers on ISE Cisco
- Juniper with ISE 2.0+ Configuration Guide

KVM (Hypervisor)

Install ISE on Ubuntu Linux KVM with ZTP []

Lightweight Directory Access Protocol (LDAP)

- ISE Compatibility Information
- Duo LDAP Proxy for RBAC Admin Access with MFA to ISE
- Configure the ISE for Integration with an LDAP Server [CCO/TechNotes] 10/Jul/2015
- Configure and Troubleshoot ISE with External LDAPS Identity Store 02/Nov/2020
- ISE Role Based Access Control with LDAP 21/Oct/2020
- ISE and LDAP Attributes Based Authentication

LinkShadow (pxGrid)

- <u>ThreatShadow ISE Config guide</u>
- <u>ThreatShadow Datasheet</u>

Live Action (pxGrid)

See https://docs.liveaction.com/LiveNX

Logzilla (syslog)

Cisco Identity Services Engine - How to Get More Value from Cisco ISE Events

McAfee (pxGrid)

Note: Please contact McAfee about pxGrid 2.0 support. Cisco pxGrid 1.0 is deprecated in Cisco ISE 3.1 and later.

McAfee DXL and Cisco pxGrid Integration (pxGrid 1.0)

Microsoft

ISE RADIUS Network Access Attributes

Microsoft Active Directory

- ISE Compatibility Information
- Integrate Active Directory with Cisco ISE []
- ISE and two way trust AD configuration 06/Feb/2020
- AD Integration for Cisco ISE GUI and CLI Login
- <u>Configure ISE 2.0: Cisco IOS® TACACS+ Authentication and Command Authorization based</u> on AD group membership 20/Jan/2016d
- Configure Microsoft Server 2012 AD, DNS, DHCP, CA, Certificate Templates, GPO Networking fun []
- The Active Directory Probe (ISE 2.2) Networking fun []
- <u>Active Directory Integration into ISE</u> <u>WirelesslyWired</u> []

Microsoft Azure

Deploy Cisco ISE Natively on Cloud Platforms

Microsoft Azure Active Directory

- Configure ISE 3.0 REST ID with Azure Active Directory 02/Mar/2021
- Configure ISE 3.0 Sponsor Portal with Azure AD SAML SSO 19/Oct/2020
- ISE BYOD Flow with Azure AD
- Configure ISE 3.1 ISE GUI Admin Login Flow via SAML SSO Integration with Azure AD
- Azure AD SSO with multiple ISE Portals
- ISE BYOD Flow with Azure AD
- ISE Admin SSO with Azure AD []

Microsoft Endpoint Manager (MEM)

Microsoft recently brought both Config Manager and Intune together into Microsoft Endpoint Manager (MEM).

Microsoft Hyper-V

Microsoft Hyper-V is a supported VM platform for ISE.

- Install ISE on Microsoft Hyper-V with ZTP []
- ISE Compatibility Guide
- ISE Installation Guides

Microsoft Intune

- Integrate MDM and UEM Servers with Cisco ISE
- How to Integrate Cisco ISE MDM with Microsoft Intune

Microsoft System Center Configuration Manager (SCCM)

How to Integrate Cisco ISE with Microsoft SCCM for Patch Management and MDM Flow

Microsoft WSUS

<u>Configure ISE Version 1.4 Posture with Microsoft WSUS</u> [CCO/<u>TechNotes</u>] 03/Aug/2015

MicroTik (TACACs)

<u>Configure and Troubleshoot External TACACS Servers on ISE - Cisco</u>

Mobile Device Management (MDM)

Also known as Enterprise Mobility Management (EMM) or Unified Endpoint Management (UEM). ISE supports many MDM vendors.

Integrate MDM and UEM Servers with Cisco ISE

Motorola

- ISE Compatibility Information
- How To: Create Network Access Device Profiles with Cisco ISE
- ISE Third-Party NAD Profiles
- ISE RADIUS Network Access Attributes

MySQL

Configure ISE 2.2 for integration with MySQL server - Cisco

Nozomi (pxGrid)

Nutanix

ISE 3.0 and later releases support Nutanix AHV. See the respective <u>ISE Installation Guides</u> for details.

• Install ISE on Nutanix Community Edition (CE) with ZTP []

Okta

Okta as SAML IdP

Open DataBase Connect (ODBC)

- Configure ISE 2.1 with MS SQL with ODBC Cisco [CCO/TechNotes] 28/Jun/2016
- <u>Configure ODBC on ISE 2.1 with PostgreSQL</u>
- Configure ODBC on ISE 2.3 with Oracle Database 25/May/2018

Oracle

Oracle Cloud Infrastructure (OCI)

Deploy Cisco ISE Natively on Cloud Platforms

Ordr (formerly CloudPost)

- Ordr and ISE Integration Guide
- <u>Cisco ISE Overview Enhanced Device Visibility for Cisco ISE</u>
- Ordr Supercharges Cisco ISE Deployments

Palo Alto Networks

IoT Security ISE Integration (ERS)

- Integrate IoT Security with Cisco ISE
- <u>Set up Cisco ISE to Identify IoT Devices</u>
- Set up Cisco ISE to Identify and Quarantine IoT Devices
- Put a Device in Quarantine Using Cisco ISE
- Apply Access Control Lists through Cisco ISE

IoT ISE pxGrid Integration

- Integrate IoT Security with Cisco ISE pxGrid
- Set up Integration with Cisco ISE pxGrid
- Put a Device in Quarantine Using Cisco ISE pxGrid

Other Documents

- Better Security Policy Enforcement with Panorama Plugin for Cisco TrustSec
- Endpoint Monitoring for Cisco TrustSec (with pxGrid)

If the Panorama plugin does not want to trust an ISE certificate, consider the option: request plugins cisco_trustsec create-account **server-cert-verification-enabled no** client-name <client-name> host <iseserver-ip>

- gridmeld [github] pxGrid with Palo Alto Networks MineMeld: gridmeld Administrators Guide
- Configure Cisco ISE with RADIUS for Palo Alto Networks [Palo Alto Live Community]
- Integrate Cisco ISE Guest Authentication with PAN-OS [Palo Alto Live Community]

Ping Federate

- How to Configure SAML SSO Authentication with PingFederate []
- <u>Configure ISE 2.1 Sponsor Portal with PingFederate SAML SSO Cisco</u>
- <u>Configure ISE 2.1 Guest Portal with PingFederate SAML SSO Cisco</u>

Postman

- ISE Postman Collections
- ISE REST APIs Webinar []
- ISE REST API Webinar Code Examples

Qualys (TC-NAC)

- <u>Cisco TC-NAC and Qualys Vulnerability Server Integration</u> []
- How to Integrate ISE and Qualys for TC-NAC
- ISE 2.1 Threat Centric NAC with Qualys []
- How To Integrate ISE and Qualys for Threat-Centric NAC with STIX Technology
- Configure ISE 2.1 Threat-Centric NAC (TC-NAC) with Qualys Cisco [CCO/TechNotes] 29/Jun/2016
- ISE RADIUS Network Access Attributes

RADIUS Servers

ISE is a RADIUS server and supports RADIUS proxy to other RADIUS servers.

- <u>Configure External RADIUS Servers on ISE</u> 18/Sep/2020
- Configure eduroam on Cisco Identity Services Engine (ISE)

Radiflow (pxGrid-ERS)

- Solution Web Brief
- Integration Guide
- Joint Solution Datasheet

Rapid7 (TC-NAC)

• Configure ISE 2.2 Threat-Centric NAC (TC-NAC) with Rapid7 - Cisco - Feb 10, 2017

REST (Representational State Transfer APIs)

- ISE REST APIs : https://cs.co/ise-api
- ISE ERS API Examples
- <u>Configure ISE Guest Accounts with REST API</u> 06/Oct/2020
- Configure ISE 3.0 REST ID with Azure Active Directory 02/Mar/2021
- ISE Identity-Group, User Creation and Modification through Rest API
- ISE on Cisco DevNet: ISE APIs, Ansible, and Automation Learning Lab | ISE 3.0 Sandbox

Rockwell

• Deploy Identity and Mobility Services within a Converged Plantwide Ethernet Architecture

RSA

<u>Cisco ISE - RSA SecurID Access Implementation Guide</u> [RSA]

Ruckus

• ISE 2.1 Integration with Ruckus 1200 Wireless: BYOD & amp; Posture with Auth VLAN

Securonix (Syslog)

- ISE and Securonix Configuration for Syslog
- Integrated Security Visibility with Securonix and Cisco pxGrid Marketing Brief (ask vendor for guides)

ServiceNow (ERS API)

• ServiceNow Integration with Cisco ISE (DevNet)

• <u>ServiceNow integration with Cisco ISE</u> (GitHub)

Smokescreen - CarbonBlack now Zscaler (pxGrid)

- Smokescreen IllusionBLACK Integration Guide
- Smokescreen IllusionBLACK Integration Video

SMTP (Simple Mail Transfer Protocol)

<u>Configure Secure SMTP server on ISE</u>

SMS

Refer to Guest Access Notifications.

Splunk (syslog, SOAR)

- Cisco Endpoint Security Analytics (CESA) Built on Splunk Quickstart POV Kit & Deployment Guide
- <u>Splunk SOAR Overview</u>
- Identity Services Engine and Splunk Apps Configuration Guide
- Splunk Phantom SOAR API Integration login required

Symantec

- How To: ISE Integration with Symantec VIP
- Symantec Endpoint Manager (SEM) via OPSWAT

TACACS (Terminal Access Controller Access-Control System) Protocol

Search this document for specific product integrations with the TACACS protocol.

- Does ISE Support My Network Access Device?
- ISE Compatibility Information RADIUS, TACACS, protocols and services
- <u>RFC8907: The Terminal Access Controller Access-Control System Plus (TACACS+) Protocol</u>
- <u>Configure and Troubleshoot External TACACS Servers on ISE</u>

Tanium (pxGrid)

ISE & Tanium - Network Quarantine Requirements

Tenable Nessus (TC-NAC)

<u>Cisco TC-NAC with ISE and Tenable Security Center</u>

ThreatConnect (SOAR)

• ThreatConnect and Cisco Identity Services Engine (ISE): Streamline Security Policy Updates

TrapX Labs DeceptionGrid (pxGrid)

• ISE Integrates with TrapX to Stop WannaCry []

VMware

vCenter

- 4 Different Methods to Install ISE on VMware vCenter with ZTP []
- How To: Promiscuous Mode With VMWare for ISE

XTENDISE

XTENDISE uses ERS and MnT APIs and collects ISE syslog messages. It controls ISE as an asset management tool and also has extensions to work through switching controls. Guides are available that describe which ISE APIs we use and how to configure ISE and XTENDISE.

- About XTENDISE
- <u>XTENDISE Network requirements</u>
- <u>XTENDISE Integration</u>