

Cisco Identity Services Engine (ISE)



Introduction

Traditional corporate network boundaries and siloed services are a thing of the past. Today's networks must accommodate an ever-growing array of consumer IT devices while providing user-centric policy and enabling global collaboration. The Cisco TrustSec® architecture addresses this shift by using identity-based access policies to tell you who and what is connecting to your network, allowing IT to enable appropriate services without sacrificing control.

The first release of ISE focuses on the pervasive service enablement of TrustSec for Borderless Networks. ISE delivers all the necessary services required by enterprise networks - AAA, profiling, posture and guest management - in a single appliance platform. In the future, the same ISE platform can be used to propagate consistent service policies throughout the borderless network, from any end point to the video delivery optimization, branch service personalization, and data center server and service agility.

As part of the Cisco TrustSec solution and Cisco's SecureX architecture for Borderless Networks, the Cisco Identity Service Engine provides a centralized policy engine for business relevant policy definition and enforcement. ISE complements global contextual information offered by Cisco Security Intelligence Operations (SIO) with localized context awareness for effective access policy enforcement.

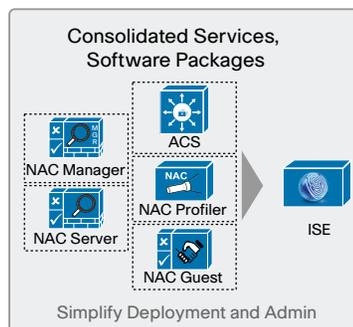
Overview

- **Security:** Secures your network by providing real-time visibility into and control over all users and devices on your network.

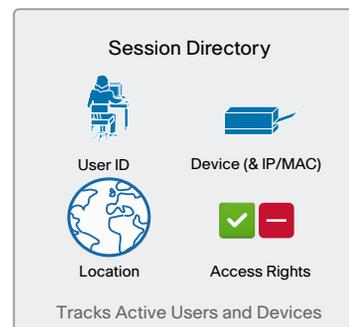
- **Compliance:** Enables effective corporate governance by creating consistent policy across an infrastructure.
- **Efficiency:** Helps increase IT and network staff productivity by automating traditionally labor-intensive tasks and streamlining service delivery.

Solution Highlights

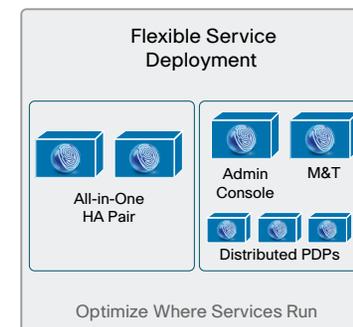
- **Business-relevant policies:** Enables centralized, coordinated policy creation and consistent policy enforcement across the entire corporate infrastructure, from head office to branch office.



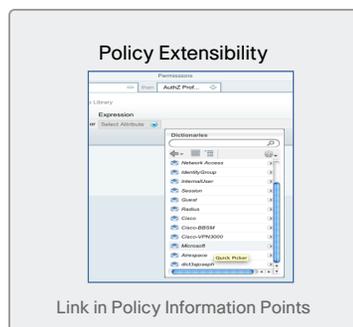
AAA, posture, profiling, and guest management capabilities in a single appliance platform



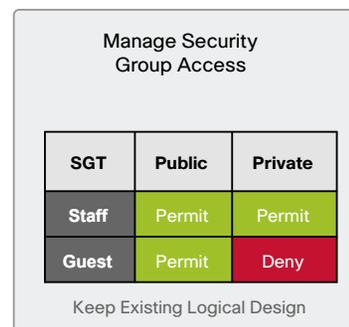
Track active users and devices to provide real-time awareness of who and what is on the network



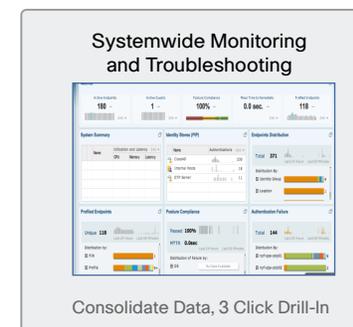
Optimize your deployments by applying appropriate services where and when they are needed



Support for third-party policy information points such as Active Directory or Sun ONE Directory Server



Manage security group tags and ACLs (SGTs and SGACLs) to enforce role-based access control for VDI environments

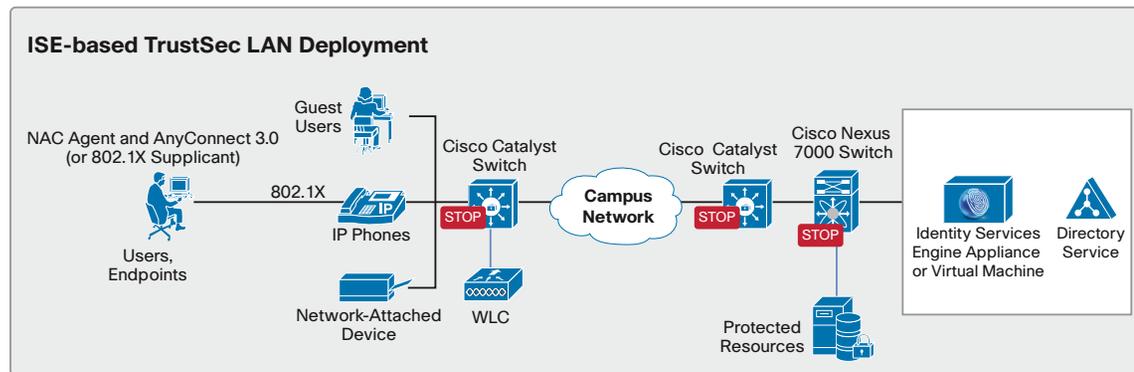


Exceptional Day 2 support with correlated logs, customized queries, a centralized dashboard, and integrated diagnostics



- **Systemwide operational visibility:** Discovers, assesses, and monitors users and endpoints and employs advanced troubleshooting capabilities to give IT teams complete visibility into who and what is on the corporate network.
- **Context-aware enforcement:** Gathers information from users, devices, infrastructure, and network services to enable organizations to enforce contextual-based business policies across the network. Cisco Identity Services Engine acts as the “single source of truth” for contextually rich identity attributes, including connection status, user and device identity, location, time, and endpoint health.
- **Flexible services architecture:** Combines AAA, posture, profiling, and guest management capabilities into a single appliance platform. Cisco Identity Services Engine can be deployed across the enterprise infrastructure, applying the appropriate services supporting 802.1x wired, wireless, and VPN networks.

Benefits



Deployment Components

The Identity Services Engine is part of an infrastructure-based Cisco TrustSec deployment using Cisco network devices to extend access enforcement throughout a network. Additional deployment components include Cisco NAC Agent and Cisco AnyConnect™ (or a 802.1x supplicant) on the endpoint; Cisco Catalyst® switches and Cisco wireless LAN controllers acting as policy enforcement points for the LAN; and Cisco Adaptive Security Appliances for secure remote access. Cisco Identity Services Engine also integrates with directory services such as Microsoft Active Directory and Sun ONE Directory Server as policy information points.

Deployment Services

Personalized, professional services from Cisco and our partners provide policy review, analysis, and design expertise to prepare your network to deploy a Cisco TrustSec solution that features Cisco Identity Services Engine. Using leading practices, Cisco TrustSec deployment services help you quickly and cost-effectively deploy a full authentication and access solution while providing knowledge transfer for ongoing operational efficiency.

Packaging and Licensing

Cisco Identity Services Engine is available as either a physical or virtual appliance. ISE licensing provides flexibility to customers to choose between functionality based licensing or deployment based licensing.

Functionality Based Licensing

- The Base license is intended for organizations that want to authenticate and authorize users and devices on their network (wired, wireless & vpn). It includes AAA services, guest lifecycle management, compliance reporting, and end-to-end monitoring and troubleshooting.
- The Advanced license expands upon the BASE and enables organizations to make policy decisions based on user and device compliance. Advanced license features include device profiling, posture services, and security group access enforcement capabilities across the entire network (wired, wireless & vpn).



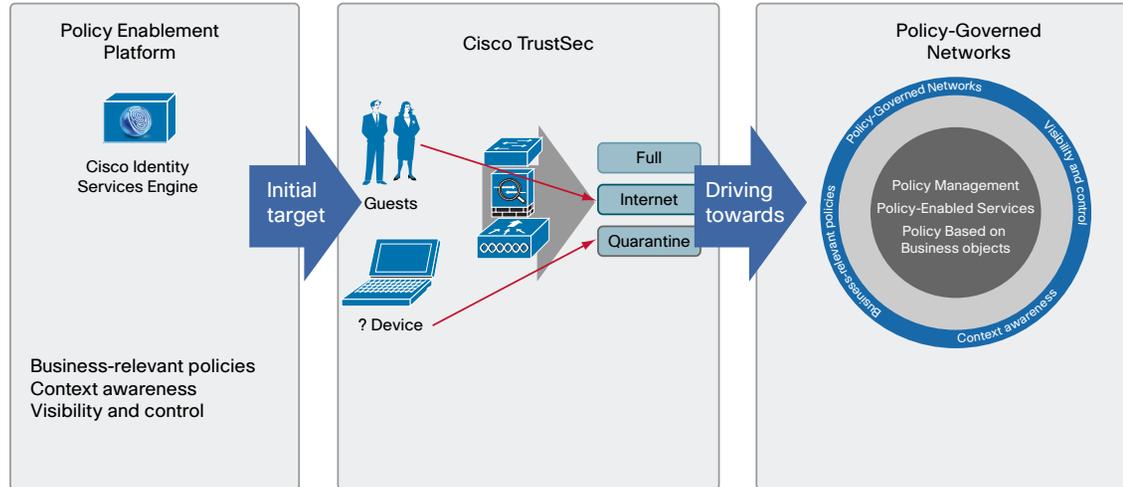
Deployment Based Licensing

- The Wireless license is intended for organizations that want to start their ISE deployment for policy decision for wireless endpoints only. The features included as part of this license includes the Base and Advanced license features.
- The Wireless Upgrade license is for customers who deployed ISE for wireless endpoints only and want to expand their deployment to wired and vpn endpoints.

Why Cisco Identity Services Engine?

Market leadership:

- Largest market share in terms of customer deployments.
- Rated #1 by leading industry analysts.
- Pioneered the original network access control technologies and developed numerous industry standards.
- The only comprehensive, single-vendor solution available today.



Technology and solution leadership:

- Uniquely combines AAA, posture, profiling, and guest management features in a single unified appliance, resulting in simplified deployments and integrated management.
- Dramatically reduces cost of ownership with world-class monitoring and troubleshooting features designed to streamline operations for your helpdesk and support teams.
- Delivers comprehensive security by integrating with embedded infrastructure features such as Security Group Access (SGA).

Cisco Vision

The first release of Cisco Identity Services Engine focuses on the pervasive service enablement of Cisco TrustSec for Cisco Borderless Networks. Future release features will include the ability to propagate consistent service policies throughout the network, from any endpoint to the data center in areas such as virtualization and branch office service prioritization.

For More Information

For more information on Cisco Identity Services Engine, visit <http://www.cisco.com/go/ise>. For more information about Cisco TrustSec 2.0 and the full range of products that comprise the Cisco TrustSec solution, visit <http://www.cisco.com/go/trustsec>.