



Cisco Identity Services Engine (ISE)

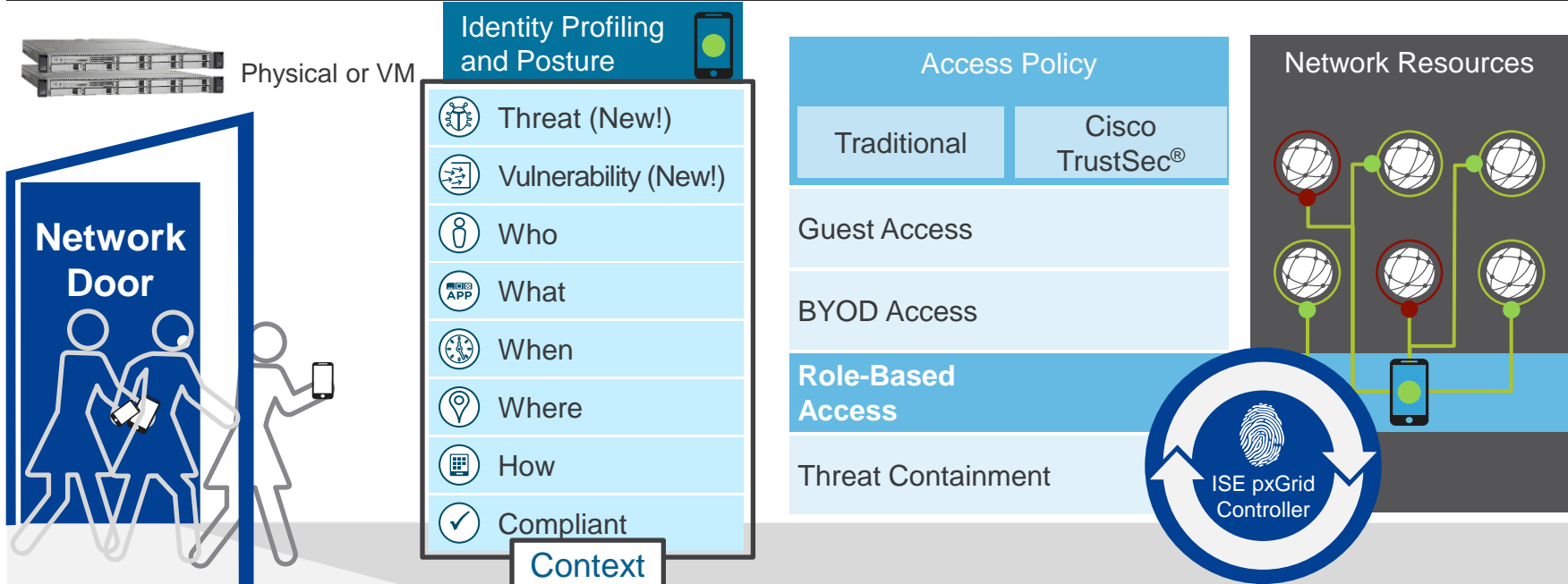
Mobility Roadshow

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Introducing Cisco Identity Services Engine

A centralized security solution that automates context-aware access to network resources and shares contextual data



- **ISE Portal Builder** – build your own guest portals here - <https://isepb.cisco.com>
- **ISE Guest Setup Wizard App** - Configure ISE and WLC at the same time.
- **ISE Express Bundle** - Cisco ISE in an entry-level bundle offered at an aggressive discount

Client Context and Policies

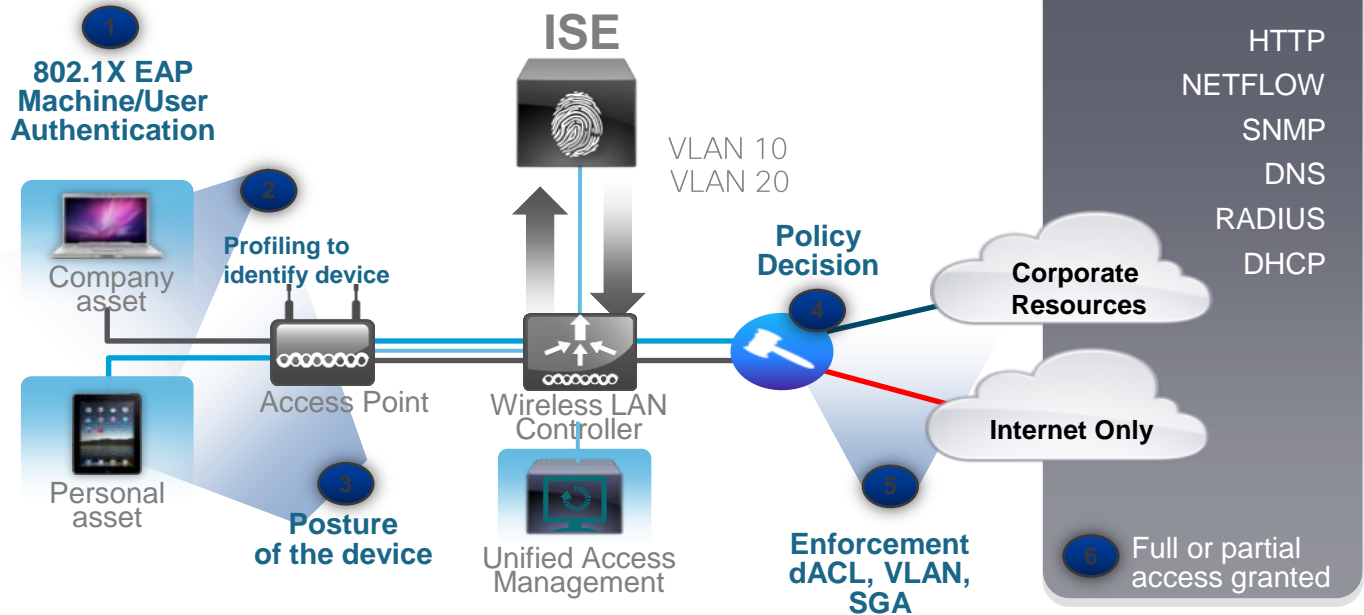
Control and Enforcement

IDENTITY

APP

HQ

2:38pm



Rich Data Sharing Enhances Protection Across the Attack Continuum



- Gain visibility into who and what is on your network
- Grant access on a “need to know” basis

- Provide threat context to network behavioral analysis
- Contain through network elements and security ecosystem

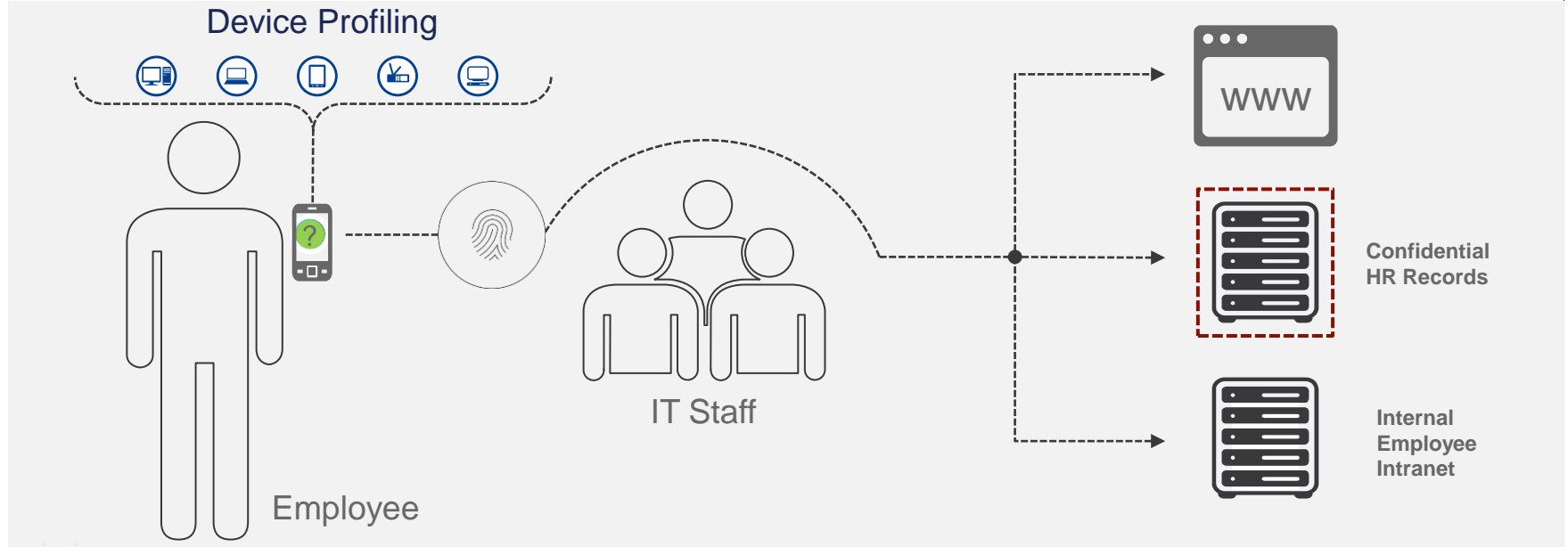
- Get better forensics and prepare for the next attack by sharing information with ecosystem partners

Enable Faster and Easier Device Onboarding without Any IT Support

Rapid device identification with out-of-the-box profiles

Simplified device management from self-service portal

Automated authentication and access to business assets



Metrics

Total Endpoints ⓘ



4282

Active Endpoints ⓘ



3725

Authenticated Guests ⓘ



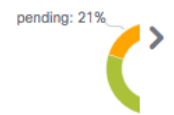
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BYOD Endpoints ⓘ



27

Posture C



System Summary ⓘ

1 nodes CPU 24HR

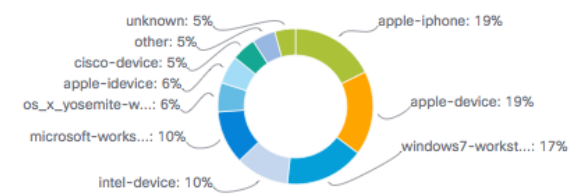
ise-1



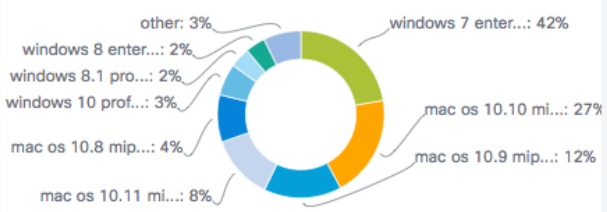
Last refreshed: Tue Feb 02 2016 19:18:01 GMT-0800 (PST)

Profiles ⓘ

Endpoint Profile



OS Types ⓘ



Last refreshed: Tue Feb 02 2016 19:18:01 GMT-0800 (PST)

Alarms ⓘ

Se...	Name	Occur...	Last Oc...
⚠	ISE Authentication Inactivity	71	11 days
ℹ	Configuration Changed	243	11 days
⚠	High Load Average	72	11 days

Network Devices ⓘ

Network Device | Device Type | Location



Authentications ⓘ

Identity Store | Identity Group | Network Device | Failure Reason






ISE use cases



NOTE: To apply the Device Admin, Plus, or ISE Apex licenses, Base licenses must be installed first.

Features included by license type

Benefit	Use case	Base <i>Perpetual</i>				Device Admin* <i>Perpetual</i>	Plus <i>Term (1,3,5 year)</i>					ISE Apex + AnyConnect Apex <i>Term (1,3,5 year)</i>		
		RADIUS / 802.1x	AAA	TrustSec security group tagging	Guest services	TACACS+	Rapid threat containment	ANC/EPS	Device profiling and feed service	BYOD with CA	pxGrid context sharing	MDM / EMM	Threat- Centric NAC	Posture (endpoint compliance and remediation)
Control all access from one place 	Guest Provide unique guest permissions to visitors	●	●		●									
	Secure access Control user access and ensure device authentication	●	●	●										
	Device Admin Differentiate access for device administrators					●								
	BYOD Seamlessly onboard devices with the right access	●	●	●				●	●					
See and share rich user and device details 	Visibility See when, where, and why users are on your network	●	●	●			●							
	Integration Share information with other products	●	●	●			●		●					
	Compliance Ensure that endpoints meet network standards	●	●	●							●		●	
Stop threats from getting in and spreading 	Segmentation Limit exposure with pre-defined access segmentation	●	●	●										
	Containment Reduce risk with rapid threat containment	●	●	●			●	●	●					
	Prevention Prevent breaches at the endpoint level	●	●	●								●		

What's New in 2.1?

- EasyConnect
- Context Visibility
 - Customizable Dashboard
 - Expanded Profiling Capabilities
- Threat Centric NAC
- **TrustSec Workflow Enhancements**
- TrustSec / ACI Policy Plane Integration
- **(Much!) Expanded 3rd Party Support**
- Major ACS Parity Features
- Compliance & MDM Enhancements
- **BYOD Stand-Up Enhancements**
- **Guest Enhancements**
- New Hardware == New Performance

Wireless TrustSec Support



User to Data Center Access Control

- Context--based access control
- Compliance requirements PCI, HIPAA, export controlled information
- Merger & acquisition integration, divestments



Campus and Branch Segmentation

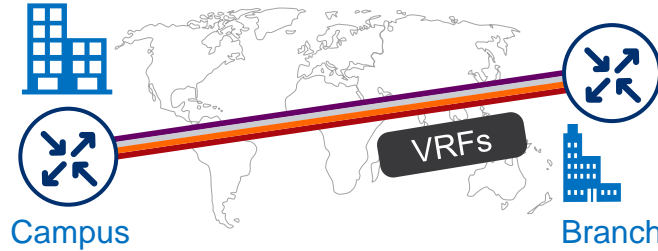
- Line of business segregation
- PCI, HIPAA and other compliance regulations
- Malware propagation control/quarantine

Feature	Platform
Inline SGT tagging and SG-ACL enforcement	17xx, 27xx,37xx, 18xx, 28xx, 1560 and 38xx 5520 and 8540
SXPv2	5520, 8540, 8510, 7510, vWLC, 5508, WISM2, 2504
SXPv4	17xx, 27xx,37xx, 18xx, 28xx, 1560 and 38xx

Simple scalable software-defined-access based segmentation and policies

The Segmentation Challenge

```
access-list 102 deny tcp 103.10.93.140 255.255.255.255 eq 970 71.103.141.91 0.0.0.127 lt 848
access-list 102 deny ip 32.15.78.227 0.0.0.127 eq 1493 72.92.200.157 0.0.0.255 gt 4878
access-list 102 permit icmp 100.211.144.227 0.0.1.255 lt 4962 94.127.214.49 0.255.255.255 eq 1216
access-list 102 deny ip 88.91.79.30 0.0.0.255 gt 26 207.4.250.132 0.0.1.255 gt 1111
access-list 102 deny ip 167.17.174.35 0.0.1.255 eq 3914 140.119.154.142 255.255.255.255 eq 4175
access-list 102 permit tcp 37.85.170.24 0.0.0.127 lt 3146 77.26.232.98 0.0.0.127 gt 1462
access-list 102 permit tcp 155.237.22.232 0.0.0.127 gt 1843 239.16.35.190 0.0.1.255 lt 4384
access-list 102 permit icmp 136.237.66.158 255.255.255.255 eq 946 119.186.148.222 0.255.255.255 eq 878
access-list 102 permit ip 129.100.41.114 255.255.255.255 gt 3972 47.135.28.103 0.0.0.255 eq 467
access-list 102 permit udp 126.183.90.85 0.0.0.255 eq 3256 114.53.254.245 255.255.255.255 lt 1780
access-list 102 deny icmp 203.36.110.37 255.255.255.255 lt 999 229.216.9.232 0.0.0.127 gt 3611
access-list 102 permit tcp 131.249.33.123 0.0.0.127 lt 4765 71.219.207.89 0.255.255.255 eq 606
access-list 102 deny tcp 112.174.162.193 0.255.255.255 gt 368 4.151.192.136 0.0.0.255 gt 4005
access-list 102 permit ip 189.71.213.162 0.0.0.127 gt 2282 74.67.181.47 0.0.0.127 eq 199
access-list 102 deny udp 130.237.66.56 255.255.255.255 lt 3943 141.68.48.108 0.0.0.255 gt 3782
```



Complex IP based policies
Need updates as topology changes

Extend segments over -
Layer 3 boundaries

Line of Business
Compliance
BYOD
Various Segmentation needs

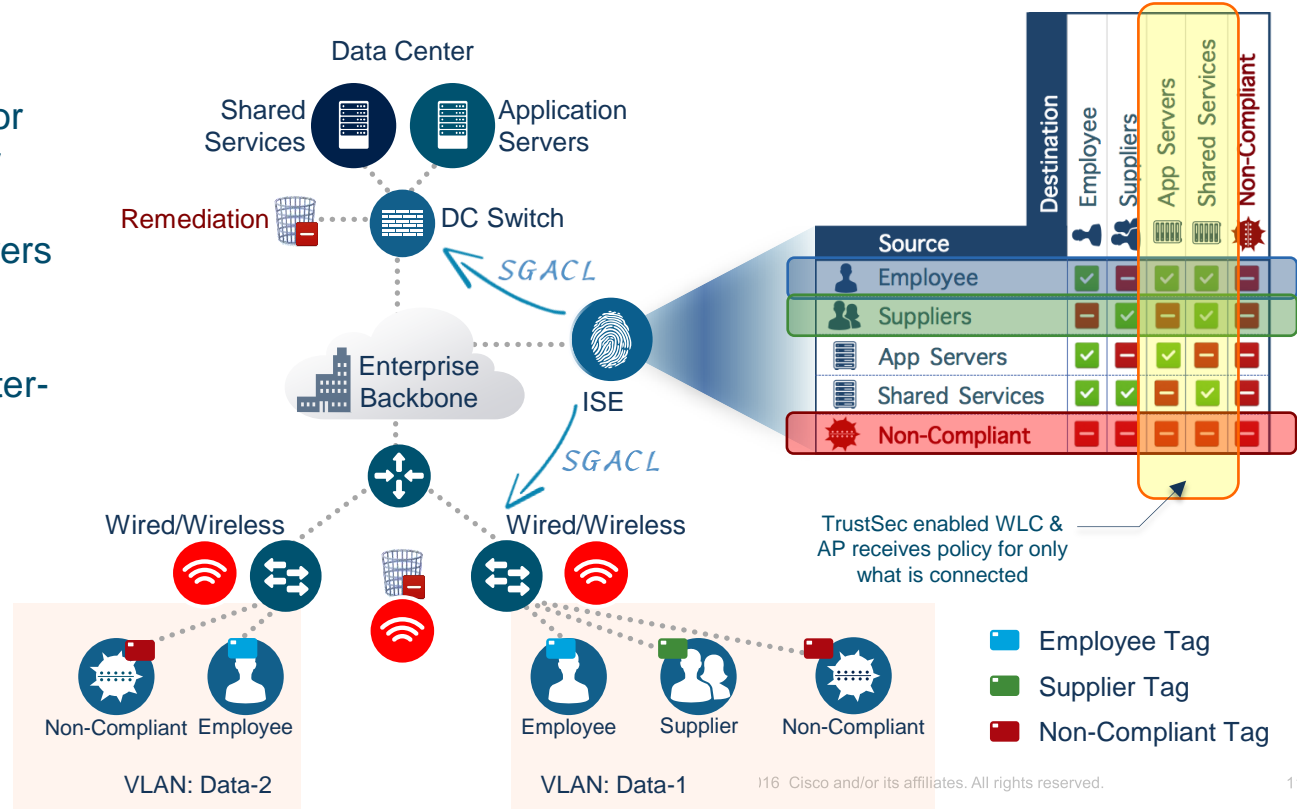


Retain Security & Compliance
as network expand and grow

Simplified and Consistent Access governed by TrustSec

Regardless of topology or location, policy (Security Group Tag) stays with users, devices, and servers

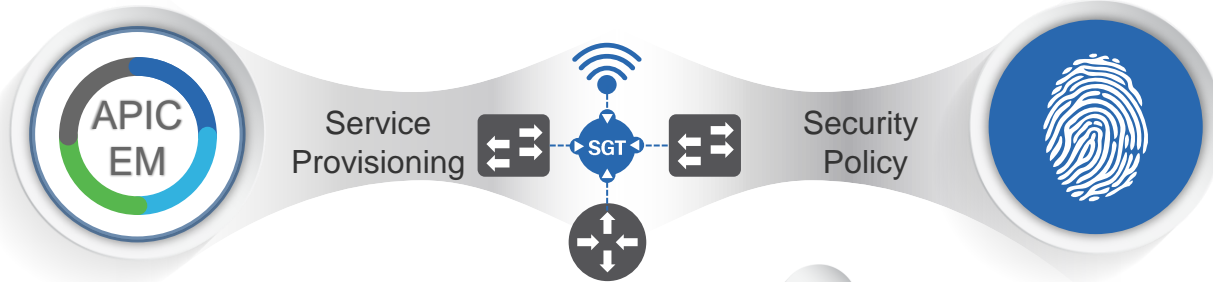
TrustSec simplifies ACL management for intra/inter-VLAN traffic



Cisco DNA and ISE

Network Controller

ISE



Discover Network Asset & Services



Check Network Service Readiness



Provision & Manage Configuration



Enable additional services instantly



Provision Network Service Changes



Identify User and Endpoints



Profile and Classify devices



Automate On-Boarding



Automated Security Policy
Provisioning Inside/outside fabric



Sync groups with security apps
and other controllers

