

Juniper Networks

Unified Access Control (UAC)

Agenda

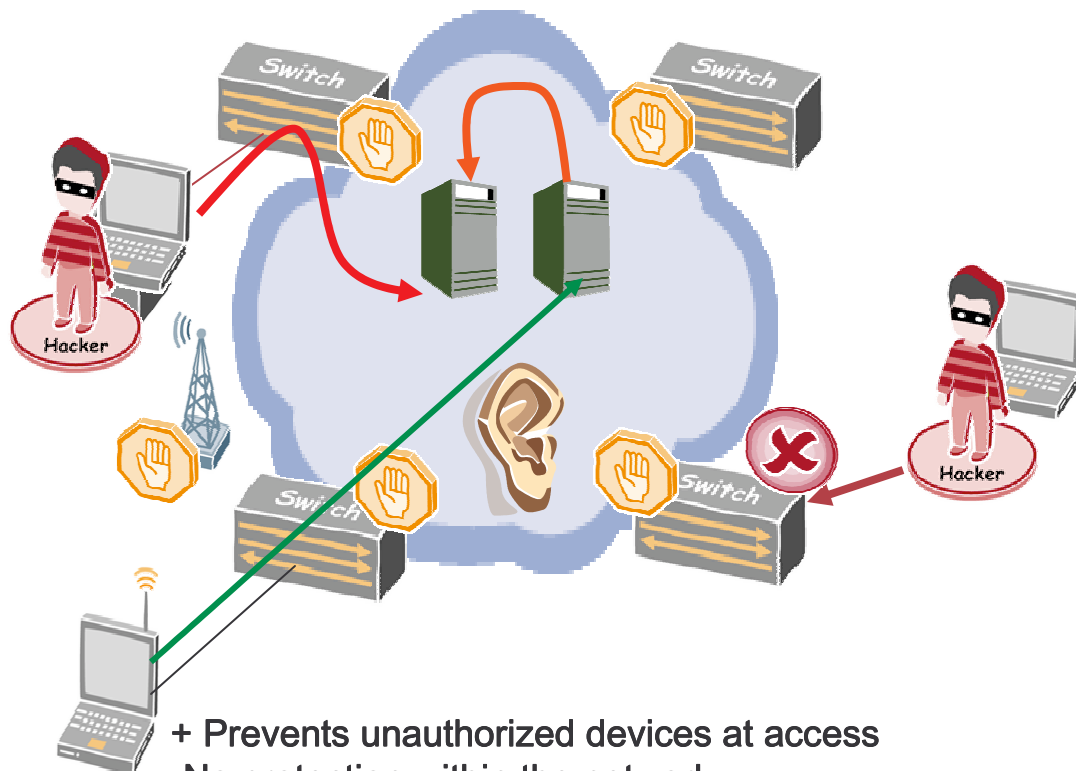
- **NAC : Layer-2 vs Layer-3 enforcement**

- **Juniper UAC**
 - Network Protection
 - Application and User Visibility
 - Coordinated Threat Control

- **Standards & why they matter**

Access Control - L2 vs L3 enforcement

L2 = Protection around the network

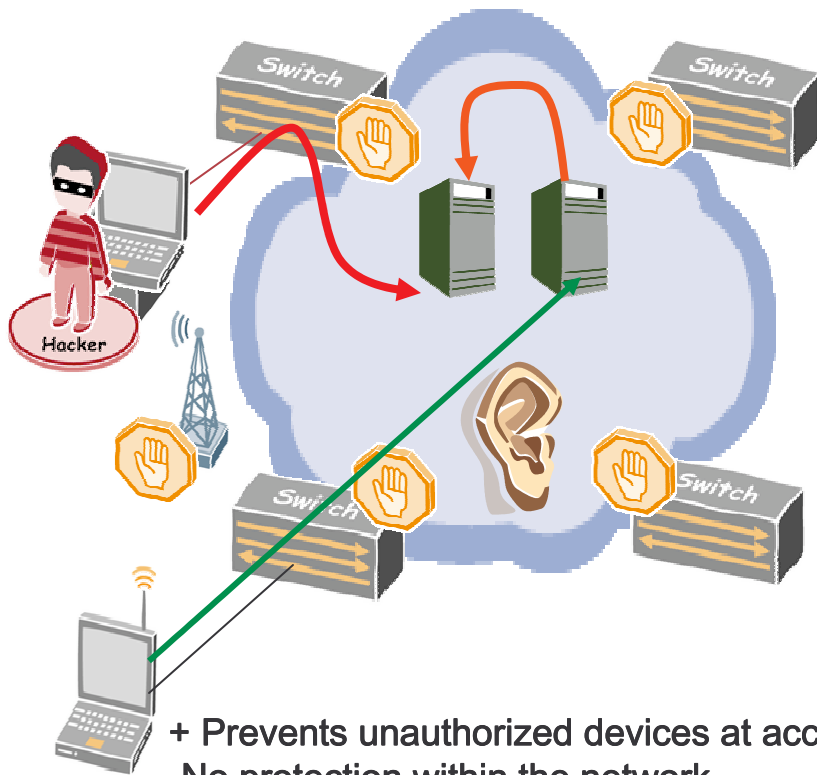


- + Prevents unauthorized devices at access
- No protection within the network
- All connected devices does not have a user..

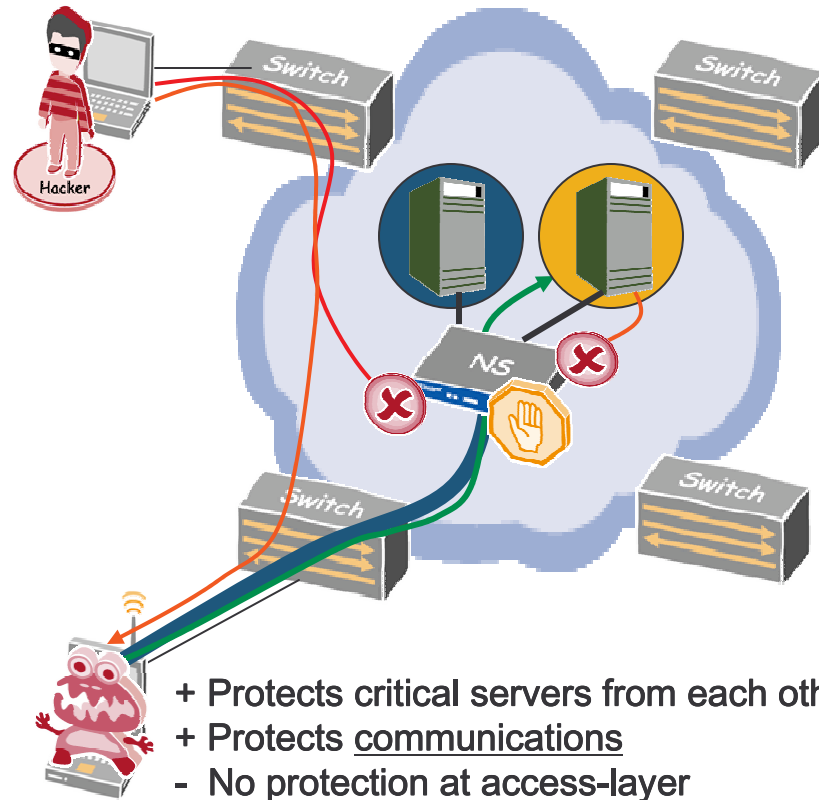
Access Control - L2 vs L3 enforcement

L2 = Protection around the network

L3 = Protection within the network



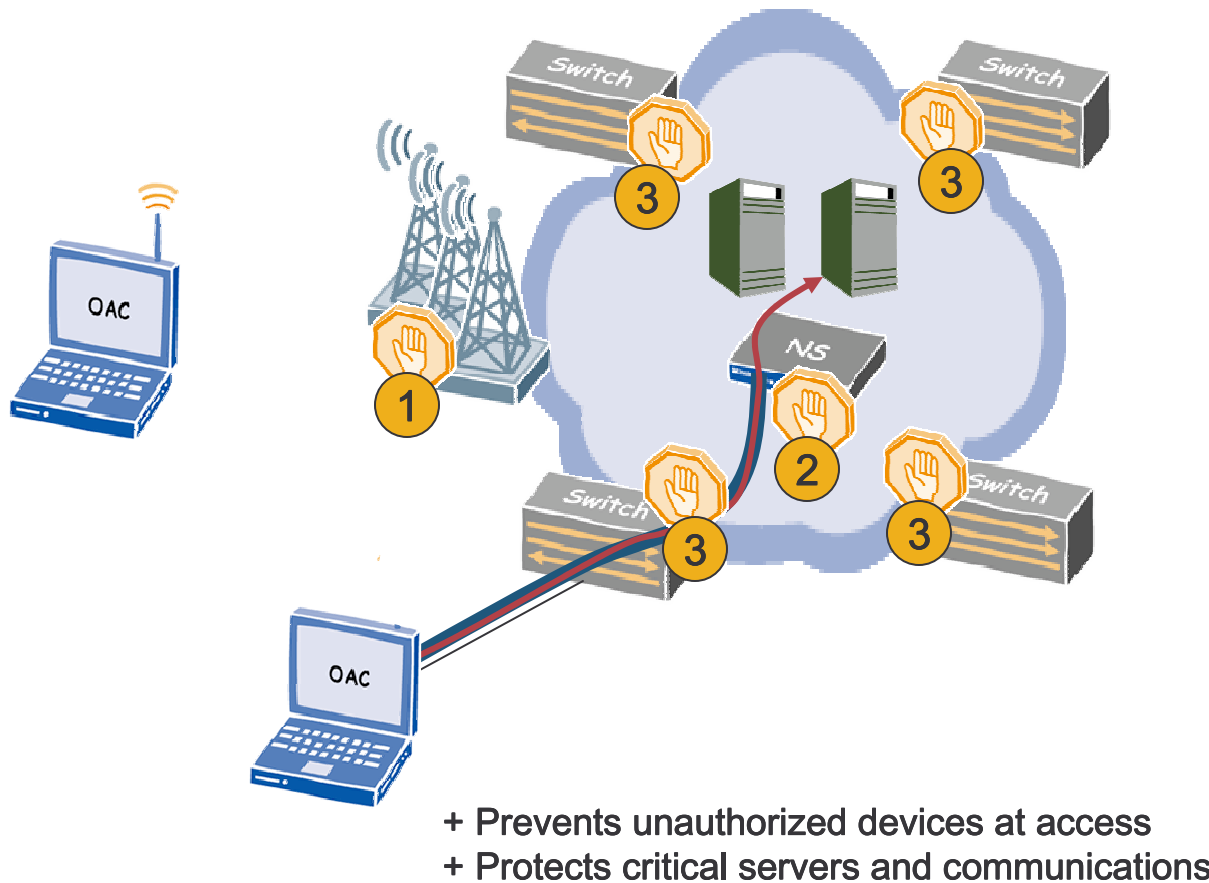
- + Prevents unauthorized devices at access
- No protection within the network
- All connected devices does not have a user..



- + Protects critical servers from each other
- + Protects communications
- No protection at access-layer

Juniper UAC = L2 and L3 enforcement

L2 + L3 = Protection around and within the network



Juniper UAC enables a phased implementation !!!

Example:

Phase-1

Protect the Wireless Network

Phase-2

Limit access to, and protect communication to the most critical servers

Phase-3

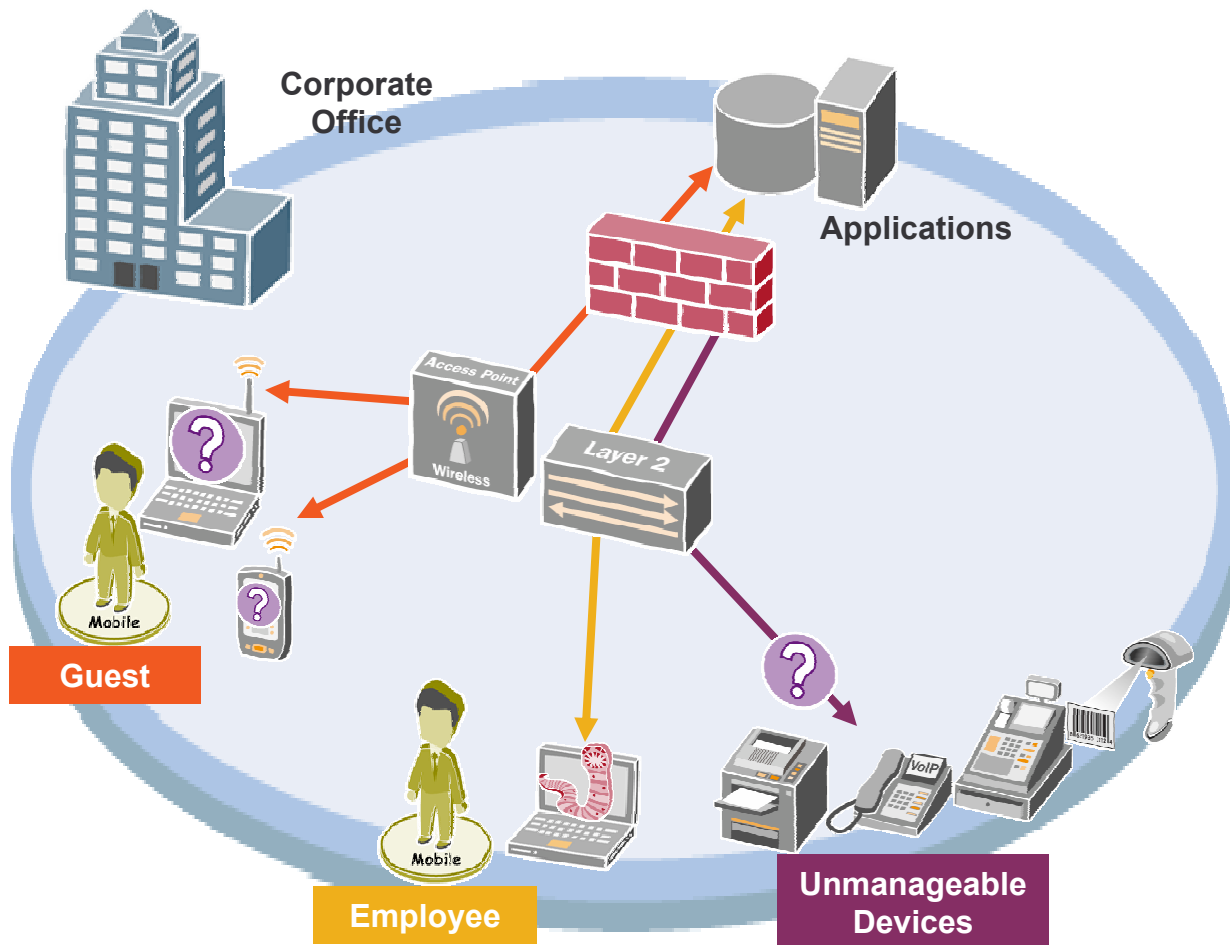
Start rolling out access control to all switches in the company.

Agenda

- NAC : Layer-2 vs Layer-3 enforcement

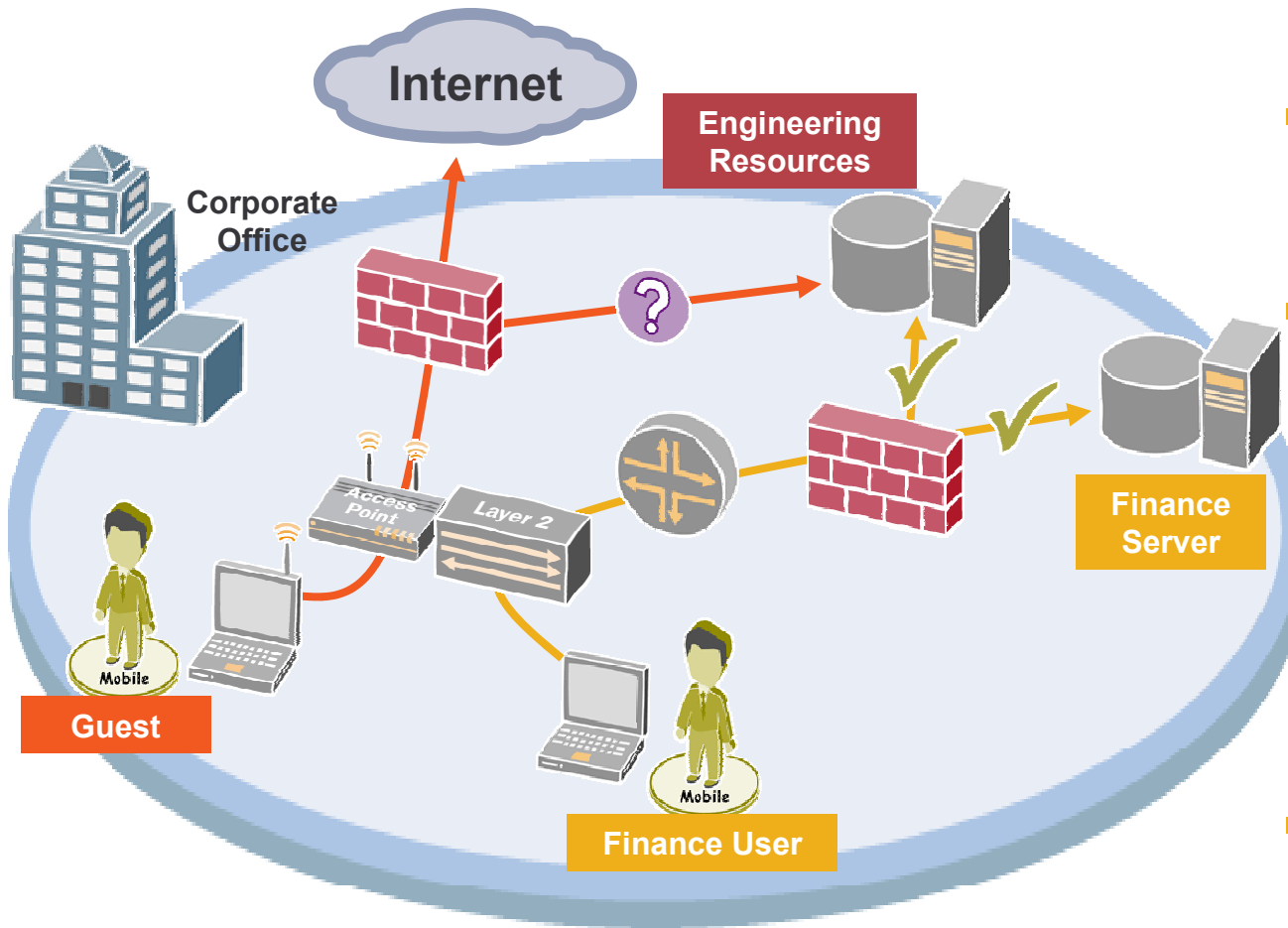
- **Juniper UAC**
 - Protection
 - Visibility
 - Threat Control

- Standards & why they matter



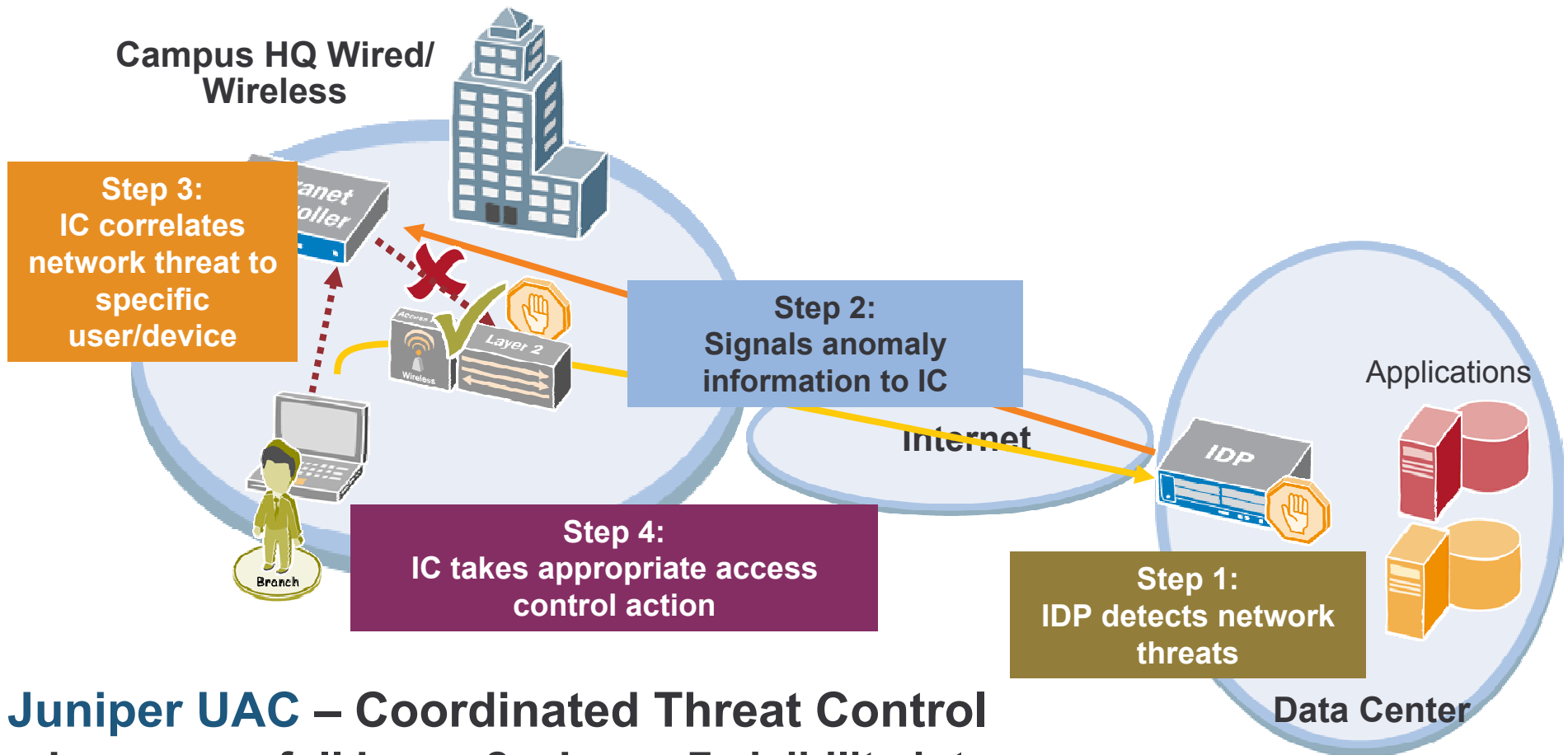
- Ever-increasing number of mobile users (guests, employees, others) with diverse unchecked, unknown, or distrusted devices
 - Just **1** infected device can take down a network and resources
- Guest networking
 - Need to identify guest users and grant them appropriate access, ***different*** from employees
- Unchecked unmanageable devices can threaten LAN security

CHALLENGE: User mobility, widespread use/deployment of unmanaged, distrusted, and unmanageable devices, and guest networking



- Lack of visibility into network and application access
- Regulatory compliance driving enterprises to demonstrate control over and visibility into corporate resources
 - Monitor, audit, and log access
- Enterprises must know what is happening within their LAN

CHALLENGE: Ensure and prove only authorized users can access network and sensitive data



Juniper UAC – Coordinated Threat Control

- Leverages full Layer 2 – Layer 7 visibility into application traffic, minimizing downtime and delivering ability to:
 - Quarantine malicious users/infected devices
 - Disable the user session
 - Log the event and notify administrators

Agenda

- NAC : Layer-2 vs Layer-3 enforcement

- Juniper UAC
 - Protection
 - Visibility
 - Threat Control

- **Standards & why they matter**

Standards & why they matter

802.1X

- **Standard for Layer-2 Authentication/Authorization**
- **Vendor-agnostic, multi-vendor compatibility**
 - Supports heterogeneous network environments
- **Reduces costs and deployment time**
 - Leverages existing, installed products – software and hardware
 - Empowers choice, an advantage over single vendor lock-in
- **Increases security**
 - Better security through consistency
- **Higher, faster Return on Investment (ROI)**

TNC - Trusted Network Connect

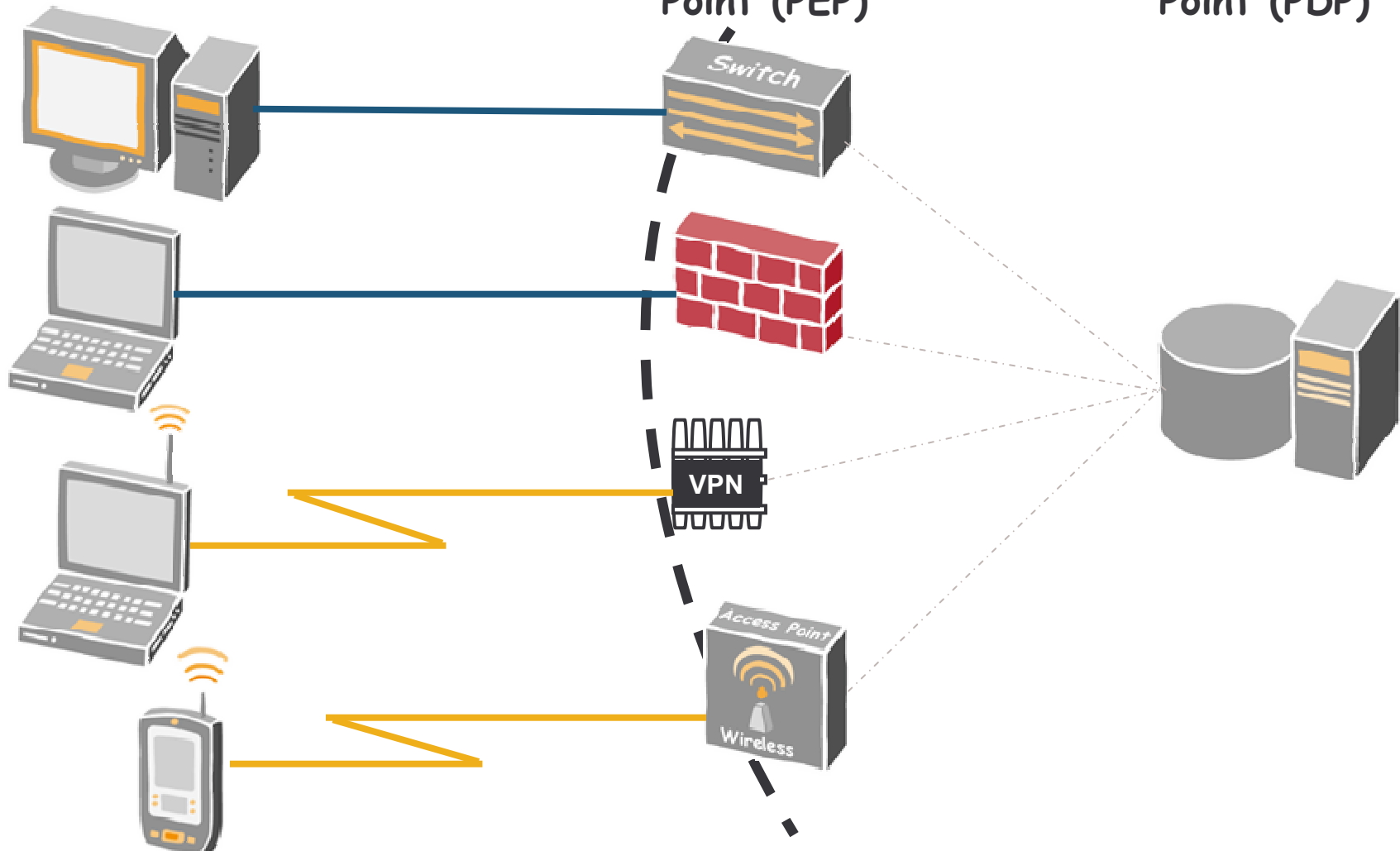
- **An open network access control architecture & standard**
- **A subgroup of the Trusted Computing Group (TCG)**
- **Vendor-agnostic, multi-vendor compatibility**
 - Supports heterogeneous network environments
- **Reduces costs and deployment time**
 - Leverages existing, installed products – software and hardware
 - Empowers choice, an advantage over single vendor lock-in
- **Increases security**
 - Thorough and open technical review of all standards
 - ALL endpoints are covered and secured

Basic TNC Architecture

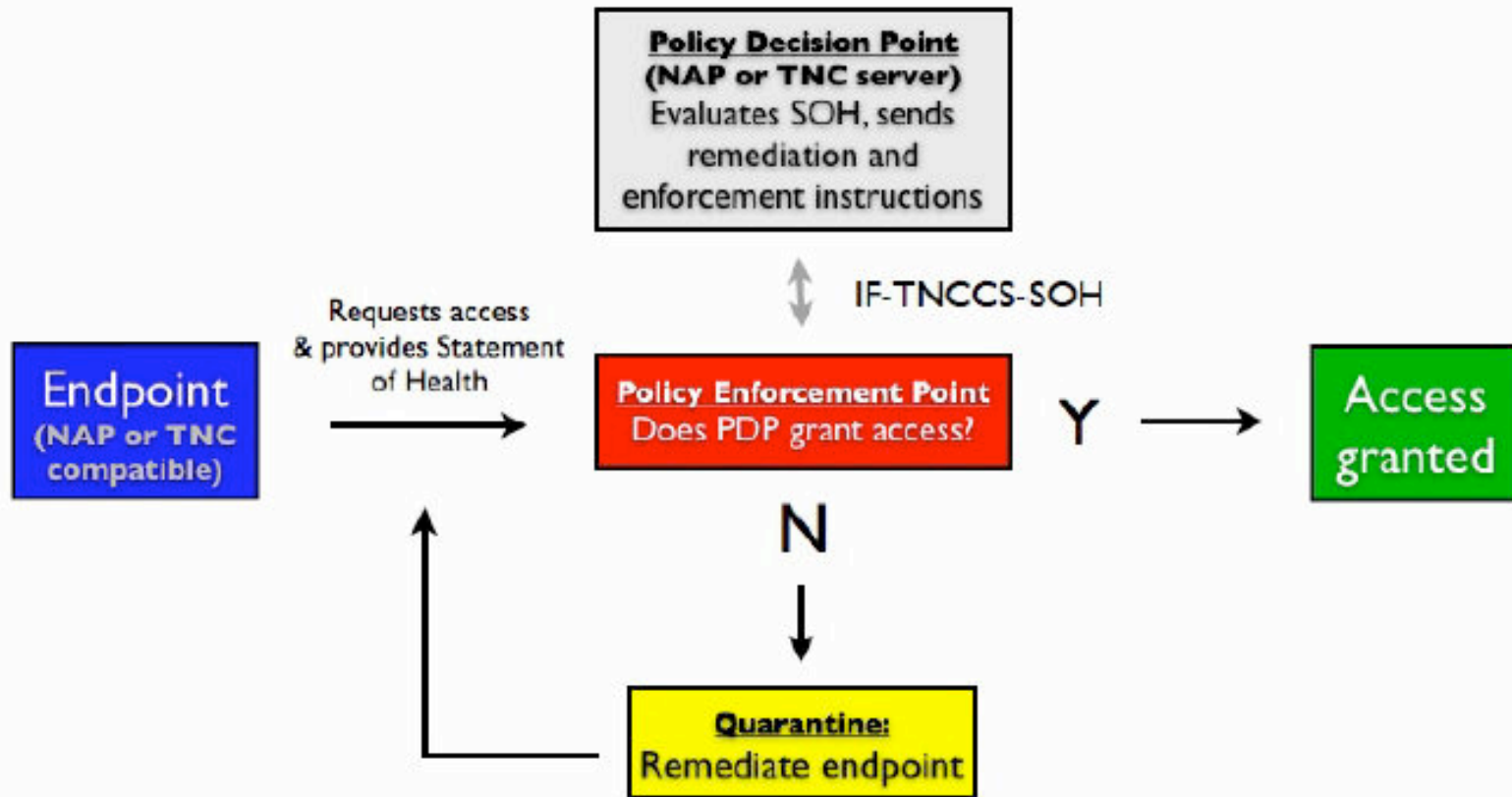
Access Requestor (AR)

Policy Enforcement Point (PEP)

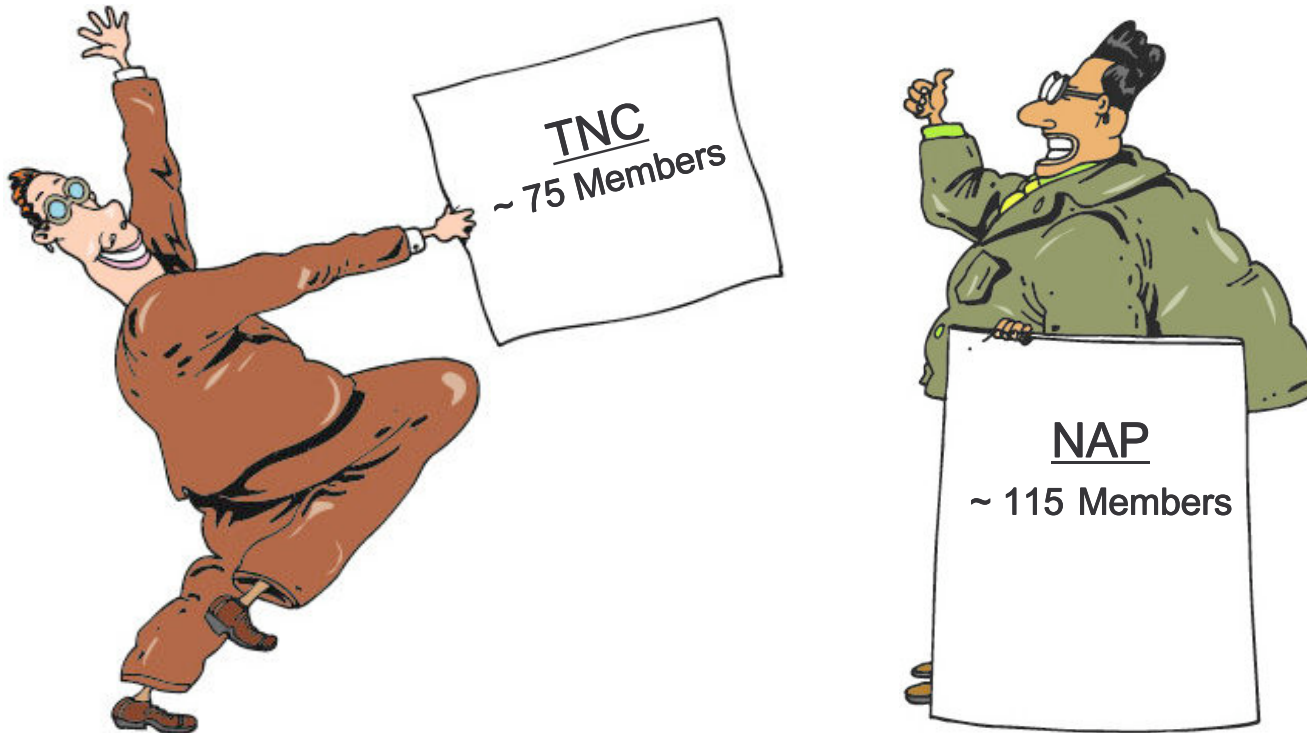
Policy Decision Point (PDP)



Controlling Network Access with TNC and NAP



Controlling Network Access with TNC and NAP



Expect widespread adoption of IF-TNCCS-SOH protocol !!!

- Complements 802.1x as Endpoint Assessment "standard"

Summary - Juniper's UAC Solution Delivers

- Does what you need it to do
 - Pre AND post authentication security checks
 - Network admission AND network access controls
 - Easy, self-service remediation
- For all use cases – guests, contractors and employees
 - Cross platform
 - Managed, unmanaged and unmanageable devices
- Ideal for a phased deployment
 - L3-L7 overlay satisfies the immediate need
 - Roll 802.1X-based infrastructure (from any vendor) when you choose
 - Both solutions in one appliance
- Standards-based – 802.1X & TNC
- All elements are field tested

Thank you for listening !

Juniper *your* Net™

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