Network Security Automation Standards: TNC and SCAP

Copyright © 2011 Trusted Computing Group

Trusted Network Connect

Open Architecture for Network Security

- Completely vendor-neutral
- Strong security through trusted computing

Open Standards for Network Security

- Full set of specifications available to all
- Products shipping for more than five years

Developed by Trusted Computing Group (TCG)

- Industry standards group
- More than 100 member organizations
- Includes large vendors, small vendors, customers, etc.

TRUSTED COMPUTING GROUP™

Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Problems Solved by TNC

Network and Endpoint Visibility

- Who and what's on my network?
- Are devices on my network secure? Is user/device behavior appropriate?

Network Enforcement

- Block unauthorized users/devices
- Grant appropriate levels of access to authorized users/devices

Network Access Control (NAC)

Device Remediation

- Quarantine and repair unhealthy devices

Security System Integration

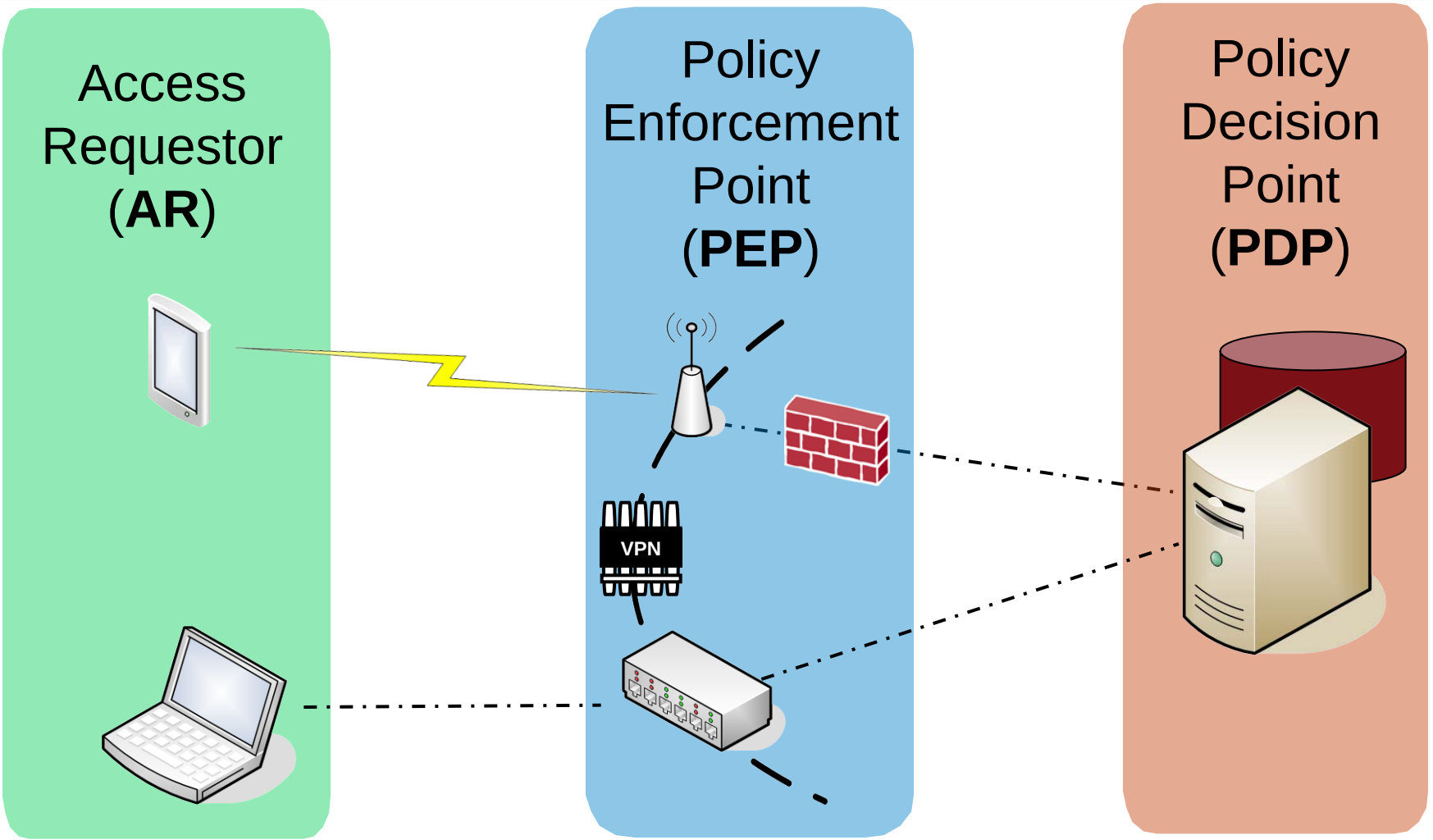
- Share real-time information about users, devices, threats, etc.

Coordinated Security

TRUSTED COMPUTING GROUP™

Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

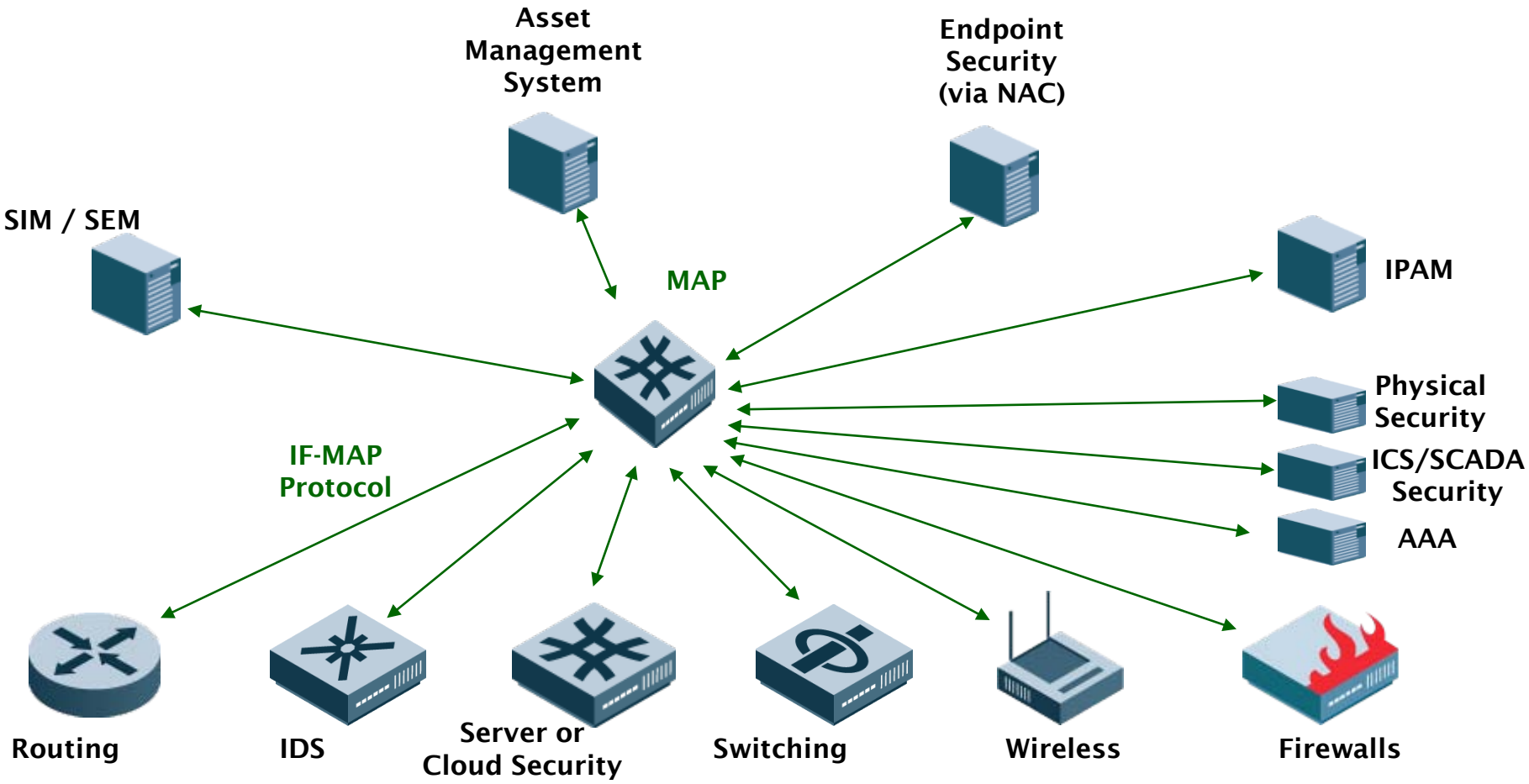
NAC Architecture



TRUSTED COMPUTING GROUP™

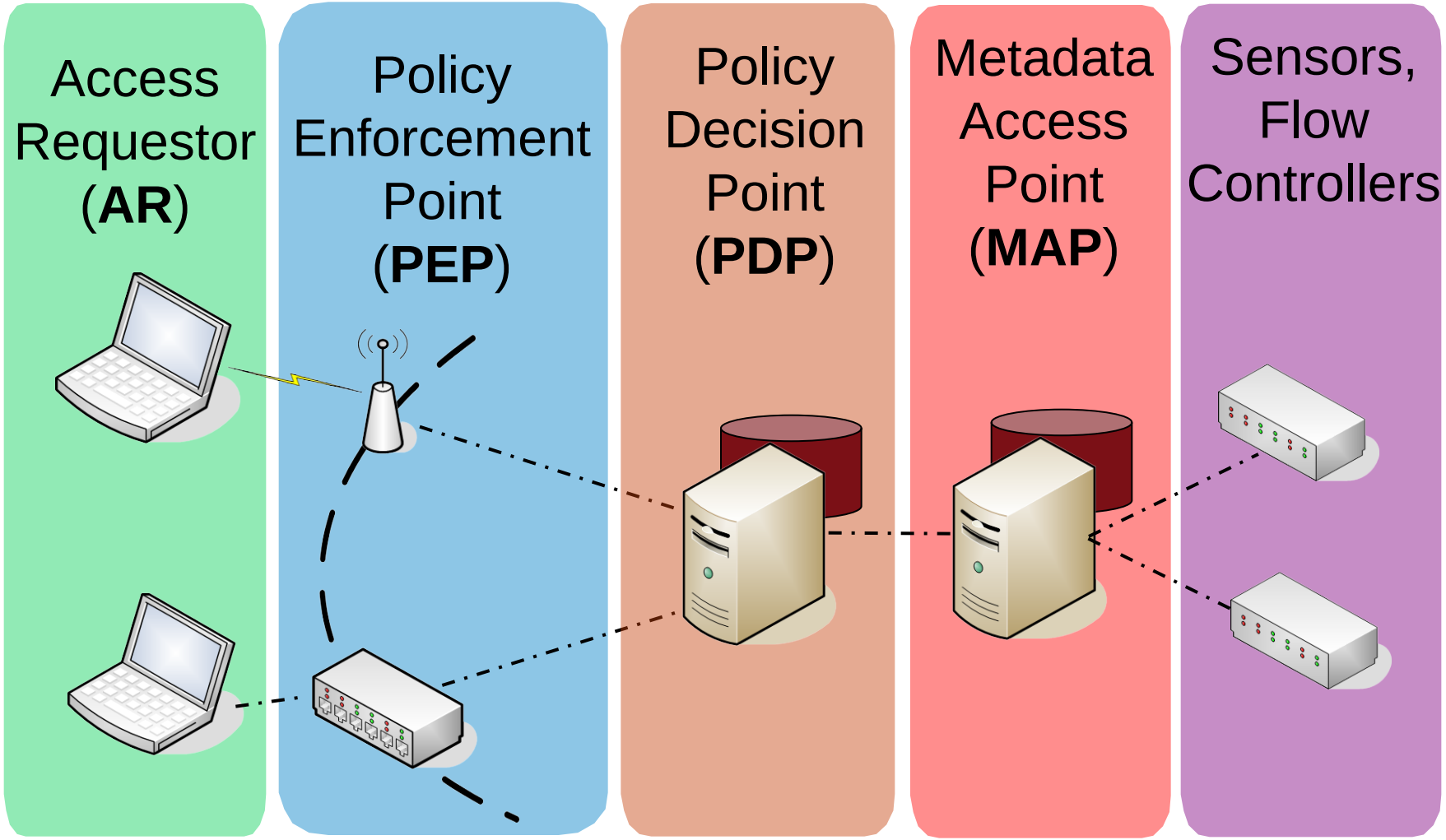
Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Coordinated Security



Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Coordinated Security & NAC Together



TRUSTED COMPUTING GROUP™

Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Typical TNC Deployments

Health Check

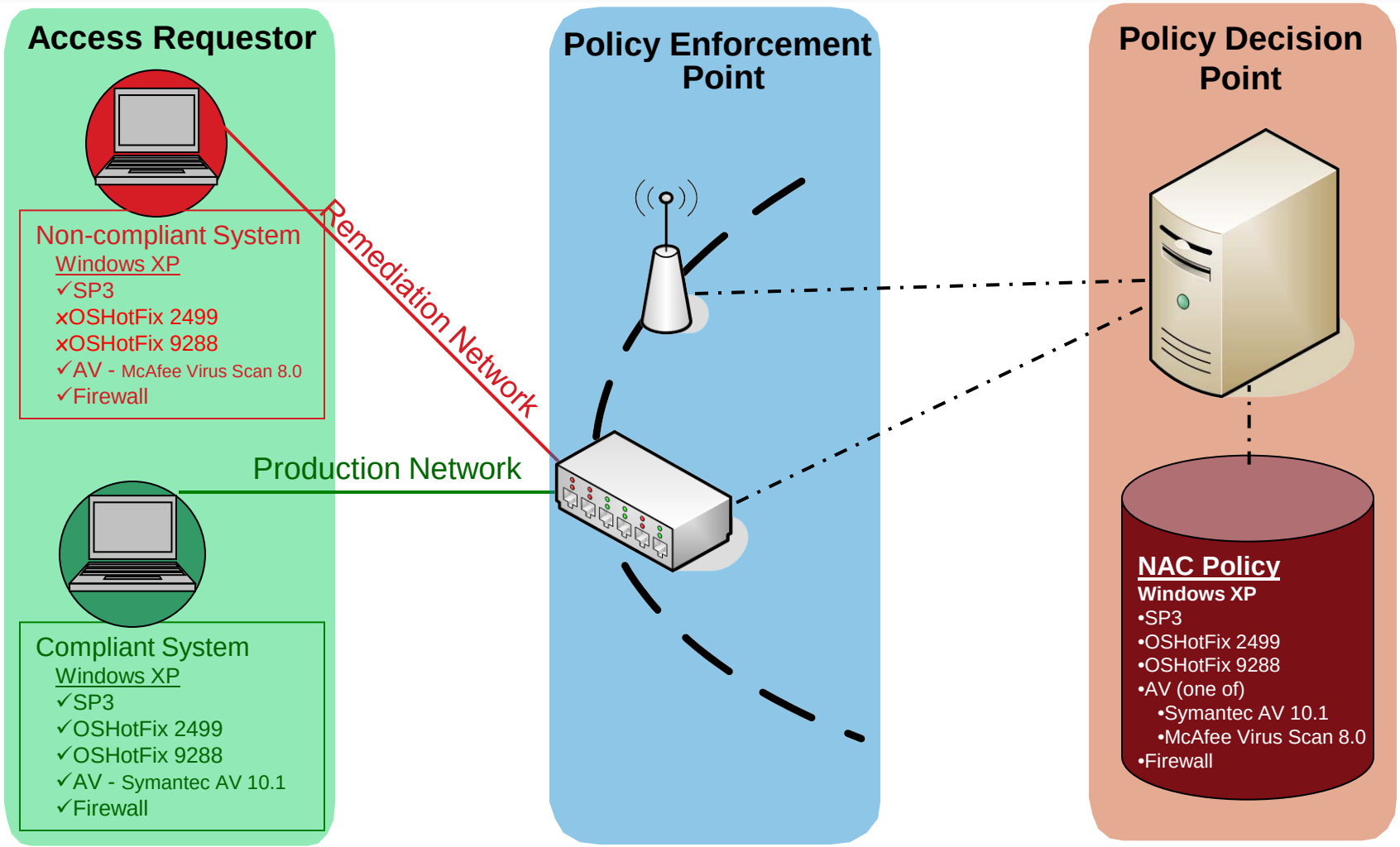
Behavior Check

User-Specific Policies

TRUSTED COMPUTING GROUP™

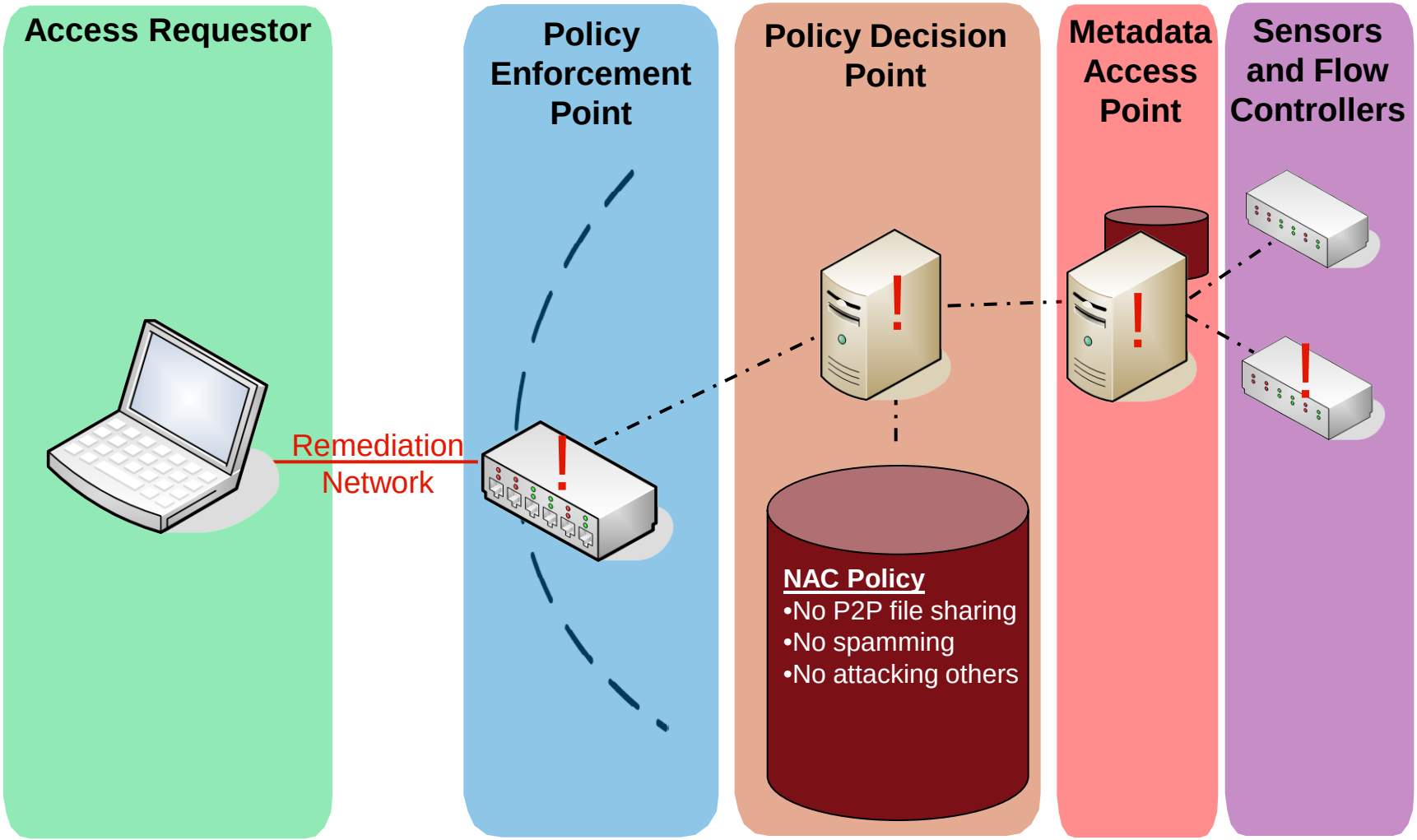
Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Health Check



Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

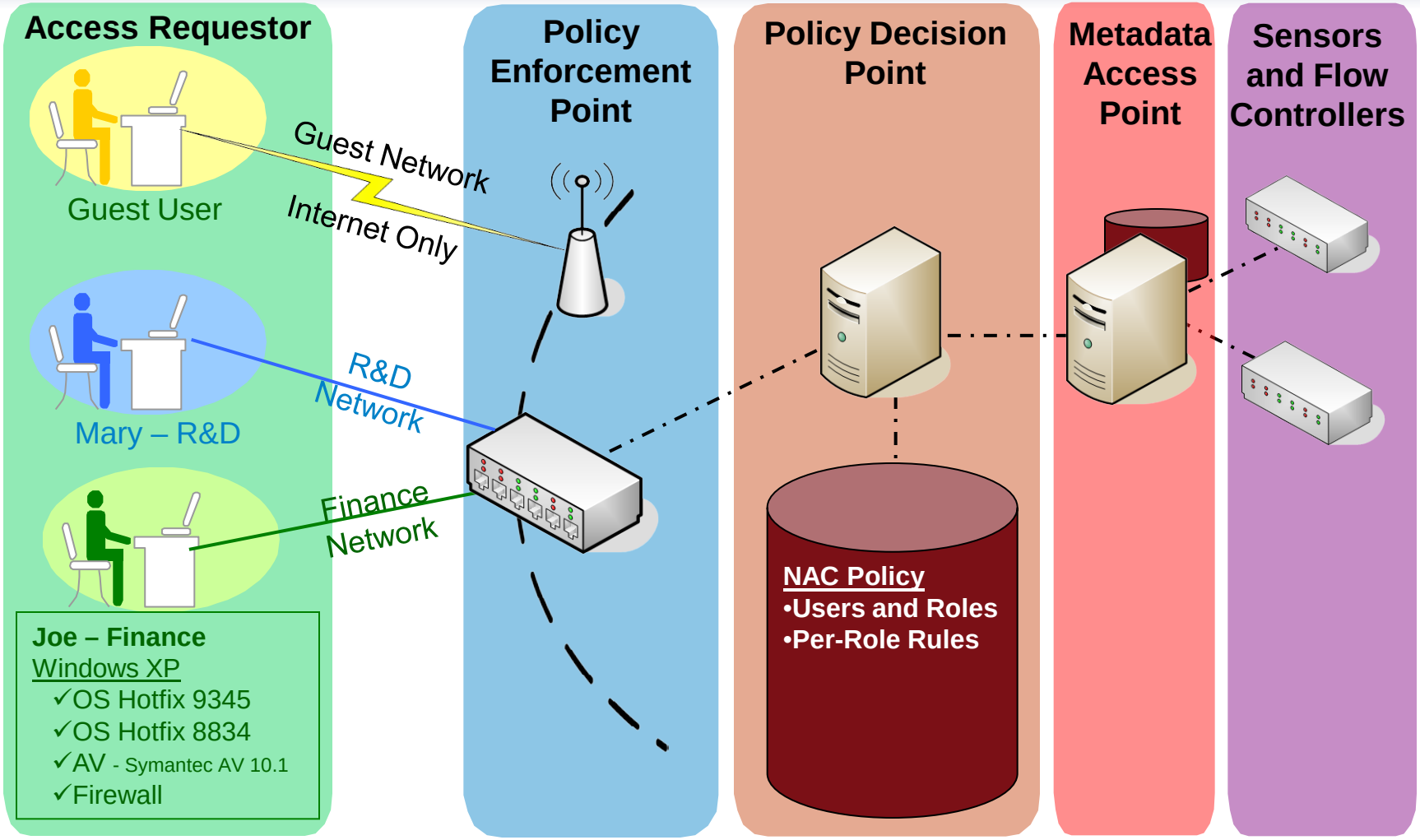
Behavior Check



TRUSTED COMPUTING GROUP™

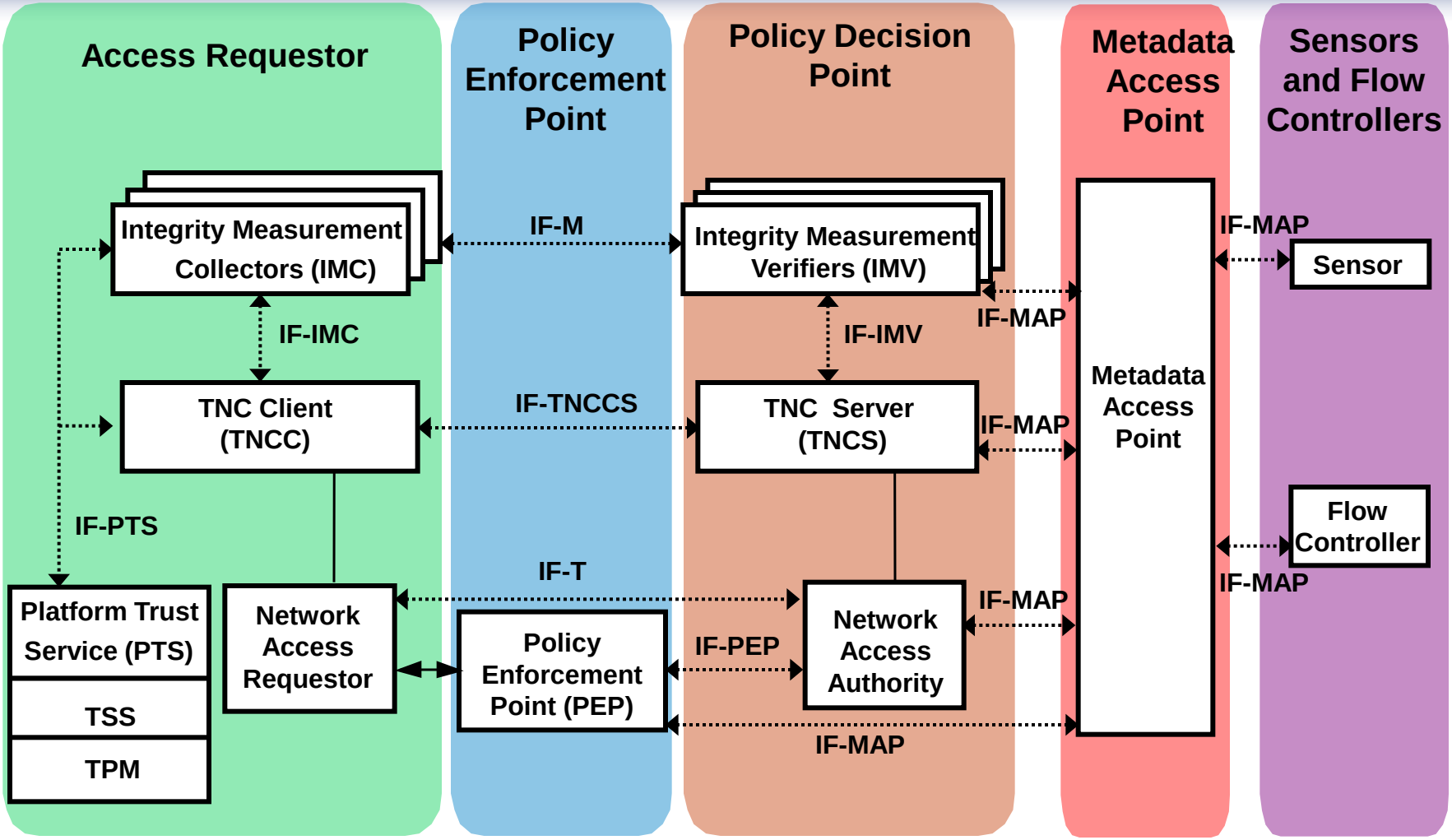
Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

User-Specific Policies



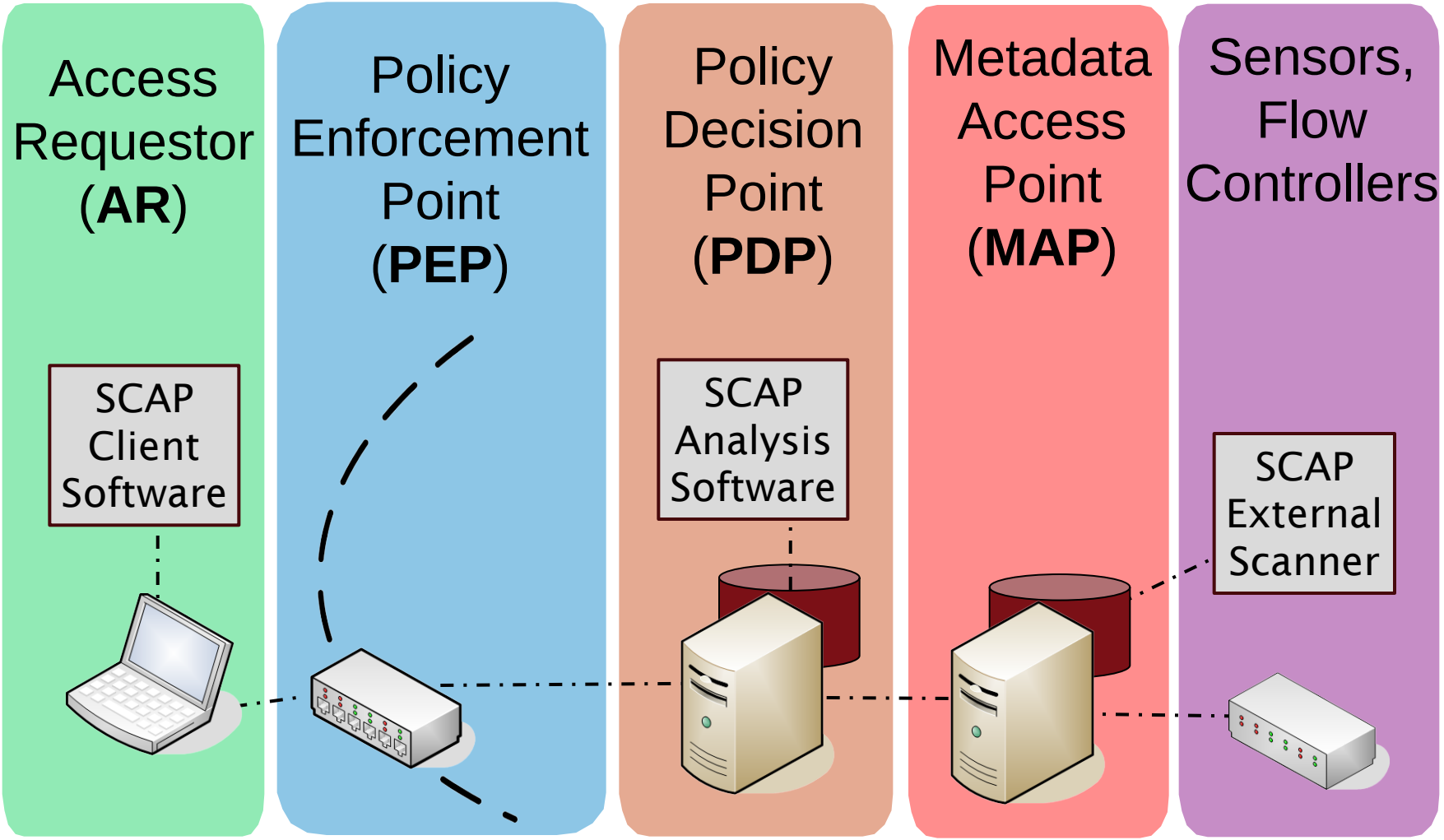
Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

TNC Architecture



Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

TNC and SCAP Together



TRUSTED COMPUTING GROUP™

Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Strengths of TNC and SCAP

TNC Strengths

- Network and Endpoint Visibility
- Network Enforcement
- Device Remediation
- Security System Integration

SCAP Strengths

- Device Assessment
- Compliance Management
- Deep, Consistent Content Libraries

Both SCAP and TNC

- Open Standards
- Vendor Neutral
- Widely Implemented

TRUSTED COMPUTING GROUP™ Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

Benefits of TNC and SCAP Together

Security automation

- At the desktop (SCAP)
- In the network (TNC)
- Across all security systems (TNC)

- … Leading to lower costs and stronger security

Open standards throughout

- Completely vendor-neutral
- Enables multi-vendor interoperability
- Lower vendor integration costs – O(n) vs. $O(n^2)$
- Lower customer costs – develop content once, deploy widely

Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.

For More Information

TNC Web Site

Technical

http://www.trustedcomputinggroup.org/developers/trusted_network_connect

Business

http://www.trustedcomputinggroup.org/solutions/network_security

TNC-WG Co-Chairs

Steve Hanna

Distinguished Engineer, Juniper Networks

shanna@juniper.net

Paul Sangster

Chief Security Standards Officer, Symantec

Paul_Sangster@symantec.com

TRUSTED COMPUTING GROUP™

Copyright© 2011 Trusted Computing Group – Other names and brands are properties of their respective owners.