

# *Trusted Network Connect: Securing Networks through Standards-Based Network Access Control and Interoperability*

April 20, 2009



# Agenda

The Challenges of NAC

A Brief TCG Overview

Introduction to the TNC Architecture and Adoption

How TNC Meets the Challenges of NAC

Deployment Discussion

Hands-on Demonstration



# Challenges of NAC

## Vendor lock-in

- Proprietary solutions require hardware rip-and-replace

## Complexity

- Too many moving parts, both in your network and in the solution

## Project scope

- Need to secure thousands of endpoints, hundreds of remote offices, a variety of user communities...

## Disruption of business practices

- Confusion, frustration, potential downtime

## Support costs

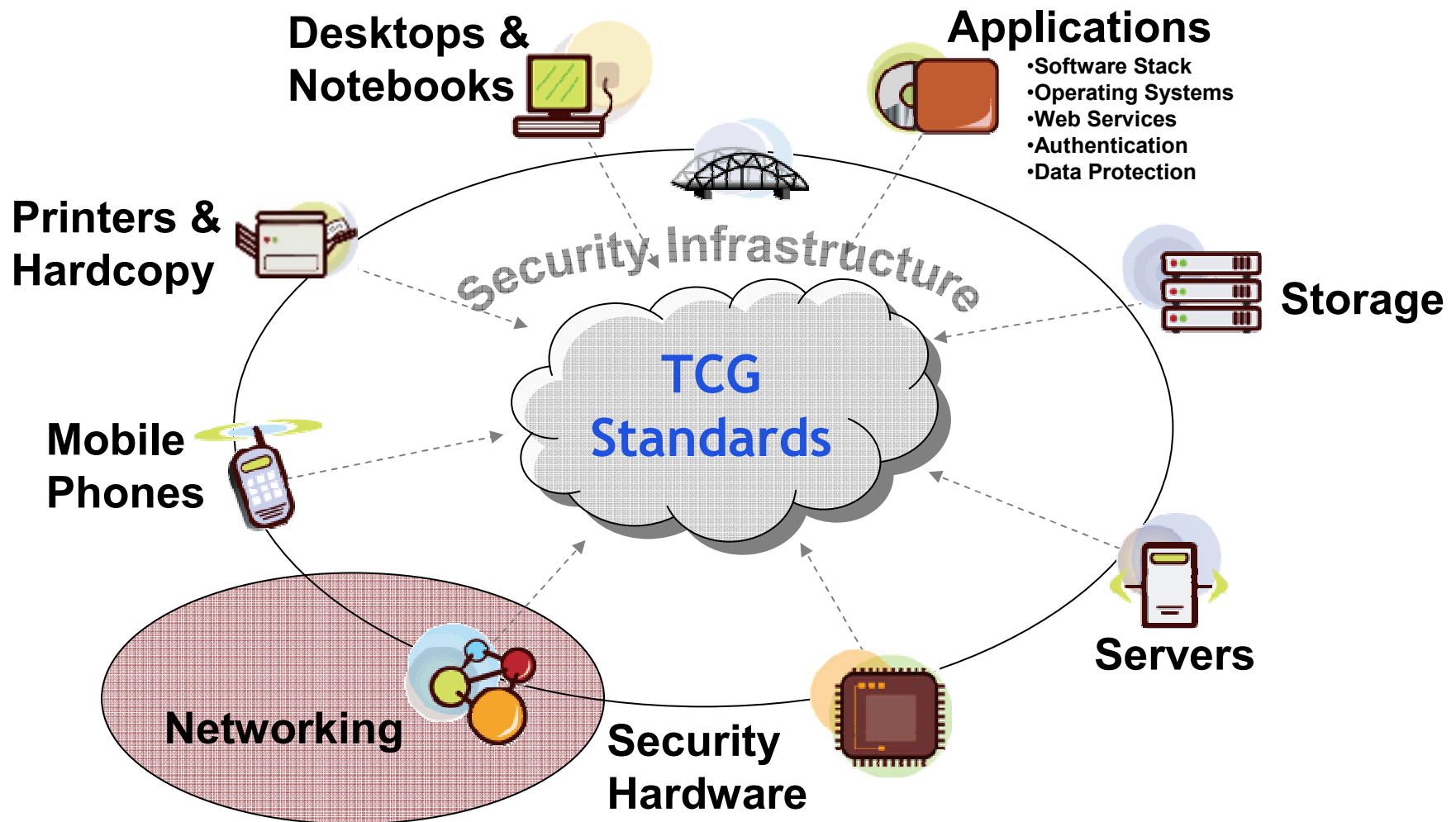
- User impact == helpdesk impact

## Uncertain future

- Relatively new technology - where is it going?



# TCG: The Big Picture



# Trusted Network Connect (TNC)

## Open Architecture for Network Access Control (NAC)

- Completely vendor-neutral
- Strong security through trusted computing

## Open Standards for NAC

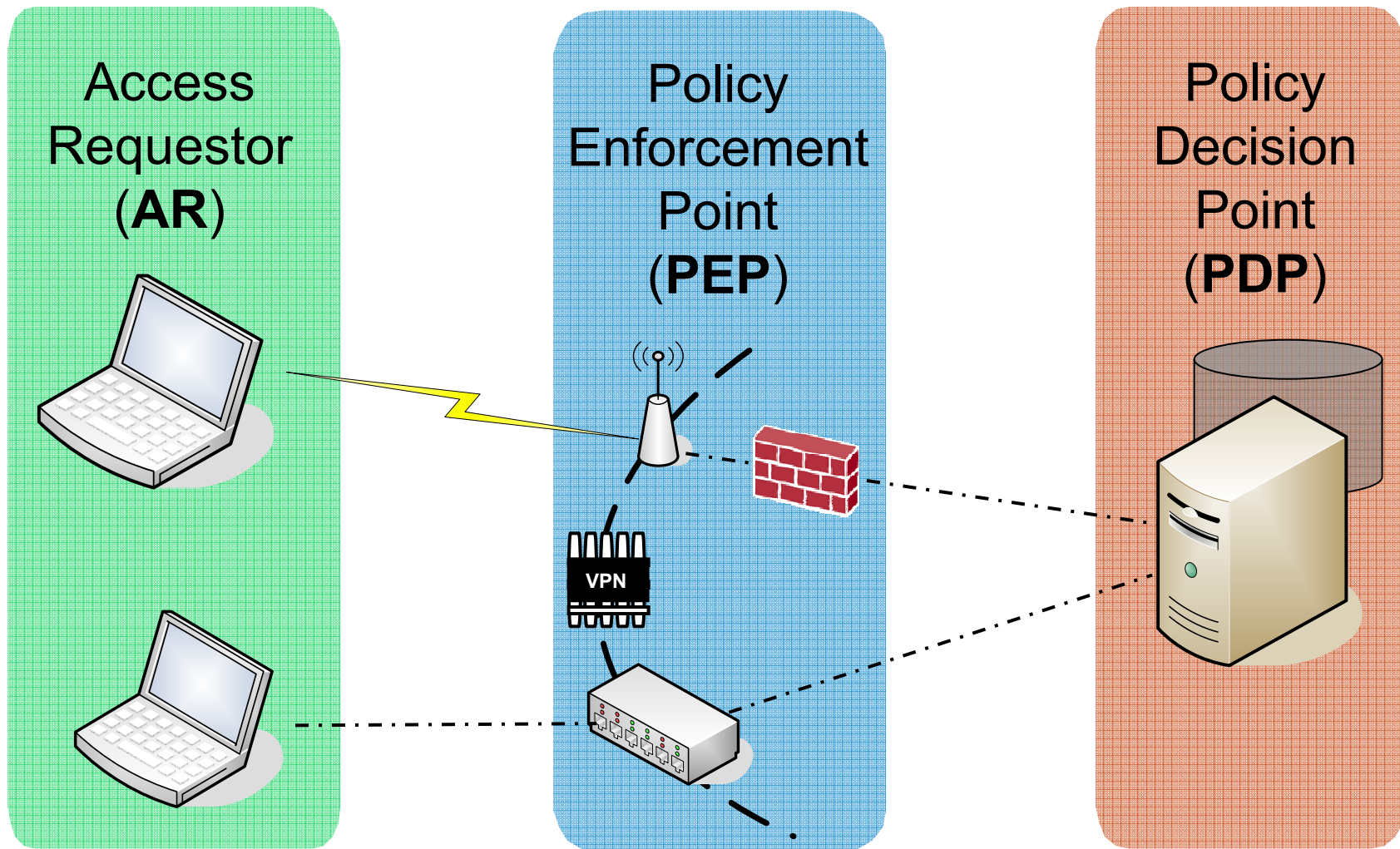
- Full set of specifications available to all
- Products shipping for more than four years

## Work Group of Trusted Computing Group

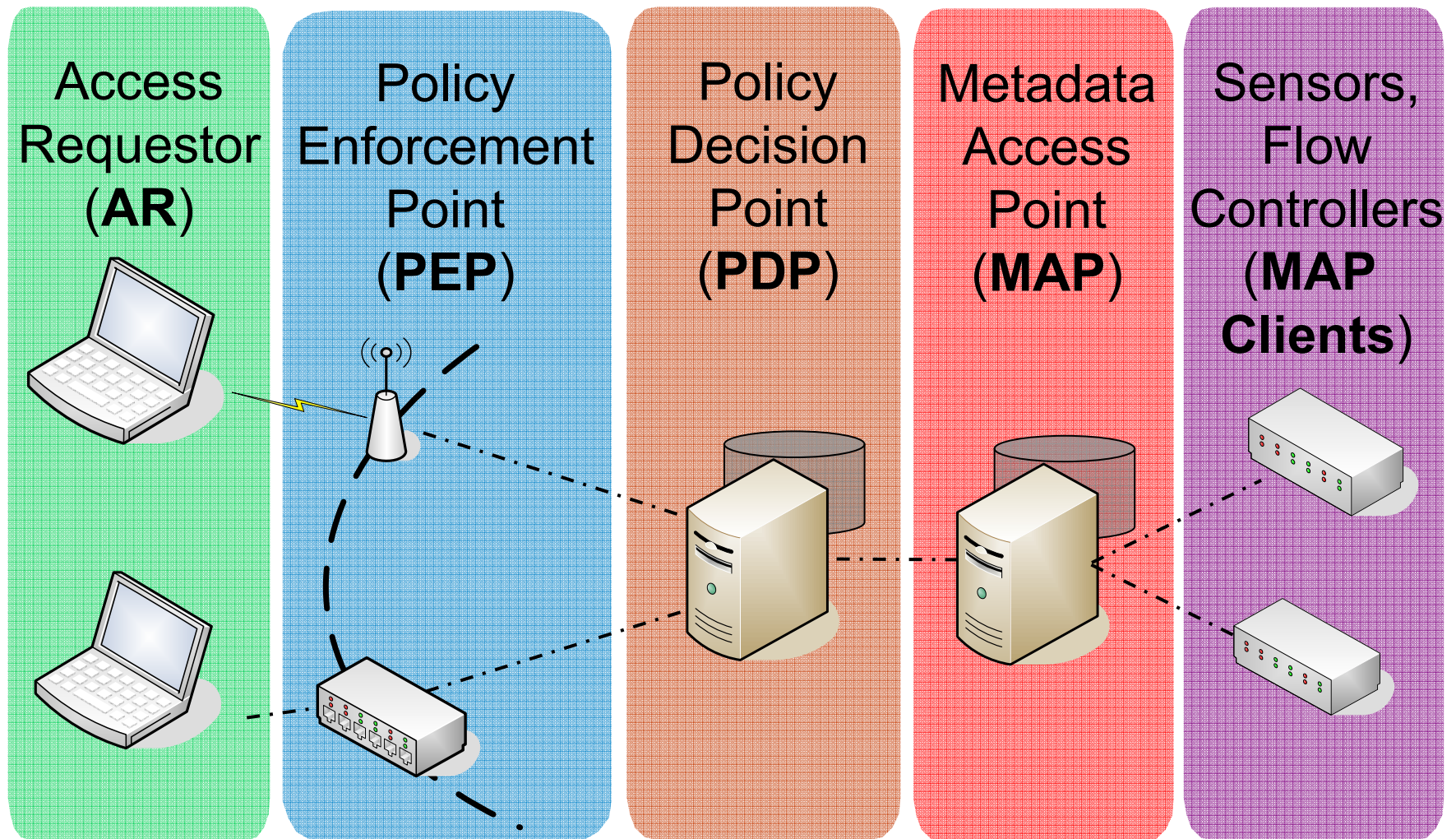
- Industry standards group
- About 175 member companies in TCG, 75 in TNC-WG
- Includes large vendors, small vendors, customers, etc.



# Basic NAC Architecture



# Integrating Other Security Devices



# TNC Architecture - Support

## Access Requestor



## Policy Enforcement Point



## Policy Decision Point



## Metadata Access Point



## Sensors, Flow Controllers



# NAC Challenges - Overcome

## **Interoperability - work with what you already have**

- Vendor-agnostic, multi-vendor support for diverse, heterogeneous networking environments

## **Reliability - use best-of-breed**

- Eliminates vendor lock-in; increases ROI
- Minimizes disruption of business practices

## **Flexibility - tackle the low-hanging fruit first**

- Reduces complexity, cost, deployment time
- Accommodates project scope in phases

## **Transparency, communication, auto-remediation**

- Lower support cost, higher user acceptance

## **Meet future as well as present needs**

- Thorough and open technical review of standards
- Prepares for whatever the future brings



# TNC Reality

TNC standards-based products are available

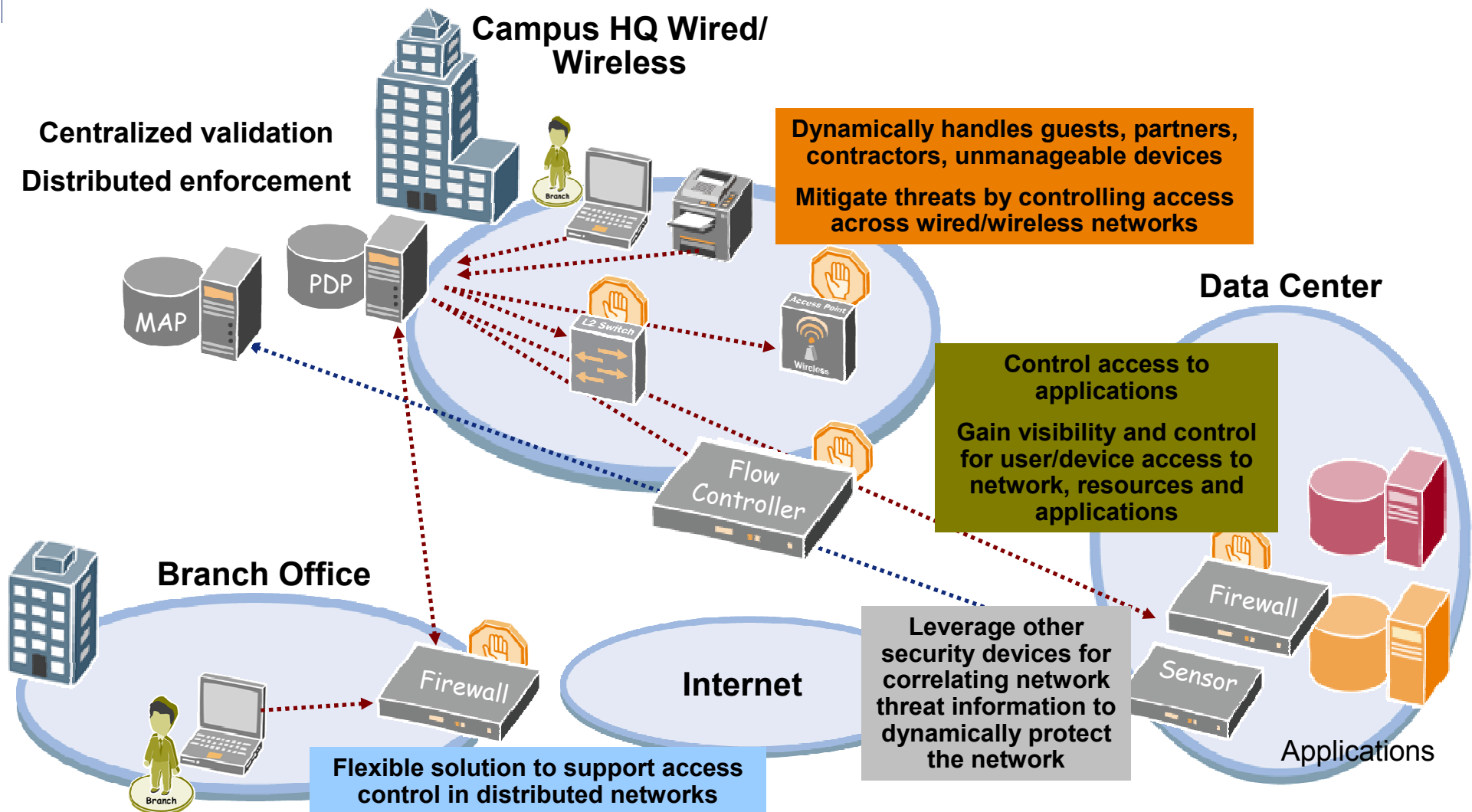
TNC-enabled solutions have been implemented by customers

The number of TNC adopters (vendor and client) continue to grow

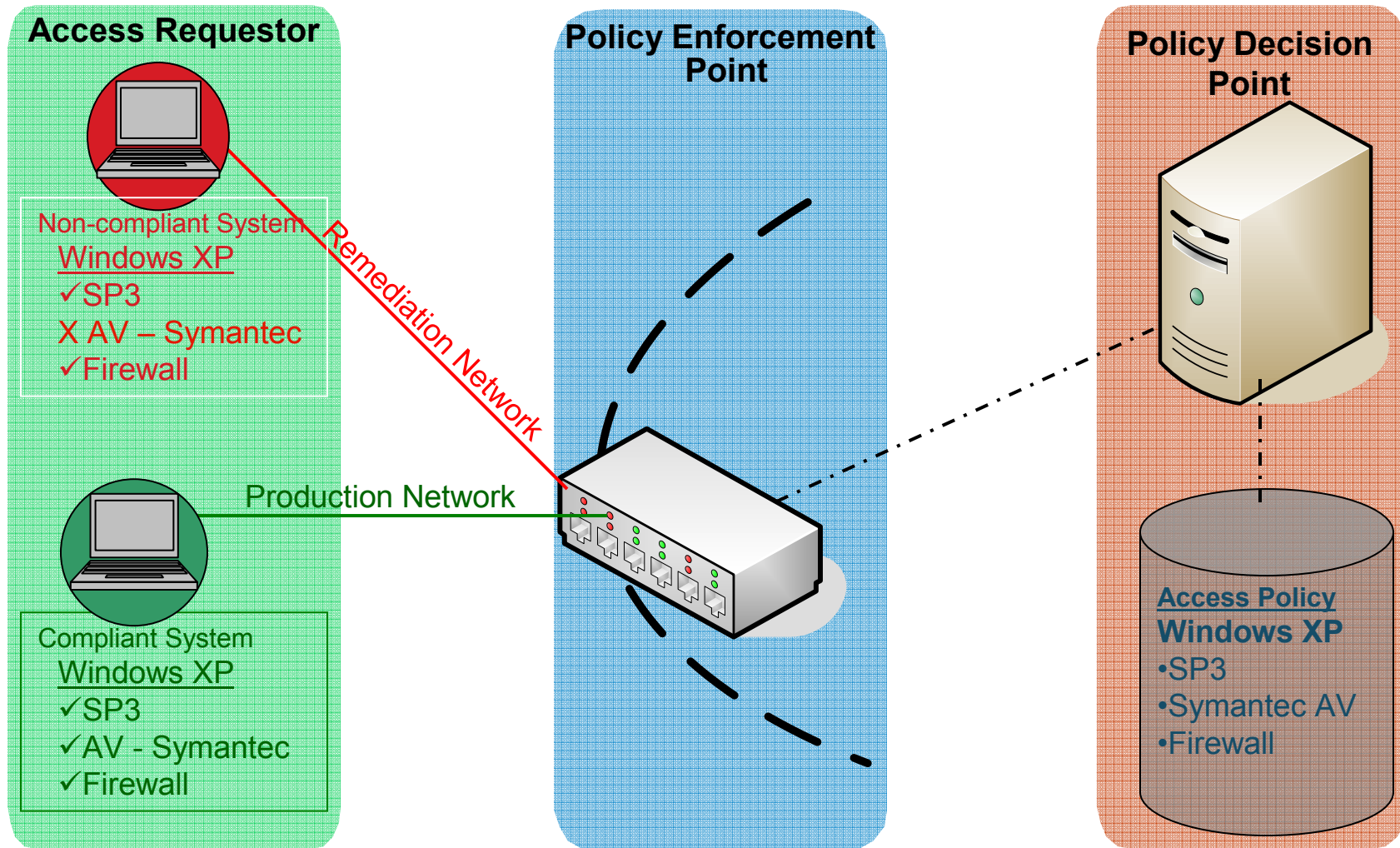
TNC-based IETF standards expected to reach RFC status in 2009



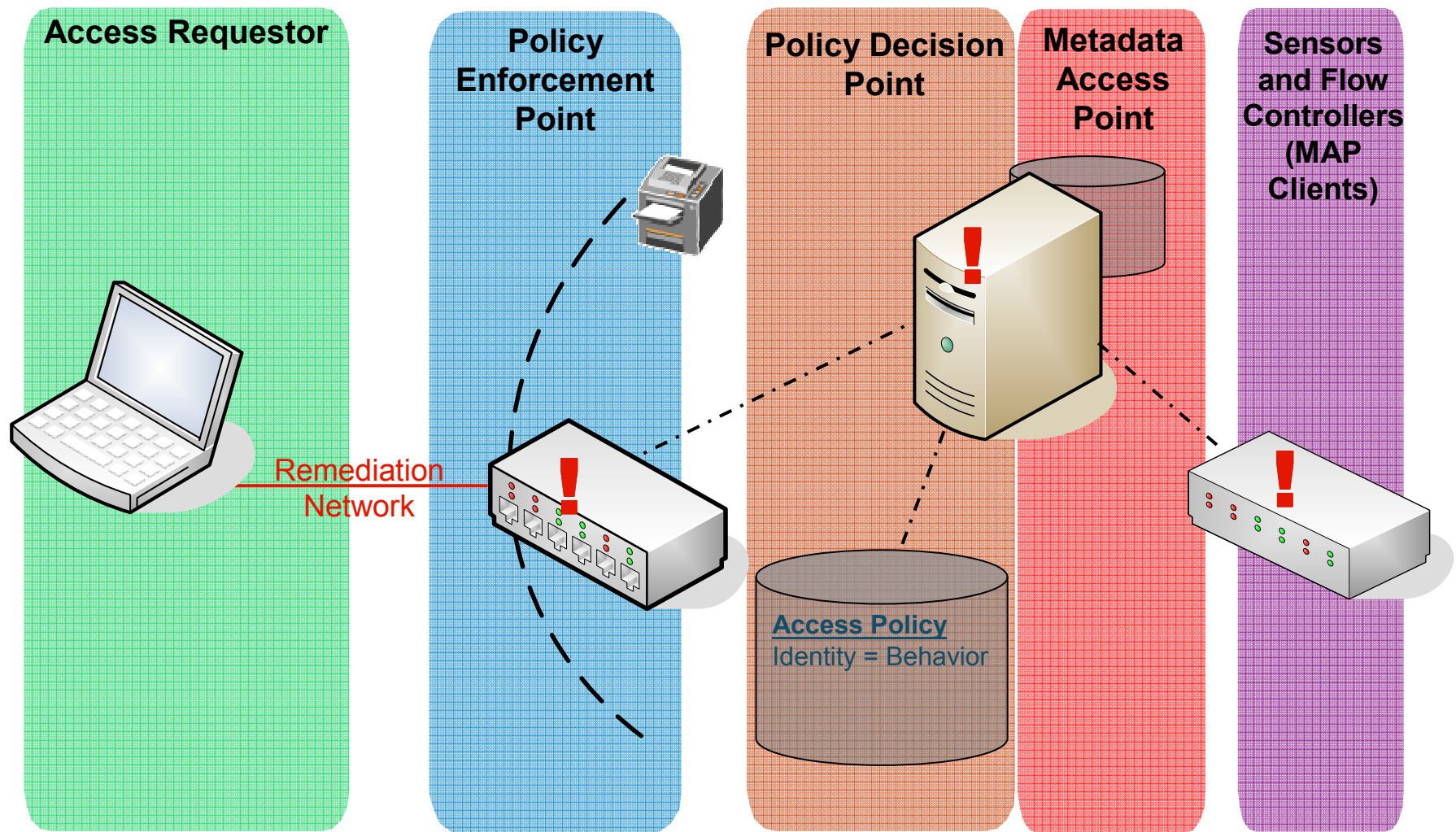
# Flexible, Standards-based Access Control



# Health Check



# Behavior Check



# Behavior Check

