



The Next Generation LAN: A Reality Today

Harry Feit
Director, Business Development
HP ProCurve Networking Business

© 2004 Hewlett-Packard Development Company, L.P.
The information contained herein is subject to change without notice



Three Forces Driving the Next Generation Enterprise LAN



- The Internet
 - the enterprise network becomes a public network!
 - security, already a key network element, will become pervasive
- Anytime, Anywhere
 - the enterprise network becomes an anytime, anywhere resource!
 - secure mobility across a range of transports, both wired and wireless, inside and out of the office, becomes pervasive
- Communications
 - the enterprise data network becomes the only network!
 - new, converged applications on multi-service networks become pervasive

The Next Generation LAN: Secure, Mobile, and Multi-service



Security

Protect assets to

- Increase productivity by presenting only the resources needed for the job
- Provide appropriate access based on an individual's business need
- Control access to communications services

Mobility

Increase productivity by

- Acting immediately
- Gaining appropriate access from wherever you choose to work
- Effectively communicating anywhere, anytime

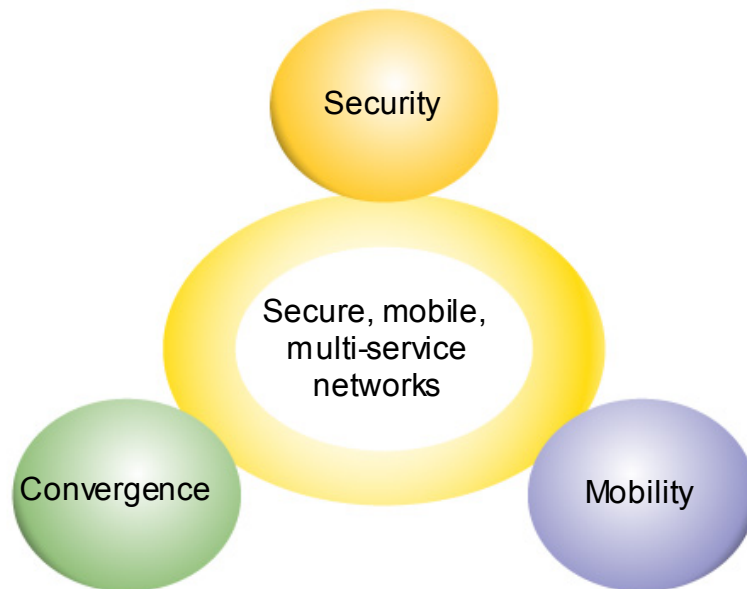
Convergence

Simplify communications to

- Lower cost with a single network
- Securely deploy new revenue-generating applications
- Increase productivity through unified messaging and more robust communications

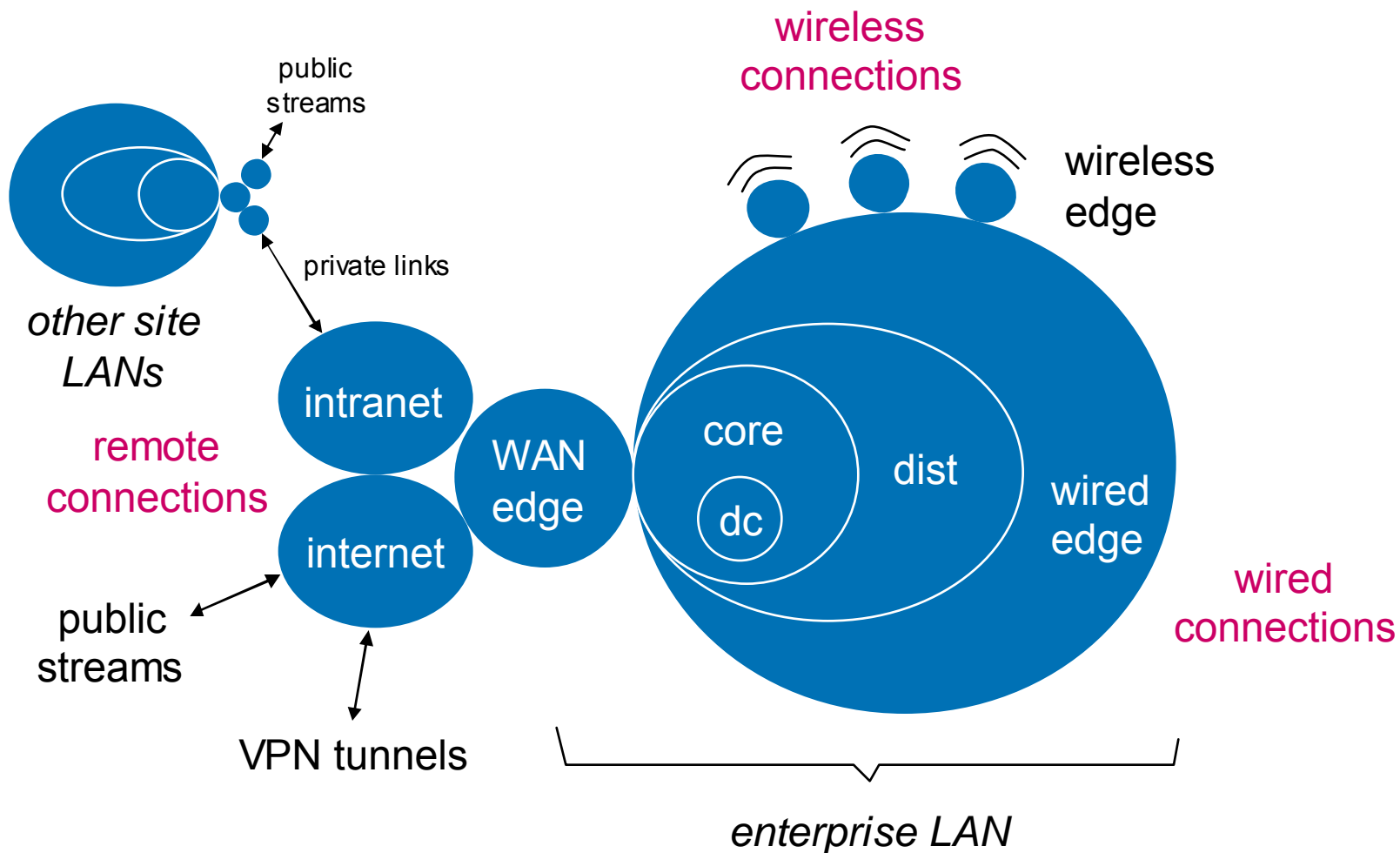
A New Unified Approach Is Required

A unified holistic approach
to secure, mobile,
multi-service networks.



- Network functionality must migrate to the **edge where users connect.**
- Network functionality must be cost effective and manageable.
- Network functionality must support all current and future traffic types.

Where is the Edge?

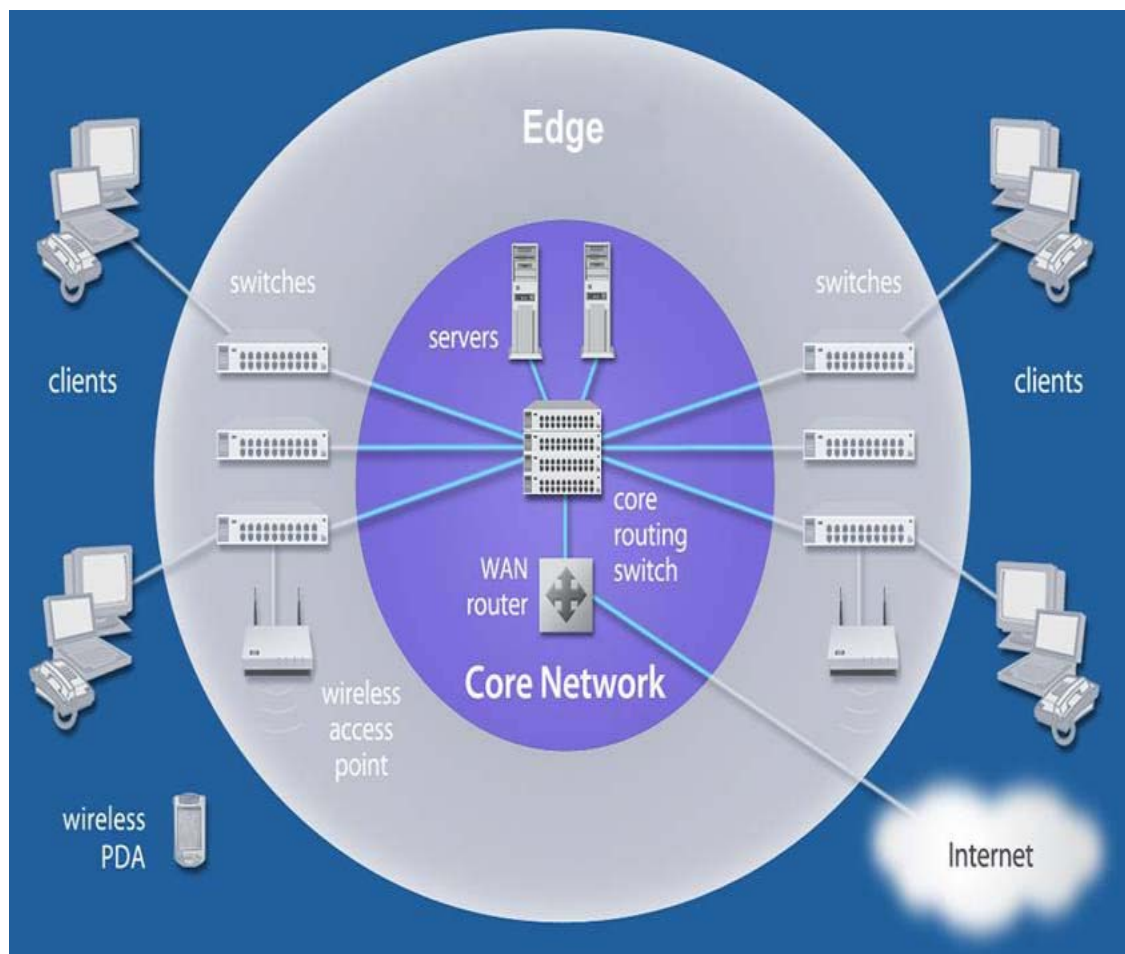


Classical Core Networks

- Classical data networks are two or three tier hierarchical networks where the network intelligence is concentrated in the core.
- Unfortunately, this architecture has significant limitations:
 - Security must be enforced at the point of access.
 - Traffic priority and routing must be immediate and end-to-end to support new applications and to implement business driven user communities.
 - Making all decisions at the core does not scale cost effectively.

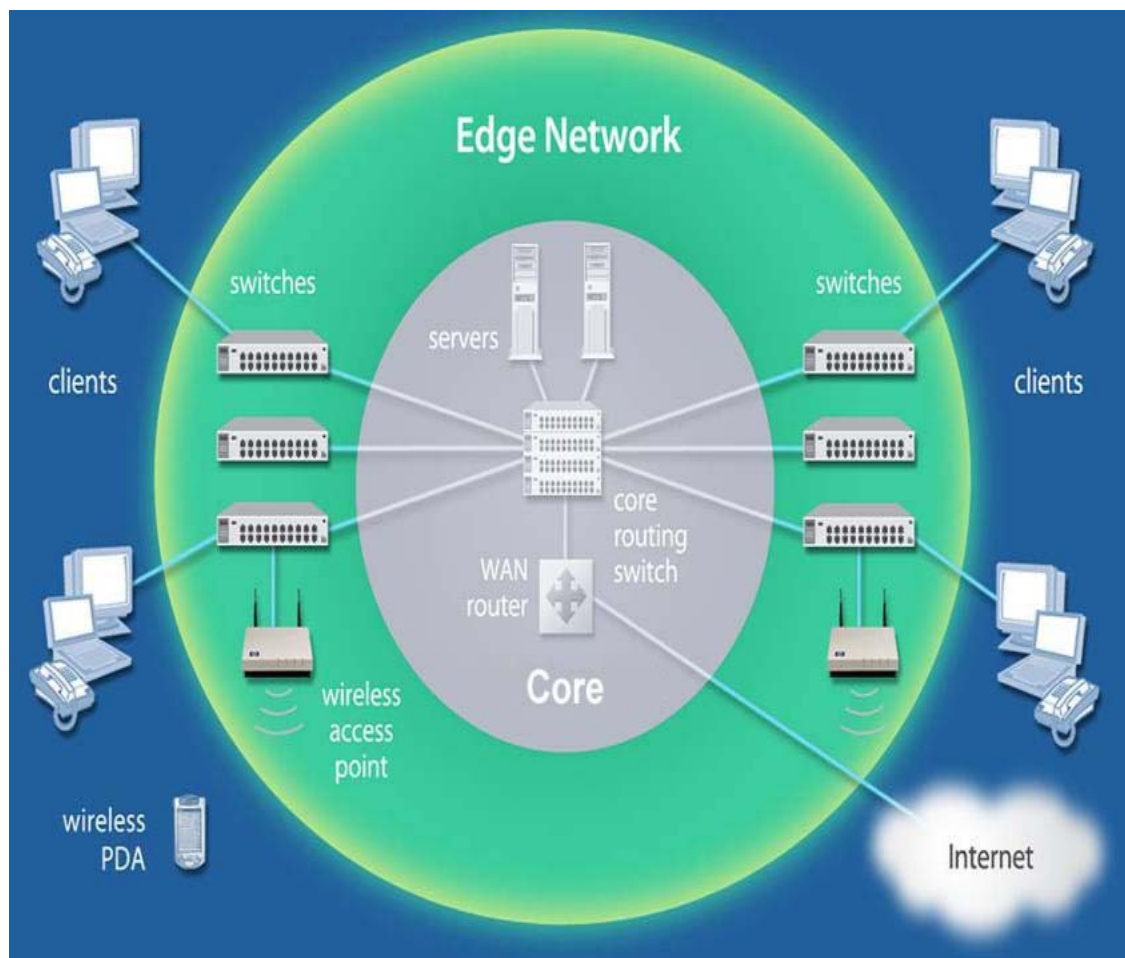
Core Centric Networks

- Every switch added at the edge increases the “decision making” load in the core – **constrained scalability**
- Cost/performance curve for core switches is not linear – **expensive and constrained scalability**
- Many decision functions **CANNOT** be deferred to the core – **can't meet emerging application needs**



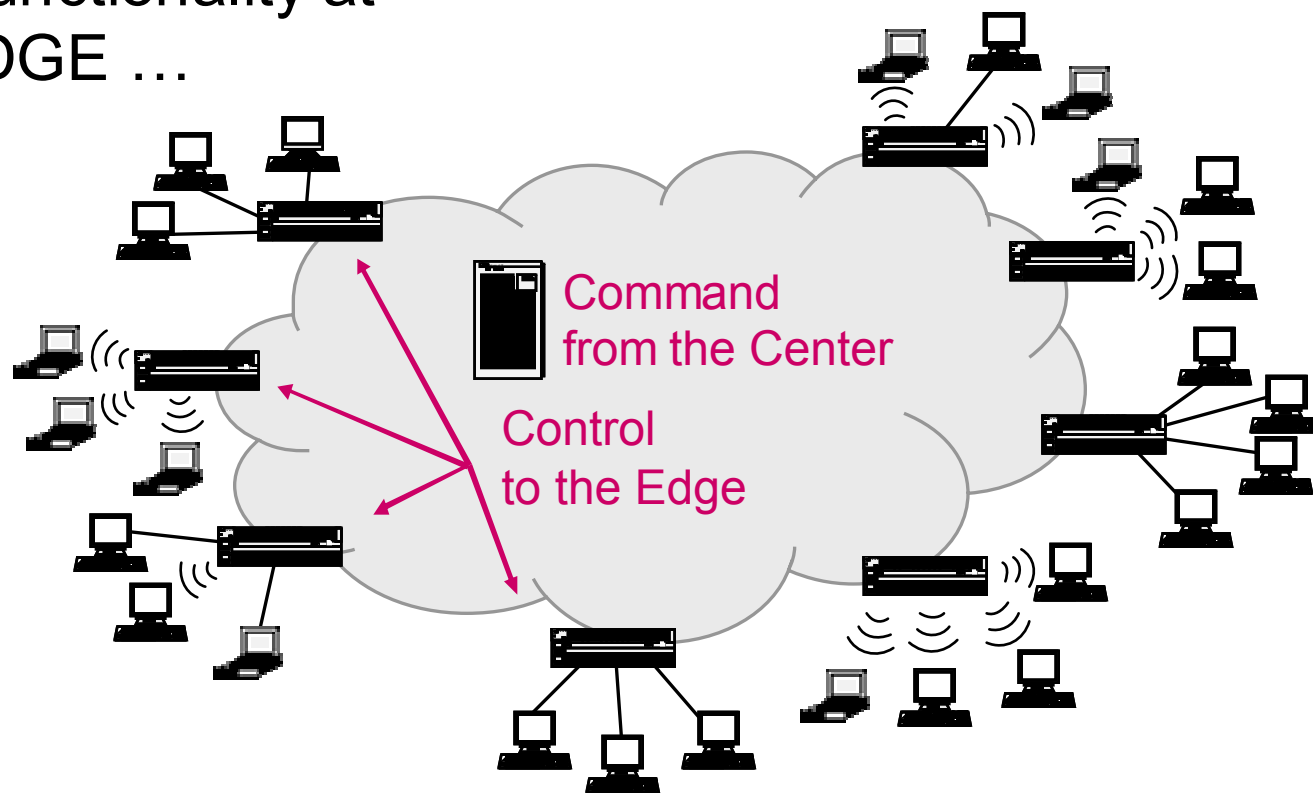
Edge Centric Networks

- Every EDGE switch adds “decision making” capacity – **linear scalability and meets all emerging application needs**
- EDGE switches are highly standardized volume components – **affordable scalability**
- Core switches get simpler (layer 2) providing pure bandwidth – **reduced cost and complexity**



The Edge Centric Challenge

Rich functionality at
the EDGE ...



... requires Command from the Center
to deliver Control to the Edge

The Next Generation LAN Architecture is EDGE Centric



Adaptive EDGE Architecture:

A business driven network that behaves uniquely and appropriately for every user

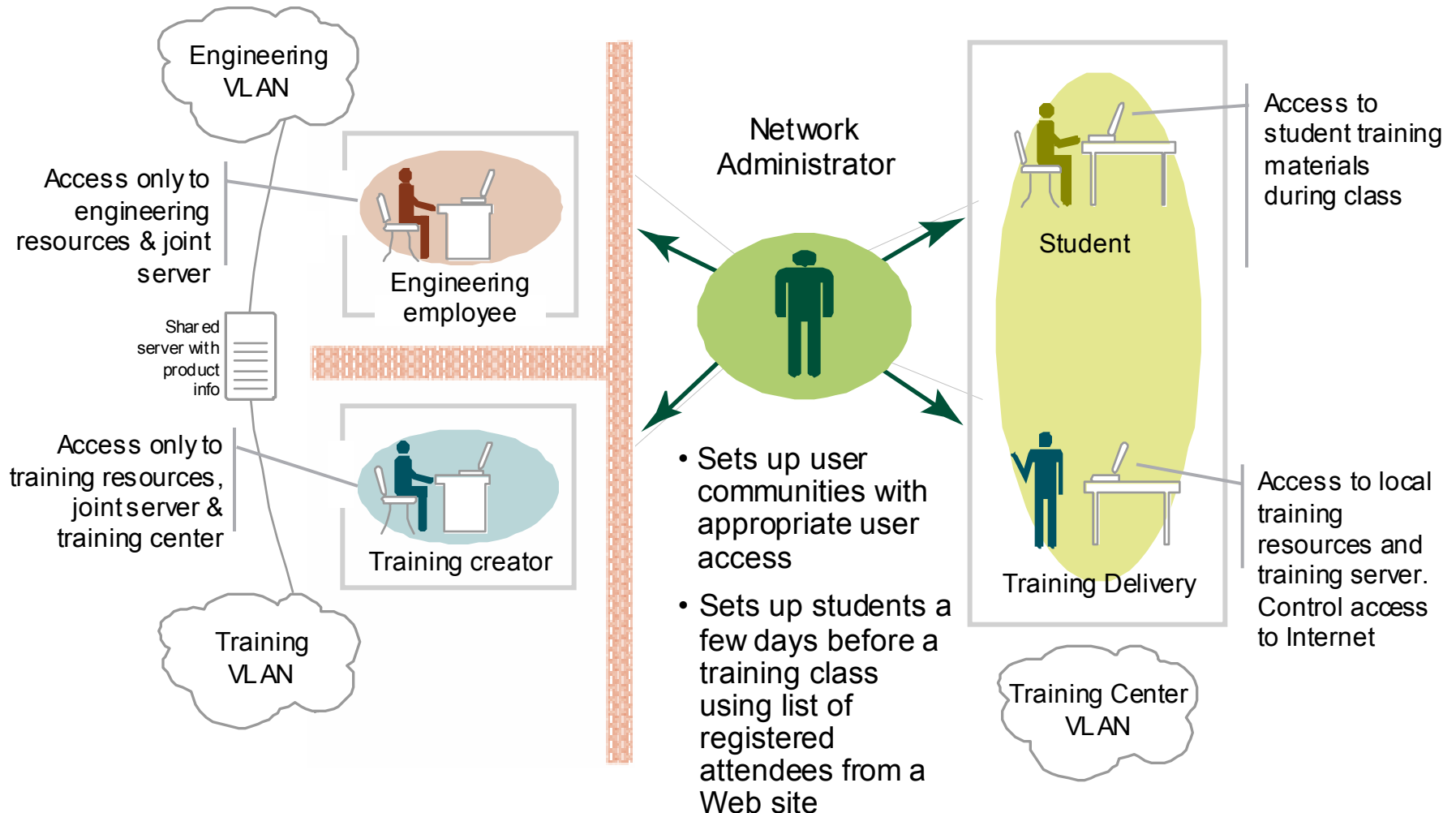
Command from the Center

Automates the configuration of the EDGE features to provide the unique behavior

Control to the EDGE

The switch and access point features that allow the correct decisions to be implemented at the EDGE

A New User Experience; A New Management Paradigm



HP ProCurve
Adaptive EDGE
Architecture TM



i n v e n t