

Network management solution update

Subheadings 20pt

Alcatel-Lucent
presents
The Dynamic Enterprise

The Knowledge
in



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February 2008

Agenda



1. Big trends in enterprise management
2. Fixed mobile convergence & SIP impact on management
3. How to better manage your SLA?
4. Worldwide premier on SLA announcement
5. Major Announcement in IP address management
6. Conclusion



Trends

Arrival of SIP in the enterprise:

- New cheap SIP devices
- Premises for IMS

Security

- How to manage subcontractors in the network
- How to detect unwanted terminals and equipments
- How to limit security threats for Alcatel-Lucent EtherBreaker ©

SLA

- More than 55% of WAN are outsourced
- Major trend in outsourcing LAN and servers in EMEA

The IT concerns for 2008 and operational impacts

OmniVista 4760 R5.0 SIP Device management



Support of OXE 9.0

- SIP devices management
 - To manage the SIP parameters of the :
 - Device : device type, Mac Address, proxy/registrar attachment
 - User : URI, user name, login/password
 - Devices : Thomson 2022, 2030, SIP Touch
 - In OmniVista 4760 Configuration interface
 - DM server :
 - Embedded in OmniVista 4760 server for medium capacity
 - Stand alone for large capacity

OmniVista 4760 R5.0 major version Q4 2008

SIP devices management

In OmniVista 4760 Configuration, new tab to manage SIP device

New application
SIP Manag.

The screenshot displays the OmniVista 4760 Configuration interface. On the left sidebar, the 'SIP Manag.' icon is circled in red. In the main configuration window, the 'SIP Manag.' tab is selected, showing a table of SIP device configurations for 'Noeud1'. A red arrow points to the 'SIP Manag.' tab in the main window.

Noeud1	
Directory Number	66006
Directory name	LORA RONCO
Directory First Name	SIP
UTF-8 Directory Name	
UTF-8 Directory First Name	
Location Node	1
Shelf Address	255
Board Address	255
Equipment Address	255
Set Type	Extern Station
Entity Number	50
Set Function	Default
Domain Identifier	0
Language ID	1
Secret Code	****

OmniVista 4760 R5.0 Operation audit

New application



- Operation Audit
 - Displays/edit reports on the operation made on OXE from 7.1
 - Summary of all operations and detail per node
 - OmniVista 4760 global option
 - ➔ Security audit
 - ➔ SLA reports

Operations audit : look and feel

Nodes tree

The screenshot displays the Alcatel-Lucent Operations Audit interface. On the left is a vertical sidebar with icons for various functions: Log on to 4760, Directory, Configuration, Account/Tra..., Reports, Alarms, Audit, Scheduler, and Maintenance. The main window is titled 'Audit' and shows a tree view of nodes under 'OXE'. A 'Refresh' button is visible next to the 'Node Call-int1' node. Below the tree is a search bar and filter controls. The filter is set to 'With Managed Object' and 'Equal'. A table of system operations is displayed below the filters.

No.	Date	Service	User	Node	Action	Command
1	11/10/2007	ssh	mtcl	call_int1	Create	config 0
2	11/10/2007	ssh	mtcl	call_int1	Update	sendall 11
3	11/10/2007	ssh	mtcl	call_int1	Update	timeout 0
4	11/10/2007	ssh	mtcl	call_val07	Update	config 0
5	11/10/2007	ssh	mtcl	call_val07	Delete	configall

Filters on date, node, login, action, object

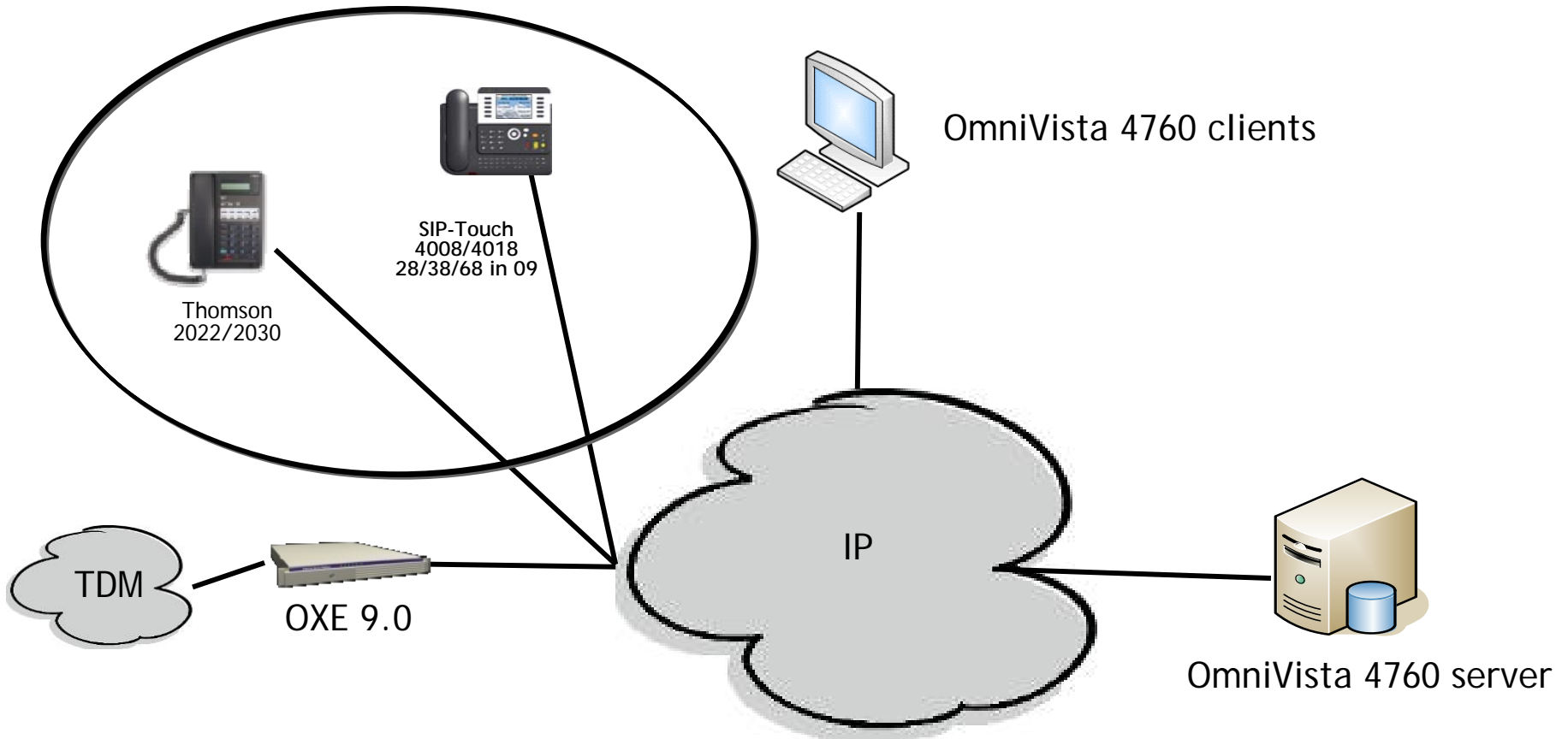
Operation's detail

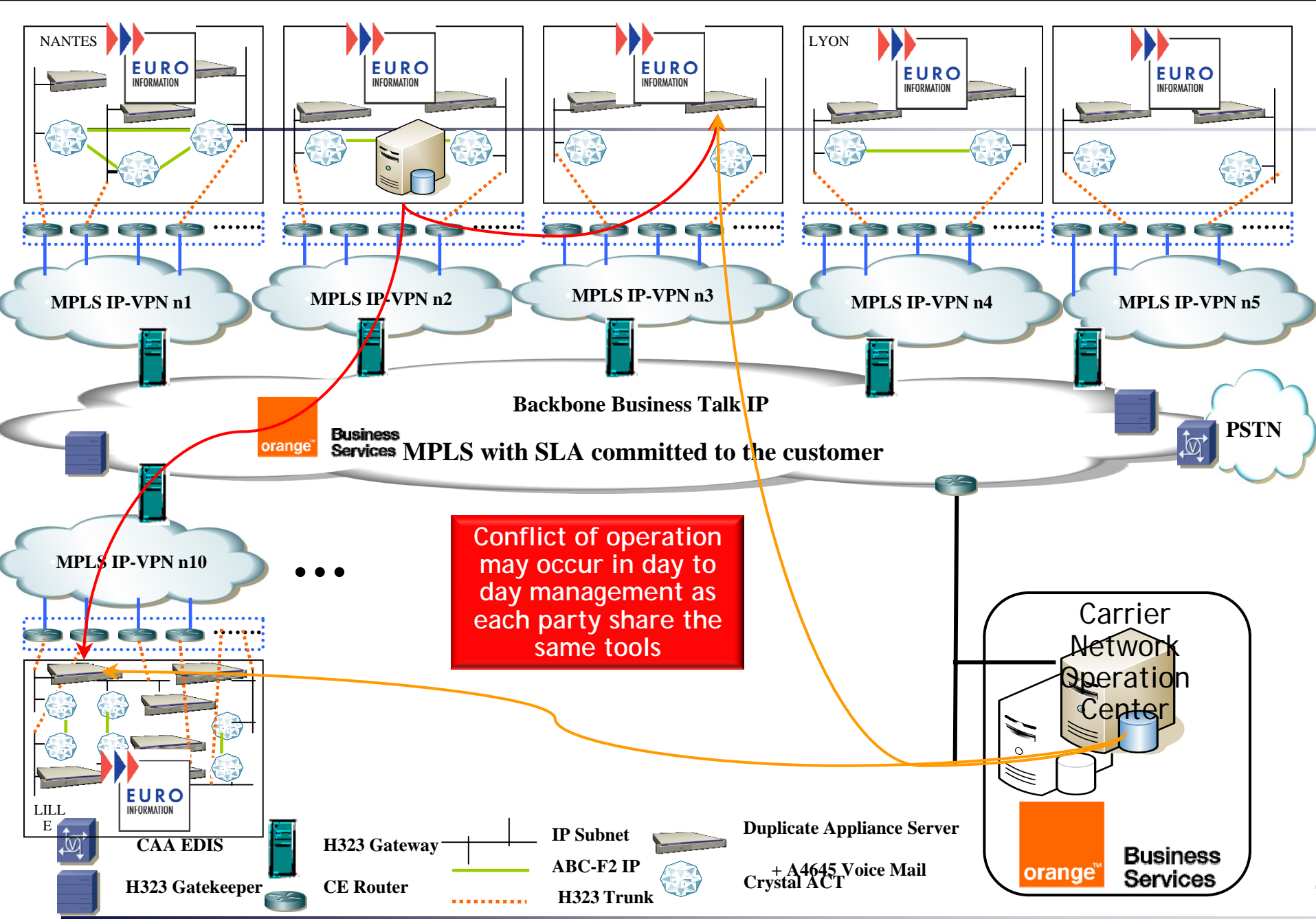
New application

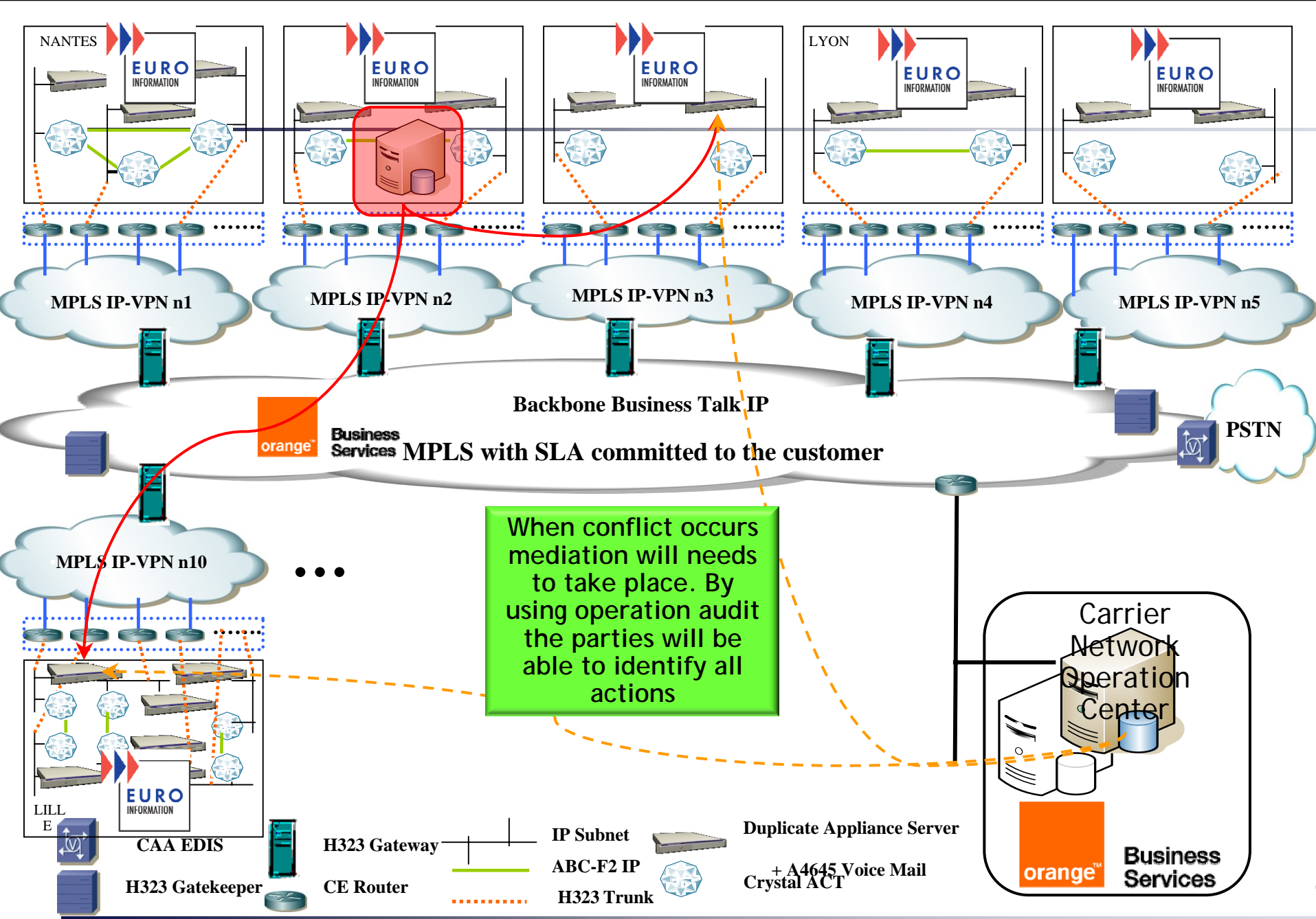
This block shows a detailed view of an operation. It includes a table with a single row for operation number 174353 and a 'Detail' section with the following text:

```
No. 174353
Detail
External : TRUE
Internal : TRUE
Display ext. calling number : TRUE
ISDN Teleservice : Phone
Hotel-Set Operation : Administrative
Use Type Of Dir. No. : Normal
Number Of Set Users : 1
Multi-line station : NO
Dialed number masked : NO
Routing Table : 0
Associated Videophone : FALSE
VIP (Very Important Pers.) : FALSE
Assistant Directory Number : 2000
Calls Priority : 0
Voice Compression
16k : NO
32k : NO
PCBT Associated : NO
Urgent Call : NO
PIN (Personal Ident.No.)
```

SIP devices







3.4

VitalSuite for CC

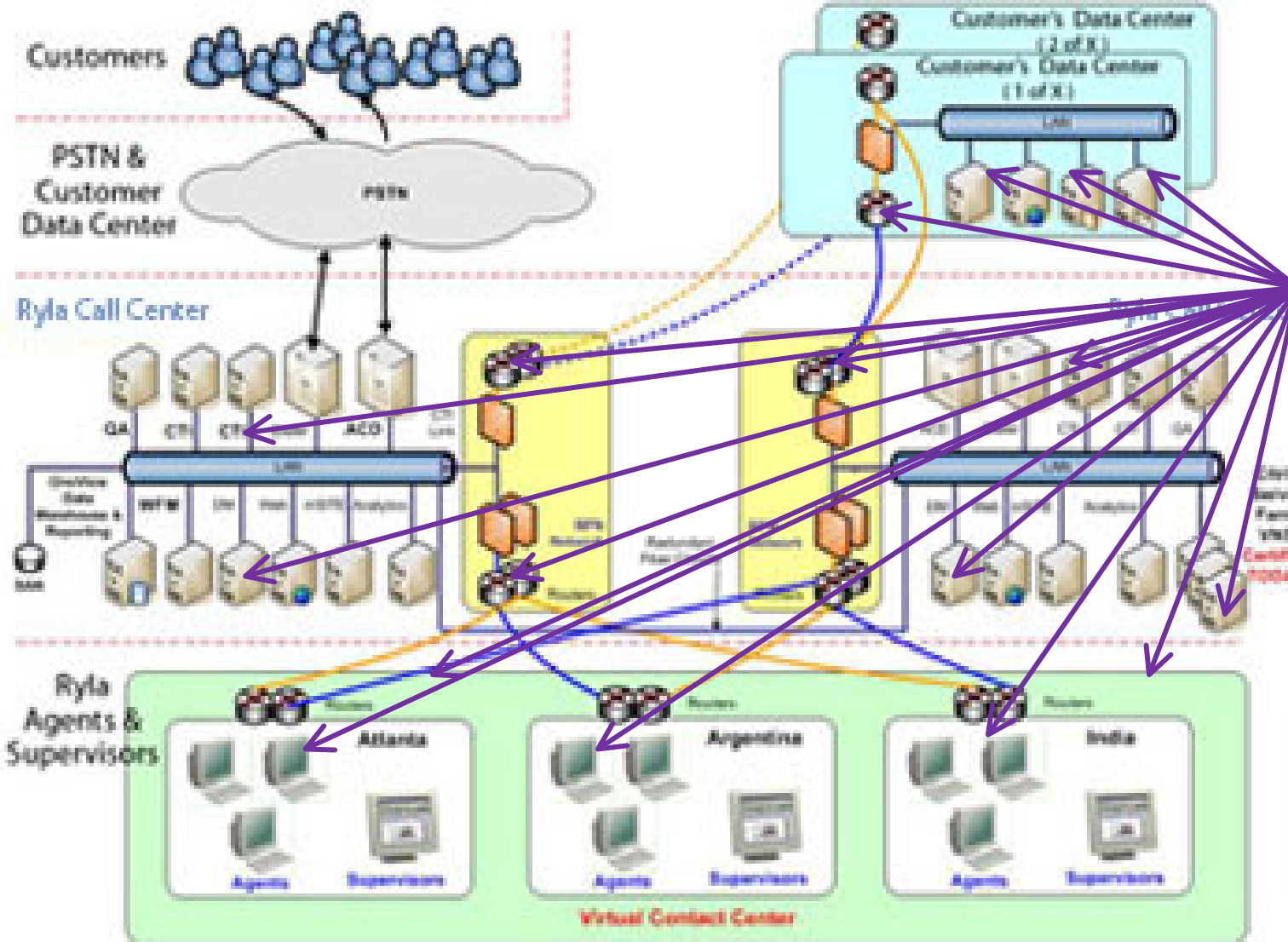
High level values for Genesys SI

- ❖ Complete visibility of the entire infrastructure
- ❖ Voice quality measurement and analysis
 - ❖ While CC does a great job on call routing it does not measure quality perceived by the customers and agents
- ❖ System load and trends
 - ❖ Plan and anticipate voice and multimedia requirements
 - ❖ E-mail, video, chat in CC should not jeopardize the entire CC solution
- ❖ SLA threshold
 - ❖ Set quality index along in addition to CC quality
 - ❖ Quality index could be on voice quality, trunk load, system load, PC load...

High level values for customers

- ❖ Avoid call drop due to bad network and voice quality
 - ❖ Voice quality measurement and analysis
 - ❖ Avoid bad company reputation
- ❖ Add new media to your existing CC safely
 - ❖ System load and trends
 - ❖ Plan and anticipate voice and multimedia load

Typical high level architecture



•Crates visibility and statistics for all key elements of a CC

VitalSuite & Genesys

- ❖ VitalSuite is multi vendors by nature
 - ❖ Support of Cisco, Avaya, Alcatel PBX
 - ❖ Routers / switches from all major players
 - ❖ IP phones and SIP phones
 - ❖ Major e-mail servers
 - ❖ Genesys: GVP, T-Server, VoiceGenie
- ❖ Deployed in carrier and large enterprise



Lots of reference in EMEA and NAR (BT, Verizon, Sprint, AT&T Cingular, Cable and Wireless, CSC, EDS, T-Mobile, Comcast, CableVision, Qwest, PacWest, KPN, Brazil Telecom, Level 3, Citigroup, JP Morgan, Nationwide Ins, State Farm Ins, Prudential, USAA, Bank of America, Mellon Financial, PNC, ...)

❖ Competition

- ❖ Cisco and Avaya do not have equivalent in their CC portfolio or partner
- ❖ Even if we support other PBX brand, support of CC is limited to Genesys technology (dos not include Cisco CC ...)

Performance Monitoring of Genesys and OmniTouch Contact Center Solutions

The Service Summary heat chart supports the following:

- Service definition
- Domain
- Reporting Group - Based on the selected domain
- Connection Type
- Agent Type
- Access Type

Contact Center Quality Reports

- Contact Center Summary
- Contact Center Group Comparison
- Contact Center Domain Comparison



All data available to VitalART

Alcatel-Lucent OmniVista 2x00 R4.0 Subcontractors manager

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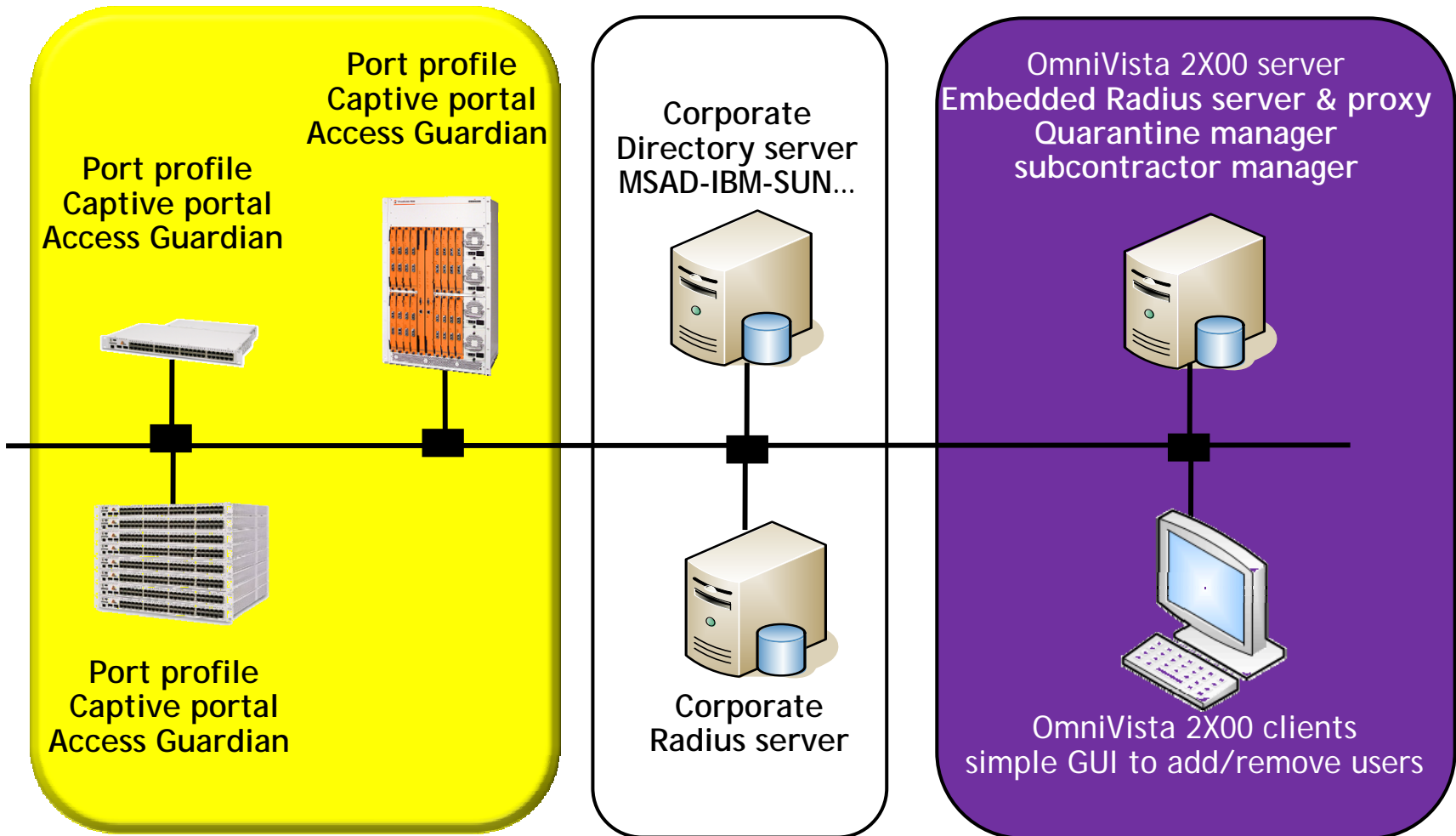
**Is your network truly setup
to welcome subcontractors?**

Subcontractors fundamentals

1. Subcontractor can not be considered as visitors or employees
2. Under controlled access and selected resources.
3. Authentication is desirable without the complexity
4. Segregated from your employee database
5. Being able to manage their credentials and time

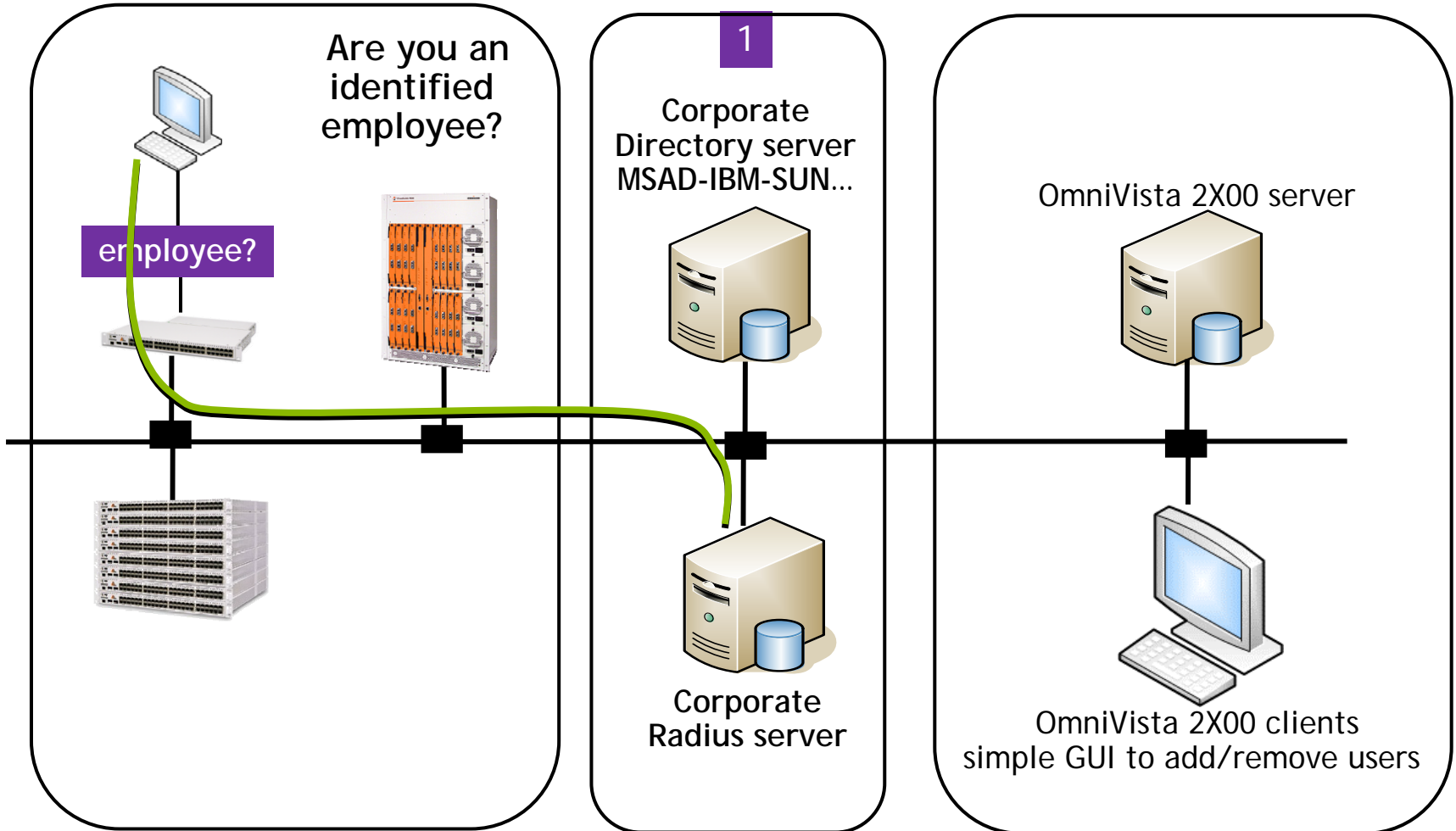


The base components

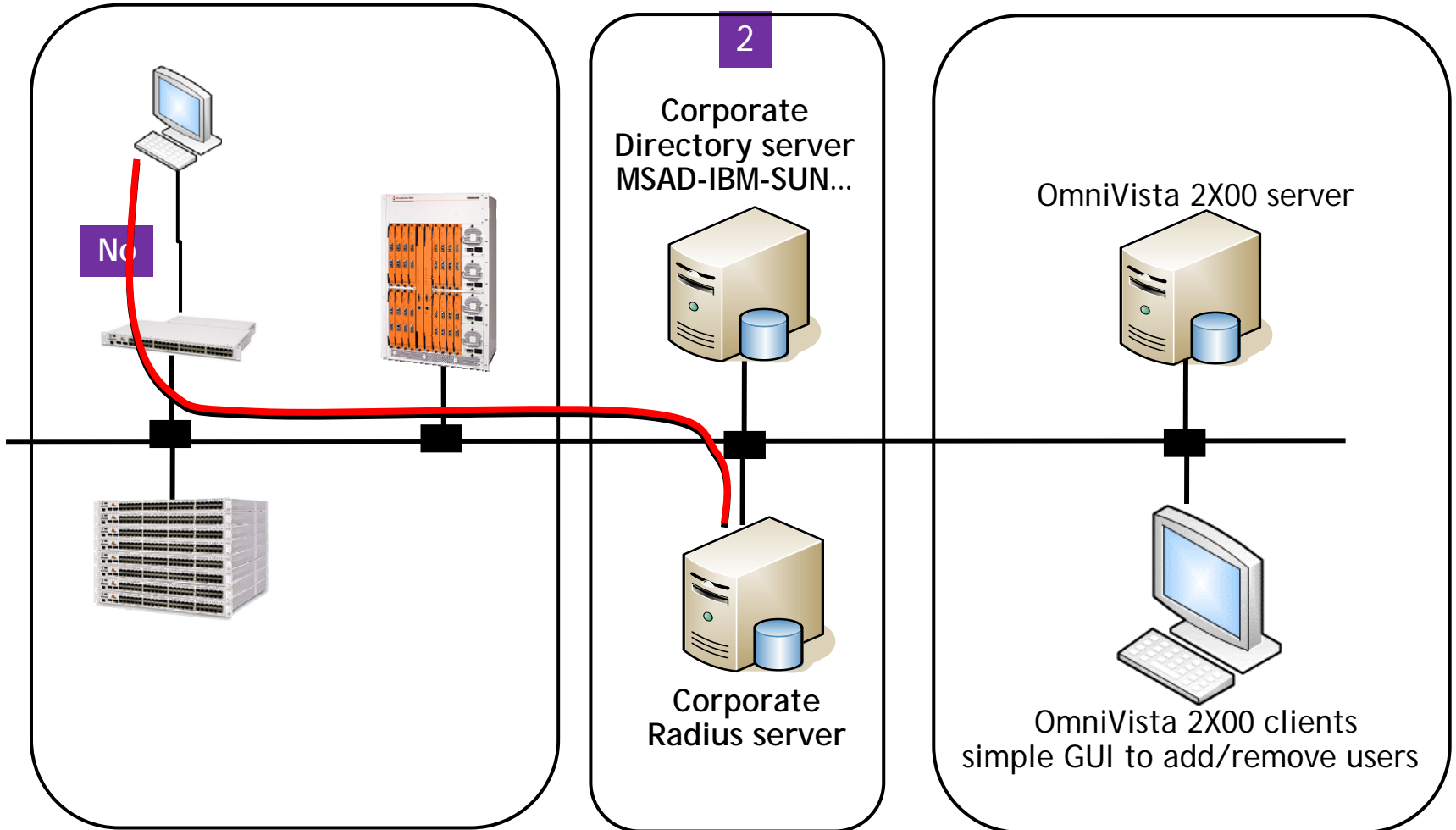


**Let's see OmniVista 2700 in
action authenticating a
declared subcontractor**

Mechanism (authentication for subcontractor)

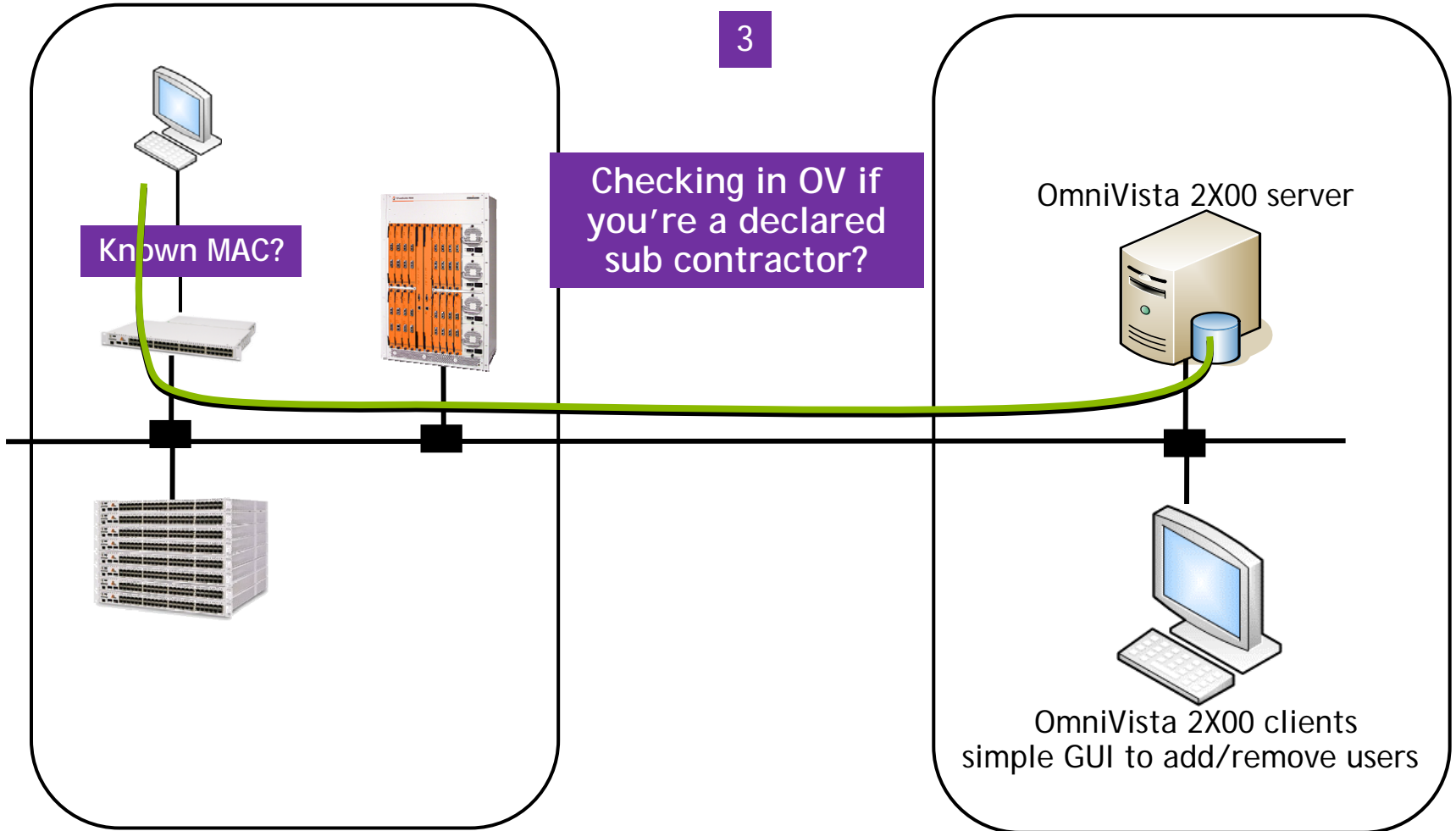


Mechanism (authentication for subcontractor)



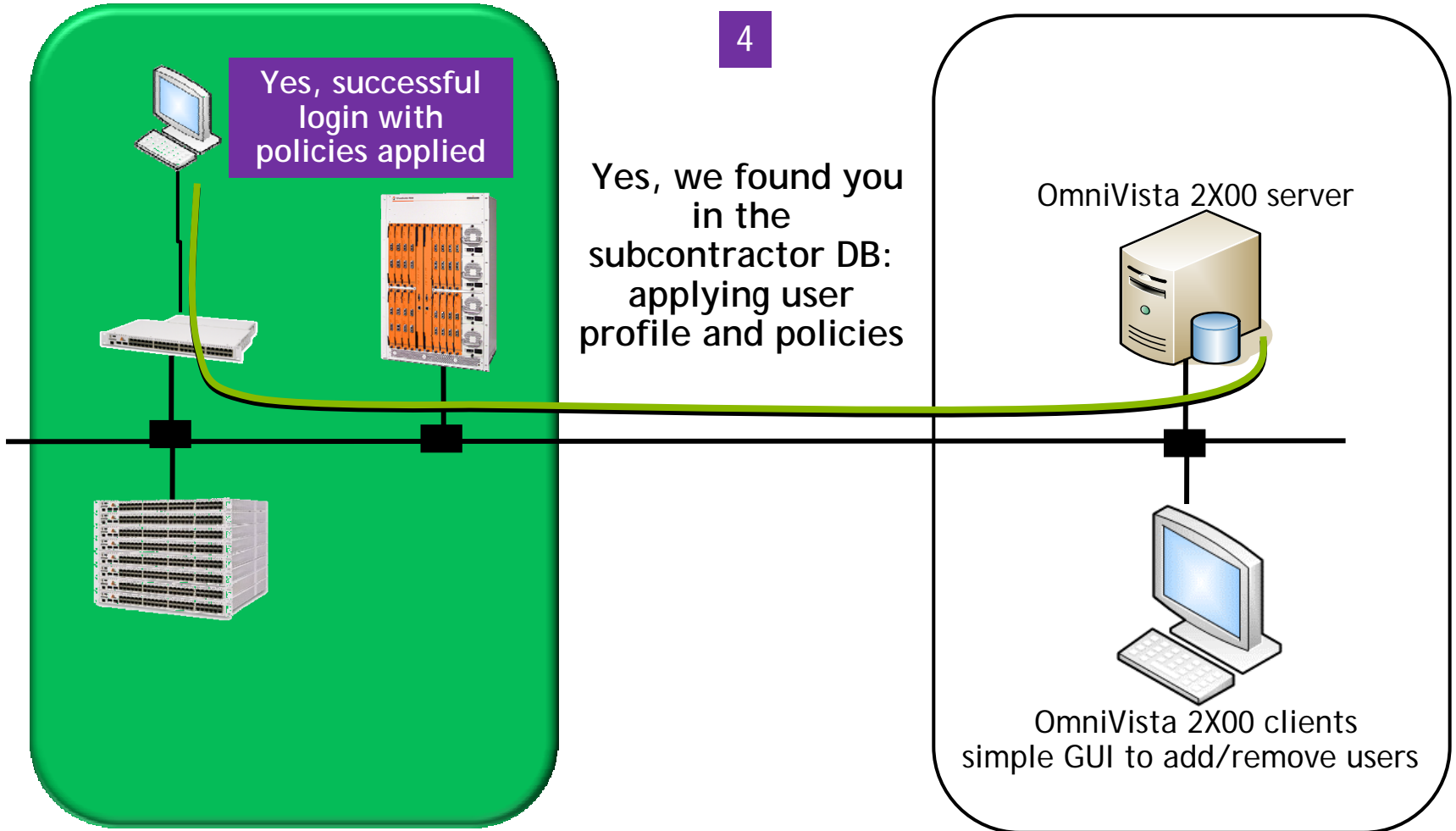
Mechanism (authentication for subcontractor)

3



Mechanism (authentication for subcontractor)

4

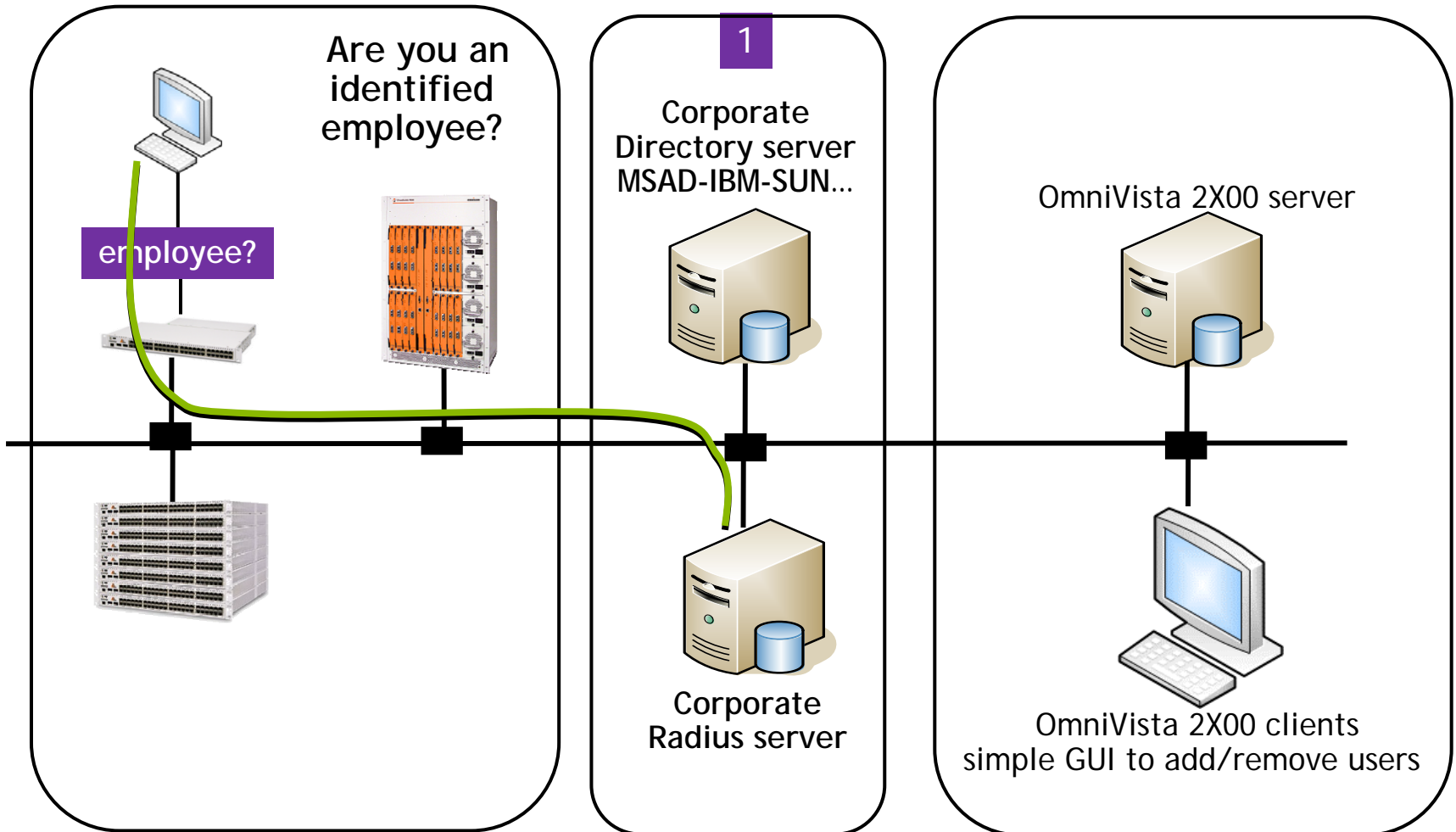


Welcome on ACME network

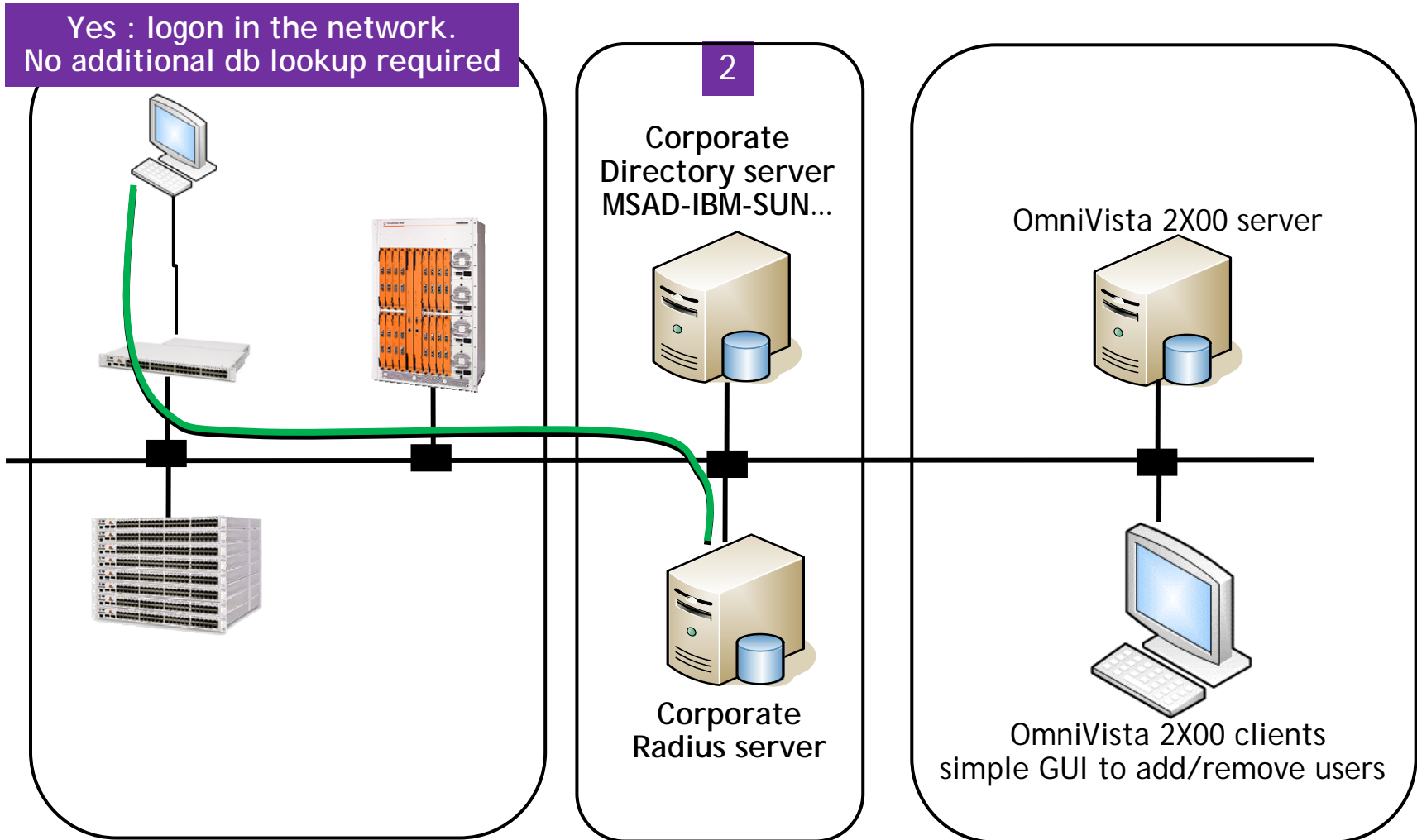


**How this mechanism relate
with existing access
guardian and corporate
authentication in place?**

Mechanism (OV already setup access guardian all across access ports)



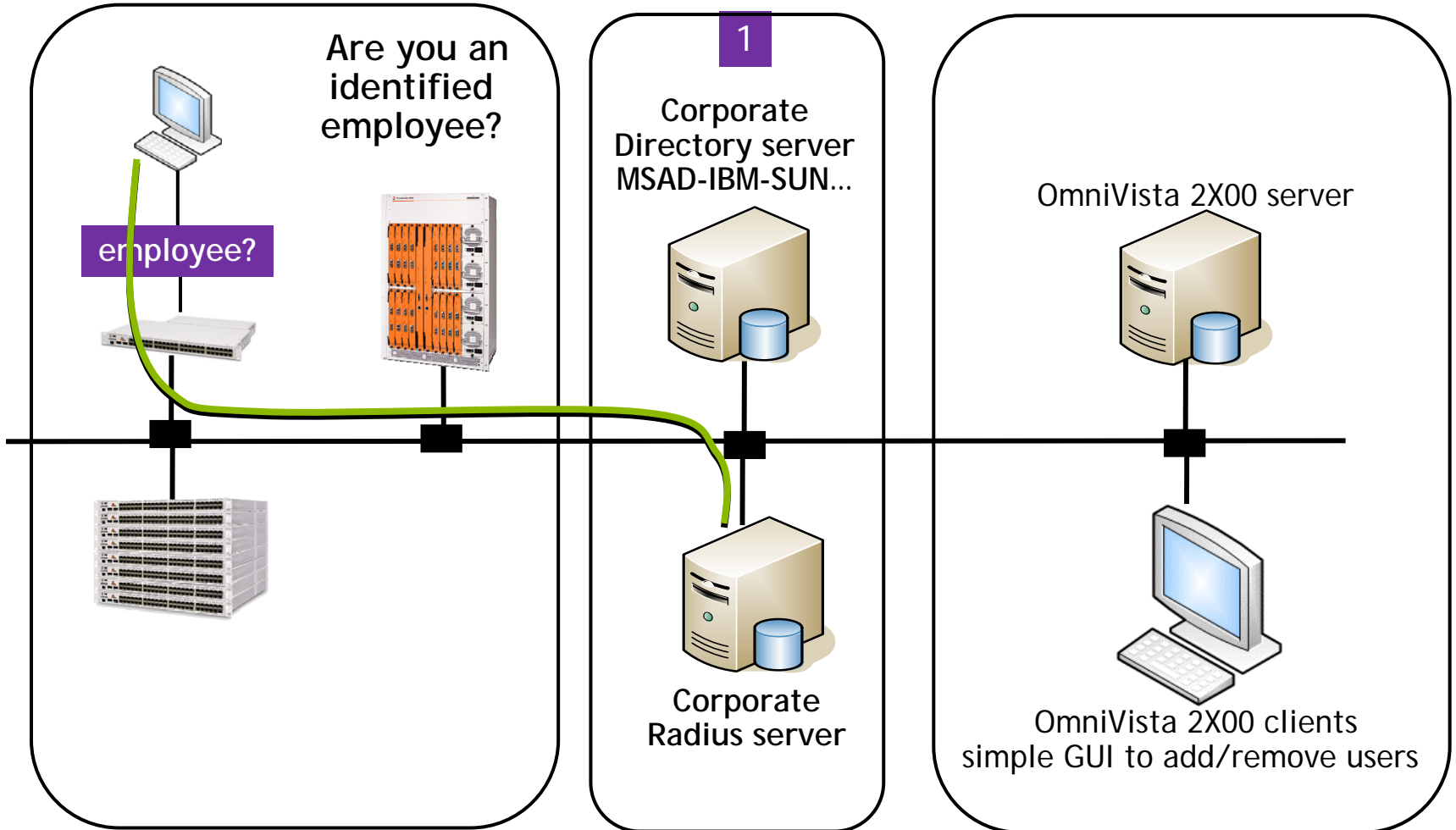
Mechanism



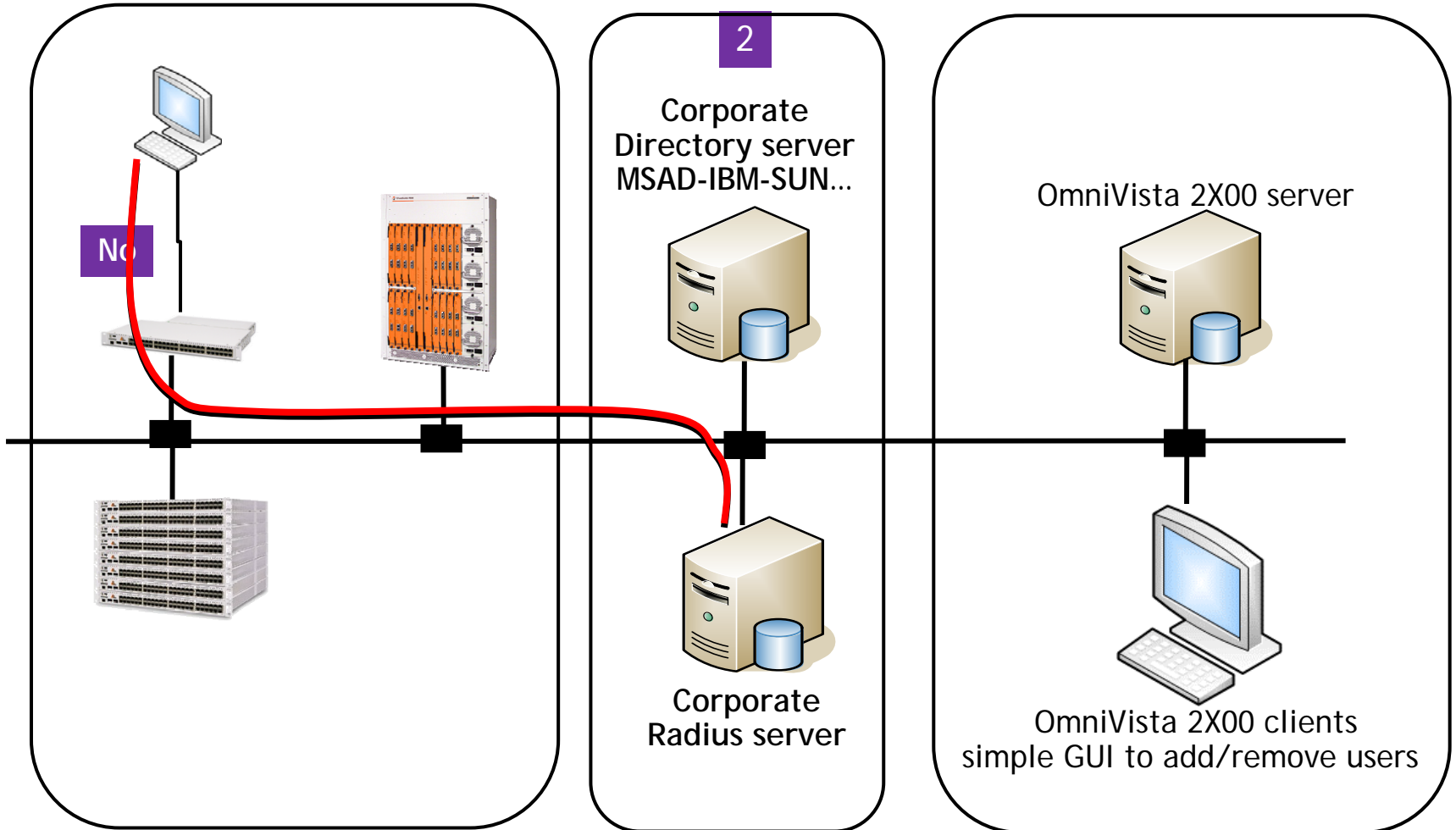
**Welcome on
ACME network**

**What's happening for users
who are not in the
employee DB and not
declared subcontractors?**

Mechanism

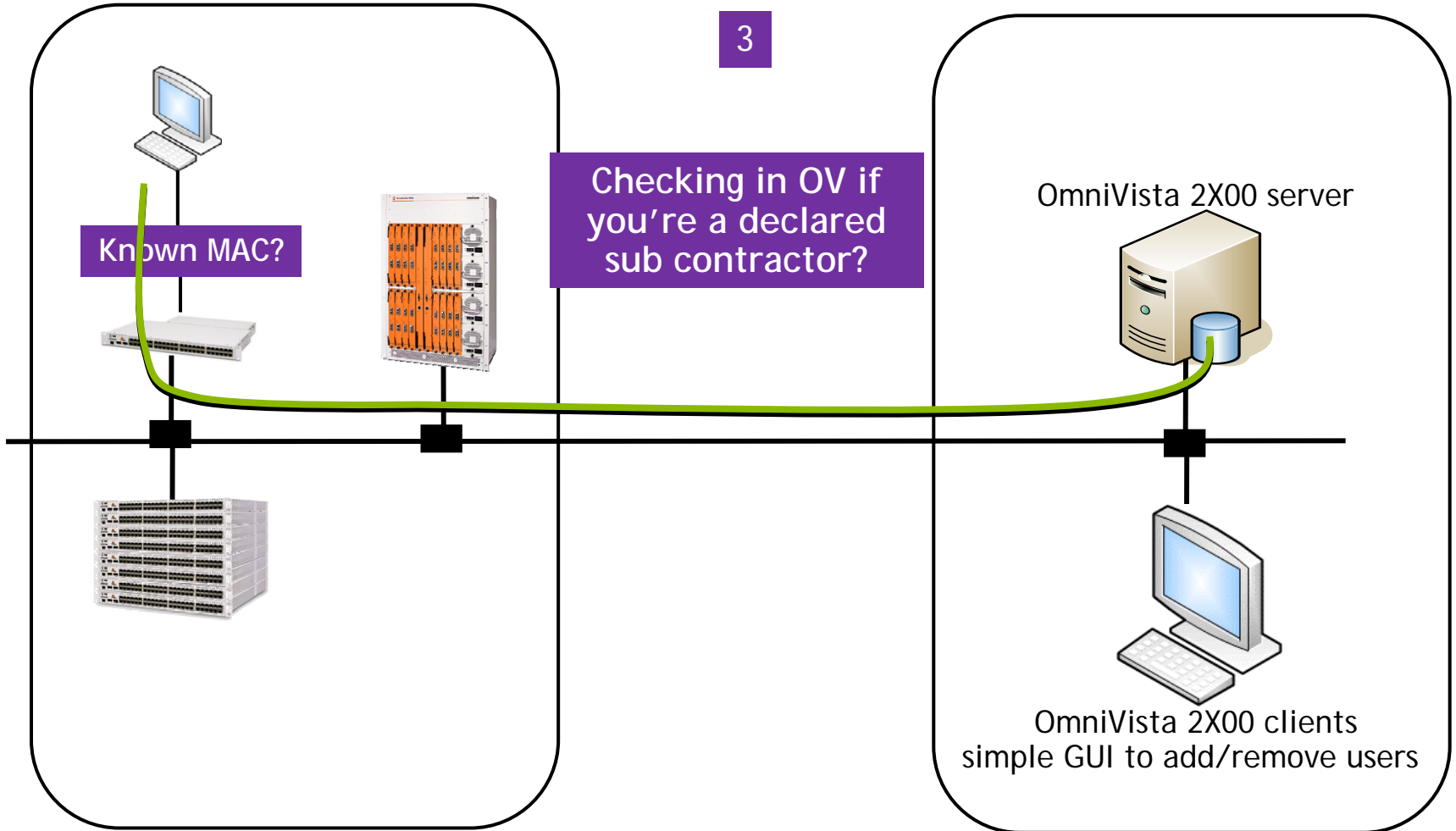


Mechanism



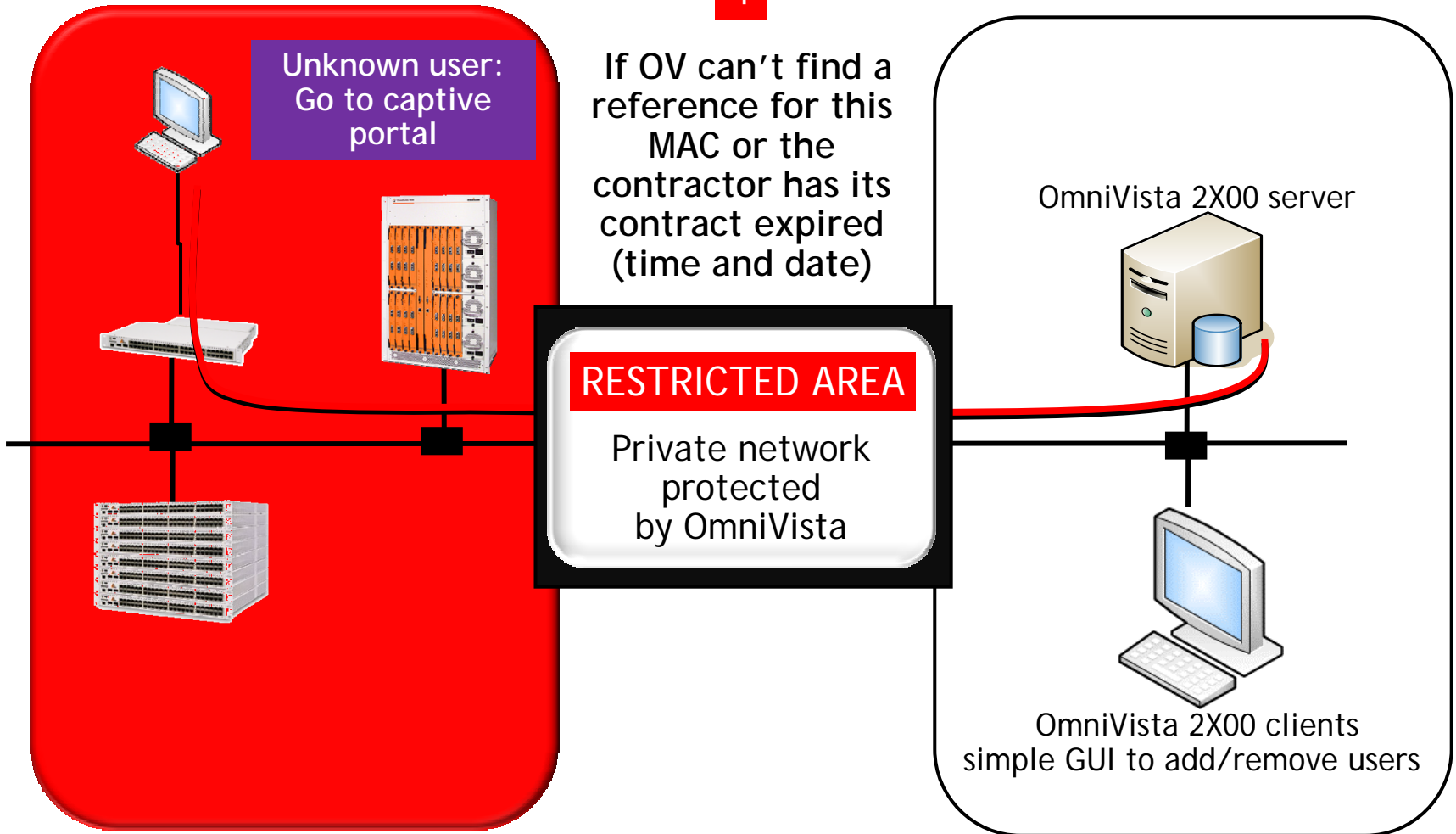
Mechanism

3



Mechanism

4



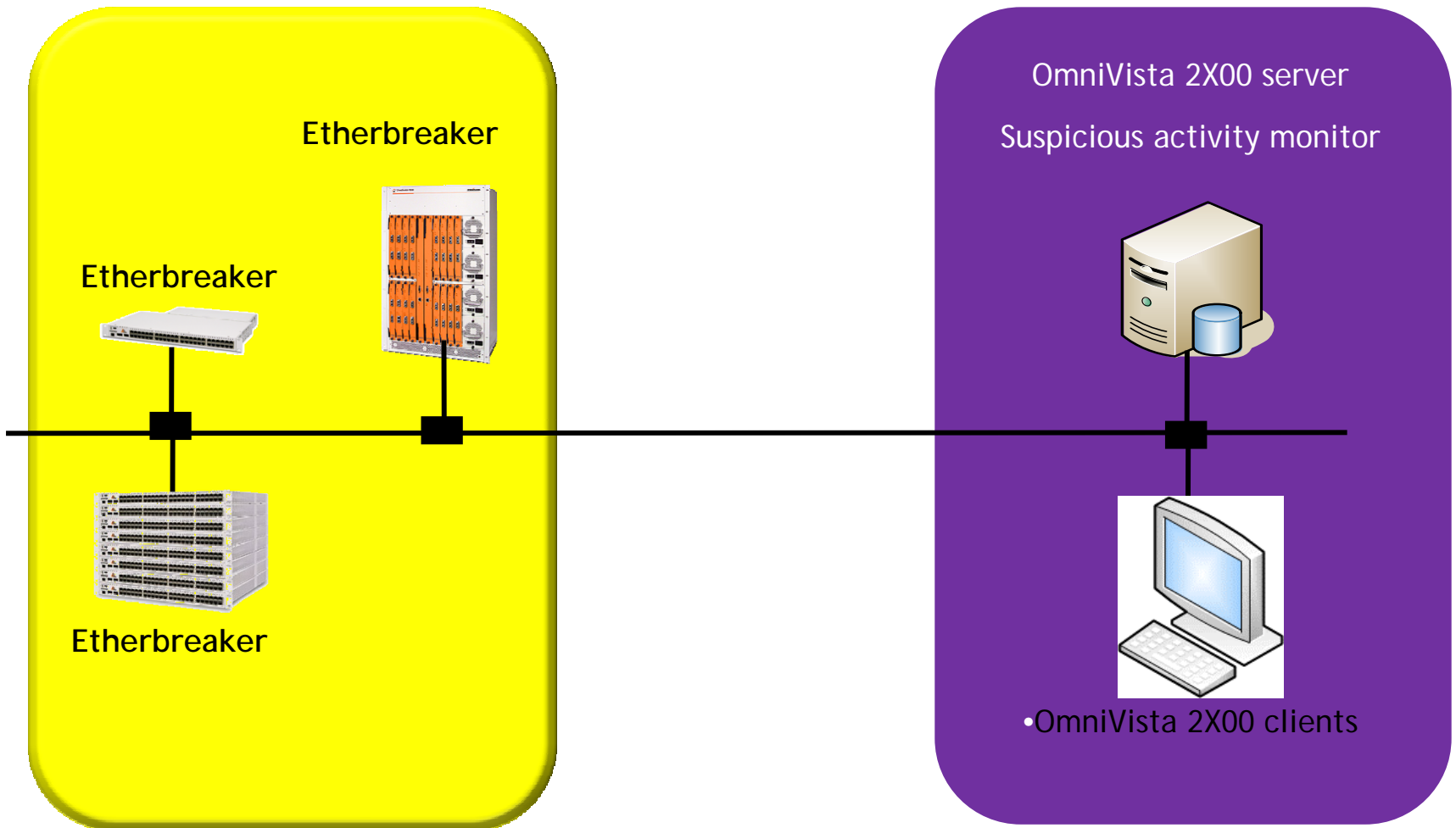
Alcatel-Lucent OmniVista 2x00 R4.0 Suspicious activity monitor

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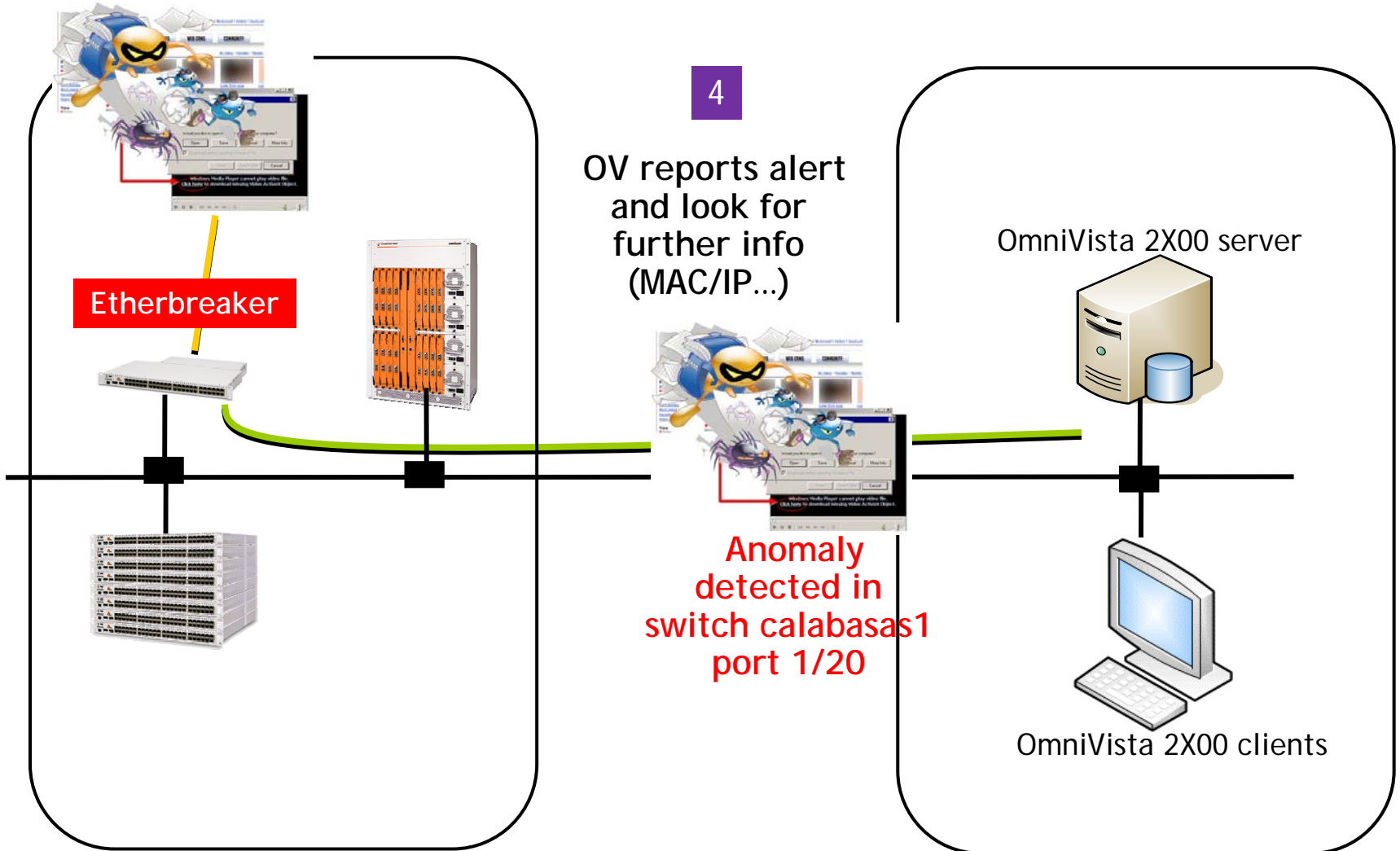


Suspicious activity ?

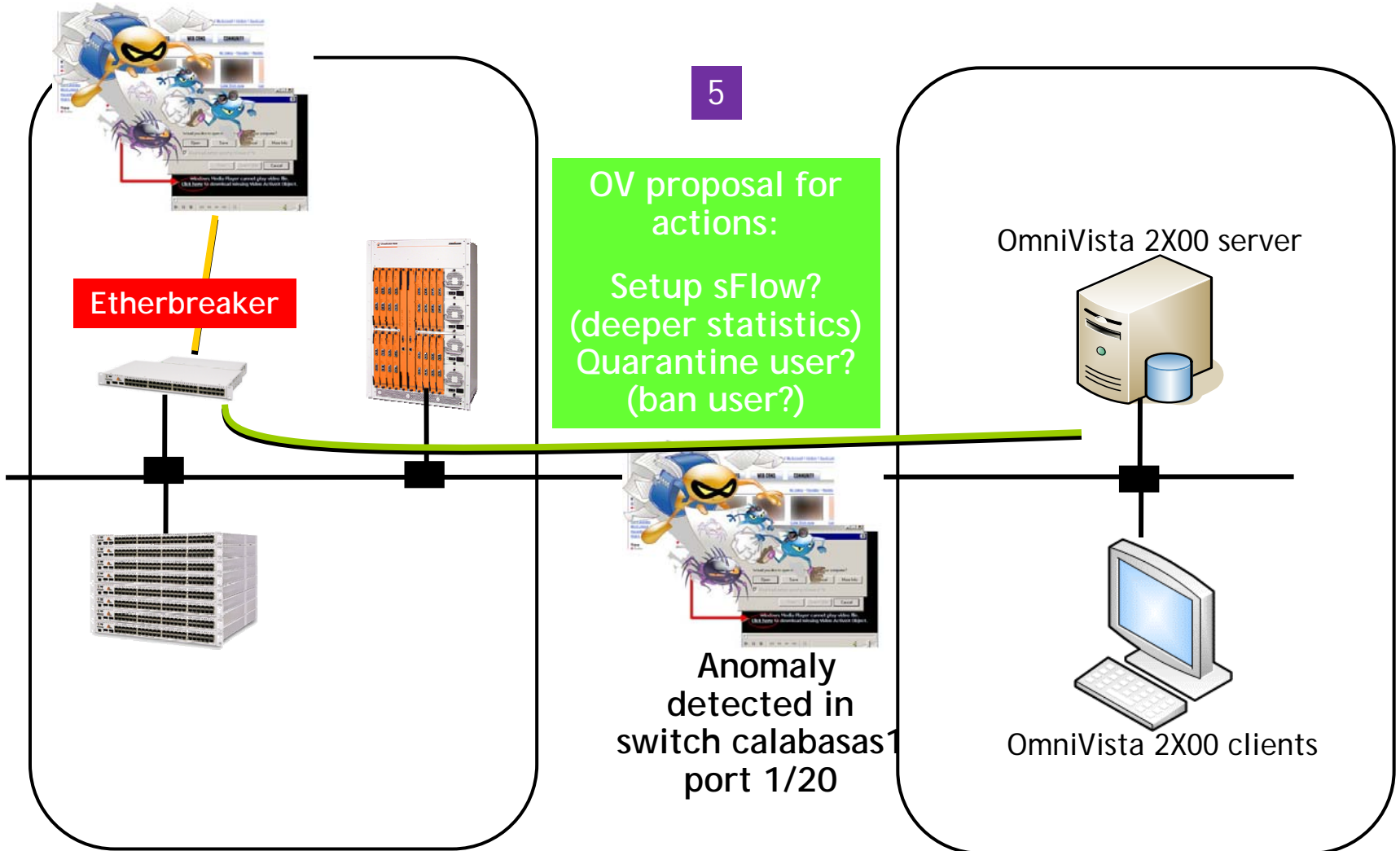
Base components



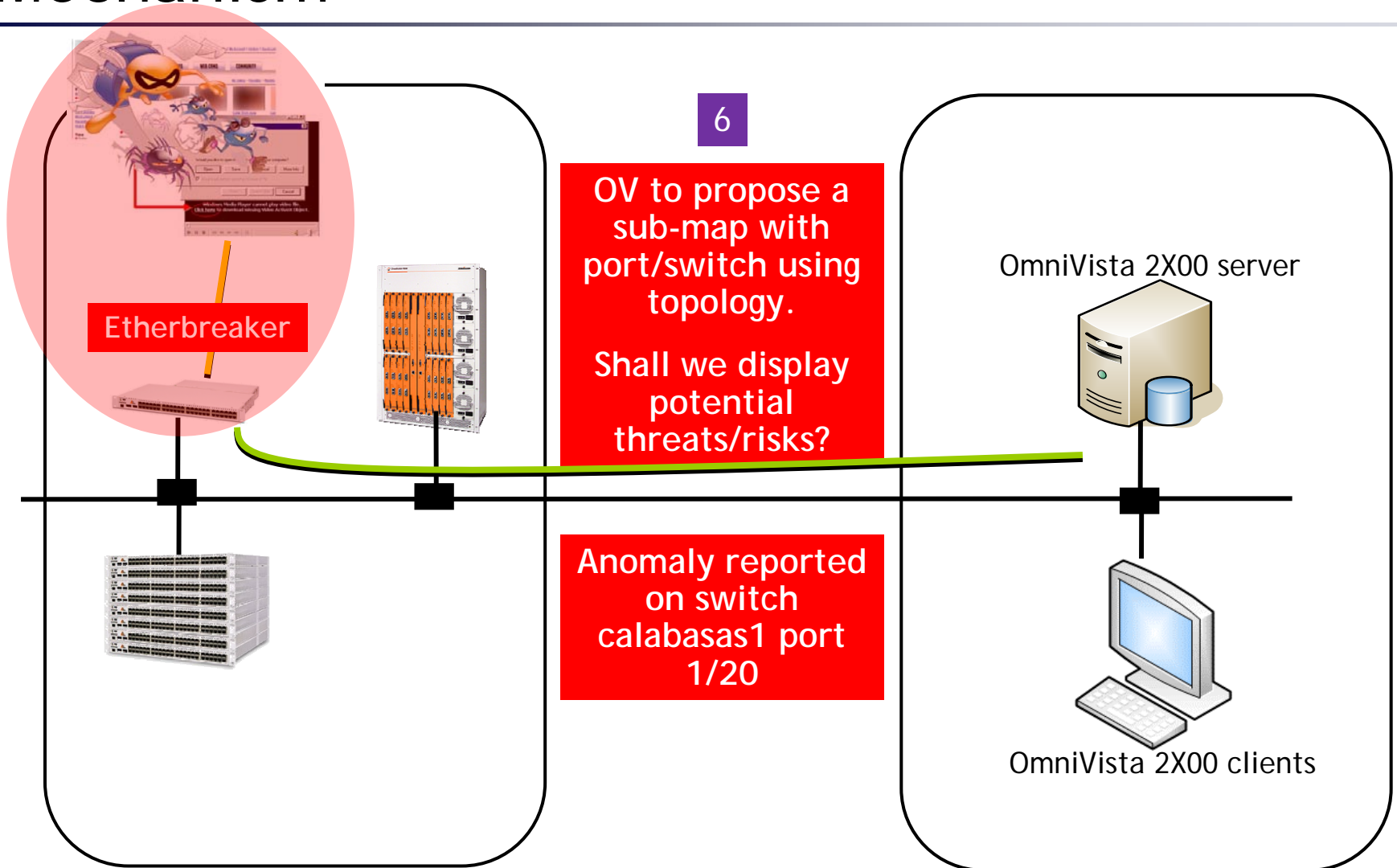
Mechanism



Mechanism



Mechanism

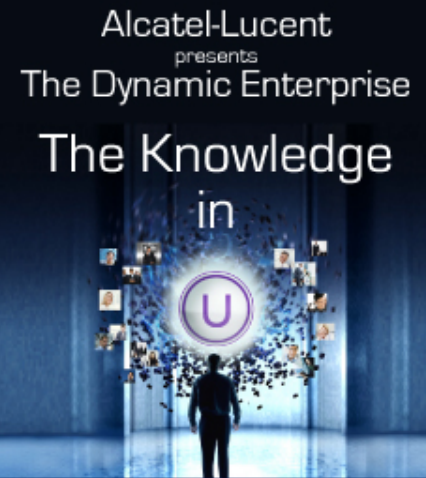


**With OmniVista
suspicious activity
monitor you have a
better control on
potential serious
problems**

RESTRICTED AREA

Private network
protected
by OV suspicious
activity monitor

Alcatel-Lucent OmniVista 2x00 R4.0 Rogue devices detector



**Unauthorized devices may
be a source for data loss or
unwanted service**

**Detect and quarantine non
authorize devices : server,
router, switch, laptop,
UMPC, PMP...**

Data loss risks and unwanted services

Are these devices allowed to surf on your corporate network?

Are those servers being managed by your company?



UMPC



PMP



SOHO switch



SOHO router



Residential gateway



SPY clock



Gaming device



Vendor's magic devices

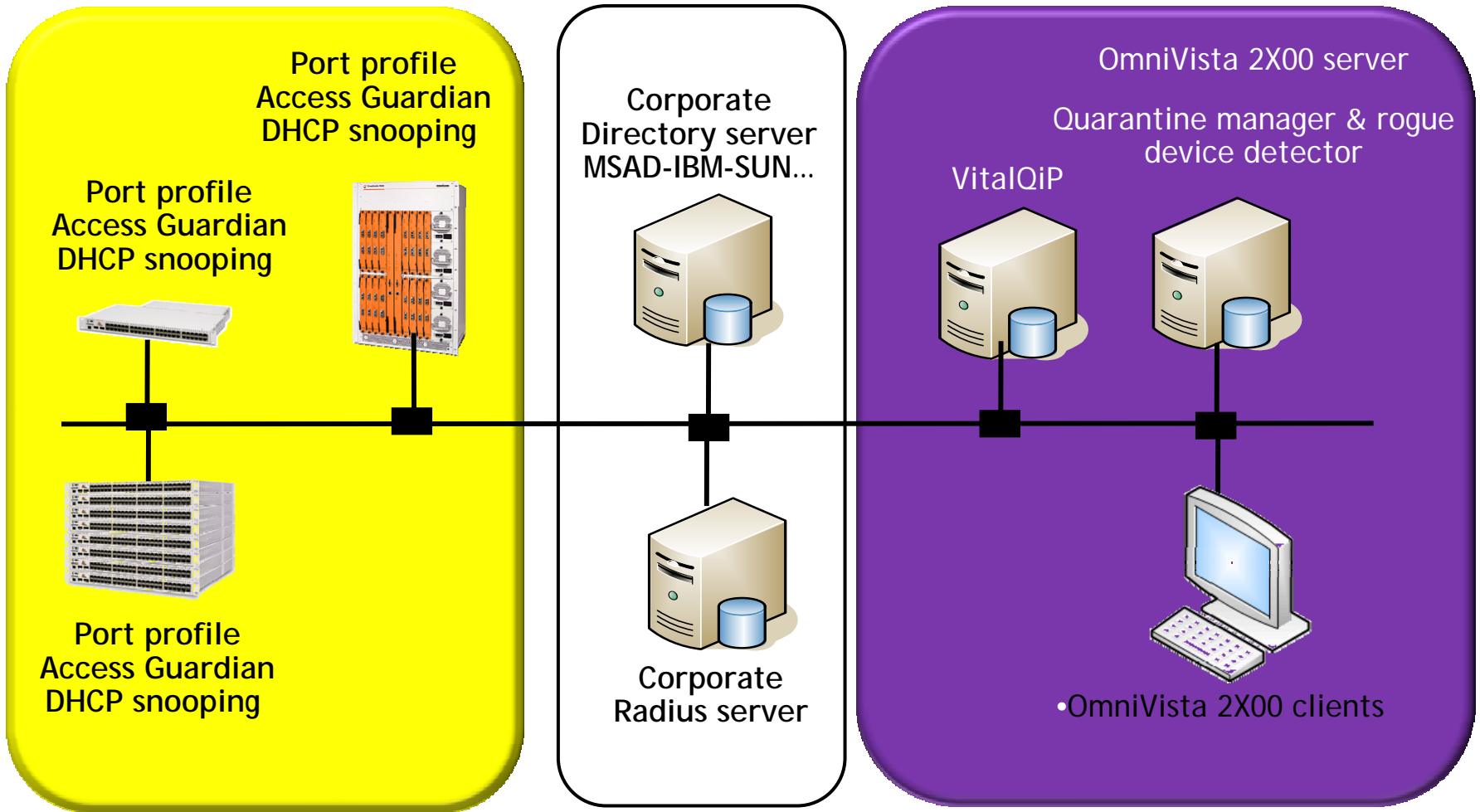


Un-managed servers

NewsGROups

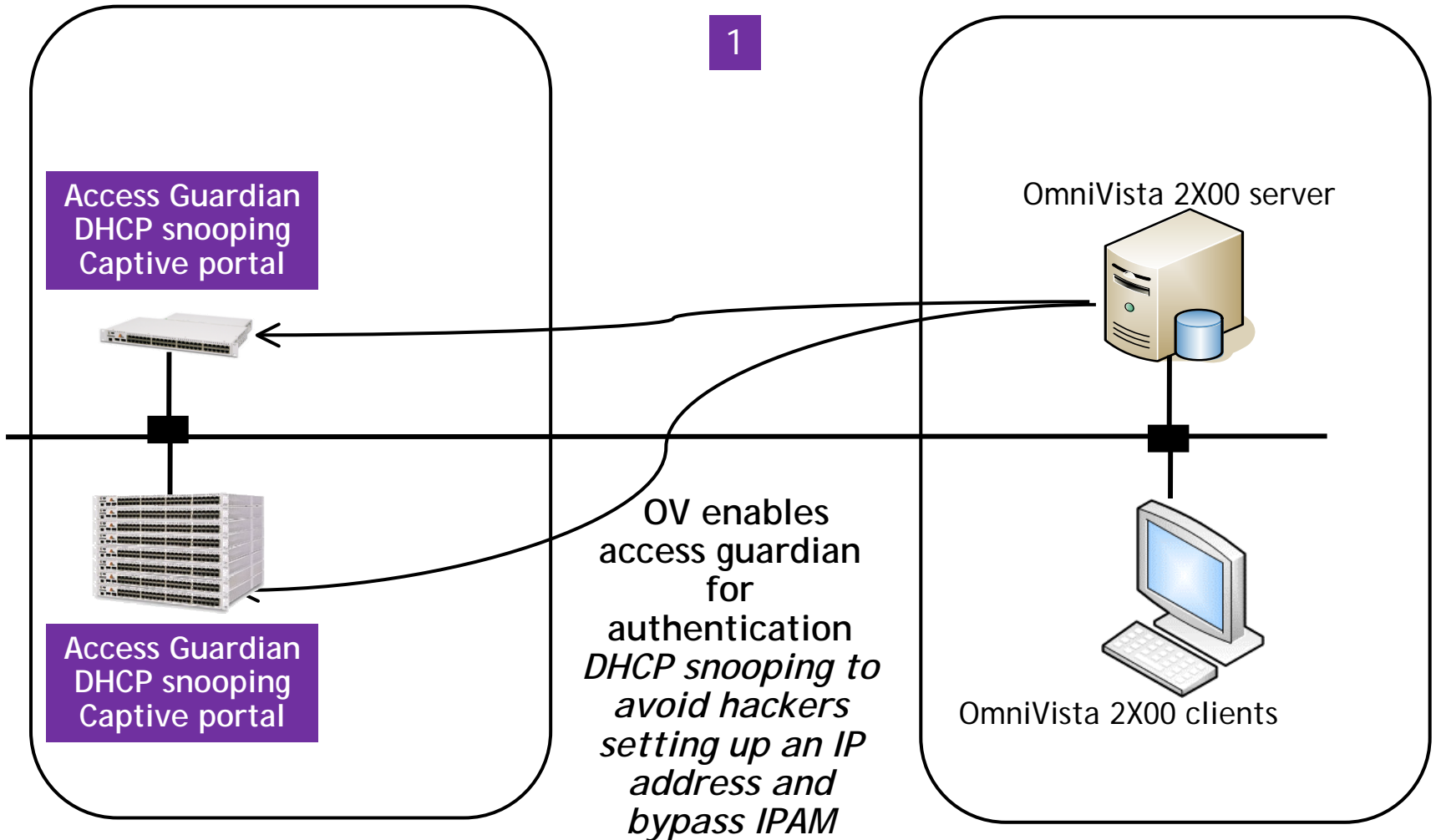


Base components



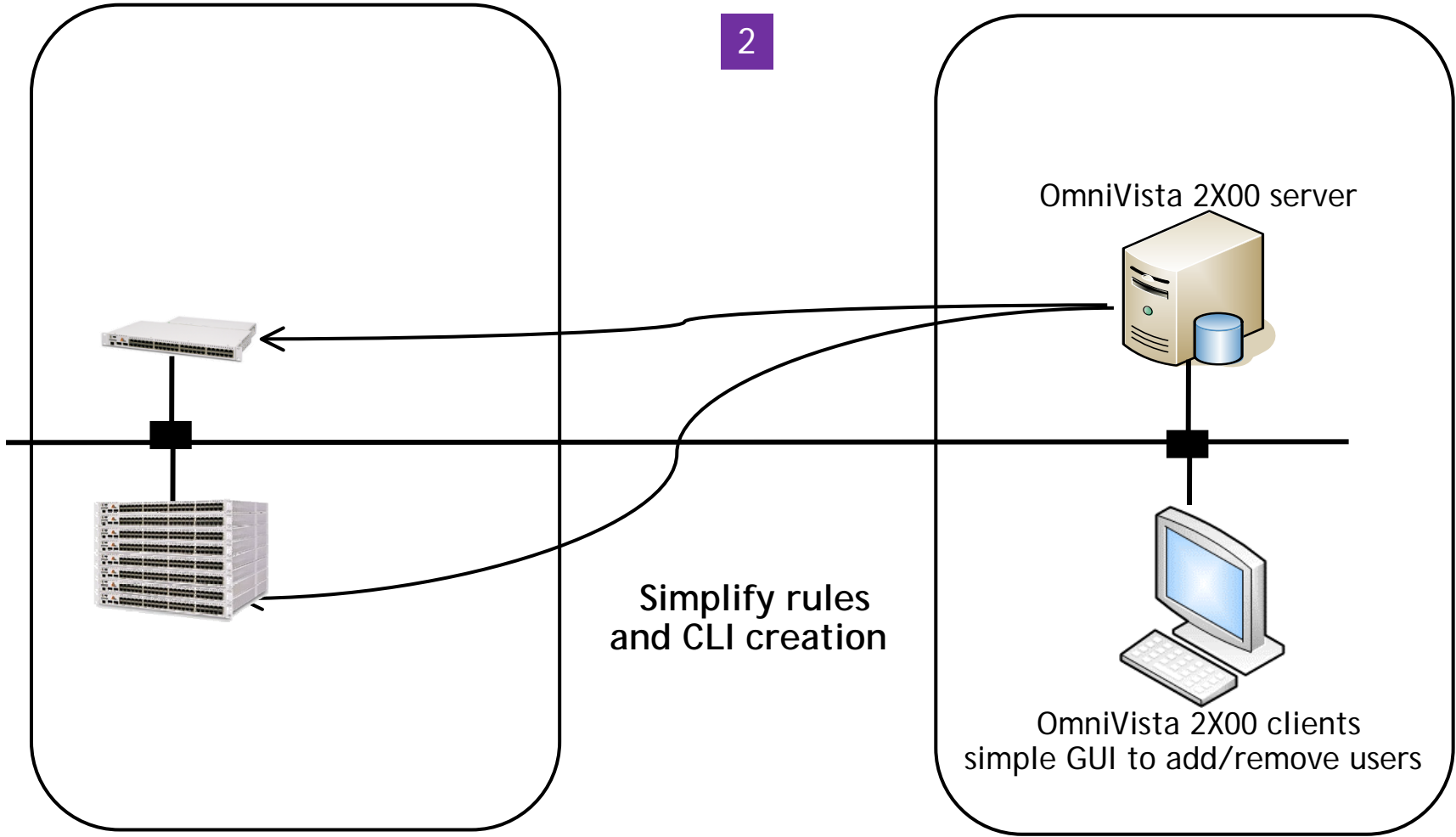
Mechanism

1

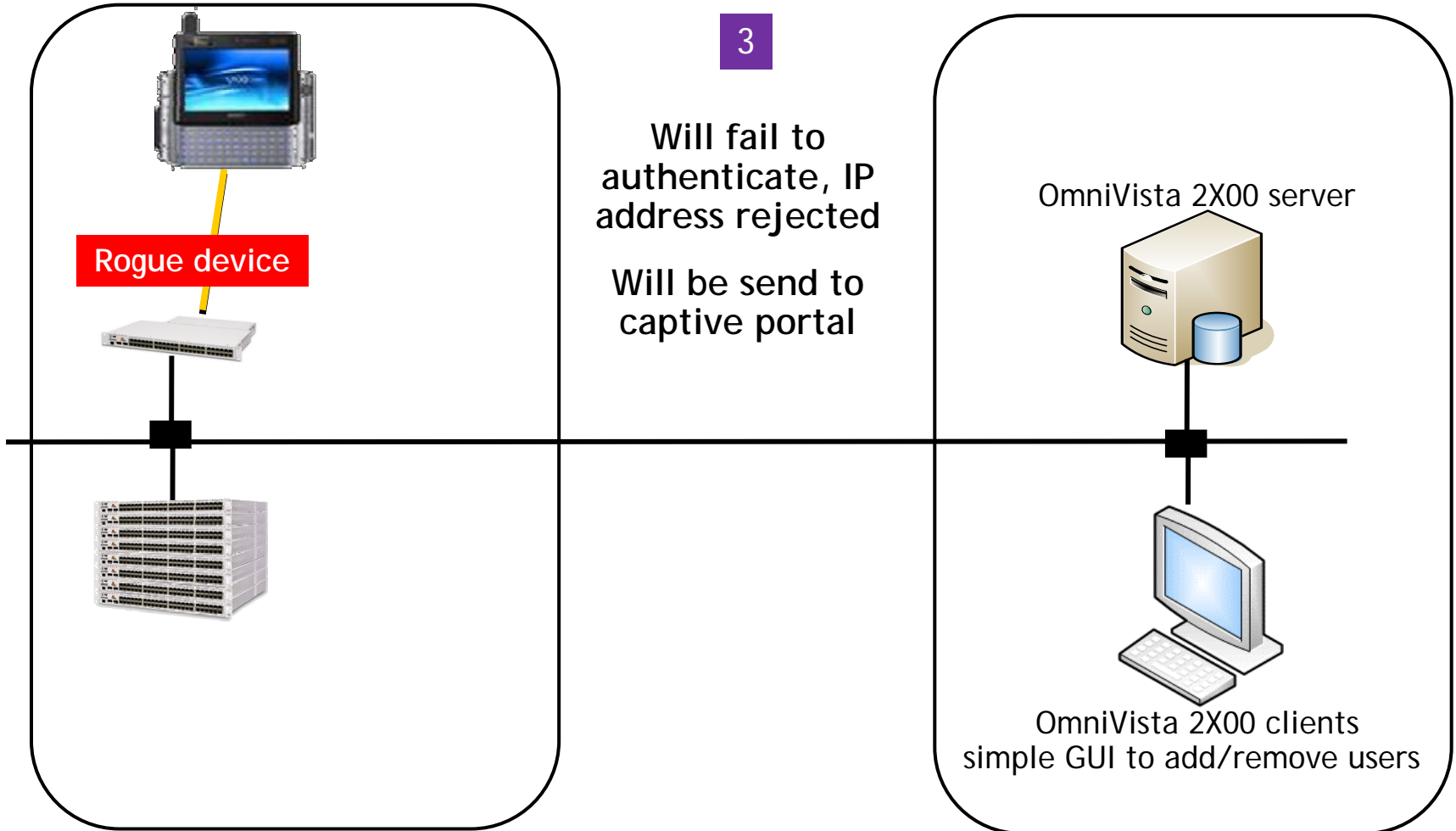


Mechanism

2



Mechanism



RESTRICTED AREA

Private network
protected
by OV rogue device
detector

What does VitalSuite v10.1 today for ALU enterprise?

VitalSuite is a SLA software monitoring data voice and applications for more than 640 type of devices/applications

1. IT are requested to provide SLA to their users (service quality & potential outsourcing)

To note: in EMEA 52% of enterprise have their WAN outsourced

- SLA reports provided by SP have to be verified and measured by MLE
- VitalSuite can provide SLA MEASURED metrics for all Omniswitch family (including OA-WLAN and Brick), plus it support more than 15 other brands (Cisco, Juniper...)
- VS includes trends analysis & capacity planning to maximize investments

2. IPT often raise VoIP quality worries

- When users' complain, MLE need a tool to verify voice quality (MoS, R-factor)
- VitalSuite is THE ONLY available software able to monitor and give real time view for OXE quality of voice and availability of PCX.
- VitalSuite includes also a SIP call simulator based on agents (IP-Touch and media gateway are silent in ALU world...)

VitalSuite roadmap for 2008

VitalSuite v10.2 (DR4: April 08)

1. Unique and 1st in the SLA/SLM industry with CC support: Genesys CC, GVP, OmniGenesys
 - New reason for dropping a call: bad voice quality (network problem in IPCC?), slow answer from agent (server too slow? regardless if it's IP or TDM CC), can't start e-mail co-browsing ?(too small pipe?)
 - OmniGenesys installed base is mainly EMEA with NxO representing a very important share
2. Building on IPD & DSL leadership
 - Support of IPD 7x50 & DSL support (2 leads in less than 2 months for IPD boxes (Germany, Aramco))
3. Customer & channels requested feature : Layer 3 Topology view

VitalSuite v10.3 (target : Q4/08) (candidates)

1. Tomography / service view : Build in collaboration with Bell Labs
 - Customers don' t know what's running in their network. Application discovery would help them understand what's running and monitor their SLA.
 - Tomography (service view) will rely on Flow monitoring (understand better flows & apps) : from Netflow (cisco), sFlow (IETF), jFlow (Juniper) DPI boards ...
2. Communication & Real time application (OTUC, MyT, MyIC, Avaya and Cisco UC) monitoring
 - Better visibility on OTUC, MyT and MyIC performance
3. *In discussion with IPD to support the DPI board and have VS as the only DPI application*

Alcatel-Lucent VitalQIP (IP address Management)

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VitalQIP summary

Provide a Complete IP Mgmt Software Solution to Enterprises, Gov't and Carriers

IP Address, DNS and DHCP Management Data

Core Features

- Network planning and administration
- IP network and host inventory
- Flexible administration and access controls
- Centralized IP services management
- Flexible APIs
- High performance, multi-vendor DNS/DHCP service management

Advanced, Optional Features

- VoIP support/IMS integration (ENUM)
- Network Access Control
- Business Process Mapping/Workflow Integration
- Network and Host Discovery and Reconciliation
- Appliance Deployment Model

Support for Lucent Offers

- Enterprise Offers
- Service Provider Offers: WiMax, IMS, IPTV

More than 850 customers

Market leading product for 7 years



Opportunities / trends

Carriers

eNUM is the key feature to SIP & IMS network

OXE SIP trunking

Enterprise

Large enterprise : OXE for more than 5k IP-Phones, external DNS, and QoS requested (QIP). QIP also add missing OXE/DHCP redundancy & failover mechanisms

More mobility & converged networks creates sales opportunities for VoIP: Critical to UC success. The PC industry is on track to see 11.2 percent growth in shipments for 2007 with notebook computers driving most of the momentum, according to Gartner

Mid size enterprises (multi-sites): TCO for server based solution not attractive. QIP appliance solution.

Competition installed base

Nortel Netid discontinued as of 10/07

No product replacement (EOL in 2011)



IDC OPINION

In 2006, worldwide end-user spending on IP address management (IPAM) solutions, which IDC defines as the combination of IPAM, domain name server (DNS), and Dynamic Host Configuration Protocol (DHCP) solutions, grew by 44.1% over 2005 levels to reach \$224 million. This marks a major growth period in the IPAM market, a market that IDC has been tracking for over 10 years. This key event and other activity in 2006–2007 indicate the following:

- ☑ Enterprises are making new investments in critical infrastructure technologies such as IPAM, DNS, and DHCP as they require greater network reliability.
- ☑ End users are acknowledging the critical importance of IPAM, DNS, and DHCP technologies by investing in commercial products with a road map and corporate backing but still need convincing of the value of replacing spreadsheets.
- ☑ Vendors are working harder to serve end-user requirements with multiple solution packaging options as well as a variety of direct and indirect approaches to the selling process.
- ☑ Technology adoption cycles for VoIP and mobile network services are just beginning to drive demand for IPAM, DNS, and DHCP solutions.
- ☑ IPAM, DNS, and DHCP solutions are already playing and will continue to play a major role in the converged communications infrastructures of enterprises and telecommunications companies alike, particularly in critical services such as unified communications and mobility.



Date	Revision #	Summary of Changes
10 October 2007	Original bulletin	This is the original publication

Customer Notification of the decision to manufacture discontinue the Product noted above:

Last Time Order Date:	December 31, 2007
Last Ship Date:	Last Date when the retired product(s) will be shipped
Manufacture Discontinue (MD) Date:	January 1, 2008
End of Life (EOL) Date:	January 11, 2011
Last Supported Software Release:	4.6 4.5
Market Regions Affected:	Global

Introduction

Beginning January, 2008 IP Address Domain Manager (also known as NetID) will no longer be available for purchase. Information on support for current releases and alternative solution can be found in the Manufacture Discontinue bulletin.

Roadmap *VitalQIP R7.2 CI and R7.2

R7.2 CI -June 2008

1. Web based GUI (easier deployment, lower TCO, available from anywhere): no client deployment
2. Growing demand in government, military and IMS for IPv6 : DHCP v6 Server
3. Committed customers feature: DNS Views (Cingular/AT&T)

- R7.2 - December 2008 (candidates), VitalQiP enterprise appliance: central site like remote DNS/DHCP could be deployed with appliances

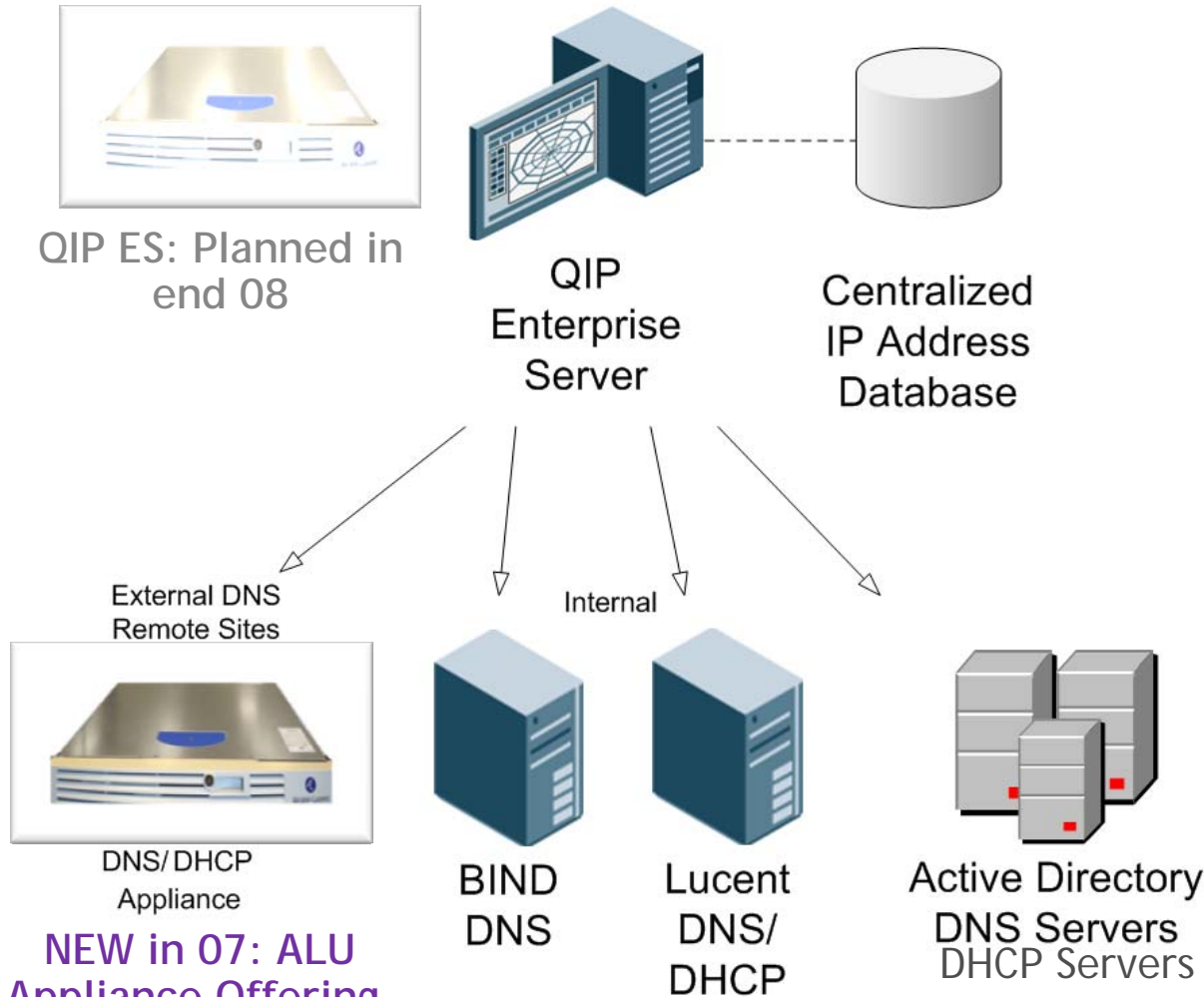
Global Policy Maintenance
Reclaim Functionality
Reports

- DNS v6 Server enhancements

FUTURE OUTLOOK

The market for IPAM solutions will grow at a 2006–2011 compound annual growth rate (CAGR) of 13.7% from end-user spending levels of \$223.9 million in 2006 to \$424.5 million in 2011. Vendor revenue will grow from \$143.5 million in 2006 to \$310.0 million in 2011 at a five-year CAGR of 16.6%.

VitalQIP Flexibility and Scalability is key to customers Environment



NEW in 07: ALU Appliance Offering 1000 & 5000 NEBS

Manage Existing Infrastructure

Manage the Migration to New Platforms

Multi-Vendor Support

Deploy Appliances Where Needed

User Purchasing Preferences for IP Address Management Requirements by Company Size

	Medium-Sized Enterprise	Large Enterprise
DNS (internal)	Appliance	Software
DNS (external)	Appliance or service	Service
DHCP	Appliance	Software
IP address management	Software or appliance	Software

Source: IDC, 2007



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