

UNISYS

Cyber Security y Infraestructura Compartida

Italo Cocentino

Director de Programas Estratégicos



Tendencias disruptivas de tecnología

<http://www.disruptiveittrends.com/>



Agenda

- ✓ Secure Private Cloud - Compartiendo infraestructura
- ✓ Stealth - Garantizando la Seguridad





Unisys Secure Private Cloud

UNISYS

Unisys Secure Private Cloud

Evolucionando su Entorno Virtualizado

Gestión de

Self Service Portal

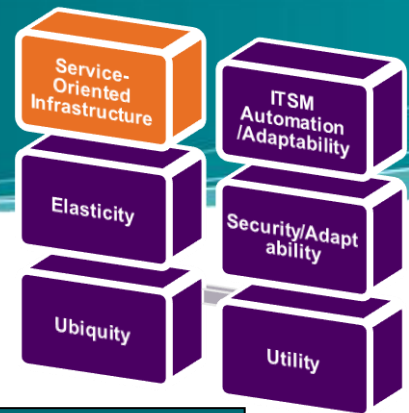
Capacidad y costos

Gestión de SLAs



- ✓ No depende de API, Vendor de HW o SW
- ✓ Físico o Virtual
- ✓ Mantiene o incrementa el nivel de ITSM (ITIL/COBIT)

Aprovisionamiento Self-Service



SPC ofrece un portal de autoservicios para aprovisionamiento y gestión de recursos físicos o virtuales.

Secure Private Cloud

Welcome Home Commission and Manage Administration Help

Manage Resources
Manage Requests
Tenants and Projects
Resource Utilization

Resource Overview

Filter Power State --None-- Go Clear

	Name	Blueprint Name	Lease Duration	User	Tenant Name	Project Name
✖	JAM-Test-1	Import VMware Virtual Machine	Mon Jan 16 00:00:00 CST 2012	Multisys Sales	SPC2 Multisys	Sales
⊖	jam-test-sles-1	Multisys-SLES11	Permanent	Admin Cloud	SPC2 Multisys	Engineering
⊕	jam-test-rhel-1	Multisys-RH5U4	Permanent	Admin Cloud	SPC2 Multisys	Engineering
⊕	jam-test-w2k3-1	Multisys-W2K3R2	Permanent	Admin Cloud	SPC2 Multisys	Engineering
⊖	jam-test-w2k8-1	Multisys-W2K8R2	Permanent	Admin Cloud	SPC2 Multisys	Engineering
⊖	jam-test-rhel-uco-notification	Multisys-RH5U4	Permanent	Admin Cloud	SPC2 Multisys	Engineering
⊖	jam-test-rhel-uco-notification-2	Multisys-RH5U4	Permanent	Multisys Engineering	SPC2 Multisys	Engineering

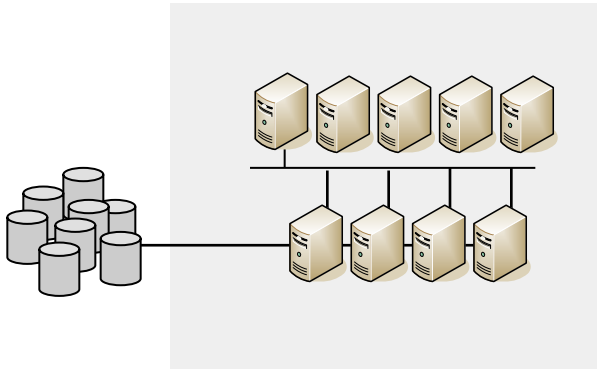
10 Page 1 of 1 11-Jan-2012 [7:52] (1 to 7 of 7 items)

Resource Details

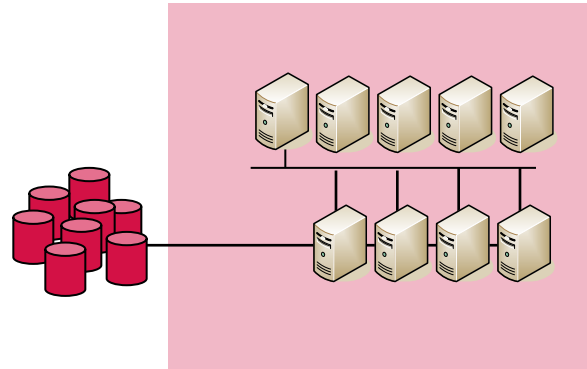
Name : JAM-Test-1
Blueprint : Import VMware Virtual Machine
User Unique ID : SPC2 Multisys_MultisysSales
Resource Type : CloudVirtualResource
Lease Duration : Mon Jan 16 00:00:00 CST 2012
Lease Pre-Expiration Notification : Do not send Lease Pre-Expiration Notification

Infraestructura Convencional

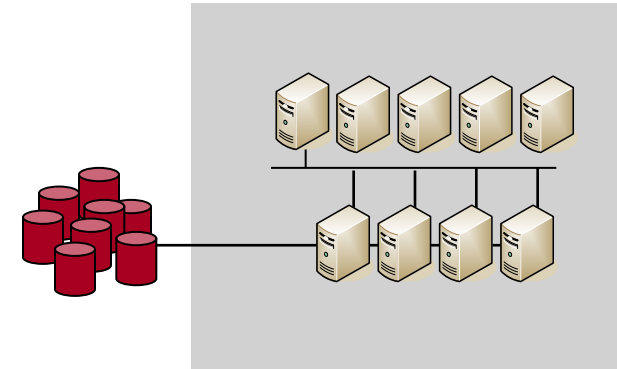
Aplicación A



Aplicación B



Aplicación C

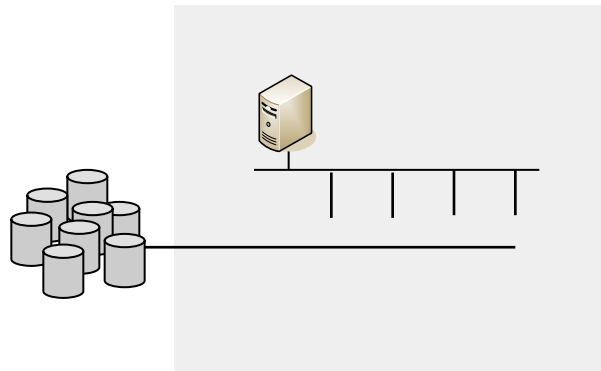


- ✓ Recursos dedicados
- ✓ Recursos no Balanceados
- ✓ Islas de Procesamiento

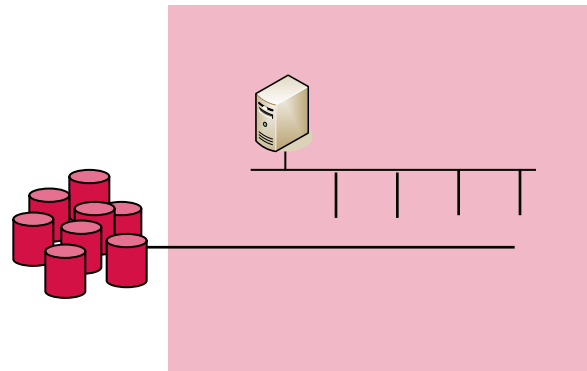
- ✓ Cluster para servidores críticos
- ✓ Utilización no eficaz de Recursos
- ✓ Servidores siempre prendidos

Infraestructura Compartiendo recursos

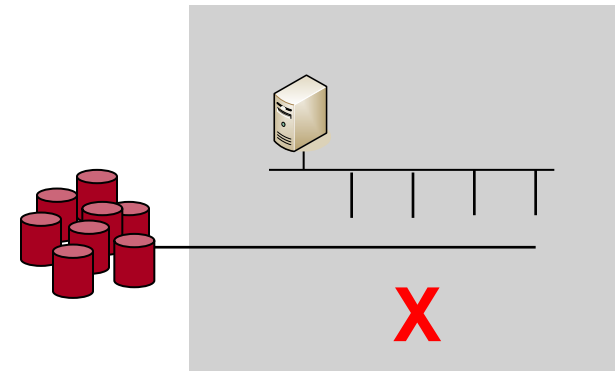
Aplicación A



Aplicación B



Aplicación C



- ✓ Asigna recursos dinámicamente desde el pool
- ✓ Agrega recursos cuando es necesario



Pool de Servidores

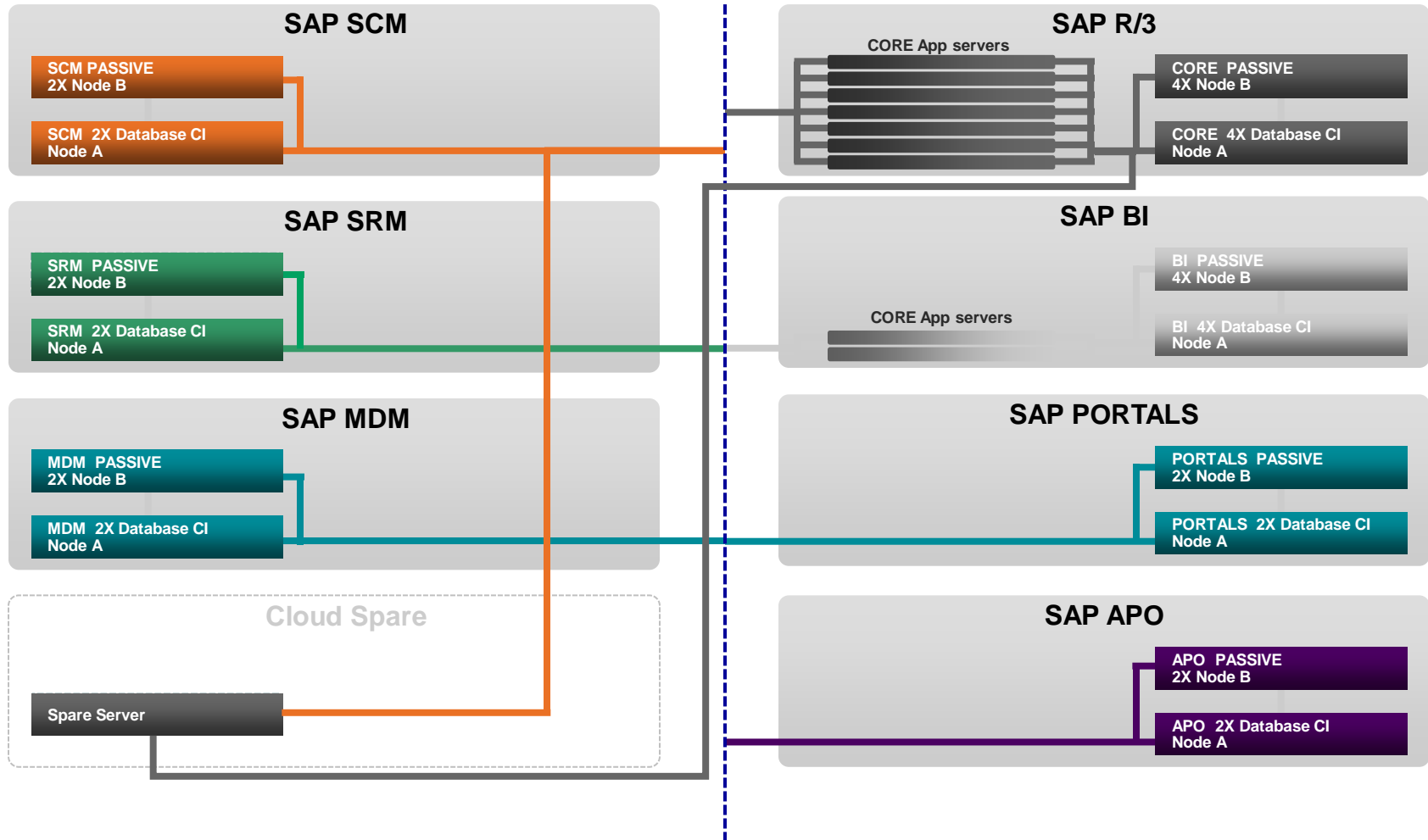
- ✓ Libera recursos inactivos o sub-utilizados
- ✓ Ejecuta failover automático
- ✓ Apaga servidores inativos

Entorno de SAP Optimizado con SPC

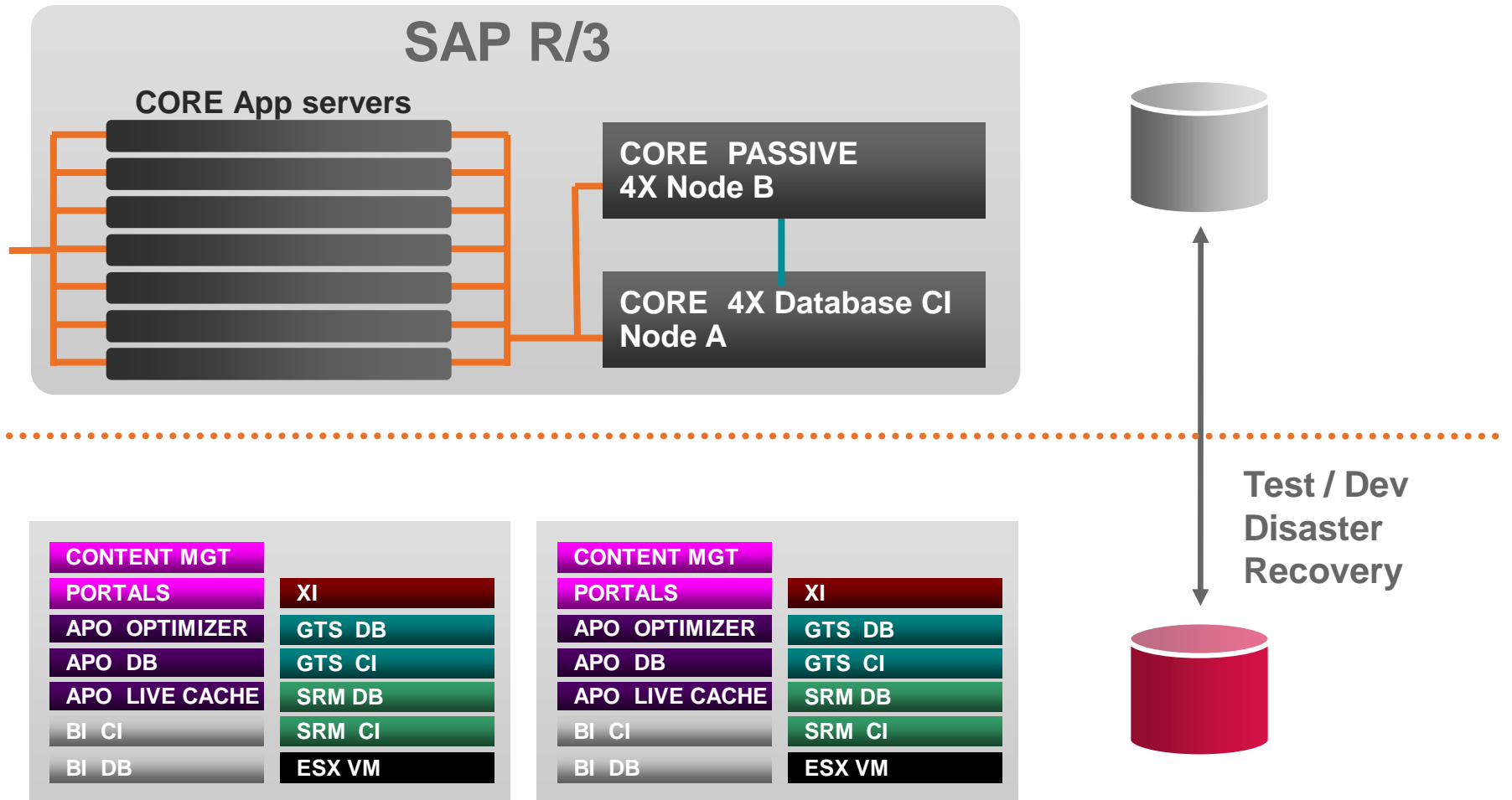


Virtual Server T&D		APO OPTIMIZER		XI	SRM DB
	CONTENT MGT	APO DB	BI CI	GTS DB	SRM CI
	PORTALS	APO LIVE CACHE	BI DB	GTS CI	ESX VM
Virtual Server T&D			TREX	SCM DB	DB
	FAX SERVER	DATA STAGING SRVR	SAP DB	SCM CI	WEB APP SERVER
	PRINT SERVER	RF GATEWAY	SAP CI	MDM	ESX VM

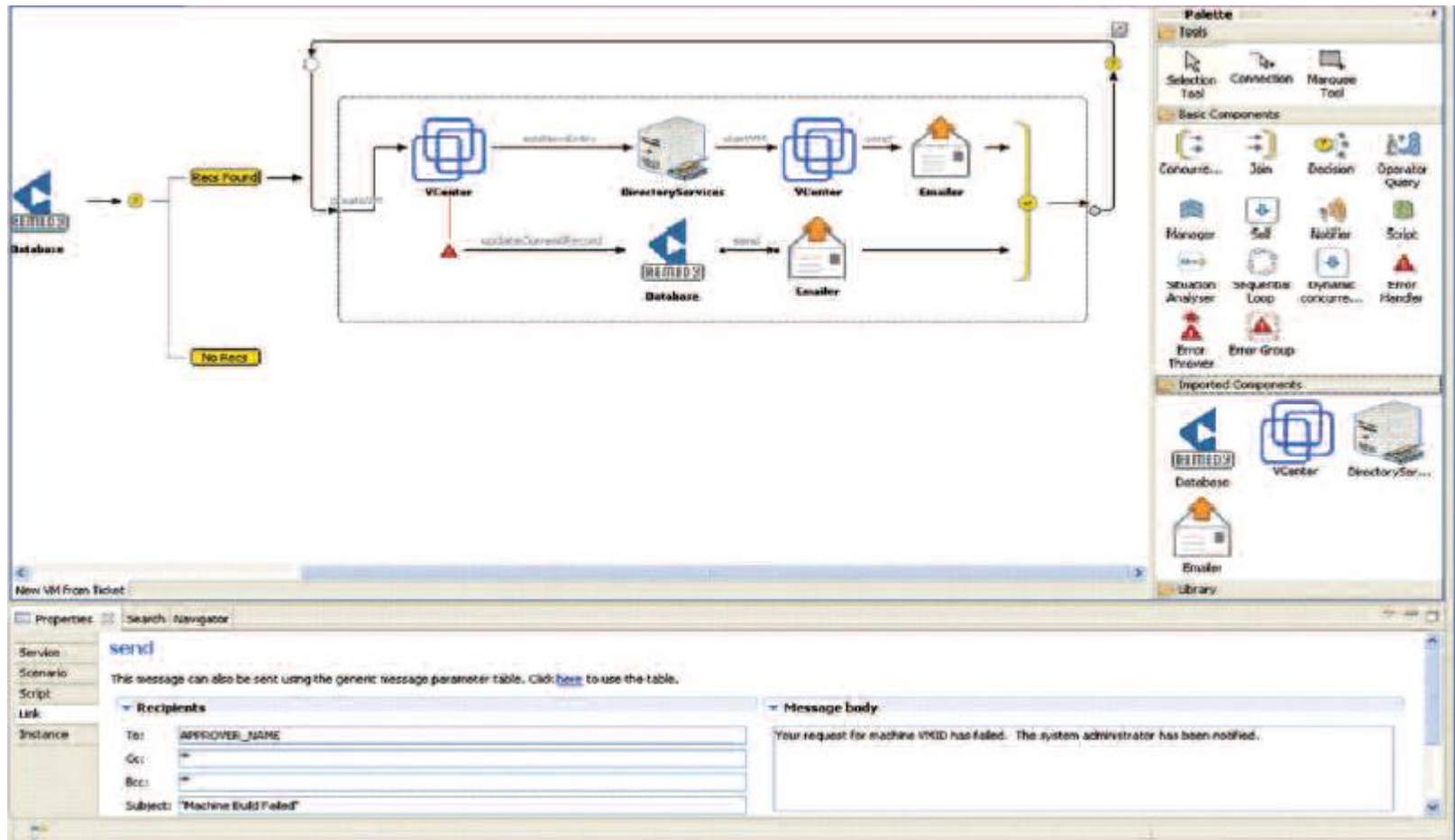
Optimizando Entornos Físicos de SAP con SPC



Disaster Recovery – Reutilizando equipos de Test y Desarrollo



Design Studio : Automatización de Procesos



Design Studio : Implementación de SLAs

The screenshot displays the Unisys uOrchestrate Studio Designer interface. The main workspace shows a Service Organization diagram with the following components and connections:

- Root Node:** A small tree icon representing the overall service organization.
- CPU (id="1"):** A gear icon representing a CPU resource.
- OSLinux (true):** A monitor icon representing the operating system environment for the CPU.
- Monitoring Group:** A dashed box containing four monitoring components: AvgCpuLoad, App1CPUload, App2CPUload, App3CPUload, and RunningServers.
- CheckServices (id="2"):** A gear icon representing a service check component.
- OSLinux (true):** A monitor icon representing the operating system environment for the CheckServices component.
- Application Group:** A dashed box containing three application components: EspressoApp1Httpd, EspressoApp2Httpd, and EspressoApp3Httpd.

Connections in the diagram include:

- The CPU component is connected to the OSLinux (true) component below it.
- The CPU component is connected to the Monitoring Group.
- The Monitoring Group is connected to the CheckServices component.
- The CheckServices component is connected to the OSLinux (true) component below it.
- The CheckServices component is connected to the Application Group.

The interface also features a left-hand tree view showing the project structure, including folders like 'src/design', 'src/java', and 'resources'. The bottom status bar shows the system tray with the time 3:58 PM and the window title 'Designer - Serpro/src/...'.

Operations Console: Monitorea y permite reaccionar a eventos

Operations Console

Favorites
 WatchProcessor {id=1} ▲

Service Organization

- ProcessorMonitor {1.3.18}
 - LoadManager {id=1}
 - WatchProcessor {id=1} ▲
 - Windows {hostname=enigmatc-...}
 - WatchProcessor {id=2}
 - Windows {hostname=server2}

Service Organization

- ProcessorMonitor {1.3.3}
 - LoadManager {id=1}
 - WatchProcessor {id=1} ▲
 - Windows 'true'
 - Windows {hostname=host7}
 - Windows {hostname=host21}
 - Windows {hostname=host22}
 - Windows {hostname=host33}
 - Windows {hostname=host29}
 - Windows {hostname=host13}
 - Windows {hostname=host46}
 - Windows {hostname=host37}
 - Windows {hostname=host44}
 - Windows {hostname=host23}
 - ...

BME Query

BME Scrolling

SLA

Application State History

APPLICATION RUNNING ▬
 APPLICATION STOPPED ■

CPU Load History

Units: Percent

0.00 20.00 40.00 60.00 80.00 100.00

Previous: 79.86 Current: 82.12

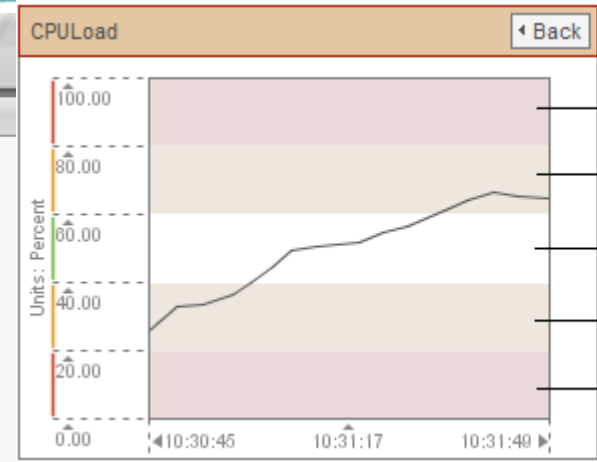
Load Reduction History

Initiated: 06/05/24 16:48:24

Phase Actual 98.00
 Phase Predicted 90 90 2

Actual 98.00
 Total Predicted 180

	Predicted	Actual
1. OVERLOADED	90s	98s
2. REDUCING	90s	



Max Thresh Region
 Max Warning Region
 Normal
 Min Warning Region
 Min Thresh Region

- All Effectors**
- Name**
- [execute](#)
 - [kill](#)
 - [killProcess](#)
 - [launch](#)
 - [reboot](#)
 - [retrieveAllProcess](#)
 - [retrieveCPUtime](#)
 - [retrieveCacheInformation](#)
 - [retrieveLogicalDiskInformation](#)
 - [retrieveMemUsage](#)
 - [retrieveMemoryInformation](#)
 - [retrievePhysicalDiskInformation](#)
 - [retrieveProcessID](#)

Interoperabilidad

CMDB Systems

- BMC Atrium CMDB
- HP Universal CMDB
- VMware SM CMDB

Configuration Management

- Microsoft System Center Configuration Manager
- VMware vCenter Configuration Manager

Event Management

- BMC Event Manager
- CA Spectrum
- EMC Ionix Network Configuration Manager (NCM)
- EMC Ionix IT Operations Intelligence (ITOI)
- HP Network Node Manager (NNM)
- HP Operations Unix (OVOU)
- IBM Tivoli Enterprise Console (TEC)
- IBM Tivoli Netcool OMNibus
- Microsoft System Center Operations Manager 2007

Provisioning*

- BMC Bladelogic
- Dell Scalent
- IBM Tivoli Provisioning Manager
- HP Opsware SAS
- Novelle Platespin
- Sun N1 Provisioning System
- VMware vCloud Director
- VMware vCenter

Service Management

- BMC Remedy Service Management Desk
- BMC Remedy IT Service Management Suite
- BMC Service Desk Express
- CA Service Desk Manager
- FrontRange HEAT
- HP Service Center
- HP Service Manager
- Symbox Change Manager
- VMware Service Manager

Universal Adapters

- CIM
- Command Line
- Email
- Flat File
- JMS (Java Message Service)
- JDBC (Java Database Connectivity)
- JMX
- SNMP
- SSH
- WebServices (XML)

Middleware

- BEA WebLogic
- IBM Websphere MQ
- Sonic MQ
- TIBCO
- webMethods

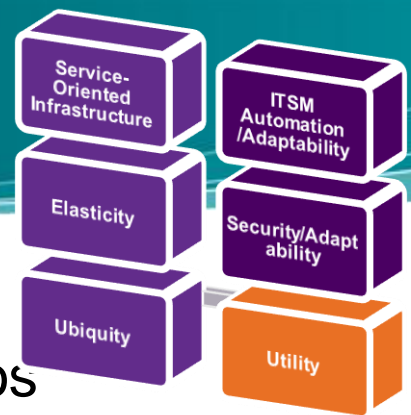
Virtualization*

- Citrix Xen Enterprise
- IBM APV/LPAR
- Microsoft Hyper-V
- Sun Solaris Zones
- VMware vSphere/vCenter

Directory Services

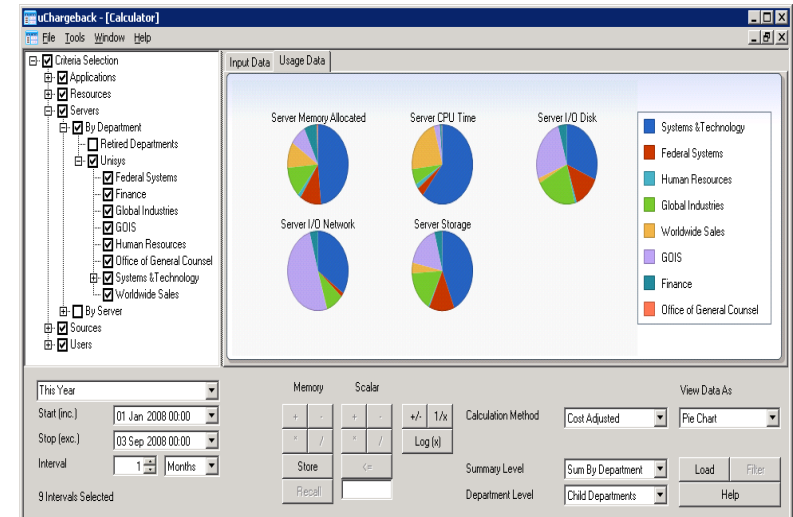
- LDAP
- Microsoft Active Directory

Planeamiento de Capacidad/Costo



El SPC recolecta y almacena la utilización de recursos para servidores físicos y virtuales.

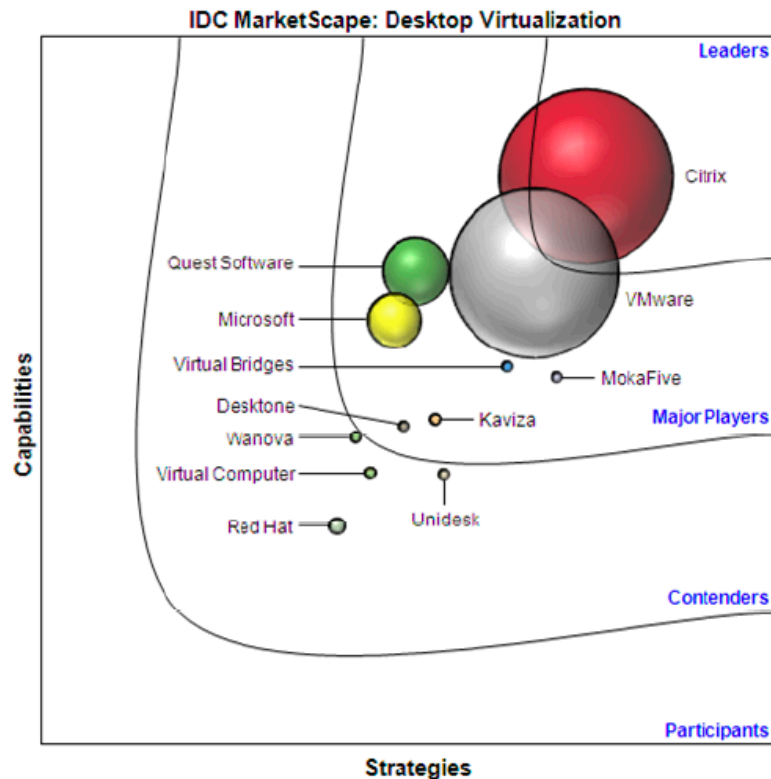
- Monitorea Servidores, Aplicaciones y procesos.
- Genera informaciones para costeo/cobro.
- Análisis de tendencias y Plan de Capacidad
- Reporte de uso de aplicaciones concurrentes



VDI Solutions

- ✓ Fuerte tendencia para 2012
- ✓ En línea con estrategias de movilidad
- ✓ Ayuda a reducir costos de licencias
- ✓ Simplifica la gestión de aplicativos
- ✓ Reduce el ciclo de refresh de los equipos
- ✓ Seguridad, backup, TCO, etc...

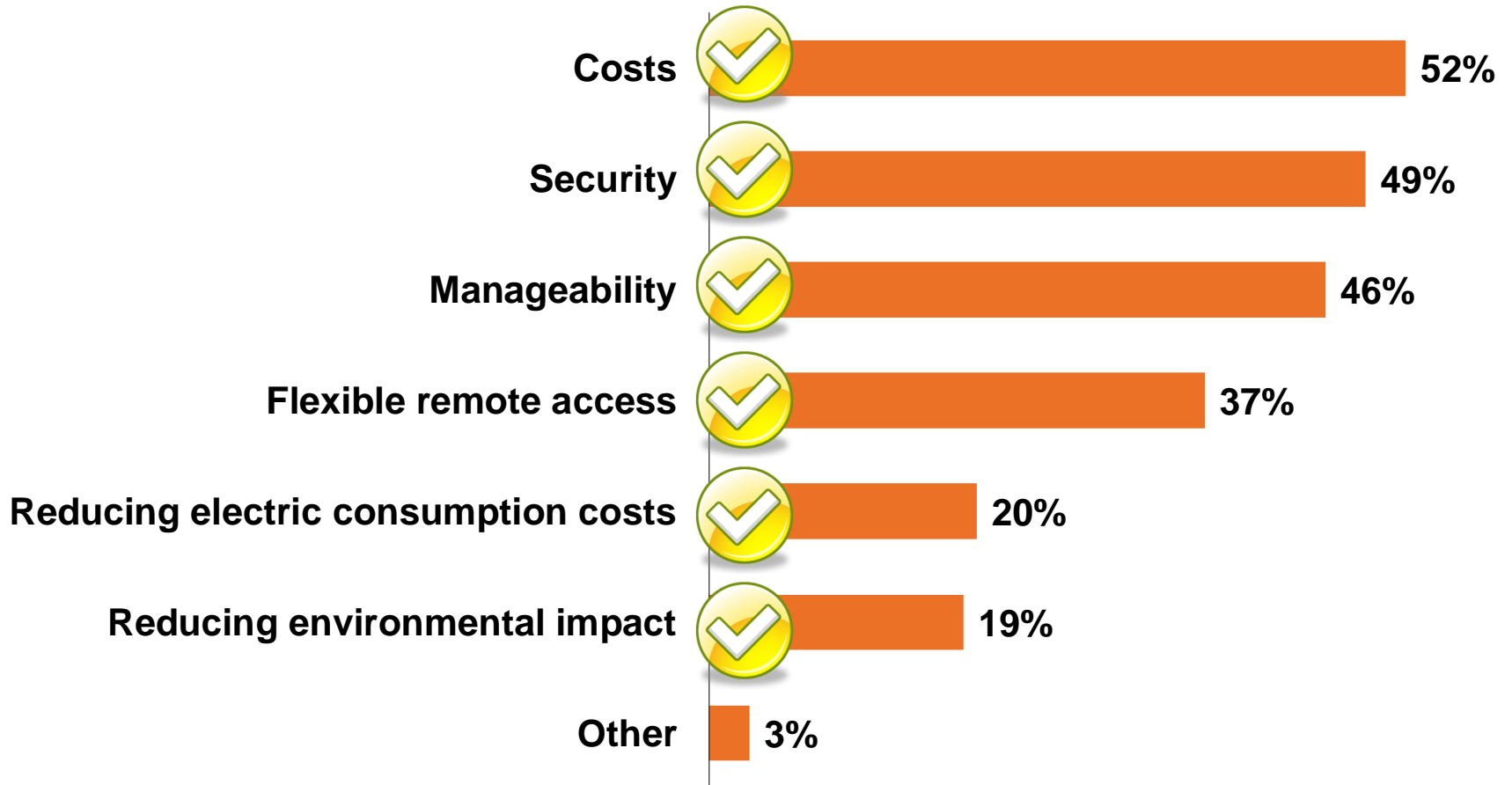
IDC MarketScape Desktop Virtualization Vendor Assessment



Source: IDC, 2011

Virtualización de Desktops

“Cuáles son las razones para tu interés en alternativas para los PC’s tradicionales?”



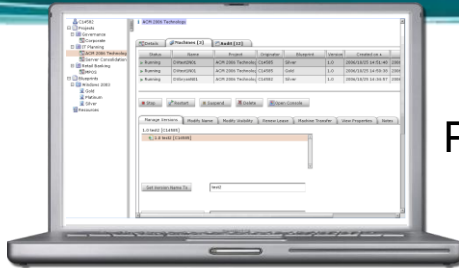
Source: Forester Enterprise And SMB Hardware Survey, North America And Europe, Q3 2007

La idea es Buena...Pero Hacerlo...



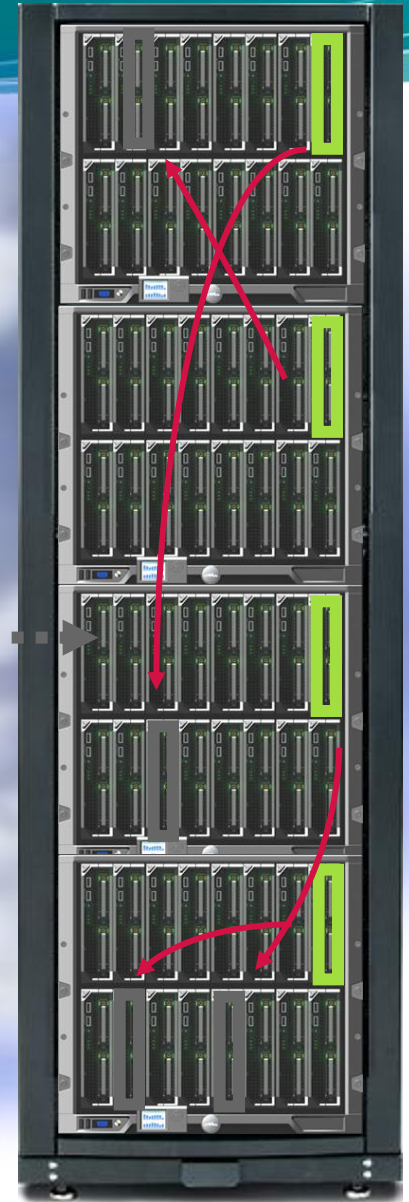
© Scott Adams, Inc./Dist. by UFS, Inc.

Cloud para Desktop Virtual



Portal Auto Servicio

La PC es generada en el Datacenter con la performance que se requiera y está siempre disponible.



Unisys SPC + vBlock

vmware

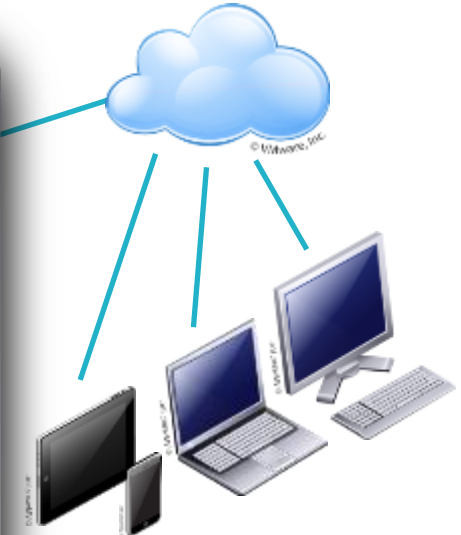
Virtualization



Unified Computing
Network

EMC²

Storage



Ecológicamente Correcto



UNISYS

Stealth Solutions

Repensando los mecanismos de aislamiento de redes

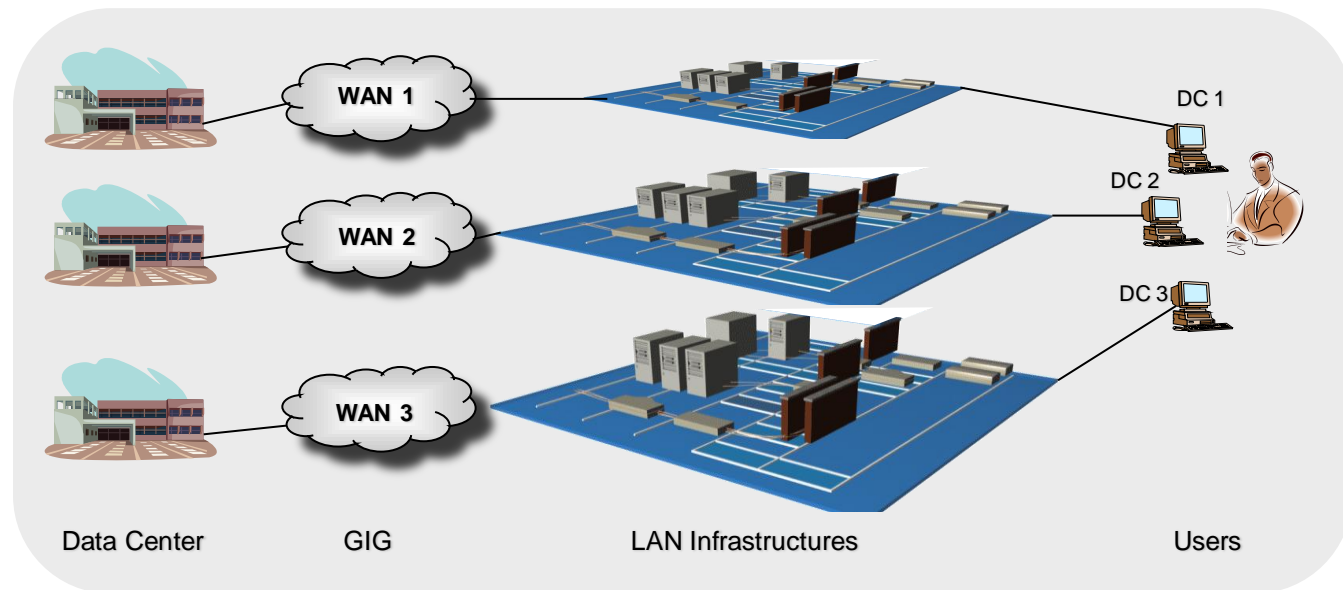


Stealth

Como surgió ?

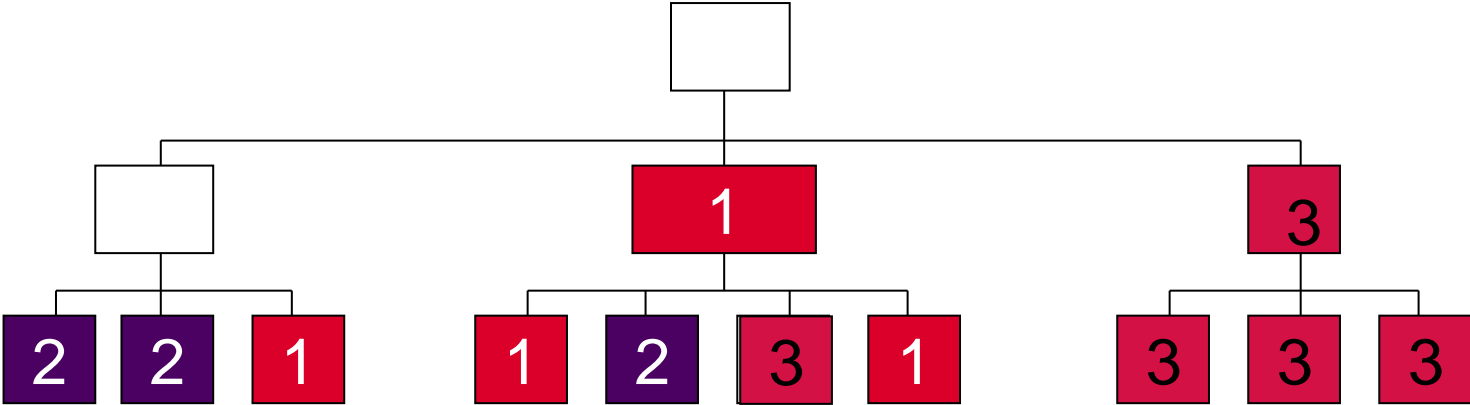
Múltiples Redes

- Complejidad
- Costo



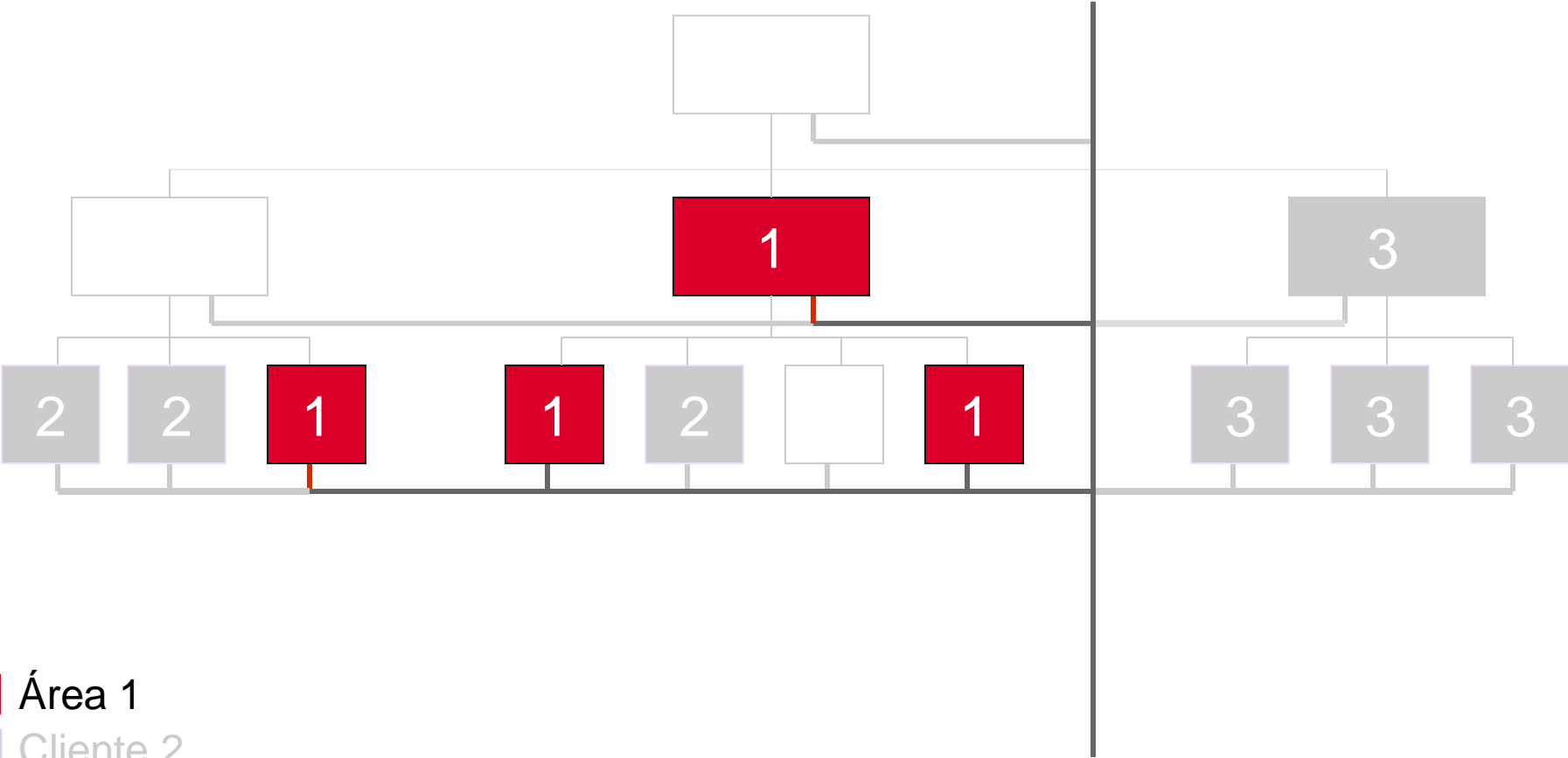
Como simplificar ?

Comunidad de Interes - COI



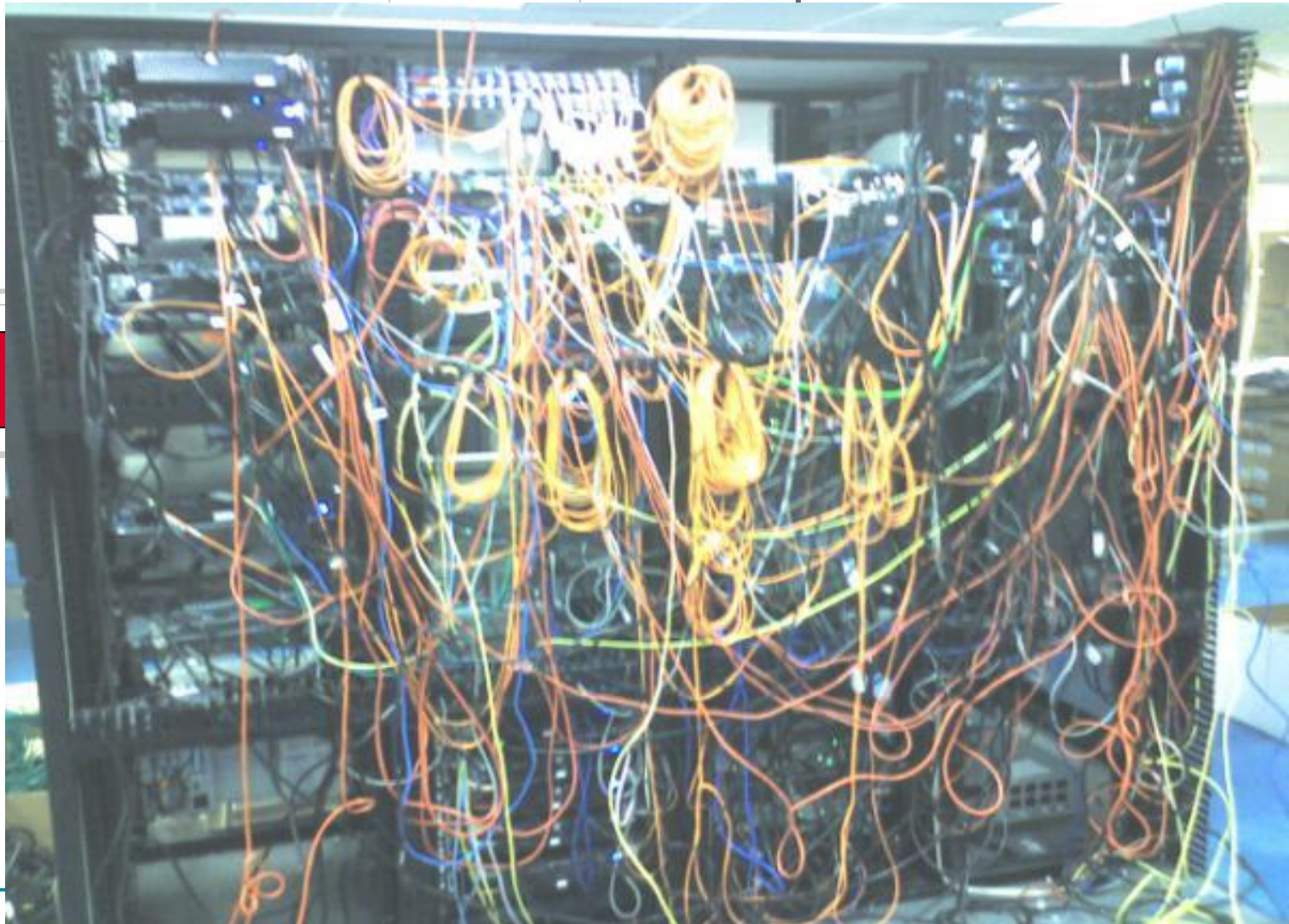
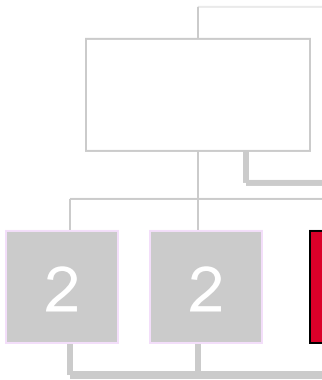
- Área 1
- Área 2
- Área 3

Stealth Mode



- Área 1
- Cliente 2
- Cliente 3

Stealth Mode



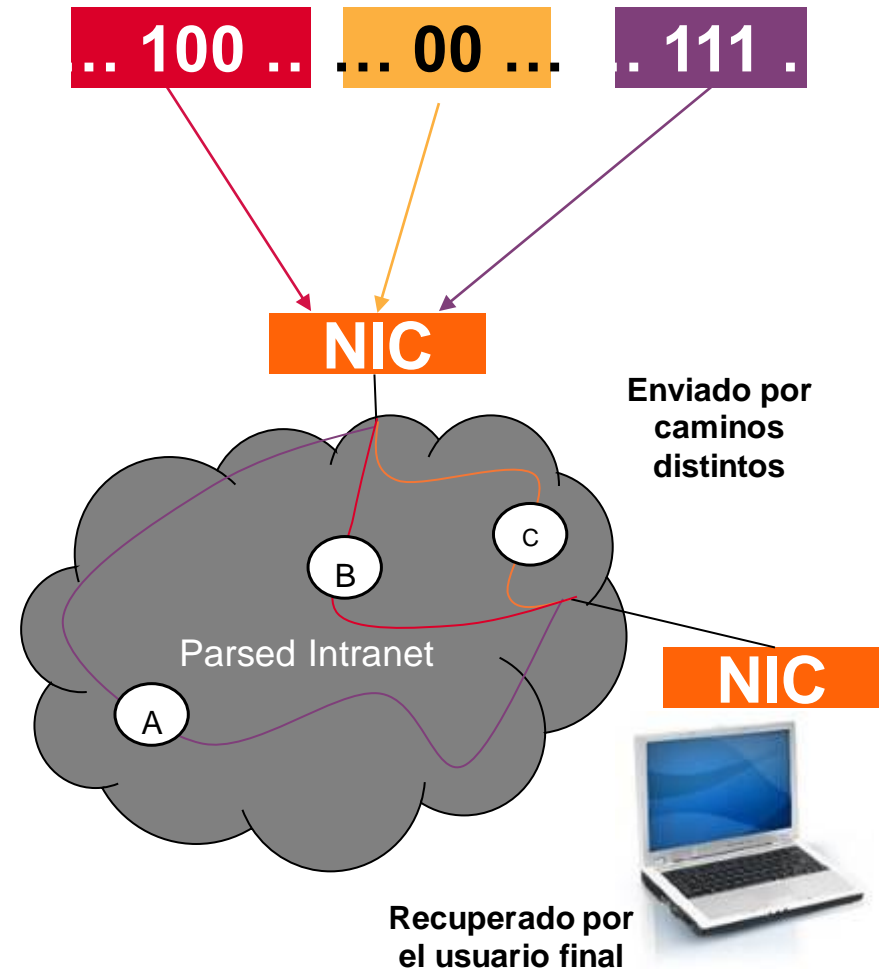
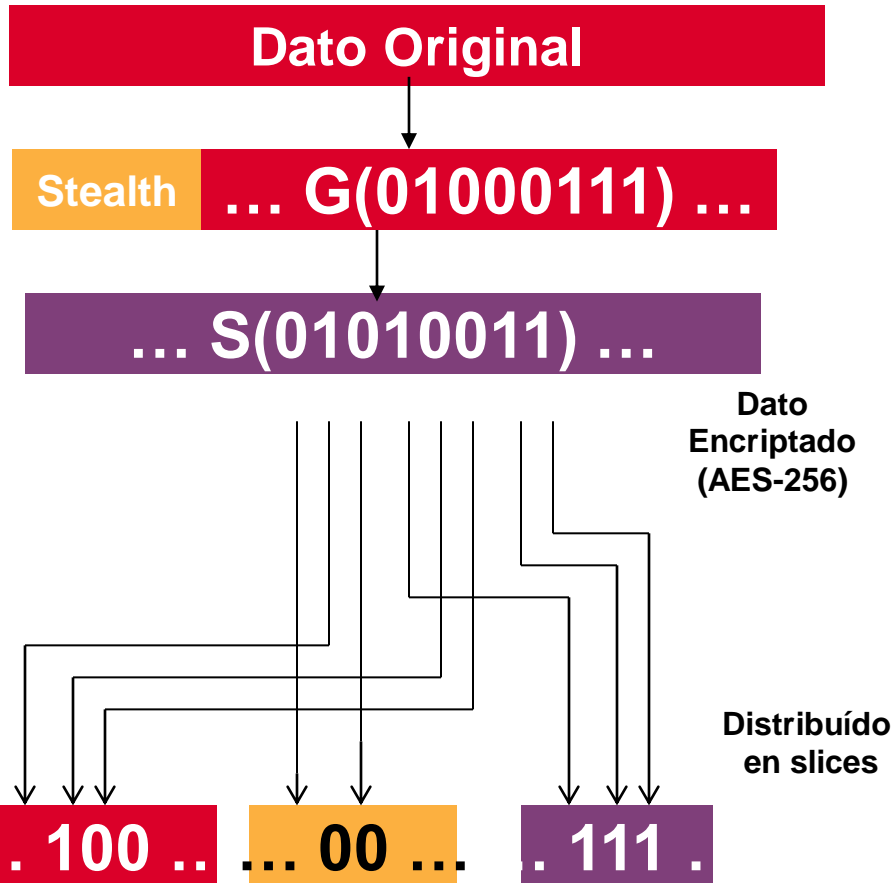
- Área 1
- Cliente 2
- Cliente 3

Stealth Mode



- Área 1
- Cliente 2
- Cliente 3

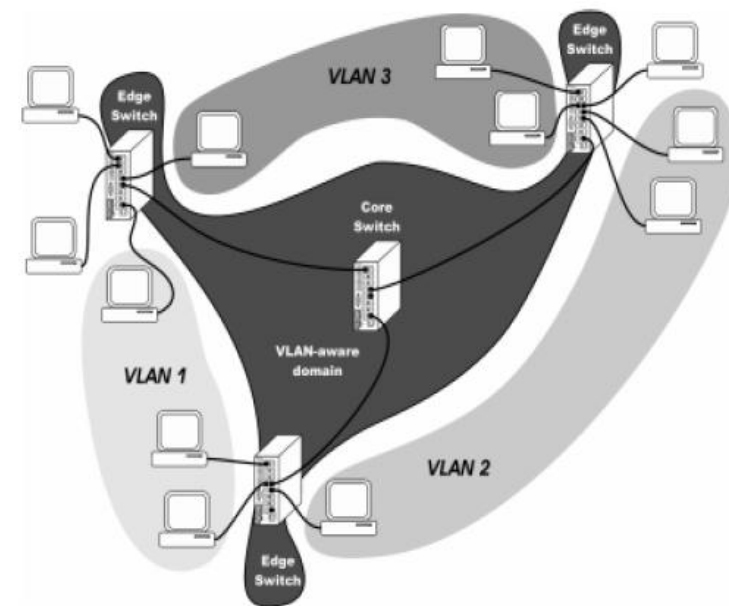
MLSTP – Multi Level Security Tunneling Protocol



Aislamiento de redes y gestión de accesos

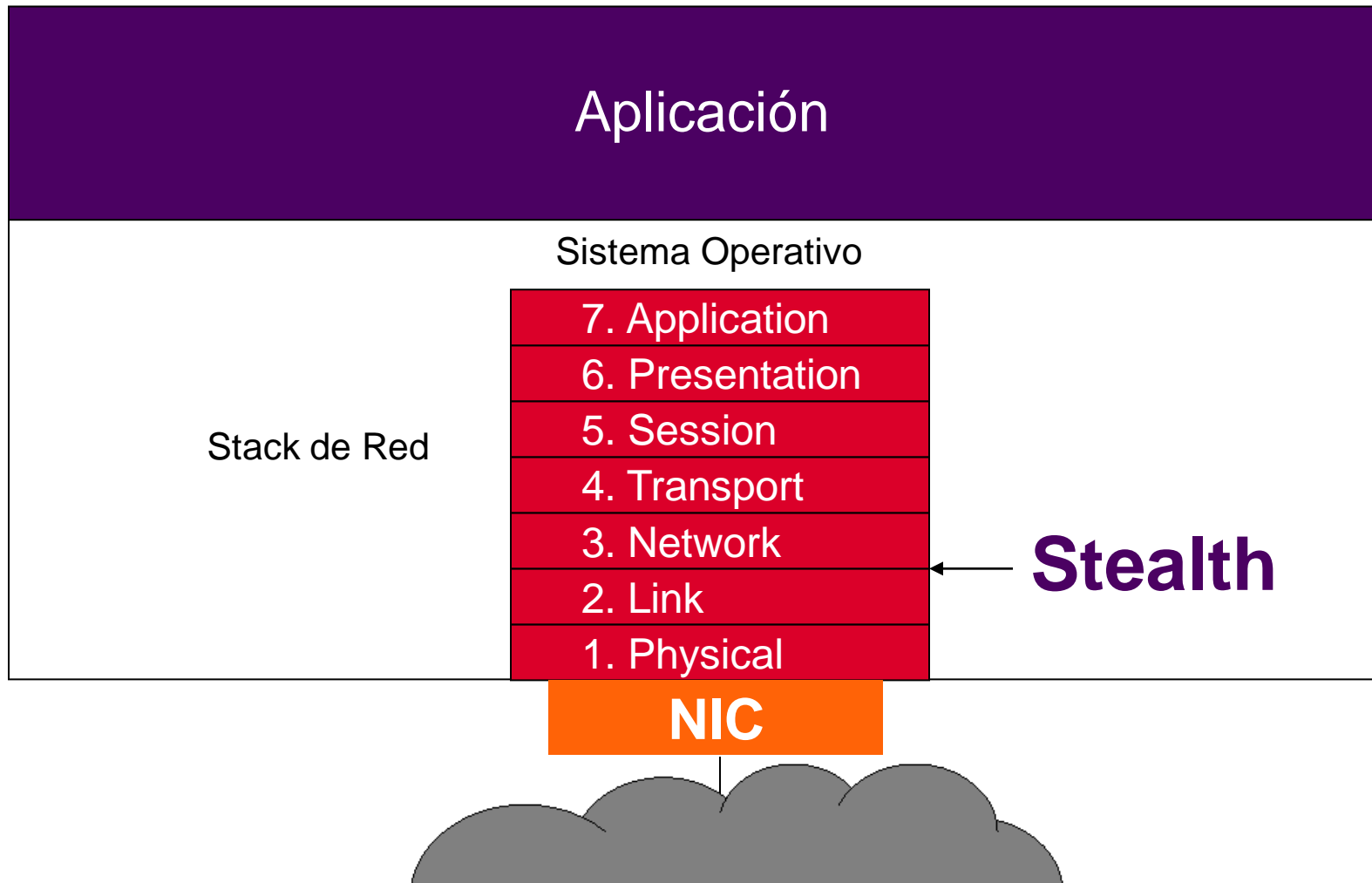
Considerando:

- ✓ Reglas de Seguridad
- ✓ Múltiples Redes
- ✓ Soluciones de VPN
- ✓ Múltiples tablas de Rutas
- ✓ Múltiples reglas de Firewall
- ✓ NATs, PATs, DMZs

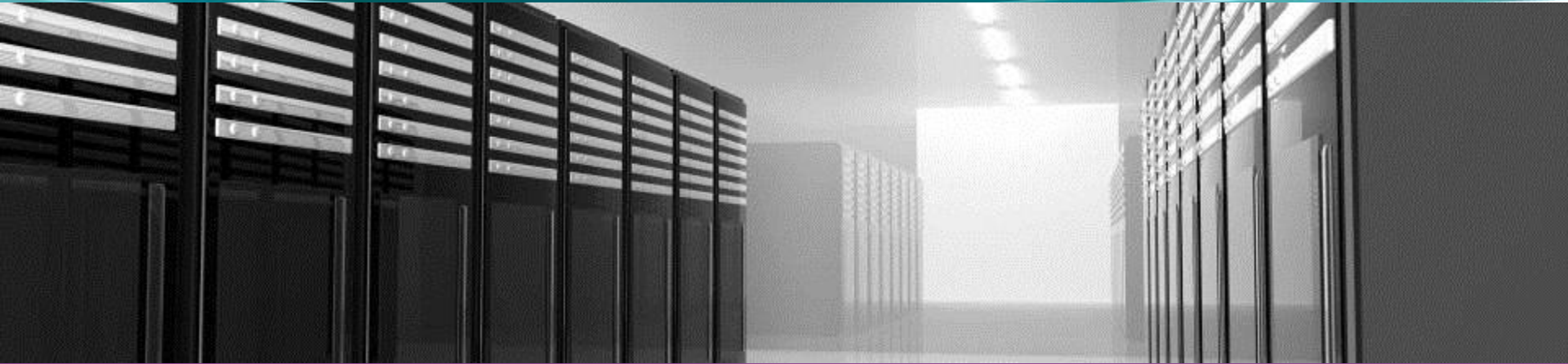


Stealth:

Antes del Sistema Operativo = Bajo impacto para adopción



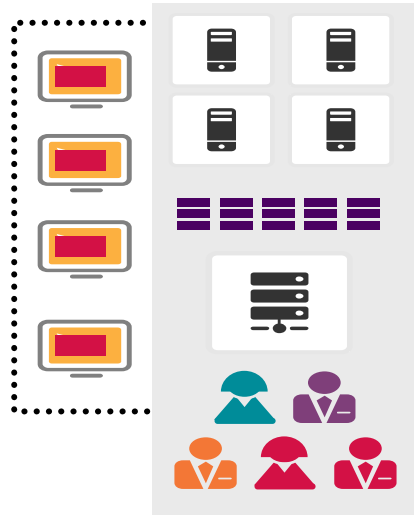
Unisys Stealth Data Protection Solutions



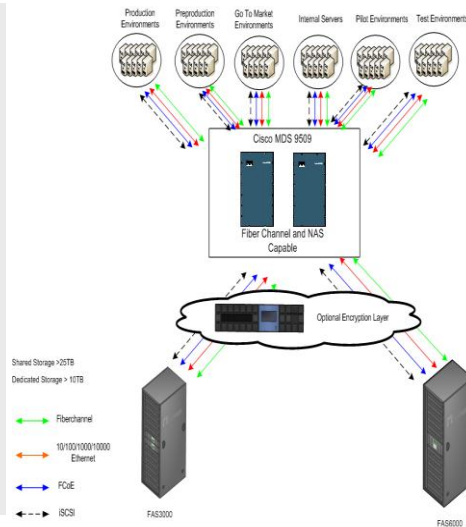
Compute Infrastructure



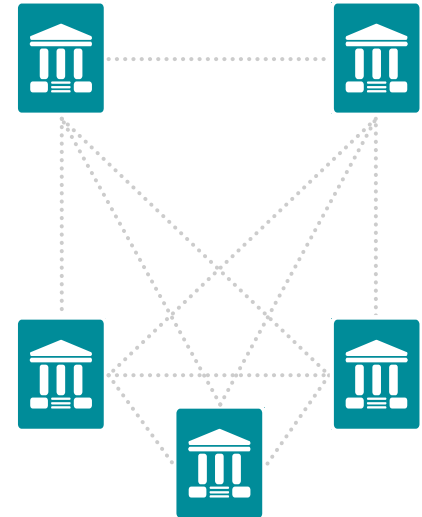
End-User Infrastructure



Storage Infrastructure

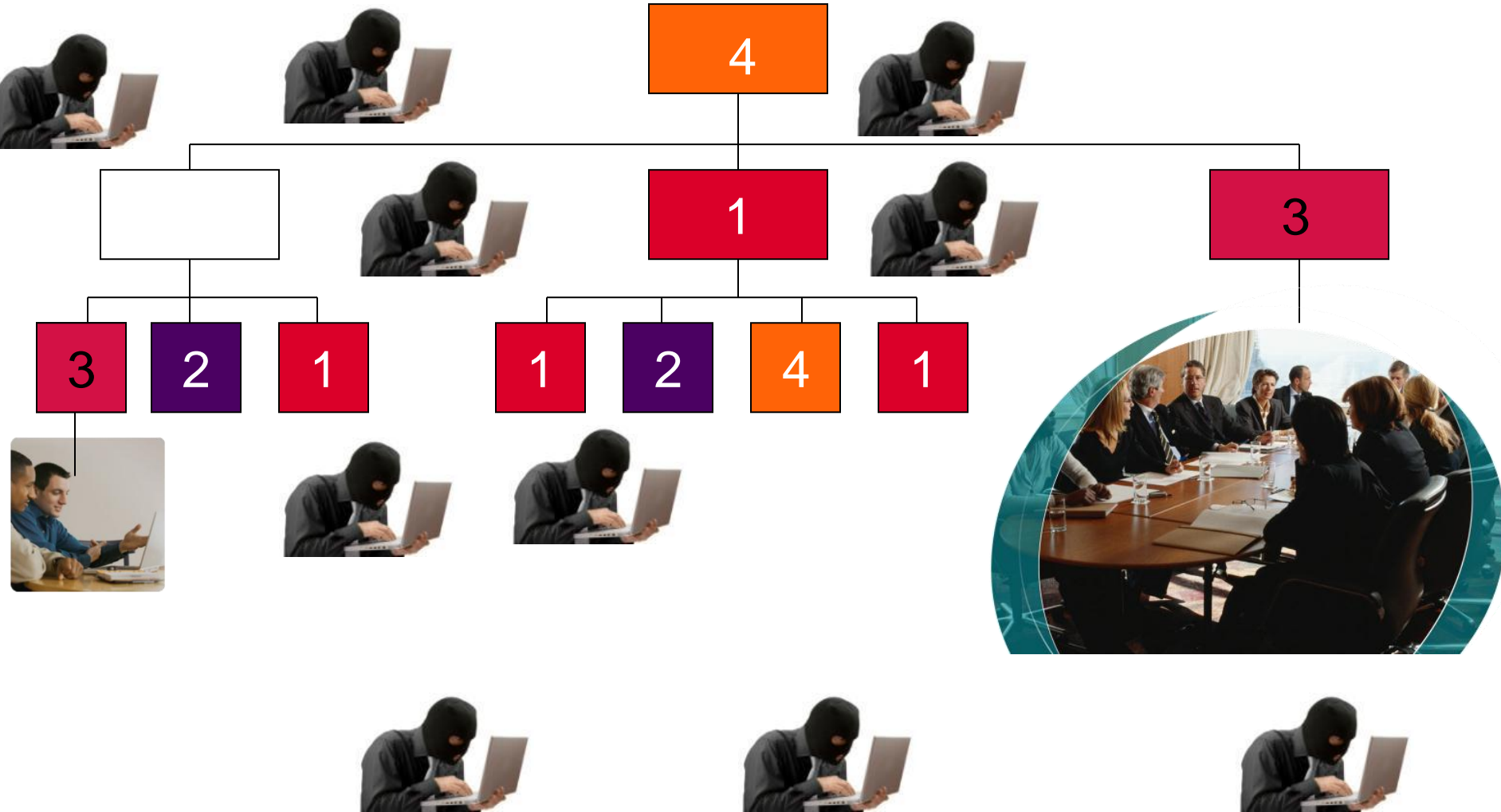


Network Infrastructure

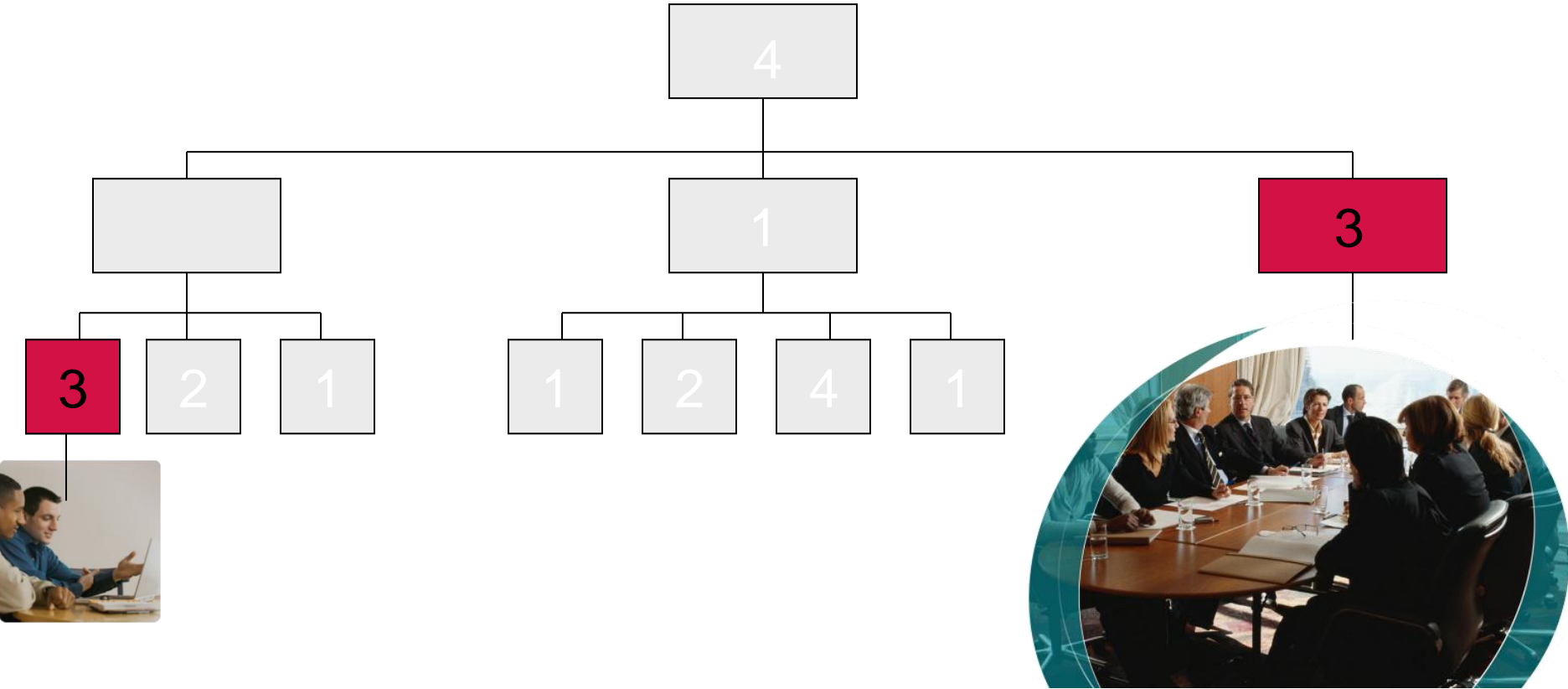


← **Stealth Solution Data Protection** →

Proteja sus ejecutivos



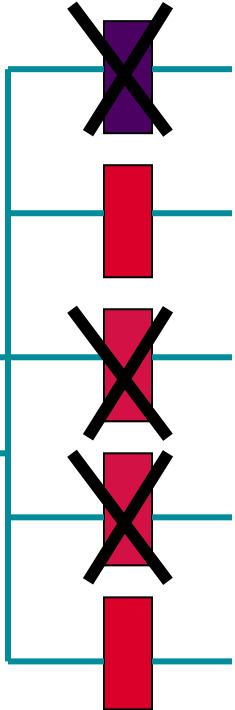
Proteja sus ejecutivos



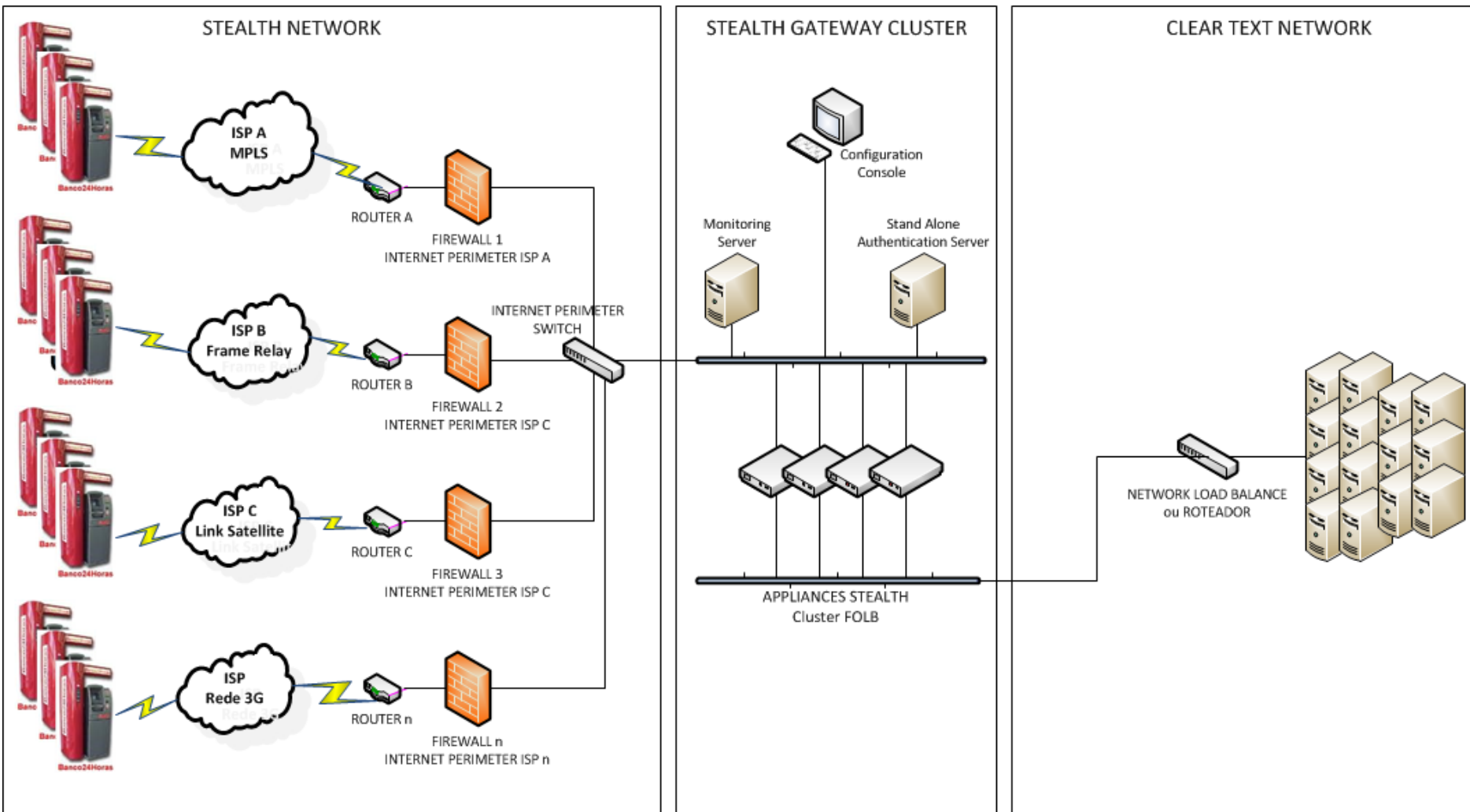
Proteja sus Servidores de misión crítica



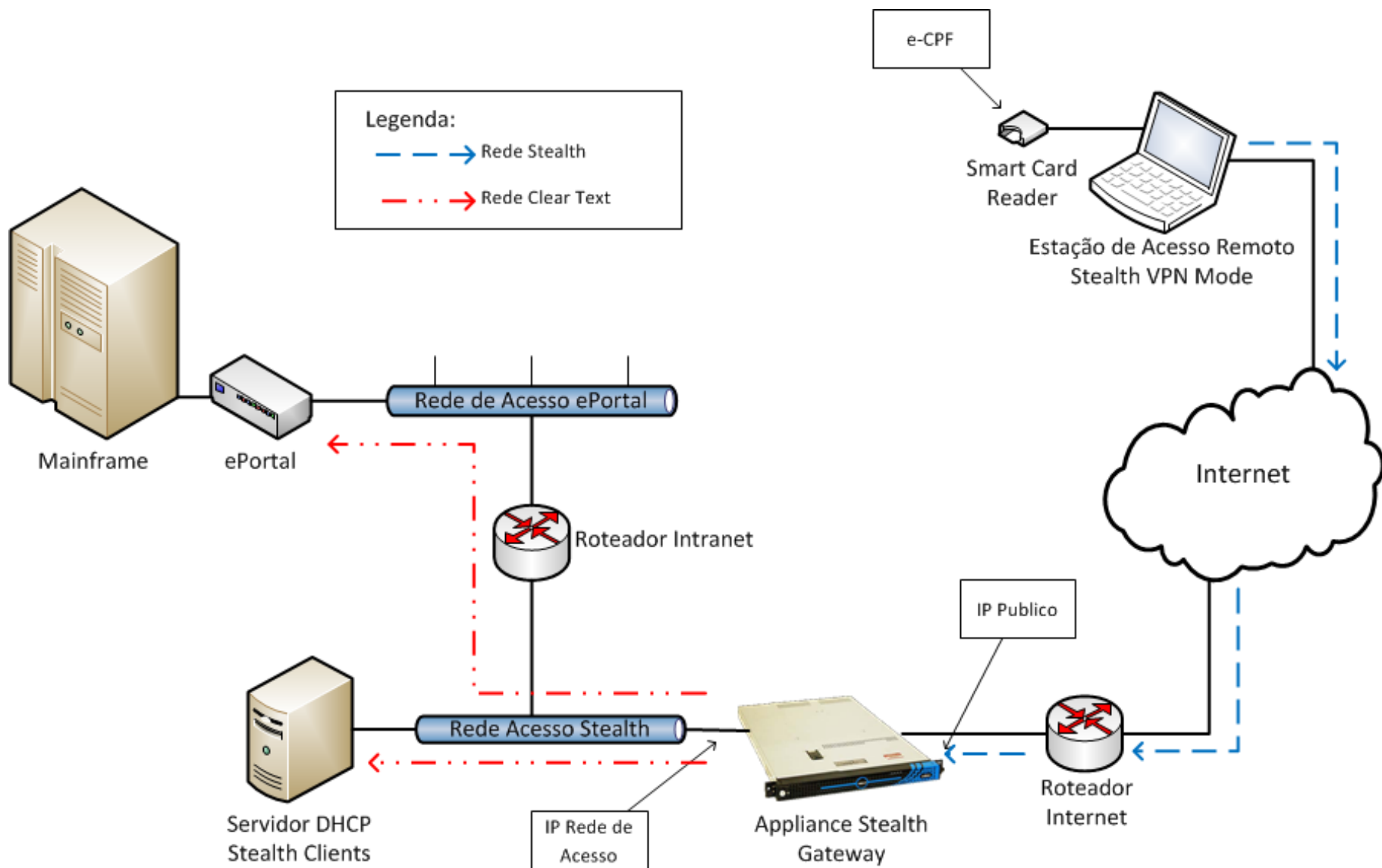
Stealth Appliances



Proyecto Stealth para ATMs



Garantizando seguridad y rastreabilidad a través de Certificados



Stealth Secure Virtual Terminal (SSVT)



Coast Guard buys Unisys solution to protect sensitive data for mobile workers

- Wed, 2012-01-11 11:13 AM The U.S. Coast Guard recently purchased 100 units of the [Unisys](#) *Stealth Solution for Secure Virtual Terminal (SSVT)* which allows mobile workers to securely access agency networks and data while traveling and between deployments.



- The Unisys SSVT can help keep a mobile user's data secure and readily available only to those authorized to view the data. SSVT combines the power of Unisys Stealth Solution for Network with a customized, dedicated and portable federal government-certified USB device. Users plug the SSVT unit into the USB ports of their laptops or mobile devices to securely boot-up and establish network connections with an enterprise network.

Stealth to Shield Australian Defence Systems

- [Thales' Australia division](#) is part of a global conglomerate that serves the defense, aerospace and space, security, and transportation markets.
- The engagement focuses on securing the virtual desktop infrastructure (VDI) of Australian Defence's Special Project Coordination Office
- [Unisys currently supports](#) more than 100,000 desktop computers at 460 Defence bases in 12 regions across Australia.
- The Unisys solution will compartmentalize the virtual network space through enhanced security methodologies and technologies. Stealth will then control who can log into each compartment, and ensure they can access only the relevant file server and storage.



CWID

Naval Surface Warfare Center : ...Stealth ha demostrado proteger sin fallas el acceso a datos por usuarios no autorizados. Una vez que uno esta asignado a una comunidad de seguridad el usuario recibe sus certificados. Basado en estos certificados el usuario obtiene acceso a drives, carpetas de red y servidores. Sin el certificado adecuado, stealth oculta todos los dispositivos de usuarios o administradores

<http://www.cwid.org/2010%20Final%20Report/htmlfiles/749ia.html>

Hertz New Zealand Unisys Stealth Solution

Problema:

Hertz Nueva Zelandia tiene más de 40 sucursales y sus sistemas de reservaciones operando 24-horas al día. La gran mayoría de sus clientes utilizan tarjetas de crédito para el pago y Hertz necesitaba cumplir con la norma Payment Card Industry Data Security Standard (PCI DSS) – desarrollada para prevención de fraudes y aumentar el control de acceso a datos

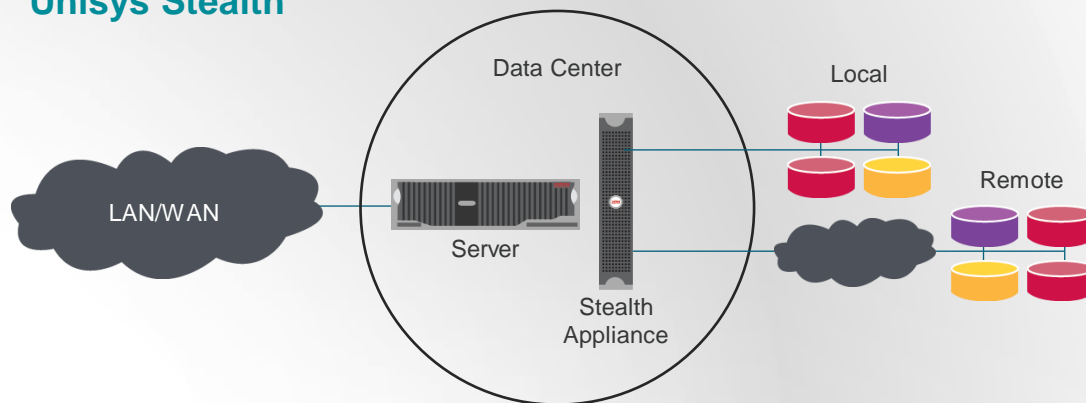


Resultados:

- Alcanzado el deadline para estar en conformidad con la norma Payment Card Industry (PCI) Data Security Standard (DSS)
- “If you can’t be seen, you can’t be hacked” – Stealth differs from traditional network management schemes by enabling changes to the network through the Identity Management System, and not risky physical changes to infrastructure assets”

Solução:

Unisys Stealth



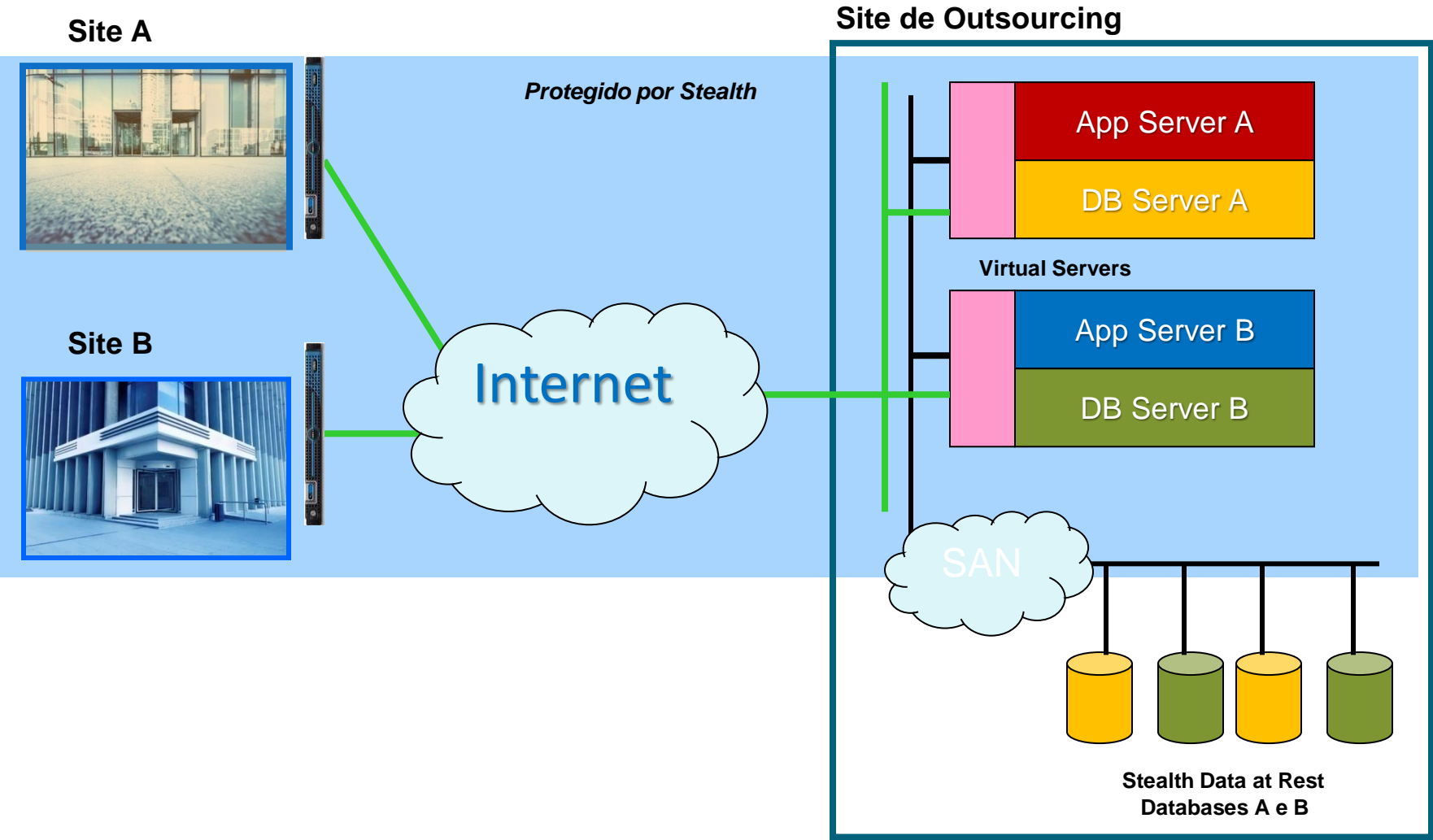
Stealth Solutions

Hay muchos casos de uso para Stealth!

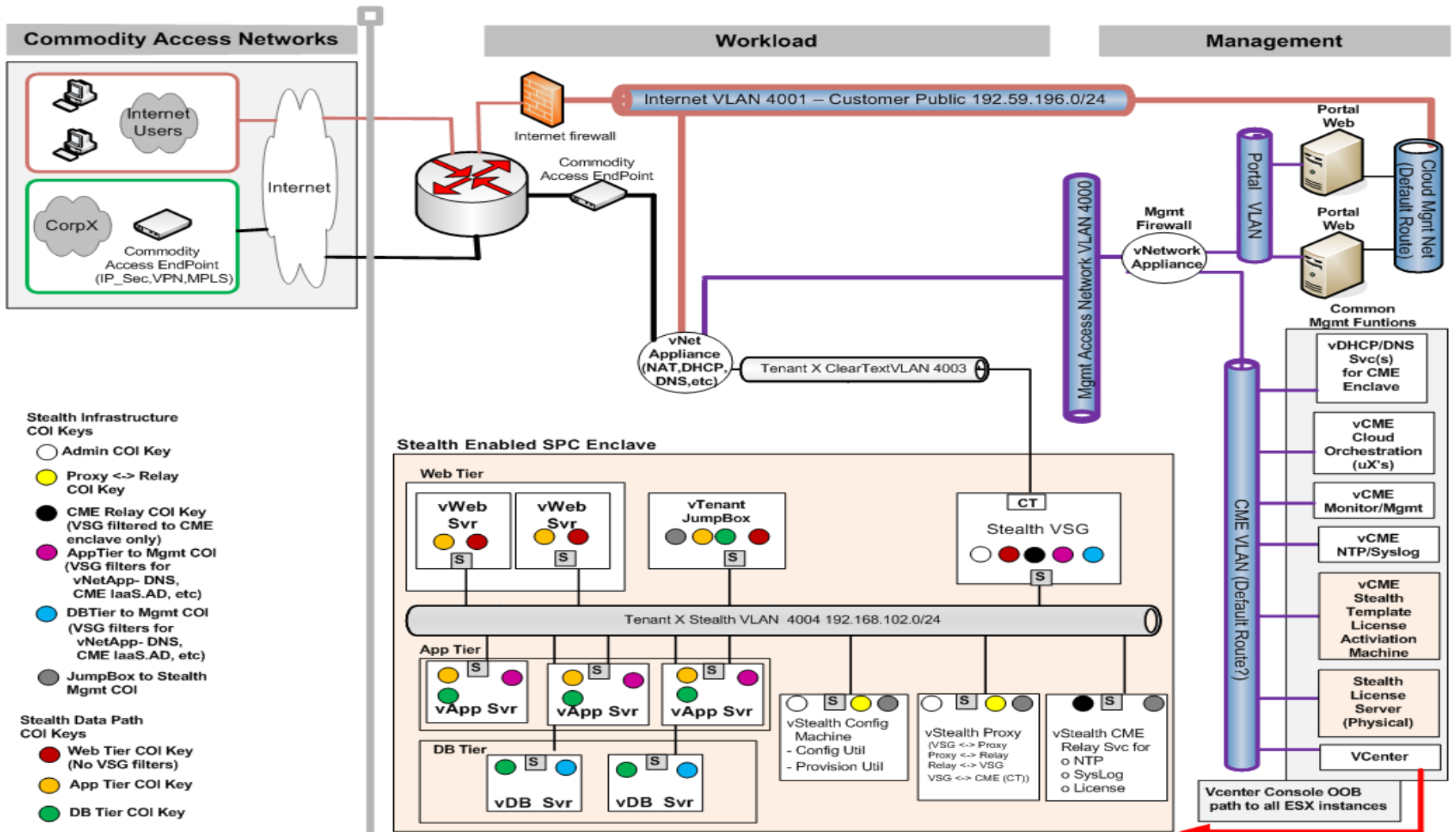
Escenarios

- Payment Card Industry
- Secure Private Cloud and Outsourcing (data separation)
- Network Consolidation
- Home and remote TeleWorkers
- First Responders Emergency Communications
- Development and Test environment isolation
- Anti-Phishing/Malware for Banking
- Point of Sale, ATMs, or Self-Service Kiosks
- Securing CCTV and video surveillance storage
- Supervisory Control and Data Acquisition (SCADA)
- Navigation systems isolation
- High Value Data Enclaves for Mobile Enablement

Stealth y SPC



Stealthy SPC





Unisys Secure Private Cloud y Stealth

UNISYS

UNISYS

Gracias !!