



Securing the private cloud



Gary Gardiner
Security Engineer

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Top Trends of 2011



1	Virtualization & Cloud Computing
2	IT Consumerization
3	Threat Landscape
4	Consolidation & Complexity
5	Data Security and Loss
6	Web 2.0 & Social Media
7	Governance, Risk & Compliance (GRC)
8	Cost Reduction
9	Green IT



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2011 Security Trends

Virtualization & Cloud Computing

On Data Center Consolidation



Private cloud¹

28% have one | 30% plan one



CIOs will virtualize 55% of production servers next year, up from 42% this year²

¹ Information Week, June 2010

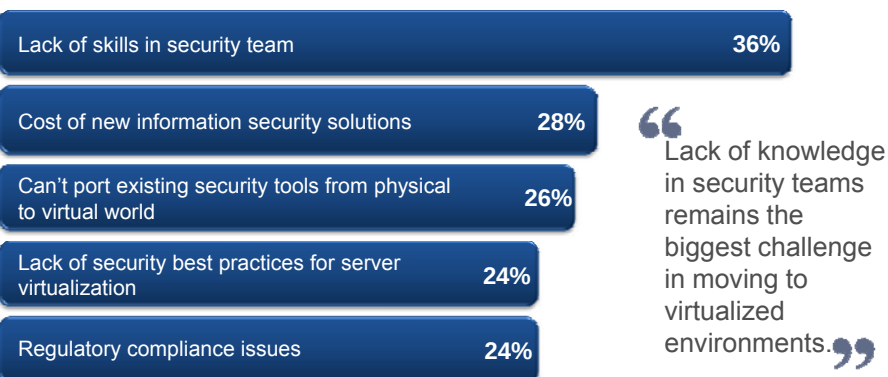
² Morgan Stanley, June 2010

Enterprise Virtualization Initiatives



Top Security Challenges for Server Virtualization

What are the biggest security challenges preventing server virtualization in your enterprise?



Enterprise Strategy Group
2010 Survey of enterprise decision makers



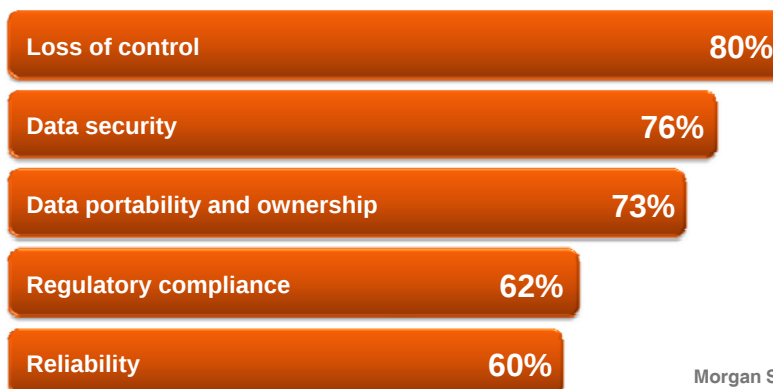
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On Cloud Computing



Top concerns with private clouds

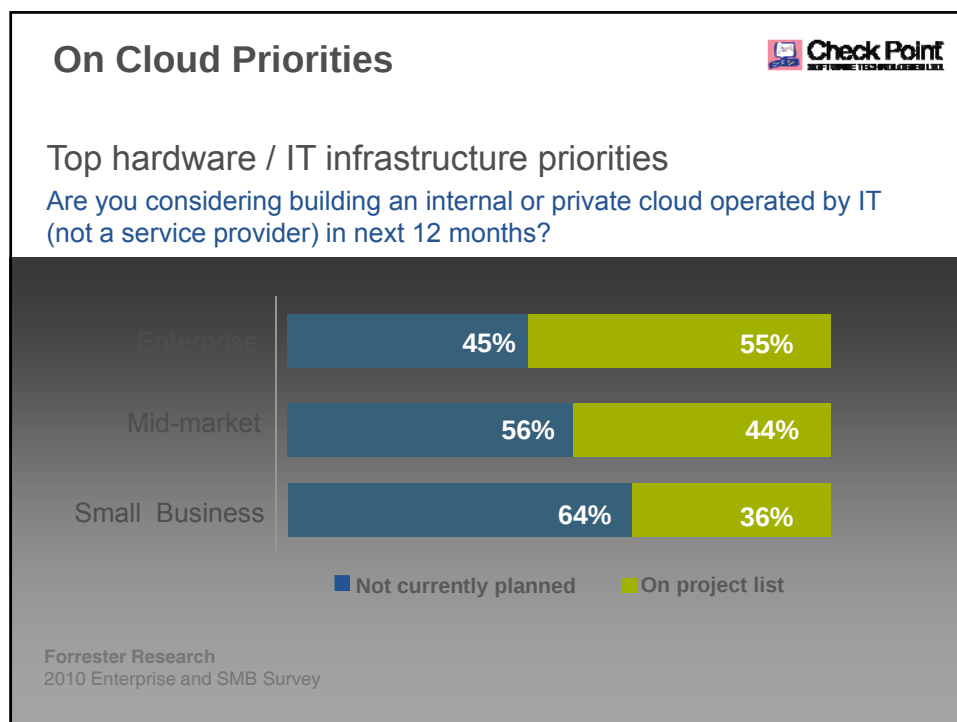
What are your greatest concerns about deploying and managing them?



Morgan Stanley
2010 CIO Cloud Survey



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2011 Security Trends

8 Cost Reduction

On Cost Reduction and Doing More with Less



“CIOs I’ve talked to expect dramatic >30% cuts in infrastructure and operations costs.”



Mark McDonald
Group Vice President, Gartner
November 2010



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2011 Security Trends

9 Green IT



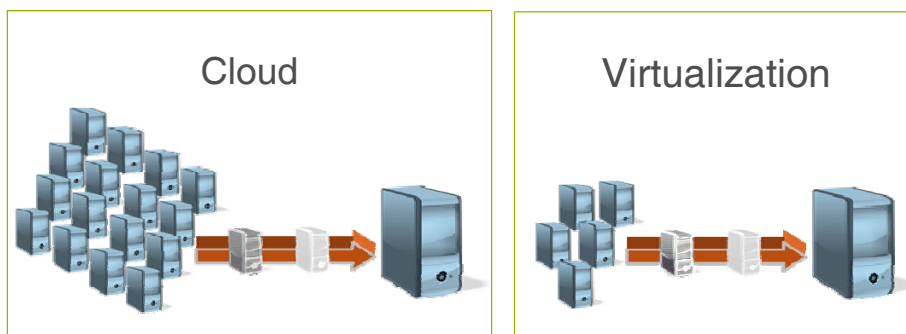
Gartner's top strategic technologies for 2011

- 1 Cloud Computing**
- 2 Mobile Applications and Media Tablets**
- 3 Web 2.0 Social Technologies and Communications**

Virtualization vs. Cloud

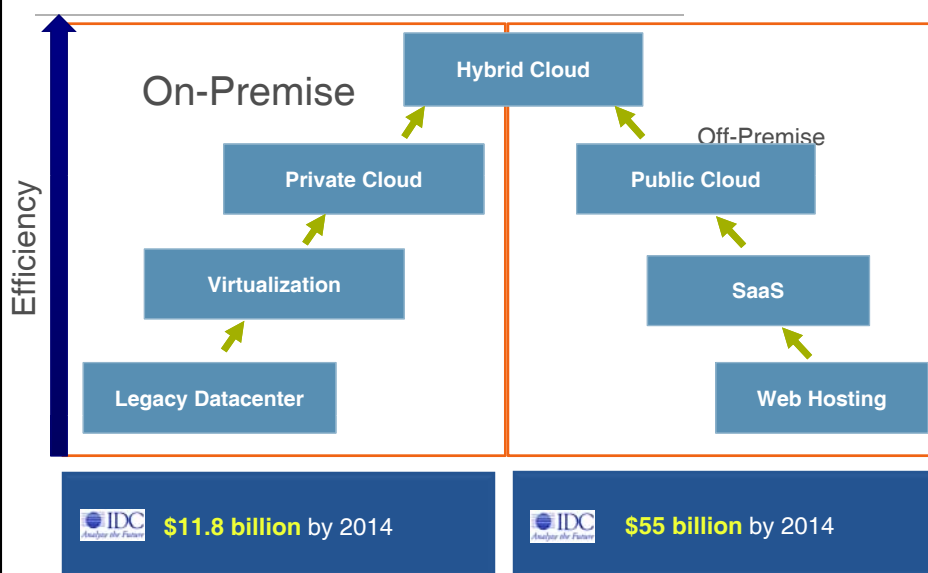


Virtualizing efficiency is good
But Cloud efficiency **is much better!**



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The Cloud Evolution

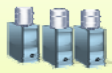


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Moving to Private Cloud

Legacy Datacenter



CorpNet	DMZ	Extranet
		
		

1:1 Server per Application

1:10 Security Zone (VLANs) per Server

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Moving to Private Cloud

Application Virtualization



CorpNet	DMZ	Extranet
		
		

1:5 Server per Application

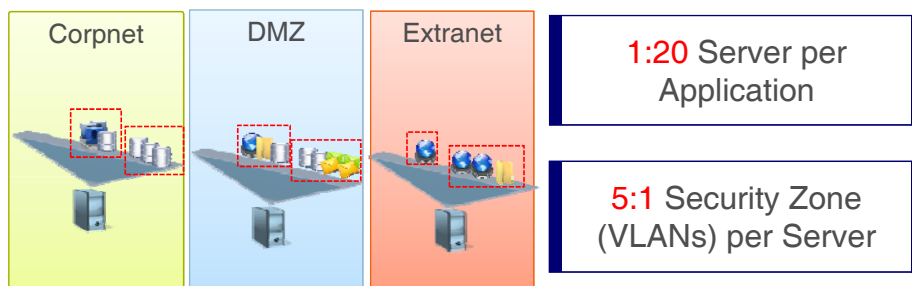
1:1 Security Zone (VLANs) per Server

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Moving to Private Cloud



Networks Virtualization

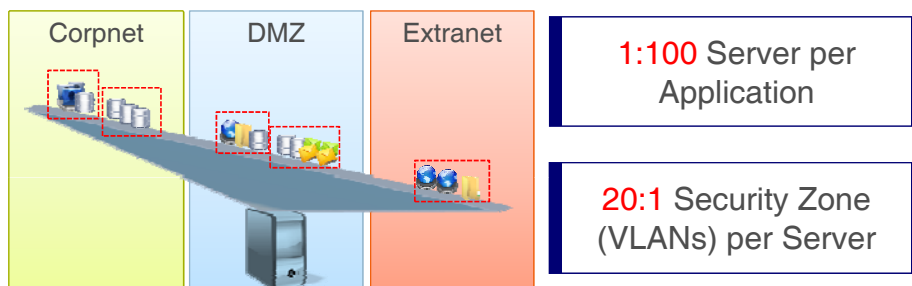


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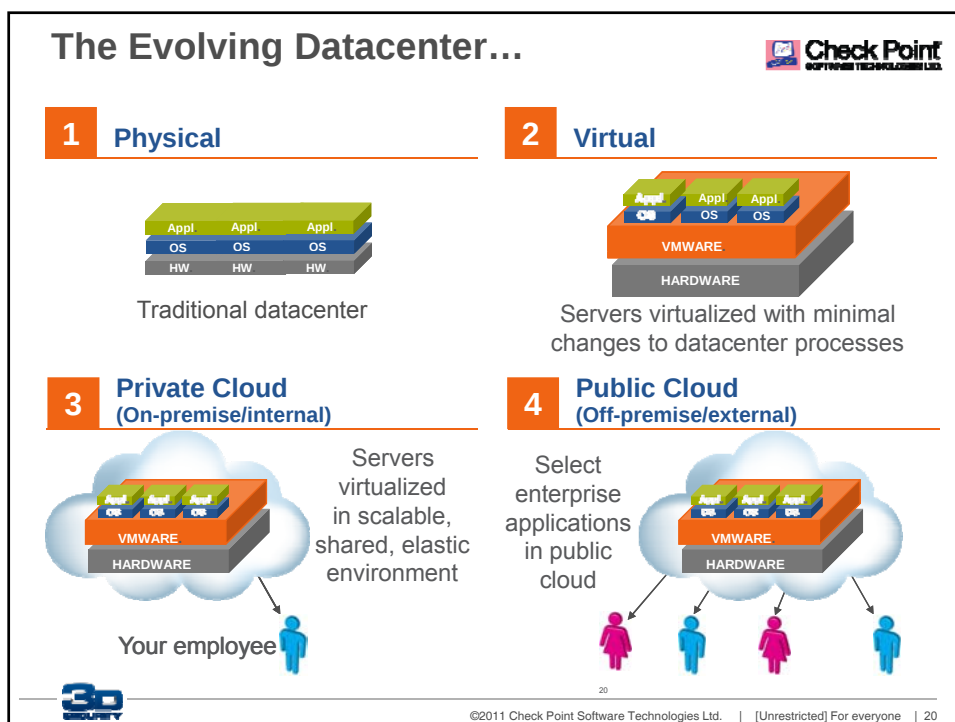
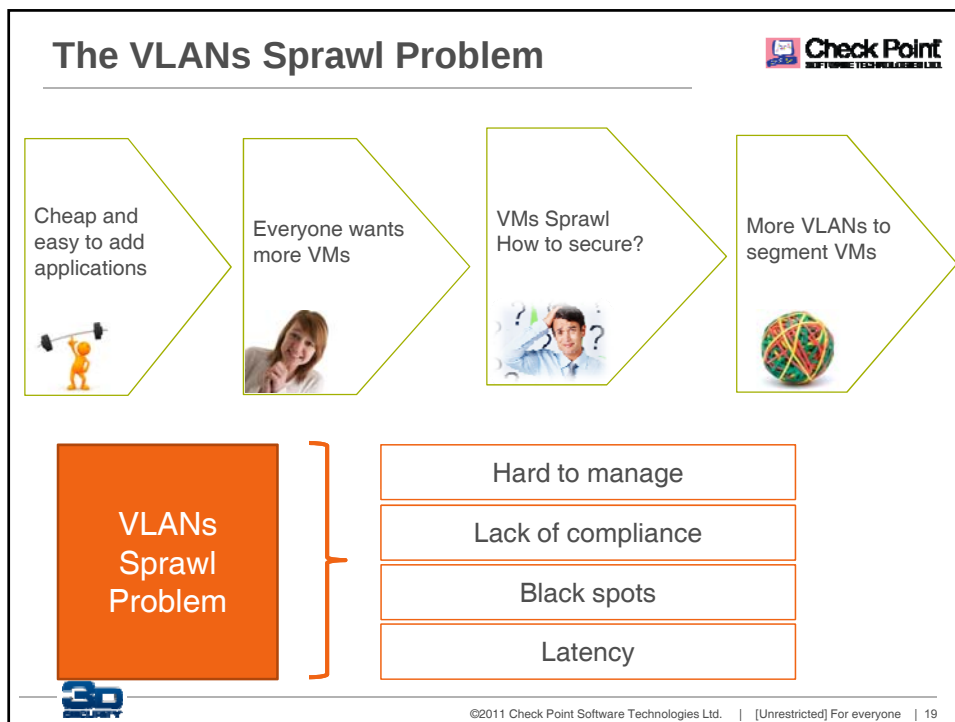
Moving to Private Cloud



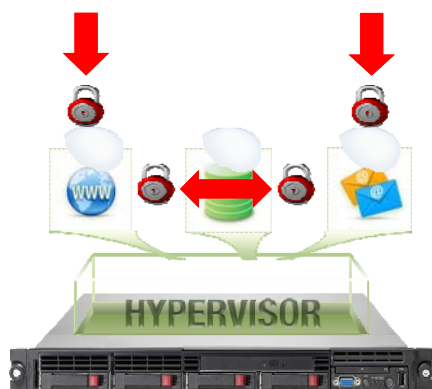
Datacenter Consolidation



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Private Cloud - Security Needs



Protection from external threats

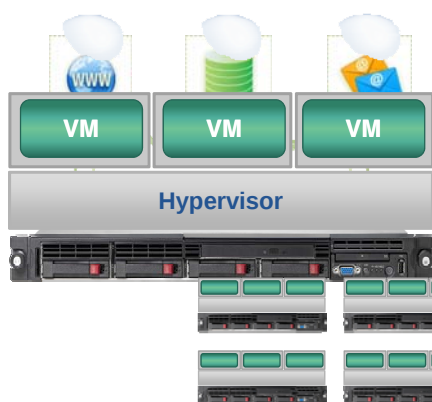
Inspect traffic between
Virtual Machines (VMs)

Secure new Virtual Machines
automatically



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Private Cloud - Security Needs



Protection from external threats

Inspect traffic between
Virtual Machines (VMs)

Secure new Virtual Machines
automatically



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Private Cloud - Security Needs



Protection from external threats

Inspect traffic between
Virtual Machines (VMs)

Secure new Virtual Machines
automatically

Ensure Security in dynamic
environment



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Introducing Check Point Security Gateway Virtual Edition (VE)



Check Point Secures the Private Cloud

Check Point
Security Gateway
Virtual Edition



Starting at
\$2,000

Best Virtual Security Gateway

Securing the Virtual Machines

Unified Management for
Physical and Virtual

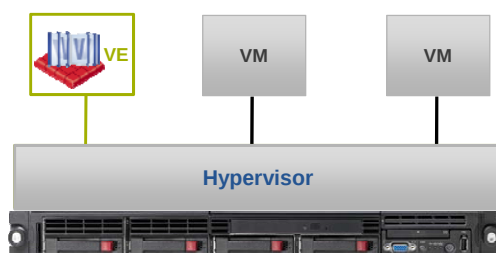


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Secure the Virtual Infrastructure



Protects Virtual Machines



- ▶ Hypervisor security
- ▶ Certified by VMWare
- ▶ Audit virtualization system



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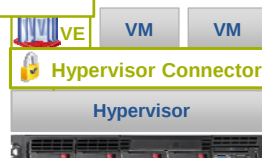
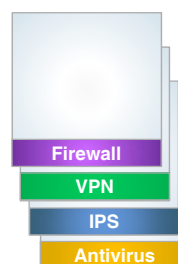
Virtual Edition Features



Best Security

- ▶ All Software Blades
- ▶ Flexible Security

Check Point
Security Gateway
Virtual Edition (VE)



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Virtual Edition Features

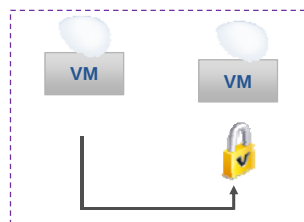


Best Security

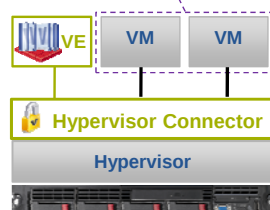
- ▶ All Software Blades
- ▶ Flexible Security

VMs Protection

- ▶ Securing New VMs Automatically
- ▶ Secure Dynamic Environment



Inspecting Inter-VM Traffic



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Virtual Edition Features

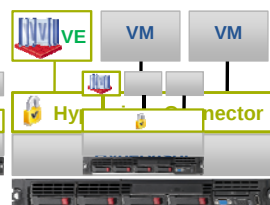
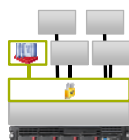


Best Security

- ▶ All Software Blades
- ▶ Flexible security

VMs Protection

- ▶ Securing New VMs Automatically
- ▶ Secure Dynamic Environment



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Virtual Edition Features

Check Point
SOFTWARE TECHNOLOGIES LTD.

Best Security	VMs Protection	Unified Management
▶ All Software Blades ▶ Flexible security	▶ Securing New VMs Automatically ▶ Secure Dynamic Environment	▶ Same management for Physical and Virtual ▶ Virtualize the Management

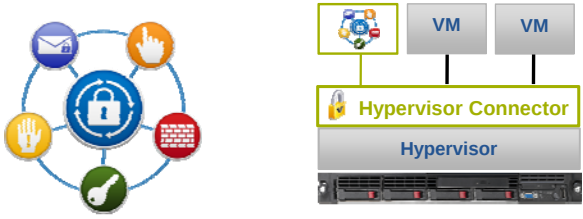


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Virtual Edition Features

Check Point
SOFTWARE TECHNOLOGIES LTD.

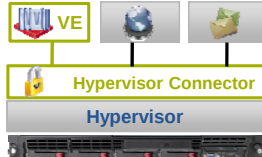
Best Security	VMs Protection	Unified Management
▶ All Software Blades ▶ Flexible security	▶ Securing New VMs Automatically ▶ Secure Dynamic Environment	▶ Same management for Physical and Virtual ▶ Virtualize the Management



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Virtualized Security Scenarios





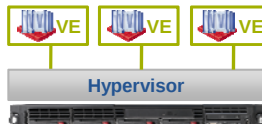
Secure the Virtual Environment

Use **Security Gateway Virtual Edition** to apply granular firewall and IPS policies for inter-VM traffic



Office in a Box

Use **Security Gateway Virtual Edition (VE)** with firewall, IPS, VPN and Software Blade to secure your office networks and assets



Enterprise Security Gateways

Consolidate your Security Gateways deployment into a virtualized environment

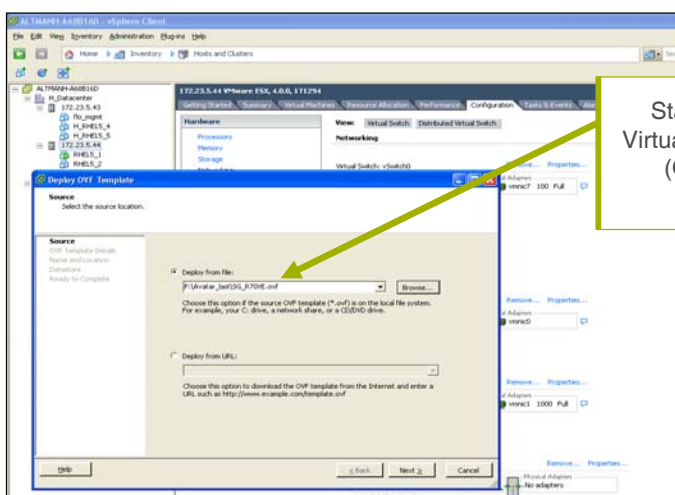


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Easy Deployment



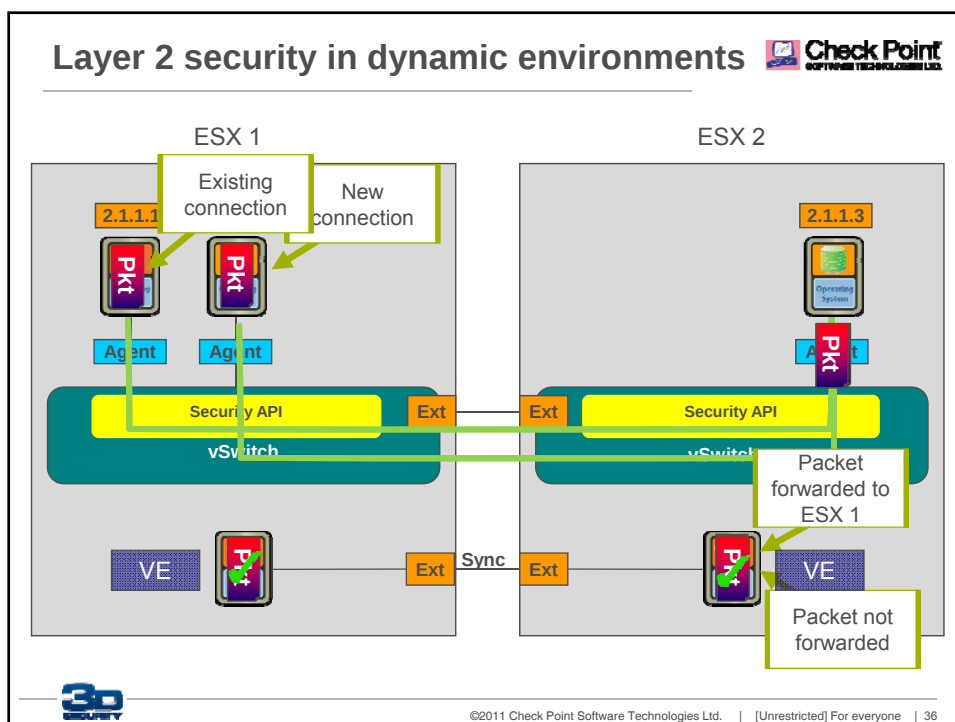
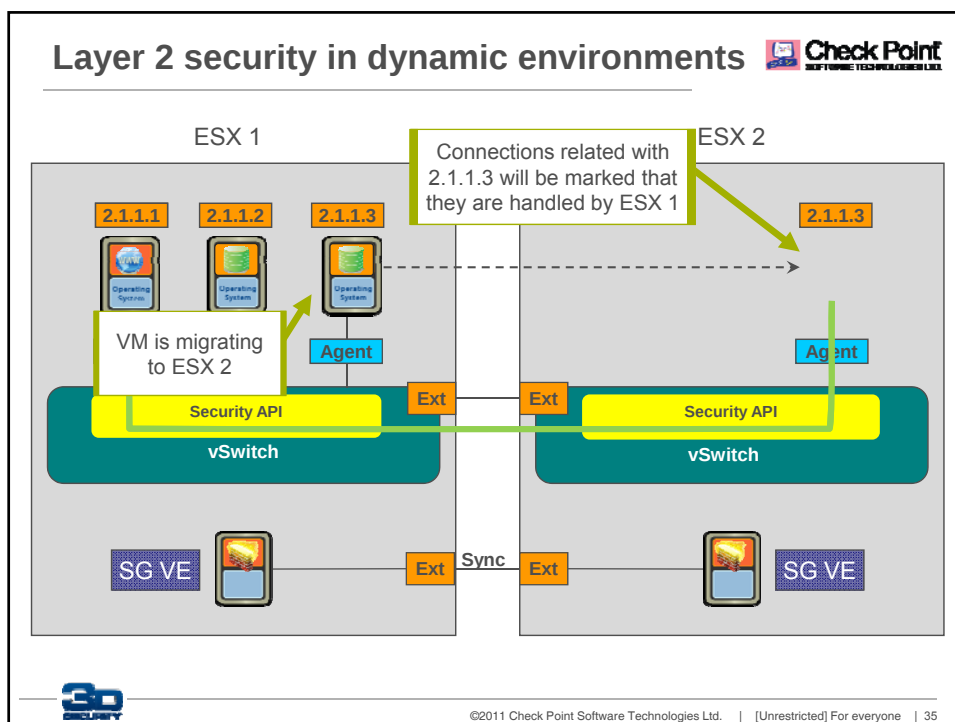
Secure virtual environment by installing a virtual appliance



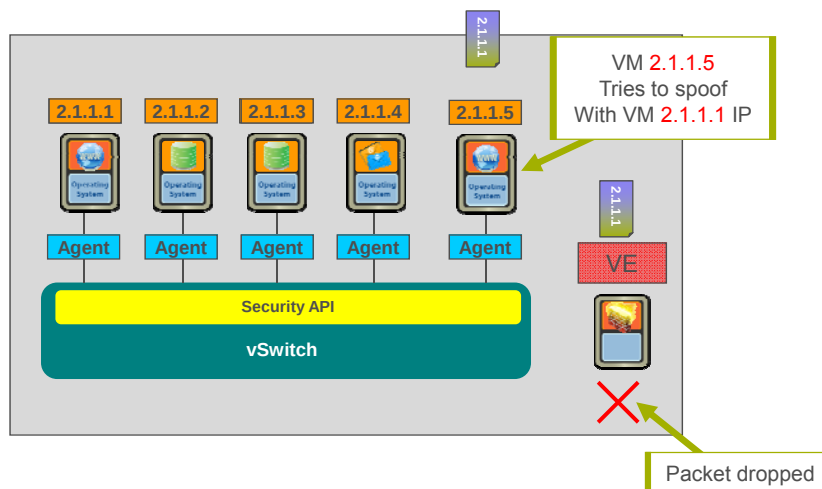
Standard Open Virtualization Format (OVF) virtual appliance



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Anti-spoofing illustration

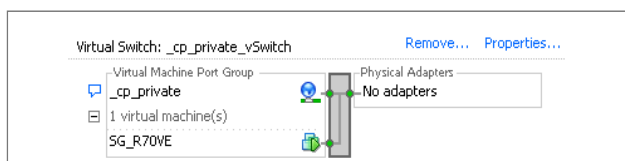


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Deployment - Layer 2 mode



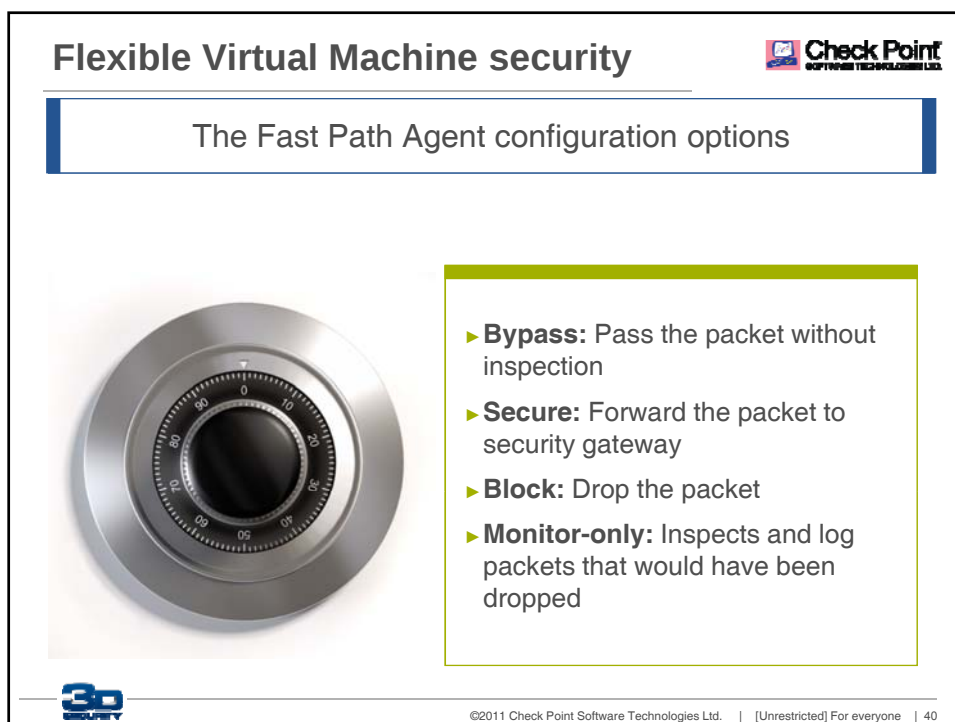
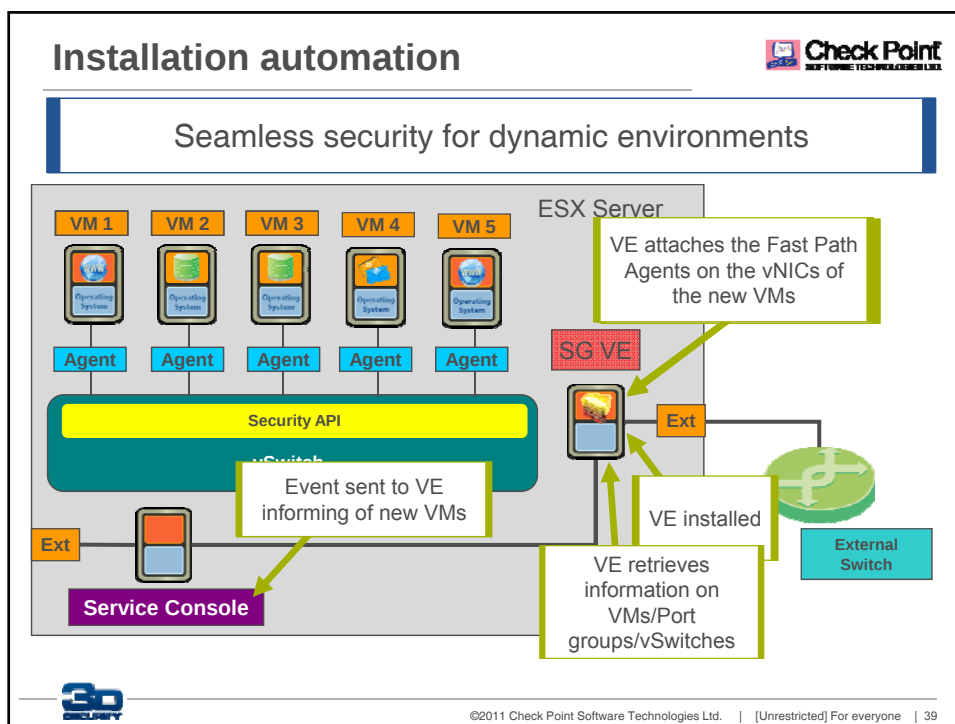
Automatic - No network changes required



- Protects all Virtual Machines on the ESX host
- Attaches fast path agent to all virtual NICs on the ESX host
- Creates new vSwitch named _cp_private_vswitch
- Creates new port group named _cp_private
- Connects Security Gateway VE to _cp_private port group



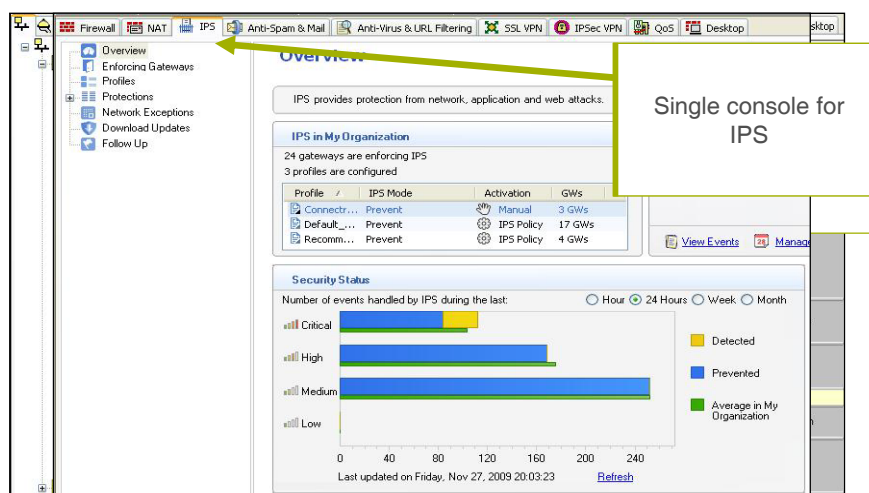
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Single security management



Unified administration of physical and virtualized environments

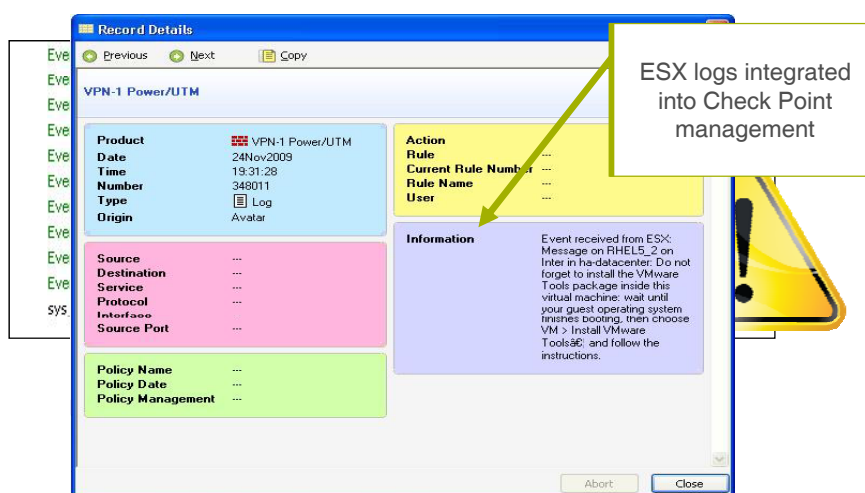


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Integration of ESX logs



Logging and auditing of virtualization events



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Pricelist



Secure Gateway Virtual Edition – Containers

The following products are based on the Software Blades architecture

Security Gateway VE Container	Specifications	Container Price
SGVE4801 	For Security Gateway VE on a Virtual System with up to 48 cores	\$6,000
SGVE1601 	For Security Gateway VE on a Virtual System with up to 16 cores	\$3,000
SGVE801 	For Security Gateway VE on a Virtual System with up to 8 cores	\$2,000

> The Firewall blade is included in the Security Gateway container price
 > Additional software blades can be added separately
 > Gateways are licensed based on number of available physical cores.



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Public Cloud

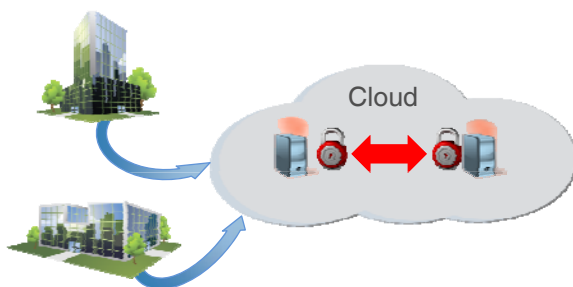


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Cloud Providers – Security Needs



Multitenancy: Servicing Multiple Customers From the Same Environment



Secure
connection to the
Cloud

Security of the
Cloud

Security within
the Cloud

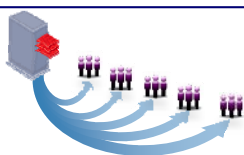


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Check Point Cloud Security



Check Point Secures the Public Clouds



Use **VSX** for secure connectivity with the Public Cloud



Secure VMs and Inter-VMs connection with
Security Gateway Virtual Edition



Offer Multi-tenancy management and customized
policy via **Multi-Domain Management**

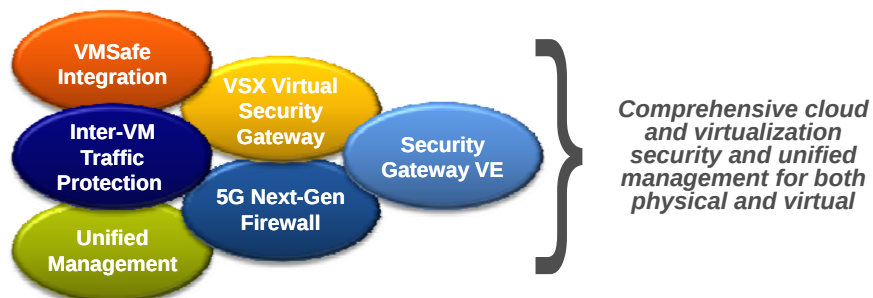


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■ The case for: Cloud Computing and Virtualization



Plug-and-play security for public / private clouds and dynamic virtual environments



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Summary



Check Point Pioneers the Cloud Security



Virtual Security Gateway For Multi-Tenant Cloud Environments

Best Hypervisor security for Virtual Machines

The only solution with unified management for Physical and Virtual



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Cloud Security Alliance





Australian Chapter

Linkedin group
<http://www.linkedin.com/groups?gid=3966724>



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Thank You!