



Check Point VPN-1 VE

Security for your Virtual Systems

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Why Virtualize?

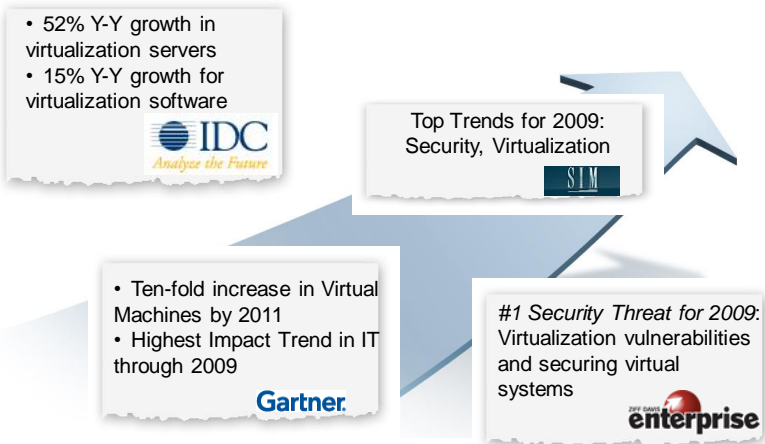
Resource Consolidation

- Real savings
 - Reduced personnel costs
 - System consolidation, shared infrastructure
 - Decreased hardware, power, space costs
 - Increased asset utilization
 - Reduced implementation/management time and complexity.
- Operational flexibility
- Simplified application delivery
- Enhanced business continuity, disaster recovery
- Green IT initiatives

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Virtualization Trends





Extending Open Choice to Virtual Systems




Check Point Appliances


Power-1



**UTM-1
Total Security**






Integrated Appliance Solutions









Secured by Check Point Appliances

- Leverage existing hardware vendor relationship
- Certified by Check Point for interoperability


Check Point Software on Open Servers

- Standardize on a server vendor
- Leverage existing infrastructure investment

VPN-1 VE
Security for Virtual Applications

- Protect virtual application with best-of-class security
- Extend security infrastructure to VMware ESX
- Complements Connectra VE



Virtualization, Like Every New Technology, Presents New Risks



- New attack vectors
- Loss of segmentation
- New management requirements

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No Free Lunches...



Virtualization Benefits	Virtualization Risks	Security and Compliance Issues
Easy machine creation	"VM sprawl"	Rapid change accelerates configuration drift
Consolidation of dozens of physical servers	"Guest escape" of control from VM into hypervisor	Malicious VM takes control of the entire virtualization server
Easy provisioning of networks	Misconfiguration errors	Breaking separation between different security zones
Mobility enables high availability, dynamic resource optimization	Mobility can break static security	Maintain isolation and network controls
Hypervisor enables consolidation	New privileged layer to be secured	Access to sensitive data in VM

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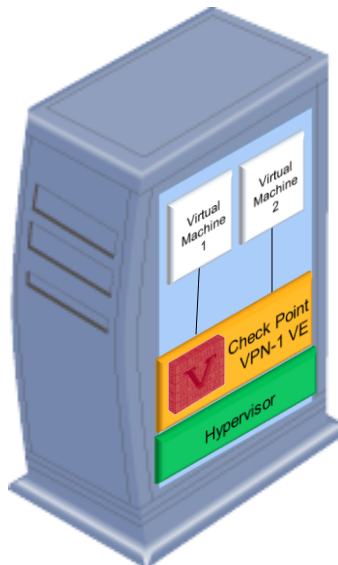
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Introducing VPN-1 VE Security for your Virtual Systems



Provides virtual applications the same best-in-class as applications on physical servers

- Separates virtual machines for security
- Protects against external threats
- Reduces need for individual appliances and switches
- Certified by VMware for ESX server



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VPN-1 VE - Great Advantages



- Separates virtual machines for security
- Protects against inter-VM and external threats
- No need for physical appliances and switches
- No HW dependency, can run where ESX runs
- Easy and flexible to maintain
 - Snapshot and Revert options
- Multiple VPN-1 VE instances
- Per-VE upgrades, not entire machine

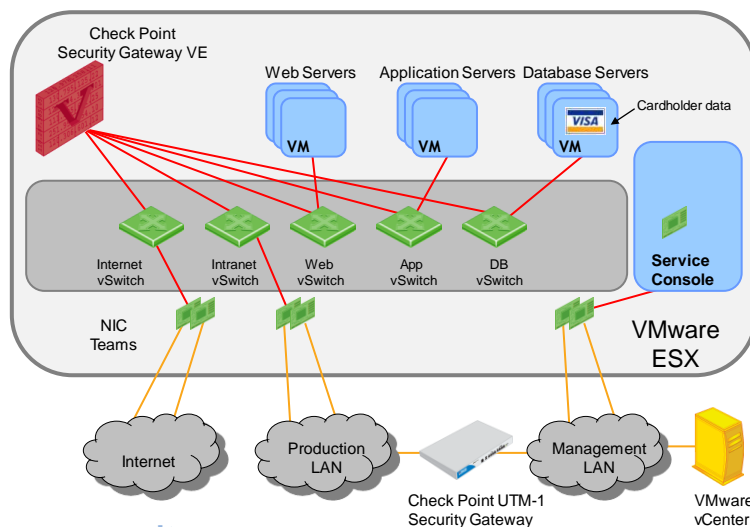


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VMware ESX Topology with VPN-1 VE



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VE Deployment Scenarios



MSPs

- Adding security to the cloud
- VPN-1 VE per customer
- VPN-1 VE per service



Office-in-a-box

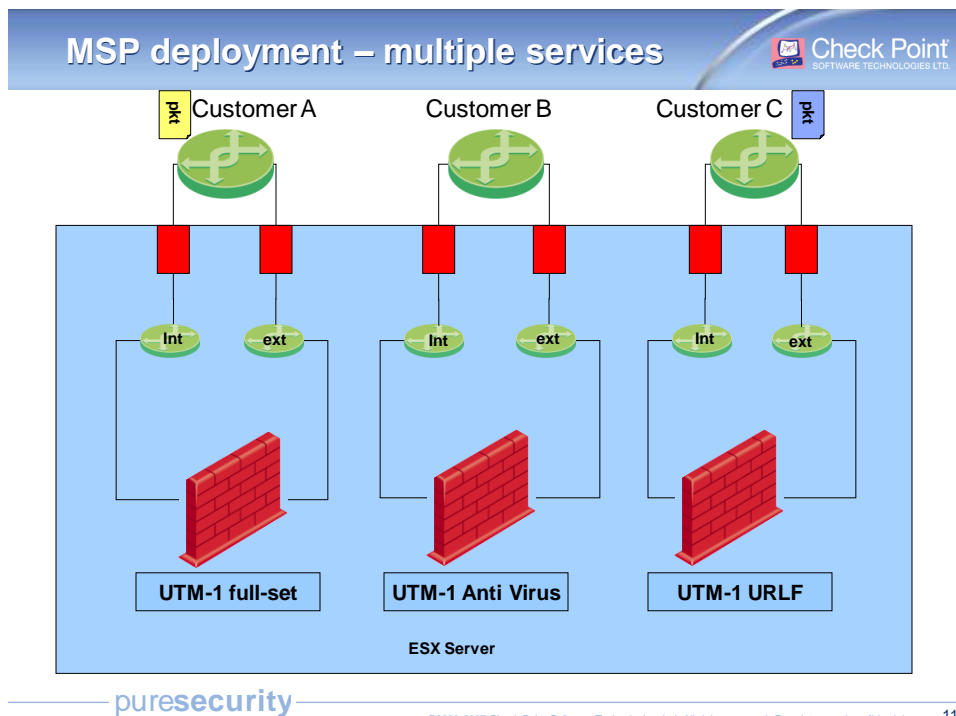
- Add VPN-1 VE to other virtual machines for remote office use
- VPN-1 VE protects other virtual machines and rest of office
- Simplifies provisioning of remote office



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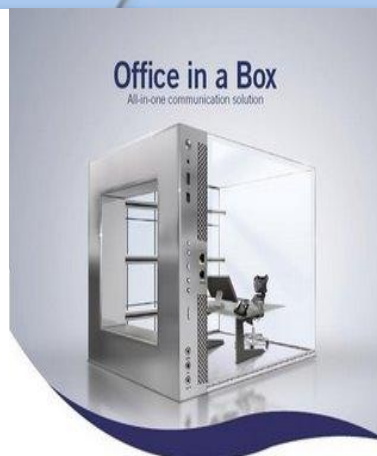
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Virtual appliance for the SMB market



- Consolidate and virtualized all physical devices under one single server
- **Add VPN-1 VE to protect consolidated virtual machines and the hosting sever itself**
- Simplifies provisioning of remote office
- Many SMB sites can be managed by one management server

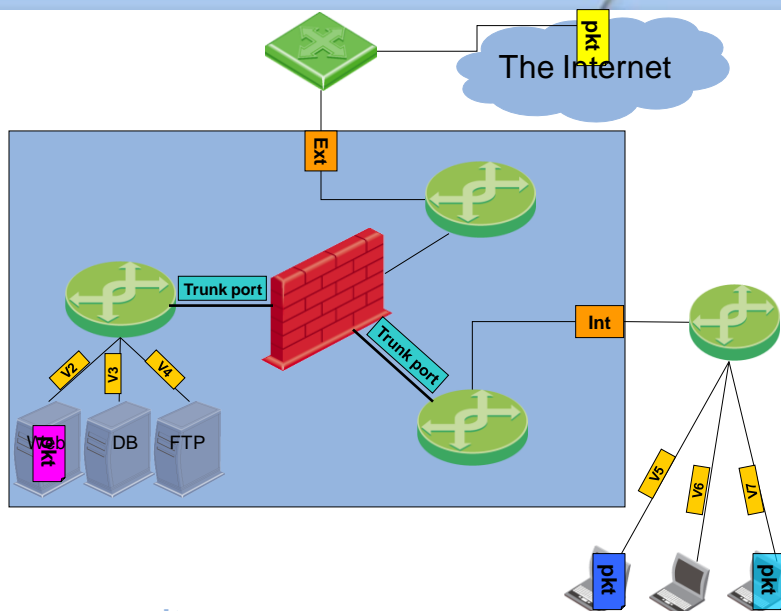


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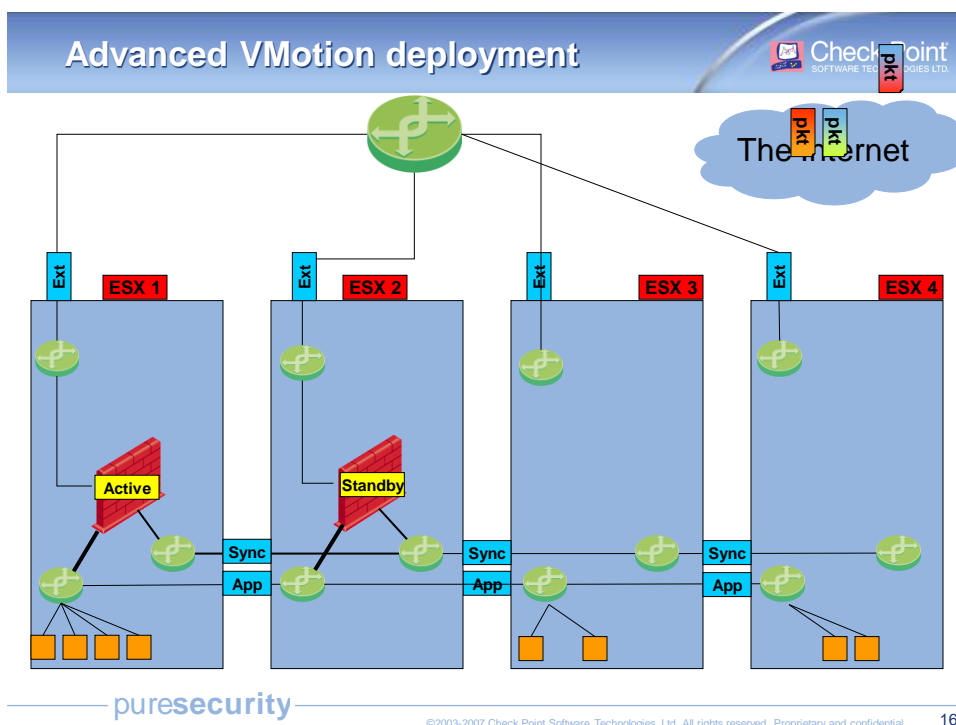
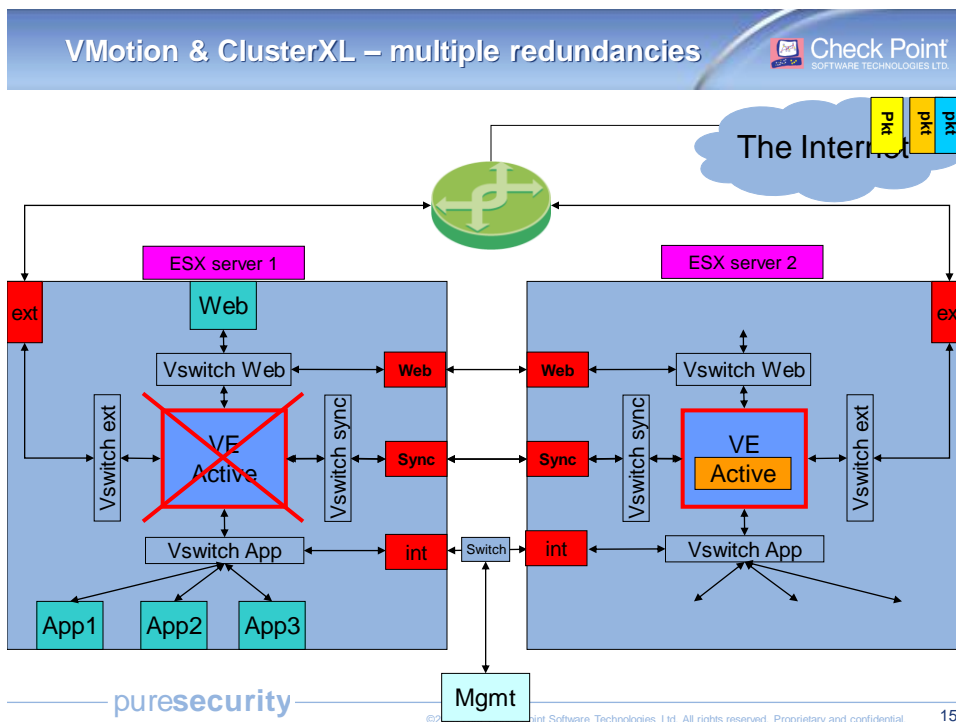
Office in a box – deployment



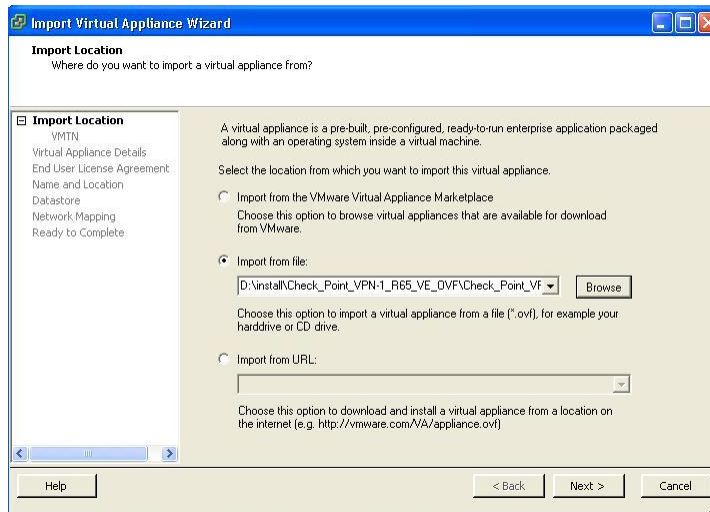
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Easy to install VE on ESX



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Consistent Security Everywhere



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Consistent virtual security eliminates gaps

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VPN-1 VE delivers:

- Segregation of virtual systems
- Same Security as Check Point Appliances and Software
- Consistent policy for virtual and physical environments

- No security gaps for attackers
- Simpler updating against new threats
- End-to-end auditing with unified architecture

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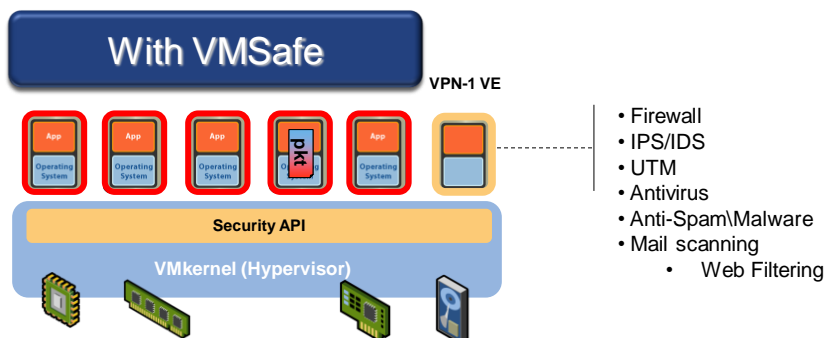
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VMware VMsafe integration

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- Inspecting the packets in the virtual switch (at the VMkernel)

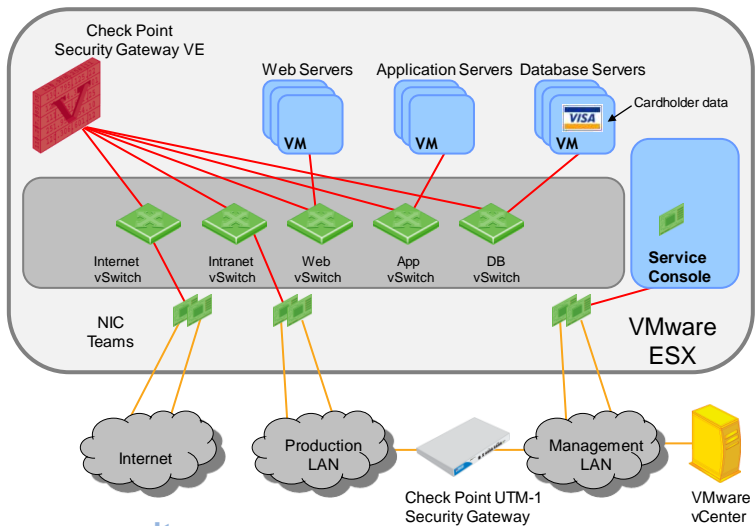


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VMware ESX Topology with VPN-1 VE



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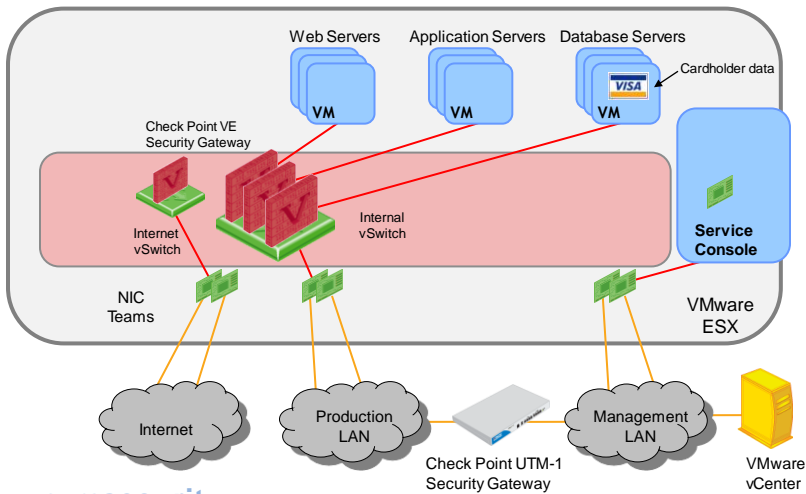
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Security Gateway VE with VMsafe



- Protect the VM by inspection from inside the vSwitch
- Complete integration and awareness of VMotion, Storage VMotion, HA, etc



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Two Solutions for your Virtualization Needs One Architecture for Simplicity



VPN-1 VE

First certified virtual appliance to provide the same level of security as physical appliances



VPN-1 Power VSX

A security operations platform to virtualize routers, switches, and VPN-1 gateways on a single piece of hardware.



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Understanding The Difference



	VPN-1 VE	VPN-1 Power VSX
Primary Use	Protecting virtual systems	Virtualizing security gateways
Number of Virtual Systems	1 per server	Between 10 and 250 per server
Underlying Operating System	SecurePlatform running on Hypervisor	Pre-hardened SecurePlatform
Management	SmartCenter or Provider-1	

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