



## Security Roadblocks in the Virtualization Journey

- What is VDI?
- VDI Security Risks and Challenges
- Trend Micro: Security Built for VMware

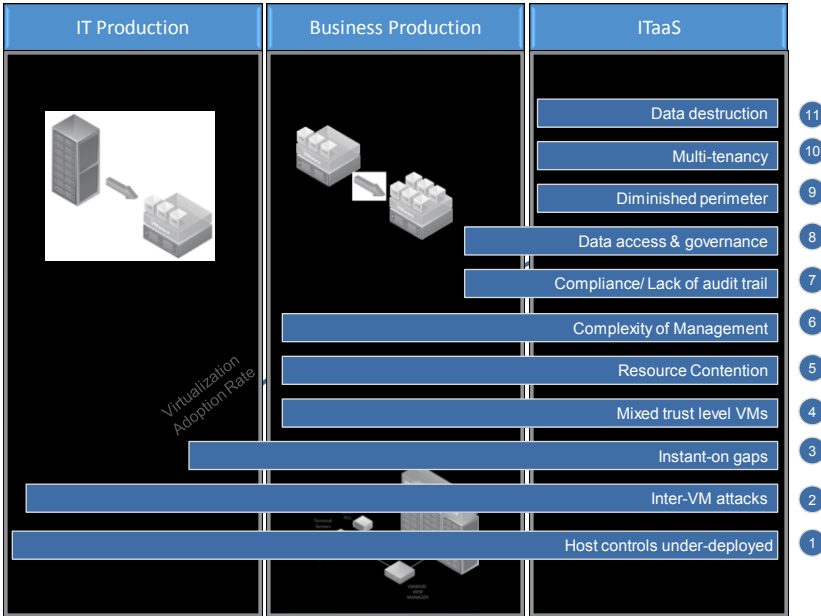
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## The virtualisation Journey

| Stage 1<br>Consolidation  | Stage 2<br>Expansion & Desktop   | Stage 3<br>Private > Public Cloud   |
|---|--|---|
| Cost-efficiency ✓   | + Quality of Service ✓   | + Business Agility ✓  |
| <p style="text-align: center;">15%<br/>Virtualization Adoption Rate</p>   | <p style="text-align: center;">30%</p>   | <p style="text-align: center;">70%</p>  |
| <p>88% of North American Enterprises do not have a Specific Virtualization security strategy.</p> <p style="color: red;">- Forrester Research</p> | <p>Majority of orgs 'fully deployed' have only virtualized one-third of all servers. Security was primary barrier.</p> <p style="color: red;">- CDW Report</p> | <p>"By far the #1 concern about cloud services is security."</p> <p style="color: red;">- IDC</p> |

## Security Challenges Along the Virtualization Journey

VMware and Trend Micro help customers address these issues, and accelerate the journey



### Security Roadblocks in the Virtualization Journey

What is VDI?

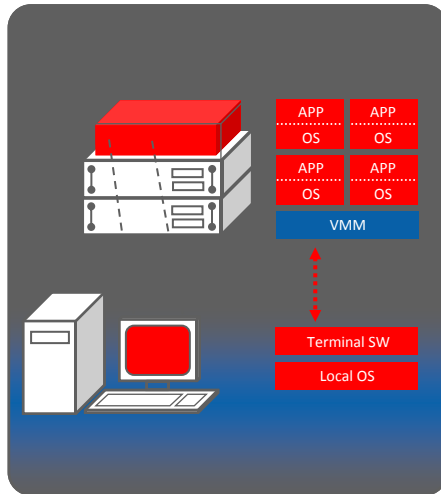
VDI Security Risks and Challenges

Trend Micro: Security Built for VMware



## What is VDI?

### Datacenter-hosted virtual desktop infrastructure



#### User Operating environment

- Virtual machine on a central server
- Accessed from existing hardware or a thin client
- Can be accessed from anywhere
  - Home PC over VPN
  - BYOC

#### Analysts view:

##### Gartner:

"[VDI] will undergo an explosive growth..."

##### Enterprise strategy group:

"60% of enterprises have a VDI strategy"

##### Forrester:

"Three quarters of firms now have client virtualization on their IT agenda for the next 12 months"

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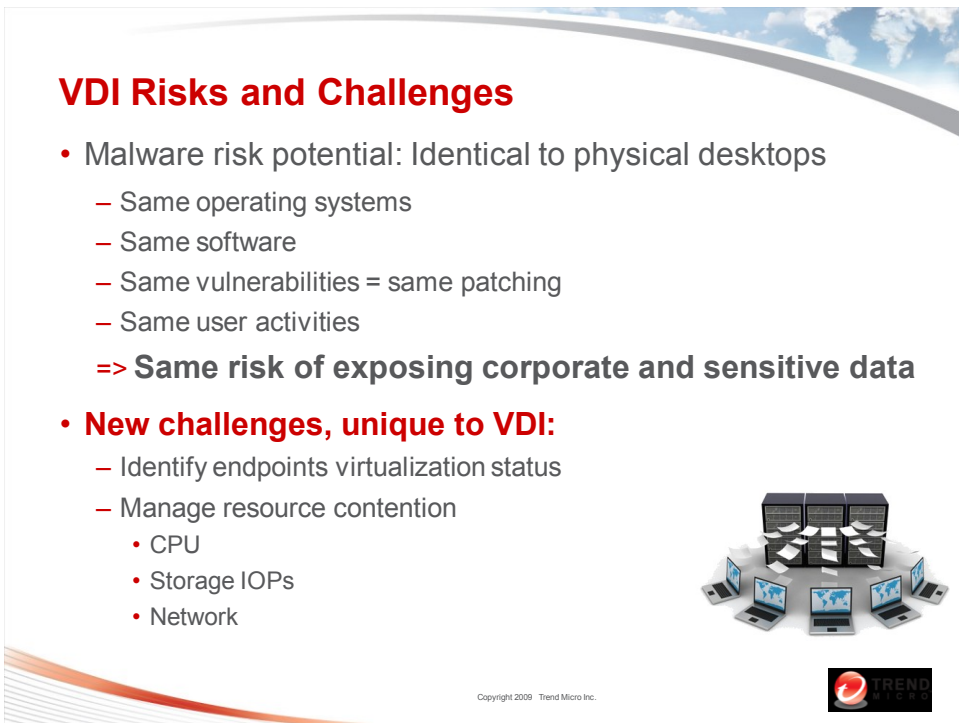
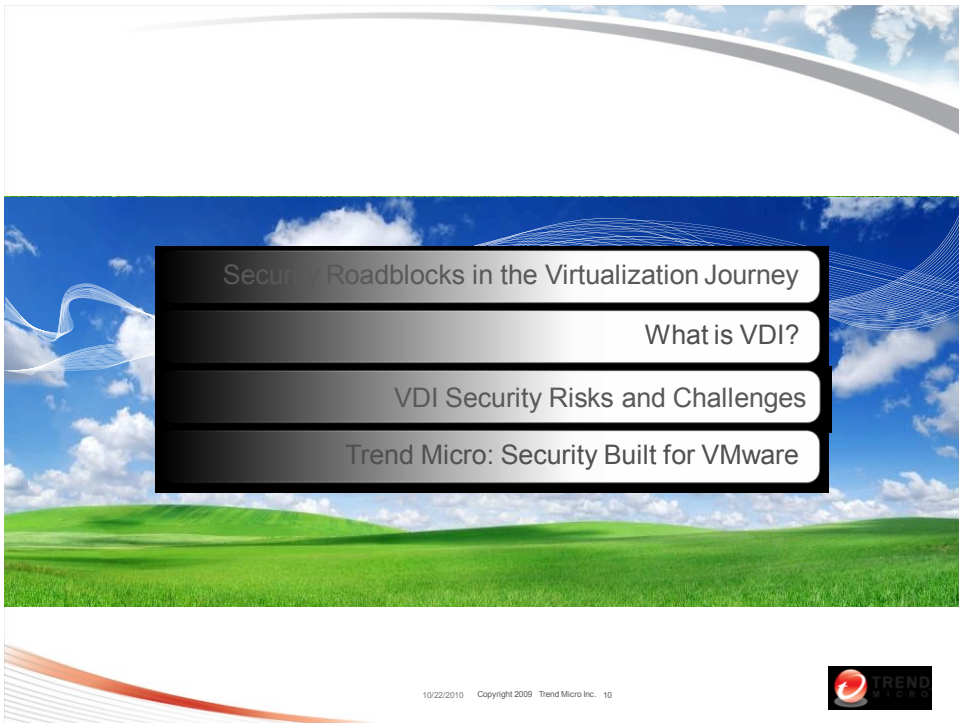
## Reasons for VDI-adoption:

- Lower operational cost than physical hardware
  - Easier Deployment, Patching, Application Provisioning
- Extended desktop hardware lifecycles
  - Windows 7 adoption funds get reassigned to VDI
- Security and data protection
  - Data never leaves the data center
- Regulatory compliance (PCI, HIPAA, etc.)
  - More tightly controlled environment



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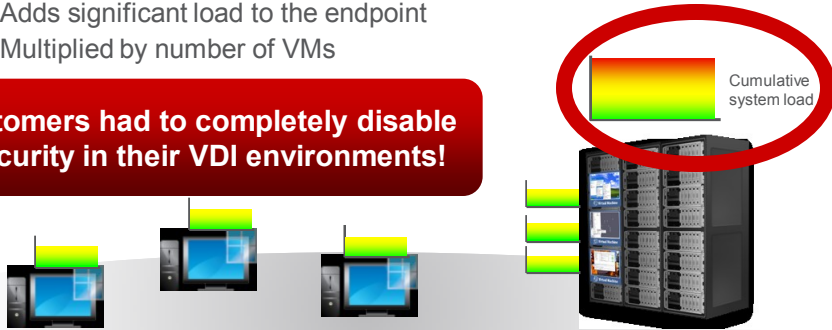




## VDI Challenges Resource Contention

- The “9-AM problem”
  - Multiple users log in and get updates at the same time
- Scheduled scans
  - Adds significant load to the endpoint
  - Multiplied by number of VMs

**Customers had to completely disable Security in their VDI environments!**



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vmware® + TREND MICRO =

Differentiating idea  
Better-than-physical security

Efficiency  
Control  
Choice  
Security

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## The need for VDI-intelligence

- Detect whether endpoints are physical or virtual
  - Integrate with virtualisation platforms
- Serialization of updates and scans per VDI-host
  - Control the number of concurrent scans and updates per VDI host
  - Maintain availability and performance of VDI host
  - Faster than concurrent approach
- Leverage Base-images to further shorten scan times
  - Pre-scan and white-list VDI base-images
  - Prevent duplicate scanning of unchanged files on a VDI host
  - Further reduce impact on the VDI host

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## Trend Micro OfficeScan – VDI Aware Pre-Scanning Base Images



Create  
Linked Clones

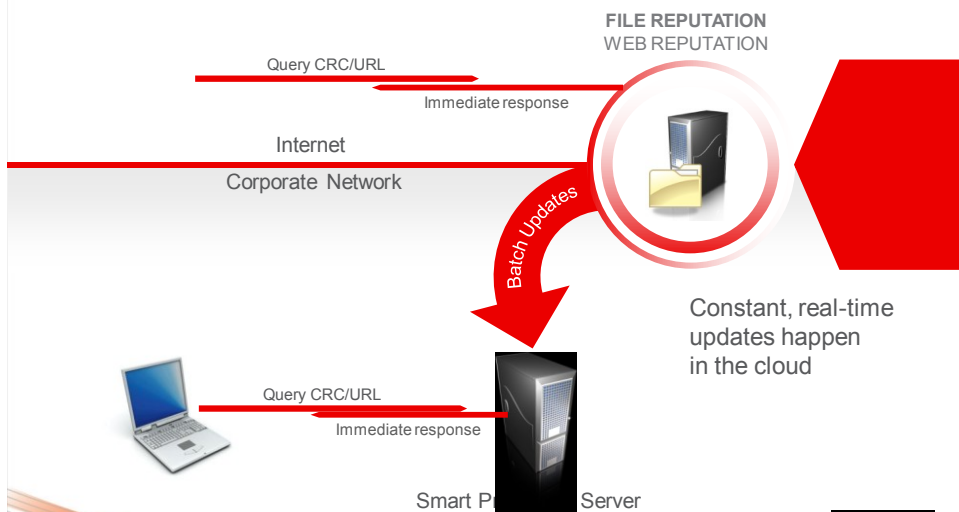
Pre-scanning of base images  
White-listing of linked clones

- Reduces Scan time
- Optimizes user experience
- Reduces impact on host system

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## Trend Micro OfficeScan – Reputation based Security Intelligence *In the Cloud*



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## Virtual Patching

- OfficeScan's Intrusion Defense Firewall
  - Determines missing patches and existing vulnerabilities
    - Operating System
    - Common desktop applications
  - Recommends set of lightweight, fast-to-deploy filters
    - Virtually patches the vulnerabilities
    - Zero-Day protection
    - Reports on attempts to exploit vulnerabilities
  - Removes filters as soon as the patch is deployed

**Patch endpoints on your terms  
Without exposing them to exploits**

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## VDI-intelligence ROI

- With VDI-aware AV, customers can run ***more than double the number of desktop images per host*** – without sacrificing security
- Investment in a VDI-aware AV solution pays for itself:
  - ***In less than 3 months with 1000 users\****
  - ***In less than 2 months with 2500 users\****

\*: assuming average cost of \$8000 per VDI server and the deployment of standard endpoint security

**You no longer have to choose  
between Security and Return On Investment**

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## **Trend Micro is Virtualisation Aware**

- **Trend Micro OfficeScan:** Industry's first VDI-aware endpoint security solution:
  - Optimized for both physical and virtual desktops
  - Virtual patching stops vulnerabilities
  - Optimizes VDI Return on Investment
  - Pays for itself in 3 months or less
- **Trend Micro Deep Security:** Industry's first 100% agent-less ESX anti-malware and server security solution:
  - Virtual patching stops vulnerabilities without compromising the business
  - Reach compliancy without headaches
  - Applications and OS unaffected

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**Unleash** your endpoints