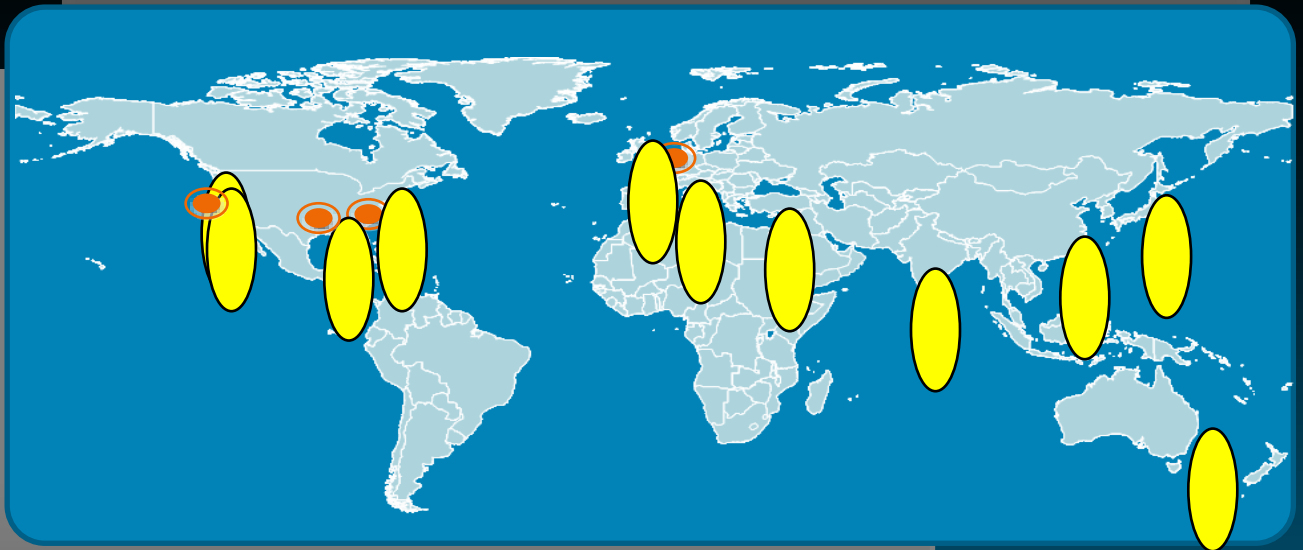
VMware's Site Recovery Manager and Cisco Technology for Resilient Data Centers

Michael Martinelli

Quick Cisco Facts

Technology and People…

More than 230k sq ft and 21 MW of power in Cisco Data Centers



- $40B Company
- 70,000+ Employees
- 300 Locations in 90 countries
- 400 Buildings
- 56 Data Centers and server rooms
- Deploying virtual servers for business application hosting environment
- Uses Cisco's Nexus line and UCS, withVMware's vSphere and Site Recovery Manager (SRM) for resiliency

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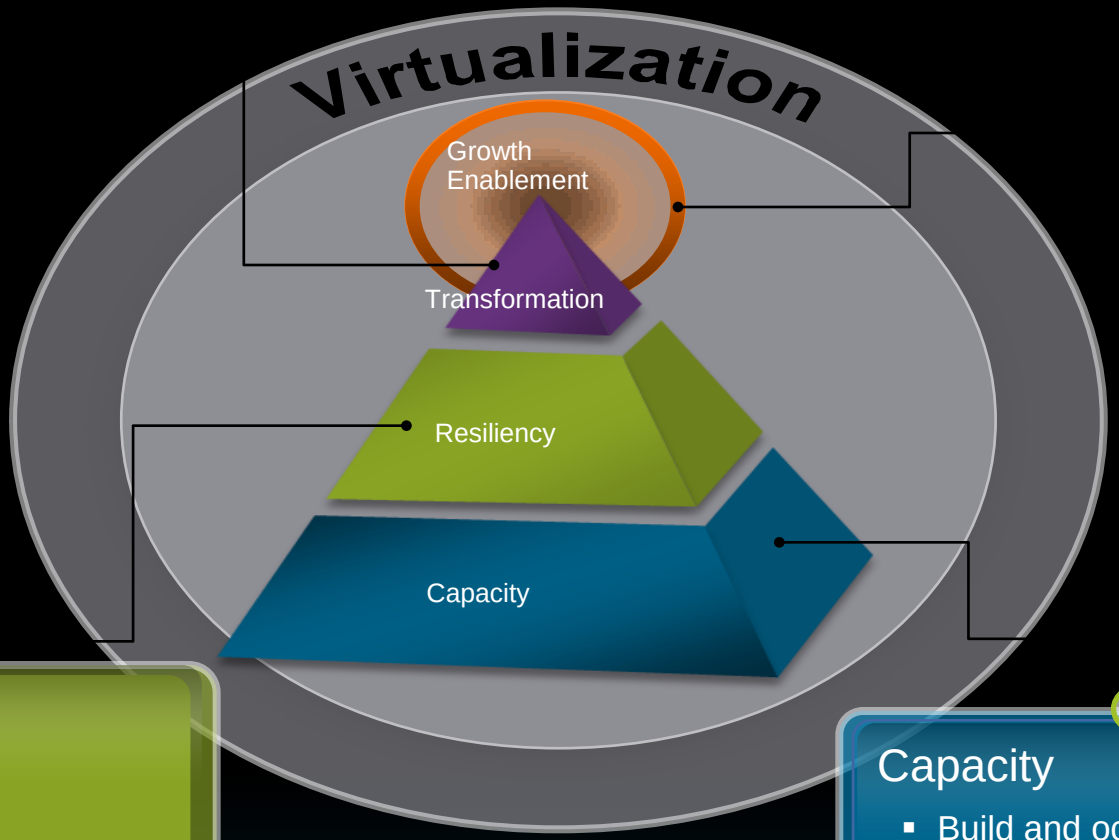
Global Data Center/Virtualization Strategy Enabling the Network as the Platform

Transformation

- Run IT as a business
- Internal service provider model
- Service-oriented architecture
- Virtualization technology
- Product & Technology transformation



Growth Enablement

- New markets and business models
- Global expansion
- User experience

Resiliency

- Increase data center tiers
- Multi-site architecture
- Move out of high risk geographies
- Improve availability & recoverability

Capacity

- Build and occupy data centers
- Optimize demand
- Consolidate where appropriate

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Services Protected by SRM

MMX – Messaging Middleware eXternal
•MMX is at the heart of the B2B system and is used to pass messages (like orders, product configurations, pricing etc.) between systems before going to our ERP system
• Pass messages asynchronously from disparate applications via JMS queues
•The sender does not have to wait for the receiver to acknowledge it
•Messages can be any format, but are typically xml documents
•More that 500 distinct IT applications that use MMX, @50% are P1 systems

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Services protected by SRM

Batch Processing Service
• Batch Processing Service is the processing facility currently used for scheduling business process batch jobs across most of Cisco
• The systems include just about everything in Finance and Enterprise Data Warehouse
• The processes include all batched business jobs, month/quarter/year-end

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Technologies Used

Across Cisco Data Centers

- Cisco UCS
- Cisco Nexus 5K, 7K, 6120 Fabric extender and N1Kv
- Cisco MDS
- Cisco GSS
- VMware vSphere
- VMware Site Recovery Manager
- EMC Symmetrix
- Netapp

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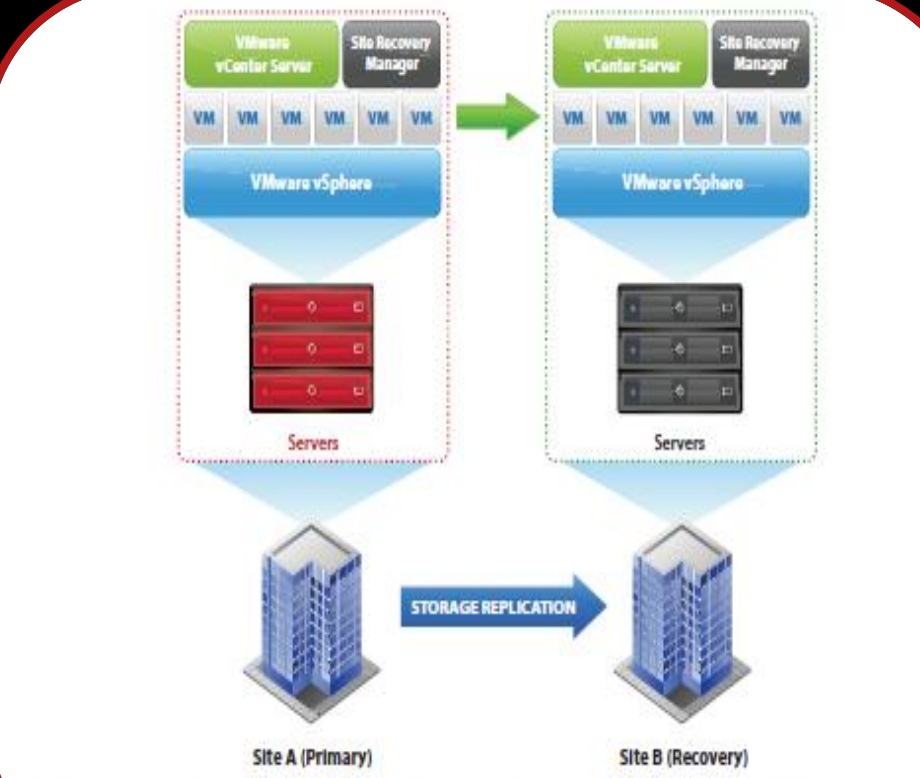
Site Recovery Manager Process

- Accelerate recovery for the virtual environment through automation
- Ensure reliable recovery by enabling non-disruptive testing



Site Recovery Manager manages and automates failover and recovery of virtual machines

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Site Recovery Manager Process

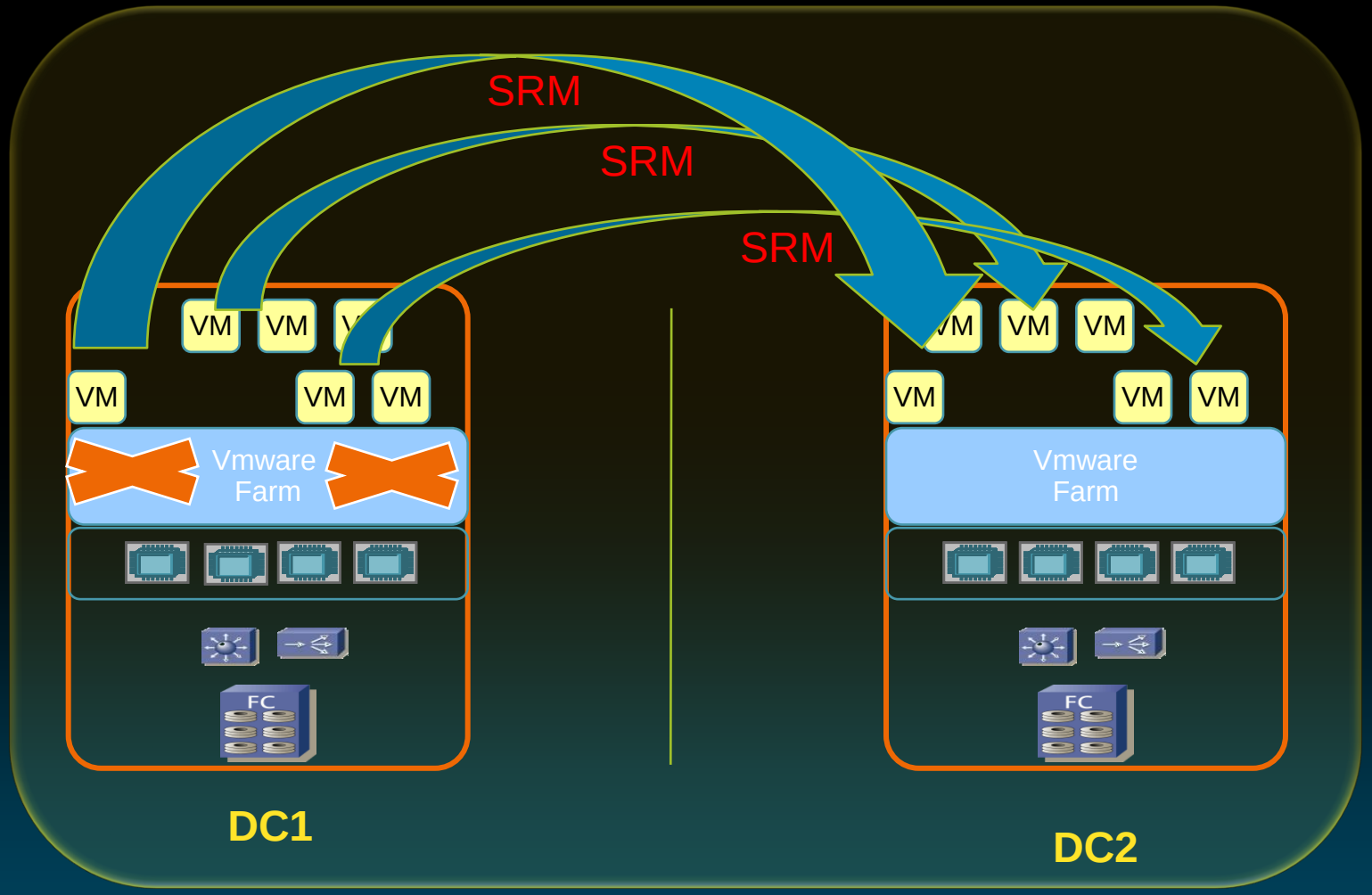
- Failover initiated
- Storage mounted
- VM's powered on
- Service restored

Linux/Windows VMs

Physical Servers

Network

Network Storage



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VMware + Cisco = Virtualization

We are truly at the forefront of Cisco's growing business.

- We hope you can walk away from this discussion with some insight into our business challenges, and our solutions
- How IT utilizes Cisco and VMware's product lines to Virtualize
- How Cisco has implemented VMware Site Recovery Manager to protect High priority Virtualized environments

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Q & A

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