Migrate To Hyper-V

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Key Focus Areas

- ❓ Who's Migrating & Why?
- 🔍 Initial Assessments
- 🔧 Migration with System Center 2012 SP1 / R2
- 🔀 MAT / Netapp Shift
- ⚖️ Double Take Move with System Center
- ☑️ Summary

Switchers

- Who
  - Small Environments
  - Medium Environments
  - Large Environments
  - Service Providers
- Why
  - Cost in SnS etc..
  - Uniformity
  - Competence
- How
  - …..

Key Focus Areas

- **Who's Migrating & Why?**
- **Initial Assessments**
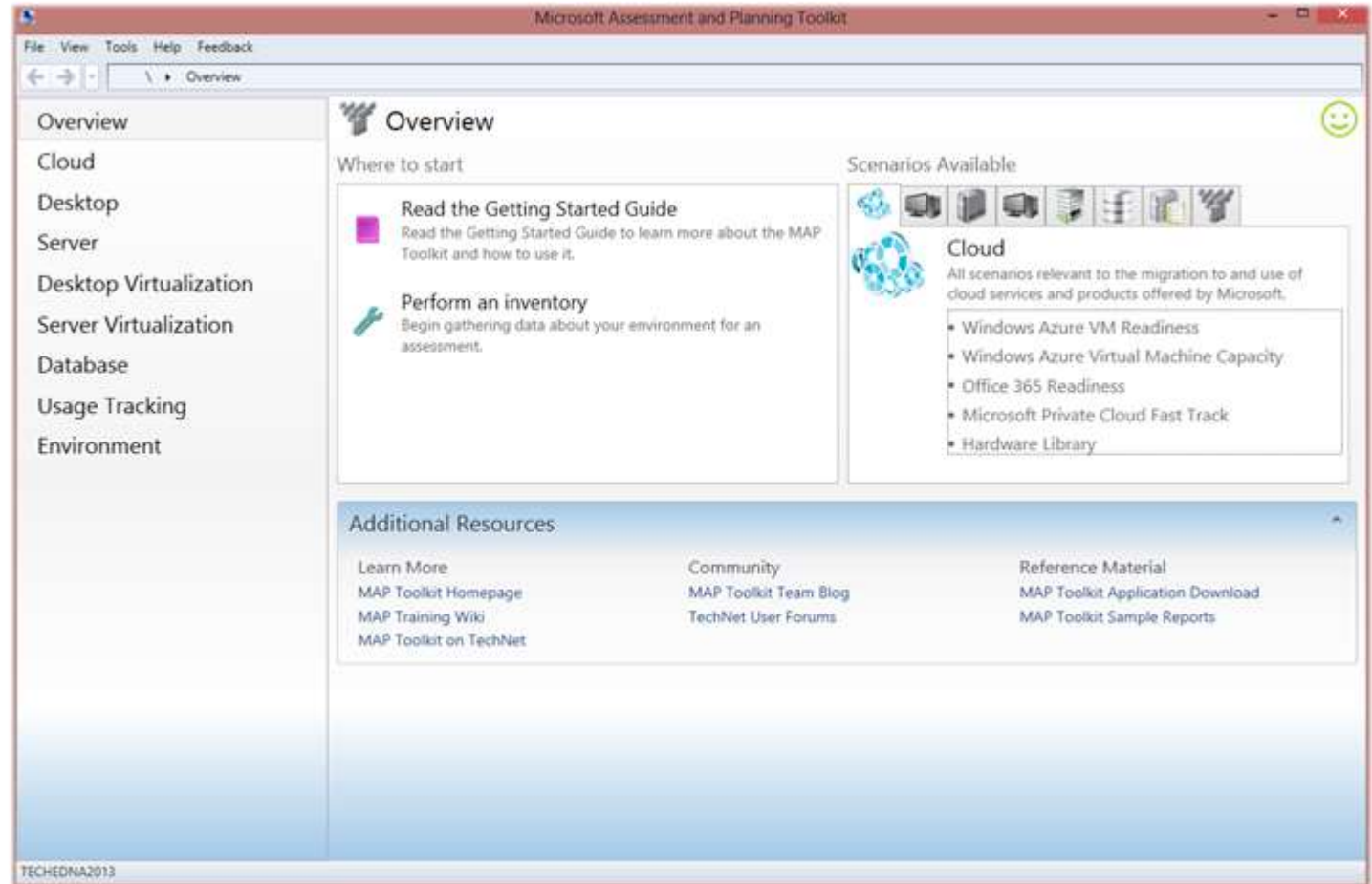- Migration with System Center 2012 SP1 / R2
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Microsoft Assessment & Planning Toolkit

- Free download

- Agentless inventory, assessment, and reporting tool

- Securely assess IT environments for various platform migrations

- Version 9.0 Beta currently available.

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Demo

Microsoft Assessment and Planning

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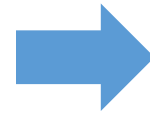- ⤬ MAT / Netapp Shift
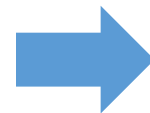- ⚖ Double Take Move with System Center
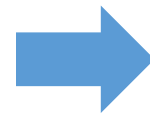- ☑ Summary

Microsoft Options | VMM + Orchestrator

V2V Inbox – Walk through a simple wizard to convert VMs from VMware to Hyper-V. VMs should have VMware Tools removed, and can be on a host (off), or in VMM library.
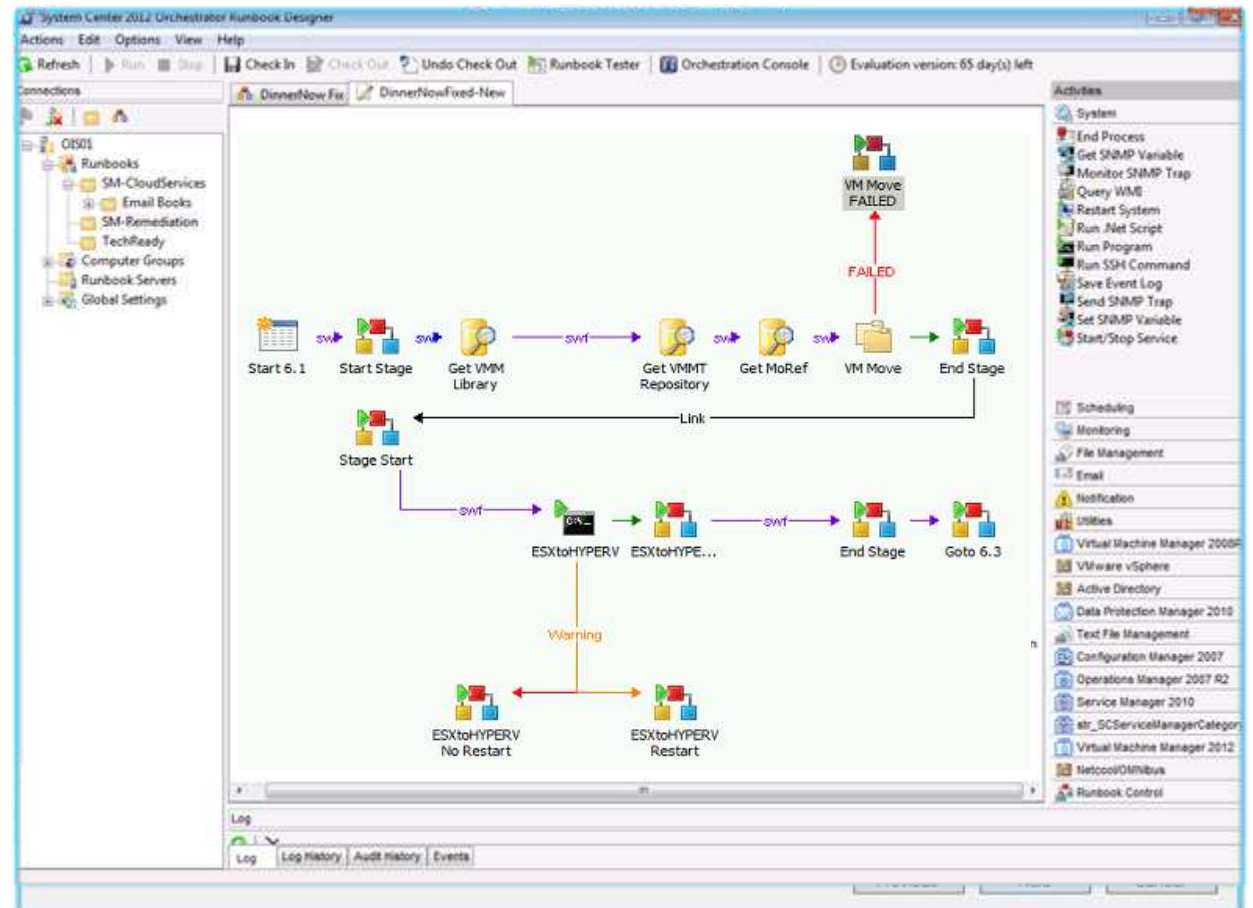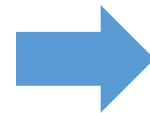
Easy Steps – Select VM settings, Select Host, Select Path, Select Networks

Finish – View Script button for PowerShell

Orchestrator – Combine with Orchestrator to automate the conversion process from VMware to Hyper-V

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VMM V2V

SC VMM 2012 (R2) P2V
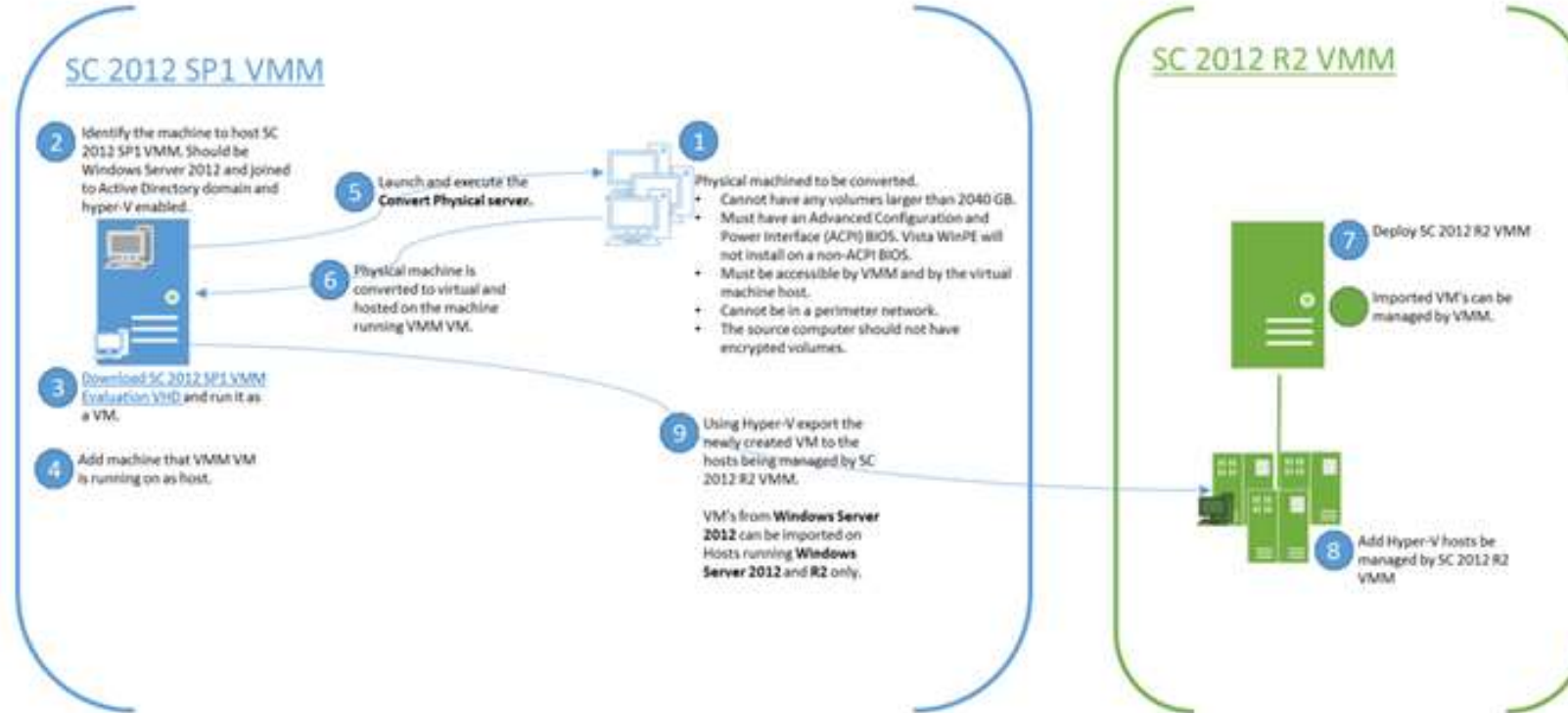
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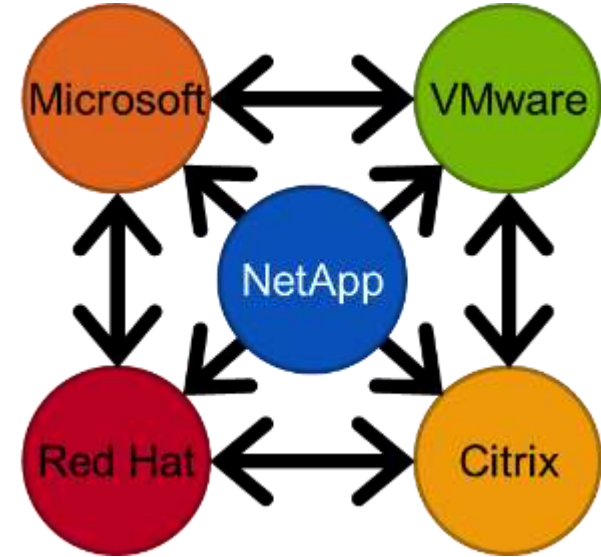- **🔧** Migration with System Center 2012 SP1
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Netapp + MS = Fast

- NetApp ClusterOS Ontap
  - At least 8.2
  - NetApp PowerShell Toolkit
- How fast is fast?
  - 5 minutes per VM tops
- MAT – Migration automation Toolkit for Shift
  - Free
  - VMware tools removed
  - Networking migrated

NetApp Shift

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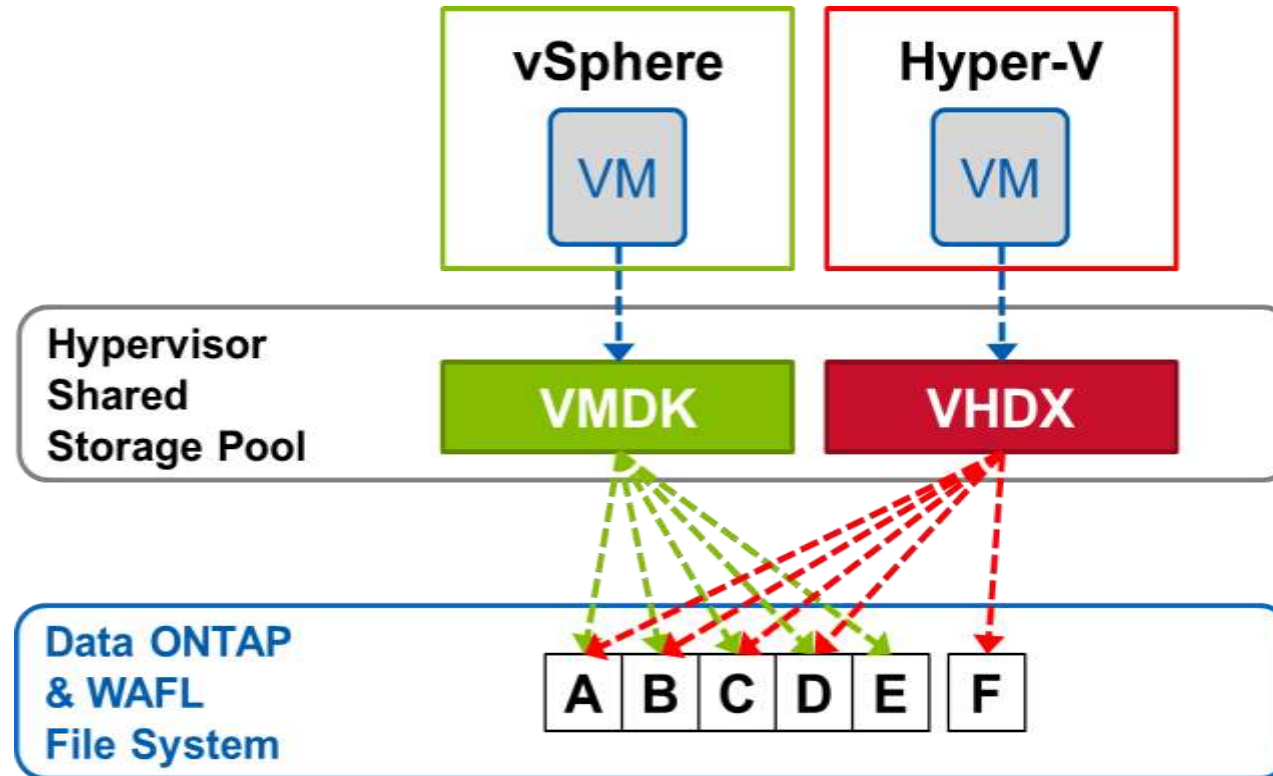- 🔀 MAT / Netapp Shift
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Today's Data Center

Dell   HP

Hyper-V

Private Cloud

Application Cluster

vSphere

LAN

Firewall

WAN

Remote Data Center

SAN/NAS Array

Azure

Public Cloud

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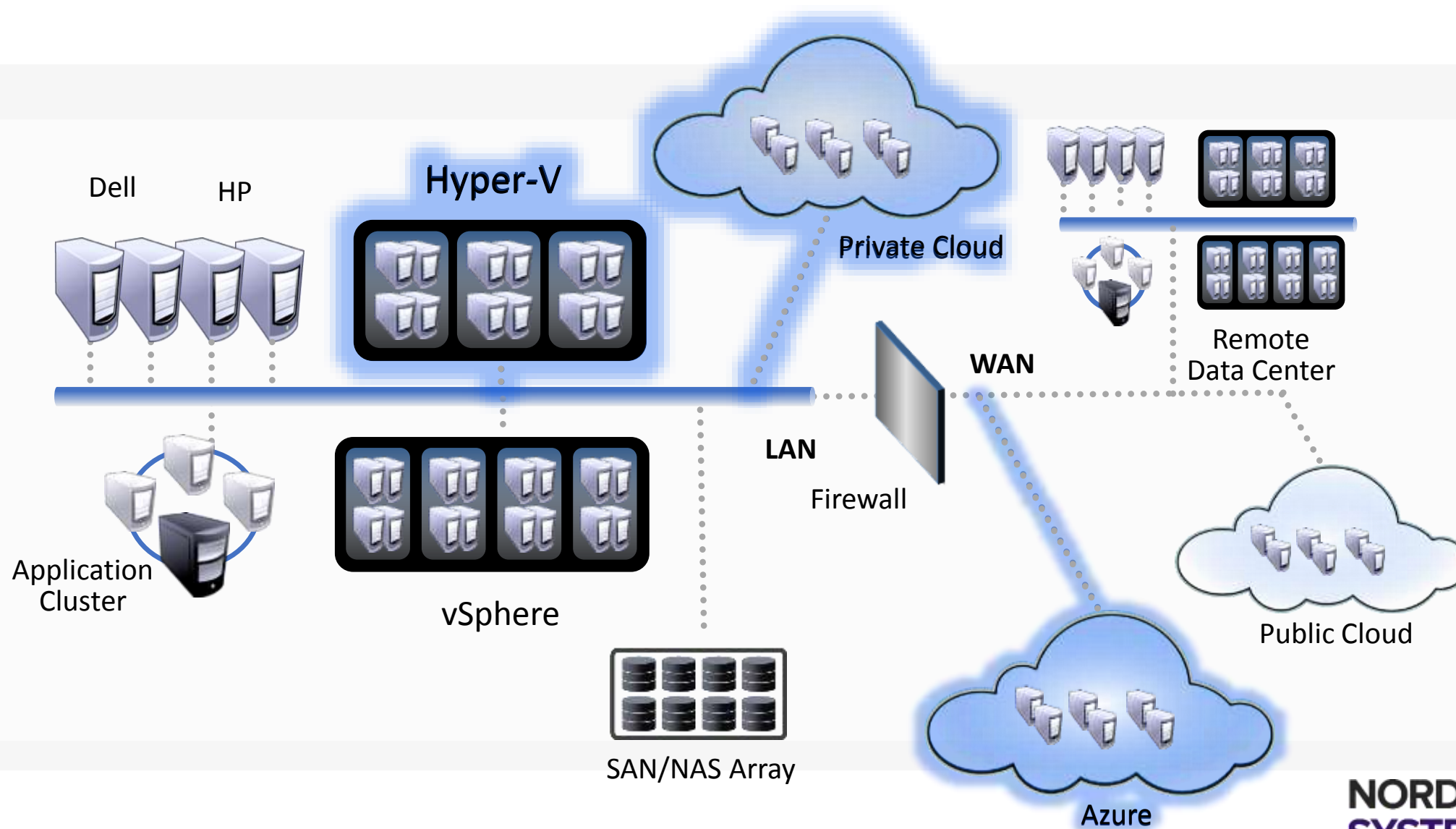
How did we get here?

Changing Needs	Business critical applications IT agility
Evolving Technology	Virtualization Private/Public Cloud
Acquisitions	Disparate platforms, hypervisors, etc... Consolidation
Performance Advances	Faster processors/storage Faster networks

Some key challenges

Migration	Updat... New ... Data ... ...lidation
Optimization	Load balancing Cloud bursting Performance requirements
Availability	Local Availability Disaste...Recovery Operatio...

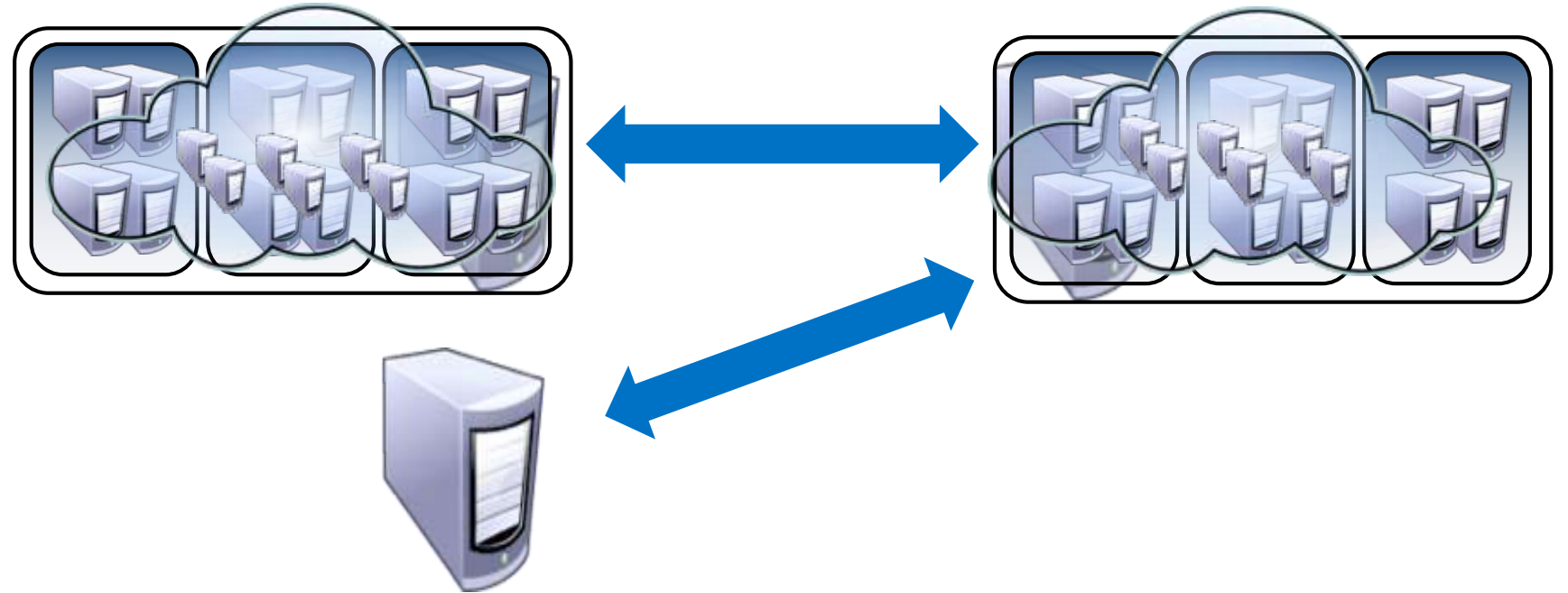**Workload Mobility**

Mobility Scenarios

Physical to Physical

Physical to Virtual

Virtual to Virtual

Premise to Cloud

Cloud to Cloud

Workload Mobility – Using Replication

SOURCE

Physical
From anywhere

Virtual
How you want it

Cloud
Storage agnostic

TARGET

Physical
To anywhere

Virtual
When you want it

Cloud
Hypervisor agnostic

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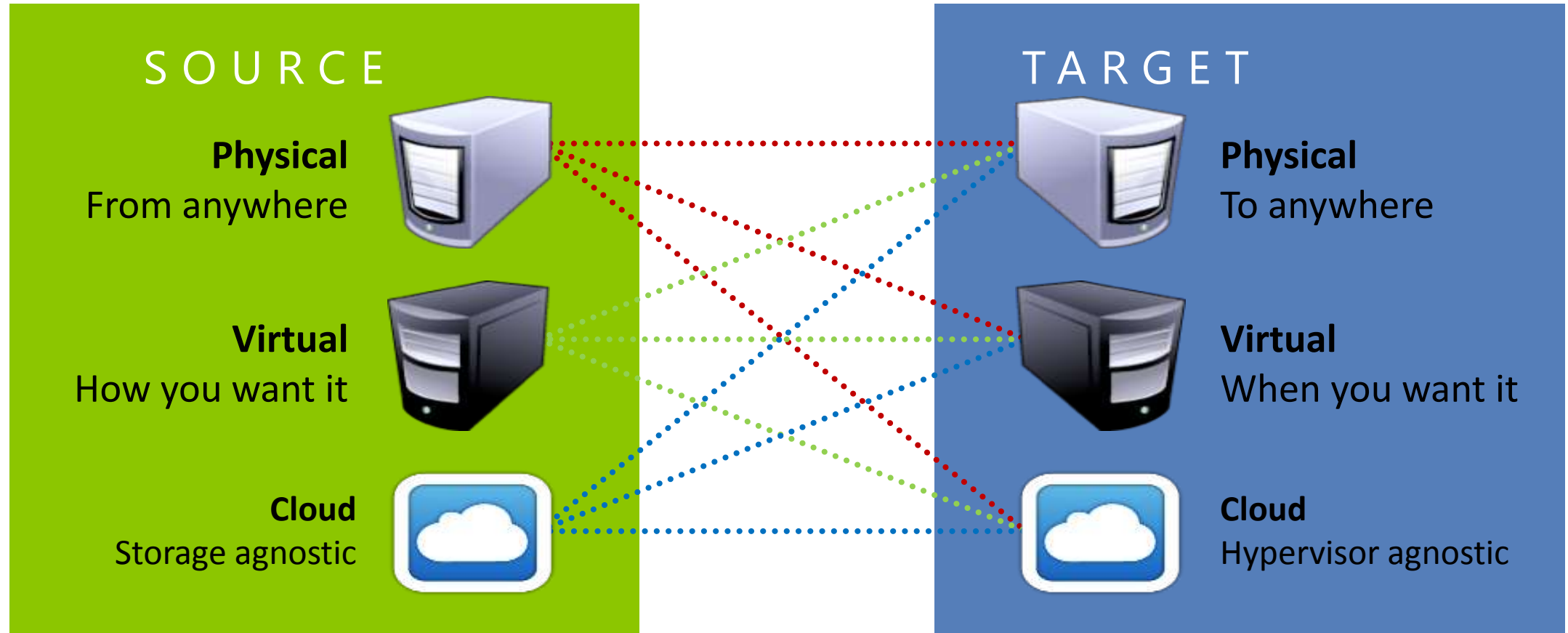
Workload Mobility – What's Important

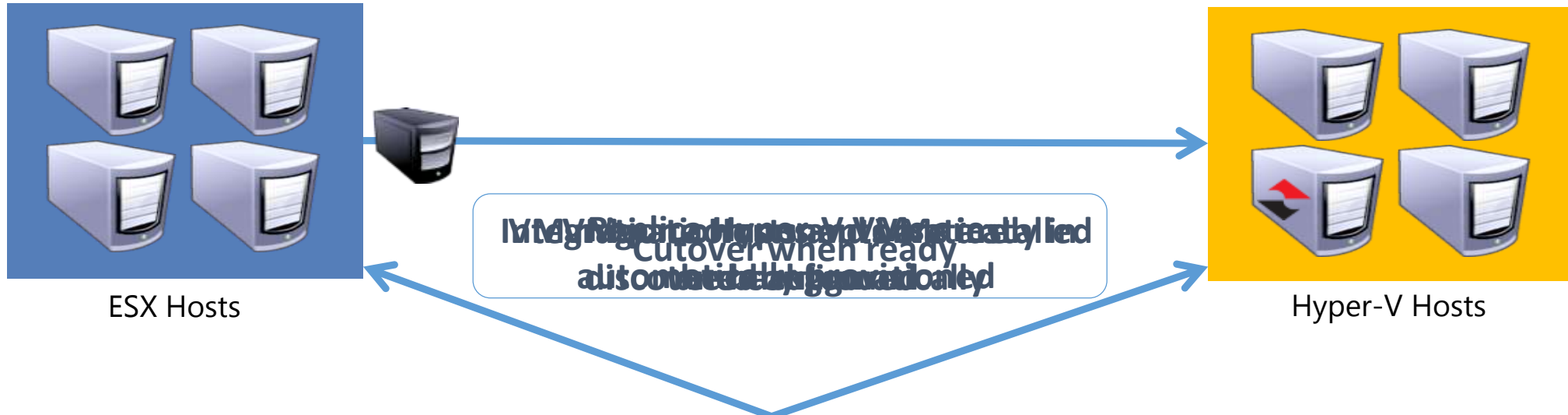| **Flexible**	Supports a broad range of platforms Data, Application, Server, Hypervisor, Site
Non-intrusive	Minimizes user down-time Minimizes impact on applications
Efficient	Optimizes data transfer Leverages existing investments
Manageable	System Center 2012 Integration Automated migration & redirection of users

System Center Integration

ESX Hosts

Hyper-V Hosts

Microsoft System Center

Service Manager

Orchestrator

Virtual Machine Manager

Operations Manager

Demo Move

Summary

- Customers are migrating for a number of reasons:
    - Cost
    - Comprehensive Management,
    - Automation
    - Integration

- Multiple options available for Migration InTheBox
    - Virtual Machine Manager (V2V/P2V) or with Orchestrator

- MAT with NetApp Shift
    - Free solution to migrate multiple VMs from VMware to Hyper-V with no System Center

- DoubleTake Move with System Center
    - Accelerates and Scales the free MVMC through simple, extensible automation

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