



recovery networks
business continuity

If you're looking for "Agile Methods in Offshore Development", that's been changed to 4pm ... this session is:

Server Virtualization



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The Future of/with/for ... IS
Virtualization

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Why me?

- Philadelphia Area VMware Users Group
- Recovery Networks VMware user
- Virtualization advocate



Agenda

- What is Virtualization?
- How/Where do I use it?
- What is to come? (i.e. trend or fad?)
- What's my next/first step?



Poll ...

- ... familiar with Virtualization?
- ... use Server Virtualization?
 - ... in Test/Dev?
 - ... in Production?
- ... Use VMware?
- ... Use non-VMware?



Virtualization ... huh?

1. Memory Virtualization is “old”
2. Storage Virtualization is “old”
... BUT improving
3. Desktop Virtualization is somewhat new
(Citrix/RDP is a form)
... BUT migrating to Application and Desktop
Virtualization (no more shared DLLs!!)
4. OS and Server Virtualization used since IBM
Mainframes
... same concept BUT better



Virtualization Software

1. Server:

- Citrix/Zen
- Microsoft Virtual Server
- VMware
- Virtual Iron

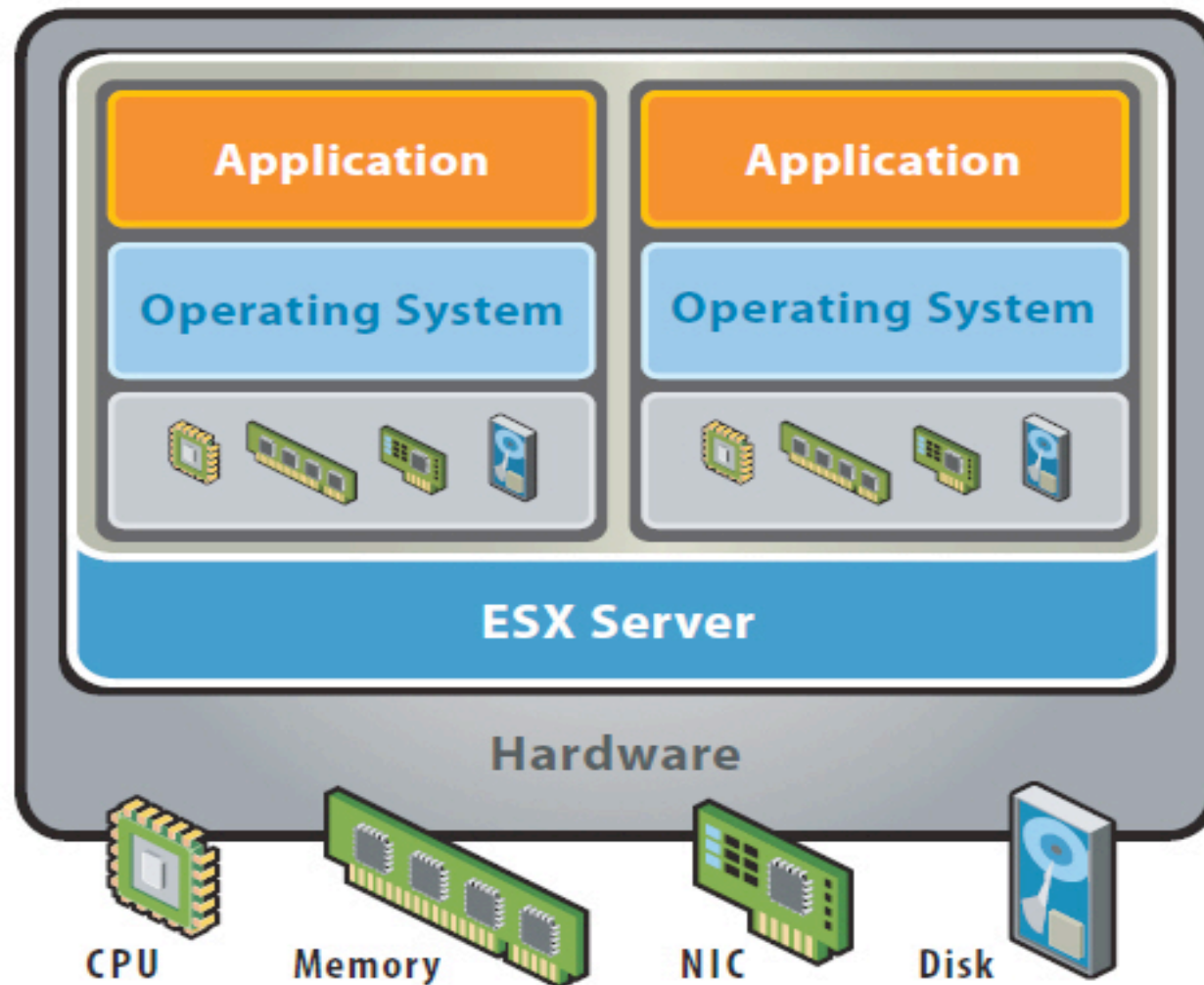
2. Desktop

- VMware, Microsoft, OpenSource at OS level
- Softricity and others at App level



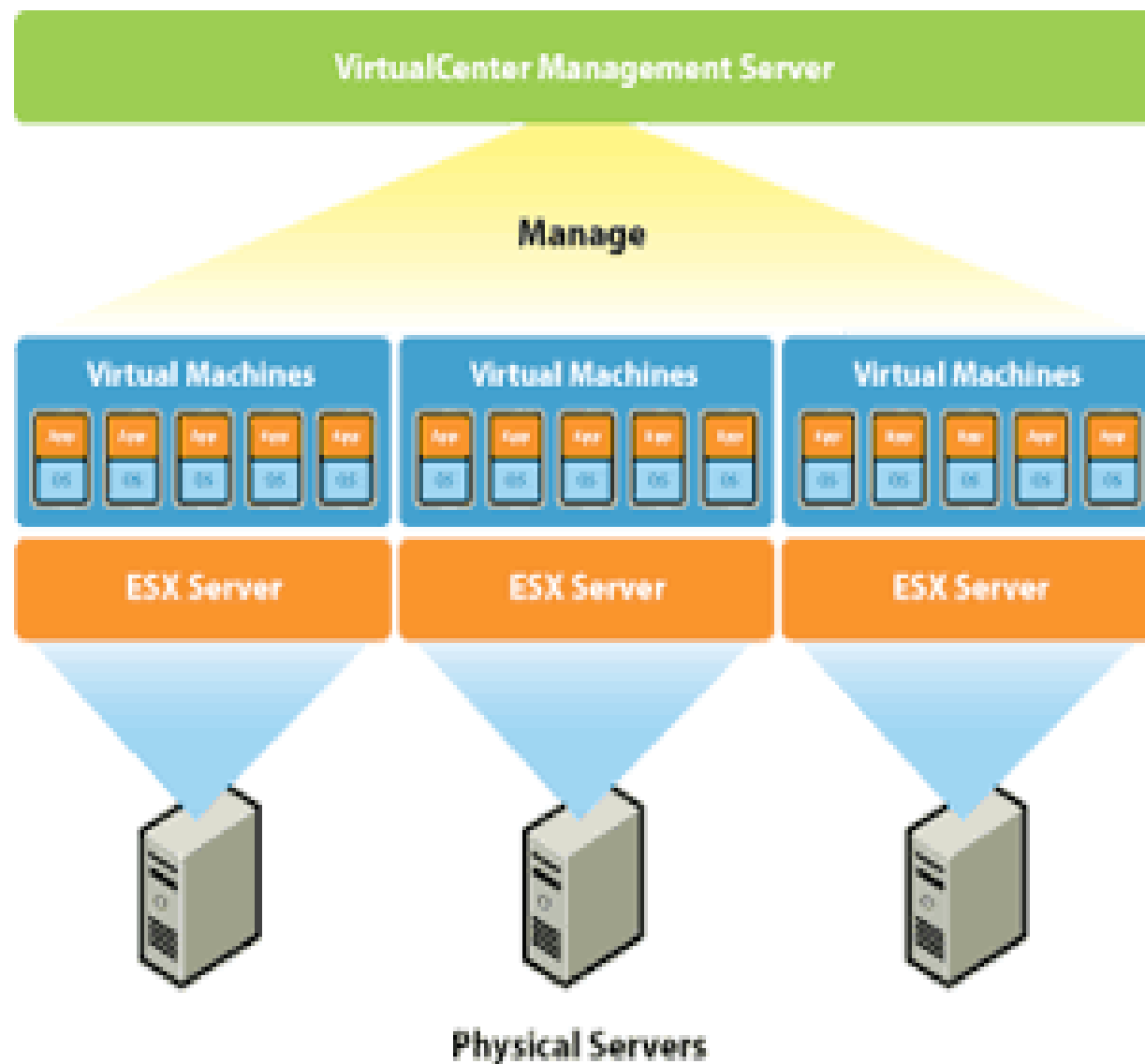
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Basic Server Virtualization





Managing VMs ...





Utilizing Virtualization

In order ...

1. Test/Dev
2. Production
3. BC/DR !!!!



Test/Dev Environments

- Provide precise copies of production servers
- Simple, fast requisitioning of new servers
- Low cost Test/Dev environment
- Maximize use of available resources



Production

- Server consolidation
- Improved uptime (even if 1 VM per Svr)
- Minimize data center requirements:
 - ✓ Cooling
 - ✓ Electricity
 - ✓ Space
 - ✓ TCO

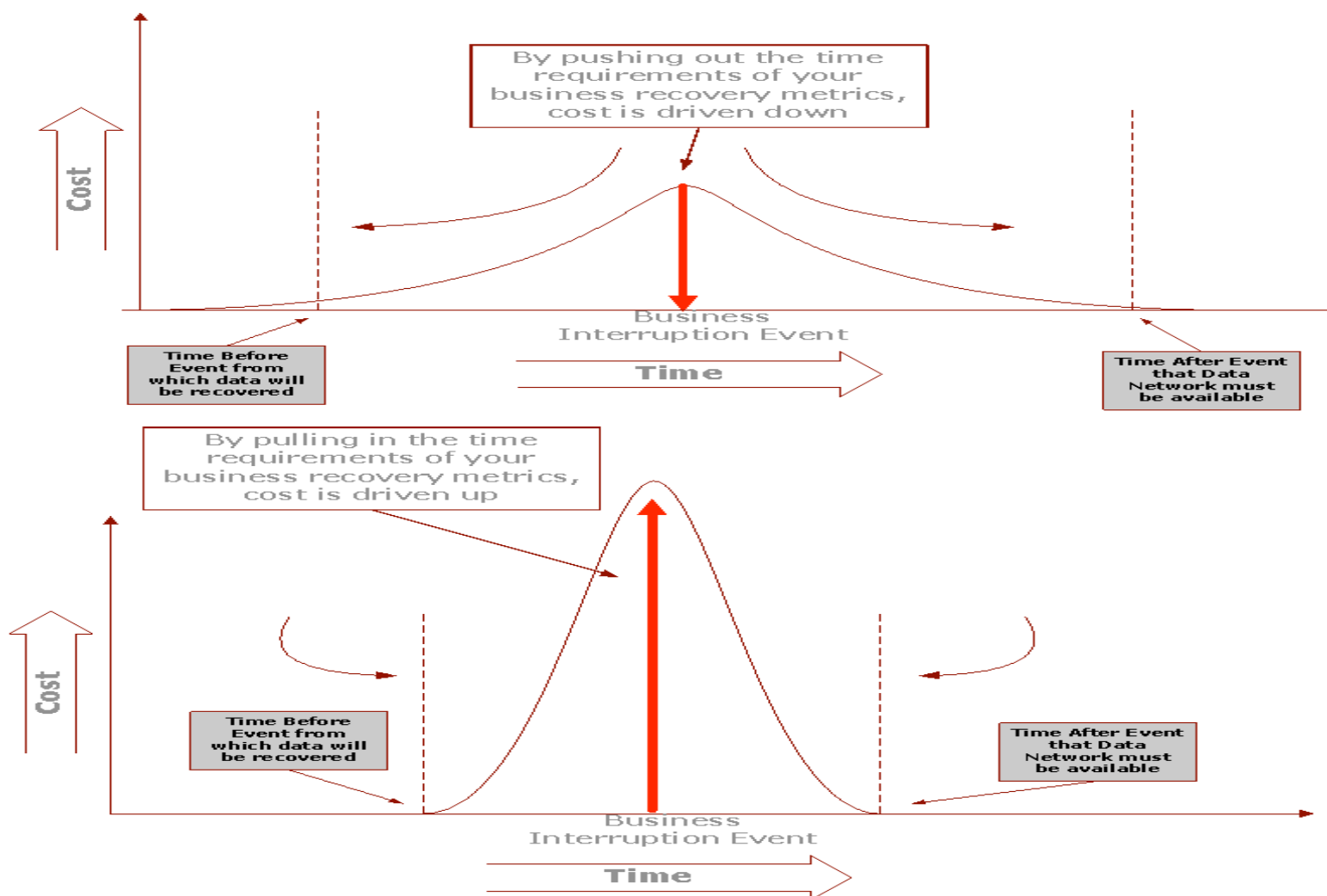


BC/DR

- Replace the traditional one-to-one requirement with a many-to-one
- Improved uptime (VMotion)
- Minimize second site Datacenter requirements
- Fool the “DR Cost Curve”



Fooling the Cost Curve w/ Virtualization





What Virtualization will NOT do ...

- ... change application resource requirements
- ... change your I/O or storage requirements
- ... prevent application issues
- ... prevent O/S-caused crashes

(so better to use a non-OS hypervisor)



Fads and Trends

FADS:

- Dot Com's (round 1)
- "Push" Technology
- "Knowledge Management"
- Mom/Pop ISP's
- Peer-to-Peer Networking
- WAP
- VoIP (round 1)
- Larry Ellison's Thin Client vision

TRENDS:

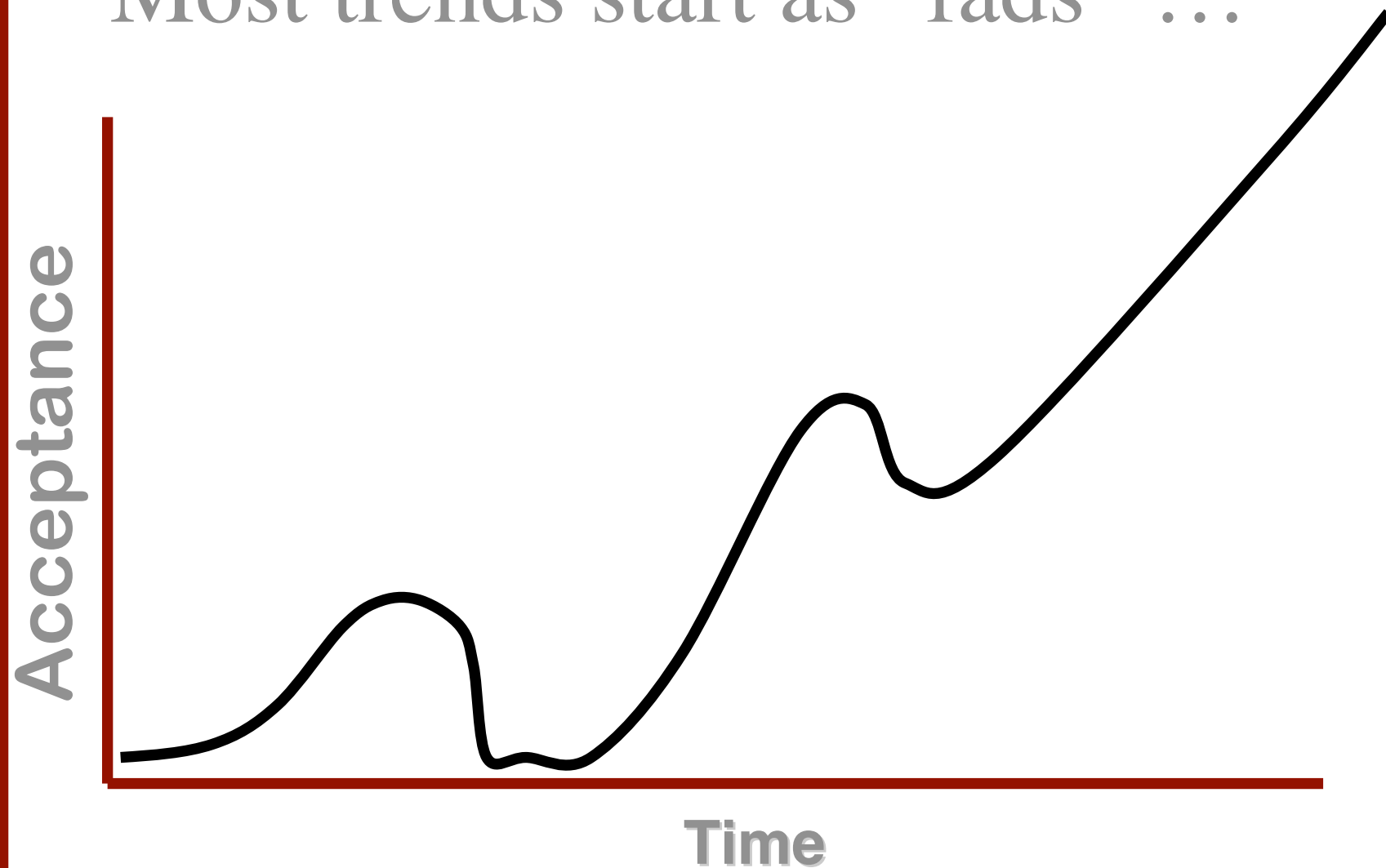
- PCs
- Dot Com's (round 2)
- The Internet
- VoIP (round 2)
- Interactive Messaging
- Smaller servers

Virtualization ... ?



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Most trends start as “fads” ...





Forecasting Trend vs. Fad

1. Is it copied successfully?
2. Is there real substance behind the hype?
3. Is it bewildering?
4. Is there a problem to be solved?
5. Is it driven or pushed (i.e. “appeal”)?
6. Is this the answer or a stepping stone?



Server Virtualization: Trend or Fad?

1. Is it copied successfully?
 - VMware started the “trend”, Microsoft is copying it with next Windows version (others, too)
2. Is there real substance behind the hype?
 - Seems to be ...
3. Is it bewildering?
 - No ... it makes perfect sense to utilize resources as much as possible
4. Is there a problem to be solved?
 - Absolutely !!!
5. Is it driven or pushed?
 - Driven by need
6. Is this the answer or a stepping stone?
 - It's the beginning of the evolution ...(IMHO)



So ... what next?

1. Basic platform is set
2. Expect improvements in flexibility and mobility
3. Expect a LOT of ISV push (lots of Mgmt Tools; careful of the fad-vs-trend)
4. Expect a “Green-ish” push (CA “PECO” giving cash back; automigration and powering down physical servers, etc.)

For more info:

ETC *Virtualization Technology Conference*

June 3rd – Penn State Great Valley

No Admission



So ... what now?

1. Start somewhere ...
2. Speak with colleagues ... (VMware Users Group Mtgs)
3. Understand conceptually where it applies
4. ... then apply it.



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Questions?

(now or later)

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