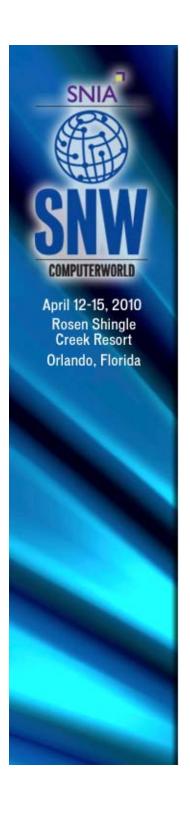


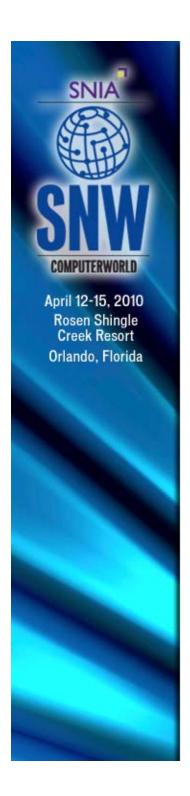
## Virtualization at Scale

Christopher Hawk
EMC Global Services Director



#### **Description**

It's a given that the technology has proven it's ability to support the highest level of application workloads. Where IT departments are struggling is in gaining buy-in from application owners, and being able to answer the question; "What applications should we virtualize next, and why?" This presentation will provide a proven approach and methodology to identify and prioritize applications to be virtualized. This approach leverages best-in-class tools to combine key management technologies to correlate the application type, application dependencies, with the environmental, platform, utilization, and performance elements. Incrementally to this information, validation of business criteria such as critically and recovery point and time objectives. Summary of benefits: -Increase accuracy of key technical and business information required to virtualize your enterprise - Reduce risk to the overall virtualization program - Minimize planning time and resources required.



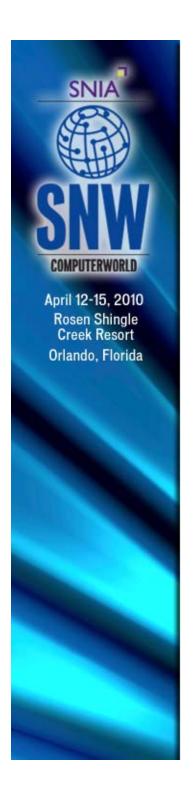
# Agenda

- Virtualization in 2010
- Drive Business Value
- Deployment Considerations
- Tier One Applications



#### Virtualization in 2010 – The Good

- Virtualization is mainstream, the CAPEX
   TCO and ROI are there
- Everyone is on the journey to the Cloud
- Performance no longer an issue
  - Reduction of hypervisor overhead to 10%
  - x64 Architecture removes barriers
- ISV Support no longer an overriding issue



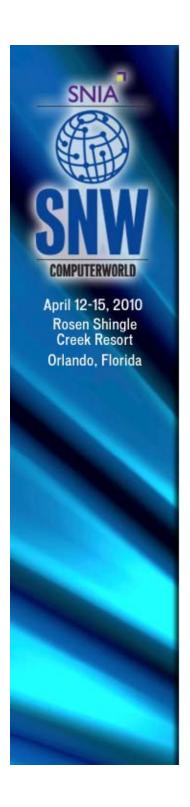
### Virtualization in 2010 – The Bad

- OPEX Savings harder to quantify
- Lack of comprehensive service management tools and standards
- Organizational process, procedures, and roles/responsibilities have not caught up to the technology
- Providing for broad-based security is still an issue



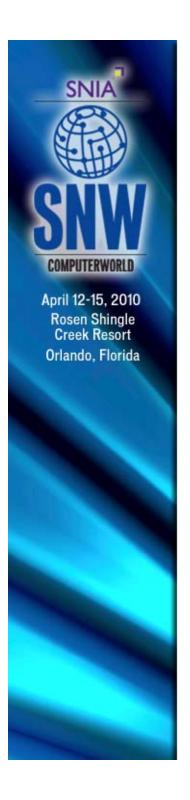
#### **Drive Business Value**

- Always ask "What value does this provide to the business?"
- Demonstrate reduced TCO, and increased ROI on a regular basis
- Clearly understand the business challenges, tie IT initiatives directly to these challenges.
  - Example: Application development lifecycle can be reduced by faster provisioning of infrastructure (How much has this saved your company in 2009? In the first quarter of 2010?)



#### **Drive Business Value**

- Today's business owners get the value of the cloud, tomorrow's business owners will not do business without it
- Demonstrate reduction in time to market for new applications that drive business revenue



## **Deployment Considerations**

- Measure twice, cut once
  - Don't design the enterprise virtual infrastructure into a corner
- Change the provisioning paradigm
  - Achieve the vision of self service across the stack
  - Pro-actively measure performance and capacity
- Standardize:
  - Enterprise management tools across virtual infrastructure platforms, and across both physical and virtual
  - Virtual infrastructure organization



## **Deployment Considerations**

- Design for the cloud, use virtualization to scale-out, not to scale-up in the same old siloed way
- Design for reduced risk
- Hit the reset button on what you know about storage
- Take advantage of newer technologies such as:
  - De-duplication
  - Bundled "N Tier" application deployment
  - vAPI integration



## Tier One Applications

- Move beyond infrastructure applications
- Understand dependencies to the infrastructure and to the other applications
- Understand application profiles, and how applications support the business process
- Understand business impact, and rightsize the virtual environment.
- Don't over-build or under-build