

# Five Minutes of Fame at Nalit PDS

## **State of Tennessee General Assembly**

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# Highlights in 2011

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- VMware and Hardware migration
- SAN migration
- Migration challenges when moving from 2003 to 2008R2
- Mobile device management? Not there yet.

# VMware

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- Replaced four Dell 2950 servers with 32GB of RAM to four Dell R710
- Migration from ESX to ESXi and VSphere 5.0
  - VMWare is discontinuing support for ESX
  - We migrated from ESX 4.1 to ESXi4.1
  - Migration from ESXi 4.1 to 5.0 is forthcoming
  - The migration is greatly simplified if you are moving to new hardware, if upgrading existing hardware it is better to go from ESX 4.x to ESXi 5.0 as there are in place upgrade solutions.

# VMware

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- Don't forget change in licensing from Socket to VRam entitlements.
- Moving to VCenter 5.0 offers a number of management improvements.
  - You get many more alerts that have improved triggers.
  - Hardware alerts are available on HCL approved hardware that do not require an agent. Examples are drive failure, etc.
  - Update component is more efficient, only focus is on Host updates. Guest updates are gone.

# SAN Migration

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- Migrated from Clarion CX500 to HDS2100
  - Initial move occurred in 2010 from 75 drives on the CX500 to 30 drives on the HDS2100
  - Completion occurred this year with the addition of drives bring the total number of drives to 52 in the HDS2100

# SAN Migration

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- Widestriping and thin provisioning
  - On the HDS2100 we chose to go with a Hitachi technology known as dynamic provisioning.
  - Dynamic provisioning allows for both wide-striping and thin provisioning. This gave us improvements in performance by using less disks to achieve similar performance, and also improves storage efficiency.
  - This technology is fully implemented in VMWare.
  - Performance with 30 drives was on par with CX500 at 75 drives and was improved with move to 46 drives in

# Migration challenges when moving from 2003 to 2008R2

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- In process of migration of Servers from 2003 to 2008R2.
- SQL, and Web Services are migrated.
- AD and File and Print are next
- Print servers can be a challenge as 2008 does not very easily support XP clients so a two or three tiered approach is being used.

# Mobile device management not there yet

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- Simply put the only mobile device platform that offers any real manageability is Blackberry and our Blackberry users are declining.
- IOS and Android users are for the most part un-managed and this is disappointing.