



SANsymphony-V Release 8.1

Q311 Highlights

GA – August 1, 2011



Featured Enhancements in 8.1



- Automated Storage Tiering
- Integration with Microsoft Windows Snapshot (VSS)
- Redundant Mirror Paths over iSCSI
- Out-of-band initialization for Asynchronous Replication
- Extended support for Microsoft Failover Clustering
- PowerShell Scripting Library
- Simpler License Activation

Automated Storage Tiering

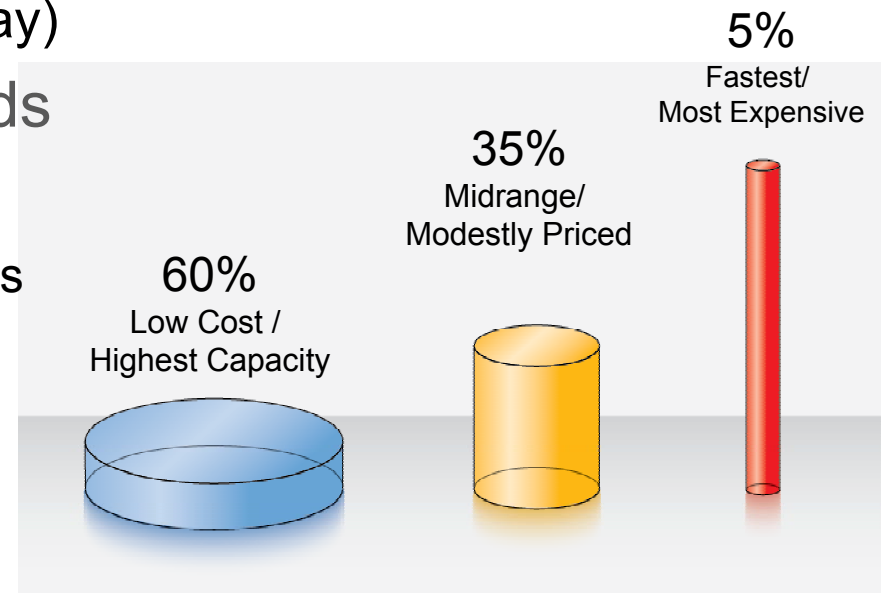


“Making best choice of real estate on your behalf”

- Dynamically migrate virtual disk blocks among different classes (tiers) of storage
- Best location at the time determined by:
 - ▶ Access frequency
 - ▶ User preferences
- Classify tiers according to price, performance & capacity
 - ▶ e.g., SSD, SAS, SATA
- Pricing / Licensing
 - ▶ Included in vL4 & vL5
 - ▶ Optional on vL2 & vL3
 - Priced per node
 - ▶ Not available on vL1
- Sales Collateral
 - ▶ Expanded PPT & technical feature descriptions
 - ▶ Web site update
 - ▶ White Paper
 - ▶ Live Test Drive update

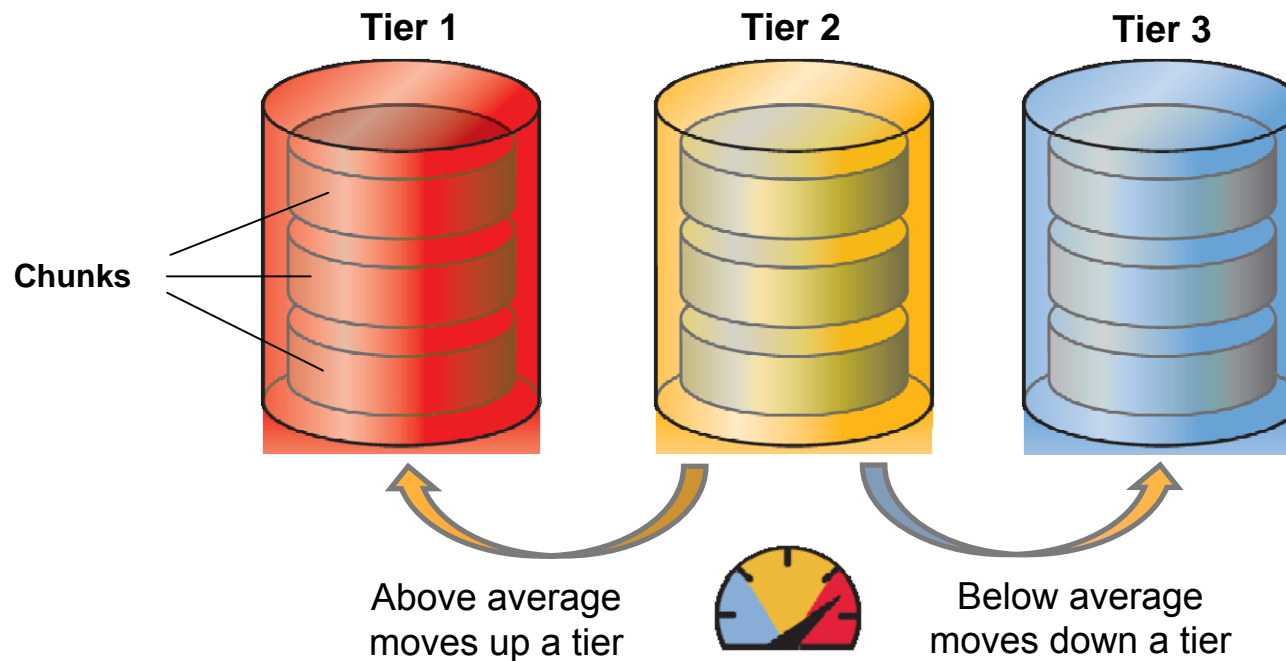
Sales Positioning

- Get best use of your investment in disk space
- Only heterogeneous auto-tiering software solution
 - ▶ Device-independent, incorporates existing disks
 - ▶ Just like all of our comprehensive solution set
- Negotiate best deal for each tier
 - ▶ Not confined to one manufacturer
 - ▶ Not confined to one frame (array)
- Override for special workloads
- Cached for additional speed
 - ▶ Minimize need for expensive drives
- Thin-provisioned to occupy minimum capacity



Auto Tiering – How it works

- Monitor sustained I/O behavior across groups of disk blocks (chunks)
- Compare access frequency against average for each tier
- Promote or demote chunks to most suitable tier



Other Important Enhancements

- Windows Volume Shadow Copy Service (VSS) provider to coordinate snapshots with other processes
 - ▶ Trigger point-in-time copy from Exchange, SQL Server, SC DPM, & others VSS requesters/writers

- Enhanced Microsoft 2008 cluster support
 - ▶ Extends support up to the maximum number of Windows 2008 R2 cluster nodes sharing a virtual disk

- Redundant synchronous mirroring paths over iSCSI
 - ▶ Alternate link if one connection between DataCore nodes fails

- Out-of-band initialization for Asynchronous Replication
 - ▶ Use transportable media to initialize remote destination
 - ▶ Speed up time to get remote site ready
 - ▶ Doesn't consume expensive WAN links

PowerShell Scripting Library



- Script administrative & configuration tasks
- *Easy-to-learn* commands (cmdlets) with intuitive verb-noun combinations
 - ▶ Correspond to actions performed via user interface
 - ▶ Create-DcsVirtualDisk, ...
- Trigger snapshots, replication, notification, etc.
- Integrate SANsymphony-V activities into other workflows
 - ▶ Applications
 - ▶ 3rd party products (hypervisor, backups, systems management, ...)

Keep in Mind

- Top level sales positioning for new prospects
 - ▶ Don't get distracted by latest features
 - ▶ Although, auto-tiering could be strong financial motivation
- Maximize
 - ▶ Availability
 - ▶ Performance
 - ▶ Utilization
- Complement Server / Desktop Virtualization
- Manage & leverage diverse storage equipment