

What's New with Tivoli Storage Manager ?

June 13th 2013

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- This presentation describes potential future enhancements to the IBM Tivoli Storage Manager family of products
- All statements regarding IBM's future direction and intent are subject to change or withdrawal without notice, and represent goals and objectives only
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- Tivoli Storage Manager Release Schedule at a Glance
- TSM 4Q 2012 TSM 6.4 Recap
- TSM 2Q 2013 TSM 6.4.1 The Next Generation TSM with Operations Center
- TSM 4Q 2013 TSM 7.1 Transforming Customer Operations
- IBM Storwize V7000U Integrated TSM/HSM client





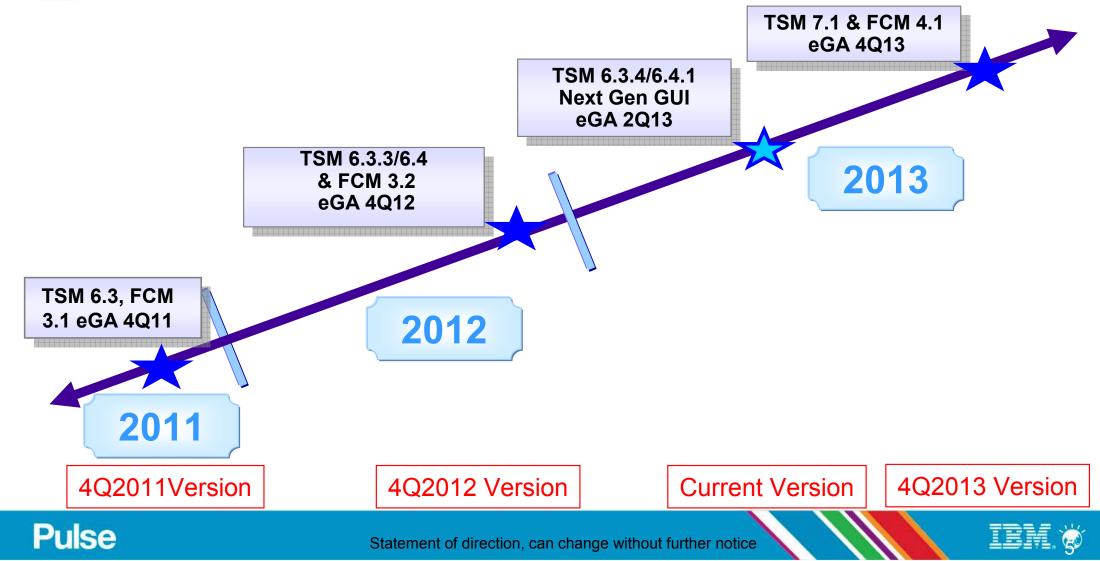


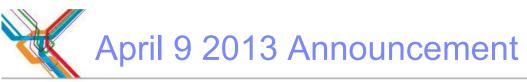
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End of Support on 30/04/2014 for:

Tivoli Storage Manager 5.5 and 6.1

- Extended Edition
- Advanced Copy Services
- Copy Services
- Databases
- Mail
- ERP
- System Archive Manager
- Storage Area Network
- Space Management
- HSM for Windows

See session "Best practice procedures for upgrading to TSM 6.3" @ 13:30 also see Youtube Video :-

http://www.youtube.com/watch?v=oPHobPgOGiw&list=PL1c3vkFzmh eeu8DsMm_ARbwZze_-Wul_N&index=1







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- TSM for VE incremental forever backups
- LDAP integration for user/admins and complex passwords
- SAP HANA in-memory database support (DP for SAP HANA)
- Application-consistent backup for MS Exchange and MS SQL running on VMware
- Enhanced Cognos reporting to monitor backup and archive environments
- MS Exchange 2012 DAG support active and passive DB backups and restores







- True progressive incremental backup methodology that does not require users to perform periodic full backups
- Improved performance with multiple backup processes in parallel
- A new configuration wizard
- Support for vApp and templates backup
- Application-aware MS SQL/Exchange backups running within a protected guest OS
- Reporting: VM backup coverage reporting from vCenter plugin and TCR and improved data in activity log and summary table





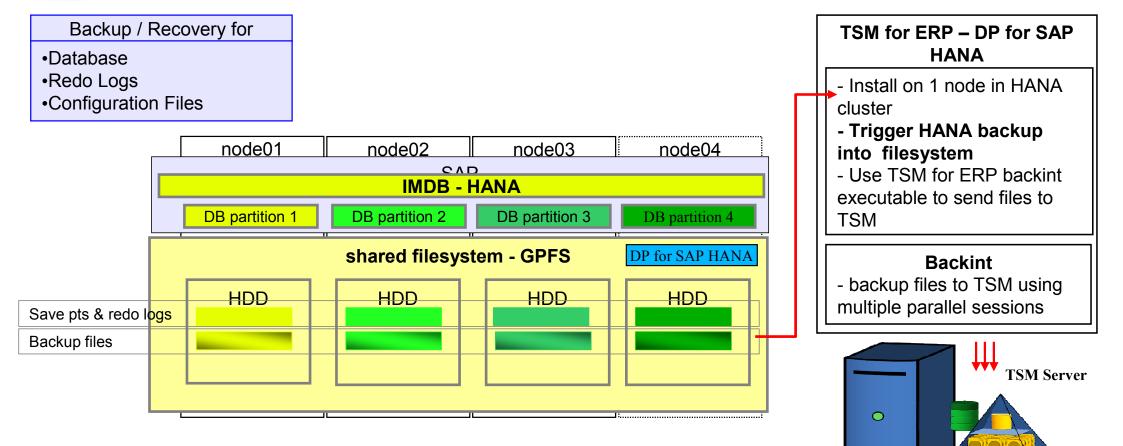


- Independent Lab Validations
 - Enterprise Storage Group (ESG) Lab Validation Report IBM Tivoli Storage Manager for Virtual Environments
- IBM TSM 4 VE Sizing Guide for 1000+ vm guests













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TSM Reporting and Monitoring (6.3.4) New Reports

Client Storage Summary and Details

-Total storage space being used by Servers, Domains and/or Client Nodes

Client Storage Usage Trends

Type of storage space used by node(s) over time
How much storage may be needed for a set of nodes' storage growth

VE Activity Status

Pulse

- -Backup activity by VE guests
- -Success/failure & how often the backups occur

VE Current Occupancy Summary

- -Like viewing occupancy entries of a client node
- -Storage used by VE guest(s) is reported

VE Backup Type Summary

-How many of your VE guest nodes are doing full and incremental backups

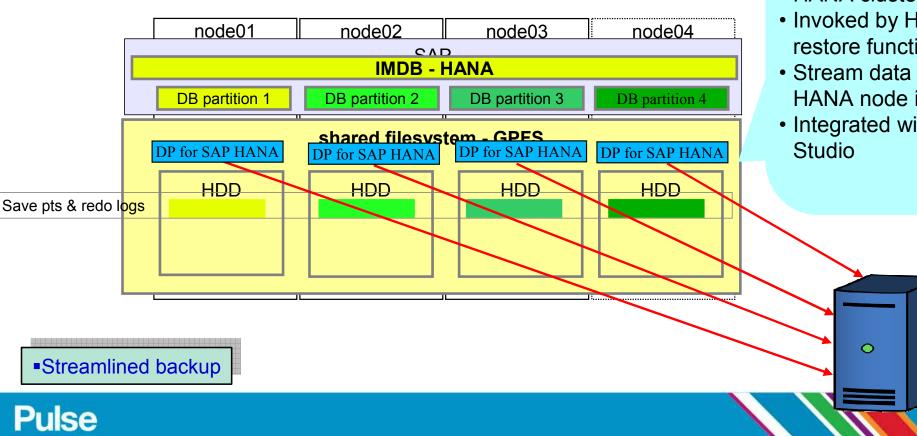
Additional out-of-the-box Cognos reports

TRM "What VM backups failed last night?" IBM "Which VMs are performing incremental forever backups?"



•Database

- •Redo Logs
- Configuration Files

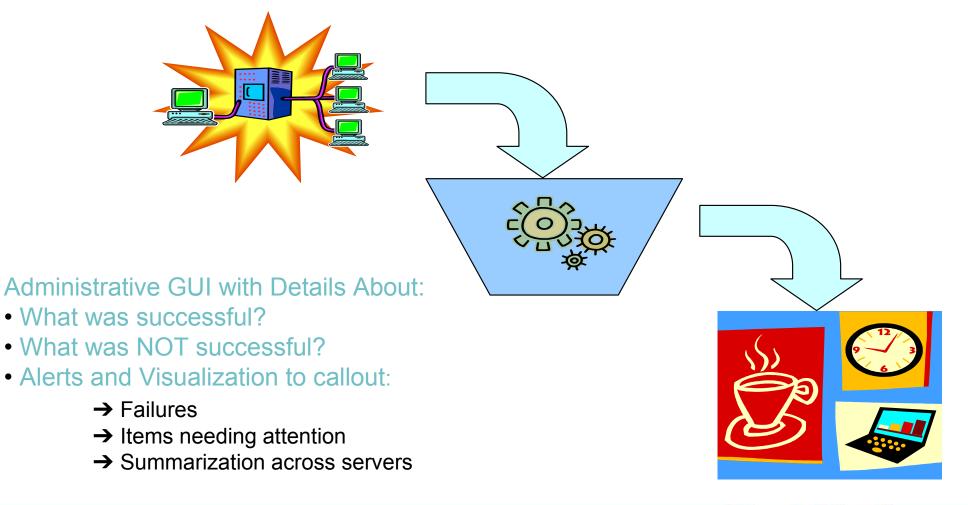


TSM for ERP – DP for SAP HANA

- Installed on all nodes in HANA cluster
- Invoked by HANA backup & restore functions
- Stream data from each HANA node in parallel
- Integrated with SAP HANA

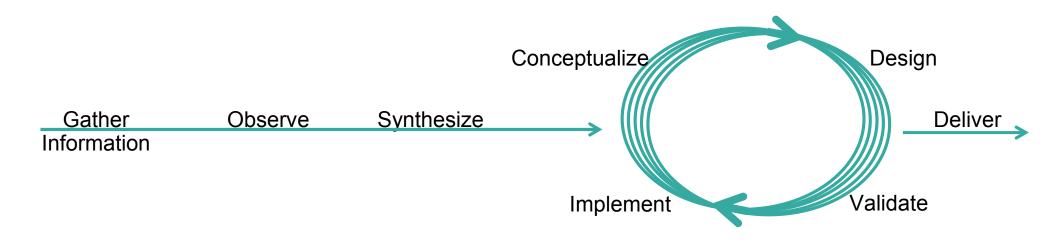
TSM Server









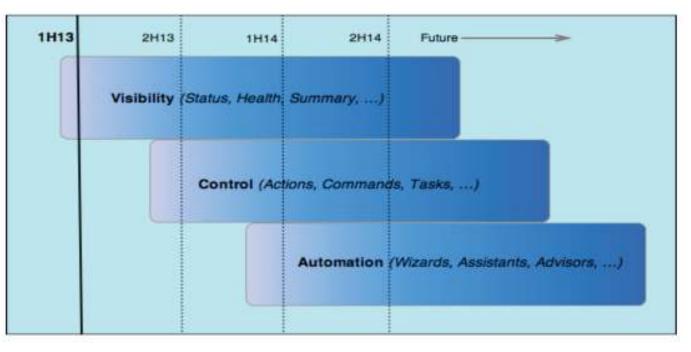


- •Gather Synthesize: human centered **research**, brand, user and engineering requirements, task analysis
- Conceptualize Design: scope, conceptualize, visualize ideas, prototype
- Validate Design Implement: usability test, graphics, validate
- •Deliver Fine tune visuals and functionality, the "look and feel", metrics









- Primary focus for first release: Visibility.
- Expect twice a year deliveries with incremental new functionality.
 - Build-out more visibility
 - Introduce and build-out control in future releases.
 - Introduce and build-out automation in future releases.



TSM What is the Operations Center - Overview

- New quick installer (IBM Installation Manager 1.6) with built-in logging around 5 mins
- Minimal footprint < 600MB
- A web-application that uses:
 - Liberty for it's webserver
 - Dojo for the primary language/technology
- TSM 6.3.4 Servers with updates and support for:
 - Collecting and providing appropriate status and monitoring data for the UI
 - Monitoring and lifecycle management of alerts that:
 - Notifies the Operations Center as alerts occur
 - Optional capability to email alerts directly to designated administrators for immediate unterhered notification
 - A data collection engine to manage the consolidation and "singular" view of multiple TSM server for a given operations center.







Consolidated backup and recovery dashboard provides an "at-a-glance" visibility to the entire backup environment

- Drastically improves usability and reduces complexity of managing TSM
- Monitor from anywhere, with any browser-enabled device (IE / Firefox / Chrome / Safari)
- Centralized view of backup problems across multiple TSM servers
- Ability to drill down on areas of interest for detailed view
- Time-based view of client backups
- Essential problem information is highlighted, simplifying diagnostic steps
- Summary status for key assets with a detailed alert list to take corrective actions
- Common look & feel with IBM Storage Unified UI experience
- Integrated command builder (CLI) gives TSM experts advanced dashboard view





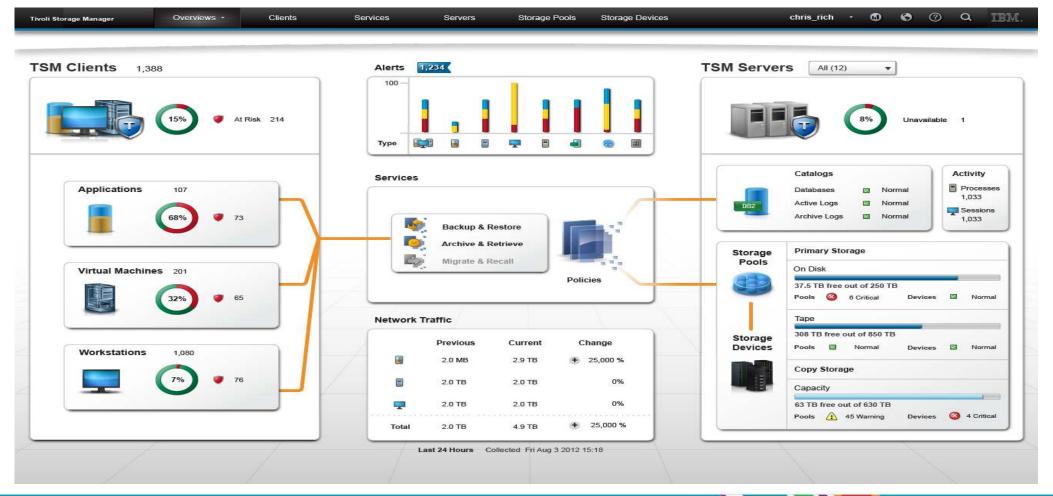


• Hub and spoke servers must have TSM V6.3.4 or later installed.















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OKCAPPPRD004	Workstation	TSMPRD09	Missed			*	🗹 🔯 Archive & Retrieve
OKCAPPPRD005	Workstation	TSMPRD09	Missed			~	🗹 📄 Migrate & Recall
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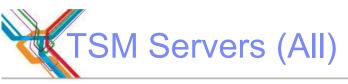




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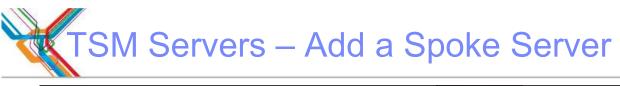




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DC1SRV06			2.2 TB	626 GB 424	2 hours	11 days
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DC2SRV23		hub and spoke servers, additional configuration is needed. Learn more	26 GB 424	626 GB 424	3 hours	11 days
DC2SRV24		Spoke server	26 GB 424	626 GB 424	🚹 1 day	1 month
DC2SRV25		Server address + Address	2.2 TB	2.2 TB	3 hours	11 days
DC3SRV31			2.2 TB	2.2 TB	3 hours	1 year
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- Additional disk space required for every 1000 clients,
- Add 2GB for database
- Add 10GB for archive log
- Hub must be sized to also contain all spoke data
- Network traffic from spoke to hub: for every 1000 clients,
- 30-60 MB/hour (default refresh setting)
- See Info Center, IBM Tivoli Storage Manager Servers, Installing and Upgrading the Server
- Required software is TSM 6.3.4 server
- Current recommendation is one hub can manage 10-20 spokes
- If there are particular sets of servers that are administered by a given TSM administrator, consider grouping them as spokes under a common hub
- Hub server could be a working TSM server, or library manager or config manager
- In larger installations, hub server may be dedicated





Youtube video of the Operations Center:

- OC install <u>http://youtu.be/VAYyZsXdBmE</u>
- OC walkthrough <u>http://youtu.be/wt1o8C_Zv40</u>

Early Access Program:

https://www-304.ibm.com/software/support/trial/cst/forms/nomination.wss?id=4589

Transparent Development Portal:

https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/communityview?c ommunityUuid=ad252900-cd24-4ed8-910a-19d531fff0ec







- Tivoli Storage Manger Release Schedule at a Glance
- TSM 4Q 2012 TSM 6.4 Recap
- TSM 2Q 2013 TSM 6.4.1 The Next Generation TSM with Operations Center
- TSM 4Q 2013 TSM 7.1 Transforming Customer Operations
- IBM Storwize V7000U Integrated TSM/HSM client







User experience

- TSM Operations Center active management functions
- Enhanced out-of-the-box reporting
- Additional DP for VMware deployment simplification
- Improved installation of TSM server and components

Virtualization support

- Full Virtual Machine instant access and recovery
- Support Active Directory
- Unified reports for VMware & traditional TSM agents
- Recovery: Database level recovery (SQL) and item level (Exchange)
- Data protection for vCloud Director tenant vApps

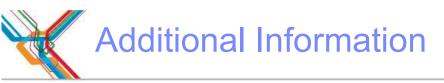
Disaster recovery

- Replication with seamless failback/failover for automated redirection of client nodes in disaster scenarios
- Replication of associated client information (client options, schedule, node info)

Application and storage device protection - currency Server infrastructure improvements







7.1 Early Access Program:

https://www-304.ibm.com/software/support/trial/cst/forms/nomination.wss?id=4807







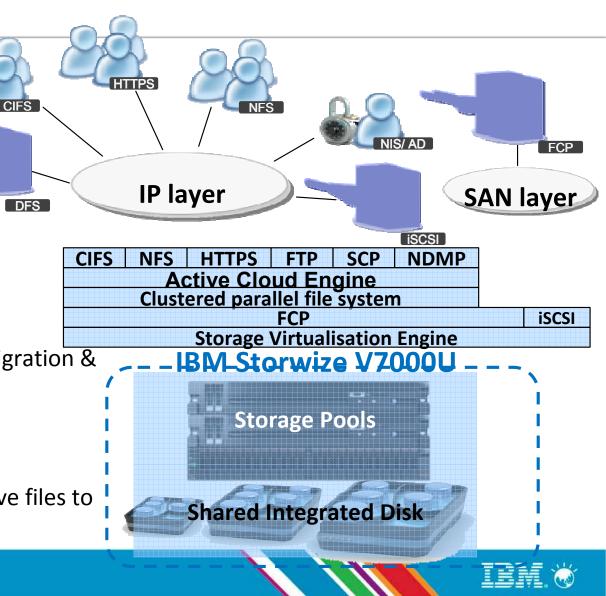
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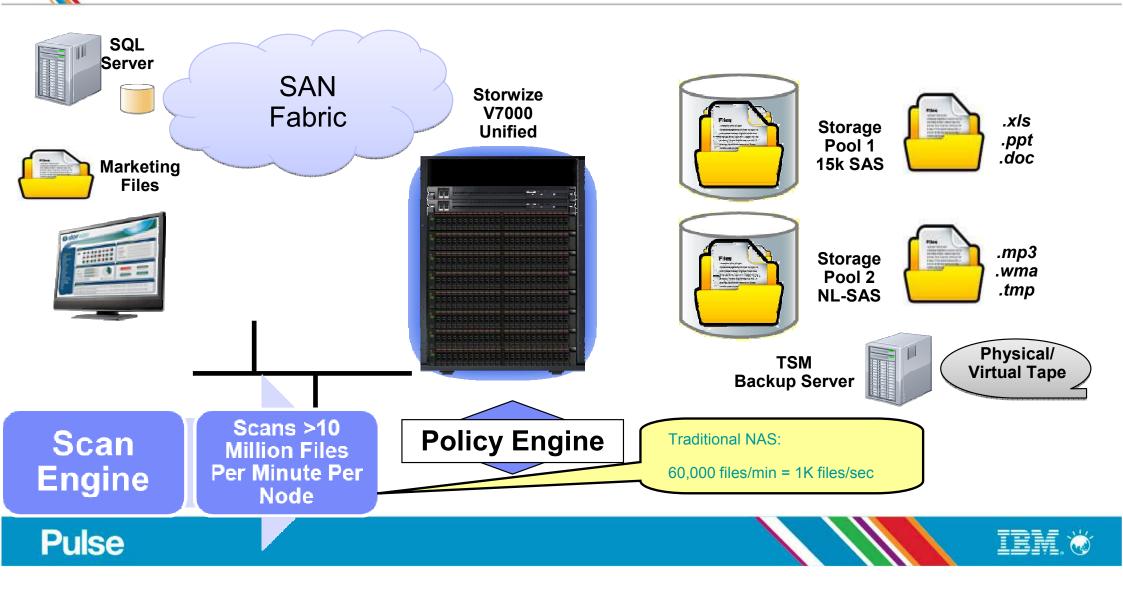




- Network File Serving
 - NFS v2/v3, CIFS, HTTP, FTP & SCP
 - Clustered parallel file system
 - Quotas Management
- Block Access
 - FCP, FCoE & iSCSI
 - Disk Storage Virtualisation Engine
- Information Lifecycle Management
 - Policy driven placement, movement, migration & deletion of files
 - Storage tiering (Disk-to-Disk-to-Tape)
 - Integrated TSM Backup/Archive Client
 - Integrated HSM agent to migrate inactive files to tape or Deduplication VTL



Storwize V7000 Unified – Integrated TSM Backup





•No more NDMP !!!

Services	Backup							
Backup Selection	Manage the currently running back	kup and restore se	essions or create new	/ sessions.				
	New Backup Tivoli Storage Mana	ger I Actions	*				Q	Filter
Backup	File System	Туре	Status		1	rrors	Files	Schedule
	TSM_HSM_DEMO	Backup	8:00 PM Success	100%	8:00 PM	0	2	Yes
	6/ Edit Backup Tivoli Sto			Success		0	2	
Antivirus	6, Start		Backup	Success		0	2	
10	6 Delete		Backup with Sync	Success		0	2	
	6 View Error		Sync only	Success		0	2	
	6 View Log		Restore	Success		0	2	
	6 Configure Tivoli St	orage Manager		Success		0	2	
	6)- <u>-</u>			Success		0	2	
	6/3/13 8:00 PM - 8:00 PM	Backup		Success		0	2	
	6/2/13 8:00 PM - 8:00 PM	Backup		Success		0	2	
	6/1/13 8:00 PM - 11:06 PM	Backup		Success		0	2	
	5/31/13 8:00 PM - 11:05 PM			Success		0	2	
	5/30/13 8:00 PM - 8:00 PM	Backup		Success		0	9	
	5/29/13 8:00 PM - 8:00 PM	Backup		Failed				
	5/28/13 8:00 PM - 8:00 PM	Backup		Failed				
	5/27/13 8:00 PM - 8:00 PM	Backup		Failed				







Questions





