TSM 7.1.1 and FCM 4.1.1

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TSM 7.1.1 and FCM 4.1.1 Announcement

- http://www-01.ibm.com/common/ssi/ShowDoc.wss?docURL=/common/ssi/rep_ca/4/64
  SA14-0664/index.html&lang=
  en&request_locale=en

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IBM Tivoli Storage Manager for Virtual Environments 2014

What's New

Simplified individual file level recovery for VMware

Fully automated VM mount to enable help desk file level recovery models

Expand single-pass hypervisor support to Hyper-V

Incremental Forever Backup

Restore of full virtual machines and Individual files from image backup

Auto discovery of VMs; auto-management of VM migrating between hosts

UI integrated with vSphere Web Client

Great for VMware administrators using the same UI for data protection

Role-based access control to limit access by datacenter

Optional integration with FCM for Windows

Off-host data movement

More efficient recovery from local snapshot

Client Benefits

Vastly improved user experience with simplified file level recovery – automates manual steps, increases administrator efficiency

An interface that is **familiar and comfortable** for VMware admins

Simplifies the management of the backup and restore processes for virtual machines in a **Hyper-V** environment

Greatly **improved efficiency** with incremental forever for **Hyper-V** and fast recovery from local recovery points with FCM

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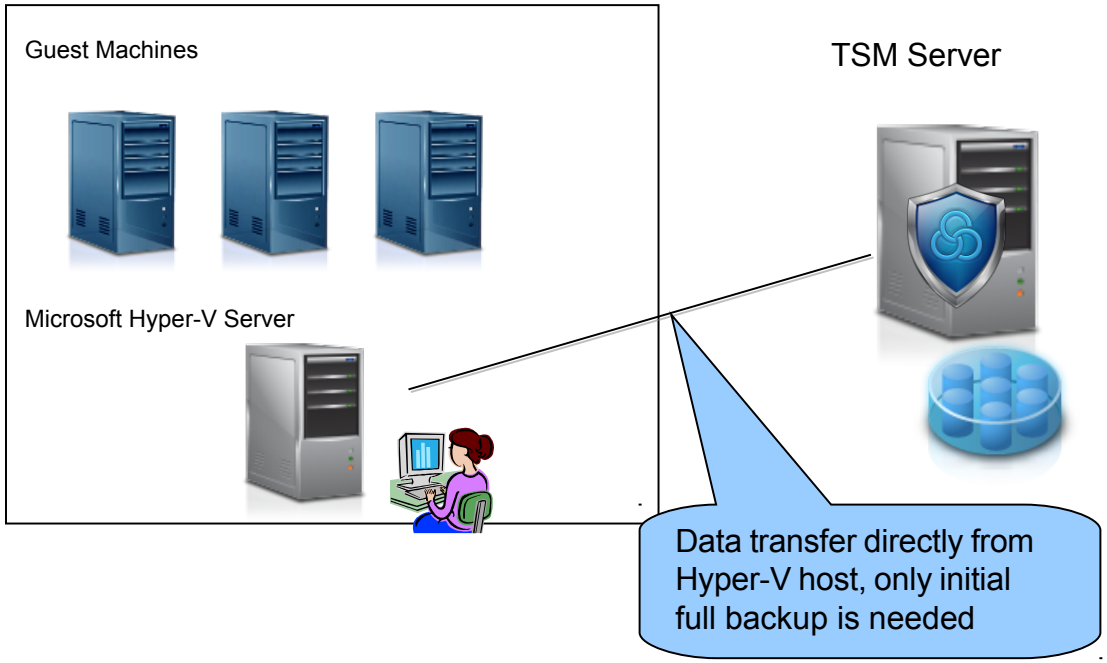
Hyper-V Incremental Forever Backup



	Existing Hyper-V Support	7.1.1 Hyper-V Support
Full VM backup	Y	Y
Incremental Forever	N	Y
Mount snapshot for individual file restore	N	Y

Customer Benefits:

- Reduced backup time
- Simplified management – no need to deploy agents on guest machines
- Reduced backup space requirements by up to 95% with incremental forever and deduplication*

**Results seen in IBM lab, improvement may vary depend on your environments*

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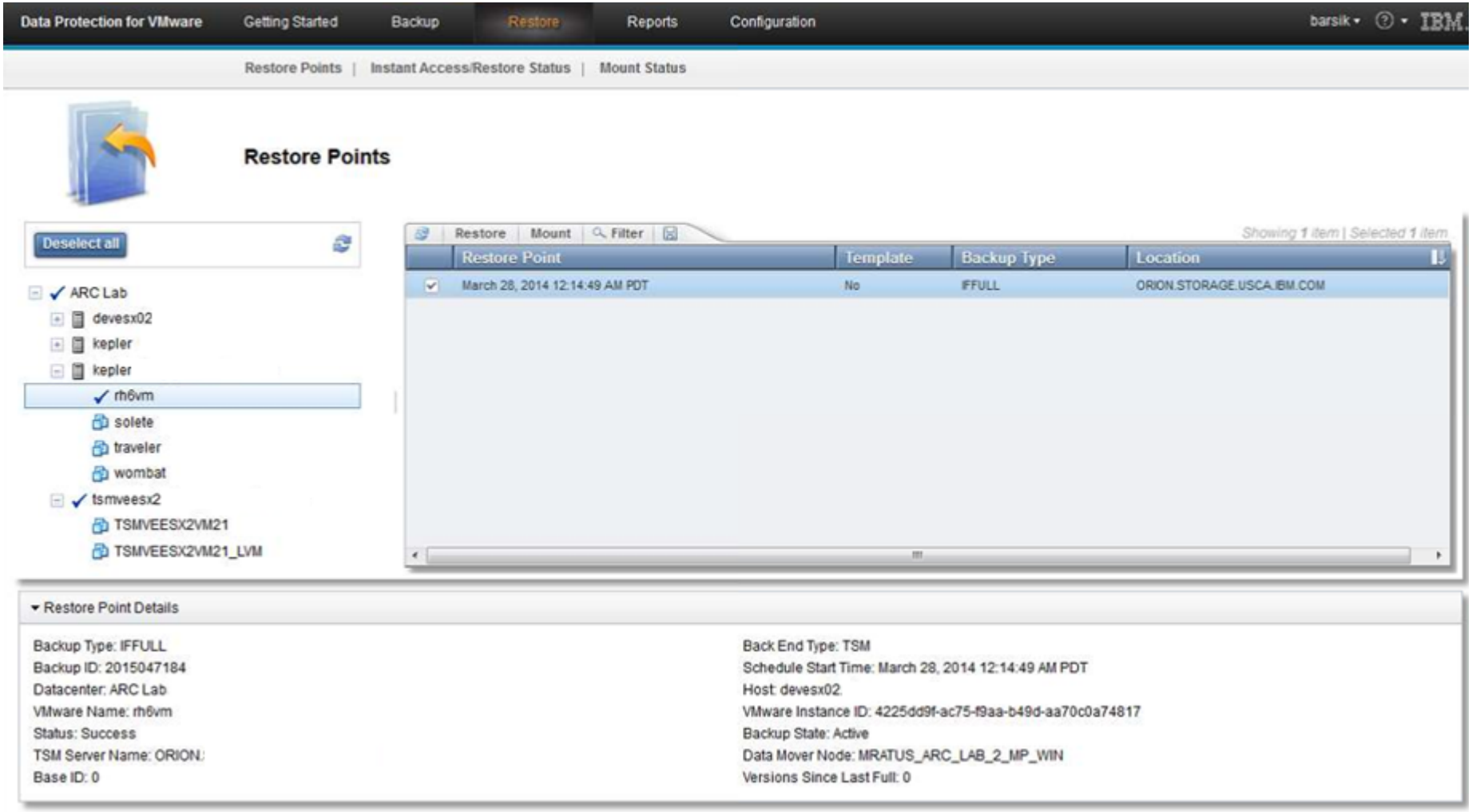
TSM for VE 2014: Simplified File Level Recovery



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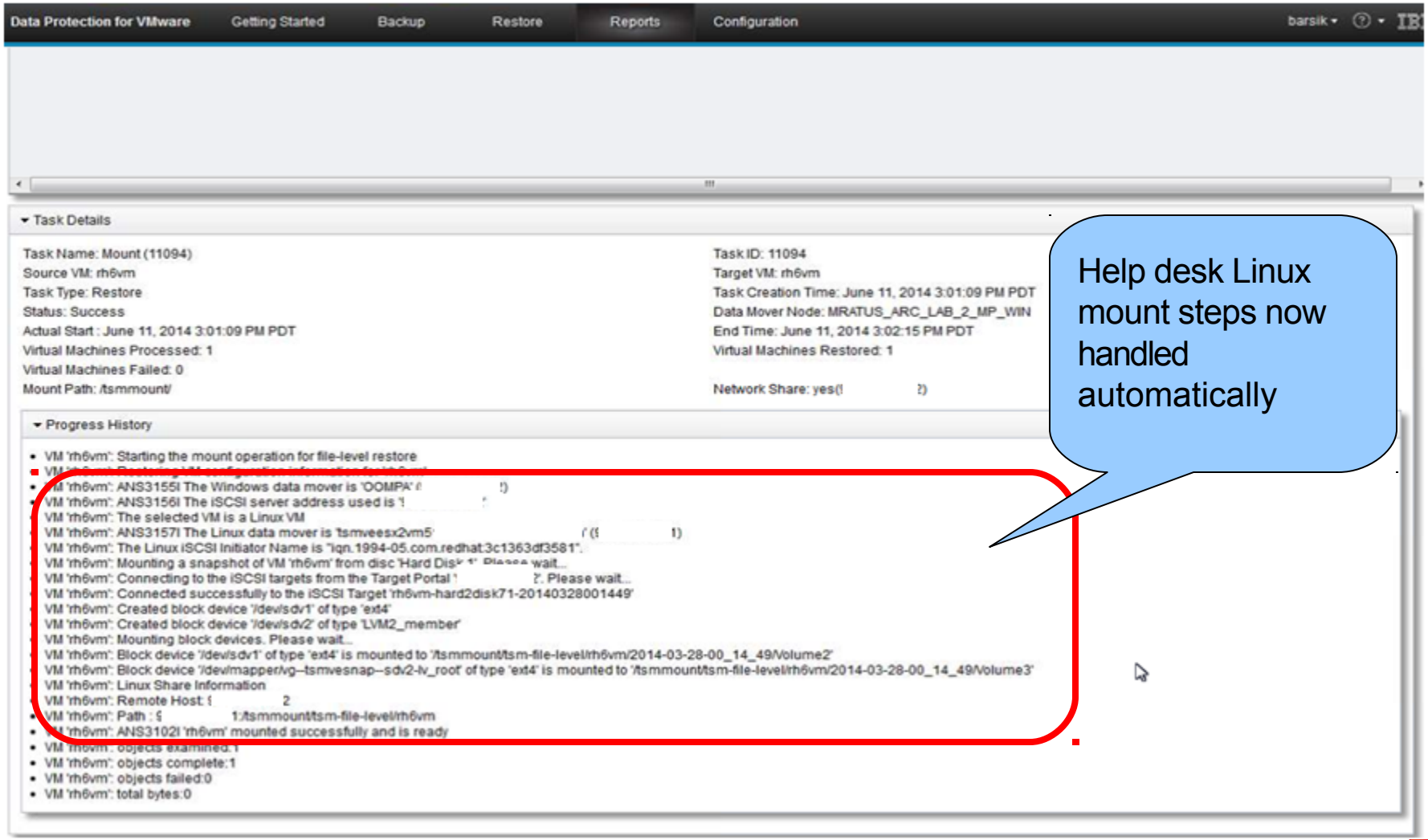
TSM for VE 2014: Simplified File Level Recovery



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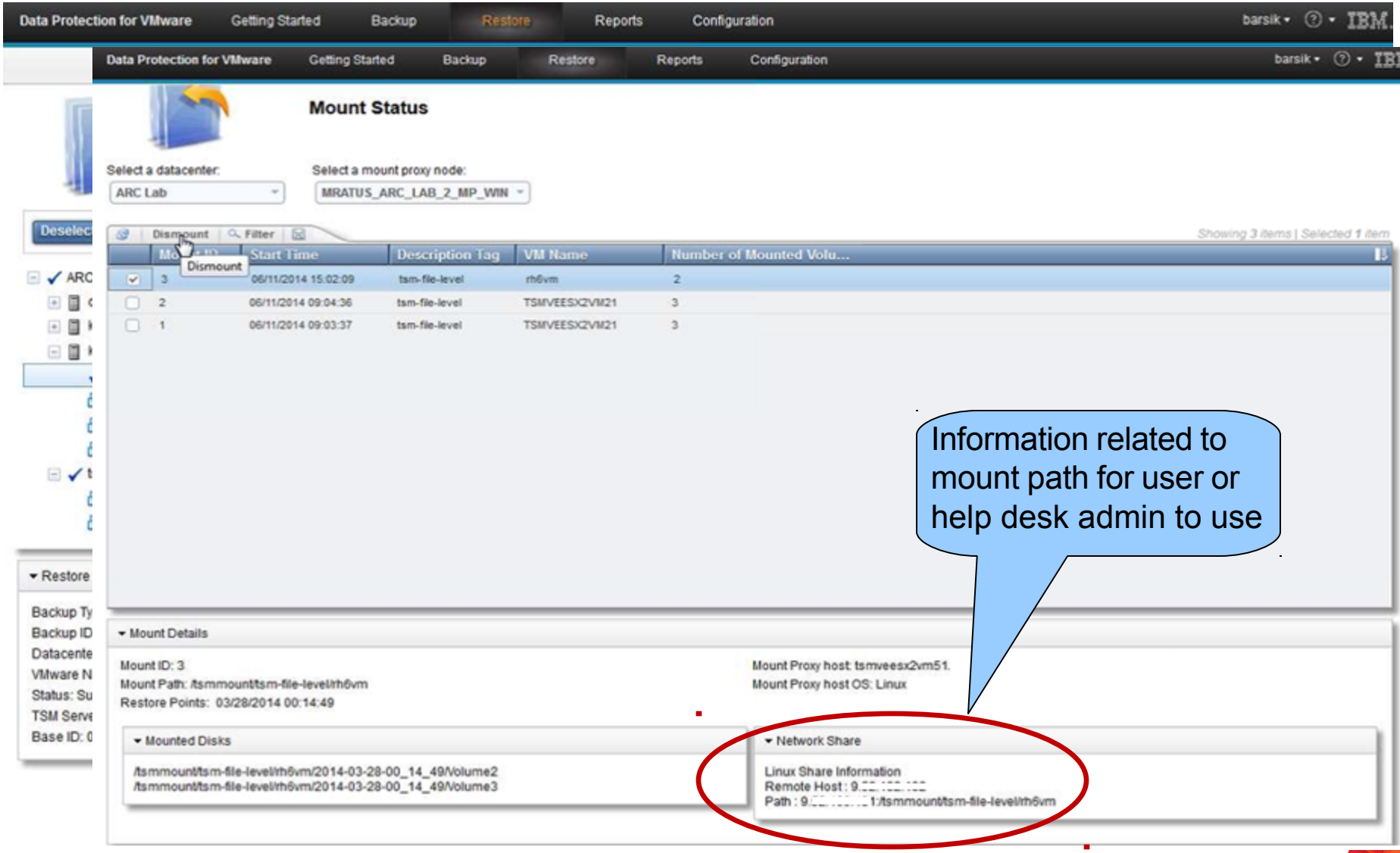
TSM for VE 2014: Simplified File Level Recovery



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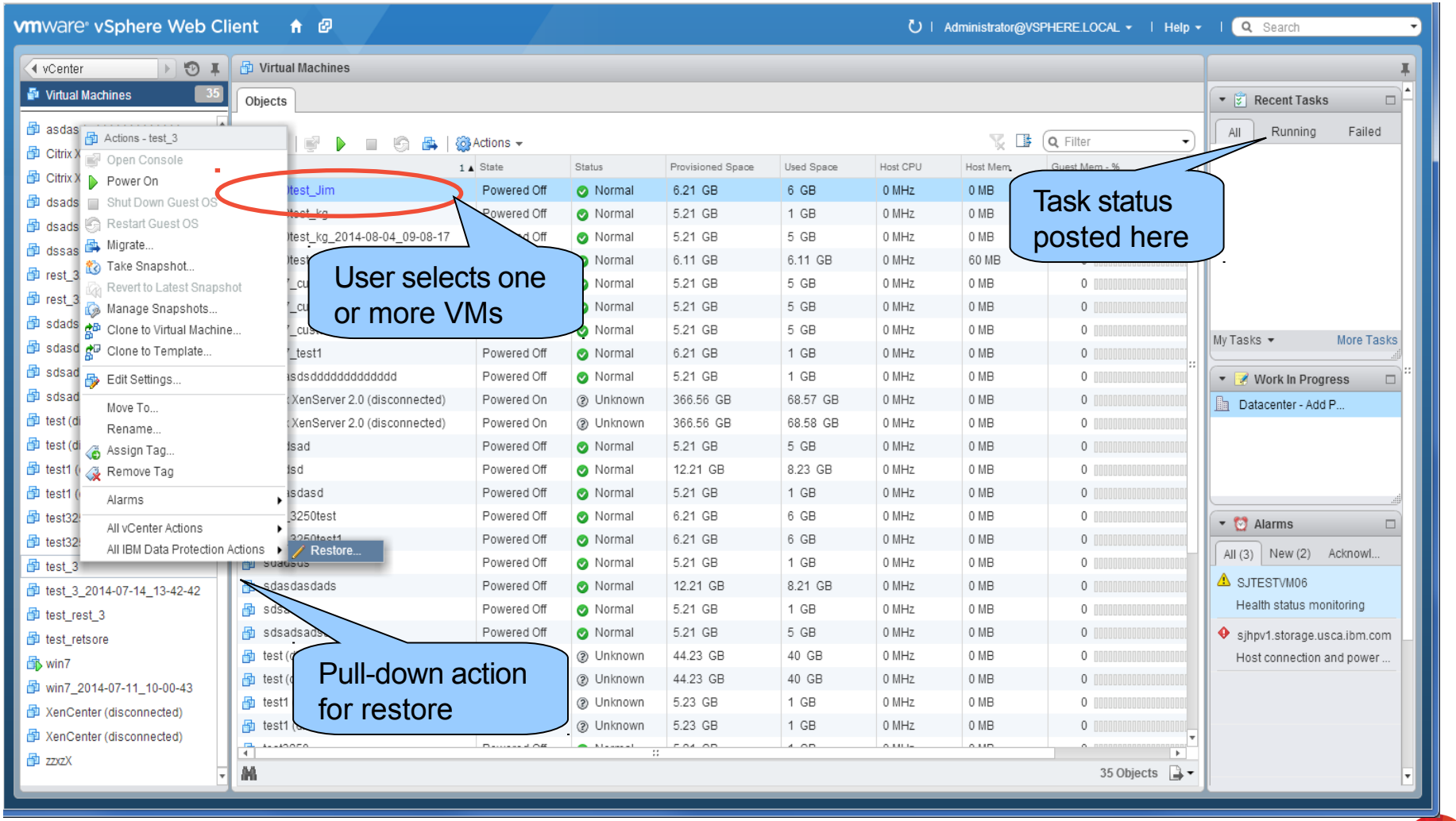
TSM For VE 7.1.1 – Integration with VMware Web Client

Use the same UI that VMware Admins use for data protection



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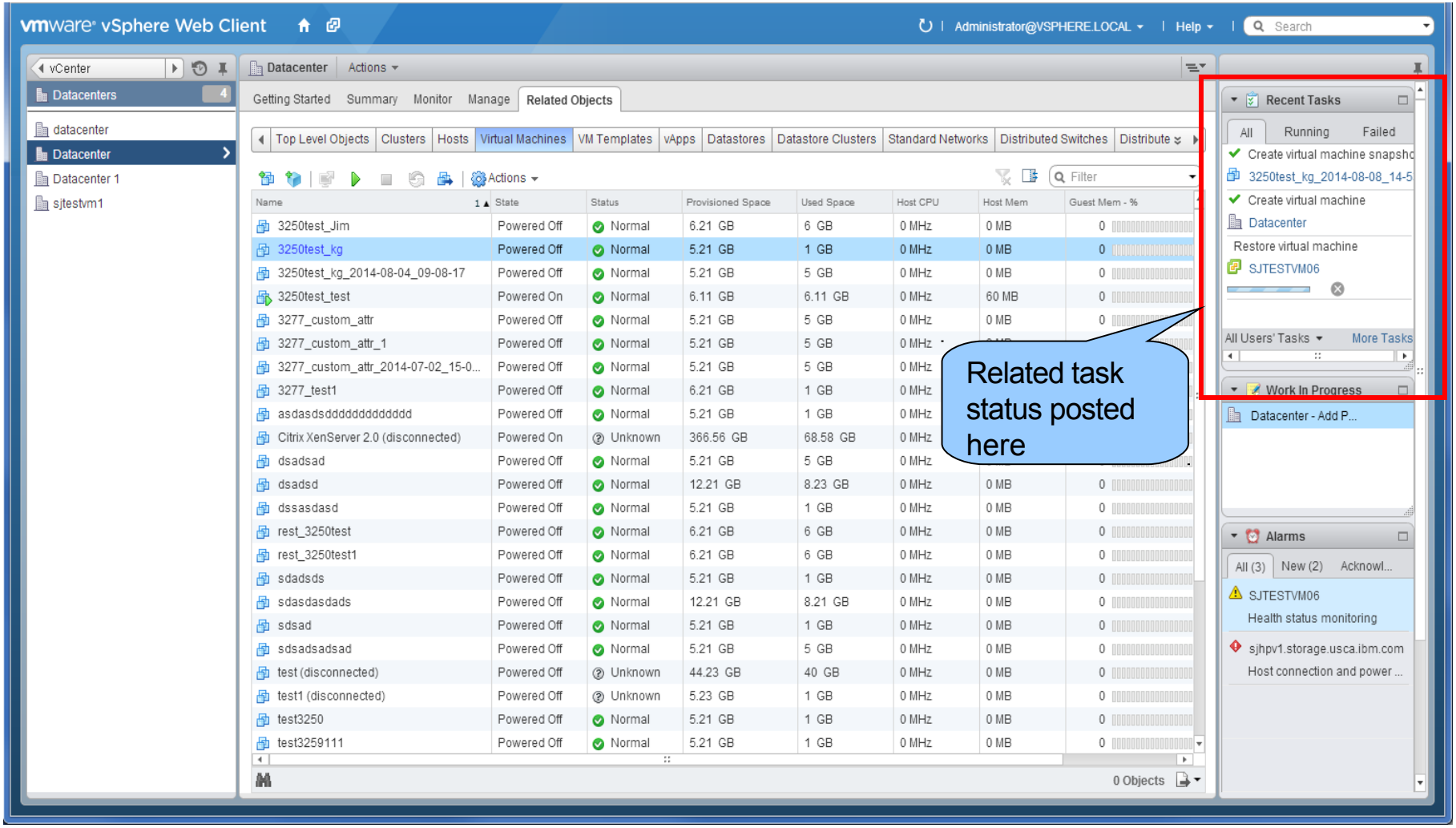
TSM For VE 7.1.1 – Integration with VMware Web Client

Restore submitted, see progress in Recent Tasks area



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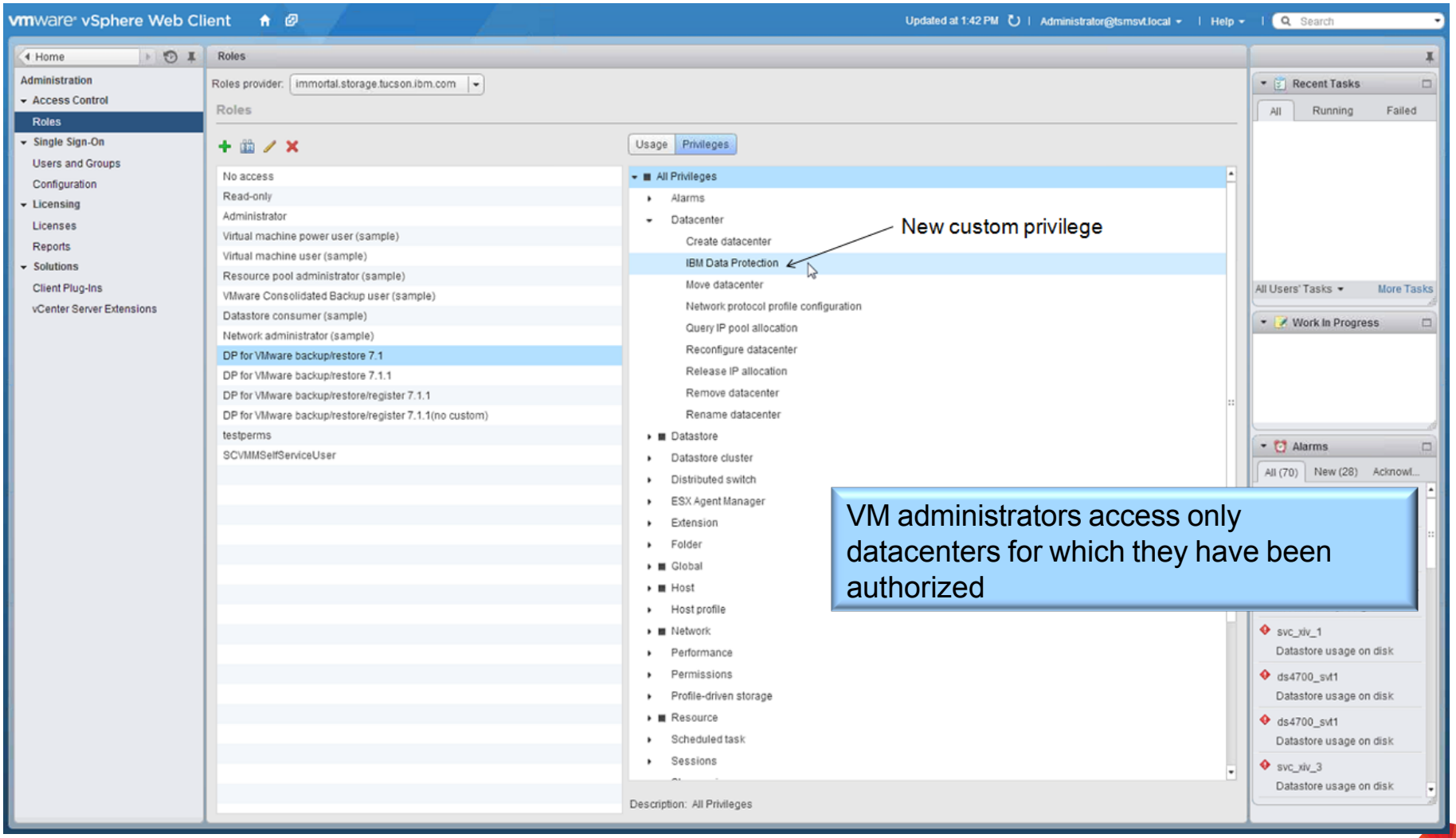
TSM For VE 7.1.1

Custom privileges by datacenter



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IBM Tivoli Storage Manager 7.1.1

DR / Replication and Security

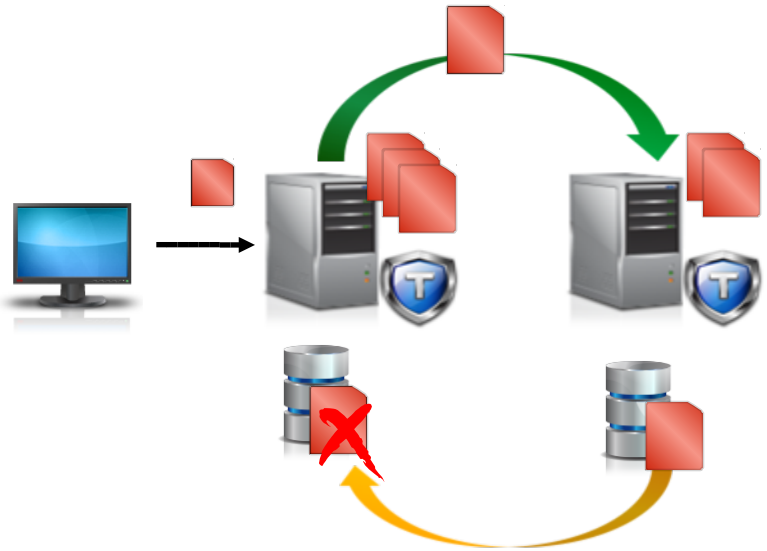
What's New

Policy differentiation for replicated data
Different policies for retention time and number of versions can be defined on the source and target TSM servers

Repair files/volume for source server from replication server
Node replication DR that enables a simplified approach to local recovery of files that have been damaged on the source server

Improved performance for small workloads

256-bit AES data encryption and NIST SP800 compliance



Client Benefits

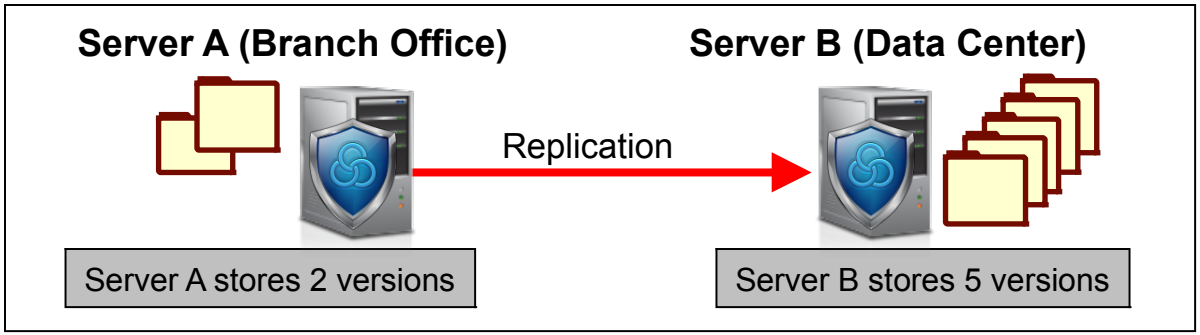
Faster, more **robust** DR that protects against localized failures and large-scale disasters. This could be used to replace local copy storage pool tapes, reducing total cost of ownership.

Target customers that would like tapeless solution for DR initiative - This capability greatly simplifies DR, using the target in a replication relationship to automatically repair data at the source

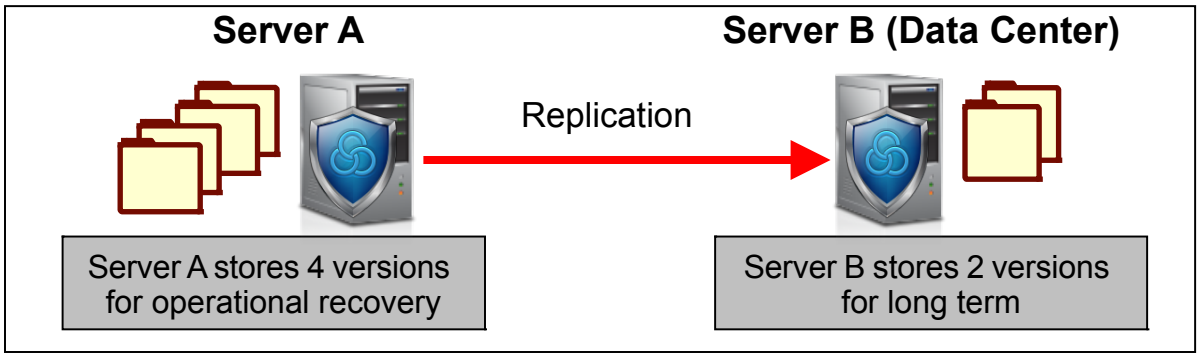
Stronger encryption capability for customers with requirements to implement strong encryption for personal sensitive data
NIST SP800 compliance enables continuous selling into government

Policy Driven Remote Replication – Dissimilar Policies

Use case:
Branch office with limited storage for fast recovery



Use case:
Remote site with fast recovery SLA requirements and data center that's for archiving



What's New

- Different policies for retention time and number of versions can be defined on source and target TSM servers
- Expiration runs independently on each server, deleting objects based on policies in effect for that server

Customer Benefits

- **Flexible management** of replicated data at different sites
- **Optimal use** of resources
- **Granular option** for hybrid cloud scenario, can be used to replace tape

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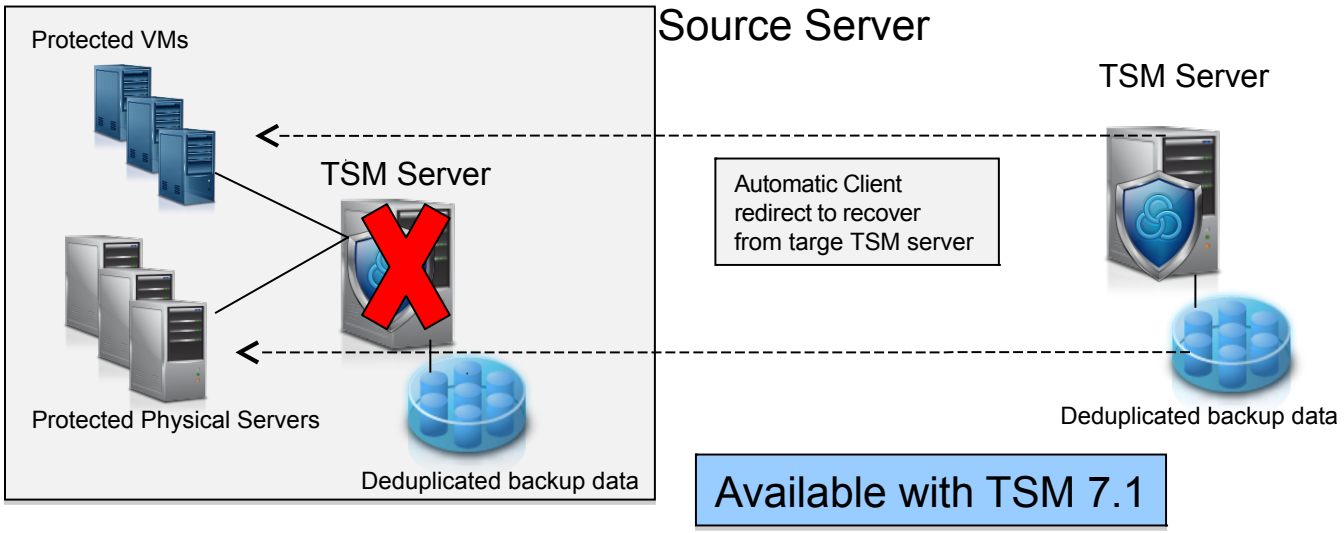
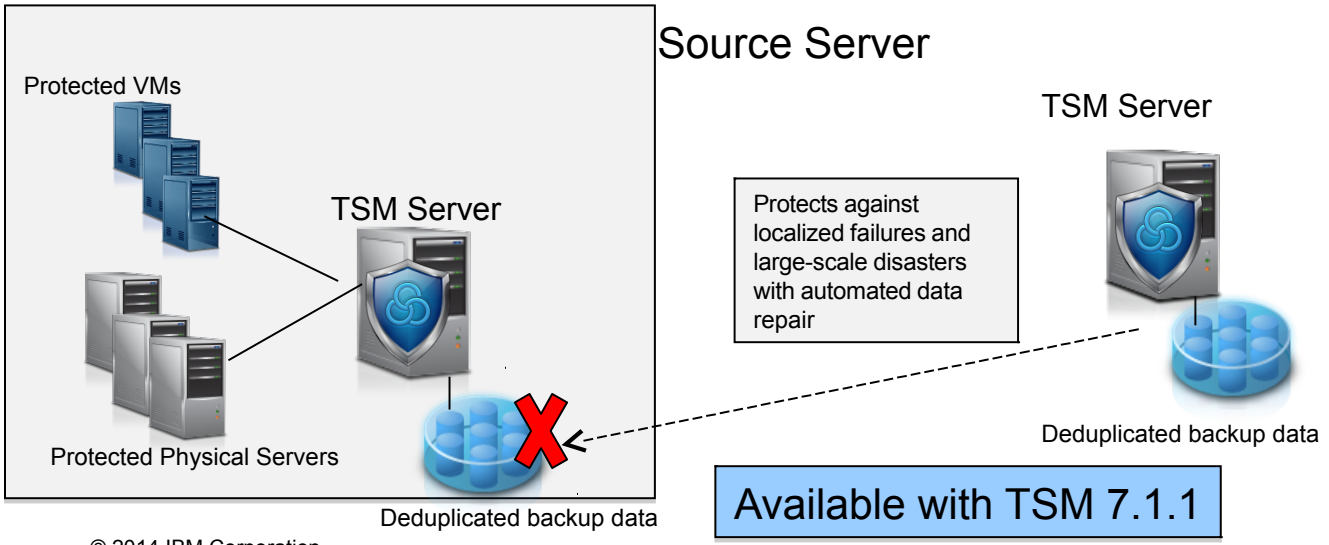
Disaster Recovery Made Easier with Automated Recovery and File Repair





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TSM Operations Center

What's New

Schedules

- View client schedules
- Create/modify client schedules
- Associate existing policies
- View server maintenance schedules

Storage pools

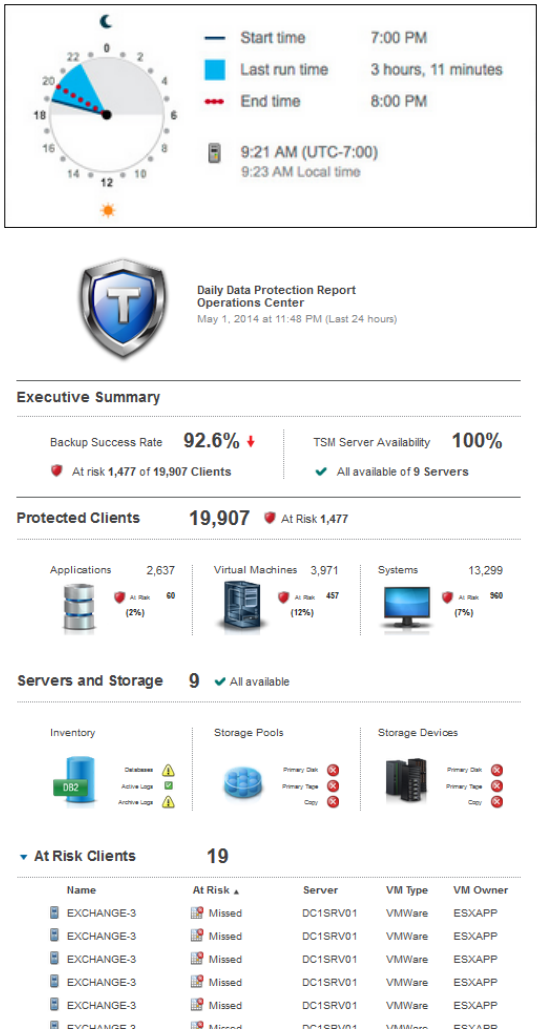
- Configure migrate/reclaim actions
- Edit storage pool properties
- View volume information

Services

- View policy details
- View active policy sets

Usability enhancements

- Email report on client coverage, status, overall TSM server health
- Configure and manage alert definitions
- Client management services for fast, easy diagnosis of backup-archive client errors and failures



Client Benefits

The continued evolution of intuitive administration

- Email reporting enables more **efficient** report distribution and **visibility at all levels** of management
- Moving from visibility of the environment to **control over the environment** with management of schedules, policies and alerts

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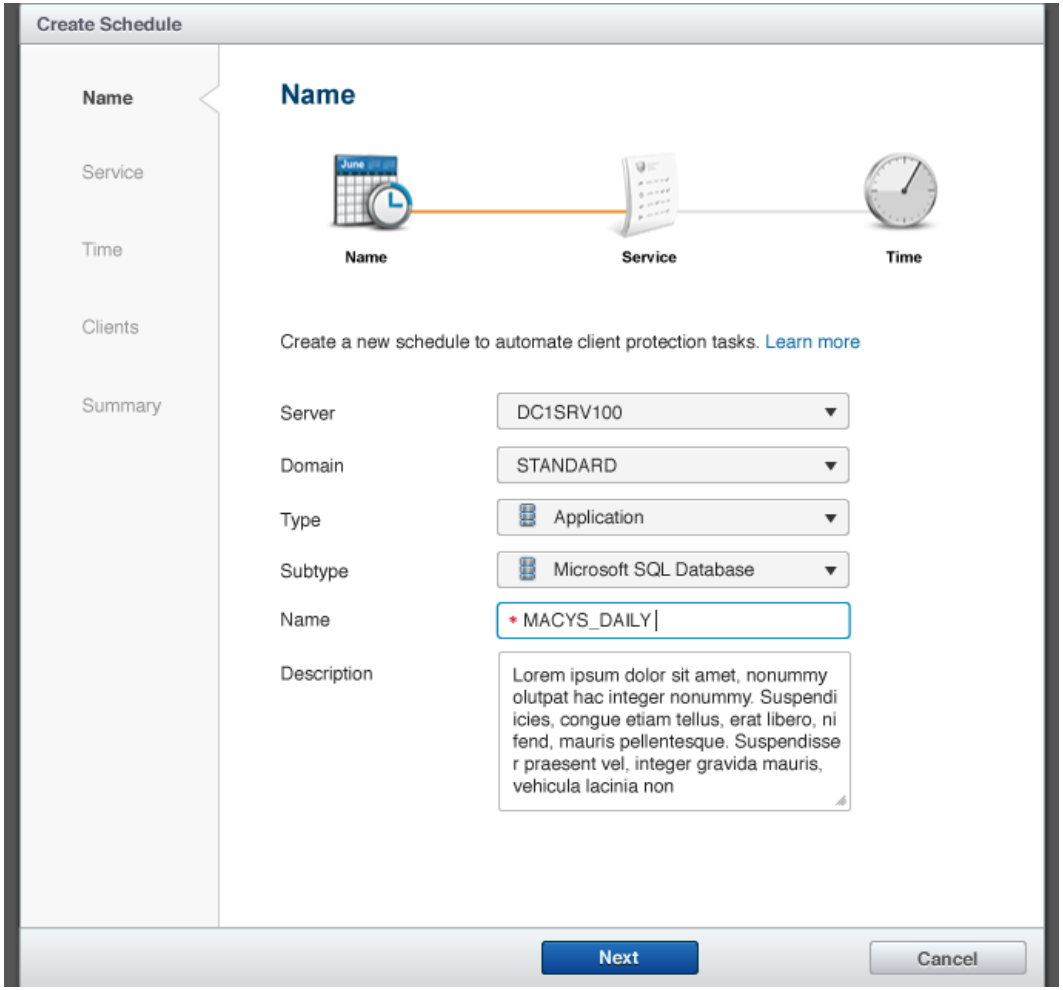
Tivoli Storage Manager

Operations Center automation



Create Client Schedule

Wizard ☒ Applications ☒ Hypervisors ☒ Systems

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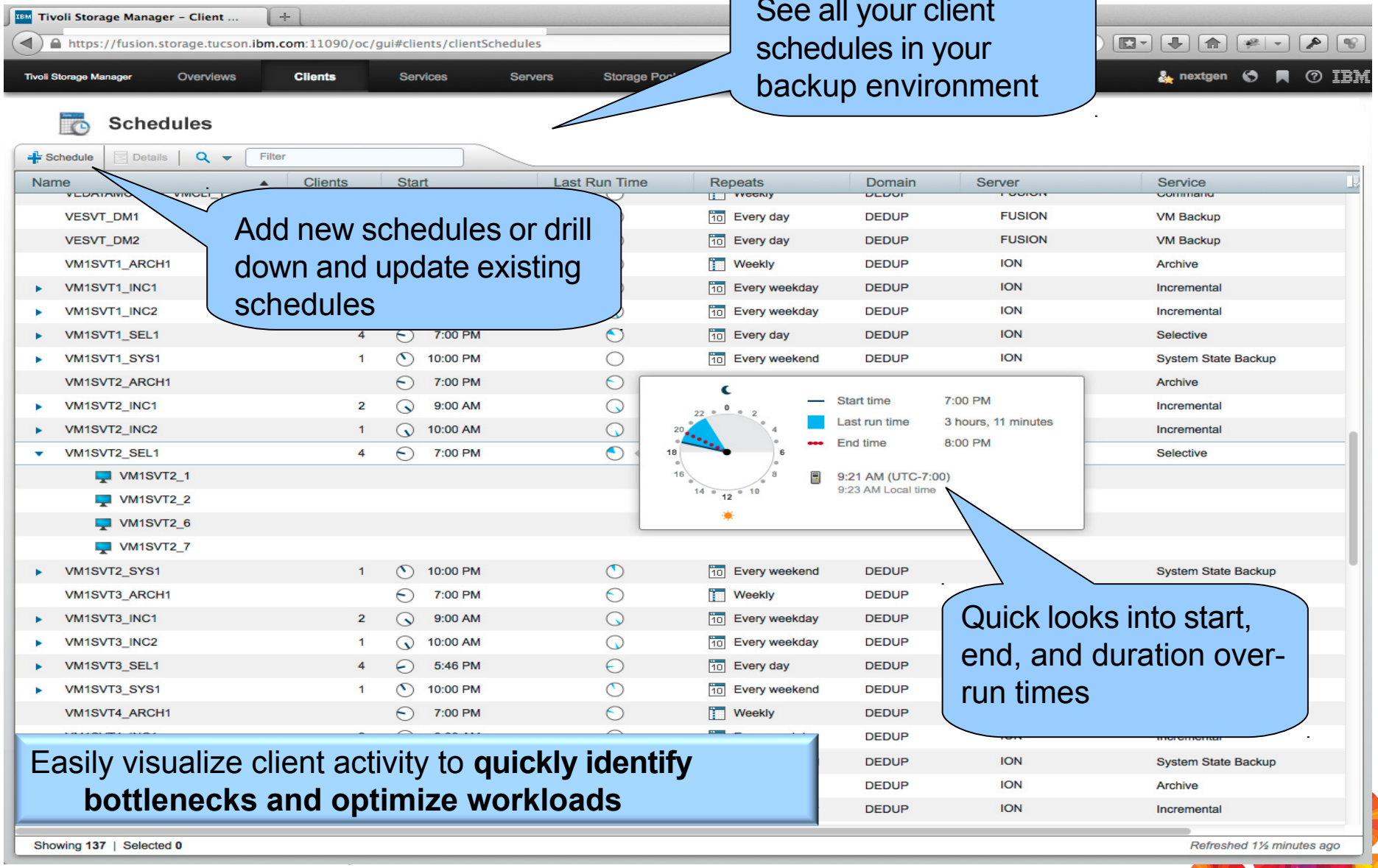
IBM Tivoli Storage Manager - Client Schedules



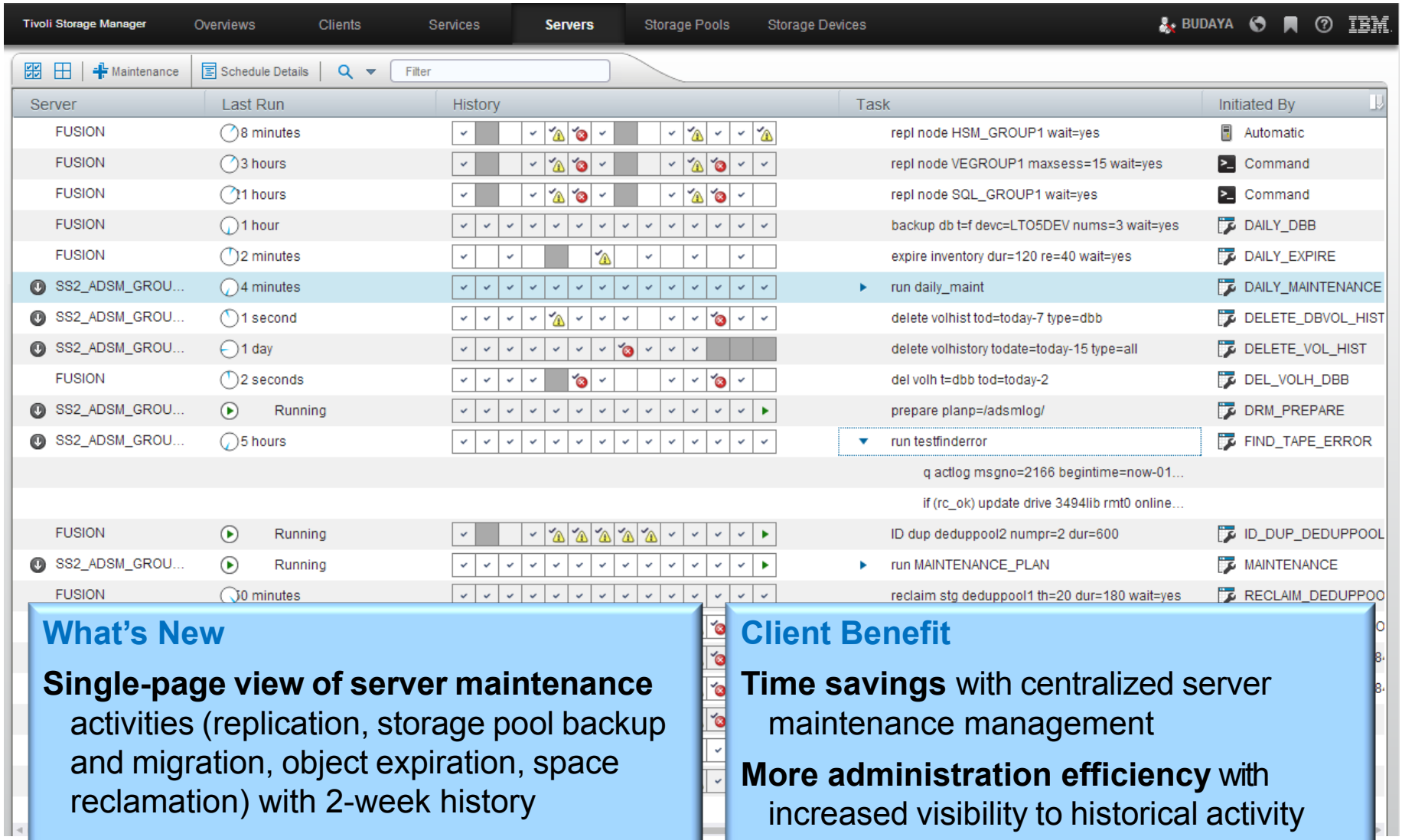
See all your client schedules in your backup environment

Add new schedules or drill down and update existing schedules

Quick looks into start, end, and duration over-run times

Easily visualize client activity to **quickly identify bottlenecks and optimize workloads**

IBM Tivoli Storage Manager - Server Maintenance



What's New

Single-page view of server maintenance activities (replication, storage pool backup and migration, object expiration, space reclamation) with 2-week history

Visibility to **scripted task details**

Client Benefit

Time savings with centralized server maintenance management

More administration efficiency with increased visibility to historical activity success

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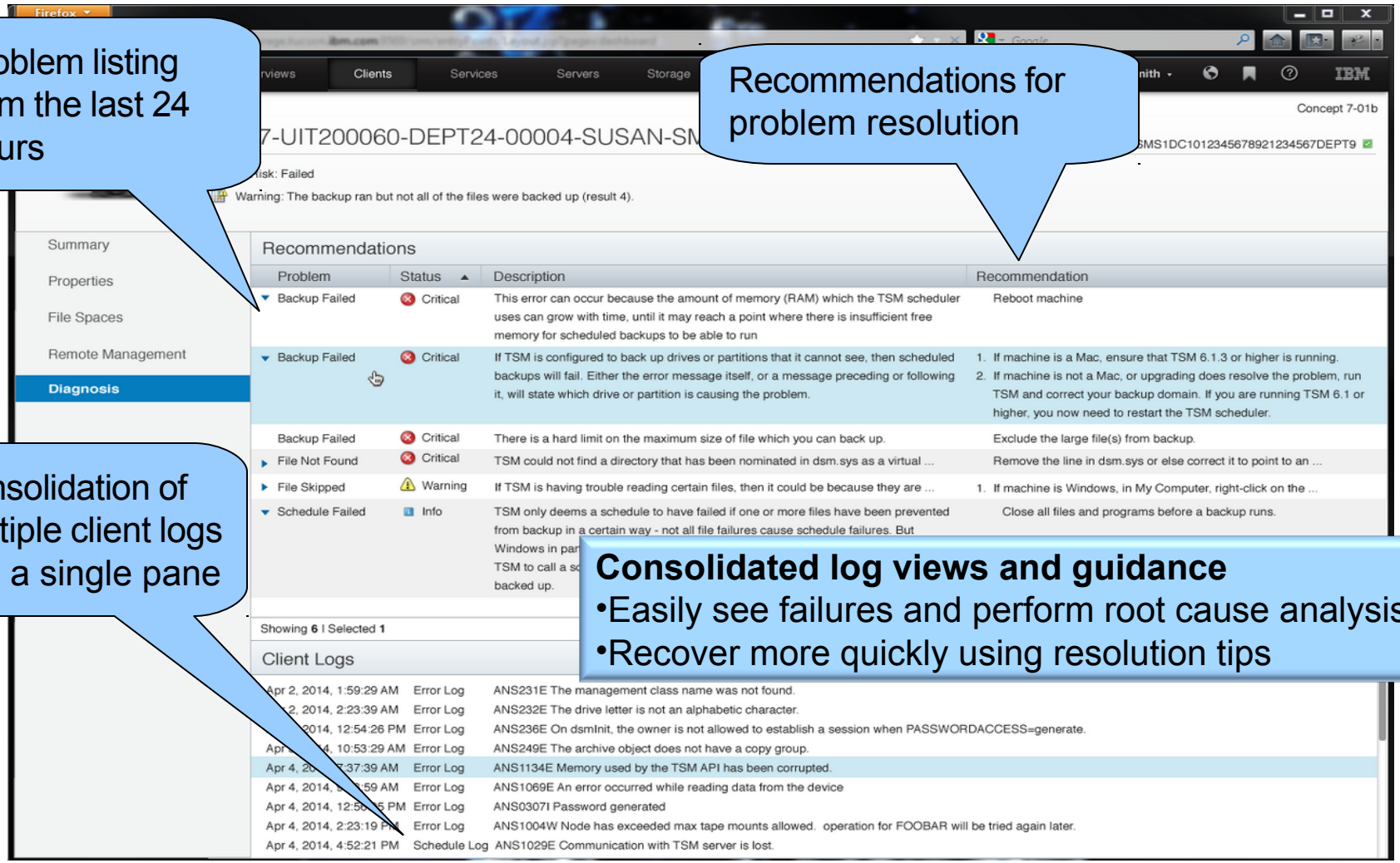
IBM Tivoli Storage Manager

Client Management Services – Client Log Diagnostics

Problem listing from the last 24 hours

Recommendations for problem resolution

Consolidation of multiple client logs into a single pane



Consolidated log views and guidance

- Easily see failures and perform root cause analysis
- Recover more quickly using resolution tips

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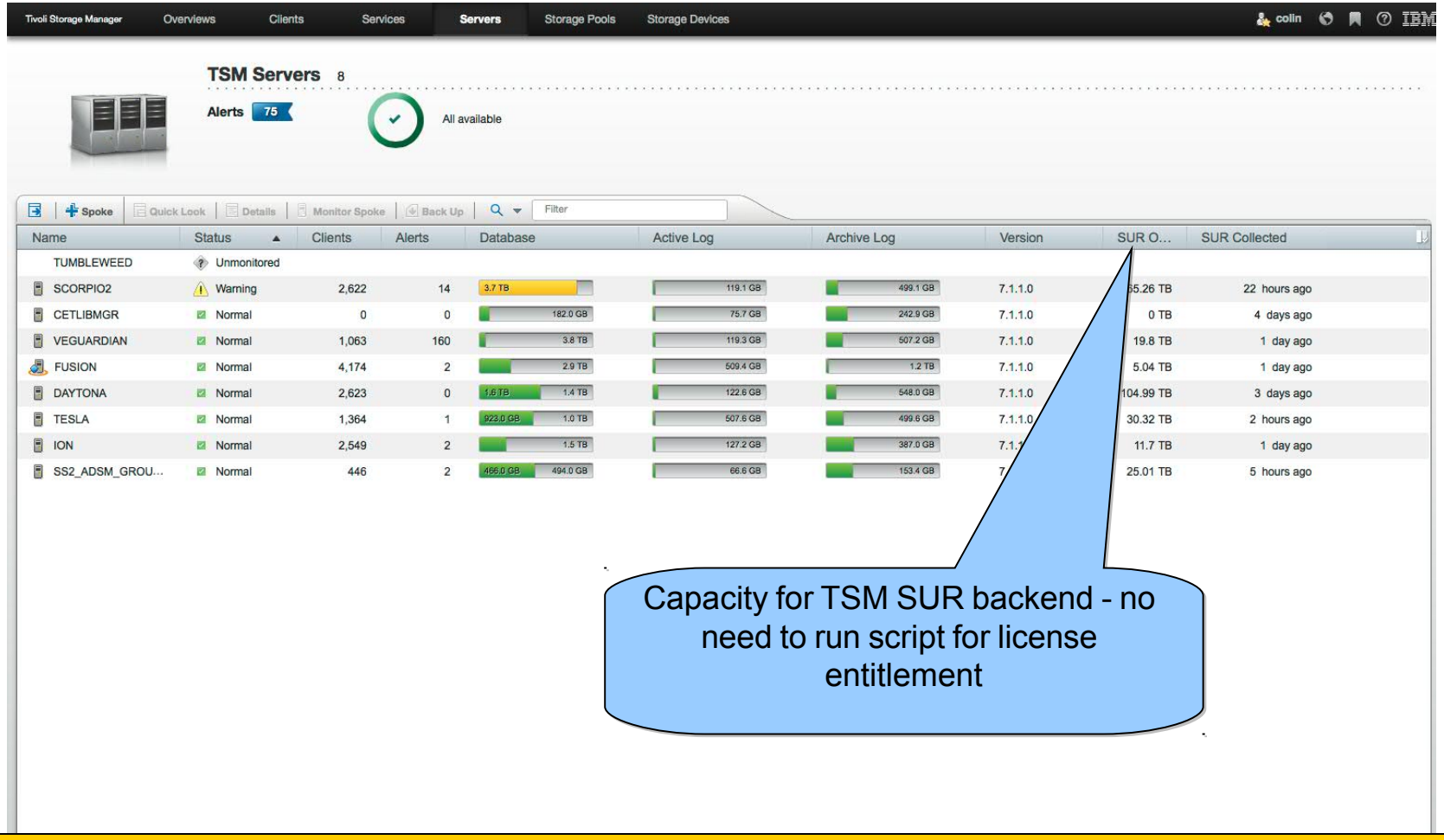
Tivoli Storage Manager– TSM SUR backend compliance



NEW! TSM Operations Center Demo on Service Engage

Anyone can be a data protection expert by using the Operations Center! The demo is available externally to customers

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Additional Enhancements in TSM 7.1.1

IBM Tivoli Storage Manager B/A client V7.1.1:

- Enhanced security with support of 256-bit AES Encryption.
- Microsoft Windows 2012 R2 support.
- Solaris x86 support

IBM Tivoli Storage Manager for Mail V7.1.1:

- Individual mailbox restore usability and performance enhancements for restoring folders and messages from the mailbox restore browser – 95% improvements*
- Support for Microsoft Exchange role-based access control to limit rights available to backup and restore administrators and automatic validation of permissions during configuration.
- Microsoft Windows 2012 R2 support.

Exchange 2010

FCM	Msg #	original	alternate	.PST file
4.1.0	3K	03:15:49	03:20:21	02:35:03
4.1.1	3K	00:02:45	00:02:33	00:01:24

IBM Tivoli Storage Manager for Databases V7.1.1:

- Microsoft SQL Server 2014 support
- Microsoft Windows 2012 R2 support

Tivoli Storage Manager for Space Management V7.1.1:

- **Improved efficiency in handling failed** cluster nodes in large **General Parallel File System (GPFS) Hierarchical Storage Management (HSM)** clusters that enable better cooperation and communication between HSM nodes.
- More control over stub file recall that provides the ability to customize recalls actions and change settings

IBM Tivoli Storage Manager for z/OS Media V7.1.1 and IBM Tivoli Storage Manager Extended Edition for z/OS Media V7.1.1 provide entitlement to:

- Either IBM Tivoli Storage Manager V7.1.1 or IBM Tivoli Storage Manager Extended Edition V7.1.1 for AIX and Linux on System z.
- IBM Tivoli Storage Manager Operations Center V7.1.1.
- IBM Tivoli Storage Manager Media Server V6.3

**Results seen in IBM lab, improvements may vary depend on your environments*

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FlashCopy Manager 2014 and FCM Adapters

What's New

FlashCopy Manager Adapters (via 3rd party partner)
EMC and HDS adapters

FlashCopy Manager for Windows:
SQL Server 2014 Support, Windows Server 2012 R2 Support
Exchange – IMR Browser Usability and Performance Enhancements

FlashCopy Manager for VMware:
Metro Mirror / Global Mirror Integration
UI integrated with vSphere Web Client
Configuration Wizard
SRDF support for EMC VMAX

Storage Device	OS Platform	Target Delivery
EMC VNX (Block)	AIX, Linux, Solaris	April 2014
HDS VSP HDS HUS	AIX, Linux, Solaris	July 2014
NetApp Cluster-mode Filers	AIX, Linux, Solaris	4Q 2014

FCM adapter schedule

Client Benefits

Protect new environments

- Apps on EMC and HDS Storage
- FCM within KVM virtual machine on Linux
- FCM failover scenario in DB2 PureScale

Improved usability experience for Exchange and VMware environments

Reduce the risk of data loss with integrated snapshot management

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TSM Suite for Unified Recovery – Front End v7.1.1

•A bundle of ten Tivoli Storage Manager products offering simplified pricing and licensing with a tiered per Terabyte (TB) Front End Capacity metric.

• A customer may install as many of the individual bundled products as needed for their environment, there is no per server, per install or PVU charge, they are simply charged for front end data protected.

•TSM SUR Entry –Front End – 100 TB max, No more than 2 TSM servers

TSM Extended Edition: Highly-scalable enterprise-class backup/restore, archive and disaster recovery

TSM for Virtual Environments: Advanced protection and flexible recovery of VMware environments

TSM for Databases: Non-disruptive protection of Oracle and Microsoft SQL data

TSM for ERP: Protects vital SAP R/3 system data more efficiently, consistently and reliably

TSM for Mail: Secures Domino and Exchange data; granular restore of Exchange objects

TSM for SAN: Maximizes storage network connections for TSM servers and client computers

TSM for Space Management: Software that moves inactive data to reclaim online disk space

TSM FastBack: Advanced data protection and near-instant recovery for Windows and Linux servers

TSM FastBack for BMR: Restore a Windows or Linux Server Operating System volume within an hour

TSM FastBack for Exchange: Fast and easy recovery of individual e-mail objects

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Thank You

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