

Novell® File Management Suite

Using Management Automation of Network File Systems with Policy and Content Analysis to Achieve ROI, Compliance, and Governance Goals

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Storage Networking World

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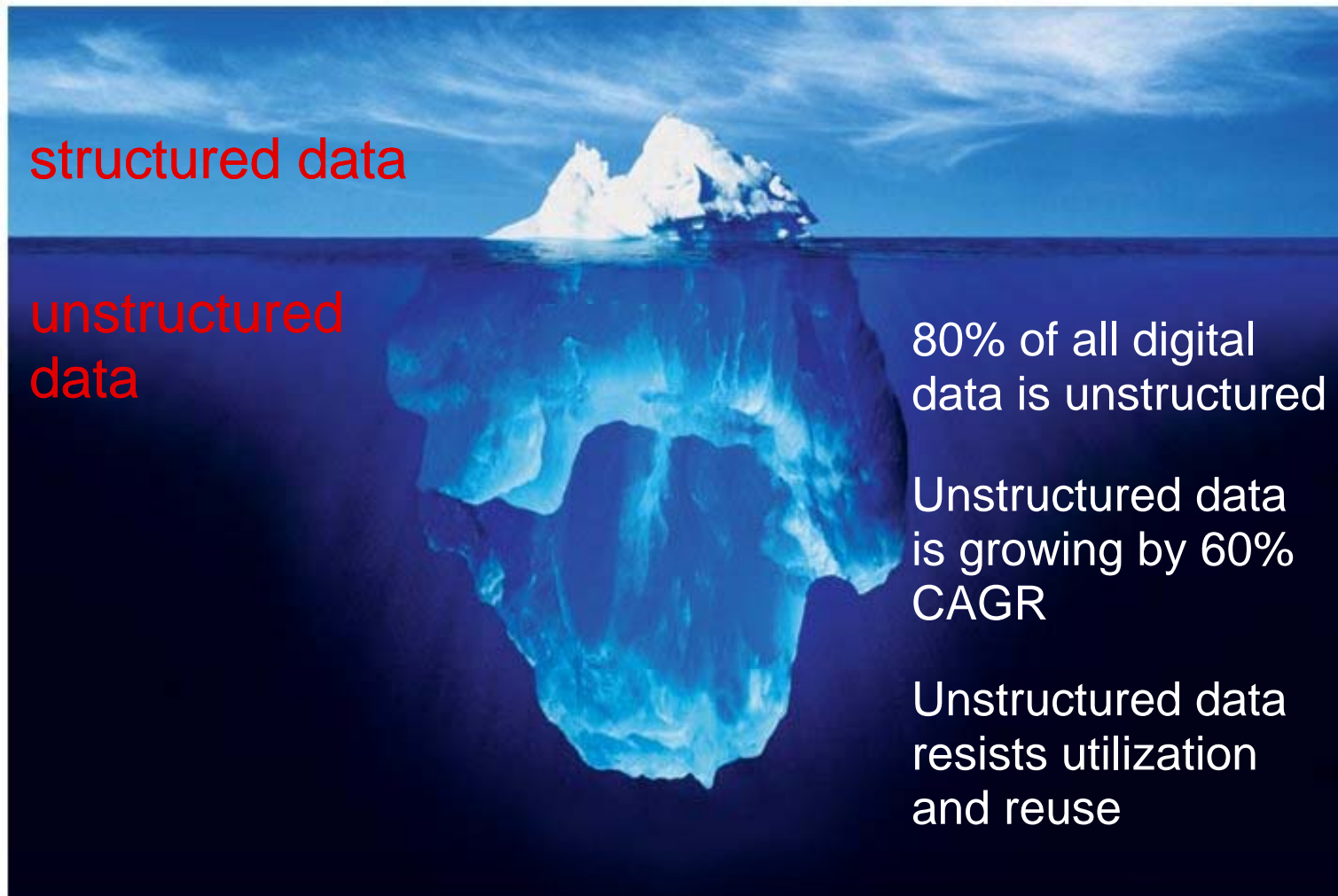
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Agenda

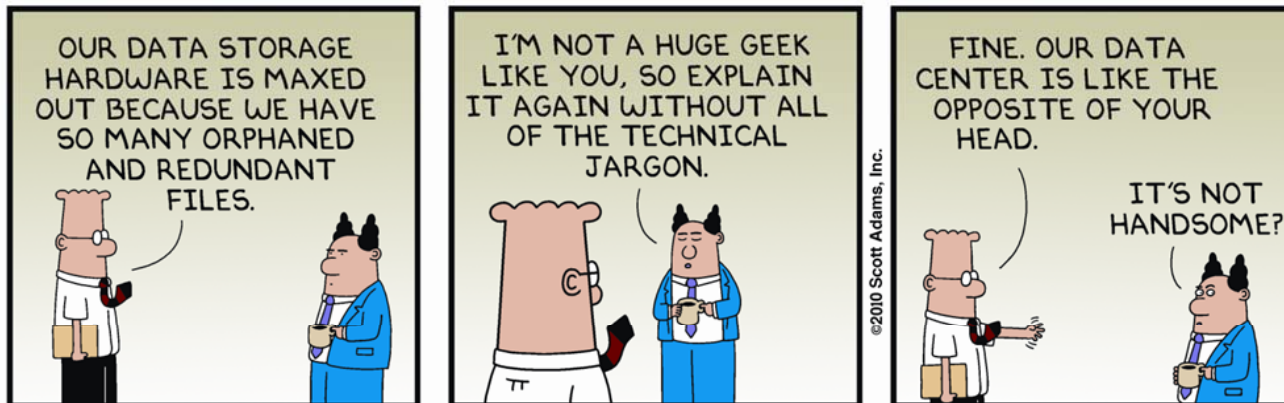
- Customer Challenges
- Novell File Management Suite
 - Novell Storage Manager
 - Novell Dynamic File Services
 - Novell File Reporter
- Summary and Giveaway

Unstructured Data:

The Iceberg in the Data Center



What's the Problem?



File View Options Help

Novell File Management ROI Analyst v1.1.1 for Novell

Profile Results

Company Profile

Organization Name:

Industry classification:

Primary operations location:

Current user population:

Current file system storage capacity (TBs):

Average annual growth rate for file system data:

What is the annual turnover in your organization?

How many administrators work on user file storage?

How often do you buy disk for storage?

What is the frequency of your backup process?

At what point does your data become less useful?

What percentage of your files are:

File Categories	Percentage
Orphan	20%
Personal	0%
Stale- 24 months old	30%
Redundant	50%
Total	100%

Identify the number of users for the following application types.

Identify your file management objectives. (select all that apply)

- ☐ Lower operational & administrative costs
- ☐ Reduce hardware spend
- ☐ Green IT
- ☐ Strengthen data governance

Three Year TCO Results

Bar chart showing TCO (Millions) for Current Practices and Novell Solution.

Current Practices: \$5.1M

Novell Solution: \$0.5M

<Click on graph to expand details>

Customer Challenges

- Explosive growth of unstructured data (files)
- Security and Regulatory compliance
- Storage admin tasks highly manual and redundant
- Rapid head count turnover
- Costs in hardware, power, cooling, administration
- More electronic collaboration = more files



Built for Diverse Customer Environments



- Not tied to traditional Novell architectures
- Architected for Microsoft infrastructures
 - Designed for the Windows customer
 - Enhances inherent Windows capabilities
- Supports leading vendor deliveries and architectures
 - DAS
 - SAN
 - NAS
 - Cloud



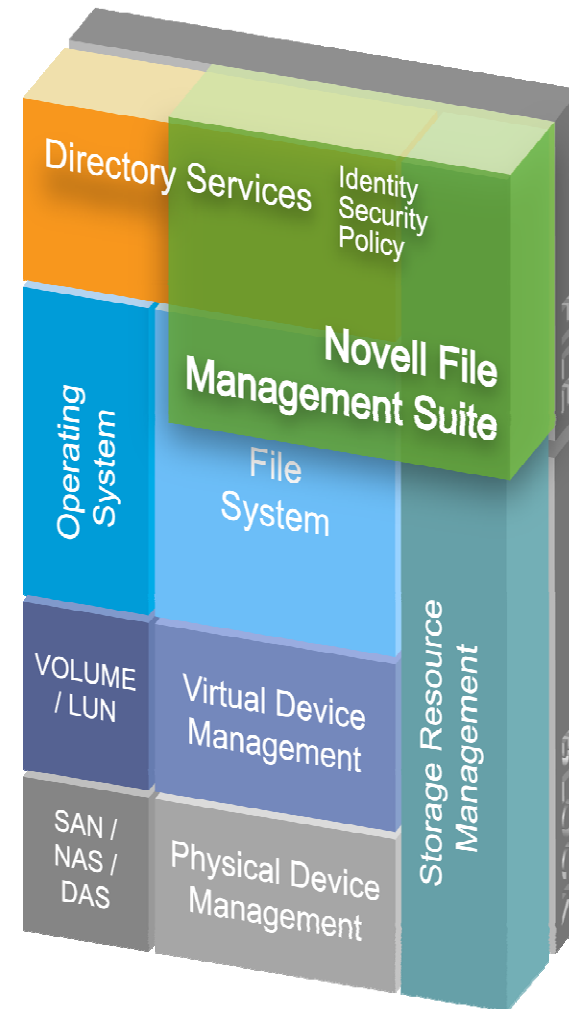
Novell File Management Suite



Novell® File Management Suite

An integrated offering that provisions, moves, optimizes, and reports on file storage based on user roles and customized business policies.

***Intelligently Manage
File Storage for Maximum
Business Benefit***



Novell File Management Suite

Driven: Identity, Policy, Automation



Discover

Inventories network storage resources to expose the “junk in the garage”, delivering information that can be used to set policies for automation



Manage

Provisions and controls users' network storage resources automatically, using customizable policies, reduce manual administration and ensure compliance



Move

Optimizes the use of network storage resources by directing less relevant files to Tier-2 storage devices, maintaining user experience while driving back-up and storage efficiencies

Novell File Management Suite

Driven: Identity, Policy, Automation



Novell File Reporter

Inventories network storage resources to expose the “junk in the garage”, delivering information that can be used to set policies for automation



Novell Storage Manager

Provisions and controls users' network storage resources automatically, using customizable policies, reduce manual administration and ensure compliance



Novell Dynamic File Services

Optimizes the use of network storage resources by directing less relevant files to Tier-2 storage devices, maintaining user experience while driving back-up and storage efficiencies

Suite Spot



Built for customers that have any one or more of:

1. Large Customer Environments
2. Dynamic Customer Environments
3. High user to admin ratios
4. Lots of data
5. High data growth
6. Budget constraints
7. Needs related to restructuring, migration, compliance

Value Driven

- Lower Operational Costs and Increase Data Governance

Know what you're storing, and avoid the risk of not knowing

Automate routine user & group storage tasks for cost savings and compliance

Prioritize file storage based on business benefit

Intelligent storage becomes cloud-capable

- Enhance existing storage solutions with easy plug-and-play architecture
Now supported on more devices

Novell Storage Manager



Benefits



- **Automate** thousands of hours of manual work on mundane and redundant tasks, and **reduce** errors criteria for consistency and audit



- Assure that users have the space they need **whenever** and **wherever** they need it



- **Enable** user productivity from Day 1, and cut rights to data upon termination

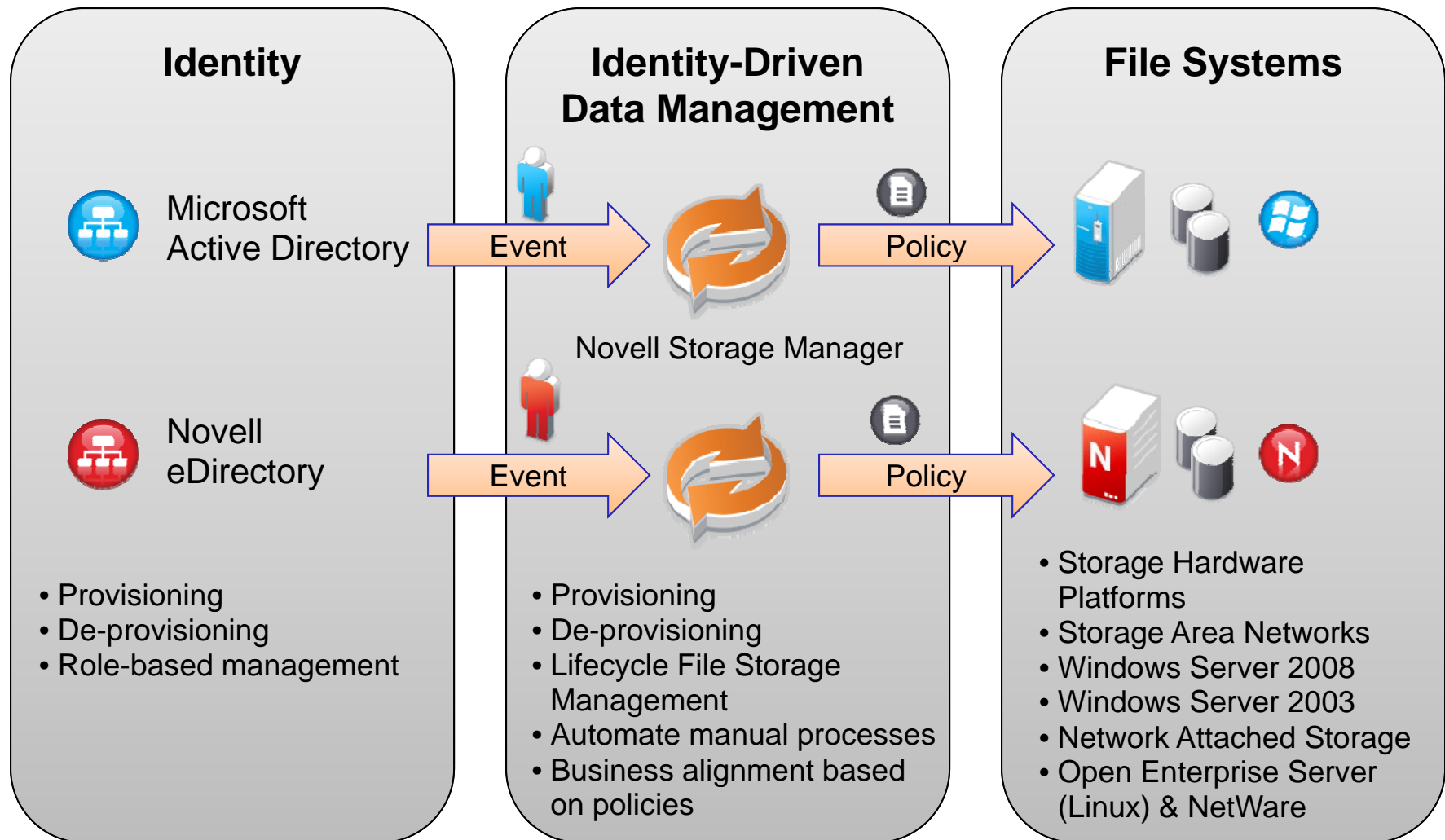


- Attach data to the **user** based on role and group

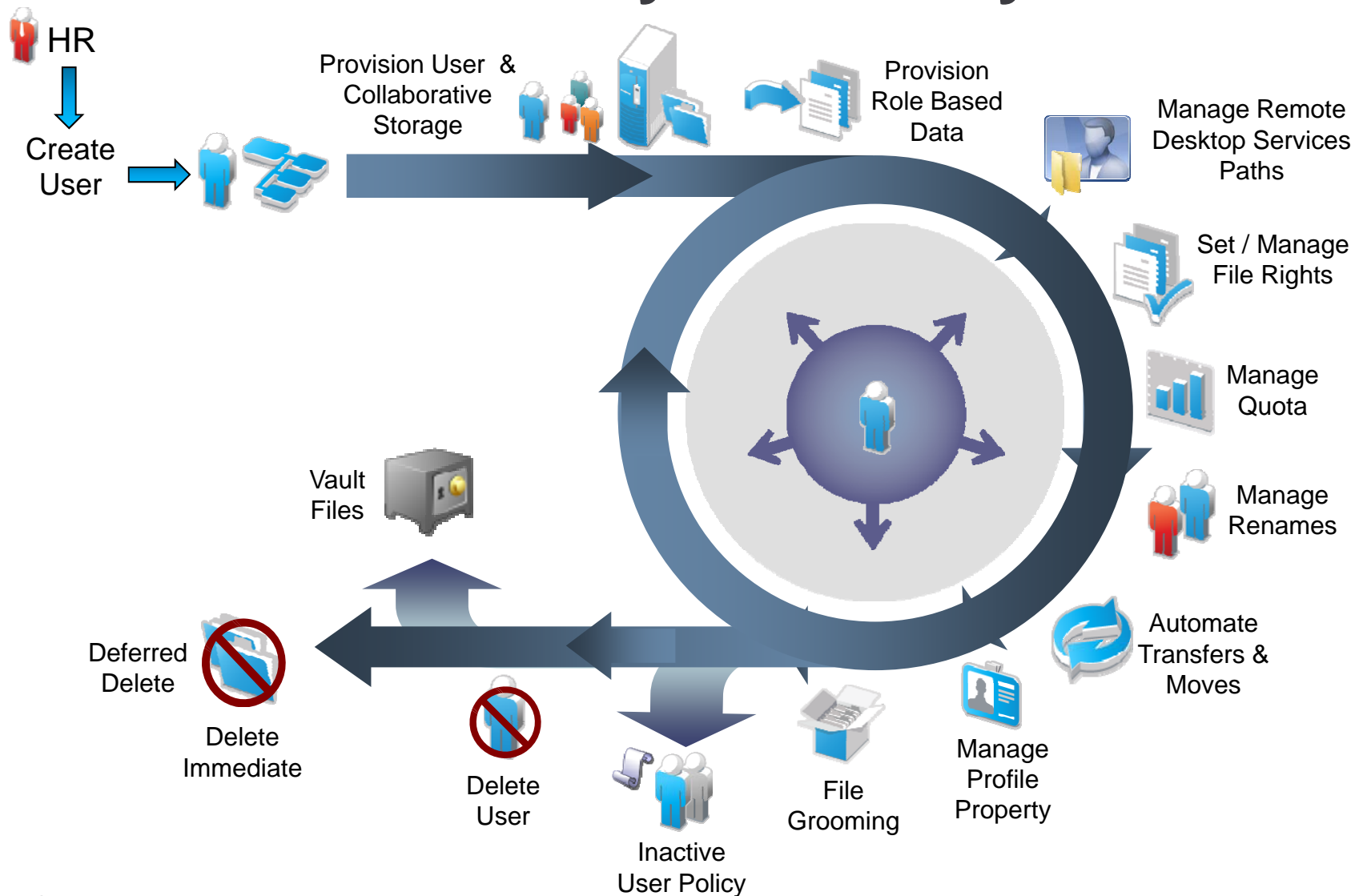


- Have the **confidence** that data is secure and available should an organization need to prove compliance with government or industry regulations

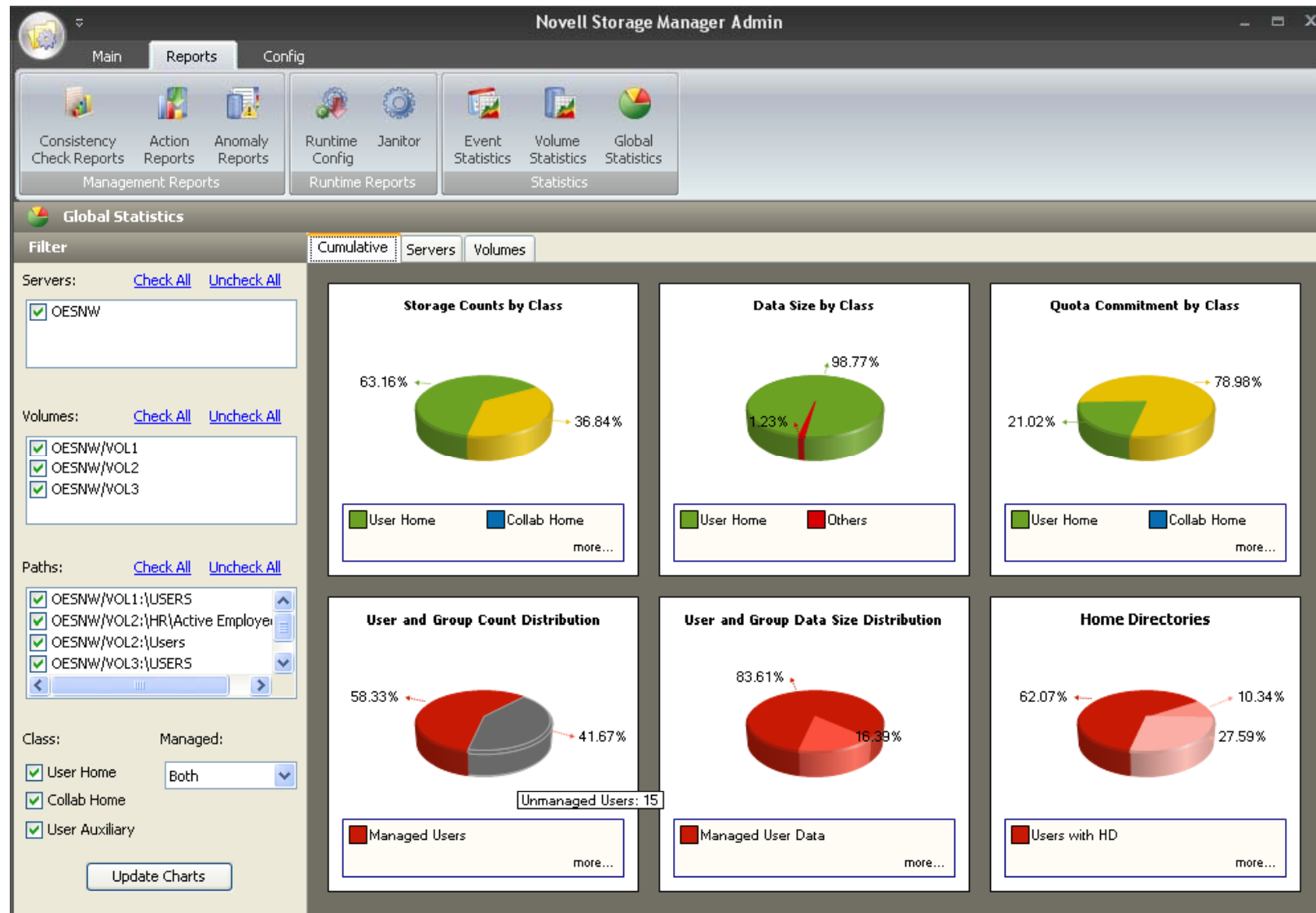
Identity-driven and Policy-based File Management



Lifecycle Management Based on Identity and Policy



Moving to a Managed State Based on Identity and Policy



File Type Analysis Reports



Novell Storage Manager Admin - TRIAL VERSION - Expires in 67 days.

Main Reports Config

Start Page Engine Status Home

Storage Management Policy Management Pending Events Management

Path Analysis Object Properties Volume List Admin Tools

Path Analysis

File Types Refresh

[ROOT]

- WIN2K8-HQ
 - Components
 - HQ_Users
 - blawson**
 - eclapton
 - jprice
 - ltimmons
 - Inactive_Users
 - NSMPROXYHOME
 - NYC_Users
 - Storage_Templates
 - Vaulted_Users
- WIN2K8-LON

Name	Size	Created	Last Access	Last Modify
Augusta National Golf Club...	3.52 MB	6/10/2009 4:04 PM	6/10/2009 4:04 PM	6/10/2009 4:04 PM
Augusta M...				
Augusta M...				
Augusta M...				
Augusta M...				
Call me th...				
CC Logo A...				
CCPicture...				
essay.doc				
Take it Ea...				
Welcome				

View File Types

Path: \\WIN2K8-HQ\\HQ_Users

Extension	Count	Total Size (MB)
BMP	12	42
TIF	1	3
PNG	1	3
JPG	3	1
GIF	3	1
RTF	16	1
DOC	4	14
MP3	2	7

OK

Collaborative Storage - Grooming Rules



Policy Editor - Projects

Cleanup: Grooming Rules

General

- Policy Options
- Associations

Setup

- Provisioning Options
- Target Paths
- Quota Options
- Move Schedule
- Dynamic Templates

Cleanup

- Cleanup Options
- Vault Rules
- Grooming Rules

Other

- Notes
- Policy Summary

Grooming Rules

Vault Path: \\ISM-W2K8-32\VAULT\Collaborative Vault\Projects

Grooming rules

Description	Action
Groom Music Files	Vault Files

Vault Rules Editor

Description: Groom Music Files

Action: Vault ☒ Files ☐ Folders

Masks: *.mp3, *.wav, *.m4a

* Only one Mask per Line

	Comparative Criteria	Numeric Criteria	Unit	
File Size Filter	[Disabled] - Any Size	0		
Create Time Filter	[Disabled] - Any Time	0		
Modify Time Filter	[Disabled] - Any Time	0		
Access Time Filter	[Disabled] - Any Time	0		

OK Cancel Apply

Changes to this policy have not been saved.

Trustee Analysis Report



Novell Storage Manager Admin

Main Reports Configure

Start Page Engine Status Home Storage Management Policy Management Pending Events Management Actions Path Analysis Object Properties Storage Resource List Collector Admin Tools

Path Analysis

Folder Trustees Quota File Types Refresh File Trustees

[ROOT]

- ISM-W2K8-32
 - Departments
 - Employees_Home
 - Projects
 - R&D1
 - Project Documents**
 - Design
 - Project Templates
 - Research
 - Project Manager
 - acox
 - manager-
 - Project Team
 - dmendez
 - Inance
 - member-
 - R&D2
 - Project Documents
 - Project Manager
 - Project Team
 - Storage_Templates
 - VAULT

View Trustees

Path : \\ISM-W2K8-32\Projects\R&D1\Project Documents

Trustee (17)	/	Rights	Via	Target
BUILTIN\Administrators		FMELRW	Inherited	\\ISM-W2K8-32\Projects\R&D1\Project Documents
BUILTIN\Administrators		FMELRW	Inherited	\\ISM-W2K8-32\Projects
BUILTIN\Administrators		FMELRW	Direct Assignment	\\ISM-W2K8-32\Projects
BUILTIN\Users		ELR*	Inherited	\\ISM-W2K8-32\Projects
BUILTIN\Users		ELR*	Inherited	\\ISM-W2K8-32\Projects\R&D1\Project Documents
CN=Angela Cox,OU=NYC,...		MELRW	Direct Assignment	\\ISM-W2K8-32\Projects\R&D1\Project Documents
CN=R&D1,OU=Projects,O...		LR	Direct Assignment	\\ISM-W2K8-32\Projects\R&D1\Project Documents
CN=R&D1,OU=Projects,O...		LR	Direct Assignment	\\ISM-W2K8-32\Projects\R&D1
CN=NSMProxyRights,CN=...		FCR	Share Rights	\\ISM-W2K8-32\Projects
CN=NSMProxyRights,CN=...		FMELRW	Inherited	\\ISM-W2K8-32\Projects\R&D1\Project Documents
CREATOR OWNER		*	Inherited	\\ISM-W2K8-32\Projects
CREATOR OWNER		*	Inherited	\\ISM-W2K8-32\Projects\R&D1\Project Documents
NT AUTHORITY\SYSTEM		FMELRW	Inherited	\\ISM-W2K8-32\Projects

OK

Quota Management



Policy Editor - Atlanta Primary

General

- Policy Options
- Associations
- Auxiliary Policies

Setup

- ☒ Provisioning Options
- Target Paths
- Quota Options** ←
- Move Schedule

Cleanup

- Cleanup Options
- Vault Rules
- Grooming Rules

Other

- Notes
- Policy Summary
- Policy Import

Setup: Quota Options

Initial Quota

Initial Quota MB

Quota Management

☒ Enable Quota Manager / Quota Preservation for this policy

Quota Maximum

☐ No Maximum Quota

☒ Maximum Quota MB

Quota Increment

☐ Set quota increment manually

☒ Increment quota by MB

Quota Managers

	Manager Object
	CN=Eric Wilkes,OU=Employees,OU=Atlanta,OU=CCTEC,DC=cctec,DC=org
	CN=NSM Quota Managers,CN=Users,DC=cctec,DC=org

OK Cancel Apply

Novell Dynamic File Services



Policy-based Data
Relocation

Benefits



- Transparent Tiered Storage



- Reduce back-up windows and associated administration costs



- Not all users' data is created equal; why treat it that way?



Novell Dynamic File Services

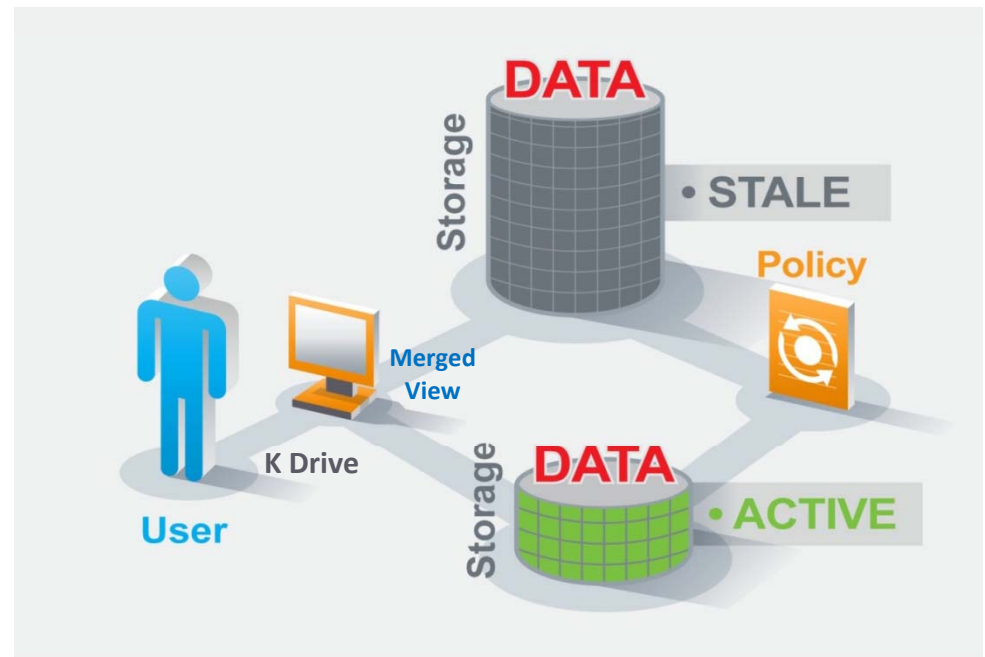
Dynamic File Services provides:

- Tiered File Storage - Automated policies to relocate unstructured files to a lower cost storage devices
- Policies based on:
 - Age of File
 - Size of File
 - File Type
 - Access/Modification Times
- User Experience: Merged view of information automatically provided for the end user.
- No agents on the desktop
- Administrators can maintain different backup/restore policies for their primary and secondary storage locations

Novell Dynamic File Services



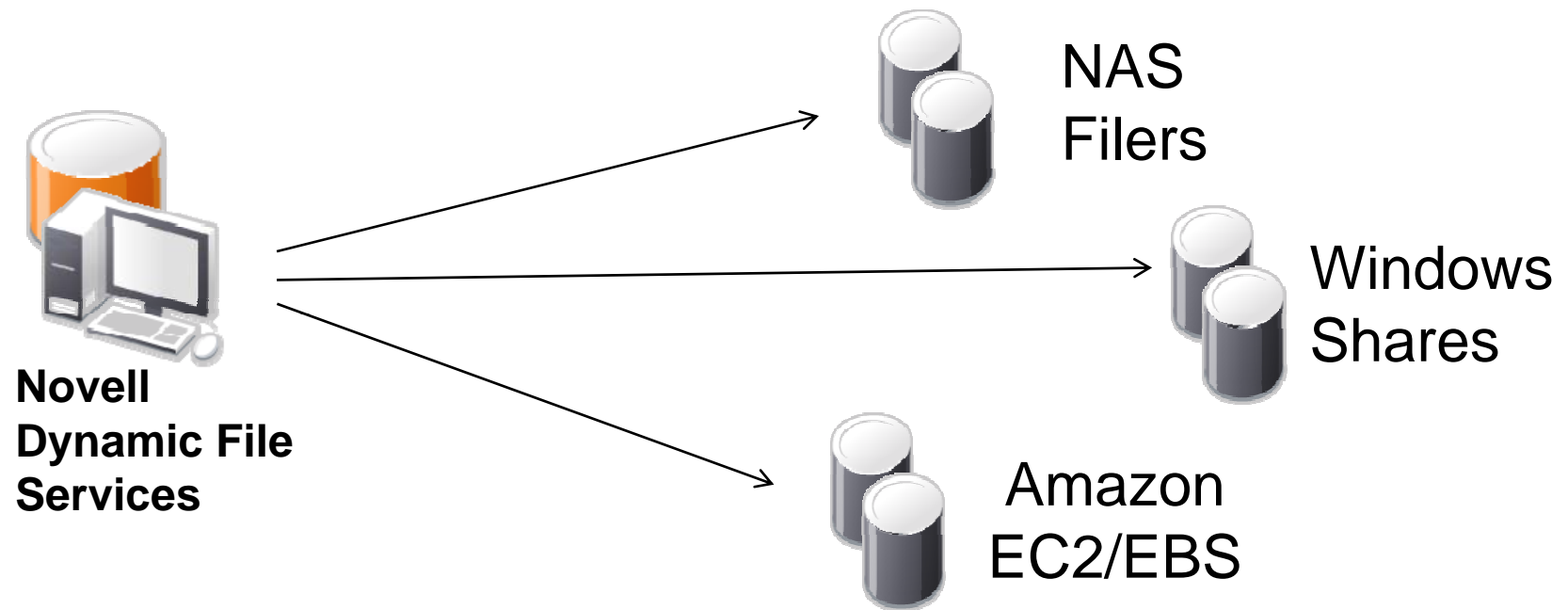
BEFORE



AFTER

Diverse Storage Targets

Secondary Storage going remote



Targets Include

- NAS Filer Support
 - ✓ EMC Celerra, NetApp Data ONTAP
- Windows Remote Shares
- Cloud Storage Support
 - ✓ iSCSI Target
 - ✓ Amazon Elastic Compute/Block

Novell File Reporter



**Automated Data
Reporting**

Benefits



- File Assessment Practice



- Discovery



- Easily turn reports into automated policies



- Don't react to storage needs; Plan for them



- Rationalized storage infrastructure saves money

Key Questions



Has there been a significant increase in users?

In what group?



Are there lots of redundant files?

Where?

Who has them?



Is space being abused?

By whom?
Are we at risk?



Are we keeping old files too long?

What are typical usage patterns?



When were these files last used?

Who owns them?

Are they relevant to our business?

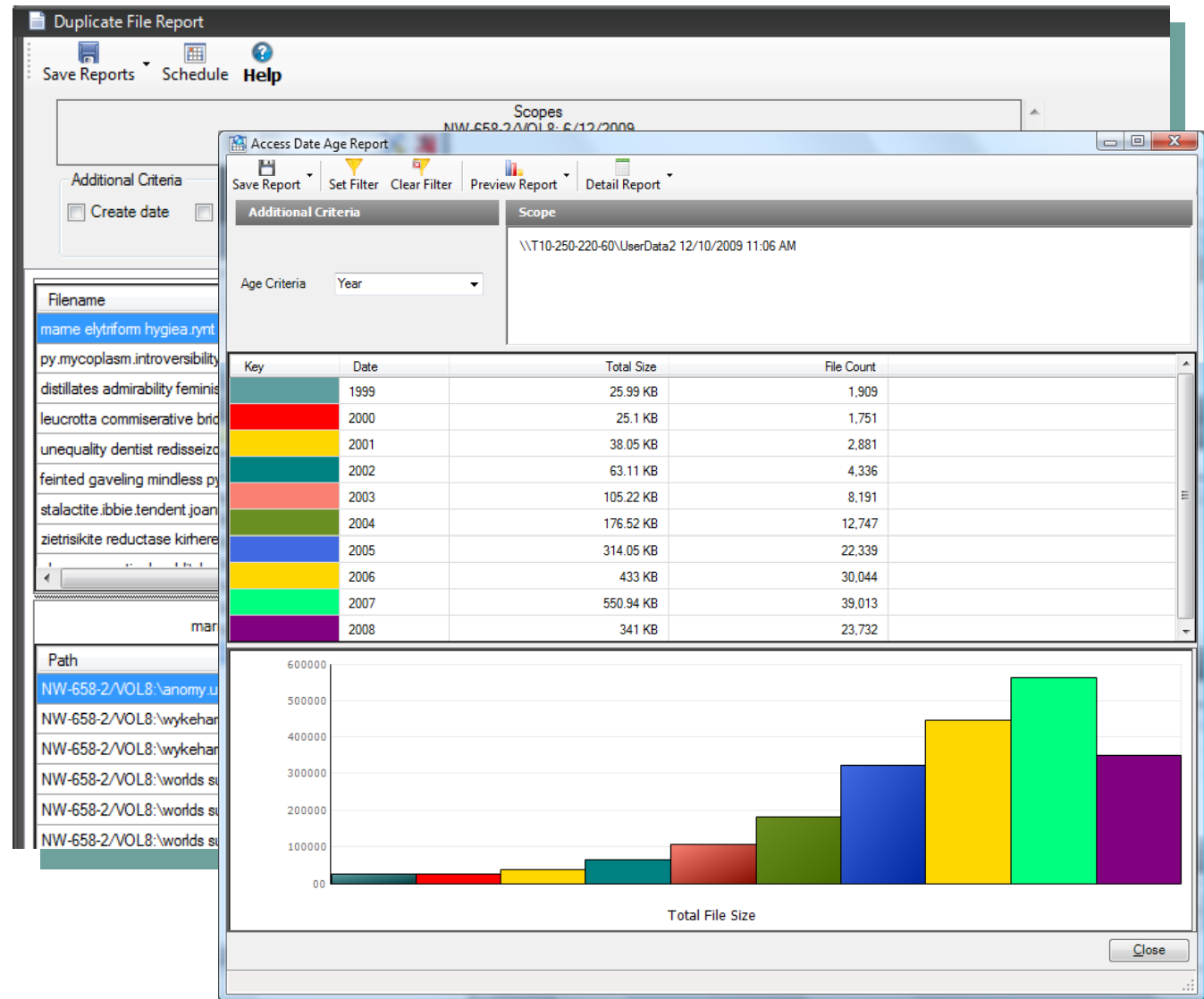
Do you know...?

- How many orphaned folders are on the network?
- How many TB of MP3s?
- How many documents haven't been accessed in the six months? The last year?
- How many redundant files are stored?
- Do you know how much space the files above take up on your network?
- How much time are you spending backing it up?

Understanding data better is the first step to rationalizing it

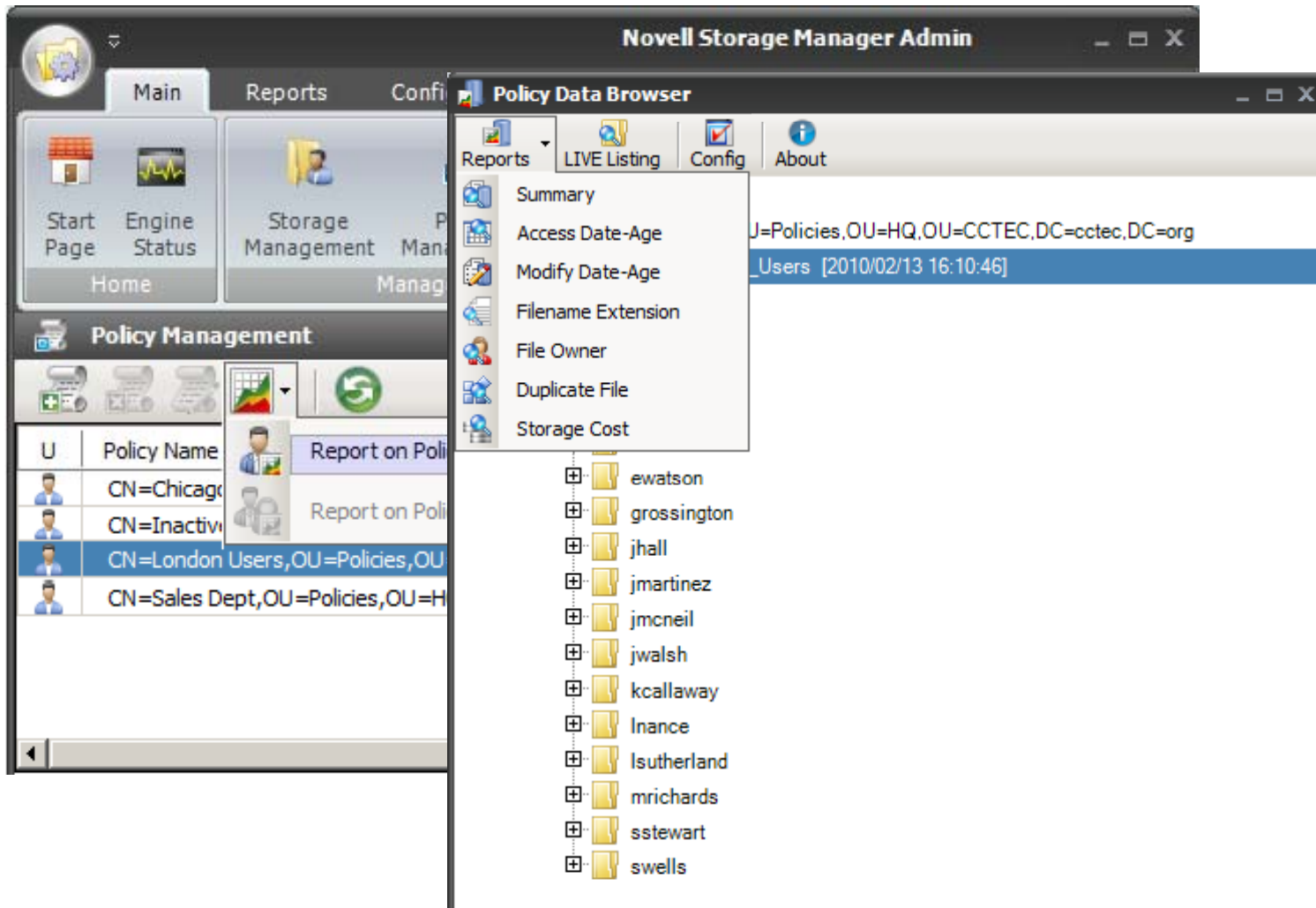
Novell File Reporter

- Agents for fast, immensely scalable reporting
- Report on volumes, aggregate paths, or on policies you create
- Schedule reports
- Observe Trends
- Built-in cost reporting





Integration with NSM Policy-based Reporting



Summary

Why This is Different?

- Drives efficiency with folder-level and file-level management
- Manages collaborative files with no end-user impact
- Uses customized policies to automate manual tasks
- Connects data to users throughout the file lifecycle
- Manages data based on relevance to the business



Giveaway



Novell®



novacoast
IT PROFESSIONAL SERVICES
PRODUCT DEVELOPMENT

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