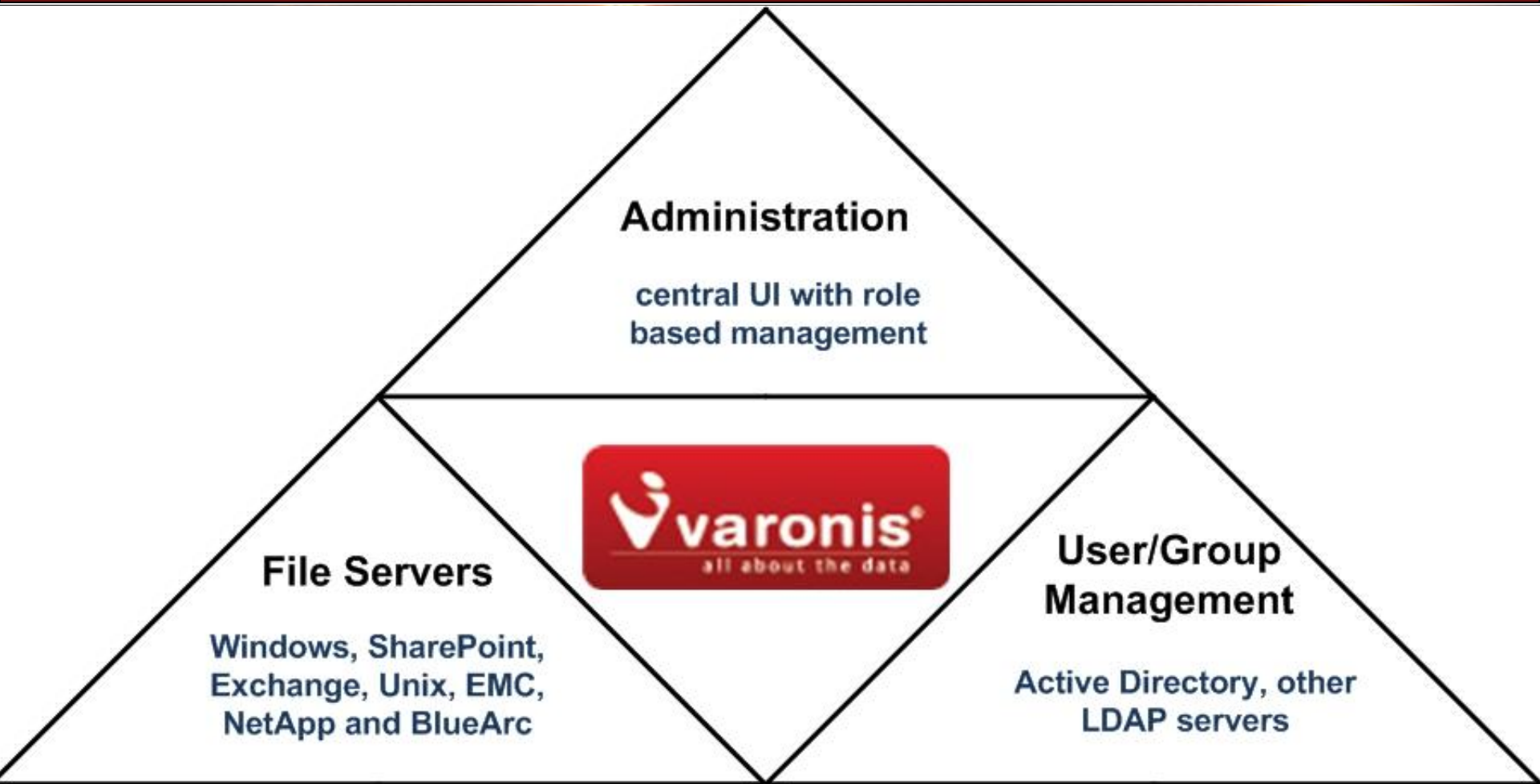
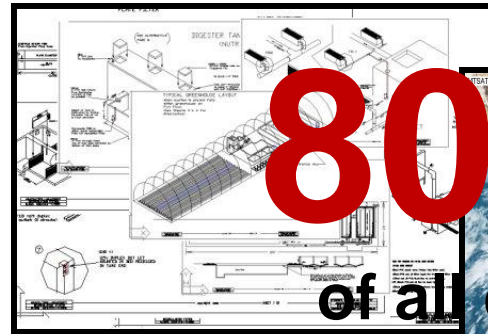




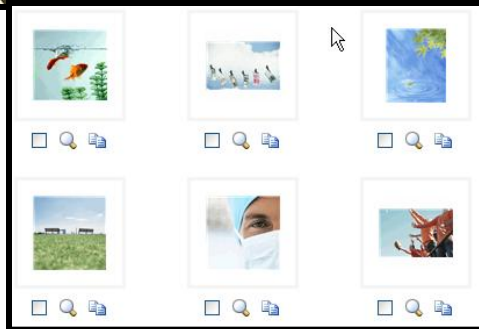
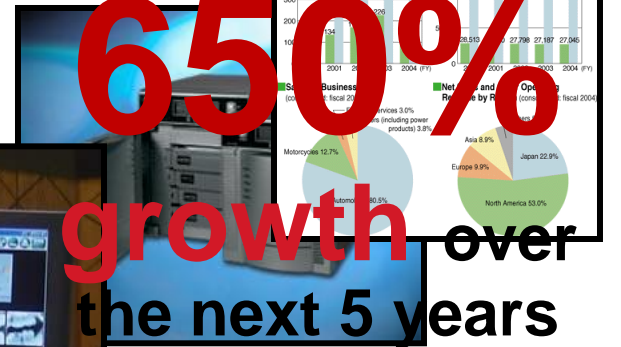
**Sandro Huber**  
**CIO**  
**FreeDivision**



# Unstructured Data Explosion



**80%**  
of all data is  
unstructured or  
semi-structured



Source: Gartner

# Data Explosion – Are We Ready?

## MORE

+ Data

+ Collaboration

+ Cross-Functional Teams

+ Security Requirements

=

MORE Containers

MORE ACLs

MORE Management

# 91%

Lack processes for  
determining data  
ownership

# 76%

Unable to determine  
who can access  
unstructured data

## Can IT answer?

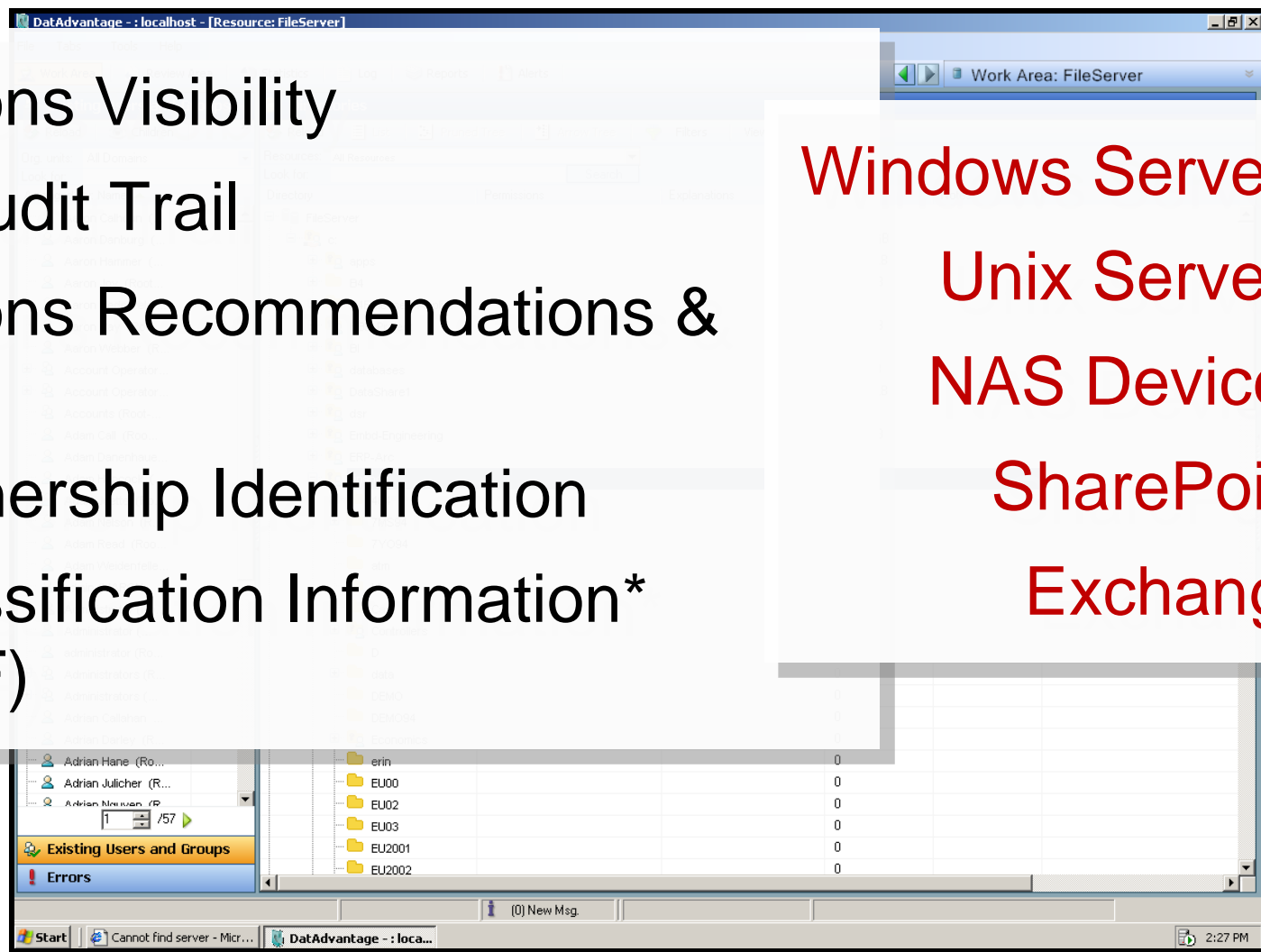
- ✓ Who has access to this folder?
- ✓ Which folders does this user *or* group have access to?
- ✓ Who has been accessing this folder?
- ✓ Which data is sensitive?
- ✓ Who is the data owner?
- ✓ Where is my sensitive data overexposed?
- ✓ How do I fix it?
- ✓ Where do I begin?

SOURCE:  
PONEMON INSTITUTE

# DatAdvantage Overview

- Permissions Visibility
- Usable Audit Trail
- Permissions Recommendations & Modeling
- Data Ownership Identification
- Data Classification Information\* (with DCF)

Windows Servers  
Unix Servers  
NAS Devices  
SharePoint  
Exchange





# Permissions - Bi-Directional Visibility

[illegible]

# Exchange- Bi-Directional Visibility

The screenshot displays the Varonis Exchange interface, which is divided into two main panes: 'Existing Users and Groups' on the left and 'Directories' on the right. The 'Existing Users and Groups' pane lists various users and groups, with 'Allen Carey (CORP)' highlighted. The 'Directories' pane shows a tree structure of resources, including 'corpfs02', 'centos5', 'http://sharepoint', and 'Exch-prod'. A red box highlights the 'Exch-prod' directory, which contains a 'Mailbox Store' and several sub-directories like 'Changed', 'Not permitted', and 'Permitted'. A red box also highlights the 'Permitted' directory, which contains a list of users and their permissions. The 'Permitted' directory is further expanded, showing a list of users and their permissions, including 'Full Access', 'Send On Behalf', and 'Publishing Author'. The 'Permitted' directory is further expanded, showing a list of users and their permissions, including 'Full Access', 'Send On Behalf', and 'Publishing Author'. The 'Permitted' directory is further expanded, showing a list of users and their permissions, including 'Full Access', 'Send On Behalf', and 'Publishing Author'.

**Existing Users and Groups**

Org. units: All Domains  
Look for: Users/Groups...

Administrators (CORP)  
ANONYMOUS LOGON (Abstract)  
Default (Abstract)  
Group\_Finance (CORP)  
**Allen Carey (CORP)**  
Allison Schafer (CORP)  
Andrew Carlisle (CORP)  
Andrew McLeirich (CORP)  
Anne Thornton (CORP)  
Beatrice Latchford (CORP)  
Benjamin Kasbekar (CORP)  
Carlos Keilly (CORP)  
Chris Overcash (CORP)  
Crystal Stone (CORP)  
Elena Cabrera (CORP)  
Eric Adler (CORP)  
Erin Manning (CORP)  
Eugene Schaefer (CORP)  
Heather Cano (CORP)  
Jane Nolan (CORP)  
Jeffrey Shaw (CORP)  
Jennifer Harrison (CORP)

**Directories**

Resources: corpfs02, centos5, http://sharepoint, Exch-prod  
Look for: to Data

corpfs02  
centos5  
http://sharepoint  
Exch-prod  
Mailbox Store  
Changed  
Not permitted  
Permitted

Permissions to Data

Permissions	Size	Contained Files
Full Access	1.87 TB	8,334
Send On Behalf	65.02 MB	86,341
Inherited FROM "Allen Carey(CORP)"	299.99 KB	340
Inherited FROM "Everyone(Abstract)"	318.66 KB	386
Inherited FROM "Group_Finance(CORP)"	5.82 KB	11
Inherited FROM "Domain Users(CORP)"	0 Bytes	0
Inherited FROM "SELF(Abstract)"	406.06 KB	487
Inherited FROM "Everyone(Abstract)"	78.95 KB	103
Inherited FROM "Allen Carey(CORP)"	388.73 KB	441
Inherited FROM "Everyone(Abstract)"	113.46 KB	168
Inherited FROM "Allen Carey(CORP)"	438.38 KB	509
Inherited from "ANONYMOUS LOGO..."	10.41 KB	1
Inherited from "Group_Finance(CORP)"	10.41 KB	1
Editor	0 Bytes	0
None	0 Bytes	0
Author	0 Bytes	0
Author	0 Bytes	0
Author	0 Bytes	0
Contributor	0 Bytes	0

**to Users/Groups**

**Data...**

# Unix Visibility

The screenshot displays the Varonis Unix Visibility interface. On the left, the 'Existing Users and Groups' pane shows a list of users and groups. The 'finance (centos5)' entry is highlighted with a red rectangle. On the right, the 'finance Properties' dialog box is open, showing the 'Access Control List (1)' tab. The dialog box contains two sections: 'Trivial access control entries' and 'Extended users and groups access control entries'. The 'Trivial access control entries' section shows a table with columns 'Object Name', 'R', 'W', 'X', and 'Effective'. The 'Extended users and groups access control entries' section shows a table with columns 'Object Name', 'R', 'W', 'X', and 'Effective'. The 'finance (centos5)' entry is listed in the 'Extended users and groups access control entries' section.

POSIX ACL's

**Existing Users and Groups**

Org. units: All Domains

Look for:

Arranged By: Type

- varonisuser (centos5)
- varonis (centos5)
- finance (centos5)**
- varonisuser (centos5)
- Other (Abstract)

**Directories**

Resources: corpfs02, http://sharepoint, ce

Look For:

Directory

- corpfs02
- http://sharepoint
- centos5
  - /
  - bin
  - etc
  - home
  - lib
  - lost+found
  - media
  - root
  - sbin
  - share
    - finance
  - srv
  - tmp
  - usr
  - var

**finance Properties**

Permissions: Access Control List (1)

Trivial access control entries

Object Name	R	W	X	Effective
<b>Mask</b>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
User (varonisuser(centos5))	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
Group (varonis(centos5))	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
Other(Abstract)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Extended users and groups access control entries

Object Name	R	W	X	Effective
finance(centos5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	

Add... Remove Remove All

OK Cancel Apply



# Identify Risk – Over-exposed Sensitive Data

**Over-Exposed Folders Containing Sensitive Data**

The screenshot shows the Varonis Directory Explorer interface. The left pane displays a directory tree for 'corpfs02'. The main pane shows a table of folders and their permissions. The right pane shows the 'Recommended Users and Groups' for the selected folder.

Directory	Permissions	Explanations	Violation...	Notes
corpfs02				
C:			203	Social Security Numbers (75) ,american ...
Share	F M R W X L	Inherited from "Everyone(Abstract)"	203	Social Security Numbers (75) ,american ...
B4			34	Social Security Numbers (10) ,american ...
BBB-Project				
BI				
databases	M R W			
DataShare1				
dsr	M R W			
Embd-Engine...				
ERP-Arc				
finance				
Fondue				
groups	R W X L	Inherited from "Everyone(Abstract)"		
HR				
HR-Private			78	Social Security Numbers (30) ,american ...
HumanResources	M R W X L	Inherited from "Everyone(Abstract)"		
legal			91	Social Security Numbers (35) ,american ...
Market				

The 'Recommended Users and Groups' pane on the right shows the 'Everyone (Abstract)' user selected. A red dashed box highlights this user, and a red arrow points from the central text box to it.

# Audit Trail

The screenshot displays the Varonis Audit Trail application interface. The top navigation bar includes tabs for Work Area, Review Area, Statistics, Log, Reports, and Alerts. The main window is divided into a left sidebar and a right pane. The sidebar shows a directory tree for 'corpfs02' with various folders like 'Share', 'apps', 'B4', 'B4Released-App', 'BBB-Project', 'BI', 'databases', 'DataShare1', 'dsr', 'Embd-Engineerin', 'FRP-Arc', and 'finance'. The 'finance' folder is highlighted with a red box. The right pane shows the 'Log' section with a query: 'File name Not like ~ AND Directory path Starts with 'C:\Share\finance' AND Time between 11/2/2009 12:00:00 AM and 11/2/2009 11:59:59 PM AND Show data from Equals 'File-system events''. Below the query, there is a table of log entries. The 'Operation Type' column is highlighted with a red box. The table shows two entries for 'Object removed'.

Resources: corpfs02, centos5, http://

Look For: Search

Directory

corpfs02

C:

Share

apps

B4

B4Released-App

BBB-Project

BI

databases

DataShare1

dsr

Embd-Engineerin

FRP-Arc

finance

404

7M594

7YO94

atm

bl

Switch to advanced mode Save/Load

Show data from: File system events From: 11/ 2/2009 12:00 AM To: 11/ 2/2009 11:59 PM Search

Log

Query: File name Not like ~ AND Directory path Starts with 'C:\Share\finance' AND Time between 11/2/2009 12:00:00 AM and 11/2/2009 11:59:59 PM AND Show data from Equals 'File-system events'

Operation Type

Time	File Server / Do...	Operation On	Operation Ty...	Operation By	File Type
Operation Type: Object added (103)					
Operation Type: Object name changed (41)					
Operation Type: Object removed (2)					
11/2/2009 10:25:...	corpfs02	C:\Share\finance\GUI\NEW\MASHV\DFEKMAL.XLS	Object removed	CORP\Elena Cabrera	XLS
11/2/2009 10:25:...	corpfs02	C:\Share\finance\GUI\NEW\MASHV\BOOK1.XLS	Object removed	CORP\Elena Cabrera	XLS

Search, Sort, and Group

# Audit Trail with Data Classification

**Log**

Search

New Group New Filter Remove Selected Filter Sort

Show data from Equals  
and  
Time Between  
and

**File-system events**

**Sensitive Data Access Activity**

Any of (OR):

Rule name Equals Visa

or

Rule name Equals MasterCard

or

Rule name Equals American Express

Switch to Simple Search Save/Load Query Definitions >>

Drag a column header here to group by that column.

Time	File Se...	O...	Object	Path	O	Operation Type	Operation By	File
12/3/2010 10:38...	corpfs...		unplanned_transactio...	C:\Share\finance\Economics\Costing\2 - Inventory Report\2006\Q...		File modified	CORP\Eric Adler	txt
12/3/2010 10:19...	corpfs...		unplanned_transactio...	C:\Share\finance\Economics\Costing\2 - Inventory Report\2006\Q...		Object added	CORP\Ann Schoenber...	txt
12/3/2010 10:19...	corpfs...		unplanned_transactio...	C:\Share\finance\Economics\Costing\2 - Inventory Report\2006\Q...		File modified	CORP\Ann Schoenber...	txt
12/3/2010 10:06...	corpfs...		New price for JV-SUP...	C:\Share\finance\Financial Reports\Prices and Item Numbers		Object added	CORP\Crystal Grove	txt
12/3/2010 10:06...	corpfs...		New price for JV-SUP...	C:\Share\finance\Financial Reports\Prices and Item Numbers		File modified	CORP\Crystal Grove	txt
12/3/2010 10:41...	corpfs...		INVETNORY SUMM...	C:\Share\finance\Economics\Costing\2 - Inventory Report\2006\Q...		Object added	CORP\Eric Adler	txt
12/3/2010 10:41...	corpfs...		INVETNORY SUMM...	C:\Share\finance\Economics\Costing\2 - Inventory Report\2006\Q...		File modified	CORP\Eric Adler	txt
12/3/2010 10:54...	corpfs...		hi-speed checkweigh...	C:\Share\legal\Corporate\License Agreements		Object added	CORP\Melissa Donovan	txt

# Audit Trail with Exchange

Users and Groups

Reload Children >>

Org. units: All Domains

Look for: allen carey

Arranged By: Name

Allen Carey (CORP)

Log

When did the event occur? - "SpecificDates" between 12/1/2010 12:00:00 AM and "1/9/2011 11:59:59 PM" AND Look only in these resources: - "(corps centos5 or http://sharepoint or Exch-prod)" AND What was the nature of the event? - "All Operations" AND Who accessed the folder? - "Allen Carey(CO

[Click here to change the query](#)

Not all results retrived from the database. Any sorting or group-by operation will take into account only currently retrived objects.

Operation Type Object

Time	File Serve...	Object	Path	Operation Ty...	Change Description
Operation Type: File modified (17)					
Operation Type: File opened (20)					
Operation Type: Message opened (16)					
Operation Type: Message received (97)					
Operation Type: Message sent (30)					
Operation Type: Message sent as (2)					
Object: Financial reports (2)					
12/2/2010 2:59:0...	Exch-prod	Financial reports	Mailbox Store\AllenCarey@corp.l...	Message sent as	Message sent to AdrianReddy@corp.local as AdamNelson@cor..
12/3/2010 10:09:...	Exch-prod	Financial reports	Mailbox Store\AllenCarey@corp.l...	Message sent as	Message sent to AdrianReddy@corp.local as AdamNelson@cor..
Operation Type: Message sent on behalf (5)					
Operation Type: Object added (13)					
Object: billing Jan- march.txt (2)					
Object: billing Jan- march.xls (2)					
12/1/2010 9:02:0...	corps02	billing Jan- march...	C:\Share\finance\Q1 2006	Object added	
12/3/2010 11:27:...	corps02	billing Jan- march...	C:\Share\finance\Q1 2006	Object added	

# Recommendations

**Directories**

Resources: corpfs02, centos5, http://sharepoint

Look For: Search

Directory Permissions Explanations Violation Count Size

corpfs02

C:

Share

apps

B4

B4R

BBB-Project

BI

databases

DataShare1

dsrc

Embd-Engineering

ERP-Arc

finance

404

7MS94

7YO94

atm

bill

Cars

Controllers

D

data

DEMO

DEMO94

Economics

**By User**

356 1.64 TB

1.64 TB

317.85 MB

1.15 GB

127.14 MB

31.79 MB

190.71 MB

52.86 GB

540.35 MB

19.12 GB

2.05 GB

2.36 GB

76.45 GB

0 Bytes

0 Bytes

0 Bytes

0 Bytes

0 Bytes

0 Bytes

0 Bytes

24.12 GB

0 Bytes

0 Bytes

0 Bytes

0 Bytes

0 Bytes

0 Bytes

19.00 GB

**Recommended Users and Groups**

Reload Children Arrange By Filters

Org. units: All Domains

Look for:

Arranged By: Status Permissions

sec IT-System (CORP) M R W X L

Group\_Finance (CORP) R W X L

Christy Venier (CORP)

Jennifer Harris...

Marc Farhat (CORP)

Eugene Schaefer ...

Eric Adler (CORP)

Jeffrey Shaw (CORP)

Benjamin Kasbekar...

Andrew Weirich (...)

Elena Cabrera (CORP)

Michael Federle (...)

Maria Hirasaki (CORP)

Heather Cane (CORP)

Margaret Coakley (CORP)

Jane Nolan (CORP)

Nathan Sonneborn (CORP)

Anne Thornton (CORP)

Allison Schaefer (CORP)

Andrew Carlisle (CORP)

Carlos Kelly (CORP)

Allen Carey (CORP)

Erin Manning (CORP)

Chris Overcash (CORP)

Crystal Grove (CORP)

**What if?**

**Excess Permissions?**



# Permissions Clean-up

The screenshot displays the Varonis FileServer management interface. A 'Commit' dialog box is open, showing a table of pending operations. Below it, a 'Scheduling' section allows selecting between 'Immediate' and 'Schedule On' options. To the right, the 'Recommended Users and Groups' pane lists 'Everyone (Abstract)' with permissions F, M, R, W, X, L. A red box highlights this entry. A third dialog box is partially visible in the background.

Include	Sequ...	Status	Description	BeginTime	Error Description
<input checked="" type="checkbox"/>	1	Pending Oper...	Protection/Uniqueness changed: legal is protec...	1/20/2010...	
<input checked="" type="checkbox"/>	2	Pending Oper...	remove group Everyone(Abstract) FMRLXW for...	1/20/2010...	

Scheduling

☒ Immediate

☐ Schedule On: Friday January 29 1:07 PM

Buttons: Abort, RollBack, Commit, Close

Recommended Users and Groups

Org. Units: All Domains

Look For:

Arranged By: Status

Permissions

Everyone (Abstract) F M R W X L

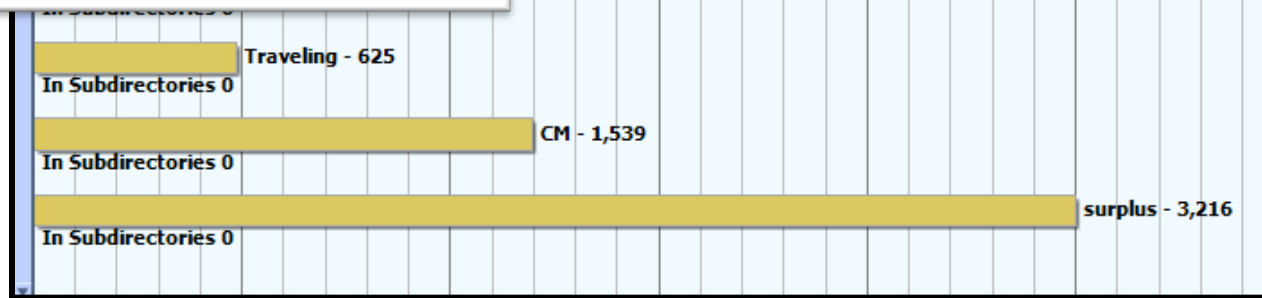
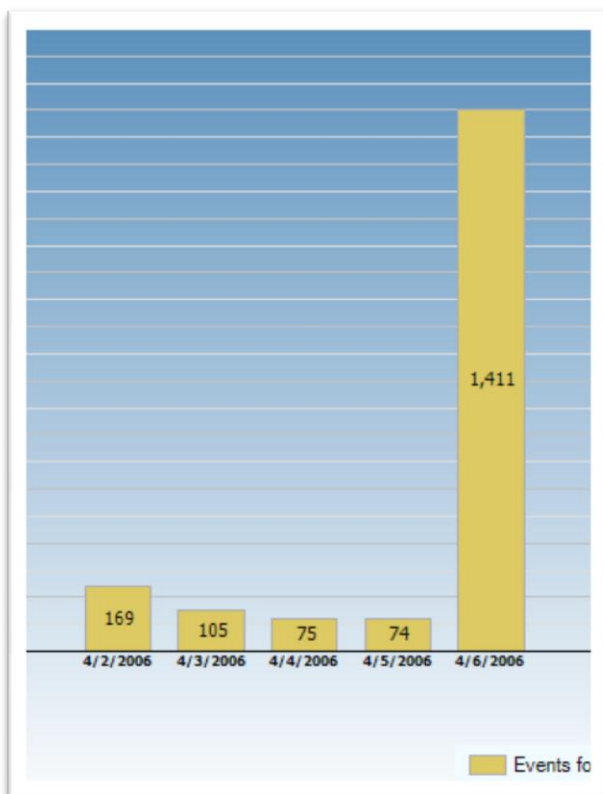
Buttons: Login, Cancel

View Outcor Properties... Open...

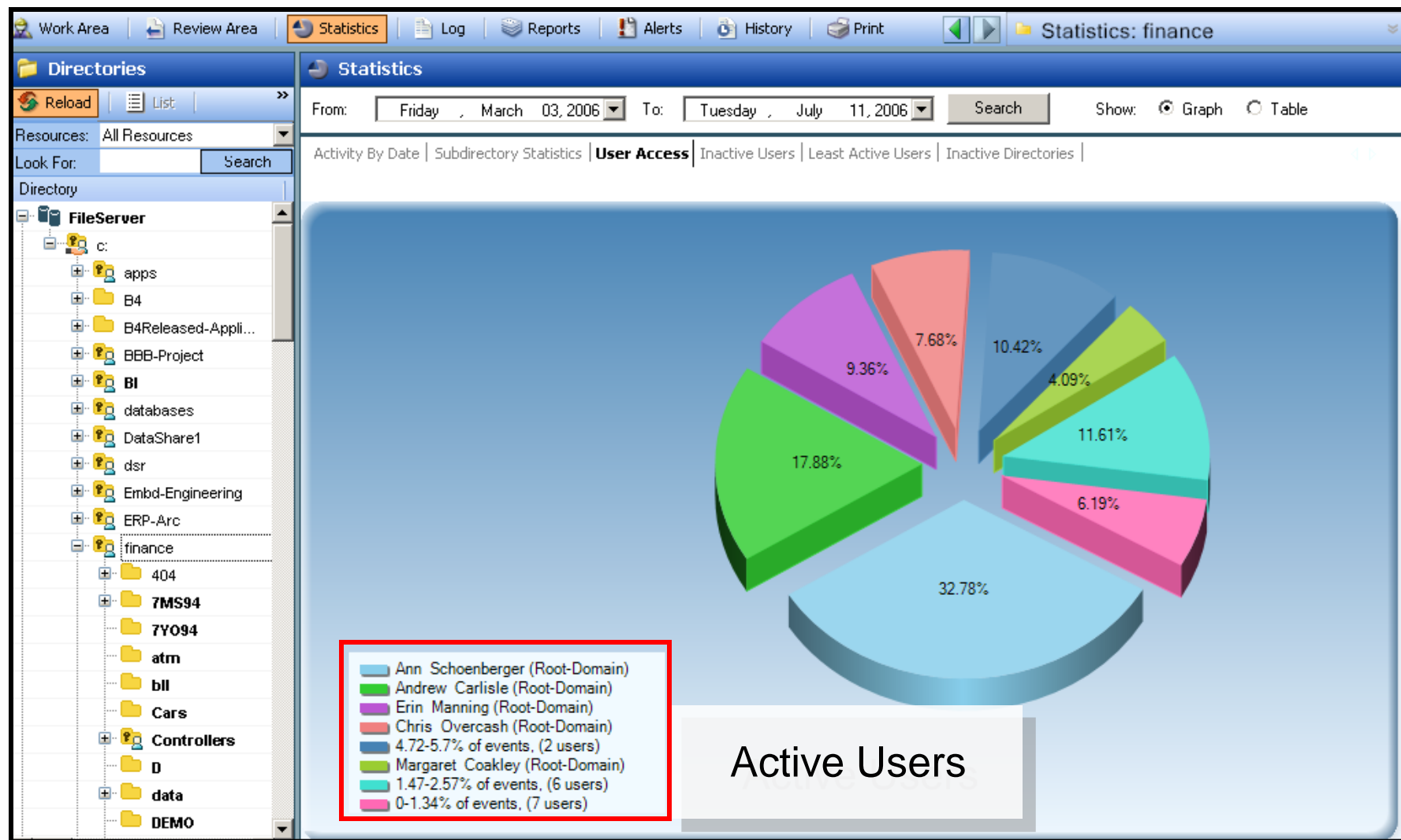
Simulate Changes

# Activity Analysis

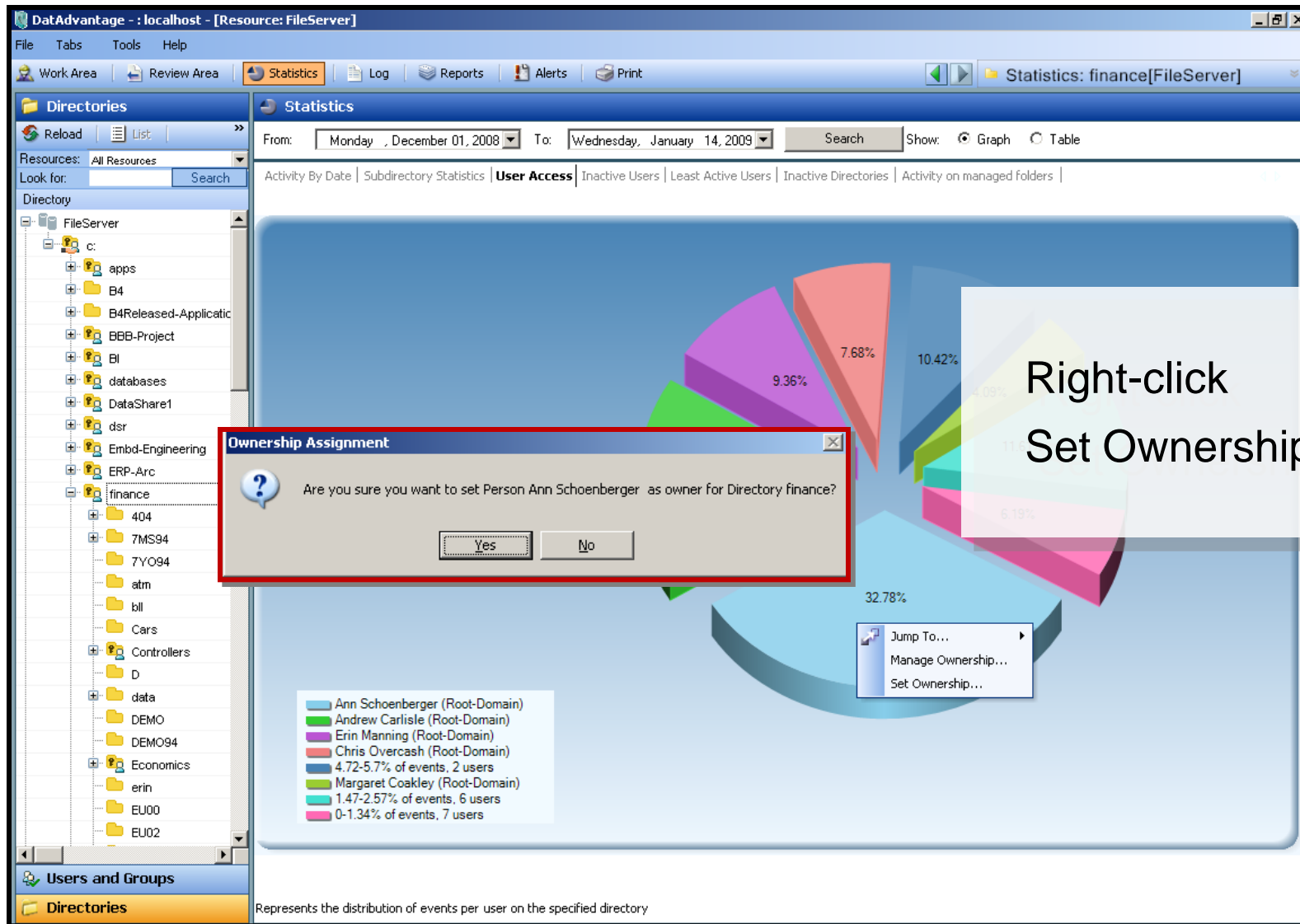
- Most/Least Active Users
- Most/Least Active Directories
- Anomalous Behavior



# Data Ownership Identification




# Data Ownership Assignment



# Reports – Automatic Data Owner Involvement

Reports



## Access Statistics

Report generated on 4/9/2009 9:09:47 AM

Access Path	User Name	Date	SAM Account Name	File Server	Event Count	Event Count on Subdirs
c:\HR					8	810
	Root-Domain\Ann Perrino				0	41
	Root-Domain\Don Penisson				8	721
	Root-Domain\Erica Caffrey				0	48
c:\HR-Private					0	174
	Root-Domain\Alex Weinger				0	156
	Root-Domain\Frances Weidenfeller				0	4
	Root-Domain\Melissa Cooley				0	14
c:\HumanResources					0	185
	Root-Domain\Alex Weinger				0	59
	Root-Domain\Denise Walters				0	6
	Root-Domain\Frances Weidenfeller				0	120

View

100%

Find | Next

Export

b. User or Group Permissions for Directory

Subscription

Send email to test@test.com

Snapshot

c. Global Group Access Analysis

d. Share Permissions

e. Unused Security Groups

5. Analysis Engine and Editing

6. Alerts

7. Inactive Resources

8. Others

9. Executive Reports


10. History

Activity

[Go to DataPrivilege Demo](#)

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Hit "Esc" to return to Main Menu

 varonis®



# DataPrivilege Overview

- Entitlement Reviews
- Authorization Workflow
- Self Service Portal
- Ethical Walls

The screenshot displays the 'InvestmentsAccess' rule configuration window. The rule is enabled and applies to the 'CORP\FINANCE' logical path and 'FINANCE' folder. The 'Clauses' section shows 'Department Equals Investments'. The 'Request Operation Type' section includes options for Grant, Grant & Revoke, Revoke, and Revoke All. The 'Expiration Date' section has radio buttons for Never, On (with a date picker), and After (with a days input). The 'Authorization' section shows 'Approve' and 'Decline' options, with a text area containing the message: 'No one from the investments department should have access to the finance data.' The 'Enforce Rule' checkbox is checked, and 'Do not approve automatically' is unchecked. The window includes 'OK' and 'Cancel' buttons at the bottom right.

Rule name: InvestmentsAccess ? ☒ Is Enabled

Logical path: CORP\FINANCE

Folder name: FINANCE

Clauses

Department Equals Investments

Edit

Request Operation Type ?

Permissions ?

Grant Grant & Revoke

Revoke Revoke All

Expiration Date ?

Approve Decline

No one from the investments department should have access to the finance data.

Characters left 921

☒ Enforce Rule ?

☐ Do not approve automatically ?


OK Cancel

# DataPrivilege – Automated Entitlement Reviews

- Approve or Overrule:
  - ▶ Changes
  - ▶ DA Recommendation
- Report

Request ID: 3504  
Request Type: Entitlement Review

Pending

 Entity Name: Group\_Finance

### Requests and Authorizations

ReqID	Request By	Request For	Date	Reason	Type	Op. Type	Status	Req On
222	Erin Manning	Crystal Grove	6/22/2009	Initial review	Membership	Grant	Approved	Group_Finance
	Authorizer Name	Role Name	Auth Level	Approval Date	Reason		Status	
	CORP \ Erin Manning	Group Owner	1	6/22/2009	Initial review		Approved	
220	Erin Manning	Nathan Sonneborn	6/22/2009	Initial review	Membership	Grant	Approved	Group_Finance
	Authorizer Name	Role Name	Auth Level	Approval Date	Reason		Status	
	CORP \ Erin Manning	Group Owner	1	6/22/2009	Initial review		Approved	
218	Erin Manning	Margaret Coakley	6/22/2009	Initial review	Membership	Grant	Approved	Group_Finance
	Authorizer Name	Role Name	Auth Level	Approval Date	Reason		Status	
	CORP \ Erin Manning	Group Owner	1	6/22/2009	Initial review		Approved	
216	Erin Manning	Anne Thornton	6/22/2009	Initial review	Membership	Grant	Approved	Group_Finance
	Authorizer Name	Role Name	Auth Level	Approval Date	Reason		Status	
	CORP \ Erin Manning	Group Owner	1	6/22/2009	Initial review		Approved	
214	Erin Manning	Allen Carey	6/22/2009	Initial review	Membership	Grant	Approved	Group_Finance
	Authorizer Name	Role Name	Auth Level	Approval Date	Reason		Status	
	CORP \ Erin Manning	Group Owner	1	6/22/2009	Initial review		Approved	

Advanced >>

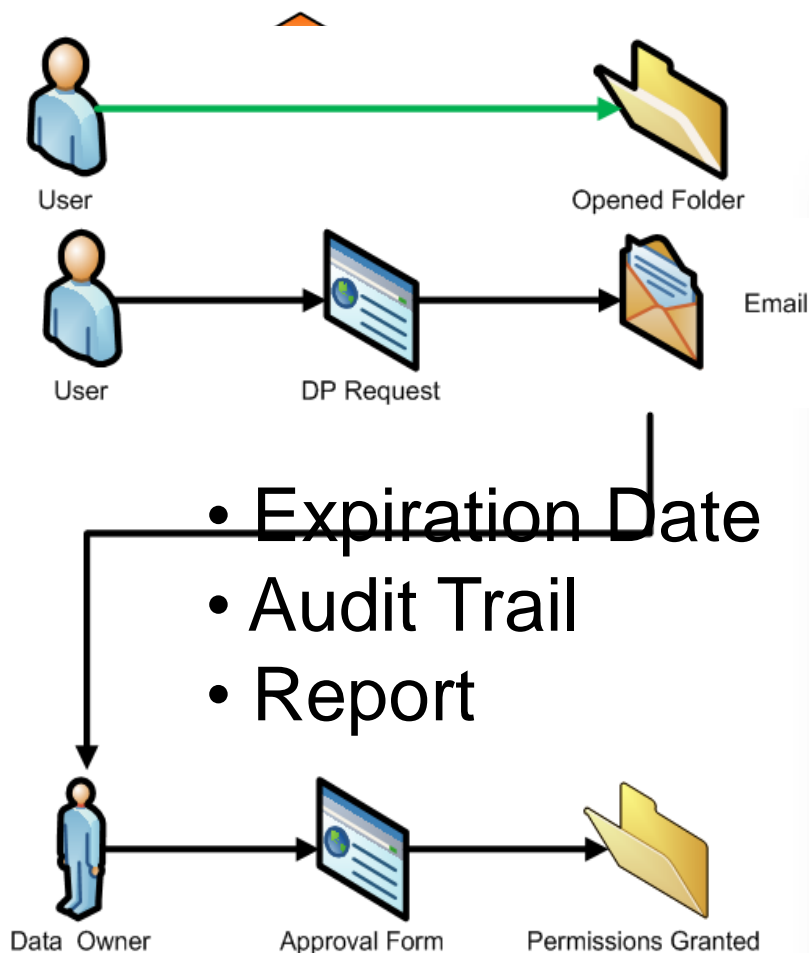
Data last synchronized with environment: September 30, 2010 1:44:49 PM

Sign

Cancel

Reset

# DataPrivilege – Authorization Workflow



Welcome, Erin Manning

Home F.A.Q. Help Contacts About

### Permission Requests

Summary Finish

1 User

**Request ID:** 39  
**Request Operation Type:** Grant Access **Pending**

**Requested For**

**Entity Name:** Adam Nelson  
**Logon Name:** AdamNelson  
**Domain Name:** CORP  
**Department:** Engineering  
**Telephone Number:**

**Permissions For Directory** **Expiration Date** ?

**Path:** \\CORPFS02\SHARE\FINANCE  
**Requested:** Modify  
**Membership to:** Modify - sec\_IT-System

☐ Never  
☐ On     
☒ After 14 Days

**Authorizers**

Name	Role	Status	Level	Permissions	Date
Erin Manning	Dir. Owner				

Total: 1 Record  
No. Of Rows: 3

**Request Reason** **Authorization Explanation** ? **Authorization** ?

I would like to review the accounts payable records.

Access granted for consulting project 602. |  
Characters left 957

☒ Approve  
☐ Decline

OK Cancel

# Complete Self Service Governance Portal

The screenshot displays the Varonis Self Service Governance Portal interface. The top navigation bar includes links for Home, F.A.Q., Help, Contacts, and About. The main content area is divided into several sections:

- Directory Owner:** A sidebar on the left contains links for Summary, Pending Requests, Permission Requests, Membership Requests, Management (Directory Owner, Group Owner), Search, and Reports. The main area shows a table of Managed Directories with columns for Display Name, Display Path, and Explanation. The table lists two directories: CORP and FINANCE.
- Statistics:** A section on the right titled "Statistics" shows a pie chart representing the distribution of events per user on the specified directory. The chart includes a legend with the following data:

User	Event Count	Percentage
Erin Manning(CORP)	43801	29.68%
Ann Schoenberger(CORP)	6829	26.01%
Derek Hirasaki(CORP)	6774	12.45%
Margaret Coakley(CORP)	6721	9.22%
Crystal Grove(CORP)	6829	3.34%
Allen Carney(CORP)	6774	4.71%

- Permissions:** A section on the right titled "Permissions" shows a table of permissions for the selected directory. The table lists the Display Name and Event Count for each user.

At the bottom of the screen, there is a "Log" button and a "Hit 'Esc' to return to Main Menu" message.

# Risks, Controls & Regulations

## High Risk Levels

- File System data is at great risk for loss, theft, and misuse
- Access configuration changes are untested

## File System Control Gaps

- Many access controls are “loose,” even broken
- No audit trail exists
- More than half of data has no known business owner

## Regulatory Requirements

- HIPAA
- PCI-DSS
- Sarbanes Oxley



# Management Challenges

1 TB of Data

2500 Unique Folders

Management  
Challenges

**For every unique folder...**

Access  
Control

How do we  
grant  
access?

Revoke it?

Data  
Ownership

Which  
folders need  
owners?

How do we  
identify the  
owners?

Global  
Access

How many  
folders are  
open?

How do we  
remediate?

Sensitive  
Content

Which data  
is sensitive?

How do we  
manage it?

# Your Data in 5 Years

Unstructured data is growing at **50%** per year...

If you have **5TB** today...



...in five years you'll have

**25TB!**

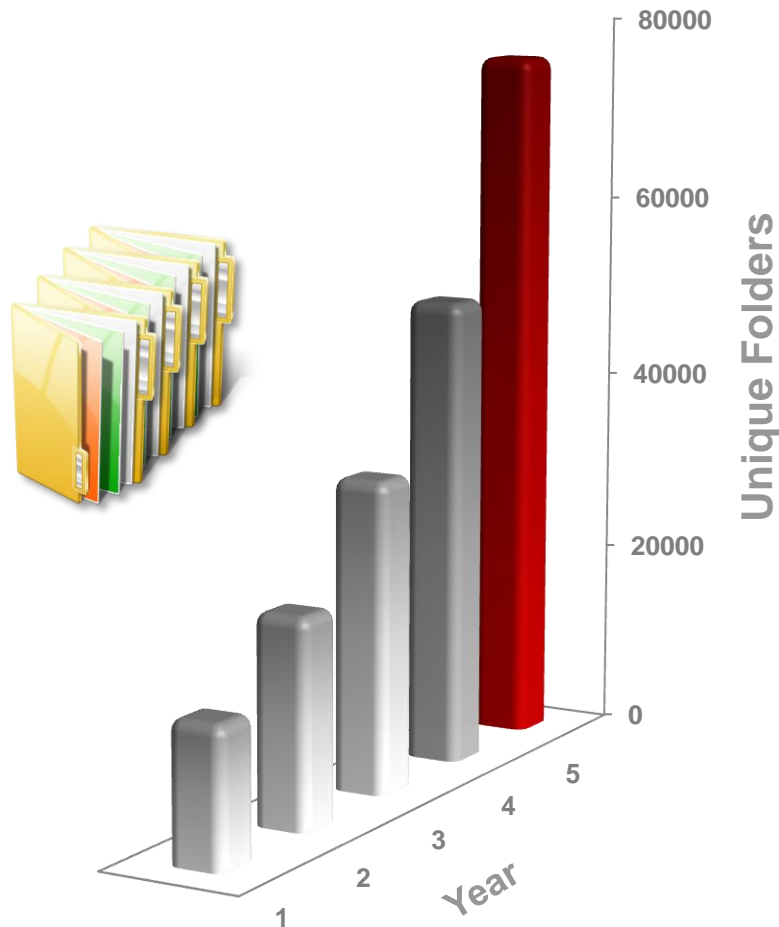
# Containers and Permissions

A single terabyte of data contains **50,000** folders  
**2500** of which are *unique* and need to be managed



**1** terabyte = **50,000** folders = **2,500** unique

# Your Permissions in 5 Years



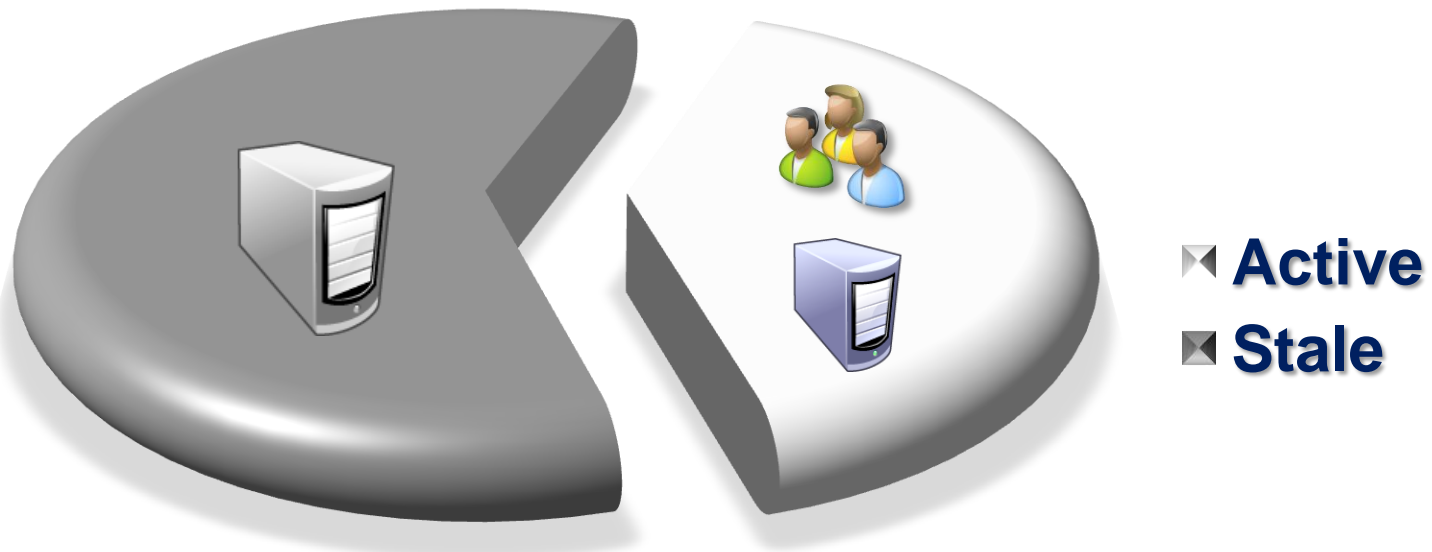
**As the data grows, so grows the complexity**

If you have **15,000** folders today...

...in five years you'll have over **75,000**

# Storage Savings

With **10** terabytes of data, **4-6 TB** is likely stale and can be archived without impacting business activity



**How much are you spending on storage?**



# Storage Savings

User Activity

Stale Data  
Identification

Storage Savings



By analyzing ***actual user activity***, Varonis can identify ***stale data*** which can be archived to less-expensive storage.

# Varonis Customers



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