Administration Guide Novell File Reporter 2.6

August 5, 2015





Legal Notices

Condrey Corporation makes no representations or warranties with respect to the contents or use of this documentation, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. Further, Condrey Corporation reserves the right to revise this publication and to make changes to its content, at any time, without obligation to notify any person or entity of such revisions or changes.

Further, Condrey Corporation makes no representations or warranties with respect to any software, and specifically disclaims any express or implied warranties of merchantability or fitness for any particular purpose. Further, Condrey Corporation reserves the right to make changes to any and all parts of the software at any time, without obligation to notify any person or entity of such revisions or changes. See the Software EULA for full license and warranty information with regard to the Software.

Any products or technical information provided under this Agreement may be subject to U.S. export controls and the trade laws of other countries. You agree to comply with all export control regulations and to obtain any required licenses or classification to export, re-export, or import deliverables. You agree not to export or re-export to entities on the current U.S. export exclusion lists or to any embargoed or terrorist countries as specified in the U.S. export laws. You agree to not use deliverables for prohibited nuclear, missile, or chemical biological weaponry end uses. Condrey Corporation assumes no responsibility for your failure to obtain any necessary export approvals.

Copyright © 2015 Condrey Corporation. All Rights Reserved.

No part of this publication may be reproduced, photocopied, or transmitted in any fashion with out the express written consent of the publisher.

Condrey Corporation 122 North Laurens St. Greenville, SC, 29601 U.S.A. http://condrey.co

Novell Trademarks

For Novell trademarks, see the Novell Trademark and Service Mark list (http://www.novell.com/company/legal/trademarks/ tmlist.html).

Third-Party Materials

All third-party trademarks are the property of their respective owners.

Contents

	Abo	ut This Manual
1	Wha	at's New
	1.1	New in Version 2.6
	1.2	New in Version 2.5
	1.3	New in Version 2.0.2
	1.4	New in Version 2.0.1
	1.5	New in Version 2.0
2	Ove	rview 13
	2.1	Novell File Reporter
	2.2	New Architecture for Version 2
	2.3	How Novell File Reporter Works
		2.3.1 Web Application
		2.3.2 NFR Engine
		2.3.3 NFR Agents
		2.3.4 Database
		2.3.5 Scans
		2.3.6 Reports
3	The	Administrative Interface 21
	3.1	Supported Browsers
	3.2	Launching the Administrative Interface
	3.3	Using the Administrative Interface
		3.3.1 Viewing Notifications
		3.3.2 Configuring the Web Interface
		3.3.3 Viewing System Information
4	Perf	orming Setup Procedures 27
	4.1	Enabling Other Identity Systems
		4.1.1 Enabling eDirectory
		4.1.2 Enabling Active Directory
	4.2	Viewing Storage Resources
	4.3	Assigning Proxy Targets
	4.4	Configuring Notifications
	4.5	Integrating with Novell Storage Manager
5	Sch	eduling and Performing Scans 39
	5.1	Scans
	0.1	5.1.1 Scan Retention
	5.2	Adding a Scan Target
	5.3	Removing a Scan Target
	5.4	Creating Scan Policies
	5.5	Establishing a Baseline Scan
	5.6	Clearing a Baseline Scan
		v

5.7	Editing a Scan Policy
5.8	Deleting a Scan Policy
5.9	Scheduling Scans
5.10	Editing a Scheduled Scan
5.11	Clearing a Schedule on a Scheduled Scan 49
5.12	Conducting an Immediate Scan
5.13	Viewing Scans in Progress
5.14	Retrying Failed Scans
5.15	Viewing Scan Data
5.16	Viewing Scan History
5.17	Troubleshooting a Failed Scan

6 Generating Reports

53

	6.1	Overview	
	6.2	Changing Your Cover Sheet Branding	
	6.3	Built-in Report Types	
	6.4	Directory Data Reports.	
		6.4.1 Generating a Summary Report	
		6.4.2 Generating a Directory Quota Report	
		6.4.3 Generating a Storage Cost Report	
	C F	6.4.4 Generating a Comparison Report	
	6.5	Permissions Reports	
		 6.5.1 Generating an Assigned NCP Permissions Report	
		6.5.2 Generating an Assigned NTFS Permissions Report6.5.3 Generating a Permissions by Path Report	
		6.5.4 Generating a Permissions by Identity Report	
	6.6	File Data Reports	
	0.0	6.6.1 Generating a Filename Extension Report	
		6.6.2 Generating a Detailed Filename Extension Report	
		6.6.3 Generating a Owner Report	
		6.6.4 Generating a Detailed Owner Report.	
		6.6.5 Generating a Duplicate File Report	75
		6.6.6 Generating a Detailed Duplicate File Report	
		6.6.7 Generating a Date-Age Report	
		6.6.8 Generating a Detailed Date-Age Report	
	6.7	Historic Comparison Reports	
		6.7.1 Generating a Historic File System Comparison Report	
		6.7.2 Generating a Historic NCP Permissions Comparison Report	
		6.7.3 Generating a Historic NTFS Permissions Comparison Report	
	6.8	Trending Report	
		6.8.1 Generating a Volume Free Space Report	
	6.9	Custom Query Reports.	
	6.10	Unformatted Reports	
		6.10.1 Generating Unformatted Reports	
	6.11	NSM Policy Reports	
	6.12	Scheduling Reports	89
	6.13	Editing a Scheduled Report	90
	6.14	Clearing a Schedule on a Scheduled Report	91
	6.15	Copying a Report Definition	91
	6.16	Viewing Reports in Progress	
	6.17	Troubleshooting Reports	
		g	-
7	Perfe	orming Other Administrative Tasks	93
	7.1	Stopping and Restarting Services	93

	7.2	Using Folder Summary
	7.3	Considerations for Reporting on NAS Devices
		7.3.1 EMC Celerra
		7.3.2 EMC Isilon and Other NAS Devices
	7.4	Changing the Default Path for Stored Reports
	7.5	Changing the Life Span of Stored Reports
	7.6	Resetting the Proxy User Password
	7.7	Changing the Report Data Font
8	Usin	g the Client Tools 99
	8.1	Using the Report Viewer
	8.2	Using the Report Designer Interface
	8.3	Creating a Custom Query Report
	8.4	Designing a Custom Query Report
	8.5	Saving the Layout as a Template
	8.6	Using a Saved Template for Custom Query Reports
9	Data	Analytic Tools 115
	9.1	Using the Heat Map
	9.2	Using the Pivot Table
Α	Filte	-
	A.1	Filters Tab
		A.1.1 And Drop-Down Menu and + Button 126 A.1.2 Relative Date Filtering Parameters 127
	A.2	Single Entry Filter Conditions
	/	A.2.1 Using the And Drop-Down Menus and + Buttons
	A.3	A.2.2 Using the <i>Relative Date</i> Filtering Settings
_	•	
в	Seci	irity Settings 131
	B.1	Rights and Privileges on Scanned Storage
		B.1.1 Granting Rights
	B.2	Windows Firewall Requirements
	B.3	Local Security Authority Rights and Privileges.
	B.4	Proxy Rights Group
	B.5	Windows Clustering through Proxy Agents
С	Log	File Locations 135
	C.1	NFR Engine Log File
	C.2	Windows Agent Log File
	C.3	Linux Agent Log File
D	NFR	Agent Scan Capabilities 137
	D.1	Server Platform and NAS Device Support
	D.1 D.2	File System Metadata
	D.3	Security Scans — Active Directory File Systems
	D.4	Security Scans — eDirectory File Systems
		,,,,

D.5	Volume Free Space Scans	139
D.6	Other Microsoft Supported Features	140
D.7	Current Limitations	140

E Glossary

F	Docu	Imentation Updates	143
		August 5, 2015	
	F.2	April 27, 2015	143
	F.3	October 7, 2014	144
	F.4	February 18, 2014	144
	F.5	November 26, 2013	144
	F.6	April 25, 2013	144
	F.7	February 13, 2013	145

About This Manual

This administration guide is written to provide network administrators the conceptual and procedural information for administering Novell File Reporter.

- Chapter 1, "What's New," on page 9
- Chapter 2, "Overview," on page 13
- Chapter 3, "The Administrative Interface," on page 21
- Chapter 4, "Performing Setup Procedures," on page 27
- Chapter 5, "Scheduling and Performing Scans," on page 39
- Chapter 6, "Generating Reports," on page 53
- Chapter 7, "Performing Other Administrative Tasks," on page 93
- Chapter 8, "Using the Client Tools," on page 99
- Chapter 9, "Data Analytic Tools," on page 115
- Appendix A, "Filtering," on page 125
- Appendix B, "Security Settings," on page 131
- Appendix C, "Log File Locations," on page 135
- Appendix D, "NFR Agent Scan Capabilities," on page 137
- Appendix E, "Glossary," on page 141
- Appendix F, "Documentation Updates," on page 143

Audience

This guide is intended for network administrators who manage user and collaborative network storage resources.

Feedback

We want to hear your comments and suggestions about this guide and the other documentation included with this product. Please use the User Comment feature at the bottom of each page of the online documentation, or go to www.novell.com/documentation/feedback.html and enter your comments there.

Documentation Updates

For the most recent version of the *Novell File Reporter 2.6 Administration Guide*, visit the Novell File Reporter Web site (http://www.novell.com/documentation/filereporter2).

Additional Documentation

For additional Novell File Reporter 2.6 documentation, see the following guides at the Novell File Reporter Web site: (http://www.novell.com/documentation/filereporter2)

- Novell File Reporter 2.6 Installation Guide
- Novell File Reporter 2.6 Database Schema and Custom Queries Guide

What's New

- Section 1.1, "New in Version 2.6," on page 9
- Section 1.2, "New in Version 2.5," on page 10
- Section 1.3, "New in Version 2.0.2," on page 10
- Section 1.4, "New in Version 2.0.1," on page 11
- Section 1.5, "New in Version 2.0," on page 11

With each product update, Novell File Reporter introduces significant architectural and feature enhancements. Starting with the release of Version 2.0, we have provided a timeline summarizing some of the more notable changes in architecture, performance, and features.

1.1 New in Version 2.6

Baseline and Previous Scans

Previous versions of Novell File Reporter 2 let you keep only the most recent File System and Permissions scans of a storage resource. With the release of Version 2.6, you can now designate a particular scan to be retained as a "Baseline scan" and keep the existing scan as a "Previous scan." This means that you can now retain up to three scans for each storage resource: a Baseline scan, a Previous scan, and a "Current scan." Any combination of two scans are the means of generating new built-in Historic Comparison reports being introduced in Version 2.6.

Historic Comparison Reports

This new built-in report lets you view the changes to a storage resource through a comparison of any two of the following scans: Baseline, Previous, or Current.

Historic Comparison reports include:

- Historic File System Comparison reports
- Historic NCP Permissions Comparison reports
- Historic NTFS Permissions Comparison reports

Custom Query Report Designer Updates

The Custom Query Report Designer has been updated to support views for Previous and Baseline scan data, as well as a number of other updates and bug fixes.

Ability to Delete a Scan Immediately

A scan can be manually deleted immediately, or it can be marked for deletion at the next maintenance interval (by default, currently 12:00 midnight local time).

Ability to Copy a Report Definition

The ability to copy Report Definitions has been added to both the Web Application and the Report Designer. The Web Application is able to copy any report definition type, and the Report Designer is able to copy any Custom Query report definitions.

File Query Cookbook

Coinciding with the release of Novell File Reporter 2.6 is the introduction of a new collaborative community portal for accessing and sharing Custom Query reports. The SQL commands for these reports are included so all that you have to do is simply copy the commands and paste them into the Report Designer. In addition, sample report layouts (.repx files) are also included for some reports which can be opened via the Report Designer report layout interface. Both the SQL and the report layouts may be customized as needed. You can access the File Query Cookbook directly through the Report Designer interface, or at http://www.filequerycookbook.com (http://

1.2 New in Version 2.5

Custom Reports through Database Querying

In addition to the built-in report types, you can generate custom reports by crafting your own database query. The report data is extracted from the scan and generated into a report in delimited text format or a custom report layout via the new Report Designer.

Custom Query Report Designer

Custom query report data can be further customized for layout and presentation from a Windows workstation with the Report Designer.

Desktop Report Viewer

Stored reports can now be downloaded and viewed from a Windows workstation with the Report Viewer application.

Early Access to Analytic Tools in Development

The release of Version 2.5 includes early access to analytic features in a new tool set that can be run from a Windows workstation.

1.3 New in Version 2.0.2

Support for Microsoft SQL Server 2012

With the release of Novell File Reporter 2.0.2, supported databases now include both PostgreSQL and Microsoft SQL Server 2012. For procedures on properly configuring a new SQL Server 2012 instance that is compatible with Novell File Reporter, see "Novell File Reporter 2.6 Installation Guide in the *Novell File Reporter 2.0.2 Installation Guide.*"

Configuration Dashboard

A new configuration dashboard is the means of managing the product licensing and sequentially configuring and administering the database, NFR Engine, and Web Application.

Reporting on Administrative Shares

Novell File Reporter can now report on administrative shares in Windows file systems.

Support for Microsoft Server 2012 R2

Novell File Reporter 2.0.2 fully supports Microsoft Server 2012 R2.

1.4 New in Version 2.0.1

Advanced Filtering

With the introduction of Novell File Reporter 2.0.1, you can use advanced filtering capabilities so that your File Data reports include only the data you want. Boolean filtering is available through a new *Filters* tab. For more information, see Appendix A, "Filtering," on page 125.

Microsoft DFS Namespace Support

Distributed File System (DFS) namespace technology helps Microsoft network administrators group shared folders located on different servers and presents them to users as a virtual tree of folders known as a namespace. Novell File Reporter now presents these namespaces as available storage resources that can be reported on.

1.5 New in Version 2.0

Advanced Architecture

To provide expanded reporting capabilities Novell File Reporter 2.0 was built on a new advanced architecture that supports:

- Simultaneous integration with eDirectory and Active Directory
- An SQL database
- Web-based administration

Easier Configuration and Management

All of the complex DSI installation and configuration tasks have been replaced with a simple installation and configuration wizard. Once installed, all management tasks are performed through a browser-based interface.

New Reporting Capabilities

Novell File Reporter 2.0 has a much stronger tie-in to network directory services. File Reporter 2.0 authenticates to a primary identity system (either eDirectory or Active Directory) and then through a proxy, establishes a connection to the other identity system. You can be connected to one Active Directory domain and many eDirectory trees at the same time.

New Reports

In addition to the extensive file report types in Version 1, Novell File Reporter 2.0 introduces:

- Permissions reports that identify who has access to a particular file or the access rights of a particular user
- Trending reports that show the growth of data on a Novell volume or Windows share over a period of time
- · Detail reports that are specific to an individual user, file type, file, and more
- Aggregate reports that report on file and folders located on storage resources in eDirectory and Active Directory

2 Overview

This section provides an understanding of Novell File Reporter, the supported third-party databases, the NFR Engine, and NFR Agents, along with how reports are generated.

- Section 2.1, "Novell File Reporter," on page 13
- Section 2.2, "New Architecture for Version 2," on page 13
- Section 2.3, "How Novell File Reporter Works," on page 14

2.1 Novell File Reporter

Novell File Reporter inventories network file systems and delivers the detailed file storage intelligence you need to optimize and secure your network for efficiency and compliance. Engineered for enterprise file system reporting, Novell File Reporter gathers data across the millions of files and folders scattered among the various network storage devices that make up your network. Flexible reporting and filtering options then present the exact findings you need so you can demonstrate compliance or take corrective action.

Novell File Reporter identifies files currently stored on the network, the size of the files, when users last accessed or modified the files, and the locations of duplicate files. Novell File Reporter can also help you calculate department or individual storage costs. Novell File Reporter can even identify access rights to folders and consequently, the files that are contained within.

2.2 New Architecture for Version 2

Novell File Reporter 2 is a significant upgrade from Novell File Reporter 1. To provide the new and future capabilities of the product, along with the extensive performance enhancements, Novell File Reporter 2 features:

- · A completely new architecture built on rewritten code
- A new reporting framework
- The utilization of a PostgreSQL or Microsoft SQL Server 2012 database
- The NFR Engine with an architecture that is common with Novell Storage Manager
- Integration with eDirectory and Active Directory

IMPORTANT: Because of their distinct architectures, Novell File Reporter Version 1.0.*x* and Version 2.6 cannot be integrated. If you have Novell File Reporter 1.0.*x* deployed in your network and want to keep it, be aware that you cannot import Version 1.0.*x* data to Version 2.6 and vice versa. You must ensure that the Version 1.0.*x* NFR Engine and data reside on servers where no components of Version 2.6 reside.

If you decide to install either the Novell File Reporter 2.6 NFR Engine or the NFR Agent on a server where a Novell File Reporter Version 1.0.*x* component is installed, you must fully remove the Version 1.0.*x* component before installing the Version 2.6 component.

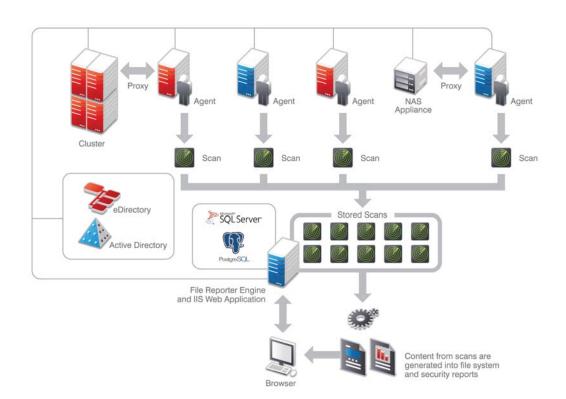
2.3 How Novell File Reporter Works

- Section 2.3.1, "Web Application," on page 15
- Section 2.3.2, "NFR Engine," on page 15
- Section 2.3.3, "NFR Agents," on page 15
- Section 2.3.4, "Database," on page 15
- Section 2.3.5, "Scans," on page 16
- Section 2.3.6, "Reports," on page 16

Novell File Reporter was developed to examine and report on terabytes of data—in other words, millions of files, folders and volumes, scattered among the various storage devices that make up your network. This reporting includes the associated rights of these files, folders, and Novell network volumes or Microsoft network shares.

To report on this data efficiently, Novell File Reporter disperses the work among a Web application, NFR Engine, NFR Agents, either a PostgreSQL or Microsoft SQL Server (2012 or later) database, and either eDirectory or Active Directory.

Figure 2-1 Novell File Reporter Work Process



2.3.1 Web Application

The Web application runs on top of Microsoft Internet Information Services (IIS) and is the means of all administrative interaction. Among other things, the Web application is responsible for:

- Management of scan policies and report definitions
- Generating Preview reports
- · Access to stored reports
- All other management functions

2.3.2 NFR Engine

The NFR Engine is the mechanism that runs Novell File Reporter. It can be hosted on Microsoft Windows Server 2008 R2 SP1, 2012, or 20012 R2. It can also run on a sufficiently enabled 64-bit Windows 7 or Windows 8 workstation.

The NFR Engine does the following:

- · Stores scans in the database
- · Schedules the scans that the NFR Agents conduct
- · Processes the scans and compiles them for inclusion in a report
- Runs scheduled reports
- Manages scan delegations to NFR Agents
- · Sends notifications that Novell File Reporter has completed a scan or generated a report

2.3.3 NFR Agents

NFR Agents are compact programs that can run on Novell Open Enterprise Server and Microsoft Windows Server hosts. NFR Agents can examine and report on Novell NSS and Windows NTFS file systems. Additionally, NFR Agents examine and report on file system security, including file and folder rights, trustee assignments, and permissions. For more information, see Appendix D, "NFR Agent Scan Capabilities," on page 137.

IMPORTANT: For optimal results, you should install an NFR Agent on every server that has a volume or share you want to report on.

NFR Agents cannot be installed on NAS devices or clustered hardware devices. For Novell File Reporter to report on these type of devices, NFR Agents can be set up as proxy agents.

2.3.4 Database

The database stores information needed for generating reports. This information includes:

- Cached Active Directory and eDirectory objects
- Scans
- Identity system information such as names of eDirectory trees and Active Directory domains and forests
- Schedule information pertaining to scans and reports
- Notification information

- Report definitions
- Scan history
- Scan policies
- Volume free space

2.3.5 Scans

Through the NFR Agent, Novell File Reporter takes a "scan" of the file system's storage resource at a given moment. A storage resource can be a Novell network server volume or a Microsoft network share.

Scans are indexed data that are specific to a storage resource. They are the means of generating a storage report. Scans include comprehensive information on the file types users are storing, when files were created, when they were last modified, permission data on the folders where these files reside, and much more.

Novell File Reporter collects scans from the NFR Agents, compresses them, and sends them to the NFR Engine, where it then decompresses them and stores the scan information into the database.

You can conduct scans at any time, but we recommend using a scheduled time after normal business hours to minimize the effect on network performance.

NOTE: Procedures for performing scans are documented in Chapter 5, "Scheduling and Performing Scans," on page 39.

2.3.6 Reports

When Novell File Reporter has a scan of a storage resource, you can utilize it to generate a report. You can generate reports through the following means:

- Built-in Reports
- Custom Queries

Built-in Reports

Generating a built-in report is as simple as selecting the report type from a menu.

To generate a report, the NFR Engine takes all of the needed scans that are applicable to the specifications of the report and consolidates them into a single report by indexing the applicable scans.

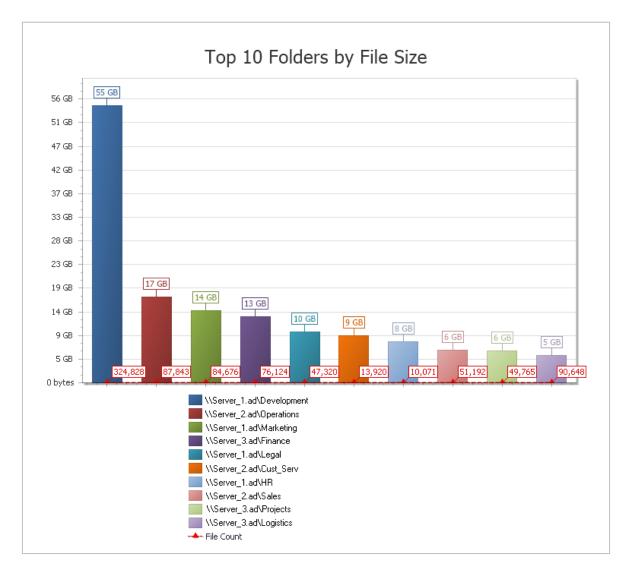
Table 2-1	Built-in Report Types	
-----------	-----------------------	--

File System Reports	Security Reports	Trending Reports
Folder Summary	Assigned NCP Permissions	Volume Free Space
Detail Reports	Assigned NTFS Permissions	
File Extension	Permissions by Path	
Duplicate Files	Permissions by Identity	

File System Reports	Security Reports	Trending Reports
Date-Age	Historic NCP Permissions Comparison	
Owner	Historic NTFS Permissions Comparison	
Storage Cost		
Comparison		
Directory Quota		
Historic File System Comparison		

Novell File Reporter lets you present built-in reports in various formats including PDF, Microsoft Excel, RTF, HTML, TXT, and CSV. The product also includes built-in graphs for certain report types.

Figure 2-2 Sample Report in Graphical Format



Custom Queries

These reports allow administrators who are familiar with querying the database to generate very specific report data that might not be available through one of the built-in report types.

Custom query report data can be further customized for layout and presentation from a Windows workstation with the Report Designer.

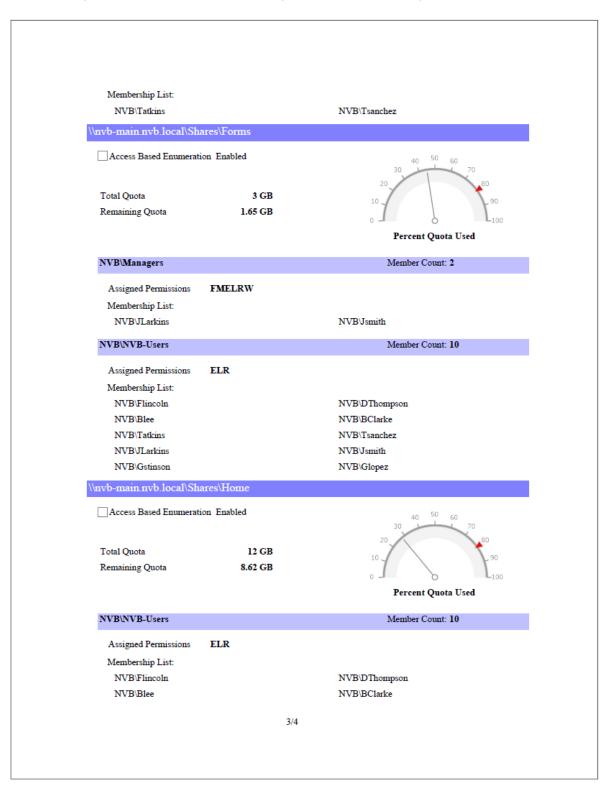


Figure 2-3 Page from a Custom Query Report Designed with the Report Designer.

The Administrative Interface

- Section 3.1, "Supported Browsers," on page 21
- Section 3.2, "Launching the Administrative Interface," on page 21
- Section 3.3, "Using the Administrative Interface," on page 22

3.1 Supported Browsers

Novell File Reporter is managed through a Web browser-based interface and is supported on the latest versions of the following browsers:

Table 3-1 Supported Browsers

Windows	Linux	Mac OS X	
Internet Explorer 10	Firefox	Firefox	
Internet Explorer 11		Chrome	
Firefox		Safari	
Chrome			

3.2 Launching the Administrative Interface

1 In the browser's address bar, type:

https://nfr_web_server_dns_name

The DNS name is the one you created in "Novell File Reporter 2.6 Installation Guide." You must enter the DNS name. You cannot log in with an IP address. The login screen appears.

Login		
Username Password		
	Log In	

2 Enter the username and password of a member of the NFR Admins group that you created and click *Log In*.

If you are authenticating to Active Directory, the username can be entered in any of the standard Active Directory formats:

domain\SAMAccountName (AD\User1)

UPN(user1@ad.test.lab)

LDAP(CN=user1,OU=home,DC=ad,DC=test,DC=lab)

With LDAP, there may be partial case sensitivity, especially with the domain (DC=) components.

If you are authenticating to eDirectory, the username must be entered in typeless FDN:

admin.novell

The Novell File Reporter Home page appears:

Solution	General	🧧 Scar	ıs	Repo	rts
Version Info		Scan Policies	0	Report Definitions	
Web Application	2.6.0.10	Scan Collection		Report Generation	
Engine	2.6.0.3	Scans In Progress	0	Reports In Progress	
Database	SQL Server 12.0.2000.8	# Scans Last Day	0	# Stored Reports	
License Info		# Scans Last Week	0	Stored Report Storage	
License Type	Production	Agents		Bytes In Use	Not availab
Identity System	NVB.LOCAL	Total Agents	1	Free Bytes Remaining	Not availab
Expiration Date	2/23/2016	-			
Licensed Features	Active Directory Reporting eDirectory Reporting	Engine Data Path C:\ProgramData\Novell\File R	eporter\Engine\data		
Server Local Time		Total Space	139.66 GB		
Current Time	3/4/2015 7:57:48 AM	Free Space	115.88 GB		
Time Zone	Pacific Standard Time (UTC -08:00)				

3.3 Using the Administrative Interface

- Section 3.3.1, "Viewing Notifications," on page 22
- Section 3.3.2, "Configuring the Web Interface," on page 24
- Section 3.3.3, "Viewing System Information," on page 25

All tasks are conducted by selecting an option from one of the menus at the top of the page.

The *Main* menu provides access to notifications and system information. The *Web Interface Configuration* option in the *Administration* menu lets you set your preference for entries listed on a page.

3.3.1 Viewing Notifications

Novell File Reporter displays notifications for successfully completed scans, failed scans, completed reports, failed reports, errors, warnings, and other information. You can use the filtering options to list only the notification types you want.

1 From the Main menu, select Notifications.

G Refresh				Notificatio
orag a column header h	ere to group by that column			
everity	Timestamp 👻	Status Code	Category	Message
٩	۳	Ŷ	٩	Ŷ
Success	3/4/2015 8:25:03 AM	(0) Operation successful.	Scan	Data scan for target \\nvb1.nvb.local\UserData3 completed successfully.
Success	3/4/2015 8:19:14 AM	(0) Operation successful.	Scan	Data scan for target \\nvb1.nvb.local\UserData2 completed successfully.
Success	3/4/2015 8:16:59 AM	(0) Operation successful.	Scan	Data scan for target \\nvb1.nvb.local\UserData1 completed successfully.
Success	3/4/2015 8:10:10 AM	(0) Operation successful.	Scan	Data scan for target \\nvb1.nvb.local\UserHome1 completed successfully.
Success	3/4/2015 8:10:09 AM	(0) Operation successful.	Scan	Data scan for target \\nvb1.nvb.local\UserHome2 completed successfully.
Error	3/4/2015 8:09:57 AM	(1024) No agent available for delegation.	Scan	The scheduled data scan (Scan ID 4) for storage path $\LWELASS/VOL4$ was unable to complete. No agent is available for the specified storage path. There are 3 retry attempts remaining. The next attempt will be made in 7143 seconds.
Error	3/4/2015 8:09:57 AM	(1024) No agent available for delegation.	Scan	The scheduled data scan (Scan ID 3) for storage path \LWELABS\VOL2 was unable to complete. No agent is available for the specified storage path. There are 3 retry attempts remaining. The next attempt will be made in 7143 seconds.
Error	3/4/2015 8:09:57 AM	(1024) No agent available for delegation.	Scan	The scheduled data scan (Scan ID 2) for storage path \LWELABS\VOLS was unable to complete. No agent is available for the specified storage path. There are 3 retry attempts remaining. The next attempt will be made in 7143 seconds.
				The scheduled data scan (Scan ID 1) for storage path

Like many pages in the administrative interface, you can modify the current display.

- 2 (Optional) Display columns in the order you want by dragging them to the desired location.
- 3 (Optional) List the most recent notification by clicking twice the column heading.
- 4 (Optional) Filter the notifications to display only the information you want:
 - 4a At the desired column heading, click the "pin" icon.For example, the Message column.
 - **4b** Select the desired filter option. For example, *Contains*.
 - **4c** In the field to the left of the "pin" icon, enter the distinguishing word or letter for the filter. For example, Permissions.

The page is updated according to the filtering parameters.

🔝 Novell File F	Reporter 2.6	Main Scans Reports Adr	min	istration		NVB\Administra Log (
G Refresh						Notificatio
Drag a column header he	ere to group by that column					
Severity	Timestamp -	Status Code		Category		Message
Ŷ	۲ ۴		9		Ŷ	Permissions
Success	3/4/2015 8:54:37 AM	(0) Operation successful.		Scan		Permissions scan for target \\nvb1.nvb.local\UserHome completed successfully.
Success	3/4/2015 8:54:37 AM	(0) Operation successful.		Scan		Permissions scan for target \\nvb1.nvb.local\UserHome completed successfully.
Success	3/4/2015 8:50:32 AM	(0) Operation successful.		Scan		Permissions scan for target \\nvb1.nvb.local\UserHome completed successfully.
Success	3/4/2015 8:50:32 AM	(0) Operation successful.		Scan		Permissions scan for target \\nvb1.nvb1.local\UserHome completed successfully.
Contains([Messag	e], 'Permissions')					Cle
		Copyright © 2015 Condrey Co				

3.3.2 Configuring the Web Interface

After 20 minutes of inactivity in the administrative interface, you are required to log in again. You can adjust this setting and specify the number of items displayed per page through the Web Config page.

1 From the Administration menu, select Web Interface Configuration.

🕢 Novell File Reporter 2.6 Main Scans Reports Administration	NVB\Administrator Log Out
	Web Config
Display Options	
Grid Page Size 50 ; rows Note: This setting applies to the current browser only.	
Session Options	
Authentication Timeout 20 ÷ minutes Note: This setting will not affect any current authenticated sessions. Report Page Execution Timeout 900 ÷ seconds	
Apply	
Copyright © 2015 Condrey Corporation	

- 2 In the Grid Page Size field, specify the number of entries you want displayed.
- **3** In the *Authentication Timeout* field, specify the minutes of inactivity before you will need to log in again.
- 4 Click Apply.
- 5 When you are notified that the Web interface configuration was saved, click OK.

3.3.3 Viewing System Information

When you work with a Novell Support representative to diagnose the source of a problem, you might be asked to access the System Info page. To do so, simply select *System Info* from the *Main* menu.

Database Statistics		Referenced Web Applica	ation Assen	nblies	
Database Version String	Microsoft SQL Server 2014 - 12.0.2000.8 (X64) Feb 20 2014 20:04:26 Copyright (c) Microsoft Corporation	Name •	Version	Processor Architecture	•
	Developer Edition (64-bit) on Windows NT 6.3 <x64> (Build 9600;) (Hypervisor)</x64>	AppResources	2.6.0.1	None	^
Database Total Size	828,309,504 bytes	CCThemes	14.2.5.0	None	
Database Host Address	10.250.11.170	Condrey.SRS.ReportLibrary	2.6.0.2	None	=
Database Name	srsdb				
Database Schema Version	2.6.0.1	DevExpress.Data.v14.2	14.2.5.0	None	
Scans		DevExpress.Printing.v14.2.Core	14.2.5.0	None	
Total Size of Scans	361,267,200 bytes	DevExpress.Web.ASPxTreeList.v14.	14.2.5.0	None	
File System Scans	11	DevExpress.Web.v14.2	14.2.5.0	None	
Permision Scans	4	DevExpress,XtraReports,v14.2	14.2.5.0	None	
Volume Trend Scans	0	DevExpress.XtraReports.v14.2.Web	14250	None	
		Devexpress.xtrakeports.v14.2.web	14.2.3.0	None	~
Identity System Data		<			>
Identity Systems Count	6				
Identity System Cached Objects	21				
Identity Systems Size	114,688 bytes				

NOTE: The layout and content displayed in the System Info page varies between environments utilizing a PostgreSQL database and Microsoft SQL Server.

4 Performing Setup Procedures

Before you can start scanning storage resources and generating reports, you first need to perform some setup procedures.

- Section 4.1, "Enabling Other Identity Systems," on page 27
- Section 4.2, "Viewing Storage Resources," on page 31
- Section 4.3, "Assigning Proxy Targets," on page 34
- Section 4.4, "Configuring Notifications," on page 35
- Section 4.5, "Integrating with Novell Storage Manager," on page 36

4.1 Enabling Other Identity Systems

- Section 4.1.1, "Enabling eDirectory," on page 27
- Section 4.1.2, "Enabling Active Directory," on page 29

During the installation of the NFR Engine, you specify the primary identity system (directory service) when you load the Novell File Reporter license file. If the Novell File Reporter license file is for Active Directory, then Active Directory is the primary identity system. If the license file is for eDirectory, then eDirectory is the primary identity system.

Novell File Reporter lets you enable other identity systems so that you can scan and report on the storage resources that are within those systems.

- Section 4.1.1, "Enabling eDirectory," on page 27
- Section 4.1.2, "Enabling Active Directory," on page 29

4.1.1 Enabling eDirectory

Novell File Reporter allows you to enable multiple eDirectory trees as identity systems.

IMPORTANT: If you have Universal Passwords set up for all users in your tree, you must have the proper settings for Novell File Reporter to work. Refer to "Novell File Reporter 2.6 Installation Guide" for more information.

IMPORTANT: If your primary identity system is Active Directory and you want to enable eDirectory, you must first install the Novell Client on the Windows server that is hosting the NFR Engine.

1 Select Administration > Identity Systems.

	Nove	ll File F	Reporter 2.6		Main	Scans I	Reports	Administration		NVB\Administrato Log Ou
0	Add 🕑	Delete	Set Default Serv	ver for eDirectory	Reset Prox	y Account Passv	word 🕄	Refresh		Identity System
Drag	a column	header he	ere to group by the	it column						
	Primary	Name		Туре	Defa	ult Server		Proxy Credentials		Authenticated
0	0	nvb.local		Active Directory						0
						Copyright (© 2015 Cond	Irey Corporation		

2 Click Add.

Add eDirectory Identity System	n
eDirectory Authentication:	
Default Server Address:	
Username:	
Password:	
Tree Name:	
Proxy Object FDN:	
Assign Supervisor rig	hts to [Root] for Proxy Account
	OK Cancel

Default Server Address: Specify the IP address of any server in the directory tree.

Username: Use typeless FDN format naming to specify an administrator name.

Password: Specify the administrator password.

Tree Name: Specify the name of the eDirectory tree.

Proxy Object FDN: Use typeless FDN format naming to specify a name for the proxy object that you are creating.

For example, NFRProxyObject.system

Assign Supervisor rights to [Root] for Proxy Account: Leaving this check box selected enables Novell File Reporter to scan all volumes in the directory tree. If you deselect this option, the NFR Agent can scan only those volumes to which the NFR proxy object has been given supervisor rights.

When this option is deselected, storage resources might not build properly.

We therefore recommend that this option remain selected.

3 Complete the fields and click OK.

The eDirectory identity system is added.

	Nove	ell File Reporte	r 2.6	Main Scans Rep	orts Administration	NVB\Administrat Log O
Đ	Add 📀	Delete Set Defa	ult Server for eDirectory R	leset Proxy Account Password	S Refresh	Identity System
Orag	a column	header here to group	p by that column			
	Primary	Name	Туре	Default Server	Proxy Credentials	Authenticated
D	0	nvb.local	Active Directory			0
0		LWELABS	eDirectory	10.250.11.160	CN=nfrproxy.O=system	S

4 (Optional) Repeat these steps to add additional eDirectory identity systems.

4.1.2 Enabling Active Directory

Novell File Reporter 2.6 allows you to enable only one Active Directory forest as an identity system.

1 Select Administration > Identity Systems.

Add	Delete Set Default S	erver for eDirectory Rese	t Proxy Account Password 🛛 😋 Re	efresh	Identity Syste
Primary	header here to group by Name	Type	Default Server	Proxy Credentials	Authenticate
Prind y	OES11-TREE	eDirectory	10.250.220.210	Proxy Credentials	→ Autilenticate

- 2 Click Add.
- 3 In the *Identity System* region, click the *Active Directory* option.

Add Identity System	
Identity System Type:	
🔘 eDirectory 🧕 Ac	tive Directory
Domain Administrator	Credentials:
Username:	
Password:	
Forest Root:	Iwlabs.local
Proxy User:	LWLABS\
Proxy Rights Group:	LWLABS\
	OK Cancel

Username: Specify a username for an administrator in Active Directory.

Password: Specify the password for the administrator.

Forest Root: Because the Windows NFR Engine host server is already part of a domain, the forest name is entered automatically.

Proxy User: Name the proxy user.

For example, NFRProxy.

Proxy Rights Group: Name the proxy rights group.

For example, NFRProxyRights.

4 Click OK.

The Active Directory identity system is added.

	Nove	ll File Reporter 2.	<u>ю Ма</u>	ain Scans Reports /	Administration	admin.syst <u>Log C</u>
0	Add 🔇	Delete Set Default Set	erver for eDirectory Reset Pro	xy Account Password 😽 Refresh	h	Identity Systen
rag	a column	header here to group by t	that column			
	Primary	Name	Туре	Default Server	Proxy Credentials	Authenticated
	0	OES11-TREE	eDirectory	10.250.220.210		0
0		lwlabs.local	Active Directory		LWLABS\nfrproxy	0

4.2 Viewing Storage Resources

When an identity system has been enabled, the associated storage resources, which include Novell volumes and Microsoft shares, are available for scanning and reporting.

Novell File Reporter cannot see a Windows network disk drive that is not shared.

1 Select Administration > Storage Resources.

1	Novell File Reporter 2.6		Main Scans	Reports Adminis	tration		NVB\Administra Log C
9	Rebuild 🔇 Cancel Rebuild 😋 Refresh]					Storage Resourc
	Identity System	In Progress	Discovery Strategy	Rebuild Start Time	Rebuild Total Time	Rebuild Status	
	LWELABS		Containers	3/4/2015 12:00:00 AM	00:00:01	0	
1	nvb.local		Containers	3/4/2015 12:00:00 AM	00:00:01	0	
Cn	eate Filter						

2 Select a check box pertaining to one of the listed eDirectory trees or Active Directory forests.

The *Rebuild* button is enabled, allowing you to rebuild the storage resources for the selected eDirectory tree or Active Directory forest. You should rebuild the storage resources whenever you add a new server.

- **3** (Optional) Click *Rebuild* to rebuild the storage resources for the eDirectory tree or Active Directory forest.
- 4 Click one of the listed eDirectory trees or Active Directory forests.

	Schedule Rebui	d Rebuild Only S	elected Servers 🛛 😋 Refr	esn		Resources Edit	or - LWELA
Resource		Operating System	FDN	File System	Last Update	Last Update Attempt	Last Status
LWELABS		OES Linux	CN=LWeLabs.O=system		3/4/2015 12:00:01 AM	3/4/2015 12:00:01 AM	0

All of the servers in the selected eDirectory tree or Active Directory forest are displayed.

5 Click each button to view options.

Discovery Options: For large organizations with eDirectory trees or Active Directory forests spanning multiple geographic areas, rebuilding the storage resources can take many hours. Rather than rebuilding the storage resources for the identity system, you can select this to create a scope that specifies just those new containers or servers that need added.

Storage Resource Discovery Options - LWELABS					
Scope b	y Container List	Scope by Server List			
	Container FDN				
N	New Io Containers defined. The entire L				
	<u>er</u>				
		ОК	Cancel		

Select whether to specify the servers through a container FDN or server FDN, then click *New* to enter the paths. Specify the FDN path and click *Update*. When all of the paths you want to be searched are listed, click *OK*.

Schedule: By default, Novell File Reporter rebuilds the identity system's storage resources at 12:00 AM each day. Larger sites might want change this setting to weekly or on a specific day of the month. To do so, click this option and modify the settings in the dialog box.

Rebuild: Clicking this button automatically rebuilds the identity system's storage resources.

Rebuild Only Selected Servers: Use this option to rebuild the selected servers.

Refresh: Refreshes the resource list.

6 Click the > for each server to browse the storage resources.

Novell File I	Reporter 2.6		Main	Scans Repo	rts Admini	stration		NVB\Administrat Log O
Discovery Options	Schedule	Rebuild	Rebuild Only Select	ed Servers 😽 Ref	esh		Resources Edi	itor - LWELAB
Resource			Operating System	FDN	File System	Last Update	Last Update Attempt	Last Status
LWELABS			OES Linux	CN=LWeLabs.O=syste	m	3/4/2015 12:00:01 AM	3/4/2015 12:00:01 AM	0
VOL1					NSS			
VOL2					NSS			
VOL3					NSS			
VOL4					NSS			
:				Copyright © 2015	Condrey Corpora	tion		

4.3 Assigning Proxy Targets

Novell File Reporter does not include a NetWare NFR Agent. Furthermore, an NFR Agent cannot be deployed on a NAS device or server cluster. Finally, some organizations might not want NFR Agents deployed on every server. In situations such as these, you can have a deployed NFR Agent on another server function as a proxy agent.

1 Select Administration > Agents.

All of the NFR Agents are listed.

Assign Proxy Targets 😮 Delete 🖏 Refresh Agents							
rag	a col	Agent Server	Version	Identity System	Last Heartbeat	Proxy Count	Status Message
2	0	nvb1.nvb.local	2.6.0.2	Active Directory, eDirectory	3/4/2015 12:07:59 PM	0	

2 Select the NFR Agent you want to set up as a proxy agent and click Assign Proxy Targets.

Assign Proxy Targets for nvb1.nvb.local					
	Server	Identity System			
	LWELABS	LWELABS			
₹ <u>Cr</u>	reate Filter				
		OK Cancel]		

3 Select the proxy targets and click OK.

4.4 Configuring Notifications

Notification parameters specify what types of notifications are listed and how email notifications are sent.

1 Select Administration > Notification Configuration.

Novell File Reporter 2.6	Main Scans Reports Administratio	NVB\Administrator Log Out
		Notification Configuration
Notification Settings		
Only notify me about events of at least this severity level: S Days to display notifications in the dashboard:	uccess Y	
Enable Mail Notifications		
Mail Settings		
Mail Server: IP Address or Hostname Port: 25		
Connection Type: TLS From Email Address: noreply@cctec.org		
Use Authentication		
Username: mailuser		
Password:		
Minutes to buffer multiple notications for a single email: 1	\$	
Save Changes		
	Copyright © 2015 Condrey Corporation	

Only notify me about events of at least this severity level: This field lets you specify the severity level of events that are recorded and displayed in the Notifications page and through email notifications.

The severity levels are listed from lowest to highest, with Success being the default setting.

If you change the severity level, Novell File Reporter records and displays only the events for that severity level and higher. Older notifications from formerly recorded severity levels continue to be displayed in the Notifications page. For example, if you change the setting from *Success* to *Warning*, only warning and error events are recorded, but the formerly recorded success and info events are still displayed, unless you filter them out.

To avoid receiving emails for every successful event, you should modify this setting to a more restrictive level.

Days to display notifications in the dashboard: This field indicates the number of days an event is listed in the Notifications page.

Enable Mail Notifications: Clicking this activates the fields in the *Mail Settings* region of the page.

Mail Server: Specify the IP address or hostname of the mail server to use for sending the email notifications.

Port: Specify the port number used by the mail server.

Connection Type: Specify the encryption type used by the mail server.

From Email Address: Specify the address you want displayed in the *From* field of the email notifications that are sent.

Use Authentication: If your mail server requires authentication, select this.

Username: Specify the mail server username.

Password: Specify the mail server password.

Minutes to buffer multiple notifications in a single email: Novell File Reporter can consolidate messages into a single email notification. If you change this setting to 5, Novell File Reporter consolidates all of the events that took place in 5 minutes and emails you a notification.

2 Specify your notification parameters and click Save Changes.

4.5 Integrating with Novell Storage Manager

If you have Novell Storage Manager deployed, you can use Novell File Reporter to report on Novell Storage Manager policies. Before you can do so, you must first specify the server address and port number of the server hosting the NSM Engine.

IMPORTANT: Novell File Reporter 2.6 requires that you upgrade to Novell Storage Manager 3.1 or above.

1 Select Administration > File Management Integration.

🔝 Novell File Reporter 2.6	Main Scans Reports Administration	NVB\Administrator Log Out
S Refresh		File Management Integration
Novell Storage Manager Engine Communication		
Server Address		
Save Changes		
	Copyright © 2015 Condrey Corporation	

- 2 Specify the IP address or DNS name of the server hosting the NSM Engine.
- **3** Specify the port number that the NSM Engine is using. The default port number is 3009.
- 4 Click Save Changes.

5

Scheduling and Performing Scans

- Section 5.1, "Scans," on page 39
- Section 5.2, "Adding a Scan Target," on page 40
- Section 5.3, "Removing a Scan Target," on page 42
- Section 5.4, "Creating Scan Policies," on page 42
- Section 5.5, "Establishing a Baseline Scan," on page 46
- Section 5.6, "Clearing a Baseline Scan," on page 47
- Section 5.7, "Editing a Scan Policy," on page 47
- Section 5.8, "Deleting a Scan Policy," on page 47
- Section 5.9, "Scheduling Scans," on page 47
- Section 5.10, "Editing a Scheduled Scan," on page 49
- Section 5.11, "Clearing a Schedule on a Scheduled Scan," on page 49
- Section 5.12, "Conducting an Immediate Scan," on page 49
- Section 5.13, "Viewing Scans in Progress," on page 49
- Section 5.14, "Retrying Failed Scans," on page 50
- Section 5.15, "Viewing Scan Data," on page 51
- Section 5.16, "Viewing Scan History," on page 51
- Section 5.17, "Troubleshooting a Failed Scan," on page 52

5.1 Scans

Through the NFR Agent, Novell File Reporter takes a "scan" of the file system's storage resource at a given moment. A storage resource can be a Novell network server volume or Microsoft network share.

Scans are indexed data that are specific to a storage resource. They are the means of generating a storage report. Scans include comprehensive information on the file types users are storing, when files were created, when they were last modified, permission data on the folders where these files reside, and much more.

Novell File Reporter collects scans from the NFR Agents, compresses them, and sends them to the NFR Engine, where it stores them in the database.

Scans can be taken at any time, but we recommend using a scheduled time after normal business hours to minimize the effect on network performance.

You should consider a number of factors as you decide how often to conduct a scan:

- Although daily scanning always provides the most up-to-date information, scanning is not throttled and may place a considerable load on the server hosting the NFR Agent.
- Most storage resources do not change rapidly enough to justify daily scanning.
- Monthly scanning places the least total load on individual servers and on the network, but scans are not as up-to-date as they could be.

- You can scan frequently changing volumes more often and scan the more static volumes less often.
- Part of the decision concerning scanning frequency involves the primary purpose of the reporting. Reporting on storage trending can generally use less frequent scans, but reporting that is intended to solve immediate problems, such as "Who filled up this volume?" needs more frequent scans.
- When information is needed immediately, you can manually trigger a scan.
- For installations where you are not sure of the optimal scanning frequency, you can start with weekly scanning, and then adjust that interval based on the needs of the particular site.

5.1.1 Scan Retention

By default, Novell File Reporter only retains the most current File System scan and Permissions scan of a storage resource. However, if you want to generate Historic Comparison reports, which let you compare two scans of the same storage resource over two points in time, you will need to specify that scans be retained. Depending on the retained scan type, this is done either manually or automatically.

Manual Retention

You can specify that a File System or Permissions scan be retained indefinitely as a "Baseline scan" by manually specifying it in the Scan Data page. For procedures and more information on Baseline scans, see Section 5.5, "Establishing a Baseline Scan," on page 46.

Automatic Retention

Within the scan policy, you can specify that the last File System scan or Permissions scan be retained when a new File System scan or Permissions scan is conducted. This version is known as a "Previous scan." For procedures and more information on Previous scans, see Section 5.4, "Creating Scan Policies," on page 42.

5.2 Adding a Scan Target

All volumes and shares must first be specified as a scan target before they can be scanned.

- 1 Select Scans > Scan Targets.
- 2 Click Add.
- 3 Click the > to view the volumes and shares of the listed servers.

Storage Resource Brows	ser	Σ	3
Resource Filter:		Apply Filter	
Refresh			
 nvb.local 		^	
\\nvb1.nvb	local\ADMIN\$		
\\nvb1.nvb	.local\C\$		
\\nvb1.nvb	.local\E\$		
\\nvb1.nvb	.local\F\$		
\\nvb1.nvb	.local\G\$		
\\nvb1.nvb	.local\H\$		
\\nvb1.nvb	.local\I\$	=	
\\nvb1.nvb	.local\]\$		
\\nvb1.nvb	local\NETLOGON		
\\nvb1.nvb	.local\print\$		
\\nvb1.nvb	.local\SYSVOL		
\\nvb1.nvb	.local\UserData1		
\\nvb1.nvb	local\UserData2		
\\nvb1.nvb	local\UserData3		
\\nvb1.nvb	local\UserHome1		
\\nvh1.nvh	local\UserHome2	~	
		OK Cancel	

4 Select the volumes and shares you want Novell File Reporter to be able to scan and click OK.

The scan targets are added.

rag a column header here	to group by that col			
Identity System	-	Target Path	▲ File System	
	٩		Υ	Ŷ
LWELABS		\\LWELABS\VOL1	NSS	
LWELABS		\\LWELABS\VOL2	NSS	
LWELABS		\\LWELABS\VOL3	NSS	
LWELABS		\\LWELABS\VOL4	NSS	
nvb.local		\\nvb1.nvb.local\UserData1	NTFS	
nvb.local		\\nvb1.nvb.local\UserData2	NTFS	
nvb.local		\\nvb1.nvb.local\UserData3	NTFS	
nvb.local		\\nvb1.nvb.local\UserHome1	NTFS	
nvb.local		\\nvb1.nvb.local\UserHome2	NTFS	
age 1 of 1 (9 items) 🔇 1	0			

5.3 Removing a Scan Target

- 1 Select Scans > Scan Targets.
- 2 Select the check box pertaining to the volume or share you want to remove as a scan target and click *Delete*.
- 3 When the confirmation dialog box appears, click Yes.

5.4 Creating Scan Policies

The specifications for a scan are established in a scan policy. The scan policy specifies the following parameters:

- What type of scan to conduct (File System, Permissions, or Volume Free Space)
- The scan targets
- Scan retry settings
- The scan schedule

IMPORTANT: The scan policy name must be unique. If you attempt to give the scan policy an existing name, Novell File Reporter generates an error.

- 1 Select Scans > Scan Policies.
- 2 Click Add.

New Scan Policy		23
Policy Name Policy Type	 File System Permissions Volume Free Space 	
	OK Cancel	

3 In the Scan Policy Name field, specify a name for the scan policy.

You can provide a description of the policy in the next dialog box.

4 Select the type of scan that Novell File Reporter is to conduct.

File System: Scans the files currently stored on the network volume or share, the size of those files, when the files were last accessed, the locations of duplicate versions, and so forth.

Permissions: Scans the rights, trustee assignments, and permissions pertaining to the folders stored on the volumes or shares.

Volume Free Space: Scans the availability of free space on the volumes or shares.

5 Click OK.

Scan Policy Edito	or	23
Name Description	NVB User Data 3 File System Enter a policy description	
Retry Count Retry Interval Directory Quotas	3 + 60 + Minutes • Scan Directory Quotas • Note that this may take a significant amount of time	 •.
Previous Scans Add Remove Target Path	Save Previous Scan	
		:

Name: Displays the name of the scan policy.

Description: Specify a description of the scan policy in this field.

Retry Count: Specify the number of times Novell File Reporter attempts to scan the storage resource targets listed in the scan policy if there is a failure.

Retry Interval: Specify the amount of time before Novell File Reporter retries scanning the storage resource targets listed in the scan policy if there is a failure.

Directory Quotas: By default, a scan does not include home folder quota information, because gathering this information on Windows shares can extend the scan time significantly. Unless you plan to generate a Directory Quota report, we recommend that you leave this option deselected.

This option applies only to File System scans.

Previous Scans: This option lets you specify whether to keep the previous version of a scan generated through this policy. This scan is known as the "Previous scan" which you can then use to generate a Historic Comparison report through a comparison with either a Baseline scan or a "Current scan." For more information, see Section 6.7, "Historic Comparison Reports," on page 79.

Previous scans are designated whenever a new scan is performed. The new scan is the Current scan and the earlier scan becomes the Previous scan. When the target paths are eventually scanned again, the new scan becomes the Current scan, the earlier Current scan becomes the Previous scan, and the former Previous scan is deleted.

NOTE: If you want to maintain a scan indefinitely, you can do so by specifying it as a Baseline scan. For more information, see Section 5.5, "Establishing a Baseline Scan," on page 46.

The management of Previous scan retention occurs when processing a new scan. This means that if you deselect *Retain existing Previous scan*, no existing Previous scan will be removed at that time, but it will be removed when a new scan is processed.

Add Target: Click this option to specify the scan targets for the scan policy.

IMPORTANT: After a target has been added to a scan policy, the same target cannot be added to another scan policy of the same scan policy type. For example, if you specify \\Pinyon\Vol1 in one File System scan, you cannot specify the same volume in another File System scan.

Clicking brings up a dialog box like the one below where you can select available storage resources.

Scan [·]	Target Browser			23
	Identity System	Target Path		
	LWELABS	\\LWELABS\VOL1		
	LWELABS	\\LWELABS\VOL2		
	LWELABS	\\LWELABS\VOL3		
	LWELABS	\\LWELABS\VOL4		
	nvb.local	\\nvb1.nvb.local\UserData1		
	nvb.local	\\nvb1.nvb.local\UserData2		
	nvb.local	\\nvb1.nvb.local\UserData3		
	nvb.local	\\nvb1.nvb.local\UserHome1		
	nvb.local	\\nvb1.nvb.local\UserHome2		
			OK	Cancel

6 Click OK to save the scan policy.

The scan policy is now displayed on the Scan Policies page.

Drag	a column header here to grou	p by that column						
	Policy Name 🔺	Scan Type 💡	Scan Target Count	Save Historical	Schedule	Retry Count	Retry Interval	Id
	Ŷ	<u>٩</u>	Ŷ	Ŷ	٩	Ŷ	Ŷ	
	System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
	System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
	System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
	55 LWELABS VOL 4 File System Scan	File System Data	1	No	[Not Scheduled]	з	60 minutes	
. 1	NVB Data 1 Permissions	Permissions	1	No	[Not Scheduled]	3	60 minutes	1
1	NVB Data 2 Permissions	Permissions	1	No	[Not Scheduled]	з	60 minutes	1
	NVB Data 3 Permissions	Permissions	1	No	[Not Scheduled]	3	60 minutes	1
7	NVB Home 1 File System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
	NVB Home 1 Permissions	Permissions	1	No	[Not Scheduled]	3	60 minutes	1
1	NVB Home 2 File System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
	NVB Home 2 Permissions	Permissions	1	No	[Not Scheduled]	3	60 minutes	1
	NVB User Data 1 File System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
. 1	NVB User Data 2 File System Scan	File System Data	1	No	[Not Scheduled]	3	60 minutes	
	NVB User Data 3 File System Scan	File System Data	1	Yes	[INot Scheduled]	3	60 minutes	1

The scan policy still needs to be scheduled. For procedures on scheduling scans, go to Section 5.9, "Scheduling Scans," on page 47.

5.5 Establishing a Baseline Scan

A Baseline scan is a scan that you save as a reference for a comparison with another scan. You compare scans when you generate a Historical Comparison report. Unlike a Previous scan, which gets replaced as a new Current scan is created, a Baseline scan is retained indefinitely until you decide to delete it. You can have only one Baseline scan per scan target.

IMPORTANT: Because you can have only one Baseline scan per scan type for a scan target, establishing a scan as a Baseline will override any established Baseline scan of the same scan type for the same scan target.

- 1 Select Scans > Scan Data.
- 2 In the far left column, select the check box pertaining to the scan you want to set as a Baseline scan.
- 3 Click Set Baseline.
- 4 When the confirmation dialog box appears, click Yes.

5.6 Clearing a Baseline Scan

Scans designated as Baseline scans are retained until the baseline designation is cleared. If a Baseline scan that is in the Retained state has its Baseline status removed, that scan will be immediately marked for deletion.

- 1 Select Scans > Scan Data.
- 2 In the far left column, deselect the check box pertaining to the scan you want to clear as a Baseline scan.
- 3 Click Clear Baseline.
- 4 When the confirmation dialog box appears, click Yes.

5.7 Editing a Scan Policy

- 1 Select Scans > Scan Policies.
- 2 Click the check box that pertains to the scan policy that you want to create a edit.
- 3 Click Edit.
- 4 Change any of the settings you wish.
- 5 Click OK.

5.8 Deleting a Scan Policy

- 1 Select Scans > Scan Policies.
- 2 Click the check box that pertains to the scan policy that you want to delete.
- 3 Read the warning and click Yes.

5.9 Scheduling Scans

- 1 Select Scans > Scan Policies.
- 2 Click the check box that pertains to the scan policy for which you want to create a schedule.
- 3 Click Edit Schedule.

Schedule for LWELABS VOL	1 File System Scan	23
Schedule Start		
Engine Local Time	12:00 AM 2	
Engine Local Start Date	3/10/2015 💌	
Schedule Recurrence		
Once		
O Daily		
Weekly Tuesday	•	
O Monthly		
) Day 1	🗧 of every month	
The First	▼ Sunday ▼ of every month	
	OK Cancel	

Engine Local Time: Specify the time that you want the scan to begin.

The time you select is based on the time zone where the NFR Engine is located and not the NFR Agent that conducts the scan.

Engine Local Start Date: Specify the date when you want the scan schedule to take effect.

Be aware that entering a date does not mean that the scan takes place on that date. If the *Engine Local Start Date* is set for today, which is a Monday, but the *Schedule Recurrence* setting is set for *Weekly* on Sunday, the scan does not take place until Sunday.

Once: Select this option to scan the storage resources specified in the scan policy only once.

Daily: Select this option for a daily scan of the storage resources specified in the scan policy.

Weekly: Select this option and specify a weekday for a weekly scan of the storage resources specified in the scan policy.

Monthly: Select this option and specify a day for a monthly scan of the storage resources specified in the scan policy.

4 Specify the scheduling parameters and click OK.

5.10 Editing a Scheduled Scan

- 1 Select Scans > Scan Policies.
- 2 Click the check box that pertains to the scan policy for which you want to edit a schedule.
- 3 Click Edit Schedule.
- 4 Make the schedule changes you want.
- 5 Click OK.

5.11 Clearing a Schedule on a Scheduled Scan

- 1 Select Scans > Scan Policies.
- 2 Click the check box that pertains to the scan policy for which you want to clear a schedule.
- 3 Click Clear Schedule.
- 4 When the confirmation prompt appears, click Yes.

5.12 Conducting an Immediate Scan

- 1 Select Scans > Scan Policies.
- 2 Click the check box that pertains to the scan policy for which you want to conduct an immediate scan.
- 3 Click Scan Now.
- 4 When the confirmation prompt appears, click Yes.

5.13 Viewing Scans in Progress

You can view details on the scans that are in progress through the Scans in Progress page. When the scan has been completed, you can view the details in the Scan History page.

1 Select Scans > Scans in Progress.

		🖒 Retry 😋 Refresh							Scans in Prog	
rag		header here to group by t								
	Scan ID	Scan Target	Scan Policy	Scan Type	Agent	Start Time •	Status	Try Count	Next Retry Time	
	Ÿ			¥	Ť	•	¥	Ψ	•	
	36	\\nvb1.nvb.local\UserDat	NVB User Data 3 File System Scan	File System Data	NVB1	3/10/2015 7:29:32 AM	Scan in Progress	0		
	35	\\nvb1.nvb.local\UserDat	NVB User Data 2 File System Scan	File System Data	NVB1	3/10/2015 7:29:32 AM	Scan in Progress	0		
1	34	\\nvb1.nvb.local\UserDat	NVB User Data 1 File System Scan	File System Data	NVB1	3/10/2015 7:29:32 AM	Scan in Progress	0		
	33	\\nvb1.nvb.local\UserHor	NVB Home 2 Permissions	Permissions	NVB1	3/10/2015 7:29:32 AM	Database Update in Progress	0		
	32	\\nvb1.nvb.local\UserHor	NVB Home 2 File System Scan	File System Data	NVB1	3/10/2015 7:29:32 AM	Database Update Pending	0		
	31	\\nvb1.nvb.local\UserHor	NVB Home 1 Permissions	Permissions	NVB1	3/10/2015 7:29:32 AM	Scan File Transfer in Progress	0		
	30	\\nvb1.nvb.local\UserHor	NVB Home 1 File System Scan	File System Data	NVB1	3/10/2015 7:29:32 AM	Scan in Progress	0		
	29	\\nvb1.nvb.local\UserDat	NVB Data 3 Permissions	Permissions	NVB1	3/10/2015 7:29:31 AM	Scan in Progress	0		

As you click *Refresh*, the completed scan listings are removed and listen in the Scan Data and Scan History pages.

5.14 Retrying Failed Scans

In the Scan Policy Editor dialog box, the default scan policy settings for *Retry Count* is three and the *Retry Interval* is 60 minutes. You can adjust each of these settings. Assuming the default settings are not adjusted, Novell File Reporter retries the scan in 60 minutes and only retries to scan up to three times.

Until Novell File Reporter has attempted all three retries, the failed scans remain listed on the Scans in Progress page. After all retries have been performed, the scan listing is moved to the Scan History page.

As long as a filed scan is listed on the Scans in Progress page, you can retry the scan manually by doing the following:

- 1 From the Scans in Progress page, select the check box corresponding to the failed scan.
- 2 Click Retry.

5.15 Viewing Scan Data

The Scan Data page lets you view a minimal set of details pertaining to the currently available scans for each scan target.

1 Select Scans > Scan Data.

P Baseline False False	Triggered Scan Time v v 3/10/2015 7:29:32 AM	Policy	Agent 📍	Status	Ŧ
		NVB Home 2	·		Ŷ
	3/10/2015 7:29:32 AM				
False			NVB1	 Operation successful. 	
	3/10/2015 7:29:32 AM	NVB Home 2 File System Scan	NVB1	(0) Operation successful.	
False	3/10/2015 7:29:31 AM	LWELABS VOL 4 File System Scan	NVB1	(0) Operation successful.	
False	3/10/2015 7:29:31 AM	LWELABS VOL 3 File System Scan	NVB1	(0) Operation successful.	
False	3/10/2015 7:29:31 AM	LWELABS VOL 2 File System Scan	NVB1	(0) Operation successful.	
False	3/10/2015 7:29:31 AM	LWELABS VOL 1 File System Scan	NVB1	(0) Operation successful.	
False	3/9/2015 11:29:27 AM	NVB User Data 1 File System Scan	NVB1	(0) Operation successful.	
False	3/9/2015 11:20:09 AM	NVB User Data 3 File System Scan	NVB1	(0) Operation successful.	
False	3/9/2015 11:05:16 AM	NVB User Data 3 File System Scan	NVB1	(0) Operation successful.	
True	3/4/2015 8:53:10 AM	NVB User Data 1 File System Scan	NVB1	 Operation successful. 	
	False False False False	Felse 3/10/2015 7:29:31 AM Felse 3/10/2015 7:29:31 AM Felse 3/10/2015 7:29:31 AM Felse 3/9/2015 11:29:27 AM Felse 3/9/2015 11:29:27 AM Felse 3/9/2015 11:20:09 AM Felse 3/9/2015 11:05:16 AM	False 3/10/2015 7:29:31 AM System Scan False 3/10/2015 7:29:31 AM System Scan IWELABS VOL 2 File IWELABS VOL 2 File False 3/10/2015 7:29:31 AM IWELABS VOL 1 File False 3/10/2015 7:29:31 AM IWELABS VOL 1 File False 3/9/2015 11:29:27 AM NVB User Data 1 File False 3/9/2015 11:20:09 AM NVB User Data 3 File System Scan System Scan System Scan False 3/9/2015 11:20:09 AM NUB User Data 3 File System Scan System Scan System Scan	False 3/10/2015 7:29:31 AM System Scan NVB1 False 3/10/2015 7:29:31 AM System Scan NVB1 False 3/10/2015 7:29:31 AM WELABS VOL 2 File System Scan NVB1 False 3/10/2015 7:29:31 AM WELABS VOL 1 File System Scan NVB1 False 3/9/2015 11:29:27 AM NVB User Data 1 File System Scan NVB1 False 3/9/2015 11:20:09 AM NVB User Data 3 File System Scan NVB1 False 3/9/2015 11:20:09 AM NVB User Data 3 File System Scan NVB1	False 3/10/2015 /:29:31 AM System Scan NVB1 successful. False 3/10/2015 7:29:31 AM LWELABS VOL 2 File System Scan NVB1 (0) Operation successful. False 3/10/2015 7:29:31 AM LWELABS VOL 2 File System Scan NVB1 (0) Operation successful. False 3/10/2015 7:29:31 AM LWELABS VOL 1 File System Scan NVB1 (0) Operation successful. False 3/9/2015 11:29:27 AM NVB User Data 1 File System Scan NVB1 (0) Operation successful. False 3/9/2015 11:20:09 AM NVB User Data 3 File System Scan NVB1 (0) Operation successful. False 3/9/2015 11:20:09 AM NVB User Data 3 File System Scan NVB1 (0) Operation successful. False 3/9/2015 11:20:09 AM NVB User Data 3 File System Scan NVB1 (0) Operation successful.

5.16 Viewing Scan History

The Scan History page displays a complete history of all scans, along with details of the scan and some basic information of the storage resource at the time of the scan, including the file and folder count.

											_
-	a column header here to g	proup by that column									
can J	Start Time 🔹	Scan Target	Scan Policy	Scan Type	Agent	Scan Duration	Database Duration	File Count	Folder Count	Status	
Ŷ	T Ŷ	Ŷ	Ŷ		Ŷ	Ť	Ŷ	۴	Ŷ		
33	3/10/2015 7:29:32 AM	\\nvb1.nvb.local\UserHome2	NVB Home 2 Permissions	Permissions	NVB1	00.00:00:13.000	00.00:00:00.103	0	0	(0) - Operation successful.	
32	3/10/2015 7:29:32 AM	\\nvb1.nvb.local\UserHome2	NVB Home 2 File System Scan	File System Data	NVB1	00.00:00:13.000	00.00:00:02.697	0	0	(0) - Operation successful.	
31	3/10/2015 7:29:32 AM	\\nvb1.nvb.local\UserHome1	NVB Home 1 Permissions	Permissions	NVB1	00.00:00:09.000	00.00:00:00.214	0	0	(0) - Operation successful.	
30	3/10/2015 7:29:32 AM	\\nvb1.nvb.local\UserHome1	NVB Home 1 File System Scan	File System Data	NVB1	00.00:00:17.000	00.00:00:00.053	0	0	(0) - Operation successful.	
29	3/10/2015 7:29:31 AM	\\nvb1.nvb.local\UserData3	NVB Data 3 Permissions	Permissions	NVB1	00.00:04:40.000	00.00:06:13.600	0	52,279	(0) - Operation successful.	
28	3/10/2015 7:29:31 AM	\\nvb1.nvb.local\UserData2	NVB Data 2 Permissions	Permissions	NVB1	00.00:01:44.000	00.00:00:23.380	0	3,000	(0) - Operation successful.	
27	3/10/2015 7:29:31 AM	\\nvb1.nvb.local\UserData1	NVB Data 1 Permissions	Permissions	NVB1	00.00:01:35.000	00.00:00:31.573	0	1,929	(0) - Operation successful.	
26	3/10/2015 7:29:31 AM	\\LWELABS\VOL4	LWELABS VOL 4 File System Scan	File System Data	NVB1	00.00:00:05.000	00.00:00:00.256	0	0	(0) - Operation successful.	
25	3/10/2015 7:29:31 AM	\\LWELABS\VOL3	LWELABS VOL 3 File System Scan	File System Data	NVB1	00.00:00:06.000	00.00:00:03.307	0	0	(0) - Operation successful.	

1 Select Scans > Scan History.

You can click the columns to list the data in ascending or descending order.

Because the Scan History page logs each successful scan, the most efficient way of locating a scan is using a filter.

5.17 Troubleshooting a Failed Scan

- 1 Verify that the NFR Agent service is running properly on its host machine.
- 2 Verify that the host machine where the NFR Agent is installed has enough free disk space to temporarily store a copy of the scan in its uncompressed and compressed form.
- **3** If an NFR Agent is not installed directly on the server with the storage resource you want to scan, verify that a proxy assignment for the storage resource has been established.
- 4 If the proxy agent is not scanning, assign the storage resource from a different proxy agent and try scanning again.
- **5** When scanning Windows storage resources, verify that the Proxy Rights group has been assigned the proper rights to the share.

The Proxy Rights group must be assigned to the builtin\administrators group or the local administrators group on the server where the scan is being conducted.

6 Verify that the Windows Firewall is configured to permit network traffic to flow between the NFR Engine and the NFR Agent.

For more information on the Windows Firewall, see Section B.2, "Windows Firewall Requirements," on page 131.

6

Generating Reports

- Section 6.1, "Overview," on page 53
- Section 6.2, "Changing Your Cover Sheet Branding," on page 54
- Section 6.3, "Built-in Report Types," on page 55
- Section 6.4, "Directory Data Reports," on page 56
- Section 6.5, "Permissions Reports," on page 66
- Section 6.6, "File Data Reports," on page 70
- Section 6.7, "Historic Comparison Reports," on page 79
- Section 6.8, "Trending Report," on page 84
- Section 6.9, "Custom Query Reports," on page 85
- Section 6.10, "Unformatted Reports," on page 87
- Section 6.11, "NSM Policy Reports," on page 89
- Section 6.12, "Scheduling Reports," on page 89
- Section 6.13, "Editing a Scheduled Report," on page 90
- Section 6.14, "Clearing a Schedule on a Scheduled Report," on page 91
- Section 6.15, "Copying a Report Definition," on page 91
- Section 6.16, "Viewing Reports in Progress," on page 92
- Section 6.17, "Troubleshooting Reports," on page 92

6.1 Overview

After you have conducted scans on storage resources, Novell File Reporter has the content needed to generate reports. The type of report you can generate depends on the type of scan that you have conducted. For example, in order to create an Assigned NTFS Permissions report, a Permissions scan on a Windows share must first be conducted.

All reports are created by first creating report definitions. The report definition specifies the report name, type, target path to the scans, and more.

IMPORTANT: The report definition name must be unique. If you attempt to give the report definition an existing name, Novell File Reporter generates an error.

Novell File Reporter has built-in aggregate reporting capabilities, meaning that you can specify multiple target paths in the same report. Additionally, Novell File Reporter has built-in scoping, which allows you to browse through the file path or identity system and specify the level where you want to start reporting data. Finally, Boolean filtering is available for all File Data Reports. For more information, see Appendix A, "Filtering," on page 125.

When the definition has been saved, you can generate the report immediately, or schedule it to be generated.

You can generate reports in either Preview or in Stored Report mode. Preview lets you view the report where you can save it locally if you want to. Stored Report saves the report to the server hosting the NFR Engine, where it remains for a set amount of days.

You can generate Detailed Reports from certain built-in report types. For example, a File Extension Report can be the means of generating a Detailed Report that includes the specific details of all of the *.mov files.

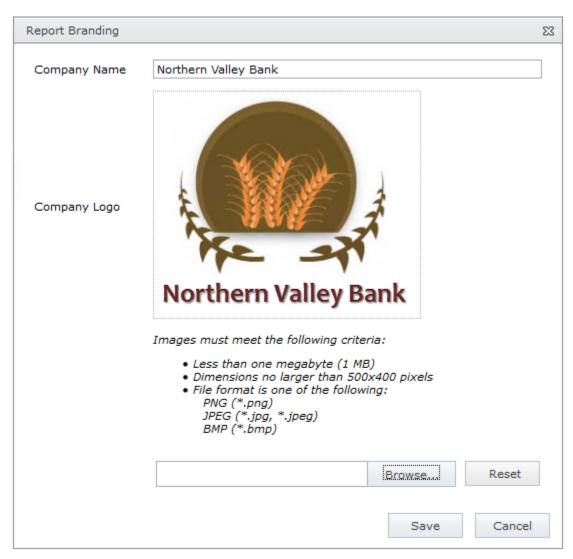
All built-in reports include a cover sheet that you can customize to include your organization's logo.

6.2 Changing Your Cover Sheet Branding

All generated built-in reports include a cover sheet that includes a default graphic. If you want, you can replace it with your organization's logo.

- **1** Select *Reports > Report Definitions*.
 - Report Branding 23 Company Name Company Logo Images must meet the following criteria: Less than one megabyte (1 MB) • Dimensions no larger than 500x400 pixels File format is one of the following: PNG (*.png) JPEG (*.jpg, *.jpeg) BMP (*.bmp) Browse... Reset Save Cancel
- 2 Select Report Branding and Styling > Report Branding.

- **3** In the *Company Name* field, specify the name of your organization. This is the name that appears on the front cover.
- 4 Click Browse, then browse to and replace the default logo with a new logo.



5 Click Save.

6.3 Built-in Report Types

Novell File Reporter has five different built-in report type classifications:

- Directory Data
- Permissions
- File Data
- Historic Comparison
- Trending

Each classification includes one or more report types. For example, in the Permissions category, there are four different reports that can be generated.

For more information about the procedures for generating built-in reports according to classification, see the following sections:

- Section 6.4, "Directory Data Reports," on page 56
- Section 6.5, "Permissions Reports," on page 66
- Section 6.6, "File Data Reports," on page 70
- Section 6.8, "Trending Report," on page 84
- Section 6.10, "Unformatted Reports," on page 87

6.4 Directory Data Reports

Reports in this classification include Summary, Directory Quota, Storage Cost, and Comparison Reports.

Before generating any type of Directory Data report, you must first conduct a File System scan on the volumes or shares you want to report on.

- Section 6.4.1, "Generating a Summary Report," on page 56
- Section 6.4.2, "Generating a Directory Quota Report," on page 63
- Section 6.4.3, "Generating a Storage Cost Report," on page 63
- Section 6.4.4, "Generating a Comparison Report," on page 64

6.4.1 Generating a Summary Report

Summary reports provide a summary of the contents of folders according to a specified level in the file system.

- 1 Select Reports > Report Definitions.
- 2 Click Add.

Add Report Definition			23
Name			
Report Type			_
Directory Data	File Data		
Summary	Filename Extension	Filename Extension Detail	
Directory Quota	Owner	Owner Detail	
Storage Cost	Duplicate File	🔘 Duplicate File Detail	
Comparison	🔘 Date-Age	🔘 Date-Age Detail	
Permissions	Historic Comparison	Trending	
Assigned NCP Permissions	🔘 File System Comparison	Volume Free Space	
C Assigned NTFS Permissions	NCP Permissions Comparison		
Permissions by Path	NTFS Permissions Comparison	Custom Query	
O Permissions by Identity		Custom Query Report	
Create report as Unformatted (for a	use with Text, Csv, or Xls exports)		
		OK Cancel	

3 In the *Name* field, specify a descriptive name of the report definition.

For example, User Volume Summary Report.

The name can contain up to 64 alphanumeric characters.

4 Select the Summary option and click OK.

Report Definition Edito	or - NVB User Volume 1 Summary Report		23
Name	NVB User Volume 1 Summary Report	Report Path Depth 0 + Initial Chart Path Depth 0 +	
Туре	Summary Report		
Report Definition created on 3/10/2015 12:43:18 PM by NVB\Administrator Description		A Report Path Depth greater than 3 or 4 may result significant report size and processing time.	
Target Paths NS	SM Policies		
Target Path	1		
		OK Cano	el
			:

5 In the *Report Path Depth* field, specify the depth of reporting.

For example, if you select 3, the Summary report lists the file contents of all file paths in the specified shares up to 3 levels in the file structure.

For example, for a server named Las Vegas, the Summary report would list the contents of these paths:

\\lasvegas.nvb.local\Users1

\lasvegas.nvb.local\Users1\a

\\lasvegas.nvb.local\Users1\a\stuff

\\lasvegas.nvb.local\Users1\a\stuff\morestuff

6 In the *Initial Chart Path Depth* field, specify the initial path depth for inclusion in the Top Ten Folders by Size chart that is displayed in the report header section.

This is important so that when the *Report Path Depth* is greater than zero, the top level folders are now conditionally included. The *Chart Path Depth* parameter is not allowed to be greater than the currently specified *Report Path Depth*.

7 From the Target Paths tab, click Add.

Scan Data Browser - File System Data	23
> N LWELABS	
> nvb.local	
OK (Cancel

8 Click the > to browse to and select the file paths you want included in the report, then click OK. You must expand the eDirectory tree or Active Directory forest to be able to select the volumes or shares, even if you want to select the root of the eDirectory tree or Active Directory forest.

9 Click OK.

The report definition is added to the list.

	Copy 🙁 Delete	Schedule - Genera	ate 🔻 💾 Report	Branding and Styling	▼ S Refresh		Report Defini	itio
ag a column header here to group by	that column							
Name	 Report Typ 	pe Ŷ	Targets NSI	1 Policies Report Ow	ner	Schedule		I
	Ŷ	٩	Ŷ	Ŷ	Ŷ		Ŷ	
NVB User Volume 1 Su Report	mmary Summary		1	0 nvb\admin	istrator	[Not Scheduled]		

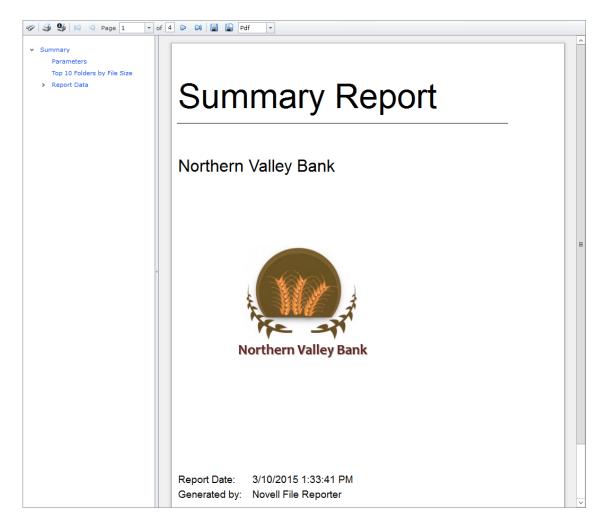
- **10** Do one of the following:
 - Generate the report in Preview mode by following the procedures under "Generating a Preview Report" on page 59.
 - Generate the report in Stored mode by following the procedures under "Generating a Stored Report" on page 61.

Generating a Preview Report

A preview report is generated from scan data in the database and is temporarily cached in the Web application's data folder. When you close a preview report, you cannot access the report again until you generate a new one using the same report definition.

When you view a report in Preview mode, you can print the report or save the report locally.

- 1 From the Report Definitions page, select the report definition from which you want to generate a report.
- 2 Select Generate > Generate Preview.
- **3** (Conditional) If you get a message stating that your browser prevented pop-up windows from appearing, enable pop-ups for this site.



All reports are structured similarly, with a title page, report parameters, for some report types a Top Ten summary, followed by a comprehensive breakdown of the data in the pages that follow.

Display the Search Window button: Lets you conduct a search within the preview report.

Print the Report button: Prints the entire preview report.

Print the Current Page button: Prints the currently displayed page.

First Page button: Takes you to the first page of the preview report.

Previous Page button: Takes you to the page that precedes the page you are viewing.

Page drop-down menu: Lets you advance to a page number by selecting it.

Next Page button: Takes you to the page that follows the page you are viewing.

Last Page button: Takes you to the last page of the preview report.

Export a Report and Save it to the Disk button: Exports the preview report to the file type listed in the drop-down menu and lets you view or save it in the new format.

Export a Report and Show it in a New Window button: Exports the preview report to the file type listed in the drop-down menu.

File Type drop-down menu: Lets you select the file type format to export the report to.

Document Navigation: Lists the contents of the report. You can click any item to advance within the preview report.

4 Export, save, or print the preview report.

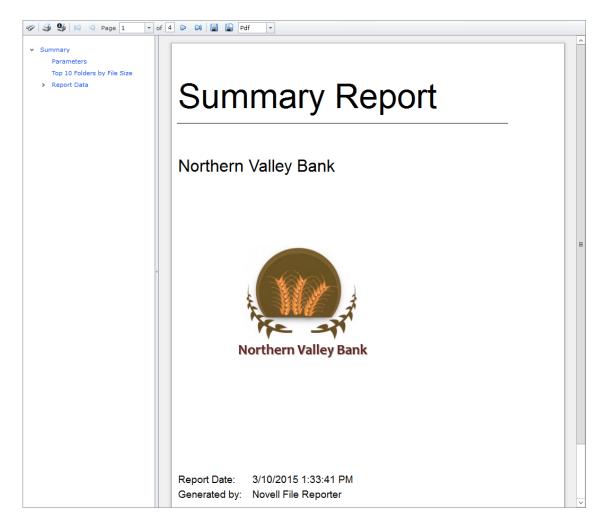
Generating a Stored Report

Generating a report in Stored mode means that the report is saved and available for access for a set number of days from the time it is generated. Of course, you can save the report locally where you can keep it indefinitely.

- 1 From the Report Definitions page, select Generate > Generate Stored Report.
- 2 Select Reports > Stored Reports.

	No	ovell File Reporter 2.6	Main 🕴 S	Scans Reports Admi	nistration	N	VB\Administrator <u>Log Out</u>
	Delete	Refresh				SI	tored Reports
Drag	a coli	umn header here to group by that	column				
		Name	Size	Report Type	Report Time 👻	Expiration Date	Id
		Ŷ	Ŷ	9	· · · · · · · · · · · · · · · · · · ·	۲ T	Ŷ
		NVB User Volume 1 Summary Report	80.93 KB	Summary	3/12/2015 6:47:42 AM	4/11/2015 12:00:00 AM	1
Page	1 of :	1 (1 items) < 1 📀					
♥ <u>Cre</u>	ate F	ilter					
				Copyright © 2015 Condrey Corp	oration		

- 3 Click the report you want to view.
- 4 (Conditional) If you get a message stating that your browser prevented pop-up windows from appearing, enable pop-ups for this site.



All reports are structured similarly, with a title page, report parameters, for some report types a Top Ten summary, followed by a comprehensive breakdown of the data in the pages that follow.

Display the Search Window button: Lets you conduct a search within the preview report.

Print the Report button: Prints the entire preview report.

Print the Current Page button: Prints the currently displayed page.

First Page button: Takes you to the first page of the preview report.

Previous Page button: Takes you to the page that precedes the page you are viewing.

Page drop-down menu: Lets you advance to a page number by selecting it.

Next Page button: Takes you to the page that follows the page you are viewing.

Last Page button: Takes you to the last page of the preview report.

Export a Report and Save it to the Disk button: Exports the preview report to the file type listed in the drop-down menu and lets you view or save it in the new format.

Export a Report and Show it in a New Window button: Exports the preview report to the file type listed in the drop-down menu.

File Type drop-down menu: Lets you select the file type format to export the report to.

Document Navigation: Lists the contents of the report. You can click any item to advance within the preview report.

5 Save or print the stored report.

6.4.2 Generating a Directory Quota Report

Directory Quota reports specify folders with assigned quota, the amount of quota assigned, and the amount of quota consumed.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Directory Quota option and click OK.

Report Definition Edito	or - Directory Quota Report User Volume 2	23
Name	Directory Quota Report User Volume 2	
Unformatted		
Туре	Directory Quota Report	
Description	Report Definition created on 3/10/2015 2:25:59 PM by NVB\Administrator	
Target Paths NS	SM Policies	
Add Remove		
Target Path		
	ОК С	ancel

- 5 From the Target Paths tab, click Add.
- 6 Browse to and select the file paths you want included in the report and click OK.
- 7 Click OK.
- 8 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.4.3 Generating a Storage Cost Report

Storage Cost reports indicate storage costs according to prices established in the *Cost per Unit* setting of the Report Definition editor. You can use this report to determine which users or groups are being irresponsible with network storage practices.

NOTE: When the report is generated, the monetary symbol that is displayed comes from the local Engine/Web server's Windows locale and region settings. For example, if the Windows server hosting the engine and Web application is set up using US locale and region, it will show a \$ for costing displays in the report.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Storage Cost option and click OK.

Report Definition Editor	- NVB User Data 1 Storage Cost Report			23
Name Unformatted	NVB User Data 1 Storage Cost Report	Unit Cost per Unit	GB •	
Type Description	Storage Cost Report Report Definition created on 3/11/2015 6:52:16 AM by NVB\Administrator			
Target Paths NSM Add Remove Target Path	1 Policies			
			ОК	Cancel

- 5 In the Unit drop-down menu, select the storage unit value for which you want to establish a cost.
- 6 In the Cost per Unit field, indicate the cost of the selected storage unit.
- 7 From the Target Paths tab, click Add.
- 8 Browse to and select the file paths you want included in the report and click OK.
- 9 Click OK.
- 10 Generate the report as either a Preview report or as a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.4.4 Generating a Comparison Report

A Comparison report specifies the differences between two selected folders on the network. This is useful if you want to verify that servers are hosting the same version of software, library files on servers are the same, and so forth.

IMPORTANT: Unlike Novell File Reporter 1, the Comparison report does not compare scans to report on the differences between two points in time.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the *Name* field, specify a descriptive name of the report definition.
- 4 Select the Comparison option and click OK.

Report Definition Editor	- Comparison Report NVB User Data 1		23
Name	Comparison Report NVB User Data 1	Comparison Results	
Unformatted		Show unique paths from both targets	*
Type Description	Comparison Report Report Definition created on 3/11/2015 7:10:43 AM by NVB\Administrator		
Target Paths Add Remove			
Target Path			Index
		ОК	Cancel

5 In the Comparison Results drop-down menu, select an option.

Show unique paths from both targets: The report indicates the differences in folder and file names for the compared target paths.

Show paths unique to the first target: The report indicates only the unique folder and file names found in the first target path.

Show paths unique to the second target: The report indicates only the unique folder and file names found in the second target path.

- 6 From the Target Paths tab, click Add.
- 7 Browse to and select two volumes, shares, or folders whose data you want to compare and click *OK*.
- 8 Click OK.
- 9 Generate the report as either a Preview report or as a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.5 Permissions Reports

Reports in this classification include Assigned NCP Permissions, Assigned NTFS Permissions, Permissions by Path, and Permissions by Identity.

NOTE: The term "Permissions" in Novell File Reporter includes NTFS permissions as well as NCP rights and trustee assignments.

Before generating any type of Permissions report, you must first conduct a Permissions scan on the volumes or shares you want to report on.

- Section 6.5.1, "Generating an Assigned NCP Permissions Report," on page 66
- Section 6.5.2, "Generating an Assigned NTFS Permissions Report," on page 68
- Section 6.5.3, "Generating a Permissions by Path Report," on page 69
- Section 6.5.4, "Generating a Permissions by Identity Report," on page 69

6.5.1 Generating an Assigned NCP Permissions Report

The Assigned NCP Permissions report indicates the assigned Novell file system rights and trustee assignments for all folders and subfolders from a specified path.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Assigned NCP Permissions option and click OK.

Report Definition Edi	Report Definition Editor - LWELABS Vol 1 NCP Permissions				
Name	LWELABS Vol 1 NCP Permissions	🔲 Limit Path Depth	0		
Unformatted					
Type	Assigned NCP Permissions Report Report Definition created on 3/11/2015 7:18:39 AM by NVB\Administrator				
Add Remove					
			OK Cance	:1	
				.:	

5 (Conditional) If you want to limit the scope of the report to a set depth in the file structure, click the *Limit Path Depth* check box and specify the depth level.

For example, if you specify 3, the report lists the file contents of all file paths in the specified target paths up to 3 levels in the file structure.

If you do not specify a path depth, Novell File Reporter will report on all levels of the specified target path.

- 6 From the Target Paths tab, click Add.
- 7 Browse to and specify the file paths you want included in the report.

Scan Data Browser - Permissions Data	23
V LWELABS	
> 📄 🧧 \\LWELABS\VOL1	
OK Cano	el

- 8 Click OK to close the Scan Data Browser.
- **9** Click *OK* to close the Report Definition Editor.
- **10** Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.5.2 Generating an Assigned NTFS Permissions Report

The Assigned NTFS Permissions report indicates the assigned Microsoft file system user permissions for all folders and subfolders from a specified path.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Assigned NTFS Permissions option and click OK.

Name NVB User Data 1 NTFS Permissions Limit Path Depth Image: Constraint of the state	Report Definition Ed	Report Definition Editor - NVB User Data 1 NTFS Permissions					
Description Report Definition created on 3/11/2015 10:28:36 AM by NVB\Administrator Target Paths Add Remove Target Path		NVB User Data 1 NTFS Permissions		0			
Add Remove Target Path		Report Definition created on 3/11/2015					
	Add Remove			OK Car	Icel		

5 (Conditional) If you want to limit the scope of the report to a set depth in the file structure, click the *Limit Path Depth* check box and specify the depth level.

For example, if you specify 3, the report lists the file contents of all file paths in the specified target paths up to 3 levels in the file structure.

If you do not specify a path depth, Novell File Reporter will report on all levels of the specified target path.

- 6 (Conditional) If you don't want the report to include inherited ACEs (Access Control Entries), deselect the *Include Inherited ACEs* check box.
- 7 From the Target Paths tab, click Add.
- 8 Browse to and specify the file paths you want included in the report and click OK.
- 9 Click OK.
- 10 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.5.3 Generating a Permissions by Path Report

The Permissions by Path report indicates the effective rights to the Novell file system or the permissions to the Microsoft file system according to the paths you specify.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Permissions by Path option and click OK.

Report Definition E	Editor - NVB User Data 3 Permissions by Path Report	23
Name	NVB User Data 3 Permissions by Path Report	
Unformatted		
Туре	Permissions by Path Report	
Description	Report Definition created on 3/11/2015 10:34:18 AM by NVB\Administrator	
Target Paths	NSM Policies	
Add Remov	re	
Target Pa	ath	
	OK Car	ncel

- 5 From the Target Paths tab, click Add.
- 6 Browse to and specify the file paths you want included in the report and click OK.
- 7 Click OK.
- 8 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.5.4 Generating a Permissions by Identity Report

The Permissions by Identity report indicates the effective rights to the Novell file system or the permissions to the Microsoft file system according to the identities you specify.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Permissions by Identity option and click OK.

Report Definition Edit	or - NVB User Data 2 Permissions by Identity Report	23
Name Unformatted	NVB User Data 2 Permissions by Identity Repo	
Туре	Permissions by Identity Report	
Description	Report Definition created on 3/11/2015 10:40:08 AM by NVB\Administrator	
Identities Add Remove	7	
Identity Sys	stem Name Display Name	
	OK Cano	el

- 5 From the *Identities* tab, click *Add*.
- 6 Browse to and specify the identities you want included in the report.
- 7 Click OK to close the Identity Browser.
- 8 Click OK to close the Report Definition Editor.
- 9 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.6 File Data Reports

Reports in this classification include Filename Extension, Owner, Duplicate File, and Date-Age, along with detailed versions of each of these reports.

Before generating any type of File Data report, you must first conduct a File System scan on the volumes or shares you want to report on.

- Section 6.6.1, "Generating a Filename Extension Report," on page 71
- Section 6.6.2, "Generating a Detailed Filename Extension Report," on page 72
- Section 6.6.3, "Generating an Owner Report," on page 73
- Section 6.6.4, "Generating a Detailed Owner Report," on page 74
- Section 6.6.5, "Generating a Duplicate File Report," on page 75
- Section 6.6.6, "Generating a Detailed Duplicate File Report," on page 76
- Section 6.6.7, "Generating a Date-Age Report," on page 77
- Section 6.6.8, "Generating a Detailed Date-Age Report," on page 78

6.6.1 Generating a Filename Extension Report

The Filename Extension report presents data grouped according to filename extension. This report is helpful for determining file types that you do not want stored on your network drives. For example, you can easily identify who is storing .MP3 or .MOV files.

NOTE: File extensions in Novell File Reporter are limited to 32 characters. File extensions longer than 32 characters are considered part of the file name and not as an extension.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Filename Extension option and click OK.

Report Definition Edi	itor - LWELABS Vol 1 Filename Extension Report	Σ
Name	LWELABS Vol 1 Filename Extension Report	
Unformatted		
Туре	Filename Extension Report	
Description	Report Definition created on 3/11/2015 10:47:27 AM by NVB\Administrator	
Target Paths Add Remove	NSM Policies Filters	
Target Path	h	
	OK	Cancel

- 5 From the Target Paths tab, click Add.
- 6 Browse to and specify the file paths you want included in the report and click OK.
- 7 (Optional) Click the Filters tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 8 Click OK.
- 9 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

10 (Optional) Generate a Detailed report on an individual file extension by clicking a file extension name in the report.

6.6.2 Generating a Detailed Filename Extension Report

A Detailed Filename Extension report is similar to a standard Filename Extension report, except you can filter the report to include only the files with the extension types you want.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Filename Extension Detail option and click OK.

Report Definition Editor - NVB User Data 1 Detailed Filename Extension Report					
Name	NVB User Data 1 Detailed Filename Extension R	Filename Extensions (no leading dot)			
Unformatted					
Туре	Filename Extension Detail Report				
Description	Report Definition created on 3/11/2015 10:55:52 AM by NVB\Administrator				
Target Paths	NSM Policies Filters				
Add Remove					
Target Path					
		OK Cance	:I		
			:		

5 In the *Filename Extension* field, specify the filename extensions you want included in the report by listing each on an individual line. Do not precede the filename extension with a period. For example:

mov jpg tmp

- 6 From the Target Paths tab, click Add.
- 7 Browse to and specify the file paths you want included in the report and click OK.
- 8 (Optional) Click the Filters tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 9 Click OK.
- 10 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.6.3 Generating an Owner Report

An Owner report groups data according to file owners. If it is determined that certain users are using a disproportionate amount of storage, you can see what these users are storing and if they are justified in doing so.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Owner option and click OK.

Report Definition Edito	r - LWELABS Vol 1 Owner Report	23
Name	LWELABS Vol 1 Owner Report	
Unformatted		
Type Description	Owner Report Report Definition created on 3/11/2015 11:02:56 AM by NVB\Administrator	
	3M Policies Filters	
Add Remove		
Target Path		
		OK Cancel

- 5 From the Target Paths tab, click Add.
- 6 Browse to and specify the file paths you want included in the report and click OK.
- 7 (Optional) Click the *Filters* tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 8 Click OK.
- 9 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

10 (Optional) Generate a Detailed report on an individual owner by clicking an owner's name in the report.

6.6.4 Generating a Detailed Owner Report

A Detailed Owner report is similar to a standard Owner report, except you can specify the users you want information on.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the *Name* field, specify a descriptive name of the report definition.
- 4 Select the Owner Detail option and click OK.

Report Definition	Editor - LWELABS	VOL 1 Own	ner Detail Report					23
Name	LWELABS	VOL 1 Ow	ner Detail Report	Own]		
Unformatted				#	Identity Syst	em 🔺	Owner	*
Туре	Report D		eated on 3/11/2015 3\Administrator	*	Tuencity Syst	No data to		
Description				No	data to paginat	e < >		
Target Paths	NSM Policies	Filters						
Add Remo	ve							
Target F	Path							
							ОК	Cancel

- 5 In the Owners region, browse to and specify the owners you want in the report and click OK.
- 6 Browse to and specify the file paths you want included in the report and click OK.
- 7 (Optional) Click the *Filters* tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 8 Click OK.
- 9 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.6.5 Generating a Duplicate File Report

A Duplicate File report indicates duplicate versions of files being stored and their locations. A principle objective for any organization determined to limit network storage usage should be the elimination of duplicate versions of files.

- 1 Select *Reports > Report Definitions*.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Duplicate File option and click OK.

Report Definition Edit	or - NVB User Data 2 Duplicate File Report			23
Name Unformatted Type	NVB User Data 2 Duplicate File Report	Match SizeMatch NameMatch Create Time		
Description	Report Definition created on 3/11/2015 12:06:04 PM by NVB\Administrator	Match Modify Time Minimum Duplicates	2	
	SM Policies Filters			
Add Remove				
Target Path				
			OK Cano	el

5 Use the check boxes and *Minimum Duplicates* field to specify the parameters for reporting.

The more check boxes you select, the more likely it is that Novell File Reporter can identify definitive duplicate files.

Match Name: Specifies that files reported must have duplicate names with other files.

Match Create Time: Specifies that files reported must have duplicate file creation times with other files.

Match Modify Time: Specifies that files reported must have duplicate file modification times with other files.

Minimum Duplicates: Specifies the minimum number of duplicate files, according to the parameters selected above, for inclusion in the report.

- 6 Browse to and specify the file paths you want included in the report and click OK.
- 7 (Optional) Click the Filters tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

8 Click OK.

9 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

10 (Optional) Generate a Detailed report on a duplicate file by clicking a specific file name in the report.

6.6.6 Generating a Detailed Duplicate File Report

A Detailed Duplicate File report is similar to a standard Duplicate File report, except you can specify the exact filename to search for, along with exact create and modify times.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the *Name* field, specify a descriptive name of the report definition.
- 4 Select the Duplicate File Detail option and click OK.

Report Definition Editor - NVB User Data 3 Duplicate I	Detail Report		23
Name NVB User Data 3 Duplicate D	etail Report Duplicate Crite	ria	bytes
Type Duplicate File Detail Report Report Definition created on 12:11:53 PM by NVB\Adminis		v	4 7 7
Target Paths NSM Policies Filters			
Add Remove Target Path			
			OK Cancel

5 In the *Duplicate Criteria* region, specify the file name size, and the dates and times that the file was created or modified.

IMPORTANT: When specifying Create or Modify times, the time entered must be exact down to the second. If a date range is required, do not enable the Create or Modify criteria here, but use the date filters in the *Filters* tab. For more information on filters, see Appendix A, "Filtering," on page 125.

- 6 Browse to and specify the file paths you want included in the report and click OK.
- 7 (Optional) Click the *Filters* tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 8 Click OK.
- 9 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.6.7 Generating a Date-Age Report

The Date-Age report presents file count data according to when files were created, last accessed, or last modified. You can use this report to help you determine which files have not been accessed for a given amount of time and then decide whether to delete, archive, or move those files to less expensive storage.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Date-Age option and click OK.

				23
Name Unformatted	LWELABS Vol 1 Date-Age Report	Date Type Detail Level	Create Time Year	•
Type Description	Date-Age Report Report Definition created on 3/11/2015 12:49:07 PM by NVB\Administrator			
Target Paths NSM Add Remove Target Path	Policies Filters		ΟΚ	Cancel

5 In the Date Type drop-down menu, select an option.

Create Time: Reports when files were created.

Modify Time: Reports when files were last modified.

Access Time: Reports when files were last accessed.

6 In the Detail Level drop-down menu, select an option.

Year: Groups the file count in the report according to the year they were created, last modified, or last accessed.

Month: Groups the file count in the report according to the month they were created, last modified, or last accessed.

Day: Groups the file count in the report according to the calendar date they were created, last modified, or last accessed.

- 7 Browse to and specify the file paths you want included in the report and click OK.
- 8 (Optional) Click the *Filters* tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 9 Click OK.
- 10 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

11 (Optional) Generate a Detailed report by clicking a specific year, month, or date in the report.

Unlike the original Date-Age report that lists the data by file count, the generated Detailed report lists individual files.

6.6.8 Generating a Detailed Date-Age Report

A Detailed Date-Age report is similar to a standard Date-Age report, except you can specify the exact create, modify, or access date parameters.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the *Name* field, specify a descriptive name of the report definition.
- 4 Select the Date-Age Detail option and click OK.

	itor - NVB User Data 1 Date-Age Detail Report			23
Name	NVB User Data 1 Date-Age Detail Report	Date Type Detail Level	Create Time Year	v
Unformatted		Selected Dates	Enter one or more dates with the yyyy-mm-dd, one per line.	
Type Description	Date-Age Detail Report Report Definition created on 3/11/2015 2:04:12 PM by NVB\Administrator			
Target Paths I Add Remove Target Path	NSM Policies Filters			

5 In the *Date Type* drop-down menu, select an option.

Create Time: Reports when files were created.

Modify Time: Reports when files were last modified.

Access Time: Reports when files were last accessed.

6 In the Detail Level drop-down menu, select an option.

Year: Groups the file count in the report according to the year they were created, last modified, or last accessed.

Month: Groups the file count in the report according to the month they were created, last modified, or last accessed.

Day: Groups the file count in the report according to the calendar date they were created, last modified, or last accessed.

7 In the Selected Dates field, specify the dates you want.

This indicates that only the files created, last modified, or last accessed on those dates will be included in the report.

- 8 Browse to and specify the file paths you want included in the report and click OK.
- 9 (Optional) Click the *Filters* tab and set the filters for the report.

For information on using the filtering capabilities of Novell File Reporter, refer to Appendix A, "Filtering," on page 125.

- 10 Click OK.
- 11 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.7 Historic Comparison Reports

Historic Comparison reports specify the differences between two similar scan types of the same target system. For example, if you had a Previous Permissions scan of a Windows share and a Current Permissions scan of the same share, you could generate a Historic NTFS Permissions Comparison report that would specify the differences in permissions between the two points in time that the scans were taken.

Historic Comparison reports can compare the following:

- Baseline scans to Previous scans
- Baseline scans to Current scans
- Historic scans to Current scans

Reports in this classification include Historic File System Comparison, Historic NCP Permissions Comparison, and Historic NTFS Permissions Comparison.

- Section 6.7.1, "Generating a Historic File System Comparison Report," on page 79
- Section 6.7.2, "Generating a Historic NCP Permissions Comparison Report," on page 81
- Section 6.7.3, "Generating a Historic NTFS Permissions Comparison Report," on page 83

6.7.1 Generating a Historic File System Comparison Report

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.

4 Under Historic Comparison, select the File System Comparison option, then click OK.

Report Definition	on Editor - LWELABS Vol 1 Historic File System C	omparison		5	23
Name	LWELABS Vol 1 Historic File System Compar	🔲 Limit Path Depth		100 🌲]
Unformatted		Scans to Compare	Current and Previou	IS 🔻	
	kumat	Query Filters			1
Туре	Historic File System Comparison Report Report Definition created on 4/7/2015	Added Entries	Files		
Description	8:43:09 AM by NVB\Administrator	Removed Entries	Folders		
Description		Modified Entries			
		Include entries		_	
		✓ File Size	Create Time	Directory Quota	
		Attributes	Modify Time		
		Owner	Access Time		
		Detail Display Opt	ions		1
		Added Entries			
		Removed Entries			
		Modified Entries			
		Always show n	odify detail for:		
		File Size	Create Time	Directory Quota	
		Attributes	Modify Time		
		Owner	Access Time		
Target Paths	S				
Add Rer	move				
Targe	t Path				
				OK Cancel	
					_

5 (Conditional) If you want to limit the scope of the report to a set depth in the file structure, click the *Limit Path Depth* check box and specify the depth level.

For example, if you specify 3, the report lists the file contents of all file paths in the specified target paths up to 3 levels in the file structure.

If you do not specify a path depth, Novell File Reporter will report on all levels of the specified target path.

6 From the Scans to Compare drop-down menu, select one of the following options:

Current and Previous: Compares the Current scan of the storage resource to the Previous scan of the storage resource.

Current and Baseline: Compares the Current scan of the storage resource to the Baseline scan of the storage resource.

Previous and Baseline: Compares the Previous scan of the storage resource to the Baseline scan of the storage resource.

All options appear whether you have scans or not. If you do not have scans, Novell File Reporter will generate an empty report.

7 In the Query Filters region, specify whether to include the following metadata categories in the report:

Added Entries: If you want the report to list files or folders that have been added since the older scan, leave this check box selected.

Removed Entries: If you want the report to list files or folders that have been removed since the older scan, leave this check box selected.

Modified Entries: If you want the report to list files or folders that have been modified since the older scan, leave this check box selected.

Files: If you want the report to list files, leave this check box selected.

Folders: If you want the report to list folders, leave this check box selected.

- 8 In the *Include entries modified by:* region of the *Query Filters*, specify which of the attributes modified between the older and newer scan you want included in the report.
- **9** In the *Detail Display Options* region, identify whether to display the metadata categories specified below in the *Detail Data* section of the report.

The categories below pertain to the *Detail Data* section of the report only, and not the *Summary Data* section.

Added Entries: If you want the report to display this category, whether there are added entries to list or not, select this check box.

Removed Entries: If you want the report to display this category, whether there are removed entries to list or not, select this check box.

Modified Entries: If you want the report to display this category, whether there are modified entries to list or not, select this check box.

10 (Conditional) If you selected the *Modified Entries* check box, in the *Always show modify detail for:* region, select any of the category options you want displayed in the report whether these metadata categories have been changed between the two scans or not.

By default, the *Modified Entries* section of the report only shows metadata that has changed. The options in this region of the dialog box are to force the display of one or more particular metadata properties.

Any metadata for an entry that Novell File Reporter has determined has changed is displayed in bold font. Any optional data that has not changed is displayed in regular font.

- 11 Browse to and specify the file paths you want included in the report, then click OK.
- 12 Click OK to close the Report Definition Editor.
- **13** Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59.

For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.7.2 Generating a Historic NCP Permissions Comparison Report

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the *Name* field, specify a descriptive name of the report definition.
- 4 Select the Historic NCP Permissions option, then click OK.

Report Definit	ion Editor - LWELABS Vol 1 Historic NCP Permissio	ons Report		23
Name Unformatted Type	LWELABS Vol 1 Historic NCP Permissions Rep Historic NCP Permissions Comparison Report	 Limit Path Depth Scans to Compare Include Removed P. 	Current and Previous	100 +
Description Target Patl	Report Definition created on 3/13/2015 11:26:58 AM by NVB\Administrator			
Add Re	et Path			
			ОК	Cancel
				.::

5 (Conditional) If you want to limit the scope of the report to a set depth in the file structure, click the *Limit Path Depth* check box and specify the depth level.

For example, if you specify 3, the report lists the permissions of file contents of all file paths in the specified target paths up to 3 levels in the file structure.

If you do not specify a path depth, Novell File Reporter will report on all levels of the specified target path.

6 From the Scans to Compare drop-down menu, select one of the following options:

Current and Previous: Compares the Current scan of the storage resource to the Previous scan of the storage resource.

Current and Baseline: Compares the Current scan of the storage resource to the Baseline scan of the storage resource.

Previous and Baseline: Compares the Previous scan of the storage resource to the Baseline scan of the storage resource.

All options appear whether you have scans or not. If you do not have scans, Novell File Reporter will generate an empty report.

- 7 (Conditional) If you do not want the report to list any paths that have been deleted or removed, deselect the *Include Removed Paths* check box.
- 8 Browse to and specify the file paths you want included in the report, then click OK.
- 9 Click OK to close the Report Definition Editor.
- **10** Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.7.3 Generating a Historic NTFS Permissions Comparison Report

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Historic NTFS Permissions option, then click OK.

Report Definit	ion Editor - NVB User Data 2 Historic NTFS Permis	sons Report		23			
Name	NVB User Data 2 Historic NTFS Permissons Re	Limit Path Depth Scans to Compare	Current and Previous	100 🗘			
Unformatted		Scans to Compare	Current and Previous				
Туре	Historic NTFS Permissions Comparison Report	Include Inherited A	CEs				
Description	Report Definition created on 3/16/2015 8:48:01 AM by NVB\Administrator	✓ Include Removed P	aths				
	Target Paths Add Remove						
Targ	et Path						
			ОК	Cancel			

5 (Conditional) If you want to limit the scope of the report to a set depth in the file structure, click the *Limit Path Depth* check box and specify the depth level.

For example, if you specify 3, the report lists the permissions of file contents of all file paths in the specified target paths up to 3 levels in the file structure.

If you do not specify a path depth, Novell File Reporter will report on all levels of the specified target path.

6 From the Scans to Compare drop-down menu, select one of the following options:

Current and Previous: Compares the Current scan of the storage resource to the Previous scan of the storage resource.

Current and Baseline: Compares the Current scan of the storage resource to the Baseline scan of the storage resource.

Previous and Baseline: Compares the Previous scan of the storage resource to the Baseline scan of the storage resource.

All options appear whether you have scans or not. If you do not have scans, Novell File Reporter will generate an empty report.

7 (Conditional) If you want your report to include not only direct permissions, but inherited permissions, select the *Include Inherited ACEs* check box.

Reporting inherited permissions could make the report significantly larger.

- 8 (Conditional) If you do not want the report to list any paths that have been deleted or removed, deselect the *Include Removed Paths* check box.
- 9 Browse to and specify the file paths you want included in the report, then click OK.
- 10 Click OK to close the Report Definition Editor.
- 11 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.8 Trending Report

Currently, the only report in this classification is the Volume Free Space report. Before generating a Volume Free Space report, you must first conduct a Volume Free Space scan on the volumes or shares you want to report on.

6.8.1 Generating a Volume Free Space Report

The Volume Free Space report lets you view available volume or share disk space over a set amount of time. For best results, you should conduct regularly scheduled Volume Free Space scans on specific volumes and shares. Novell File Reporter then has the data it needs to graph the pattern of free space on the volume or share.

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the Volume Free Space option and click OK.

Report Definition E	Editor - NVB User Data 1 Free Space Report			Σ
Name	NVB User Data 1 Free Space Report	Last number of days to include	365 ‡	
Unformatted				
Туре	Volume Free Space Trending Report			
	Report Definition created on 3/16/2015 9:23:05 AM by NVB\Administrator			
Description				
Target Paths				
Add Remov				
Target Pa				
langeere				
				_
			OK Cance	əl

5 In the *Last number of days to include* field, specify the last number of days you want the report to include.

For example, if you want the report to graph the last month, enter 30.

The lowest number you can specify is 7.

- 6 Browse to and specify the volumes or shares you want included in the report and click OK.
- 7 Click OK.
- 8 Generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.9 Custom Query Reports

Custom Query Reports are reports that are generated through a series of SQL commands that you enter. These commands enable you to generate very specific detail in reports that are not available through the built-in report types in Novell File Reporter.

The SQL commands must be specific to the database (Microsoft SQL Server or PostgreSQL) that your deployment of Novell File Reporter is utilizing.

NOTE: For details and examples of the supported database functions, tables, and views that you can utilize in Custom Query reports, refer to the *Novell File Reporter 2.6 Database Schema and Custom Queries Guide*.

SQL commands are entered through report editors available from the Novell File Reporter browserbased administrative interface and from the Report Designer client tool.

NOTE: For details on using the report editor in the Report Designer, see Section 8.4, "Designing a Custom Query Report," on page 106.

TIP: Don't forget to utilize File Query Cookbook as a resource for obtaining SQL commands and sample report layouts that have been submitted by the Novell File Reporter community. Both the SQL commands and report layouts can be customized as needed.You can access the File Query Cookbook directly through the Report Designer interface, or at http://www.filequerycookbook.com. (http://www.filequerycookbook.com.)

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the *Name* field, specify a descriptive name for the report definition.
- 4 Select Custom Query Report.

e	Custom Query Editor - Internet Explorer	_ D X
🙆 https://nfr.nvl	b.local/Reports/CustomQueryEditor.aspx?rptId=25	🔒 🏦 🛧 🌣
Editor		^
Save Execute (Ctl-S) (Ctl-E) Query	✓ Include Column Headers Delimiter , (Comma) ▼ Delimited Text	
1		
Record Limit	100 💠	
Drag a column he	ere	
	No data to display	^
		\sim
No data to pag	ginate (1)	

5 Enter the SQL commands according to what information you want included in your report.

As you enter commands, you can click *Execute* to get a preview in the bottom portion of the editor of how the report will appear.

The *Row Limit* setting does not limit the size of the report. Instead, it limits the how much can be previewed.

Https://nf.nvb.local/Reports/CustomQueryEditor.aspx?ptd=25 Editor Editor Save Execute Outry Delimiter [.Comma] Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text Delimiter Text	6		Custom Qu	uery Editor - Inte	ernet Explorer		_		x
Save Execute Save Execute Delimiter(Comma) Delimiter(Comma) Delimiter Text 1 SELECT server, scan_target, file_count, directory_count FROM srs.active_fs_scans WHERE server = 'nvb-main.nvb.local' ************************************	🙆 http	https://nfr.nvb.local/Reports/CustomQueryEditor.aspx?rptld=25						î) 🖈	Ø
Save Execute Save Execute Query Delimited Text 1 SELECT server, scan_target, file_count, directory_count 2 FROM srs.active_fs_scans 3 WHERE server = 'nvb-main.nvb.local' Custom Query modified - dick Save or press Ctl-S to commit changes ****** ************************************	Ec	litor							^
1 SELECT server, scan_target, file_count, directory_count 2 FROM srs.active_fs_scans 3 WHERE server = 'nvb-main.nvb.local'	(Ctl-S)	Execute (Ctl-E) Delimiter , (Comm	na) 🔹						
# server scan_target file_count 1 nvb-main.nvb.local \nvb-main.nvb.local 37700	1 2	SELECT server, sca FROM srs.active_fs	scans	directory_0	count				
Record Limit 100 ‡ # server scan_target file_count 1 nvb-main.nvb.local \\nvb-main.nvb.local\\Users 37700	Custom	Query modified - click Save (or press Ctl-S to commit changes						
1 nvb-main.nvb.local \nvb-main.nvb.local\Users 37700 13365	Record	Limit 100 🌲		- 11111 +					
	#	server	scan_target	file_count	directory_count				
2 nvb-main.nvb.local \\nvb-main.nvb.local\Shares 108 19	1	nvb-main.nvb.local	\\nvb-main.nvb.local\Users	37700	13365				
	2	nvb-main.nvb.local	\\nvb-main.nvb.local\Shares	108	19				
Page 1 of 1 (2 items)	Pag	e 1 of 1 (2 items)	0						~

- 6 When you are satisfied with the report and the previewed results, click Save.
- 7 Close the Custom Query Report Editor.
- 8 Select Reports > Report Definitions.
- **9** Select the Custom Query Report you just saved and generate the report as either a Preview report or a Stored report.

For procedures on generating a Preview report, see "Generating a Preview Report" on page 59. For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.

6.10 Unformatted Reports

Novell File Reporter allows you to generate unformatted reports. In some instances, having an unformatted report might be useful for doing extensive sorting and filtering of the report data using a product such as Microsoft Excel.

Novell File Reporter can generate an unformatted report for all built-in report types except for Summary reports.

You can generate unformatted reports by selecting the option in the Add Report Definition dialog box or by selecting the Unformatted check box in the Report Definition Editor dialog box.

6.10.1 Generating Unformatted Reports

- 1 Select Reports > Report Definitions.
- 2 Click Add.
- 3 In the Name field, specify a descriptive name of the report definition.
- 4 Select the report type you want to generate.
- 5 Select Create report as Unformatted.

Report Type		
Directory Data	File Data	
Summary	Filename Extension	Filename Extension Detail
Directory Quota	Owner	🔘 Owner Detail
Storage Cost	Ouplicate File	🔘 Duplicate File Detail
Comparison	🔘 Date-Age	🔘 Date-Age Detail
Permissions	Historic Comparison	Trending
Assigned NCP Permissions	🔘 Historic File System	Volume Free Space
Assigned NTFS Permissions	Historic NCP Permissions	
Permissions by Path	O Historic NTFS Permissions	Custom Query
O Permissions by Identity		Custom Query Report

- 6 Click OK.
- 7 In the Report Definition Editor, specify the settings and the file paths you want included in the report, then click *OK*.
- 8 Click OK.
- 9 Generate the report as either a Preview report or a Stored report.
 For procedures on generating a Preview report, see "Generating a Preview Report" on page 59.
 For procedures on generating a Stored report, see "Generating a Stored Report" on page 61.
- 10 From the file type drop-down menu, select either XLS, XLSX, Text, or CSV.
- 11 Click the Export a Report and Save it to the Disk button.
- 12 Select Save File and click OK.

6.11 NSM Policy Reports

In most reports, you browse to and specify a file path for the report through the *Target Paths* tab. If you have Novell Storage Manager managing your organization's user and collaborative storage, you can have Novell File Reporter report on the storage according to the target paths of the Novell Storage policies, rather than through a specific file path.

IMPORTANT: Novell File Reporter 2.6 requires that you upgrade to Novell Storage Manager 3.1 or above.

The advantages to specifying an NSM policy rather than a file path is that an NSM policy can include many different target paths. For example, in a large organization that utilizes Novell Storage Manager's load balancing capabilities, a single NSM policy might have 10 or more target paths. If you chose to specify the paths through the *Target Paths* tab, you would need to list all 10 paths. But if you have each of the target paths listed in a single NSM policy, through the *NSM Policies* tab, all you need to do is add the single NSM policy.

Another important advantage is that Novell File Reporter reads the associated policy target paths each time a report is generated, so that it dynamically responds to changes in assigned target paths for NSM policies.

NOTE: Procedures for integrating Novell File Reporter with Novell Storage Manager are included in Section 4.5, "Integrating with Novell Storage Manager," on page 36.

You can specify NSM policies for all Novell File Reporter reports with the exception of Comparison reports, Permissions by Identity reports, and Volume Free Space reports.

6.12 Scheduling Reports

You can generate reports on a one-time or regularly scheduled basis.

- 1 Select Reports > Report Definitions.
- 2 From the list of report definitions, select one that is not scheduled.
- **3** Select Schedule > Edit Schedule.

Schedule for Comparison R	Report NVB User Data 1	23
Schedule Start		
Engine Local Time	12:00 AM ‡	
Engine Local Start Date	3/16/2015 🔹	
_ Schedule Recurrence	·	
Once		
🔘 Daily		
Weekly Monday	-	
O Monthly		
) Day 1	of every month	
The First	▼ Sunday ▼ of every month	
	OK Cancel	

Engine Local Time: Specify the time that you want the report to generate.

The time you select should be based on the time zone where the NFR Engine is located and not the workstation where you are accessing the Web application.

Engine Local Start Date: Specify the date when you want the report schedule to take effect.

Be aware that entering a date does not mean that the report generates on that date. If the Engine Local Start Date is set for today, which is a Monday, but the Schedule Recurrence setting is set for Weekly on Sunday, the report does not generate until Sunday.

Once: Select this option to schedule the report to be generated only once.

Daily: Select this option to schedule the report to be generated daily.

Weekly: Select this option and specify a weekday to generate the report.

Monthly: Select this option and specify a day to generate the report each month.

4 Specify the scheduling parameters and click OK.

The new schedule is displayed in the Schedule column of the Report Definitions page.

6.13 Editing a Scheduled Report

- 1 Select Reports > Report Definitions.
- 2 From the list of report definitions, select one whose schedule you want to edit.

- 3 Select Schedule > Edit Schedule.
- 4 Make the schedule changes you want.
- 5 Click OK.

6.14 Clearing a Schedule on a Scheduled Report

- 1 Select Reports > Report Definitions.
- 2 From the list of report definitions, select one whose schedule you want to clear.
- 3 Select Schedule > Clear Schedule.
- 4 When the confirmation screen appears, click Yes.

The status of the report definition appears in the Schedule column as Not Scheduled.

6.15 Copying a Report Definition

To save time in creating a new report definition and its associated properties, you can copy an exiting report definition.

When you copy a built-in report, the following properties are included:

- Report Parameters
- Report Targets Paths
- Report Identity Targets
- Filters
- NSM Policies

When you copy a Custom Query report, the following properties are included:

- SQL Query
- Report Layout

NOTE: Copying a report definition does not copy the content in the *Description* field, nor does it copy the report schedule.

- 1 Select Reports > Report Definitions.
- 2 From the list of report definitions, select one that you want to copy.
- 3 From the taskbar, click Copy.

Copy Report	Definition	23		
Source LWELABS Vol 1 Date-Age Report Target Copy of LWELABS Vol 1 Date-Age Report				
	Copy Cancel			

4 Click Copy.

The new report definition is added to the list of report definitions with the name *Copy* of preceding the name of the original report definition.

- 5 Select the copy of the report definition.
- 6 From the taskbar, select Rename.

Rename Report Definition				
New Name	Copy of LWELABS Vol 1 Date-A	ge Rej		
	Rename Can	icel		

- 7 In the New Name field, specify a name for the new report definition, then click Rename.
- 8 From the taskbar, select Schedule > Edit Schedule.
- 9 Set the scheduling parameters for the new report definition, then click OK.
- 10 From the taskbar, click *Edit*.
- 11 In the *Description* field, enter a new description.
- 12 Click OK to save the report definition parameters.

6.16 Viewing Reports in Progress

When you generate large reports, you can view the progress in the Reports in Progress page.

- 1 Select Reports > Reports in Progress.
- 2 Click Refresh.

When the report disappears from the list, the report generation has completed.

6.17 Troubleshooting Reports

If there is potential for a reporting problem, Novell File Reporter provides notifications to help resolve the issue. The following points might also be helpful.

- 1 Verify that a scan exists for the storage resources you want to report on.
- 2 If your reports include too much data to be useful, narrow the scope of the report by implementing filters. For more information, see Appendix A, "Filtering," on page 125.

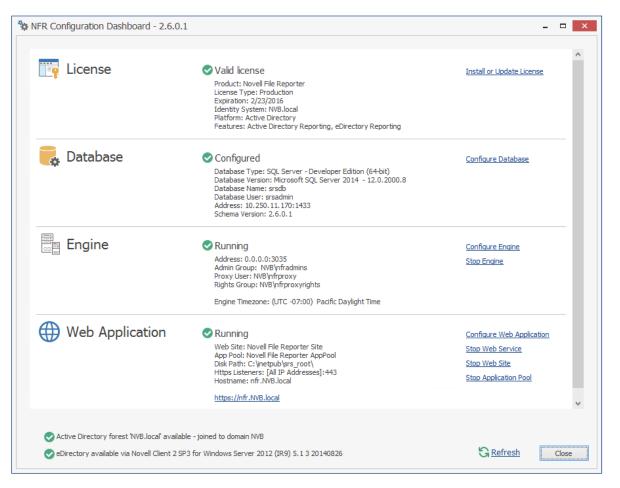
7 Performing Other Administrative Tasks

This section provides procedures for performing administrative tasks not covered in the previous sections.

- Section 7.1, "Stopping and Restarting Services," on page 93
- Section 7.2, "Using Folder Summary," on page 94
- Section 7.3, "Considerations for Reporting on NAS Devices," on page 94
- Section 7.4, "Changing the Default Path for Stored Reports," on page 95
- Section 7.5, "Changing the Life Span of Stored Reports," on page 96
- Section 7.6, "Resetting the Proxy User Password," on page 96
- Section 7.7, "Changing the Report Data Font," on page 96

7.1 Stopping and Restarting Services

Use the Configuration Dashboard to stop and restart the NFR Engine, Web Application, Web Service, Web Site, and Application Pool.



7.2 Using Folder Summary

The Folder Summary feature provides you a visual folder structure according to the latest scanned file system data. Folder Summary also provides extensive summary information for the folders and files.

You can access Folder Summary by selecting *Reports > Folder Summary*.

Figure 7-1 Folder Summary

Expo	ort Pdf 🔹 😋 Refresh						Folder Sumn
Path		▲ Scan Start Time	File Size	File Count	Folder Count	Folder Quota % of Parent Folder Siz	e % of Total Size
N LV	VELABS						
× [\\LWELABS\VOL1	3/11/2015 7:27:36 AM					
~	*		6 MB	22,437	1,984	100	100
	> 🚞 10k		6 MB	10,091	1,759	89	89
	> 🚞 10k-flat		0 bytes	10,000	0	0	0
	> 🚞 10k-folders-flat		0 bytes	0	0	0	0
	> 🚞 1k		644 KB	1,230	206	10	10
	> 🚞 1k-flat		61 KB	1,116	14	1	1
>	\\LWELABS\VOL2	3/10/2015 7:29:31 AM					
>	\\LWELABS\VOL3	3/10/2015 7:29:32 AM					
>	\\LWELABS\VOL4	3/10/2015 7:29:31 AM					
nv	/b.local						
× 🥫	\\nvb1.nvb.local\UserData1	3/10/2015 7:29:39 AM					
~			14 GB	28,905	1,929	100	100
	> 🚞 AA		0 bytes	1	1	0	0
	> 🚞 Alexander Adams		7 MB	15	0	0	0
	> 🚞 Alexander Baker		7 MB	15	0	0	0
	> 🚞 Alexander Bell		7 MB	15	0	0	0
	> Alexander Brown		7 MB	15	0	0	0

You can print, save, or export the data as a PDF or XLS file.

7.3 Considerations for Reporting on NAS Devices

In Active Directory network environments, Novell File Reporter can report on the contents of Network Attached Storage (NAS) devices through an NFR Agent proxy assignment. Integration information for reporting on specific NAS device types is found below.

- Section 7.3.1, "EMC Celerra," on page 94
- Section 7.3.2, "NetApp filer," on page 95
- Section 7.3.3, "EMC Isilon and Other NAS Devices," on page 95

7.3.1 EMC Celerra

For an EMC Celerra NAS device, configuration is similar to configuring a server in the domain to be managed by a proxy agent.

- 1 Join the NAS device to a domain where Novell File Reporter can report from.
- 2 Grant the proxy rights group membership in the NAS device's built-in Administrators group.

- **3** Grant the proxy rights group the folder share and NTFS permissions that are required to access the storage.
- 4 Grant the LSA rights and privileges to the proxy rights group, except the rights and privileges that don't exist on the EMC Celerra NAS device.

7.3.2 NetApp filer

For a NetApp filer device, configuration is very simple because the device does not fully emulate a Windows Server at the operating system level.

- 1 Use the NetApp filer administration utility to join the NAS device to a domain where Novell File Reporter can report.
- 2 Grant the proxy rights group membership in the NAS device's built-in Administrators group.
- **3** Grant the proxy rights group the folder share permissions that are required to access the storage.

There are no LSA rights and privileges to grant on a NetApp filer NAS device.

7.3.3 EMC Isilon and Other NAS Devices

Perform the following steps to integrate an EMC Isilon device. You can use these same steps to see if other NAS devices integrate with Novell File Reporter.

1 In the associated Computer object in Active Directory, add the following text somewhere in the description attribute for that object:

SRGenericNASDevice

- 2 Rebuild the storage resources and verify that the NAS device is displayed on the list.
- **3** Perform any needed steps for giving the proxy rights group access to the desired shares and folders on the NAS device.

7.4 Changing the Default Path for Stored Reports

The default path for stored reports is established during the installation of the NFR Engine. If you want to change the file path, you can do so if the new path is on the server hosting the NFR Engine and Web application.

Because both the Web application and the NFR Engine via the Stored Reports DLL need access to the report files, the service accounts those processes run as must have both Read and Write access to the specified path. For the Engine, this is the Windows Proxy Account; for eDirectory (or the "service account" when running in eDirectory mode) and for the Web Application, this is the associated IIS AppPool Identity, which is a hidden account created by Windows and tied to the Application Pool when the Web service was configured.

If you create a new folder for the stored reports, you must assign Read and Write access for the associated Windows server/proxy account to that folder, as well as the AppPool Identity. Because you cannot browse for the AppPool Identity, you need to use the name of the AppPool itself:

Select Users or Groups	? ×
<u>S</u> elect this object type:	
Users, Groups, or Built-in security principals	Object Types
From this location:	
LITMUX8	Locations
Enter the object names to select (<u>examples</u>):	
IIS AppPool\NFR AppPool	Check Names
<u>A</u> dvanced OK	Cancel

Novell File Reporter does not move previously generated reports to the new location.

- 1 Select Administration > Stored Reports Configuration.
- 2 In the Stored Reports Folder field, specify a new path.
- 3 Click Save Changes.

7.5 Changing the Life Span of Stored Reports

By default, stored reports are available for access for 30 days. You can adjust this setting by following the procedures below.

NOTE: You can always save a Preview or Stored report locally so it remains accessible indefinitely.

- 1 Select Administration > Stored Reports Configuration.
- 2 In the Default Expiration field, adjust the setting.
- 3 Click Save Changes.

7.6 Resetting the Proxy User Password

If the proxy user password is not working, you can reset it through the NFR Engine Configuration Utility. As part of the configuration process, it resets the proxy user password.

7.7 Changing the Report Data Font

Due to limitations of font encoding in PDF files, you might need to specify an alternate report data font. Locales that have multi-byte characters or characters outside the Latin-1 set of characters supported by the default font are especially at risk.

If you know the collected data is limited to a specific locale or language, choose a font that properly displays all characters for that locale or language.

If the collected data might contain characters that span multiple locales or that include both multi-byte and Latin-1 characters, for example, choose an appropriate Unicode Font that can accurately display most characters from the Unicode set and not just a specific locale.

Two Unicode fonts known for having both good Unicode character coverage and good glyph presentation are MS Arial Unicode (a sans-serif font) and CODE2000 (a serif font).

For more information on these fonts and on Unicode fonts in general, see (http://en.wikipedia.org/ wiki/Unicode_font).

NOTE: You can change the data font to any font that is available on the server hosting the Web Application.

Headers and parameters in the reports remain in the default Arial font.

To change the report data font:

- 1 From the Reports menu, select Report Definitions.
- 2 From the Report Branding and Styling drop-down menu, select Report Data Font.
- **3** From the *Report Data Font Name* drop-down menu, select the font you want displayed in the report.

Report Data Font		23
Font Name	Aria Tahoma Times New Roman	*
	Traditional Arabic Trebuchet MS Tunga Urdu Typesetting Utsaah	~

4 Click Save.

The Novell File Reporter Client Tools provide client-based reporting capabilities along with advanced reporting design options currently unavailable through the browser-based administrative interface. These tools include the Report Viewer and the Report Designer.

- Section 8.1, "Using the Report Viewer," on page 99
- Section 8.2, "Using the Report Designer Interface," on page 102
- Section 8.3, "Creating a Custom Query Report," on page 104
- Section 8.4, "Designing a Custom Query Report," on page 106
- Section 8.5, "Saving the Layout as a Template," on page 112
- Section 8.6, "Using a Saved Template for Custom Query Reports," on page 112

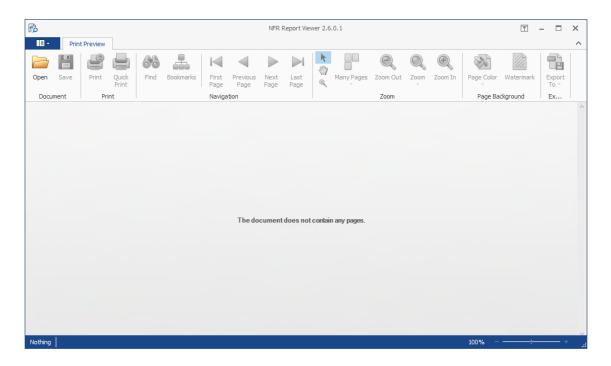
8.1 Using the Report Viewer

This tool allows you to view all stored reports locally from a Windows workstation. Because the Report Viewer utilizes the resources of the Windows workstation, rather than those of the NFR Engine, the Report Viewer can display stored reports much faster in most instances.

NOTE: You must be a member of the nfrreportusers group to view reports using the Report Viewer. The name nfrreportusers is the default name (which you can change) of the Novell File Reporter report users group created during the installation of the NFR Engine.

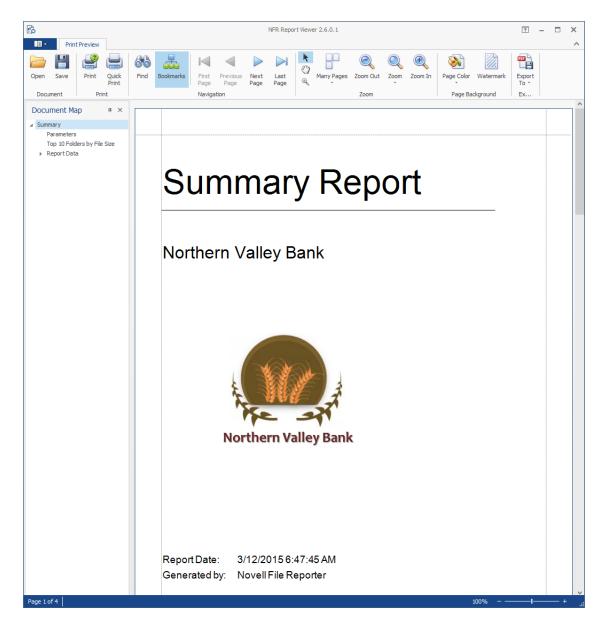
In comparison to the viewing capabilities of the browser-based administrative interface, the Report Viewer offers more capabilities. For example, with the Report Viewer you can change the visual display parameters of the report.

1 Launch the Novell File Reporter File Viewer application.



2 Click Open, browse to the location of your stored reports, then click Open.

To determine where stored reports are located, in the Novell File Reporter administrative interface, select *Administration* > *Stored Reports Configuration* and view the location in the *Stored Reports Folder* field.



3 (Optional) Adjust the view to your preferences using the tools discussed below.

Bookmarks: Click to toggle between the report *Document Map* being displayed and not displayed.

Many Pages: Click to specify the number of pages you want displayed.

Zoom Out: Click to see more of the report page at a reduced size.

Zoom: Click to change the zoom level of the report preview.

Zoom In: Click to get a close-up view of the report.

Page Color: Click to change the color for the background of the report pages.

Watermark: Click to insert a ghosted text or image behind the content of each page of the report. A watermark is often used to indicate how a document is to be treated specifically.

The Watermark dialog box lets you specify your watermark settings. Your watermark can either be in text or graphic form.

Watermark		×
	Text Watermark	Picture Watermark
	Text: DO NO	IT COPY
	Direction: Forwar	rd Diagonal V Color:
	Eont: Verdar	na v <u>S</u> ize: 36 v
DO NOT CORT	✓ Bold	Italic
	Transparancy (0, 2	55): 50
30 ⁵	Transparency (0-2	
	Position	Page Range
	🔘 In <u>f</u> ront	<u>A</u> II O Pages:
	● <u>B</u> ehind	Enter page numbers and/or page ranges separated by commas. For example: 1,3,5-12
Clea <u>r</u> All		OK Cancel

4 (Optional) Save the Report using the tools discussed below.

Save: Click to save the report. The report is saved as a . PNRX file, meaning that in this format, the report can only be opened through the Report Viewer.

Export To: Click to export the report to a new format. Each selected format option brings up a dialog box where you can provide specifics on how you want the report exported.

XLSX Export Options					
Export mode:	Single file	~			
Page range:					
Sheet name:	Sheet				
Text export mode:	Value	~			
Show grid lines					
Export hyperlink	s				
Raw data mode					
	OK Cancel				

8.2 Using the Report Designer Interface

This tool allows you to design reports locally from a Windows workstation, while offering significantly more reporting design capabilities to those of the browser-based administrative interface.

NOTE: You must be a member of the nfradmins group to design reports using Report Designer. The name nfradmins is the default name (which you can change) of the Novell File Reporter administrators group created during the installation of the NFR Engine.

1 Launch the Novell File Reporter Report Designer application.

Login	×
Service URL	
User Name	User login name
Password	Password
	Login Cancel

2 Enter the login credentials and click Login.

	NFR Report Designer		Ī	×
Main				/
New Custom Rename Delete Refresh Edit Que Query Report	ry Design Report Clear Report Layout Layout			
Manage	Edit			
Report Name	Report Type	Report Layout Defined	Use Formatted Layout	Id
No	[Unknown]			
Custom Query Report	Custom Query			
🔚 Directory Quota Summary with Owner	Custom Query			

3 Familiarize yourself with the Report Designer interface.

All Custom Query Reports are listed. Those that have *not* been designed using the Report Designed Layout interface are displayed with the green-bannered text icon, while those designed using the Report Designer have the blue notebook icon.

All of the options on the toolbar are available by selecting a report and right-clicking.

New Custom Query Report: Click to create a new Custom Query Report by launching the Query Editor.

Rename: Click to rename a selected Custom Query Report.

Delete: Click to delete a selected Custom Query Report.

Edit Query: Click to edit the SQL commands pertaining to a selected Custom Query Report through the Report Designer's Query Editor.

Design Report Layout: Launches the Report Designer Layout interface. For more information on the Report Designer Layout interface, see Section 8.4, "Designing a Custom Query Report," on page 106.

Clear Report Layout: Click to clear custom design settings created using the Report Designer Layout interface. This is a nonreversible procedure.

[Report Type]: By default, this check box is selected so that it displays only Custom Query Reports, which are the only reports that can be designed using the Design Editor. You can deselect the check box to view all of your reports.

8.3 Creating a Custom Query Report

NOTE: For details and examples of the supported database functions, tables, and views that you can utilize in Custom Query reports, refer to the *Novell File Reporter 2.6 Database Schema and Custom Queries Guide*.

1 Click New Custom Query Report.

New Cust	om Query		×
Name		Create	Cancel

2 Specify a descriptive name, then click Create.

The Report Designer Query Editor is launched.

Query Editor - Custom Perms 2	
Main	^
R SQL Text Editor	
Save Eventer Penet All	
Query V III Query Results Dock Panels	
SQL Query View	
SQL Query Text ×	-
SQL Query Builder	л ×
🖉 Main 🖉 Q Main	
✓ Expression ↓ ≣ srsdb ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓ ↓	15
▶ 🛄 srs	
U Output Expression Aggregate Alias Sort Type Sort Order Grouping	
C >	
SQL Query Builder SQL Query Results	
Records Loaded (0)	

- 3 In the SQL Query Builder region, expand srs to see the Tables and Views folders.
- 4 Expand either the Tables or Views folder.
- 5 Expand a displayed table or view.
- 6 Select the tables and fields you want included in the query by double-clicking each.

Query Editor - Custom Perms 2	
Main	
Save Execute Query Builder Reset All Dock Panels	
SQL Query View	
SQLQueryText x 1 Select srs.active_ntfs_aces.fullpath, 2 srs.active_ntfs_aces.trustee_display_name, 3 srs.active_ntfs_aces.permissions, 4 srs.active_ntfs_aces.volume, 5 srs.active_ntfs_aces.access_mask, 6 From srs.active_ntfs_aces	
SQL Query Builder # X SQL Query Builder Main Image: acce_flags acce_flags acce_flags acce_flags acce_trype Image: access mask acce_trype Image: access mask acce_trype Image: access mask Bace_trype Image: access mask Bace_trype Image: access mask Image: access mask Image: access mask Image: acce_trype Image: access mask Image: access mask Image: access mask Image: acce <	
Records Loaded (0)	

7 Append the query with any additional SQL commands in the text editor.

8 Click Execute Query to get a preview of the Custom Query Report.

Query Edito	r - Custom Pe	ms 2				ĸ
Main						^
Save Exe	cute ery V 📑 C	QL Text Editor Juery Builder Juery Results View	Reset All Dock Panels			
SQL Query	'ext 🗙					-
2 srs 3 srs 4 srs 5 srs	srs.active_ntfs active_ntfs active_ntfs active_ntfs active_ntfs srs.active_n 95	aces.trus aces.perm aces.volu aces.acce	tee_displa issions, me,			
<			Ш			>
	y Results				4 >	٤
-	n header here to g		mn			
fullpath		permissions	volume	access_mask		
	n Everyone		\\nvb-main	1179817		^
	n BUILTIN\U			1179817		
	n BUILTIN\U		\\nvb-main	4		
	n BUILTIN\U		\\nvb-main	2		
	n BUILTIN\A			2032127		
\\nvb-ma	n BUILTIN\A	Lf Cf Cs Rx	\\nvb-main	2032127		
\\nvb-ma	n NT AUTHO	. Lf Cf Cs Rx	\\nvb-main	2032127		
\\nvb-ma			\\nvb-main	268435456		
Novb-ma		I FDv TFDa	Novh-main	1179817		~
SQL Query	Builder SQL Qu	ery Results				
Records Load	ed {0}					

- 9 Click Save.
- 10 Close the Query Editor.

8.4 Designing a Custom Query Report

After you have created a Custom Query Report, either through the Report Designer Query Editor or the Query Editor built into the browser-based administration interface, you can design the layout of the report.

NOTE: This exercise introduces you to some of the very basic design features of the Report Designer. Through familiarizing yourself with the basic features, you will become proficient enough in the interface to try more advanced features.

1 From the listed Custom Query Reports, select the one you want to design.

				NFR F	Report Designer ·	- 2.6.0.19		Ť –		×
	l ▼ Main									
	🗋 🖃 🖹 🗙	G								
	w Custom Rename Copy Delete ry Report	Refresh	Edit Query	Design Report Layout	Clear Report Layout	Visit Community Portal	Access Online Templates			
	Manage			Edit		Community				
	Report Name				Report Type	?	Report Owner	Last Modified	Id	
P N	o				[Unknown]					
	EE Copy of Custom query report				Custom Query		nvb\administrator	3/23/2015 8:56		2
	EE Custom query report				Custom Query		nvb\administrator	3/23/2015 8:35		2
	EE Custom Query Report 2				Custom Query		nvb\administrator	4/24/2015 8:37		3

2 Click Design Report Layout.

2						NF	FR Report Desig	gner 2.5.	0.16							₫ -	□ ×
Report Des	signer Print	t Preview															^
Open Save To Database * Report	Refresh Data Bindings Report	All Data	Cut	Copy Paste	Undo	Redo	Times New F	ΒI	U Font	· <u>A</u> · ≣∃≣≣	官臣 羊 릐 町 바 止 Alignment	Layout	Q Zoom Out Q Zoom ™ Q Zoom In Zoom	Window	vs Scripts Scripts		
Tool Box	4 × C	ustom Perr	ns								🔥 Data I	Rindinas r	efresh require	ed be	eport Explorer		- # ×
TOOLDOX	* ^ 🖻	asconricin									- Ducu 1	sindings i	erresirrequire				U # ^
Standard Controls	~ [🖌 (1999)	1.1.1.1		+ 1 + + +	1	2 + + + 1 +	· · 3 ·		+ 4 + + + 1	5 1	. 6	1 · · · 7 · · ·	• •	CustomQueryRe	portBase	
Pointer Deinter Label Check Box Picture Box		· · · · · · · · · · · · · · · · · · ·	etail												 Operation Detail BottomMarg 	in	
Panel																	
Table		:															
🔨 Line																	
🌄 Shape		1												Ę	Report Explorer	🔓 Field I	ist
Chart														Ρ	roperty Grid		□ # ×
🕜 Gauge		1												Cu	stomQueryReport	tBase Rep	ort v
Sparkline															2+		
E Pivot Grid														ſ	Appearance Background Cole	Transa	• •
Table Of Contents		<												>		Black	urcrit
		Group and	Cort										л) Д		Border Dash Sty	Solid	
Page Info													4)	` [1	
Page Break		Add a Gro	up 🗏 A	dd a Sort 🕷	Delete 🛛 🖗	Move U	Jp 🛞 Movel	Down								None Times New R	oman
	F	ield Name			Sort Or	der	Show Header	Sho	w Footer						Foreground Cole		
Cross-band Line															Formatting Rule		
Cross-band Box				_		a new grou	uping or sorting	level, fir	st provide a c	lata source for	the report.				Formatting Rule ▶ Paddino .	(Collection) 0. 0. 0. 0	~
		Group and	Sort	o Scripts Errors													
CustomQueryReportBase	{ PaperKind: Le	tter }													100%		+

- 3 Click Refresh Data Binding.
- 4 In the upper-left corner of the layout grid, from the *Data Member* drop-down menu, select *Query Results*.

This action properly ties the data to the Report Designer.

4	ta a a ta an i	F 1 + + + 1 + + + 1 + + + 2 +	1 I I
	Report Tasks		
-	Edit and Reorder Bands Edit Bindings		
-	Data Member	Query Results	
- 1	Data Adapter	🔺 🔂 Data Set	
≡	Filter String	🕨 🔠 Query Results	
•		None 68	
:	Detail Count at Design Time		
-	Measure Units		
1	Formatting Rules		
-	Formatting Rule Sheet		
-	Style Sheet		
-	Watermark		
1			

- 5 At the bottom of the Report Explorer region, click Field List.
- 6 Expand the Query Results to show all of the result fields of the Custom Query Report.

Field List	щ	х
🔺 🔂 Data Set		
Query Results		
ab basic_permissions		
ab fullpath		
ab trustee_display_name		
ab volume		
🕞 Report Explorer 🛛 📴 Field List		

7 Drag the result fields to the *Detail* region of the layout grid.

🔻 🔳 Detail						>
	[basic_permissions]	[fullpath]		<pre>[trustee_display_name]</pre>	⊌[volume]	0
			20			

_

8 Resize the frame so the bottom is aligned with the bottom of the four report elements.

[pasic_permissions] [fullpath] [f	

- 9 Right-click above the *Detail* frame and select *Insert Band* > *Page Header*.
- **10** From the *Tool Box*, drag a *Label* over to the new *PageHeader* frame and line it up above the first report element.

alabel1	+	-					
-	•						
-							

- **11** Repeat Step 10 for each label you want to have in the report.
- 12 Edit the label names.

	label4	label3	label2	Permissions
)()	

- **13** Resize the frame so the bottom is aligned with the bottom of the report elements.
- 14 Click the Download All Data button.
- 15 When the confirmation dialog box appears, click Yes.
- 16 Click Print Preview to view how the report looks up to this point.

) =									Ni K Kep	ort Designer	2.3.0.10								
IB -	Report De	signer	Print Pre	view															
H	2		2	?.		-			6	6			evious Page ext Page	*		© Zoom Out © Zoom ▼	Page Color *	105 -	
ve Report	Print	Quick Print	Options	Parameters	Header/Footer	Scale	Margins	Orientation	Size Fi	nd Bookm	arks First Page	-	ast Page	0	Many Page	s 🔍 Zoom In	Watermark	- 🔛	
ocument			Print			Page	Setup		5		Navigation				Zo	om	Page Background	Ex	Close
stom Per	rms *																		
					Permissi	0115		Full Path		Truste	e		Network Sh	are					
					*			\\nvb-main	nvb.local\Us	ns BUILT	IN\Users		\\nvb-main.i	1vb.loc	al Users				
					FMELRW	v		\\nvb-main	nvb.local/Us	as BUILT	IN\Administra	ators	\\nvb-main.i	nvb.loc	al\Users				
					FMELRW	v		\\nvb-main	nvb.local\Use	as NTAU	THORITY\SY	STEM	\\nvb-main.i	wb.loc	al\Users				
					*			\\nvb-main	nvb.local\Use	as BUILT	IN\Users		\\nvb-main.i	nvb.loc	al Users				
					ER			\\nvb-main	nvb.local\Use	as Everyo	ne		\\nvb-main.	nvb.loc	al\Users				
					ELR			\\nvb-main	nvb.local/Use	as BUILT	IN\Users		\\nvb-main.i	wb.loc	al\Users				
					FMELRW	v		\\nvb-main	nvb.local\Us	as BUILT	IN\Administra	ators	\\nvb-main.i	nvb.loc	al/Users				
					*			\\nvb-main	nvb.local/Use	as CREAT	OR OWNER		\\nvb-main.i	wb loc	al Users				
					FMELRW	v		\\nvb-		BUILT	IN\Administra	ators	\nvb-main.	1vb.loc	al\Users				
								main.nvb.lo y Adams	cal\Users\An	thon									
					FMELRW	V		\\nvb- main.nvb.lc y Adams	cal\Users\An		IN\Administr:	ators	\\nvb-main.r	ivb.loc	al/Users				
					*			\\nvb-	cal\Users\An		OR OWNER		\\nvb-main.	nvb.loc	al\Users				
					FMELRW	v		\\nvb- main.nvb.lo	ocal\Users\Am		THORITY\SY	STEM	\\nvb-main.s	nvb.loc	al/Users				
					*				ocal\Users\And		IN\Users		\\nvb-main.i	ivb loc	al/Users				
					ELR				ocal\Users\An		IN\Users		\\nvb-main.ı	wb.loc	al\Users				
					2				ocal\Users\And		IN\Users		\\nvb-main.ı	nvb loc	al\Users				
					ELR			y Adams \\nvb- main.nvb.lc y Adams\to	cal\Users\An		IN\Users		\\nvb-main.s	nvb.loc	al\Users				
								\\nvb-	cal\Users\An		IN\Users		\\nvb-main.ı	nvb.loc	al\Users				
					FMELRW	v		\\nvb-	cal\Users\An		IN\Administra	ators	\\nvb-main.r	ivb loc	al\Users				

- 17 Click the Report Designer tab.
- **18** Right-click above the *PageHeader* frame and select *Insert Band* > *Report Header*.
- **19** From the *Tool Box*, drag a *Label* over to the new *ReportHeader* frame and center it at the top of the frame.
- 20 Enter a name for the report.

ReportHeader [one band per report]	ta 🛛 🖉 👘 👘 👘 👘 👘 👘	
	 Permissions Report 	

- 21 From the *Tool Box*, drag a *Picture Box* below the report title.
- 22 Activate the frame, click the > and from the *Image* field, click the ellipses (...) to select a graphic.

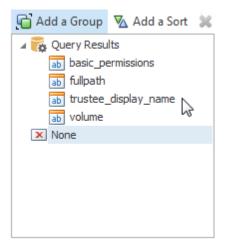
Permissions Report
Northern Valley Bank
NOT THEFT VALLEY DATK

- 23 From the Tool Box, drag a Label over to the ReportHeader frame and center it below the graphic.
- 24 In the new label, enter today's date.
- 25 From the *Tool Box*, drag a Page Break to the *Report Header* frame and below the date label.
- 26 From the *Tool Box*, drag a *Page Info* to the right of the furthermost label on the right in the *GroupHeader* frame.

You might need to adjust the width of the Page Info frame.

	Permissions	Full Path	Trustee	Network Share 1/1 +
--	-------------	-----------	---------	---------------------

27 From the *Group and Sort* region, select *Add a Group* and select one of the result fields you would like the report to sort.



- 28 From the Tool Box, drag a Label over to the new GroupHeader1 frame.
- 29 Give the label a descriptive name.
- 30 From the Field List region, expand the Query Results.
- **31** Drag the applicable report element into the GroupHeader1 frame, next to the label you just named.

- 32 If necessary, expand the length of the report element.
- **33** Select both items in the *GroupHeader1* frame; from the *Property Grid* region, for the *Borders* setting, select *All*.
- 34 Adjust the depth of the *GroupHeader1* frame so that it has the desired space you want from the columns in the report.
- **35** Click *Preview Report*.

	NFR Report Designer 2.5.0.16	吾 - □ ×
Report Designer Print Preview Save Report Document Print Custom Permas*	s Header/Footer Scale Margine Orientation Size Page Setup ro 10 Navigation R Navigatio R Navigat	Ex Close
	Permissions Full Path Trustee Network Share 2/8 Name of Trustee BUILTIN Administrators	^
	FMELRW \\mvb-main.nvb.localUses BUILTIN\Administrates \\mvb-main.nvb.localUses FMELRW \\mvb-main.nvb.localUses BUILTIN\Administrates \\mvb-main.nvb.localUses	
	FMELRW \\nvb- BUILTIN\Administratos \\nvb-main.nvb.localUses main.nvb.localUsers\Anhon y Adams	
	FMELRW \\nrvb-main.nvb.localUses main.nvb.localUsers\Anthon y.Adams	
	FMELRW \\nvb- BUILTIN\Administrators \\nvb-main.nvb.localUsers main.nvb.localUsersAnthon y Adams to_acquitted	
	FMELRW \\nvb- main.nvb.local\User main.nvb.local\User y.Adamsto_acquited	
	FMELRW \unvb- BUILTIN\Administrators \unvb-main.nvb.localUsers main.nvb.localUsers\Anthon y Allen	
	FMELRW \\mvb. BUILTIN\Administraton \\nvb-main.nvb.localUsen main.nvb.localUsen/Authon y.Allen	
< Page 2 of 8	FMELRW \\nvb- BUILTIN\Administrators \\nvb-main.nvb.localUsers main.nvb.localUsers 100%	> ×

- 36 Click Save to Database to save the report.
- 37 When notified that the report definition was successfully saved to the database, click OK.

8.5 Saving the Layout as a Template

When working with the Report Designer, you might create a layout design that you want to utilize as a template for future Custom Query Reports. You can do so using Save As File.

- In Report Designer, open the Custom Query Report whose design you want to save as a template.
- 2 Select Save > Save As File.
- 3 Name and save the layout.

The layout is saved as a . repx (Report Layout XML) file.

8.6 Using a Saved Template for Custom Query Reports

You can use saved .repx files as design templates for Custom Query Reports.

TIP: You can also use the sample report layouts and SQL commands that are available from the File Query Cookbook, a new collaborative community portal for accessing and sharing Custom Query reports. Both the SQL commands and report layouts can be customized as needed. You can access the File Query Cookbook directly through the Report Designer interface, or at http://www.filequerycookbook.com (http://www.filequerycookbook.com).

- 1 In Report Designer, open the Custom Query Report you want to design using a saved template.
- 2 Click Open, then select the .repx file you want to use for designing your report.

The report is updated with the design from the .repx file.

9

Data Analytic Tools

- Section 9.1, "Using the Heat Map," on page 115
- Section 9.2, "Using the Pivot Table," on page 118

With the release of Novell File Reporter 2.5, Novell provided a "Technology Preview" of analytic tools that are still in development. Although some features and capabilities will be introduced at a later time, many of these features and capabilities are available today.

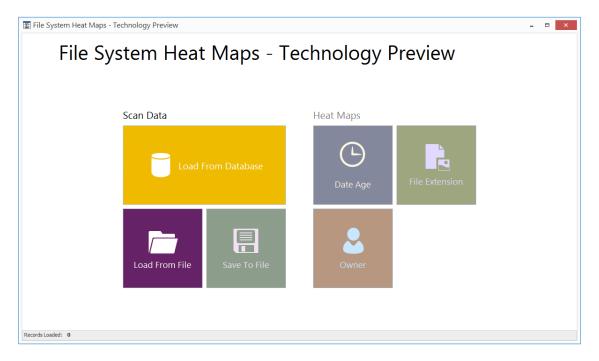
The data analytic tools include the following Windows workstation applications:

- Heat Map (32-bit application)
- Pivot Table (64-bit application)

9.1 Using the Heat Map

NOTE: As a 32-bit application, the Heat Map might not be able to process large scans due to its current memory limitations.

1 Launch the FSHeatMaps.exe application.



2 Click Load from Database or Load from File to load Fie System scans.

🕵 Login		×
Web Service URI Name		
Password		
	Login <u>C</u> ancel	

3 Complete the fields in the Login dialog box, then click Login.

The Web Service URI field should specify the URL used to access the Novell File Reporter web application.

All of the File System scans appear in a list.

y that column	▲ Scan Target	Entries Count
nvb-main.nvb.local	\\nvb-main.nvb.local\Users	51,065
nvb-main.nvb.local	\\nvb-main.nvb.local\Users2	27,742
nvb-main.nvb.local	\\nvb-main.nvb.local\Users3	22,252
nvb-main.nvb.local	\\nvb-main.nvb.local\Users4	22,996
nvb-main.nvb.local	\\nvb-main.nvb.local\Users5	11,893
nvb-main.nvb.local	\\nvb-main.nvb.local\Users6	12,731
nvb-main.nvb.local	\\nvb-main.nvb.local\Users7	19,723
nvb-main.nvb.local	\\nvb-main.nvb.local\Users8	21,340
	nvb-main.nvb.local nvb-main.nvb.local nvb-main.nvb.local nvb-main.nvb.local nvb-main.nvb.local nvb-main.nvb.local	Server Scan Target m/b-main.m/b.local \mb-main.m/b.local\Users m/b-main.m/b.local \mb-main.m/b.local\Users2 m/b-main.m/b.local \mb-main.m/b.local\Users3 m/b-main.m/b.local \mb-main.m/b.local\Users3 m/b-main.m/b.local \mb-main.m/b.local\Users4 m/b-main.m/b.local \mb-main.m/b.local\Users5 m/b-main.m/b.local \mb-main.m/b.local\Users6 m/b-main.m/b.local \mb-main.m/b.local\Users7

4 Double-click one of the listed scans.

The *Date Age, File Extension*, and *Owner* options are now available, enabling you to view the heat map data according to the selected option.



5 Click one of the options.

🛐 Heat Map									- 🗆 🗙
Name	Files Size	^	Name	Size	Extensions	Owners	Age		
# nvb-main.nvb.localm	,122,436	85.23 (GroupSymmetryADV1_cctx.org_Jul-01-201	1.31 KB			1.94	~	
a 🚺 Users7	,122,436	85.23 (15 FSFAdmin-3.1.1007.msi	13.83 MB	Owner			Size	Count ^
CC_Team	,122,436	85.23 (AD AD			25.00 GB 12.76 GB	1,076,237 27,203
► 🛅 bgashler	226	128.51			ADV			12.69 GB	5,933
► T bratiff	820	1.23 (eshropshire		12.61 GB	2,613
callen	16	2.08 1			AD 🕹 AD 🗤			6.48 GB	1,211
- dhudkc	36	3.621				nattd		3.94 GB	2,483
	421	646.81 \			AD\;	ane		3.84 GB	127
< Collateral	721	>			BUIL	TIN\Adminis	trators	1.55 GB	1,647 🧹

You can navigate the file system in the top left frame, view the contents in the top middle frame, and change the display parameters in the top right.

Placing the cursor over a location on the heat map displays the full file path of an individual file in the bottom portion of the heat map.

NOTE: A current limitation of the heat map is that you must restart the application to load a separate set of scan data.

9.2 Using the Pivot Table

This exercise introduces you to some of the very basic features of the pivot table. Through familiarizing yourself with the basic features, you will become proficient enough in the interface to utilize even more advanced features.

1 Launch the DataAnalytics.exe application.

∑. Ÿ	NFR Data Analytics - 2.5.0.8	🗈 – 🗆 🗙
Main Chart		^
Lead from Lead from Save to	eate Year Owner dify Year Auto Fit cess Year File Extension Presets Display Export	
Pivot Fields #	Drop Filter Fields Here	
Drag Items to the PivotGrid	Size C Drop Column Fields Here	
Dimensions	Drop Row Fields Grand Total Here Size Count	
Access Time	Grand Total	
Create Time		
Modify Time		
File Extension		
∺ File Name		
3 Owner		
Drag fields between areas below: Filter Area Column Area		
i i i i i i i i i i i i i i i i i i i		
	Chart	л ×
		Grand Total Size
🔜 Row Area 🔰 Data Area		
Size		
Count		
Defer Layout Update Update	Grand Total	
Record Count: 0		

2 Click either Load from Database or Load from File.

×
User login name
Password
Login Cancel

3 Complete the fields in the Login dialog box, then click Login.

The Web Service URI field should specify the URL used to access the Novell File Reporter web application.

All of the File System scans appear in a list.

¢				NFR Data Analytics - 2.5.0.8			-	
Load from Database	Dr	ag a column header here to	group by that column					
		Identity System 🔺	Server 🔺	Network Path	*	File Count	Folder Count	Scan Id
	Þ	nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users		37,700	13,365	1
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users2		20,116	7,626	2
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users3		15,886	6,366	3
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users4		16,795	6,201	4
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users5		8,543	3,350	5
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users6		9,156	3,575	6
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users7		14,070	5,653	7
		nvb.local	nvb-main.nvb.local	\\nvb-main.nvb.local\Users8		15,455	5,885	8
		Load						

4 Double-click one of the listed scans.

	NFR Data Analytics - 2.5.0.8	🗈 – 🗆 🗙
Main Chart		^
Load from Load from File Scan Data	y Year Auto Elto Everente	
Pivot Fields #	Drop Filter Fields Here	
Drag Items to the PivotGrid	Size C Drop Column Fields Here	
	Drop Row Fields Grand Total	
Dimensions	Here Size Count	
Greate Time Create Time	Grand Total 2 GB 37,700	
Greate Time Modify Time		
File Extension		
File Name		
0wner		
 Drag fields between areas below:		
Filter Area Column Area		
	Chart	ά ×
		Consult Table LI Cine
🔛 Row Area 🔰 Data Area	2 GB	Grand Total Size
Size	16	
Count		
Defer Layout Update Update	0 Grand Total	
Record Count: 37,700		

5 For this exercise, click *Create Year* from the toolbar. Observe the creation of the pivot table.

<u>8</u> . V						NFR Data A	alytics - :	2.5.0.8			Ť		×
Main	Chart												
oad from Database	Save to File	Crea		ctension Al	← → uto Fit	Export Ger	erate						
Database File Scan Data	File	Acce	Presets		i Columns iisplay	Pivot Data Re Export	port						
Pivot Fields		д	Drop Filter Fie										
PIVOL FIElds			Size C		- Calda U								
rag Items to the Pivo	tGrid		Size C	Grand Tot		iere							
🔺 🚞 Dimensions			Create Ti			Count							
🕨 🚞 Access Tir	me		2002		15 MB	271							
🕨 🚞 Create Ti	me		2003		58 MB	859							
🕨 🚞 Modify Tir	ne		2004		48 MB	862							
🔡 File Exter	nsion		2005		141 MB	1,794							
File Name	2		2006		225 MB	4,025							
Owner			2007		258 MB	4,804							
			2008		341 MB 212 MB	6,013							
			2009		212 MB 30 MB	3,477							
rag fields between ar			2010		11 MB	208							
Filter Area	Column .	Area	2012		8 MB	140							
					10.40	005							
			Chart										д
												nd Total	Cine
Row Area	∑ Data Are	a						10 MB			Gra	nu rocarj	5128
Create Tim 🔺	Size		10 M										
	Count												
			0										
Defer Layout Upda	te	Update						1970					
cord Count: 37,7	200												

6 From the *Pivot Fields* region, drag *File Extension* to the right of the *Count* column.

Pivot Fields 4	Drop Filter Fields He	ere Ç	
Drag Items to the PivotGrid	Size C		Here
🔺 🚞 Dimensions	Create Ti 🔺	Size	Count
Access Time	2002	15 MB	271
🕨 🚞 Create Time	2003	58 MB	859
🕨 🚞 Modify Time	2004	48 MB	862
File Extension	2005	141 MB	1,794
	2006	225 MB	4,025
Owner	2007	258 MB	4,804
	2008	341 MB	6,013
	2009	212 MB	3,477
Drag fields between areas below:	2010	30 MB	573
Filter Area	2011	11 MB	208
	2012	8 MB	140
		10.10	

Observe the updated appearance of the pivot table.

				NEK Data A	nalytics - 2.5.0.8			LT		×
Modif	fy Year ss Year	File Extens		Export Ger	erate					
щ	Drop Filt	ter Fields H	ere							
88	Size	C	File Extension 🔺							
					a		a told indicate for you u	ip in aac		
	Create	Ti ▲	Size	Count	Size	Count	Size Co	unt Size	Cou	unt
	2002		4 MB	50	80 KB	2		48	IO KB	
	2003		23 MB	303	121 KB	2			1 MB	
	2004		10 MB	126	100 KB	1			2 MB	
	2005		13 MB	205	143 KB	2			3 MB	
	2006		24 MB	427	793 KB	13			5 MB	
	2007		42 MB	623	890 KB	12		4	8 MB	
	2008		65 MB	885	1 MB	19		3	6 MB	
	2009		69 MB	1,033	600 KB	10			5 MB	
	2010		5 MB	72	153 KB	2		80	IS KB	
area	2011		2 MB	24				54	I9 KB	
	2012		2 MR	20				63	H KR	>
		t								ц >
	10 M -				[4 MB				Size
	1 M -									
Update	0.					1970				
	Modit Acce	Image: Second	Modify Year Tile Extens Presets Presets Image: Constraint of the extens of the exte	Modify Year Owner Auto Fit Access Year File Extension Auto Fit Presets Display Image: Size C Size C File Extension Auto Fit Drop Fitter Fields Here Size 2002 4 MB 2003 23 MB 2005 13 MB 2005 13 MB 2005 13 MB 2009 65 MB 2010 5 MB 2011 2 MB 2013 5 MB 2014 1 M 10 M 2011 2013 5 MB 2014 2 MB 2015 3 M3 C 2010 5 MB 2011 2 MB 2012 2 MB 2013 2 MB 2014 10 M 10 M 10 M 10 M 10 M 10 M 10 M	Image: Second	Modify Year Womer Auto Fit Data Columns Export Export Export Access Year File Extension Auto Fit Data Columns Display Export Export B Drop Fiter Fields Here Size Count Size 2002 4 MB 50 80 KB 2002 4 MB 50 80 KB 2003 121 KB 2004 100 MB 126 100 KB 2005 13 MB 2025 13 MB 2025 13 MB 2005 13 MB 2005 2005 13 MB 2025 13 KB 2005 2010 KB 100 KB 2005 13 KB 2005 2010 KB 10 MB 126 100 KB 2005 13 KB 100 KB 2005 13 KB 100 KB 2005 13 KB 100 KB 2009 69 MB 1,033 600 KB 2010 5 MB 72 153 KB 100 KB 10	Modify Year Worker Worker Auto Fit Data Columns Export Export Presets Display Export Export Export 0 Drop Fitzer Fields Here 1 1 Size C File Extension * 2002 4 MB 50 80 KB 2003 23 MB 303 121 KB 2004 10 MB 126 100 KB 2005 13 MB 205 143 KB 2006 24 MB 623 690 KB 2009 69 MB 1,033 600 KB 2010 5 MB 72 153 KB 2011 2 MB 24 1 10 M 12 MB 24 1 10 M 12 MB 24 1 10 M 10 MB 14 KB 2 2010 5 MB 72 153 KB 2 2011 2 MB 24 1 10 M 10 MB 14 MB 10 M 10 MB 14 MB	Modify Year Winer Winer Auto Fit Data Columns Export Generate Provide	Image: Source of the Extension in the Exten	Modify Year Worker Worker Autor it back Column Byort Generate Report Presets Dop Fiter Fields Here Export Sze Count Size Count 300 Dop Fiter Fields Here Sze Count Size Count Size Count 2002 4 MB 50 80 KB 2 480 KB 400 KB

7 In the pivot table, double-click one of the cells.

Τ	Count	File Name	File Extension	Size	Create Time	Modify Time	Access Time	Owner	Index	Parent Inc
	\\nvb-main	and salary	mp3	49,915	6/1/2004 1	4/3/1971 9	12/18/203	BUILTIN\A	898	^
Ì	\\nvb-main	campaign-g	mp3	47,850	5/30/2004	5/31/2009	5/16/2004	BUILTIN\A	3914	
	\\nvb-main	all.and.to	mp3	41,539	8/2/2004 1	12/31/200	1/2/2006 1	BUILTIN\A	6568	
	\\nvb-main	his_has_e	mp3	72,920	8/27/2004	9/13/2007	3/30/2008	BUILTIN\A	6999	
	\\nvb-main	have_food	avi	37,530	1/30/2004	2/21/2009	11/13/200	BUILTIN\A	9090	
	\\nvb-main	as cohort fi	avi	113,604	11/9/2004	11/21/200	11/22/200	BUILTIN\A	10357	
	\\nvb-main	scrawny int	mp3	46,591	3/27/2004	10/10/200	3/18/2006	BUILTIN\A	11102	
ľ	\\nvb-main	add.food.n	mp3	51,745	8/21/2004	8/21/2006	9/30/2003	BUILTIN\A	12426	
	\\nvb-main	what_she.avi	avi	89,882	8/25/2004	7/24/2006	5/20/2008	BUILTIN\A	13394	
	\\nvb-main	would tell p	mp3	34,794	12/6/2004	4/19/2006	2/1/2009 3	BUILTIN\A	14579	
	\\nvb-main	educate he	mp3	34,040	4/8/2004 7	2/15/2008	9/28/2006	BUILTIN\A	15424	
	\\nvb-main	me_she.mp3	mp3	57,594	9/7/2004 1	4/7/2007 1	1/24/2008	BUILTIN\A	16147	
	\\nvb-main	stepping.s	mp3	50,966	7/20/2004	2/15/2006	8/14/2006	BUILTIN\A	17118	
ľ	\\nvb-main	for-of-on-s	avi	67,578	10/20/200	2/1/2005 1	3/21/2007	BUILTIN\A	20936	
	\\nvb-main	glance.until	mp3	25,804	5/16/2004	5/18/2028	7/26/2006	BUILTIN\A	21557	
	\\nvb-main	to docs chl	mp3	43,040	7/20/2004	12/29/200	8/20/2008	BUILTIN\A	22743	
	\\nvb-main	thus_was	mp3	59,631	5/22/2004	4/25/2008	7/2/2008 6	BUILTIN\A	23413	
	\\nvb-main	he she ves	avi	10,433	9/14/2004	4/30/2007	6/23/2007	BUILTIN\A	24041	
	\\nvb-main	to to mines	avi	51,744	3/1/2004 6	6/26/2007	8/22/2007	BUILTIN A	24848	~

- 8 Expand the *Count* column to see the paths of all listed files.
- 9 Close the Scan Data Details report.

10 In the pivot table, from the *File Extension* tab that you added, click the associated filter icon; then from the drop-down menu, deselect *Show All*.

Drop Filter Fi	elds Here		
	File Extension 🔺		
		Show All)	
Cr ▲	Size	(Show All) / (Show Blanks)	
2002	4 MB		2
2003	23 MB	a told indicate for you up in	2
2004	10 MB	aac	1
2005	13 MB	able	2
2006	24 MB	aces	/ 13
2007	42 MB	OK Cancel	12
2008	65 MB		.:: 19

11 From the same drop-down menu, select two or three common media file types such as mp3, mov, and so forth; then click *OK*.

Observe the updated pivot table.

12 In the pivot table, highlight two rows and observe the change in the *Chart* region.

v				NFR Data Analy	tics - 2.5.0.8				A - 🗆 Ņ
ad from Load from File File File According to the file file file file file file file fil	ify Year ess Year File	Extension A Data	uto Fit E a Columns Piv	xport General ot Data Report	te				
Scan Data	Presets		Display	Export					
Pivot Fields #	Drop Filter F	ields Here							
rag Items to the PivotGrid		File Extension 🔺	٣						
		avi		mp3		Grand Total			
Dimensions	Cr ▲	Size	Count	Size	Count	Size	Count		
Access Time	2002	264 KB	5		6		11		
Create Time	2003	229 KB	4		11		15		
Modify Time	2004	985 KB	17		27		44		
File Name	2005	3 MB	38	2 MB	45		83		
0wner	2006	3 MB	105	2 MB	54		159		
	2007	2 MB 2 MB	35	4 MB 5 MB	85		120 163		
	2008	2 MB 2 MB	4/		60		99		
	2009	2 MB	15		5		20		
rag fields between areas below:	2010	135 KB	3		4		7		
Filter Area 🔠 Column Area	2012	64 KB	1		1		2		
File Extens 🔺 📍				0.40.100	_	210.10			
	Chart								д
		3 MB	[2 MB		21	4B	4 MB	avi Size
Row Area 🔰 Data Area	1 M								avi Count
Create Tim 🔺 Size	10 K								mp3 Size
Count			105	54			35	85	mp3 Coun
	100								
	0								
Defer Layout Update Update	Ť		2006				200	07	

- 13 Click the *Chart* tab and the middle arrow to expand the chart options.
- 14 Click the *Pie* option.
- 15 Click the Main tab.
- 16 Click Generate Report, then view the report.
- 17 Close the report.

18 Click Save to File to save the data locally.

Save to File saves only the data. In other words, the data from the scan. After it is saved locally, you can load the data into a pivot table later.

A Filtering

- Section A.1, "Filters Tab," on page 125
- Section A.2, "Single Entry Filter Conditions," on page 127
- Section A.3, "Multi-Condition Filtering," on page 129

Novell File Reporter enables you to utilize advanced filtering capabilities so that your reports include only the data you want. Novell File Reporter provides this advanced filtering capability for all File Data Reports, which include:

- Filename Extension Reports
- Filename Extension Detail Reports
- Owner Reports
- Owner Detail Reports
- Duplicate File Reports
- Duplicate File Detail Reports
- Date-Age Reports
- Date-Age Detail Reports

A.1 Filters Tab

- Section A.1.1, "And Drop-Down Menu and + Button," on page 126
- Section A.1.2, "Relative Date Filtering Parameters," on page 127

All filtering takes place in the Filters tab of the Report Definition Editor.

Figure A-1 Filters Tab

Report Definition Editor	- LWELABS Vol 1 Filename Extension Report	23
Name	LWELABS Vol 1 Filename Extension Report	
Unformatted		
Туре	Filename Extension Report	
Description	Report Definition created on 3/11/2015 10:47:27 AM by NVB\Administrator	
Target Paths NSM	Policies Filters	
And O	Relative Create Date Since 🔻 0 🗘 Days 💌 ago	
	Relative Modify Date Since 🔻 0 🗘 Days 🔻 ago	
	■ Relative Access Date Since ▼ 0 ↓ Days ▼ ago	
L	OK Cancel	
		:

You set filter parameters using the Boolean operators available through the *And* drop-down menu, and adding the search parameters with the+ button. Alternatively, you set date filters using the *Relative Date* filter parameters on the right-hand portion of the page.

You can filter according to size, dates, or both.

A.1.1 And Drop-Down Menu and + Button

The And drop-down menu is used to:

- Select Boolean operators for creating a search filter
- · Create additional groups or conditions
- Delete search filters, groups, or conditions

Figure A-2 And Drop-Down Menu

And	0
٩	And
0	Or
٩	Not And
0	Not Or
	Add Group
- T.	Add Condition
×	Remove

The + button next to the *And* drop-down menu is the used to create parameters for a search condition.

```
Figure A-3 Parameters for Filter
```

```
And O
File Size Equals <enter a value> O
```

A.1.2 Relative Date Filtering Parameters

Select the *Relative Create Date*, *Relative Modify Date*, and *Relative Access Date* check boxes to enable the corresponding drop-down menus and fields.

Figure A-4 Relative Date Filtering Parameters

🗹 Relative Create Date	Since	-	0 🌲	Days	-	ago
------------------------	-------	---	-----	------	---	-----

A.2 Single Entry Filter Conditions

- Section A.2.1, "Using the And Drop-Down Menus and + Buttons," on page 127
- Section A.2.2, "Using the Relative Date Filtering Settings," on page 128

You can use either the *And* drop-menu and + button, or the *Relative Date* filtering settings to create single entry filter conditions.

A.2.1 Using the And Drop-Down Menus and + Buttons

- 1 From the And drop-down menu, select a Boolean operator.
- 2 Click the + button to add an entry.
- 3 From the File Extension drop-down menu, select a Boolean operator.

```
And C

File Extension Begins with < enter a value > C

File Extension

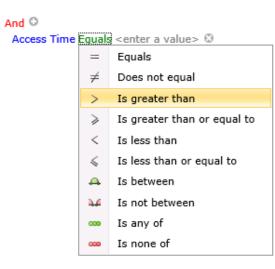
File Size

Create Time

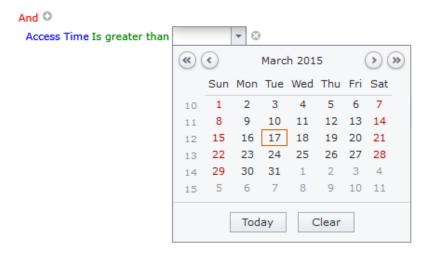
Modify Time

Access Time
```

4 From the Equals drop-down menu, select a Boolean operator.



5 In the *<enter a value>* field, enter a value.



File size values must be entered in bytes. For example, if your filtering parameters were for all files larger than 500 MB, you would enter 524288000 (500 x 1024 x1024). A more practical entry might be 500000000. Do not attempt to enter commas; they are placed automatically.

6 Click OK to save the settings in the Report Definition Editor.

Using the settings in this procedure as an example, when you generate a report, the data would include only files that have been accessed after March 17, 2015.

A.2.2 Using the Relative Date Filtering Settings

1 From the right-hand side of the Report Definition Editor, select a check box.

This enables the corresponding fields and drop-down menus.

- 2 From the first drop-down menu, select either Since or Before.
- 3 From the numeric field to the right, enter a numeric setting.
- 4 From the drop-down menu to the right, select from the options.



5 Click OK to save the settings in the Report Definition Editor.

Using the setting in this procedure as an example, when you generate a report, the data would include only files that have been accessed in the last six months.

A.3 Multi-Condition Filtering

You can set multi-conditioned filters by:

- Entering parameters for more than one entry using the And drop-down menu
- Specifying multiple Relative Date filtering settings
- Combining parameters specified through the And drop-down menu and the Relative Date filtering settings

IMPORTANT: Be aware that when you set multiple entries in a condition for filtering, that all entries must be met in order for Novell File Reporter to report on the file.

For example, in the example below, the files would appear in the report only if they were greater than 500 MB and had been accessed after April 1, 2012.

And ^O File Size Is greater than 524,288,000 ^O Access Time Is greater than 4/1/2012 ^O

B

Security Settings

- Section B.1, "Rights and Privileges on Scanned Storage," on page 131
- Section B.2, "Windows Firewall Requirements," on page 131
- Section B.3, "Local Security Authority Rights and Privileges," on page 132
- Section B.4, "Proxy Rights Group," on page 133
- Section B.5, "Windows Clustering through Proxy Agents," on page 133

B.1 Rights and Privileges on Scanned Storage

Novell File Reporter must have the proper rights set on each network volume or share that it scans. In addition, certain privileges must be granted to Novell File Reporter on the machine hosting the NFR Engine and on each server where storage is managed.

B.1.1 Granting Rights

Every Windows network share to be scanned by Novell File Reporter must have proper rights assigned to the Novell File Reporter proxy rights group.

- 1 As an Active Directory domain administrator, authenticate to the server where the storage is located.
- **2** Grant Read Only sharing privileges to the proxy rights group for each share that Novell File Reporter will scan.

B.2 Windows Firewall Requirements

The Windows Firewall has different default configurations on Windows Server 2003, Windows Server 2008, Windows Server 2008 R2, and Windows Server 2012. The following Windows Firewall exceptions are configured during component installations and upgrades:

- The NFR Engine must remain permitted to make outbound connections.
- The NFR Engine must remain able to listen on port 3035.

This is the default port choice that is presented during the installation and configuration.

- The NFR Agent must remain permitted to make outbound connections.
- The NFR Agent must remain able to listen on port 3037.

This is the default port choice that is presented during the installation and configuration.

 On each server running Windows Server 2008 or later and hosting storage that you wish to collect quota via proxy, you must enable the Remote File Server Resource Manager Management - FSRM Service (RPC-In) firewall rule.

On servers running Windows Server 2008, the firewall settings are applicable to each of three different categories of network interfaces that are identified based upon their IP address range (public IP addresses versus private IP addresses) and whether or not the computer is a member of a domain.

Depending upon the specific environment where Novell File Reporter is installed, the firewall might need to have these exceptions enabled in one or more of the following categories:

- Domain
- Private
- Public

B.3 Local Security Authority Rights and Privileges

Local Security Authority (LSA) rights and privileges are assigned to accounts or groups, and they determine how those accounts or group members may access the system. The rights and privileges are modified through secpol.msc or Local Security Policy from:

Start > Administrative Tools > Local Security Policy

1 In Local Security Policy, go to the following:

Security Settings > Local Policies > User Rights Assignments

- 2 In the table of *Privileges* and the objects to which they apply located on the right, verify that the Novell File Reporter proxy rights group has the following privileges:
 - Access this computer from the network
 - Act as part of the operating system
 - · Back up files and directories
 - Bypass traverse checking
 - Create a token object
 - Create symbolic links
 - Impersonate a client after authentication
 - Log on as a batch job
 - Manage auditing and security log
 - Restore files and directories
 - Take ownership of files or other objects

IMPORTANT: The NFR Engine and NFR Agent components attempt to repair these privileges on startup on the servers on which they're installed. Absence of some of these privileges causes the NFR Engine and NFR Agent components to not function properly. Removal of these rights and privileges via Group Policy Object (GPO) results in the NFR Engine and NFR Agent not functioning properly.

If GPO conflicts are detected, set up an additional GPO with just the privileges listed above and assign it to the proxy rights group for the appropriate servers.

IMPORTANT: Some people assume that assigning these rights and privileges to the proxy rights group is sufficient so that they can thus remove the proxy rights group as a member of built-in Administrators. This is incorrect. In order for the NFR Agent to collect quota information on Windows, the Novell File Reporter proxy rights group must be a member of built-in Administrators.

B.4 Proxy Rights Group

By default, whenever any of the components of Novell File Reporter are installed on a server in a domain, the proxy rights universal security group is granted membership in that server's built-in Administrators security group. This grants Novell File Reporter certain permissions needed in addition to the LSA privileges required for successful scanning of file system metadata.

On other servers in the domain that are hosting storage to be scanned by Novell File Reporter through a proxy agent, you must also grant the proxy rights group membership in the built-in Administrators group. This is necessary because there are many actions performed that require membership in this group regardless of the LSA privileges that the user has been granted—in particular, reading directory quotas.

Additionally, the other servers in the domain that are not hosting components, but are hosting storage to be scanned, must have the necessary rights and privileges, along with some file share and NTFS permissions. The easiest way of granting these rights and privileges is through Group Policy objects in Active Directory.

As explained previously, at a minimum, you must grant Read Only sharing and security privileges to the proxy rights group for each share that Novell File Reporter will scan.

B.5 Windows Clustering through Proxy Agents

Novell File Reporter supports clustering of Windows Server 2003 and later through proxy agents. Configuring a cluster to be scanned through a proxy agent is similar to configuring an individual server to be scanned by a proxy agent. In particular, the Novell File Reporter proxy rights group must be granted membership in the built-in Administrators group and it must also be granted all of the LSA rights and privileges that are granted at each cluster node. When this is done, the folder share permissions and NTFS permissions that are required must be granted to the proxy rights group for all shares and NTFS volumes that will be scanned by Novell File Reporter.

C Log File Locations

When troubleshooting Novell File Reporter, you might need to refer to the NFR Engine or NFR Agent log files. Procedures for finding each are provided below.

- Section C.1, "NFR Engine Log File," on page 135
- Section C.2, "Windows Agent Log File," on page 135
- Section C.3, "Linux Agent Log File," on page 135

C.1 NFR Engine Log File

- 1 At the machine hosting the NFR Engine, launch Windows Explorer.
- 2 In the Address Bar, type %programdata% and press Enter.
- 3 Use the following path to locate the log file:

Novell\File Reporter\Engine\Log

C.2 Windows Agent Log File

- 1 At the machine hosting the Windows NFR Agent, launch Windows Explorer.
- 2 In the Address Bar, type %programdata% and press Enter.
- 3 Use the following path to locate the log file: Novell\File Reporter\Agent\Log

C.3 Linux Agent Log File

- 1 At the server hosting the Linux NFR Agent, launch a terminal session.
- 2 Use the following path to locate the log file:

/var/opt/novell/filereporter/agent/log

NFR Agent Scan Capabilities

- Section D.1, "Server Platform and NAS Device Support," on page 137
- Section D.2, "File System Metadata," on page 138
- Section D.3, "Security Scans Active Directory File Systems," on page 138
- Section D.4, "Security Scans eDirectory File Systems," on page 139
- Section D.5, "Volume Free Space Scans," on page 139
- Section D.6, "Other Microsoft Supported Features," on page 140
- Section D.7, "Current Limitations," on page 140

D.1 Server Platform and NAS Device Support

Server Platform	File Reporter 2.0.0	File Reporter 2.0.1	File Reporter 2.0.2, 2.5, and 2.6
NetWare 6.5 SP8	×	×	×
OES Linux 2 SP3, SP4	¥	×	×
OES Linux 11 RTM, SP1	×	×	×
Windows Server 2003	×	×	×
Windows Server 2008	¥	×	×
Windows Server 2008 R2	¥	×	×
Windows Server 2012	¥	×	×
Windows Server 2012 R2	×	×	×

 Table D-1
 Server Support Matrix

 Table D-2
 NAS Device Support for Windows Environments

NAS Device	File Reporter 2.0.0	File Reporter 2.0.1	File Reporter 2.0.2, 2.5, and 2.6
NetApp filer (7 mode or Cluster mode)	*	×	×
EMC Celerra	v	*	×
Isilon	×	×	×

D.2 File System Metadata

The following table lists file system scanning capabilities of Novell File Reporter.

File System Metadata	Windows ReFS	Novell NSS	Novell TFS	NCP Volumes
Full Path	*	¥	*	×
File Name	~	¥	×	×
File Name Extension	×	¥	×	×
File Size	×	¥	×	×
File Sparse Size	×	×	×	×
File Compressed Size	×	X 1	X ¹	×
File Size on Disk ²	×	¥	×	×
Create Time	*	¥	~	×
Modify Time ³	×	¥	×	×
Access Time ³	×	¥	×	×
Directory Quota	×	¥	~	×
Owner	*	¥	×	¥

Table D-3 File System Metadata Support

1. Even though NSS volumes support compression, they only report compression metrics at the volume level, not on a per-file basis.

- 2. File size-on-disk calculations are currently performed using an assumed 4 KB block size.
- 3. Access and Modify time stamps for directories are not consistently defined across file system types. These time stamps should only be considered for file entries.
- 4. Directory or Folder Quotas for Windows NTFS volumes are only available on Windows 2008 R2 and later servers, and only if the File Server Resource Manager (FSRM) Role has been installed.

D.3 Security Scans — Active Directory File Systems

Table D-4 Permission Scan Capabilities for Active Directory Environments

Windows Component	Supported Notes
Share Permissions	×

Windows Component	Supported	Notes
Security Descriptors	*	Includes the ACLs and ACEs, owner, and all ACE and security descriptor flags. However, only security descriptors for folders are currently collected. Additionally, deny ACEs are not factored into calculations for Permission by Identity or Permission by Path reports.
Universal Security Groups	×	
Global Security Groups	×	
Local Security Groups	×	The local security groups themselves are collected, but group memberships for local security groups are not currently processed.
Nested Group Memberships	*	Nested group membership is collected as a flat list of all intermediate and leaf groups, users, and other security principals. The hierarchy of group nesting is not currently preserved.
Primary Groups	×	
Local Security Authority (LSA) Privileges	×	LSA privileges are not currently collected.

D.4 Security Scans — eDirectory File Systems

Table D-5

Novell Component	Supported	Notes
Trustees	×	Only trustees for directories are currently collected.
Inherited Rights Masks (IRMs)	0	These are fully scanned and collected, but reporting does not calculate them for Permissions by Path or Permissions by Identity reports.
Security Equivalence	*	For calculation of effective rights, security equivalence is collected for all objects that are direct trustees of any file system folder entry, as well as implicit trustees.
Rights Inherited from eDirectory	*	All users in eDirectory that have Write or Supervisor access to the server object automatically have Supervisor rights to all volumes on that server.
eDirectory Inherited Rights Filters (IRFs)	×	IRFs are not currently collected nor reported.

D.5 Volume Free Space Scans

- Free space for NSS volumes is currently calculated as volume free space + purgeable space.
- Used space for NSS volumes is currently calculated as total size calculated free space. This
 means that the volume compressed size is included along with actual space used.

 For NSS volumes that are oversubscribed on a shared NSS Pool, the volume total size of each volume in the pool will change as data is added or removed from other volumes in the pool. This is known behavior for oversubscribed volumes.

Oversubscribed NSS volumes are defined as two or more NSS volumes that are set to grow to the size of a shared NSS Pool.

D.6 Other Microsoft Supported Features

- Multiple domains in a single forest
- Distribute File System (DFS) running in domain-based mode

D.7 Current Limitations

The following are scan limitations of Novell File Reporter 2.6:

- Microsoft Environments
 - No scanning for workstations
 - No scanning for standalone servers
 - No support for Distributed File System (DFS) in standalone mode
 - No support for Single Label Domains
 - No support for FAT or FAT32 file systems
 - No support for Trusted Forests
- Novell Environments
 - NetWare Traditional File System (TFS) volumes are not supported.

Glossary

Baseline Scan: A scan that you save as a reference for a comparison with another scan via a Historical Comparison report. You can have one File System Baseline scan and one Permissions Baseline scan for each storage resource.

Built-in Reports: With the exception of Custom Query reports, all of the report types that you can generate through the options displayed on the Add Report Definition page.

Current Scan: The most recent scan of a storage resource.

Custom Query Report: Custom reports generated through SQL commands to the database. Custom Query Reports can be generated both from the Novell File Reporter browser-based administrative interface and from the Report Designer client tool.

DeployAgents Tool: A tool that is used for remotely installing and configuring NFR Agents.

Historic Comparison Report: File system or permissions reports that specify the differences between two similar scan types of the same target system. Historic Comparison reports can compare Baseline scans to Previous scans, Baseline scans to Current scans, and Previous scans to Current scans.

Identity System: Refers to the supported directory services, which are eDirectory and Active Directory. Novell File Reporter can report on storage resources that reside in either identity system.

NFR Agent: Compact programs that can run on Novell Open Enterprise Server and Microsoft Windows Server hosts. NFR Agents can examine and report on Novell NSS and Windows NTFS file systems. Additionally, NFR Agents examine and report on file system security, including folder rights, trustee assignments, and permissions.

NFR Engine: The component that runs Novell File Reporter. It can be hosted on a Microsoft Windows Server 2008 R2 or 2012.

The NFR Engine does the following:

- Stores scans in the database
- · Schedules the scans that the NFR Agents conduct
- Processes the scans and compiles them for inclusion in a report
- · Provides the report information to the user interface
- Determines that a condition has been met to start a triggered report
- Runs scheduled reports
- Monitors how many agents are online
- · Sends notifications that Novell File Reporter has completed a scan or generated a report

Novell Storage Manager: A network file management system that utilizes directory services enacted policies to automatically manage user and group network storage. When installed and configured in the same network, Novell File Reporter can report on Novell Storage Manager policies.

PostgreSQL Database: One of the supported databases developed by the PostgreSQL Global Development Group. Novell File Reporter includes a version of PostgreSQL that you can choose to install.

Preview Report: A report generated through the *Generate Preview* option. Might also be referred to as "viewing the report in Preview mode."

Previous Scan: When the *Retain existing Previous scan* option is selected in the Scan Policy Editor, the status of the Current scan becomes the Previous scan. You can then use the Previous scan as a reference for a Historic Comparison report. There is only one File System Previous scan and one Permissions Previous scan for each storage resource.

Proxy Agent: An NFR Agent that performs agent services on a storage resource through a proxy association. NAS devices, clustered configurations, and NetWare servers require proxy agents.

Proxy Target: Servers, clusters, and NAS devices that are not hosting an NFR agent but are being scanned through a proxy agent.

Report: The result of a report request specified through the report definition. Reports are first presented on-screen in either Preview or Stored mode. You can save reports in a number of different formats.

Scan: Comprehensive file information pertaining to a storage resource at a specific time. Information from scans is the means of generating reports.

Scan Policy: Specifies how and where the scan is conducted. All scans are managed through a scan policy.

Scan Target: The storage resource on the network that can be scanned by Novell File Reporter.

SQL Server: One of the supported databases developed and distributed by Microsoft. Novell File Reporter supports SQL Server 2012.

Storage resource: A resource within the network environment that Novell File Reporter monitors and reports on. Depending on the environment in which Novell File Reporter is deployed, a storage resource can be a server volume, a Windows server share, a Novell Storage Manager policy, or a network folder path.

Stored Report: A report that is stored in the Reports folder of the NFR Engine. By default, a stored report is only stored for 30 days, but this setting can be adjusted through the Stored Reports Configuration page.

Unformatted Report: Report data generated as "raw" text rather than formatted and presented in a formatted report. In some instances, having an unformatted report might be useful for doing extensive sorting and filtering of the report data through a product such as Microsoft Excel.

Web Application: The Novell File Reporter administrative interface that runs on top of Microsoft IIS.

Documentation Updates

This section contains information about documentation content changes that were made in this *Novell File Reporter 2.6 Administration Guide* after the initial release of Novell File Reporter 2.0. The changes are listed according to the date they were published.

The documentation for this product is provided on the Web in two formats: HTML and PDF. The HTML and PDF documentation are both kept up-to-date with the changes listed in this section.

If you need to know whether a copy of the PDF documentation that you are using is the most recent, the PDF document includes a publication date on the title page.

The documentation was updated on the following dates:

F.1 August 5, 2015

Updates were made to the following sections:

Location	Update Description
Section 2.3.3, "NFR Agents," on page 15.	Removed information on support for NetWare Traditional file system support.
Table D-3 on page 138.	Removed information on support for NetWare Traditional file system support.
Section D.7, "Current Limitations," on page 140.	Removed information on support for NetWare Traditional file system support.
Appendix E, "Glossary," on page 141.	Removed information on support for NetWare Traditional file system support.

F.2 April 27, 2015

Updates were made to the following sections:

Location	Update Description
Section 5.1.1, "Scan Retention," on page 40.	New section.
Section 5.4, "Creating Scan Policies," on page 42.	Information on Previous scans.
Section 5.5, "Establishing a Baseline Scan," on page 46.	New section.
Section 5.6, "Clearing a Baseline Scan," on page 47.	New section.
Section 6.7, "Historic Comparison Reports," on page 79.	New section.
Section 6.15, "Copying a Report Definition," on page 91.	New section.

Location

Appendix E, "Glossary," on page 141.

New entries.

F.3 October 7, 2014

Updates were made to the following sections:

Location	Update Description
"Custom Queries" on page 18.	New section.
Section 5.14, "Retrying Failed Scans," on page 50.	New section.
Section 6.9, "Custom Query Reports," on page 85.	New section.
Chapter 8, "Using the Client Tools," on page 99.	New section.
Chapter 9, "Data Analytic Tools," on page 115.	New section.

F.4 February 18, 2014

Updates were made to the following sections:

Location	Update Description
Various.	Updated references to database references to include information specific to Microsoft SQL Server 2012.
Section 7.3, "Considerations for Reporting on NAS Devices," on page 94.	Updated this section to include new procedures for EMC Isilon and other NAS devices.
Section 7.7, "Changing the Report Data Font," on page 96.	Expanded this section.
Appendix D, "NFR Agent Scan Capabilities," on page 137.	New section.

F.5 November 26, 2013

Updates were made to the following sections:

Location	Update Description
Section 7.7, "Changing the Report Data Font," on page 96.	New section.

F.6 April 25, 2013

Updates were made to the following sections:

Location	Update Description
Section 3.3.2, "Configuring the Web Interface," on page 24.	New procedures.
Appendix A, "Filtering," on page 125.	New section.
Appendix B, "Security Settings," on page 131.	New section.
Appendix C, "Log File Locations," on page 135.	New section.

F.7 February 13, 2013

Updates were made to the following sections:

Location	Update Description
Section 3.1, "Supported Browsers," on page 21.	Removed Internet Explorer 8 from the list of supported browsers.
Section 5.4, "Creating Scan Policies," on page 42.	Specified that a target path cannot be included in more than one scan policy of the same type.
Section 6.6.1, "Generating a Filename Extension Report," on page 71.	Inserted a note on the maximum length of file extensions.