

Best Practices Guide

Simplifying Filr Deployments with File Reporter and Storage Manager

October 5, 2015

Novell.



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.
www.condreycorp.com

Trademarks

The Condrey Corporation "C's" logo and Novell Kanaka for Mac are trademarks of Condrey Corporation in the U.S. and other jurisdictions. Mac, and Mac OS X are trademarks or registered trademarks of Apple, Inc. in the U.S. and other countries. Novell, NetWare, eDirectory, and SUSE are trademarks or registered trademarks of Novell, Inc. in the U.S. and other countries. Linux is a trademark or registered trademark of Linus Torvalds in the U.S. and other countries.

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

Third-Party Materials

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

Contents

About This Guide	5
1 Introduction	7
2 Prerequisite Tasks to Perform Using File Reporter	9
2.1 Identify Irrelevant Files	9
2.2 Ensure that Access Rights are Correct	9
2.3 Remove Sensitive Files from Filr-Enabled Locations.	10
3 Prerequisite Tasks to Perform Using Storage Manager	11
3.1 Standardize on a Single File Structure Syntax	11
3.1.1 Standardizing All Home Directory Syntaxes	11
3.1.2 Standardizing All Group Directory Syntaxes	12
3.2 Ensure that Rights are Correct.	12
3.2.1 Ensure or Correct Home Directory Rights	12
3.2.2 Ensure or Correct Group Directory Rights	12
3.3 Ensure that All Attributes are Correct.	12
3.3.1 Ensure or Correct Home Directory Attributes	13
3.3.2 Ensure or Correct Group Directory Attributes	13
3.4 Move Irrelevant Files	13
3.5 Other Preparatory Tasks Novell Storage Manager can Perform	14

About This Guide

This guide is written to provide network administrators best practices for preparing their Novell or Microsoft networks for running Novell Filr using Novell File Reporter and Novell Storage Manager.

- ♦ [Chapter 1, “Introduction,” on page 7](#)
- ♦ [Chapter 2, “Prerequisite Tasks to Perform Using File Reporter,” on page 9](#)
- ♦ [Chapter 3, “Prerequisite Tasks to Perform Using Storage Manager,” on page 11](#)

Audience

This guide is intended for network administrators tasked with enabling network areas for remote access and sharing using Filr.

Feedback

We want to hear your comments and suggestions about this guide. 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 this *Best Practices Guide*, visit the [Novell Filr Documentation website \(https://www.novell.com/documentation/novell-filr-1-2/\)](https://www.novell.com/documentation/novell-filr-1-2/).

Additional Documentation

This guide references product capabilities of both Novell File Reporter and Storage Manager. It does not provide procedural information. For procedures pertaining to Novell File Reporter, refer to the:

- ♦ [Novell File Reporter 2.6 Administration Guide \(https://www.novell.com/documentation/filereporter2/file_reporter_2_6_admin/data/bookinfo.html\)](https://www.novell.com/documentation/filereporter2/file_reporter_2_6_admin/data/bookinfo.html)

For procedures pertaining to Novell Storage Manager, refer to the applicable guide for your environment:

- ♦ [Novell Storage Manager 4.0 for eDirectory Administration Guide \(https://www.novell.com/documentation/storagemanager4/storagemanager_edir_admin/data/a20gkue.html\)](https://www.novell.com/documentation/storagemanager4/storagemanager_edir_admin/data/a20gkue.html)
- ♦ [Novell Storage Manager 4.1 for Active Directory Administration Guide \(https://www.novell.com/documentation/storagemanager4/storagemanager_ad_admin/data/a20gkue.html\)](https://www.novell.com/documentation/storagemanager4/storagemanager_ad_admin/data/a20gkue.html)

1 Introduction

Since the introduction of Novell Filr in April 2013, we've learned certain situations make deploying and enabling Filr challenging. Most enterprise networks are not optimally designed for you to simply deploy the product. In most cases, you will need to perform a variety of prerequisite tasks including identifying and moving irrelevant files, creating directories, adjusting access rights and more. Fortunately, Novell has its own enterprise file reporting and file management products that can greatly simplify these prerequisite tasks.

This document discusses some best practices for Filr deployments using File Reporter and Storage Manager.

2 Prerequisite Tasks to Perform Using File Reporter

This section introduces best practices for preparing your network for Filr using Novell File Reporter.

- ♦ [Section 2.1, “Identify Irrelevant Files,” on page 9](#)
- ♦ [Section 2.2, “Ensure that Access Rights are Correct,” on page 9](#)
- ♦ [Section 2.3, “Remove Sensitive Files from Filr-Enabled Locations,” on page 10](#)

2.1 Identify Irrelevant Files

Before you can access and share files remotely using Filr, Filr must first create a database index of all of the files located on each volume or directory you want to enable for Filr access and sharing. Depending on the amount of files in each of these designated Filr-enabled locations, this can be an extremely long process.

As a best practice, your Filr-enabled locations on the network should include only relevant files, meaning files that have been created, modified, or accessed in, for example, the last 12 months.

- 1 Using File Reporter, identify your irrelevant files by generating a Date-Age report that includes each network location you want to enable for Filr remote access and sharing.

The Date-Age report presents file count data according to when files were created, last accessed, or last modified.

- 2 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.

NOTE: After you have identified these files, you can use Storage Manager to “groom” these files automatically to a different storage location. For more information, see [Section 3.4, “Move Irrelevant Files,” on page 13](#).

2.2 Ensure that Access Rights are Correct

Filr utilizes the security and access controls of the NSS or NTFS network file system where it is deployed. In other words, if your network file system is not secured so that only the right people have the right access to the right places, Filr can dramatically expose these security shortcomings.

- 1 Using File Reporter, use any of the following applicable Permissions reports on each network location you want to enable for Filr remote access and sharing:

Assigned NCP Permissions: Assigned Novell file system rights and trustee assignments for all directories and subdirectories from a specified path.

Assigned NTFS Permissions: Assigned Microsoft file system user permissions for all folders and subfolders from a specified path.

Permissions by Path: Effective rights to the Novell file system or the permissions to the Microsoft file system according to the paths you specify.

Permissions by Identity: Effective rights to the Novell file system or the permissions to the Microsoft file system according to the identities you specify.

- 2 Based on the findings of the reports, make any needed adjustments in permissions.

NOTE: You can ensure that home directory and group directory rights are correct using Storage Manager. See [Section 3.2.1, “Ensure or Correct Home Directory Rights,”](#) on page 12 and [Section 3.2.2, “Ensure or Correct Group Directory Rights,”](#) on page 12.

2.3 Remove Sensitive Files from Filr-Enabled Locations

With any organization, there are certain sensitive files that should remain exclusively on premises. For example, the minutes from a board or directors meeting or a proposed employee benefits plan for the next fiscal year might be considered documents you would not want the risk of being accessed and viewed remotely.

- 1 Using File Reporter, identify sensitive files located on network locations you want to enable for remote access and sharing by using any of the following report types:
 - ◆ Summary report
 - ◆ Filename Extension report
 - ◆ Filename Extension Detail report
 - ◆ Owner report
 - ◆ Owner Detail report
 - ◆ Custom Query report
- 2 Based on the findings of the reports, remove all sensitive files you don't want made available for remote access and sharing through Filr.

3 Prerequisite Tasks to Perform Using Storage Manager

This section introduces best practices for preparing your network for Filr using Novell Storage Manager.

- ♦ [Section 3.1, “Standardize on a Single File Structure Syntax,” on page 11](#)
- ♦ [Section 3.2, “Ensure that Rights are Correct,” on page 12](#)
- ♦ [Section 3.3, “Ensure that All Attributes are Correct,” on page 12](#)
- ♦ [Section 3.4, “Move Irrelevant Files,” on page 13](#)
- ♦ [Section 3.5, “Other Preparatory Tasks Novell Storage Manager can Perform,” on page 14](#)

3.1 Standardize on a Single File Structure Syntax

- ♦ [Section 3.1.1, “Standardizing All Home Directory Syntaxes,” on page 11](#)
- ♦ [Section 3.1.2, “Standardizing All Group Directory Syntaxes,” on page 12](#)

When you deploy Filr, it creates a Net Folder server for each home directory syntax type. For example, if home directory attributes in an organization vary among the following syntaxes, Filr creates a Net Folder server for each type:

- ♦ *servername\share\subfolder\home_folder*
- ♦ *DNS_name\share\subfolder\home_folder*
- ♦ *IP_address\share\subfolder\home_folder*

You would then need to configure Filr for each of these syntaxes.

A much better approach is to standardize on one syntax type. This reduces the number of Net Folder servers Filr has to create and manage. This approach also cuts the time you need to spend configuring the different types of syntaxes.

3.1.1 Standardizing All Home Directory Syntaxes

Using Novell Storage Manager, you can standardize all home directory file structure syntaxes by doing the following:

- 1 Run a Consistency Check report on the network storage to determine settings inconsistencies.
- 2 Create a Home Folder policy.
- 3 Establish the managed path (the correct home directory attribute syntax) within the policy.
- 4 Perform an Assign Managed Path Management Action.

3.1.2 Standardizing All Group Directory Syntaxes

You can also standardize all group directory (referred to as “collaborative storage” with Novell Storage Manager) file structure syntaxes by doing the following:

- 1 Use the Consistency Check report that you ran previously to determine inconsistencies in group storage directories.
- 2 Create a Collaborative Storage policy.
- 3 Establish the managed path with the policy.
- 4 Perform an Assigned Managed Path Group Action.
- 5 Establish the managed path within the policy.

3.2 Ensure that Rights are Correct

For any number of reasons, user home directories tend to vary in their rights assignments. Varied rights assignments are also common among group storage areas. Improper rights settings can affect capabilities within Filr. For example, if a home directory has only Read and File Scan rights, a user won't be able to modify and save files. You should therefore ensure the rights to these directories are correct.

- ♦ [Section 3.2.1, “Ensure or Correct Home Directory Rights,” on page 12](#)
- ♦ [Section 3.2.2, “Ensure or Correct Group Directory Rights,” on page 12](#)

3.2.1 Ensure or Correct Home Directory Rights

You can ensure or correct home directory rights by doing the following:

- 1 Use the Consistency Check report you ran previously to examine home directory file rights. If the rights are not correct, follow the steps below.
- 2 Establish the rights settings for all home directories in the Home Folder policy.
- 3 Perform an Apply Rights Management Action.

3.2.2 Ensure or Correct Group Directory Rights

You can ensure or correct group directory rights by doing the following:

- 1 Use the Consistency Check report that you ran previously to examine group directory file rights. If the rights are not correct, follow the steps below.
- 2 Establish the rights settings for all home directories in the Collaborative Storage policy.
- 3 Perform an Apply Rights Management Action.

3.3 Ensure that All Attributes are Correct

Similar to rights settings, you should ensure that all home directory and group directory attributes are correct. If attributes are not correct, files and folders can become hidden and restricted from any modification.

- ♦ [Section 3.3.1, “Ensure or Correct Home Directory Attributes,” on page 13](#)
- ♦ [Section 3.3.2, “Ensure or Correct Group Directory Attributes,” on page 13](#)

3.3.1 Ensure or Correct Home Directory Attributes

You can ensure or correct home directory attributes by doing the following:

- 1 Use the Consistency Check report you ran previously to examine home directory attributes. If the attributes are not correct, follow the steps below.
- 2 Establish the attributes settings for all home directories in the Home Folder policy.
- 3 Perform an Apply Attributes Management Action.

3.3.2 Ensure or Correct Group Directory Attributes

You can ensure or correct group directory attributes by doing the following:

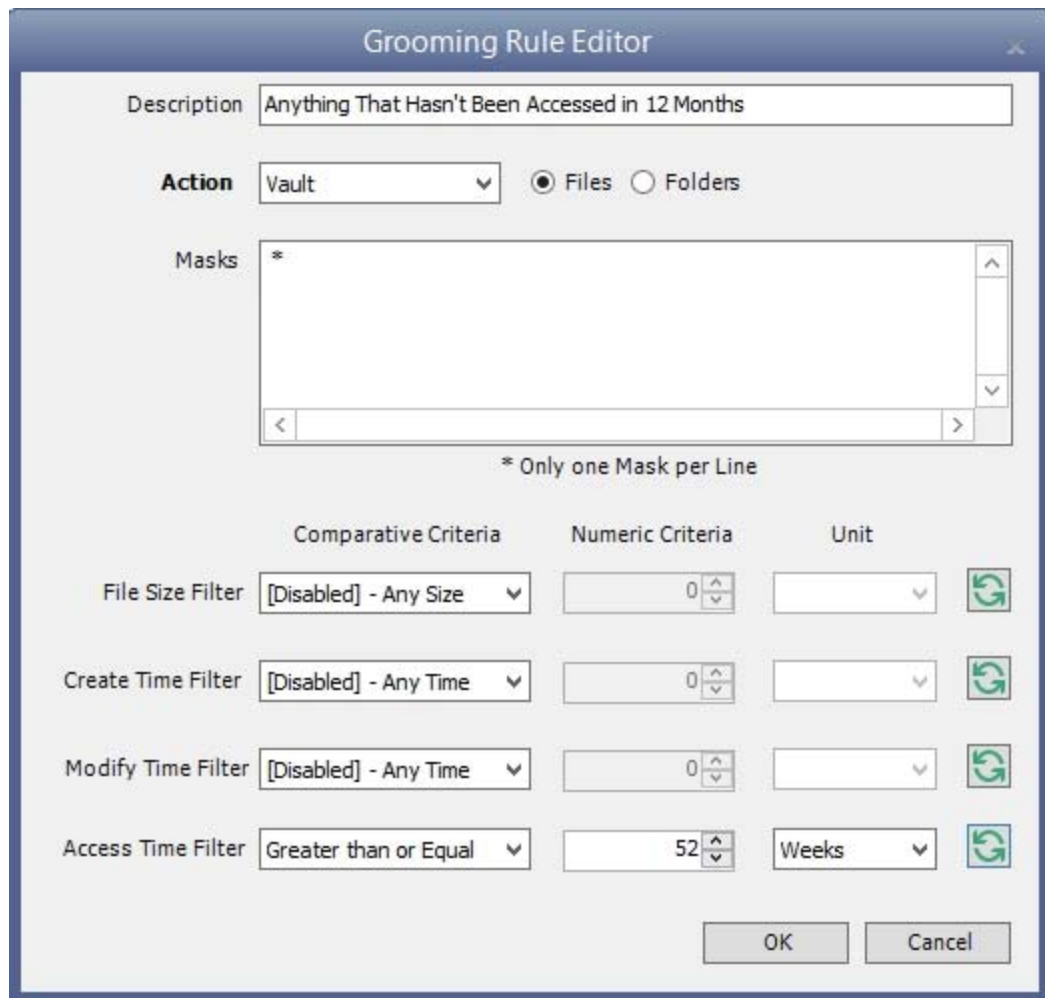
- 1 Use the Consistency Check report you ran previously to examine group directory attributes. If the attributes are not correct, follow the steps below.
- 2 Establish the attributes settings for all home directories in the Collaborative Storage policy.
- 3 Perform an Apply Attributes Management Action.

3.4 Move Irrelevant Files

Once you have identified the irrelevant files you want removed from Filr-enabled locations on the network, you can have Storage Manager automatically move them to other locations on the network through the File Grooming capabilities of a Storage Manager policy.

- 1 In the policy managing the Filr-enabled storage location, set a Grooming Rule that moves files that have not been accessed for a set amount of time.

A sample Grooming Rule is shown below.



2 Perform a Groom Management Action to enact the file grooming process.

3.5 Other Preparatory Tasks Novell Storage Manager can Perform

You might need to adjust the network file system structure to successfully deploy Filr. In addition to the Best Practices discussed in this guide, Novell Storage Manager can automate these file structure adjustments. Typically, these can include any of the following tasks:

- ◆ Creating home and group directories
- ◆ Structuring subdirectories within the home and group directories
- ◆ Provisioning specific documents within a directory or subdirectory
- ◆ Establishing disk quota for home and group directories
- ◆ Grooming and vaulting files from directories based on file type or when it was last accessed
- ◆ Moving directories
- ◆ Load balancing storage
- ◆ Archiving files
- ◆ Deleting files