

Hands-on Guide for Windows

Novell Filr 1.0.1

September 2013

Novell.

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About This Quick Start Guide

This guide steps you through the following:

1. Setting up Novell Filr with test users and data on a Windows/Active Directory network.
2. Briefly exploring Novell Filr administration and user functionality.

A lab network is the assumed target environment, but the instructions can be adapted for installing Filr on a production network if desired.

- ♦ [Chapter 1, "Small Versus Large Filr Deployments," on page 7](#)
- ♦ [Chapter 2, "Hands-on System Requirements," on page 9](#)
- ♦ [Chapter 3, "Downloading Filr Software," on page 13](#)
- ♦ [Chapter 4, "Creating Test Users," on page 17](#)
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- ♦ [Chapter 8, "Administering Filr," on page 77](#)
- ♦ [Chapter 9, "Using Filr," on page 101](#)

Audience

This guide is for administrators of Windows/Active Directory networks who want to evaluate Novell Filr.

Feedback

We want to hear your comments and suggestions about this guide and the other Filr documentation. Please use the User Comments feature at the bottom of each page of the online documentation.

Documentation Updates

For the most recent version of this guide, access [it on the Web \(http://www.novell.com/documentation/novell-filr1/filr1_hands-on_w/data/bookinfo.html\)](http://www.novell.com/documentation/novell-filr1/filr1_hands-on_w/data/bookinfo.html).

Additional Documentation

For additional Novell Filr documentation, see the [Filr Documentation Web page \(http://www.novell.com/documentation/novell-filr1\)](http://www.novell.com/documentation/novell-filr1).

1 Small Versus Large Filr Deployments

Novell Filr can be deployed in the following ways:

- ♦ **As a Small Deployment:** A single, multi-purpose Filr appliance
- ♦ **As a Large Deployment:** At least three separate, single-purpose appliances (Filr, Filrsearch, and MySQL)

Either deployment type works for the exercises in this guide, but production environments require large deployments, and many production workloads require [clustered Filr appliances](#).

Your First Hands-on Task: Choose a Deployment Type

- 1 Using the information in this section, choose a deployment type for the hands-on exercises that matches your goals for learning about Filr.

For example, if you only have a casual interest in learning about Filr and want to invest the minimum time and effort required, a small deployment is the best fit. On the other hand, if you think you might want to deploy Filr inside your organization, and you want to investigate what that will require, you should probably consider a large deployment.

- ♦ **Comparison of Deployment Types:** The following table summarizes the main differences between small and large Filr deployments.

| Small Deployment | Large Deployment |
|---|--|
| ♦ Does not support production environments | ♦ Supports production environments |
| ♦ Maximum capacity is <ul style="list-style-type: none">♦ 300 active users♦ 2,500 folders♦ 50,000 files | ♦ Supports more than <ul style="list-style-type: none">♦ 300 active users♦ 2,500 folders♦ 50,000 files |
| ♦ Cannot be upgraded to a large deployment, and cannot “grow” by leveraging shared, external storage | ♦ If shared storage is configured as part of the initial configuration, a large deployment can “grow” to include multiple, clustered Filr appliances . IMPORTANT: Shared storage is not covered in this guide, but a link to that documentation is provided. |
| ♦ Requires downloading two files: the Filr appliance and the Hands-on_Filr-windows.zip file | ♦ Requires downloading four files: the Filr, Filrsearch, and MySQL appliances, and the Hands-on_Filr-windows.zip file |
| ♦ Offers a streamlined, quick installation and configuration | ♦ Requires a more involved installation and configuration |

| Small Deployment | Large Deployment |
|---|---|
| ♦ Uses only one IP address | ♦ Requires three IP addresses |
| ♦ Cannot access an existing MySQL database (all functionality is contained within the single appliance) | ♦ Can use an existing MySQL database in place of the MySQL appliance provided with Filr |

- ♦ **Both Types Are Covered in This Guide:** Where different procedures are required, section titles begin with “Small Deployment” or “Large Deployment.”

Most of the sections apply to both deployment types.

- 2 Continue with [Chapter 2, “Hands-on System Requirements,”](#) on page 9.

2 Hands-on System Requirements

To set up Filr for the hands-on exercises, ensure that your system meets the requirements for your deployment type.

- ◆ [Section 2.1, “Small Deployment: System Requirements,” on page 9](#)
- ◆ [Section 2.2, “Large Deployment: System Requirements,” on page 10](#)

2.1 Small Deployment: System Requirements

Table 2-1 *Small Deployment System Requirements*

| Item | Details |
|---|---|
|  Windows Server | A Windows 2003 R2 or 2008 R2 server that is attached to an Active Directory domain. Administrative rights on the server. |
|  Filr Software | Software for the Filr appliance (see Section 3.1, “Small Deployment: Software,” on page 13) |
|  Virtualization Server | One of the three virtualization platforms listed in “ Filr Server Requirements ” in the Novell Filr 1.0.1 Installation and Configuration Guide : <ul style="list-style-type: none">◆ Hyper-V◆ VMware◆ Xen The virtualization server should have at least the following resources available for the Filr virtual machines: <ul style="list-style-type: none">◆ 12 GB RAM◆ 125 GB free hard drive space |
|  One IP Address on Your network | One IP address on the Active Directory domain network, including: <ul style="list-style-type: none">◆ DNS host name◆ The subnet mask◆ The primary gateway IP address◆ A DNS server IP address |

| Item | Details |
|---|---|
|  my-email1@example.com  my-email2@example.com Two Email Addresses | Two Web-based email addresses for receiving invitations and notifications |
|  Windows Workstation | A Windows workstation for administering the appliances and testing the Filr Windows application: <ul style="list-style-type: none"> ◆ Enterprise-level (non-home) version of Windows XP, Windows 7, or Windows 8 ◆ Joined to your Active Directory domain ◆ Mozilla Firefox 9, Mozilla Firefox 10, Microsoft Internet Explorer 8, or Microsoft Internet Explorer 9 for configuring and managing the appliance after the initial setup ◆ Microsoft Office or LibreOffice ◆ A Java Runtime Environment (JRE) |
|  Wireless Connectivity | Wireless connectivity on your network |
|  Mobile Devices | At least one mobile device (iOS 5 or later or Android 2.3 or later) that is capable of connecting to your network's wireless connection |

2.2 Large Deployment: System Requirements

Table 2-2 Large Deployment System Requirements

| Item | Details |
|--|--|
|  Windows Server | A Windows 2003 R2 or 2008 R2 server that is attached to an Active Directory domain. Administrative rights on the server. |
|  Filr Software | Software for the three Filr appliances: Filr, Filrsearch, and MySQL (see Section 3.2, "Large Deployment: Software," on page 14). |
|  Filrsearch Software | |
|  MySQL Software | |

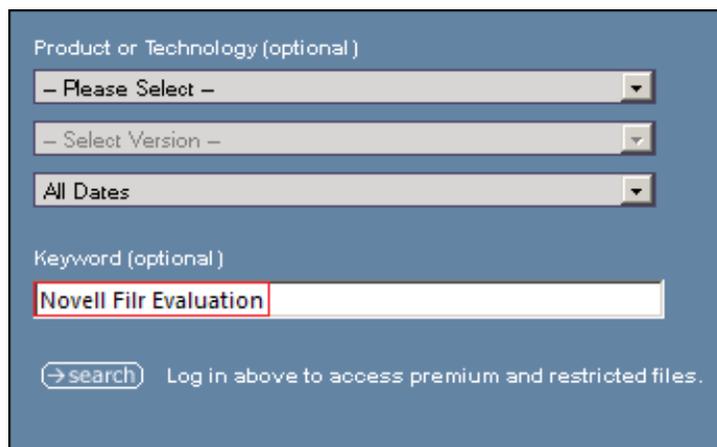
| Item | Details |
|--|---|
|  <p>Virtualization Server</p> | <p>One of the three virtualization platforms listed in “Filtr Server Requirements” in the Novell Filtr 1.0.1 Installation and Configuration Guide:</p> <ul style="list-style-type: none"> ◆ Hyper-V ◆ VMware ◆ Xen <p>The virtualization server should have at least the following resources available for the Filtr virtual machines:</p> <ul style="list-style-type: none"> ◆ 18 GB RAM ◆ 250 GB Hard drive free space |
|  <p>Three IP Addresses on Your network</p> | <p>Three IP addresses on the Active Directory domain network for the Filtr appliances, including:</p> <ul style="list-style-type: none"> ◆ IP addresses ◆ DNS host names ◆ The subnet mask ◆ The primary gateway IP address ◆ At least one DNS server IP address |
|  <p>my-email1@example.com my-email2@example.com</p> <p>Two Email Addresses</p> | <p>Two Web-based email addresses for receiving invitations and notifications</p> |
|  <p>Windows Workstation</p> | <p>A Windows workstation for administering the appliances and testing the Filtr Windows application:</p> <ul style="list-style-type: none"> ◆ Enterprise-level (non-home) version of Windows XP, Windows 7, or Windows 8 ◆ Joined to your Active Directory domain ◆ Mozilla Firefox 9, Mozilla Firefox 10, Microsoft Internet Explorer 8, or Microsoft Internet Explorer 9 for configuring and managing the appliance after the initial setup ◆ Microsoft Office or LibreOffice ◆ A Java Runtime Environment (JRE) |
|  <p>Wireless Connectivity</p> | <p>Wireless connectivity on your network</p> |
|  <p>Mobile Devices</p> | <p>At least one mobile device (iOS 5 or later or Android 2.3 or later) that is capable of connecting to your network’s wireless connection</p> |

3 Downloading Filr Software

- Section 3.1, “Small Deployment: Software,” on page 13
- Section 3.2, “Large Deployment: Software,” on page 14

3.1 Small Deployment: Software

- 1 If you don't already have a Novell account, register for one on the [Novell Web site \(https://secure-www.novell.com/selfreg/jsp/createAccount.jsp?\)](https://secure-www.novell.com/selfreg/jsp/createAccount.jsp?).
- 2 Access the [Novell Downloads Web page \(http://download.novell.com\)](http://download.novell.com).
- 3 Do a keyword search for *Novell Filr*.



Product or Technology (optional)

- Please Select -

- Select Version -

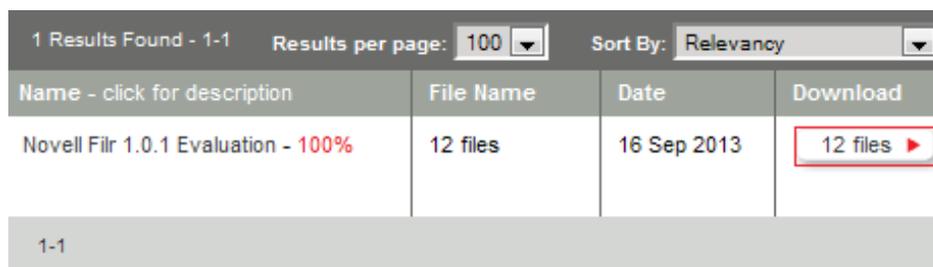
All Dates

Keyword (optional)

Novell Filr Evaluation

→ search Log in above to access premium and restricted files.

- 4 In the *Results* section, click the *Novell Filr Evaluation* Download button.



1 Results Found - 1-1 Results per page: 100 Sort By: Relevancy

| Name - click for description | File Name | Date | Download |
|-------------------------------------|-----------|-------------|------------|
| Novell Filr 1.0.1 Evaluation - 100% | 12 files | 16 Sep 2013 | 12 files ▶ |

1-1

- 5 Continue the download process until you have successfully downloaded the following:
 - Hands-on_Filr-windows.zip

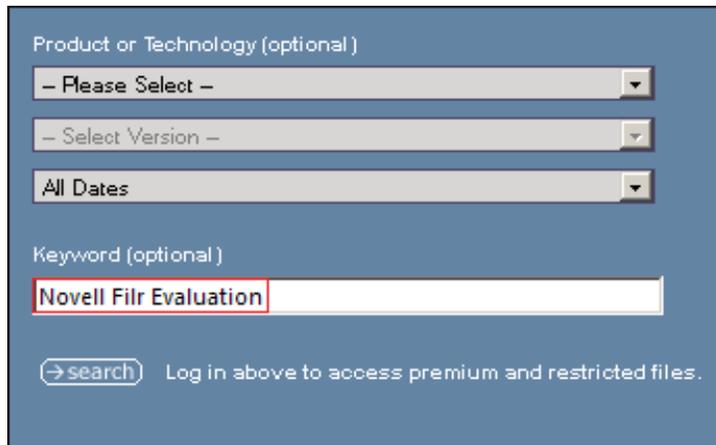
- ♦ The file for your virtualization platform:

| | |
|---------|-----------------------------|
| VMware | Filr.x86_64-version.ovf.zip |
| Hyper-V | Filr.x86_64-version.vhd.zip |
| Xen | Filr.x86_64-version.xen.tar |

6 Continue with [Chapter 4, “Creating Test Users,”](#) on page 17.

3.2 Large Deployment: Software

- 1 If you don't already have a Novell account, register for one on the [Novell Web site \(https://secure-www.novell.com/selfreg/jsp/createAccount.jsp?\)](https://secure-www.novell.com/selfreg/jsp/createAccount.jsp?).
- 2 Access the [Novell Downloads Web page \(http://download.novell.com\)](http://download.novell.com).
- 3 Do a keyword search for *Novell Filr*.



- 4 In the *Results* section, click the *Novell Filr Evaluation* Download button.

| 1 Results Found - 1-1 | | | |
|-------------------------------------|-----------|--------------------|------------|
| Results per page: 100 | | Sort By: Relevancy | |
| Name - click for description | File Name | Date | Download |
| Novell Filr 1.0.1 Evaluation - 100% | 12 files | 16 Sep 2013 | 12 files ▶ |

1-1

5 Continue the download process until you have successfully downloaded the following:

- ◆ Hands-on_Filr-windows.zip
- ◆ The files for your virtualization platform:

| | |
|--------|-----------------------------------|
| VMware | Filr.x86_64-version.ovf.zip |
| | Filrsearch.x86_64-version.ovf.zip |
| | MySQL.x86_64-version.ovf.zip |

| | |
|---------|-----------------------------------|
| Hyper-V | Filr.x86_64-version.vhd.zip |
| | Filrsearch.x86_64-version.vhd.zip |
| | MySQL.x86_64-version.vhd.zip |

| | |
|-----|-----------------------------------|
| Xen | Filr.x86_64-version.xen.tar |
| | Filrsearch.x86_64-version.xen.tar |
| | MySQL.x86_64-version.xen.tar |

6 Continue with [Chapter 4, "Creating Test Users,"](#) on page 17.

4 Creating Test Users

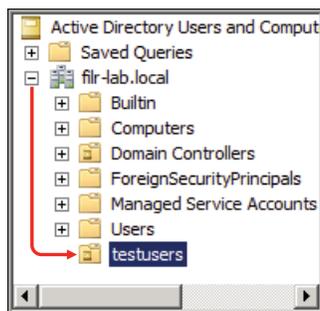
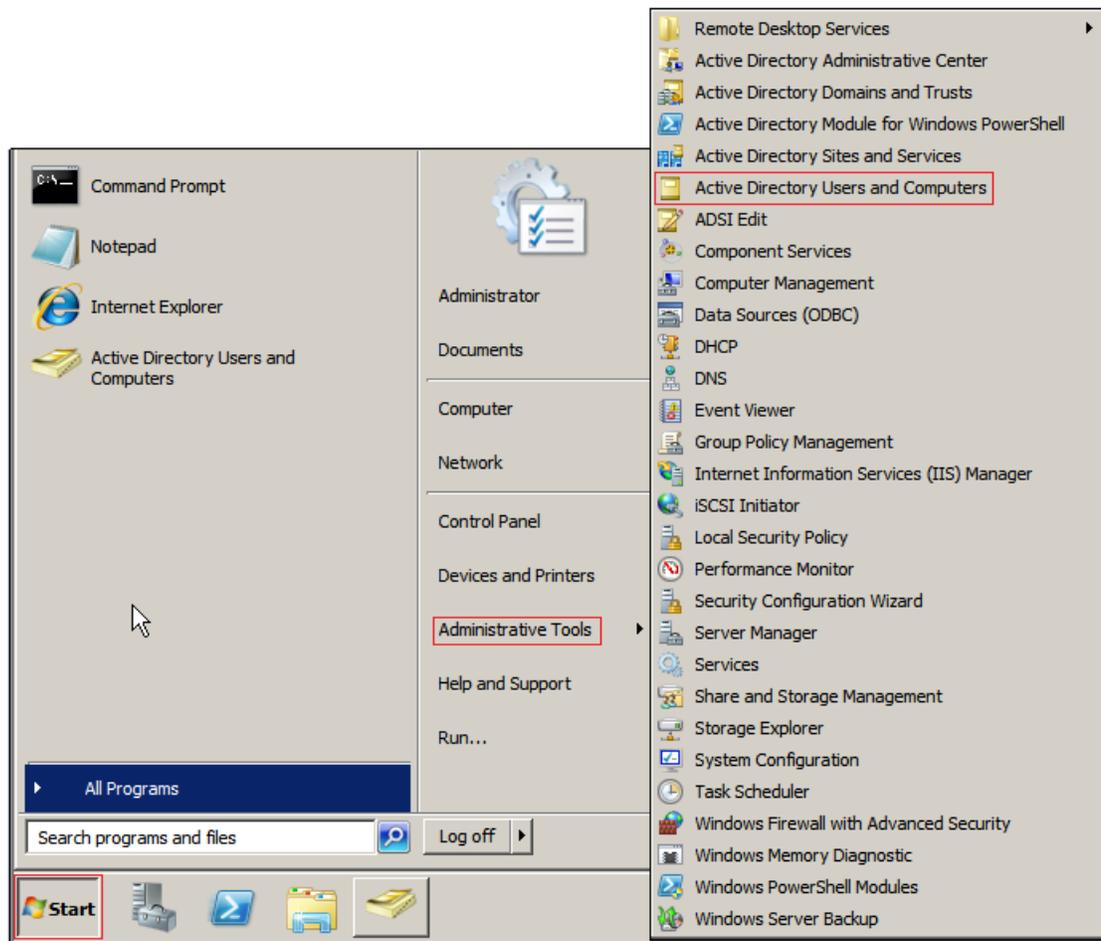
For information about users and groups in Filr, see “Users and Groups with Filr” in the *How Filr Works—Overview Guide*.

The tasks in this guide involve the test users shown in [Table 4-1](#).

Table 4-1 Test Users to Create

| First Name | Last Name | User Logon Name | Role in Organization | Example Password | Home Folder |
|------------|-----------|-----------------|------------------------------------|------------------|-------------|
| A | Red | ared | Development Supervisor | F1lrrock\$ | Yes |
| A | Pink | apink | Developer | F1lrrock\$ | No |
| A | Blue | ablue | IT Supervisor | F1lrrock\$ | Yes |
| A | Green | agreeen | Network Technician | F1lrrock\$ | No |
| A | Yellow | ayellow | Marketing Supervisor | F1lrrock\$ | Yes |
| A | Orange | aorange | Marketing Administrative Assistant | F1lrrock\$ | No |
| A | Black | ablack | Director of Sales | F1lrrock\$ | Yes |
| A | Gray | agray | Sales Representative | F1lrrock\$ | No |
| Filr | Proxyuser | filrproxyuser | n/a | N0v3llfi!r | No |

- 1 Create an ou container named `testusers` in your AD domain.



TIP: Locating the container at the top of the domain isn't required, but it makes the path shorter during the LDAP import.

The use of a separate container simplifies the LDAP import process and the removal of users when your evaluation concludes.

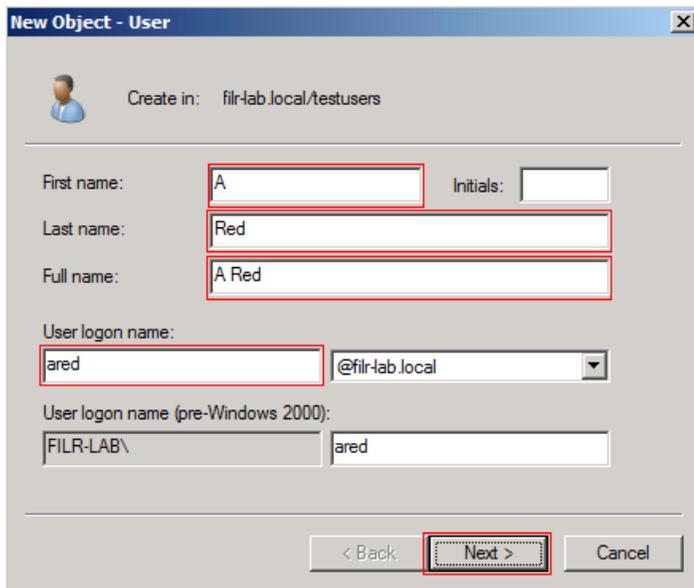
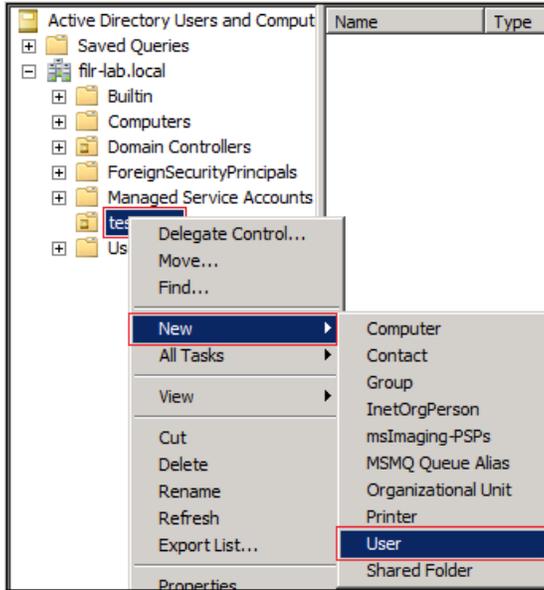
- 2 Create the users listed in [Table 4-1](#) in the *testusers* container and assign them passwords as indicated in the table and shown in the screen shots that follow.

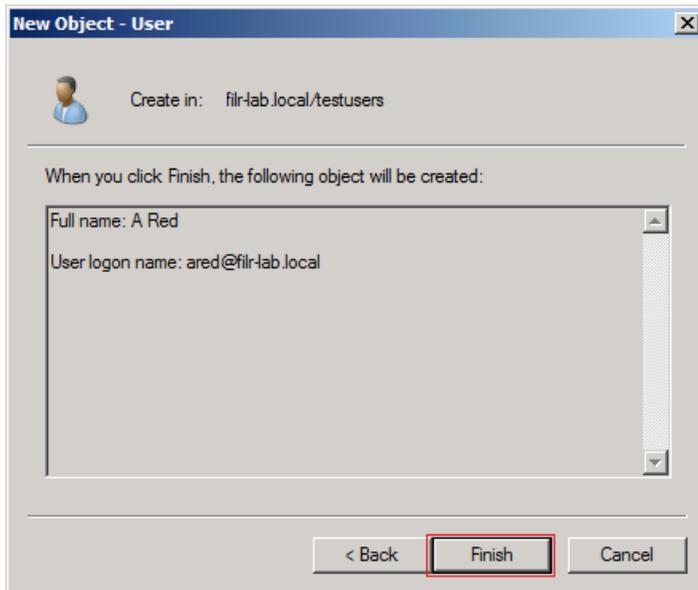
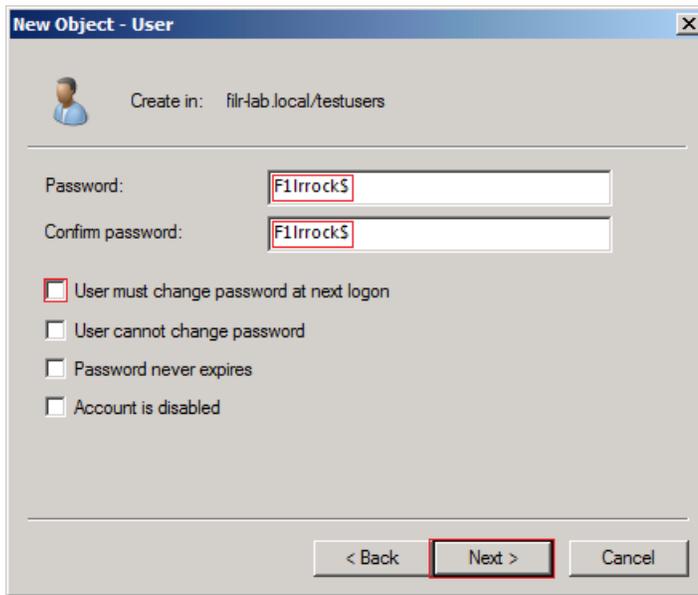
Users are assigned the same password to simplify the evaluation test process.

The password for the proxy user is the “administrative” password used in the examples in this guide.

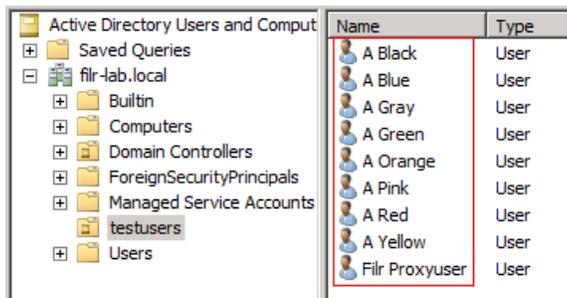
If the suggested passwords don't meet your password policy requirements, specify passwords that do.

IMPORTANT: Make sure that you deselect *User must change password at next login* as shown.





3 Ensure that you create all of the users.

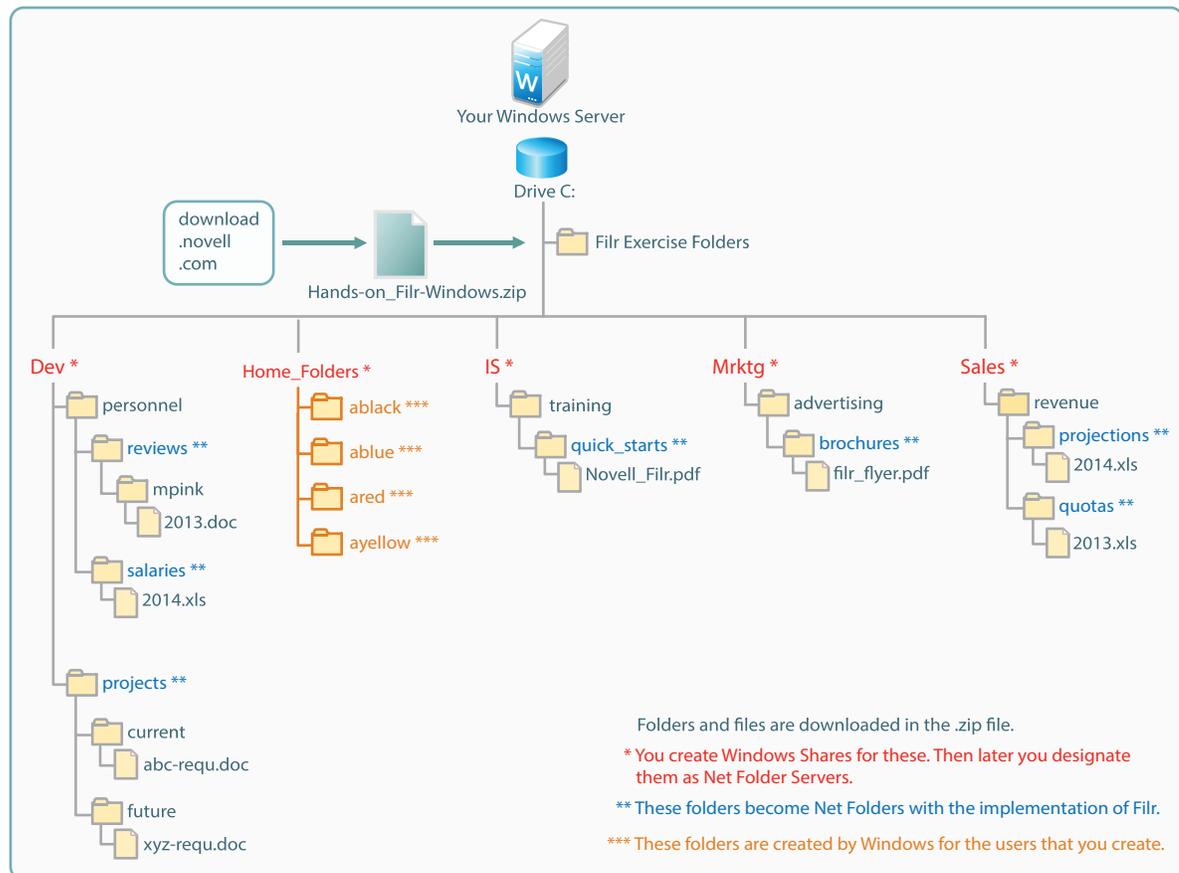


4 Continue with [Chapter 5, "Preparing Folders and Files,"](#) on page 21.

5 Preparing Folders and Files

Figure 5-1 illustrates the folders and files that are contained in the zip that you downloaded in Chapter 3, “Downloading Filr Software,” on page 13.

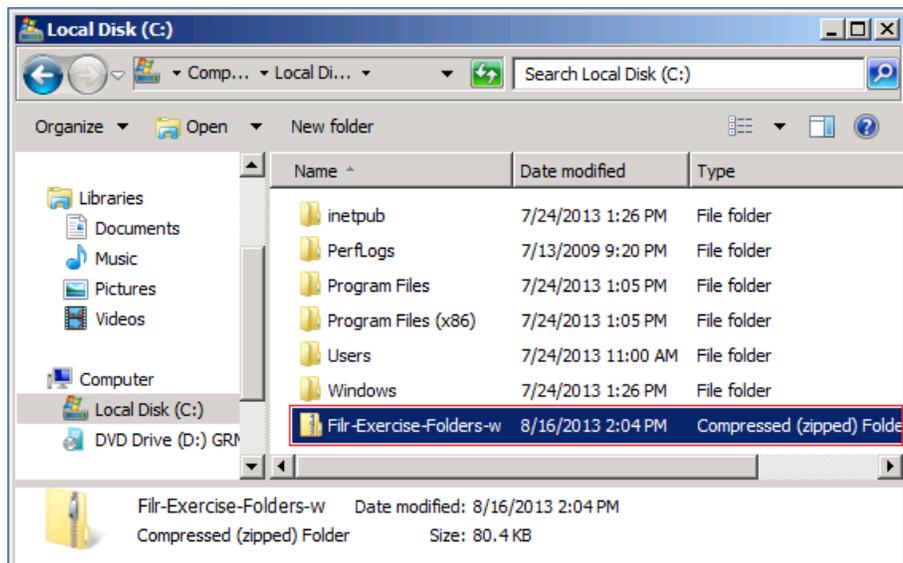
Figure 5-1 Hands-on Files and Folders



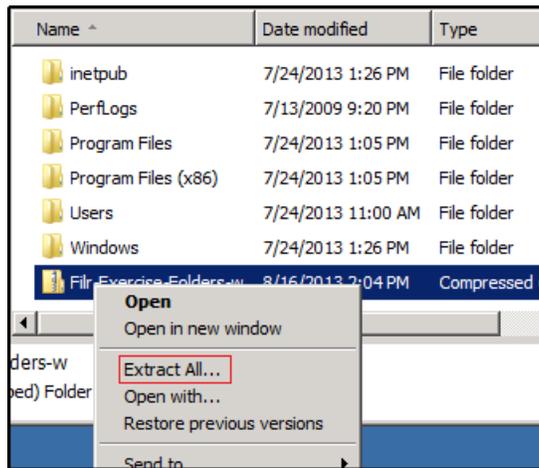
- Section 5.1, “Unzipping the Exercise Folders and Files,” on page 22
- Section 5.2, “Setting Up the Home_Folders Share,” on page 23
- Section 5.3, “Assigning Home Folders,” on page 31
- Section 5.4, “Setting Up the Other Hands-on Exercise Folders and Files,” on page 34

5.1 Unzipping the Exercise Folders and Files

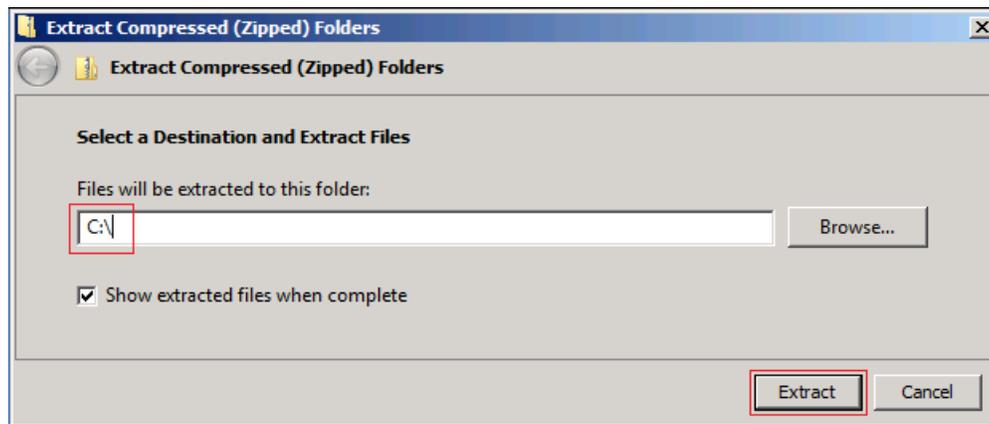
- 1 Copy the Hands-on_Filr-windows.zip file that you downloaded in [Chapter 3, “Downloading Filr Software,”](#) on page 13, to *Local Disk (C:)* on your Windows server.



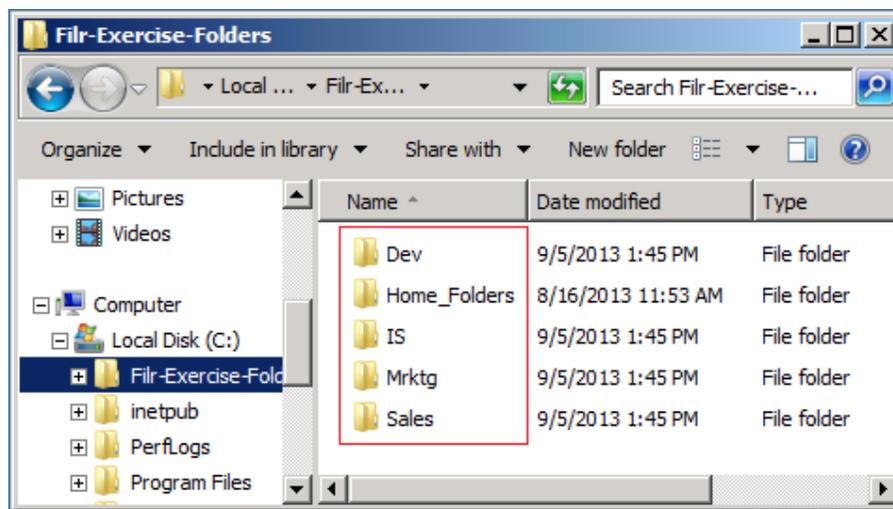
- 2 Right-click the zip file, then select *Extract All*.



- 3 Change the extraction path to *c:*, then click *Extract*.



- 4 Double click the extracted Filr-Exercise-Folders folder to reveal the five directories used in the exercises that follow.



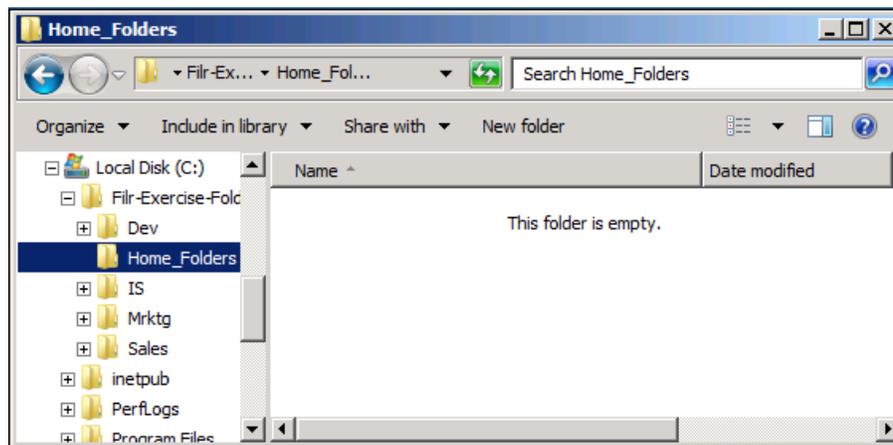
- 5 Continue with [Setting Up the Home_Folders Share](#).

5.2 Setting Up the Home_Folders Share

- ♦ [Section 5.2.1, "Configuring Home_Folders Share Permissions,"](#) on page 23
- ♦ [Section 5.2.2, "Configuring Home_Folders NTFS Permissions,"](#) on page 27

5.2.1 Configuring Home_Folders Share Permissions

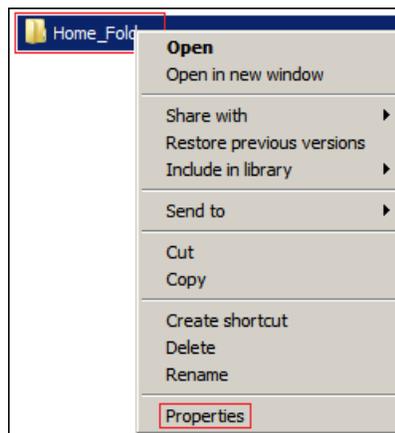
- 1 On the Windows server, click the Windows Explorer icon .
- 2 Navigate to the Home_Folders folder that you downloaded and extracted in [Section 5.1, "Unzipping the Exercise Folders and Files,"](#) on page 22.



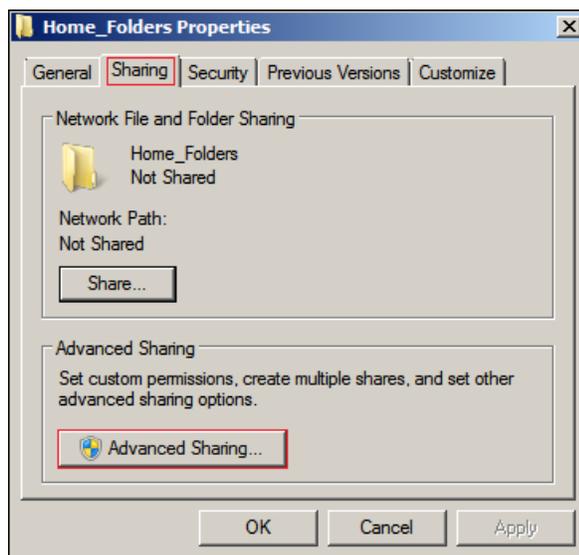
3 Share Home_Folders by doing the following:

3a Right click the folder.

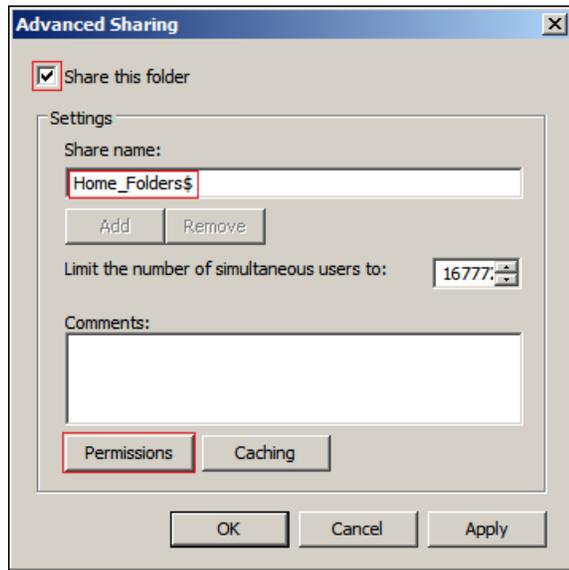
3b Click *Properties*.



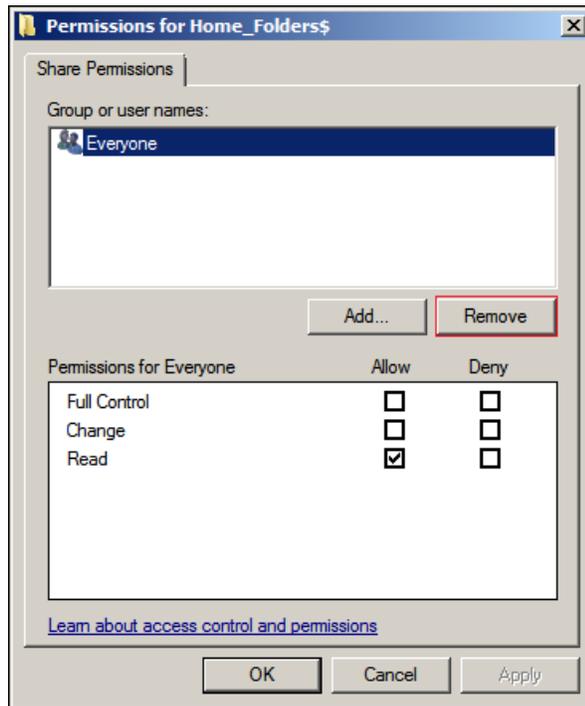
3c Click the *Sharing* tab, then click *Advanced Sharing*.



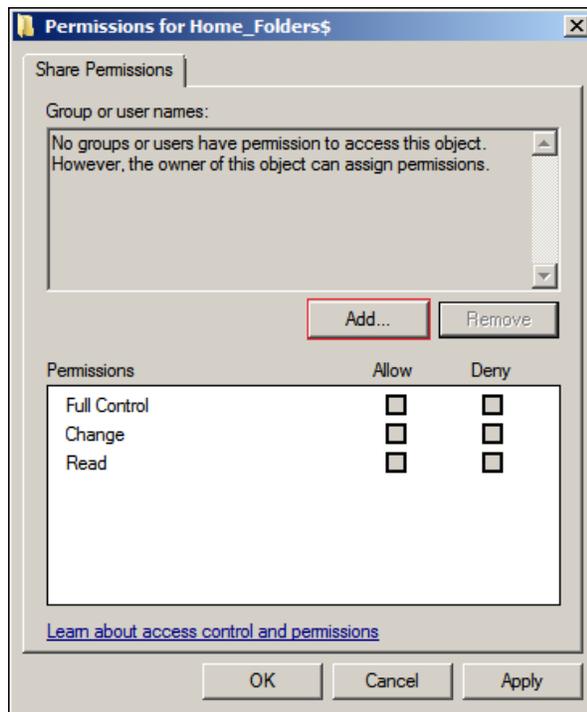
- 3d Select the *Share this folder* option, name the share Home_Folders\$, then click *Permissions*.
As you probably know, the dollar sign (\$) hides the folder from users browsing the network.



- 4 Configure group permissions by doing the following:
4a Click *Remove* to remove access by the *Everyone* group.



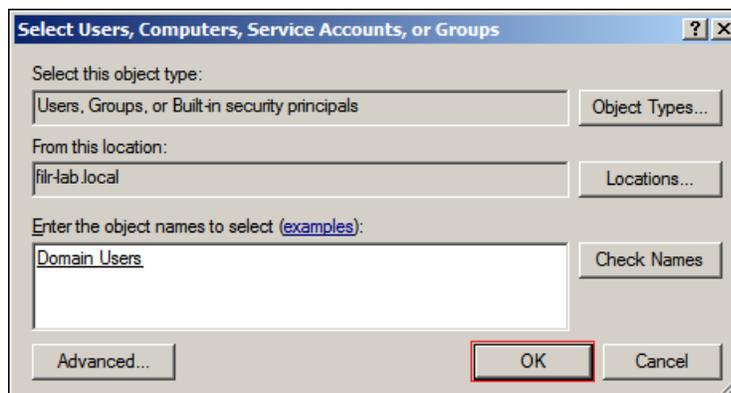
- 4b Click *Add*.



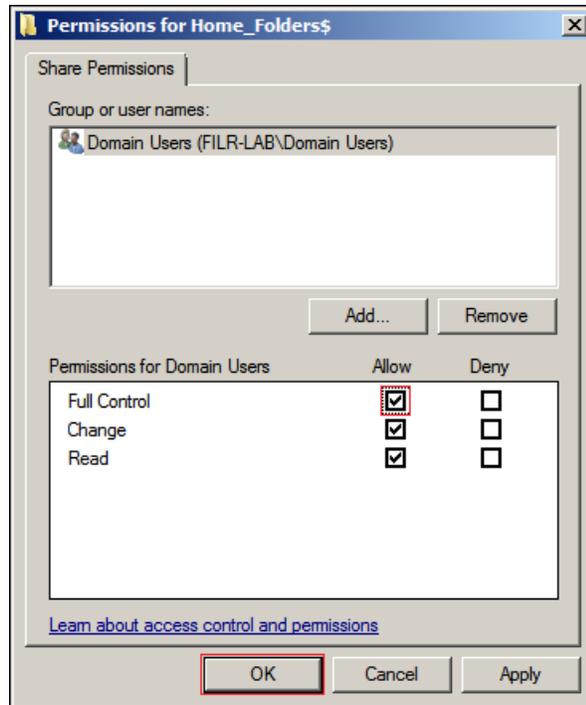
4c In the *Enter the object names to select* field, type `Domain Users`, then click *Check Names*.



4d Click *OK*.



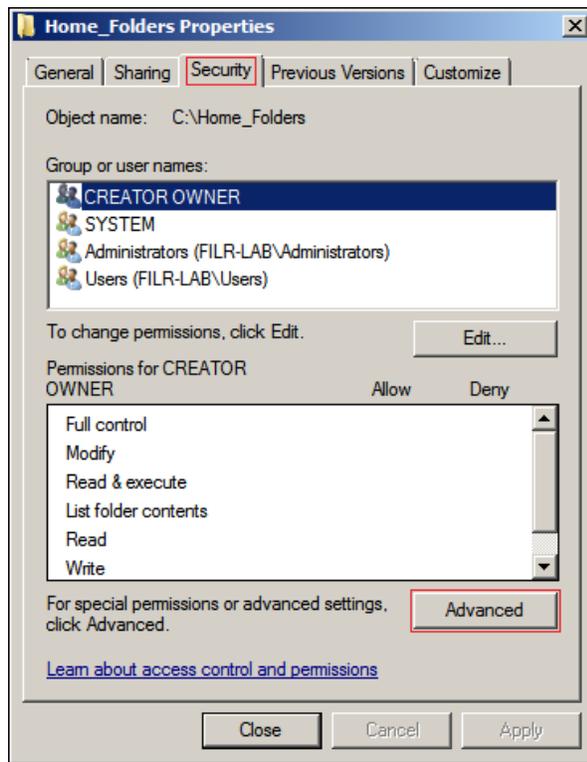
4e Under *Permissions for Domain Users*, Allow full control, then click *OK > OK*.



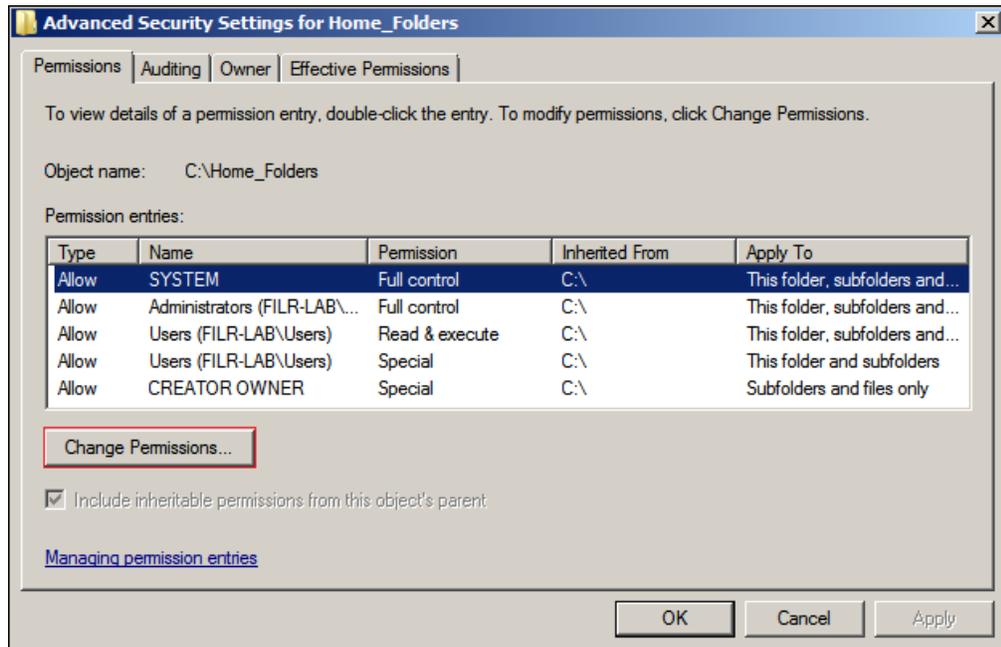
4f Continue with [Configuring Home_Folders NTFS Permissions](#).

5.2.2 Configuring Home_Folders NTFS Permissions

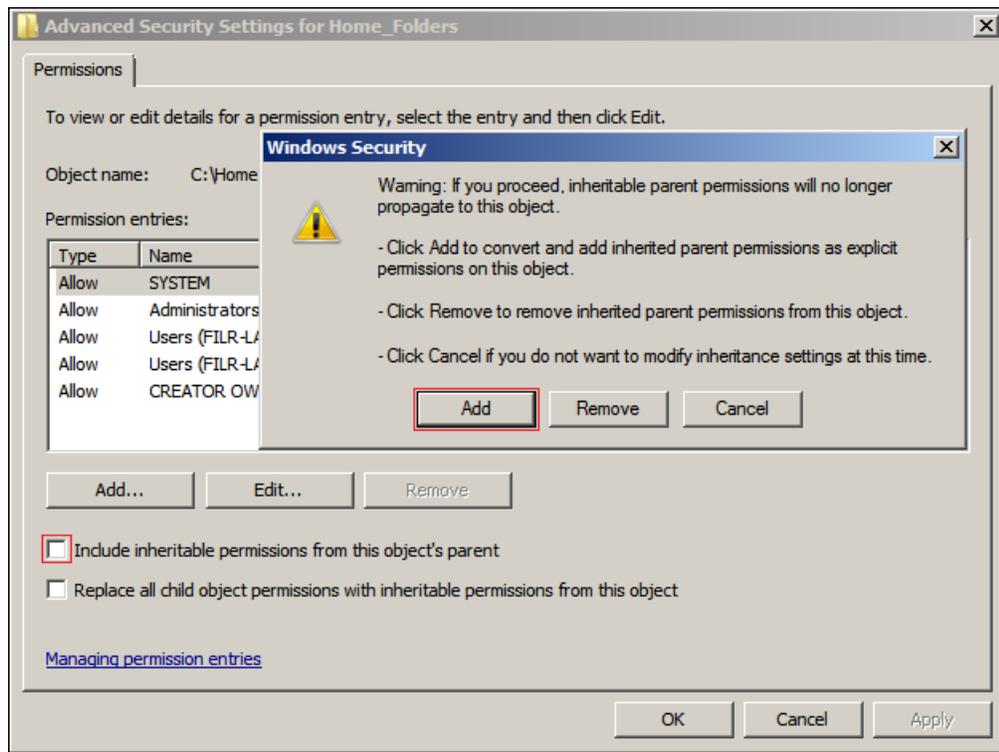
- 1 Configure file permissions by doing the following:
 - 1a Click the *Security* tab, then click *Advanced*.



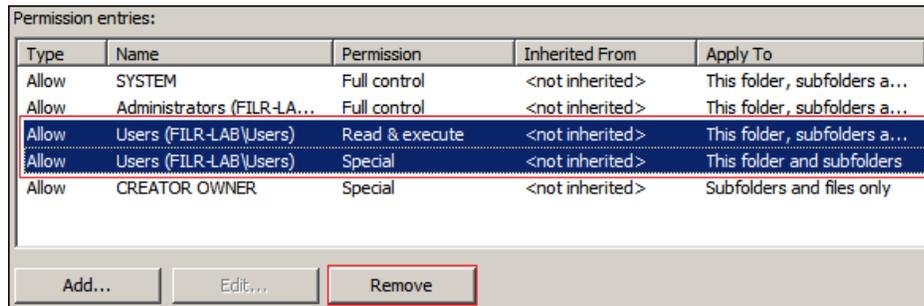
1b Click *Change Permissions*.



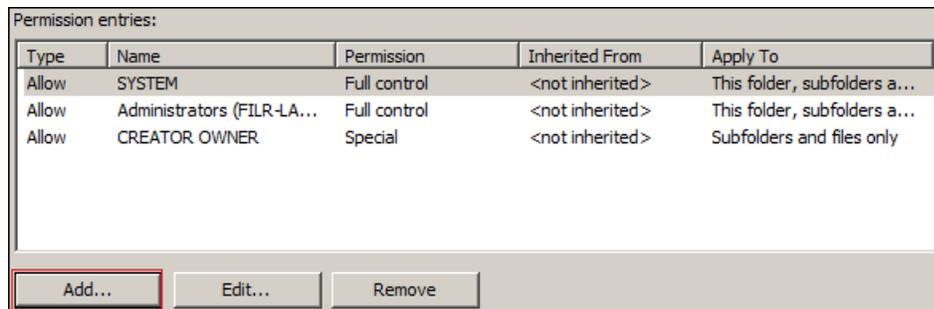
1c Deselect *Include inheritable permissions from this object's parent*, then on the warning, click *Add*.



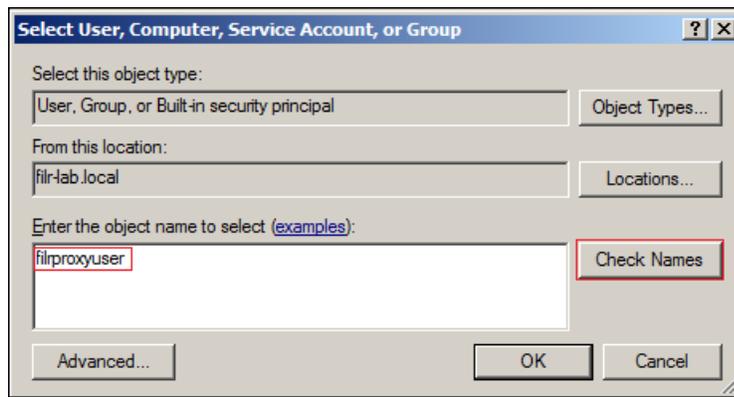
1d In the *Permission entries* list, Shift-click to select the two *Users* entries, then click *Remove*.



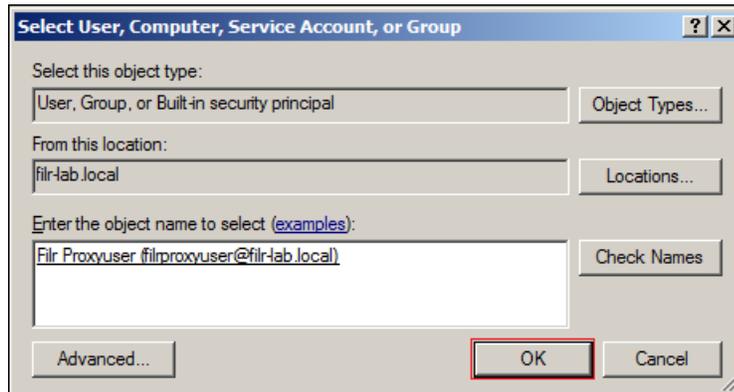
1e Click *Add*.



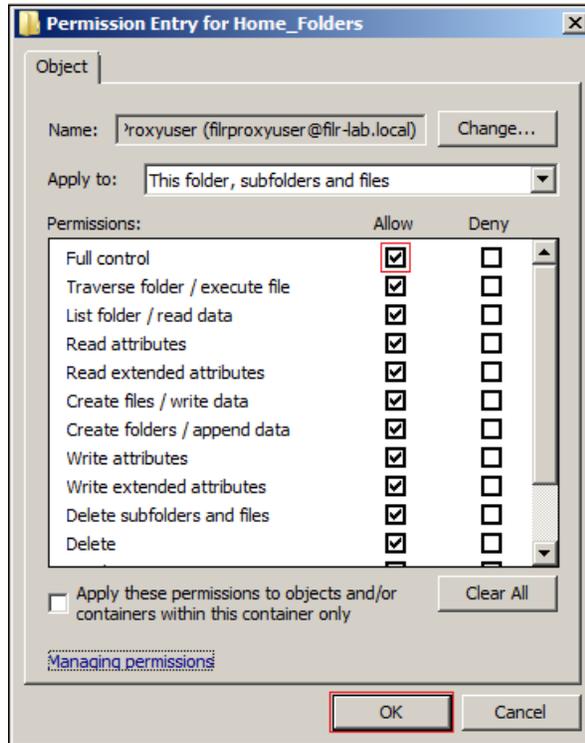
1f Type `filrproxyuser`, then click *Check Names*.



1g Click OK.



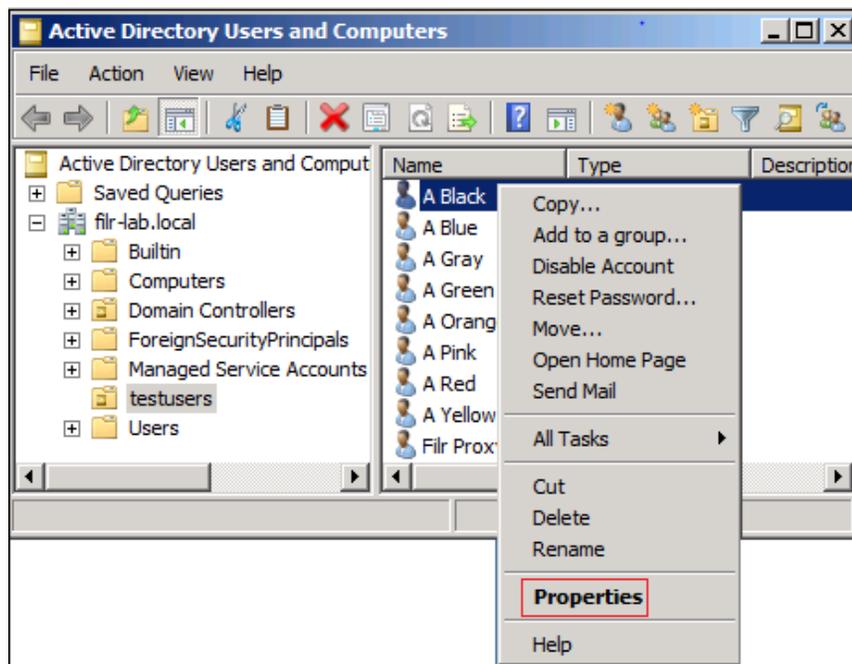
1h Allow full control, then click *OK > OK > OK > Close*.



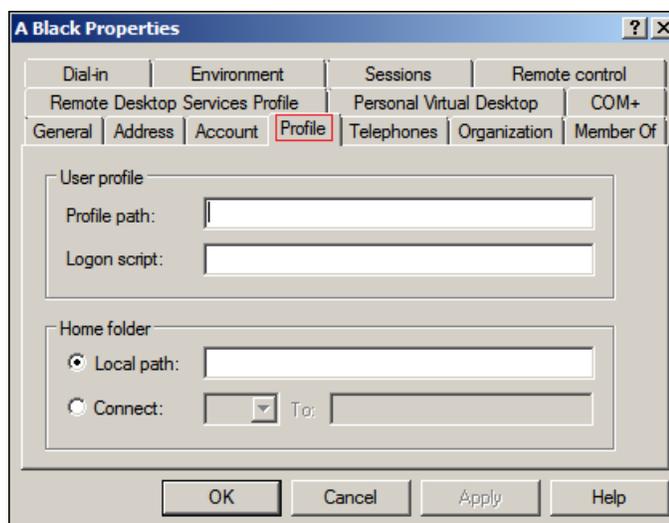
2 Continue with [Assigning Home Folders](#).

5.3 Assigning Home Folders

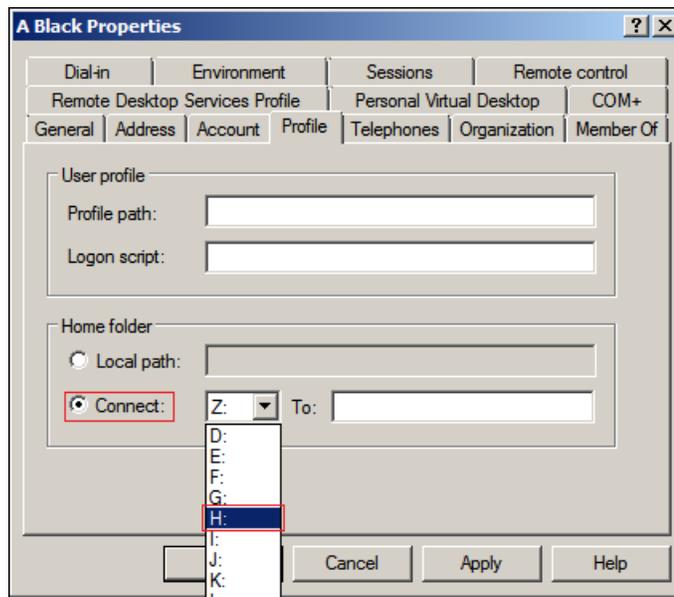
1 In *Administrative Tools > Active Directory Users and Computers*, right-click *A Black*, then select *Properties*.



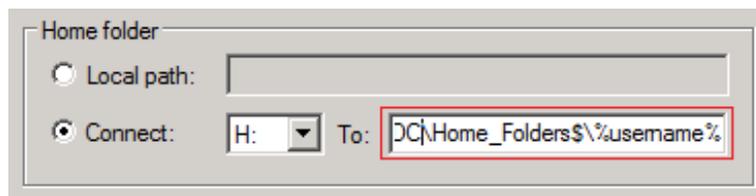
2 Click the *Profile* tab.



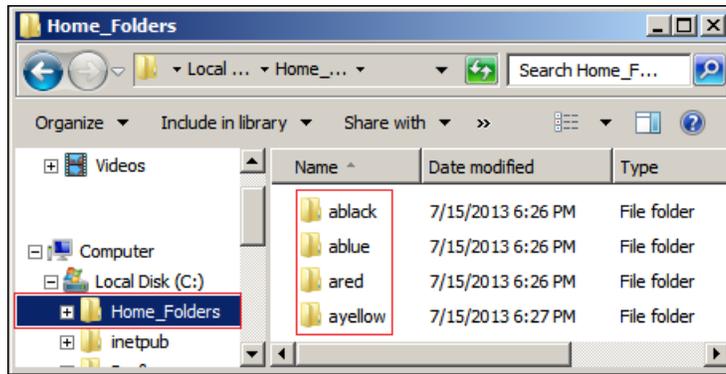
3 Under *Home folder*, select *Connect*, then click the *Connect* drop-down list and select *H:*.



- 4 For the first user, in the *To* field, type the UNC path to the HOME_Folders share on your Windows server, followed by %username%.
For example, the share path on the Windows server used for the development of this guide is \\Windows-DC\Home_Folders\$\%username%.



- 5 Select the string and copy it to the clipboard by using Ctrl+C.
For the second and subsequent users, you can use Ctrl+V to paste the string into the *To* field.
- 6 Click OK.
- 7 Repeat from [Step 1](#) for each of the following users:
 - ♦ A Blue
 - ♦ A Red
 - ♦ A Yellow
- 8 After configuring the home folders indicated, verify that the home folders have been created by accessing the Home_Folders folder in Windows Explorer.



9 Continue with [Setting Up the Other Hands-on Exercise Folders and Files](#).

5.4 Setting Up the Other Hands-on Exercise Folders and Files

- ◆ [Section 5.4.1, “Creating Shares and Changing Share Permissions,”](#) on page 34
- ◆ [Section 5.4.2, “Changing the NTFS Permissions,”](#) on page 39

5.4.1 Creating Shares and Changing Share Permissions

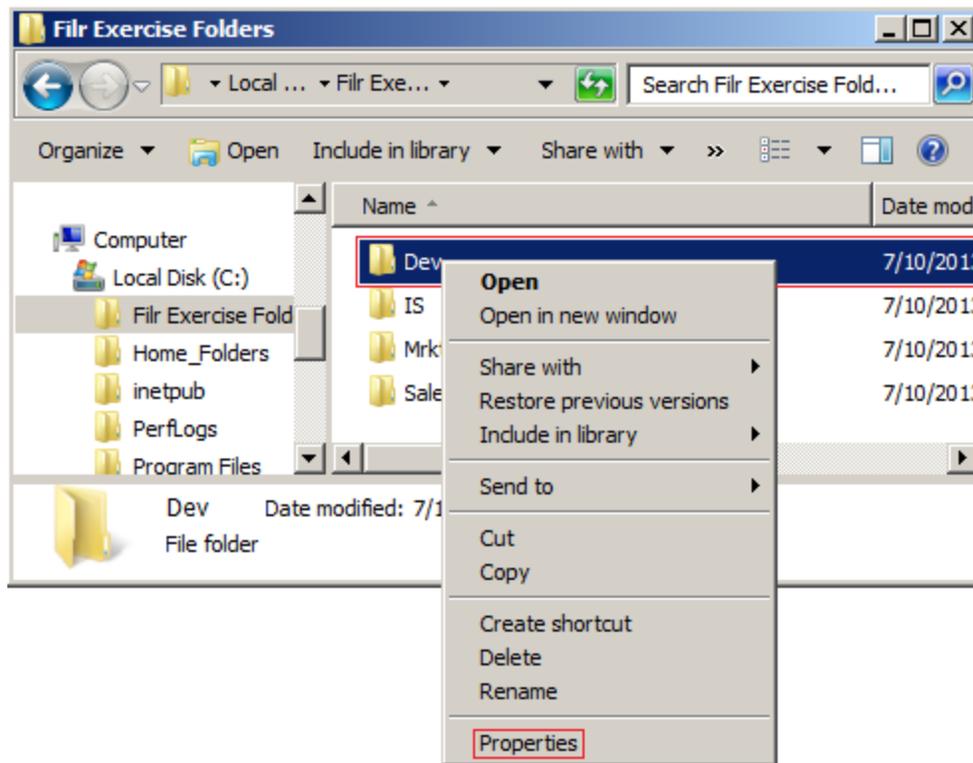
[Table 5-1](#) lists the rest of the Filr exercise folder names and the users to assign full share permissions.

Table 5-1 Share Permission Assignments

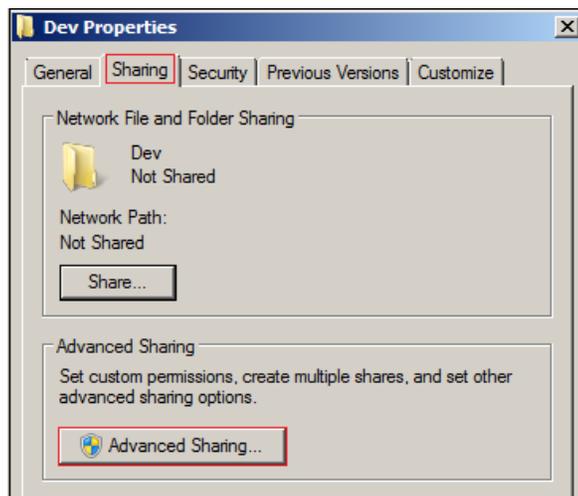
| Folder Name | Users to Assign Full Share Permissions |
|-------------|--|
| Dev | <ul style="list-style-type: none"> ◆ ared ◆ filrproxyuser |
| IS | <ul style="list-style-type: none"> ◆ ablue ◆ filrproxyuser |
| Mrktg | <ul style="list-style-type: none"> ◆ ayellow ◆ filrproxyuser |
| Sales | <ul style="list-style-type: none"> ◆ ablack ◆ filrproxyuser |

Create shares and assign share access by doing the following for each folder listed.

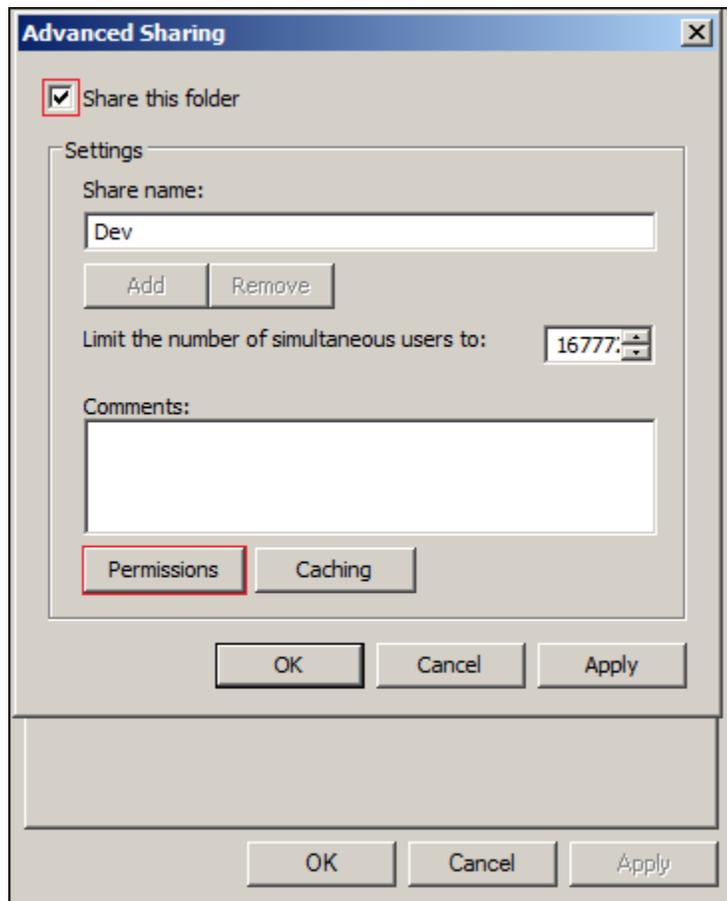
- 1 In Windows Explorer, right-click one of the four folders in [Table 5-1](#), starting with Dev, then click *Properties*.



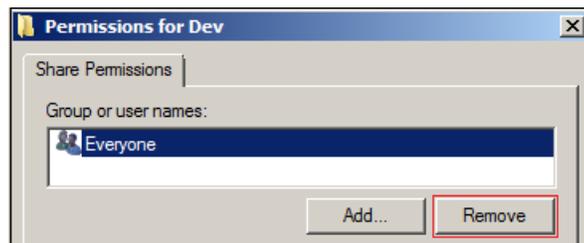
2 Click the *Sharing* tab, then click *Advanced Sharing*.



3 Select the *Share this folder* option, then click *Permissions*.



- 4 Click *Remove* to remove access by the *Everyone* group.

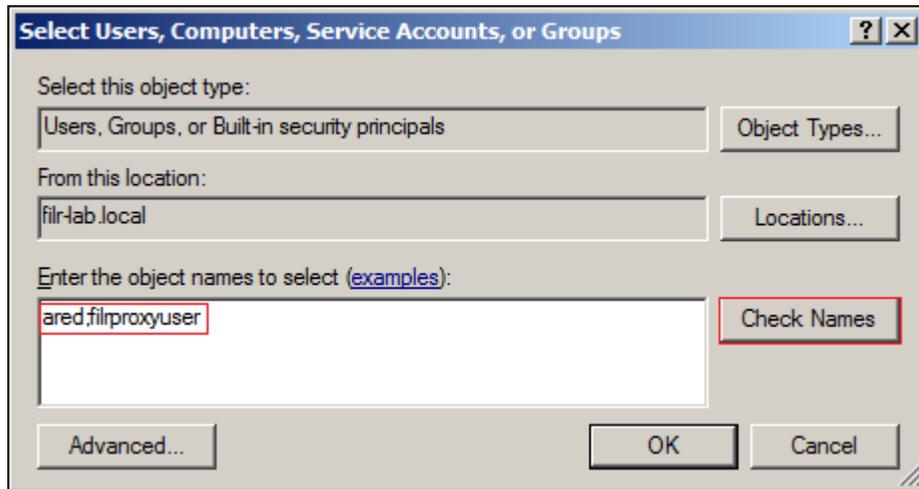


- 5 Click *Add*.

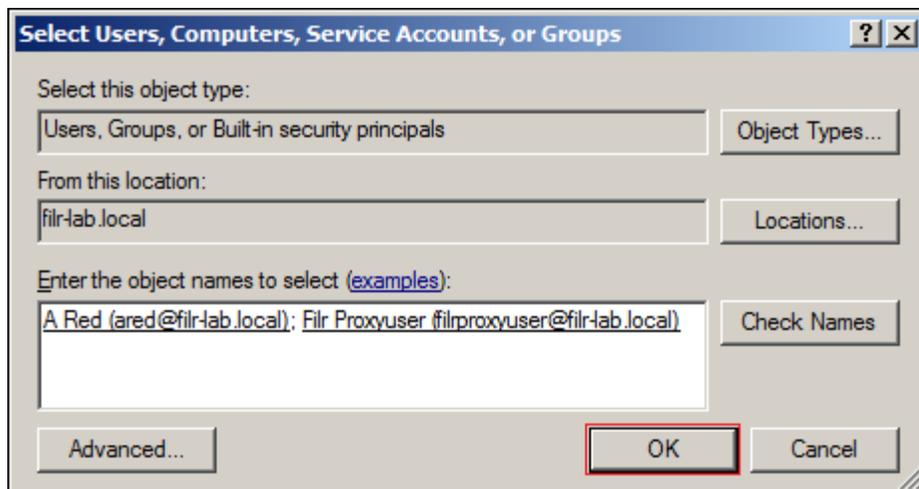


- 6 In the *Enter the object names to select* field, type the users listed in the second column of [Table 5-1 on page 34](#), separated by a semicolon.

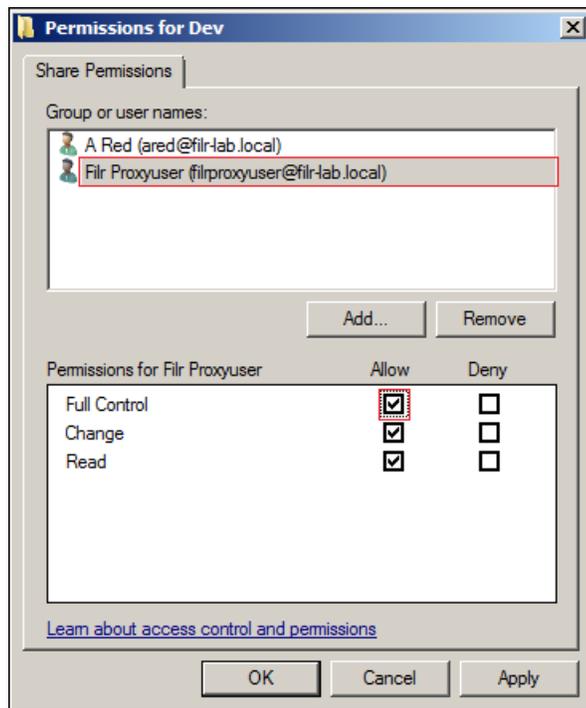
For example, for the Dev folder, type `ared;filrproxyuser`, then click *Check Names* to validate your entries.



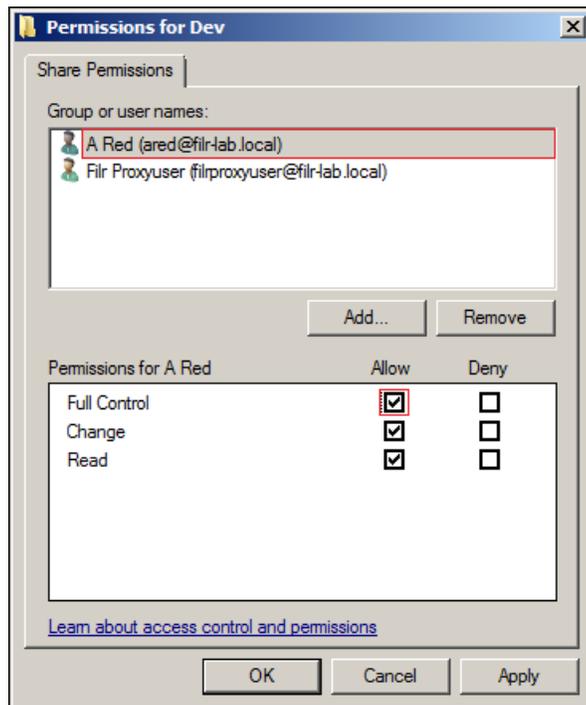
- 7 Click *OK*.



- 8 With *Filr Proxyuser* selected, under *Permissions for Filr Proxyuser > Full Control*, select *Allow*.



- 9 Select the other user and assign it *Full Control* as well.



- 10 Click *OK* > *OK* > *Close*.
- 11 Right-click the next folder (skipping *Home_Folders*), then repeat from [Step 1](#) until all of the folders have been shared and secured.
- 12 Continue with [Changing the NTFS Permissions](#).

5.4.2 Changing the NTFS Permissions

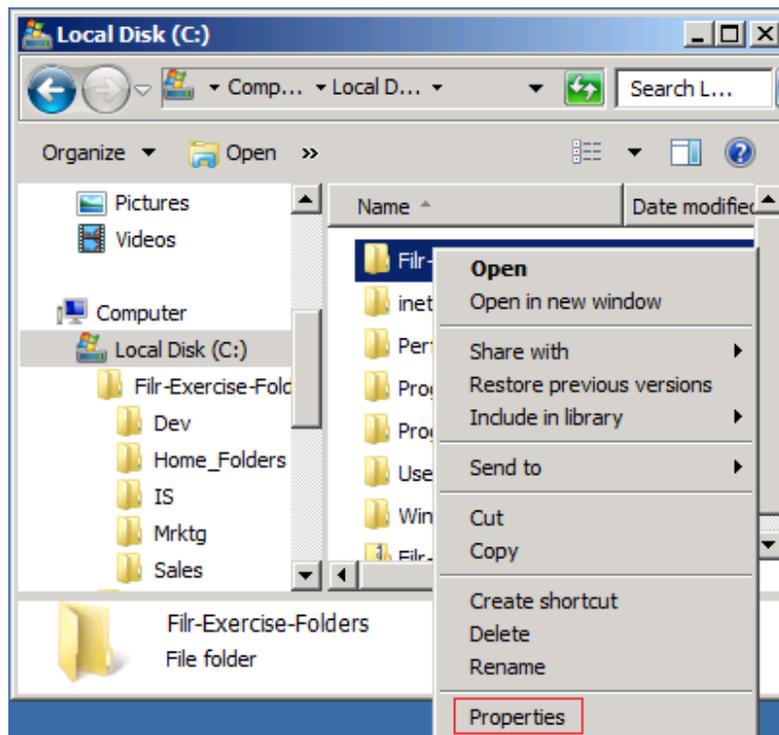
Table 5-2 lists the Filr exercise folder names and the users to assign full NTFS permissions.

Table 5-2 NTFS Permission Assignments

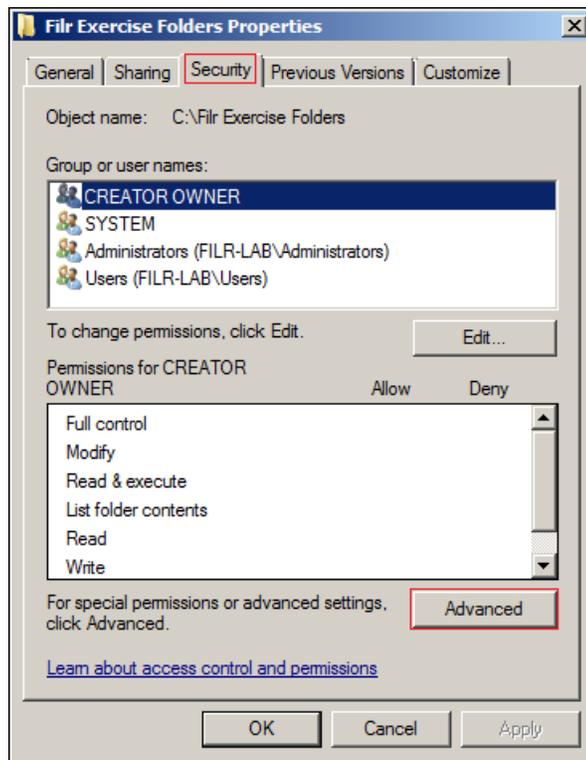
| Folder Name | Users to Assign Full NTFS Permissions |
|-----------------------|---------------------------------------|
| Filr Exercise Folders | filproxyuser |
| Dev | ared |
| IS | ablue |
| Mrktg | ayellow |
| Sales | ablack |

Adjust NTFS permissions to the `Filr_Exercise_Folders` folder by doing the following:

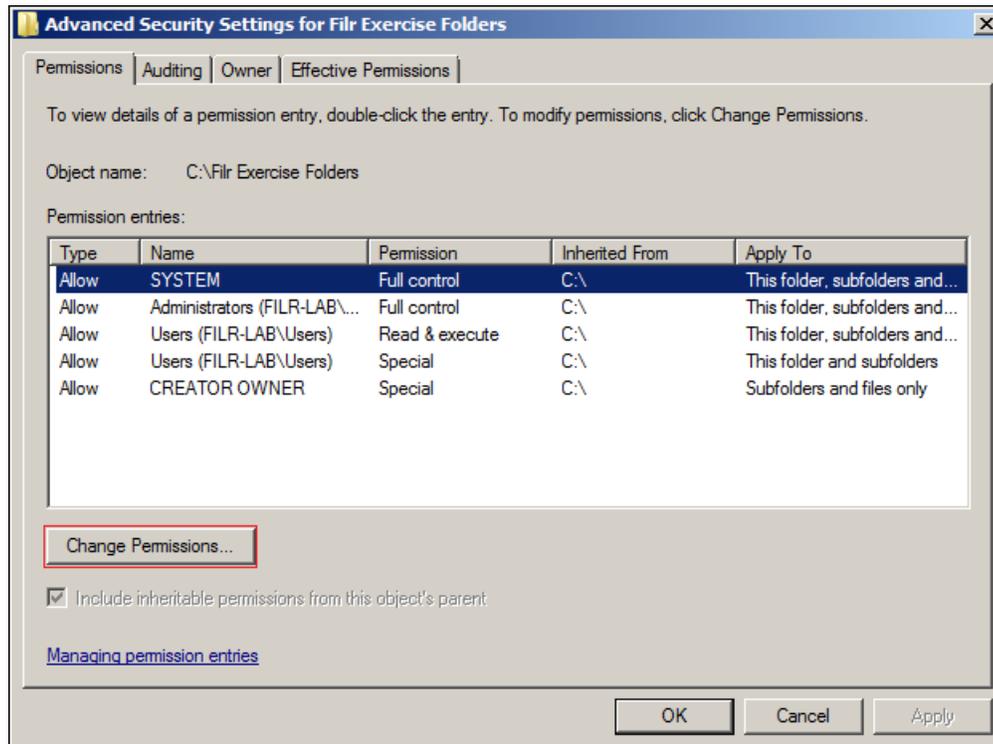
- 1 In Windows Explorer, right-click `Filr_Exercise_Folders` and select *Properties*.



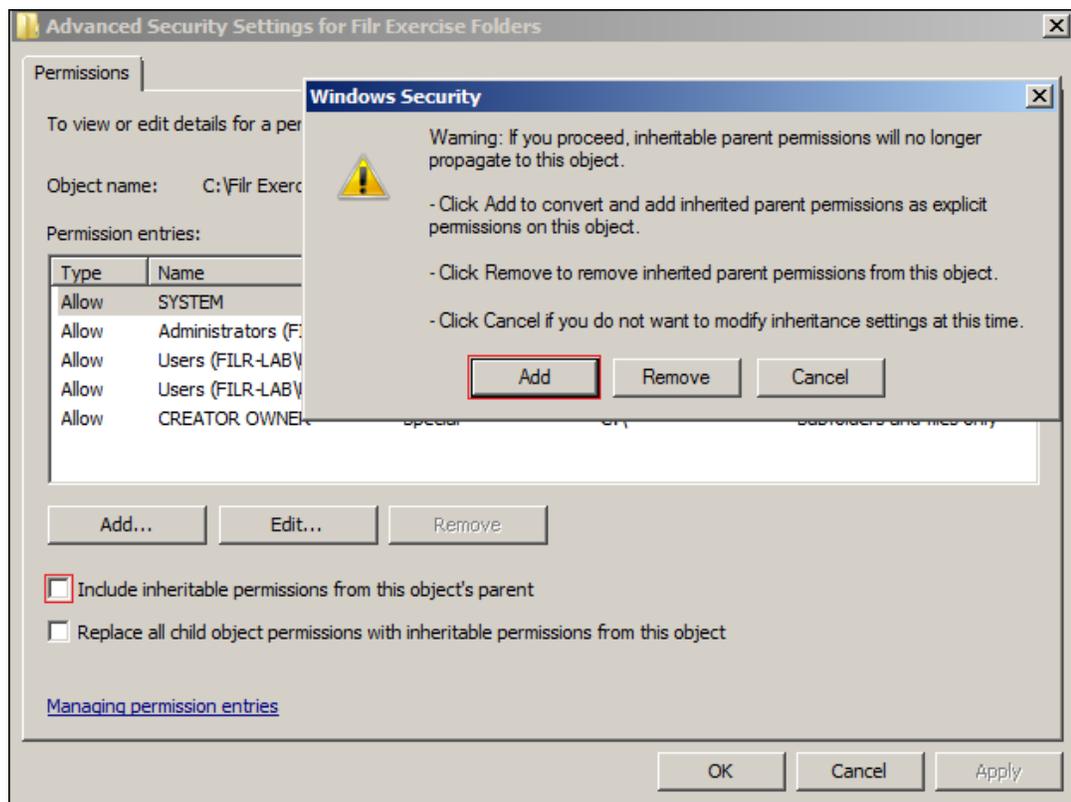
- 2 Click the *Security* tab, then click *Advanced*.



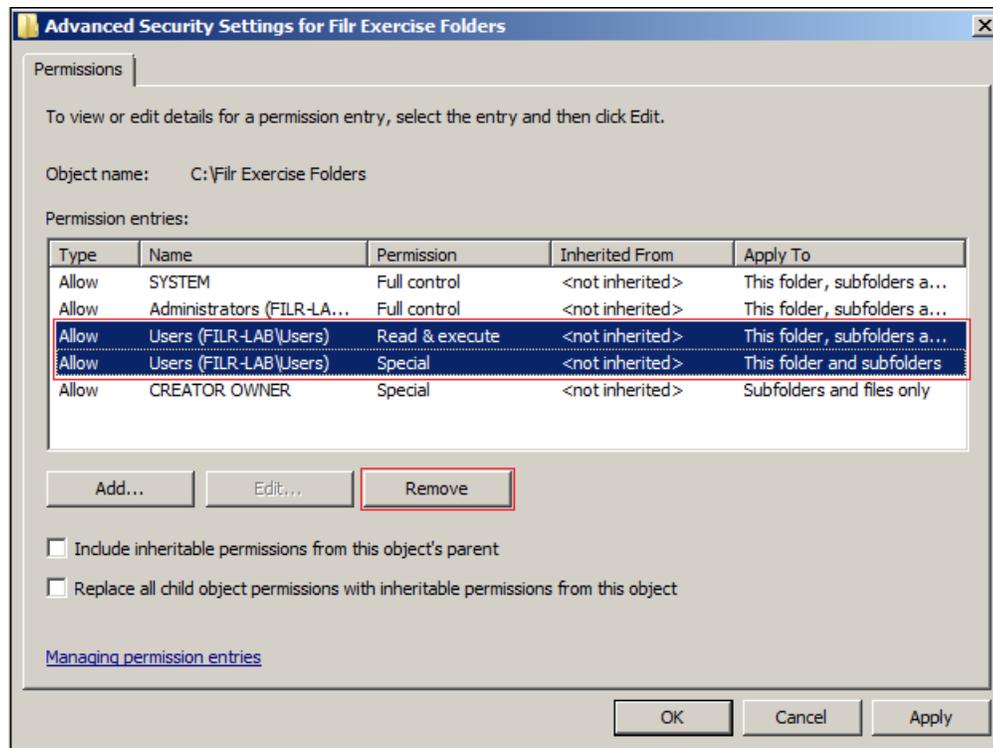
3 Click *Change Permissions*.



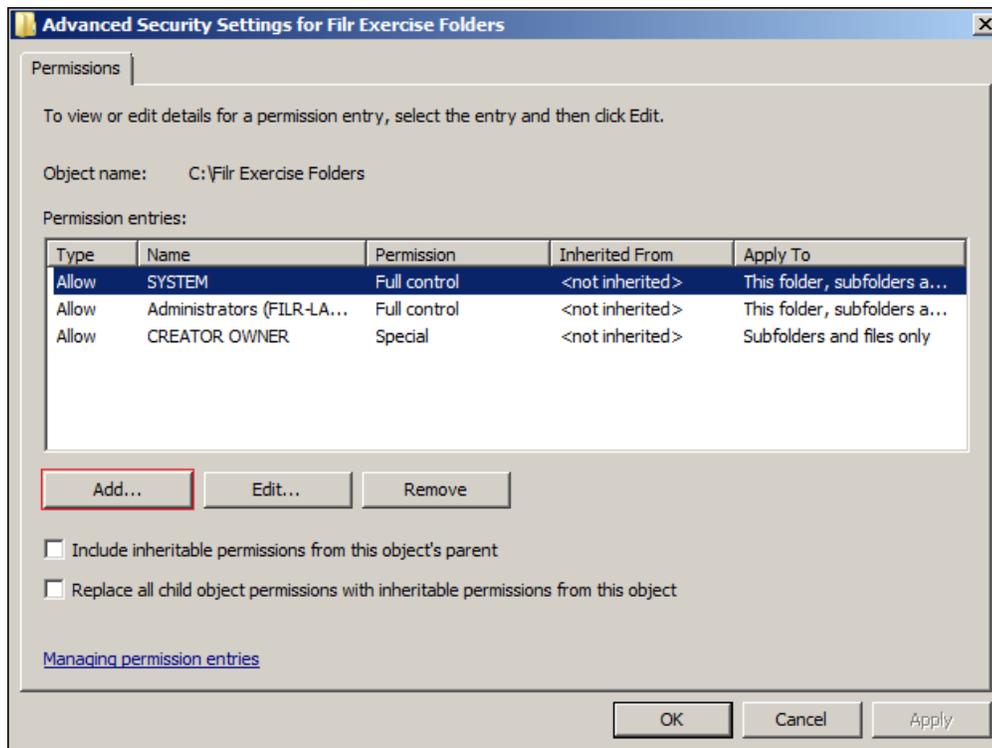
4 Deselect *Include inheritable permissions from this object's parent*, then click *Add*.



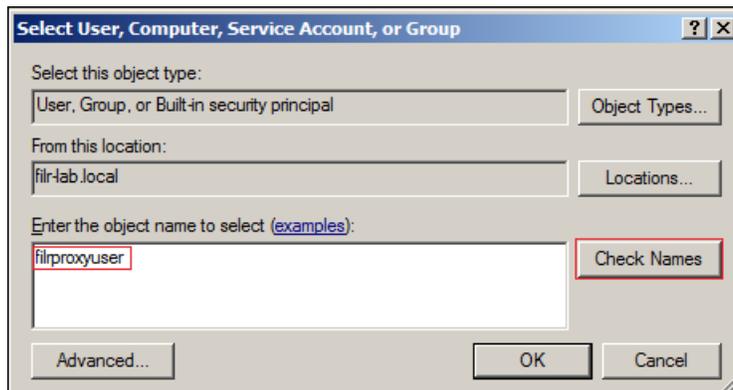
5 In the *Permission entries* list, select the *Users* entries, then click *Remove*.



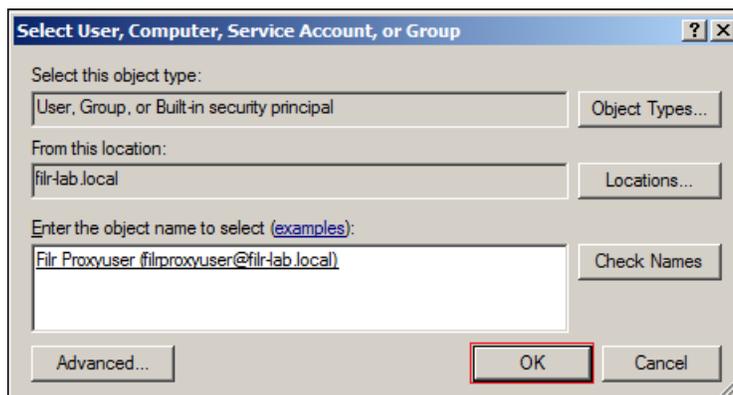
6 Click *Add*.



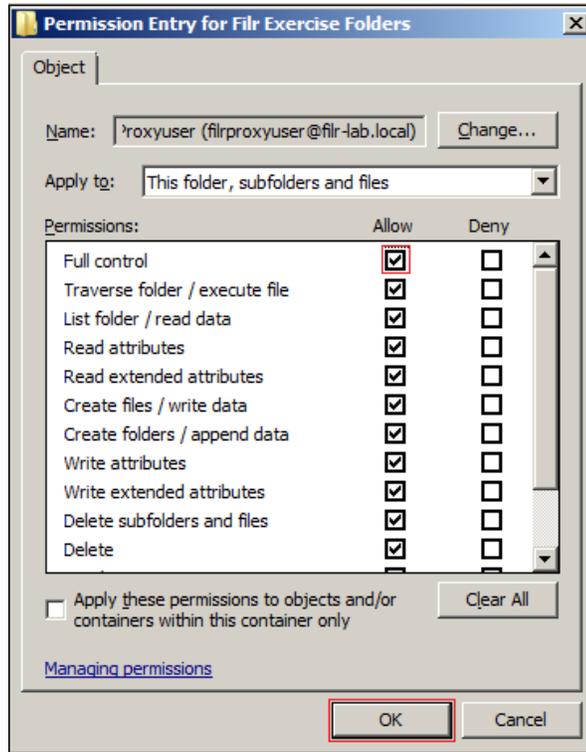
7 Type `filproxyuser`, then click *Check Names*.



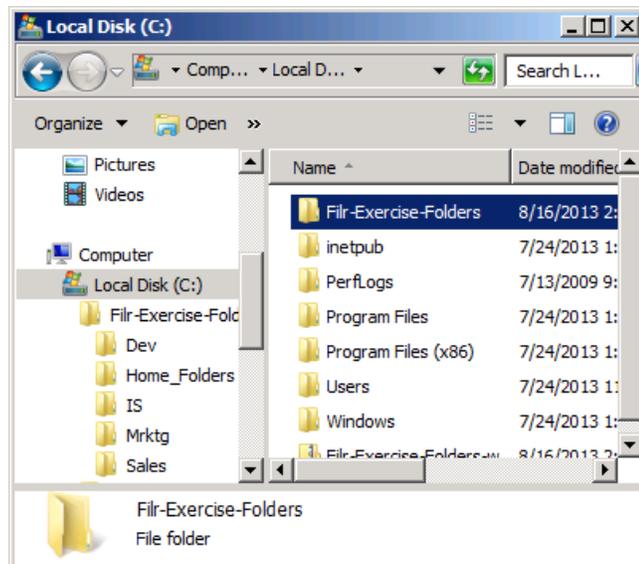
8 Click *OK*.



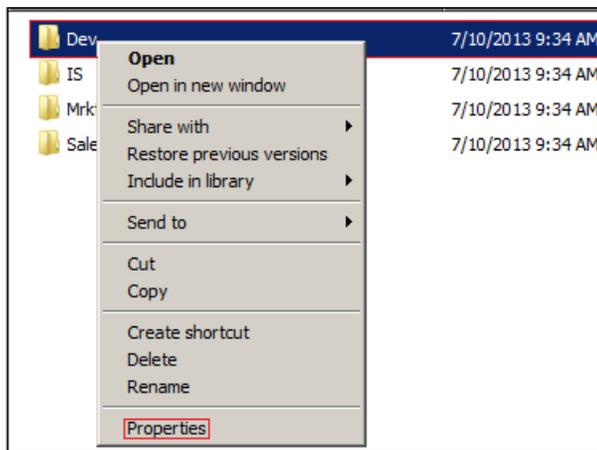
- 9 Allow full control, then click *OK* > *OK* > *OK* > *OK*.



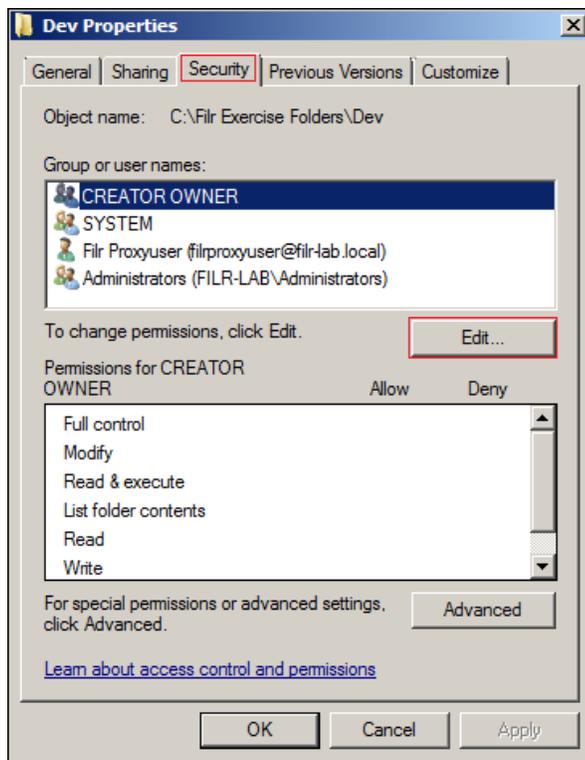
- 10 Double-click *Filr-Exercise-Folders*.



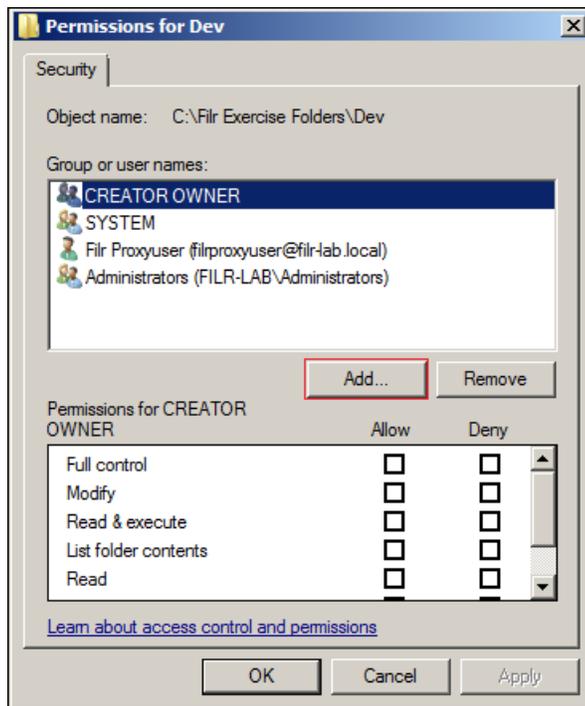
- 11 Right-click the *Dev* folder listed in the right frame, then select *Properties*.



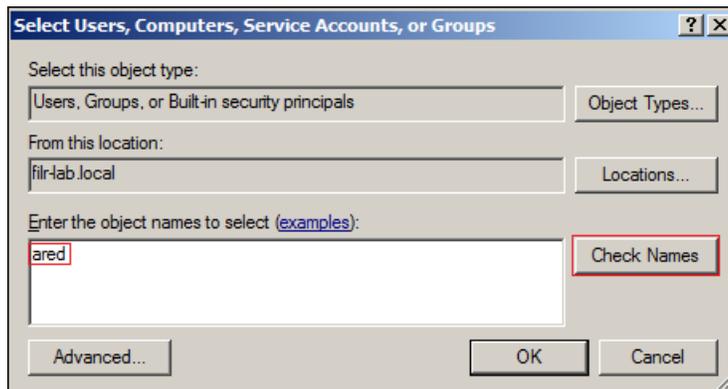
12 Click the *Security* tab, then click *Edit*.



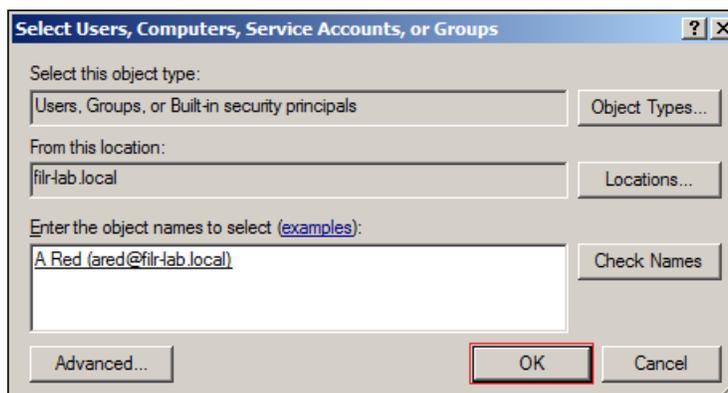
13 Click *Add*.



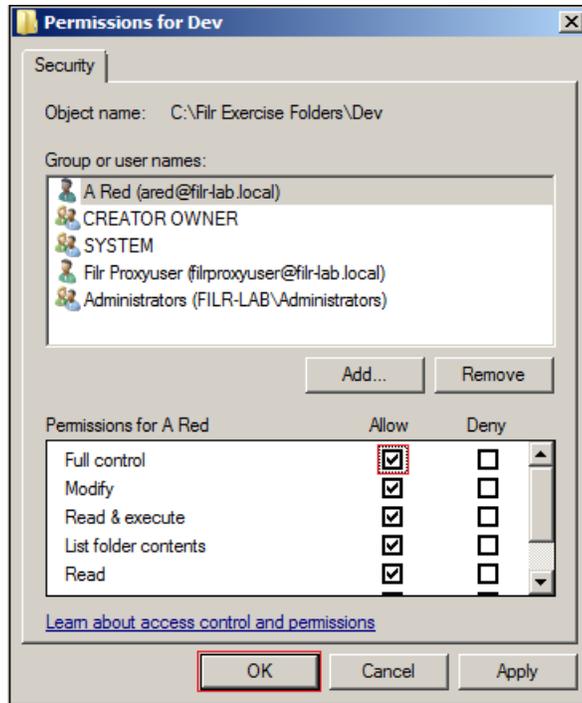
- 14 Referring to [Table 5-2 on page 39](#), type the user (object name) to assign full permissions to the directory (ared is for Dev), then click *Check Names*.



- 15 Click OK.



- 16 Allow full control, then click *OK* > *OK*.



- 17 Right-click the next folder name listed in [Table 5-2 on page 39](#), click *Properties*, then repeat from [Step 12 on page 44](#) until full rights have been assigned as indicated in the table.

When all of the folders have been assigned, continue with [Chapter 6, “Deploying and Configuring the Filr Appliances,” on page 47](#).

6 Deploying and Configuring the Filr Appliances

- ♦ Section 6.1, “Small Deployment: Deploying and Configuring,” on page 47
- ♦ Section 6.2, “Large Deployment: Deploying and Configuring,” on page 52

6.1 Small Deployment: Deploying and Configuring

- ♦ Section 6.1.1, “Deploying Filr,” on page 47
- ♦ Section 6.1.2, “Configuring the Filr Appliance,” on page 51

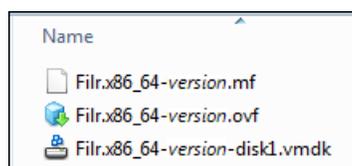
6.1.1 Deploying Filr

IMPORTANT: The instructions in this section assume that Filr is being deployed on a VMware server.

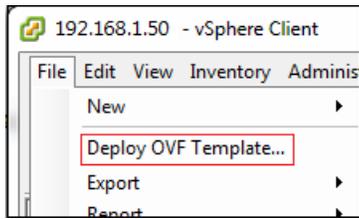
If you are deploying Filr on Hyper-V, follow the instructions in “[Hyper-V Configuration](#)” in the *Novell Filr 1.0.1 Installation and Configuration Guide* to the point that you power on the appliance. Then resume these instructions at [Step 5 on page 48](#).

If you are deploying Filr on Xen, follow the instructions in “[Xen Configuration](#)” in the *Novell Filr 1.0.1 Installation and Configuration Guide* to the point that you power on the appliance. Then resume these instructions at [Step 5 on page 48](#).

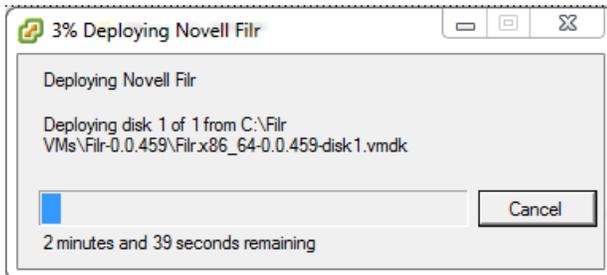
- 1 On a workstation with the vSphere client installed, extract the `Filr.x86_64-version.ovf.zip` file that you downloaded in [Chapter 3, “Downloading Filr Software,” on page 13](#) until you have a folder containing three files with `.mf`, `.ovf`, and `.vmdk` extensions.



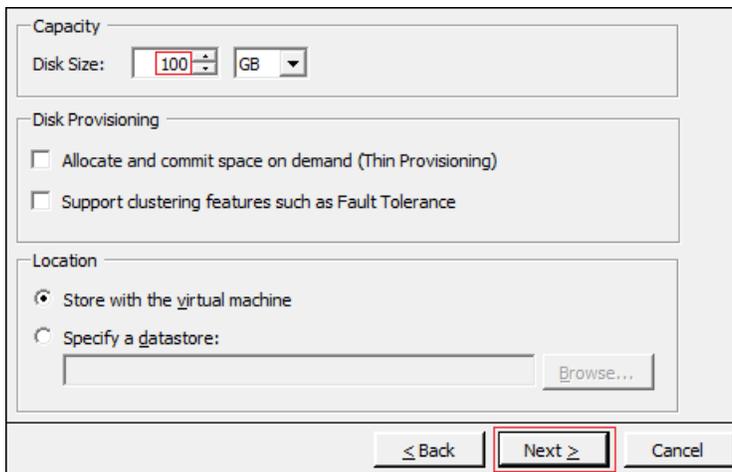
- 2 Using the vSphere client, attach to your VMware ESX server, then click *File > Deploy OVF Template*.



- 3 Browse to and open the Filr .ovf file, then proceed through the various dialogs as you normally would until the virtual machine is deployed.



- 4 Edit the virtual machine settings and add a 100 GB hard disk.



- 5 After the hard disk has been added, click *Power on the virtual machine*.

Getting Started Summary Resource Allocation Performance Event

What is a Virtual Machine?

A virtual machine is a software computer that, like a physical computer, runs an operating system and applications. An operating system installed on a virtual machine is called a guest operating system.

Because every virtual machine is an isolated computing environment, you can use virtual machines as desktop or workstation environments, as testing environments, or to consolidate server applications.

Virtual machines run on hosts. The same host can run many virtual machines.

Basic Tasks

-  [Power on the virtual machine](#)
-  [Edit virtual machine settings](#)

6 After the appliance starts, accept the license agreement.

Novell Filr Appliance License Agreement

License Language: English
Keyboard Language: english-us (English (US))

manner prohibited by the United States Export Administration or any applicable export laws, restrictions or regulations.

21. You have the rights expressly set forth in the Agreement and no other. All rights in and to the Font Software, including unpublished rights, are reserved under the copyright laws of the United States and other jurisdictions. All rights reserved. Notwithstanding the foregoing, to the extent that any law, statute, treaty, or governmental regulation shall be deemed by a court of competent jurisdiction to provide you with any additional or different rights from those provided herein and such rights shall be deemed non-waivable as a matter of law and to supersede the rights specifically provided herein, then such law, statute, treaty, or governmental regulation shall be deemed to be made a part of the Agreement. To the extent that any such rights created by any law, statute, treaty or governmental regulation are waivable, you agree that your acceptance of the Agreement shall constitute an effective and irrevocable waiver of such rights. The Agreement may be enforced by AMT or by an authorized dealer acting on behalf of AMT.

22. If this product is acquired under the terms of a (i) GSA contract - use, reproduction or disclosure is subject to the restrictions set forth in the applicable ADP Schedule contract, (ii) DOD contract - use, duplication or disclosure by the Government is subject to the applicable restrictions set forth in DFARS 252.277-7013; (iii) Civilian agency contract - use, reproduction, or disclosure is subject to FAR 52.277-19(a) through (d) and restrictions set forth in the Agreement.

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- 7 Complete the initial configuration settings, substituting the IP address and other settings that you identified in [Chapter 2, “Hands-on System Requirements,”](#) on page 9 for the Filr appliance on your network.

IMPORTANT: Ensure that the *Time Zone* settings match the settings of your Windows environment.

For example, the following screen shows the IP addresses and the other information that was used for the Filr appliance that was deployed in a private network when this guide was developed.

The screenshot shows a configuration form with the following fields and values:

- Root Password: novellfilr
- Confirm Root Password: novellfilr
- Vaadmin Password: novellfilr
- Confirm Vaadmin Password: novellfilr
- Hostname (e.g. server.domain.com): filr.filr-lab.local
- IP Address (e.g. 10.0.0.1): 192.168.1.110
- Network Mask (e.g. 255.255.255.0): 255.255.255.0
- Gateway (e.g. 10.0.0.2): 192.168.1.1
- DNS Server (e.g. 10.0.0.3): 192.168.1.200
- Alternate DNS Server (e.g. 10.0.0.3): (empty)
- NTP Server/s (e.g. time.domain.com): time-a.nist.gov
- Region: USA
- Time Zone: Mountain (Denver)

- 8 Proceed through the screens, accepting the defaults, until the configuration process completes.

```
The system is ready for appliance configuration.

To configure the appliance:
  1. At your management workstation, open a browser and enter one of the following URLs:

      https://filr.filr-lab.local:9443
      https://192.168.1.110:9443

  2. Log in as vaadmin with the password that you set.

IMPORTANT: Do not use the terminal prompt before consulting the documentation.
Appliance administration requires appliance-specific tools.
Using standard tools can result in service disruption or failure.

filr login: _
```

- 9 Continue with [Configuring the Filr Appliance](#).

6.1.2 Configuring the Filr Appliance

- 1 In your management browser, enter the following URL: `https://Filr-appliance-IP-address:9443`.
- 2 Click through the security warnings and accept the certificate if needed.
- 3 Log in with Username: `vaadmin` and the password you set in [Step 7 on page 55](#).

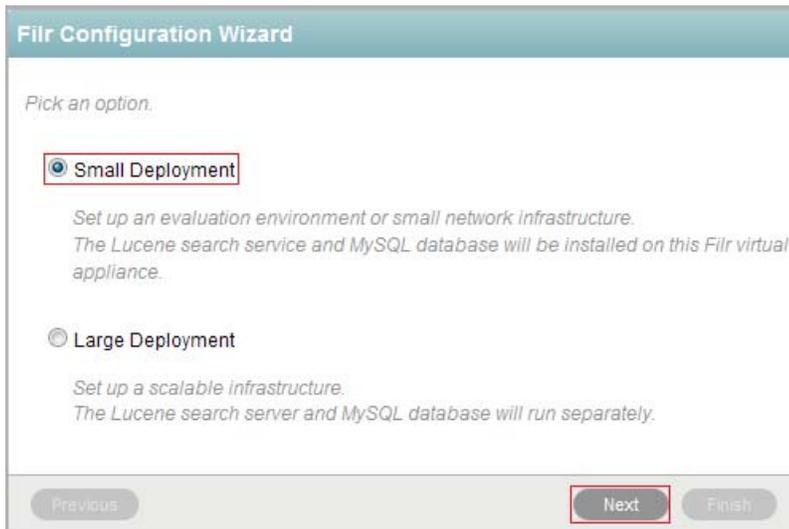


The image shows the Novell Filr Appliance Administration login page. It features a dark grey background with the Novell logo and the text "Novell Filr Appliance Administration" in white. Below the header, there is a copyright notice: "© Copyright 2011-2013 Novell, Inc. All rights reserved.". The login form consists of two input fields: "Username:" with the value "vaadmin" and "Password:" with the value "password". A "Log in" button with a right-pointing arrow is located at the bottom right of the form.

- 4 Click the *Novell Appliance Configuration* icon.



- 5 Ensure that *Small Deployment* is selected, then click *Next*.



The image shows the "Filr Configuration Wizard" screen. The title bar is teal and contains the text "Filr Configuration Wizard". Below the title bar, the instruction "Pick an option." is displayed. There are two radio button options: "Small Deployment" (selected) and "Large Deployment". The "Small Deployment" option has a red box around it. Below each option is a brief description: "Set up an evaluation environment or small network infrastructure. The Lucene search service and MySQL database will be installed on this Filr virtual appliance." for Small Deployment, and "Set up a scalable infrastructure. The Lucene search server and MySQL database will run separately." for Large Deployment. At the bottom of the wizard, there are three buttons: "Previous", "Next" (highlighted with a red box), and "Finish".

- 6 Specify and confirm N0v3llfi!r as the root password.



Database

Set the MySQL administrator password on the database.

User Name: root

User Password: N0v3llfi!r

Confirm Password: N0v3llfi!r

Previous Next Finish

- 7 Click *Finish*.



Default Locale

Select the primary language of the Filr server.

Default Locale: English (United States)

Previous Next Finish

- 8 Skip to [Chapter 7, “Securing LDAP Communications between Filr and Active Directory,”](#) on page 69.

6.2 Large Deployment: Deploying and Configuring

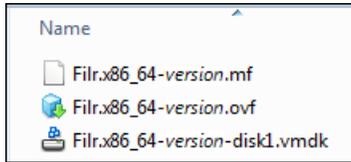
- [Section 6.2.1, “Deploying Filr,”](#) on page 53
- [Section 6.2.2, “Deploying Search,”](#) on page 56
- [Section 6.2.3, “Deploying MySQL,”](#) on page 58
- [Section 6.2.4, “Configuring the MySQL Appliance,”](#) on page 60
- [Section 6.2.5, “Configuring the Search Appliance,”](#) on page 63
- [Section 6.2.6, “Configuring the Filr Appliance,”](#) on page 65

IMPORTANT: The instructions in this section assume that the Filr appliances are being deployed on a VMware server.

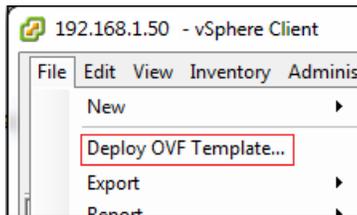
If you are deploying Filr on Hyper-V or Xen, refer to the instructions in [“Installing the Filr Appliance and Configuring the Operating System”](#) in the *Novell Filr 1.0.1 Installation and Configuration Guide*. In each case, after you reach the point where you accept the license agreement, you can return to the respective deploying sections in this guide and continue on from that point.

6.2.1 Deploying Filr

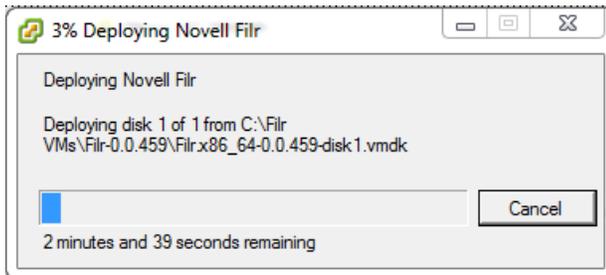
- 1 On a workstation with the vSphere client installed, extract the `Filr.x86_64-version.ovf.zip` file that you downloaded in [Chapter 3, “Downloading Filr Software,”](#) on page 13 until you have a folder containing three files with `.mf`, `.ovf`, and `.vmdk` extensions.



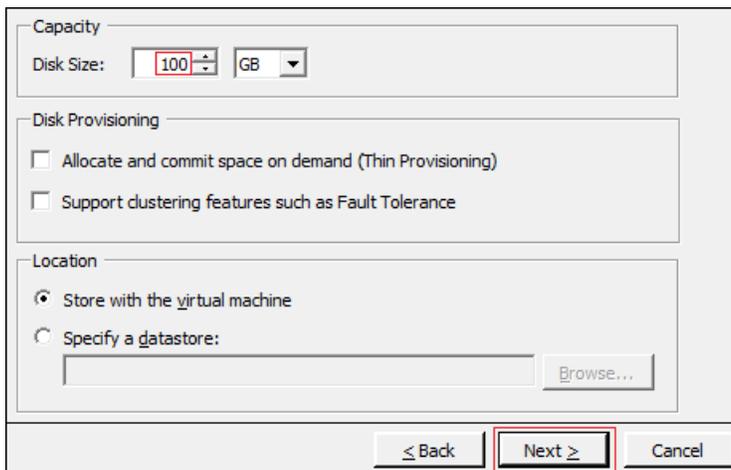
- 2 Using the vSphere client, attach to your VMware ESX server, then click *File > Deploy OVF Template*.



- 3 Browse to and open the `Filr.x86_version.ovf.zip` file, then proceed through the various dialogs as you normally would until the virtual machine is deployed.



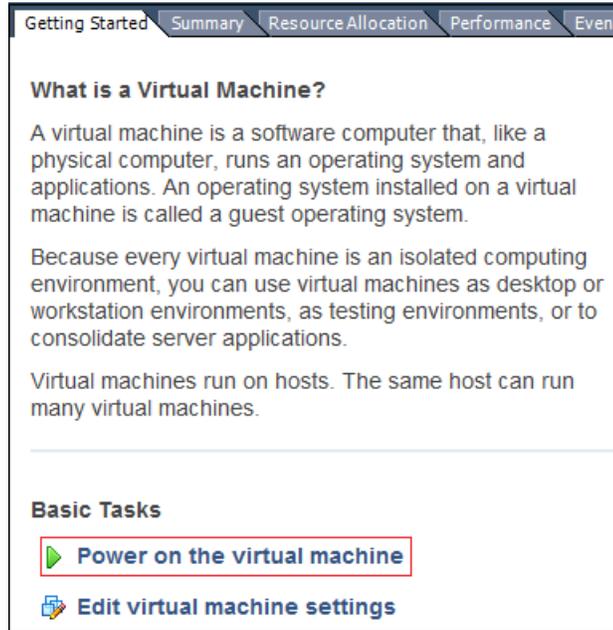
- 4 Edit the virtual machine settings and add a 100 GB hard disk.



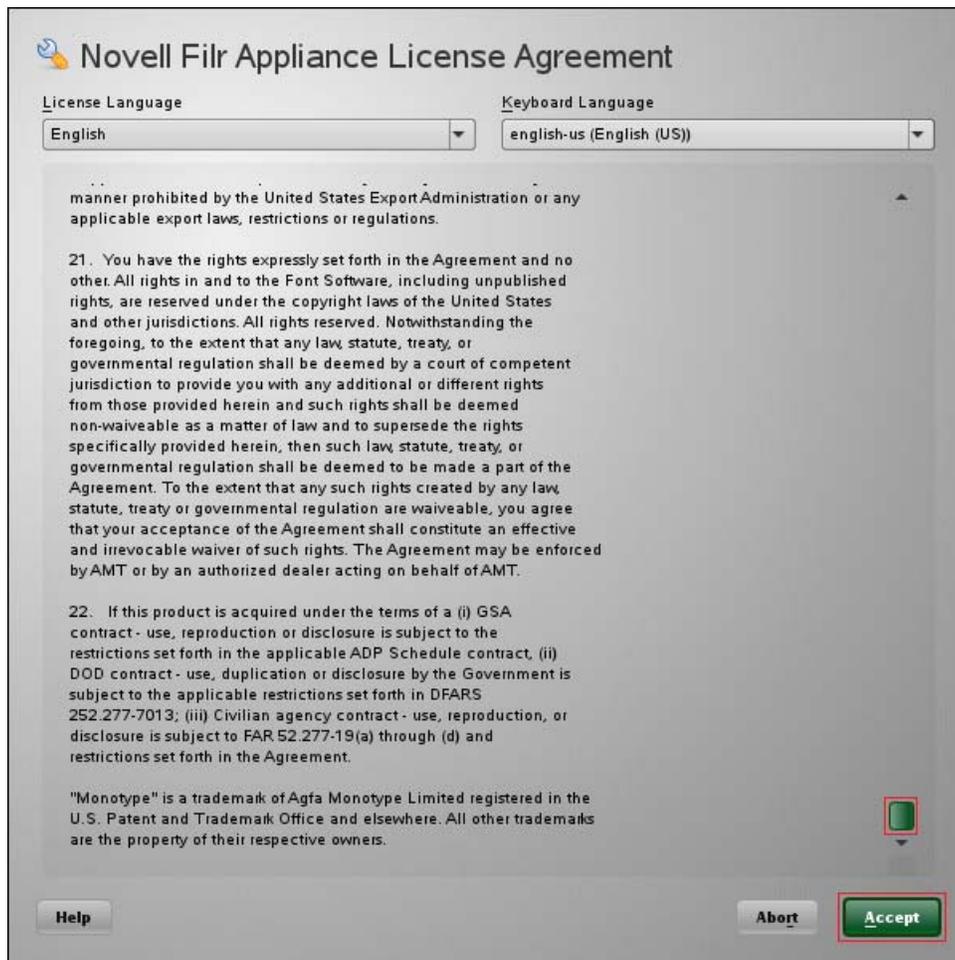
TIP: When you deploy Filr in a production environment, you have a choice to make at this point. You can either add a second hard disk to the appliance or you can specify an NFS mount point for shared storage.

Shared storage lets you provide a more robust and expandable environment by clustering multiple Filr appliances that all access the same storage area. For more information, see the information in the [Novell Filr 1.0.1 Installation and Configuration Guide](#), starting with the table named “[Filr Appliance Storage](#).”

- 5 After the hard disk has been added, click *Power on the virtual machine*.



- 6 After the appliance starts, accept the license agreement.



- 7 Complete the initial configuration settings, substituting the IP address and other settings that you identified in [Chapter 2, “Hands-on System Requirements,” on page 9](#) for the Filr appliance on your network.

IMPORTANT: Ensure that the *Time Zone* settings match the settings of your Windows environment.

For example, the following screen shows the IP addresses and the other information that was used for the Filr appliance that was deployed in a private network when this guide was developed.

| | |
|--|--|
| Root Password: | Confirm Root Password: |
| <input type="text" value="novellfilr"/> | <input type="text" value="novellfilr"/> |
| Vaadmin Password: | Confirm Vaadmin Password: |
| <input type="text" value="novellfilr"/> | <input type="text" value="novellfilr"/> |
| Hostname (e.g. server.domain.com): | |
| <input type="text" value="filr.filr-lab.local"/> | |
| IP Address (e.g. 10.0.0.1): | |
| <input type="text" value="192.168.1.110"/> | |
| Network Mask (e.g. 255.255.255.0): | |
| <input type="text" value="255.255.255.0"/> | |
| Gateway (e.g. 10.0.0.2): | |
| <input type="text" value="192.168.1.1"/> | |
| DNS Server (e.g. 10.0.0.3): | Alternate DNS Server (e.g. 10.0.0.3): |
| <input type="text" value="192.168.1.200"/> | <input type="text"/> |
| NTP Server/s (e.g. time.domain.com): | |
| <input type="text" value="time-a.nist.gov"/> | |
| Region: | Time Zone: |
| <input type="text" value="USA"/> | <input type="text" value="Mountain (Denver)"/> |

- 8 Proceed through the screens, accepting the defaults, until the configuration process completes.

```

The system is ready for appliance configuration.

To configure the appliance:
  1. At your management workstation, open a browser and enter one of the following URLs:

      https://filr.filr-lab.local:9443
      https://192.168.1.110:9443

  2. Log in as vaadmin with the password that you set.

IMPORTANT: Do not use the terminal prompt before consulting the documentation.
Appliance administration requires appliance-specific tools.
Using standard tools can result in service disruption or failure.

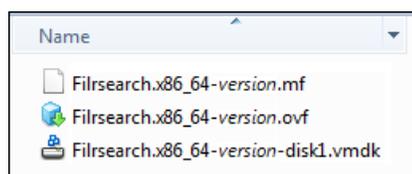
filr login: _

```

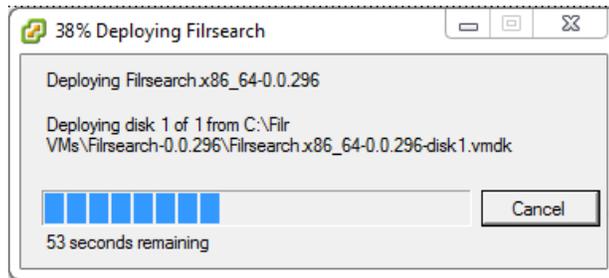
- 9 Continue with [Deploying Search](#).

6.2.2 Deploying Search

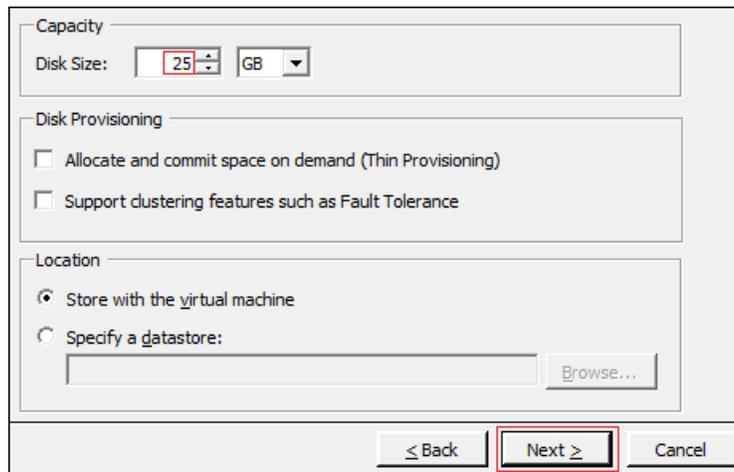
- 1 On the VMware workstation host machine, extract the `Filrsearch.x86_64-version.ovf.zip` file that you downloaded in [Downloading Filr Software](#) until you have a folder containing three files with `.mf`, `.ovf`, and `.vmdk` extensions.



- 2 Proceed as you did with Filr by deploying the Filrsearch OVF template file, and so on until the virtual machine is deployed.



- 3 Edit the virtual machine settings and add a 25 GB disk.



- 4 After the hard disk has been added, power on the virtual machine.
- 5 When the license agreement appears, read and accept it, then complete the initial configuration settings, as shown below. Substitute the IP address and other settings that you identified in [Chapter 2, "Hands-on System Requirements,"](#) on page 9 for the Filrsearch appliance on your network.

IMPORTANT: Ensure that the *Time Zone* settings match the settings of the Windows environment.

For example, the following screen shows the IP addresses and the other information that was used for the Filrsearch appliance that was deployed in a private network when this guide was developed.

| | |
|--|--|
| Root Password: | Confirm Root Password: |
| <input type="text" value="novellfilr"/> | <input type="text" value="novellfilr"/> |
| Vaadmin Password: | Confirm Vaadmin Password: |
| <input type="text" value="novellfilr"/> | <input type="text" value="novellfilr"/> |
| Hostname (e.g. server.domain.com): | |
| <input type="text" value="filrsearch.filr-lab.local"/> | |
| IP Address (e.g. 10.0.0.1): | |
| <input type="text" value="192.168.1.111"/> | |
| Network Mask (e.g. 255.255.255.0): | |
| <input type="text" value="255.255.255.0"/> | |
| Gateway (e.g. 10.0.0.2): | |
| <input type="text" value="192.168.1.1"/> | |
| DNS Server (e.g. 10.0.0.3): | Alternate DNS Server (e.g. 10.0.0.3): |
| <input type="text" value="192.168.1.200"/> | <input type="text"/> |
| NTP Server/s (e.g. time.domain.com): | |
| <input type="text" value="time-a.nist.gov"/> | |
| Region: | Time Zone: |
| <input type="text" value="USA"/> | <input type="text" value="Mountain (Denver)"/> |

6 Proceed through the screens, accepting the defaults, until the configuration process completes.

```

The system is ready for appliance configuration.

To configure the appliance:
  1. At your management workstation, open a browser and enter one of the following URLs:

      https://filrsearch.filr-lab.local:9443
      https://192.168.1.111:9443

  2. Log in as vaadmin with the password that you set.

IMPORTANT: Do not use the terminal prompt before consulting the documentation.
Appliance administration requires appliance-specific tools.
Using standard tools can result in service disruption or failure.

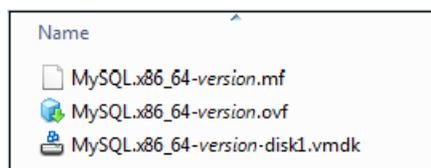
filrsearch login:

```

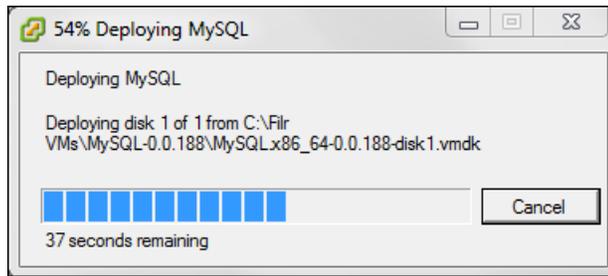
7 Continue with [Deploying MySQL](#).

6.2.3 Deploying MySQL

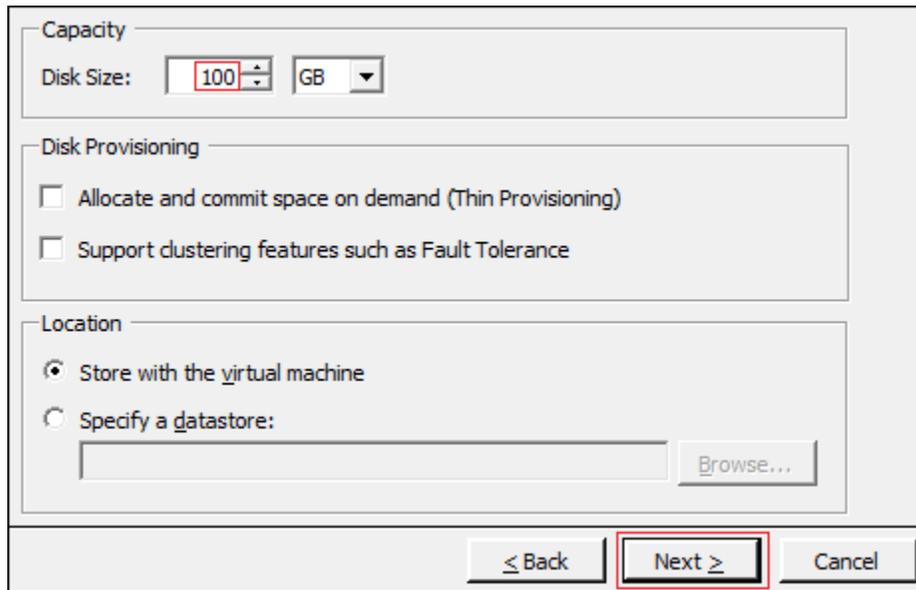
1 On the VMware workstation host machine, extract the `MySQL.x86_64-version.ovf.zip` file that you downloaded in [Downloading Filr Software](#) until you have a folder containing three files with `.mf`, `.ovf`, and `.vmdk` extensions.



- 2 Proceed as you did with Filr and Filrsearch by deploying the MySQL OVF template file, and so on until the virtual machine is deployed.



- 3 Edit the virtual machine settings and add a 100 GB disk.



- 4 After the hard disk has been added, power on the virtual machine.
- 5 When the license appears, read and accept it, then complete the initial configuration settings as shown below. Substitute the IP address and other network settings that you identified in [Chapter 2, "Hands-on System Requirements,"](#) on page 9 for the MySQL appliance.

IMPORTANT: Ensure that the *Time Zone* settings match the settings of the Windows server.

| | |
|---|--|
| Root Password: | Confirm Root Password: |
| <input type="text" value="novellfilr"/> | <input type="text" value="novellfilr"/> |
| Vaadmin Password: | Confirm Vaadmin Password: |
| <input type="text" value="novellfilr"/> | <input type="text" value="novellfilr"/> |
| Hostname (e.g. server.domain.com): | |
| <input type="text" value="mysql.filr-lab.local"/> | |
| IP Address (e.g. 10.0.0.1): | |
| <input type="text" value="192.168.1.112"/> | |
| Network Mask (e.g. 255.255.255.0): | |
| <input type="text" value="255.255.255.0"/> | |
| Gateway (e.g. 10.0.0.2): | |
| <input type="text" value="192.168.1.1"/> | |
| DNS Server (e.g. 10.0.0.3): | Alternate DNS Server (e.g. 10.0.0.3): |
| <input type="text" value="192.168.1.200"/> | <input type="text"/> |
| NTP Server/s (e.g. time.domain.com): | |
| <input type="text" value="time-a.nist.gov"/> | |
| Region: | Time Zone: |
| <input type="text" value="USA"/> | <input type="text" value="Mountain (Denver)"/> |

- 6 Proceed through the screens, accepting the defaults, until the configuration process completes.

```

The system is ready for appliance configuration.

To configure the appliance:
  1. At your management workstation, open a browser and enter one of the following URLs:

      https://mysql.filr-lab.local:9443
      https://192.168.1.112:9443

  2. Log in as vaadmin with the password that you set.

IMPORTANT: Do not use the terminal prompt before consulting the documentation.
Appliance administration requires appliance-specific tools.
Using standard tools can result in service disruption or failure.

mysql login:

```

- 7 Continue with [Configuring the MySQL Appliance](#).

6.2.4 Configuring the MySQL Appliance

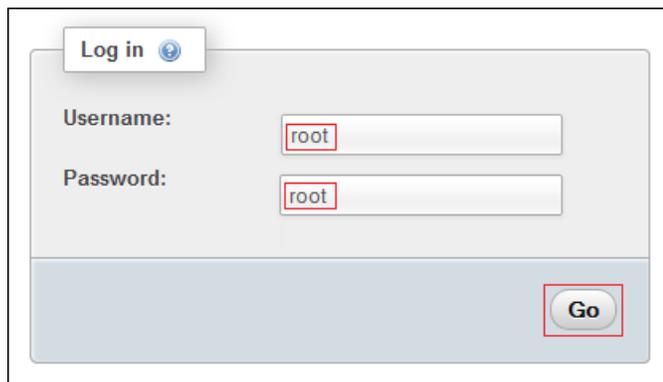
- 1 Launch your management browser on the management workstation and enter the following URL: `https://MySQL-appliance-ip-address:9443`.
- 2 Click through the security warnings and accept the certificate if needed.
- 3 Log in with Username: `vaadmin` and the password you set for the `vaadmin` user in [Step 5 on page 59](#).



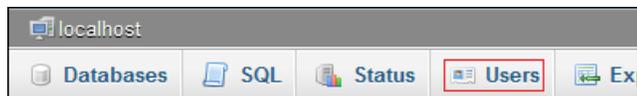
- 4 Click the *phpMyAdmin* icon.



- 5 Type *Username* root and *Password* root, then click *Go*.

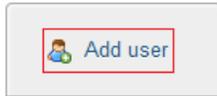


- 6 Click *Users*.



- 7 Create a database user for the Filr appliance by doing the following:

- 7a Click *Add User*.



7b Type the required information in the fields indicated.

| Field Name | Value to Type |
|------------|-------------------------------------|
| User name | filr |
| Host | <i>ip_address_of_Filr_appliance</i> |
| Password | <i>password</i> |
| Re-type | <i>password</i> |

7c Select *Create database with same name and grant all privileges*, then click *Add User*.

A screenshot of the "Add user" dialog box. The dialog has a title bar "Add user" and is divided into two sections: "Login Information" and "Database for user".
In the "Login Information" section, there are four rows of input fields. Each row starts with a label (User name, Host, Password, Re-type) and a dropdown menu labeled "Use text field:". The text fields contain "filr", "ip_address_of_Filr_appliance", "password", and "password" respectively. A "Generate password:" label is followed by a "Generate" button and an empty text field.
In the "Database for user" section, there are three radio button options: "None", "Create database with same name and grant all privileges" (which is selected and highlighted with a red box), and "Grant all privileges on wildcard name (username_%)".
At the bottom right, there are two buttons: "Add user" (highlighted with a red box) and "Cancel".

8 Secure the MySQL appliance by changing the root user password.

8a In the *Users Overview* section, select *root*, then click *Edit Privileges*.

Users overview

| | User | Host | Password | Global privileges | Grant | Action |
|-------------------------------------|---------|---------------|----------|-------------------|-------|-------------------------|
| <input type="checkbox"/> | Any | % | -- | USAGE | No | Edit Privileges Export |
| <input type="checkbox"/> | Any | localhost | No | USAGE | No | Edit Privileges Export |
| <input type="checkbox"/> | Any | mysql | No | USAGE | No | Edit Privileges Export |
| <input type="checkbox"/> | filr | 192.168.1.110 | Yes | USAGE | No | Edit Privileges Export |
| <input type="checkbox"/> | ganglia | localhost | Yes | ALL PRIVILEGES | No | Edit Privileges Export |
| <input checked="" type="checkbox"/> | root | % | Yes | ALL PRIVILEGES | Yes | Edit Privileges Export |
| <input type="checkbox"/> | root | 127.0.0.1 | No | ALL PRIVILEGES | Yes | Edit Privileges Export |
| <input type="checkbox"/> | root | localhost | Yes | ALL PRIVILEGES | Yes | Edit Privileges Export |
| <input type="checkbox"/> | root | mysql | No | ALL PRIVILEGES | Yes | Edit Privileges Export |

- 8b** Scroll down to the *Change password* section, type a new password in both *Password* fields, then click *Go*.

The screenshot shows a 'Change password' dialog box with the following elements:

- No Password
- Password: Re-type:
- Password Hashing: MySQL 4.1+ MySQL 4.0 compatible
- Generate password:
-

- 9** Continue with [Configuring the Search Appliance](#).

6.2.5 Configuring the Search Appliance

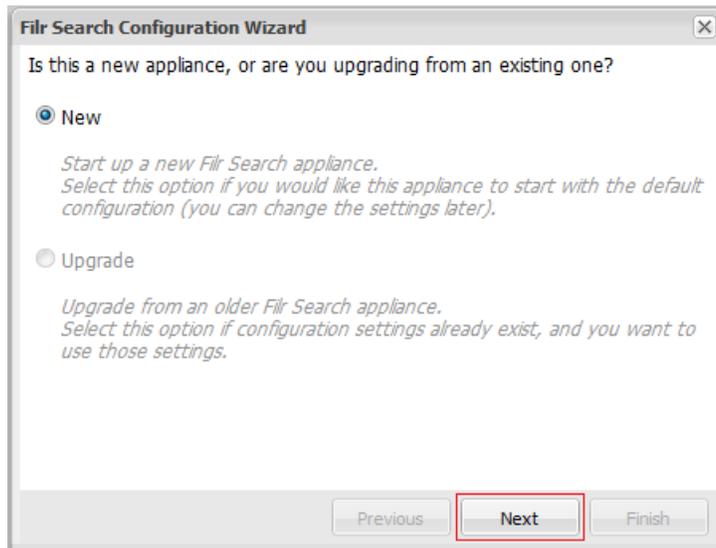
- 1 In your management browser, enter the following URL: `https://Filrsearch-appliance-ip-address:9443`.
- 2 Click through the security warnings and accept the certificate if needed.
- 3 Log in with Username: `vaadmin` and the password you set for the `vaadmin` user in [Step 6 on page 58](#).



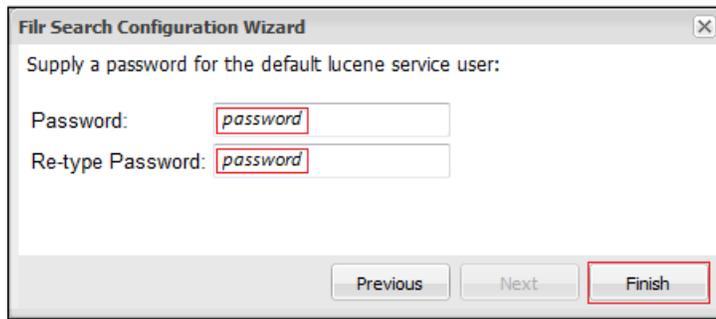
- 4 Click the *Filr Search Appliance Configuration* icon.



- 5 Click *Next*.



- 6 Type and confirm a *Password* for the search service, then click *Finish*.



7 Click *Submit*.



8 When the password is updated, continue with [Configuring the Filr Appliance](#).

6.2.6 Configuring the Filr Appliance

- 1 In your management browser, enter the following URL: `https://Filr-appliance-IP-address:9443`.
- 2 Click through the security warnings and accept the certificate if needed.
- 3 Log in with Username: `vaadmin` and the password you set in [Step 7 on page 55](#).



4 Click the *Novell Appliance Configuration* icon.



- 5 Ensure that *Large Deployment* is selected, then click *Next*.

The screenshot shows the 'Filr Configuration Wizard' window. At the top, it says 'Pick an option.' There are two radio button options: 'Small Deployment' and 'Large Deployment'. The 'Large Deployment' option is selected. Below each option is a brief description. A warning box states: 'The Filr Appliance is not configured with "Shared Storage" which is required for clustering of Filr. If you wish for this appliance to be part of a cluster you must redeploy and create "Shared Storage" in the initial install.' At the bottom, there are three buttons: 'Previous', 'Next', and 'Finish'. The 'Next' button is highlighted with a red box.

- 6 Type the IP address of the MySQL appliance in the *Host Name* field, and the *User Password* that you specified in [Step 7b on page 62](#), then click *Next*.

The screenshot shows the 'Database' configuration screen. It asks to 'Specify the access information (how to connect) for the MySQL database.' The 'Database Type' is set to 'MySQL'. The 'Host Name' field contains 'MySQL-appliance-ip-address'. The 'Port' is set to '3306'. The 'Database Name' is 'filr', the 'User Name' is 'filr', and the 'User Password' is 'password'. At the bottom, there are three buttons: 'Previous', 'Next', and 'Finish'. The 'Next' button is highlighted with a red box.

- 7 Type the IP address of the Filrsearch appliance in the *Host Name* field, and the *Lucene User Password* that you specified in [Step 6 on page 64](#), then click *Next*.

Search Appliance

Specify the access information for the Search Appliance Server.

Host Name:

RMI Port: (Default is 1199)

Lucene User Name:

Lucene User Password:

The Lucene search server can be:

- The integrated search server in the Filr virtual appliance (local)
- The Lucene virtual appliance that is included with Filr, running separately.

8 Click *Finish*.

Default Locale

Select the primary language of the Filr server.

Default Locale:

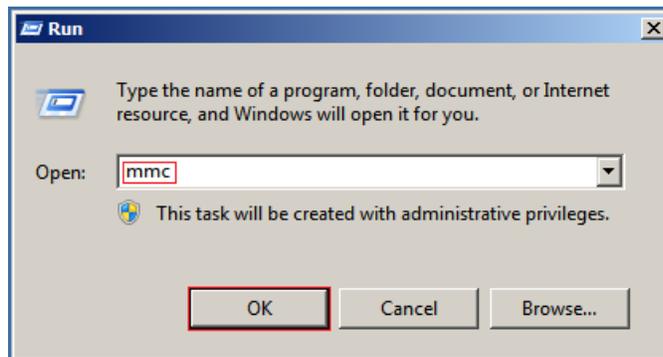
You now have a basic large deployment Filr infrastructure.

Continue with [Chapter 7, "Securing LDAP Communications between Filr and Active Directory,"](#) on page 69.

7 Securing LDAP Communications between Filr and Active Directory

1 Generate a self-signed certificate for Active Directory.

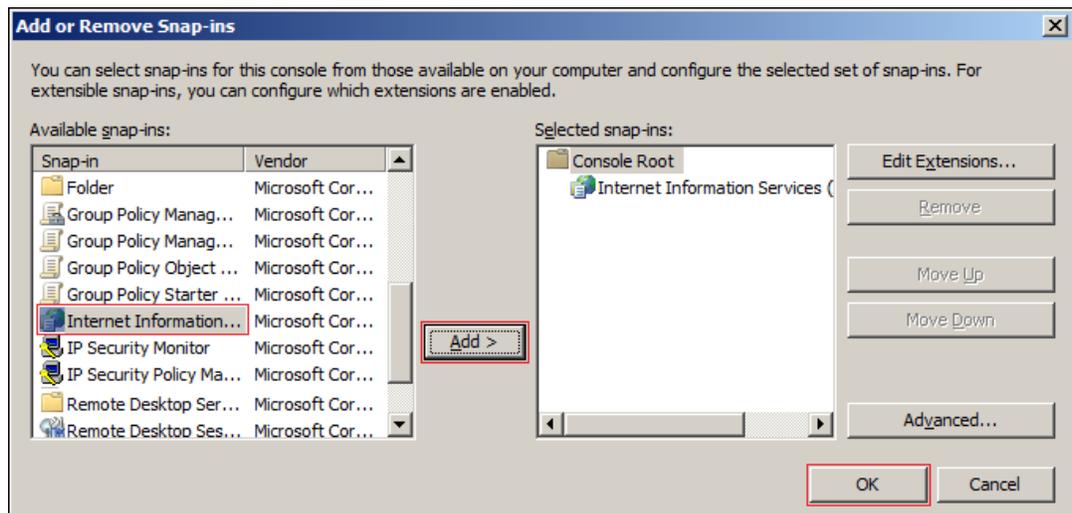
1a On the Windows server, click *Start > Run*, then enter `mmc`.



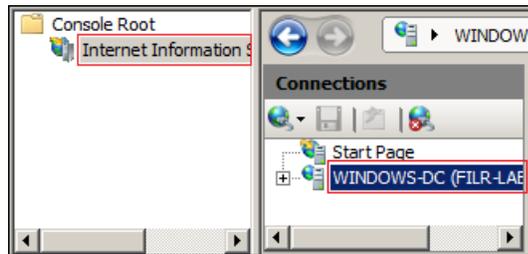
1b In MMC, type `Ctrl+M`.

1c If the *Internet Information Services (IIS) Manager* snap-in is not installed on your Windows server, install it.

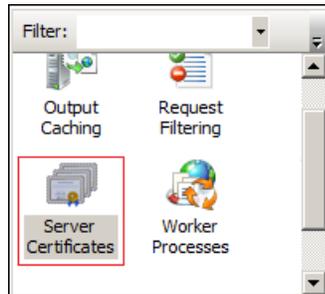
1d With IIS selected, click *Add*, then click *OK*.



1e In the left frame, click *Internet Information Services*, then click a Windows server that Filr can connect to for synchronizing the test users that you created in [Chapter 4, "Creating Test Users,"](#) on page 17.



1f In the Filter list, scroll down to *Server Certificates* and double-click the icon.



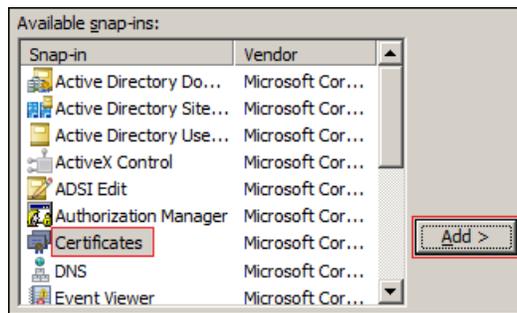
1g In the Actions list, click *Create Self-Signed Certificate*.



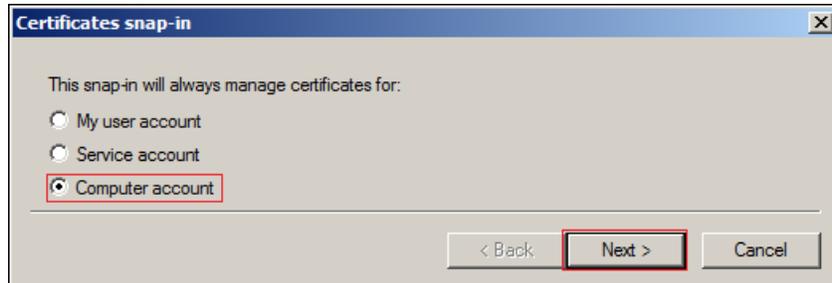
1h Name the certificate with a name you can remember, such as the server name, then click *OK*.



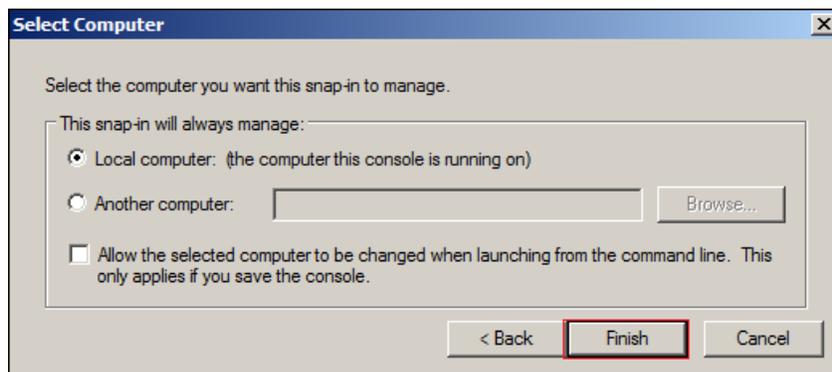
1i Type *Ctrl+M*, select the *Certificates* plug-in, then click *Add*.



1j Select *Computer account*, then click *Next*.

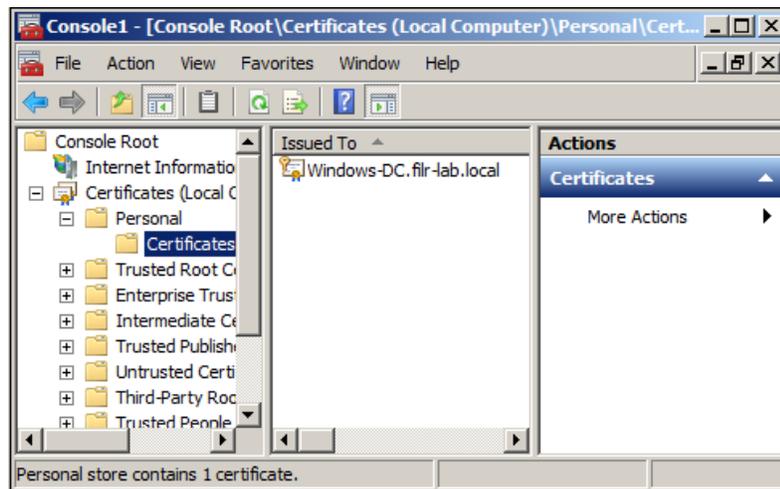


1k Click *Finish*.

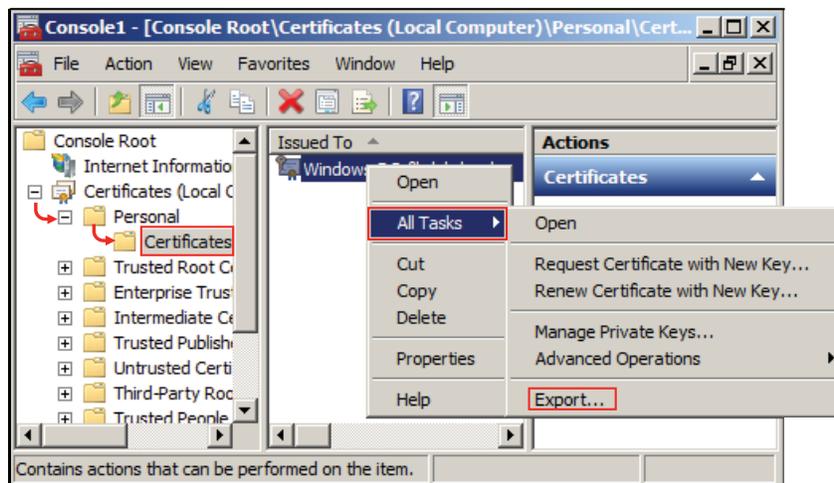


1l In the Snap-ins dialog, click *OK*.

1m In MMC, expand the *Certificates* plug-in, expand *Personal*, then click *Certificates*.



1n Right-click the certificate you created, select *All Tasks*, then click *Export...*



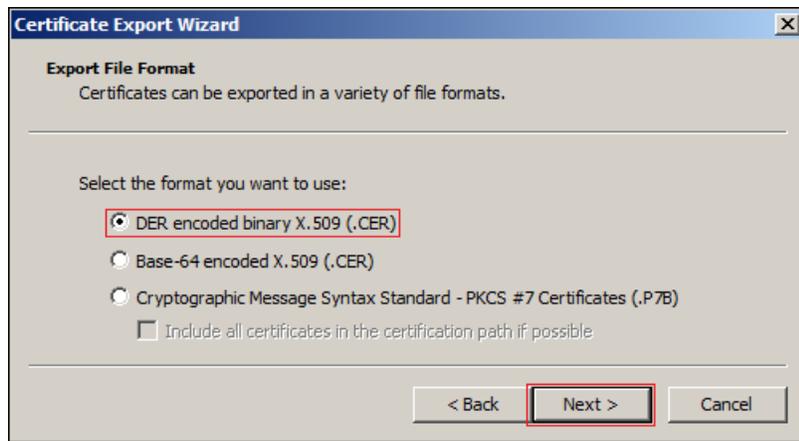
1o In the Certificate Export wizard, click *Next*.



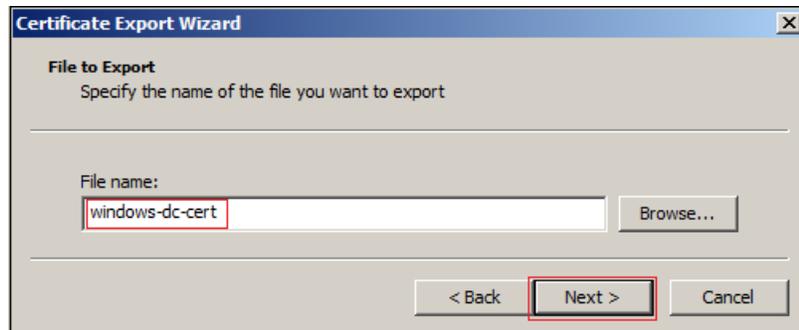
1p Ensure that *No, do not export the private key* is selected, then click *Next*.



1q Ensure that *DER encoded binary* is selected, then click *Next*.



1r Name the certificate, then click *Next*.



1s Click *Finish* > *OK*.

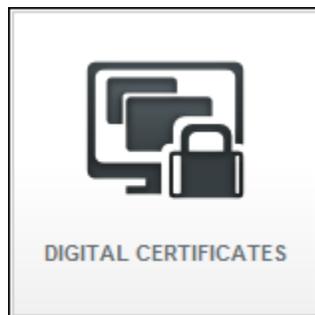


The certificate is saved in `C:\Users\Your-User-Name`.

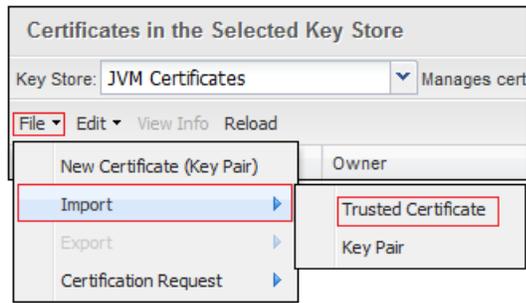
- 1t Ensure that the certificate is accessible from your management browser.
- 2 Using your management browser, import the certificate into the Filr appliance's Java Keystore:
 - 2a In the upper-right corner of the Filr Console, click the *Home* link.
 - 2b Click the *Appliance System Configuration* icon.



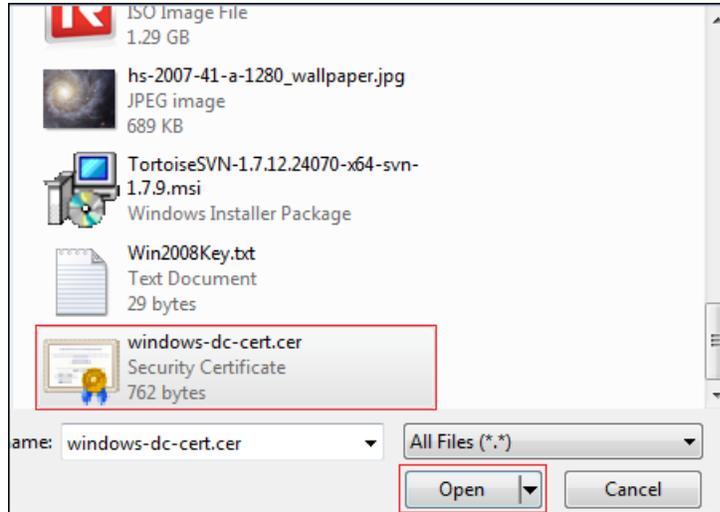
- 2c Click the *Digital Certificates* icon.



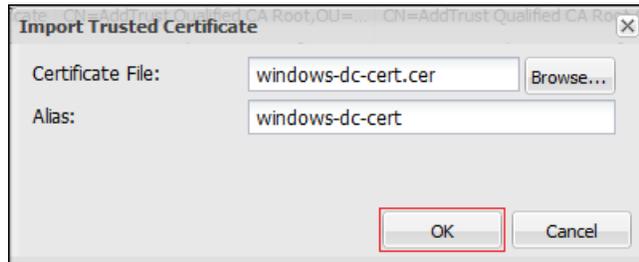
- 2d Click *File > Import > Trusted Certificate*.



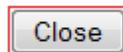
2e Browse to the certificate file that you saved in [Step 1s on page 73](#), then click *Open*.



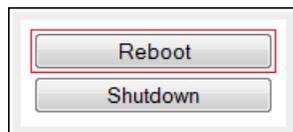
2f Click *OK*.



2g Click *Close*.



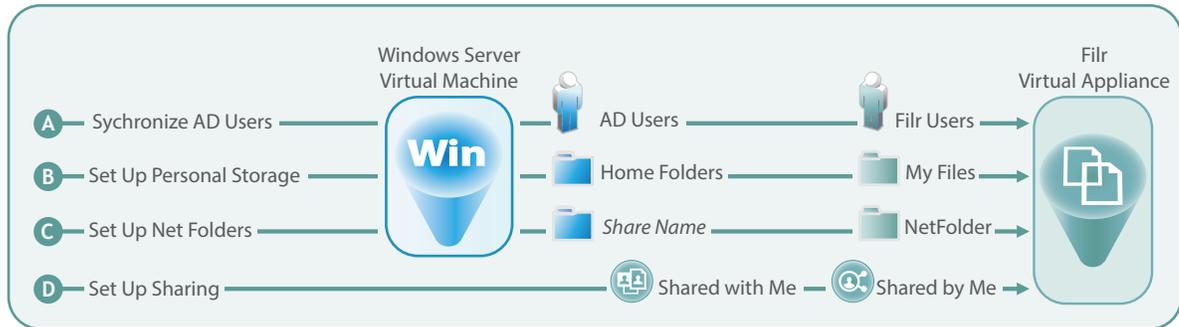
2h Click *Reboot > OK > OK*.



As soon as the Filr appliance restarts, both the Windows server and Filr are prepared for the exercises in [Chapter 8, "Administering Filr,"](#) on page 77.

8 Administering Filr

The Filr administration exercises are summarized in the following graphic.



NOTE: If you want the ability to repeat the exercises that follow, consider taking a snapshot of the Filr VMs before you begin. That way you can always restore the VMs to their original states without risking ripple effects from previous steps.

This section guides you through the following tasks:

- [Section 8.1, “Synchronizing LDAP Users,” on page 77](#)
- [Section 8.2, “Setting Up Users’ My Files Folders,” on page 83](#)
- [Section 8.3, “Setting Up Net Folders,” on page 84](#)
- [Section 8.4, “Enabling Sharing,” on page 93](#)
- [Section 8.5, “Setting Guest Access,” on page 94](#)
- [Section 8.6, “Allowing the Desktop Application to Be Deployed,” on page 95](#)
- [Section 8.7, “\(Optional\) Setting Up Email Communication with the Filr VM,” on page 96](#)

8.1 Synchronizing LDAP Users

In [Section 4, “Creating Test Users,” on page 17](#), you populated Active Directory with the users shown in [Figure 8-1 on page 78](#).

Figure 8-1 Users Created for the Filr Exercises

| testusers | | |
|--|--------|-------------|
| Name | Type ^ | Description |
|  A Black | User | |
|  A Blue | User | |
|  A Gray | User | |
|  A Green | User | |
|  A Orange | User | |
|  A Pink | User | |
|  A Red | User | |
|  A Yellow | User | |
|  Filr Proxyuser | User | |

Importing users to Filr is accomplished by setting up LDAP synchronization with Active Directory.

- 1 Using your administrative browser, access Filr through the following URL:

`https://Filr-appliance-IP-address:8443`

- 2 If prompted, accept and trust the certificate.
- 3 Sign in as *User ID*: admin with *Password*: admin.



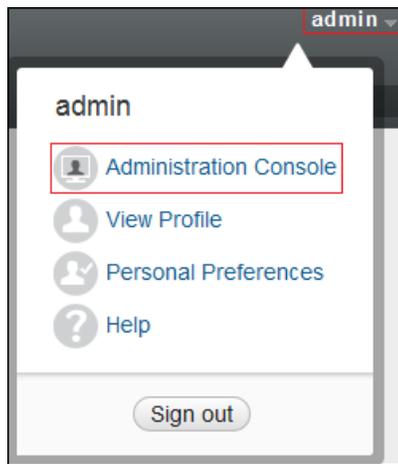
The image shows the Novell Filr sign-in interface. At the top, it says "Novell. Filr". Below that is a checkbox for "Sign in using OpenID". There are two input fields: "User ID:" with the value "admin" and "Password:" with the value "admin". A "Sign In" button is located at the bottom right.

- 4 When prompted, change the password to the administrative password you have chosen.



The image shows a "Change Password" dialog box. It contains the text: "You are currently using the default password. For security reasons, you should change your password." There are three input fields: "Current password:" with the value "admin", "New password:" with the value "Nov3llfilr", and "Confirm new password:" with the value "Nov3llfilr". "OK" and "Cancel" buttons are at the bottom right.

- 5 Click *admin* (upper right), then select *Administration Console*.



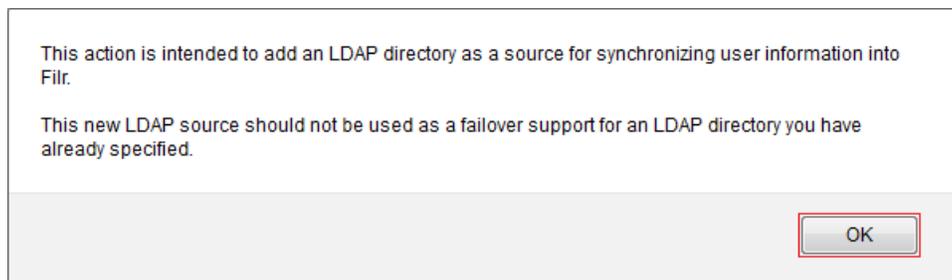
6 Under *System*, click *LDAP*.



7 Click *Add a New LDAP Source*

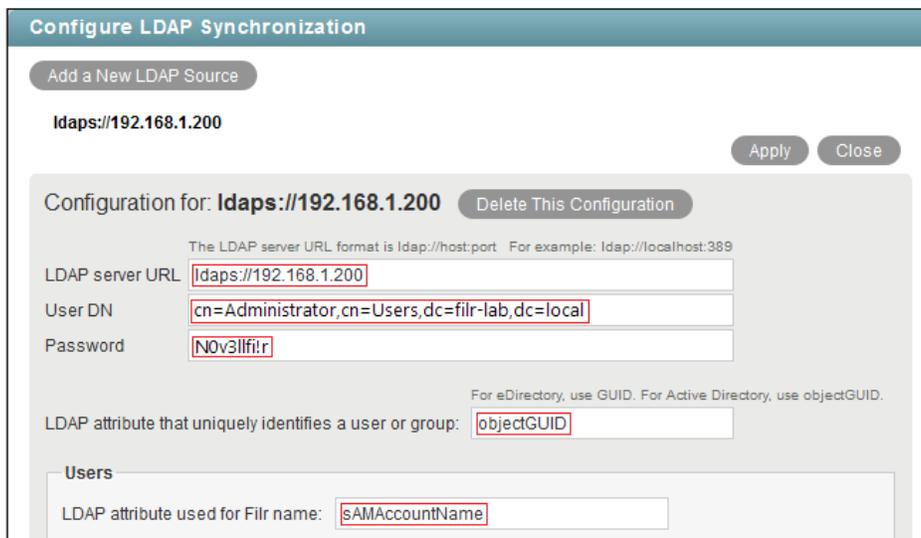


8 Click *OK*.



9 Enter the LDAP source information.

| Field Name | Value to Enter |
|-------------------------|---|
| LDAP Server URL | <code>ldaps://windows-server-IP-address</code> |
| User DN | <p>IMPORTANT: This is the distinguished name of an Active Directory user who has sufficient rights to access the information for the test users that you created in Chapter 4, “Creating Test Users,” on page 17. For example, it could be the user name that you used for that task.</p> <p>TIP: If you aren’t certain of the syntax, open a terminal prompt on the server and enter the <code>dsquery user</code> command.</p> <p>For example, the DN for the Administrator user account used to create the test users when developing this guide is: <code>cn=Administrator,cn=users,dc=filr-lab,dc=local.</code></p> |
| Password | <p>The password of the user above.</p> <p>For example, the password of the Administrator user on the server used for this guide is <code>N0v3llfi!r.</code></p> |
| LDAP Unique Identifier | objectGUID |
| LDAP Attribute for Filr | sAMAccountName |



- 10 Skip to the *Base DN* field, then type the DN of the testusers container on your server. For example, `ou=testusers,dc=filr-lab,dc=local.`

Base DN

This is the location of the users that you created in Active Directory ([Figure 8-1 on page 78](#)). As with [Step 9](#), if you aren’t certain of the syntax, use the `dsquery user` command.

- 11 Select the following options:
- ◆ *Enable Schedule*
 - ◆ *Run Immediately*

- ◆ *Every Day*
- ◆ *Repeat Every 0.25 Hours*

12 Select the following options for user synchronization:

- ◆ *Synchronize User Profiles*
- ◆ *Register LDAP User Profiles Automatically*

13 Click *Apply*.

All of the users in the testusers container are added.

14 Click *Close*.

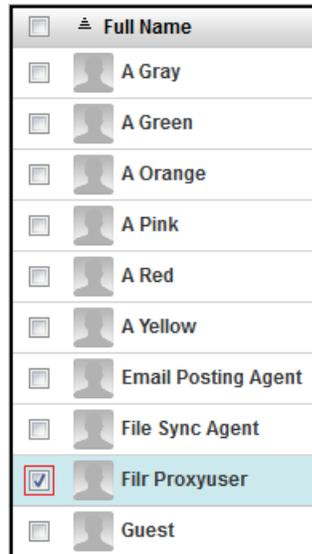


15 Remove the filrproxyuser by doing the following:

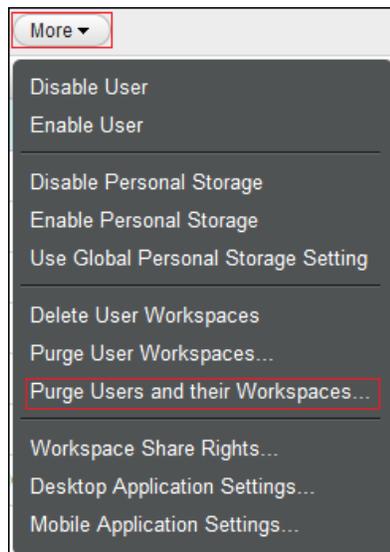
15a In the left frame, click *User Accounts*.



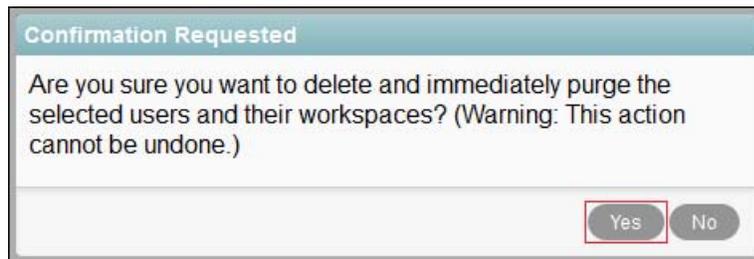
15b Select *Filr Proxyuser*.



15c Click *More*, then select *Purge Users and their Workspaces*.



15d Click *Yes*.



16 Continue with [Section 8.2, "Setting Up Users' My Files Folders,"](#) on page 83.

For complete instructions on using Filr LDAP synchronization, see "[Synchronizing Users and Groups from an LDAP Directory](#)," in the *Novell Filr 1.0.1 Administration Guide*.

8.2 Setting Up Users' My Files Folders

1 Under *Management > User Accounts*, select the check boxes next to the names of the following users:

- ◆ A Black
- ◆ A Green
- ◆ A Orange
- ◆ A Pink

| | Full Name | Type |
|-------------------------------------|-----------|------|
| <input checked="" type="checkbox"/> | A Black | LDAP |
| <input type="checkbox"/> | A Blue | LDAP |
| <input type="checkbox"/> | admin | |
| <input type="checkbox"/> | A Gray | LDAP |
| <input checked="" type="checkbox"/> | A Green | LDAP |
| <input checked="" type="checkbox"/> | A Orange | LDAP |
| <input checked="" type="checkbox"/> | A Pink | LDAP |

2 Click *More > Enable Personal Storage*.



3 Continue with [Setting Up Net Folders](#).

8.3 Setting Up Net Folders

- ♦ [Section 8.3.1, “Specifying Net Folder Servers,”](#) on page 84
- ♦ [Section 8.3.2, “Creating Net Folders and Setting Net Folder Access and Sharing Rights,”](#) on page 89

8.3.1 Specifying Net Folder Servers

Net Folder Servers are connections to shares on Windows file servers. You can set up as many connections to each file server as needed. For the hands-on lab, you create one Net Folder Server for each Share defined in [“Setting Up the Other Hands-on Exercise Folders and Files”](#) on page 34.

Configuring the Home_Folders Net Folder Server

1 Under *Management*, click *Net Folder Servers*.



- 2 Four of the users that you synchronized with the Windows server have Home directories on the server. Therefore, the Net Folder Server for the Home_Folder\$ share on your Windows server (for example, *Windows-DC-Home_Folders\$*), is already created and listed.

IMPORTANT: Although Home folders are technically like other Net Folders in Filr, their primary role is personal storage. Therefore, they are accessed through *My Files* rather than through *Net Folders*.

- 3 The Home Net Folder Server is marked with an icon that indicates that its configuration needs attention.

In the Name column, click the Home_Folders\$ server link.

| Name | Server Path |
|---|-----------------------------|
|  Windows-DC-Home_Folders\$ | \\Windows-DC\Home_Folders\$ |

- 4 One valuable Filr feature is the ability to share files and folders with others who do not have native file system rights.

This sharing functionality is provided through Net Folder proxy users. However, the “Home” Net Folder Server has no Net Folder proxy user configured. That is why the yellow icon is displayed.

You granted the Net Folder proxy user (*filrproxyuser*) full control of the Home_Folders\$ share in [Step 2 on page 18](#). You simply need to make Filr aware of that assignment.

- 4a In the *Proxy Name* field, type the DN of the *filrproxyuser*.

For example, in the guide’s development environment, this is
`cn=filrproxyuser,cn=testusers,dc=filr-lab, dc=local`

- 4b In the *Proxy Password* field, type the password specified for the *filrproxyuser*:

For example, `N0v311fi!r`

4c Click *Test Connection*.

Edit Net Folder Server: Windows-DC-Home_Folders\$

Name: Windows-DC-Home_Folders\$

The server path must be entered using UNC syntax. For example:
For OES, use \\server ip address\volume
For Windows, use \\server ip address\share

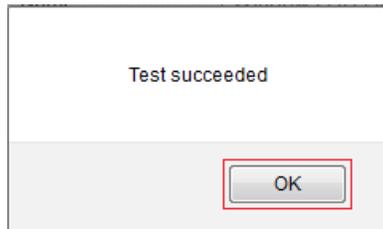
Server path: \\Windows-DC\Home_Folders\$

Proxy name: cn=filrproxyuser,cn=users,dc=filr-lab,dc=local

Proxy password: N0v3Ifilr

Test Connection

5 When you click *Test Connection*, you should see a message that the test succeeded. Click *OK*.



6 Click *OK* > *OK*.
The warning icon is removed.

| Name | Server Path |
|--|-----------------------------|
| <input type="checkbox"/> Windows-DC-Home_Folders\$ | \\Windows-DC\Home_Folders\$ |

Configuring the Other Net Folder Servers

1 To add Net Folder Servers for the other shares on the Windows server, click *Add*.

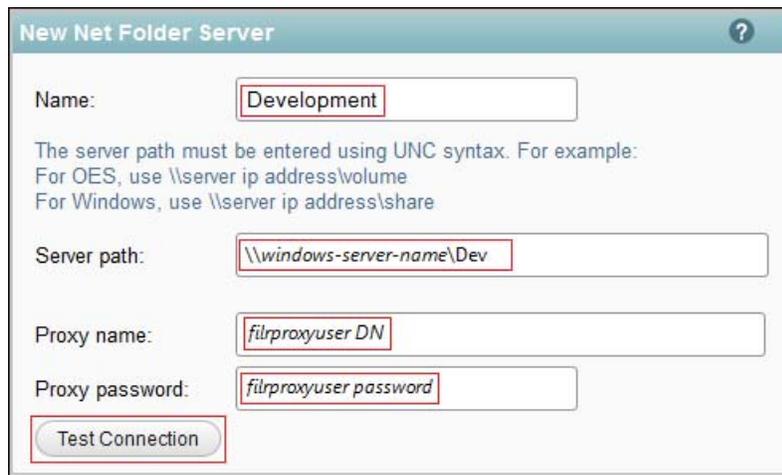


2 Use the information in [Table 8-1](#) as you add a Net Folder server for each share.

Table 8-1 Net Folder Servers to Add

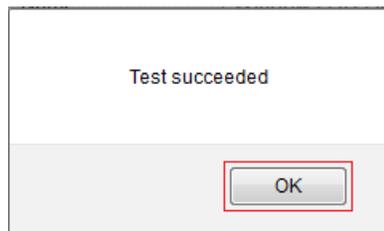
| Share | Field | Text |
|-------|-----------------------|--|
| Dev | Name | Development |
| | Server Path | \\windows-server-IP-address\Dev |
| | Proxy Name | filproxyuser DN For example: cn=filproxyuser,ou=testusers,dc=fil-lab,dc=local |
| | filproxyuser Password | For example: N0v3llfi!r |
| IS | Name | IS |
| | Server Path | \\windows-server-IP-address\IS |
| | Proxy Name | filproxyuser DN For example: cn=filproxyuser,ou=testusers,dc=fil-lab,dc=local |
| | Proxy Password | For example: N0v3llfi!r |
| Mrktg | Name | Marketing |
| | Server Path | \\windows-server-IP-address\Mrktg |
| | Proxy Name | filproxyuser DN For example: cn=filproxyuser,ou=testusers,dc=fil-lab,dc=local |
| | Proxy Password | For example: N0v3llfi!r |
| Sales | Name | Sales |
| | Server Path | \\windows-server-IP-address\Sales |
| | Proxy Name | filproxyuser DN For example: cn=filproxyuser,ou=testusers,dc=fil-lab,dc=local |
| | Proxy Password | For example: N0v3llfi!r |

2a Type the information for each share in the fields indicated, beginning with *Dev*. Then click *Test Connection* to verify that the information is typed correctly.



Notice that the Net Folder Server names do not necessarily need to mirror the server and share names.

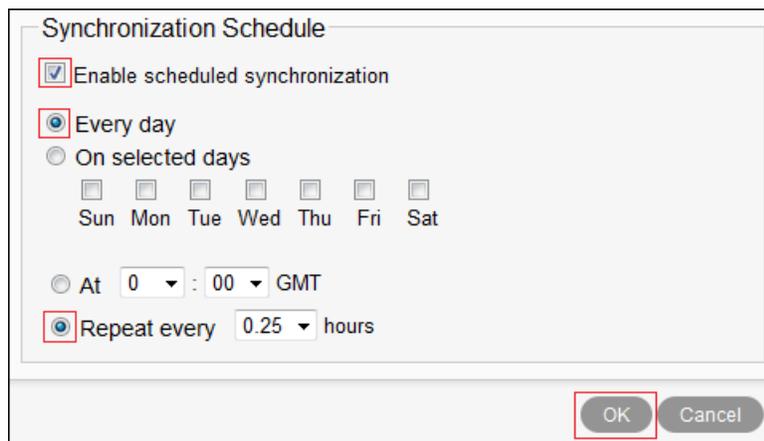
2b Click *OK*.



2c Under *Synchronization Schedule*, select

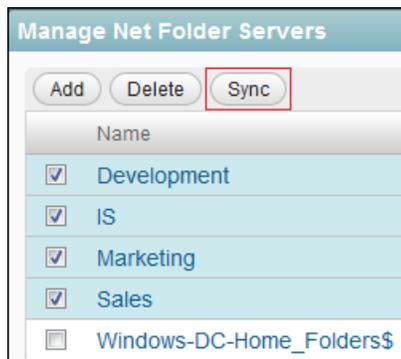
- ◆ *Enable Scheduled Synchronization*
- ◆ *Every Day*
- ◆ *Repeat every 0.25 hours*

Then click *OK*.



2d Repeat from [Step 2](#) to create Net Folder Servers for the IS, Marketing, and Sales shares.

3 Click *Sync*.



When the sync operation completes, Filr has metadata for each Net Folder Server in its database.

- 4 Continue with [Creating Net Folders and Setting Net Folder Access and Sharing Rights](#).

8.3.2 Creating Net Folders and Setting Net Folder Access and Sharing Rights

Net Folders are connections to specific directories on Net Folder Servers. You can set up as many Net Folders as needed. You can also specify a separate and independent synchronization schedule for each Net Folder.

- 1 Under *Management*, click *Net Folders*.



- 2 Use the information in [Table 8-2](#) as you create the Net Folders needed for the hands-on exercises.

Table 8-2 Net Folder Configuration Information

| Name | Server | Relative Path | Users with Rights to Net Folder | Sharing Rights |
|---------------|-------------|-----------------------|---------------------------------|--|
| reviews | Development | personnel\reviews | ared | Allow Access Internal |
| comp planning | Development | personnel\salaries | ared | Allow Access |
| projects | Development | projects | ared | Allow Access Internal External |
| training | IS | training\quick_starts | ablue | Allow Access Internal Re-share |
| cool stuff | Marketing | advertising\brochures | ayellow | Allow Access Internal External Public Re-share |
| projections | Sales | revenue\projections | ablack | Allow Access Internal |
| 2013 tracking | Sales | revenue\quotas | ablack | Allow Access Internal |

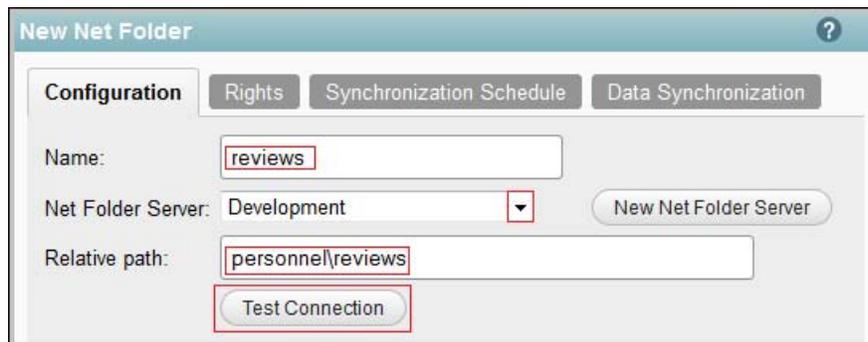
2a Click *Add*.



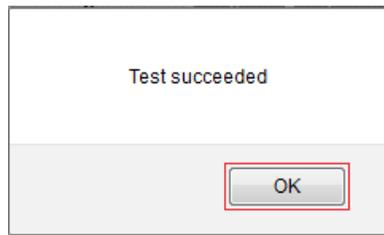
Although the Home_Folders\$ share is Net Folder Server and four users have Home folders, there are no Net Folders displayed.

Home folders are displayed and managed under *My Files* rather than *Net Folders*.

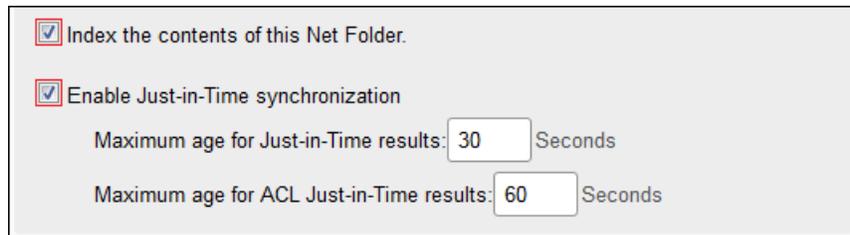
2b Referring to [Table 8-2](#), in the New Net Folder dialog type a name (starting with *reviews*). Select the appropriate Net Folder Server, type the relative path for the Net Folder, then click *Test Connection* to verify that the information is entered correctly.



2c Click OK.



2d Click *Index the Contents of This Net Folder* and *Enable Just-in-Time Synchronization*.



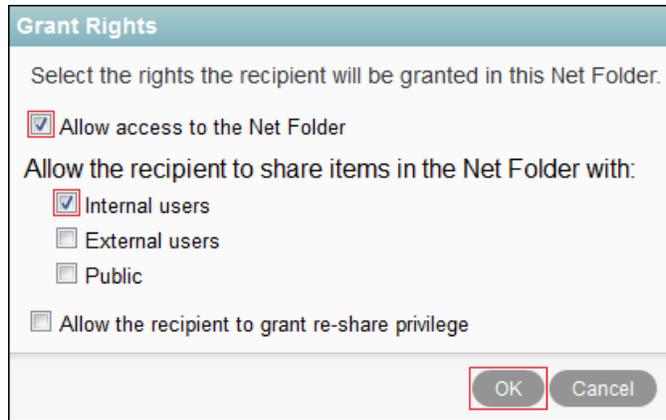
Although content indexing carries significant processing overhead and should, therefore, probably not be applied to all Net Folders, the content used in these exercises is so small that the overhead involved with indexing is miniscule.

2e Click the *Rights* tab.

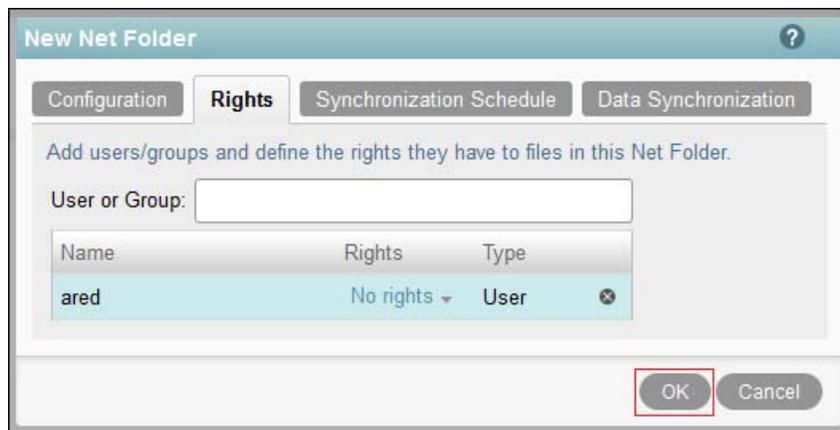
In the *User or Group* field, begin typing the user listed in the table, then select the correct user.



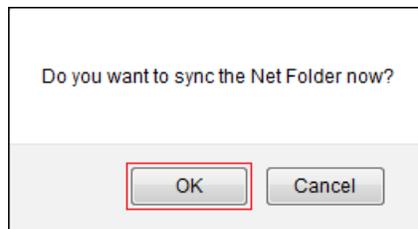
2f In the *Grant Rights* dialog, set the sharing rights as listed for the folder, then click *OK*.



2g Click *OK*.



2h Click *OK*, then return to [Step 2](#) for the next Net Folder.



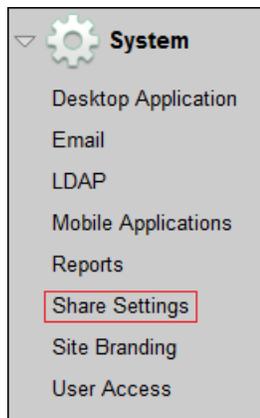
2i When all of the Net Folders have been specified, continue with [Enabling Sharing](#).

| Name | Server Name | Relative Path |
|---|-------------|-----------------------|
| <input checked="" type="checkbox"/> 2013 tracking | Sales | revenue\quotas |
| <input checked="" type="checkbox"/> projections | Sales | revenue\projections |
| <input checked="" type="checkbox"/> cool stuff | Marketing | advertising\brochures |
| <input checked="" type="checkbox"/> training | IS | training\quick_starts |
| <input checked="" type="checkbox"/> projects | Development | projects |
| <input checked="" type="checkbox"/> comp planning | Development | personnel\salaries |
| <input checked="" type="checkbox"/> reviews | Development | personnel\reviews |

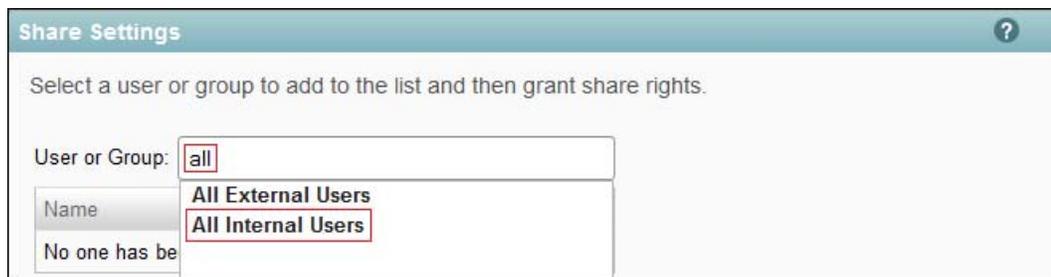
8.4 Enabling Sharing

Even though you granted sharing rights in the previous section, actually allowing users to share files and folders requires that you enable sharing for the Filr site.

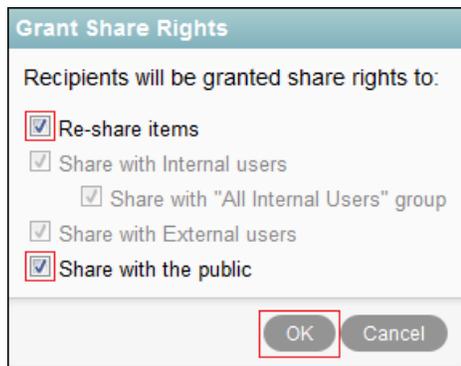
1 Under *System*, click *Share Settings*.



2 In the *User or Group* field, start to type *all*, then select *All Internal Users*.

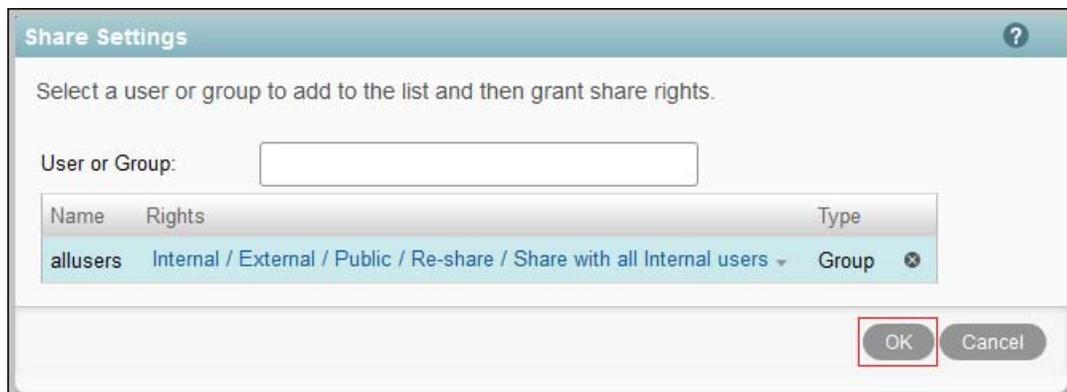


3 Click *Re-share items* and *Share with the public*, then click *OK*.



This sets the maximum sharing rights that can be granted anywhere on the system. Re-sharing and public access are only available if they are actually enabled on the Net Folders.

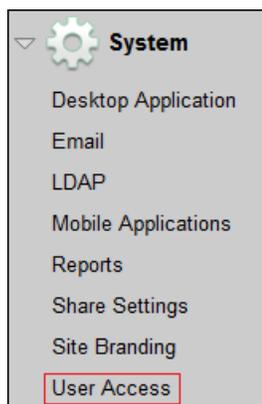
- 4 Click OK.



8.5 Setting Guest Access

The hands-on exercises let you access Filr as a user who doesn't have an account in Filr.

- 1 Under *System*, click *User Access*.



- 2 Select *Allow Guest access* and *Guest access is read-only*, then click OK.



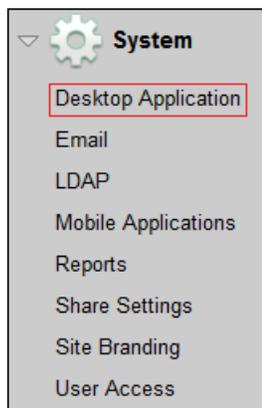
The *read-only* option prevents public (guest) users from logging comments. This is generally a good idea in light of the risk of “spam” comments. Comments cannot be removed in this version of Filr.

- 3 Continue with [Allowing the Desktop Application to Be Deployed](#).

8.6 Allowing the Desktop Application to Be Deployed

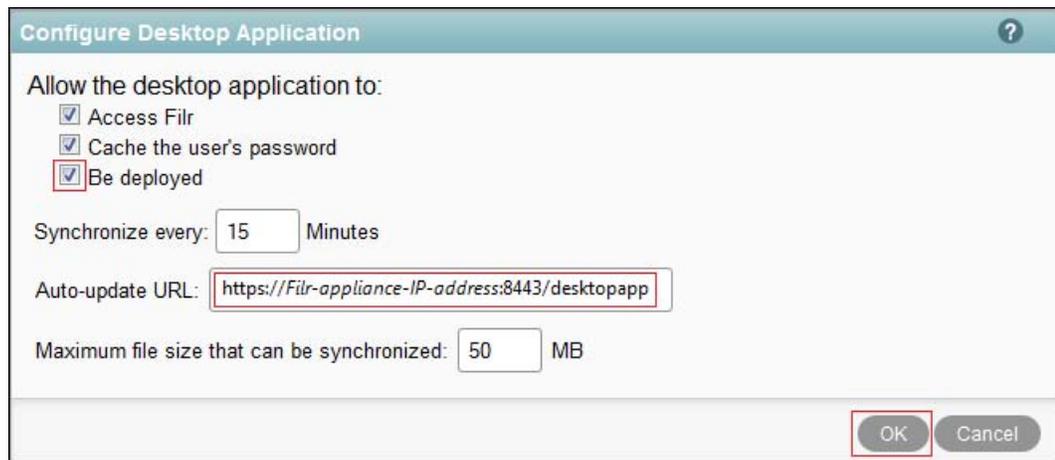
Some of the Filr end user exercises are done through the Desktop Application. To enable the Desktop Application to be deployed through the Web application:

- 1 Under *System*, click *Desktop Application*.



- 2 Select *Be deployed*.

In the *Auto-update URL* field, type `https://Filr-appliance-IP-address:8443/desktopapp/`, then click *OK*.



3 Continue with [\(Optional\) Setting Up Email Communication with the Filr VM](#).

8.7 (Optional) Setting Up Email Communication with the Filr VM

The hands-on exercises leverage two of your personal email addresses:

- One is assigned to user *ared* for demonstrating Filr's notification capabilities.
- The other is used for inviting an external user to collaborate on a project.

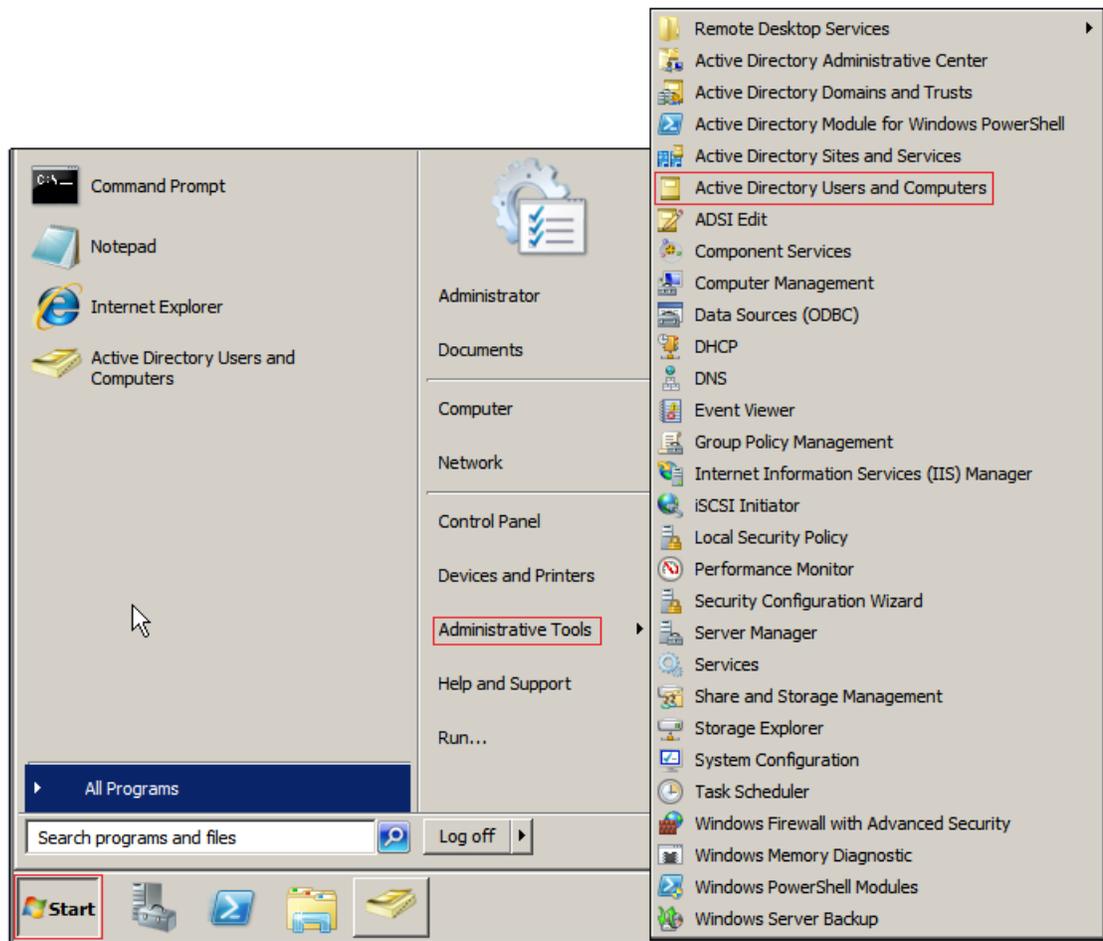
If you are not interested in email notifications or external sharing as part of the end user exercises, you can skip all of the remaining sections and steps in this guide that are marked (Email Only).

If you want to experiment with email notifications that originate from Filr, you must complete the following sections:

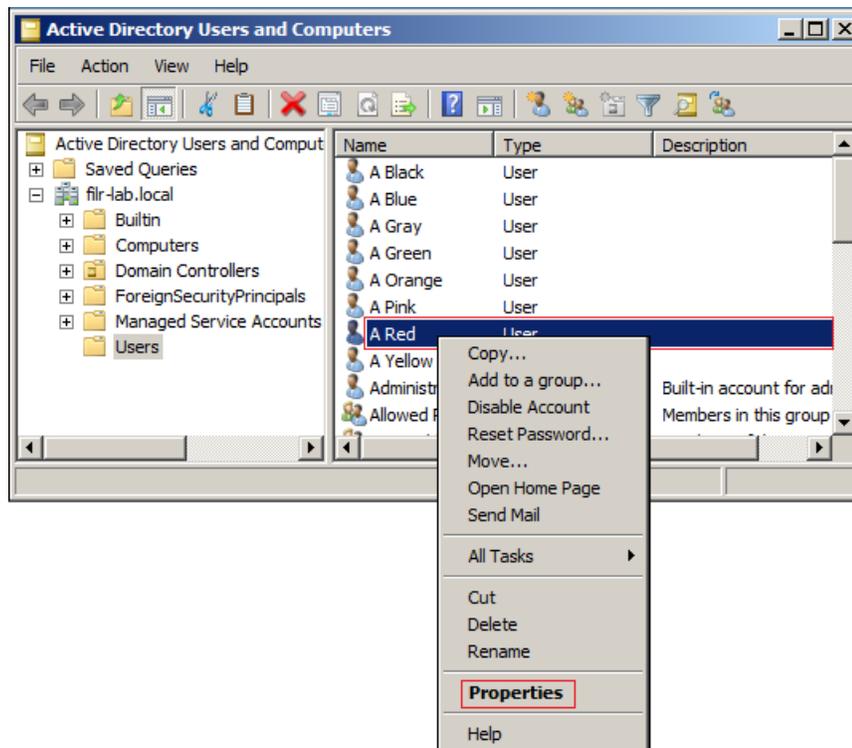
- [Section 8.7.1, "\(Email Only\) Entering an Email Address for User ared,"](#) on page 96
- [Section 8.7.2, "\(Email Only\) Synchronizing ared's Change with Filr,"](#) on page 99

8.7.1 (Email Only) Entering an Email Address for User ared

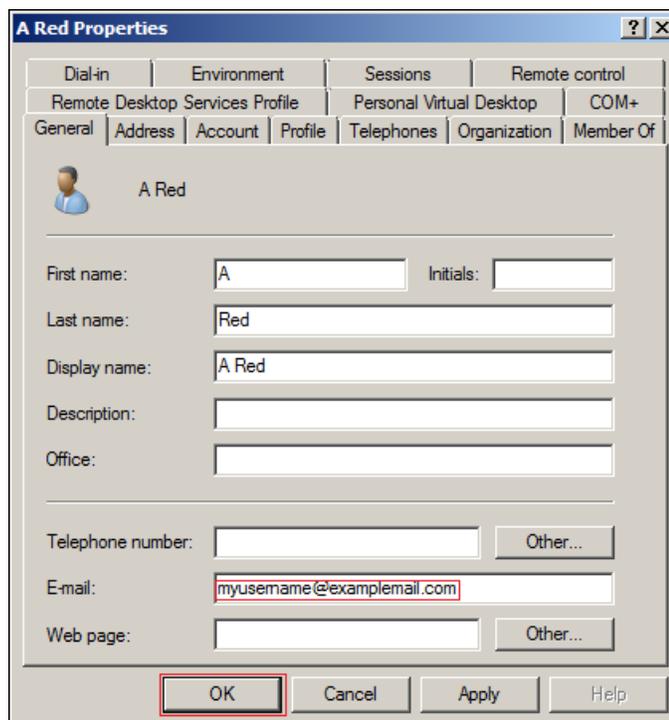
1 On the Windows server, click *Start > Administrative Tools > Active Directory Users and Computers*.



2 Right-click user *ared* and select *Properties*.



- 3 Type the email address you have chosen to use with these exercises, for example `myusername@examplemail.com`.



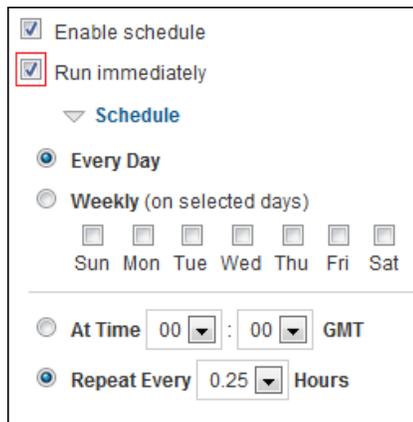
- 4 Click OK, then continue with [\(Email Only\) Synchronizing ared's Change with Filr](#).

8.7.2 (Email Only) Synchronizing ared's Change with Filr

- 1 In the *Administration Console* under *System*, click *LDAP*.



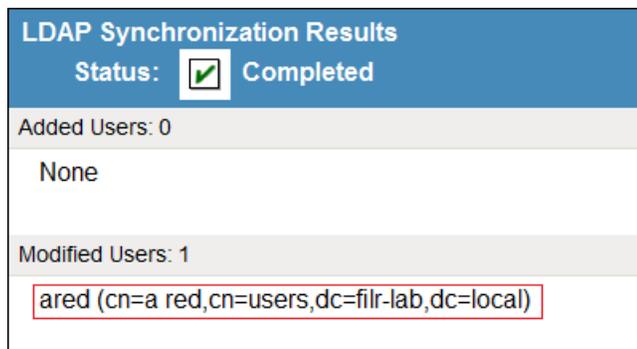
- 2 Select *Run immediately*.



- 3 Click *Apply*.



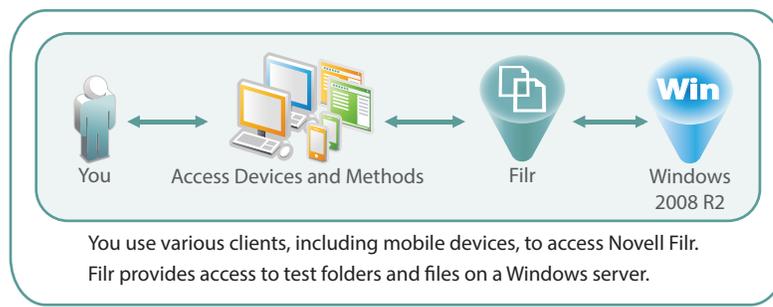
User ared's profile is modified.



- 4 Continue with [Chapter 9, "Using Filr,"](#) on page 101.

9 Using Filr

The Filr end user exercises can be summarized as follows:



This section guides you through the following tasks:

- ◆ [Section 9.1, “Accessing Filr to Do the Filr End User Exercises,” on page 101](#)
- ◆ [Section 9.2, “Understanding Test Users and Their Roles,” on page 106](#)
- ◆ [Section 9.3, “Exploring Filr Functionality for End Users,” on page 107](#)

9.1 Accessing Filr to Do the Filr End User Exercises

You need connections to Filr through the following access points to complete the Filr End User Exercises:

- ◆ A browser
- ◆ The Filr Desktop Application
- ◆ A mobile device
- ◆ [Section 9.1.1, “Connecting to Filr through a Browser and Installing the Filr Desktop Application,” on page 101](#)
- ◆ [Section 9.1.2, “Starting the Filr Desktop Application,” on page 104](#)
- ◆ [Section 9.1.3, “Installing and Starting a Filr Mobile App,” on page 106](#)

9.1.1 Connecting to Filr through a Browser and Installing the Filr Desktop Application

To connect through the browser and install the Filr Desktop Application:

- 1 On the Windows management workstation, start a browser and access the following URL:

`https://Filr-appliance-IP-address:8443`

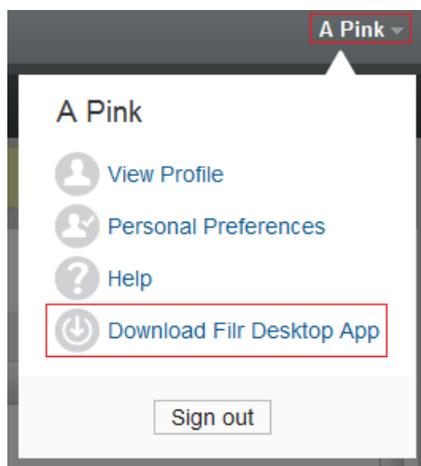
- 2 If prompted, accept and install the certificate.

3 Log in as *User ID: apink*.



The image shows the Novell Filr login interface. At the top, it says "Novell. Filr". Below that, there is a checkbox for "Sign in using OpenID". Underneath, there are two input fields: "User ID:" with the text "apink" and "Password:" with asterisks. A "Sign In" button is located at the bottom right of the form.

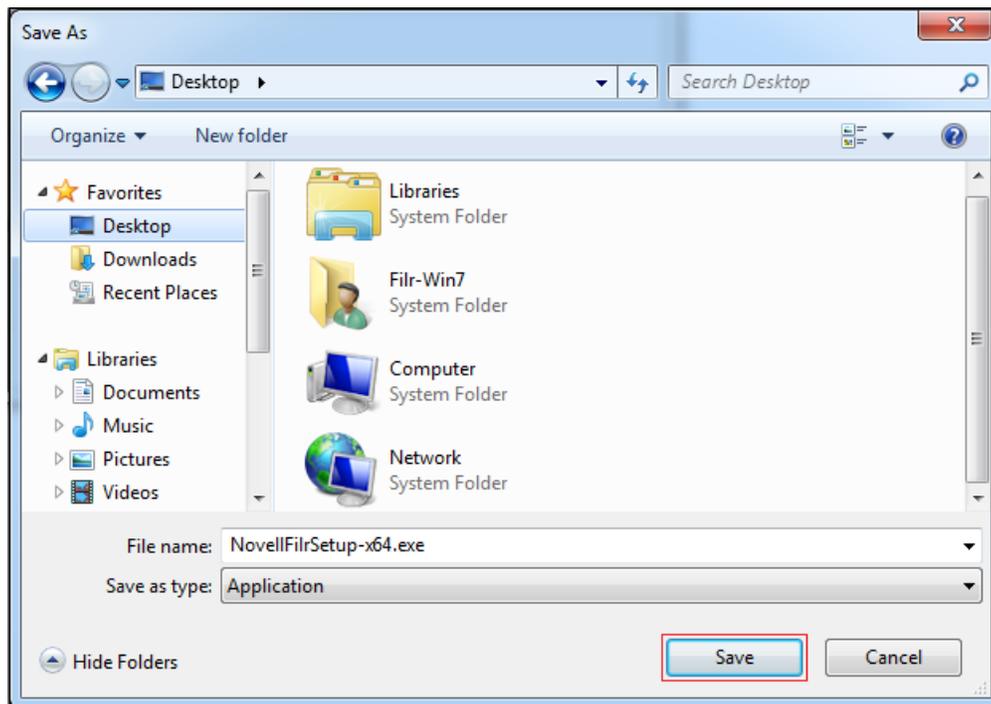
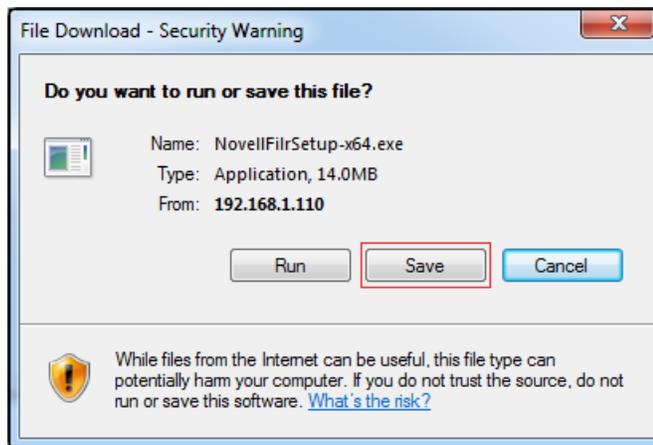
4 In the upper-right corner, click *apink*, then select *Download Filr Desktop App*.



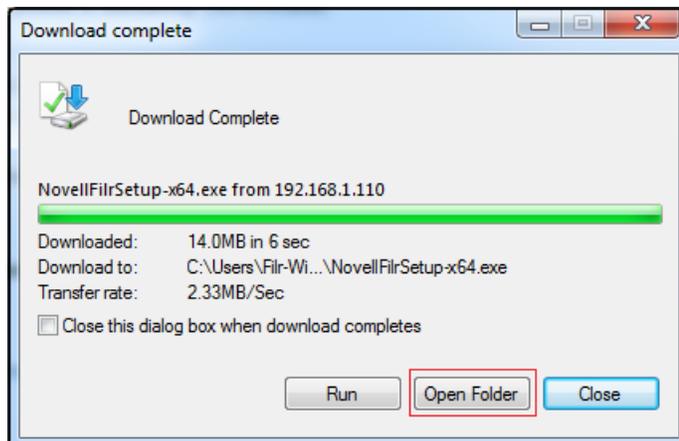
5 Click the appropriate link for the host workstation, for example, *Windows X64 Client*.

| PRODUCT | TYPE | DOWNLOADS |
|---------------------|---|---|
| Filr Windows Client |  | Windows x86 Client (MD5: ec03fa0ed8ecd096489820e97446f836) |
| | | Windows x64 Client (MD5: 44bdc8e9cbe3b48d42b151b9b9e18a0b) |
| Filr MacOS Client |  | MacOS Client (MD5: 60dae8b429756aa3cc9e14ff3a055aa9) |

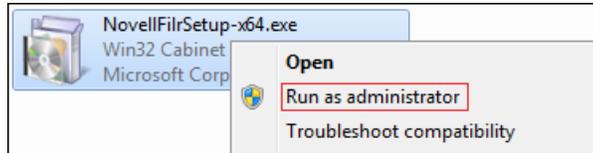
6 Save the file.



7 When the download completes, click *Open Folder*.



- 8 Right-click the downloaded file and select *Run as administrator*.



- 9 Run the installation, accepting the licenses, rebooting the workstation, and so on until the desktop application is installed.

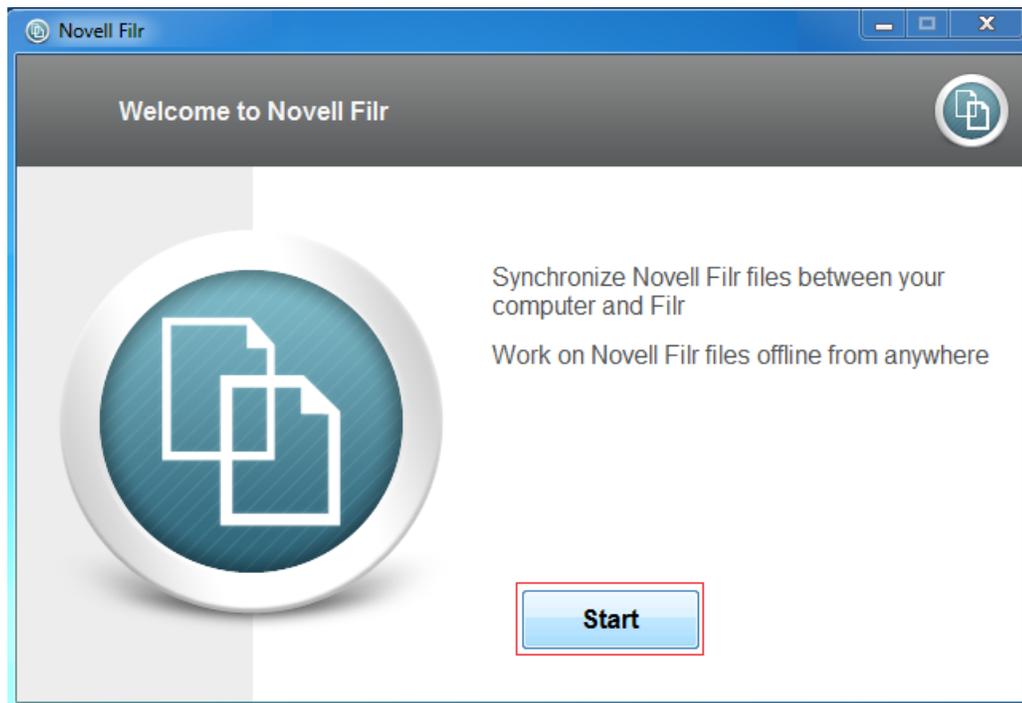
Depending on your download speed, downloading and installing Microsoft .NET can take a while.

For additional information, see the applicable Quick Start on the [Novell Filr online documentation site](#).

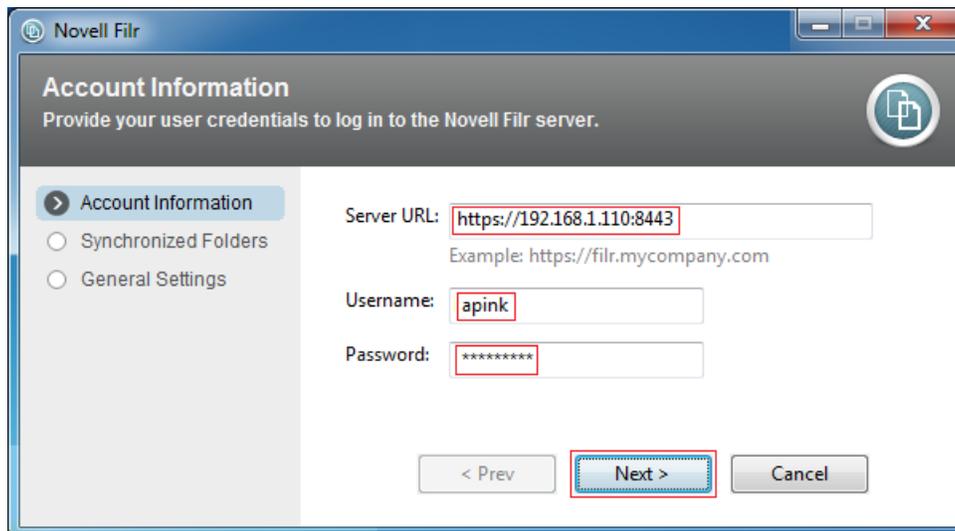
- 10 Continue with [Starting the Filr Desktop Application](#).

9.1.2 Starting the Filr Desktop Application

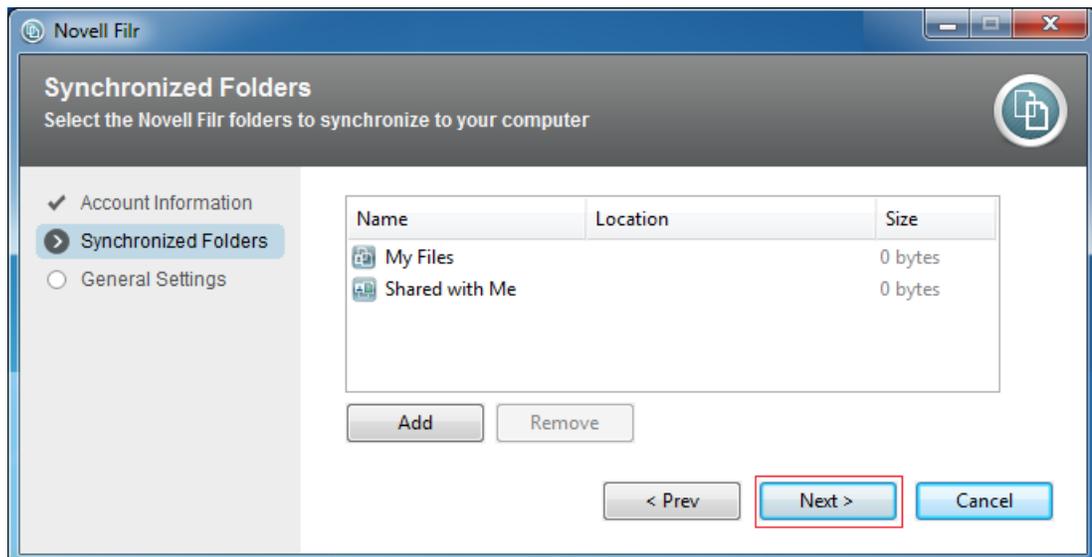
- 1 On the Novell Filr welcome screen, click *Start*.



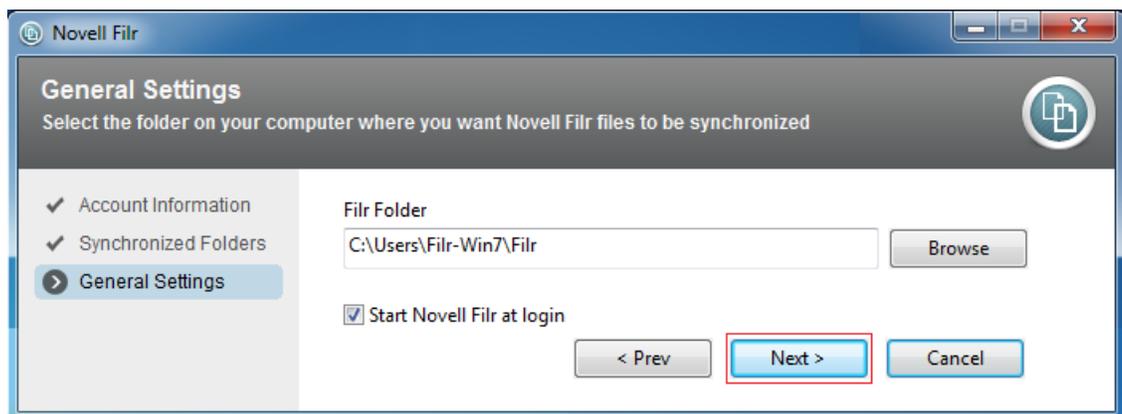
- 2 In the *Server URL* field, type `https://Filr-appliance-IP-address:8443`, type *Username*: apink and apink's *Password*, then click *Next*.



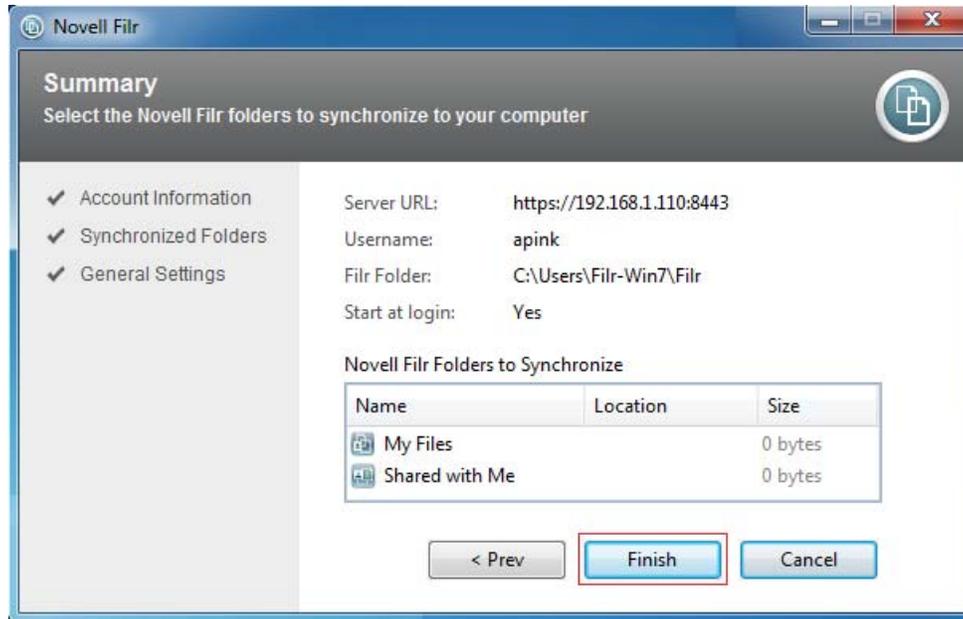
- 3 Continue through any security warnings.
- 4 Click *Next*.



- 5 Click *Next*.



6 Click *Finish*.



A Filr folder is now available in on the workstation (in Windows Explorer or Macintosh Finder).

9.1.3 Installing and Starting a Filr Mobile App

Filr mobile apps are available as free downloads in the Apple App Store, the Google Play App Store, and the Amazon Appstore for Android.

Download and install the Filr mobile app on the mobile device as you would any other device app.

To access the Filr Mobile App:

- 1 Start the app in the same way that you start other apps on your mobile device.
- 2 Log in as *Username*: `ablack`.
- 3 Continue with [Understanding Test Users and Their Roles](#).

9.2 Understanding Test Users and Their Roles

[Table 4-1](#) lists eight users that have been synchronized from the Windows server to Filr.

As you can see, there are differences in their Home Folder and personal storage allocations (third column). Most have one or the other, but *ablack* has both and *agray* has no personal storage. We will briefly explore what this means in [Section 9.3.1, “My Files—Home Folders and Personal Storage,”](#) on page 107.

Notice also that only the manager-level users (*ared*, *ablue*, and so on) have file system rights on the Windows server (fourth column). Nevertheless, the hands-on exercises require that files be accessed by internal and external users who do not have file system rights. We will explore how this is accomplished in the “sharing” sections, starting with [Section 9.3.2, “Internal Sharing,”](#) on page 114.

Table 9-1 *User Roles and Tasks*

| User Name | Role in the FILR-LAB organization | Home Folder and Personal Storage | File System Rights on the Windows Server |
|------------------|--|---|---|
| <i>ared</i> | Development Manager | Home folder | Full control of Dev share and directory |
| <i>apink</i> | Developer | Personal | None |
| <i>ablue</i> | IT Manager | Home folder | Full control of IT share and directory |
| <i>agreen</i> | Filr Administrator | Personal | None |
| <i>ayellow</i> | Marketing Manager | Home folder | Full control of Mrktg share and directory |
| <i>aorange</i> | Product Line Manager | Personal | None |
| <i>ablack</i> | District Manager | Home folder Personal | Full control of Sales share and directory |
| <i>agray</i> | Account Manager | | None |

9.3 Exploring Filr Functionality for End Users

After you have completed the setup and administration instructions in this guide, the Filr VMs and your Windows server are ready for the exercises in the following sections:

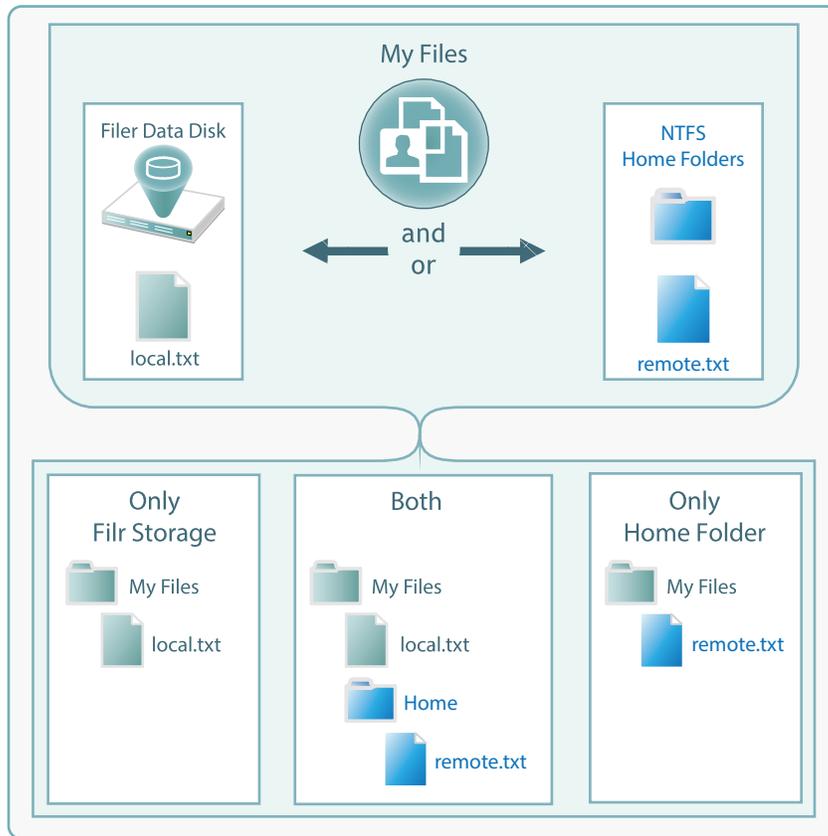
- ◆ [Section 9.3.1, “My Files—Home Folders and Personal Storage,” on page 107](#)
- ◆ [Section 9.3.2, “Internal Sharing,” on page 114](#)
- ◆ [Section 9.3.3, “\(Email Only\) External Sharing,” on page 122](#)
- ◆ [Section 9.3.4, “Public Sharing,” on page 130](#)
- ◆ [Section 9.3.5, “Re-sharing and Searching,” on page 133](#)
- ◆ [Section 9.3.6, “More Things You Can Try,” on page 136](#)

9.3.1 My Files—Home Folders and Personal Storage

The files and folders that users see when they access My Files are illustrated in [Figure 9-1](#) and demonstrated in the steps that follow the figure.

- ◆ The top half shows that two storage locations can be assigned to users for their own use—personal storage on the Filr data disk and/or home storage on a Windows file server.
- ◆ The bottom half shows how the assigned storage is displayed in My Files, depending on what a user is assigned.

Figure 9-1 What Filr Users See in My Files Depends on What Is Set Up for Them



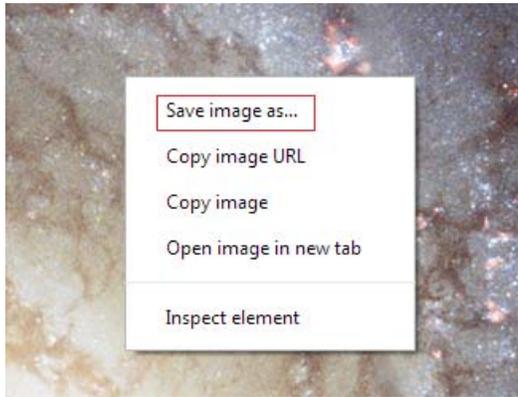
In the following steps, take the role and do the steps of the users that are indicated.

- 1 User *ablack* is a fan of the Hubble telescope and especially likes [this image \(http://hubblesite.org/gallery/wallpaper/pr2007041a\)](http://hubblesite.org/gallery/wallpaper/pr2007041a).

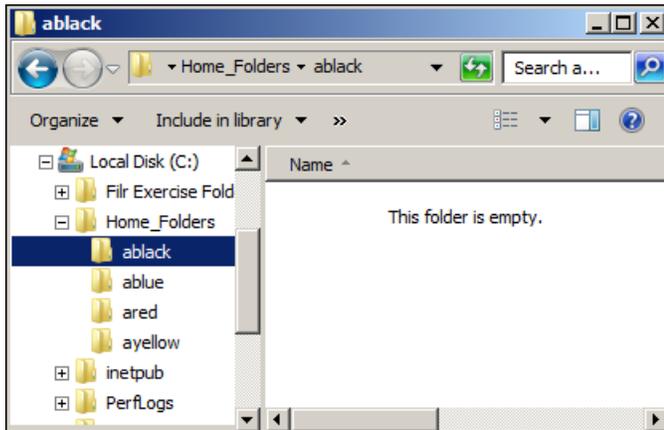
On the Windows VMware host workstation, open a browser, then select the 1280X1024 link.



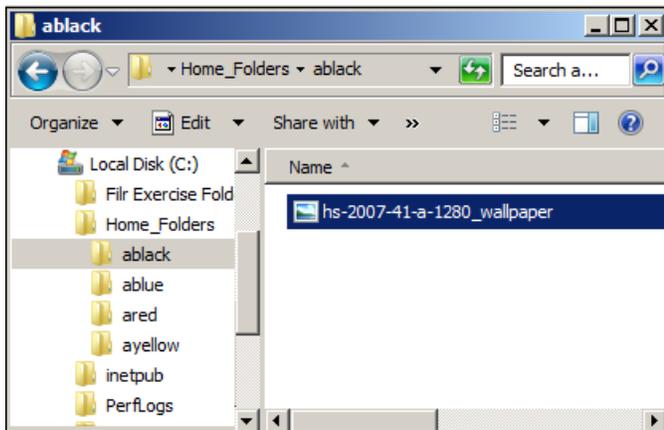
- 2 Right-click the displayed image, then save it to the desktop.



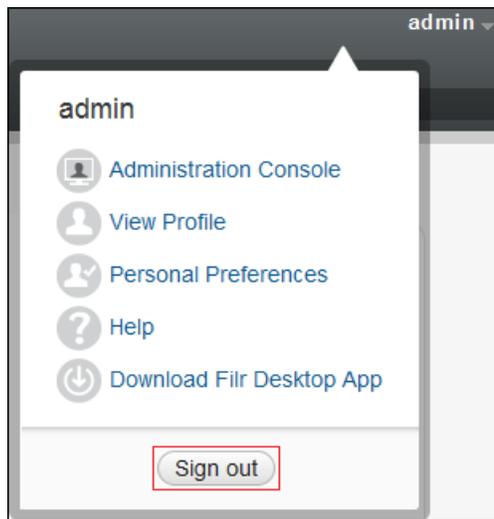
3 On the Windows server, access user *ablack*'s home folder in Windows Explorer.



4 Drag and drop (copy) the image from the desktop to *ablack*'s home folder on the Windows server.



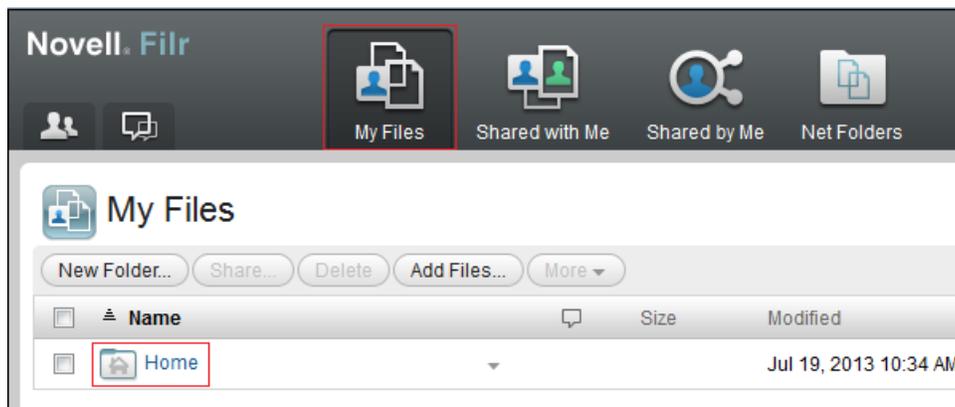
5 In the administrative browser, sign out as user admin.



6 Sign in as *User ID*: *ablack*.



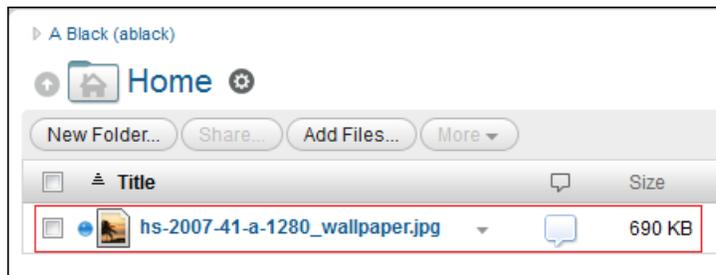
7 Click MyFiles and notice the folder named Home. This is *ablack's* home folder on the Windows server.



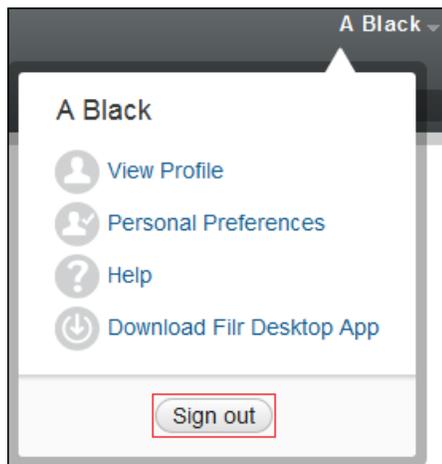
Refer to [Table 4-1](#) and notice that user *ablack* has a home Folder and is also assigned personal storage. In other words, user *ablack* is an example of the section labeled “Both” in [Figure 9-1](#).

8 Open the Home folder.

The Hubble image file is there as you would expect it to be.



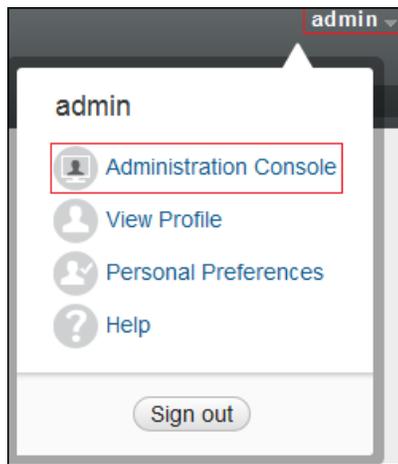
9 Sign out as user *ablack*.



10 Sign in as *User ID*: admin.



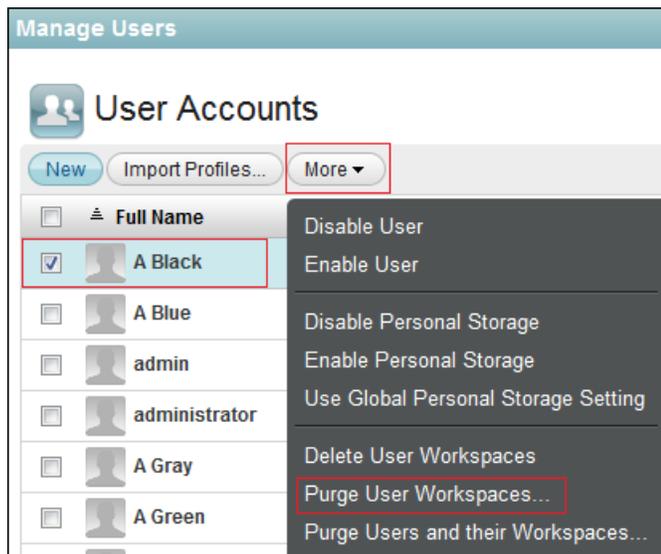
11 Access the *Administration Console* (upper-right corner).



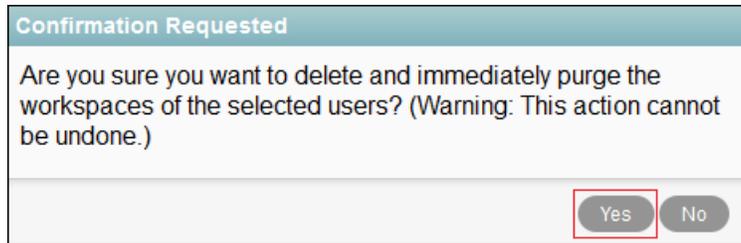
12 Under *Management*, click *User Accounts*.



13 Select *A Black*, then click *More* and select *Purge User Workspaces* > *Yes*.



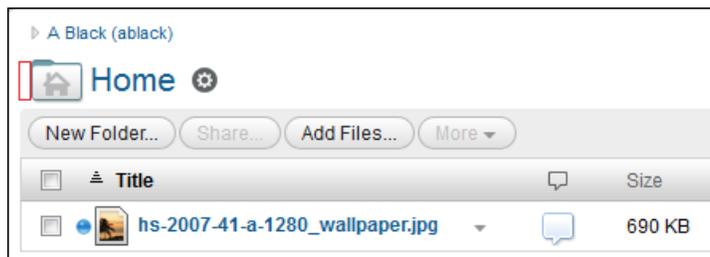
- 14 Click *Yes*.



- 15 Select *A Black* again, then click *More* and select *Disable Personal Storage*.



- 16 Sign out as user *admin*, then sign in as user *ablack*.
- 17 Notice that the Home folder has disappeared from user *ablack*'s My Files folder (the up-arrow left of Home has disappeared) and the Hubble image file is now directly listed as a child.

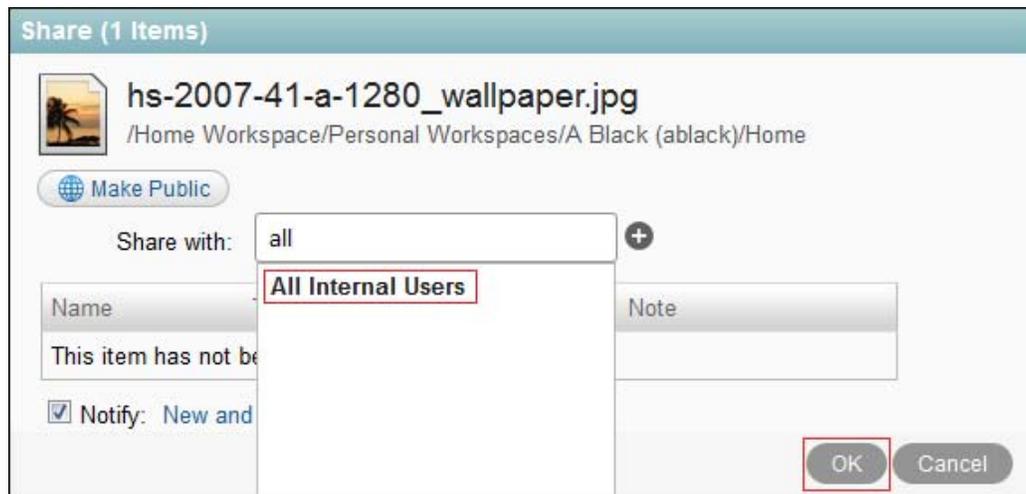


Because you purged and removed the Personal Storage that was assigned to user *ablack*, user *ablack* now fits the definition in the section of [Table 4-1](#) that is labeled "Only Home Folder." (Purging *ablack*'s personal storage had no effect on the Windows server's file structure or files.)

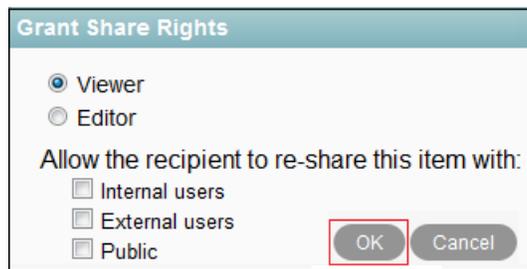
- 18 Click the down-arrow next to the image, then select *Share*.



- 19 In the *Share with* field, type *all*, select *All Internal Users*, then click *OK*.



20 Click OK.



21 Feel free to explore further if you want to get more experience with Filr's *My Files* functionality and the role that traditional home folders play in that context. Then continue with [Internal Sharing](#).

9.3.2 Internal Sharing

The exercises in this section demonstrate how Novell Filr users can share files with users who are internal to your organization.

- ♦ [“User ared Initiates User apink’s Annual Review”](#) on page 114
- ♦ [“User apink Responds to the Annual Review Request”](#) on page 118
- ♦ [“User ared Approves apink’s Annual Review”](#) on page 120

User ared Initiates User apink’s Annual Review

User *ared* needs to complete the annual review for user *apink*, but *apink* doesn’t have file system access to the review file (*apink_2013.doc*). Rather than sending the file in email or assigning *apink* the required file system trustee rights on the Windows server, *ared* simply shares the review file with *apink* and includes Editor privileges. First, however, *ared* optionally ensures that email notifications will be sent when the file changes.

- 1 Sign in to the Web application as user *ared*. (This requires that you sign out as user *ablack* first.)

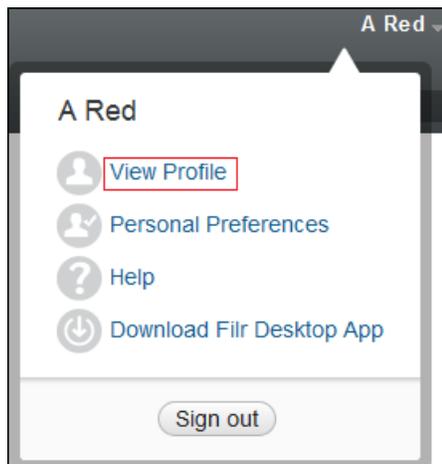


- 2 Click *Shared with Me* and notice that the image that *ablack* shared is listed.

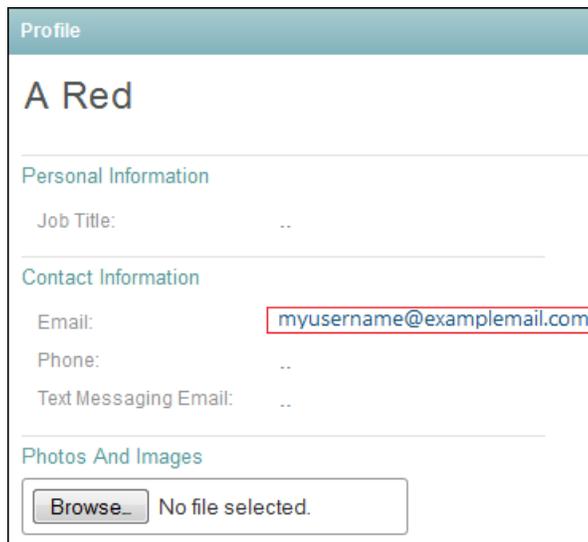


IMPORTANT: If you are not experimenting with email notifications, skip to [Step 4](#) and skip all subsequent steps that are marked (Email only).

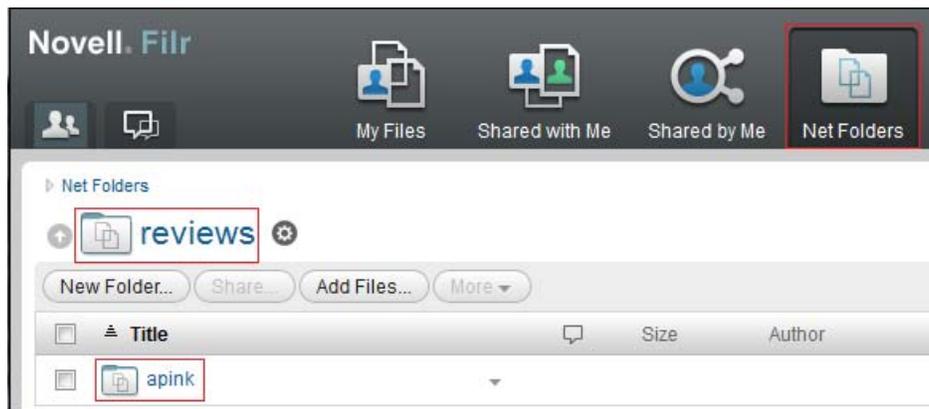
- 3 (Email only) Click *A Red* in the upper-right corner, then select *View Profile*.



When the profile displays, notice that the email address you configured in Active Directory for user *ared* is listed.



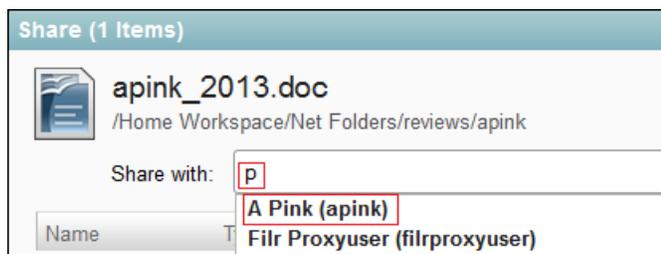
- 4 Click *Net Folders > reviews > apink*.



- 5 Click the check box for `apink_2013.doc`, then click the file drop-down arrow ▾ to the right of the file and select *Share*.



- 6 In the *Share with* field, type `p`, then select *A Pink*.



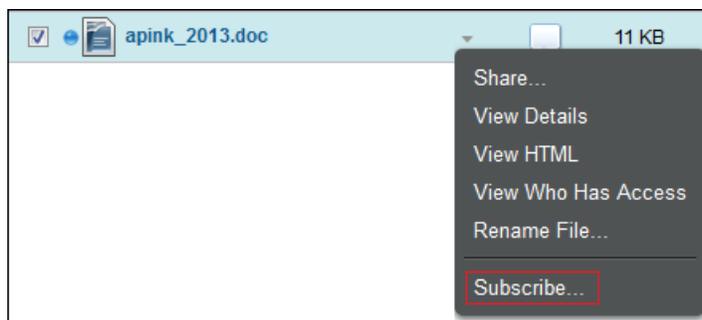
- 7 Select *Editor*, then click *OK*



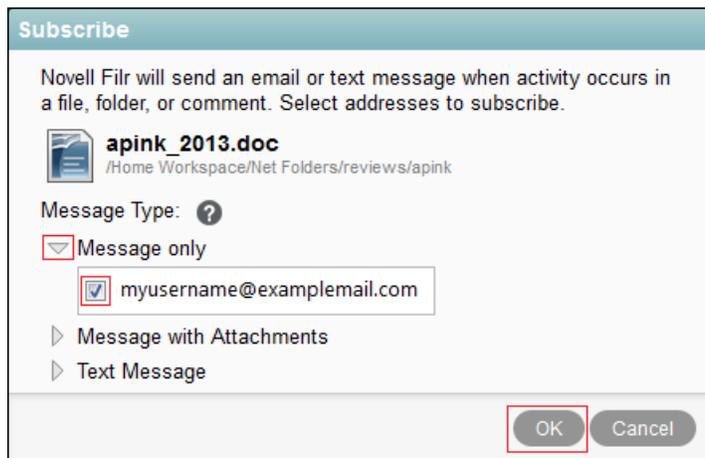
- 8 Click *OK*.



- 9 (Email only) Click the check box for *apink_2013.doc* and the file drop-down arrow again, then click *Subscribe*.



- 10 (Email only) Expand the *Message Only* option, then select the email address you entered for user *ared* in Directory and click *OK*.



- 11 Click the comment icon .

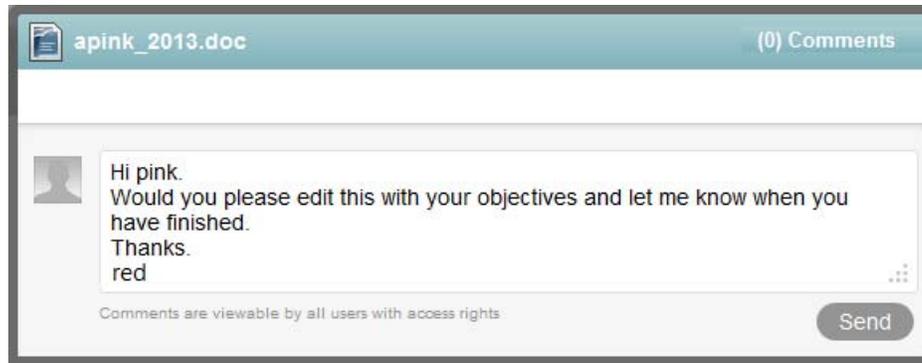
- 12 Add a comment, such as

Hi pink.

Would you please edit this with your objectives and achievements and let me know when you have finished?

Thanks.

red



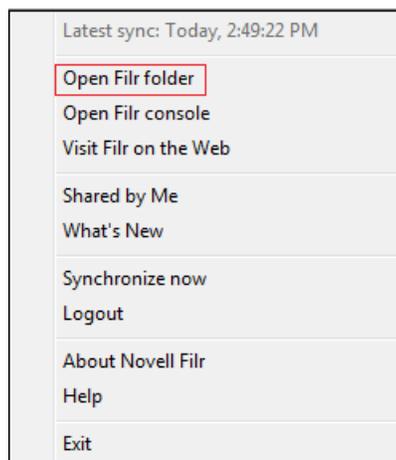
- 13 Click *Send* and close the Comments dialog.

User pink Responds to the Annual Review Request

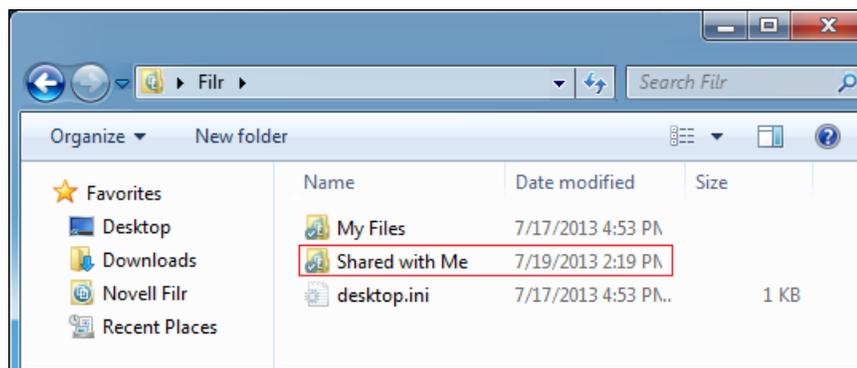
- 1 On the Windows 7 VM desktop in the notifications area, right-click the Filr icon.



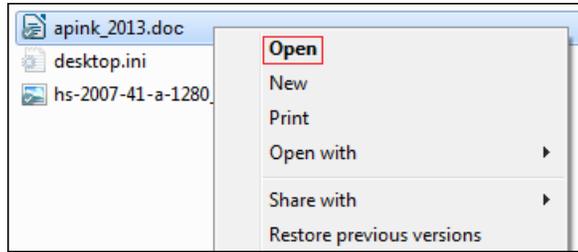
- 2 Select *Open Filr folder*.



- 3 Double-click *Shared with Me*.

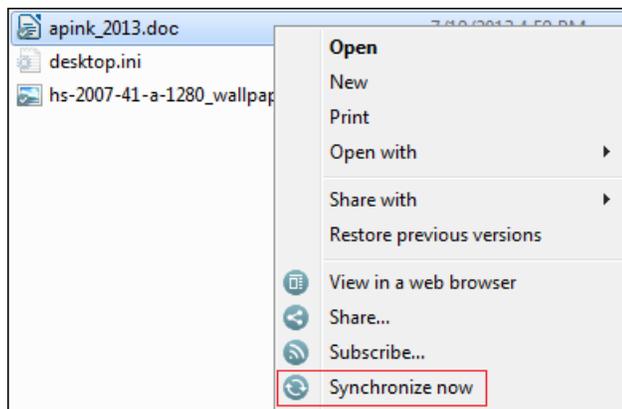


- 4 Right-click *apink_2013.doc*, then select *Open*.



The file should open in LibreOffice Writer, assuming the [prerequisites](#) are met for the Windows workstation.

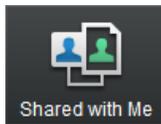
- 5 Make a few changes, then save and close the file.
You can be as verbose or brief as you want.
- 6 In the Shared with Me folder on the workstation, right-click the file you just edited and select *Synchronize now*.



- 7 Sign in to the Web application as user *apink*



- 8 Click *Shared with Me*.

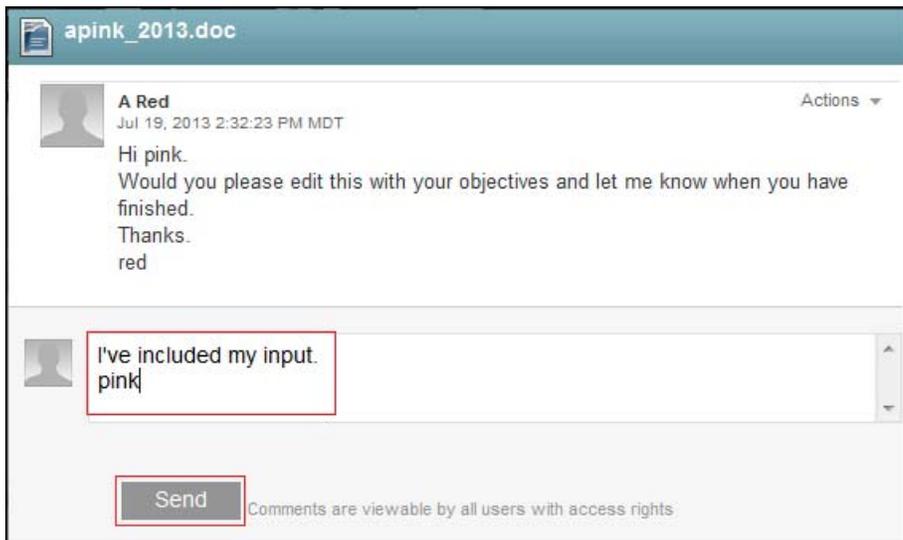


- 9 Click the drop-down arrow for `apink_2013.doc`, then click View HTML.



Your changes are reflected in the view.

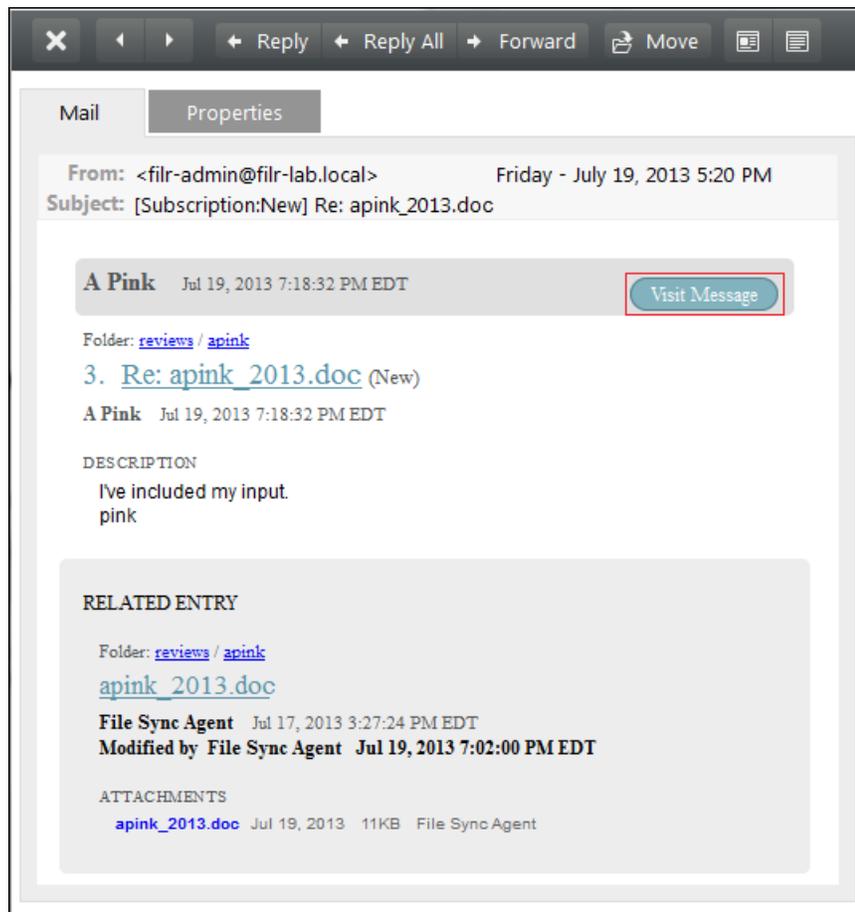
- 10 Close the HTML view.
- 11 Click the review file's comment icon, type a comment indicating that the review is ready, then click *Send* and close the comment panel.



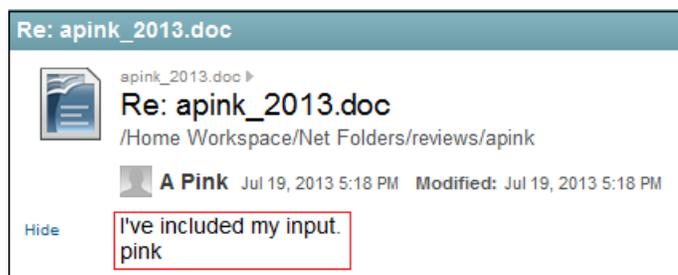
- 12 Continue with [User ared Approves apink's Annual Review](#).

User ared Approves apink's Annual Review

- 1 Log in to the email account that you assigned to user *ared*, open the message from *filr-admin*, then click the *Visit Message* link.



- 2 Sign in to the Web application as user *ared*.
The message from apink is displayed.



- 3 In the new comment box, type a comment indicating that the review is approved, then click *Send*.



- 4 Close the view.
- 5 Continue with [\(Email Only\) External Sharing](#).

9.3.3 (Email Only) External Sharing

The exercises in this section demonstrate how Filr users can share files with users who are external to your organization.

- ♦ [“About External Users”](#) on page 122
- ♦ [“User ared Gathers Input for the Next Release”](#) on page 122
- ♦ [“User opaque Self-Provisions and Responds to the Review Request”](#) on page 125
- ♦ [“User ared Responds to User opaque’s Input”](#) on page 128

IMPORTANT: Completing the instructions in [Section 8.7, “\(Optional\) Setting Up Email Communication with the Filr VM,”](#) on page 96 is required for the exercises in this section.

About External Users

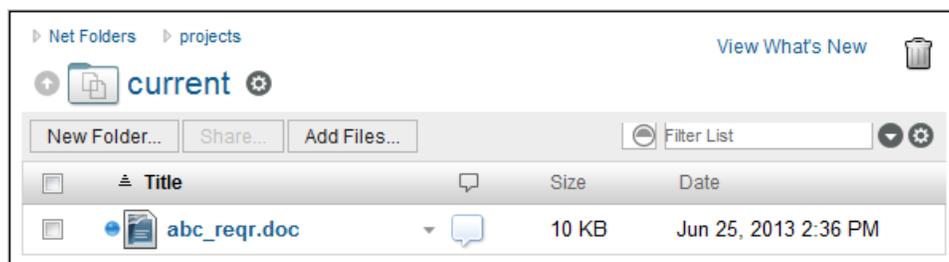
External users are those who receive share invitations through email and subsequently provision themselves as system users. They can then log in to the system using the credentials they establish with Filr, or they can elect to be authenticated through a Google or Yahoo Open ID account.

For more information about the different kinds of users who can access Filr, see [“Users and Groups with Filr”](#) in the *How Filr Works—Overview Guide*.

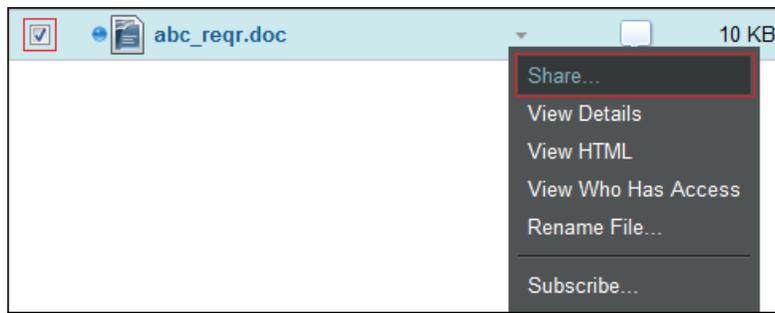
User ared Gathers Input for the Next Release

User *ared* managed the ABC product release and is responsible for gathering input for the upcoming XYZ product. User *ared* also wants to invite input from a key partner named M Opaque. Inviting M Opaque to participate requires using the second email address mentioned in [Chapter 2, “Hands-on System Requirements,”](#) on page 9 and further explained in [Section 8.7, “\(Optional\) Setting Up Email Communication with the Filr VM,”](#) on page 96.

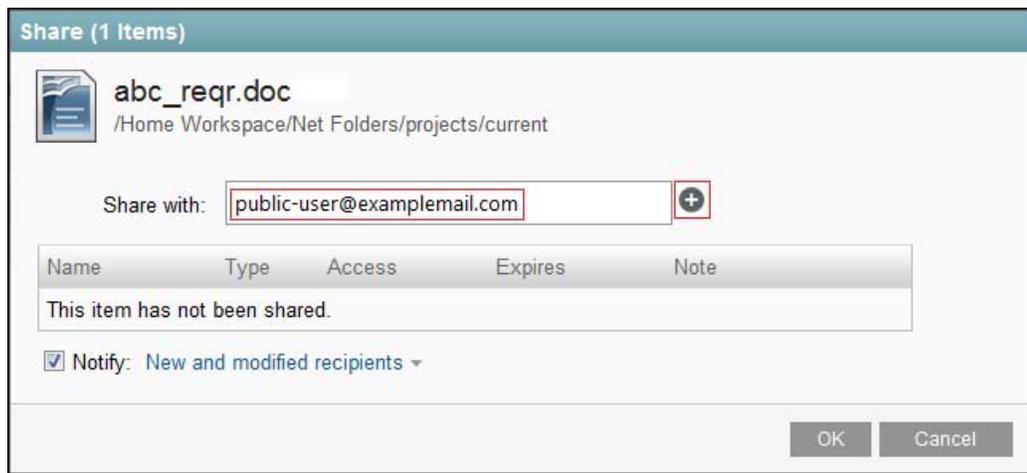
- 1 If you aren’t already signed in to the Web application as user *ared*, do so now.
- 2 Click *Net Folders > projects > current*.



- 3 Click the check box for `abc_reqr.doc`, then click the file drop-down arrow to the right of the file and select *Share*.



- 4 In the *Share with* field, type your second email address, then click the plus sign (+) to add the external user.

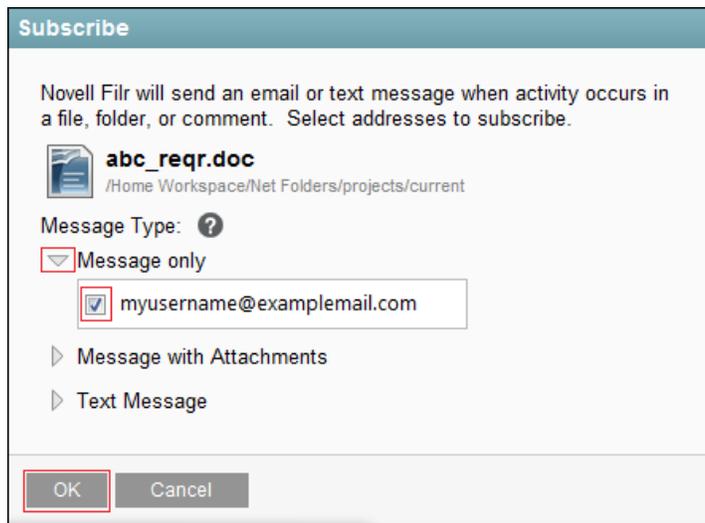


At this point, user *ared* could share the document with internal or other external users, but for brevity's sake, we aren't including steps for that.

- 5 Click *OK* > *OK*.
- 6 Click the check box for *abc_reqr.doc* and the file drop-down arrow again, then click *Subscribe*.



- 7 Expand the *Message only* option, then select the email address you entered for user *ared* in Directory and click *OK*.



8 Click the comment icon  to the right of the down-arrow.

9 Add a comment, such as

It's time to gather input for the next release.

Please log comments to let us know which features we need to include this time.

Then click *Send*.



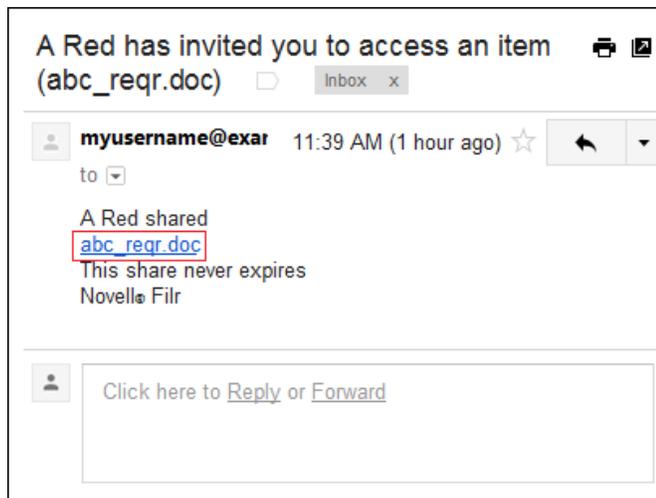
10 Close the Comments dialog.



- 11 Continue with [User opaque Self-Provisions and Responds to the Review Request](#).

User opaque Self-Provisions and Responds to the Review Request

- 1 Log in to the email account that you used to invite user *opaque* to participate in the review.
- 2 Open the message from the email address that you assigned to user *ared* and click the *abc_reqr.doc* link.



- 3 The registration dialog lets external users register or log in as a guest.
 Register as M Opaque by typing *First name: M, Last name: Opaque, Password: F11rrock\$, and Re-enter password: F11rrock\$*.
 The User ID (email address) cannot be changed.



Novell. Filr

Please enter the following information and then click on the Register button.

User ID:

First name:

Last name:

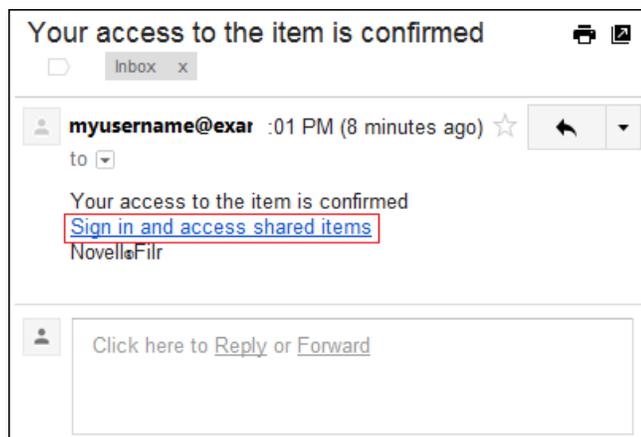
Password:

Re-enter password:

Or

To authenticate using google, click on this image 

- 4 Open the confirmation email, then click *Sign in and access shared items*.



- 5 Type the password F1lrrock\$, then click *Sign in*.



6 Click *Comments* and read the comment from user *ared*.

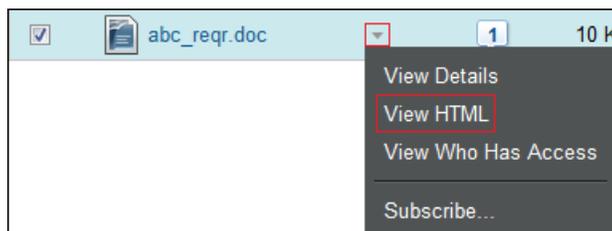


7 Click *Actions*, then click *Subscribe*.



Emails will now be sent to user *opaque* as others comment on the document or perform other actions.

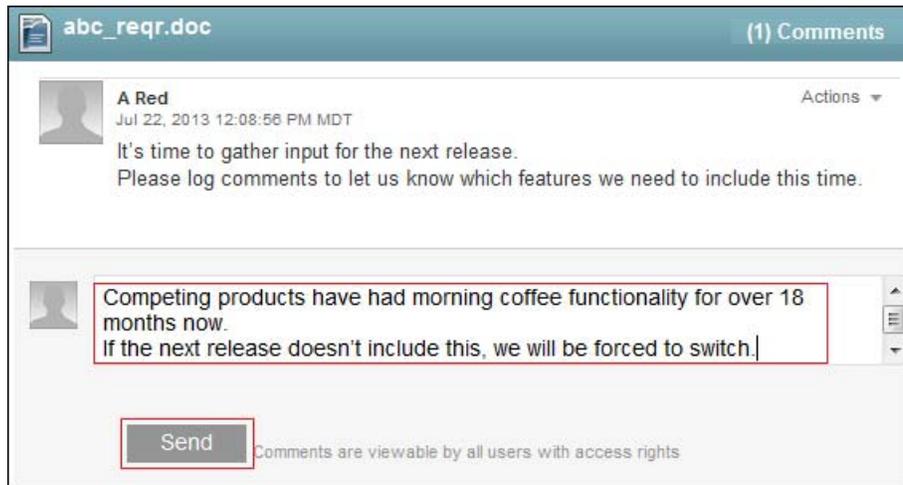
8 Read the HTML view of ABC Project.



9 Log the following comment, then click *Send*.

Competing products have had morning coffee functionality for over 18 months now.

If the next release doesn't include this, we will be forced to switch.

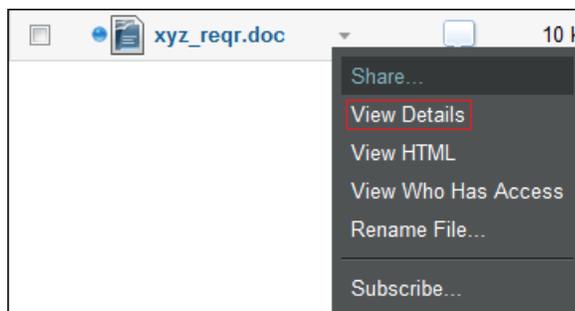


10 Continue with [User ared Responds to User opaque's Input](#).

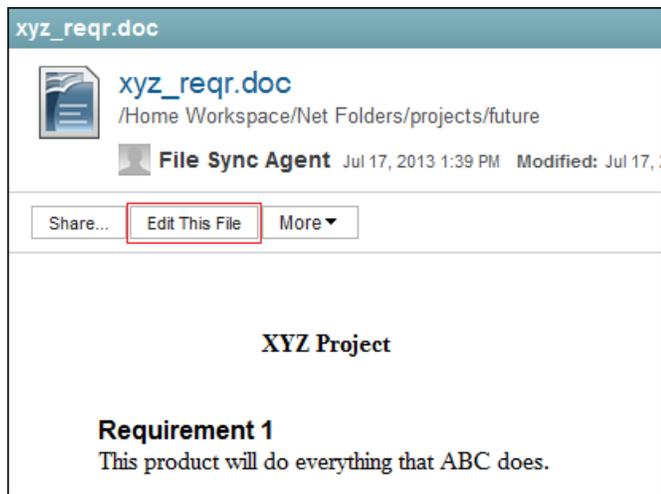
User ared Responds to User opaque's Input

User *ared* receives notification of user *opaque*'s comment (you can check *ared*'s email if you wish) and remembers that the requested feature has been discussed. It should already be in the next requirements document (*xyz_reqr.doc*), but *ared* isn't certain that it is.

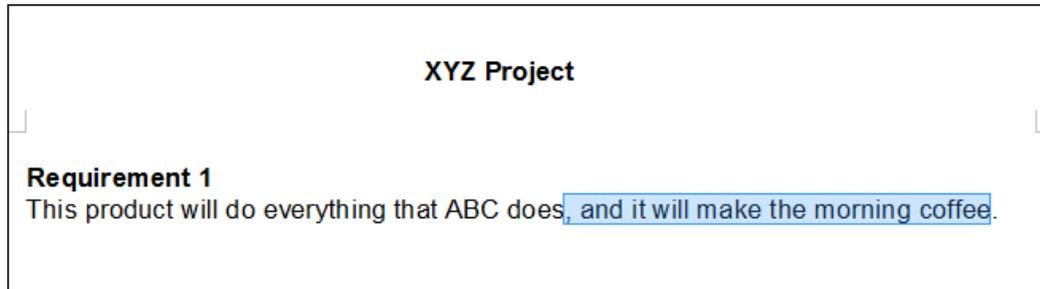
- 1 Log in to the Web application as user *ared*.
- 2 Click *Net Folders > projects > future*.
- 3 Click the file drop-down arrow ▼ for *xyz_reqr.doc* and select *View HTML*.
The file has not been updated.
- 4 Click the file drop-down arrow ▼ again, then select *View details*.



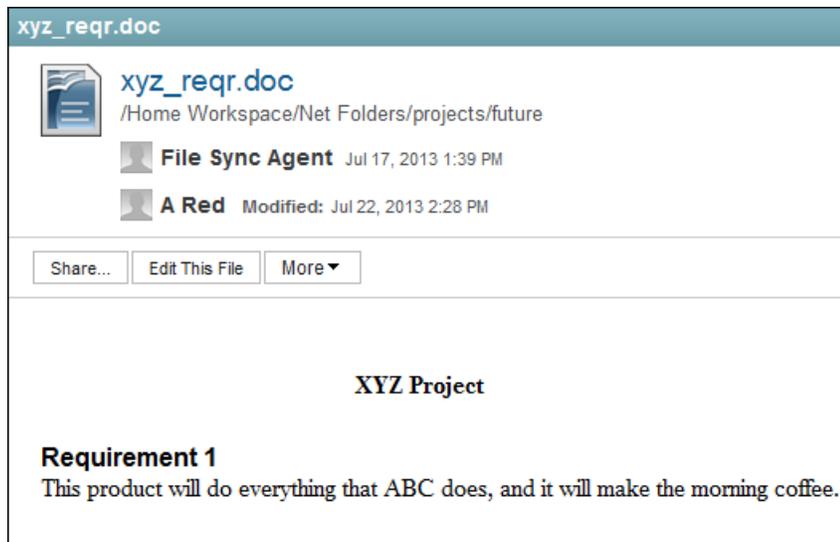
- 5 Click *Edit this file*, then continue past the security warning and other messages until you are prompted to log in.



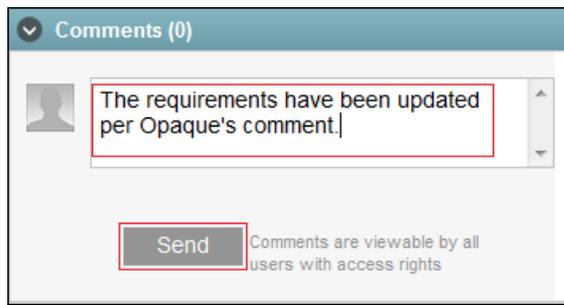
- 6 Log in as user *ared*.
- 7 Insert the following text before the period:
, and it will make the morning coffee



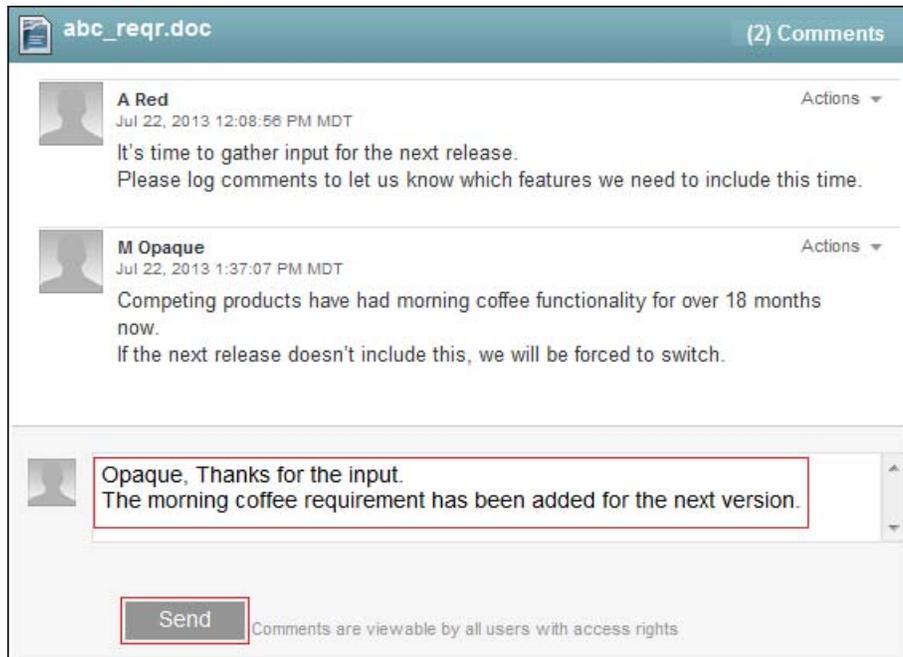
- 8 Save the file and close LibreOffice.
- 9 Navigate to `xyz_reqr.doc` again and view its details to confirm that the change has been made.



- 10 Log and send a comment indicating that the file has been updated.



- 11 Log a comment for the `abc_reqr.doc` file that Opaque's requirement has been included in the next version.

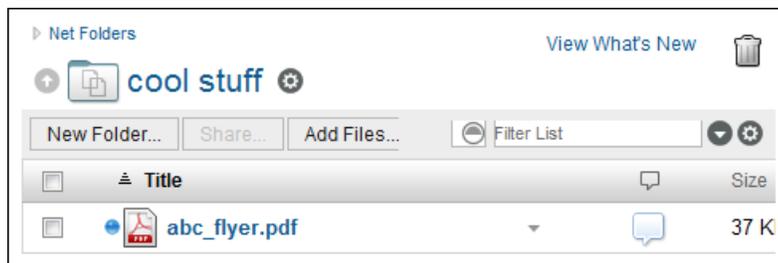


- 12 Continue with [Public Sharing](#).

9.3.4 Public Sharing

User *ayellow* wants to get the word out about the abc version of the organization's product and elicits the help of user *aorange* with the effort.

- 1 Log in to the Web application as *User ID: ayellow*.
- 2 Click *Net Folders > cool stuff*.



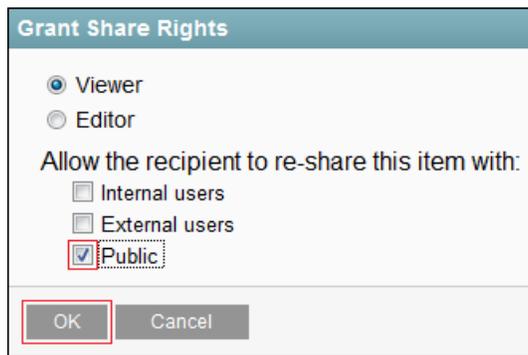
- 3 Click the file drop-down arrow ▼ for `abc_flyer.pdf`, then select *Share*.



- 4 In the *Share with* field, type `o`, then select *A Orange*.



- 5 Click *Public* > *OK* > *OK*.



- 6 Log in as *User ID: aorange*.

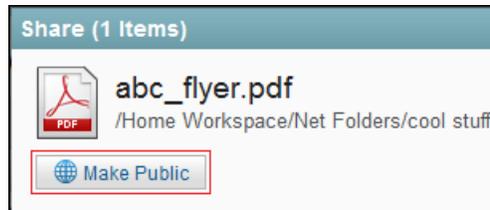
- 7 Click *Shared with Me*.



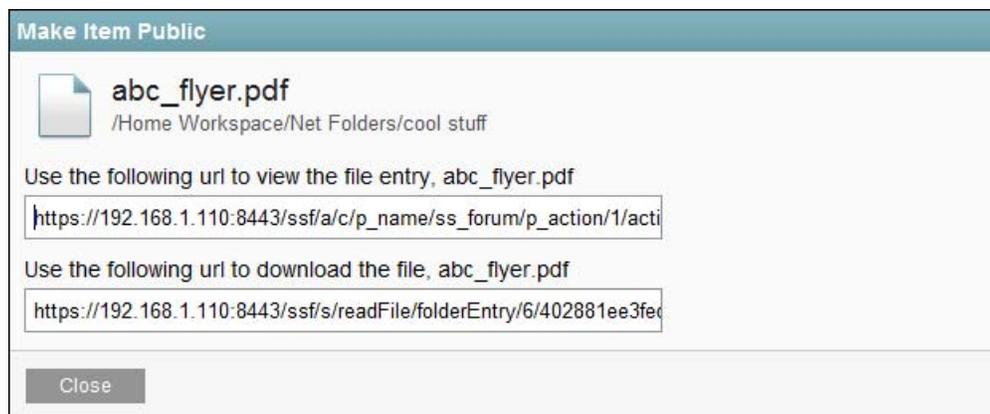
- 8 Click the action drop-down for the `abc_flyer.pdf` file, then click *Share*.



- 9 Click *Make Public*.



- 10 In the *Type* column, click *Public* to view and copy the URLs that can be shared in social media, and so on.



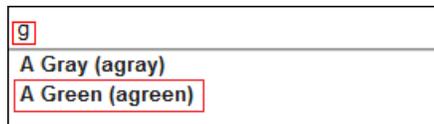
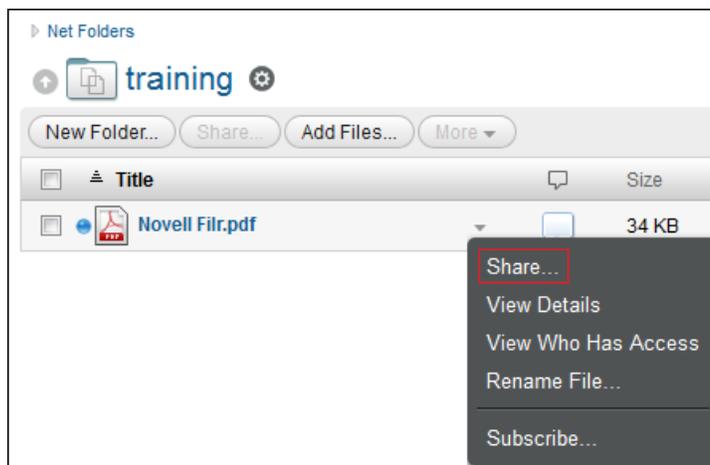
- 11 Enter one of the URLs in a separate browser window or tab, then click *Enter as Guest* to see what Internet users who access the URL will see.

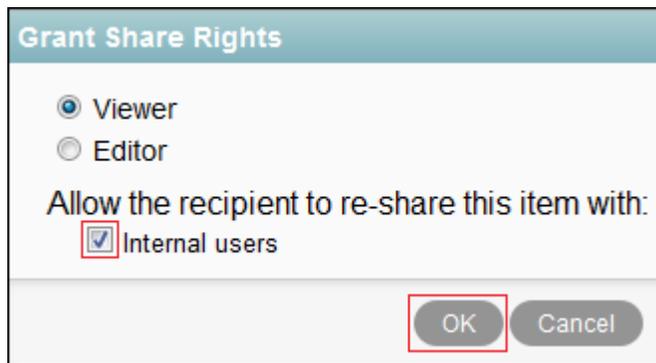


12 Continue with [Re-sharing and Searching](#).

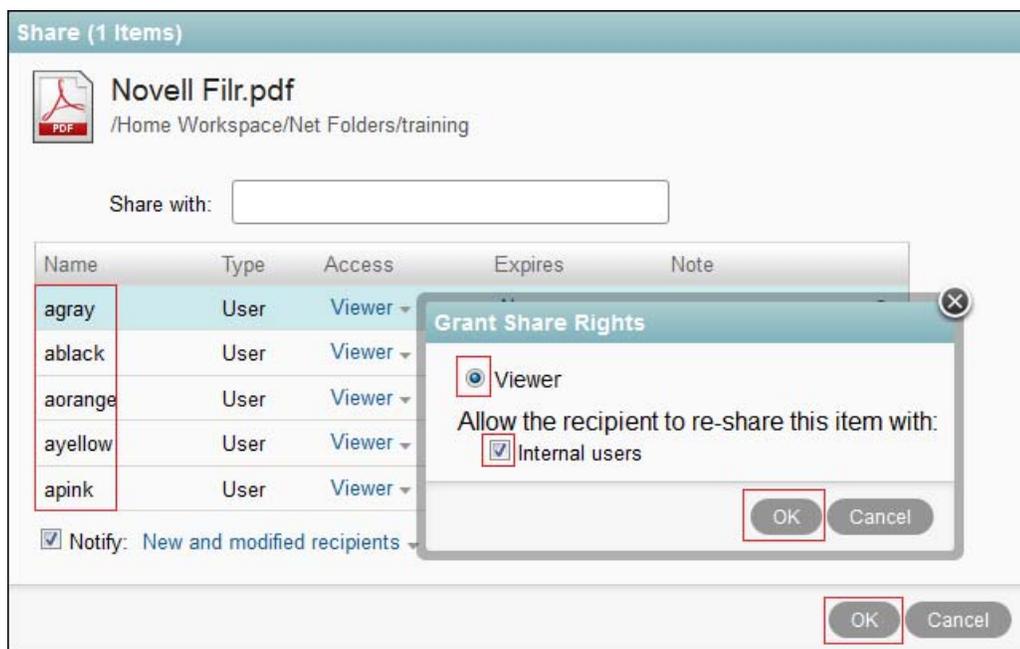
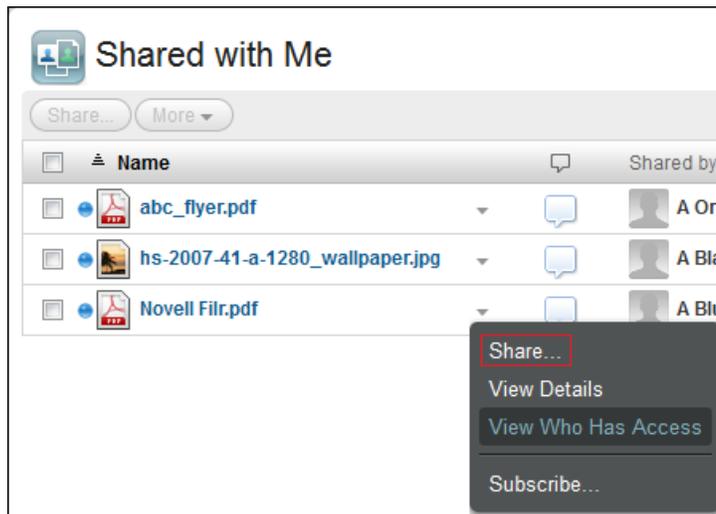
9.3.5 Re-sharing and Searching

- 1 Log in to the Web application as *User ID: ab1ue*.
- 2 In Net Folders, navigate to *training > Novell-Filr.pdf*, then share the file with *agreen* as a *Viewer* with rights to reshare the file with internal users.



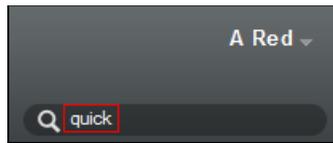


- 3 Log in as user *agreen*, then share the file (with rights to reshare) with users *apink*, *ayellow*, *aorange*, *ablack*, and *agray*.



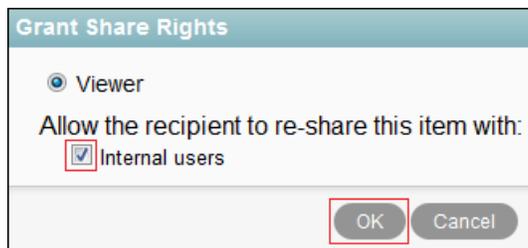
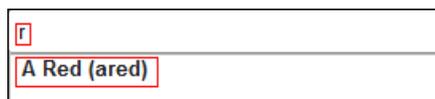
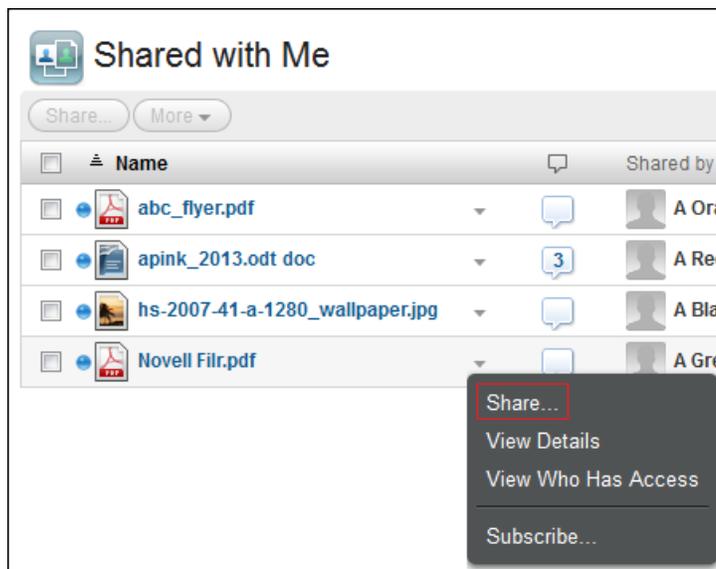
A few days after user *agreen* has shared the file, user *apink* is talking with user *ared* in the hallway and mentions the file.

- 1 Log in as user *ared*, then in the search field, type *quick* and press Enter.



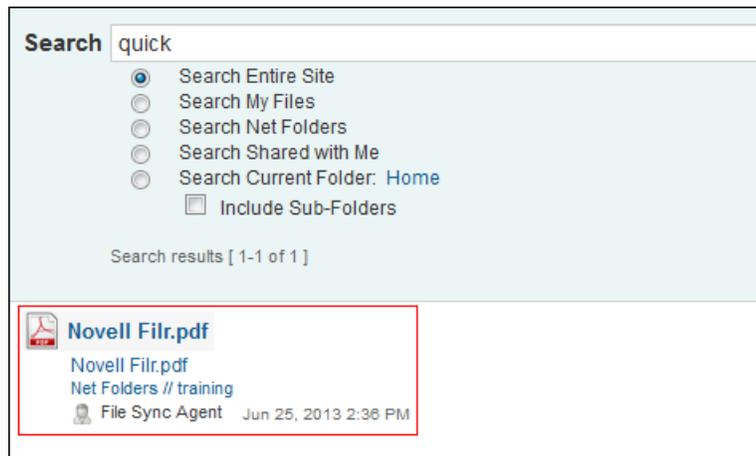
Because the file is not found, user *ared* asks *apink* to share the file.

- 2 Log in as user *apink* and share the file with *ared*.



3 Log in as user *ared* and search for the file again.

The file is listed in the search results window.



9.3.6 More Things You Can Try

There are a few additional files in the other Net Folders that you can experiment with as indicated below. You can also experiment with your own files.

| Activity Type | Net Folder | File Location | Task Descriptions |
|---------------|---------------|---------------|--|
| Planning | comp planning | 2014.xls | 1. User <i>ared</i> opens the file in LibreOffice and plans a 5.5% increase for <i>apink</i> 's 2014 salary. |
| Planning | projections | fy_2014.xls | 1. User <i>ablack</i> shares the file with user <i>agray</i> as a viewer and asks whether the goals are realistic. 2. User <i>agray</i> comments that the Q3 estimate is low and the Q4 estimate is high. User <i>agray</i> asks that \$10,000 be transferred from Q4 to Q3. 3. User <i>ablack</i> adjusts the Q3 and Q4 estimates, thanks <i>agray</i> , and acknowledges the change. |
| Reporting | quotas | fy_2013.xls | 1. User <i>ablack</i> shares this file with user <i>agray</i> as an Editor and requests that <i>agray</i> update it with Q4 actual results. 2. User <i>agray</i> opens the file, enters \$110,900, and saves the file. 3. User <i>agray</i> comments that the file is now ready for review. |