

Data ONTAP™ 5.2

Start Here

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Part number 210-02178
October 1998

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Purpose of this document

Welcome

Welcome to release 5.2 of the Data ONTAP™ software.

This document provides you with the information that you need to get started using Data ONTAP 5.2 and your NetApp® filer.

Organization

This document is organized as shown in the following table.

Chapter	Contents
Chapter 1, “ Introduction ,” on page 1	Provides orientation to this document.
Chapter 2, “ Information for All Users ,” on page 3	Provides information that all users need to know.
Chapter 3, “ Information for New Filer Installations ,” on page 11	Provides information that users who are installing new filers need to know.
Chapter 4, “ Information for Filer Upgrades ,” on page 15	Provides information that users who are upgrading to Data ONTAP 5.2 need to know.

What to do next

The following table describes how you should proceed.

If you are...	Then...
Installing a new filer or a factory-configured cluster	Read the following information in this document: ◆ Chapter 2, “Information for All Users,” on page 3 ◆ Chapter 3, “Information for New Filer Installations,” on page 11 Then read the following documents in the order that they are listed: 1. <i>Read Me First</i>, if it is included in the documentation 2. <i>Hardware Installation Guide</i> for your new filer 3. <i>First-Time Configuration Guide</i> 4. If you are converting two filers to a cluster, the <i>Cluster Conversion Guide</i>
Upgrading an existing filer	Read the following information in this document: ◆ Chapter 2, “Information for All Users,” on page 3 ◆ Chapter 4, “Information for Filer Upgrades,” on page 15 Then read the following documents in the order that they are listed: 1. <i>Read Me First</i>, if it is included in the documentation 2. <i>Software and Firmware Upgrade Guide</i> 3. If you are converting two filers to a cluster, the <i>Cluster Conversion Guide</i>

Overview

Contents of this chapter

This chapter contains information that all Data ONTAP software users should read. The following table describes the chapter's contents.

To learn about...	Read...
Limitations of this release	“Limitations of this release” on page 4
Documentation included with this release	“Documentation included in this release” on page 5
Corrections to information contained in various documents	“Documentation changes” on page 8

Limitations of this release

Virtual interface trunking not supported

Virtual interface trunking is not supported in cluster takeover mode.

Viewing bug information

To see information about Data ONTAP 5.2 bugs, log in to NetApp On the Web (NOW) at <http://now.netapp.com> and click Bugs On Line.

Documentation included in this release

Documentation provided in several formats

This release includes documentation in the following formats:

- ◆ print
- ◆ Adobe Acrobat PDF
- ◆ HTML
- ◆ ASCII text

Not all documents are provided in all formats.

Documents provided

The following table lists the documents in this release and describes their contents.

Document	Description
<i>Cluster Conversion Guide</i>	Describes how to convert a pair of filers to a cluster.
<i>Command Reference</i>	Describes the commands that you use to control a filer.
<i>End User Software License</i>	Describes the terms and conditions under which the Data ONTAP software is licensed to you.
<i>First Time Configuration Guide</i>	Describes how to configure a new filer.
<i>Hardware Guide for the NetApp F600 Series</i>	Describes how to install a new filer.
<i>intro.txt</i>	Describes the contents of the Data ONTAP CD-ROM. This is an ASCII file on the CD-ROM.
<i>NetApp Fibre Channel StorageShelf Hardware Guide</i>	Describes how to install Fibre Channel StorageShelf disk shelves.

Document	Description
<i>Quick Reference Card</i>	Summarizes the commands that you use to control a filer.
<i>Read Me First</i>	Describes any critical information that was too late to be described in other documents.
<i>Software and Firmware Upgrade Guide</i>	Describes how to upgrade the Data ONTAP software on an existing filer.
<i>Start Here</i>	This document. Describes information for new and experienced users, and provides an overview of how to proceed with a new filer installation or an existing filer upgrade.
<i>System Administrator's Guide</i>	Describes how to manage a filer once it is installed and configured.

Document formats

The following table lists the documents in this release and shows the formats in which they are provided.

Document	Print	PDF	HTML	Man Pages
<i>Cluster Conversion Guide</i>	X	X	X	
<i>Command Reference</i>	X		X	X
<i>End User Software License</i>	X			
<i>First-Time Configuration Guide</i>	X	X	X	
<i>Hardware Guide for the NetApp F600 Series</i>	X	X		
<i>NetApp Fibre Channel StorageShelf Hardware Guide</i>	X	X		
<i>Quick Reference Card</i>	X	X		

Document	Print	PDF	HTML	Man Pages
<i>Read Me First</i> (provided if there was last-minute information)	X			
<i>Software and Firmware Upgrade Guide</i>	X	X	X	
<i>Start Here</i>	X	X	X	
<i>System Administrator's Guide</i>	X	X	X	

Accessing the PDF files

You can access the PDF files as follows:

- ◆ From the Data ONTAP CD-ROM: Read the *intro.txt* file on the CD-ROM to find the PDF files, then use Adobe Acrobat Reader 3.0 or later to open the files.
- ◆ From NetApp On the Web (NOW): Go to <http://now.netapp.com>, click the Software Library link, click the Data ONTAP 5.2 link, then click the desired PDF file.

Accessing the HTML files

You can access the HTML files as follows:

- ◆ From the Data ONTAP CD-ROM: Read the *intro.txt* file on the CD-ROM to find the directory that contains the Documentation Web, then use your browser to open the *index.htm* file. You need to use Netscape 4.0 or later or Internet Explorer 4.0 or later to view the documentation in HTML.
- ◆ From NetApp On the Web (NOW): go to <http://now.netapp.com>, click the Software Library link, click the Data ONTAP 5.2 link, then click the desired HTML file.

Accessing the man pages

You can access the man pages as follows:

- ◆ From a UNIX system: Mount the */etc/man* directory from your filer's default volume, modify the man page path to add the */etc/man* directory to the path, then use the `man` command to view the individual pages.
- ◆ With an HTML browser: Go to http://filename/na_admin, where *filename* is the name of the filer you want, then click the Manual Pages link.

Documentation changes

About this section

This section contains changes to NetApp documentation. The information in this section supersedes the information in any other NetApp documentation.

Changes to the Hardware Guide for the NetApp F600 series

Changes to filer labels: The labels for the serial connectors on the NetApp F630 system, as shown on page 1-8, have changed as follows.

Old	New
COM1	Console
COM2	Diagnostic

Corrections to tables: Table 3-1, “Supported external tape stackers,” on page 3-2, should be titled “Supported external tape libraries.” It should include the following additional items.

Manufacturer	Model
Breece Hill Technologies	Q2.15
Digital or Sun	DLT 4700

Table 3-2, “Supported external tape drives,” on page 3-2, should include the following additional items.

Manufacturer	Model
Digital or Sun	DLT 4000
Digital or Sun	DLT 7000
Exabyte	8900

The following entry should be removed from Table 3-2.

Manufacturer	Model
Breece Hill Technologies	Q2.15

ATM card slot assignments: The ATM card works in any of slots 1 through 8 and slot 10. The first ATM card should go into slot 10 unless you have a Gigabit Ethernet card in that slot.

Manufacturer	Model
Digital or Sun	DLT 4000
Digital, Quantum, or Sun	DLT 7000 (F200 series only)

Changes to the Field Service Guide for the NetApp F600 series

The labels for the serial connectors on the NetApp F630 system, as shown on pages 3-5 and 3-6, have changed as follows.

Old	New
COM1	Console
COM2	Diagnostic

What to do next

Next steps

What you do next depends on whether you are installing a new filer or cluster, or upgrading an existing filer, as shown in the following table.

If you are...	Read...
Installing a new filer or a factory-configured cluster	Chapter 3, “ Information for New Filer Installations ,” on page 11
Upgrading a filer or converting filers to a cluster	Chapter 4, “ Information for Filer Upgrades ,” on page 15

Overview

Who should read this chapter

You should read this chapter if you are installing a new filer or a factory-configured cluster. If you are upgrading from a previous version of Data ONTAP, read Chapter 4, “[Information for Filer Upgrades](#),” on page 15 instead.

What is in a new filer

A new filer has the following items installed on it:

- ◆ The latest version of Data ONTAP.
- ◆ The latest firmware.
- ◆ The additional items that you ordered.

Methods of administering a filer

Three ways to administer a filer

You can administer a filer in three ways:

- ◆ Using the filer's command-line interface.
- ◆ You can also perform most filer and cluster administrative functions using FilerView, a graphical user interface. To access FilerView on a filer, open the following URL with a Web browser:
`http://filername/na_admin`
then select the 1024x768 link under FilerView; use the 800 x 600 link if you are using a laptop.
- ◆ You can also perform most CIFS administrative functions using Windows facilities. For further information, see the CIFS administrations chapter of the *System Administrator's Guide*.

What to do next

For new filer or factory-configured cluster installations

If you are installing a new filer or factory-configured cluster, follow these steps.

Step	Action
1	Read the <i>Read Me First</i> document if it is included in the documentation.
2	Follow the instructions in the <i>Hardware Installation Guide</i> for your new filer.
3	Follow the instructions in the <i>First-Time Configuration Guide</i> . This guide includes instructions for configuring the software for filers and clusters and for making any necessary hardware connections for a factory-configured cluster.

For cluster conversions

If you are using the new filer with another filer to form a cluster, follow these steps.

Step	Action
1	Read the <i>Read Me First</i> if it is included in the documentation.
2	Follow the instructions in the <i>Hardware Installation Guide</i> for your new filer.
3	Follow the instructions in the <i>Cluster Conversion Guide</i> .

Overview

Who should read this chapter

You should read this chapter if you are converting filers to a cluster. If you are installing a new filer or a factory-configured cluster, read Chapter 3, “[Information for New Filer Installations](#),” on page 11.

Deciding whether to upgrade

Before you upgrade to Data ONTAP™ 5.2 software, consider the following: if you upgrade and find that you need to revert to a pre-5.1 release later, you might lose qtree information.

Contents of this chapter

This chapter contains information for users who are upgrading to Data ONTAP 5.2 from a previous releases of the Data ONTAP. The following table describes the contents.

To learn about...	Read...
System requirements for running this release of the Data ONTAP software	“ System requirements for this release ” on page 16
What is new in this release	“ New features in this release ” on page 17
What steps to take after reading this guide	“ What to do next ” on page 19

System requirements for this release

Filers supported

This release is supported only on NetApp F630 filers with fibre channel connections to disk shelves.

Number of disk shelves supported

Up to 24 disk shelves are supported for each cluster or filer.

Main memory requirements

For up to 56 disks, you need 256 MB of main memory.

For 57 or more disks, you need 512 MB of main memory.

NVRAM requirements

Each filer must have 32 MB of NVRAM.

Firmware requirement

You must have Firmware 2.1_a1. For instructions about upgrading your filer firmware, see the *Software and Firmware Upgrade Guide*.

Core dump space needed

When a core dump occurs within a NetApp filer, the memory and NVRAM are dumped to a set of areas at the beginning of all the disks, which has a fixed size. Therefore, a filer with a large amount of memory but not enough disks does not have enough room to do a full core dump.

The following table shows how many 9 GB disks (not counting spare disks) are needed for the amount of memory you might have in a filer.

Memory (in MB)	Disks Needed
256	4
512	7

New features in this release

Clusters

This release supports clusters. A cluster consists of a pair of NetApp filers that are connected and configured to provide fault tolerance. When one filer in a cluster undergoes a system failure and can't reboot, the partner filer in the cluster can take over the failed filer's functions and serve the data on the failed filer's disks. This is known as a takeover. In addition to an automatic takeover, you can issue a command at any time to force a takeover.

Year 2000 compliance

This release of Data ONTAP is Year 2000 compliant. The Year 2000 Compliance includes the ability to do the following tasks:

- ◆ Handle date information before, during, and after the 1st of January 2000, including but not limited to the following actions:
 - ❖ Accepting date input.
 - ❖ Providing date output.
 - ❖ Performing calculations on dates, or portions of dates.
- ◆ Function accurately and without disruption solely as a result of the change from this century to the next.
- ◆ Respond to two digit year date input in a way that resolves the ambiguity as to century in a disclosed, defined and pre-determined manner.
- ◆ Store and provide output of date information in ways that are unambiguous to century.
- ◆ Correctly process leap years.

FilerView enhancements

This release contains enhancements to FilerView to support clusters. These features are highlighted in the online Help in sections headed "Cluster Considerations."

Man page enhancements

Some man pages in this release contain sections headed "CLUSTER CONSIDERATIONS" that describe aspects of commands that are specific to clusters.

**True hot disk
insertion**

You can insert a disk into a disk shelf without entering any filer commands.

What to do next

Converting filers to a cluster

Obtain the required licenses and cluster hardware, then follow the instructions in the *Cluster Conversion Guide*.

Note

Before you put your cluster into operation, run the `disk_fw_update` command from each filer to ensure that the disks have the latest firmware.

Obtaining hardware: Converting filers to a cluster requires additional adapters and cables. To obtain the necessary hardware for converting two filers into a cluster, read the *Cluster Conversion Guide* to find out what you need, then consult your Network Appliance sales representative or call Network Appliance to order the hardware.

Licensing requirements for clusters: To use clusters, you must have a cluster license for each filer. You must have a license on each filer for each protocol that you use. You can obtain licenses from your Network Appliance sales representative or directly from Network Appliance.

After the conversion

After your cluster is operating, consult the *System Administrator's Guide* and the online man pages or the *Command Reference Guide* for information about clusters. In particular, read the following documents for information about clusters:

- ◆ Chapter 9, “Cluster Administration,” of the *System Administrator's Guide*.
- ◆ The *Quick Reference Card*, which lists the commands that behave differently in a cluster environment.
- ◆ The man pages for commands that behave differently in a cluster environment and the man pages for the `cf` and `partner` commands.

