

sgi



Getting Started with StorHouse/CCi

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StorHouse®



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Table of Contents



| | |
|---|-----|
| Welcome | iii |
| Chapter 1: Overview | 1 |
| About StorHouse/CCi | 1 |
| Logging on to StorHouse/CCi | 2 |
| About the CCI Main Window | 3 |
| Main Header Bar | 5 |
| Accessing RFS and StorHouse Nodes | 9 |
| The Next Step | 10 |
| Chapter 2: Using StorHouse/RFS Administration Windows | 11 |
| About RFS Administration Windows | 11 |
| RFS Statistics, or Main, Window | 12 |
| Header Menu | 13 |
| RFS Statistics Report | 14 |
| RFS Management and Reports Window | 15 |
| Header Menu | 16 |
| Management Options | 17 |
| Reporting Options | 20 |

| | |
|---|----|
| Chapter 3: Using StorHouse Administration Windows | 23 |
| About StorHouse Administration Windows..... | 23 |
| StorHouse Node Administration Window | 24 |
| Header Menu | 26 |
| Reporting Options..... | 26 |
| Administration Options..... | 27 |
| Example One – Determining if the Tables for an RFS Collector Have a Backup Copy..... | 27 |
| Example Two – Finding Information about a StorHouse Volume Set | 31 |



Welcome

Welcome to *Getting Started with StorHouse/CCi*, a comprehensive web-based interface for managing and monitoring StorHouse and StorHouse/RFS systems. StorHouse/CCi makes it easy to track and report on StorHouse and RFS system performance throughout the enterprise.

Purpose of This Manual

This introductory document explains how to get started using the StorHouse/CCi software. It introduces StorHouse/CCi, discusses the main CCI functional areas, and explains how to maneuver through the various CCI windows.

SGL recommends that, after reading this document, you take some time to explore the CCI software and become more familiar with its rich, in-depth interface.

Audience

The audience for this document consists of system administrators who are responsible for using StorHouse/CCi to manage their StorHouse and RFS environment. This document assumes the audience understands StorHouse and RFS concepts and operation and has completed basic StorHouse training. For example, the audience should be knowledgeable about volume sets, file sets, storage levels, file and volume management principles, RFS profiles, collections, collectors, and staging areas. The audience should also be aware of the various types of reports available in CCI.

Contents

This document contains three chapters:

- Chapter 1, “Overview,” introduces StorHouse/CCi and describes its main features. It also explains the CCI login procedure, header menu, and various links on the CCI Main world view window, including the link to create CCI user accounts.
- Chapter 2, “Using StorHouse/RFS Administration Windows,” explains the StorHouse/RFS administration windows, including where to manage RFS profiles, logs, diagnostics, alerts, registrations, and reports.
- Chapter 3, “Using StorHouse Administration Windows,” explains the StorHouse administration windows. It also shows how CCI simplifies system management by enabling administrators to drill down to related tasks from the same window.

Overview

This chapter introduces StorHouse/CCi and describes its main features. It also explains the CCI login procedure, header menu, and various links on the CCI Main world view window, including the link to create CCI user accounts.

About StorHouse/CCi

StorHouse/CCi is an SGI software product that creates a website for managing StorHouse and StorHouse/RFS systems across the enterprise. You can install CCI on any StorHouse or RFS server or on any Red Hat Linux server. Once installed, administrators can access CCI from any common Web browser such as Firefox, Internet Explorer or Mozilla.

The interface architecture provides an at-a-glance view of all StorHouse and StorHouse/RFS servers plus point-and-click access to configuration tools and system reporting on a per-server basis. Moreover, by leveraging the CCI web-based architecture, administrators can



securely access CCI from both inside and outside the firewall, thereby enabling anywhere/anytime StorHouse management.

StorHouse/CCI key features include:

- Single-point for managing all StorHouse and StorHouse/RFS systems within the enterprise
- Rich graphical access to system status and the capability to easily modify and optimize the StorHouse configuration
- Drill-down capability for obtaining detailed information about performance and storage characteristics of each system component, including servers, libraries, and drives
- Support for configuring customized monitoring and alert profiles so that automatic notifications will be delivered to individuals or groups via standard SMTP-based email
- Capability to collect detailed system diagnostic information at a granular level to enable rapid isolation and correction of system issues related to both hardware failure and software configuration
- Real-time access to current configuration information for capacity planning and accelerated system management
- Web-access to all StorHouse management functions via a system command line interface (CLI), which facilitates the construction of sophisticated macros for automating complex tasks
- Generation of real-time reports on system, directory, library, performance, usage, volume, network, and user information
- Interface to configure StorHouse multi-view, point-in-time recovery

Logging on to StorHouse/CCI

The StorHouse/CCI installation procedure creates a CCI user account for your organization and provides a default administrator login ID and password. SGI recommends that you change the default password to one that is more secure at

your earliest convenience. You can add additional CCI user accounts or change passwords for existing accounts from the CCI Main window.

Figure 1-1 illustrates the CCI login window.

sgi.

StorHouse/CCI Login

Account:

Password:

login

Minimum Requirements:

- Cookies enabled in web browser
- Screen resolution of 800x600 or higher

Figure 1-1: StorHouse/CCI Login Window

About the CCI Main Window

Once you log in to CCI, the Main, or home, window will be empty. You must populate the Main page with StorHouse and StorHouse/RFS nodes by registering those nodes in CCI. Once nodes are registered, CCI presents a world-view of your StorHouse environment for an immediate snapshot of all StorHouse and StorHouse/RFS activity.

Figure 1-2 illustrates the CCI Main world view window.

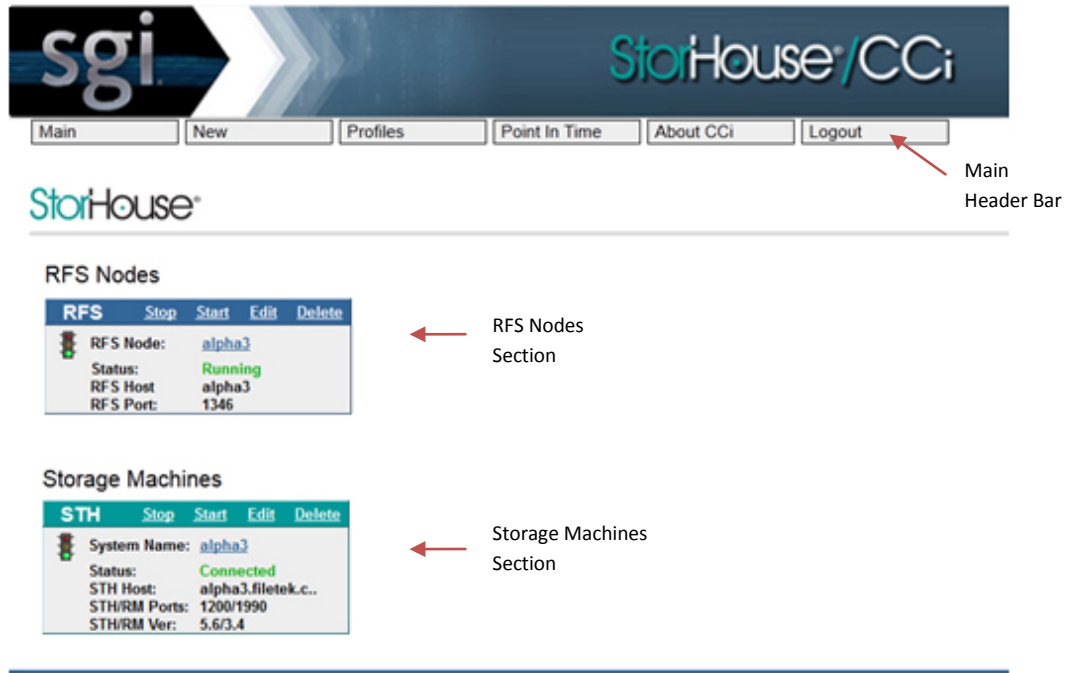


Figure 1-2: StorHouse/CCi Main World View Window

The CCI Main window is divided into two sections. The RFS Nodes section displays all RFS servers registered in CCI. The Storage Machines section displays all StorHouse servers registered in CCI. For example, the sample system configuration shown in Figure 1-2 contains one RFS node called alpha3 and one StorHouse node, also called alpha3. In this case, the RFS server software is running on the same physical machine as the StorHouse software.

Main Header Bar

The header bar on the Main window contains six buttons: Main (home), New, Profiles, Point in Time, About CCI, and Logout. Figure 1-3 illustrates the Main header bar.



Figure 1-3: StorHouse/CCI Main Header Bar

The header bar buttons work as follows.

- Clicking *Main* displays the CCI Main, or home, page.
- When you place the cursor over *New*, CCI displays a drop-down list of choices as shown in Figure 1-4. By selecting an item in the list, you can register a new StorHouse, StorHouse/RFS, or Point-in-Time server or create a new RFS profile.

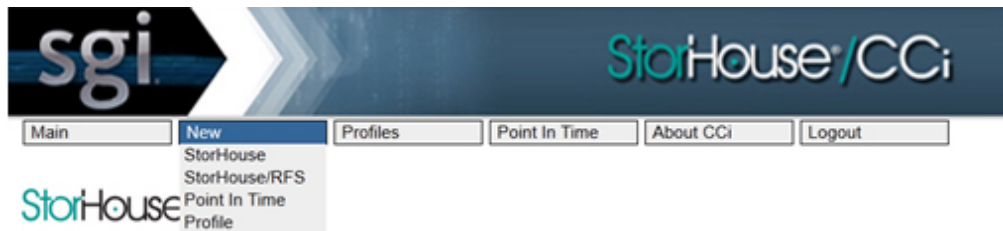


Figure 1-4: CCI New Options

- Clicking *Profiles* displays a list of all RFS profiles defined in CCI. From the Profile window, you can edit, delete, copy, or deploy each profile to a specific RFS server.

For information about how to create and deploy RFS profiles in CCI, refer to the document, *StorHouse/RFS Configuration File Reference Manual*, publication number 900186.

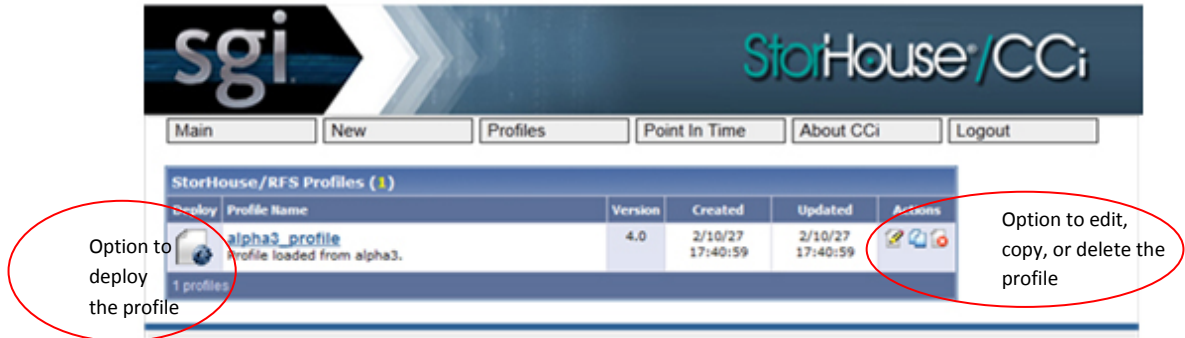


Figure 1-5: CCI Profile Options

- Clicking *Point in Time* displays all point-in-time systems and denotes whether they are currently active or inactive. From the PIT window, you can start/stop the RFS service running on a PIT server, activate/deactivate a PIT server, or edit/delete a PIT server registration.

For information about how to set up the multi-view point-in-time recovery feature in CCI, refer to the document, *StorHouse Multi-View Point-in-Time Recovery*, publication number 900202.



Figure 1-6: Point-in-Time

- When you place the cursor over *About CCI*, the software displays a drop-down list of choices as illustrated in Figure 1-7. By selecting an item in the list, you can show CCI configuration information, access troubleshooting tools, create/modify CCI user accounts, and set general alert options.



Figure 1-7: About CCI Options

Figures 1-8 illustrates the About CCI Troubleshooting, User Accounts, and Options windows.

sgl StorHouse/CCi

Main New Profiles Point In Time About CCI Logout

Troubleshooting Tools

Alert Email Test

Test Email

Network Troubleshooting

Show IP configuration Ping localhost

Show route table Traceroute localhost

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Main New Profiles Point In Time About CCI Logout

StorHouse/CCi User Accounts

[Create New User Account](#)

| User ID | Name | Description | Last Login | Actions |
|---------|---------------|-------------|---------------------|---------|
| admin | Administrator | | 2013/05/28 11:43:08 | |

Total 1 accounts.

sgl StorHouse/CCi

Main New Profiles Point In Time About CCI Logout

General Options

Alerts
Configure alerts options

Figure 1-8: About CCI Troubleshooting, Accounts, and Options Windows

Accessing RFS and StorHouse Nodes

As Figure 1-9 illustrates, the Main window provides a world-view of all StorHouse/RFS and StorHouse systems.

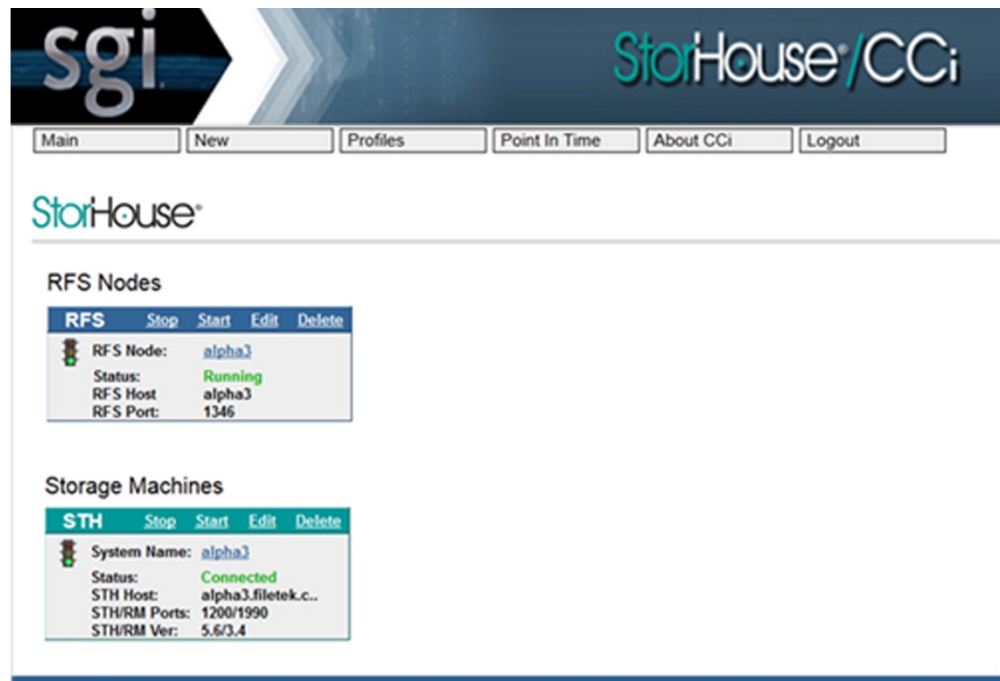


Figure 1-9: CCI Main World View Window

For each RFS node, you can start/stop the RFS software and edit/delete the RFS registration. In addition, if you click the RFS Node name (in this example, alpha3), CCI displays the Statistics report for that RFS server.

For each StorHouse node, you can start/stop the StorHouse software and edit/delete the StorHouse registration. In addition, if you click the StorHouse System Name (in this example, alpha3), CCI displays statistics and the main system administration window for that StorHouse server.

The Next Step

Now that you are familiar with the CCI Main window format and links, you are ready to delve deeper into a more detailed description of CCI functionality. Refer to Chapter 2, “Using RFS Administration Windows,” for a closer look at how to manage RFS servers. Refer to Chapter 3, “Using StorHouse Administration Windows,” for a more in-depth view of the StorHouse administration interface.

Using StorHouse/RFS Administration Windows



This chapter explains the StorHouse/RFS administration windows, including where to manage RFS profiles, logs, diagnostics, alerts, registrations, and reports. You can execute some tasks from more than one CCI location (for example, window or menu bar).

About RFS Administration Windows

The CCI Main window is the gateway to the RFS administration windows. For example, you can manage registrations and profiles by clicking New or Profile on the Main window header bar. Additionally, you can drill down to manage a specific RFS server by clicking the RFS Node name for that server as illustrated in Figure 2-1.

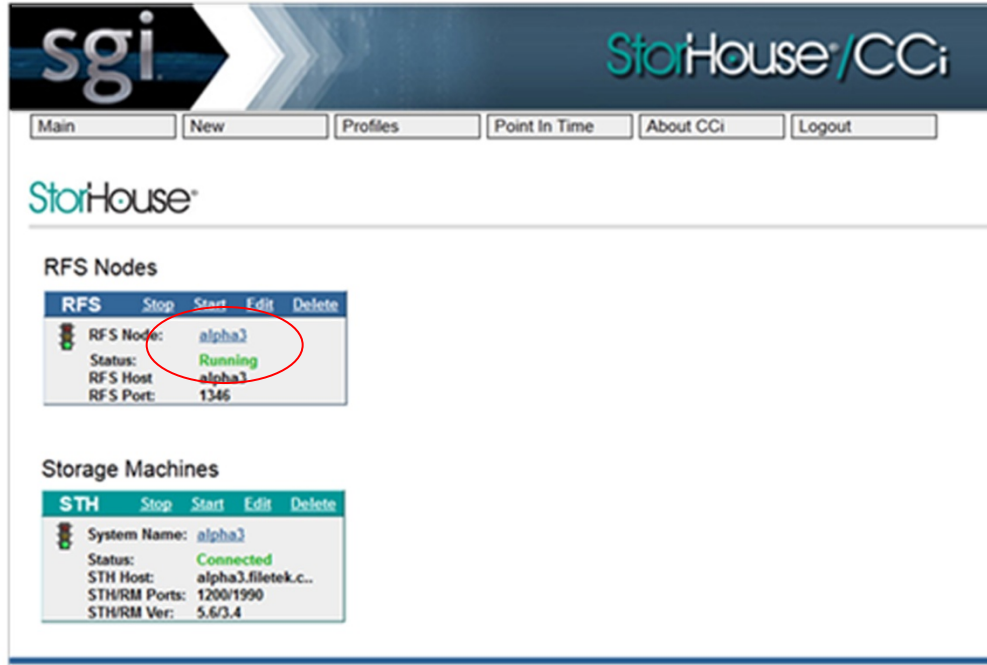


Figure 2-1: Clicking an RFS Node Name

RFS Statistics, or Main, Window

When you click an RFS Node name on the CCI Main window, CCI displays the Statistics, or RFS Main, window for the selected RFS server. Figure 2-2 illustrates the RFS Statistics window for the RFS server alpha3.

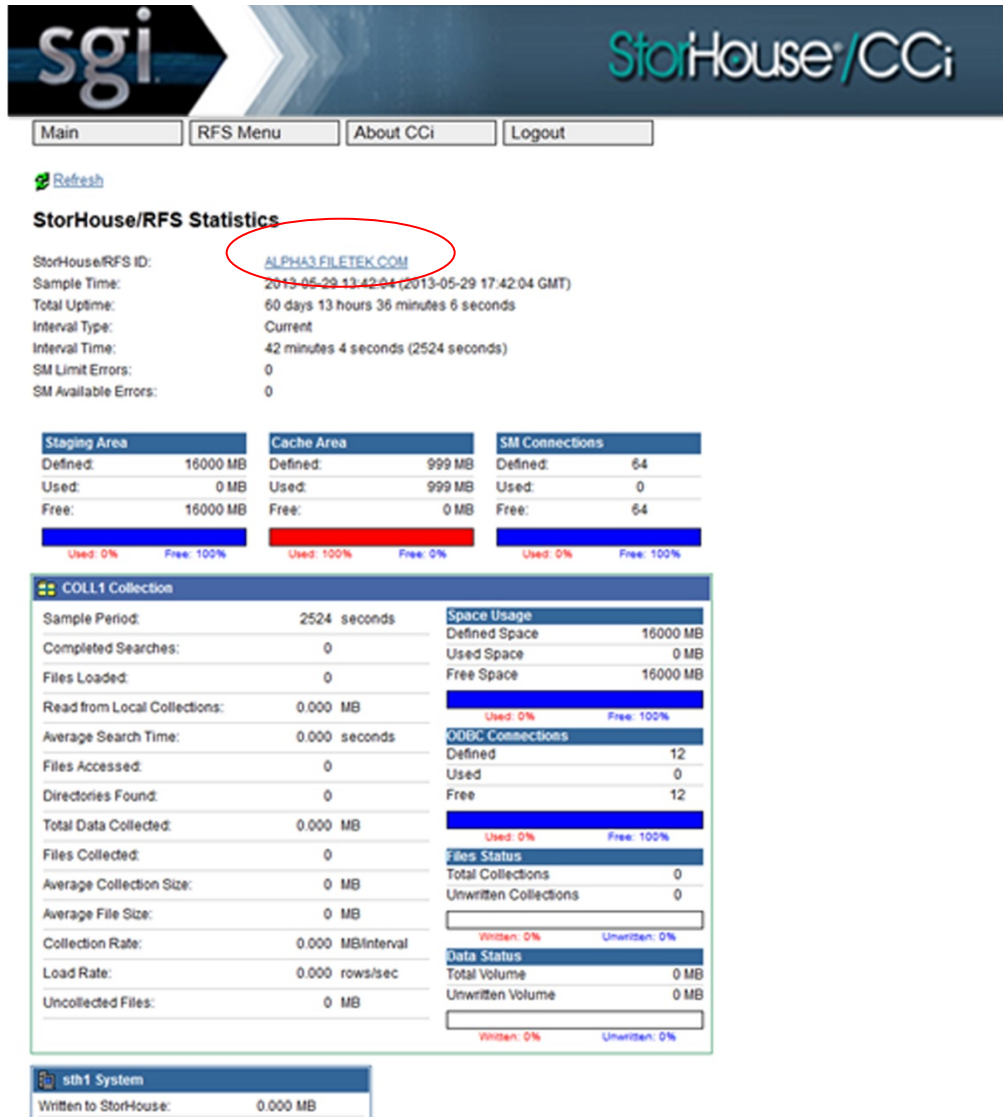


Figure 2-2: Statistics Window for RFS Server Alpha3

Header Menu

The header menu on the Statistics window contains four options: Main, RFS Menu, About CCI, and Logout. Figure 2-3 illustrates this menu.



Figure 2-3: RFS Statistics Window Header Menu

The RFS Menu options are:

- Main – Clicking *Main* returns you to the CCI Main, or home, window.
- RFS Menu – If you place the cursor over *RFS Menu*, CCI displays a drop-down list of five options, which work as follows:
 - Selecting *RFS Config* displays a text version of the RFS configuration file for the selected RFS server.
 - Selecting *RFS Log* displays the RFS Log Viewer.
 - Selecting *RFS Diagnostics* displays the RFS Diagnostics window.
 - Selecting *RFS Alerts* displays the RFS Alerts window.
 - Selecting *RFS Health* displays the Health report for the selected RFS server.
- About CCI – If you place the cursor over *About CCI*, the software displays a drop-down list of CCI management options as described in Chapter 1.
- Logout – Clicking *Logout* logs you out of CCI.

RFS Statistics Report

The Statistics report contains information about RFS staging and caching areas and StorHouse connections for a specific RFS server (in this case, alpha3). In addition, the report contains information about each collection configured for the RFS server. (In the sample Statistics report in Figure 2-4, there is one collection called COLL1.) Collection reporting includes space utilization, ODBC connections, file/data status, and amount of data written to StorHouse. You can refresh the Statistics report display by clicking the Refresh link located in the upper left-hand corner of the RFS Statistics window.

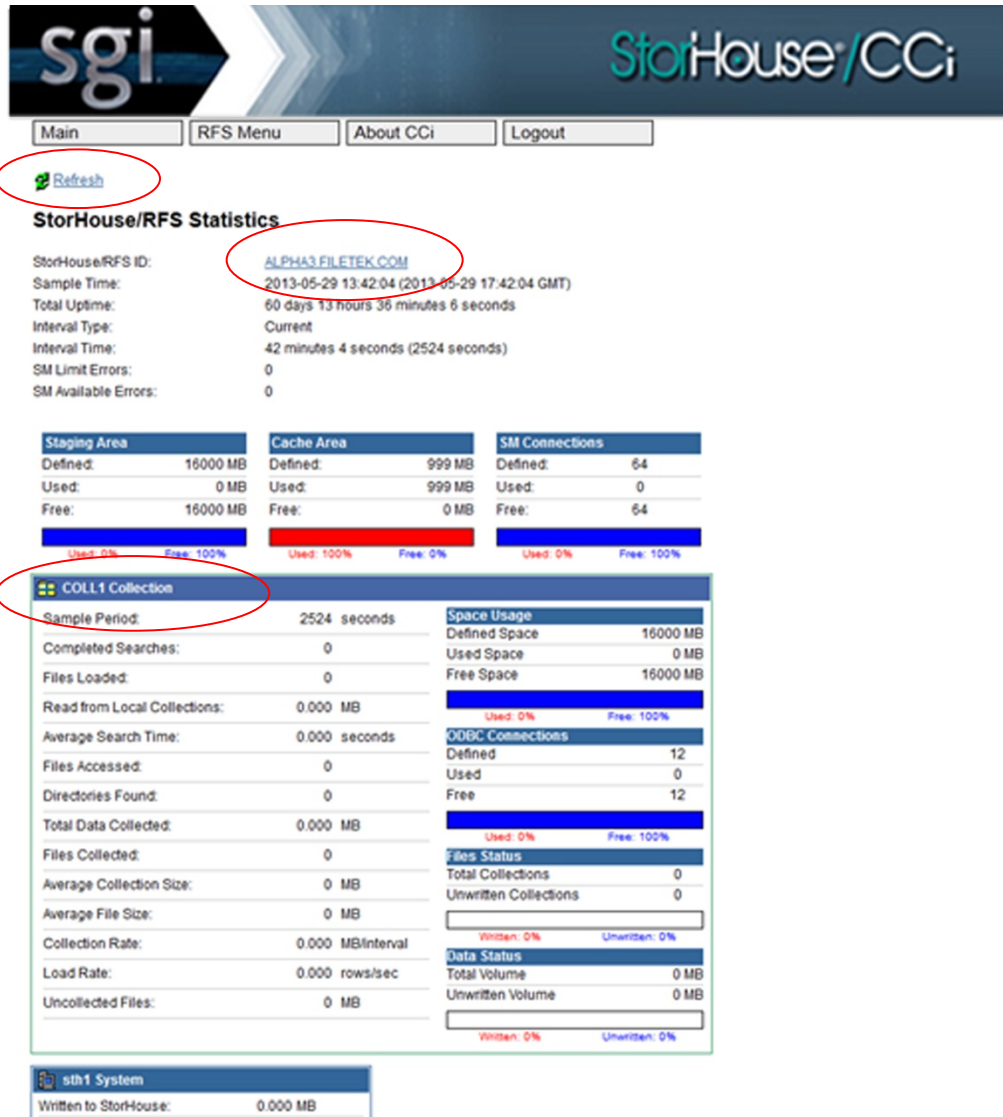


Figure 2-4: Statistics Report for Alpha3

RFS Management and Reports Window

Directly under the StorHouse/RFS Statistics title, there is an entry called StorHouse/RFS ID. In Figure 2-4, the StorHouse/RFS ID is Alpha3.FileTek.com. If you

click Alpha3.FileTek.com, CCI displays the StorHouse/RFS Management and Reports window for alpha3.



Figure 2-5: StorHouse/RFS Management and Reports Window

Header Menu

The header menu on the RFS Management and Reports window is similar to the header menu on the RFS Statistics window except that it has one more selection: RFS Main. Clicking RFS Main returns you to the RFS Statistics window.

Management Options

The StorHouse/RFS Management and Reports Window provides six management options:

- Profiles – View all RFS profiles and edit, copy, delete, or deploy a specific RFS profile. The functionality is the same as clicking Profiles on the CCI Main header menu.
- Configuration – View a text version of the RFS configuration file for the selected server.
- Log – View the StorHouse/RFS log for the selected server. This functionality is similar to clicking the RFS Log option in the RFS Menu drop-down list.



Figure 2-6: RFS Log Viewer

- Diagnostic – Set the RFS diagnostic mode. This functionality is the same as selecting the RFS Diagnostic option in the RFS Menu drop-down list.



Figure 2-7: Configure RFS Diagnostics

- Monitoring & Alerts – Configure RFS monitoring and alerts. This functionality is the same as selecting the RFS Alerts option in RFS Menu drop-down list.




[Main](#) | [New](#) | [Profiles](#) | [Point In Time](#) | [About CCI](#) | [Logout](#)

Monitoring & Alerts

Enable StorHouse/RFS Monitoring
 Monitor interval: seconds

 StorHouse/CCi sends alerts when any of the following conditions are met:

- StorHouse/CCi server lost connection to StorHouse/RFS
- Staging free space is less than %
- Number of used StorHouse/SM connections is more than
- Limit on open SM files has been exceeded more than: times
- Number of SM connection failures has exceeded:
- Number of uncollected files is more than
- Number of ODBC connection is more than
- Number of completed searches is less than
- Average search time is more than seconds

 Alert emails will be sent to the following address(es):

 Multiple addresses can be separated with semicolon, space, or comma.
 For example: user1@company.com; user2@company.com

StorHouse/CCi uses the following SMTP server to send alert emails:
 SMTP Server: localhost
 SMTP Port: 25

[Change E-mail options](#)

Figure 2-8: Configure RFS Monitoring and Alerts

- Registration – Register a new RFS server in CCI or modify, delete, or copy the registration for alpha3. This functionality is the same as selecting New->RFS on the CCI Main header menu.

alpha3 StorHouse/RFS Registration

Home | Registration | Profile | Log | Diagnostic | Alerts | Statistics | Health

Refresh | New | Copy | Delete

alpha3 StorHouse/RFS Registration

*Name:

Description:

*Host Name:

*Control Port:

Enabled:

Created Time: 2012/06/05 12:45:03
Updated Time: 2012/06/05 12:45:03

StorHouse/RFS Name
Required: Yes
Description: The name of the StorHouse/RFS system.

Fields with * are required.

Figure 2-9: RFS Server Registration

Reporting Options

The two reporting options are:

- Current Statistics – Displays the StorHouse/RFS Statistics, or RFS Main, window
- Health – Displays the RFS Health report for the given RFS server. This functionality is the same as selecting RFS Health on the RFS Menu drop-down list.

Figure 2-10 illustrates a sample RFS Health report.



StorHouse/RFS Health

Validation and Health Report for RFS on ALPHA3.FILETEK.COM
as-of: 2013-06-04 14:17:05

----- GENERAL INFORMATION -----

RFS Version: RFS 4.0.66.7 created: Sep 4 2012 at 14:36:12
FSD Version: NFS 4.0.66.7 created: Sep 4 2012 at 14:35:35
The current log file is /rfs/logs/rfs.log
Data returned from StorHouse will be cached in /rfs/cache/ (CacheDir).
Up to 999 MB (MaxCacheSpace) may be used for StorHouse cache.
Unused files will be removed from virtual directories after 480 minutes (FileCleanupTimeout).
General cleanup will occur every 10 minutes (CleanupTimeout).

----- STATISTICS -----

Statistics will be produced every 60 minutes (StatsInterval).
Statistics will be available as RFSSTATS.TXT.
Successfully connected to primary statistics database RFS using System Definition sth1 and DSN alpha3
The ARCHIVE_RFS table is valid and accessible.
The ARCHIVE_TABLES table is valid and accessible.
The ARCHIVE_SYSTEMS table is valid and accessible.
Completed STATS section validation.

----- ALIASES -----

Aliases will be read from table ARCHIVE_ALIASES in database RFS
Successfully connected to primary system database RFS using DSN alpha3
The ARCHIVE_ALIASES table is valid and accessible.
Completed ALIASES section validation.

----- COLLECTOR DEFINITION: ROOT -----

Files collected will be added to collections in collection definition COLL1.
Files will be collected from each user's / directory (UserDir) in /rfs/collectors/root (StagingDir).
Files must be unmodified for 2 minutes before they will be collected.
Up to 16000 MB of disk space can be used by this collector to stage files.
Up to 16000 MB of disk space can be used by this collector to collect files.
Subdirectories 0 levels or more below the virtual root directory will be cleaned up when they are empty.
Warning: This collector has not yet collected any files and its operability can not be verified.
Completed Collector Definition ROOT section validation.

----- COLLECTION DEFINITION: COLL1 -----

Collections will be stored locally in (CollectionDir) /rfs/collections/
Collection files written to StorHouse will be 1800 MB (MaxWriteSize).
16000 MB of local storage will be used to hold collections (Total MaxCollectionSpace).
This amount of collection space can hold between 8 and 9 collections.
A collection will be written to StorHouse no later than 1440 minutes after the first file is collected into.
Collection files will NOT be compressed before being written to StorHouse (Compression=No).
Users are allowed to browse directories (Browse=Yes).
Completed collection definition COLL1 section validation.

----- STORAGE DEFINITION: STOR1 -----

No more than 12 concurrent searches using ODBC (MaxSearchConnections) will be allowed.
If ODBC connections are idle for 10 minutes, they will be terminated.
Successfully connected to primary system database RFS using DSN alpha3
The ARCHIVE 0 table is valid and accessible.

Figure 2-10: RFS Health Report for Alpha3

Using StorHouse Administration Windows



This chapter explains the StorHouse administration windows, including where to generate/view performance reports and manage StorHouse volume sets, file sets, files, volumes, devices, directories, and databases.

About StorHouse Administration Windows

Similar to StorHouse/RFS administration, the CCI Main window is the gateway to StorHouse server administration. For example, you can manage StorHouse server registrations by clicking New on the Main window header menu. Additionally, you can drill down to manage a specific StorHouse server by clicking the StorHouse System Name for that server as illustrated in Figure 3-1.

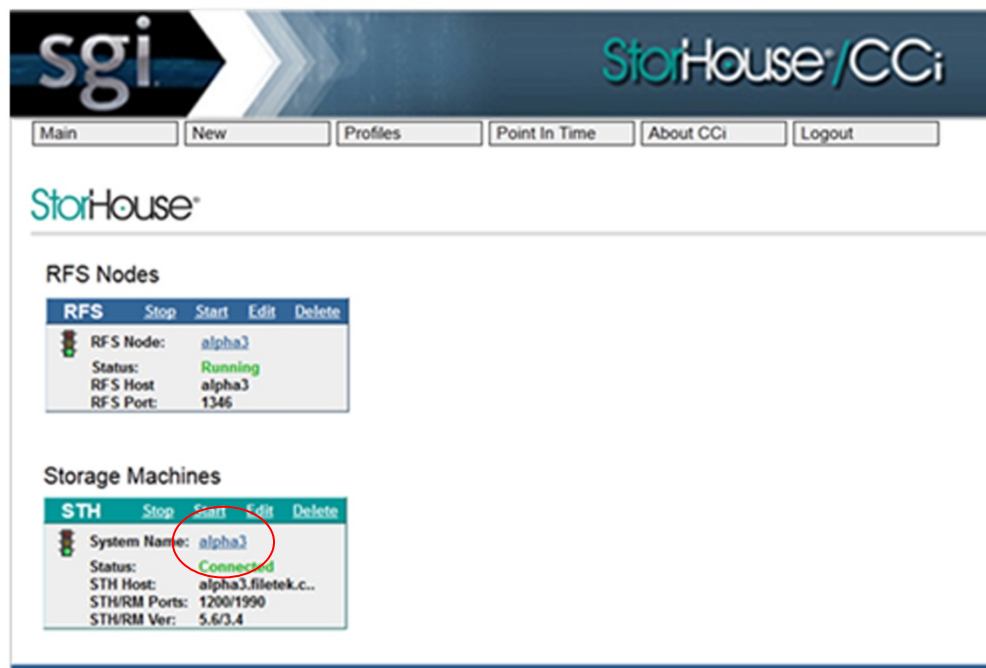


Figure 3-1: Clicking a StorHouse System Name

StorHouse Node Administration Window

When you click a StorHouse System Name on the CCI Main window, CCI displays the StorHouse Node Administration window for the selected StorHouse server. Figure 3-2 illustrates the StorHouse Node Administration window for the StorHouse server alpha3. This window is divided into two main sections: reporting and administration.

STH Node ID: alpha3

[All](#) | [Drive](#) | [Performance](#) | [Library](#) | [Storage](#) | [Usage](#) | [Volume](#) | [Network](#)

Date Time: 06/04/2013 14:19:28

| Performance Statistics | | | | | | | | |
|------------------------|-------|--------|-------------------|---------|---------|------------|----------|----------|
| Command | Count | Failed | Time (in seconds) | | | Data Size | | |
| | | | Fastest | Slowest | Average | Largest | Smallest | Average |
| GET | 1,507 | 0 | 0 | 3 | 0 | 799 KB | 171 KB | 222 KB |
| PUT | 373 | 0 | 0 | 5 | 0 | 17,060 KB | 1 KB | 715 KB |
| COPY | 0 | 0 | 0 | 0 | 0 | 0 KB | 0 KB | 0 KB |
| BACKUP | 992 | 0 | 0 | 559 | 11 | 718,201 KB | 0 KB | 3,351 KB |
| MIGRATE | 0 | 0 | 0 | 0 | 0 | 0 KB | 0 KB | 0 KB |

← Reporting section

System

Host Name: [alpha3.filetek.com](#) StorHouse/SM: **5.6 (Running)** StorHouse/RM: **3.4 (Running)**

[System Configuration](#) | [System Parameters](#) | [Device Status](#) | [Alerts](#) | [StorHouse User Log](#)
[Run SM Command](#) | [StorHouse/SM Error Information](#) | [Scheduled Events](#) | [New Event](#) | [Current Users](#)

Search

[Databases](#) | [Directories](#) | [Volume Sets](#) | [File Sets](#) | [File Groups](#)
[Volumes](#) | [Files](#) | [Locked Files](#) | [User Accounts](#) | [File Set Partitions](#)

File Management

[Archive File](#) | [Backup File](#) | [Create Primary File Copy](#) | [Relocate File](#) | [Purge File](#) | [Remove Deleted Files](#) | [Stage File](#) | [Write-back File Extents](#)

Create

[New Database](#) | [New Volume Set](#) | [New File Set](#) | [New File Group](#) | [New User Account](#)

Directory Management

[Backup Directory Metadata](#) | [Restore Directory Metadata](#)

Volume Set Management

[Catalog Volume Set](#) | [Erase Volume Set](#) | [Export Volume Set](#) | [Import Volume Set](#) | [Move Volume Set](#) | [Uncatalog Volume Set](#)

Volume Management

[Change Volume Attributes](#) | [Erase Volume](#) | [Export Volume](#) | [Move Volume](#)
[Recover Volume](#) | [Retire Volume](#) | [Uncatalog Volume](#) | [Validate Volume](#)

Administration section →

Figure 3-2: StorHouse Administration Window for Alpha3

Header Menu

The StorHouse Administration header menu contains two choices.

- Clicking *Main* returns you to the Main CCI home window.
- Clicking *Logout* logs you out of the CCI software.

Figure 3-3 illustrates the header menu.



Figure 3-3: Header Menu

Reporting Options

You can generate six individual reports from the StorHouse Administration window or one combined report. The six report types are Drive, Performance, Library, Usage, Volume, and Networks. Simply click a report type to create the report. Figure 3-4 illustrates a Performance report for alpha3.

Date Time: 06/04/2013 14:19:28

| Performance Statistics | | | | | | | | |
|------------------------|-------|--------|-------------------|---------|---------|------------|----------|----------|
| Command | Count | Failed | Time (in seconds) | | | Data Size | | |
| | | | Fastest | Slowest | Average | Largest | Smallest | Average |
| GET | 1,507 | 0 | 0 | 3 | 0 | 799 KB | 171 KB | 222 KB |
| PUT | 373 | 0 | 0 | 5 | 0 | 17,060 KB | 1 KB | 715 KB |
| COPY | 0 | 0 | 0 | 0 | 0 | 0 KB | 0 KB | 0 KB |
| BACKUP | 992 | 0 | 0 | 559 | 11 | 718,201 KB | 0 KB | 3,351 KB |
| MIGRATE | 0 | 0 | 0 | 0 | 0 | 0 KB | 0 KB | 0 KB |

Figure 3-4: Performance Report

Administration Options

The StorHouse administration section is divided into seven components (Figure 3-2):

- System
- Search
- File Management
- Create
- Directory Management
- Volume Set Management
- File Set Management

Each component contains many options. Moreover, many of these options provide additional links to related administration tasks. SGI recommends that you take some time to explore each administration section to become familiar with all available choices.

The remainder of this chapter provides examples of how to use the StorHouse Administration window Search option. Figure 3-5 illustrates this window.

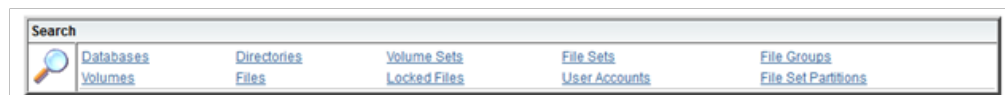


Figure 3-5: Search Window

Example One – Determining if the Tables for an RFS Collector Have a Backup Copy

The Search section on the StorHouse Administration window contains options for finding information about StorHouse resources – databases, directories, volume sets, file sets, file groups, volumes, files, locked files, user accounts, and file set partitions. For example, you can use the Search->Files section to determine whether StorHouse has created backup copies of the table files for a specific RFS collector (in this example, the ROOT collector on the alpha3 RFS system). However, before you can determine whether table files for the ROOT collector are backed up, you must know the volume set and file set assigned to ROOT.

Use the following procedure to determine which volume set and file set are assigned to the ROOT collector.

▼ To determine the volume set and file set assigned to the ROOT collector

1. On the CCI **Main** window, click the **RFS Node name** (in this case, alpha3).
2. On the **RFS Statistics (Main)** window, place the cursor over **RFS Menu** in the header menu, and click **RFS Config**. CCI displays the RFS configuration file for the RFS node alpha3.

```
[ALIASES]
SystemName=sth1
MirrorName=
Database=RFS
TableName=ARCHIVE
UserId=SYSADM
Password=_)=>01

[STATS]
SystemName=sth1
MirrorName=
StatsInterval=60
Database=RFS
TableName=ARCHIVE
UserId=SYSADM
Password=_)=>01
FileType=TXT

[sth1]
DNSName=alpha3.filetek.com
MailRecipient=cs@filetek.com
RetryInterval=3
UserId=SYSADM
Password=_)=>01
Group=RFS
VSET=RFS
FSET=RFS
FSETSegments=1
MaxSMFiles=64
MaxSMWriters=4
Checkpoint=1800

[STOR1]
SystemName=sth1
MirrorName=
Database=RFS
TableName=ARCHIVE
UserId=SYSADM
Password=_)=>01
MaxSearchConnections=12
SearchConnectionTimeout=10

[COLL1]
Storage=STOR1
CollectionDir=/rfs/collections
MaxLoadInterval=1440
MaxWriteSize=1800
Compression=no
Browse=yes
Retention=0

[COLLECTORS]
ROOT=COLL1

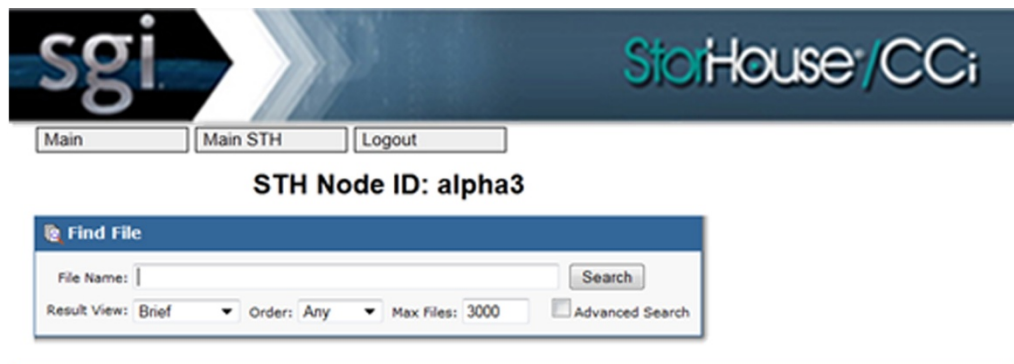
[ROOT]
StagingDir=/rfs/collectors/root
UserDir=/
WaitTime=2
MaxStagingSpace=16000
MaxCollectionSpace=16000
FileVersionLimit=0
```

The ROOT collector (1) collects files for the COLL1 collection (2). The COLL1 collection uses the STOR1 storage definition (3). The STOR1 storage definition uses the sth1 system definition (4). The RFS volume set and file set are assigned to the sth1 system definition. You will use these volume set and file set names in your search criteria.

Use the following procedure to determine whether the tables for the ROOT collector have a backup copy.

▼ To determine whether the tables for the ROOT collector have a backup copy

1. On the CCI **Main** window, click the StorHouse **System Name** (in this case, alpha3). CCI displays the StorHouse Administration Main window.
2. On the **StorHouse Administration Main** window, in the **Search** section, click **Files**. CCI displays the Find File window for alpha3.



3. On the **Find File** window, select the **Advanced Search** checkbox. CCI expands the Find File window so you can enter more search criteria.

STH Node ID: alpha3

Find File

File Name: Search

Result View: Brief Order: Any Max Files: 3000 Advanced Search

Search Criteria

None
 Directory Primary
 Volume Set File Set:
 Volume

File Copies

Primary:
Backup:
Archive:
Safe Copies:

Options

File Group:
Version:
Created After:
Created Before:
Unused Since:
Level:

Attributes

Damaged:
Deleted:
Resident:
Buffered:
Physical:
Backup:

4. In the expanded **Find File** window, select **Volume Set**, and then, in the **Volume Set** and **File Set** text boxes, type **RFS**.
5. In the **Safe Copies** text box, type **1** to indicate files that have only one safe copy (the primary copy), and then click **Search**. CCI displays the results list.

STH Node ID: alpha3

| File Name | Version | Status | Size | Created | File Group | Volume Set | File Set |
|--|---------|----------|---------------|-----------------------|------------|------------|----------|
| COLL120101123144210(C)ALPHA3.FILETEK.COM | 0 | Complete | 148,086,920 | 2010-11-24 @ 14:46:29 | RFS | RFS | RFS |
| COLL120101124144629(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,570,005,150 | 2010-11-25 @ 15:32:53 | RFS | RFS | RFS |
| COLL120101125153253(C)ALPHA3.FILETEK.COM | 0 | Complete | 635,082 | 2010-11-28 @ 23:40:38 | RFS | RFS | RFS |
| COLL120101128234038(C)ALPHA3.FILETEK.COM | 0 | Complete | 914,614,268 | 2010-11-30 @ 11:11:07 | RFS | RFS | RFS |
| COLL120101205135537(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,652,190,900 | 2010-12-06 @ 14:02:57 | RFS | RFS | RFS |
| COLL120101206140257(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,678,665,568 | 2010-12-06 @ 14:05:52 | RFS | RFS | RFS |
| COLL120101208140552(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,703,299,072 | 2010-12-07 @ 14:03:50 | RFS | RFS | RFS |
| COLL120101207140350(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,678,665,568 | 2010-12-07 @ 14:06:34 | RFS | RFS | RFS |
| COLL120101207140634(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,268,708 | 2010-12-07 @ 14:09:08 | RFS | RFS | RFS |
| COLL120101207140908(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,268,708 | 2010-12-07 @ 14:11:51 | RFS | RFS | RFS |
| COLL120101207141151(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,680,824,174 | 2010-12-07 @ 14:14:31 | RFS | RFS | RFS |
| COLL120101207141431(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,903,592 | 2010-12-07 @ 14:17:12 | RFS | RFS | RFS |
| COLL120101207141712(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,903,592 | 2010-12-07 @ 14:20:10 | RFS | RFS | RFS |
| COLL120101207142010(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,268,708 | 2010-12-07 @ 14:22:52 | RFS | RFS | RFS |
| COLL120101207142252(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,586,150 | 2010-12-07 @ 14:25:32 | RFS | RFS | RFS |
| COLL120101207142532(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,678,665,568 | 2010-12-07 @ 14:28:20 | RFS | RFS | RFS |
| COLL120101207142820(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,268,708 | 2010-12-07 @ 14:30:59 | RFS | RFS | RFS |
| COLL120101207143059(C)ALPHA3.FILETEK.COM | 0 | Complete | 1,679,903,592 | 2010-12-07 @ 14:33:38 | RFS | RFS | RFS |

Because the search included Safe Copies=1, none of the displayed files have a backup copy.

Example Two – Finding Information about a StorHouse Volume Set

Example two explains how to use the Search window to find information about the SYSTEM volume set. It also illustrates how CCI enables you to drill down to different administration levels so that you can perform related tasks from the same CCI window.

▼ To find information about the StorHouse SYSTEM volume set

1. In the **Search** section of the **StorHouse Administration** window, click **Volume Sets**. CCI displays the Find Volume Set window.



2. On the **Find Volume Set** window, in the **Volume Set** text box, type **system**, and then click **Search**. CCI displays the results window.



3. To find more information for the SYSTEM volume set, under **Volume Set**, click **SYSTEM**. CCI displays the following window.

STH Node ID: alpha3



SYSTEM Volume Set

| | |
|--------------------|---|
| Volume Set | SYSTEM |
| Created | 2010-09-17 @ 15:09:10 |
| Modified | 2013-05-31 @ 00:45:02 |
| <hr/> | |
| Directory | Primary |
| Library | L00 |
| Media | TFD - LTO4 800GB Ultrium tape cartridge |
| Volume Slides | 1 |
| <hr/> | |
| Limit | No limit |
| Size | 799,994,281 KB |
| Allocated | 719,912,196 KB |
| Free | 80,082,085 KB |
| <hr/> | |
| Archive Volume Set | None |
| Archive File Set | * |
| Backup Volume Set | None |
| Backup File Set | * |
| <hr/> | |
| Cycle After | 0 days |
| Deactivate After | 0 days |
| Expire After | 0 days |
| Hold | No |

| Actions | | | | | |
|---------|-------------------------------------|------------------------------|--------------------------------|------------------------------|----------------------------|
| | Return to VSET List | Edit VSET | Copy VSET | Release VSET | Erase VSET |
| | Move VSET | Catalog VSET | Uncatalog VSET | Export VSET | |

| Objects in VSET | | | | | |
|-----------------|-------------------------|---------------------------|-----------------------|-------------------------------|-------------------------------------|
| | Volumes | File Sets | Files | Deleted Files | File Set Partitions |

This window displays all volume set properties for the SYSTEM volume set as well as other options. For example, you can perform related actions such as editing the SYSTEM volume set attributes, or you can search for objects (volumes, file sets, files, deleted files, and file set partitions) in the SYSTEM volume set.

4. To search for volumes in the SYSTEM volume set, under **Objects in VSET**, click **Volumes**. CCI displays the following window.

STH Node ID: alpha3

Find Volume

Volume:

Result View: Brief Advanced Search

| | |
|--|---|
| <p>Search Criteria</p> <p><input type="radio"/> None</p> <p><input type="radio"/> Directory Primary</p> <p><input checked="" type="radio"/> Volume Set SYSTEM</p> <p><input type="radio"/> Free Pool <input type="text"/></p> <p>Other</p> <p>Location: <input type="text"/></p> <p>Memo: <input type="text"/></p> <p>Hold: <input type="text"/></p> | <p>Side Attributes</p> <p><input type="checkbox"/> Enabled</p> <p><input type="checkbox"/> Disabled</p> <p><input type="checkbox"/> Deactivated</p> <p><input type="checkbox"/> Expired</p> <p><input type="checkbox"/> Retire</p> <p><input type="checkbox"/> Permlocked</p> <p><input type="checkbox"/> Needs Cleaning</p> <p><input type="checkbox"/> Writelocked</p> <p><input type="checkbox"/> Not Writelocked</p> |
|--|---|

| Volume | Directory | Volume Set | Location | Media | Allocated Space | Free Space | Modified Time |
|----------------------|-----------|------------|----------|-------|-----------------|---------------|-----------------------|
| TFD"400034".A | Primary | SYSTEM | L00 | TFD | 719,912,196 KB | 80,082,085 KB | 2013-05-31 @ 00:45:02 |

1 volumes found.

CCi found one volume, TFD"400034".A, in the SYSTEM volume set.


- To find information about volume TFD"400034".A, under **Volume**, click **TFD"400034".A**. CCI displays the following window.


TFD"400034":A volume properties

| General | | Current State | |
|-------------|---|---|--|
| Volume: | TFD"400034":A | State Changed: 2010-12-17 @ 14:54:49 | |
| Volume Set: | SYSTEM | <input type="checkbox"/> Active | |
| Directory: | Primary | <input type="checkbox"/> Blank | |
| Location: | L00 | <input checked="" type="checkbox"/> Cataloged | |
| Media: | TFD - LTO4 800GB Ultrium tape cartridge | <input type="checkbox"/> Cataloging | |
| System ID: | 003100 | <input type="checkbox"/> Deactivated | |
| Site ID: | alpha3 | <input type="checkbox"/> Disabled | |
| | | <input type="checkbox"/> Erasing | |
| | | <input type="checkbox"/> Expired | |
| | | <input checked="" type="checkbox"/> Initialized | |
| | | <input type="checkbox"/> Needs Cleaning | |
| | | <input type="checkbox"/> Permlocked | |
| | | <input type="checkbox"/> Retire | |
| | | <input type="checkbox"/> Uncataloged | |
| | | <input type="checkbox"/> Uncataloging | |
| | | <input type="checkbox"/> Writelocked | |

| Attributes | |
|-------------------|--------|
| Cycle After: | 0 days |
| Deactivate After: | 0 days |
| Expire After: | 0 days |
| Extents: | 109632 |
| Mounts: | 1757 |
| Hold: | NOHOLD |

| Time | | Space | |
|-------------------|-----------------------|--------------------|----------------|
| Created: | 2011-03-05 @ 06:19:40 | Writable Percent: | 56 % |
| Modified: | 2013-05-31 @ 00:45:02 | Writable Space: | 449,846,605 KB |
| Initialized: | 2010-12-17 @ 14:54:49 | General Allocated: | 719,912,196 KB |
| Last Dismount: | 2013-05-31 @ 01:45:29 | General Free: | 80,082,085 KB |
| First Allocation: | 2011-03-05 @ 06:19:40 | | |
| Last Allocation: | 2013-05-31 @ 00:15:01 | | |

| Actions | | | |
|---|-------------------------------|---------------------------------|----------------------------------|
|  | Change Volume | Move Volume | Validate Volume |
| | | Validate Volume | Uncatalog Volume |

| Objects in Volume | | |
|---|-----------------------|-------------------------------------|
|  | Files | Deleted Files |
| | | File Set Partitions |

This window displays all properties for volume TFD"400034".A as well as other options. For example, you can perform related actions such as editing the volume attributes, or you can search for objects (files, deleted files, and file set partitions) on the volume.

6. To search for deleted files on volume TFD"400034".A, under **Objects in Volume**, click **Deleted Files**.

STH Node ID: alpha3

Find File

File Name:

Result View: Brief Order: Any Max Files: 3000 Advanced Search

Search Criteria

None
 Directory Primary
 Volume Set
 Volume TFD*400034*A

File Copies

Primary:
Backup:
Archive:
Safe Copies:

Options

File Group:
Version:
Created After:
Created Before:
Unused Since:
Level:

Attributes

Damaged:
Deleted:
Resident:
Buffered:
Physical:
Backup:

| File Name | Version | Status | Size | Created | File Group | Volume Set | File Set |
|-----------|---------|----------|---------|-----------------------|------------|------------|----------|
| PDF1306 | 0 | Complete | 384,569 | 2013-05-15 @ 23:13:55 | SERVICE | SYSTEM | SERVICE |
| VDF1306 | 0 | Complete | 10,905 | 2013-05-15 @ 23:13:56 | SERVICE | SYSTEM | SERVICE |
| VHE | 0 | Complete | 487 | 2013-05-15 @ 23:13:55 | SERVICE | SYSTEM | SERVICE |

3 files found.

CCI found three deleted files on the volume.

At this point, you can drill down even more to learn additional information about each deleted file's group, volume set, and file set.