

# User Guide

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# CTERA Agent for Linux

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**Tip**



For legal information and for the end user license agreement, refer to ***Legal Information*** (on page 85) in this guide.

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# Introduction

This chapter introduces the CTERA Agent and Cloud Attached Storage technology.

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## About Cloud Attached Storage

CTERA's Cloud Attached Storage® combines on-premises Network Attached Storage devices and/or CTERA Agent software with cloud services in a single, integrated solution. File sharing is performed on the local network, while cloud storage services are used for off-site backup and disaster recovery. Automated differential backup and restore functions include the industry's latest block-level de-duplication, compression, and encryption technologies, ensuring secure and efficient synchronization between the cloud storage service and the CTERA appliance or CTERA Agent-installed computer.

## About the CTERA Agent

You can back up data from any computer on your network that is installed with the CTERA Agent. You can also use the CTERA Agent to easily backup roaming PCs or remote offices even when they are outside your network.

The CTERA Agent supports the following modes:

### **Appliance mode**

The CTERA Agent connects to a local CTERA appliance, which provides the backup and restore capabilities of a local network solution, together with the safety and manageability of a cloud backup service. Data from the CTERA Agent-installed computer is backed up to a network share on the CTERA appliance and from the appliance to the CTERA Portal.

The CTERA Agent can be remotely managed and monitored from the CTERA appliance's Web interface. For information, refer to your CTERA appliance's user guide.

**+ Cloud Agent mode**

The CTERA Agent connects directly to CTERA Portal, without utilizing the services of an intermediate CTERA appliance. Data from the CTERA Agent-installed computer is backed up to a folder on the CTERA Portal.

Cloud Agent mode also supports Cloud Drive synchronization, a subscription service that enables you to synchronize your portal cloud drive with a specific folder on the CTERA Agent.

The CTERA Agent can be remotely managed, monitored, and accessed from the CTERA Portal. For information, refer to the *CTERA Portal User Guide*.

**Tip**



The CTERA Agent is also available as an app that can be installed on mobile devices. For information refer to the *CTERA Mobile User Guide*.

## CTERA Agent Licensing (Appliance Mode)

When the CTERA Agent is installed on the Linux operating system, it consumes one *CTERA Server Agent* license from the pool of workstation agents in your appliance. If your appliance runs out of the included number of server agent licenses, it requests additional licenses from the CTERA Portal *Server Agents* license pool allocated to your CTERA Portal account.

**Tip**



A license is taken for as long as an agent is defined in your appliance. If you are no longer using an agent, you can delete the agent entry from the appliance to regain its license.

## CTERA Agent Licensing (Cloud Mode)

When the CTERA Agent is installed on the Linux operating system, the agent consumes one *CTERA Server Agent* license from your CTERA Portal quota.

**Tip**



A license is taken for as long as an agent is defined in your CTERA Portal Account. If you are no longer using an agent, you can delete the agent entry from your CTERA Portal Account to regain its license.

## Supported Backup Operations

The CTERA Agent supports file-level backup, which allows backing up files and folders from the CTERA Agent local interface to the CTERA appliance. The CTERA Agent can back up both unlocked and locked files.

The backed up files can later be restored as needed.

Traffic generated by CTERA Agent backup operations of any type can be secured with Secure Socket Layer (SSL) encryption.

## Contacting Technical Support

If you require assistance in configuring or using your CTERA Agent, contact technical support at <http://www.ctera.com/support>.





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# Installing the CTERA Agent

This chapter describes how to install the CTERA Agent on a computer running Linux.

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## Requirements

### Software Requirements

In order to install and manage the CTERA Agent, you will need the following:

- + A supported operating system

For a list of supported operating systems, including information on which ones are compatible with the graphical user interface, see **Supported Operating Systems** (page 8).

On operating systems that are not compatible with the graphical user interface, the CTERA Agent is managed via the command line.

- + Either Microsoft Internet Explorer 7.0 or later, Mozilla Firefox 3.0 or later, or Google Chrome 5.0 or later
- + Adobe Flash Player

**Table 1: Supported Operating Systems**

Supported OS	Graphical User Interface Supported?
CentOS 5.x	
CentOS 6.0	✓
Red Hat Enterprise Linux 5.x	
Red Hat Enterprise Linux 6.0	✓
SUSE 11 Linux Enterprise 64 bit	
SUSE 11 Linux Desktop 32 bit	
Debian 6 32 bit and 64 bit	✓
Fedora 15 or higher, 32 bit and 64 bit	✓
Mandriva 32 bit and 64 bit	
Mandriva 2011 x86.1	
Mandriva 2011 x86_64.1	✓
Ubuntu server 12.10 32 bit and 64 bit	
Ubuntu desktop 12.10 32 bit and 64 bit	
Ubuntu server 11.4 32 bit and 64 bit	✓
Ubuntu desktop 11.4 32 bit	✓
Ubuntu 10.4 32 bit and 64 bit	✓

## Opening Ports on Your Firewall

In order to back up roaming PCs and remote offices *outside* your network in Appliance mode, you must open your firewall for the network where the CTERA appliance is located, to allow incoming TCP ports 995 and 873 to the CTERA appliance.

## Installing the CTERA Agent

### » To install the CTERA Agent

- 1 Log in as root.
- 2 In the CTERA appliance's Web interface's **My Computers** tab, choose **CTERA Agent for Linux**, then click **Install**.

The CTERA Agent installer script is downloaded to your computer.

- 3 Make the installer script executable, by running the following command:

```
chmod +x filename
```

Where *filename* is the name of the downloaded file.

- 4 Run the installer script.

The CTERA Agent is installed under `/usr/local/ctera-agent`.

The following files are created:

- + The CTERA Agent log file, `/var/log/ctera-agent.log`
- + The CTERA Agent configuration file, `/etc/ctera/db.xml`

If the Linux version supports the CTERA Agent user interface, then the CTERA Agent icon is added to the taskbar.

The user group "ctera" is created.

## Uninstalling the CTERA Agent

### » To uninstall CTERA Agent

- 1 Log in as root.
- 2 Run `/usr/local/ctera-agent/scripts/uninstall-ctera-agent.sh`.

The CTERA Agent is uninstalled.



# Using the CTERA Agent in Appliance Mode

This chapter explains how to use CTERA Agents to perform local backup by connecting them to a CTERA appliance.

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## Workflow

To use the CTERA Agent for local backup in Appliance Mode, do the following:

- 1 Install the CTERA Agent on the computer whose files you want to back up to the CTERA appliance.  
See *Installing the CTERA Agent* (on page 8).
- 2 Connect the CTERA Agent to the CTERA appliance.  
See *Connecting the Agent to a CTERA Appliance* (on page 12).
- 3 If local configuration of the agent is enabled, do the following:
  - a Connect to the CTERA Agent Manager.  
See *Connecting to the CTERA Agent Manager* (on page 14).
  - b Configure the file-level backup settings for the CTERA Agent.  
See *Configuring File-Level Backup Settings* (on page 17).

Local configuration is controlled by the **Allow user to configure the agent** check box in the CTERA Agent global settings. See *your CTERA appliance's user guide*, Configuring Global Settings for All CTERA Agents.

## Connecting the Agent to a CTERA Appliance


### Tip



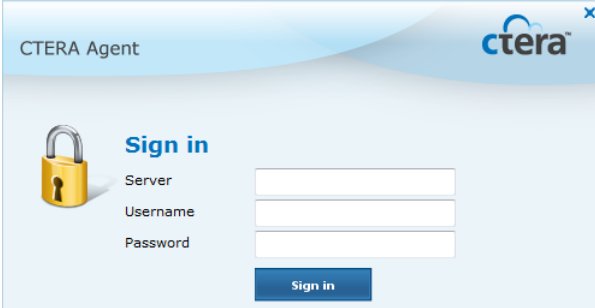
You can use CTERA Agent for backing up remote sites or roaming employees. To do so you must perform the following steps:

1. Open your firewall for incoming TCP ports 995 and 873 to the CTERA appliance.
2. If you do not have a fixed IP address, you need to use the Dynamic DNS (DDNS) Service. Go to the **Cloud Services > Status** page in your CTERA appliance's Web interface, and make sure that you are subscribed to the DDNS service. Note the DNS address that was allocated to your appliance. If connecting the agent via the CTERA Agent tray icon, enter this address in the **Server** field. If connecting the agent via the command line, set the *address* parameter to this IP address.

### » To connect the CTERA Agent to the CTERA appliance via the graphical user interface

- 1 Click the CTERA Agent tray icon  in the taskbar.

The **Sign In** window opens.




The image shows a screenshot of the CTERA Agent Sign In window. The window title is "CTERA Agent" and it features the CTERA logo in the top right corner. On the left side, there is a yellow padlock icon. The main content area is titled "Sign in" and contains three input fields labeled "Server", "Username", and "Password". Below these fields is a blue "Sign in" button.

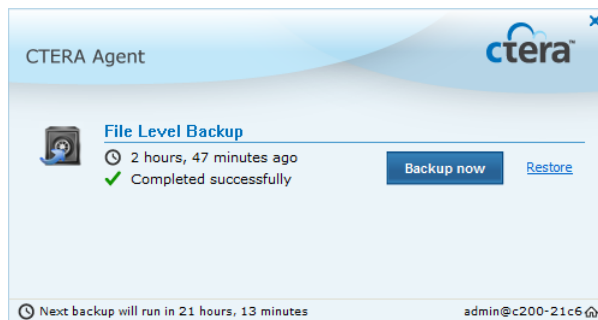
- 2 In the **Server** field, do one of the following:
  - + Type the CTERA appliance's IP address.
  - + Type the CTERA appliance's host name, as it appears in the Web interface's **Main > This Device** page.

If your appliance is connected to CTERA Portal and subscribed to the Dynamic DNS service, enter the appliance DNS name as it appears in the **Services** page, in this field. If you opened the appropriate ports on your firewall, this will enable the CTERA Agent to back up from anywhere on the Internet. See **Opening Ports on Your Firewall** (on page 8).

- 3 In the **Username** and **Password** fields, type your user name and password on this appliance.
- 4 Click **Sign in**.

The following things happen:

- + The CTERA Agent connects to the CTERA appliance.
- + The CTERA Agent tray icon changes to , and the **CTERA Agent** screen opens.



## » To connect the CTERA Agent to the CTERA appliance via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl signin address username password
```

Where:

- + *address* is the CTERA appliance's IP address or hostname.
- + *username* is your username for accessing the CTERA appliance.

You are prompted for your password.

- 3 Enter your password for accessing the CTERA Portal.

The CTERA Agent connects to the CTERA appliance.

- 4 A success message appears, followed by the URL at which you can access the CTERA Agent Manager.

```
[root@centos60_64bit litmus-0.13]# cteractl signin c200-0302 test
Password:
Connecting ...
Successfully attached to server c200-0302
Acquiring license ...licensed
Connected successfully.
To access the agent web GUI, surf to the following URL: http://192.168.90.148:8921/
```

## Using the CTERA Agent Manager

By default, the CTERA Agent inherits settings from the global settings for all CTERA Agents. If desired, you can override the global settings, as well as configure the following agent-specific settings, via the CTERA Agent Manager:

- + Enable file-level backup for the agent
- + Files and folders to back up during file-level backup

## Connecting to the CTERA Agent Manager

To allow end users to connect to the CTERA Agent Manager, where they can modify their own CTERA Agent's settings and select files or folders to backup without assistance from an administrator, select the **Allow user to configure the agent** check box in the global settings. See *your CTERA appliance's user guide*, Configuring Global Settings for All CTERA Agents.

Root users and members of the group "ctera" can manage the CTERA Agent.

If the **Allow user to configure the agent** option is not enabled, or if the CTERA Agent user is not a root user, then agent settings can only be configured by administrators via the appliance Web interface. See *your CTERA appliance's user guide*, Configuring the Agent.

### » To connect to the CTERA Agent Manager via the graphical user interface

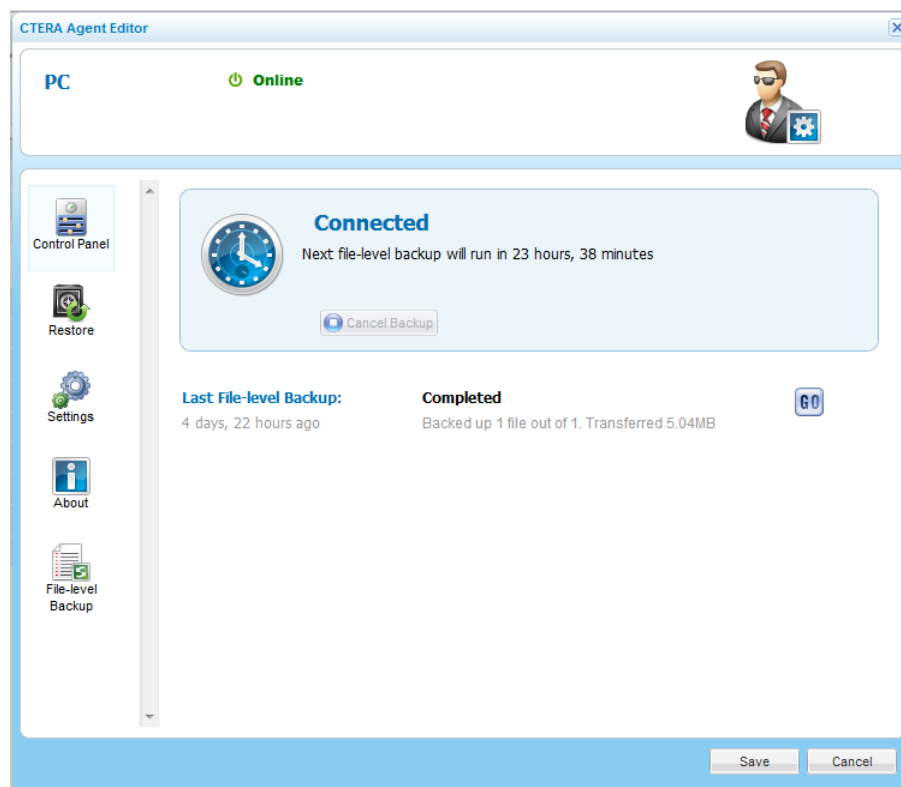
- + Right-click the CTERA Agent tray icon in the taskbar, and click **Settings**.

The following things happen:

- + If you are not yet logged in to the CTERA appliance Web interface, the **Log In** page appears.

Enter your username and password, then click **Log In**.

- + The CTERA appliance Web interface opens displaying the CTERA Agent Manager.



### » To connect to the CTERA Agent Manager directly via your browser

- + Using a web browser, connect to port 8921 on the local host.



For example: `http://localhost:8921`

The following things happen:

- + If you are not yet logged in to the CTERA appliance Web interface, the **Log In** page appears.

Enter your username and password, then click **Log In**.

- + The CTERA appliance Web interface opens displaying the CTERA Agent Manager.

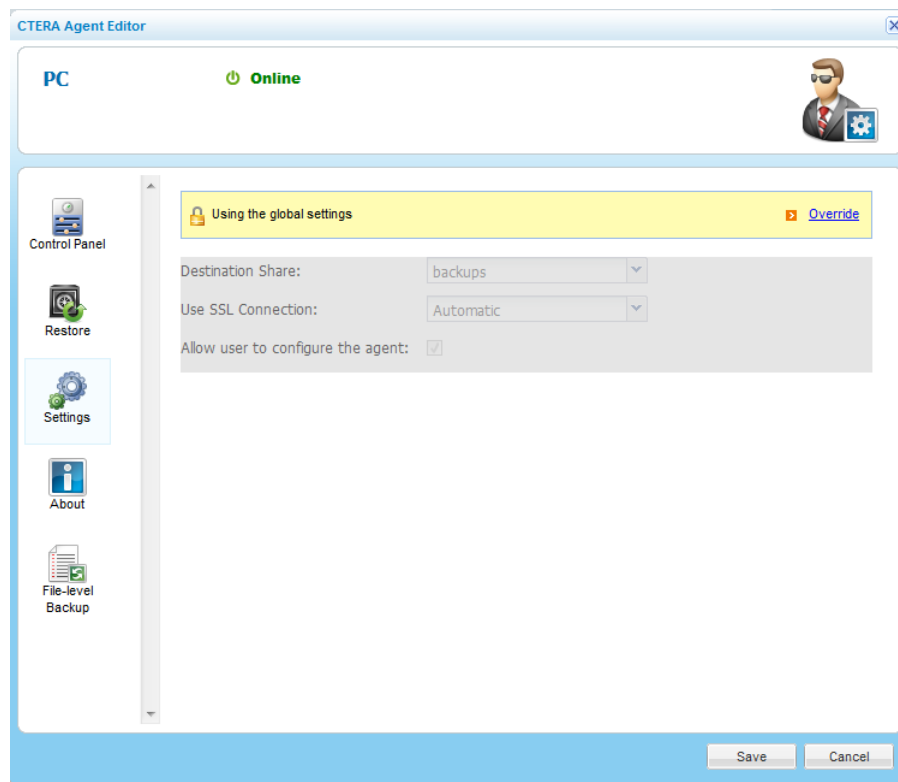
## Configuring the Agent

### Configuring General Settings

#### » To configure general settings

- 1 In the CTERA Agent Manager, click the **Settings** tab.

The **Settings** tab appears.



- 2 Click **Override**, to override the global general settings.

#### Tip



You can revert to global general settings at any time, by clicking **Use global settings**.

- 3 Complete the fields using the information in the following table.
- 4 Click **Save**.

**Table 2: General Settings Fields**

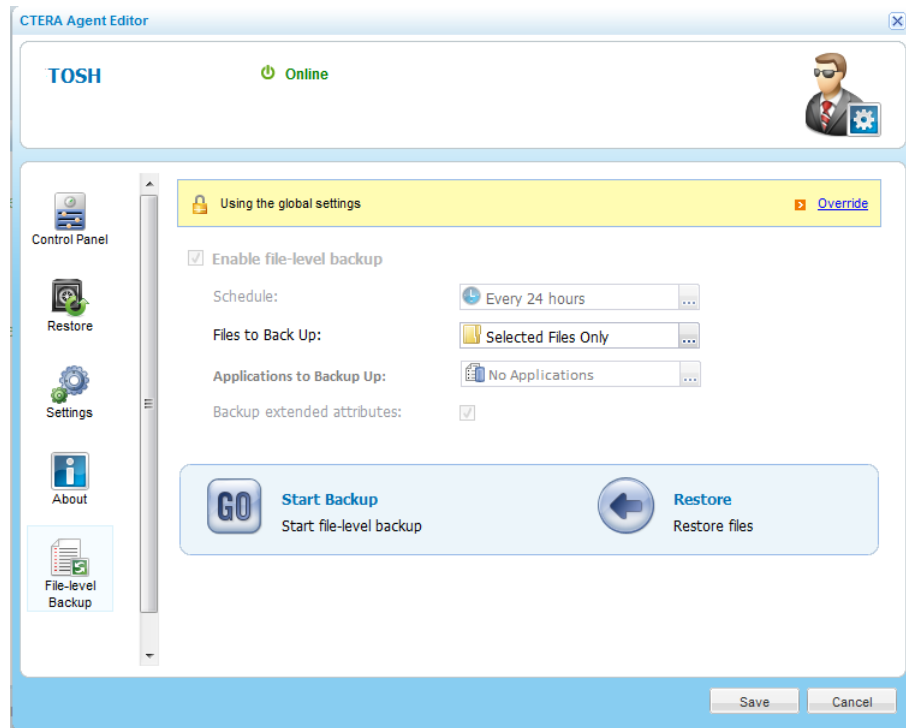
In this field...	Do this...
<b>Destination Share</b>	<p>Select the local CTERA appliance network share with which the files and folders from the CTERA Agent-enabled computer should be backed up.</p> <p>Subdirectories will automatically be created under this network share for each backed up folder.</p>
<b>Use SSL Connection</b>	<p>Specify whether to use Secure Socket Layer (SSL) encryption for connections from the CTERA Agent to the CTERA appliance:</p> <ul style="list-style-type: none"> <li>+ <b>Enabled.</b> The CTERA Agent will use SSL.</li> <li>+ <b>Disabled.</b> The CTERA Agent will not use SSL.</li> <li>+ <b>Automatic.</b> The CTERA Agent will not use SSL when in the same LAN as the CTERA appliance, and will use SSL when they are not in the same LAN as the CTERA appliance.</li> </ul> <p>The default value is <b>Automatic</b>.</p>
<b>Allow user to configure the agent</b>	<p>Select this option to allow CTERA Agent users to configure their own agent.</p> <p>In order for CTERA Agent users to manage their own agents, this option must be selected, <i>and</i> the CTERA Agent users must be members of the "ctera" user group.</p> <p><b>Note:</b> When this option is cleared, selecting files for local backup can only be done by an administrator in the CTERA appliance Web interface. The CTERA Agent user cannot select files for backup locally, nor can they configure agent settings via the CTERA appliance Web interface. However, the user can still initiate backup and restore operations.</p>

## Configuring File-Level Backup Settings

### » To configure file-level backup settings

- 1 In the CTERA Agent Manager, click the **File-level Backup** tab.

The **File-level Backup** tab appears.



- 2 To override the general settings for file-level backup, click **Override**.

General settings include the file-level backup schedule.

#### Tip



You can revert to general file-level backup settings at any time, by clicking **Use global settings**.

- 3 To enable file-level backup, select the **Enable file-level backup** check box.
- 4 To schedule file-level backup, do the following:

- a In the **Schedule** field, click .

The **Schedule** dialog box appears.

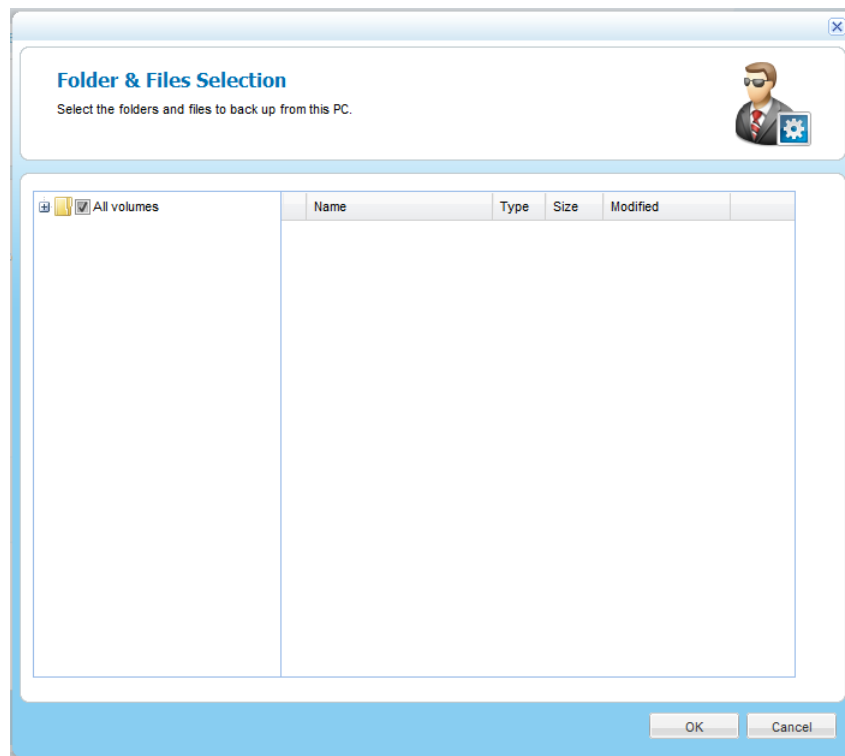
- b Complete the fields using the information in **Schedule Fields** (page 19).
- c Click **OK**.

The default file-level backup value is **Every 24 hours**.

- 5 To select files and folders for backup, do the following:

- a In the **Files to Back Up** field, click .

The **Folder & Files Selection** window opens.



- b Expand the tree nodes and select the check boxes next to the folders and files you want to back up.
- c Click **OK**.
- d To back up special file permissions and metadata, check **Backup extended attributes**.
- 6 Click **Save**.

At the bottom of the workspace, the **Destination** field indicates the folder on the CTERA appliance to which files will be backed up. The **Local Disk Space Usage** field indicates the amount of used space on the disk after the next local backup operation, out of the total amount of space available on the disk.

**Table 3: File-Level Backup Tab Fields**

In this field...	Do this...
<b>Manual Only</b>	Choose this option to disable automatic backups.
<b>Periodically</b>	Choose this option to specify that automatic backups should be performed every certain number of hours. The <b>Start Every</b> field is enabled, and you must complete it.
<b>Start Every</b>	Use the arrows to specify the interval between backups, in hours.
<b>Specific Time</b>	Choose this option to specify that automatic backups should be performed at a certain hour on certain days. The <b>Start Time</b> and <b>On Days</b> fields are enabled, and you must complete them.
<b>Start Time</b>	Select the hour at which backups should start.
<b>On Days</b>	Specify on which days backups should occur, by selecting the relevant check boxes or clicking <b>Every Day</b> .

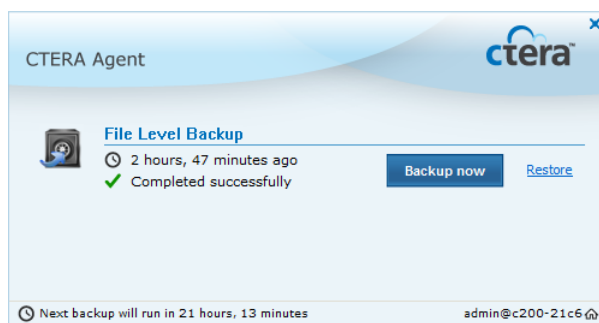
## Manually Starting Backup

The CTERA Agent will automatically back up files to the CTERA appliance according to the schedule configured on the CTERA appliance. If desired, you can manually trigger backup at any time.

### » To manually start backup via the graphical user interface

- 1 Click the CTERA Agent tray icon in the taskbar.

The **CTERA Agent** screen appears.



- 2 Click **Backup now**.

A progress bar appears, and the number of files and bytes remaining for local back up are displayed.

The CTERA Agent backs up files to the CTERA appliance.

» **To manually start backup via the command line**

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl start
```

The CTERA Agent backs up files to the CTERA appliance.

## Stopping the Current Local Backup Operation

» **To stop the current backup operation via the graphical user interface**

- 1 Click the CTERA Agent tray icon in the taskbar.  
The **CTERA Agent** screen appears with a progress bar.
- 2 Click **Cancel**.  
The current backup operation is stopped.

» **To stop the current backup operation via the command line**

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl cancel
```

The current backup operation is stopped.

## Suspending and Resuming Local Backup

You can suspend local backup for a CTERA Agent, including:

- + The currently running local backup for the CTERA Agent
- + All scheduled automatic local backups for the CTERA Agent

» **To suspend local backup via the graphical user interface**

- + Right-click the CTERA Agent tray icon in the taskbar, and click **Suspend**.

If local backup is currently running, it is paused. All future automatic backups for the CTERA Agent are suspended.

» **To suspend local backup via the command line**

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl suspend
```

If local backup is currently running, it is paused. All future automatic backups for the CTERA Agent are suspended.

### » To resume local backup via the graphical user interface

- + Right-click the CTERA Agent tray icon in the taskbar, and click **Unsuspend**.

Local backup resumes.

### » To resume local backup via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl unsuspend
```

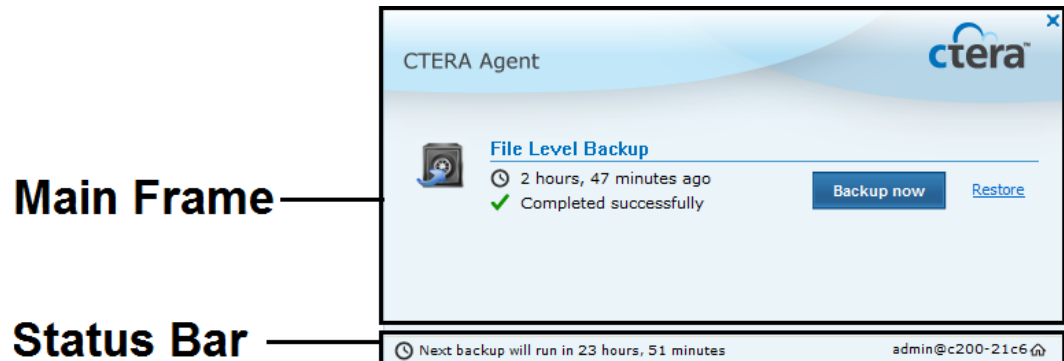
Local backup resumes.

## Viewing the Agent Status


### » To view the CTERA Agent's status via the graphical user interface

- + Click the CTERA Agent tray icon in the taskbar.

The **CTERA Agent** screen appears.



The screen is composed of the following parts:

- + **Main frame.** Displays controls for performing backups and restoring from the created backup files. The amount of time since the last backup is displayed, as well as an indication of whether the backup was successful. Mousing over the backup result displays a tooltip with additional details about the backup.
- + **Status bar.** Displays the amount of time remaining until the next automatic backup, followed by `username@appliance`, where `username` is your username for accessing the CTERA appliance and `appliance` is the name of the CTERA appliance to which the CTERA Agent is currently connected. The  icon indicates that the CTERA Agent is in Appliance mode.

### » To view the CTERA Agent's status via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl status
```

The agent status is displayed.

```
[root@centos60_64bit litmus-0.13]# cteractl status
Status      : Connected to rafi3.ctera.me (192.168.90.248)
Username    : rafi
Last task status : Completed successfully; 6.16MB sent (5 files), 0 bytes remaining
License status : licensed
```

**Table 4: Agent Status Fields**

In this field...	Do this...
<b>Status</b>	The agent's current status.
<b>Username</b>	The username you used to log in to the CTERA appliance.
<b>Last task status</b>	The result of the last task performed.
<b>License status</b>	The CTERA Agent's license status.

## Viewing Agent Details

You can view CTERA Agent details, including its version, the operating system on which it is installed, and copyright information.

### » To view CTERA Agent details

- 1 Right-click the CTERA Agent tray icon in the taskbar, and click **About**.

The **About CTERA Agent** screen appears.



- 2 To view the end user license agreement and services agreement, click **Legal Information**.
- 3 To close the window, click **OK**.



## Disconnecting the Agent from a CTERA Appliance

If desired, you can disconnect the CTERA Agent from a CTERA appliance.

### » To disconnect the CTERA Agent from a CTERA appliance via the graphical user interface

- 1 Right-click the CTERA Agent tray icon in the taskbar, and click **Sign out**.

A confirmation message appears.

- 2 Click **OK**.

The CTERA Agent disconnects from the CTERA appliance.

### » To disconnect the CTERA Agent from a CTERA appliance via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl signout
```

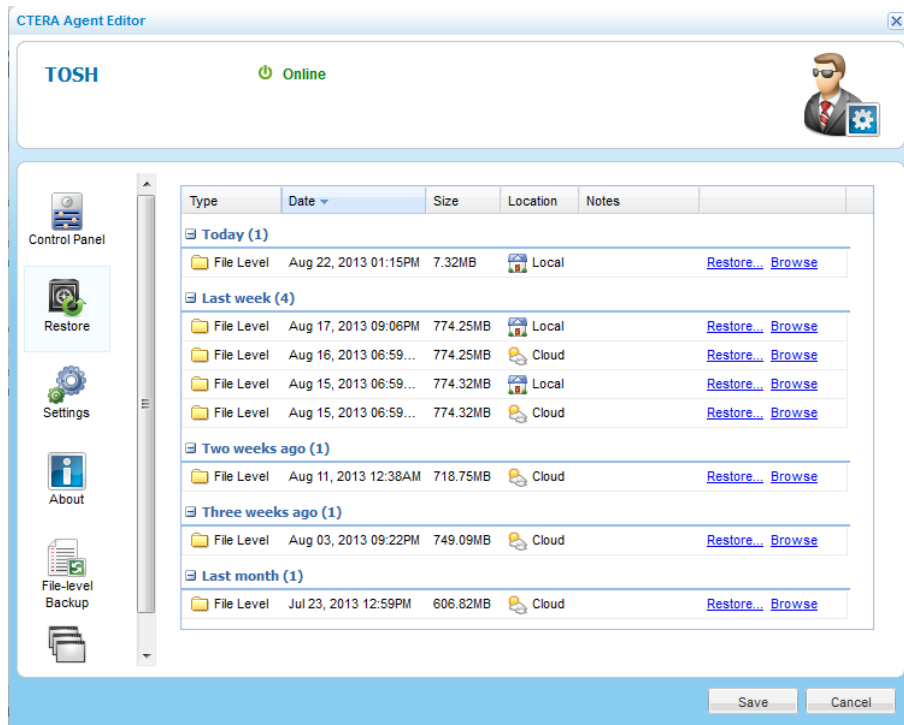
The CTERA Agent disconnects from the CTERA appliance.

## Restoring Files from File-Level Backup

### » To restore files from file-level backup

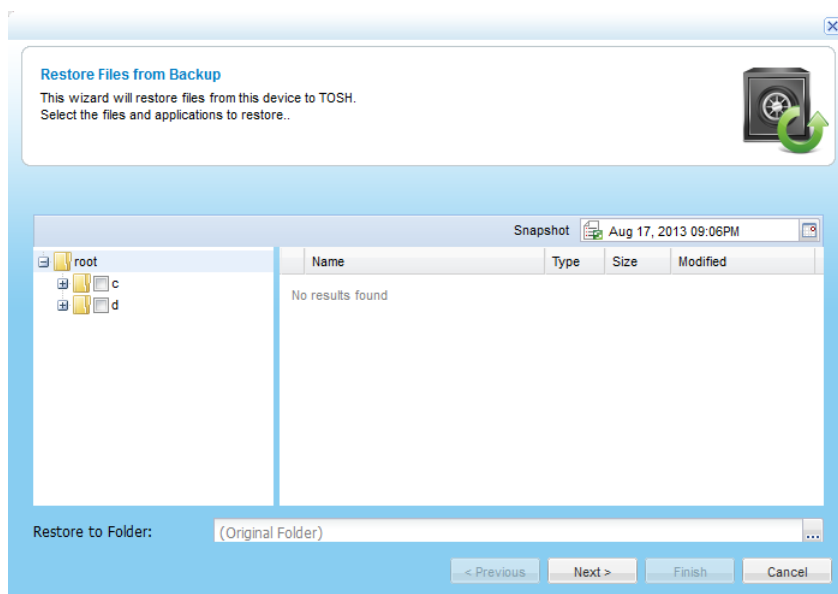
- 1 Do one of the following:
  - + Connect to the CTERA Agent Manager, then click the **Restore** tab.  
See *Connecting to the CTERA Agent Manager* (on page 14).
  - + Right-click on the CTERA Agent tray icon in the taskbar, and click **Restore**.

The CTERA Agent Manager opens displaying the **Restore** tab.



- 2 Next to the desired snapshot, click **Restore**.

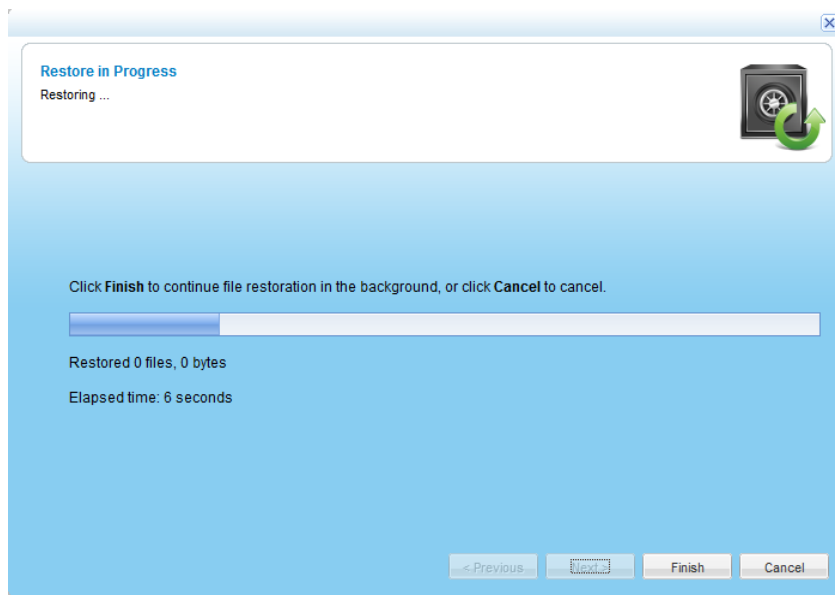
The **Restore Files from Backup** dialog box opens.



- 3 To view a folder's contents, select the folder in the left pane.  
The selected folder's contents appear in the right pane.
- 4 In either pane, select the check boxes next to the files and folders you want to restore.  
For an explanation of the icons and check boxes next to each folder, see **Folder Icons** (page 35).

**5** Click **Next**.

The **Restore In Progress** screen appears with a progress bar.

**6** Click **Finish**.



# Using the CTERA Agent in Cloud Agent Mode

This chapter explains how to use CTERA Agents to perform cloud backup by connecting them to the CTERA Portal.

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## Workflow

To use the CTERA Agent for backup in Cloud Agent mode, do the following:

- 1 Install the CTERA Agent on the computer whose files you want to back up to the CTERA appliance.  
See ***Installing the Agent*** (see "***Installing the CTERA Agent***" on page 8).
- 2 Connect the CTERA Agent to the CTERA appliance.  
See ***Connecting the Agent to the CTERA Portal*** (on page 28).
- 3 Configure CTERA Agent settings, by doing the following:
  - a Connect to the CTERA Agent Web Interface.  
See ***Connecting to the CTERA Agent Web Interface*** (on page 30).
  - b Configure the CTERA Agent's cloud backup settings.

See **Configuring Cloud Backup Settings** (on page 33).

- c (Optional) Enable remote access.


See **Enabling/Disabling Remote Access** (on page 54).

- d (Optional) Configure logging.

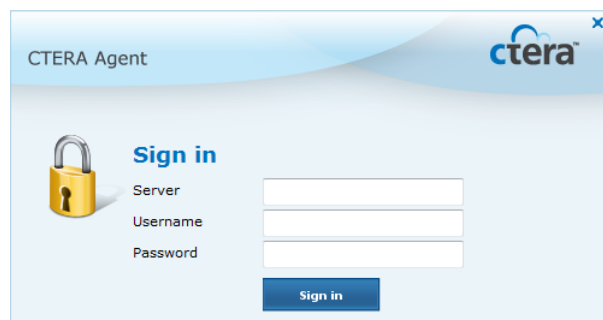
See **Configuring Event Log Settings** (on page 61).

## Connecting the Agent to the CTERA Portal

- » **To connect the CTERA Agent to the CTERA Portal via the graphical user interface**

- 1 Click the CTERA Agent tray icon  in the taskbar.

The **Sign In** window opens.



- 2 In the **Server** field, type the CTERA Portal's DNS name.
- 3 In the **Username** and **Password** fields, type you user name and password for accessing the CTERA Portal.
- 4 Click **Sign in**.

The following things happen:

- + The CTERA Agent connects to the CTERA Portal, and the CTERA Agent appears in the CTERA Portal, in the **Main > Devices** page.
- + A backup folder is automatically created for this agent on the CTERA Portal.

- + If this is the first time this agent connects to the CTERA Portal, the **Initialization Required** screen opens.

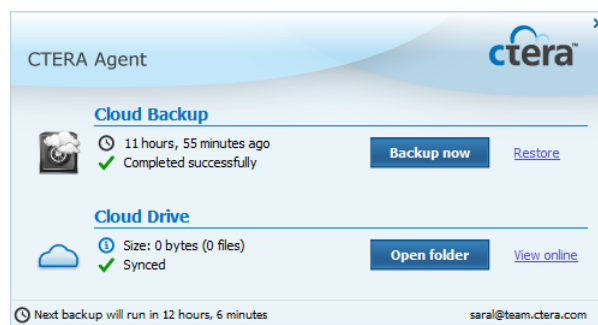


Do one of the following:

- + To use an automatically generated encryption key to protect the created backup folder, choose **Use an automatically generated encryption key**, and then click **Initialize**.
- + To secure the backup folder with your own secret passphrase, choose **Use my own secret passphrase**, enter the desired passphrase in the **Secret Passphrase** and **Re-type Passphrase** fields, and then click **Initialize**.

Each time the agent connects to CTERA Portal, you will need to enter this passphrase.

- + The CTERA Agent tray icon changes to , and the **CTERA Agent** screen opens.



## » To connect the CTERA Agent to the CTERA Portal via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl signin address username
```

Where:

- + *address* is the CTERA Portal's DNS name.
- + *username* is your username for accessing the CTERA Portal.

You are prompted for your password.

### 3 Enter your password for accessing the CTERA Portal.

The following things happen:

- + The CTERA Agent connects to the CTERA Portal, and the CTERA Agent appears in the CTERA Portal, in the **Main > Devices** page.
- + A backup folder is automatically created for this agent on the CTERA Portal.
- + If this is the first time this agent connects to the CTERA Portal, you are prompted to initialize the created backup folder.

```
|Initializing required  
|[1] Use an automatically generated encryption key  
|[2] Use my own secret passphrase  
|[3] Cancel
```

Do one of the following:

- + To use an automatically generated encryption key to protect the backup folder, enter 1.
- + To secure the backup folder with your own secret passphrase, enter 2, and then enter the desired passphrase when prompted.

Each time the agent connects to CTERA Portal, you will need to enter this passphrase.

- + A success message appears, followed by the URL at which you can access the CTERA Agent Web Interface.

```
|Connected successfully.  
|To access the agent web GUI, surf to the following URL: http://192.168.90.148:8921/
```

## Using the CTERA Agent Web Interface

In Cloud Agent mode, the CTERA Agent includes a Web interface, in which you can do the following:

- + Configure and use the Cloud Backup service for file-level backup
- + Enable/disable remote access
- + Monitor your CTERA Agent via logs

## Connecting to the CTERA Agent Web Interface

In order to access the CTERA Agent Web interface, a user must belong to the "ctera" user group or be a root user.

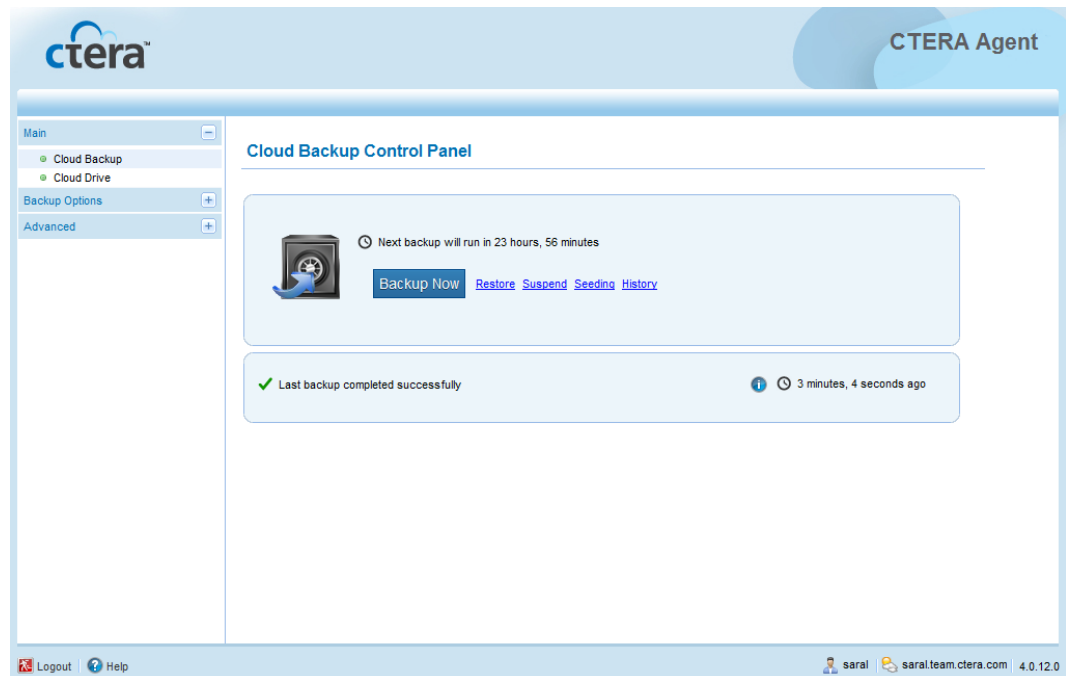
### » To connect to the CTERA Agent Web interface via the graphical user interface

- + Right-click the CTERA Agent tray icon in the taskbar, and click **Settings**.
- + If the currently logged in user account does not have sufficient credentials to manage the CTERA Agent, a **Login** page appears.



Enter the user name and password of an administrator or backup operator on this machine.

- + The CTERA Agent Web interface opens in your Web browser, displaying the **Cloud Backup Control Panel** page.



## » To connect to the CTERA Agent Web interface via the command line

- + Using a web browser, connect to port 8921 on the local host.

For example: `http://localhost:8921`

The following things happen:

- + If the currently logged in user account does not have sufficient credentials to manage the CTERA Agent, a **Login** page appears.

Enter the user name and password of an administrator or backup operator on this machine.

- + The CTERA Agent Web interface opens in your Web browser, displaying the **Cloud Backup Control Panel** page.

## The CTERA Agent Web Interface

The CTERA Agent Web interface consists of the following elements:

- + **Navigation pane.** Used for navigating between pages.
- + **Main frame.** Displays information and controls for the menu item selected in the navigation pane.

- + Status bar.** Displays general and session-specific controls and information, including controls for logging out of the Web interface, your user name, and the firmware version



## Sorting Tables

You can sort a table according to a specific column, in ascending or descending order.

### » To sort a table according to a column

- 1 Click on the desired column's heading.

The table is sorted according to the column. An arrow in the column's heading indicates that the table is sorted according to the column. The arrow's direction indicates the sort order.

#### System

Type	Date	User
i	2013/08/14 23:01:22	
i	2013/08/14 22:38:30	
i	2013/08/15 12:29:34	
i	2013/08/15 12:29:17	
i	2013/08/15 11:48:52	

In this example, the table is sorted according to the **Type** column, in descending order.

- 2 To reverse the column's sort order, click on the column's heading again.

The sort order is reversed.

- 3 To select the desired sort order from a list, do the following:

- a Mouse-over the column's heading.

An arrow appears in the right side of the column heading.

**System**

Select Topic: System ▾ Minimum Severity: Info ▾

Type	Date	User	Det
	2013/08/22 14:37:43	Sort Ascending	
	2013/08/22 13:14:33	Sort Descending	
	2013/08/22 11:55:50		Con
	2013/08/22 11:55:18		Disc
	2013/08/22 11:06:17		Con

- b Click on the arrow, then click on the desired sort order in the drop-down list.

The column is sorted accordingly.

## Navigating Between Table Pages

When a table contains multiple pages, you can navigate between the pages by using the controls at the bottom of the table.

### » To navigate between pages

- + Do any of the following:
  - + To navigate to the next page, click .
  - + To navigate to the previous page, click .
  - + To navigate to page 1, click .
  - + To navigate to a specific page, in the **Page** field, type the desired page number.

## Refreshing Table Contents

You can refresh the contents of various tables in the main frame.

### » To refresh a table's contents

At the bottom of the table or list, click .

The table's contents are refreshed.

## Configuring Cloud Backup Settings

### » To configure cloud backup settings

- 1 Specify the data that should be included or excluded from backup operations, by doing one or more of the following:
  - + To choose specific files and folders to include in the back up, select the desired files and folders.

See **Selecting Files and Folders for Cloud Backup** (on page 34).

- + To choose specific file types to include in or exclude from backup operations, define and enable backup sets.

See **Working with Backup Sets** (on page 35).

## 2 Do one or more of the following:

- + Schedule automatic backup of the selected folders.

See **Scheduling Automatic Cloud Backup** (on page 45).

The files will be backed up according to the configured schedule.

- + Perform a manual backup of the selected folders.

See **Manually Starting Cloud Backup** (on page 47).

The files will be backed up immediately.

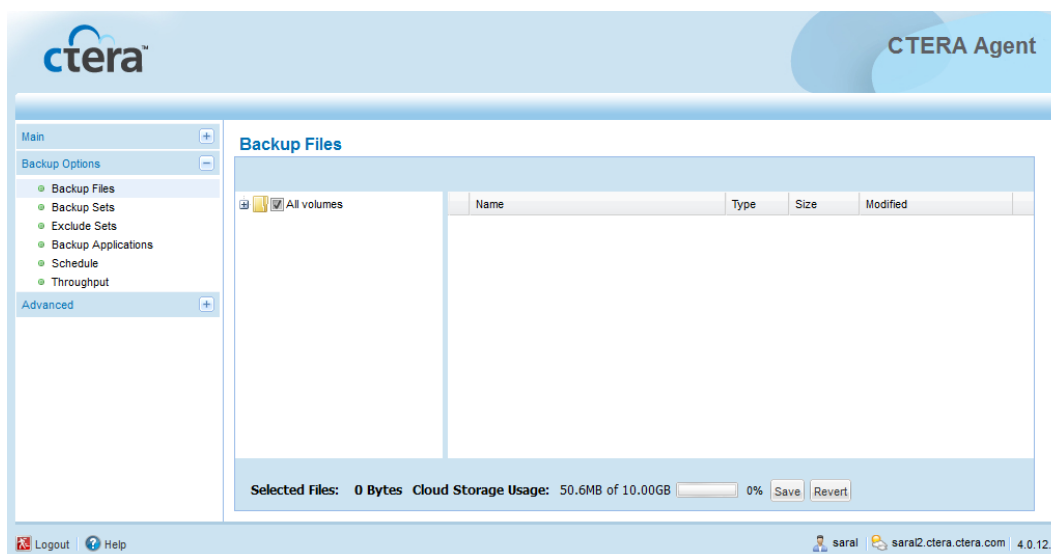
## Selecting Files and Folders for Cloud Backup

By default, all folders and files are selected for cloud backup. If desired, you can modify the selection.

### » To select files and folders for cloud backup

#### 1 In the navigation pane, click **Backup Options > Backup Files**.

The **Backup Files** page appears.



#### 2 Expand the tree nodes to reveal the folders.

For an explanation of the icons and check boxes next to each folder, see **Folder Icons** (page 35).





The folder contents appear in the right pane.

- 3 Select the check boxes next to the files and folders you want to back up.
- 4 Click **Save**.

At the bottom of the workspace, the **Selected Files** field indicates the size of the files selected for backup. The **Cloud Storage Usage** field indicates the amount of used space in your account after the next cloud backup operation (including backups from any other CTERA appliances included in your account).

For example, let's say your account includes two CTERA appliances, and each appliance will back up 100 MB worth of files in the next cloud backup operation, for a total of 200 MB. Your account already has 350 MB worth of files stored online. In this case, the **Cloud Storage Usage** field will display "550MB".



**Table 5: Folder Icons**

This icon...	Indicates...
	Existing files in this folder are selected for backup. New files and folders in this folder will be backed up.
	This folder and all of its sub-folders are selected for backup. Note that the check box has a white background.
	Some (but not all) of the folder's sub-folders are selected for backup. Note that the check box has a gray background.
	This folder and all of its sub-folders will not be backed up.

## Working with Backup Sets

A *backup set* represents a group of files with certain file extensions and/or located in certain folders. For example, a set called "My Music" may include all files with the extensions \*.wav and \*.mp3 that are located in the folder **My Documents > Music**.

There are two types of backup sets:

-  **Included sets.** Files that should be included in each backup
-  **Excluded sets.** Files that should be excluded from each backup

You can use backup sets to fully customize backup operations. For example, if you did not select the **My Documents** folder for backup, but you want to back up all of the PDF files in this folder, you would define an *included set* that includes all files that are located in the **My Documents** folder and have the file extension \*.pdf. Conversely, if you selected the **My Documents** folder for backup, but you do *not* want to back up PDF files in this folder, you would define an *excluded set* that includes all files that are located in the **My Documents** folder and have the file extension \*.pdf.

#### Tip



For information on the order in which the CTERA appliance processes included sets, excluded sets, and selected folders, see *your CTERA appliance's user guide*, [How Can I Control the Scope of Backup Operations?](#).

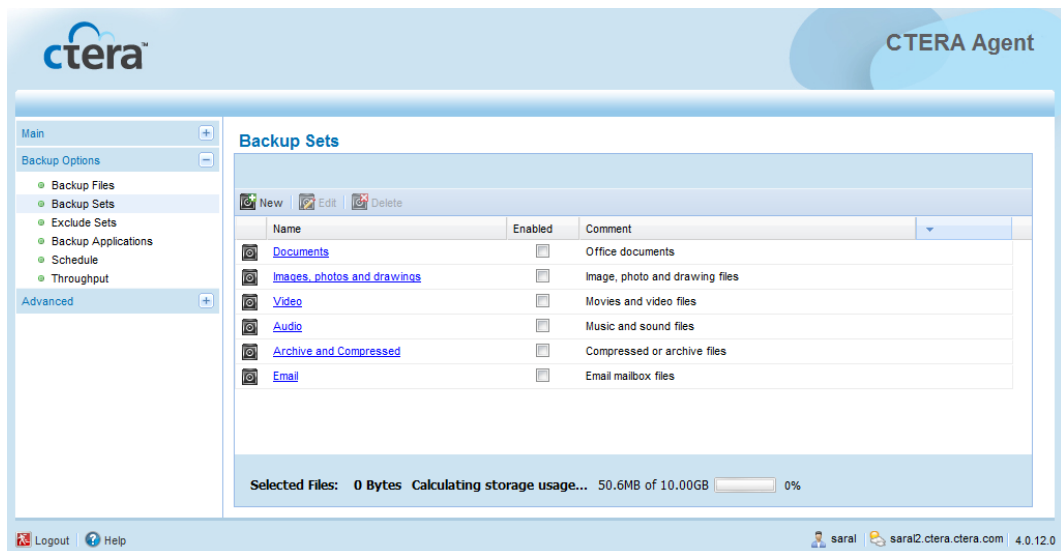
## Enabling/Disabling Included Sets

In order for an included set to be used during backup operations, it must be enabled.

### » To enable an included set

- 1 In the navigation pane, click **Backup Options > Backup Sets**.

The **Backup Sets** page appears.



- 2 Next to the desired included set, in the **Enabled** column, select the check box.

The included set is enabled.

At the bottom of the workspace, the **Selected Files** field indicates the size of the files selected for backup. The **Cloud Storage Usage** field indicates the amount of used space in your account after the next cloud backup operation (including backups from any other CTERA appliances included in your account).

### » To disable an included set

- 1 In the navigation pane, click **Backup Options > Backup Sets**.

The **Backup Sets** page appears.

- 2 Next to the desired included set, in the **Enabled** column, clear the check box.

The included set is disabled.

At the bottom of the workspace, the **Selected Files** field indicates the size of the files selected for backup. The **Cloud Storage Usage** field indicates the amount of used space in your account after the next cloud backup operation (including backups from any other CTERA appliances included in your account).

## Adding and Editing Included Sets

### » To add or edit an included set

- 1 In the navigation pane, click **Backup Options > Backup Sets**.

The **Backup Sets** page appears.

- 2 Do one of the following:

- + To add a new included set, click **New**.
- + To edit an existing included set, click on its name.


The **Backup Set Details Wizard** opens, displaying the **Backup Set Details** dialog box.

- 3 In the **Backup Set Name** field, type the name of the backup set.
- 4 In the **Comment** field, type a description of the backup set.
- 5 In the **If** field, do one of the following:
  - + To specify that all of the conditions must be met in order for a file to be included in the backup set, select **all of the conditions are true**.

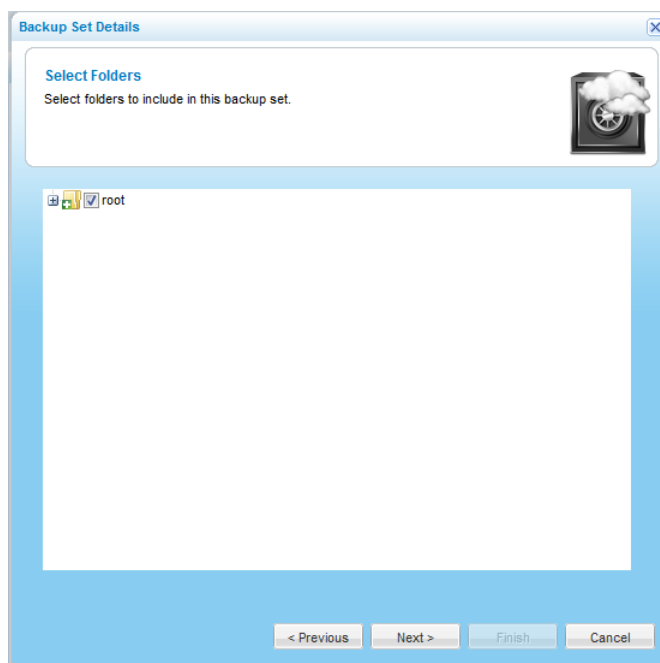




Likewise, if you select **File Type** as the condition parameter in the first column, select **is one of** with as the condition operator in the second column, and type "avi, mov, mpg" in the third column (without the quotation marks), then the backup set will include all files with the extension \*.avi, \*.mov, and \*.mpg.

- 7 To delete a condition, click  in its row.
- 8 Click **Next**.

The **Select Folders** dialog box appears.



This dialog box enables you to select the folders to which this backup set applies. By default, the root folder is selected, meaning that the backup set applies to all files in all folders. If desired, you can select specific folders to which this backup set should apply.

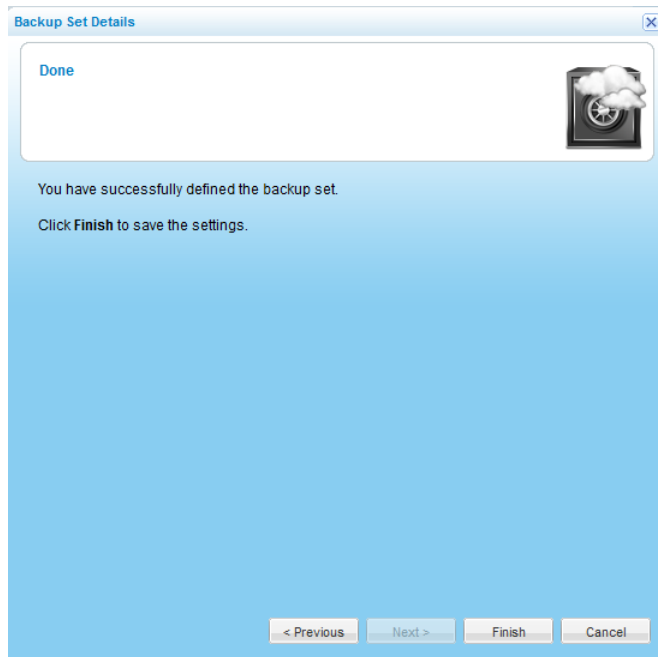
For example, you can create a backup set that contains all files that have the extension \*.txt and reside in the folder /share1/textfiles by entering "txt" in the previous dialog box, and then choosing the folder /share1/textfiles in this dialog box.

- 9 Expand the tree nodes to reveal the folders.

For an explanation of the icons and check boxes next to each folder, see **Folder Icons** (page 35).

- 10 Select the check boxes next to the folders you want to include in the included set.
- 11 Click **Next**.

The **Done** screen appears.



**12** Click **Finish**.

**Tip**



If you added a new included set, it is automatically enabled.

**Table 6: Backup Set Condition Operators**

Use this operator...	To do this...
<b>equals</b>	<p>Include all files for which the parameter in the first column matches the string in the third column.</p> <p>This operator is relevant for the <b>File Name</b>, <b>File Path</b>, and <b>File Type</b> parameters only.</p>
<b>begins with</b>	<p>Include all files for which the parameter in the first column begins with the string in the third column.</p> <p>This operator is relevant for the <b>File Name</b>, <b>File Path</b>, and <b>File Type</b> parameters only.</p>
<b>ends with</b>	<p>Include all files for which the parameter in the first column ends with the string in the third column.</p> <p>This operator is relevant for the <b>File Name</b>, <b>File Path</b>, and <b>File Type</b> parameters only.</p>
<b>contains</b>	<p>Include all files for which the parameter in the first column contains the string in the third column.</p> <p>This operator is relevant for the <b>File Name</b>, <b>File Path</b>, and <b>File Type</b> parameters only.</p>
<b>is one of</b>	<p>Include all files for which the parameter in the first column is included in the set specified in the third column.</p> <p>This operator is relevant for the <b>File Name</b>, <b>File Path</b>, and <b>File Type</b> parameters only.</p>
<b>less than</b>	<p>Include all files whose size is less than the amount specified in the third column.</p> <p>This operator is relevant for the <b>File Size</b> parameter only.</p>
<b>more than</b>	<p>Include all files whose size is more than the amount specified in the third column.</p> <p>This operator is relevant for the <b>File Size</b> parameter only.</p>
<b>before</b>	<p>Include all files whose last modification date is before the date specified in the third column.</p> <p>This operator is relevant for the <b>File Modified</b> parameter only.</p>
<b>after</b>	<p>Include all files whose last modification date is after the date specified in the third column.</p> <p>This operator is relevant for the <b>File Modified</b> parameter only.</p>

## Deleting Included Sets

### » To delete an included set

- 1 In the navigation pane, click **Backup Options > Backup Sets**.

The **Backup Sets** page appears.

- 2 Select the desired included set's name and click **Delete**.

A confirmation message appears.

- 3 Click **Yes**.

The included set is deleted.

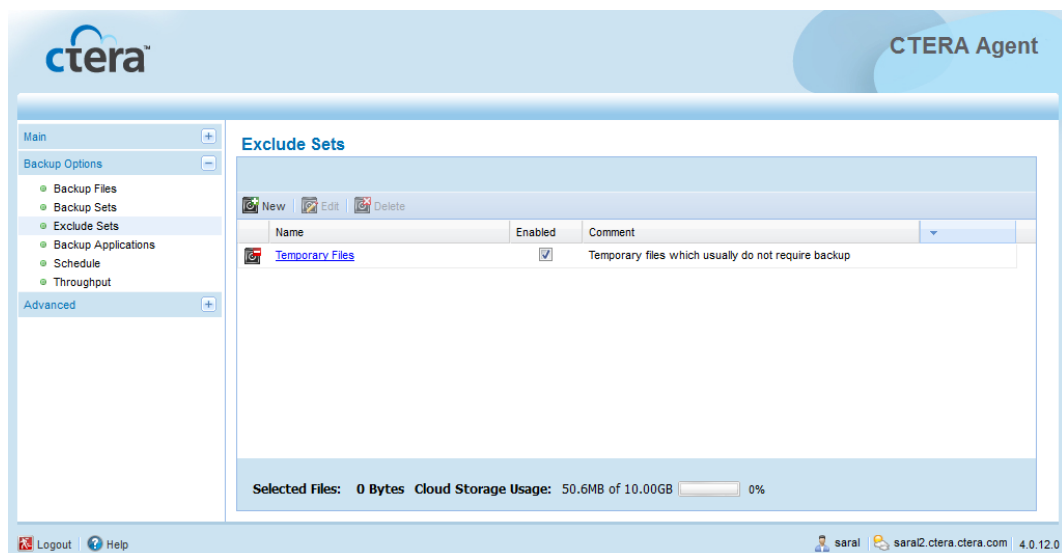
## Enabling/Disabling Excluded Sets

In order for an excluded set to be used during backup operations, it must be enabled.

### » To enable an excluded set

- 1 In the navigation pane, click **Backup Options > Exclude Sets**.

The **Exclude Sets** page appears.



- 2 Next to the desired excluded set, in the **Enabled** column, select the check box.

The excluded set is enabled.

At the bottom of the workspace, the **Selected Files** field indicates the size of the files selected for backup. The **Cloud Storage Usage** field indicates the amount of used space in your account after the next cloud backup operation (including backups from any other CTERA appliances included in your account).

### » To disable an excluded set

- 1 In the navigation pane, click **Backup Options > Exclude Sets**.

The **Exclude Sets** page appears.

- 2 Next to the desired excluded set, in the **Enabled** column, clear the check box.

The excluded set is disabled.

At the bottom of the workspace, the **Selected Files** field indicates the size of the files selected for backup. The **Cloud Storage Usage** field indicates the amount of used space in your account after the next cloud backup operation (including backups from any other CTERA appliances included in your account).

## Adding and Editing Excluded Sets

### » To add or edit an excluded set

- 1 In the navigation pane, click **Backup Options > Exclude Sets**.

The **Exclude Sets** page appears.

- 2 Do one of the following:


- To add a new excluded set, click **New**.
- To edit an existing excluded set, click on its name.

The **Backup Set Details Wizard** opens, displaying the **Backup Set Details** dialog box.

- 3 In the **Backup Set Name** field, type the name of the backup set.
- 4 In the **Comment** field, type a description of the backup set.
- 5 In the **If** field, do one of the following:
  - To specify that all of the conditions must be met in order for a file to be included in the backup set, select **all of the conditions are true**.
  - To specify that one or more of the conditions must be met in order for a file to be included in the backup set, select **at least one of the conditions is true**.
- 6 Define the conditions that must be met in order for a file to be included in the backup set, by doing the following for each condition:
  - a Click **Add condition**.  
A row appears in the table.
  - b Click **Select**, then select the desired condition parameter from the drop-down list.
  - c In the second column, click **Select**, then select the desired condition operator from the drop-down list.


See **Backup Set Condition Operators** (page 41).

d Click in the third column, and complete the condition:

- + If the parameter is **File Size**, type the desired file size and unit.
- + If the parameter is **File Modified**, click  and choose the desired date.
- + For all other parameters, type the desired free-text value.

For example, if you select **File Name** as the condition parameter in the first column, select **begins with** as the condition operator in the second column, and type "Work-123-" in the third column, then the backup set will include all files whose names begin with "Work-123-".

Likewise, if you select **File Type** as the condition parameter in the first column, select **is one of** with as the condition operator in the second column, and type "avi, mov, mpg" in the third column, then the backup set will include all files with the extension \*.avi, \*.mov, and \*.mpg.

7 To delete a condition, click  in its row.

8 Click **Next**.

The **Select Folders** dialog box appears.

This dialog box enables you to select the folders to which this backup set applies. By default, the root folder is selected, meaning that the backup set applies to all files in all folders. If desired, you can select specific folders to which this backup set should apply.

For example, you can create a backup set that contains all files that have the extension \*.txt and reside in the folder /share1/textfiles by entering "txt" in the previous dialog box, and then choosing the folder /share1/textfiles in this dialog box.

9 Expand the tree nodes to reveal the folders.

For an explanation of the icons and check boxes next to each folder, see **Folder Icons** (page 35).

10 Select the check boxes next to the folders you want to include in the excluded set.

11 Click **Next**.

The **Done** screen appears.

12 Click **Finish**.

#### Tip



If you added a new excluded set, it is automatically enabled.

## Deleting Excluded Sets

### » To delete an excluded set

- 1 In the navigation pane, click **Backup Options > Exclude Sets**.

The **Exclude Sets** page appears.

- 2 Select the desired excluded set's name and click **Delete**.

A confirmation message appears.

- 3 Click **Yes**.

The excluded set is deleted.

## Scheduling Automatic Cloud Backup

### » To schedule automatic cloud backup

- 1 In the navigation pane, click **Backup Options > Schedule**.

The **Schedule** page appears.

- 2 Click **Override**, to override the portal settings.

#### Tip



You can revert to portal settings at any time, by clicking **Use portal settings**.

- 3 Complete the fields using the information in the following table.
- 4 Click **Save**.

**Table 7: Backup Schedule Fields**

In this field...	Do this...
<b>Periodically</b>	<p>Choose this option to automatically back up files every specified number of hours.</p> <p>The <b>Start Every</b> field is enabled, and you must complete it.</p>
<b>Start Every</b>	<p>Type the amount of time between automatic cloud backups, in hours.</p> <p>The default value is 24 hours.</p>
<b>Specific Time</b>	<p>Choose this option to automatically back up files according to a specified daily schedule.</p> <p>The <b>Start Time</b>, <b>Stop Time</b>, and <b>On Days</b> fields are enabled, and you must complete them.</p>
<b>Start Time</b>	<p>Select the time at which cloud backup should start.</p> <p><b>Note:</b> If a given backup extends past the scheduled time for the next automatic backup, the next automatic backup will commence immediately upon completion of the prior backup.</p>
<b>Stop Time</b>	<p>Select the time at which cloud backup must end. This can be any of the following:</p> <ul style="list-style-type: none"> <li>+ A specific hour</li> <li>+ <b>On Completion.</b> The backup operation will only end when cloud backup is complete.</li> </ul> <p>The default value is <b>On Completion</b>.</p> <p><b>Note:</b> If the amount of changed data to back up is large, the backup process can take several hours or days. Therefore, if a stop time is configured, the backup process may not be completed within the time frame. For example, if you specify that data should be backed up between 12 AM - 2 AM, and the backup requires 3 hours, the backup will not be completed.</p>
<b>On Days</b>	<p>Select the days on which cloud backup should be performed. This can be any of the following:</p> <ul style="list-style-type: none"> <li>+ One or more specific days</li> <li>+ <b>Every Day.</b> Cloud backup will occur every day.</li> </ul> <p>The default value is <b>Every Day</b>.</p>



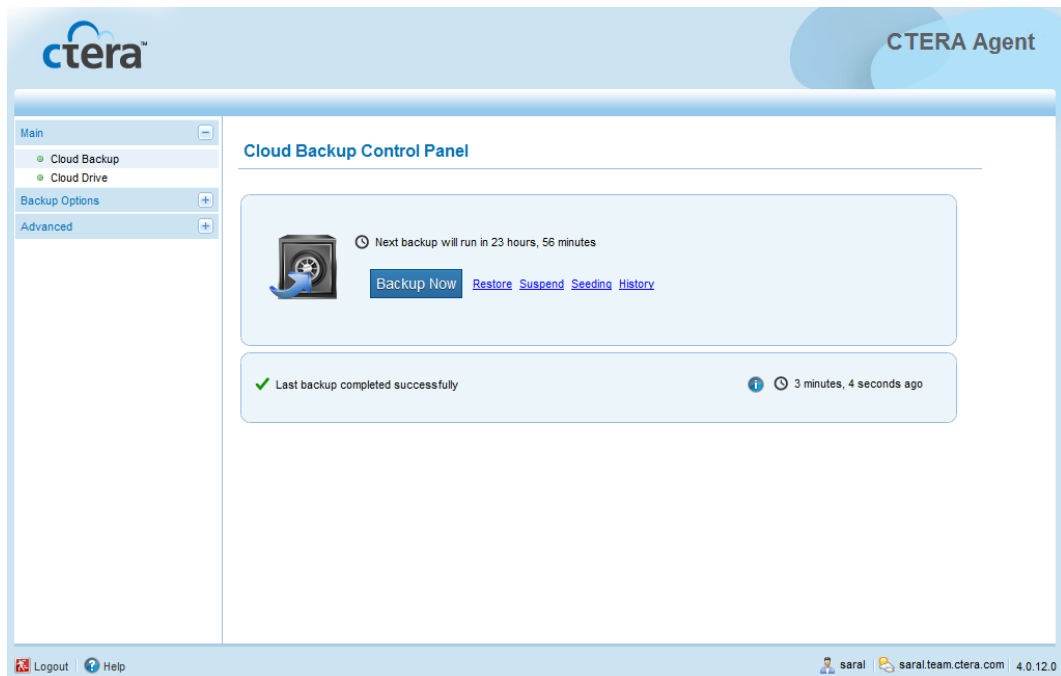
## Manually Starting Cloud Backup

You can manually start cloud backup at any time.

### » To manually start cloud backup

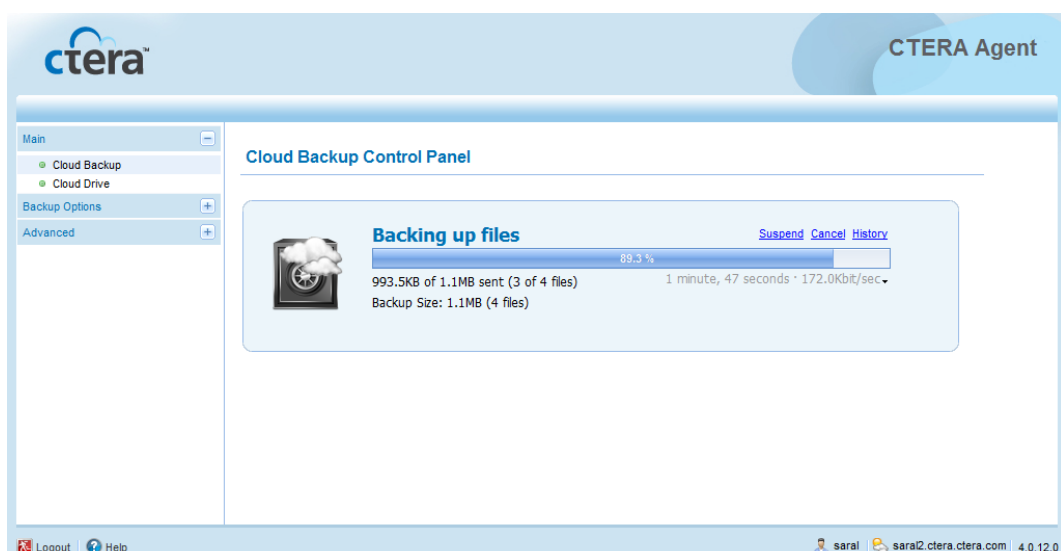
- 1 In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.





- 2 Click **Backup Now**.

A progress bar appears, and the files are backed up to cloud storage.



- 3 To toggle the information displayed under the progress bar, do one of the following:

- + To display the effective throughput (in Kbit/sec), click the  icon, and then click **Show effective throughput**.
- + To display the bandwidth usage (in bit/sec), click the  icon, and then click **Show bandwidth usage**.

## Canceling the Current Cloud Backup

You can cancel a running cloud backup.

### Tip



Only the current backup will be canceled. The next automatic backup will occur as scheduled.

### » To cancel the current cloud backup

- 1 In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.

- 2 Click **Cancel**.

The current backup is canceled.

## Suspending the Cloud Backup Service

You can suspend the CTERA Cloud Backup service, including:

- + The currently running backup
- + All scheduled automatic backup

### Tip



Performing the following procedure is equivalent to suspending the Cloud Backup service via the CTERA Agent tray icon's right-click menu.

### » To suspend the CTERA Cloud Backup service

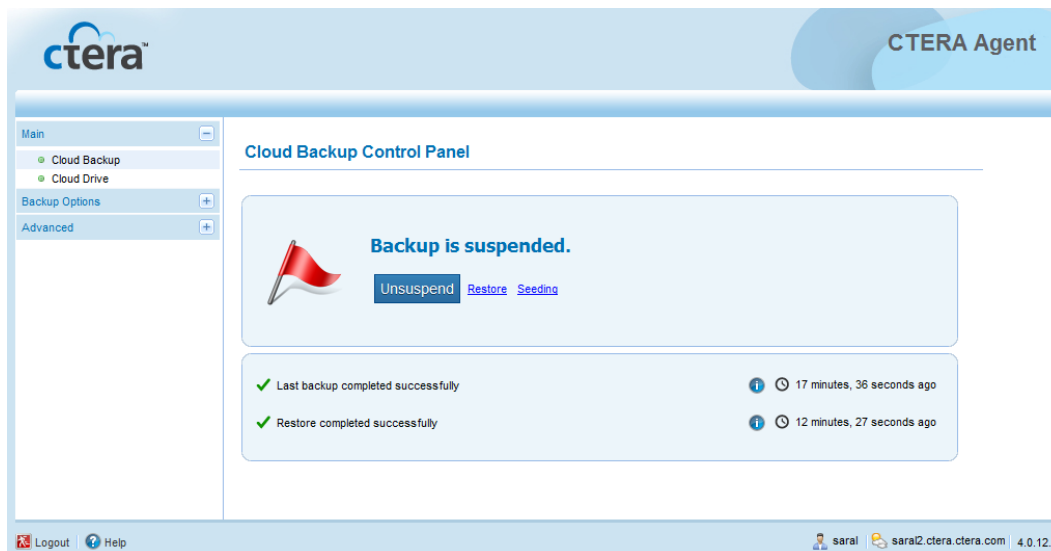
- 1 In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.

- 2 Click **Suspend**.

If a backup is currently running, it is paused. All future automatic backups are suspended.

A message appears, indicating that backup has been suspended.



## Resuming the Cloud Backup Service

If the CTERA Cloud Backup service is suspended, you can unsuspend it.

### Tip



Performing the following procedure is equivalent to resuming the Cloud Backup service via the CTERA Agent tray icon's right-click menu.

### » To resume the CTERA Cloud Backup service

- 1 In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.

- 2 Click **Unsuspend**.

If a backup was running at the time when backups were suspended, that backup is resumed.

Otherwise, cloud backup will occur at the next scheduled time.

## Viewing Cloud Backup Information

You can view information on the last backup performed and the next scheduled back up.



### » To view cloud backup information

- 1 In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.

The following information is displayed:

**Table 8: Cloud Backup Information**

This field...	Displays...
<b>Next backup will run in</b>	The amount of time until the next scheduled automatic backup.
<b>The last backup result</b>	<p>The status of the last backup:</p> <ul style="list-style-type: none"> <li>+ <b>Completed successfully</b></li> <li>+ <b>Backup in Progress</b></li> <li>+ <b>The last backup has failed</b>, followed by the reason it failed</li> </ul> <p>If an error occurred during backup, refer to the backup logs for details. See <b>Viewing Cloud Backup Logs</b> (on page 64).</p>
	<p>Mouse-over this icon to view the following information about the last backup:</p> <ul style="list-style-type: none"> <li>+ The total size of the files that you selected for backup</li> <li>+ The total number of files that you selected for backup</li> <li>+ The amount of time the backup took</li> </ul>
	The amount of time since the last backup ended.

## Preparing a Backup Seeding Hard Drive

When you have a lot of information to back up, the initial backup to the cloud can take a long time. If your CTERA service provider offers a backup seeding service, then you can speed up the initial backup by preparing a backup seeding hard drive, that is, is a drive that contains all of the files you want to include in your initial backup. You then deliver the seeding drive to the service provider, and the service provider uses the seeding drive to create the initial backup.

The seeding drive can optionally be encrypted using AES-256 and RSA public key encryption, so even if the drive is lost, there is very little risk to your sensitive information.

### » To prepare a backup seeding hard drive

- 1 Select the files and folders you want to include in the initial backup.

See **Selecting Files and Folders for Cloud Backup** (on page 34).

These files and folders will be written to the seeding drive.

- 2 In the navigation pane, click **Main > Cloud Backup**.

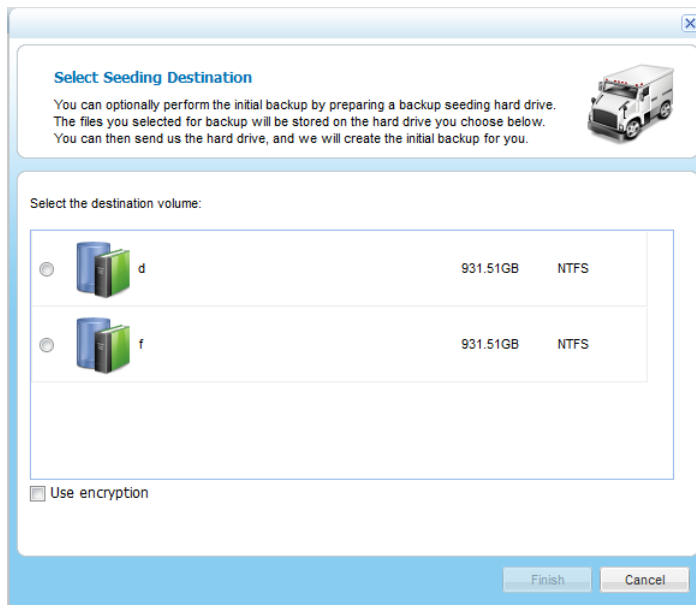
The **Cloud Backup Control Panel** page appears.

- 3 Click **Seeding**.

**Tip**

This option will appear only if the backup seeding service is supported by your service provider.

The **Select seeding destination** dialog box appears.



- 4 Choose the drive to use as the seeding drive.

**Warning**

The contents of this drive will be deleted.

- 5 To encrypt the seeding drive, select the **Use encryption** check box.
- 6 Click **Finish**.

A confirmation message appears.

- 7 Click **Yes**.

The selected files and folders are written to the seeding drive.

You can now deliver the seeding drive to your service provider.

**Tip**

During the time your service provider is loading the backup seeding drive to your account, the backup service will be temporarily disabled for your appliance.

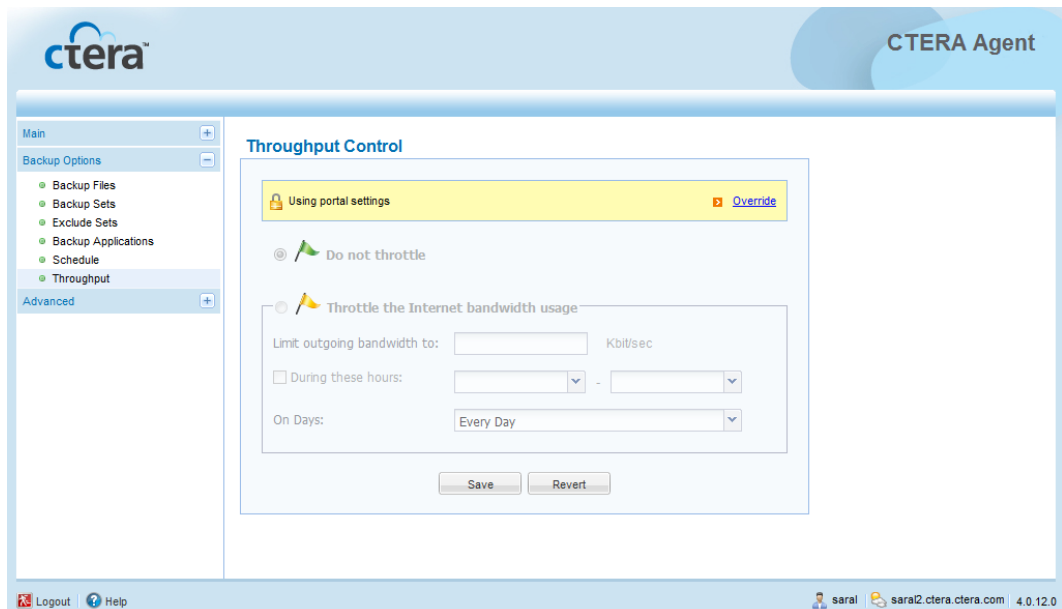
## Restricting Throughput

If desired, you can restrict the amount of bandwidth used for backing up files online.

### » To restrict throughput

- 1 In the navigation pane, click **Backup Options > Throughput**.

The **Throughput Control** page appears.



- 2 Click **Override**, to override the portal settings.
- 3 Complete the fields using the information in the following table.
- 4 Click **Save**.

**Table 9: Throughput Control Fields**

In this field...	Do this...
<b>Do not throttle</b>	Choose this option to specify that throughput should not be restricted.
<b>Throttle the Internet bandwidth usage</b>	Choose this option to restrict the bandwidth used for cloud backups. The rest of the fields on the page are enabled, and you must complete them.
<b>Limit outgoing bandwidth to</b>	Type the maximum bandwidth to use for cloud backups in kilobytes per second.
<b>During these hours</b>	Select this option to specify that the bandwidth used for cloud backups should be restricted only at specific times of the day. Then use the drop-down lists to specify the time range during which the bandwidth should be restricted.
<b>On Days</b>	Select to specify that the bandwidth used for cloud backups should be restricted only on specific days. This can be any of the following: <ul style="list-style-type: none"> <li><input type="checkbox"/> One or more specific days</li> <li><input checked="" type="checkbox"/> <b>Every Day.</b> Bandwidth used for cloud backup will be restricted every day.</li> </ul> The default value is <b>Every Day</b> .

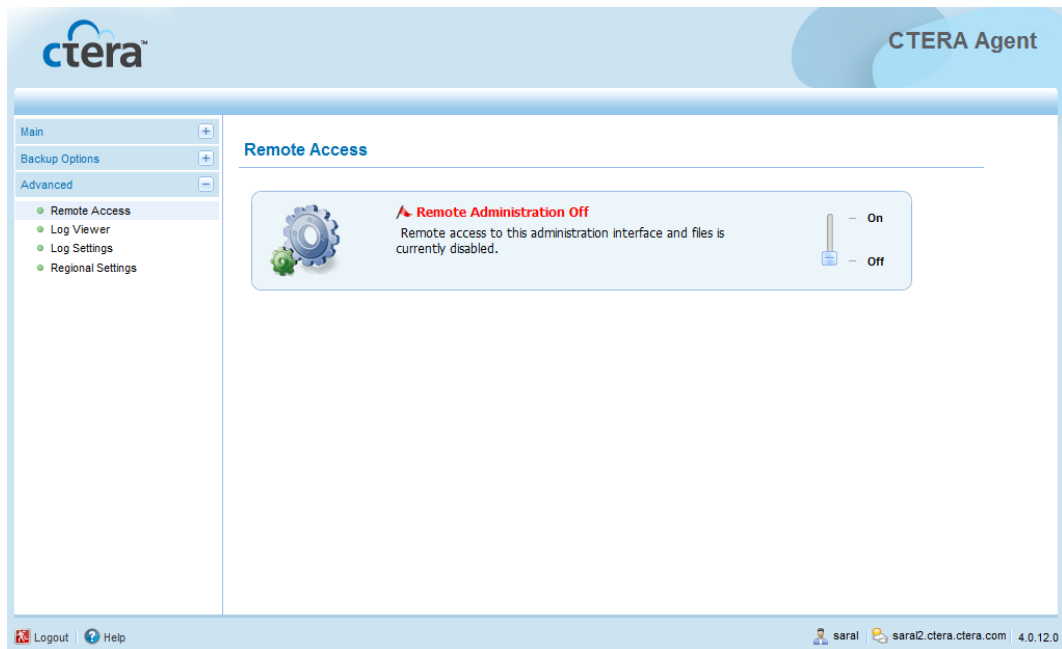
## Enabling/Disabling Remote Access

You can enable and disable administration of this agent from the portal.

### » To enable remote access

- 1 In the navigation pane, click **Remote Access**.

The **Remote Access** page appears.

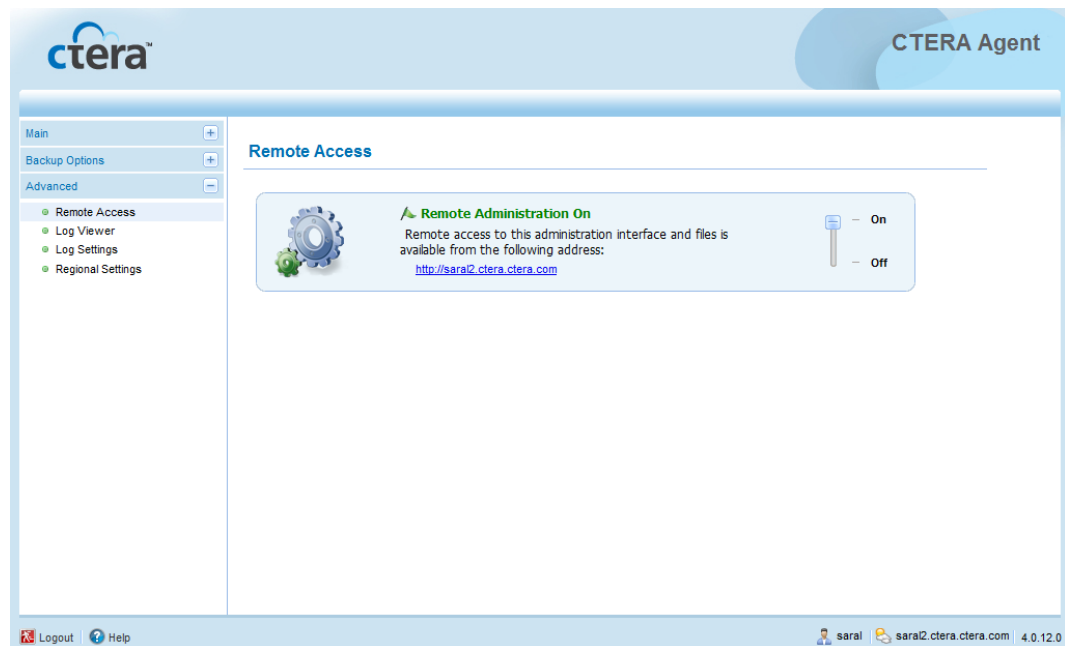


- 2 Slide the lever to the **On** position.

Remote access is enabled.



A link appears, which you can click on to view a remote management page. You can keep this link in your browser bookmarks, for remote access to this appliance.



## » To disable remote access

- 1 In the navigation pane, click **Remote Access**.

The **Remote Access** page appears.

- 2 Slide the lever to the **Off** position.

Remote access is disabled.

## Using Cloud Drive Synchronization

If you are subscribed to the Cloud Drive service on your service provider's CTERA Portal, cloud drive synchronization is enabled in the CTERA Agent by default, enabling you to synchronize your portal cloud drive with a specific folder on one or more CTERA agents in cloud mode.

Synchronization is bi-directional. Conflicts that may occur when a file has been modified on multiple sources are detected and automatically resolved by choosing the most recent version of the file. On a computer with an older file version, the file is moved to the cloud drive's `.conflicts` folder, called the "conflicts trashcan". Files in the conflicts trashcan are automatically deleted after a configurable time.

### Tip



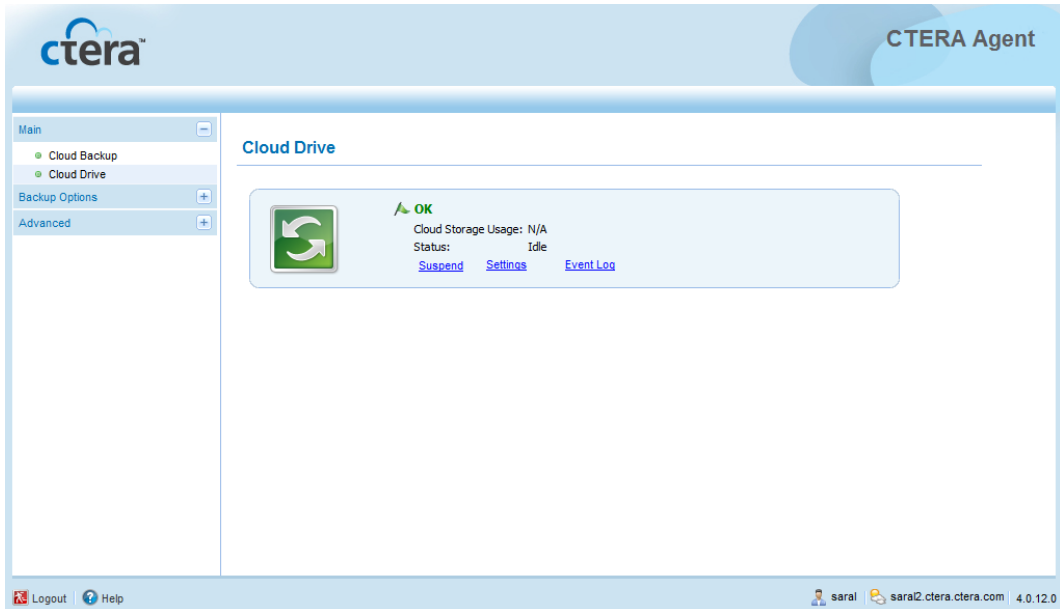
In order for conflict resolution to be performed correctly, your computer clock must be synchronized with the CTERA Portal clock. If there is more than one hour difference between the two clocks (after taking into account timezone differences), the agent will not synchronize the cloud drive folder.

## Suspending/Unsuspending Cloud Drive Synchronization

### » To suspend cloud drive synchronization

- 1 In the navigation pane, click **Main > Cloud Drive**.

The **Cloud Drive** page appears.



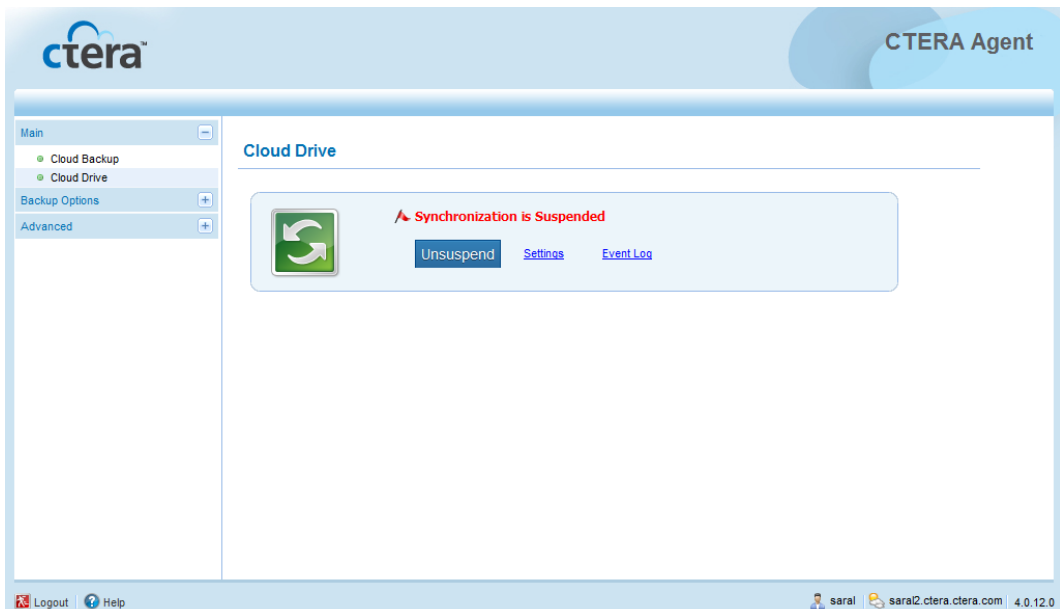
- 2 Click **Suspend**.

Cloud drive synchronization is suspended.

### » To unsuspend cloud drive synchronization

- 1 In the navigation pane, click **Main > Cloud Drive**.

The **Cloud Drive** page appears.



**2** Click **Unsuspend**.

Cloud drive synchronization is no longer suspended, and you can now configure the desired settings.

## Selecting Cloud Folders for Synchronization

You can specify which of the portal cloud folders should be synchronized with the CTERA appliance.

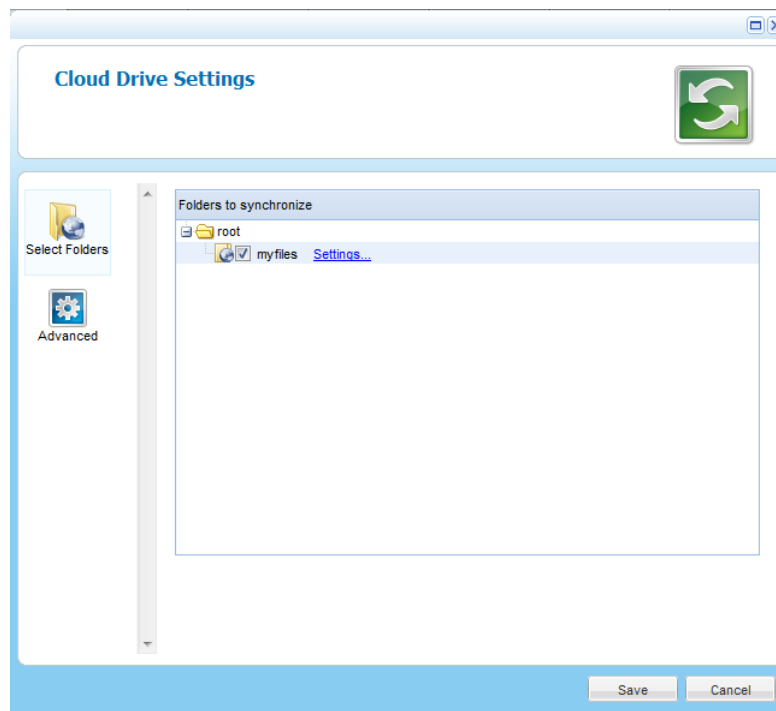
» **To select portal cloud folders for synchronization**

**1** In the navigation pane, click **Main > Cloud Drive**.

The **Cloud Drive** page appears.

**2** Click **Settings**.

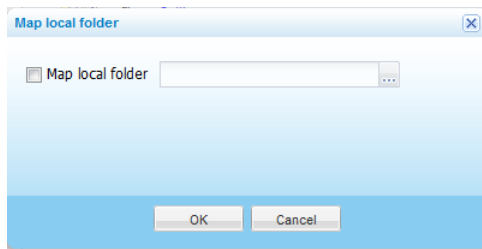
The **Cloud Drive Settings** window opens displaying the **Select Folders** tab.



The **Select Folders** tab displays a tree of the folders in the portal cloud drive that are available to be synchronized.

**3** Expand the tree nodes and select the check box next to the portal cloud folder you want to synchronize with the CTERA appliance. By default, the selected portal cloud folder is synced to the path CTERA\CTERA Agent\CloudDrive under your system's ProgramData folder.

- 4 If you would like to map a different local folder to synchronize with the selected portal cloud drive folder, click **Settings**. The **Map local folder** dialog box appears.



- 5 Check **Map local folder**.
- 6 Click **.** The **Folder Browser** window appears. Browse to the local folder you want to synchronize to the selected portal cloud folder. If, at any time, you want to revert to the default local folder, uncheck the Map local folder box in the Map local folder window.
- 7 Click **Close**.
- 8 In the **Map local folder** window, click **OK**.
- 9 Click **Save**.

## Configuring Advanced Cloud Drive Synchronization Settings

You can specify which local folder should be synchronized with the cloud drive, as well as how conflicts between file versions should be handled.

### » To configure advanced cloud drive synchronization settings

- 1 In the navigation pane, click **Main > Cloud Drive**.

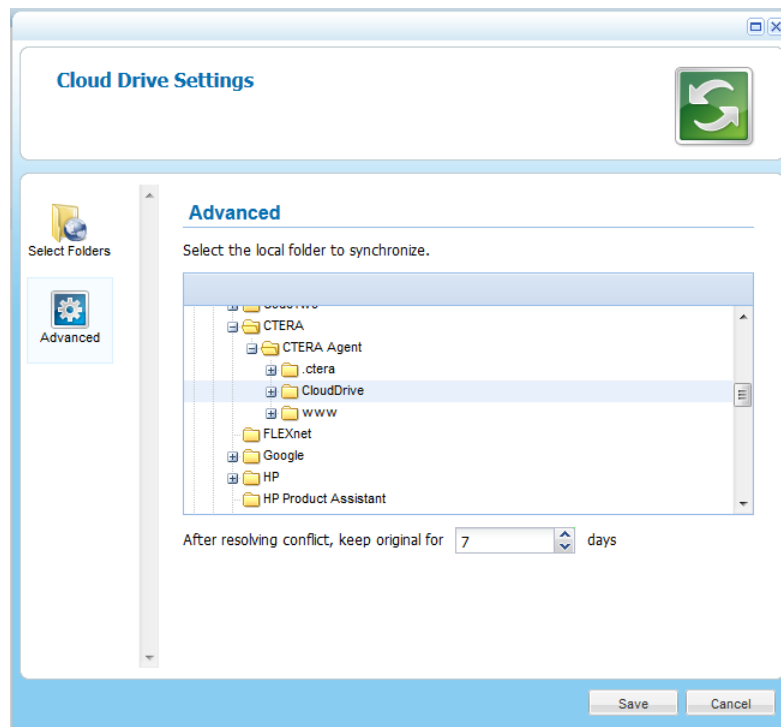
The **Cloud Drive** page appears.

- 2 Click **Settings**.

The **Cloud Drive Settings** window opens displaying the **Select Folders** tab.

- 3 Click the **Advanced** tab.

The **Advanced** tab appears.



- 4 Expand the tree nodes and select the local folder under which folders should be created for each portal cloud folder you chose for synchronization.

For information on choosing portal cloud folders for synchronization, see **Selecting Cloud Folders for Synchronization** (on page 57).

- 5 In the **After resolving conflict, keep original for** field, use the arrow buttons to specify the number of days that the appliance should retain the original version of a file that was independently modified on more than one replica.

After this time, the conflicting copies are deleted. Conflicting copies are stored in the conflicts trashcan folder, `.conflicts`.

- 6 Click **Save**.

## Viewing Cloud Drive Synchronization Status

You can view information on cloud drive synchronization status and the amount of cloud storage used.



### » To view cloud drive synchronization status

- + In the navigation pane, click **Main > Cloud Drive**.

The **Cloud Drive** page appears.

The following information is displayed:

**Table 10: Cloud Drive Synchronization Information**

This field...	Displays...
<b>Cloud Storage Usage</b>	The amount of used space in your account, followed by the number of files on the cloud drive.
<b>Status</b>	<p>The cloud drive synchronization status. Some possible statuses are:</p> <ul style="list-style-type: none"> <li> <b>Sync in progress.</b> Synchronization is currently in progress.</li> <li> <b>Path is not configured.</b> The path to the local folder which should be synchronized with the cloud drive is not configured. To configure it, see <i>Configuring Advanced Cloud Drive Synchronization Settings</i> (on page 58).</li> </ul>

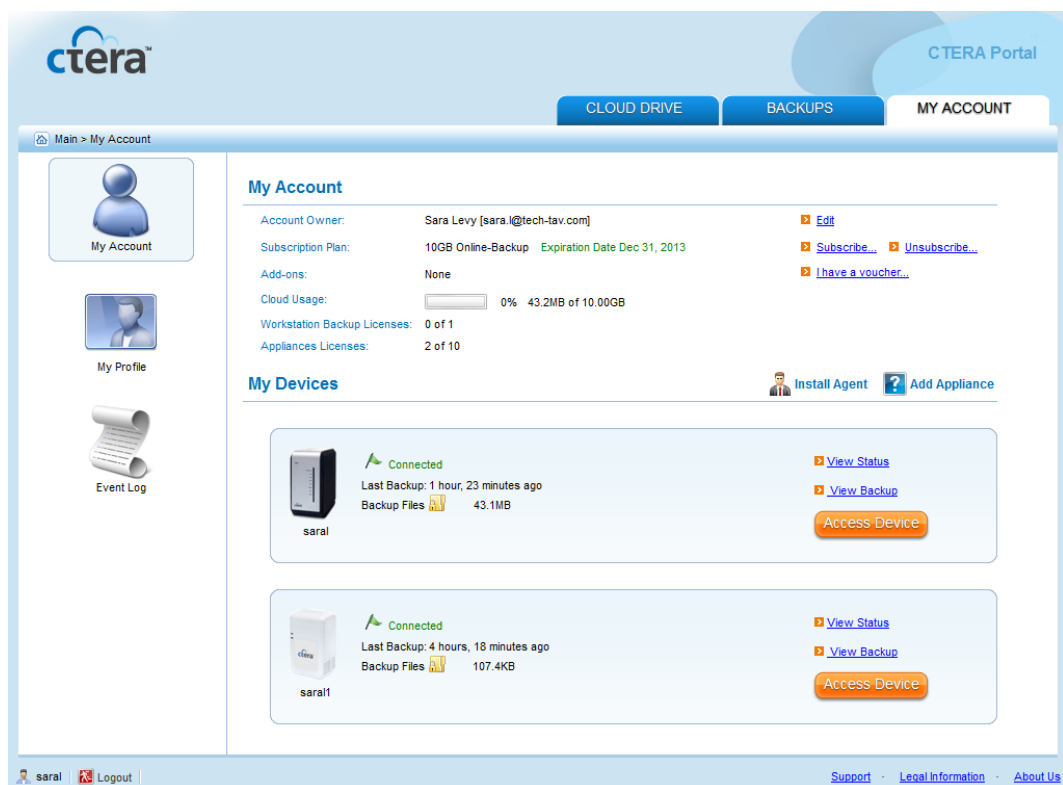
## Managing Files and Folders on the Cloud Drive

You can manage files and folders directly on the CTERA Portal cloud drive.

### » To manage files and folders on the cloud drive

- 1 Using a Web browser, log in to your CTERA Portal account.

The CTERA Portal opens displaying the **My Account** tab.

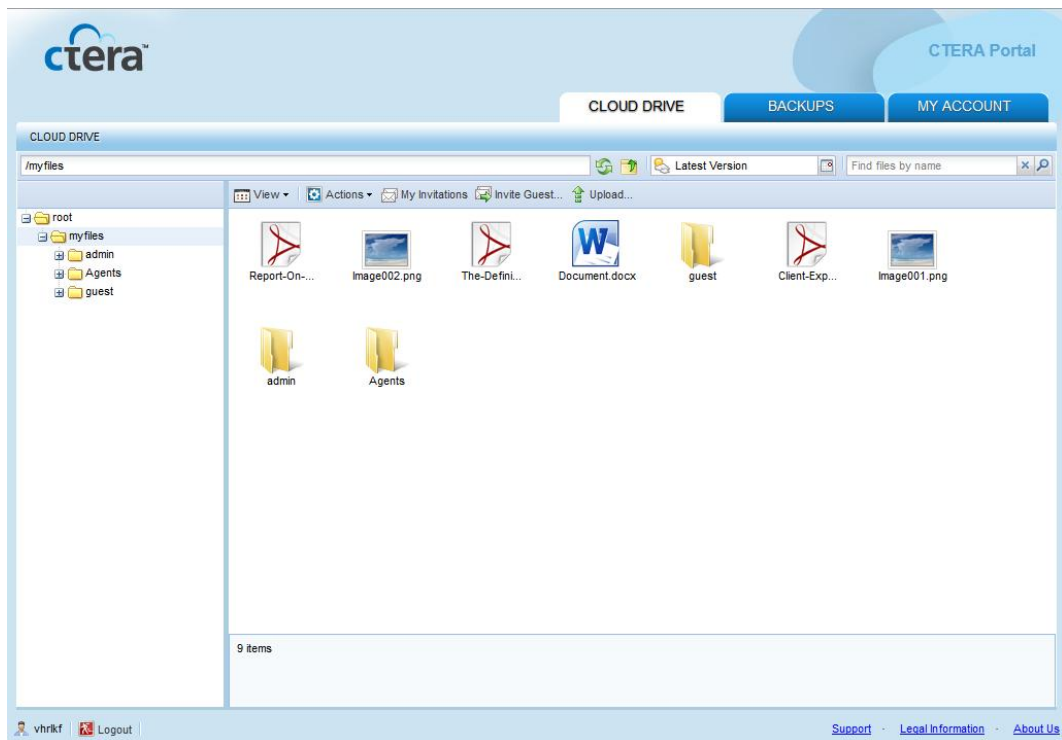


The screenshot shows the CTERA Portal interface. At the top, there are navigation tabs for 'CLOUD DRIVE', 'BACKUPS', and 'MY ACCOUNT'. The 'MY ACCOUNT' tab is active. The page displays the following information:

- My Account:**
  - Account Owner: Sara Levy [sara.l@tech-tav.com] [Edit](#)
  - Subscription Plan: 10GB Online-Backup Expiration Date Dec 31, 2013 [Subscribe...](#) [Unsubscribe...](#)
  - Add-ons: None [I have a voucher...](#)
  - Cloud Usage: 0% 43.2MB of 10.00GB
  - Workstation Backup Licenses: 0 of 1
  - Appliances Licenses: 2 of 10
- My Devices:**
  - [Install Agent](#) [Add Appliance](#)
  - Device 1 (sara1): Connected, Last Backup: 1 hour, 23 minutes ago, Backup Files: 43.1MB. [View Status](#), [View Backup](#), [Access Device](#)
  - Device 2 (sara1f): Connected, Last Backup: 4 hours, 18 minutes ago, Backup Files: 107.4KB. [View Status](#), [View Backup](#), [Access Device](#)

- 2 Click the **Cloud Drive** tab.

The **Cloud Drive** tab opens.



- 3 Navigate to the portal folder you selected in *Selecting Cloud Folders for Synchronization* (on page 57).
- 4 Manage the files as desired.

## Configuring Event Log Settings

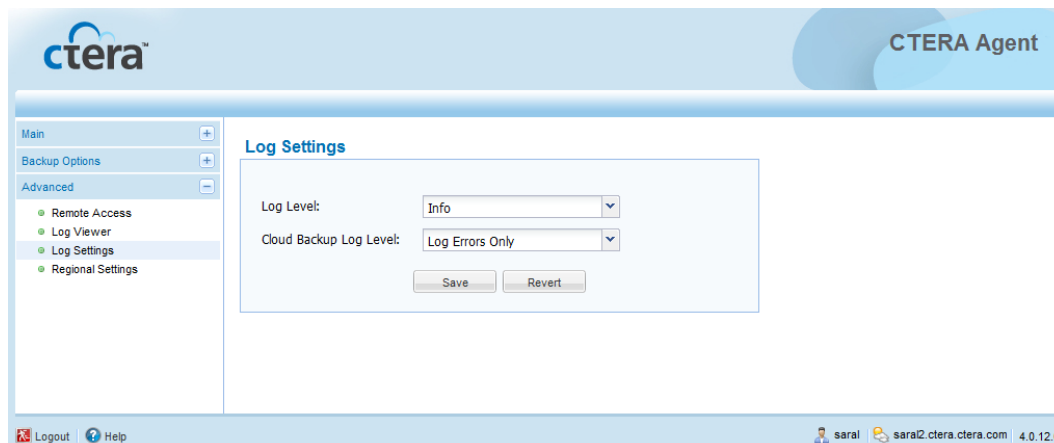
You can configure settings for the CTERA appliance Event Log, including log storage and the log level to display.

### » To configure Event Log settings

- 1 Do one of the following:
  - + In the navigation pane, click **Advanced > Log Settings**.
  - + When viewing any log category, click **Settings**.

See *Viewing Logs* (on page 63).

The **Log Settings** page appears.



- 2 Complete the fields using the information in the following table.
- 3 Click **Save**.

**Table 11: Log Settings Fields**

In this field...	Do this...
<b>Log Level</b>	<p>Select the minimum log level to display in the CTERA appliance Web interface.</p> <p>For example, if you select <b>Critical</b>, then only <b>Alert</b>, <b>Critical</b>, and <b>Emergency</b> logs will appear in the CTERA appliance Web interface.</p> <p>The default value is <b>Info</b>.</p>
<b>Cloud Backup Log Level</b>	<p>CTERA appliance automatically logs all backup and restore operations. Specify whether CTERA appliance should display additional information about files that are backed up and restored, by selecting one of the following:</p> <ul style="list-style-type: none"> <li>+ <b>Log Every File.</b> Provide additional information about all backed up and restored files.</li> <li>+ <b>Log Errors Only.</b> Only provide additional information about files for which errors occurred during backup and restore operations.</li> <li>+ <b>No Logging.</b> Do not provide additional information about backed up and restored files.</li> </ul> <p>The additional information includes file name, deduplication ratio, and more. See <b>Viewing Backup Logs</b> (see "<b>Viewing Cloud Backup Logs</b>" on page 64).</p> <p>The default level is <b>Log Errors Only</b>.</p>



## Viewing Logs

The CTERA appliance Event Log includes the following log categories:

**Table 12: Log Categories**

This log category...	Displays...
<b>System</b>	General CTERA Agent events, including connecting to the CTERA Portal, disconnecting from the CTERA Portal, and so on
<b>Cloud Backup</b>	Events related to cloud backup or restore operations
<b>Cloud Sync</b>	Events related to cloud drive synchronization operations
<b>Access</b>	Events related to user access to the CTERA Agent Web interface
<b>Audit</b>	Changes to the CTERA Agent configuration

## Viewing System Logs

### » To view System logs

- + In the navigation pane, click **Advanced > Log Viewer**.

The **Log Viewer** page appears displaying the system logs.

The screenshot shows the CTERA Agent web interface. The left navigation pane is expanded to 'Advanced' > 'Log Viewer'. The main content area displays the 'System' log category. At the top, there are controls for 'Select Topic' (set to System), 'Minimum Severity' (set to Info), and buttons for 'Clear' and 'Export to Excel'. Below these is a table of log entries:

Type	Date	User	Details	More Info
Info	2013/08/25 09:46:39		Connected to portal	name: team.ctera.com, ip: 174.129.244.61, type: CTERA Portal
Warning	2013/08/25 09:46:21		Connection to portal failed	name: team.ctera.com, ip: 174.129.244.61, type: CTERA Portal
Info	2013/08/25 09:46:21		Disconnected from portal	name: team.ctera.com, ip: 174.129.244.61, type: CTERA Portal
Info	2013/08/25 09:23:30		Connected to portal	name: team.ctera.com, ip: 174.129.244.61, type: CTERA Portal
Info	2013/08/25 09:23:23		Agent started up	

At the bottom of the log list, there is a pagination control showing 'Page 1' and 'Displaying logs 1 - 5'. The footer of the interface includes 'Logout', 'Help', and user information: 'sara | saral.team.ctera.com | 4.0.12.0'.

### Tip















If the **Log Viewer** is already open and a different log category is displayed, in the **Select Topic** drop-down list, select **System**.

The following information is displayed:

**Table 13: System Log Fields**

This field...	Displays...
Type	An icon indicating the log level. See <i>Log Levels</i> (page 64).
Date	The date and time at which the event occurred.
User	The user who triggered the event.
Details	A description of the event.
More Info	Additional information about the event.

**Table 14: Log Levels**


Icon	Log Level
	<ul style="list-style-type: none"> <li> Emergency</li> <li> Alert</li> <li> Critical</li> <li> Error</li> </ul>
	<ul style="list-style-type: none"> <li> Warning</li> </ul>
	<ul style="list-style-type: none"> <li> Notice</li> <li> Info</li> </ul>
	<ul style="list-style-type: none"> <li> Debug</li> </ul>

## Viewing Cloud Backup Logs

### » To view Cloud Backup logs

1 Do one of the following:

-  To access Cloud Backup logs from the **Cloud Backup Control Panel** page, click **History**.

-  To access Cloud Backup logs from the **Log Viewer**:

- 1 In the navigation pane, click **Advanced > Log Viewer**.

The **Log Viewer** page appears.

- 2 In the **Select Topic** drop-down list, select **Cloud Backup**.

The Cloud Backup logs appear. For information on the displayed fields, see the following tables.

The screenshot displays the CTERA Agent interface for Cloud Backup logs. The main pane shows a table of backup operations:

Type	Start Time	Mode	Type	Duration	Result	Files
!	2013/08/22 08:57:06	Backup	manual	00:14:50	Canceled by user	3167
!	2013/08/22 08:53:25	Backup	manual	00:01:53	Canceled by user	13254
!	2013/08/22 08:52:35	Backup	manual	00:00:07	Canceled by user	0

Below the table, there is a section for 'Export to Excel' with the following columns: Type, Operation, File Name, Path, Duration, Size, Transferr..., Dedup Ratio, Result. The lower pane shows 'No results found'.

### Tip



By default, the lower pane will appear displaying all files for which an error occurred during backup. However, if you disabled additional logging for backup operations, the lower pane will not appear. For information on configuring the logging level, see **Configuring Event Log Settings** (on page 61).



- 2 To view additional logging information for a backup operation, click on the desired operation in the upper pane.

Information about files included in the backup operation appears in the lower pane.

**Table 15: Cloud Backup Log Upper Pane Fields**

This field...	Displays...
<b>Type</b>	An icon indicating the log level. See <i>Log Levels</i> (page 64).
<b>Start Time</b>	The date and time at which the backup operation started.
<b>Mode</b>	The operation mode, <b>Backup</b> or <b>Restore</b> .
<b>Type</b>	The type of backup, <b>Manual</b> or <b>Scheduled</b> .
<b>Duration</b>	The amount of time the backup operation took.
<b>Result</b>	The result of the backup operation.
<b>Files</b>	The number of files to be backed up.
<b>Size</b>	The total size of the files to be backed up.
<b>Transferred Files</b>	The number of files transferred to cloud storage during the backup operation.
<b>Transferred Size</b>	The size of the files transferred to cloud storage during the backup operation.
<b>Changed Files</b>	The number of files that changed since the last backup operation.
<b>Changed Size</b>	The total size of the files that changed since the last backup operation.
<b>More Info</b>	Additional information about the event.

**Table 16: Cloud Backup Log Lower Pane Fields**

This field...	Displays...
<b>Type</b>	An icon indicating whether backup was successful (  ) or not (  ).
<b>Operation</b>	The operation performed ( <b>create</b> , <b>delete</b> , <b>modify</b> , or <b>rename</b> ).
<b>File Name</b>	The name of the backed up file.
<b>Path</b>	The path to the backed up file.
<b>Duration</b>	The amount of time backup took for the file.
<b>Size</b>	The size of the file.
<b>Transferred Size</b>	The size of the file transferred to cloud storage.
<b>Dedup Ratio</b>	The deduplication ratio for the file.
<b>Result</b>	The result of the backup operation.
<b>More Info</b>	Additional information about the event.

## Viewing Cloud Sync Logs

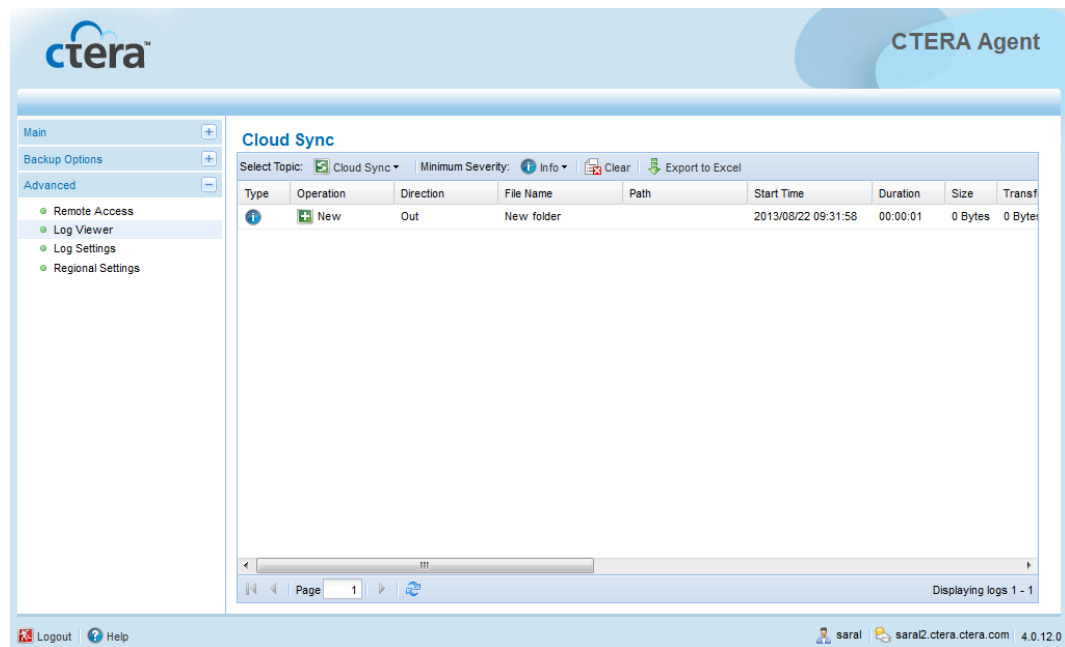
### » To view Cloud Sync logs

- 1 In the navigation pane, click **Advanced > Log Viewer**.

The **Log Viewer** page appears.





- 2 In the **Select Topic** drop-down list, select **Cloud Sync**.

The Cloud Sync logs appear.



The following information is displayed:

**Table 17: Cloud Sync Log Fields**

This field...	Displays...
<b>Type</b>	An icon indicating the log level. See <i>Log Levels</i> (page 64).
<b>Operation</b>	The synchronization operation performed:  <b>New</b> . A new file or directory was created.  <b>Updated</b> . A file or directory was updated.
<b>Direction</b>	The synchronization operation's direction:  <b>In</b> . From the cloud drive to the local drive.  <b>Out</b> . From the local drive to the cloud drive.
<b>File Name</b>	The name of the file transferred during the synchronization operation.
<b>Path</b>	The path to the file transferred during the synchronization operation.
<b>Start Time</b>	The date and time at which the synchronization operation started.
<b>Duration</b>	The amount of time the synchronization operation took.
<b>Size</b>	The size of the synchronized file.
<b>Transferred Size</b>	The actual amount of data transferred.
<b>Dedup Ratio</b>	The deduplication ratio for the file transferred during the synchronization operation.
<b>Result</b>	The result of the synchronization operation.
<b>More Info</b>	Additional information about the event.

## Viewing Access Logs

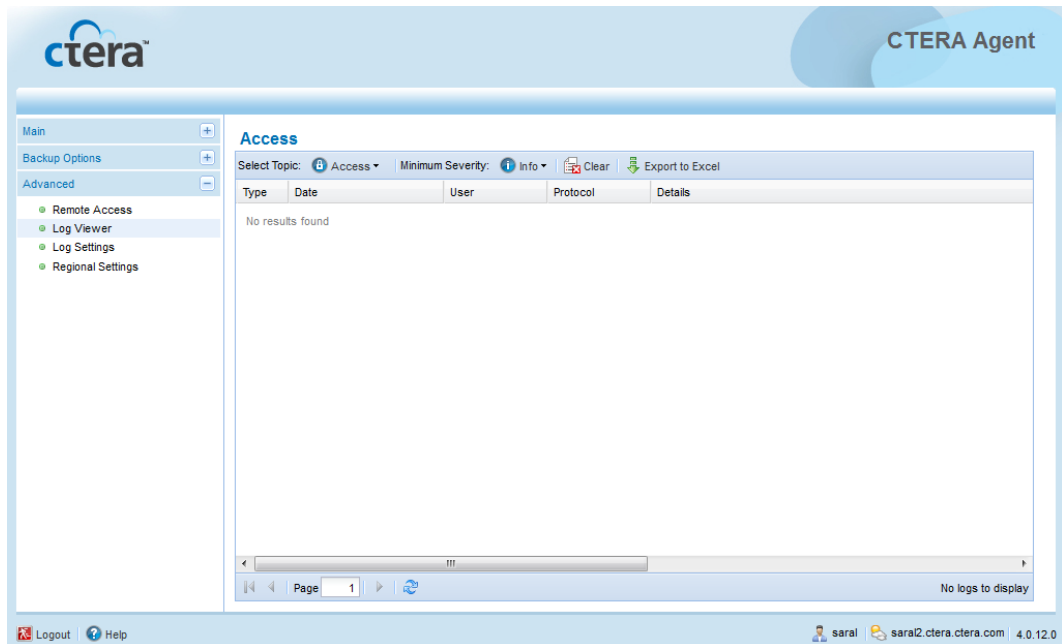
### » To view Access logs

- 1 In the navigation pane, click **Advanced > Log Viewer**.

The **Log Viewer** page appears.

- 2 In the **Select Topic** drop-down list, select **Access**.

The Access logs appear.



The following information is displayed:

**Table 18: Access Log Fields**

This field...	Displays...
<b>Type</b>	An icon indicating the log level. See <i>Log Levels</i> (page 64).
<b>Date</b>	The date and time at which the event occurred.
<b>User</b>	The user that triggered the event.
<b>Protocol</b>	The protocol used when triggering the event: <ul style="list-style-type: none"> <li>+ GUI</li> <li>+ CIFS (Windows File Sharing)</li> <li>+ AFP</li> <li>+ FTP</li> <li>+ NFS</li> <li>+ RSync</li> <li>+ CTERA Agent</li> <li>+ WebDAV</li> </ul>
<b>Details</b>	A description of the event.
<b>Client IP</b>	The IP address from which the user triggered the event.
<b>More Info</b>	Additional information about the event.

## Viewing Audit Logs

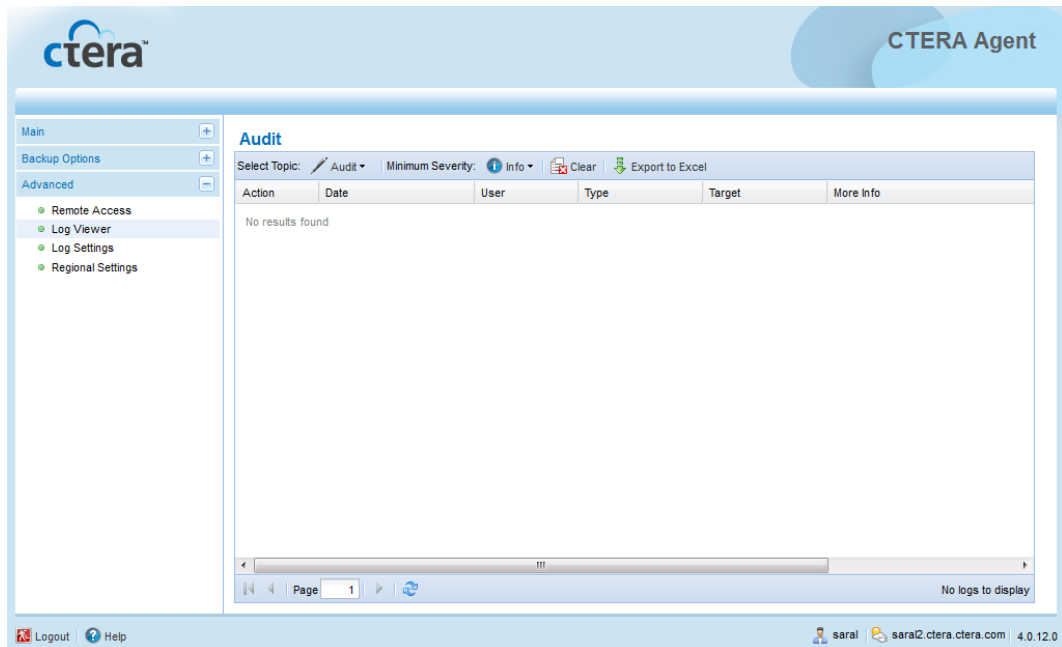
### » To view Audit logs

- 1 In the navigation pane, click **Advanced > Log Viewer**.

The **Log Viewer** page appears.

- 2 In the **Select Topic** drop-down list, select **Audit**.

The Audit logs appear.










The following information is displayed:

**Table 19: Audit Log Fields**

This field...	Displays...
<b>Action</b>	The action type. See <b>Audit Log Action Types</b> (page 71).
<b>Date</b>	The date and time at which the event occurred.
<b>User</b>	The user who performed the action.
<b>Type</b>	The type of setting that was affected by the action. For example, if user JohnS was deleted, this column displays "Users".
<b>Target</b>	The object that was affected by the action. For example, if user JohnS was deleted, this column displays "JohnS".
<b>More Info</b>	Additional information about the event.



**Table 20: Action Types**

Icon	Label	Description
	Added	An object was added to the CTERA appliance Web interface.
	Deleted	An object was deleted from the CTERA appliance Web interface.
	Modified	An object was modified.
	Formatted	A disk was formatted.
	Expanded	An array was enlarged.
	Disabled	A setting was disabled.
	Enabled	A setting was enabled.

## Filtering Logs

In any log category, you can filter the logs so that only those with a certain minimum log level are displayed.

### Tip



For information on configuring the default minimum log level to display in *all* log pages, see **Configuring Event Log Settings** (on page 61).

### » To filter logs in a log category

- 1 View the desired log category.

See **Viewing Logs** (on page 63).

- 2 In the **Minimum Severity** drop-down list, select the minimum log level to display in this category.

For example, if you select Critical, then only Alert, Critical, and Emergency logs will be displayed.

The logs are filtered accordingly.

## Clearing Logs

You can clear logs for any log category.

### » To clear logs for a log category

- 1 View the desired log category.

See **Viewing Logs** (on page 63).

- 2 Click **Clear**.

A confirmation message appears.

### 3 Click **Yes**.

The logs in this category are cleared.

## Exporting Logs

You can export logs in any category to a Comma-Separated Values (\*.csv) file on your computer, which you can view in Microsoft Excel as a worksheet.

### » To export logs in a log category

#### 1 View the desired log category.

See **Viewing Logs** (on page 63).

#### 2 Click **Export to Excel**.

The logs are exported.

## Configuring the CTERA Agent Language

You can configure the language to be displayed in the CTERA Agent's interface.

The following languages are supported: English, French, German, Hebrew, Italian, Polish, and Spanish.

### » To configure the CTERA Agent language

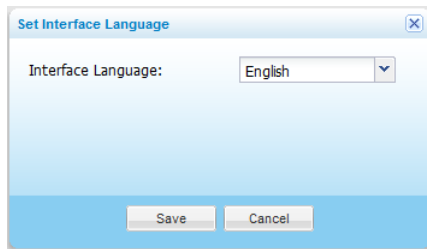
#### 1 In the navigation pane, click **Advanced > Regional Settings**.

The **Regional Settings** page appears, displaying the date, time, and time zone currently configured on the CTERA Agent.



#### 2 Click **Change Language**.

The **Set Interface Language** dialog box appears.



- 3 In the **Interface Language** drop-down list, select your language.
- 4 Click **Save**.

## Logging Out of the CTERA Agent Web Interface

### » To log out of the CTERA Agent Web interface

- 1 In the status bar, click **Logout**.

You are logged out of the CTERA Agent Web interface.

#### Tip



You will be automatically logged out after a period of inactivity.

## Manually Starting Backup

The CTERA Agent will automatically back up files to the CTERA Portal according to the schedule you configured in the CTERA Agent Web interface (see **Scheduling Automatic Cloud Backup** (on page 45)). If desired, you can manually trigger backup at any time.

#### Tip

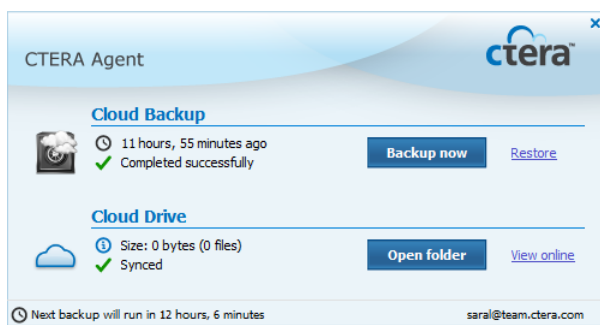


Backup can also be manually started via the CTERA Agent Web interface. See **Manually Starting Cloud Backup** (on page 47).

### » To manually start backup via the graphical user interface

- 1 Click the CTERA Agent tray icon in the taskbar.

The **CTERA Agent** screen appears.



- 2 Next to the desired backup type, click **Backup now**.

A progress bar appears, and the number of files and bytes remaining for local back up are displayed.

The CTERA Agent backs up files to the CTERA Portal.

#### » To manually start backup via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl start
```

The CTERA Agent backs up files to the CTERA Portal.

## Stopping the Current Backup Operation

### Tip



Backup can also be stopped via the CTERA Agent Web interface. See **Canceling the Current Cloud Backup** (see "**Canceling the Current Cloud Backup**" on page 48).

#### » To stop the current backup operation via the graphical user interface

- 1 Click the CTERA Agent tray icon in the taskbar.

The **CTERA Agent** screen appears with a progress bar.

- 2 Click **Cancel**.

The current backup operation is stopped.

#### » To stop the current backup operation via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl cancel
```

The current backup operation is stopped.

## Suspending and Resuming Backup

You can suspend backup for a CTERA Agent, including:

- + The currently running backup for the CTERA Agent
- + All scheduled automatic backups for the CTERA Agent

**Tip**

Backup can also be suspended and resumed via the CTERA Agent Web interface. See *Suspending the Cloud Backup Service* (on page 48) and *Resuming the Cloud Backup Service* (on page 49).

**» To suspend backup via the graphical user interface**

- + Right-click the CTERA Agent tray icon in the taskbar, and click **Suspend**.

If backup is currently running, it is paused. All future automatic backups for the CTERA Agent are suspended.

**» To suspend backup via the command line**

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl suspend
```

If backup is currently running, it is paused. All future automatic backups for the CTERA Agent are suspended.

**» To resume backup via the graphical user interface**

- + Right-click the CTERA Agent tray icon in the taskbar, and click **Unsuspend**.

Backup resumes.

**» To resume backup via the command line**

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl unsuspend
```

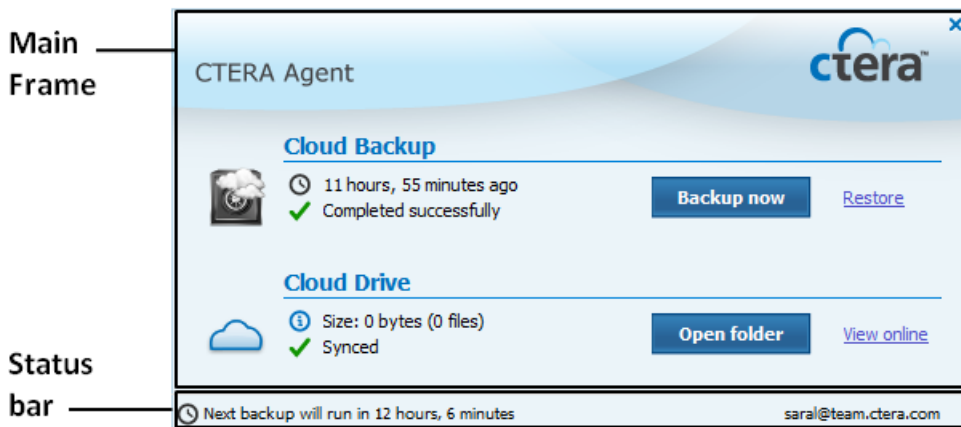
Backup resumes.

## Viewing the Agent Status


**» To view the CTERA Agent's status via the graphical user interface**

- + Click the CTERA Agent tray icon in the taskbar.

The **CTERA Agent** screen appears.



The screen is composed of the following parts:

- + **Main frame.** Displays controls for performing backups and restoring from the created backup files. The amount of time since the last backup is displayed, as well as an indication of whether the backup was successful. Mousing over the backup result displays a tooltip with additional details about the backup.
- + **Status bar.** Displays the amount of time remaining until the next automatic backup, followed by `username@portal`, where `username` is your `username` for accessing the CTERA Portal and `portal` is the name of the CTERA Portal to which the CTERA Agent is currently connected. The  icon indicates that the CTERA Agent is in Cloud Agent mode.

## » To view the CTERA Agent's status via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl status
```

The agent status is displayed.

```
[root@centos60_64bit litmus-0.13]# cteractl status
Status       : Connected to rafi3.ctera.me (192.168.90.248)
Username     : rafi
Last task status : Completed successfully; 6.16MB sent (5 files), 0 bytes remaining
License status  : licensed
```

**Table 21: Agent Status Fields**

In this field...	Do this...
<b>Status</b>	The agent's current status.
<b>Username</b>	The username you used to log in to the CTERA appliance.
<b>Last task status</b>	The result of the last task performed.
<b>License status</b>	The CTERA Agent's license status.

## Viewing Agent Details

You can view CTERA Agent details, including its version, the operating system on which it is installed, and copyright information.

### » To view CTERA Agent details

- 1 Right-click the CTERA Agent tray icon in the taskbar, and click **About**.

The **About CTERA Agent** screen appears.



- 2 To view the end user license agreement and services agreement, click **Legal Information**.
- 3 To close the window, click **OK**.

## Disconnecting the Agent from the CTERA Portal

If desired, you can disconnect the CTERA Agent from the CTERA Portal.

### » To disconnect the CTERA Agent from a CTERA Portal via the graphical user interface

- 1 Right-click the CTERA Agent tray icon in taskbar, and click **Sign out**.

A confirmation message appears.

- 2 Click **OK**.

The CTERA Agent disconnects from the CTERA Portal.

### » To disconnect the CTERA Agent from a CTERA Portal via the command line

- 1 Log in as root.
- 2 Run the following command:

```
/sbin/cteractl signout
```

The CTERA Agent disconnects from the CTERA Portal.

## Restoring Files from Cloud Backup

### Restoring Files and Folders from the Cloud Backup Control Panel

You can restore individual files or folders that were backed up to cloud storage. Alternatively, you can simultaneously restore *all* backed up files and folders, in order to roll back your disk contents to a previous point in time.

Note that if the same files already exist on your computer, they will be overwritten with the files you selected for restoration. Files that have been deleted since the date of the selected files will be recreated. Files that exist on your computer, but which do not exist in cloud storage or were not selected for restoration, will not be affected.

To restore files, the CTERA Agent must be connected to the CTERA Portal.

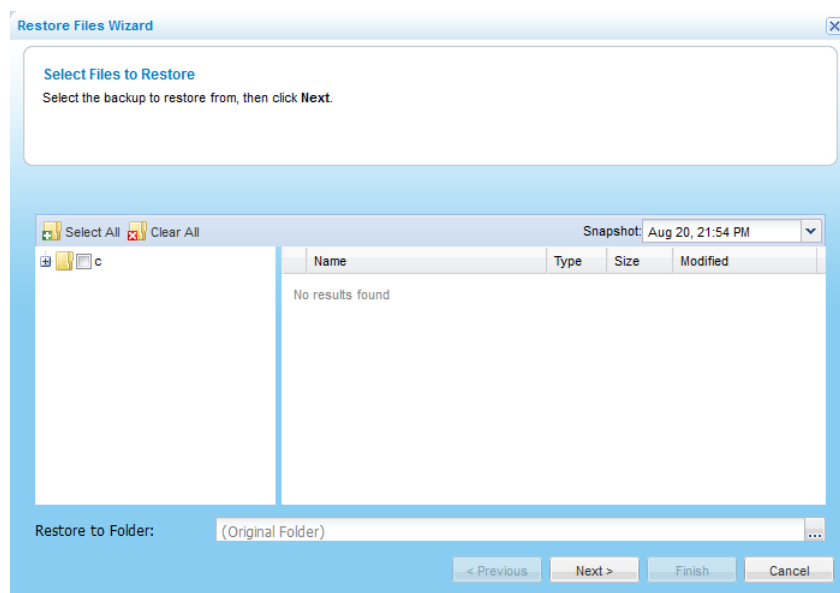
#### » To restore backed up files from the Cloud Backup Control Panel

**1** In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.

**2** Click **Restore**.

The **Restore Files Wizard** opens, displaying the **Select Files to Restore** dialog box.



**3** In the **Snapshot** drop-down list, select the date and time of the snapshot from which you want to restore files.

**4** Specify which files and folders you want to restore, by doing any of the following:

**+** To select individual files and folders:

**1** In the left pane, expand the nodes and click on the desired folders.

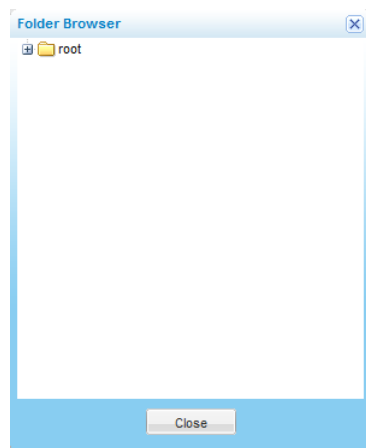
The folder contents appear in the right pane.



- 2 Select the check boxes next to the desired folders and files.

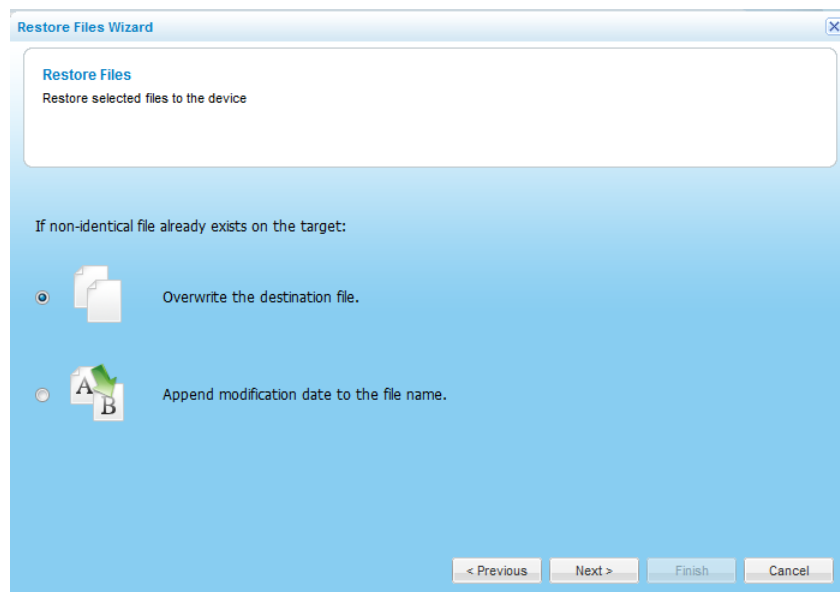
For an explanation of the icons and check boxes next to each folder, see **Folder Icons** (page 35).

- + To select all files, click **Select All**.
  - + To un-select all files, click **Clear All**.
- 5 If you want to restore files to a location other than the original location:
    - a Click in the **Restore to Folder** field. The **Folder Browser** dialog box appears.



- b Select the folder to which you would like to restore the files.
  - c Click **Close**.
- 6 Click **Next**.

The **Restore Files** dialog box appears.

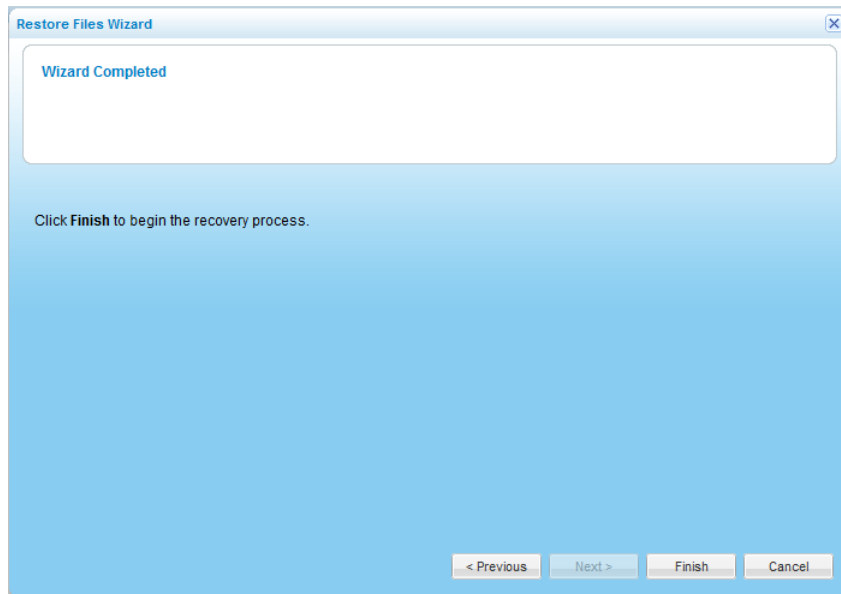


- 7 Specify how the CTERA appliance should handle files that exist both on your drive and in the selected backup, by doing one of the following:

- + To specify that the files on your drive should be overwritten by the files in the backup, choose **Overwrite the destination file**.
- + To specify that the files on your drive should have the modification date appended to their name, choose **Append modification date to the file name**.

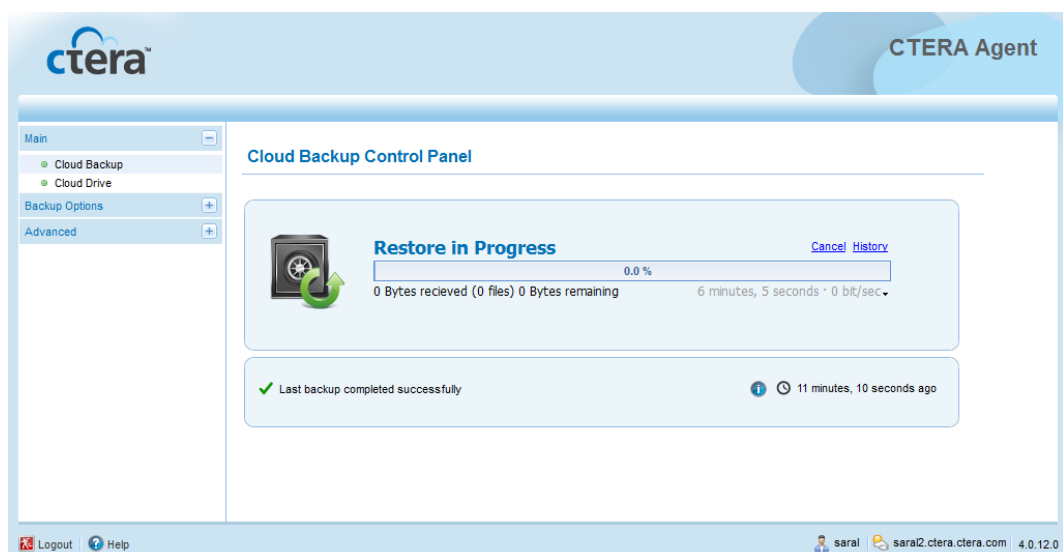
8 Click **Next**.

The **Wizard Completed** screen appears.




9 Click **Finish**.

A progress bar appears, and the files are restored from the selected backup.



10 To toggle the information displayed under the progress bar, do one of the following:

- + To display the effective throughput (in Kbit/sec), click the  icon, and then click **Show effective throughput**.

- To display the bandwidth usage (in bit/sec), click the ▾ icon, and then click **Show bandwidth usage**.

## Canceling the Current Restore Process

When restoring files from the Cloud Backup Control Panel, you can cancel a running file restore process.

### » To cancel the current restore process

- 1 In the navigation pane, click **Main > Cloud Backup**.

The **Cloud Backup Control Panel** page appears.

- 2 Click **Cancel**.

The current restore process is canceled.

## Accessing the Cloud Drive Folder

If you are subscribed to the Cloud Drive service, your cloud drive will automatically be mapped as a network drive. You can access the cloud drive and its contents using the following procedure.

By default, access to the cloud drive folder is restricted to members of group "ctera". If you would like to allow other users to access the directory, modify the directory permissions.

### » To access the cloud drive

- Navigate to `/usr/local/cloud`.

The cloud drive's contents are displayed.



# Using Pre/Post Backup Scripts

CTERA Agent includes pre-backup and post-backup scripts, which are shell scripts that are executed before and after the backup, respectively. You can use these scripts to perform necessary actions before the backup (for example, dumping a database to a file) and after the backup (for example, deleting temporary files that were created by the pre-backup script).

## Tip



The scripts are supported both in Cloud Agent mode and Appliance mode.

The scripts return an exit code of 0 for success or any other value for failure. Upon failure, the pre-backup script's output is automatically saved to `/etc/ctera/pre-backup.log`, and the post-back script's output is automatically saved to `/etc/ctera/post-backup.log`.

## Tip



The pre-backup and post-backup scripts are executed or terminated as follows:

- + If the pre-backup script fails, the backup process does not run, and the post-backup script is executed immediately.
- + The post-backup script is executed regardless of whether the pre-backup script succeeded or failed.
- + If the user cancels backup, both the pre-backup and post-backup scripts will still run to completion.
- + If a script runs longer than 20 minutes, an error is considered to have occurred, and the script is terminated.

## Tip



It is necessary to set the executable permission for these scripts.

## » To use the pre-backup or post-backup script

- 1 Open the desired script in any text editor.

The location of the pre-backup script is: `/etc/ctera/pre-backup.cmd`

The location of the post-backup script is: `/etc/ctera/post-backup.cmd`

- 2 Edit the script as desired.

Here is an example of a pre-backup script:

```
#!/bin/bash
```

```
# Prepare for backup here...  
  
/usr/local/mydatabase/dump-database > /backup-files/db-dump  
  
# This script returns success result code  
  
exit 0
```

Here is an example of a post-backup script:

```
#!/bin/bash  
  
# Clean up  
  
rm -f /backup-files/db-dump  
  
# This script returns success result code  
  
exit 0
```

### 3 Save the script.

# Legal Information

This chapter contains important legal information about your CTERA products.

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