



BlackPearl Eon Browser

User Guide



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Part Number

90990126 Revision B

Revision History

Revision	Date	Description
A	February 2017	Initial release.
B	February 2018	Updated for the Eon Browser 2.1.6 release.

Note: To make sure you have the most current version of this guide check the Spectra Logic Technical Support portal at support.spectralogic.com/documentation/user-guides/.

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ABOUT THIS GUIDE

This guide describes how to configure, monitor, and maintain the BlackPearl® Eon Browser that allows easy transfer of data to and from the Spectra® BlackPearl Deep Storage System. The two products are referred to as the *browser*, or the *system*, respectively, in these instructions.

INTENDED AUDIENCE

This guide is intended for data center administrators and operators who maintain and operate file storage systems. The information in this guide assumes a familiarity with computing terminology and with network connectivity protocols such as SAS, Fibre Channel, and Ethernet.

RELATED INFORMATION

This section contains information about this document and other documents related to the Spectra BlackPearl system.

Typographical Conventions

This document uses the following conventions to highlight important information:



WARNING

Read text marked by the “Warning” icon for information you must know to avoid personal injury.



Caution

Read text marked by the “Caution” icon for information you must know to avoid damaging the library, the tape drives, or losing data.



Important

Read text marked by the “Important” icon for information that helps you complete a procedure or avoid extra steps.

Note: Read text marked with “Note” for additional information or suggestions about the current topic.

This guide uses an arrow (…➤) to describe a series of menu selections. For example:

Select **Configuration** …➤ **Network**.

— means —

Select **Configuration**, then select **Network**.

Related Publications

For additional information about the Spectra BlackPearl system and the Spectra S3 interface, refer to the publications listed in this section.

Spectra BlackPearl System

The following documents related to the Spectra BlackPearl system are available on the Support Portal website at support.spectrallogic.com, and from the Documentation screen on the BlackPearl user interface.

- The *Spectra BlackPearl User Guide* provides detailed information about configuring, using, and maintaining your BlackPearl system.
- The *Spectra BlackPearl Spectra S3 API Reference* provides information on understanding and using the Spectra S3 API.

The following documents are available after logging into your Support portal account at: support.spectrallogic.com.

- The *Spectra BlackPearl Release Notes and Documentation Updates* provide the most up-to-date information about the BlackPearl system, including information about the latest software releases and documentation updates.
- The *BlackPearl Eon Browser Release Notes and Documentation Updates* provide the most up-to-date information about the BlackPearl Eon Browser, including information about the latest software releases and documentation updates.

ONLINE FORUM

Need help with Spectra Logic's S3 software development kits or the Spectra S3 API? Post your question at the Spectra Logic S3-SDK discussion forum located at: <https://developer.spectrallogic.com/forums>

CHAPTER 2

Using the BlackPearl Eon Browser

This chapter describes procedures installing and configuring the Eon Browser, as well as instructions for using the browser to transfer data to and from a BlackPearl system.

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INTRODUCTION

The Spectra BlackPearl Eon Browser provides a common graphical interface that allows you to easily move data on a host computer to a BlackPearl system, and copy data back to your host computer from the system. Data transferred to the system can then be transferred to tape or disk-based storage. The BlackPearl Eon Browser simplifies transferring data from tape or disk storage to your local host.

The BlackPearl Eon Browser is available for the Microsoft Windows[®] operating system, the Apple Mac OS[®] operating system, the Ubuntu operating system, the Fedora[®] operating system, with source files available for compilation on other Linux[®] operating systems.

- Notes:**
- The BlackPearl Eon Browser operates by moving data from the selected source location, through the host computer running the BlackPearl Eon Browser, to the destination location. This occurs even if there is a direct connection between the source and destination. This can result in slower data transfer performance depending on the host computer CPU, memory, and network configurations.
 - Communication with a BlackPearl system uses the Spectra S3 REST protocol, which is a variation of the Amazon[™] S3 protocol. The BlackPearl Eon Browser is one of many software clients using the Spectra S3 protocol that you can use to read or write data to a BlackPearl system.

REQUIREMENTS

The BlackPearl Eon Browser has the following requirements:

- The host computer where the BlackPearl Eon Browser resides must use one of the operating systems listed below:

Operating System ^a	Version
Windows	<ul style="list-style-type: none"> ▪ Windows 10 ▪ Windows 8 ▪ Windows 7 SP1 ▪ Windows Server 2008 R2 SP1 ▪ Windows Server 2012 and 2012 R2
Mac OS X	<ul style="list-style-type: none"> ▪ Mac OS X 10.9, or later
Linux ^b	<ul style="list-style-type: none"> ▪ Ubuntu Linux 12.x, 13.x, 14x, 15.x ▪ Fedora 25

a. 64-bit operating systems required.

b. Other versions of the Linux operating system can compile a version using the source files.

- The BlackPearl system must be running BlackPearl 3.2.2 software, or later.
- Files stored as objects on a BlackPearl system must follow the Amazon S3 naming guidelines. See <http://docs.aws.amazon.com/AmazonS3/latest/dev/UsingMetadata.html> for more information.
- Files stored on tape media must follow LTFS naming restrictions:
 - The colon character (:) is not allowed in LTFS file names and therefore not allowed in BlackPearl object names. The slash character (/) is also technically not allowed in LTFS file names; however, the BlackPearl software can accommodate a slash in the object name and translates it as a directory in the LTFS file system (e.g. directory1/directory2/video1.mov).
 - Directory names have a limit of 255 characters.
 - File names have a variable character limit. If you are using English ASCII characters, the limit is 1024 characters. If you are using a graphical language, such as Japanese, the limit is 512 characters.
 - Spectra Logic does not recommend the following characters in LTFS file names or BlackPearl object names for reasons of cross-platform compatibility: control characters such as carriage return (CR) and line feed (LF), double quotation mark (“), asterisk (*), question mark (?), less than sign (<), greater than sign (>), backslash (\), forward slash (/) vertical line (|).

DOWNLOAD THE BLACKPEARL EON BROWSER

Use the instructions in the following sections to download the BlackPearl Eon Browser for Microsoft Windows or Apple Mac OS operating systems.

1. Using a web browser, navigate to:

https://github.com/SpectraLogic/ds3_java_browser/releases

2. Click the software download link appropriate for your operating system. The BlackPearl Eon Browser install file begins downloading through your web browser.

INSTALL AND LAUNCH THE BLACKPEARL EON BROWSER

Use the instruction in this section to install and launch the BlackPearl Eon Browser. The instructions differ depending on which operating system is installed on your host machine.

- [Microsoft Windows](#) below
- [Apple Mac OS](#) on page 14

Microsoft Windows

1. Double click the .msi file you downloaded in [Download the BlackPearl Eon Browser](#). The setup wizard License Agreement window displays.

Note: Depending on the configuration of your host computer, the Windows operating system may display a Security Warning dialog box informing you that the publisher of the software cannot be verified. If this occurs, click **Run** to continue.

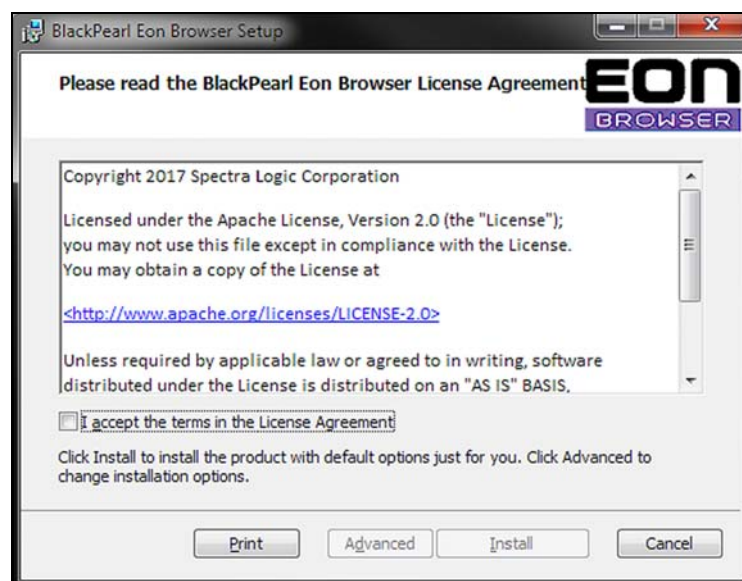


Figure 1 The BlackPearl Eon Browser Setup Wizard.

2. Select the check box to accept the terms of the license agreement.
3. Click **Install**. The BlackPearl Eon Browser installs on to your local host. The BlackPearl Eon Browser Setup Wizard window displays the final installation setup window.

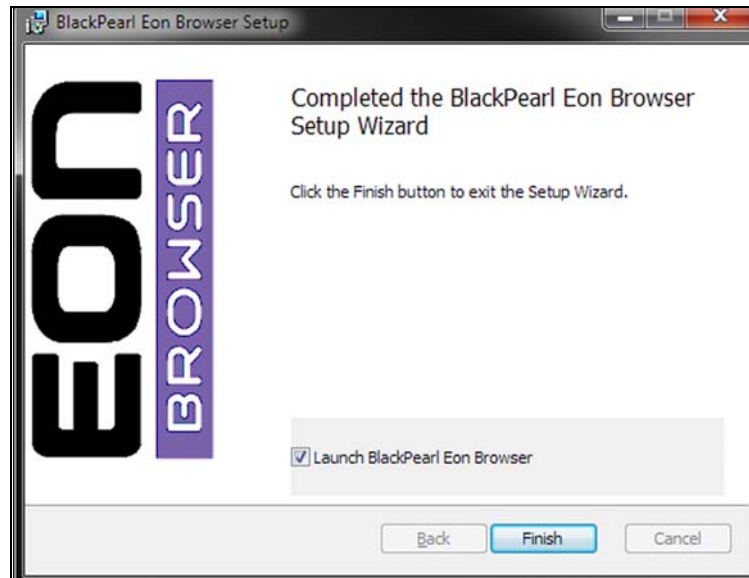


Figure 2 The BlackPearl Eon Browser Setup Wizard.

4. Select or clear **Launch BlackPearl Eon Browser**, and click **Finish** to close the setup wizard window. If you selected the option, the BlackPearl Eon Browser immediately launches.
Note: To start the BlackPearl Eon Browser after the initial launch, click the BlackPearl Eon Browser shortcut on the Start menu.
5. Continue with [Interface Overview](#) on page 15.

Apple Mac OS

1. Double-click the .dmg file you downloaded in [Download the BlackPearl Eon Browser](#) on page 13. An icon displays on the operating system desktop.
Note: The installation .dmg file includes a Mac security certificate.
2. Double-click the icon on the desktop. A window displays showing the Eon icon on the left side and the Applications folder icon on the right side.
3. Drag and drop the Eon icon onto the Application folder icon. The program installs.
4. Open the Application tab and double-click **Spectra BlackPearl Eon Browser** to launch the program.
5. Continue with [Interface Overview](#) on page 15.

INTERFACE OVERVIEW

This section provides an overview of the BlackPearl Eon Browser interface.

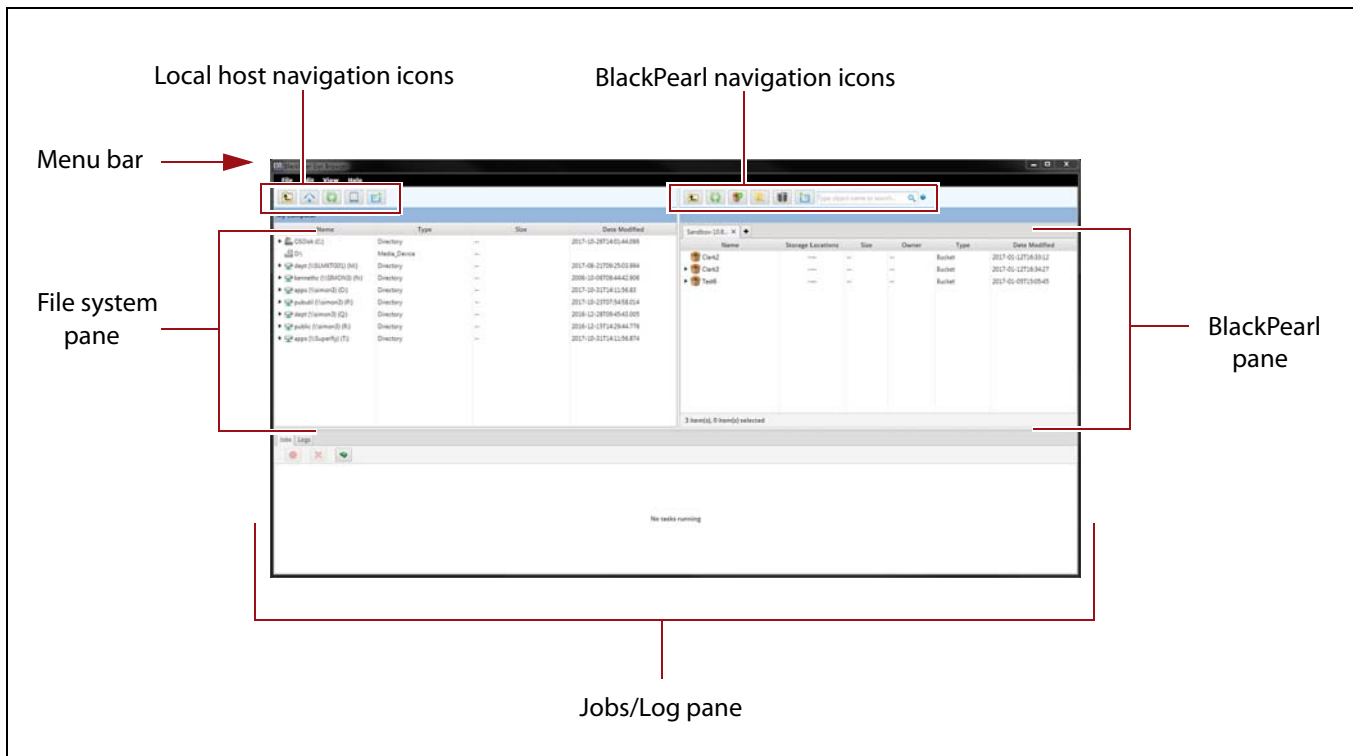












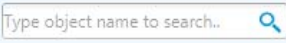













Figure 3 The BlackPearl Eon Browser main window.

Item	Description	
Menu bar	File	<ul style="list-style-type: none"> ▪ Sessions—Provides controls to create or open a session. ▪ Settings—Provides controls to configure logging, performance, and default job priorities. ▪ Exit/Quit—Closes the BlackPearl Eon Browser. Note: There is no confirmation prompt for this action.
	Edit	<ul style="list-style-type: none"> ▪ Select All—Selects all files displayed in the current pane.
	View	<ul style="list-style-type: none"> ▪ Jobs—Enable or disable the display of job information in the Jobs/Logs pane. ▪ Logs—Enable or disable the display of log information in the Jobs/Logs pane.
	Help	<ul style="list-style-type: none"> ▪ About—Displays information about the Eon Browser.

Item	Description	
File system navigation icons	Use these icons to navigate through the local and network drives available to the local host and to transfer files to a BlackPearl system.	
		Parent Directory —Click this button to navigate to the parent directory of the directory currently displayed in the file system pane.
		Home —Click this button to navigate to the user directory of the local host. For example, in the Microsoft Windows operating system, this is referred to as the “User” directory.
		Refresh —Click this button to refresh the current display in the file system pane.
		New Folder —Click this button to create a new folder in the selected bucket in the local system.
		Computer —Click this button to navigate to the computer-level directory of the local host. For example, in the Microsoft Windows operating system, this is referred to as “My Computer”.
		Transfer to BlackPearl —Click this button to copy the selected files in the file system pane to the selected bucket in the BlackPearl pane.
BlackPearl navigation icons	Use these icons to create new buckets and folders on the BlackPearl system, search the buckets for a filename, or transfer files to the local host.	
		Parent Directory —Click this button to navigate to the parent directory of the directory currently displayed in the file system pane.
		Refresh —Click this button to refresh the current display in the BlackPearl pane.
		New Bucket —Click this button to create a new bucket on the BlackPearl system assigned the user configured in the active session.
		New Folder —Click this button to create a new folder in the selected bucket in the BlackPearl system.
		Delete Objects —Click this button to delete selected files, folders, or buckets in the BlackPearl pane.
		Transfer to Local System —Click this button to copy the selected files in the BlackPearl pane to the selected location in the file system pane.
		Search —Type your desired search term into the entry box, and click the magnifying glass icon to begin a search.

Item	Description
File system pane	<p>This pane displays the following information about the contents of the currently selected location on the local host.</p> <ul style="list-style-type: none"> ▪ Name—The name of a file or directory. ▪ Type—The type of file or directory. ▪ Size—The size of the file. ▪ Date Modified—The date and time of the last time the file or folder was modified.
BlackPearl pane	<p>This pane displays the following information about the contents of the currently selected location on the BlackPearl system.</p> <ul style="list-style-type: none"> ▪ Name—The name of a file, folder, or bucket. ▪ Storage Locations—Displays icons to indicate where the file is currently persisted. ▪ Size—The size of the file. ▪ Owner—The username of the assigned owner of the bucket. Only buckets assigned to the user accessing the system using the BlackPearl Eon Browser display. ▪ Type—The type of object on the system. Values: Bucket, Directory, File. ▪ Date Modified—The date and time of the last time a file or bucket was modified.
Jobs/Log pane	<p>This pane displays either the current job list, or the current session log.</p> <ul style="list-style-type: none"> ▪ Jobs—The status of current job(s) being processed by the BlackPearl Eon Browser. If there are no active jobs this pane is blank. ▪ Log—The current session log of all commands sent to the BlackPearl system. This pane also displays any errors that occur.
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Recover Job—Click this button to recover interrupted job(s). When applicable, the number of interrupted jobs displays on the corner of the button.</p> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>View/Modify Job Priority—Click this button to view and optionally change the job priority of an in-progress transfer.</p> </div> </div>
	<div style="display: flex; align-items: center;">  <div style="margin-left: 10px;"> <p>Cancel All Running Jobs—Click this button to cancel all job(s) currently transferring data.</p> </div> </div> <div style="display: flex; align-items: center; margin-top: 10px;">  <div style="margin-left: 5px;">or</div> <div style="margin-left: 5px;"> <p>Jobs Toggle—Click this button to toggle between viewing jobs that are currently in cache, or persisted to tape.</p> </div> </div>

Item	Description	
BlackPearl pane - Storage Location column	For each file present on the BlackPearl system, the storage location icon(s) indicate where the file is stored.	
		BlackPearl Cache — The file resides in the BlackPearl system cache memory.
		ArcticBlue — The file is stored on an associated ArcticBlue™ disk solution.
		Online Disk — The file is stored on an associated BlackPearl expansion node.
		Tape — The file is stored on media in an associated tape library.
		Ejected Tape — The file is stored on media that was ejected from an associated tape library.
		Public Cloud — The file is stored on a public cloud.
	Replication — The file was replicated, by another system, to the system in the current open session.	


CONFIGURE BLACKPEARL EON BROWSER SETTINGS

The BlackPearl Eon Browser offers several options that control how the browser is used with BlackPearl systems. These settings are universal and apply to all instances of the BlackPearl Eon Browser and all BlackPearl systems configured in the browser.

Configure Logging

To aid in the troubleshooting of data transmission issues, the BlackPearl Eon Browser automatically creates log files in the specified directory.

Use the instructions in this section to enable or disable logging, and configure the directory to which logs are saved, the maximum log size, and the number of logs retained.

1. From the BlackPearl Eon Browser menu bar, select **File**  **Settings**. The Settings dialog box displays. The Logging tab opens by default.

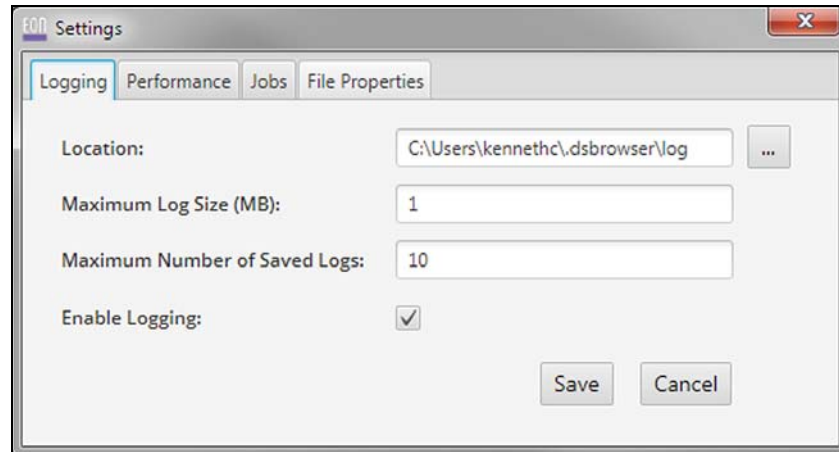


Figure 4 The Settings dialog box - Logging tab.

2. If desired, change the directory to which logs are saved by manually entering the directory path in the entry field, or click the **Browse** icon (...) and navigate to the desired directory.
3. If desired, enter a value in megabytes (MB) for the **Maximum Log Size** in the entry field. Larger log files use more space on the host computer but decrease the number of times the browser needs to start a new log.
4. If desired, enter a value for the **Maximum Number of Saved Logs** in the entry field. More log files use more space on the host computer but allow for logging over longer periods of time.
5. Select (enable) or clear (disable) **Enable Logging**.
Note: Logging is enabled by default. Spectra Logic recommends that logging remains enabled.
6. Click **Save**.

Configure Performance

Currently, the only performance option for the BlackPearl Eon Browser is the ability to set the number of parallel threads the browser uses to improve data transmission performance.

- Notes:**
- Spectra Logic recommends using three threads for 1 GigE connections, and 10-12 threads for 10 GigE connections.

- Increasing the number of threads provides better performance, but may saturate the network, resulting in connection and transmission errors. Reduce the number of threads if you experience connectivity issues.

Use the instructions in this section to configure the number of threads used by the browser.

1. From the BlackPearl Eon Browser menu bar, select **File** ⋮ **Settings**. The Settings dialog box displays. The Logging tab opens by default (see Figure 4 on page 19).
2. Click the **Performance** tab. The Performance tab displays.

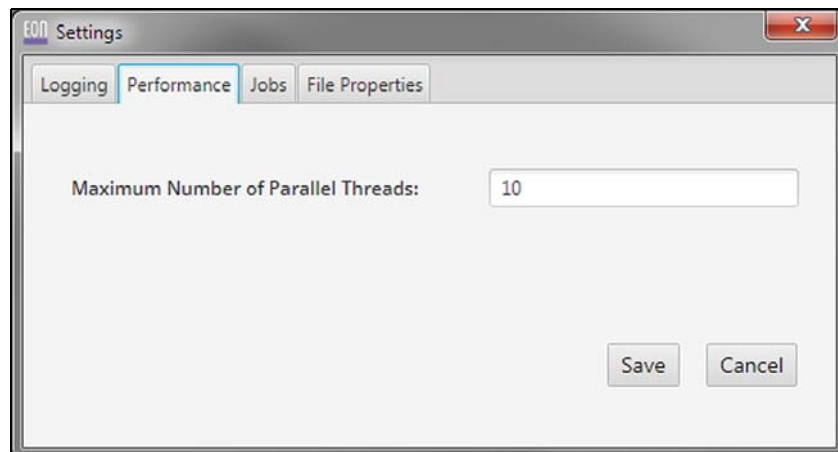



Figure 5 The Settings dialog box - Performance tab.

3. In the entry box, enter the maximum number of parallel threads.
4. Click **Save**.

Configure Job Priority

The Job Priority setting determines the resources assigned and the processing order for GET and PUT jobs. Priorities can be set manually or configured to use the default priority of the data policy configured on the BlackPearl system.

Use the instructions in this section to change the PUT or GET job priorities.

1. From the BlackPearl Eon Browser menu bar, select **File**  **Settings**. The Settings dialog box displays. The Logging tab opens by default (see [Figure 4 on page 19](#)).
2. Click the **Jobs** tab. The Jobs tab displays.

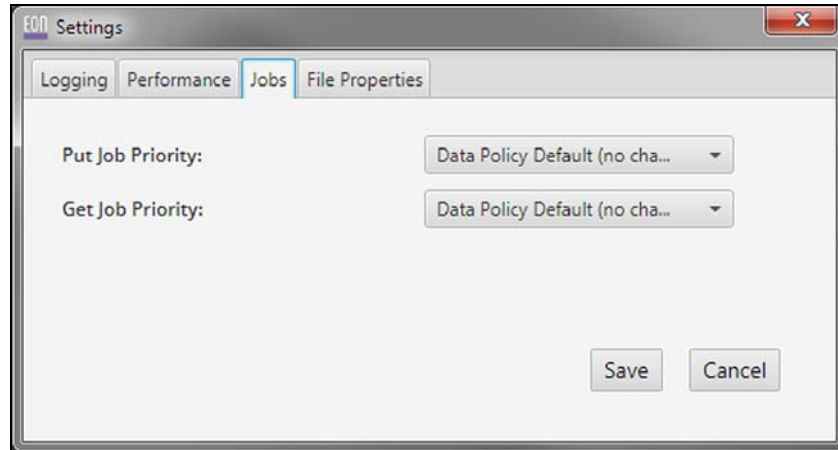


Figure 6 The Settings dialog box - Jobs tab.

3. Using the drop-down menus, select the desired priority for **Put Job Priority**, **Get Job Priority**, or both.

Note: Each priority determines the resources assigned and the processing order. Jobs with priority **URGENT** can use up all of the resources and prevent other jobs from making progress. Use this priority sparingly.

4. Click **Save**.

Configure File Properties

Each file on an operating system has file property metadata associated with it. These properties include creation date, owner, permissions, and other options, depending on the source operating system.

When Archive and Restore File Properties is enabled, the BlackPearl Eon Browser copies these file properties to the BlackPearl system along with the file itself. When you restore the file from the system, the file properties are also restored at the same time. This allows you to maintain the original file metadata information. These file properties are displayed when viewing the metadata associated with each file in the BlackPearl Eon Browser.

Note: To view the metadata, see [View File Properties on page 37](#).

Use the instructions in this section to enable or disable copying file properties to a BlackPearl system.

1. From the BlackPearl Eon Browser menu bar, select **File ... Settings**. The Settings dialog box displays. The Logging tab opens by default (see [Figure 4 on page 19](#)).
2. Click the **File Properties** tab. The File Properties tab displays.

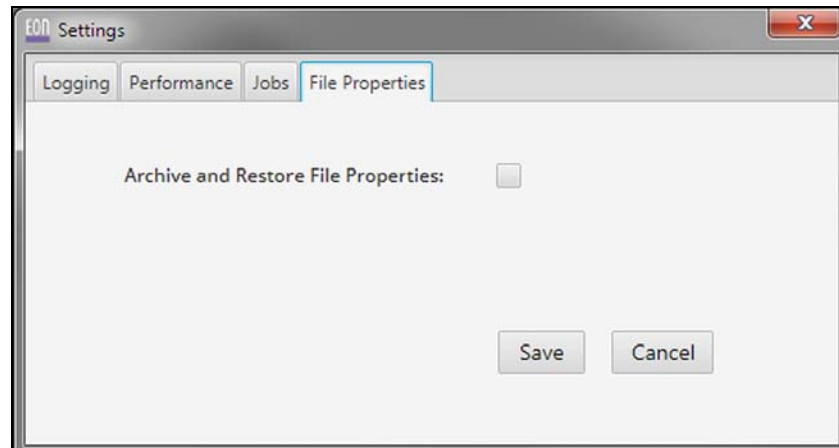


Figure 7 The Settings dialog box - File Properties tab.

3. Select (enable) or clear (disable) **Archive and Restore File Properties**.

Note: If you disable Archive and Restore File Properties, the metadata for each file is not transferred to the BlackPearl system. When the file is copied back to the host computer, the file creation date is set to the current time, and the file inherits the permissions of the parent directory.

4. Click **Save**.


USING THE BLACKPEARL EON BROWSER

The instructions in this section describes the steps necessary to associate the BlackPearl Eon Browser with one or more BlackPearl systems, and to transfer data to and from a system.

Create a New Session

Before you can transfer data to a BlackPearl system, you must associate the BlackPearl Eon Browser with a system, which is referred to as a Session.

Use the instructions in this section to create a new session.

1. If there are no sessions configured, click **New Session** in the BlackPearl pane. Otherwise, from the BlackPearl Eon Browser menu bar, select **File**  **Sessions**.

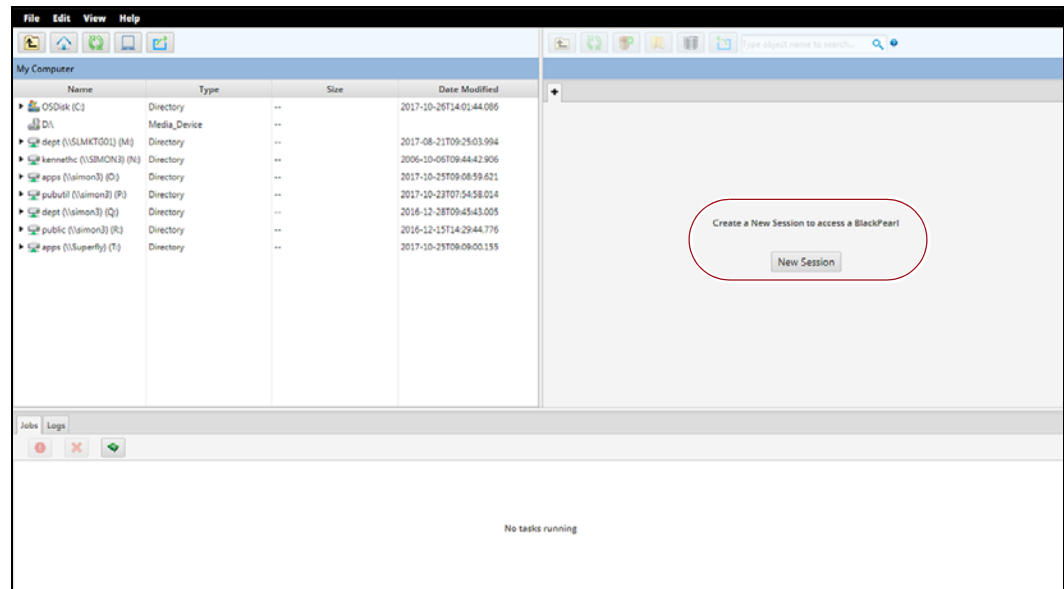


Figure 8 The BlackPearl Eon Browser main window.

The Sessions dialog box displays.

Note: If you previously configured one or more sessions, they display in the Select Existing pane of the Sessions dialog box.

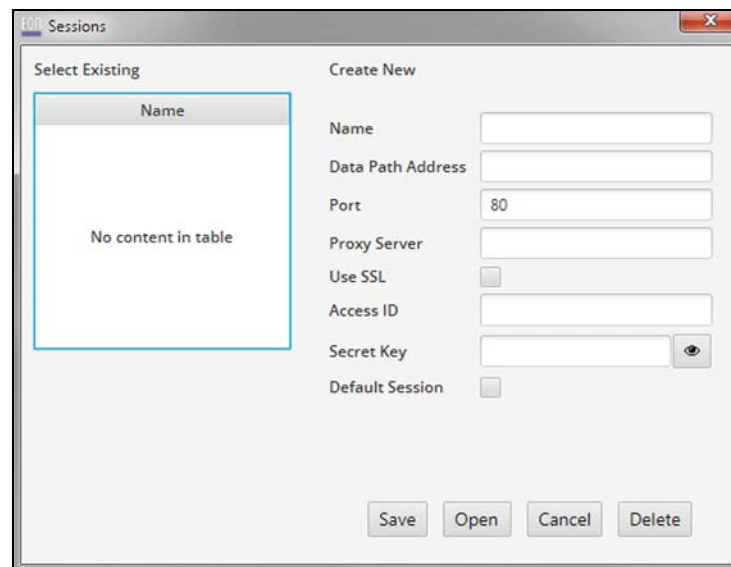


Figure 9 The Sessions dialog box.

2. Enter a **Name** for the session. There are no character restrictions for a session name.

3. Enter a valid IPv4 address, or hostname, for the **Data Path Address**. This is the IP address of the data port on the BlackPearl system.
Note: If necessary, see the *Spectra BlackPearl User Guide* for instructions on determining the data port IP address.
4. Enter the **Port** on which BlackPearl target system's S3 server is running.
5. If necessary, enter a valid IPv4 address for the **Proxy Server**.
6. Select the **Use SSL** check box to configure the browser to encrypt data while transferring it to the BlackPearl system. Data is encrypted using Secure Socket Layer (SSL).
7. Enter the **Access ID** and **Secret Key** for a user currently configured on the target BlackPearl system.
Notes:
 - Only the buckets assigned to the user specified in a session are accessible using the BlackPearl Eon Browser.
 - Click the "eye" button to display or hide the characters in the Secret Key field.
8. Select the **Default Session** check box to configure this BlackPearl system as the default session for the Eon Browser. The Eon Browser automatically opens the default session when the program is launched.
9. Click **Save**. The BlackPearl Eon Browser attempts to connect to the specified system using the settings configured above. A success dialog box displays.
Note: If the browser fails to connect to the system, an error message displays indicating an authentication problem. If needed, verify the settings above and try again.

- Click **OK**. The Sessions dialog box displays showing the newly created session in the Select Existing pane.

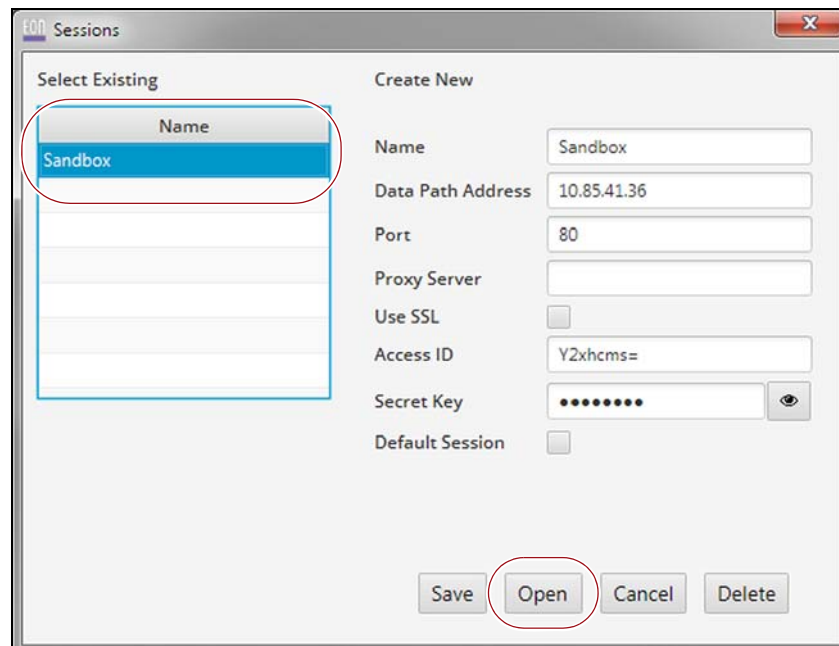


Figure 10 The Sessions dialog box displaying a previously configured session.

- Highlight the session you want to open and click **Open**. The BlackPearl Eon Browser window displays. The selected session displays in the BlackPearl pane.

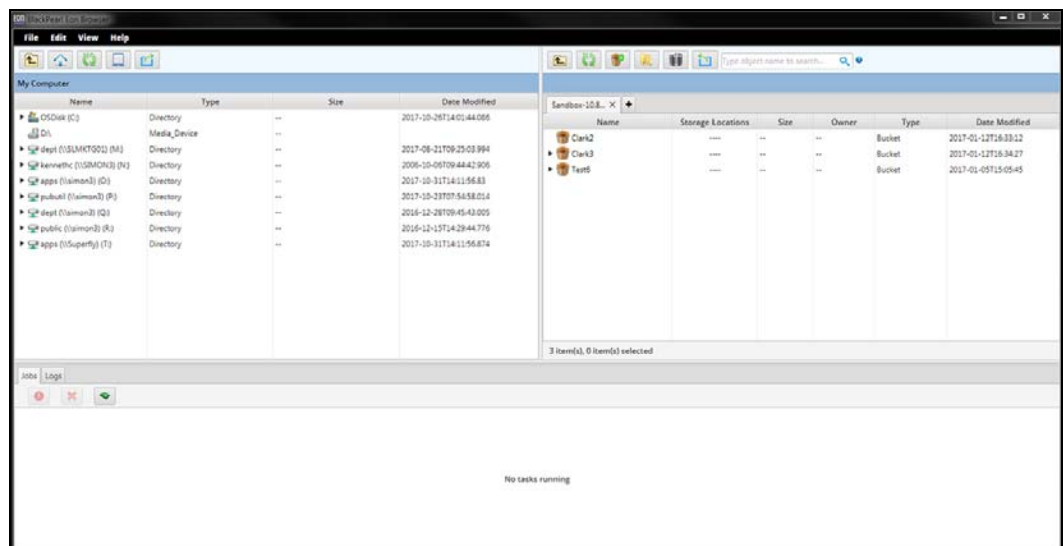


Figure 11 The BlackPearl Eon Browser main window displaying an open session.

Open an Existing Session

After you create a session, every time you launch the BlackPearl Eon Browser, you must open the session manually. Use the instructions in this section to open a previously created session.

1. From the BlackPearl Eon Browser menu bar, select **File** ▾ **Sessions**. The Sessions dialog box displays. Previously created sessions display in the Select Existing pane (see [Figure 10 on page 25](#)).
2. Highlight the session you want to open and click **Open**. The main BlackPearl Eon Browser window displays. The selected session displays in the BlackPearl pane.

Navigating and Searching Files, Folders, and Buckets

The BlackPearl Eon Browser allows you to quickly and easily navigate and search the file structure on the BlackPearl system. You can select to search the entire system, a selected group of buckets, or a single bucket.

- Notes:**
- Search terms are case sensitive.
 - If you select one or more bucket(s), the browser only searches in the selected buckets.
 - The browser only searches for bucket, folder, and filenames. The browser does not search metadata.

Navigating Buckets and Folders

Use the tips below to help you navigate the filesystem structure on a BlackPearl system.

- Click the arrow icon (>) to the left of a bucket or folder to display the contents as a sub list, with the upper level directory structure remaining visible in the pane.
- Double-click a bucket or folder to change the view of the BlackPearl pane to the level of the bucket or folder, with only the contents displayed in the pane. Click the **Parent Directory** button to return to the previous view.

Note: These functions also work on the host file system pane.

Search the BlackPearl System or Specified Bucket(s)

1. In the BlackPearl pane of the browser, select the bucket you want to search. To search multiple buckets, CTRL+click to select individual buckets, or SHIFT+click to select a consecutive range of buckets.

Note: Do not select any buckets if you want to search the entire BlackPearl system.

2. Click the search window.
3. Type the search term and press **Enter** on your keyboard.

When the search results are displayed, click the red **X** in the search window to return to the previous display.

CREATE BUCKETS AND FOLDERS

The BlackPearl Eon Browser allows you to create buckets and folders within buckets without the need to use the BlackPearl user interface.

Buckets created through the BlackPearl Eon Browser must specify an existing data policy on the BlackPearl system. The BlackPearl Eon Browser does not have the functionality to create data policies, so the BlackPearl user interface must be used to create data policies and the associated storage domains. Contact the administrator for your BlackPearl system to understand the configured storage architecture, and which data policies to use when creating buckets.

For more information, see the *Spectra BlackPearl User Guide*.

Create a Bucket

When creating a bucket, you specify the name and data policy for the bucket. The owner of the bucket is set automatically to the user configured in the current session.

Use the instructions in this section to create a new bucket.

Note: For more advanced options when creating a bucket, use the BlackPearl user interface and see the *Spectra BlackPearl User Guide* for instructions.

1. On the BlackPearl Eon Browser menu bar, click the **New Bucket** icon.

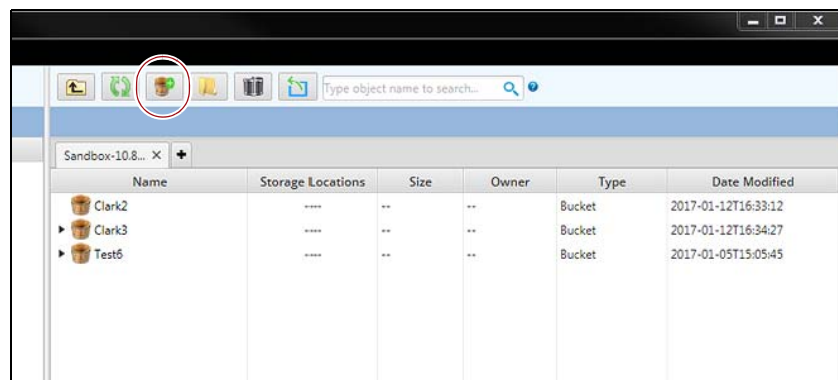


Figure 12 The New Bucket icon.

The New Bucket dialog box displays.

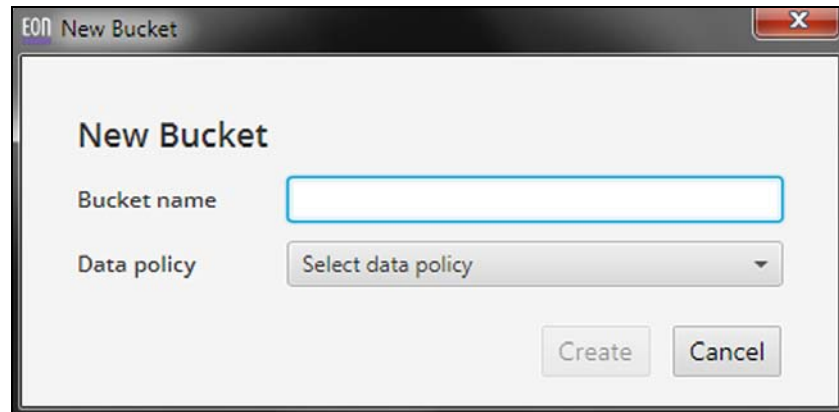


Figure 13 The New Bucket dialog box.

2. Enter a **Bucket name** for the bucket.
 - Notes:**
 - The bucket name cannot use the colon (:), forward slash (/), or space () characters.
 - The bucket name cannot exceed 255 characters.
3. Using the drop-down menu, select a previously created **Data policy** for the bucket.
4. Click **Create**. The new bucket displays in the BlackPearl pane of the BlackPearl Eon Browser.

Create a Folder

If desired, you can create one or more folders in a bucket to help organize data transferred to the BlackPearl system. Use the instructions in this section to create a new folder.

1. In the BlackPearl pane, select the bucket in which you want to create a new folder.
2. On the BlackPearl Eon Browser menu bar, click the **New Folder** icon.

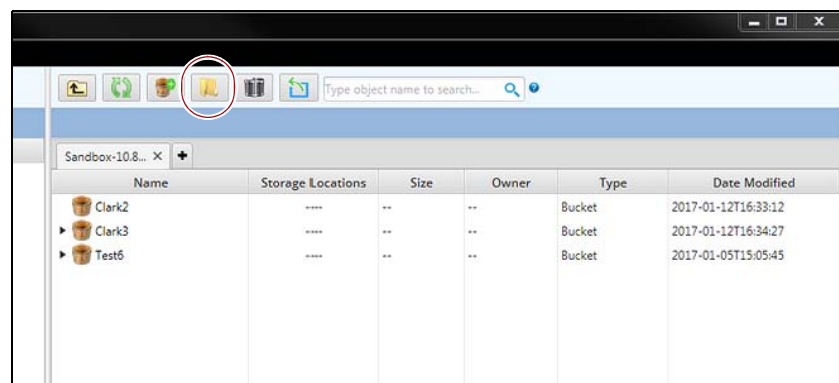


Figure 14 The New Folder icon.

3. The Create Folder dialog box displays.

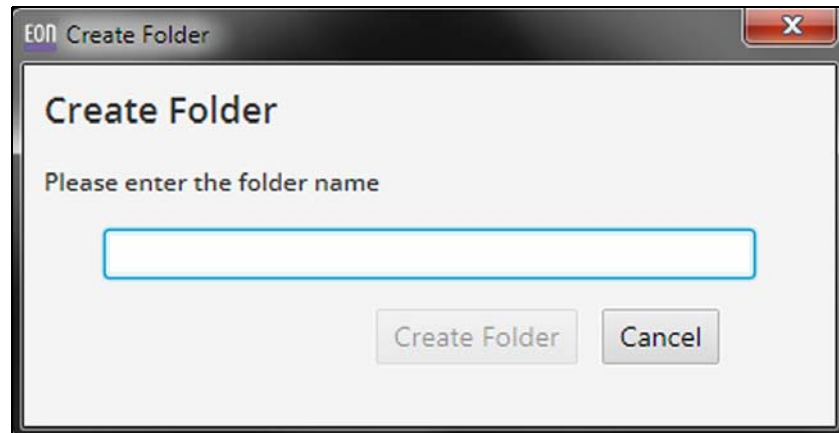


Figure 15 The Create Folder dialog box.

4. Enter a **Folder name** for the folder.
5. Click **Create Folder**. The new folder displays in the BlackPearl pane of the BlackPearl Eon Browser.

Editing the Properties of a Bucket or Folder

It is not possible to edit the properties of an existing bucket or folder using the BlackPearl Eon Browser. See the *Spectra BlackPearl User Guide* for instructions.

TRANSFER FILES

The BlackPearl Eon Browser simplifies transferring files between your host machine and a BlackPearl system. Use the instructions in this section to transfer files to or from a BlackPearl system.

Transfer Files to the BlackPearl System

Use the instructions in this section to transfer a copy of files from a host to a BlackPearl system.

1. If necessary, open a session as described in [Open an Existing Session on page 26](#). The main BlackPearl Eon Browser window displays. The selected session displays in the BlackPearl pane.
2. In the file system pane, select the files you want to transfer to the BlackPearl system.

Notes: ■ To select a consecutive group of files or folders, click the first item, press and hold down the **Shift** key, and then click the last item.

- To select nonconsecutive files or folders, press and hold down the **Ctrl** key, and then click each item that you want to select.

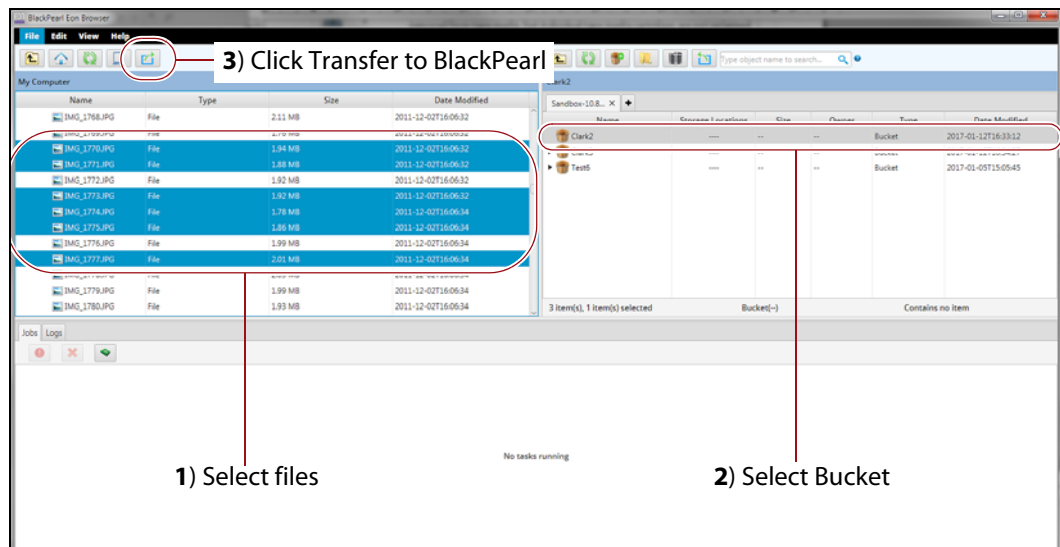


Figure 16 The BlackPearl Eon Browser main window displaying an open session and files selected on the host machine, ready for transfer.

3. In the BlackPearl pane, select the bucket or folder into which you want to transfer files.
4. Click the **Transfer to BlackPearl** icon to begin the transfer. Alternatively, you can drag the selected files and drop them on the name of the bucket or folder where you want to store the files. The transfer job status displays in the Jobs pane.

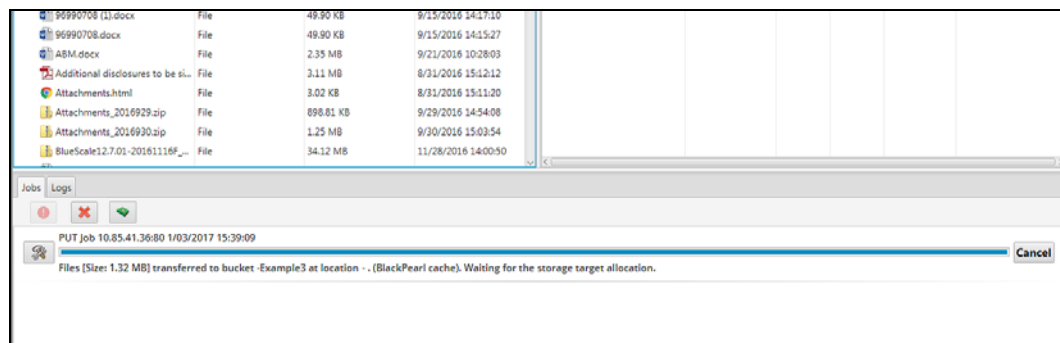


Figure 17 The Jobs pane displaying an in-progress data transfer.

Note: Files transferred to a BlackPearl system are not deleted from the host.

Transfer Files from the BlackPearl System

Use the instructions in this section to transfer files from a BlackPearl system to a local host.

1. If necessary, open the existing session as described in [Open an Existing Session on page 26](#). The main BlackPearl Eon Browser window displays. The selected session displays in the BlackPearl pane.
2. In the BlackPearl pane, open the bucket or folder containing the files you want to transfer to the local system and select the files.

- Notes:**
- To select a consecutive group of files or folders, click the first item, press and hold down the **Shift** key, and then click the last item.
 - To select nonconsecutive files or folders, press and hold down the **Ctrl** key, and then click each item that you want to select.
 - Only the buckets and files assigned to the user specified in a session are accessible using the BlackPearl Eon Browser.

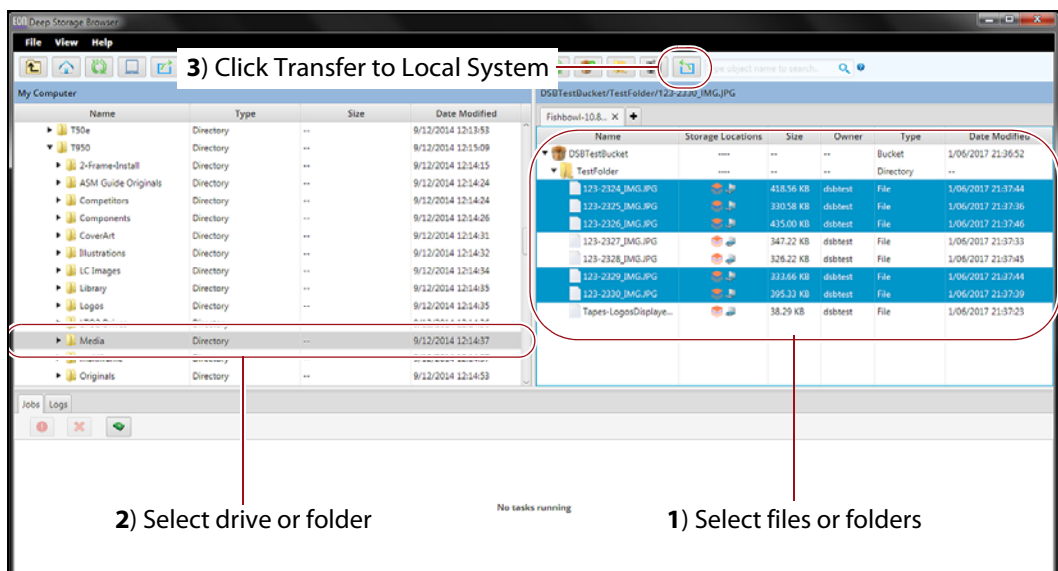


Figure 18 The BlackPearl Eon Browser main window displaying an open session and files selected on the BlackPearl system, ready for transfer.

3. In the file system pane, select the drive or folder into which you want to transfer files.
4. Click the **Transfer to Local System** icon to begin the data transfer. Alternatively, you can drag the selected files or folders and drop them on the name of the drive or folder where you want to store the files.

- Notes:**
- If the amount of data transferred to the local host is greater than the available space on the local host, the transfer fails.
 - Files transferred to a host are not deleted from the BlackPearl system.

Change an In-Progress Transfer Priority

If desired, you can change the priority of an in-progress transfer so that it processes sooner or later than other in-progress transfers.

Use the instructions in this section to change an in-progress transfer priority.

1. While a job is transferring, click **View/Change Job Priority** next to the job for which you want to change the priority. The Change Job Priority dialog box displays.

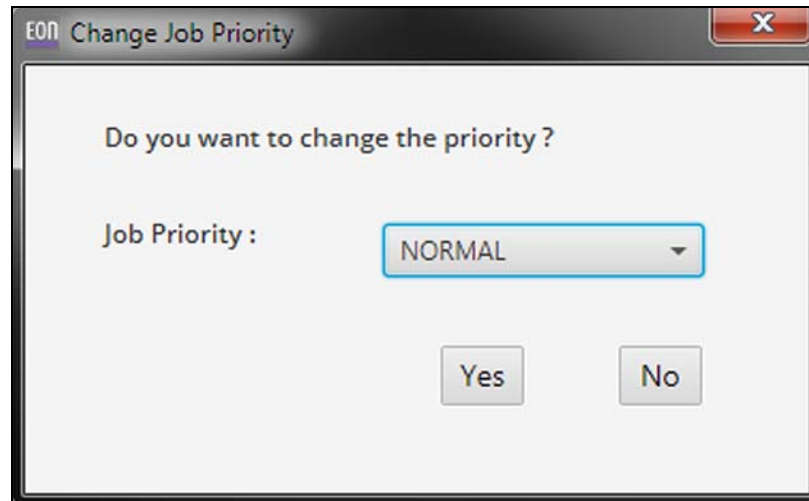


Figure 19 The Change Job Priority dialog box.

2. Use the **Job Priority** drop-down menu to select a new priority for the job.
Note: Jobs with priority **URGENT** can use up all of the resources and prevent other jobs from making progress. Use this priority sparingly.
3. Click **Yes**.

Cancel an In-Progress Data Transfer

For various reasons, you may want to stop a data transfer currently in-progress.

Use the instructions in this section to cancel a data transfer.

While the files are transferring to or from a BlackPearl system, the status of the transfer shows in the Jobs pane. For each job in progress, a status line displays while files are being transferred.

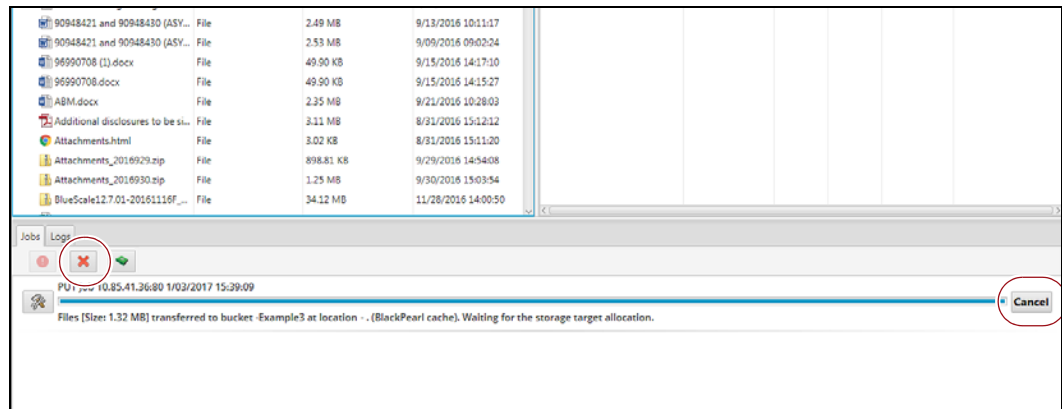


Figure 20 Click **Cancel** to stop an in-progress job.

- To stop a single in-progress data transfer job, click **Cancel** on the job status line.
- To stop all in-progress jobs, click the red **X** at the top of the Jobs pane.

Recover Interrupted Jobs

If a transfer is interrupted, for example if the Ethernet connection is lost in the middle of the transfer, the BlackPearl Eon Browser allows you to recover the interrupted job(s) and restart them. When restarted, the browser only transfers data that is remaining in the transfer queue.

1. If necessary, use the method appropriate for your operating system to launch the browser and open the session that experienced the transfer interruption as described in [Open an Existing Session on page 26](#).
2. In the jobs pane, the **Interrupted Jobs** icon (an exclamation point in a red circle) displays the number of interrupted jobs.



Figure 21 The Jobs/Logs pane indicating an interrupted job.

3. Click the **Interrupted Jobs** icon. The Interrupted Jobs of (*session IP address*) dialog box displays.

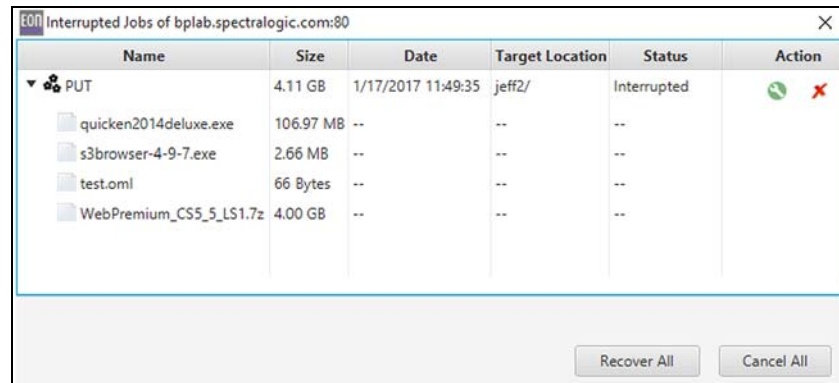


Figure 22 The Interrupted Jobs dialog box.

Use the instructions below to recover or cancel job(s).

Recover Job(s)

- To recover a single interrupted job, click the **Recover Job** icon (a wrench in a green circle).
- To recover all interrupted jobs, click **Recover All**.

The BlackPearl Eon Browser transmits the remaining files in the job to the BlackPearl system.

Cancel Job(s)

- To cancel a single interrupted job, click the **Cancel Job** icon (a red X).
- To cancel all interrupted jobs, click **Cancel All**.

The BlackPearl Eon Browser clears the job(s) from the transmission queue.

Delete Files on a BlackPearl System Using the BlackPearl Eon Browser

If desired, you can delete file(s) previously transferred using the BlackPearl Eon Browser.



Caution

Files deleted using the BlackPearl Eon Browser cannot be recovered after the deletion completes.

Use the instructions in this section to delete one or more file(s).

1. In the BlackPearl pane of the BlackPearl Eon Browser, select the files you want to delete.
 - Notes:**
 - To select a consecutive group of files or folders, click the first item, press and hold down the **Shift** key, and then click the last item.
 - To select nonconsecutive files or folders, press and hold down the **Ctrl** key, and then click each item that you want to select.
2. From the BlackPearl Eon Browser menu bar, click the **Delete Objects** icon. The Delete Files confirmation window displays.

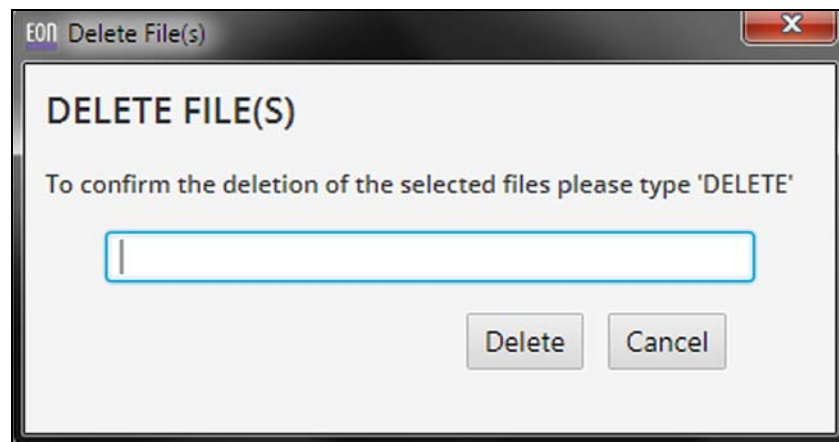


Figure 23 The Delete Files confirmation window.

3. Type `DELETE` into the entry field.
4. Click **Delete**. All selected files immediately delete.



Important

When data that is persisted on tape media is deleted from a bucket, it is marked as deleted, but individual tape media cartridges are not reclaimed for use until all data is deleted from a tape cartridge.

Delete a Bucket

If desired, you can delete an existing bucket using the BlackPearl Eon Browser.

Note: Before you can delete a bucket, you must delete all files in the bucket. See [Delete Files on a BlackPearl System Using the BlackPearl Eon Browser on page 34](#) for instructions for deleting files.

1. In the BlackPearl pane of the BlackPearl Eon Browser, right-click on the bucket you want to delete.

2. From the drop-down menu select **Delete Bucket**. The Delete Bucket confirmation window displays.

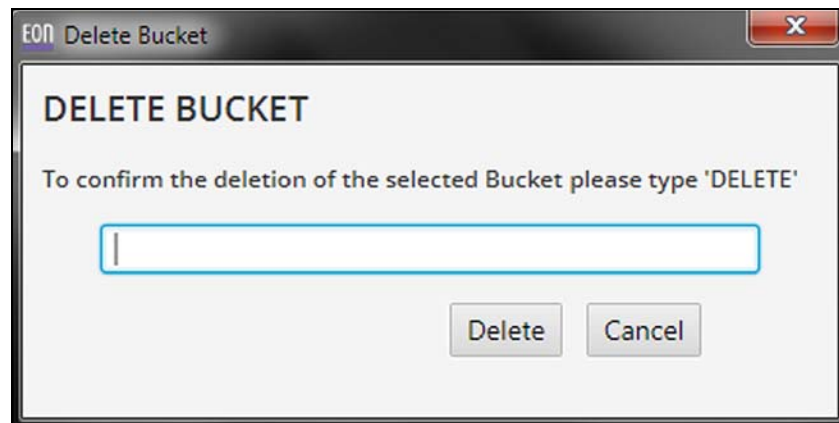


Figure 24 The Delete Bucket confirmation window.

3. Type `DELETE` into the entry field.
4. Click **Delete**. The bucket immediately deletes.



Important

When a bucket containing data that is persisted on tape media is deleted, it is marked for deletion, but individual tape media cartridges are not reclaimed for use until all data is deleted from a tape cartridge.

Delete a Folder

If desired, you can delete an existing folder using the BlackPearl Eon Browser.



Caution

Deleting a folder using the BlackPearl Eon Browser deletes all files contained in the folder, which cannot be recovered after the deletion completes.

1. In the BlackPearl pane of the BlackPearl Eon Browser, right-click on the folder you want to delete.

2. From the drop-down menu select **Delete Folder**. The Delete Folder confirmation window displays.

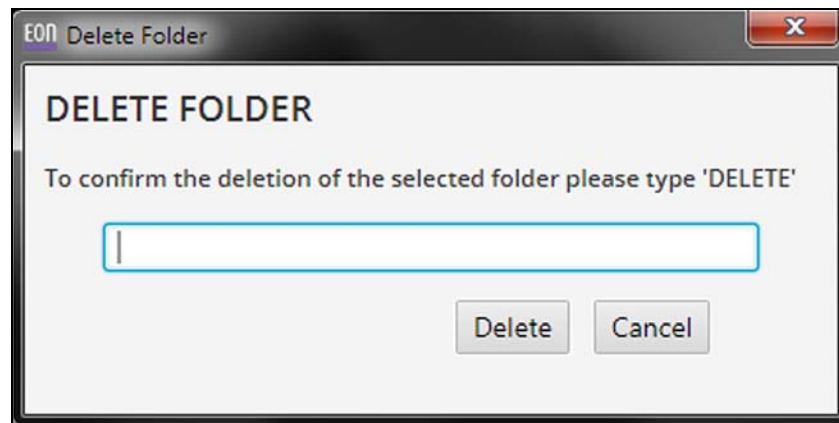


Figure 25 The Delete Folder confirmation window.

3. Type `DELETE` into the entry field.
4. Click **Delete**. The folder and all files contained in the folder immediately delete.



Important

When a folder containing data that is persisted on tape media is deleted, it is removed from tape media, but individual tape media cartridges are not reclaimed for use until all data is deleted from a tape cartridge.

VIEW OBJECT PROPERTIES

The BlackPearl Eon Browser allows you to view the properties associated with a file, and to view the physical locations (disk, tape, or replication target) where a file is persisted.

View File Properties

Use the instructions in this section to view the properties of a file.

1. In the BlackPearl pane of the BlackPearl Eon Browser, right-click on the file for which you want to view properties.

Note: You can only view the properties of a single file at a time.

- From the drop-down menu select **File Properties**. The File Properties window displays, listing any information for the file.

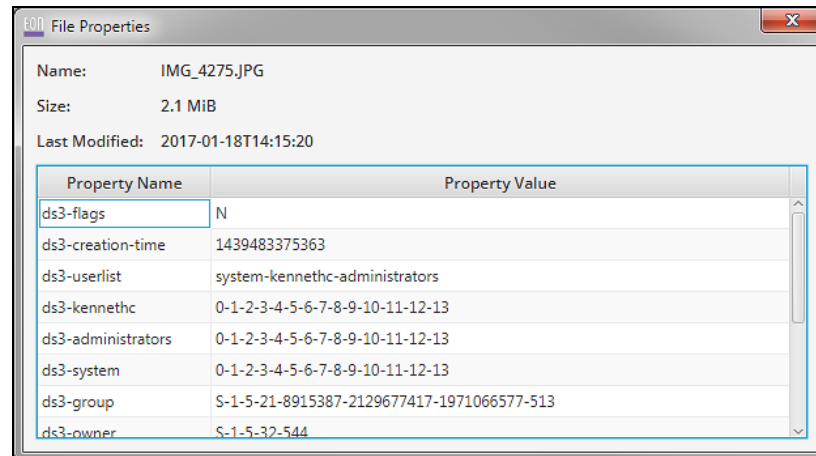


Figure 26 The File Properties window.

- Click the red **X** to close the File Properties window.

View Physical Placement

Use the instructions in this section to view the physical placement of a file or bucket.

- In the BlackPearl pane of the BlackPearl Eon Browser, right-click on the file or bucket for which you want to view the physical placement.

Note: You can only view the physical placement of a single file or bucket at a time.

- From the drop-down menu select **Physical Placement**. The Physical Placement Location information window displays, listing the storage pools, tapes, and/or replication targets where the file or bucket is persisted.



Figure 27 The Physical Placement Location informational window.

- Click the red **X** to close the Physical Placement Location window.