



BlackPearl and Globus Deliver Affordable Hybrid Storage for Research Institutions

Why Spectra® BlackPearl® Converged Storage System for Globus Environments?

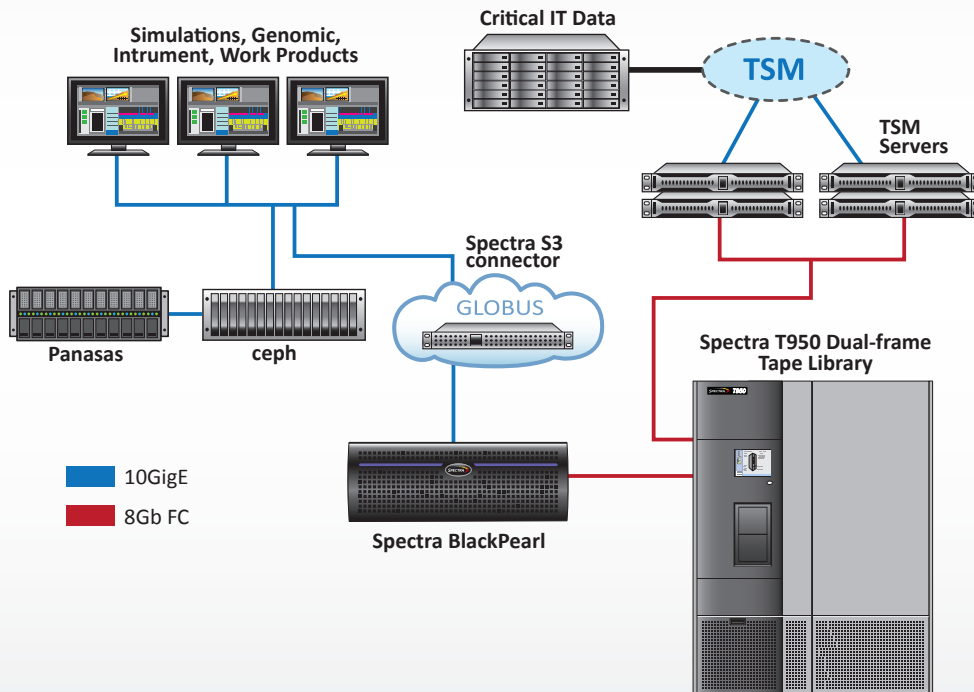
Together, Spectra and Globus seamlessly integrate to provide researchers with an end-to-end data management and archive solution. This integration allows users to manage their research data, easily connect and share their research, effortlessly archive their data on multiple storage domains and delivers affordable hybrid storage for research institutions.

How does it work?

The Spectra Logic BlackPearl connector enables use of the Globus data access interface on a Spectra BlackPearl Converged Storage System. With the Globus Connect Server and Spectra Logic BlackPearl DSI, users can easily manage endpoints.

How does BlackPearl fit into Globus workflow?

With the BlackPearl integration, Globus users can directly archive data, search, monitor transfers and performance, and restore data using the Globus Client.



System Features

Enables short and long form archive in one system

- Restore full files
- Integrate seamlessly to the cloud
- Transfer files directly to and from tape via GridFTP
- Reduce complexity associated with operating and managing disk and tape systems
- Eliminate additional ISV expenses for archiving of data

BlackPearl System Specifications

- Performance: Up to 1GB/sec
- Database: 50 million to 1 billion objects
- Drives and media: LTO, IBM® TS11XX
- Phone home support
- Spectra tape library support: T50e through TFinity® ExaScale
- Seamless scaling
- Enterprise disk: Up to 6PB of online in a single rack
- Archive disk: Up to 7.1PB in a single rack
- LTO: 1-144 drives, and up to 56,230 slots
- IBM® TS11XX: Up to 144 drives, and up to 44,910 slots



System Requirements



Basic Setup

A BlackPearl must be configured and available for network communications with Globus. Spectra Logic BlackPearl 3.5 or later is required.



Globus Requirements

A functional Globus Connect Server is required for installation and use of the Spectra Logic BlackPearl connector. A server endpoint must also be installed and configured. The Spectra Logic BlackPearl DSI should be used with the latest version of Globus Connect Server.

The screenshot shows the Globus Connect Personal web interface. At the top, there are navigation links: Manage Data, Publish, Groups, Support, and Account. Below this is a sub-navigation bar with Transfer Files, Activity, Endpoints, Bookmarks, and Console. The main heading is 'Transfer Files'. A notification bar at the top of the main content area states: 'Transfer request submitted successfully. Task id: 6e36aa6e-13e1-11e7-bb56-22000b9a448b'. Below the notification, there are two endpoint selection fields. The left field is for 'Endpoint: SpectraNAS' with a path of '/media/spectra/Data/'. The right field is for 'Endpoint: SpectraBP' with a path of '/-/Globus_TP/'. Below these fields are two file lists. The left list shows folders like 110GB, 1GB, 5GB, and lost-found, along with files named 1GB_001.bt through 5GB_9.bt. The right list shows folders 1GBfiles and mlink, and files 110GB_1.bt through 110GB_4.bt. At the bottom, there is a 'Label This Transfer' input field and 'Transfer Settings' with checkboxes for sync, delete files on destination, preserve source file modification times, verify file integrity after transfer (checked), and encrypt transfer.

Installation Overview

Once a valid Globus Connect Server installation is in place, the Spectra Logic BlackPearl DSI can be installed. First, the GridFTP BlackPearl DSI package needs to be installed for the user's platform. Once that package is installed, the user creates a file that configures the GridFTP service to use the Spectra Logic BlackPearl DSI. Then, two files must be created by the user; one with the EndPoint and AccessID File; and one that contains mappings from the local user servers to the Spectra Logic BlackPearl system. After installing the gridftp-blackpearl-dsi package and configuring the BlackPearl DSI per the above, the GridFTP service needs to be restarted.