

LSI SANtricity® ES Storage Management Software

Simulator Overview

Version 10.7 (for LSI CTS2600 Configurable Storage
Components)

June 4, 2010

Audience

Welcome to the SANtricity ES Storage Manager Simulator Overview. The audience for this overview are technically-oriented members of the sales community who wish to utilize the Simulator understand more about how SANtricity ES Storage Manager works, as well as demonstrate its capabilities to prospects.

Goals of this Document

During the sales cycle, the SANtricity ES Storage Manager Simulator can be a powerful tool in demonstrating how quickly and easily CTS2600 controller can solve business problems. This overview is designed to help users install the Simulator and become familiar with its capabilities.

Prerequisites

The SANtricity ES Storage Manager Simulator program runs on Windows 2000 or XP environments. Other environments have not been tested nor are they approved for use.

Loading the software

The SANtricity ES Storage Manager Simulator program is available from a variety of sources (CD, web, etc.) and comes as a zip file with the following name: **2600_V1.zip**.

Unzip this file into a folder of your choice. Within this folder will be the **DEMO** folder and simply navigate there and execute the batch file named *Start_Demo.bat*.

You're ready to go!

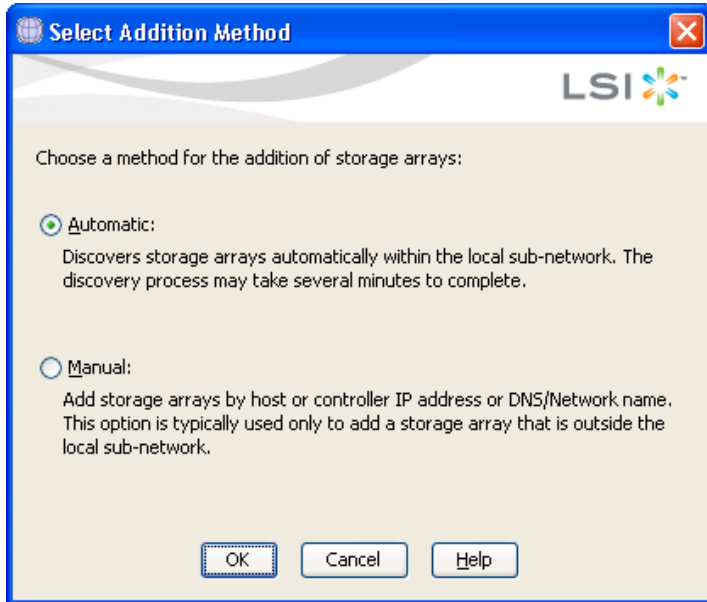
Helpful Hints

- When the installation of the SANtricity ES Storage Manager Simulator is completed, it is *not* necessary to reboot your system before executing the *Start_Demo* batch file.
- If you have had previous versions of the Simulator installed, ghost systems may appear and have a status of *unresponsive*. To correct, simply delete any unresponsive systems and rediscover the storage systems.

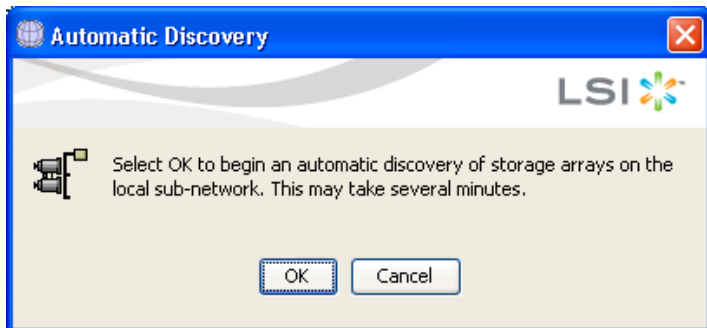
Getting Started

Executing Start_Demo.bat starts a Java session with the SANtricity ES Storage Manager Simulator. You'll see the SANtricity ES Storage Manager splash screen followed by one of the two following screens:

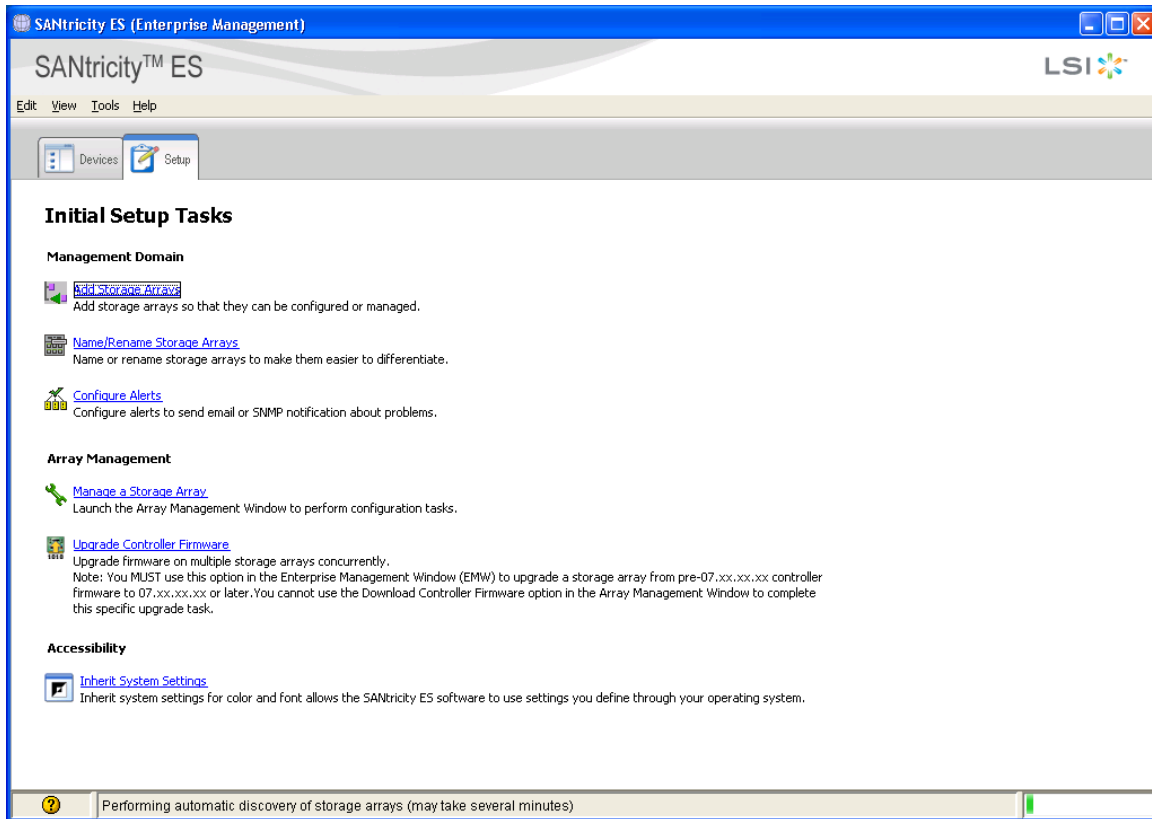
If this is the first time you've installed the SANtricity ES Storage Manager Simulator, you'll see the Select Addition Method screen asking to automatically discover storage systems. Select OK.



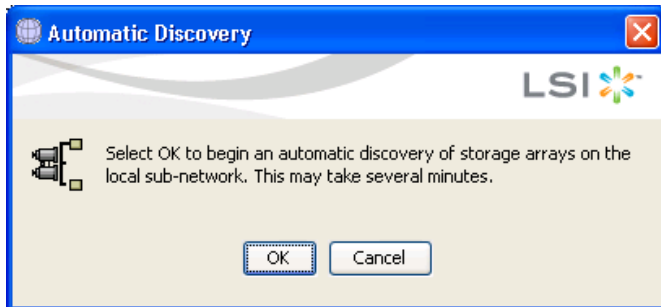
Select OK.



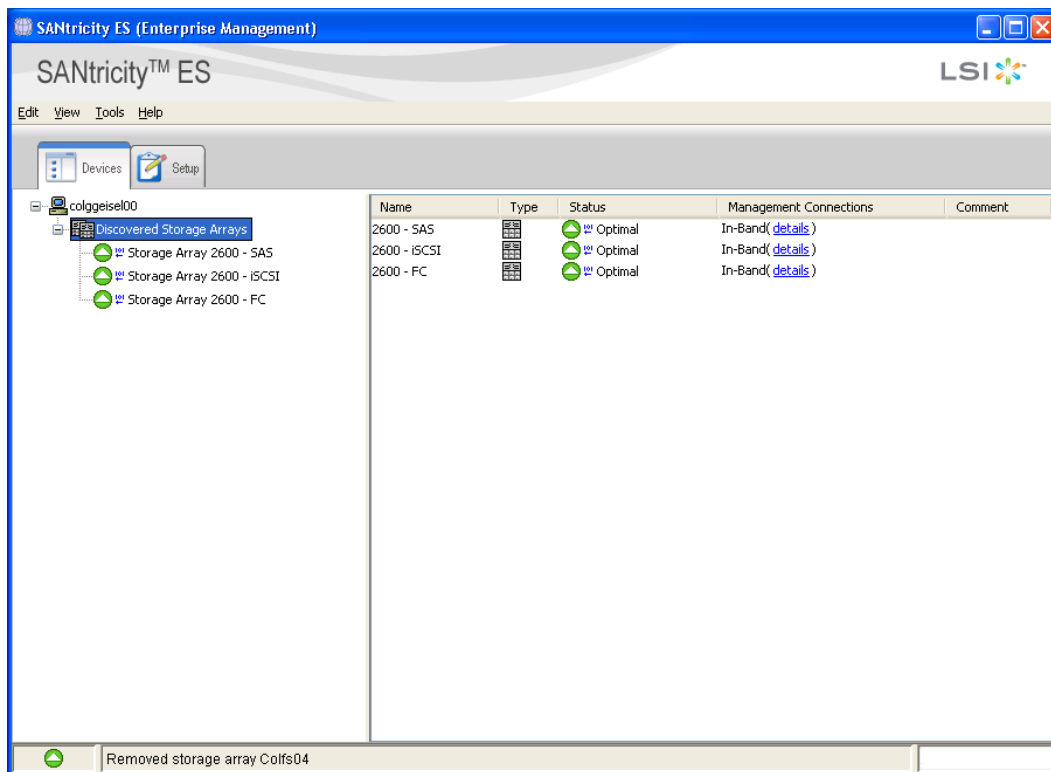
If you've had previous versions of the SANtricity ES Storage Manager Simulator, you'll see the Setup Tab in the Enterprise Management Window.



Click Add Storage Arrays, select the Automatic option from the next window and click OK, then click OK one last time.



Once the automatic discovery is complete, select the devices tab to see the systems.



As noted earlier, you may see *unresponsive* ghost systems from previous Simulator sessions. If so, simply right click on these systems and select **Remove**.

Otherwise, you will see three storage systems configured as follows:

- **CTS2600 with the SAS host interface card (2600 - SAS)** – This system has two controllers and supports 12 3.5-in drives in the first enclosure, three CDE 2600-12 enclosures, and two CD2600-24 expansion units (96 drives). All of the premium features are enabled and no RAID arrays are configured.
- **CTS2600 with the iSCSI host interface card (2600 - iSCSI)** – This system has two controller modules and supports 24 2.5-in drives in the first enclosure and three additional EXP3524 expansion units (96 drives). All of the premium features are enabled and no RAID arrays are configured.
- **CTS2600 with the FC host interface card (DS3500 iSCSI)** – This system has two controller modules and supports 12 3.5-in drives in the first enclosure and seven additional EXP3512 expansion units (96 drives). All of the premium features are enabled and no RAID arrays are configured.

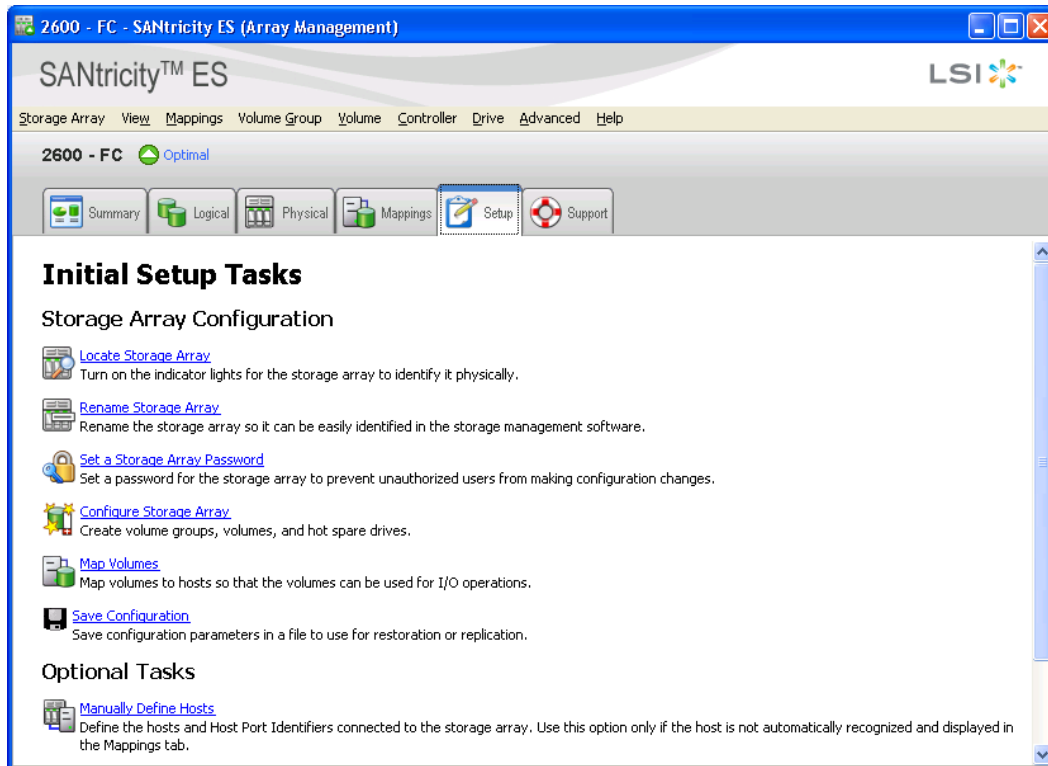
The Enterprise Management Window provides a view of all CTS2600 storage systems on your network and is an initial launch point for various tasks.

- Add Storage Arrays
- Name/Rename Storage Arrays
- Configure Alerts
- Manage a Storage Array
- Inherit System Settings

There are two options to select a system to manage:

- Click Manage a Storage Array from the Setup tab, then select the system you wish to manage; or
- Go to the Devices tab and double-click on the system you wish to manage.

Selecting the 2600 - FC will open the Array Management Window:

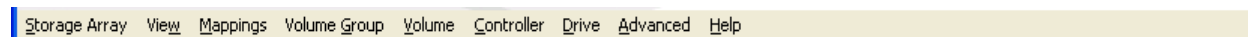


The SANtricity ES Storage Manager use interface provides multiple options to manage each system.

The Setup tab provides launch points for nearly all routine administrative tasks, including:

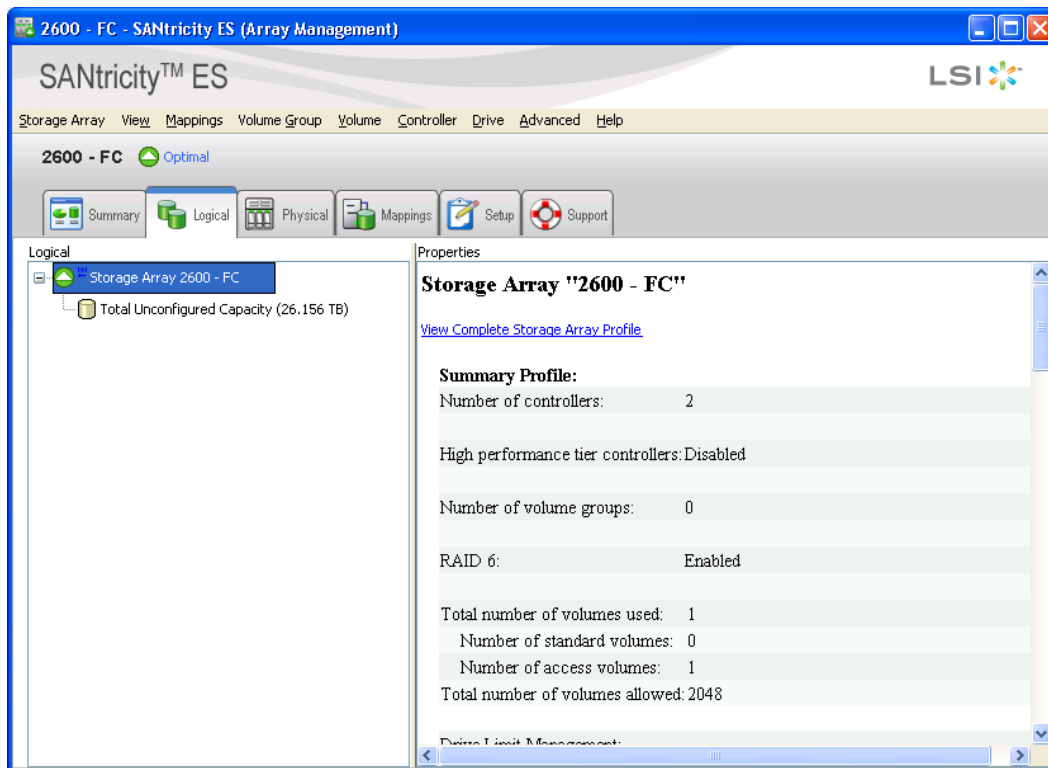
- Locate Storage Array
- Rename Storage Array
- Set a Storage Array Password
- Configure Storage Array
- Map Volumes
- Save Configuration
- Manually Define Hosts
- Configure Ethernet Management Ports
- View/Enable Premium Features

The tasks can also be accessed from the pull down menus across the top:



or by going to the Logical/Physical or Mappings tabs and right-clicking on the appropriate object, which we will demonstrate in the coming pages.

The Logical tab is the second tab accessible from the Array Management Window and contains two panes: the **Logical** pane and the **Properties** pane:

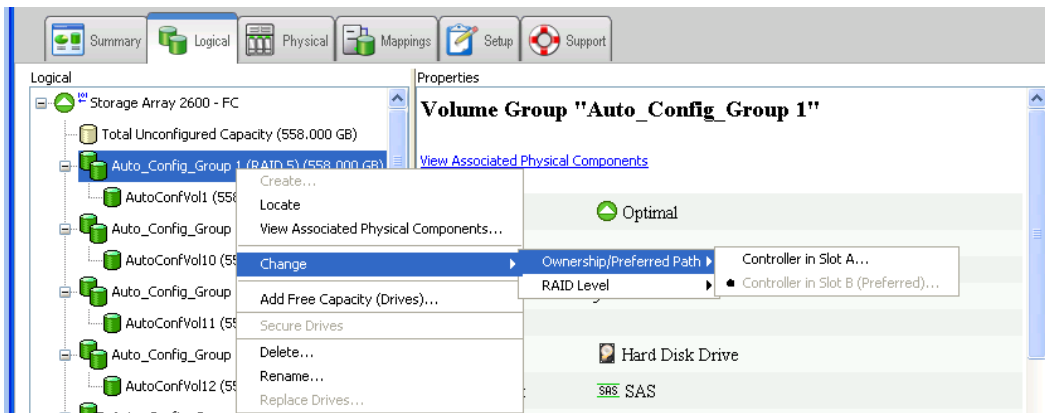


The **Logical** pane provides a tree-structured view of the storage system's disk configurations. Clicking the plus (+) sign or the minus (-) sign adjacent to the array will expand or collapse the view. These views under the storage array include un-configured capacity as well as configured volume groups and their associated volumes. Snapshot images, if any, can also be viewed from the volume in which they reside.

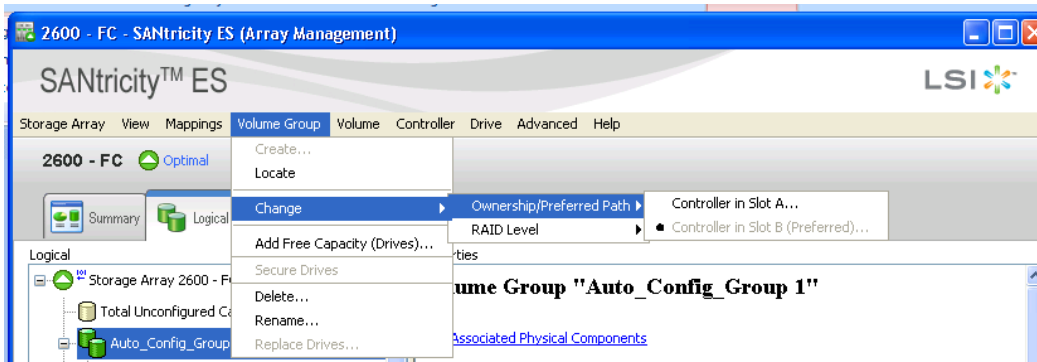
The **Properties** pane provides detailed information about the component selected in the **Logical** pane. The information varies depending on what type of component is selected. Information may include whether the component is in an optimal status, total capacity, RAID level, media and interface type as well as controller ownership.

The physical component's overview is provided in the **Properties** pane and is associated with the logical component selected in the **Logical** pane. A greater detailed view can be found by clicking a component, and selecting "View Complete Storage Array Profile". This physical view can also be retrieved by selecting the **Physical** tab which will be covered next.

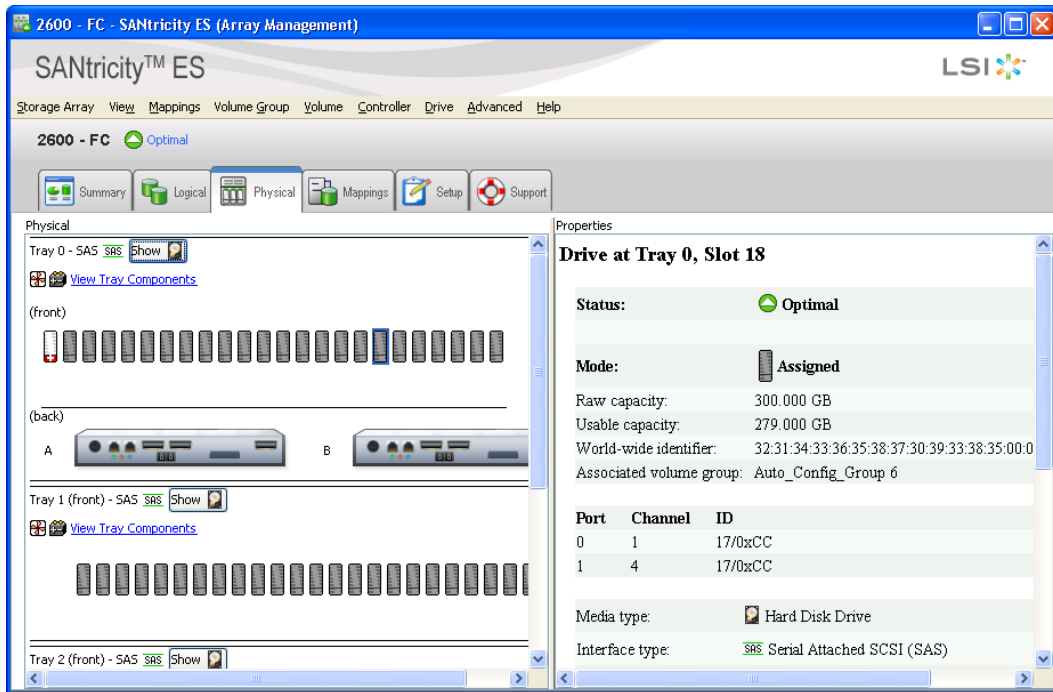
As mentioned earlier, in general, selecting an object (volume group, volume, controller, drive) and right-clicking pops up a list of commands associated with the object. The same control is also achieved by using the equivalent menu selection item. For example, right-clicking a volume group:



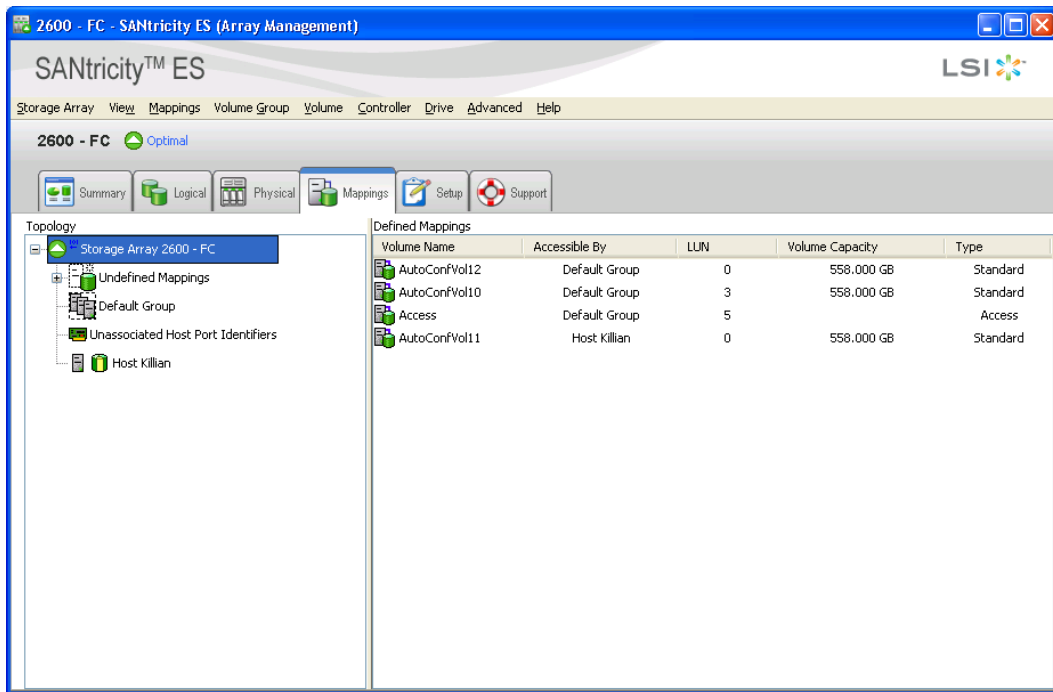
provides the same options as clicking on the Volume Group menu option:



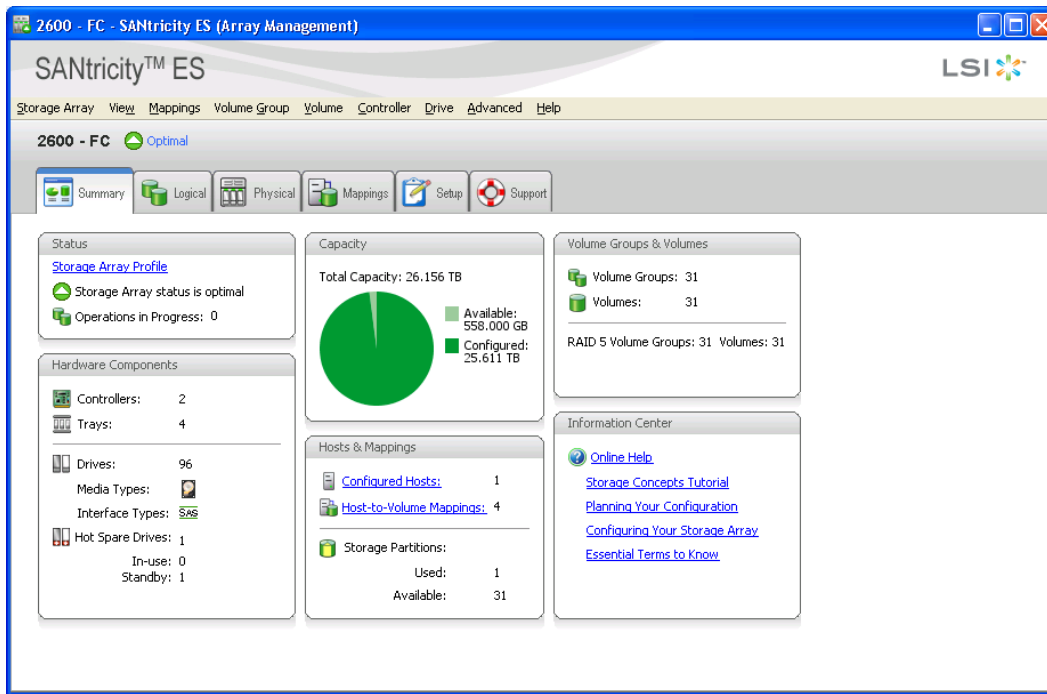
The **Physical** tab provides both a physical view of the storage system as well as detailed information regarding the physical components. Within the **Physical** tab, the **Physical** pane appears on the left and the **Properties** pane appears on the right. The **Physical** pane shows a graphical representation of the physical components in the storage system, such as the RAID controller modules and the expansion enclosures while the **Properties** pane displays detailed information about the component that is selected in the **Physical** pane.



The Mappings tab provides a view of how each logical drive is mapped to a host. Selecting the storage system shows all mappings for that storage system:



The new Summary table provides a quick view of the storage system, including status, hardware components, capacity, host and mappings, volume groups and volumes and the information center.



Setting up a Demo Environment

The unconfigured storage systems within this simulator are ideal for in-depth exploration of the SANtricity ES Storage Manager feature set. These systems can serve as a basis for demonstrating how volumes and volume groups are created, mappings are defined and premium features are utilized.