

# Getting Started Guide Drobo Model B810i



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# 1. Before You Begin

Congratulations on your new Drobo! This Getting Started Guide will help you get your Drobo set up in just a few steps. Before you begin, it's a good idea to check your system and hardware requirements. In this chapter, you will:

- View product features at a glance
- Check box contents
- Check system requirements
- Ensure that you have the hardware you need for the Drobo device

# 1.1 Product Features at a Glance

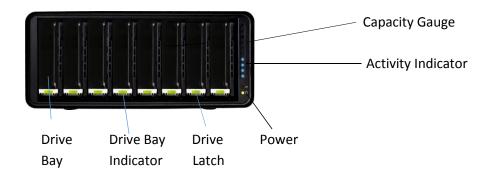


Figure 1: Front of the Drobo B810i with the Front Bezel removed



Figure 2: Back of the Drobo B810i with the Rear Bezel removed

# 1.2 Check Box Contents

Check your product's box to ensure it contains all the components listed below.

- Drobo 8-Bay SAN Storage for Business, model B810i
- 3x 6 ft. CAT6 Ethernet Cable
- One 6' Power Cord (regions specific power cord)
- Protective Bag
- Safety/Warranty Booklet
- Drobo logo decal
- 3 LED status labels one each for France, Germany and Japan

# 1.3 Check System Requirements

Check to ensure your operating system and cable interface are supported.

# 1.3.1 Operating Systems Supported for Drobo Model B810i for iSCSI connectivity

Following is the list of operating systems that Drobo B810i supports for the iSCSI connectivity (servers which use the storage space on the Drobo B810i)

- Windows Server 2012
- Windows Server 2008 R2 SP1
- Windows 10
- Windows 8/8.1
- Windows 7
- Mac OS X Server 10.10 and higher (64 bit)
- VMware vSphere 6.0 (ESXi)

### Note:

For best performance, ensure you are running the latest service packs for the appropriate Windows operating systems. For the most current list of supported operating systems, you can check the specifications for your product online <a href="www.drobo.com/products/index.php">www.drobo.com/products/index.php</a>., click **Drobo B810i** and then click the **Tech Specs** tab.

# 1.3.2 Operating Systems Supported for the Drobo Dashboard Management Application

Drobo Dashboard is the software companion to the Drobo B810i. It can be installed on client computers which connect to the Drobo B810i via a network in order to set up, manage and use the Drobo B810i. Following is the list of operating systems that support Drobo Dashboard on the client computer(s).

Windows Server 2012

- Windows Server 2008 R2 SP1
- Windows 10
- Windows 8/8.1
- Windows 7
- Mac OS X Server 10.10 and higher (64 bit)

### Note:

The iSCSI initiator for MAC systems is not included with the Drobo system. Please refer to iSCSI KB article <a href="https://myproducts.drobo.com/article/AA-01201">https://myproducts.drobo.com/article/AA-01201</a> for ATTO on MAC. For the most current list of supported operating systems, navigate to <a href="https://www.drobo.com/products/index.php">www.drobo.com/products/index.php</a>., click **Drobo B810i** and then click the **Tech Specs** tab.

# 1.3.3 Cable Interfaces Supported

Drobo B810i has three Gigabit Ethernet ports available: one dedicated management port and two iSCSI data ports.

### iSCSI (Ethernet) Data Port



ISCSI (Internet Small Computer System Interface) is an internet Protocol (IP) based networking standard for connecting storage devices to computers. By using a high performance Ethernet connection, iSCSI can be used over long distances on your existing network infrastructure. It's also ideal for high volume data storage traffic and is designed to be a direct block-level protocol that reads and writes directly to the storage device.

With two iSCSI data ports on the Drobo B810i, you can maximize performance by creating greater bandwidth and failover protection. You can configure each port to a different network so that both networks have access to the Drobo B810i. You can also connect one port directly to the host computer and the other to a network via a router.

Drobo B810i's management ("MGMT") port is used to configure network settings and perform other administrative tasks. The MGMT port can be connected to your Local Area Network (LAN) or directly to a computer.

You will configure the ports during the setup process. See "Setting Up in Just a Few Steps!" for more information.

### **Notes:**

- While the MGMT port is dedicated to management traffic (out-of-band), Drobo B810i can also be managed by a connected server through an iSCSI data port (in-band)
- Drobo B810i's iSCSI connection supports gigabit Ethernet connections (1000 Mbit/s) for optimal performance. Although your Drobo B810i will auto-negotiate the highest connection speed available to your computer, router or switch, iSCSI is designed for higher speeds and does not perform as well at slower speeds. Hence, it is recommended to use a gigabit switch for iSCSI traffic.
- A regular network adapter card is required, as Drobo, Inc., does not support iSCSI-specific cards, or HBA (host bus adapter) cards.

# 1.4 Checking the Hardware You Need

To use your Drobo B810i, you'll need at least two hard drives. If you plan to use Dual Disk Redundancy, which protects your data against two hard drive failures, you will need at least three hard drives.

### Note:

For the Drobo B810i, we recommend that you use at least four hard drives and two SSDs. This provides more data drives, better striping performance (especially with DDR enabled), and also helps distribute loads more effectively.

This section helps you:

- Select the hard drives to use with B810i
- Choose the amount of drive space (capacity) to have available on those drives to ensure Your data is protected.
- Know the basic requirements for Ethernet cables
- Know the requirements for a router or switch
- Work with your power supply
- Know the requirements for power protection

### 1.4.1 Selecting Hard Drives

You can use hard drives from any manufacturer and with any capacity (the space available on the hard drive) with your Drobo device.

### Warning:

Any pre-existing data on the drives will be erased when inserted into the Drobo B810i. If you wish to keep the data, copy it to another drive or medium before using with this Drobo device.

# 1.4.2 Determining How Much Hard Drive Space You Need

In order to protect your data from hard drive failure, your Drobo device requires more space than what you will use for your data, sometimes as much as double or more the amount of space.

The best way to determine how much usable, protected storage space you will have available for your data, based on the number and capacity of your drives, is to use our Capacity Calculator at <a href="http://www.drobo.com/storage-products/capacity-calculator/">http://www.drobo.com/storage-products/capacity-calculator/</a>

A shortcut to estimating the capacity available for your data is to omit the largest drive and then add the capacity of the remaining drives. If you plan to use Dual Disk Redundancy, omit the largest two drives. For example:

### Single Disk (Default) Redundancy

# Drives	Drive Capacities	Usable Protected Capacity*
3	6TB + 6TB + <del>6TB</del>	= 12TB
4	4TB + 4TB + 6TB + <del>6TB</del>	= 14TB
5	4TB + 6TB + 6TB + 6TB + <del>6TB</del>	= 22TB

# **Dual Disk Redundancy**

# Drives	Drive Capacities	Usable Protected Capacity*
3	6TB + <del>6TB</del> + <del>6TB</del>	= 6TB
4	4TB + 4TB + <del>6TB</del> + <del>6TB</del>	= 8TB
5	4TB + 6TB + 6TB + <del>6TB</del> + <del>6TB</del>	= 16TB

### Notes:

- Actual capacity is often less than what is shown in the examples above due to the different systems used for rating capacity. This has nothing to do with Drobo devices.
- Know that all Drobo devices enable you to easily increase storage capacity at any time by simply inserting additional drives or replacing smaller drives with larger ones.

# 1.4.3 Using a Router or Switch

Since Drobo B810i has 3 Gigabit Ethernet ports, you might need two or up to three Ethernet cables, depending on how you plan to configure and use Drobo B810i.

### Tip:

For best performance, we recommend using Category 6 (CAT6) copper Ethernet cables with RJ45 connectors. If you are connecting a Drobo B810i to a router or switch, your router or switch needs to support gigabit Ethernet connections (1000 Mbit/s) for optimal performance. Although your Drobo B810i will auto-negotiate the highest connection speed available to your router or switch, iSCSI does not perform well at slower speeds.

# 1.4.4 Using an Uninterruptible Power Supply (UPS) or Power Surge Protector

We highly recommend you plug your Drobo device into an uninterruptible power supply (UPS), which protects against sudden losses in power as well as power surges. We also recommend a power surge protector, although this only protects against power surges.

# 2. Setting Up in Just a Few Steps!

Once you ensured you meet all system and hardware requirements, it's time to set up your Drobo B810i for use. This can be done in just a few steps.

- 1. Rack Mount the B810i
- 2. Install Drobo Dashboard.
- 3. Insert the hard drives.
- 4. Consider the configuration options for Drobo B810i.
- 5. Connect cables for the management port, and power on your Drobo device.
- 6. Turn on Drobo B810i for upgrading to latest firmware release
- 7. Reboot the System and Set the administrator username and password.
- 8. Configure iSCSI settings.

### Note:

This is required if you will be connecting your Drobo B810i to a router or switch via its iSCSI connection(s), or if you plan to use your Drobo B810i in a multi- host, virtual environment.

9. Format the drives into volumes, or Logical Unit Numbers (LUNs).

### Note:

- If you plan to use your Drobo B810i in a multi-host (clustered), virtual environment, you then also need to provision storage to the virtual machine (VM) using your virtualization management software. For more information, see this topic in the Drobo B810i Online User Guide

# 2.1 Rack Mount the Drobo B810i

You have the option of rack mounting the B810i. You will require an 8 slot rack mount (P/N DR-B800-2R11)

# 2.2 Installing Drobo Dashboard

Drobo Dashboard is the management software companion to the Drobo device, enabling you to easily set up and manage Drobo B810i. Drobo Dashboard can also manage more than one Drobo device at a time.

You first install Drobo Dashboard on a client computer on the LAN to which you connected Drobo B810i via its management port. You will use this connection to configure network settings for the iSCSI data ports on Drobo B810i.

You can install the latest version of the Drobo Dashboard from <a href="http://www.drobo.com/start/start-drobo-b810i/">http://www.drobo.com/start/start-drobo-b810i/</a>.

### Note:

You need to have administrator rights on the computer on which you install Drobo Dashboard.

- 1. Using your browser on an active Internet connection, navigate to <a href="http://www.drobo.com/start/start-drobo-b810i/">http://www.drobo.com/start/start-drobo-b810i/</a>.
- 2. Locate the link for the latest Drobo Dashboard software and click on it.
- 3. If you're given a choice to install (or run) Drobo Dashboard or save the installation file to your computer, choose to save the file to your computer. Locate the file and double-click on it to begin installation. (You can delete the installation file afterwards.)
- 4. If warning messages appear, asking if you're sure you want to open and/or install the file or program, click the **OK** or **Run** button, as appropriate, to continue with the installation.
- 5. A dialog box may appear, asking you to select your language from the drop-down list. After doing so, click the **OK** button.
- 6. The Drobo Dashboard Installation Wizard appears, preparing to install.

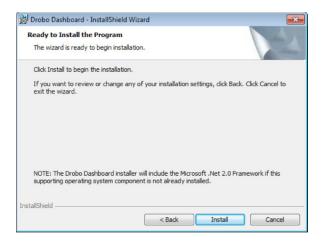


7. Click the **Next** button (Windows) or the **Continue** button (Macintosh), as appropriate.

### Note:

If the Microsoft iSCSI Initiator window appears, click the **Yes** button. Follow the instructions to install the Microsoft iSCSI Initiator, clicking the **Next** button as needed. When finished, you are returned to the InstallShield Wizard to continue installation.

- 8. Follow the directions of the Installation Wizard, clicking the **Next** or **Continue** button after each page, as appropriate.
- 9. When you reach the ready to install page, click the **Install** button.



Depending on your operating system, one of the following may result:

- In some Windows operating system, a Windows Access Control dialog box appears, asking if you want to allow changes to your computer. Click the **Allow** or **Yes** button, as appropriate.
- In the Macintosh, you will be prompted for your administrator password. Enter it and click the appropriate button.

- 10. Drobo Dashboard installs on your computer.
- 11. If you are on a Macintosh, you will be prompted to restart your computer in order to complete installation. Do this.
- 12. After installation is complete, leave the **Launch Drobo Dashboard** check box selected and click the **Finish** button.
- 13. The Drobo Dashboard application appears. When it launches for the first time, the **Confirm** dialog box appears, asking if you would like Drobo to automatically check for software updates of your Drobo Dashboard and firmware for your Drobo device.
- 14. We strongly recommend that you click the **Yes** button.

Afterwards, the **All Devices** page displays in Drobo Dashboard. Leave Drobo Dashboard open as you continue with the set up procedures.

# 2.3 Inserting the Hard Drives

After installing Drobo Dashboard, you are ready to insert hard drives into your Drobo B810i. For more information on hard drive requirements, see "Checking the Hardware You Need".

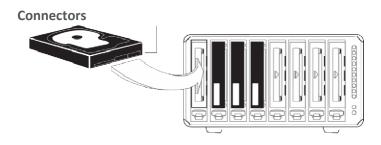
### Warning:

Any pre-existing data on the hard drives will be erased, as the drives will be formatted. If you wish to keep the data, copy it to another drive or medium before using with your Drobo device.

### Note:

Once you insert the drives into your Drobo device, they function as a unit or "pack." To access the data on them, you will need the entire pack.

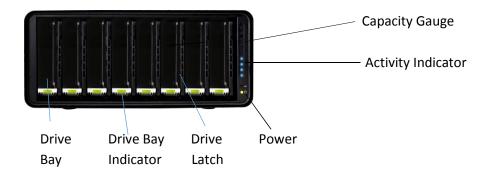
- 1. Remove the face plate from the front of your Drobo B810i by pulling it off.
- 2. With one hand, hold the hard drive so that its connectors are positioned at the device and toward the left.



### Warning:

For optimal performance, keep the Drobo B810i in its normal horizontal position. If placed on its side, hard drives may disconnect.

3. With your other hand, use your thumb to depress and hold open one of the drive locks to a selected data bay. Refer to the image below.



- 4. Slide the hard drive into the data bay, release the drive lock and push the drive into place until you feel it connect. The drive lock will snap behind the drive, securing it into place.
- 5. Insert additional drives in the same manner, following steps 2 through 4.
- 6. When finished, replace the faceplate right side up, so that when your Drobo device is turned on, you will be able to see the indicator lights.

You are now ready to connect cables and power on your Drobo device. Before connecting cables, however, it is a good idea to consider the configuration options for Drobo B810i.

# 2.4 Configuration Options for Drobo B810i

Before connecting cables, it is important to know how you plan to set up the Drobo B810i in your environment. With two iSCSI data ports on the Drobo B810i, you have the flexibility to configure the ports to optimally meet your specific needs. For more information and recommended examples of how to configure Drobo B810i in your networked environment, see https://myproducts.drobo.com/article/AA-01123

### Note

We recommend that you connect Drobo B810i (via any of its iSCSI ports) to a private, isolated Storage Area Network (SAN). This will increase the security of the data on the server. A single storage device can serve 2 different application servers via the two iSCSI data ports, each of which can be on 2 different private networks.

Specifically, you can connect the Drobo B810i via its iSCSI data ports in any one of these three ways:

- Connecting directly to a host computer / server
- 2. Connecting to a dedicated switch, which is then connected to a host computer / server. (This is a typical method of configuring a SAN).
- 3. Connecting to your existing LAN, which is then connected to your computer / server, sharing a common network for iSCSI regular data traffic.
- 4. For all options, we recommend that you manually set a static IP address for each iSCSI data port you use, so that the configuration does not change (like it would in DHCP) and you do not experience a loss of connectivity. To do this, you configure the network settings using Drobo Dashboard, the software companion to the Drobo device.

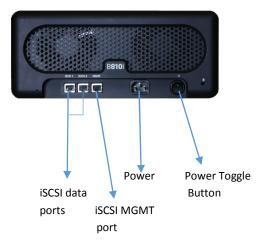
# 2.5 Connecting the Cables with iSCSI and Turning On Your Drobo Device

After installing Drobo Dashboard and inserting the hard drives into your Drobo

B810i, you are ready to connect the cables. You will first connect your Drobo

B810i to a host computer using the Ethernet cable on management port (MGMT) for the initial, administrative setup only — regardless of how you plan to use your Drobo B810i. After the initial setup, and also implement its use in a multi-host, virtual environment if desired.

As you follow the steps, refer to the image below, which shows the back of a Drobo B810i.



# 2.5.1 Connecting the Management Port

1. Plug one end of the Ethernet cable into the MGMT port (MGMT) back of your Drobo B810i.

2. Plug the other end to a host computer, a switch or into a router on your LAN.

# 2.5.2 Connecting to a Power Source

- 1. Connect the power cord to the power connection at the back of your Drobo device.
- 2. Connect the other end of the power cord to a power source.

### Note:

We recommend plugging into an uninterruptible power supply (UPS) or surge protector. For more information, see "<u>Using an Uninterruptible Power Supply (UPS) or Power Surge Protector</u>".

You are now ready to turn on your Drobo device.

# 2.6 Turn On Drobo B810i for upgrading to latest firmware release



1. When you first receive the Drobo B810i, you must use the Drobo Dashboard app to update it to the latest firmware release.

### **Important**

If you are a first-time Drobo user, simply <u>install the latest version of Drobo Dashboard</u>. If you are an existing Drobo user and have a Drobo Dashboard version <u>earlier than 2.8.0</u> installed, then you must use these instructions to *uninstall Drobo Dashboard* (<u>Windows</u>, <u>Mac</u>) prior to installing the latest version.

- 2. Ensure that the Mac or the PC you are using for this setup has a valid internet / network connection.
- 3. If using Mac, ensure that the Firewall (**System Preferences -> Security & Privacy -> Firewall**) is set to "allow incoming" for DD service (Drobo Dashboard).
- 4. Verify that the Drobo is powered off.
- 5. Turn on the Drobo.

### Warning:

Powering on the Drobo will begin the disk format process. Please be aware that all data on the disks will be erased.

6. Your Drobo should begin updating to the latest firmware and automatically formatting the disk. Please allow Drobo up to 20 minutes for the total initialization process. Here's what you will see happen:

When your Drobo appears in Drobo Dashboard, you may select it and go into the Status page which will show that the Drobo is initializing. While initialization is taking place, all of the drive slot LEDs will be yellow, and the capacity LEDs will blink blue. When initialization is complete, Drobo will restart to finish the firmware upgrade process.

### Note:

If Drobo Dashboard does not detect your Drobo and initialization does not begin, please disable any firewall and antivirus programs and ensure that your Drobo is connected *directly* to the Ethernet port on your computer and not via an Ethernet switch. In this scenario, be sure that your computer is set to get its IP address on that Ethernet port via DHCP. If Drobo Dashboard will still not detect your Drobo and the lights remain solid red, please call our support line for assistance or open a ticket on your support account. For more info, please see: <a href="How do I contact technical support">How do I contact technical support</a>?

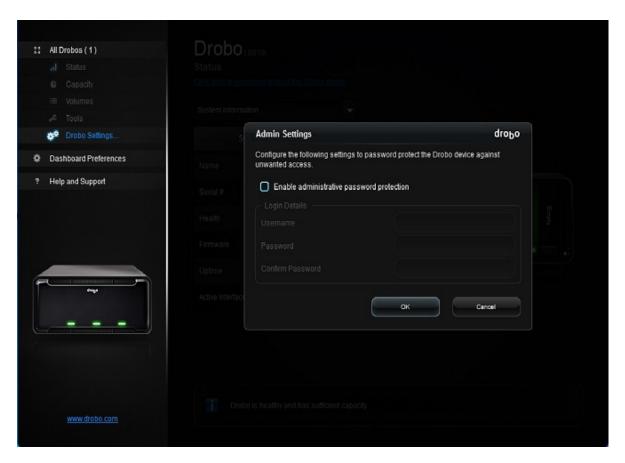
7. If red drive lights are seen again (e.g. "Unknown Disk Set"), please go to Drobo Dashboard's "Tools" and choose ERASE (reset), allowing reboot of the Drobo. Alternatively, you can use the pinhole method as described in Step 2 of <a href="https://doi.org/10.25/2016/jhis.27/2016/">https://doi.org/10.25/2016/</a> ALL DATA FROM ALL DRIVES AND RETURN YOUR DROBO TO DEFAULT SETTTINGS. \*\*

The next step is to set the administrator username and password for your Drobo B810i.

# 2.7 Set the Administrator Username and Password

Follow these steps while still connected to the Drobo B810i via the Ethernet cable.

- 1. In the Drobo Dashboard, make sure the Drobo B810i is selected from the All Drobos page.
- 2. Click the **Tools** option on the Navigation Menu.
- 3. Click the link that reads: Click here to password protect this Drobo device. The Admin Settings page opens.



- **4.** Ensure that the **Enable administrative password protection** check box is selected.
- 5. In the **Username** text box, enter a username for the administrator.
- **6.** In the **Password** text box, enter the password for the administrator.
- 7. In the **Confirm Password** text box, e-enter the password you just typed.
- 8. Click the **OK** button.

You are returned to the main page in the Drobo Dashboard, showing that you are now connected to Drobo B810i with the username you entered.

You are now ready to configure network settings for the iSCSI data ports, as applicable.

# 2.8 Configuration options for Drobo B810i

Before using Drobo B810i, you will need to configure the settings for its iSCSI data ports.

Network settings include IP addresses for the two iSCSI data ports available on your Drobo B810i, as well as the related subnet mask and default gateway information. Network settings also include the ability to modify the Maximum Transfer Unit (MTU) for each iSCSI data port (This is the maximum number of bytes that can be transferred at a time, in one frame).

You can modify the MTU settings in order to support the use of jumbo frames. Jumbo frames are those that maintain data transfer rates of more than 1,500 bytes per frame, and can carry up to 9,000 bytes per frame. Use of jumbo frames minimizes transaction loads, and can dramatically improve network performance by raising effective bandwidth.

You can also choose to modify the settings for the management port.

If you use jumbo frames, ensure that the frame size (in bytes) that you enter for the MTU is supported by your computer and router or switch. There needs to be end-to-end matching of MTU settings, from the Drobo B810i to your switch or router to your host computer.

With two iSCSI data ports on the Drobo B810i, you can configure each port to a different network so that both networks have access to the Drobo B810i. You can also connect one port directly to the host computer and the other to a network via a router. What iSCSI settings you configure depend on how you plan to set up your Drobo B810i. With iSCSI, you have the option to set up your Drobo B810i in one of three general configurations.

1. Directly connect your Drobo B810i via the management (MGMT) port to your computer's Ethernet port. In this configuration, you do not need to set a static IP address for data ports.



2. Connect your Drobo B810i via the management (MGMT) port to a switch in which another Ethernet port on the switch is connected to your computer. In this configuration, you will need to manually set static IP addresses for the data ports.



### Note:

You can connect multiple Drobo B810is to the same switch provided the Drobo B810is and the host computer are on the same subnet and each Drobo B810i has a unique static IP address assigned to it.

3. Connect your Drobo B810i via the management (MGMT) port to a switch (or router) in which another Ethernet port on the switch (or router) is connected to your network. In this configuration you will need to manually set static IP address for your data ports.

### **Notes:**

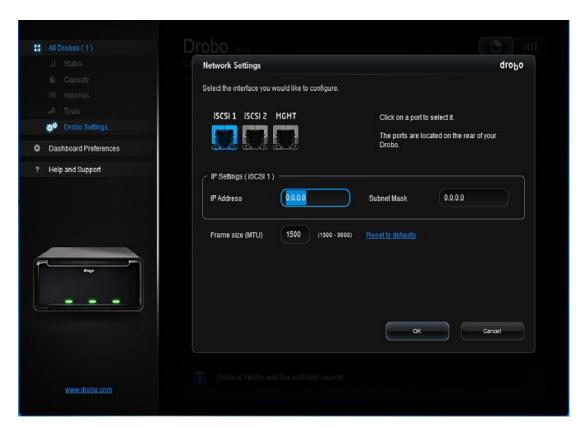
- Drobo B810i supports gigabit Ethernet connections (1000 Mbits) for optimal performance of iSCSI. Although your Drobo B810i will auto-negotiate the highest connection speed available to your computer, router or switch, iSCSI does not perform well at slower speeds.
- You can purchase an add-on gigabit Ethernet adapter card for your computer, if needed. Note, however, that regular adapter network card is required, as Drobo, Inc. does not support iSCSI specific cards, or HBA (host bus adaptor) cards.
- If you experience trouble with the following setup steps (such as everything appearing fine, but Drobo Dashboard is not discovering the Drobo B810i for example), check to ensure your operating system's firewall is set to allow inbound and outbound network connections for the Drobo Dashboard application. In other words, check to ensure firewall allows executable and related files from Drobo Dashboard to pass through.

# 2.9 Configuring iSCSI Settings

1. Once the connection between your Drobo B810i and host computer has been established, your Drobo B810i appears in Drobo Dashboard on the **All Devices** page as follows.



2. To manually assign IP addresses and modify other iSCSI settings, first click the **Device Settings** option on the **Navigation** menu, and click **Network**. The **Network** (iSCSI) Settings page appears.



3. In the **iSCSI 1** area, change the settings for the first iSCSI port as needed.

### **Notes:**

- If you are setting up the Drobo B810i on a network with DHCP server, ensure you assign a static IP address that is outside the pool used by the DHCP server. Check the documentation for your router for more information. (This is not a concern when setting up on a dedicated SAN).
- If you choose to modify the **Frame size (MTU)** to support jumbo frames, ensure that the size you enter is supported by your computer and router or switch. There needs to be end-to-end matching of MTU settings, from the Drobo B810i to your switch or router to your host computer.
- If you will be using your Drobo B810i in a multi-host, virtual environment (e.g. VMware), or in Linux, make note of the iSCSI settings, as you will need to add them to the initiator software that comes with your VM operating system.
- 4. In the **iSCSI 2** area, change the settings for the second iSCSI port as needed.
- 5. If you would like to modify the settings for the management port, click the **MGMT** port icon at the top. The MGMT port settings of the Network Settings page opens. Set or modify the settings for the MGMT port as needed.
- 6. Click the **OK** button.

You are now ready to create volumes on the Drobo B810i.

# 2.10 Formatting the Drives into Volumes

Once your Drobo B810i is connected via its iSCSI (Ethernet) connection, you will then need to format the drives.

## Note:

You can only format drives while connected via iSCSI data ports.

Before doing the steps to format the drives, however, it is important to know the number of volumes, or Logical Unit Numbers (LUNs), you would like to create, the sizes of those volumes and the file system format you will choose when you format the drives.

# 2.10.1 Selecting a File System and Volume Size

When you create and format volumes for your Drobo B810i, you will need to choose a particular file system for each volume. What file system formats are available to you depend on the operating system platform running on your host computer(s)/server(s). (See Figure 1)

### Note:

Drobo Dashboard must be running on the host to format the volume for the host. You will do this in the next section, which includes the step-by-steps for creating and formatting volumes.

You will also need to choose a size for each volume. The largest volume size allowed depends on the file system format you choose and the total capacity of the drives in the Drobo device. In Windows, volumes are sometimes called "logical drives" or "partitions." It is also known as a "Logical Unit Number" (LUN).

### **Important Notes:**

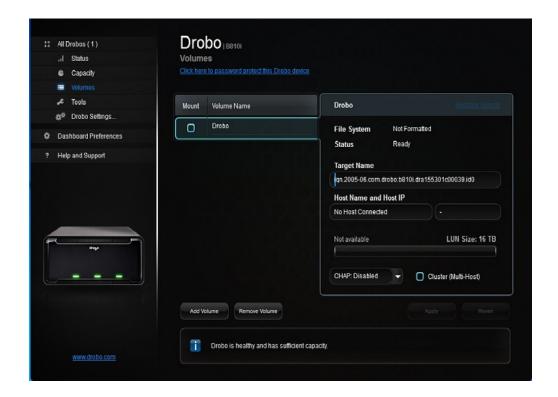
- Volume size does not represent how much actual storage space is available on your Drobo B810i. It
  represents virtual storage space because Drobo devices include thin provisioning technology. For
  example, your Drobo B810i may be loaded with 8TB of hard drive space, but you can create a volume
  (or multiple volumes) of 64TB. This enables you to do add more capacity to your Drobo B810i (by
  inserting an additional drive or replacing a smaller capacity drive with a larger capacity one) without
  having to format an additional volume. The additional capacity becomes part of the same volume
  you formatted originally.
- Your operating system will show the virtual space you have available on your Drobo device, as defined by the volume size.
- If the amount of available, protected storage space in your Drobo B810i ever exceeds the size of the volume that you chose (this may occur when you add one or more additional hard disks to your Drobo B810i), then Drobo Dashboard will automatically create a new volume (or volumes) of the same size as the original volume. Drobo Dashboard will notify you when this occurs and ask you to format and name the new volume(s).
- You can create and manage multiple volumes, each with its own size and supported file format. After creating your volumes, each will display uniquely, rather than as a single volume. On the Drobo B810i, you can create up to 256 volumes of up to 64TB each.
- You can also set a Challenge Handshake Authentication Protocol (CHAP) password for any volume you would like to protect.

# 2.10.2 Creating Volumes

Now that your Drobo B810i is connected via iSCSI (Ethernet), you are ready to create and format the drives into volumes. Drobo Dashboard automates this process for a Windows or Mac operating system running on your host computer (server).

If you are running VMware on the host server, see the next section, "<u>Creating Volumes with Other Operating System Platforms</u>" for more information.

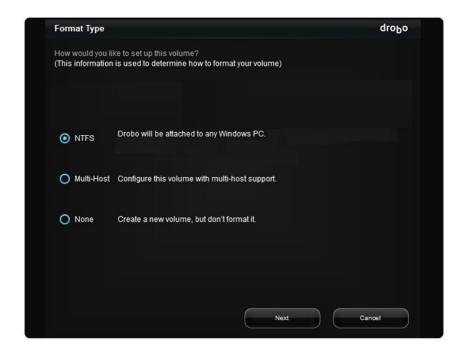
- 1. In Drobo Dashboard, select your Drobo B810i from the **All Devices** page, then click the **Volumes** option on the **Navigation** menu.
- 2. The **Volumes** page opens, displaying a default, unformatted volume.



3. Click the Add Volume button to create a new volume. The **Format Type** page appears.

Depending on your operating system the window displays with different options:

• For Windows, the following appears



For the Macintosh, the following appears



4. Select the appropriate file format for your operating system.

### **Important Note:**

If you plan to use your Drobo B810i in a virtual environment, you must select the **Multi-Host** option. Otherwise, only one server in that environment / cluster will be able to see the volumes (or LUNs).

- 5. Afterwards, click the **Next** button. The **Volume Size** page opens.
- 6. Click and drag to slide the pointer to the size of the volume you would like to create. If you would like to create a volume that is less than 1TB, click and drag to slide the pointer to <1TB, and then enter an amount in gigabytes in the Volume size text box. When finished, click the **Next** button



The **Volume Name** page appears.



### Note:

If you are on a windows computer, then the **Drive Letter** dropdown list does not display.

- 7. If you are on a Windows computer, then from the **Drive Letter** drop-down list, select the letter for the drive to which you will assign the volume.
- 8. In the **Name** text box, modify the default name for the volume as you like, and then click the **Finish** button.

# Tip:

We recommend including the word "volume" in the name so as not to confuse the volume name with your Drobo device's name.

The **Volumes** page appears, displaying the volume you just created.



### Note:

The volume will not format until you click the **Apply** button.

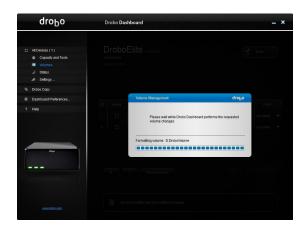
9. You can create additional volumes by repeating steps 3 through 8.

### Tip:

We recommend that you delete the default, unformatted volume by selecting it and clicking the **Delete** button.

- 10. When finished, click the **Apply** button.
- 11. The **Confirm** dialog box appears, asking if you want to apply volume changes.
- 12. Click the Yes button.

The volume(s) are formatted.



### Note:

Some Windows operating systems and the Macintosh operating system will also prompt you to format the drives. If so, click **Cancel** or **Ignore**, as appropriate. When changes are complete, a message appears to let you know.

13. Click the **OK** button. You are returned to the Volumes page.

If you want to set a CHAP password to protect one or more volumes, see "Setting CHAP Passwords for Volumes" in the Online User Guide.

Now that Drobo B810i is set up, you can easily mount the volumes you just created by checking the mount box in the Drobo Dashboard. When mounted, the volumes are easily accessible within your operating system. You can also add Drobo B810i to your virtual environment.

For more information, see this topic in the Online User Guide.

# 2.10.3 Creating Volumes with Other Operating System Platforms

Follow these general steps to create and format volumes if you are running VMware on the host server, or if you do not wish to use Drobo Dashboard on the host server to format volumes.

- 1. In Drobo Dashboard on your management client computer (which is on the LAN that connects to the Drobo B810i via the MGMT port), make sure Drobo B810i is selected on the All Drobos page and click the Volumes option on the Navigation menu. The Volumes page opens.
- 2. Click the **Create** button to create a new volume.

### Note:

As you are on the MGMT port, file system options are limited and you will not be able to format the volumes you create here.

- 3. Follow the directions on the screen, clicking the **Next** or **Finish** button as appropriate to create a volume. Repeat steps 2 and 3 to create additional volumes.
- 4. While still in Drobo Dashboard, click **Settings** from the Navigation menu, and then click **Network** to view network settings for the iSCSI data ports. Copy down the IP addresses, as you will need them for your iSCSI initiator software.
- 5. Give the host server access to the newly create volume(s). Based on the initiator you are using (Microsoft, VMware, etc.), you will be requested to provide the IP address and CHAP settings for the Drobo B810i.
- 6. Format the volume(s) with the appropriate file system format(s).

Now that Drobo B810i is set up, you can add Drobo B810i to your virtual environment.

# 2.11 Adding the Drobo B810i to Your Virtual Environment

If you plan to use your Drobo B810i in a multi-host, virtual environment you have one last step: to add Drobo B810i as a storage device to your iSCSI VLAN using your virtualization software.

You will first need to physically connect the Drobo B810i to the desired host computer, and then enter iSCSI settings for the Drobo B810i into your virtualization software's iSCSI initiator.

For further information and configuration steps, please see the following:

- Visit our knowledge base at <a href="http://support.datarobotics.com/app/answers/list">http://support.datarobotics.com/app/answers/list</a>
   and enter multi-host for the keyword search. Click on the knowledge base article, "Drobo B810i and Multi-Host Environments."
- To see our configuration steps and best practices for using VMware, visit www.drobo.com/virtualization/index.php
- Also visit our knowledge base at <a href="http://support.datarobotics.com/app/answers/list">http://support.datarobotics.com/app/answers/list</a> and type in the keyword, multi-host and/or VMware.

# 3. Where to Go from Here

After you've set up your Drobo B810i, you're ready to use it to store and back up data onto your Drobo device. Next steps include:

- Implementing best practices to maximize the safety of your data
- Ensuring optimal performance by keeping your software (Drobo dashboard and your Drobo device's firmware) up to date
- Knowing how to safely shutdown your Drobo device
- Using the online user guide and context sensitive help to learn more about how to manage and use your Drobo device
- Using your knowledge base to answer almost any additional question
- Getting the support you may need

# 3.1 Using Best Practices

Although your Drobo device provides redundancy and automatically protects your data against a hard drive failure, it should only be one part of an overall, digital asset management strategy.

To better safeguard your valuable data, we strongly encourage you to review our guide on best practices, which can be found at <a href="https://www.drobo.com/support/best">www.drobo.com/support/best</a> practices.php.

Our guide offers strategies to protect data beyond hard drive failures. Following best practices will help maximize the safety of your data.

# 3.2 Keeping Your Software Up to Date

To ensure optimal performance, we highly recommend that you set your Drobo device to automatically check for software updates. (You may have already done this during the initial setup.) This feature keeps both Drobo Dashboard and your product's firmware current.

You can also install updates from <a href="http://www.drobo.com/start/start-drobo-b810i/">http://www.drobo.com/start/start-drobo-b810i/</a>.

- 1. Launch Drobo Dashboard and select your Drobo device on the **All Devices** page.
- 2. From the Navigation menu, click **Dashboard Preferences** page opens.



3. Ensure that the **Enable Auto Updates** check box is selected, and then click the **OK** button.

When one or more software updates are available, a message appears, asking if you would like to install the update(s). If so, click the **Yes** button and follow the prompts to install them.

# 3.3 Safely Shutting Down Your Drobo B810i

If you plan to shut down your Drobo device for any reason, it is very important that you always do so safely. Improper Drobo device shutdowns may cause file corruption and/or data loss.

It is a good idea to shut down your Drobo device before any of the following situations:

- You are not going to be using your Drobo device for an extended period
- You are going to disconnect the cable(s) or power cord
- You want to move your Drobo to another location
- You are going to remove the entire disk pack
- You are going to apply operating system updates

# 3.3.1 Safely Shutting Down Your Drobo Device Using Drobo Dashboard

This is the recommended method for safely shutting down your Drobo device.

1. Check that the activity light on your Drobo device is off, indicating that no data is actively being transferred to or from your Drobo device. Refer to Figure 2, below.

**Note:** If data is actively being transferred, the activity light will be blinking green.

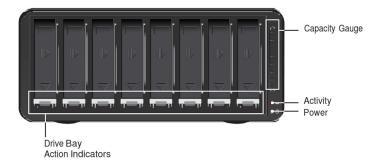


Figure 2: Indicator lights on a Drobo B800i

Also check to ensure the drive bay action indicator lights are not blinking alternately between yellow and green. This indicates that your Drobo device is busy working to protect your data. Wait until these lights are a solid green.

2. In Drobo Dashboard, select the Drobo device that you would like to shut down from the **All Devices** page.

- 3. Click the **Tools** option on the Navigation menu, and click the **Shutdown** icon. A message appears, asking you to confirm the shutdown.
- 4. Click the Yes button.

It can take up to two minutes for your Drobo device to power down. Afterwards, the power light turns off, indicating your Drobo device has shut down.

# 3.3.2 Safely Shutting Down Your Drobo Device Manually

Although Drobo Dashboard allows for a "cleaner" shut down, you can safely shut down your Drobo device manually.

1. Check that the activity light on your Drobo device is off, indicating that no data is actively being transferred to or from your Drobo device. Refer to Figure 2 in the previous steps.

**Note:** If data is actively being transferred, the activity light will be blinking green.

- 2. Also check to ensure the drive bay action indicator lights are not blinking alternately between yellow and green. This indicates that your Drobo device is busy working to protect your data. Wait until these lights are a solid green.
- 3. Press and hold the **power toggle button** on the back of your Drobo device once for three full seconds.

It can take up to two minutes for your Drobo device to power down. But afterwards, the power light turns off, indicating your Drobo device has shut down.

# 3.4 Using the Online User Guide

After you've set up your Drobo device, you're ready to use it to store and back up data. To learn how to manage and use your Drobo device, refer to the Online User Guide for your product, which can be found within your Drobo Dashboard software by clicking the **Help & Support** option on the **Navigation** menu.

The latest version can also be found at <a href="http://www.drobo.com/start/">http://www.drobo.com/start/</a>

# 3.5 Using Context-Sensitive Help

When using Drobo Dashboard, you can click the **Help** option in the upper right corner of the **Navigation** menu to display context-sensitive help. The Help window appears in your internet browser, providing information particular to the screen from which you clicked for help.

# 3.6 Using the Knowledge Base

Our searchable knowledge base provides answers to almost any question related to the Drobo device that you can't find in the Online User Guide.

From within Drobo Dashboard, you can access our knowledge base by clicking the **Help & Support** option on the **Navigation** menu, and clicking the **Search Knowledge Base** icon. You can access our knowledge base at <a href="http://support.datarobotics.com/app/answers/list">http://support.datarobotics.com/app/answers/list</a>.

# 3.7 Getting Support

To get support, first be sure to register your product at <a href="https://myproducts.drobo.com/login">https://myproducts.drobo.com/login</a>, if you haven't already done so. You can then go to <a href="https://myproducts.drobo.com/support">https://myproducts.drobo.com/support</a> for details on how to contact support.

You can also obtain additional hardware and phone support by purchasing DroboCare. The DroboCare™ support program extends your peace of mind beyond the standard warranty term and phone support included with your Drobo product purchase. To learn more about DroboCare visit <a href="http://www.drobo.com/drobocare">http://www.drobo.com/drobocare</a>.

Also see our DroboCare FAQ at: https://myproducts.drobo.com/article/AA-01191.