Quick Start Guide

FreeNAS®

FreeNAS® Mini Storage Device

December 2014 Edition for FreeNAS 9.3

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Quick Start Guide

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Welcome to the FreeNAS® Mini Storage Device Quick Start Guide. Here you'll find everything you need to get started and to configure your device for use within your network. The FreeNAS® Mini Storage Device is designed to be easy to setup with just a few mouse clicks from a web browser interface. This Quick Start Guide demonstrates a configuration that will allow the computers in your network to access the storage device, regardless of their operating system. It includes pointers to additional resources should you wish to customize your configuration or to learn more about the features provided by FreeNAS®. By following the instructions in this Guide, you should be up and running in about 15 minutes.

PARTS LIST

- ✓ One (1) FreeNAS Mini device
- ✓ One (1) power cord
- ✓ Two (2) case door keys
- ✓ One (1) FreeNAS Quick Start Guide (you're reading it now).

If you ordered a device pre-populated with drives:

- ✓ Four (4) drive trays, populated with drives, separated from the FreeNAS Mini device.

If you ordered a driveless model:

- ✓ Four (4) drive trays, filled with dummy drives secured by two (2) screws each.
- ✓ Eight (8) additional hard drive screws.

SETTING UP YOUR FREENAS® MINI

To connect to your FreeNAS Mini appliance in order to set it up you will need the following:

- ✓ a USB keyboard (or keyboard with USB adapter)
- ✓ a VGA display (or display with a VGA adapter)
- ✓ an Ethernet cable
- ✓ a switch which is connected to the other computers in your network
- ✓ a Phillips screwdriver (if installing your own hard drives)
- ✓ a web browser running on a computer connected to the same network as your FreeNAS Mini. A modern web browser, such as Mozilla Firefox, Google Chrome, or Internet Exporer 10 or later, is required. If you find that the FreeNAS Web User Interface is working incorrectly, try using the latest version of Mozilla Firefox, available at getfirefox.com.

INSTALLING HARD DRIVES

If you ordered a FreeNAS® Mini with hard drives, they will already be installed in the drive trays. Insert them into the drive bays, with the tray numbered '0' at the top, followed by 1, 2, and 3 at the bottom. Drive numbering is for your convenience only and has no bearing on the operation of your FreeNAS® Mini.

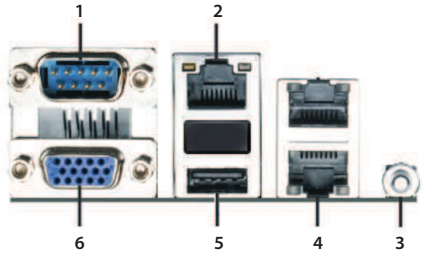
If you ordered a driveless FreeNAS® Mini, your drive trays will be in the FreeNAS® Mini device, filled with dummy drives secured by two screws each. Remove the dummy drives and use those screws and the additional eight screws in the accessories kit to install your chosen drives into the drive carriers.

PLUGGING IN YOUR FREENAS® MINI APPLIANCE

To connect the appliance to your network and prepare it for configuration, perform the following steps. Refer to page 4 for a guide to the back panel of your FreeNAS Mini.

1. Connect a monitor to the VGA port using a VGA cable, or any adapter from VGA to a video device you have available.
2. Plug one end of an Ethernet cable into the Ethernet port. Connect the other end to a switch or router connected in turn to the device you plan to use to configure your FreeNAS Mini.
3. Plug one end of the power cord into the back panel of the device and plug the other end into a power socket or UPS device.
4. Plug the USB keyboard into the USB port on the back panel.

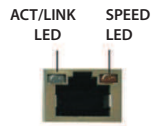
BACK PANEL LAYOUT AND LED INDICATORS



1 Serial Port
2 IPMI Lan Port*
3 UID Switch
4 Gigabit LAN Ports**
5 USB 2.0 Port
6 VGA Port

* There are two LEDs on each LAN port. Please refer to the table below for the LAN port LED indications.

IPMI LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Orange	100Mbps connection
On	100Mbps connection	Green	1Gbps connection

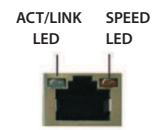


IPMI Port

The default IPMI login is "admin" with the password "admin".

** There are two LEDs on each LAN port. Please refer to the table below for the LAN port LED indications.

Gigabit LAN Port LED Indications			
Activity/Link LED		SPEED LED	
Status	Description	Status	Description
Off	No Link	Off	10Mbps connection
Blinking	Data Activity	Off	100Mbps connection
On	100Mbps connection	Green	1Gbps connection

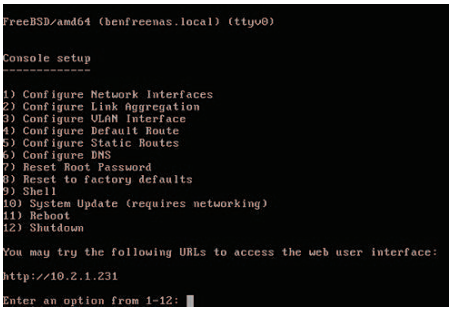


LAN Port

GET AN IP ADDRESS

The device will boot up and you'll see some text messages on the VGA display as the operating system loads. When the system has finished booting, you will see a screen similar to Figure 1. Please be aware that all operations performed at this console menu are performed with root privileges and will override any existing settings.

Figure 1: Console Setup Screen



If there is a DHCP server in your network, the Ethernet port on the device will automatically receive an IP address which can be used to access the device from a web browser. In the example shown in Figure 1, the device is reachable at http://10.2.1.231.

If your network does not have a DHCP server, refer to Section 3: Booting into FreeNAS in the FreeNAS® 9.3 Users Guide for instructions on how to manually set an IP address. The current version of the FreeNAS documentation can be found at http://doc.freenas.org/9.3.

You may now unplug the USB keyboard and monitor from the back of the FreeNAS mini, as they are not used for the rest of the configuration process. You are now ready to configure your FreeNAS® device.

FREENAS® SOFTWARE SETUP

1. Log in for the first time

Direct your web browser to the IP address displayed at the console of your FreeNAS Mini. You will need to log in to the FreeNAS Web User Interface with a username and password. The default password is "abcd1234".

Figure 2: Log In to the FreeNAS Web User Interface.

2. The Initial Configuration Wizard

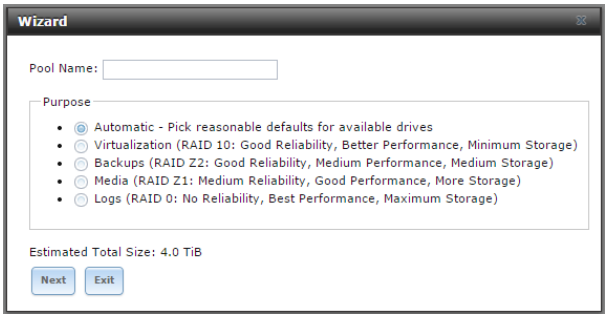
Once you log in for the first time, a configuration wizard will pop up to guide you through the initial configuration of your FreeNAS Mini appliance. You may quit the Wizard to perform manual configuration any time, but settings are only saved at the end. First, choose your time zone and whether you want to use a language other than English and keyboard layout other than the standard US one. Click "Next" to proceed.

Figure 3: Select Your Time Zone, Language, and Keyboard Layout.

3. Volume Configuration

The Wizard will next present some choices for pre-designed volume configurations. Choose a name for your volume and a standard volume configuration if you wish, then click "Next" to continue. If you have a custom configuration you want to use, you may quit the Wizard and perform Volume configuration by hand, then click the "Wizard" button to return to the Wizard with the Volume Configuration step left out. You must have a volume configured to continue with the Wizard.

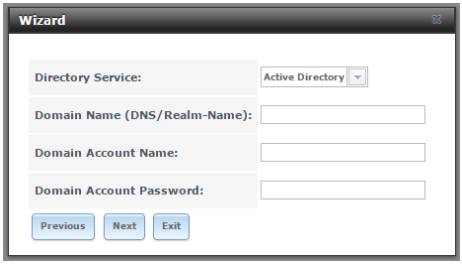
Figure 4: Name your volume and select a standard volume configuration.



4. Directory Services

If you know your Directory Service account information, select the service you use, enter the necessary information, and then click "Next". If you do not use a directory service, you can click "Next" and proceed to the next step.

Figure 5: Enter your Directory Service information.



5. Shares and Permissions

Next, you will need to set up at least one share in order to store files on your FreeNAS Mini over the network. On this screen, choose a name for the share. Windows shares are supported by all modern Windows versions, Mac OS X, most popular Linux distributions, and FreeBSD, so we recommend Windows shares if you're not sure what type to pick. If you want the share to be used by anyone on your network without logging in, click the "guest access" button, then click "Add". You may make as many shares as you want, or skip this step if you don't want to add shares at this time.

Figure 6: Choose a share name and type, then add your share.

If you instead want to assign a particular owner of the share, click the "Ownership" button. On the Permissions screen, enter the name of the user you want to own the share and what group you want to share it with. If those aren't pre-existing system users and groups, click "Create User" and "Create Group" to add them to the system. You will be prompted to create a password to create a new user. You may also choose what permissions are available to the user, group, and other users. In figure 7, both john and the family group will be able to use the share with full permissions. Once you finish changing the user and group permissions, click "return" to go back to share configuration. The permissions you selected will apply to the next share you add.

Figure 7: Select a user or create a new one.

6. Miscellaneous Settings

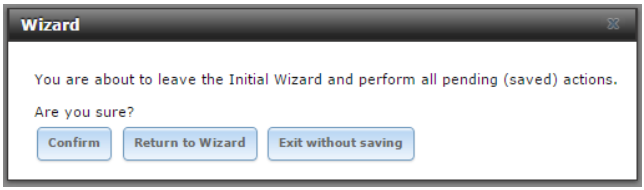
Next, the Wizard will offer you a number of optional configuration options. "Console messages" will enable a live feed of the FreeNAS console log in the footer of the FreeNAS Web Interface. The rest of the settings concern sending emails to alert you of issues with your FreeNAS Mini, such as failed disks or available updates. Enter an email into "Root Email", the address you'd like FreeNAS to send the alerts from into "From Email", and the hostname or IP address of the SMTP server you want to use to send the emails in "Outgoing Mail Server". Port 25 is the default for SMTP, but if you use an alternate port, enter it in "Port to connect to". If the mail server supports encrypted SMTP connections, select the encryption type in the "TLS/SSL" drop-down menu. If the mail server supports SMTP authentication, check the "Use SMTP Authentication" box and enter the username and password used for authentication to the mail server.

Figure 8: Configure console footer messages and email alerts.

7. Finish Configuration

If you're sure about all your settings, click "Confirm" to have FreeNAS perform the configuration you've selected. If you want to check one more time, click "Return to Wizard", which will take you back through the steps of the wizard with all your selected configurations already in place. If you'd rather discard your changes and proceed to the FreeNAS UI, you may click "Exit without saving" at this time.

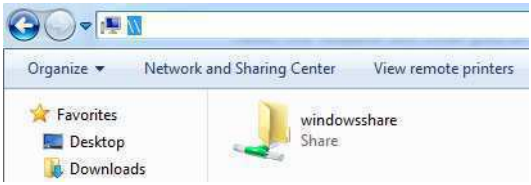
Figure 9: Save or Confirm your settings.



8. Connect to your share

Now, it's time to connect to your share. The wizard will already have started the CIFS (windows share) service, so it would already be working. We'll use Windows as an example. Open an Explorer window in a Windows computer on the same network as your FreeNAS Mini. In the address bar at the top, enter \\ followed by the hostname of your FreeNAS Mini Appliance ("freenas" by default). The current hostname also appears in the title bar of the browser window where you configure your FreeNAS Mini. Your share contents should appear. You may have to enter the username and password you entered earlier as well.

Figure 10: Enter \\ followed by the hostname or IP address of your FreeNAS Mini appliance in the Windows Explorer progress bar.



Once you connect, you can use the share like a normal folder.

ADDITIONAL RESOURCES

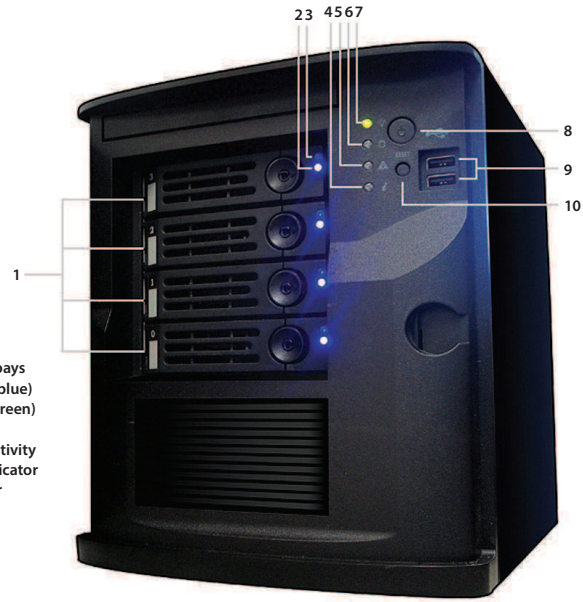
This Quick Start Guide is intended to get you started using your FreeNAS Mini as soon as possible. The FreeNAS Mini supports a great many features and many different configurations.

For complete documentation, visit http://doc.freenas.org/.

The FreeNAS® Forums provide an opportunity to interact with other FreeNAS® users and to discuss their configurations.

Visit the forums at http://forums.freenas.org.

FREENAS® MINI FRONT PANEL LAYOUT



1 4 x hot swap, tool-less drive bays
2 drive inserted (blue)
3 drive activity (green)
4 unit identity
5 network link/activity
6 HDD access indicator
7 power indicator
8 power button
9 2 x USB 2.0
10 reset button

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