



# ELITENAS ENI04L+ (B)



QUICK INSTALLATION GUIDE v1.0

## TABLE OF CONTENTS

End User License Agreement .....	3
<b>Hardware Information .....</b>	<b>5</b>
Package Contents .....	5
Hardware Connection Diagram .....	5
Hard Drive Installation .....	5
<b>Integration and Setup .....</b>	<b>6</b>
Default Settings .....	6
Initial Setup .....	6
Console Login .....	8
SSH & Telnet Login .....	8
Web Login .....	8
<b>Volume Management .....</b>	<b>9</b>
Before Getting Started .....	9
Work-Flow .....	9
<b>NAS Setup Work-Flow .....</b>	<b>13</b>

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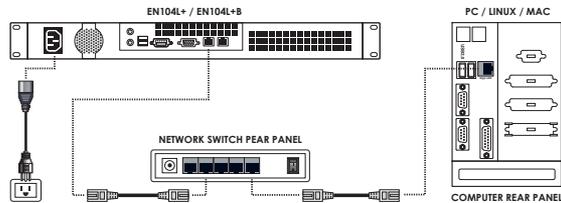
## HARDWARE INFORMATION

### PACKAGE CONTENTS

EN104I+ / EN104L+B / EN104L+XE / EN104L+BXE .....	1
Power Cord .....	1
Manual / CD .....	1
USB 2.0 Cable .....	1
eSATA Cable .....	1
SATA Bracket .....	1
HD Tray Keys .....	4
Removable Tray Modules (Screws Included) .....	4

**NOTE:** Please contact Sans Digital in case of missing or damaged items.

### HAREWARE CONNECTION DIAGRAM

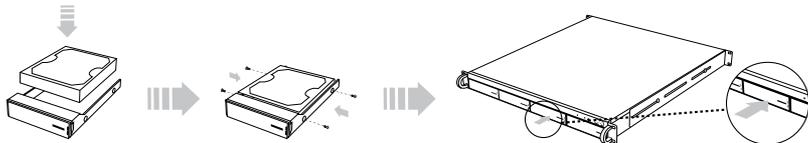


### HARD DRIVE INSTALLATION

**Step-1:** Press the key into the lock slot (located on front of each hard drive tray), until tray handle releases. Pull the tray handle to remove the tray from the enclosure. Dismount the plastic tray protectors by removing the screws in the illustration below.



**Step-2:** Place the hard drive into the tray, and fasten the screws in the corresponding locations. Place the tray with the mounted hard drive back into the enclosure. (If the screws are not properly fastened, the hard drive may be pushed towards the back of the unit and the tray handle will not open properly.)



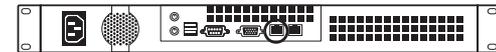
## INTEGRATION AND SETUP

### DEFAULT SETTINGS:

LAN Port#1 IP address: **DHCP**  
 Administrator Username: **root**  
 Password: **0000** (4 zeros)

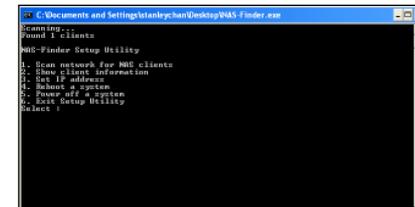
### INITIAL SETUP – Assigning IP to the Unit

1. Connect the NAS unit to your network (connect the RJ45 network cable to the LAN port 1 as shown in the diagram below), power the unit on and allow it approximately two (2) minutes to boot up.

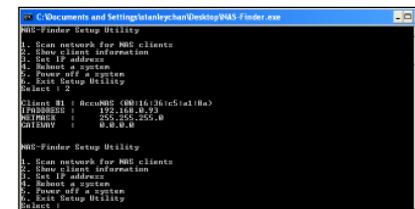


2. Go to a computer that connected to the same network as the NAS unit. Insert the included EN104L+(B) CD into the CD-ROM drive of the computer. Copy the “NAS-Finder.exe” to the computer and run “NAS-Finder.exe” to locate the NAS unit. This software will allow you to assign an IP address to the NAS unit.

3. After executing the NAS-FINDER program, a DOS dialog box will appear with the main menu.

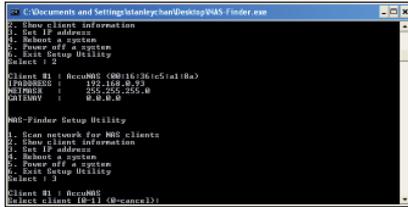


4. To view client (NAS unit) information, typing '2' within the main menu and press 'enter'. The dialog box will display each detected NAS unit along with their network settings. A number is assigned to each detected unit, starting from #1. In the example below, Client #1, EN104L+(B) is detected, with IP address 192.168.0.93.



**NOTE:** Information, such as MAC address, IP address, NETMASK and etc, may be different from system to system.

- To setup the TCP/IP, type '3' and press 'enter'.

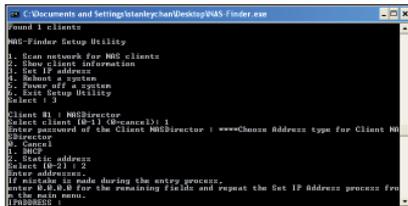


Enter '1' to select Client #1: ENI04L+(B) or '0' to cancel. Once selected, enter the default password for the NAS unit: 0000 (4 zeros).



**NOTE:** DHCP is pre-defined for LAN port-1. DHCP is used to quickly assign a local IP to the NAS unit. Changing the IP address to a static IP address is strongly recommended for daily operations.

Enter '2' to change the IP address to a static IP address.



Enter an IP address, a Subnet Mask and a Gateway. When finished, the setup software will return to the main menu. Select '4' to reboot the unit.

**NOTE:** The unit must reboot in order for the new IP address to become effective.

- The NAS-Finder Utility could also be used to reboot or power down a EliteNAS unit within the network. From the main menu, selecting '4' and '5' respectively will perform these actions. For security reasons, administrator password for each NAS unit must be entered to execute the command. An incorrect password will result in "Reboot failed" or "Power Down Failed" errors and the Utility will return to the main menu.
- To exit from the NAS-Finder Utility, select '6' from the main menu.

## CONSOLE LOGIN – Assigning IP to the NAS from the Console

If the NAS unit could not be detected via the NAS-Finder Utility, console login could be used for detection by connecting a keyboard and monitor to the NAS unit. Power on the NAS unit and a DOS dialog box will prompt the user to enter a username and a password. The default settings are as below:

**Username: root**  
**Password: 0000**

- To assign an IP address to LAN Port-0, type the following:

```
#ifdown eth0
#ifconfig eth0 10.1.1.100
#ifconfig eth0 netmask 255.255.255.0
#ifup eth0
```

The above command will assign the LAN Port IP to: 10.1.1.100 and assign Netmask to: 255.255.255.0. Change the IP address and network mask (numbers in bold) to your personal network settings.

- To display current Gateway setting, type the following:

```
#route
```

To assign a Gateway address to LAN Port-0, type the following:

```
#route add default gw 10.1.1.1
```

The above command will assign the Gateway address to 10.1.1.1. Please change the Gateway address (numbers in bold) to your personal network setting.

## SSH & TELNET LOGIN

By default, SSH and Telnet logins are enabled. SSH and Telnet logins are used to replace local console login using monitor and keyboard. In order to enable or disable these features, login using a local console and type the following:

To Disable Telnet:

```
#mv /etc/xinetd.d/telnet /root
#service xinetd restart
```

To Disable SSH:

```
# service stop sshd
# chkconfig --level 345 sshd off
```

To Enable SSH:

```
# chkconfig --level 345 sshd on
# service start sshd
```

## WEB LOGIN - http/https Login

Once the IP address has been set, you could now access the Administrator GUI remotely. In a web browser, type in the assigned IP address (or simply type: 'EliteNAS') and enter the following username and password: **User ID: root Password: 0000**

# VOLUME MANAGEMENT

## BEFORE GETTING STARTED

1. By now, the NAS unit should have an assigned static IP by following the previous steps.
2. To manage the NAS unit from the Web GUI, Java Runtime must be installed, Java Runtime allows the managing station (such as a laptop) to communicate with the NAS unit during NAS reboot, and provides the accurate countdown for the NAS unit to auto-reconnect with the Web GUI.
3. In the managing station's web browser, type the defined IP address of the NAS unit, such as: 192.168.1.128 or simply type: NASDirector. The login settings are:

**Login ID: root**  
**Password: 0000**

4. References from the included CD:

\Manual\Detail User Manual  
 \Manual\Detail SFM – NAS to NAS Mirroring User Guide  
 \Manual\Detail Snapshot User Guide  
 \Manual\Detail NAS-to-NAS Folder Replication User Guide  
 \Manual\NAS Hardware User Guide  
 \Manual\PCIe RAID User Guide

Administrator User Guide for the NAS  
 User Guide for Server Failover & Mirroring Function  
 User Guide for Snapshot Function  
 User Guide for NAS to NAS Folder Replication Function  
 Hardware Chassis manual and motherboard manual  
 Guide for the PCI-e based RAID configuration

## WORK-FLOW

### Step-1: Select “Manage”



### Step-2: RAID Volume Creation

1. Select “Storage Manager” → “RAID Volume Manager”.
2. Select the drives you wish to include by checking the appropriate checkbox. Select the desired RAID mode from the drop down menu.
3. Click create “RAID & Add Spare”.
4. The selected drives will start to create the RAID. The status of the RAID creation will show on the next screen.
5. The NAS unit supports background initialization where the user could begin using the unit simultaneously as the RAID is being created.



### Step-3: Select “Network Setting”

Network Setting allows the user to perform the following setups:

1. Assign IP to NIC ports, and configure NIC ports Bonding (teaming) Mode.
2. Enable/Disable Network services/protocols, such as:
  - Workgroup/Domain/ADS service for Windows clients.
  - NFS, NIS, AFP, LDAP, FTP, iSCSI (initiator/target), IPsec services.

By default, CIFS service is enabled, please refer to the NAS-Administrator Guide for instructions on disabling this service.



### Step-4: Select “Storage Manager” → “Volume Group Manager”

- RV – raw volume; the total available volume that has not been defined.
- PV – physical volume; the total RAID or JBOD defined volume, converted from RV.
- LV – logical volume; Network Shares or iSCSI Target Volumes, assigned from PV.

The “RV Pool” displays the available volumes associated with their capacity. This is the raw RAID volume. Select the desired volume by placing a check mark on “OK”, and click “Create PV”. The NAS unit will then write its signature to the RV and convert it into a PV.



### Step-5: Select “Storage Manager” → “Logical Volume Manager”

LV is the actual share used via Microsoft Network, AFP or NFS. The name assigned will be the share name.

To create the LV:

1. Select the appropriate PV.
2. Assign a name to the share under “Volume Name”.
3. Select a file format: “iSCSI” or “NFS” (for network share).
4. Type in a share description (optional).
5. Assign a size to the share under “Volume Size” in MB.
6. Click “Create LV”.

**Note:** The Volume-Name (LV name) will be the network share name. The Volume size (LV size) will be the network share size.



### Step-6: Select “User & Access” → “Local User Management”

“Local User Management” is for Windows Workgroup clients (who are not Domain users or ADS users) and Mac clients.



### Step-7: Select “User & Access” → “Access Control – Microsoft”

Choose a Volume (Network Share).

By default, all users with account on the EN104L+(B) are given full access to the volume.

Assigning a specified user to the “Assigned User List” will deny the access right of all users who are not on the “Assigned User List”.

**Caution:** “Read/Write”  $\neq$  “Full control”. User with “Read/Write” privileges could read and write files in the volume/share, but the user could not delete the file(s).



### Step-8: Access the Share/Volume on the NAS from a Client

From a Windows Client, launch the Windows Explorer

In the address bar, type: `\\IP\vol_I` (such as: `\\192.168.1.128\vol_I`) or `\\nasdirector\vol_I`

The IP (192.168.1.128) is what was assigned to the NIC on the EN104L+(B), and “vol\_I” is the volume / share name created during Step-4.

Map the path to a local drive letter with logon reconnection selected.

# NAS SETUP WORK-FLOW

