

Dominion SX Quick Setup Guide

What You've Got

Check the contents of the carton containing the DSX. This is what you should have:

- DSX unit
- Rack mount kit
- 1 or 2 power cords (depending on the DSX model)
- RJ-45 adapter (for loopback testing of console ports)
- CD-ROM and warranty card

If any piece is missing or damaged, contact your Raritan sales representative immediately.

What Else You'll Need

In addition to the equipment in the carton, you will need:

- 1 crossover Ethernet cable to configure the DSX through a browser-based interface, or
- 1 null modem cable to configure the DSX through a command line interface, and
- Enough cables to connect your managed devices to the DSX. Refer to the Raritan Price book for the types of cables needed for each type of device you intend to connect.

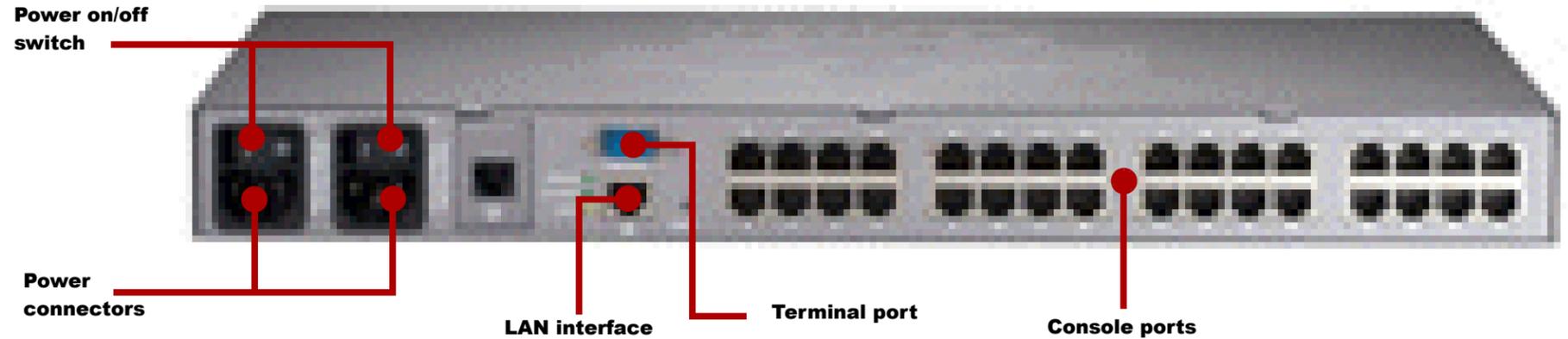
Factory Defaults

The DSX unit is shipped from the factory with the following default settings built in:

Setting	Default
IP address	192.168.0.192
Subnet mask	255.255.255.0
Gateway	192.168.0.192
Username	admin (all lowercase)
Password	raritan (all lowercase)
Unit name	DominionSX

Connect the Target Devices

The DSX comes in a variety of models. The model shown above contains two power outlets, one LAN interface, and 32 console ports. Your model may differ,



but this will not affect the following installation instructions.

1. Install the DSX in your chosen location. Rack mounting is recommended but not required.
2. Connect the power cord to the power connector on the DSX and to an external power source. If your unit has two power connectors, you can connect the second power connector to a backup power source.
3. Flip the power switch to turn the DSX unit on. The unit performs a hardware and firmware self test. The software boot sequence starts and is complete when the light goes on and remains on.
4. Connect your target servers or other serially managed devices to the console ports on the DSX.
 - a. Connect one end of a standard Cat5 Ethernet cable to one of the console ports on the DSX.
 - b. Connect the other end to a Raritan Nulling Serial Adapter (p/n ASCSDB9F, ASCSDB9M, ASCSDB25F, ASCSDB25M) as appropriate.
 - c. Connect the adapter to the console port on the target device

Important Note: Many Cisco and Sun devices have console ports with non-standard RJ-45 connections. Most can be connected to the DSX with a "serial rollover cable." This is NOT a standard Ethernet cable or crossover Ethernet cable. If you have misplaced the rollover cable that came with your Cisco or Sun device, you can purchase one from Raritan (p/n CRLVR-15).

Configure the DSX Using a Browser

You can configure the DSX using a Web browser or a command line interface (CLI). If you prefer a CLI, skip this section and proceed directly to the next section.

1. Connect a computer to the LAN interface on the DSX using a crossover Ethernet cable. If your DSX has two LAN interfaces, use LAN1.
2. Make sure the computer has a route to the DSX's default IP address (192.168.0.192). Open a console window and enter the `route print` command. If the default IP address is NOT on the Active Routes list, do the following:
 - a. On a Windows machine, type `ipconfig` and note your IP address. Then type:


```
route add 192.168.0.192 <installation computer IP address>
```
 - b. On a Unix or Linux machine, type `ifconfig` and note your IP address. Then type:


```
route add 192.168.0.192 <installation computer IP address> -interface
```
 - c. Type:


```
ping 192.168.0.192
```

 This should produce a reply. If it does not, check the physical connection between the computer and the DSX, and make sure you executed the `route add` command correctly.
3. Open a browser and enter this URL:


```
http://192.168.0.192
```

4. When the Login window appears, enter the default username (**admin**) and password (**raritan**). Use all lowercase letters.
5. You will be prompted to change the default password. Do so now, and then log in again using the new password. Be sure to remember this password.
6. Click the **Setup** tab, and then click **Network**. Network can be found under the **Configuration** header.
7. In the **Network Basic Settings** panel, give the DSX an IP address, subnet mask, and gateway address on your LAN. You can also give the unit a name to help identify it (up to 64 characters, spaces and special characters not allowed) and enter your domain (required to send SMTP messages).

The screenshot shows the 'Network Basic Settings' configuration window. It includes the following fields:

- IP Address:** 192.168.0.192
- Subnet Mask:** 255.255.255.0
- Gateway IP Address:** 192.168.0.192
- Mode:** 100 Mbps
- Domain:** (empty)
- Unit Name:** DominionSX

 There are 'OK' and 'Cancel' buttons at the bottom.

8. The DSX will now reboot. Once the reboot is complete, log in again using your new password.

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9. Click the **Setup** tab, and then click **Date/Time**. Date/Time is found under the **Configuration** header.
 - a. Select your time zone from the drop-down menu in the **UTC Offset** field.
 - b. You can enter the date and time manually, or you can enter the IP addresses of up to two Network Time Protocol (NTP) servers.
 - c. When you are finished, click **OK**. The DSX's clock is now set.
10. Click the **Setup** tab again, and then click **Port Configuration**. You can now configure each console port that has a target device connected to it:
 - a. Click the checkbox next to a port with a target device connected to it. If more than one target device will have the exact same settings, you can select multiple ports.
 - b. Click **Edit** to display the settings for the port(s) and enter the following information:

Setting	Description
Name	A name to identify the target device connected to the port
Application	The application used to communicate with the target device
Baud rate	The communications speed of the target device
Parity Bits	The number of bits used for parity checking
Flow Control	The type of flow control used to regulate data communications
Emulation	The terminal communications protocol used by the target device

- c. Click **OK**, and then repeat for any other ports.

Congratulations! Your Dominion SX is configured and ready for use. For assistance in getting started, go to the **What To Do Next** section in this Quick Setup Guide.

Configuring the DSX Using the CLI

1. Connect a computer to the **Terminal** port on the DSX. This port is a DB9 male port on all models except models that have two power connectors and two LAN interfaces. These models have RJ-45 connectors.
2. Open a terminal emulation program and connect to the DSX. Make sure the communications parameters are set to 9600 bps, no parity, 8 data bits, and 1 stop bit.
3. When the Login prompt appears, enter the default username (**admin**) and password (**raritan**). Use all lowercase letters.
4. You will be prompted to change the default password. Do so now, and then log in again using the new password. Be sure to remember this password.
5. At the prompt, enter **config**, and at the next prompt enter **network**.
6. Give the DSX an IP address, subnet mask, and gateway address on your LAN. At the `admin > config > network >` prompt, enter:

```
interface enable true if lan1 ip <ip address> mask <subnet mask> gw <gateway ip address>
```
7. You will now be prompted to reboot the DSX. Enter **yes** to start the reboot. When it is complete, log in again using your new password.
8. At the `admin >` prompt, enter **config**, and at the next prompt enter **network**.
9. Give the unit a name to help identify it (up to 64 characters, spaces and special characters not allowed) and your domain (required to send SMTP messages). Enter:

```
name unitname <DSX name> domain <domain name>
```
10. You will now be prompted to reboot the DSX. Enter **yes** to start the reboot. When it is complete, log in again.
11. At the `admin >` prompt, enter **config**, and at the next prompt enter **time**.
12. At the `admin > config > time >` prompt, set the date and time on the DSX.
 - a. Enter **timezonelist** and find the number code that corresponds to your time zone.

- b. Enter:

```
clock tz <timezone code> datetime <"time string">
```

 where `<timezone code>` is the time zone code
`<"time string">` is the current date and time in "YYYY-MMDD HH:MM:SS" format (quotes included, use 24-hour time).
Example:

```
clock tz 9 datetime "2007-03-15 09:22:33"
```
12. Enter **top** to return to the top level prompt. Then, enter **config**, and at the next prompt enter **ports**. You can now configure each console port that has a target device connected to it:
 - a. Enter:

```
config port <port number>
```

 followed by the parameters described in the table below:

Parameter	Description
<code>name <port name></code>	A name to identify the device connected to the port
<code>bps <baud rate></code>	The communications speed of the device
<code>parity <parity type></code>	The number of bits used for parity checking. Your choices are none, odd or even.
<code>flowcontrol <control type></code>	The type of flow control used to regulate data communications. Your choices are none, hw (hardware) or sw (X on/X off).
<code>emulation <emulation type></code>	The terminal communication protocol used by the device. Your choices are VT100, VT220, VT320, ANSI.

Example:

```
config port 1 name cisco1700 bps 9600 parity odd flowcontrol none emulation vt100
```

Note: In addition to the above parameters, additional parameters include:

```
[detect <true|false>] [escapemode <none|control>] [escapechar char] [exitstring <cmd[#delay];>] [dpaip ipaddress] [telnet port] [ssh port].
```

- b. Repeat Step a for each port with a device connected to it.

Note: You can also use port ranges or the wildcard asterisk *, as in: `config port * bps 115200`. This will configure all ports for a communications speed of 115200 bps. Or: `config port 3-7 bps 115200`. This will configure ports 3 through 7 for 115200 bps.

13. When done, click **top** to return to the top level prompt.

Congratulations! Your Dominion SX is configured and ready for use. For assistance in getting started, go to the **What To Do Next** section in this Quick Setup Guide.

What to Do Next

Your Dominion SX is now a fully configured, network ready device. We suggest you get started by doing the following:

- **Create additional user profiles and groups**
 Although the DSX comes with a default user profile and user group built in, you may find it useful to create additional ones. By doing this, you can give individual users different levels of permissions and port access rights. For instructions, refer to Chapter 6 in the User Guide.
- **Enhance the DSX's authentication and security capabilities**
 Although the DSX will authenticate all users locally, if you have a RADIUS, LDAP or TACACS+ server in your facility, you can also use remote authentication. If both are enabled, remote authentication will be given priority, but if a user cannot be found in the remote authentication database, the local database will be used as a backup.
 You can also create IPTables firewall rules to restrict access to the DSX, set up SSL encryption, and even implement Kerberos protection. For instructions, refer to Chapter 7 in the User Guide.
- **Launch the Raritan Serial Console (RSC) and manage your target devices remotely**
 You can launch the RSC from any Java enabled browser and use it to manage and control your target devices remotely. For instructions, see Chapter 5 in the User Guide.