

Release Notes for Raritan Dominion SX- Software Version 3.1.0.5.7

Date: July 9, 2007
Update: September 12, 2007

Effective:

Immediately.

Applicability:

This applies only to the following Dominion SX models: DSX16 and DSX32.

This particular version of DSX3.1 is **not applicable** specifically to ALL other 16- and 32-port models, including DSXA-32, DSXA-16, and DSXA-32-DL. Upgrade packages for these models are available from the Raritan Support web site.
http://www.raritan.com/support/sup_upgrades.aspx

If the SX unit's original firmware is less than 2.2.10, please do not apply this firmware. Contact Raritan Technical Support for assistance.

If the unit has been upgraded before, the current firmware version may be greater than or equal to 2.2.10. Please contact your system administrator about the original firmware version or date of purchase of the unit and contact Raritan Technical Support for assistance.

If you are using CommandCenter SecureGateway (CC-SG), CC-SG 3.1 or higher supports SX3.1.0.5.7

Release Matrix for Dominion DSX16 and DSX32 only

Upgrade Limitations:

- This upgrade is only from 2.5.x or 3.0.x to 3.1.0.5.7
- Any prior version, e.g., 2.4.x, must be upgraded to 2.5.x first, then it can be upgraded to 3.1.0.5.7

Starting Release	Final Release	Comments
2.5.x/3.0.x	3.1.0.5.7	Step 1. Upgrade with UpgradePack_2.5.6_3.1.0.5.7/Pack1of2 (unit will auto reset after upgrade) Step 2. Upgrade with UpgradePack_2.5.6_3.1.0.5.7/Pack2of2 (unit will auto reset after upgrade)

Upgrade Time is approx 6 minutes. Note that there are two upgrade packs to apply, and the firmware upgrade is not complete until both upgrade packs are applied.

The RFP files are ONLY for use with CommandCenter Secure Gateway. Once loaded onto CommandCenter SecureGateway 3.1, these files can be used to upgrade DSX16 and DSX32 units from CommandCenter-SG 3.1 or higher.

Reboot /Upgrade	Definition	Time
Pre-reboot upgrade time	Time required to copy files and extract some files	3 minutes
Post-reboot file extraction time boot up	Time required to extract files which were copied during upgrade	3 minutes

Upgrade Limitation:

- Only upgrade from 2.5.x and 3.0.x is supported
- If upgrade is attempting from 2.4.x or older release to 3.1, the upgrade will fail. The unit will not be impacted as no files will get copied
- This release **is not supported** by older versions of CC-SG, namely CC-SG2.3 or CC-SG3.0 (or any older releases).

Release 3.1 Overview:

Release 3.1 is a software upgrade of release 3.0. It includes scores of new features and enhancements to the current new product.

- Internationalized Raritan Serial Console (RSC) application for standalone use on Windows, Solaris, and Linux. This is the best-of-class Java application from any company in the console server business, and it is available as a downloadable applet when accessing a port on the Dominion SX. This provides and preserves a common user-experience with the application and the applet. Furthermore, since this applet is also used by Command Center Secure Gateway (CCSG), it carries the common user experience to users of this platform as well.
- Fully-featured power control for RPC and Dominion PX with outlet associations for servers and networking devices with multiple power feeds – whether these inputs are from one power distribution unit or multiple power distribution units.
- Security: enhancement to the firewall – added pre- and post- routing and Static NAT (SNAT) support.
- Localization: the Raritan Serial Console (RSC) supports four languages: English, Chinese, Japanese and Korean.
- Enhancements in SMTP notifications – persistent attempts (automatic retries) to send SMTP notifications and support for mail server authentication.
- Enhancement in Security: when the Modem Dial Back option is enabled, the user is not allowed to connect to SX by using direct dial in (non-PPP) feature of hyper terminal or similar dialup applications.
- Reliability: CPU Watchdog Timer is added to monitor the health of software. The LED blinking logic is added to indicate activity of serial port, LAN port and operating system heartbeat.

Known Limitations:

When using Internet Explorer 6.0 or higher, please “Turn-off the Pop-up Blocker” in order to view the user list or other associated applications.

When performing Associations Power Control command, the delay parameters represents the User Specified Delay. It is the minimum time (delay) needed between operations. Experienced Delay is Operational Delay plus User Specified Delay, e.g., Sequence Interval and Power Recycle Interval

When using NFS, renaming a port (channel) only takes effect in the NFS log when logging is stopped and started again

JRE 1.5.0 does not support “RSC Help” window in this release. Please upgrade JRE to 1.5.0.03 or above version

Power control is not supported on the last port of the unit. The last port can be used for non-power control target

Japanese menu support is provided. However, Japanese Encoding for the target communication is not fully supported

Release 3.1 Compatibility Information

- Dominion SX models: DSX16 and DSX32 only. If your model number has any suffix (like DSXA, DSXB, or DSX-32-DLM etc.), these models are not supported by this upgrade. There are other files on Raritan’s web-site for these units. This upgrade is intended for units that do NOT have PMON (name of a bootloader).
- The standalone version of the Raritan Serial Console (RSC) is available from the Raritan Support web site.
http://www.raritan.com/support/sup_upgrades.aspx
Contact Raritan Technical Support or Sales Engineering for more information
- When upgrading from Firmware release 2.5, please note the following specific changes:
 - The port used for SX application is now **changed from TCP port 51000** (or other user- specified high-numbered port) **to TCP port 5000**. This port is also renamed as the CSC port.
 - The Discovery port used for CommandCenter communications is not changed, and remains at UDP port 5000. CommandCenter Secure Gateway 3.1 is required for release compatibility.
 - User groups are now supported, so users can now be put into groups that are function-based, rather than user based.
 - To accommodate the many new features, the TCL interpreter has been removed.
 - Kerberos V5 is NOT supported on the DSX16 and DSX32 models only (all other models support Kerberos)
 - The factory default inactivity timeout has been changed to 10 minutes (from 5 minutes)

Important Notes and Information:

- The minimum configuration requirements for the Raritan Serial Client are:
 - CPU speed of 1.0 GHz
 - RAM of 512 Mbytes.
- When changing certain key administrative settings (IP Address, IP Gateway etc.), you must re-boot the SX for the new parameter(s) to take effect.
 - The Administrator should warn all users when a re-boot is necessary.
 - The Administrator should change the necessary parameters and then perform a re-boot for the settings to take effect.

Release Package Details:

The Release 3.0 package for the Dominion SX series has the following components:

- *DominionSXReleaseNotes-Intel-3.1.0-v3*
- *UpgradePack_2.5.6_3.1.0.5.7.zip*

Firmware Upgrade Instructions

Firmware Upgrade Prerequisites:

- It's highly recommended to clear up any event logs before upgrade is started to free up space
- If you have any questions, or do not meet the pre-requisites listed below, please **stop** and contact Raritan Technical Support for further instructions. Please read the entire instructions (this document) before proceeding with the upgrade.

General Upgrade Instructions (Standalone Upgrade)

Note: For best results, the SX device should be re-booted before the firmware upgrade is applied. This will ensure that no users are logged in and/or no sessions are active.

- Only Administrators can upgrade the SX.
- There should not be any active users using the Dominion SX; this means that no users, other than the Administrator performing the update, are logged into the unit. Up to 6 minutes are required to complete the update procedure.
- The software upgrades are written to flash memory, and this takes time to complete. Please do not power-off the unit, or disconnect the Ethernet connection while the upgrade is going on. If you have any questions during the update, call Raritan Technical Support.

1. Close any remote or local SX sessions to all devices connected to the Dominion SX unit – servers, power strips, and serial devices.
2. Close all open RaritanConsole windows.
 - This procedure can only be done from the (Web-browser) interface, with a supported browser.
 - If doing the firmware upgrade over a VPN, ensure that the connection is stable and that no inactivity timeouts have been set.
 - If operating through a router/firewall, the FTP port (TCP port 21) may be blocked and the upgrade may not be possible; in this case a local FTP server is necessary to upgrade the Dominion SX unit.
 - If you are running an FTP server on a Windows PC to upgrade the Dominion SX unit, please read the following additional notes:
 - Please Disable the Windows Firewall before doing the upgrade, or else the upgrade will fail.
 - If you are using VPN software (like Cisco's VPN client), it may also have a built-in firewall that blocks FTP access to the Windows PC. By default when the Cisco VPN client is loaded (it may or may not be in use), the firewall is running automatically, so it has to be disabled to allow the Dominion SX to access the FTP server on the Windows PC.
 - Additional operating system security settings, and optional software, may also prevent an FTP server on the Windows PC from being accessed from the Dominion SX unit.
 - On a heavily loaded Windows PC (with lots of applications running), connection timeouts to the FTP server may cause the upgrade to be aborted; it is best to close all applications except the FTP server to complete the upgrade.

CAUTION: Failure to follow the upgrade instructions exactly could render the Dominion SX unit inoperative, requiring an RMA and a return to factory for repair. Please follow the upgrade instructions explicitly.

The following section provides detailed, step-by-step instructions to perform the upgrade. If unsure of any instructions, please contact Raritan Technical Support before proceeding with the upgrade.

Additional Prerequisites:

- **Note:** for best results, the SX device should be re-booted before the firmware upgrade is applied. This will ensure no users are logged in or sessions active.
- In Internet Explorer (or other supported browser), type in the IP Address of your Dominion SX unit, and login in as an Administrator.

Before you perform a firmware upgrade, you must

1. Download the upgrades file(s) onto a local FTP server.
2. **Unzip the files.**
3. Obtain the IP address of the FTP server.
4. Obtain the file path to the upgrade file(s).
5. Obtain a user account (Optional) if “anonymous” access to the FTP server is not supported.

The Firmware Upgrade feature allows you to upgrade the Dominion SX unit's firmware to a newer version. These upgrades preserve user-defined settings. You do not need re-configure the unit after the upgrade is complete.

Firmware Upgrade

Important: During an upgrade procedure, do not attempt to access any unit features or functions, including, but not limited to, Reset and Exit. Interrupting the upgrade procedure can cause memory corruption and render the unit non-functional. Such an action may void your warranty or service contract, and in such a case unit repair/replacement costs may be solely the responsibility of the user.

Note: Many upgrades can be performed "anonymously" from the FTP server.

To perform the upgrade:

1. Click the **Firmware Upgrade** section on the Maintenance menu. To view the Firmware Upgrade information
 2. Type the **IP Address of the FTP server** in the IP Address field
 3. Type your **Login** name in the Login field
 4. Type your **Password** in the Password field
 5. Type the **File Path** in the File Path field
 6. Click **Upgrade**
- Once the upgrade is initiated, the upgrade status message indicates the progress of the upgrade
 - Locate and select the **DIRECTORY** where the unzipped SX3.1 firmware is located on the FTP server. A file-name is not necessary, just the right path to the directory containing the upgrade files.
For example: C:\Documents and Settings\SX3.1\UpgradePack_2.5.6_3.1.0.5.7\Pack1of2
 - After firmware pack 1 is applied, the SX will restart

IMPORTANT: the following scenario only applies to the Dominion SX of type DSX-16, DSX-32 bought before August 2004. The attempt to upgrade firmware to the 3.1.0.5.7 version will be aborted if the unit is detected with less than 32MB partition size. The upgrade will not be performed but the unit's operation will not be impacted.

If the SX auto restarts after displaying the message “version_check: version check programming flash with new data” for a minute or so and the version number remains the same as before after restarting, the partition size of the SX is less than 32MB. Please contact Raritan Technical Support for the further assistance.

On the other hand, if the version number is changed to 3.1.0.5.7 after rebooting, the partition size of the SX is 32MB and you can perform the following procedures to complete the upgrade.

- After unit restart, repeat above procedures but enter the directory for firmware pack 2.
For example: C:\Documents and Settings\SX3.1\UpgradePack_2.5.6_3.1.0.5.7\Pack2of2
- The firmware upgrade may take up to 6 minutes per SX.
- You cannot operate the SX during the upgrade.
- The progress bar may pause for a long period at certain points; this is normal.
- **DO NOT REBOOT OR POWER CYCLE THE SX!**
- When complete, the Dominion SX will reboot and the current session will close.

- After the reboot, the unit will be fully updated in approximately 3 minutes (This time is taken by unzipping certain files, and writing them to flash memory – with error-checking at all stages).
- You can verify the result by:
 1. Close all open browser windows.
 2. Open a new browser session, type in the IP Address of the Dominion SX unit, and login to verify that the upgrade was a success.

If you have any questions about compatibility with previous versions of Dominion SX software or CommandCenter Secure-Gateway, please contact Raritan Technical Support.

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