

CommandCenter Secure Gateway

Quick Setup Guide for CC-SG Virtual Appliance and Imadmin License Server Management

This Quick Setup Guide explains how to install and configure the CommandCenter Secure Gateway.

For additional information on any aspect of CommandCenter Secure Gateway, see the CommandCenter Secure Gateway User Guide, which can be downloaded from the Firmware and Documentation section (<http://www.raritan.com/support/firmware-and-documentation/>) of Raritan's website.

For CC-SG release 5.3 and later, Raritan recommends deploying without a license server. See the "CC-SG Virtual Appliance Quick Setup Guide - No License Server" in the Support > Firmware and Documentation section of Raritan's website for instructions.

This installation includes the virtual CC-SG appliance and the Imadmin license server manager.

The Raritan vendor daemon specified in this guide allows license server installation on either a physical server or a VMware Virtual Machine.

You do not need to upgrade CC-SG or re-install your CC-SG virtual appliance to install the license server manager on new physical or virtual machine. You do need to obtain new license files to change your license server to a new server, either physical or virtual. Contact Raritan Technical Support to rehost your CC-SG installation.

Your old license files, old "raritan" vendor daemon file, and old utilities cannot be used with this new license server installation.

Requirements

1. ESX/ESXi 4.1/5.0 to deploy the CommandCenter Secure Gateway virtual appliance
 - Must have a datastore with 40GB minimum available
 - Must have 2GB memory available
 - 2 physical NICs in the server. (ESX/ESXi networking refers to these as "vmnic".)
 - A high availability cluster with access to shared storage is recommended. Fault tolerance may also be used. See CC-SG Administrators Help "Using VMware High Availability or Fault Tolerance with a CC-SG Virtual Appliance".
<http://www.raritan.com/help/ccsg/v5.4.0/en/#25713>
2. Client computer running vSphere Client 4.1/5.0
3. A physical host or VMware Virtual Machine as host with a Windows or Linux server, to host the Flexera™ FlexNet Publisher® license server, and a supported OS. A dedicated physical server is not required. See the FlexNet Publisher License Administration Guide, "Selecting a License Server Machine" for more details. When using a VMware Virtual Machine as host, ESX/ESXi 4.1/5.0 is required.

Flexera's Imadmin 11.8 license server manager is supported on:

- Windows 32-bit, x86 on:
 - Windows Server 2008
 - Windows Server 2003
 - Windows XP Professional with SP3
 - Windows Vista (Ultimate)
 - Windows 7 (Ultimate)
- Linux 32-bit Linux Standard Base (LSB) 3.0 Certified, x86 on:
 - Red Hat Enterprise Linux 4.0
 - Red Hat Enterprise Linux 5.0
- Raritan supports and provides version 11.8 of the Flexera FlexNet Publisher license server manager.

If using a physical server for the license server, note that Raritan's testing has shown the following processor/OS combinations to be favorable:

- Intel Pentium 4 with Windows XP
- Intel Pentium D with Windows Vista
- Intel Celeron with Windows 2003 Server
- AMD Opteron with Windows 2003 Server

- AMD Opteron with Windows 7
 - AMD Opteron with Windows 2008 Server
 - AMD Athlon 64 with Windows Vista
- Raritan's testing has shown the following processor/OS combinations to be unfavorable. The Raritan vendor daemon fails to start and displays the message: "(raritan) No valid hostids, exiting.":
- Intel Xeon with Windows 2003 Server
 - Intel Pentium 3 with Windows 2003 Server
4. The virtual appliance .OVF file, the Raritan vendor daemon file, and the Flexera license server manager files, which are available at the following links at <http://www.raritan.com/support/commandcenter-secure-gateway>. See **Download Installation Files** (on page 2) for details.
- **CommandCenter Secure Gateway Virtual Appliance** link: You must log in to the Raritan Software License Key Management site to view this link. See **Get Your License** (on page 3).
 - **Flexera License Manager & Raritan Vendor Daemon Files** link

Download Installation Files

The complete set of installation files is available at <http://www.raritan.com/support/CommandCenter-Secure-Gateway/> by accessing the CommandCenter Secure Gateway Virtual Appliance link.

You must log in to the Raritan Software License Key Management to access these files at this link. See **Get Your License** (on page 3) for details.

If you prefer not to download the .OVF file due to its size, the .OVF file is also shipped to customers on the product DVD. The DVD does not include the Flexera or vendor daemon files, so you must download them from the website.

Note: The files needed for both Linux and Windows, and both lmadm and lmgrd license server managers are included, but the instructions in this document specify which files to use for each type of installation. You can ignore any inapplicable files.

The installation files are packaged in two .ZIP files. The <release number> part of the filename will contain the actual CC-SG release number.

The vccsg_rel_<release number>_ovf.ZIP file contains:

- .OVF file used to deploy the virtual appliance

The flexserver-11.8-raritan-3.0.ZIP file contains:

- Raritan vendor daemons and Raritan ID utility for Linux and Windows
- Flexera™ FlexNet Publisher® license server managers for Linux and Windows
 - Linux: lmadm install binary, lmgrd, and lmutil
 - Windows: lmadm install executable, lmgrd, lmtools, and lmutil

Install License Server Software on a Linux or Windows Server

CommandCenter Secure Gateway virtual appliance requires the Flexera™ FlexNet Publisher® license server software to be installed on a supported physical or virtual server.

See **Requirements** (on page 1) for supported servers.

Linux Server

The flexserver11.8 subdirectory, extracted from the flexserver11.8.zip file downloaded earlier from the Flexera License Manager & Raritan Vendor Daemon link, contains two of the files you will use in the installation:

- flexserverv11.8-linux.tar.gz
 - raritan-linux32-3.0.zip
1. Log in to the Linux server.
 2. Add a user called *flex* to the system.
 3. Log in as *flex* and open the terminal.
 4. Copy the flexserverv11.8-linux.tar.gz and raritan-linux32-3.0.zip files to home/flex.
 5. Unzip the contents to the same location.

```
tar -xvzf flexserverv11.8-linux.tar.gz
```

The files are unpacked. The following directories are created:

- flexserverv11.8
 - i86_lsb is created under flexserverv11.8
6. Unzip the raritan-linux32-3.0.zip file to home/flex. This zip file contains the Raritan vendor daemon file.

```
unzip raritan-linux32-3.0.zip
```

The file is unzipped. The following files are available:

- raritan-linux32
 - raritanid
7. Move and rename the Raritan vendor daemon file to prepare for the lmadm installation.

```
cp raritan-linux32
/home/flex/flexserverv11.8/i86_lsb/lmadm
/raritan
```
 8. Change the permissions of the "raritan" file.

```
chmod +x
/home/flex/flexserverv11.8/i86_lsb/lmadm
/raritan
```
 9. Move the Raritan ID utility file to the same directory as the Raritan vendor daemon file.

```
cp raritanid
/home/flex/flexserverv11.8/i86_lsb/lmadm
/raritanid
```

Note: You must also copy the "raritan" and "raritanid" files from this location to the location where you install

Imadmin. See ***Install the Imadmin License Server Manager and Start the Server*** (on page 4).

10. Verify the LSB release.

```
run lsb_release -a
```

11. If you need to install it, run `yum install redhat-lsb` as root.

Windows Server

The flexserver11.8 subdirectory, extracted from the flexserver11.8.zip file downloaded earlier from the Flexera License Manager & Raritan Vendor Daemon link, contains two of the files you will use in the installation:

- flexservv11.8-win.zip
- raritan-win32-3.0.zip

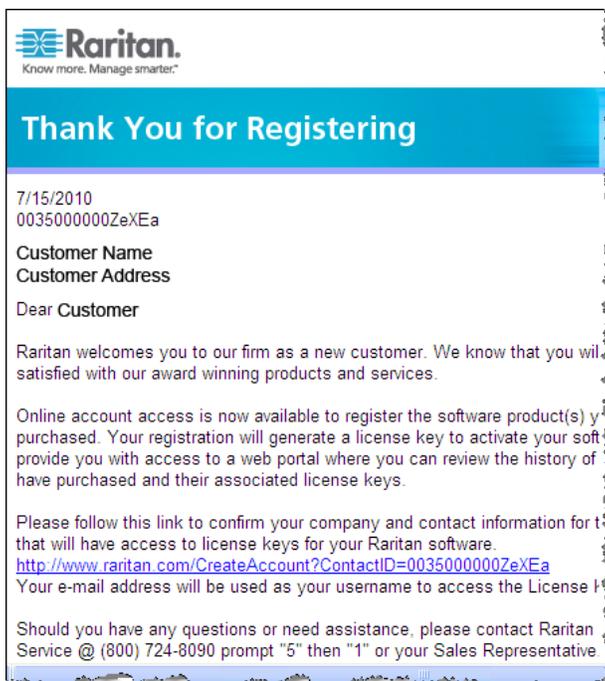
1. Unpack the flexservv11.8-win.zip file to C:\ on the Windows server. This creates a folder called flexnet-win.

2. Unpack the raritan-win32-3.0.zip to C:\flexnet-win\i86_n3\

Note: You must also copy the "raritan.exe", "raritanid.exe", and "dmidecode.exe" files from this location to the location where you install Imadmin. See ***Install the Imadmin License Server Manager and Start the Server*** (on page 4).

Get Your License

1. The license administrator designated at time of purchase will receive an email from Raritan Licensing Portal from the email address licensing@raritan.com, with the subject line Thank You for Registering.



2. Click the link in the email to go to the Software License Key Login page on Raritan's website. Create a user account and login. The username is your email address. The licensing account information page opens. Your license files will be available shortly.
3. Check your email for another message from Raritan Licensing Portal from the email address licensing@raritan.com, with the subject line Your Raritan Commandcenter SG Software License Key is Available.



Thank You for Registering

7/15/2010
0035000000ZeXEa

Customer Name
Customer Address

Dear Customer

This is an important email regarding your recent Raritan CommandCenter Sec purchase. Your Software License Key may now be generated. This License required to activate this Software Product.

You can access that license key(s), as well as review the history of Raritan s products that you have purchased with their associated license keys, at our v here - <http://www.raritan.com/licensing>.

4. Click the link in the email to go to the Software License Key Login page on Raritan's website and login with the user account just created.
5. Click the Product License tab. The licenses you purchased display in a list. You may have only 1 license, or multiple licenses.
6. To get each license, click Create next to the item in the list. If you have more than 1 license, such as a base license of CCSG128-VA and an add-on license of CCL-1024, create the base license first.

Note: If you are migrating from an old license server to a new one, you must get rehosted licenses. You cannot use the old license files. Make sure you create and download the new licenses. If you do not see new licenses listed, contact Raritan Technical Support to request rehosted licenses.

7. Select New Deployment - For Use With License Server if this is the first time you are creating a license, or if you are migrating to a new license server. If you have multiple CC-SG deployments with more than 1 license server, select Add to an Existing License Server Deployment, then select the license server you want to add this license to.
8. Select Single as the Deployment Mode and Path. Leave Vendor Daemon Path blank then click Next.
9. Select Hostname or Host IP, then enter either the hostname or IP address of the license server.

Note: If using the license server's hostname in the license file, ensure that DNS and reverse DNS lookups are correct and correspond to the hostname. Make sure to include the fully qualified domain name in the license file you upload. CC-SG cannot locate the license server without this information. The machine hosting the license server manager should also have DNS properly configured.

If using the license server's IP address in the license file, the license server manager will still perform DNS consistency checks even when the license file contains the IP address. If the checks fail, the license server manager will report an error.

To correct this, define an Environment Variable, FLEXLM_ANYHOSTNAME, set equal to 1. The FLEXLM_ANYHOSTNAME will allow the license server to bypass the initial hostname checks.

10. Enter the Host ID of the license server, using these instructions to retrieve it. The Host ID contains 36 characters for physical servers, such as:
A005B983-8DFE-D511-A510-00112FCB87F6; and 40 characters for virtual servers, such as:
c8d0517a7934beatfba82ac4e5d1df5caf6ea0e0.

- **Virtual License Servers:** To retrieve the Host ID of your license server, run the `raritanid` utility on the license server from the directory.
 - On Linux: Run `./raritanid` from the `/home/flex/flexserverv11.8/i86_lsb/raritan` directory
 - On Windows: Open a Command window, and use `cd` to change to the `\flexnet-win\i86_n3` directory, then run `raritanid`
- **Physical License Servers:** To retrieve the Host ID of your license server, run the `dmidecode` program on the license server from the directory. In the Linux example, the `-s` option is used to retrieve the value of the system-uuid DMI string that corresponds to the System Information UUID attribute. If your `dmidecode` version does not support the `-s` option, parse the output for the value of the System Information UUID attribute using `dmidecode | grep UUID`.
 - On Linux: `su - root; dmidecode -s system-uuid`
 - On Windows: Open a Command window, and use `cd` to change to the `\flexnet-win\i86_n3` directory, then run `dmidecode -s system-uuid`

Note: To copy the Host ID in Windows, right-click then choose Mark. Use arrow keys and Shift key to select the Host ID. Paste it into the Host ID field in the License Portal.

11. Enter the TCP port number that CC-SG will use to communicate with the license server. The default port is 27000. If the license server is behind a firewall, make sure the port number you enter is open. You can change the port number in the license file later if needed.

12. Click Create License. The details you entered display in a pop-up. Verify that your Host ID is correct.

Warning: Make sure the Host ID is correct! A license created with an incorrect Host ID is not valid and requires Raritan Technical Support's help to fix.

13. Click OK. The license file is created.
14. Click Download Now and save the license file.

Install the Imadmin License Server Manager and Start the Server

The FlexNet Publisher License Server Installer application will guide you through the installation, on both Linux and Windows.

The installer requires Java run time 1.5 or later.

The installer gives options for the install folder, for service configuration, and for starting the server. The recommended selections are described here.

► Choose Install Folder:

Do not install the Imadmin in the same folder as an existing FlexNet Publisher installation. You must have write permissions to the installation folder.

► Service Configuration:

It is recommended to install the license server manager as a service, so that it will automatically start whenever the operating system restarts.

During Windows installations, select the Run as Service checkbox to allow this configuration. For UNIX installations, see the FlexNet Publisher License Administration Guide, "Installing Imadmin License Server Manager as an Operating System Service" for instructions on this configuration.

► Starting the Server:

Select the "Start server now" option at the end of the installer to immediately start the server. If the server starts successfully, the license server manager interface opens. If the server does not start, see the FlexNet Publisher License Administration Guide, "License Server Manager Not Starting."

When the license server manager interface opens, the feature list will be blank until you upload your license file. See **Upload Your License in Imadmin** (on page 5).

Linux Server

If using a virtual Linux server, do this procedure from the VM console.

1. Change to the directory with the Imadmin files.
- ```
cd
/home/flex/flexserverv11.8/i86_lsb/lmadmin
```

2. Run the lmadmin binary to install the license server manager.  

```
./lmadmin-i86_lsb-11_8_0_0.bin
```
3. The installer dialog appears. See **Install the lmadmin License Server Manager and Start the Server** (on page 4) for details on the dialogs.
  - In the Choose Install Folder dialog: You must have write permissions to the installation location. The default installation folder is `/opt/FNPLicenseServerManager`. Do not install in the same location as a previous installation.
4. Select the "Start server now" checkbox and click Finish to complete the installation and start the license server and the license server manager.
5. Copy the Raritan vendor daemon file from `/home/flex/flexserverv11.8/i86_lsb/lmadmin/raritan` to the same location where you installed lmadmin. The default folder is `/opt/FNPLicenseServerManager`.  

```
cp raritan /opt/FNPLicenseServerManager
```
6. Copy the Raritan ID utility from `/home/flex/flexserverv11.8/i86_lsb/lmadmin/raritanid` to the same location where you installed lmadmin. The default folder is `/opt/FNPLicenseServerManager`.  

```
cp raritanid /opt/FNPLicenseServerManager
```

## Windows Server

1. In the `C:\flexnet-win\i86_n3\lmadmin` directory, double-click the `lmadmin-i86_n3-11_8_0_0.exe` file to start the installer.
2. The installer dialog appears. See **Install the lmadmin License Server Manager and Start the Server** (on page 4) for details on the dialogs.
  - In the Choose Install Folder dialog: You must have write permissions to the installation location. The default installation folder is `\ProgramFiles(x86)\FlexNet Publisher License Server Manager`. Do not install in the same location as a previous installation.
  - Visual C++ 2005 SP1 Redistributable Package must be available on the server. Select the checkbox to install this package during installation.
  - In the Service Configuration dialog: Select the Run as Service checkbox to setup the license server manager as a service. Leave other options as default.
3. Select the "Start server now" checkbox and click Finish to complete the installation and start the license server and the license server manager.
4. Copy the Raritan vendor daemon file, "raritan.exe", the Raritan ID utility, "raritanid.exe", and "dmidecode.exe" from `C:\flexnet-win\i86_n3` to the same location where you installed lmadmin. The default folder is `\ProgramFiles(x86)\FlexNet Publisher License Server Manager`.

## Upload Your License in lmadmin

After your license server manager starts successfully, in either Linux or Windows, use lmadmin to upload your license files to the server.

The Raritan vendor daemon file must be in the lmadmin install location before you upload license files, or the daemon will not start automatically. See **Install the lmadmin License Server Manager and Start the Server** (on page 4) for details on file locations.

You can access the license server manager locally, or remotely, using `http://<IP address>:8080`. If you are using the license server locally, you must transfer the license files to the server. If you are accessing the license server remotely, you can upload the license files from your client computer.

### ► To upload your license in lmadmin:

1. In the FlexNet lmadmin interface, click Administration in the top right corner.
2. Log in using the default username and password: `admin/admin`.
3. Follow the prompts to change the default password.
4. Click Vendor Daemon Configuration in the left toolbar.
5. In the Vendor Daemons page, click Import License.
6. Click Browse, then select the license file and click OK.
7. Click Import License.
  - If the license import is successful, a message displays: "Successfully uploaded license file to `licenses/raritan/FILE1_CC5G128VA_2C7rIAF_bbe5f120_05DEC11_3130.lic`. Configured new vendor daemon, raritan."
  - The licensed features are listed in the dashboard after the Raritan vendor daemon starts successfully. To view the feature list, click Dashboard, select Concurrent Licenses, then select "raritan" from the drop-down list.
8. To add more license files, click Vendor Daemon Configuration, select Import License, select the additional license file, and import the license.
  - If the license import is successful, a message displays: "Successfully uploaded license file to `licenses/raritan/<your add-on license>.lic`. Changed vendor daemon license path for raritan. Vendor daemon must be restarted for change to take effect. Updated vendor daemon configuration for raritan."
  - You must stop and restart the Raritan vendor daemon to use the new licenses.

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Note: Starting and stopping the vendor daemon is always available when accessing the license server locally. If you will be accessing remotely, you can disable this feature. See the FlexNet Publisher License Administration Guide.

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## Install CommandCenter Secure Gateway on VMware ESX/ESXi Server 4.1/5.0

You do not need to upgrade or reinstall your CC-SG virtual appliance to migrate or update your license server installation. Skip this procedure if your CC-SG virtual appliance is already installed properly and you do not want to install a new CC-SG. Go to **Install and Check Out Your License** (on page 6) if you want to install and check out your new, rehosted licenses, and your CC-SG virtual appliance is already installed.

1. Connect to the ESX/ESXi 4.1, 5.0, or 5.1 from your client computer using vSphere 4.1, 5.0, or 5.1.
2. Log in as a user that has permission to create, start, and stop virtual machines.
3. Choose File > Deploy OVF Template.
4. Select Deploy From File then click Browse to go to the directory where you unzipped the files. Select the .OVF file. Click Next.
5. Details about the virtual machine that will be created display. You can change the default name of the virtual machine. Click Next.
6. Select the inventory location. Click Next.
7. Select the Host where you want to deploy the CommandCenter Secure Gateway. **A host that is part of a high availability cluster is recommended for failover protection.** Click Next.
8. If you selected a cluster, select the specific host. Click Next.
9. Choose the datastore where all files will be stored. Make sure the datastore has 40GB free. Click Next.

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Note: Datastore availability is critical for proper and reliable operation. The datastore should be highly available with redundant network access and routine backup.

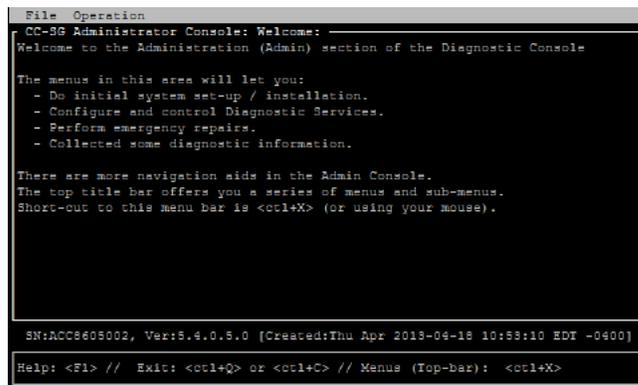
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10. Choose the network your CC-SG is being deployed on. Click Next.
11. View the summary then click Finish. Wait several minutes while the virtual machine is created.
12. Power on the virtual machine.
13. Open the Console tab to access the Diagnostic Console of CC-SG.

### Log in to Diagnostic Console to Set CC-SG IP Address

1. Log in as *admin/raritan*. Usernames and passwords are case-sensitive.
2. You will be prompted to change the local console password.
  - a. Type the default password (*raritan*) again.
  - b. Type and then confirm the new password. The new password must be a strong password consisting of at least eight characters that are a combination of letters and numbers.

3. Press CTRL+X when you see the Welcome screen.



```

File Operation

CC-SG Administrator Console: Welcome:
Welcome to the Administration (Admin) section of the Diagnostic Console

The menu in this area will let you:
- Do initial system set-up / installation.
- Configure and control Diagnostic Services.
- Perform emergency repairs.
- Collected some diagnostic information.

There are more navigation aids in the Admin Console.
The top title bar offers you a series of menus and sub-menus.
Short-cut to this menu bar is <ctrl+X> (or using your mouse).

SN:ACC8E05002, Ver:5.4.0.5.0 [Created:Thu Apr 2013-04-18 10:53:10 EDT -0400]
Help: <F1> // Exit: <ctrl+Q> or <ctrl+C> // Menu (Top-Bar): <ctrl+X>

```

4. Choose Operation > Network Interfaces > Network Interface Config. The Administrator Console appears.
5. In the Configuration field, select DHCP or Static. If you select Static, type a static IP address. If needed, specify DNS servers, netmask, and gateway address.
6. Select Save. Wait a few minutes as CC-SG restarts.

### Default CC-SG Settings

IP Address: 192.168.0.192

Subnet Mask: 255.255.255.0

Username/Password: admin/raritan

### Log in to CC-SG

1. Launch a supported browser and type the URL of the CC-SG: <https://<IP address>/admin>.  
For example, <https://192.168.0.192/admin>.

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Note: The default setting for browser connections is HTTPS/SSL encrypted.

---

2. When the security alert window appears, accept the connection.
3. You will be warned if you are using an unsupported Java Runtime Environment version. Follow the prompts to either download the correct version, or continue. The Login window appears.
4. Type the default username (*admin*) and password (*raritan*) and click Login.  
The CC-SG Admin Client opens.

### Install and Check Out Your License

1. Choose Administration > License Management.
2. Click Add License.
3. Read the license agreement and scroll down the whole text area, then select the I Agree checkbox.
4. Click Browse, then select the base virtual appliance license file.

5. Click Open. CC-SG connects with the license server and retrieves a list of licensed features. The features display in a list.
6. Select the CCSG128-VA base license then click Check-Out to activate it.
7. To activate Add-On licenses, select each license then click Check-Out.

See the CC-SG Administrators Guide for more details about licenses. See the Flexera™ FlexNet Publisher® documentation for more details about managing your license server. You can download the FlexNet Publisher License Administration Guide for FlexNet Publisher Licensing Toolkit 11.8 from [www.flexera.com](http://www.flexera.com), under Support > Documentation Center.

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### Additional Information

For more information about the CommandCenter Secure Gateway™ and the entire Raritan product line, see Raritan's website ([www.raritan.com](http://www.raritan.com)). For technical issues, contact Raritan Technical Support. See the Contact Support page in the Support section on Raritan's website for technical support contact information worldwide.

Raritan's products use code licensed under the GPL and LGPL. You can request a copy of the open source code. For details, see the Open Source Software Statement at (<http://www.raritan.com/about/legal-statements/open-source-software-statement/>) on Raritan's website.