

Spectra2 User Guide

733-0892 Rev. A

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Spectra2 User Guide

733-0892 Rev. A

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Technical Assistance Center (TAC) – Plano, Texas USA

Serves North America, South America, Latin America, Asia, UK, Europe, Middle East, Pacific Rim and Africa.

NETSCOUT SYSTEMS, INC.

3033 W President George Bush Highway
Plano, TX 75075 USA

1-469-330-4580 (Customer Support voice)

1-469-330-4617 (Customer Support fax)

E-mail:

nd-tac-us@netscout.com

Web:

<http://www.netscout.com/product/enterprise/test-optimization/test-tools-for-lab-and-production>

When you contact Customer Support, the following information can be helpful in diagnosing and solving problems:

- Your organization's name, contact name, phone number, and location of system
- Spectra2 Software version
- Detailed description of the problem, or source of the problem based on its symptoms
- Error text messages, supporting screen images, logs, and error files, as appropriate

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1 Getting Started with Spectra2

1.1 Overview

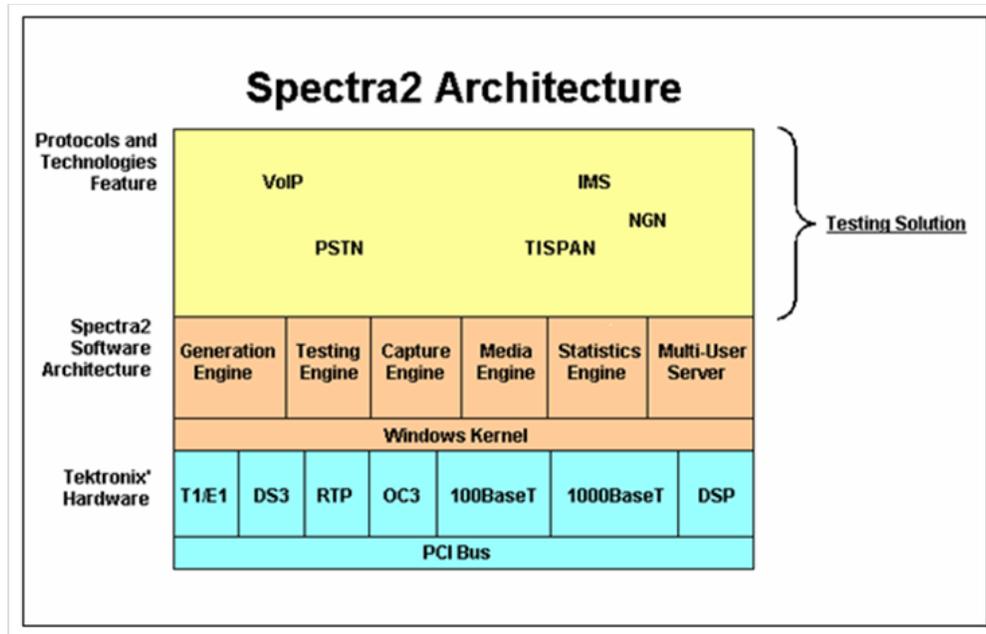
This guide contains information to help you understand Spectra2's monitoring, protocol testing, and load generation capabilities. Spectra2 is a hardware and software solution designed for network maintenance, surveillance, commissioning, and troubleshooting of Voice over Internet Protocol (VoIP), Public Switched Telephone Network (PSTN), IP Multimedia Subsystem (IMS), and Telecoms & Internet converged Services and Protocols for Advanced Networks (TISPAN) networks. The following four primary features are the core of the Spectra2 solution :

- Monitoring
- Functional Testing
- Load Generating
- Media Analysis

With Spectra2, you can use a single unit for monitoring, emulating, generating, analyzing network traffic and data, and generating statistics. Spectra2 is a client- server system that contains multiple applications (appearing as tabs) within a single interface and an external System Administrator application.

Spectra2 runs on a Windows operating system (OS) using Peripheral Component Interconnect (PCI) and PCIe backplane technology to warehouse a variety of interface boards supporting:

- Physical T1/E1
- Copper Gigabit Ethernet
- Optical Gigabit Ethernet
- Optical 10-Gigabit Ethernet
- OC-3/STM-1



Spectra2 Architecture

Note: DS3 is a legacy interface and is no longer available for purchase.

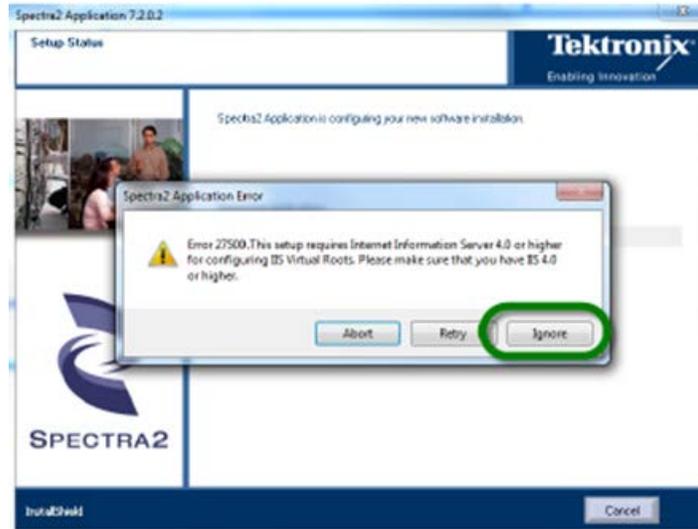
1.2 System Requirements for Client

The following list provides the minimum system requirements for a client workstation on which you install Spectra2:

- 2.0Ghz Duo Core or comparable processor
- Windows XP or Windows 7 32 or 64-bit
- 2Gb of Random Access Memory (RAM)
- 3 GB of available hard disk space with at least 300 MB on the Windows system drive
- Installation of Internet Explorer 5.0 or later to access the Spectra2 online help system

1.3 Internet Information Service (IIS) on a Server

During the install or upgrade process for Spectra2, a message may appear about configuring your Internet Information Service (IIS). IIS is not needed, please click Ignore as illustrated below and continue with the installation or upgrade procedure.



1.4 Modifying the Visual Settings

If you install the Spectra2 server on an XP or Windows 7 workstation, you need to modify the visual settings to optimize your workstation's performance.

Step	Action
1	From the menu, select Control Panel to open the Control Panel window
2	Double-click the System icon to open the System Properties dialog box
3	Click the Advanced tab, and then click Settings in the Performance area to open the Performance area dialog box
4	Click the Visual Effects tab
5	Click the Adjust for best performance option button
6	Click OK to return to the System Properties dialog box
7	Click the Automatic Updates tab
8	Click the Keep my computer up to date check box to remove the checkmark, and then click Apply
9	Click the Remote tab
10	Click the Allow users to connect remotely to this computer check box to add a checkmark, and then click Apply
11	Click OK to close the dialog box
12	From the Start menu, select Control Panel to open the Control Panel window

13	Double-click the User Accounts icon to open the User Accounts dialog box
14	Click Change the way user log on or off
15	Click the Use the welcome screen check box to remove the checkmark, and then click Apply Options
16	Close the User Accounts dialog box
17	Right-click the desktop and select Properties to open the Display Properties dialog box
18	Click the Screen Saver tab
19	Select Blank from the Screen saver options menu
20	Click Power... to open the Power Options Properties dialog box
21	Select Never from the Turn off monitor options menu
22	Select Never from the Turn off hard disks options menu
23	Click Apply , and then click OK to close the Power Options Properties dialog box
24	Click OK to close the Display Properties dialog box

1.5 Installing Spectra2 on a Server

Installing Spectra2 is a two-part process, which include the following two procedures:

- Install the Spectra2 application
- Install the Spectra2 decodes

You must have administrator privileges on your system to install Spectra2 on a server.

For additional information, refer to “Modifying, Repairing, and Uninstalling the Spectra2 Application” and “Modifying, Repairing, Uninstalling, and Updating the Spectra2 Decodes” in this document.

1.5.1 Installing the Specta2 Application on a Server

The following steps guide you through installing the Spectra2 application on a server. Custom installations require Windows XP or Windows 7 as your operating system (OS). Ensure your system meets the requirements before installing. Refer to “System Requirements for Client” on page 2 for additional information.

Step	Action
1	Install IIS on your server if you do not have it installed. Refer to “Installing the Internet Information Service (IIS) on a Server” in this document.

2	Close all applications, including any Terminate and Stay Resident (TSR) programs that are in the system tray.
---	---

Note: TSR programs are programs that show no outward signs of output but still run in the background on your system. For example, antivirus software generally runs as a TSR program. TSR programs use system resources that interfere with the installation process

3	Modify your visual settings if you are using an XP or Windows 7 workstation. Refer to “Modifying the Visual Settings” section in this document.
4	Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens
5	Click Install Spectra2 , and wait while the InstallShield Wizard dialog box opens and prepares to install the application (for Windows 7 installation, make sure to right-click the setup.exe file and select “Run as administrator”)
6	Click Next when the Welcome area of the InstallShield Wizard dialog box opens.
7	Read the information in the New Features area of the InstallShield Wizard dialog box, and click Next .
8	Read the License Agreement in the License Agreement area of the InstallShield Wizard dialog box
9	Click Yes to accept the License Agreement and to open the Customer Information area of the InstallShield Wizard dialog box
10	Complete the following steps: <ul style="list-style-type: none"> • Enter your user name in the User Name field • Enter your company name in the Company Name field
11	Click Next to open the Choose Destination Location area of the InstallShield Wizard dialog box
12	Click Browse... and navigate to where you want to install the application, or accept the default path C:\Program Files\Tektronix\Spectra2\ (for Windows 7 64-bit installation, the path will indicate C:\Program Files (x86)\Tektronix\Spectra2\ by default).
13	Click Next to open the Select Features area of the InstallShield Wizard dialog box
14	Click one of the following buttons for the type of installation you want: <ul style="list-style-type: none"> • Spectra2 Server – Installs the client and server portions of the Spectra2 application, including the System Administrator application • Custom – Allows you to specify the components you want to install. Recommended for advanced users
15	Click Install to allow for the “Napatech” driver (required for IPSMi-Gen2 cards) to be installed.

Note: If you already have a license file then you do not need to complete Steps 16 and 17 below.

16	Click Yes if a Question dialog box opens requesting you to install a license file. The Choose Destination Location area of the InstallShield Wizard dialog box opens. This message does not appear if you already have the license file in the correct location.
----	---

17	Click Browse... to navigate to the location of the product license on the Spectra2 floppy disk, or accept the default path <code>C:\License</code> except in cases when you have previously installed Spectra2 on your system
18	Click OK when a dialog box appears, indicating the Web Client Install has been added to your system
19	The InstallShield Wizard Complete area of the InstallShield Wizard dialog box opens after the application installs. Click Finish to open an InstallShield Wizard Complete area.
20	Click OK if the Information dialog box appears notifying you to install Acrobat Reader to view the printed guides. This message does not appear if you already have Acrobat Reader installed.
21	Click OK if the Spectra2 Application dialog box appears notifying you to install the Spectra2 Decodes. This message does not appear if you have already installed the decodes on your system.
22	Click Yes, I want to restart my computer now option button and click Finish . Your workstation restarts, and the application installation process completes

1.5.2 Installing the Specta2 Licenses

To install the Spectra2 License files, follow the steps below:

Step	Action
1	Remove any existing Spectra2 feature and decode license in the Bin folder located in the Spectra2 installation directory. <ul style="list-style-type: none"> The default Spectra2 installation directory is <code>C:\Program Files\Tektronix\Spectra2</code>
2	Copy the new Spectra2 feature and decode licenses to the Bin folder located in the Spectra2 installation directory.

1.5.3 Installing the Specta2 Decodes

You must install the Spectra2 decodes separately from the Spectra2 application. The following steps guide you through installing the Spectra2 decodes using a CD-ROM or downloaded software. Ensure your system meets the requirements before installing. Refer to "System Requirements for Client" in this document for additional information.

Step	Action
1	Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens.
2	Click Install Spectra2 Decodes , and wait while the Install Decodes dialog box opens, which lists the available decodes to install. (for Windows 7 installation, make sure to right-click the InstallApp.exe file and select "Run as administrator")
3	Click the check boxes next to the protocols you want to install for each decode option purchased. A checkmark (✓) next to a protocol indicates the set of decodes included in the installation process. You must select the Main Install check box the first time you install the decodes. Spectra2 detects your licenses in the

	C:\Program Files\Tektronix\Spectra2\Bin file and automatically places a checkmark (✓) next to protocols for which you have a license.
--	---

Note: The Install Decodes dialog box remains open throughout the install and you must repeat an install for each set of decodes.

4	Click Install after you click all the protocol options purchased
5	<p>The InstallApp.exe program finds each protocol selected and launches the corresponding install for it. Complete the following process for each option selected. This process repeats for each option.</p> <ul style="list-style-type: none"> • Click Next in the Welcome area of the InstallShield Wizard dialog box • The Select Features dialog box options and displays the selected features licenses. Click Next to start the install. The install process only installs licensed features. Read the warning message on the dialog box about installing decodes for which you do not have a license • Click Finish after the install completes

Note: If you do not have a license file in C:\Program Files\Tektronix\Spectra2\Bin, the InstallApp.exe program prompts you to install the license. Follow the steps to install the license files.

6	Click OK when Please reboot your system appears
7	Restart your workstation, and the install process completes

1.6 Installing Spectra2 on a Client

Installing Spectra2 is a two-part process, which include the following two procedures

- Install the Spectra2 application
- Install the Spectra2 decodes

For additional information, refer to “Modifying, Repairing, and Uninstalling the Spectra2 Application” and “Modifying, Repairing, Uninstalling, and Updating the Spectra2 Decodes” sections in this document.

Note: When a Spectra2 client runs on a PC that has multiple NICs, it compares the NIC IP addresses and uses the closest match to connect to the Spectra2 server (Spectra2 services).

1.6.1 Installing the Specta2 Application on a Client

The following steps guide you through installing the Spectra2 application on a client using a CD-ROM or downloaded software. Ensure your system meets the requirements before installing. Refer to “System Requirements for Client” section for additional information.

Step	Action
1	Close applications, including any Terminate and Stay Resident (TSR) programs that are in the system tray.

Note: TSR programs are programs that show no outward signs of output but still run in the background on your system. For example, antivirus software generally runs as a TSR program. TSR programs use system resources that interfere with the installation process

2	<p>Complete one of the following steps:</p> <ul style="list-style-type: none"> • Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens. Click Install Spectra2 and wait while the InstallShield Wizard dialog box opens and prepares to install the application • Windows XP and Windows 2000—If you are installing downloaded software, navigate to the executable and double-click setup.exe and wait while the InstallShield Wizard dialog box opens and prepares to install the application • Windows 7 – if you are installing downloaded software, navigate to the executable, right-click on setup.exe, and click Run As Administrator. You must provide your permission before you proceed
3	Click Next when the Welcome area of the InstallShield Wizard dialog box opens
4	Read the information in the New Features area of the InstallShield Wizard dialog box, and click Next
5	Read the License Agreement in the License Agreement area of the InstallShield Wizard dialog box
6	Click Yes to accept the License Agreement and to open the Customer Information area of the InstallShield Wizard dialog box
7	<p>Complete the following steps:</p> <ul style="list-style-type: none"> • Enter your user name in the Unser Name field • Enter your company name in the Company Name field
8	Click Next to open the Choose Destination Location area of the InstallShield Wizard dialog box
9	Click Browse... and navigate to where you want to install the application, or accept the default path C:\Program Files\Tektronix\Spectra2\.(for Windows 7 64-bit installation, the path will indicate C:\Program Files (x86)\Tektronix\Spectra2\ by default).
10	Click Next to open the Select Features area of the InstallShield Wizard dialog box
11	Click the Spectra2 Client button to open the Setup Status area of the InstallShield Wizard dialog box and install the application.
12	Click Ignore if a message appears about configuring your IIS components. This process only applies to a Spectra2 server.
13	The InstallShield Wizard Complete area of the InstallShield Wizard dialog box opens after the application installs. Click Finish to open another InstallShield Wizard Complete area
14	Click OK if the Information dialog box appears notifying you to install Acrobat Reader to view the printed guides. This message does not appear if you already have Acrobat Reader installed.
15	Click OK if the Spectra2 Application dialog box appears notifying you to install the Spectra2 Decodes. This message does not appear if you have already installed the decodes on your system.
16	Click Yes, I want to restart my computer now option button and click Finish . Your workstation restarts, and the application installation process completes

1.6.2 Installing the Spectra2 Decodes

You must install the Spectra2 decodes separately from the Spectra2 application. The following steps guide you through installing the Spectra2 decodes using a CD-ROM or downloaded software. Ensure your system meets the requirements before installing. Refer to “System Requirements for Client” in this document for additional information.

Step	Action
1	Complete one of the following steps: <ul style="list-style-type: none"> • Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens. Click Install Spectra2 Decodes and wait while the Install Decodes dialog box opens which lists the available decodes to install • Windows XP and Windows 2000—If you are installing downloaded software, navigate to the executable and double-click InstallApp.exe and wait while the InstallShield Wizard dialog box opens and prepares to install the application • Windows 7 – if you are installing downloaded software, navigate to the executable, right-click on InstallApp.exe, and click Run As Administrator. You must provide your permission before you proceed
2	Click the check boxes next to the protocols you want to install for each decode option purchased. A checkmark (✓) next to a protocol indicates the set of decodes included in the installation process. You must select the Main Install check box the first time you install the decodes. Spectra2 detects your licenses in the C:\Program Files\Tektronix\Spectra2\Bin file and automatically places a checkmark (✓) next to protocols for which you have a license.

Note: The Install Decodes dialog box remains open throughout the install and you must repeat an install for each set of decodes.

3	Click Install after you click all the protocol options purchased
4	The <code>InstallApp.exe</code> program finds each protocol selected and launches the corresponding install for it. Complete the following process for each option selected. This process repeats for each option. <ul style="list-style-type: none"> • Click Next in the Welcome area of the InstallShield Wizard dialog box • The Select Features dialog box options and displays the selected features licenses. Click Next to start the install. The install process only installs licensed features. Read the warning message on the dialog box about installing decodes for which you do not have a license • Click Finish after the install completes

Note: If you do not have a license file in C:\Program Files\Tektronix\Spectra2\Bin, the InstallApp.exe program prompts you to install the license. Follow the steps to install the license files.

5	Click OK when Please reboot your system appears
6	Restart your workstation, and the install process completes

1.7 Installing Spectra2 Application from the Web Client Install

The following steps guide you through installing the Spectra2 application on a client using the web client install that comes with your Spectra2 server installation. You can only use Internet Explorer 5.5, SP1 or higher to use the web client install. Ensure your system meets the requirements before installing. For additional information, refer to “Modifying, Repairing, and Uninstalling the Spectra2 Application” section in this document.

Step	Action
1	Close all applications, including any Terminate and Stay Resident (TSR) programs that are in the system tray

Note: TSR programs are programs that show no outward signs of output but still run in the background on your system. For example, antivirus software generally runs as a TSR program. TSR programs use system resources that interfere with the installation process.

Note: If you are having problems installing, verify you set the security to enable “Download unsigned Active X controls.”

2	Access <a href="http://<yourservername>/clientinstall">http://<yourservername>/clientinstall on a browser to access the Spectra2 Web Client Install page bundled with the Spectra2 server installation.
3	Click Click Here in the Spectra2 Install area to begin installing the client version of the Spectra2 application
4	Click Save when a Security Warning dialog box appears asking if you want to install the Spectra2 application
5	Navigate to where you want to save the <code>setup.exe</code> file, and then click Save
6	Double-click the <code>setup.exe</code> file to begin the installation process, and wait while the InstallShield Wizard dialog box opens and prepares to install the application. (for Windows 7, right-click on <code>setup.exe</code> and select the “Run as Administrator option)
7	Click Next when the Welcome area of the InstallShield Wizard dialog box opens
8	Read the information in the New Features area of the InstallShield Wizard dialog box, and click Next .
9	Read the License Agreement in the License Agreement area of the InstallShield Wizard dialog box
10	Click Yes to accept the License Agreement and to open the Customer Information area of the InstallShield Wizard dialog box
11	Complete the following steps: <ul style="list-style-type: none"> • Enter your user name in the User Name field • Enter your company name in the Company Name field
12	Click Next to open the Choose Destination Location area of the InstallShield Wizard dialog box
13	Click Browse... and navigate to where you want to install the application, or accept the default path <code>C:\Program Files\Tektronix\Spectra2\</code> except in cases where you are installing from a previous installation (for Windows 7 the default path will indicate <code>C:\Program Files (x86)\Tektronix\Spectra2\</code>)
14	Click Next to open the Select Features area of the InstallShield Wizard dialog box

15	Click the Spectra2 Client button to open the Setup Status area of the InstallShield Wizard dialog box and install the application.
----	---

Note: You can install the Spectra2 Server and Spectra2|SE applications using the web install

16	Click Ignore if a message appears about configuring your IIS components. This process only applies to a Spectra2 server.
17	The InstallShield Wizard Complete area of the InstallShield Wizard dialog box opens after the application installs. Click Finish to open another InstallShield Wizard Complete area
18	Click OK if the Information dialog box appears notifying you to install Acrobat Reader to view the printed guides. This message does not appear if you already have Acrobat Reader installed.
19	Click OK if the Spectra2 Application dialog box appears notifying you to install the Spectra2 Decodes. This message does not appear if you have already installed the decodes on your system.
20	Click Yes, I want to restart my computer now option button and click Finish . Your workstation restarts, and the application installation process completes

1.8 Modifying, Repairing, and Uninstalling the Spectra2 Application

The following sections provide information about modifying, repairing, and uninstalling the Spectra2 application.

1.8.1 Modifying the Specta2 Application

The following steps guide you through modifying the Spectra2 application. You can select new program components to add or select currently installed components you want to remove.

Step	Action
1	Complete one of the following steps: <ul style="list-style-type: none"> Windows XP or Windows 7 – from the Start menu, select Control Panel to open the Control Panel window Windows 2000 – from the Start menu, select Settings>Control Panel to open the Control Panel window
2	Complete one of the following steps: <ul style="list-style-type: none"> Window 7 – Click on Programs and Features to open the Uninstall or change a program dialog. Windows XP – Double-click the Add or Remove Programs icon to open the Add or Remove Programs dialog box. Windows 2000 – Double-click the Add/Remove Programs icon to open the Add/Remove Programs dialog box
3	Complete one of the following steps:

	<ul style="list-style-type: none"> Window 7 – Right-click Spectra2 Application in the list of software, and click Uninstall. You must provide your permission before you proceed; click Continue to open the Welcome area of the InstallShield Wizard dialog box Windows XP & Windows 2000 – Select Spectra2 Application from the list of software, and click Change/Remove to open the Welcome area of the InstallShield Wizard dialog box
4	Click the Modify option button, and click Next to open the Select Features area of the InstallShield Wizard dialog box
5	Select the components you want to install and clear the components you do not want to install. A checkmark (✓) next to a component indicates the features the InstallShield Wizard adds to your existing application. Click Next to open the Setup Status area of the InstallShield Wizard dialog box

Note: If you remove a checkmark (✓) from a check box, the InstallShield Wizard removes the feature from the application

6	Click Ignore if a message appears about configuring your IIS components. This process only applies to a Spectra2 server.
7	The Maintenance Complete area of the InstallShield Wizard dialog box opens after modifying the application. Click Finish to open the InstallShield Wizard Complete area
8	Click the Yes, I want to restart my computer now option button and click Finish . Your workstation restarts, and the modify process completes

1.8.2 Repairing the Specta2 Application

The following steps guide you through repairing the Spectra2 application. You can use this procedure to reinstall all program components installed by the previous install. This process requires the Spectra2 CD-ROM.

Step	Action
1	Close all applications, including any Terminate and Stay Resident (TSR) programs that are in the system tray

Note: TSR programs are programs that show no outward signs of output but still run in the background on your system. For example, antivirus software generally runs as a TSR program. TSR programs use system resources that interfere with the installation process.

2	Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens
3	Click Install Spectra2 , and wait while the Welcome area of the InstallShield Wizard dialog box opens
4	When the Welcome area of the InstallShield Wizard dialog box opens, click the Repair option button.
5	Click Next to open the Setup Status area of the InstallShield Wizard dialog box
6	Click Ignore if a message appears about configuring IIS components. This process only applies to a

	Spectra2 server
7	After the application makes any repairs, the Maintenance Complete area of the InstallShield Wizard dialog box opens. Click Finish to open the InstallShield Wizard Complete area.
8	Click Yes, I want to restart my computer now option button and click Finish . Your workstation restarts, and the repair process completes

1.8.3 Uninstalling the Specta2 Application

The following steps guide you through uninstalling the Spectra2 application

Step	Action
1	Complete one of the following steps: <ul style="list-style-type: none"> Window 7 – from the Start menu, select Control Panel to open the Control Panel window Windows XP – from the Start menu, select Control Panel to open the Control Panel window Windows 2000 – from the Start menu, select Settings>Control Panel to open the Control Panel window
2	Complete one of the following steps: <ul style="list-style-type: none"> Window 7 – Click Programs and Features to open the Uninstall or change a program dialog Windows XP – Double-click the Add or Remove Programs icon to open the Add or Remove Programs dialog box Windows 2000 – Double-click the Add/Remove Programs icon to open the Add/Remove Programs dialog box
3	Complete one of the following steps: <ul style="list-style-type: none"> Window 7 – Right-click Spectra2 Application in the list of software, and click Uninstall. You must provide your permission before you proceed; click Continue to open the Welcome area of the InstallShield Wizard dialog box Windows XP & Windows 2000 – Select Spectra2 Application from the list of software, and click Change/Remove to open the Welcome area of the InstallShield Wizard dialog box

*Note: For Windows XP, Windows 7 and Windows 2000, you can also use a shortcut to uninstall. From the Start menu, select All Programs>Tektronix> Uninstall Shortcuts>Run the Uninstall for Spectra2 (for Windows 7, make sure to right-click and select the “Run as Administrator” option). Click the **Remove** option button, and click **Next**. A confirm uninstall message opens.*

4	Click Ignore if a message appears about requiring IIS 4.0 or higher.
5	For Windows XP, Windows 7 and Windows 2000, click Yes to open the Setup Status area of the InstallShield Wizard dialog box
6	After the application uninstalls, the Uninstall Complete area of the InstallShield Wizard dialog box opens. Click Finish to open the InstallShield Wizard Complete area

7	Click Yes, I want to restart my computer now option button and click Finish . Your workstation restarts, and the remove process completes
---	---

1.9 Modifying, Repairing, and Uninstalling the Spectra2 Decodes

The following sections provide information about modifying, repairing, uninstalling and updating the Spectra2

Step	Action
1	Complete one of the following steps: <ul style="list-style-type: none"> • Window 7 – from the Start menu, select Control Panel to open the Control Panel window • Windows XP – from the Start menu, select Control Panel to open the Control Panel window • Windows 2000 – from the Start menu, select Settings>Control Panel to open the Control Panel window
2	Complete one of the following steps: <ul style="list-style-type: none"> • Window 7 – Click Programs and Features to open the Uninstall or change a program dialog • Windows XP – Double-click the Add or Remove Programs icon to open the Add or Remove Programs dialog box • Windows 2000 – Double-click the Add/Remove Programs icon to open the Add/Remove Programs dialog box
3	Complete one of the following steps: <ul style="list-style-type: none"> • Window 7 – Right-click Spectra2 Application in the list of software, and click Uninstall. You must provide your permission before you proceed; click Continue to open the Welcome area of the InstallShield Wizard dialog box • Windows XP & Windows 2000 – Select Spectra2 Application from the list of software, and click Change/Remove to open the Welcome area of the InstallShield Wizard dialog box
4	Click the Modify option button, and click Next to open the Select Features area of the InstallShield Wizard dialog box.
5	For protocols that give you an option, select the decodes you want to install and clear the decodes you do not want to install. A checkmark (✓) next to a decode indicates the decodes the InstallShield Wizard installs. Read the warning message on the dialog box about installing decodes for which you do not have a license.
6	Click Next to open the Setup Status area of the InstallShield Wizard dialog box and install the decodes.

Note: If you remove a checkmark (✓) from a check box, the InstallShield Wizard removes the feature from the application

7	The Maintenance Complete area of the InstallShield Wizard dialog box opens after modifying the decodes. Click Finish , and restart your workstation to complete the modify process
---	---

1.9.1 Repairing the Spectra2 Decodes

The following steps guide you through repairing the Spectra2 decodes. You can use this procedure to reinstall all program components installed by the previous install. This process requires the Spectra2 CD-ROM.

Step	Action
1	Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens
2	Click Install Spectra2 Decodes , and wait while the Decode Install dialog box opens

Note: The Decode Install dialog box remains open throughout the install.

3	Click the check boxes next to the protocols you want to install for each decode option purchased. A checkmark (✓) next to a protocol indicates the set of decodes included in the installation process. You must select the Main Install check box the first time you install the decodes. Spectra2 detects your licenses in the C:\Program Files\Tektronix\Spectra2\Bin file and automatically places a checkmark (✓) next to protocols for which you have a license.
4	Click Install , and when the Welcome area of the InstallShield Wizard dialog box opens, click the Repair option button.
5	Click Next to open the Setup Status area of the InstallShield Wizard dialog box.
6	After the decodes make any repairs, the Maintenance Complete area of the InstallShield Wizard dialog box opens. Click Finish , and then click OK when Please reboot your system appears
7	Restart your workstation, and the repair process completes.

1.9.2 Uninstalling the Spectra2 Decodes

The following steps guide you through uninstalling a specific Spectra2 decode.

Step	Action
1	Complete one of the following steps: <ul style="list-style-type: none"> • Window 7 – from the Start menu, select Control Panel to open the Control Panel window • Windows XP – from the Start menu, select Control Panel to open the Control Panel window • Windows 2000 – from the Start menu, select Settings>Control Panel to open the Control Panel window
2	Complete one of the following steps: <ul style="list-style-type: none"> • Window 7 – Click Programs and Features to open the Uninstall or change a program dialog • Windows XP – Double-click the Add or Remove Programs icon to open the Add or Remove Programs dialog box • Windows 2000 – Double-click the Add/Remove Programs icon to open the Add/Remove Programs dialog box

3	Complete one of the following steps: <ul style="list-style-type: none"> Window 7 – Right-click the decode you want to remove in the list of software, and click Uninstall. You must provide your permission before you proceed. Windows XP & Windows 2000 – Select the decode you want to remove from the list of software, such as Spectra2 Main Decodes, and click Change/Remove to open the Welcome area of the InstallShield Wizard dialog box.
4	Click the Remove option button, and click Next . A confirm uninstall message opens.
5	Click Yes to open the Setup Status area of the InstallShield Wizard dialog box.
6	After the decodes uninstall, the Uninstall Complete area of the InstallShield Wizard dialog box opens. Click Finish

1.9.3 Updating the Spectra2 Decodes

The following steps guide you through updating the Spectra2 decodes. You can use this procedure to update specific sets of decodes without uninstalling and re-installing all decodes. This process requires the Spectra2 CD-ROM.

Step	Action
1	Insert the Spectra2 CD-ROM into your CD-ROM drive. The Spectra2 Install dialog box opens.
2	Click Install Spectra2 Decodes and wait while the Install Decodes dialog box opens.

Note: The Install Decodes dialog box remains open throughout the install and you must repeat an install for each set of decodes.

3	Click the check boxes for the set of decode files you want to update. A checkmark (✓) next to a decode indicates the set of decodes that will install. Spectra2 detects your licenses in the C:\Program Files\Tektronix\Spectra2\Bin file and automatically places a checkmark (✓) next to protocols for which you have a license.
4	Click Install , click Yes when asked if you want to upgrade, and when the Resuming Install area of the InstallShield Wizard dialog box opens, click Next

Note: If licensing information changes, you need to place an updated license file in C:\Program Files\Tektronix\Spectra2\Bin

5	For protocols that give you an option, select the decodes you want to install and clear the decodes you do not want to install. A checkmark (✓) next to a decode indicates the decodes the InstallShield Wizard installs. Read the warning message on the dialog box about installing decodes for which you do not have a license
6	Click Next to open the Setup Status area of the InstallShield Wizard dialog box and install the decodes.

Note: If you remove a checkmark (✓) from a check box, the Spectra2 InstallShield Wizard does not install the decode

7	The InstallShield Wizard Complete area of the InstallShield Wizard dialog box opens after the decodes install. Click Finish , and then click OK when Please reboot your system appears
8	Restart your workstation, and the update process completes

2 Spectra2 System Administrator

2.1 Overview

This section contains information and procedures for Spectra2 system administrators, and covers the following topics:

- Introduction to using the System administrator for tasks to setup the system
- Managing passwords and user accounts, including adding, deleting, or modifying user profiles
- Managing board resources and user sessions, including allocating board resources and viewing and terminating user sessions on a server
- Remote Desktop Connection client, using the remote desktop access client provided by Windows 7 or Windows XP

2.2 Using the System Administrator Application

The System Administrator application enables the system administrator or a user with administrator privileges to add, delete, or modify user profiles, allocate board resources, view board information, and view and terminate user sessions on a server. You can resize each pane and column on the System Administrator window; Spectra2 retains the column widths for each user.

Spectra2 contains multiple applications within a single interface and an external System Administrator application. The Spectra2 client displays tabs with each tab representing an independent application. The System Administrator application is separate and does not appear on a tab.

You can use the System Administrator application from any workstation where you install it to access any Spectra2 server running Spectra2, or you can run the application on the server. You install the System Administrator application by selecting either the Complete option or the Custom option when you install the application. If you select the Client option, the System Administrator application does not install.

Only the system administrator or a user with administrator privileges can access and run the System Administrator application. A user with administrator privileges is equivalent to a system administrator and has the same permissions.

NETSCOUT can package Spectra capabilities with Spectra2 media and signaling testing for packet-switched networks. When NETSCOUT packages these two applications, they can run concurrently on the same box, but they function independently of each other.

Spectra2 and Spectra can now both use SNI boards if they reside on the same platform. Changes in Spectra allow for pooling of SNI resources including a user login that requests resources from the Spectra2 server, thereby avoiding hardware resource conflicts.

Spectra2 uses port numbers 10000 (UDP), 10001 (TCP), and 10010-10015 (UDP) to communicate with the server. The web server on the Spectra2 server also uses port number 80 (TCP). If your client software cannot connect to the Spectra2 server, your network may contain a Network Address Translation (NAT) or firewall device. Your System Administrator may need to configure your network equipment to allow access to the listed ports.

2.2.1 Accessing the System Administrator Application in Spectra2

Complete the following steps to access the System Administrator Application for the first time in Spectra2.

Step	Action
1	From the Start Menu, select All Programs>Tektronix> Spectra2 System Admin to launch the System Administrator application. The Login to Spectra2 Server dialog box appears.



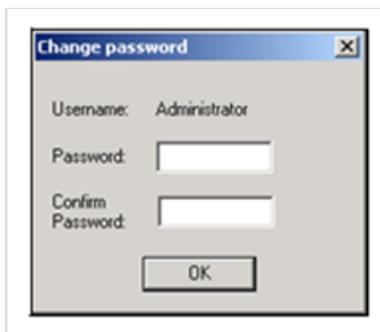
Login to Spectra2 Server Dialog Box

2	Enter any user name and any password (it does not matter what you enter). A System Administrator prompt appears indicating no accounts exists on the server and asks you to create a default Administrator account
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System Administrator Prompt

3	Click Yes to create the Administrator account. A Change password dialog box appears
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Change Password Dialog Box

4	Enter a password of up to 20 characters in the Password field for the default Administrator account. Passwords are case-sensitive and can include characters, numbers, and symbols, but not spaces
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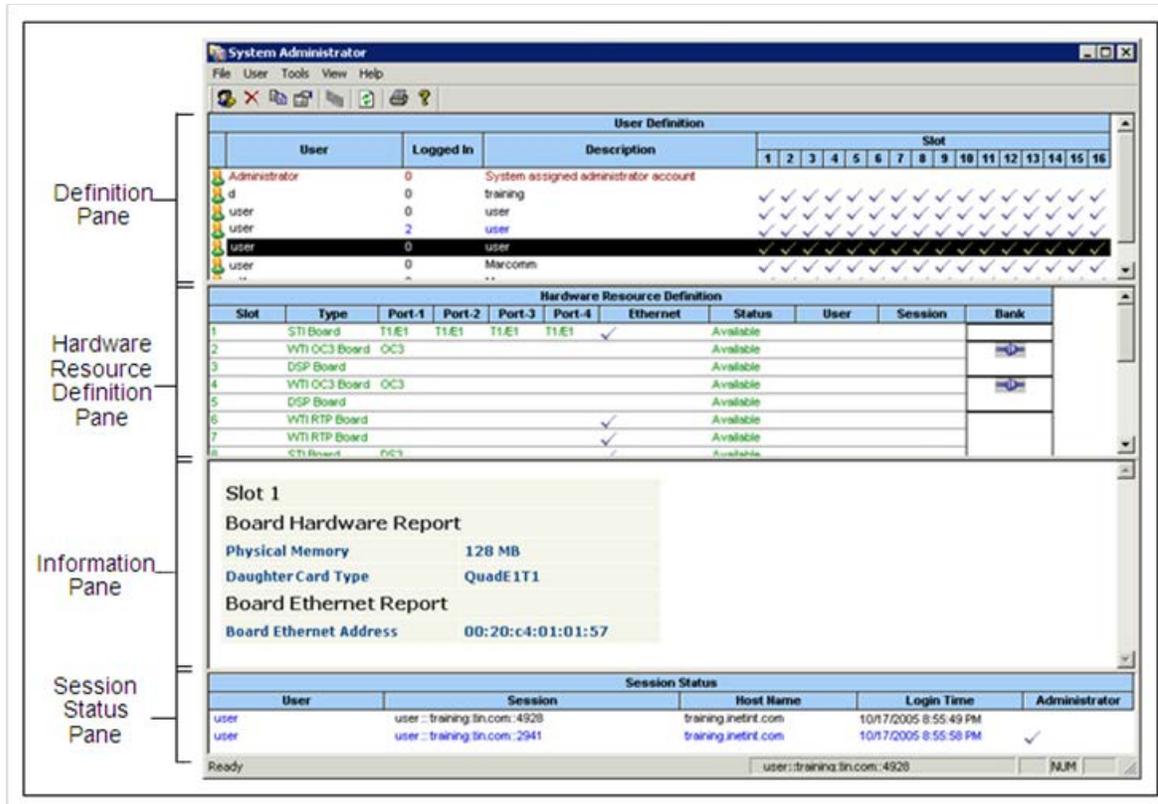
If you change the Administrator password and forget the new password, the Technical Assistance Center (TAC) cannot reset it.

5	Re-enter your new password in the Confirm Password field
6	Click OK to apply your settings and to open the System Administrator application.
7	Click the New User button to set up user accounts. The Administrator cannot log in to the Spectra2 client, so you must create at least one user account for testing.

Continue reading this section for an overview of the System Administrator application. For procedures about setting up user accounts, see “Managing Passwords and User Accounts” section in this document.

2.2.2 System Administrator Window

The System Administrator window enables the system administrator or a user with administrator privileges to add, delete, or modify user profiles, allocate board resources, view board information, and view and terminate user sessions on a server. You can resize each pane and column on the System Administrator window; Spectra2 retains the column widths for each user.



System Administrator Window for Spectra2

The System Administrator window consists of the following panes:

- User Definition pane—displays users and the properties associated with their user profile. The database of Spectra2 and Spectra2|SE users for the system appears in this pane as well as a description about users, if they are logged in, and which allocated board resources they can use in the system. The User Properties dialog box allows the system administrator to add, delete, and modify user profiles. Changes you make in the User Properties dialog box only updates in the System Administrator window - User Definition pane for Spectra2 and Spectra2|SE users who are not logged in to the system.
- Hardware Resource Definition pane—displays the status of all board resources in the system that you use for Spectra2 or Spectra2|SE. This pane displays the slot number, board type—STI, SNI, SNIv3, WTI, WTI RTP, WTI OC3, WTI T1E1, WTI DS3, DSP, NSI, IPSMi or VI-SE—and port type, status of each board resource, as well as the user name, and session information for each board resource and banks. VI-SE boards only appear in this pane for Spectra2|SE users. If you open a workspace created prior to Spectra2 6.0, you may see STI-SE boards, which are really VI-SE boards.

Only the system administrator or a user with administrator privileges can disable or enable a board resource by using the Enable/Disable Resource button. You cannot disable board resources that are In Use unless you first terminate the user session using the board resource. The associated text for Available and In Use board resources is green; text for disabled board resources appears red. The text for Not Equipped slots appears gray; text for boards with warning messages, which are not severe, appear orange.

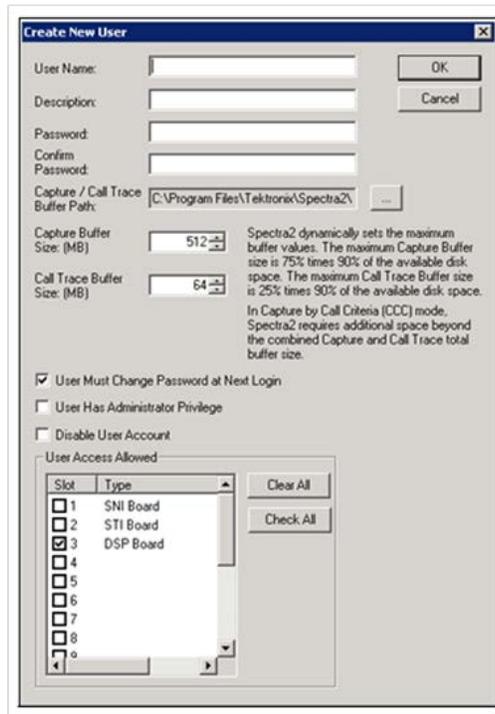
- Board Information pane—displays the Slot number, Board Hardware Report, Board Ethernet Report (when applicable), and Board Warnings (when applicable)

- Session Status pane—displays all current Spectra2 user sessions running on the system. This pane displays the user name, Spectra2 server or client name, and login time, so you can select the appropriate user whose session you want to end. Only a user with administrator privileges can terminate a user session (a user's connection). You cannot terminate the current system administrator's session in the System Administration application. The Administrator column has a checkmark if the system administrator or a user with administrator privileges is running a session. You can only terminate one user session at a time.

2.2.3 Create New User Dialog Box

When you create or copy user accounts, the Create New User Dialog box appears; however, the contents of the fields in the dialog box depend on the option you select. The following list describes what occurs when you use each option:

- Create a New User—You can use this feature to create new user accounts and passwords and grant permissions and board resources. When you click the New User button, the Create New User dialog box opens and all fields are empty except for the Capture Buffer Size and the Call Trace Buffer Size fields, the User Must Change Password at Next Logon check box, which has a checkmark, and the Capture/Call Trace Buffer Path
- Copy User—You can use this feature to copy the profile of the currently selected user account to create a new user account. The new user accounts have the same access permissions and hardware board resources as the selected user profile. When you click the Copy User button, the Create New User dialog box opens and the properties for the User Name, Password, and Confirm Password fields are empty. The System Administrator application copies all other properties from the profile of the selected user account.



Create New User Dialog Box

You can also enter descriptions about users, grant administrator privileges, require users to change their passwords, disable user accounts, configure capture and call trace buffers, and allocate their board resources on this Spectra2 server.

Spectra2 uses the following formulas to dynamically calculate the maximum capture and call trace buffer size you can configure in this dialog box:

- The maximum Capture Buffer Size value is 75% x 90% of available disk space. The default value is 512 megabytes
- The maximum Call Trace Buffer Size value is 25% x 90% of available disk space. The default value is 64 megabytes
- In Capture by Call Criteria (CCC) mode, Spectra2 requires additional space beyond the combined Capture and Call Trace total buffer size

Only the current system administrator can create or copy user accounts. The information you add in this dialog box updates in the System Administrator window - User Definition pane but only for users who are not logged in to the Spectra2 server. You must also click in this pane to activate the menu options to create new user accounts. The Administrator user cannot login into the Spectra2 client so you must create at least one user account for testing.

2.2.4 User Properties Dialog Box

The User Properties dialog box allows the system administrator to add, delete, and modify user profiles and their associated properties, and allocate board resources. You can enter descriptions about each user, grant them administrator privileges, require users to change their passwords, disable user accounts, configure capture and call trace buffers, and allocate the board resources they can use on this Spectra2 server. For recommendations on buffer size, see "Create New User Dialog Box" section in this document.

The changes you make in the User Properties dialog box update in the System Administrator window - User Definition pane but only for users who are not logged in to Spectra2. You must also click in this pane to activate the menu options to create new user accounts. The User Properties dialog box has the same fields as the "Create New User Dialog Box" section in this document.

2.2.5 Change Password Dialog Box

You might want to change the Administrator password you use to log in to the System Administrator application for security reasons. To change the password of the built-in administrator account, you must first log in using the built-in account user name and password you create the first time you use the software, and access the Change Password dialog box (see Figure 1.10). You cannot change any other properties of the built-in administrator account. If you change the Administrator password and forget the new password, TAC cannot reset it.



Change Password Dialog Box

2.3 Managing Passwords and User Accounts

The System Administrator window enables you to add, delete, or modify user profiles. The following are procedures for managing passwords and user accounts:

- Changing Your Password
- Changing the Administrator Password
- Creating a User Account
- Copying a User Account
- Modifying a User Account
- Disabling or Enabling a User Account
- Deleting a User Account

2.3.1 Changing Your Password

If you are a user with administrator privileges, you might want to periodically change your password you use to log in to the System Administrator application for general security reasons. To change the password of the built-in administrator account, you must first log in using the built-in account user name and password you create the first time you use the software.

Complete these steps to change your password.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Select your user account from the User Definition pane in the System Administrator window
3	Click the User Properties button to open the User Properties dialog box
4	Enter your new password in the Password field
5	Re-enter your new password in the Confirm Password field

6	Click OK to apply your settings and return to the System Administrator window
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2.3.2 Changing the Administrator Password

You might want to change the Administrator password you use to log in to the System Administrator application for security reasons. To change the password of the built-in administrator account, you must first log in using the built-in account user name and password you create the first time you use the software. You cannot change any other properties of the built-in administrator account. If you change the Administrator password and forget the new password, TAC cannot reset it.

Complete these steps to change the administrator password.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Click Administrator in the User Definition pane in the System Administrator
3	From the Tools menu, select Change Administrator Password to open the Change Password dialog box
4	Enter your old password in the Old Password field
5	Enter your new password in the New Password field
6	Re-enter your new password in the Confirm Password field
7	Click OK to apply your settings and return to the System Administrator window

2.3.3 Creating a User Account

You use the Create New User dialog box to create new user accounts and profiles. Users log in to Spectra2 with their user names. This procedure details how you create new user accounts and establish access permissions and board resources. When you create a new user account, the Create New User dialog box opens and all fields are empty except for the Capture Buffer Size field, the Call Trace Buffer field, the User Must Change Password at Next Logon check box, which has a checkmark, and the Capture/Call Trace Buffer Path, which defaults to:

C:\Program Files\Tektronix\Spectra2\Data

Note: Free disk space should be at least 10% of needed buffer size.

Complete these steps to create a user account.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Click the New User button to open the Create New User dialog box

3	Enter a user name in the User Name field
4	Enter a description of the user or the user account in the Description field
5	Enter a password of up to 20 characters in the Password field

Note: Passwords are case-sensitive

6	Reenter the password in the Confirm Password field. This password must match the text you enter in the Password field
7	Change the default amount of capture buffer space for this user in the Capture Buffer Size field
8	Change the default amount of call trace buffer space for this user in the Call Trace Buffer Size field
9	Click the Browse button to access the Capture File Path dialog box, so you can change the default location for automatically saving your capture and call trace data. When in Capture by Call Criteria (CCC) mode, Spectra2 automatically saves your call trace and associated capture data at this location

Note: You can only select a path from a server not a client.

10	Select a drive from the Current Drive options menu
11	Use the area below the Current Folder field to navigate to where you want to set your default path
12	Click OK to save the path and return to the Create New User dialog box
13	Click to select or clear the following check boxes: <ul style="list-style-type: none"> • User Must Change password at Next Logon • User Has Administrator Privilege • Disable User Account
14	Click the Slot check boxes in the Slot column of the User Access Allowed area to designate which board resources the user can access. You can use the Check All button to select all of the available board resources

Note: Use the Slot check boxes to restrict and grant users privileges to particular boards. In a multi-user client environment, you might want to give users access to only a certain number of boards to share the board resources among all users using the server

15	Click OK to create the new user account and return to the System Administrator window
16	To add another user account, repeat steps 2 through 15

2.3.4 Copying a User Account

The Copy user feature enables you to copy the profile of the currently selected user account to create a new user account based on the selected account. You can use this option to create new user accounts with identical access permissions and board resources as existing user profiles.

When you select the Copy User button, the Create New User dialog box opens. The properties for the User Name, Password, and Confirm Password fields are empty. The System Administrator application copies all other properties from the profile of the selected user account.

Complete the following steps to copy a user account

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Select a user account from the User Definition pane in the System Administrator window
3	Click the Copy User button to open the Create New User dialog box
4	Enter a new user name in the User Name field
5	Enter a description of the user or the user account in the Description field. If a description already exists, modify it for the new user account
6	Enter a password of up to 20 characters in the Password field

Note: Passwords are case-sensitive.

7	Re-enter the password in the Confirm Password field. This password must
8	Modify any of the remaining fields for the new user as applicable. Because you are copying an existing account, all the remaining fields have the same properties as the selected account.
9	Click OK to create the new user account and return to the System Administrator window.

2.3.5 Modifying a User Account

You use the User Properties dialog box to modify a selected user account. You can disable the account to prevent logins using that account, restrict board resource access, grant administrator privileges, designate the amount of space users have in the capture and call trace buffers, or require users to change their passwords at the next login.

Note: Free disk space should be at least 10% of needed buffer size.

Complete these steps to create a user account.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Select a user account from the User Definition pane in the System Administrator window.
3	Click the User Properties button to open the User Properties dialog box
4	Modify the description of the user or the user account in the Description field

5	Enter a password of up to 20 characters in the Password field
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Note: Passwords are case-sensitive

6	Reenter the password in the Confirm Password field. This password must match the text you enter in the Password field
7	Designate a new amount of capture buffer space for this user in the Capture Buffer Size field.
8	Designate a new amount of call trace buffer space for this user in the Call Trace Buffer Size field.
9	Click the Browse button to access the Capture File Path dialog box, so you can change the location for automatically saving the capture data for this user. When in Capture by Call Criteria (CCC) mode, Spectra2 automatically saves the call trace and associated capture data at this location.
10	Select a drive from the Current Drive options menu

Note: You can only select a path from a server, not a client.

11	Use the area below the Current Folder field to navigate to where you want to set your default path
12	Click OK to save the path and return to the Create New User dialog box
13	Click to select or clear the following check boxes: <ul style="list-style-type: none"> • User Must Change password at Next Logon • User Has Administrator Privilege • Disable User Account
14	Restrict or grant board resource access by clicking the Slot check boxes in the Slot column of the User Access Allowed area. You can use the Check All button to select all of the available board resources. You can also use the Clear All button to restrict access to all available board resources.
15	Click OK to modify the user account and return to the System Administrator window.
16	To modify another user account, repeat steps 2 through 15 above.

2.3.6 Disabling or Enabling a User Account

You use the User Properties dialog box to disable or enable a selected user account. Disabling a user account prevents logins using the account; enabling a user account allows logins using the account. Only the current system administrator can disable or enable a user account .

Complete the following steps to disable or enable a user account.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application

2	Select a user account from the User Definition pane in the System Administrator window.
3	Click the User Properties button to open the User Properties dialog box
4	Select the Disable User Account check box to prevent logins using an account, or click the Disable User Account check box to clear the checkmark to permit logins using an account

Note: A disabled account still exists and still appears in the System Administrator window - User Definition pane, but the user cannot log in to Spectra2. You can restore a disabled account to enabled status at any time. You cannot disable the built-in administrator account, and you cannot disable any user who is currently logged in to Spectra2.

5	Click OK to return to the System Administrator window.
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2.3.7 Deleting a User Account

You use the delete feature to remove a user account. Only the current system administrator can delete a user account.

Complete the following steps to delete a user account.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Select a user account from the User Definition pane in the System Administrator window.
3	Click the Delete User button. A confirmation message appears.

Note: You cannot recover a deleted user account. You cannot delete the built-in administrator account or an account for a user who is currently logged in to Spectra2.

4	Click Yes to delete the user account, or click No to cancel and return to the System Administrator window.
---	--

2.4 Managing Board Resources and User Sessions

The System Administrator window enables you to allocate board resources, and view and terminate user sessions on a server. The following are procedures for managing board resources and user sessions:

- Enabling or Disabling a Board Resource
- Terminating a User Session

In a multi-user client environment, you might want to give users access to only a certain number of boards to share the board resources among all users using the server. To change a user's privileges to particular boards, use the Slot check boxes in the Create New User Dialog box to restrict or grant access to board resources. Refer to "Creating a User Account" section of this guide.

2.4.1 Enabling or Disabling a Board Resource

You use the Enable/Disable Resource feature to enable or disable a selected board resource. Disabling a board resource prevents anyone from using it; enabling a board resource restores its available status. Only the current system administrator can enable or disable a board resource.

Complete the following steps to enable or disable a board resource.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Select a board resource from the Hardware Resource Definition pane in the System Administrator window
3	Click the Enable/Disable Resource button to prevent any user from accessing the selected board resource. A confirmation message appears.

Note: You cannot disable a board resource that client applications are using for tests and has an In Use status. You must first terminate the user session of the person using the resource. You can restore a disabled board resource to available at any time. You can only enable or disable one board resource at a time.

4	Click Yes to disable the selected board resource, or click No to cancel and return to the System Administrator window.
5	Restore a disabled board resource by clicking the Enable/Disable Resource button, and the board status becomes available

2.4.2 Terminating a User Session

You use the Terminate a User session feature to end a selected user's connection to a server under unusual conditions, such as a session in progress on the server even though the client session ended. Terminating a user session releases the board resources a user has in-use by stopping any test in progress and closing the user's Spectra2 client session to the Spectra2 server. Only the current system administrator can terminate a user session.

Complete the following steps to terminate a user session.

Step	Action
1	From the Start Menu, select All Programs>Tektronix>Spectra2 System Admin to open the System Administrator application
2	Select a user session from the Session Status pane in the System Administrator window
3	From the Tools menu, select Terminate Session . A confirmation message appears

Note: You cannot terminate the current system administrator's session in the System Administration application. The Administrator column has a checkmark if the system administrator or a user with administrator privileges is running a session. You can only terminate one user session at a time.

4	Click Yes terminate the user session, or click No to cancel and return to the System Administrator window. A message appears on the client advising the user that the system administrator terminated the connection to the server, and the client application is exiting.
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2.5 Remote Desktop Connection Client

Both Windows 7 and Windows XP include a client-server remote access utility that you can configure for Windows-based machines. You can use the Remote Desktop Connection client to access a Spectra2 server when no Spectra2 clients are available, enabling you to perform administrative tasks. This utility installs during a typical XP or Windows 7 installation. This application is not for use with UNIX or Linux platforms. The following list provides the system requirements for a client workstation to install and run the Remote Desktop Connection client:

- Remote Desktop Connection software (installed with Windows XP or Windows 7)
- Administrative privileges on the remote Spectra2 server

2.5.1 Configuring the Spectra2 Server for Remote Access

If no one needs exclusive access to a Spectra2 server, and multiple users need occasional access to the machine, all users can use the Administrator user name, or you can create a single common user name and password, such as "Spectra2user" or "remote." If certain users need exclusive uninterrupted access to the box, configure the list of remote users to include those specific users. You can control permissions levels through the Users utility in the Control Panel.

Before using the Remote Desktop Connection client, you must configure the Spectra2 server to enable remote access by completing the following steps. For additional setup and troubleshooting information, refer to the Windows XP or Windows 7 online help.

Step	Action
1	From the Start Menu, select Control Panel to open the Control Panel
2	Double-click the System icon. The System Properties window opens
3	Click the Remote tab
4	Click to select the Allow users to connect remotely... check box in the Remote Desktop area

Note: You must be logged on as an administrator or a member of the Administrators group to enable the Remote Desktop feature.

5	An informational message about remote sessions appears indicating that user accounts for remote connections must have passwords. Click OK
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Note: Steps 6 through 15 are optional.

6	Click Select Remote Users... The Remote Desktop Users dialog box appears
7	Click Add.... The Select Users dialog box appears

8	Click Locations... to specify the search location. The Locations dialog box appears. Select the local unit name or your Local Access Network (LAN) connection as the location you want to search for users to add. Click OK
9	Click Object Types... to specify the types of objects for which you want to search. The default setting is Users
10	Enter the names of the objects you want to search for, such as user names, in the Enter the object names to select (examples): field.
11	Click Check Names.
12	Click OK when the system locates the name. The name now appears in the list of users on the Remote Desktop Users dialog box
13	Repeat steps 7 through 12 for each remote desktop user you want to add
14	Click OK after adding all users to close the Select Users dialog box and return to the Remote Desktop Users dialog box
15	Click OK to return to the Remote tab
16	Click OK to retain the new users and close the System Properties window. The target machine now accepts Remote Desktop Connection clients. For additional setup and troubleshooting information, refer to the Windows XP online help

2.5.2 Running the Remote Desktop Connection Client

Complete the following steps to run the Remote Desktop Connection client.

Step	Action
1	Complete one of the following steps: <ul style="list-style-type: none"> Windows 7 —From the Start Menu, select All Programs>Accessories> Remote Desktop Connection. The Remote Desktop Connection dialog box appears. Windows XP and Windows 2000—From the Start Menu, select All Programs>Accessories>Communications>Remote Desktop Connection. The Remote Desktop Connection dialog box appears.
2	Click Options to open additional login settings
3	Click the Display tab if you want to adjust the size of the remote window. The default setting is full-screen.
4	Click the Local Resources tab, and enable the check boxes for Disk drives and Printers if you prefer to map client drives and printers to the Remote Desktop unit. Completing this process gives the Remote Desktop access through Windows Explorer making file transfers convenient, as well as providing access to network printers
5	Click the Programs tab if you want to start any auxiliary programs when you connect
6	Click the Experience tab and choose the appropriate connection speed from the options menu: Modem, Broadband, LAN, or Custom

7	Click the General tab, click Save As... , and enter a name for this Remote Desktop connection setting. You can save multiple Remote Desktop connection settings and select one to open when you connect
8	Click Connect
9	For Windows 7 only when accessing an Windows XP server, complete the following steps: <ul style="list-style-type: none"> • Enter your credentials to access the remote server and click OK. • You will receive a warning that the remote computer is running a version of Windows earlier than Windows 7 and asking if you want to connect anyway. Click Yes
10	The remote desktops loads, overtaking any other remote clients on the system, as well as any local user, preventing them from using the unit. If another user is logged in, Windows asks if you want to continue logging off the other user. Click Yes
11	End your session by selecting Log Off from the Start Menu inside the Remote Desktop window. Programs from the session end, and drives unmap, fully closing all connections. Other remote clients and local users are unable to use the unit until you end your session

2.5.3 Ending and Resuming Remote Sessions

NETSCOUT recommends you end sessions by selecting the Log Off option from the Start Menu inside the Remote Desktop window. Logging off ends all session applications, and unmaps user drives, fully closing all connections. Other remote clients and local users are unable to use the unit until you end your session.

Your session also ends if a user on the remote Spectra2 server enters the same login ID and password for the existing session, thereby closing the remote session and switching to a local session. If another user overtakes your session and you are using the map local drives option, Windows maps that user to your local workstation, and that user might interrupt running programs. Running a second Remote Desktop session can also end another user's session.

To temporarily leave a session and resume it later select Disconnect from the Start Menu inside the Remote Desktop session window, or click the X icon on the top of the Remote Desktop window. Disconnecting does not log you off and leaves all session applications running and all locally mapped drives still mapped. When you reconnect, the session restores intact.



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