

Avalanche Commander for SmartBits Quick Start Guide

This document provides an introduction to the Avalanche Commander for SmartBits.

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Purpose

This guide discusses the general steps required to set up, start, monitor, and analyze an HTTP-based Quick test on a SmartBits chassis using Avalanche Commander. For more information on using Avalanche Commander, refer to the Avalanche online Help.



- Important:**
- It is assumed that the SmartBits hardware is already set up and connected using a single VLAN. Refer to the installation guide that comes with your SmartBits chassis for more information on the hardware setup.
 - Before proceeding with this guide, refer to the *Avalanche Release Notes* (located on the Avalanche Documentation CD) and do the following:
 - 1 Review the “*Download Manager Requirement for TeraMetrics Modules*” section.
 - 2 Complete the “*Installing Application RPM Files on TeraMetrics Modules*” section.
 - To successfully add the SmartBits chassis in Avalanche Commander for both the client and server, you need to know the administration port IP addresses used during the SmartBits hardware setup. For all other fields mentioned in this guide, use the default values.

Adding a SmartBits Chassis

The following procedure tells you how to add a SmartBits chassis in Avalanche Commander and select the TeraMetrics cards used for testing.



To add a SmartBits chassis:



Tip: Launch Avalanche Commander by selecting **Start menu > Programs > Spirent Communications > Avalanche > Avalanche Commander**.

- 1 From Avalanche Commander, select **Administration > SmartBits Chassis**. The SmartBits Chassis Administration window opens.
- 2 Select **Chassis > Add** located at the top of the window.
- 3 Enter the administration port IP address of the chassis, and then click **Add**. Avalanche connects to the chassis. Click the plus sign next to the chassis IP address to display the list of TeraMetrics cards in the Chassis list as shown in [Figure 1 on page 3](#).

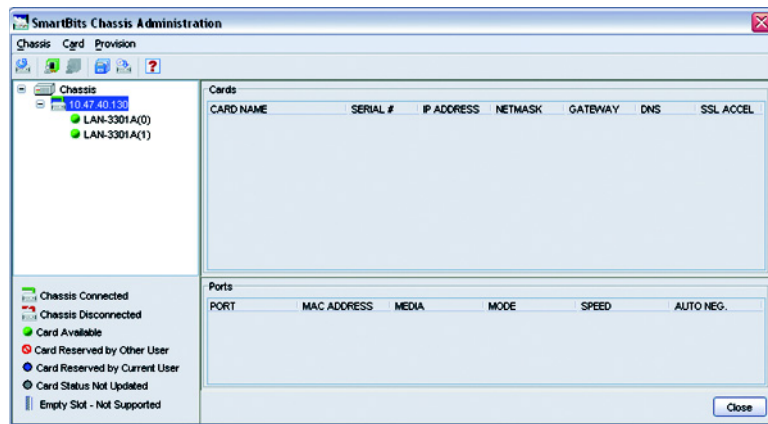


Figure 1. SmartBits Chassis Administration Window

- 4 From the *Chassis* list, reserve one card to use as a client and one card to use as a server by selecting a card, and then selecting **Card > Reserve**. Avalanche reserves the selected cards and displays the port information of each card in the *Ports* pane.



Note: After selecting your cards, review the port configuration settings from the *Ports* pane. To change a setting, right click on the field.

- 5 Click **OK**.

Creating a New Project and Test

Avalanche uses *projects* to help organize the different tests you create. You can create many different projects, and each project can contain a variety of tests. The following procedure describes how to use the Avalanche wizards to create a new project and a Quick test within the project.



To create a new project and test:

- 1 From Avalanche Commander, select **File > New > Project**. The New Project window opens (*Figure 2 on page 4*).



Figure 2. New Project Window

- 2 Enter a name and specify the location where your project will be saved, and then click **Finish**.
- 3 From Avalanche Commander, select **File > New > Test**. The New Test window opens.
- 4 From the New Test window, select the project created in steps 1 and 2, and then click **Next**.
- 5 Name your new test and click **Next**. The New Test... Step 3 of 4 window opens (*Figure 3*).

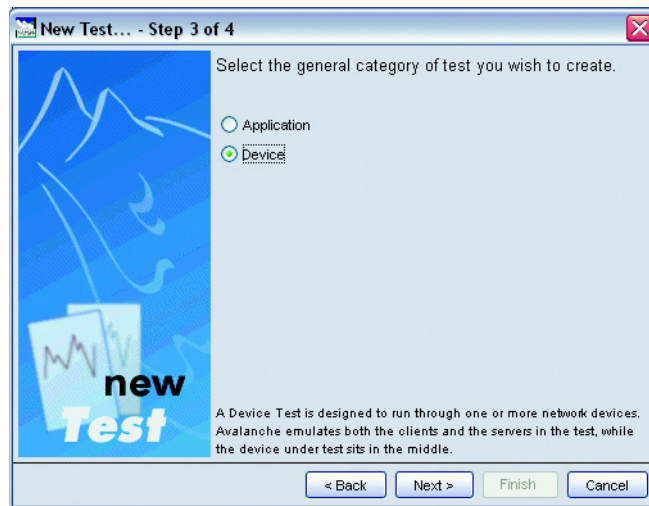


Figure 3. New Test Window – Test Category Selection

- 6 Select **Device** as the category, and then click **Next**. The New Test... Step 4 of 4 window opens (*Figure 4*).
- 7 Select **Quick** as the specific type of test to create, and then click **Finish**.



Note: A *Device* test simulates both clients and servers in Avalanche Commander and will test one or more network devices such as a firewall, SLB, or SSL accelerator. An *Application* test requires configuration of the *Client* tab only, and will test against an application server or network infrastructure.



Figure 4. New Test Window – Test Type Selection

Configuring the Client

The main Avalanche Commander window contains several tabs. The *Client* tab (*Figure 5 on page 6*) allows you to define the actions list, client IP addresses, load under test, and the ports used for testing. For the Quick test, use the default values that are already entered in each field.

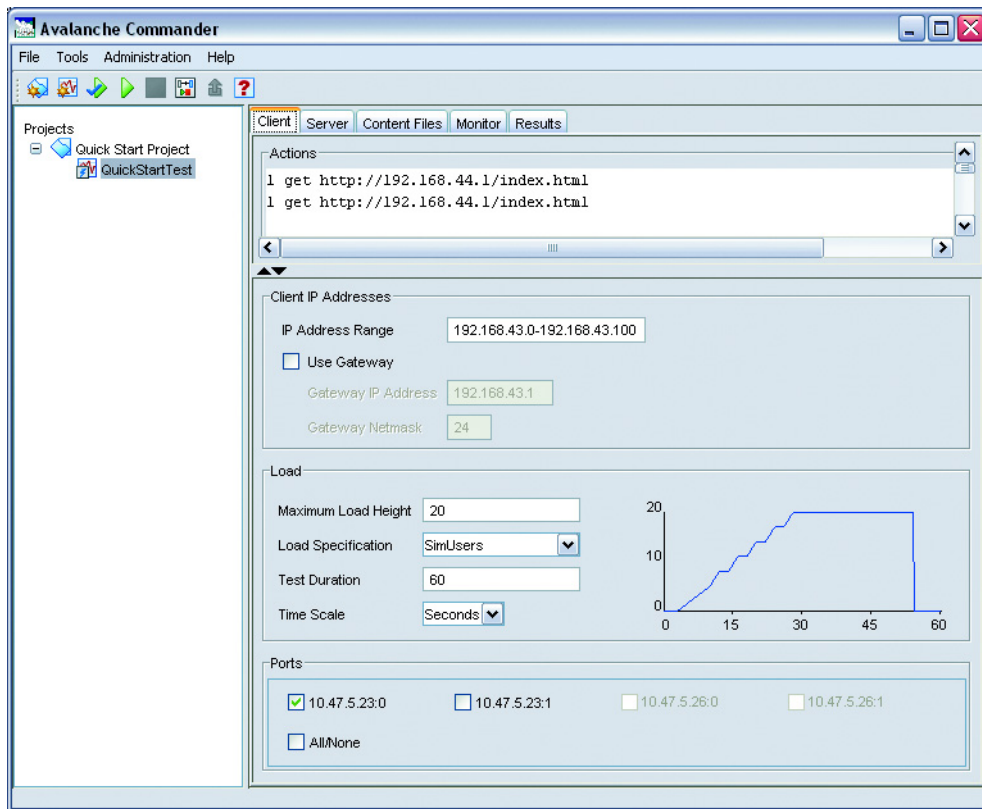


Figure 5. Avalanche Commander Client Tab

The **Client** tab is divided into the following panes:

- The *Actions* pane identifies the actions that you want to simulate during a test. Each line in the action list represents a simulated user requesting an object from your test device, typically a server. As Avalanche adds new simulated users during a test, each simulated user executes the actions list sequentially from top to bottom.
- The *IP Address Range* in the *Client IP Addresses* pane is the group of IP addresses that generate client traffic.



Note: The *Use Gateway* checkbox and the *Gateway IP Address* and *Gateway Netmask* fields are used only when the Avalanche client appliance connects to a test network on a different subnet through a router.

- The *Load* pane is used to define the load generated for testing.
- The *Ports* pane displays the ports that will generate client traffic. This list is shared between the *Client* and *Server* tabs, so if you select a port on the *Server* tab, you cannot select the same port on the *Client* tab and vice-versa.

Configuring the Server

The *Avalanche Commander Server* tab (Figure 6) allows you to define the protocols, server IP addresses, and the ports used for testing. For this Quick test, use the default values that are already entered in each field.



Important: The *Server* tab is only available if you are configuring a *Device* test.

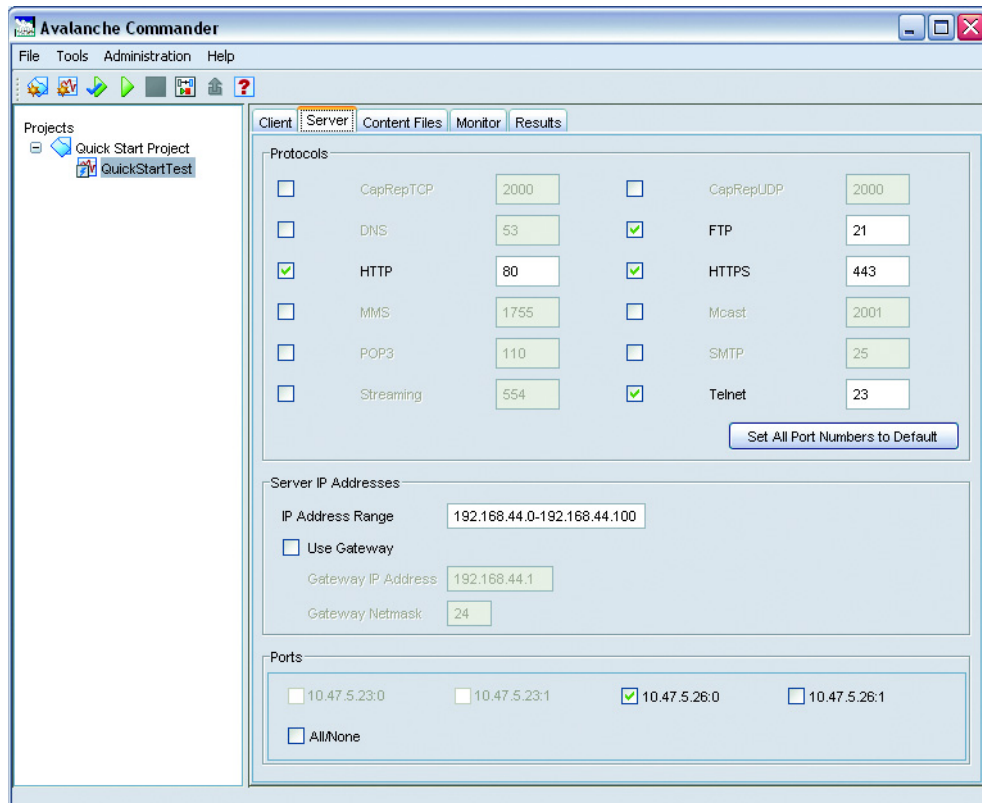


Figure 6. Avalanche Commander Server Tab

The *Server* tab is divided into the following panes:

- The *Protocols* pane is used to select the protocols and port numbers that you want to test. Avalanche provides a default port value for each protocol.
- The *IP Address Range* in the *Server IP Addresses* pane is the group of IP addresses that generate server traffic.



Note: The *Use Gateway* checkbox and the *Gateway IP Address* and *Gateway Netmask* fields are used only when the Avalanche server connects to a test network on a different subnet through a router.

- Use the *Ports* pane to select the ports that you want to generate server traffic. This list is shared between the *Client* and *Server* tabs. If you selected a port on the *Client* tab, you cannot select the same port on the *Server* tab and vice-versa.

Performing a Trial Run, Starting a Test, and Monitoring a Test

From Avalanche Commander, you can perform a trial run, start and stop tests, and monitor the real-time status of your tests.



To perform a trial run, start and stop tests, and monitor the real-time status of your tests:

- 1 Click the **Monitor** tab. The *Monitor* tab (*Figure 7*) displays the stages of the test as they occur and indicates the status of the test transactions.

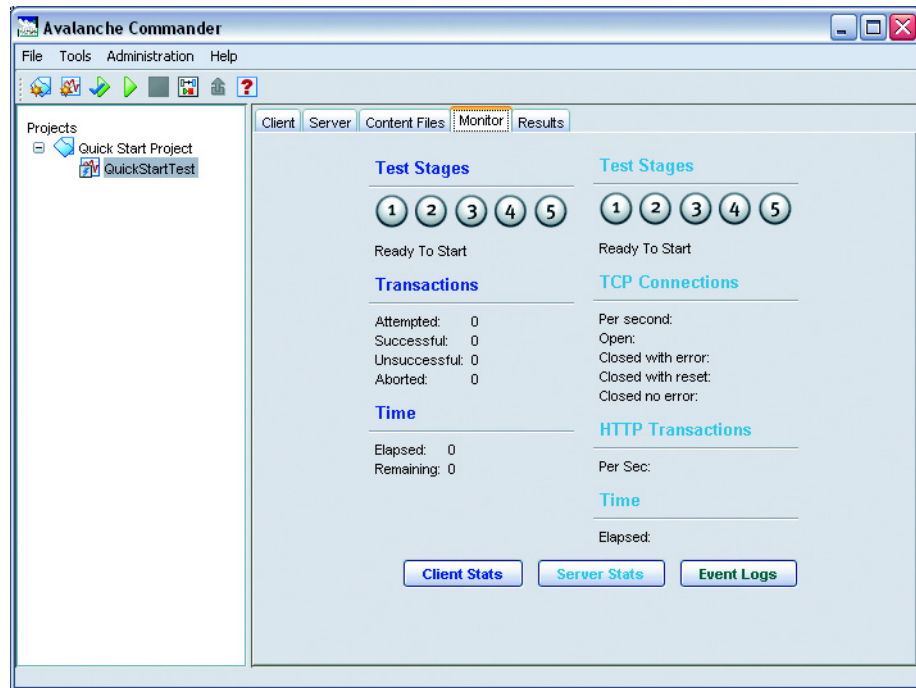




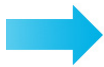
Figure 7. Avalanche Commander Monitor Tab

- 2 From Avalanche Commander, click the **Trial Run**  icon located on the tool bar. The trial run helps ensure that your test has been properly configured. During a trial run, each transaction in the action list is executed once. At the end of the trial run process, the values for *Attempted* and *Successful* transactions in the *Monitor* tab should match.

- 3 From Avalanche Commander, click the **Run**  icon located in the tool bar to start the test. Test Stages, Transactions, and Time information is updated on the *Monitor* tab as the test progresses.
- 4 Monitor the performance of your test while it runs by clicking the **Client Stats** and **Server Stats** buttons. The *Client* and *Server* statistical windows open, displaying real-time text and graphical data for the test in progress.
- 5 When your test stage displays the message “Test Stopped,” your test has completed, and you are ready to view and analyze results.

Viewing and Analyzing Results

Avalanche provides a variety of tools that you can use to analyze test results. For each test, you can get information and export it to another file, such as a spreadsheet application, or you can analyze the information with Avalanche Analyzer.



To view and analyze test results:

- 1 Click the **Results** tab. Test results for all of your tests appear (*Figure 8*).
- 2 In the *Name* column, navigate to the test folder that you want to view. Avalanche identifies each test folder by the date and time in 24-hour format.

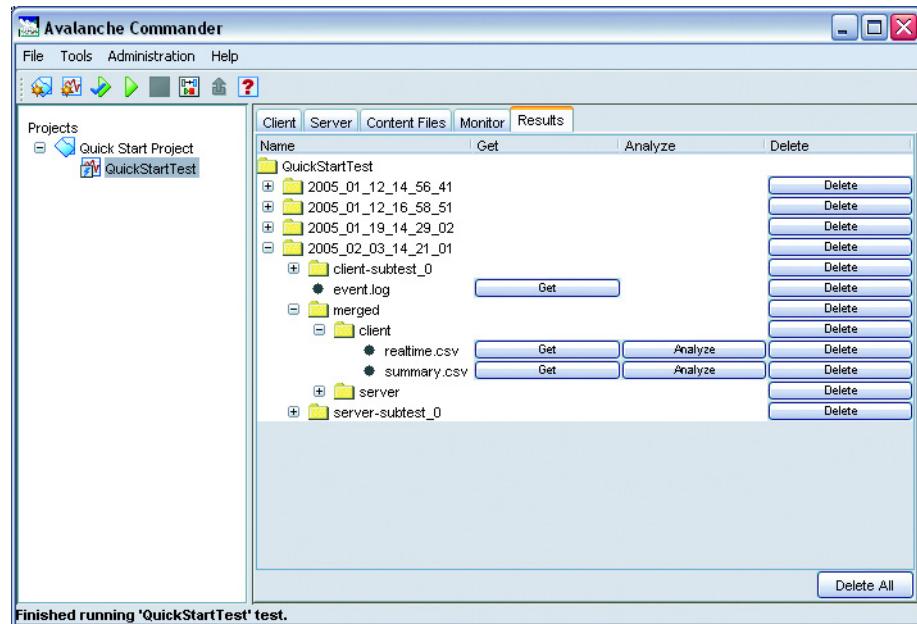


Figure 8. Avalanche Commander Results Tab

- 3 Click the **Analyze** button to view the *realtime.CSV* or *summary.CSV* result files in Avalanche Analyzer (*Figure 9*). For more information about Avalanche Analyzer, refer to the Avalanche Analyzer documentation.

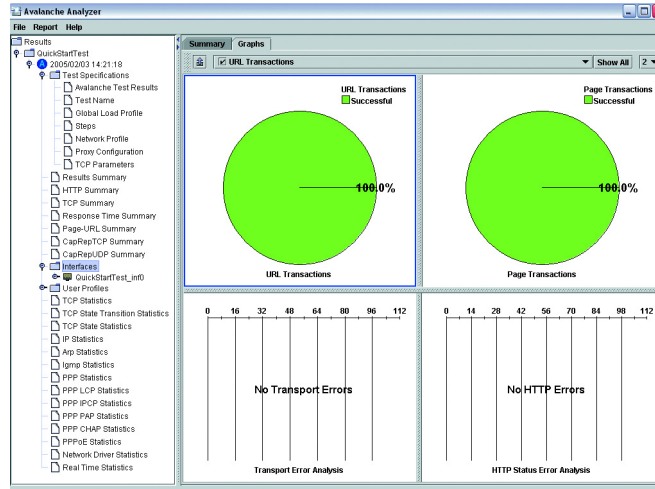


Figure 9. Sample Test Results in Avalanche Analyzer

How to Contact Us

To obtain technical support for any Spirent Communications product, please contact our Support Services department using any of the following methods:

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The latest versions of user manuals, application notes, and software and firmware updates are available on the Spirent Communications Customer Service Center websites at <http://support.spirentcom.com> and <http://support.spirentcom.com.cn> (China).

Information about Spirent Communications and its products and services can be found on the main company websites at <http://www.spirentcom.com> and <http://www.spirentcom.com.cn> (China).

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