



SmoothTraffic

Quick Start Guide

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During their development, all SmoothWall products are subjected to exhaustive penetration testing. There are no insecurities in a standard SmoothWall system or SmoothWall add-on module.

All files that implement SmoothWall security policies are part of the system configuration and must only be altered using the recommended configuration procedures outlined in this documentation.

SmoothWall Ltd. disclaims all responsibility for any configuration and/or installation changes that may compromise network security.

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SmoothTraffic Quick Start

In this guide:

- How to install and configure SmoothTraffic in your SmoothWall system.

Prerequisites

Install and configure a compatible SmoothWall system.

Installing SmoothTraffic

You can install SmoothTraffic by installing it from your SmoothWall system or from a SmoothTraffic CD.

To install SmoothTraffic:

- 1 Log on to your SmoothWall system and browse to the `system > maintenance > modules` page.
 - To install SmoothTraffic from your SmoothWall system, click **Refresh module list**.
 - To install from a CD, click **Advanced** to display all options, click **Browse**, navigate to and select `SmoothTraffic-X.x-module.tar.gz` where `X.x` is the version number. Click **Upload** to upload SmoothTraffic to your SmoothWall system. Click **Refresh module list** to update the Available modules area.
- 2 In the Available modules area, locate SmoothTraffic and click **Install**. Your SmoothWall system installs SmoothTraffic. The next step is to reboot your system.
- 3 Browse to the `system > maintenance > shutdown` page, select **Immediately** and click **Reboot**. Once the system has rebooted and you have logged on, SmoothTraffic becomes available. Your next steps are to configure SmoothTraffic.

Configuring SmoothTraffic

Configuring SmoothTraffic entails applying a traffic scheme that suits your network.

To configure SmoothTraffic:

- 1 Log on to your SmoothWall system and browse to the `networking > traffic > control` page.
- 2 Click on the traffic schemes listed in the Available schemes area to review their functionality. After reviewing them, in the Scheme area, from the Current SmoothTraffic scheme drop-down list, select a scheme to suit your environment. Usually, the Default scheme is adequate for most requirements.
- 3 In the Bandwidth calibration area, under External: set the download and upload speeds for traffic on the external connection. Or, optionally, enter user-defined speeds. To not include the interface, select User defined and leave the User defined field blank.

- 4 In the **Bandwidth** calibration area, under **Port 1**: set the download and upload speeds for traffic on the internal connection. Or, optionally, enter user-defined speeds. To not include the interface, select **User defined** and leave the **User defined** field blank.
- 5 Click **Save** and browse to the **networking > traffic > ports** page.
- 6 To add a rule to manage traffic based on the port it is sent from is destined for, enter the following information:

Field	Explanation
Rule name	The name for this rule. Rule names may contain only alpha-numeric characters and the underscore ‘_’ character.
Order	The order in which rules are processed.
Logged	Optionally, select to enable logging for any traffic managed by this rule.
Interface	Select which interface the rule will apply to.
Protocol	Select which protocol the rule will apply to.
Service direction	Select if the rule applies to incoming or outgoing traffic. This refers to the direction in which the traffic was initiated.
Service	Select the service that this port rule applies to.
User defined	If User defined is selected from the Service list: <ul style="list-style-type: none"> • Enter a numeric port value. Port ranges can be entered using the following format: 6666:6668 • Or, leave this field empty to: <ul style="list-style-type: none"> • specify all ports • or no ports as applicable for TCP and UDP.
Action	Select the traffic tag or differentiated services (diffserv) mark that will be applied to the traffic managed by this port rule. Set traffic tag – Sets an internal traffic tag which categorizes the traffic according to the active scheme Set diffserv mark – Assigns a TCP/IP diffserv mark. Diffserv marks are a way of assigning a special marker to a particular packet which can then be honored by any computers, routers or traffic management systems lying upstream of your SmoothWall system. Note – SmoothTraffic will also allow these options to be preserved in IPSEC (encrypted) traffic.
Comment	Enter a descriptive comment about this port rule.
Apply globally	Select to enable the rule and apply it to all internal and external addresses.

- 7 Click **Add** to create and add the rule to the list of current port rules.
- 8 Browse to the **networking > traffic > diffserv** page. If you have equipment that is using a particular differentiated services (diffserv) mark, you can set another diffserv mark to use upstream.
- 9 To create a rule which SmoothTraffic can interpret and use to either assign a new diffserv mark, or assign traffic according to a specific diffserv mark it contains, enter the following information:

Field	Explanation
Rule name	The name for this rule. Rule names may contain only alpha-numeric characters and the underscore ‘_’ character.

Field	Explanation
Order	The order in which rules are processed.
Logged	Optionally, select to enable logging for any traffic managed by this rule.
Interface	Select which interface the rule will apply to.
Mark	Select the diffserv mark to identify traffic by.
Action	Select the traffic tag or diffserv mark that will be applied to the traffic managed by this rule. Set traffic tag – Sets an internal traffic tag which categorizes the traffic according to the active scheme Set diffserv mark – Assigns a TCP/IP diffserv mark.
Service	Select the service that this port rule applies to.
Comment	Enter a descriptive comment about this port rule.
Apply globally	Select to enable the rule and apply it to all internal and external addresses.

- 10 Click Add to create and add the rule to the list of current diffserv rules.
- 11 On the networking > traffic > peer-to-peer page, to create a rule which SmoothTraffic can interpret and use to manage peer to peer traffic, such as BitTorrent or Kazaa, enter the following information:

Field	Explanation
Rule name	The name for this rule. Rule names may contain only alpha-numeric characters and the underscore ‘_’ character.
Order	The order in which rules are processed.
Logged	Optionally, select to enable logging for any traffic managed by this rule.
Interface	Select which interface the rule will apply to.
Traffic type	Select the diffserv mark to identify traffic by.
Action	Select the traffic tag or diffserv mark that will be applied to the traffic managed by this rule: Set traffic tag – Sets an internal traffic tag which categorizes the traffic according to the active scheme Set diffserv mark – Assigns a TCP/IP diffserv mark.
Service	Select the service that this port rule applies to.
Comment	Enter a descriptive comment about this port rule.
Apply globally	Select to enable the rule and apply it to all internal and external addresses.

- 12 Click Add to create and add the rule to the list of current peer-to-peer rules.
- 13 On the networking > traffic > address page, to apply the traffic rules you created on the ports, diffserv and peer-to-peer pages, enter the following information:

Field	Explanation
Rule name	The name for this rule. Rule names may contain only alpha-numeric characters and the underscore ‘_’ character.
Matching	Select the rule that will match a particular type of network traffic for this address rule. Note: Only non-global port, diffserv and peer-to-peer rules will be available.

Field	Explanation
Logged	Optionally, select to enable logging for any traffic managed by this rule. Note that this type of logging should be used to assist developing rules rather than being enabled for long periods.
Internal IP	Specify the internal IP address, IP address range or subnet that the underlying rule will be applied to. The following formats can be used: 192.168.10.1 for a single IP address 192.168.10.1-192.168.20.50 for an IP address range 192.168.10.0/24 for an IP subnet 168.10.0/255.255.255.0 for an IP subnet If you leave this address blank, the rule will be applied to all internal IP addresses.
External IP	Specify the external IP address, IP address range or subnet that the underlying rule will be applied to. If you leave this address blank, the rule will be applied to all external IP addresses.
Order	Set the precedence of this address rule when matching packets.
Comment	Enter a descriptive comment about this port rule.
Enabled	Select to enable the rule.

- 14 Click Add to create and add the rule to the list of current address rules.
- 15 On the networking > traffic > groups page, create and assign a rule for traffic management based on groups of users.

Field	Explanation
Current group rules	Select the group you want to assign the rule to.
Set traffic tag	Select one of the following options: Set traffic tag – categorizes the traffic according to the active scheme Set diffserv mark – Assigns a TCP/IP diffserv mark.
Logged	Optionally, select to log rule information.
Enabled	Select to apply the rule to the group.

- 16 Click Save to apply the rule.

Applying the Rules

To apply the rules you have created:

- 1 Navigate to the networking > traffic > control page. In the Automatic control area, select Start Traffic sub-system automatically and in the Manual control area, click Restart.

For full information on configuring and working with SmoothTraffic, see the *SmoothTraffic Administrator’s Guide*.

Viewing SmoothTraffic Information

You can review network traffic using your SmoothWall system's reports and realtime traffic graphs.

Generating SmoothTraffic Reports

To generate SmoothTraffic reports:

- 1 Go to the [information > reports > customize page](#).
- 2 In the Available sections area, select the traffic report you want, click **Add** and then and click **View**. Current traffic is reported.

Reviewing Traffic Graphs

Your SmoothWall system can provide you with realtime graphs of traffic activity on your network.

To view realtime traffic activity:

- 1 Go to the [information > realtime > traffic graphs page](#). Current traffic is displayed and information is updated automatically.

