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SmoothTraffic – Quick Start Guide

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Chapter 1

SmoothTraffic Quick Start

In this guide:

- How to install SmoothTraffic in your Smoothwall System.

Prerequisites

Before installing, ensure that your Smoothwall System has all the latest updates installed.

Installing SmoothTraffic

You install SmoothTraffic by installing it from the **System > Maintenance > Modules** page.

To install SmoothTraffic:

- 1 Log on to your Smoothwall System, browse to the **System > Maintenance > Modules** page and click **Refresh module list**.
- 2 In the Available modules area, locate **SmoothTraffic** and click **Install**. Your Smoothwall System installs SmoothTraffic.
- 3 You must now reboot your system. Browse to the **System > Maintenance > Shutdown** page, select **Immediately** and click **Reboot**.

Once your Smoothwall 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.
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.

Field	Explanation
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.
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.

Field	Explanation
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 **Logs and reports > Reports > Customize** page.

- 2 In the Available sections area, select the traffic report you want, click **Add** and then 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 **Logs and reports > Realtime > Traffic graphs** page. Current traffic is displayed and information is updated automatically.

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