

smoothwall

Smoothwall S2 Appliance

Getting Started Guide



For future reference:

Serial number:

Date installed:

Smoothwall contact:

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All brands or product names used in this document are acknowledged.

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Contents

About this guide	1
Audience and scope	1
Related information.....	1
Introduction to the S2 Appliance	2
About the S2 Appliance	2
Reviewing package contents	2
Reviewing the panel and ports.....	3
Installing the S2 Appliance	4
Installing as a basic web proxy	4
Installing in firewall mode.....	5
Getting started	6
Registering the S2 Appliance.....	6
Configuring the S2 Appliance for your network.....	8
Changing the IP address	8
Creating an external connection.....	10
Updating the Smoothwall	11
Getting the latest guardian blocklists	12

About this guide

This guide provides an introduction to the Smoothwall S2 Appliance, guiding you through the initial setup of your Smoothwall S2 Appliance.

Audience and scope

This guide is aimed at system administrators maintaining and deploying an S2 Appliance.

This guide assumes the following prerequisite knowledge:

- An overall understanding of the functionality of Secure Web Gateway or Unified Threat Management.
- An overall understanding of networking concepts.

Note: We strongly recommend that everyone working with Smoothwall products attend Smoothwall training. For information on our current training courses, contact your Smoothwall representative.

Related information

For additional information relating to your S2 Appliance see:

- <https://help.smoothwall.com> containing the Smoothwall latest product documentation.
- <https://kb.smoothwall.net> enables you to troubleshoot problems and find articles you may find useful.

Introduction to the S2 Appliance

About the S2 Appliance

The Smoothwall S2 appliance has been designed specifically for smaller installations such as Primary Schools or small business firewalls. Although small it is still mighty, with an Intel® Processor with 8Gb memory, four 1GB Ethernet ports, and 128Gb solid state hard disk.

The Smoothwall S2 Appliance come preinstalled with Smoothwall and provides you with the hardware platform required to run either:

Secure Web Gateway delivering the features you need to provide a security online experience for all types of users. Smoothwall's web content filtering analyzes actual page content to make an intelligent filtering decision.

OR

Unified Threat Management delivering all the features of the Secure Web Gateway paired with a next generation firewall to give you total protection.

For the latest Smoothwall product documentation, refer to <http://help.smoothwall.com>

Reviewing package contents

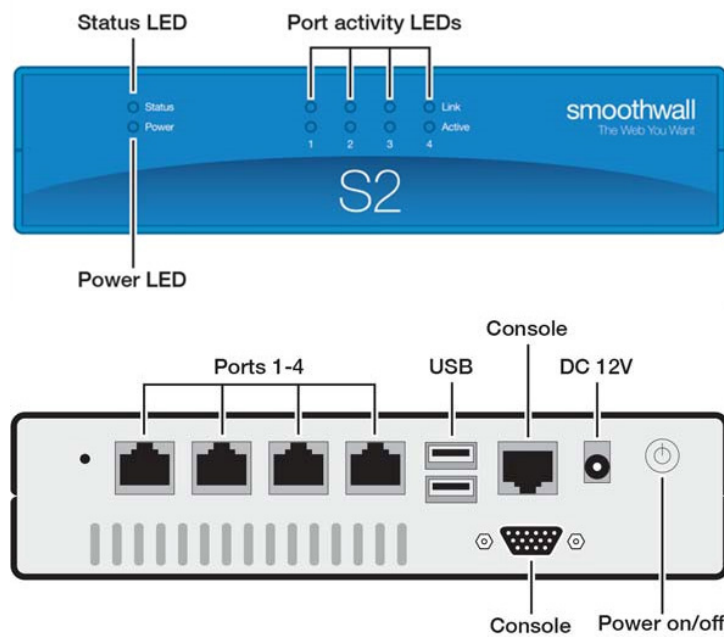
Your S2 package contains the items needed to initially set up an S2 Appliance.

For a detailed hardware specification, refer to your Smoothwall representative.

Component	Information
S2	The S2 appliance.
AC power cord (US and UK)	Provided with the S2.
Ethernet crossover cable	Provided with the S2.
S2 Getting Started Guide	This guide.
Information sheets	Applicable warranty and certification sheets.

Reviewing the panel and ports

The image below provides an overview of the S2 Appliance's ports and Panel LEDs:



Object	Description
Ports 1 to 4 (Labelled as E0 - E3 on the S2 Appliance)	Port 1 (labelled E0 on the appliance) is the default interface. The other ports can be used to provide internal networking zones and external connections. Note that bypass ports are not available on the S2 Appliance.
Console	Can be used to connect a console and administer the S2 Appliances.
USB ports	Connection of external storage devices and keyboard, if required.
Power	Indicates when the power supply to the S2 Appliance is on. The power button on the rear of the appliance. To initiate a clean shutdown when the S2 Appliance is running, press the power button. To force a power off, press and hold the power button for five seconds. <hr/> Note: It is not usually necessary to use the power button to power on the S2 Appliance, as applying mains power should automatically start it.

Installing the S2 Appliance

This section describes the steps needed to install the S2 Appliance in a number of scenarios, including:

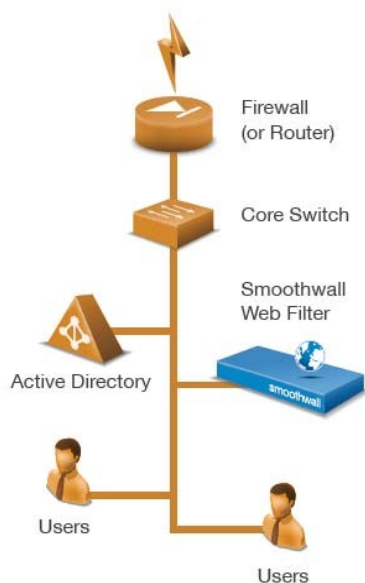
- [Installing as a basic web proxy on page 4](#)
- [Installing in firewall mode on page 5](#)

Installing as a basic web proxy

This is the simplest scenario. The S2 Appliance is deployed using only one interface plugged into the network. Typically, this is used in a Secure Web Gateway installation.

To configure a basic installation, do the following:


1. Place the appliance in a stable and secure location.
2. Connect an Ethernet cable from port 1 to your network; the other ports are not used:



3. Using the supplied AC power cord, connect the appliance to the power supply.

The appliance boots.

Note: On initial start-up your S2 Appliance will perform a series of system configuration tasks. Please be patient while your S2 Appliance completes this initial start-up procedure.

If the appliance does not power on and boot automatically, hold down the  key on the keypad for one second.

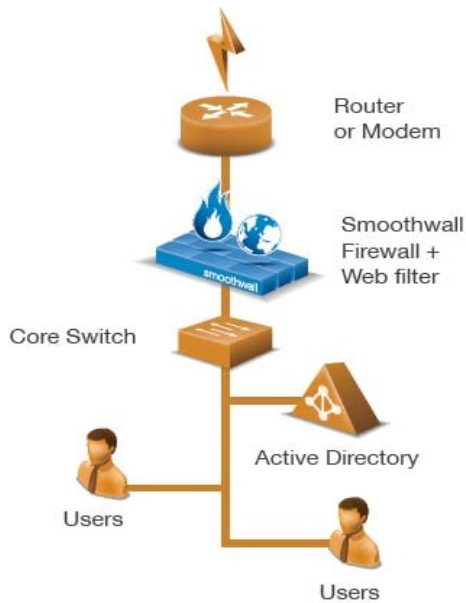
For details on how to register your appliance, see [Getting started on page 6](#).

Installing in firewall mode

This section describes how to install the appliance as a firewall. Typically, this is used in a Unified Threat Management installation.

To install the appliance as a firewall, do the following:


1. Place the appliance in a stable and secure location.
2. Connect an Ethernet cable from your network switch to port 1 of the appliance.
3. Connect an Ethernet cable from a port on the appliance to an external network, or internet connected router or firewall.



4. Using the AC power cord, connect the appliance to the power supply.

The appliance boots.

Note: On initial start-up your S2 Appliance will perform a series of system configuration tasks. Please be patient while your S2 Appliance completes this initial start-up procedure.

If the appliance does not power on and boot automatically, hold down the  key on the keypad for one second.

For details on how to register your appliance, see [Getting started on page 6](#).

Getting started

This section describes the initial setup of the S2 Appliance, including:

- [Registering the S2 Appliance](#) on page 6
- [Configuring the S2 Appliance for your network](#) on page 8
- [Updating the Smoothwall](#) on page 11
- [Getting the latest guardian blocklists](#) on page 12

Registering the S2 Appliance

You must register the S2 Appliance before you can use it.

Note: The appliance comes with pre-assigned internal IP addresses to allow access for the initial configuration, after which you must change them. For more information, see [Changing the IP address](#) on page 8.

To register the appliance, do the following:

1. From a computer on the same subnet as the Smoothwall System, start a web browser and connect to Smoothwall System via HTTPS, using the following URL:

`https://192.168.110.1:441/`

or via HTTP, using the following URL:

`http://192.168.110.1:81/`

If the computer is not in the same subnet, you can add an alias or second IP to your computer's network card, for example: `192.168.110.2 subnet mask 255.255.255.0`.

If your appliance is used in a Secure Web Gateway installation, and you need to specify a gateway, use one appropriate to your network.

2. Accept the appliance's security certificate and when the Login page opens, enter the following credentials:

- **Username** Enter `admin`. This is the default account used to administer the Smoothwall System.

- **Password** Enter `smoothwall`. This is the default password for the `admin` username.

3. Click **Login**.

4. When prompted, enter the following information:

- **Serial number** The software license key provided by your Smoothwall representative.

The serial number determines whether the appliance is configured as Secure Web Gateway or as Unified Threat Management.

- **Name** Your organization's contact person in matters relating to the appliance.

- **Organization** The name of your organization.

- **Department** The department within your organization that has ownership of the appliance.

- **Locality or town** The town, or location, in which your organization is located.

- **State** The state in which your organization is located.

- **Country** The country in which your organization is located.

- **Email** Email address of your organizations appliance contact.

5. Click **Save**. Review the information you have supplied.

6. Click **Confirm**.

The appliance reboots and configures its initial settings. This can take up to five minutes to complete.

Once the appliance has rebooted, the browser will refresh back to the login prompt.

7. Re-enter the default username and password.

8. Click **Login**.

9. When prompted, enter the following information:

- **Timezone** From the **Timezone** drop-down list, select your timezone.
- **Admin password** Enter your new system administrator password, re-entering the new admin password in the **Again** field to confirm consistent password entry.
- **Root password** Enter your new system root password, re-entering the new root password in the **Again** field to confirm consistent password entry.
- **Initial web filter policy setup** Select one of the following web filter policies:

Option/field	Description
Education web filter policy	This is designed to protect students and is highly restrictive. It is suitable to use as a basis for British Educational Communications and Technology Agency (BECTA) compliance.
Workplace/productivity web filter policy	This policy blocks adult, drug, and gambling content. It also blocks social networking, and other sites that may impact productivity at work.
Workplace web filter policy	This policy is a less restrictive workplace web filtering policy. It only blocks adult, drug, and gambling content.
CIPA web filter policy	This is a minimal web filtering policy designed to comply with the USA's Children's Internet Protection Act (CIPA). Note: The CIPA web filter policy does not include an intolerance category as the American Civil Liberties Union (ACLU) considers such a category to be a violation of the USA constitution's First Amendment.

10. Click **Save**.

The appliance applies your selection and displays the Dashboard which is its default home page containing external connectivity controls and a number of reports. The browser will refresh back to the login prompt.

11. Enter your new login credentials and click **Login**.

Note: The S2 Appliance displays a warning message stating it is unable to register. This warning remains up to 5 minutes after the appliance has an IP address and correct DNS assigned, and has successfully connected to the Internet.

Configuring the S2 Appliance for your network

To use the S2 Appliance on your network, you must do the following:

- [Changing the IP address on page 8](#)
- [Creating an external connection on page 10](#)

Changing the IP address

The S2 Appliances have pre-assigned internal IP addresses. You must change them to make the appliance accessible on your network.

Tip: The safest method is to add an additional IP address to the interface, then delete the preassigned address. This way, should the wrong IP address be configured, you can still access the administration user interface to correct it.

To change the IP address, do the following:

1. Browse to **Network > Configuration > Interfaces**.
2. Click the **IP addresses** link for the relevant interface to display the **Attached addresses** table.
3. Click **Add new IP address**.
4. Complete the following:
 - **Status** — New IP addresses are enabled by default.
 - **Type** — Choose whether this IP address is assigned a static IP address (**Static IPv4**), or an IP address assigned via DHCP (**DHCP IPv4**).

Depending the type of IP address, additional parameters may require configuration:

Use as	Additional Parameter	Description
Static IPv4	IP address	Enter the additional IP address for this interface.
	Subnet mask	Enter the subnet mask for the IP address
	Gateway	If traffic from this IP address needs to go through a gateway, select User defined , and either enter it into the box provided, or choose it from the drop-down list. Else, leave None selected.
	Bandwidth	This parameter is only displayed if a User defined Gateway is configured. If multiple gateways are configured and used, enter the minimum bandwidth used to load balance traffic between connections. If a single gateway is configured, load balancing is not used so this parameter can be left at 1. Select whether the configured value is in kilobits per second (kbps), or in megabits per second (Mbps).
	Connection monitoring	This parameter is only displayed if a User defined Gateway is configured. Connection monitoring is enabled by default. It is not recommended you disable connection monitoring for external gateways, otherwise S2 assumes the gateway always has an internet connection.

Use as	Additional Parameter	Description
DHCP IPv4	Bandwidth	If multiple gateways are configured and used, enter the minimum bandwidth used to load balance traffic between connections. If a single gateway is configured, load balancing is not used so this parameter can be left at 1. Select whether the configured value is in kilobits per second (kbps), or in megabits per second (Mbps).
	Connection monitoring	Connection monitoring is enabled by default. It is not recommended you disable connection monitoring for external gateways, otherwise S2 assumes the gateway always has an Internet connection.
	DHCP client hostname	Optionally, enter the DHCP client hostname as specified by the DHCP server.

- **Comment** — If require, enter any information relating to this IP address.

If comments have been added, the **Show comments** button is displayed on the **Attached addresses** table. Clicking this displays comments added for the IP address.

5. Click **Add**.

The appliance applies the new IP address to the interface.

6. Log out of the administration user interface, and browse to the new IP address, via HTTPS using port 441 or HTTP using port 81.

7. Browse to **Network > Configuration > Interfaces**.

8. Click the **IP addresses** link for the relevant interface to display the **Attached addresses** table.

9. Locate and select the pre-assigned IP address.

10. Click **Delete**.

11. Browse to **Network > Configuration > DNS**.

12. From the Global panel, select System internal DNS server.

13. Click Save changes.

14. From the **DNS forwarders** panel, click **Add new DNS forwarders** to configure the DNS servers for the DNS proxy service to use when resolving requests as follows:

- **Status** New DNS forwarders are enabled by default.
- **Server IP address** Either enter the server IP addresses, or select the relevant DNS IP addresses, or range from the drop-down list.

For a detailed description about working with address objects, refer to the Smoothwall product help – <https://help.smoothwall.com>
- **Link Load Balancing pool or Local IP address** Leave this option as **Default**.

For a detailed description about link load balancing, refer to the Smoothwall product help – <https://help.smoothwall.com>
- **Comment** Enter an optional comment for this DNS server.
- **Show comments** Displayed on the **DNS forwarders** table if any comments have been added. Clicking this displays the comments added for the server IP address.

15. Click **Add**.
16. Browse to the **Web proxy > Web proxy > Settings**.
17. Click **Save and Restart** to apply the changes to the web proxy.

Creating an external connection

If your Smoothwall system is to provide access to the Internet, you must configure the connection details as follows:

Note: The following instructions are for external connections made through a NIC (Network Interface Card) interface. You can also configure an external connection to use a PPPoE connection. For a detailed description of how to configure a PPPoE connection, refer to the Smoothwall product help – <https://help.smoothwall.com>.

1. Browse to **Network > Configuration > Interfaces**.
2. Select the relevant interface, and click **Edit**.
3. Complete the following:
 - **Name** — Enter a meaningful name for this connection.
 - **Use as** — Select **External**.
 - **Spoof MAC** — If MAC address spoofing is required, enter the new MAC address here.
 - **MTU** — If required, you can set the Maximum Transmission Unit (MTU) size, in bytes, for this connection.
 - **Comment** — Enter an optional comment for this external interface.
If any comments are added, a **Show comments** button is displayed allowing interface comments to be reviewed.
4. Click **Save changes**.
You must assign the IP address, and gateway if provided, as advised by your ISP. This can either be a static IP address or one assigned dynamically.
5. Click the **▼ IP addresses** link for the external interface to display the **Attached addresses** table.
6. Click **Add new IP address**.
7. Complete the following:
 - **Status** — New IP addresses are enabled by default.
 - **Type** — Choose whether this IP address is assigned a static IP address (**Static IPv4**), or an IP address assigned via DHCP (**DHCP IPv4**).

Depending the type of IP address, additional parameters may require configuration:

Use as	Additional Parameter	Description
Static IPv4	IP address	Enter the additional IP address for this interface.
	Subnet mask	Enter the subnet mask for the IP address
	Gateway	If traffic from this IP address needs to go through a gateway, select User defined , and either enter it into the box provided, or choose it from the drop-down list. Else, leave None selected.

Use as	Additional Parameter	Description
	Bandwidth	<p>This parameter is only displayed if a User defined Gateway is configured.</p> <p>If multiple gateways are configured and used, enter the minimum bandwidth used to load balance traffic between connections. If a single gateway is configured, load balancing is not used so this parameter can be left at 1.</p> <p>Select whether the configured value is in kilobits per second (kbps), or in megabits per second (Mbps).</p>
	Connection monitoring	<p>This parameter is only displayed if a User defined Gateway is configured.</p> <p>Connection monitoring is enabled by default.</p> <p>It is not recommended you disable connection monitoring for external gateways, otherwise the S2 assumes the gateway always has an internet connection.</p>
DHCP IPv4	Bandwidth	<p>If multiple gateways are configured and used, enter the minimum bandwidth used to load balance traffic between connections. If a single gateway is configured, load balancing is not used so this parameter can be left at 1.</p> <p>Select whether the configured value is in kilobits per second (kbps), or in megabits per second (Mbps).</p>
	Connection monitoring	<p>Connection monitoring is enabled by default.</p> <p>It is not recommended you disable connection monitoring for external gateways, otherwise S2 assumes the gateway always has an internet connection.</p>
	DHCP client hostname	<p>Optionally, enter the DHCP client hostname as specified by the DHCP server.</p>

- **Comment** — Enter an optional comment for this IP address.

If comments have been added, the **Show comments** button is displayed on the **Attached addresses** table. Clicking this displays comments added for the IP address.

8. Click **Add**. The appliance applies the new IP address to the interface.

Updating the Smoothwall

You must ensure the S2 Appliance has the latest Smoothwall software release and update:

- Releases provide new features and product improvements.
- Updates provide bug fixes and enhancements to address potential security threats.

The Smoothwall must be connected to the Internet in order to discover, download and install system updates. Smoothwall's support systems are directly integrated with the Smoothwall's update procedure.

To check for and install releases and updates, do the following:

1. Browse to **System > Maintenance > Updates and releases**.
2. In the **Update: fix and patch your installed release** section, click **Check for updates**.
 - If an update exists it will be listed under **Available updates**.
 - If a new release exists it will be listed under the **Available releases**, in the **Releases: new functionality and major upgrades** section.

3. If you want to:

- **Review Update/Release details:**
 - a. Click **Details**. Review details of the current update including any previous release updates.
 - b. Click **OK** to close the Update information dialog.
- **Install the Smoothwall Update/ Release:**
 - a. Click **Install**. Details of the update, including details of any previous release updates are displayed.
 - b. Click **Install and reboot**.
- **Schedule the Smoothwall Update/ Release install at a later time:**
 - a. Click **Schedule**.
 - b. Select the preferred update implementation time.
 - c. Click **Apply**.

Note: The scheduled update process will automatically reboot the system following the scheduled install.

For a detailed description of further configuration needed for your Smoothwall system, refer to the Smoothwall product help – <https://help.smoothwall.com>.

Getting the latest guardian blocklists

Guardian blocklists are groups of settings, which are updated on a regular basis by Smoothwall, to maintain the Smoothwall System's list of undesirable, inappropriate or objectionable content.

To initiate Guardian blocklists download, do the following:

1. Browse to **System > Maintenance > Licenses**.
2. Within the Blocklist subscriptions panel, click **Update**.

The Smoothwall System downloads and installs the latest blocklist.

Note: After this initial blocklist download, the Smoothwall will check for updated blocklists hourly. When a new blocklist becomes available, the Smoothwall automatically downloads and installs the updated blocklist.

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