GUIDE

STORMSHIELD NETWORK SSL VPN CLIENT

INSTALLATION GUIDE

Version 5.1.1 EA

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Reference: sns-en-ssl_vpn_installation_guide-v5.1.1-EA

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Change log

Date	Description
July 29, 2025	Addition of a link to the Stormshield SSL VPN client v5 user and configuration guide
July 22, 2025	New document

Getting started

Welcome to the Stormshield Network SSL VPN Client installation guide version 5.1.1 EA.

This guide explains how to install, update and uninstall the Stormshield SSL VPN client on Windows, Linux and macOS operating systems.

SSL VPN allows remote users to securely access a organization's resources - internal or otherwise - via the SNS firewall. To set up an SSL VPN connection with the SNS firewall, an SSL VPN client, such as the Stormshield SSL VPN client, has to be installed on each user's workstation.

In this guide, Stormshield Network SSL VPN Client is named "Stormshield SSL VPN client".

Specific characteristics of Stormshield SSL VPN clients

This section presents some of the specific characteristics of Stormshield SSL VPN clients.

Compatible versions and operating systems

For more information on operating systems and compatible versions, refer to the section SSL VPN Client in the *Network Security & Tools Product Life Cycle document*.

Connection modes

Connection mode	Description
Stormshield mode	This mode has to be used with a Stormshield SNS firewall. In this mode: • The Stormshield SSL VPN Client automatically retrieves the SSL VPN configuration on the first connection to the SNS firewall, or on subsequent connections if the SSL VPN configuration has been modified. Every time the Stormshield SSL VPN client connects to the SNS firewall, it checks whether the local SSL VPN configuration of the connection in use has to be updated. • The Stormshield SSL VPN client sends information to the SNS firewall every time it connects, making it possible it to check the compliance of the client workstation (ZTNA).
Import OVPN file	This mode makes it possible to import an OpenVPN configuration file (OVPN format), and to connect to the OpenVPN gateway that provided the configuration file.

Ports and protocols

In a default configuration, the Stormshield SSL VPN client must be able to contact the following ports to set up SSL VPN connections.

Source	Destination	Protocol/Port (default)	Purpose of the connection
Client (SSLVPNService) **Stormshield mode only**	OpenVPN gateway	TCP/443 (captive portal)	Retrieve SSL VPN configuration and send information to the SNS firewall to verify the compliance of the client workstation (ZTNA).
Client (OpenVPN)	OpenVPN gateway	UDP/1194 (SSL VPN)	Set up the SSL VPN connection
Client (OpenVPN)	OpenVPN gateway	TCP/443 (SSL VPN)	Set up the SSL VPN connection (compatibility)

To set up an SSL VPN connection, the Stormshield SSL VPN client always chooses the UDP network first to ensure optimal performance.

Running scripts

The Stormshield SSL VPN client can automatically run scripts on the user's workstation every time an SSL VPN connection is opened or closed.

Operating system	Operation/Implementation
Windows	The scripts to be run must be added to the configuration of the SNS firewall's SSL VPN service.
Linux	The scripts **sslvpn_connect.sh** and **sslvpn_disconnect.sh** have to be added on each workstation, and at this location: `/opt/stormshield/sslvpnclient/modules/ssl-vpn/etc/`
macOS	The scripts **sslvpn_connect.sh** and **sslvpn_disconnect.sh** have to be added on each workstation, and at this location: `/Applications/Stormshield/SSL VPN Client.app/Contents/MacOS/Modules/ssl-vpn/etc/`

In Linux and macOS environments, you have to comply with the location and script names mentioned.

Limitations and explanations on usage

For more information, refer to the section Limitations and explanations on usage in the *SSL VPN Client release notes*.

Installing on a Windows operating system

This section explains how to install, update and uninstall the Stormshield SSL VPN client on Windows operating systems.

Downloading the installer for Windows

1. The MSI package of the Stormshield SSL VPN client can be downloaded from:
   - The Stormshield SSL VPN website at https://vpn.stormshield.eu/,
   - Your MyStormshield area in **Downloads** > **Downloads** > **Stormshield Network Security** > **SSL VPN**.

   Two MSI packages are available: one in French, and the second in English. Only the language of the installer is different. Once the Stormshield SSL VPN client is installed, it can be used in English or French.
2. Check the integrity of the downloaded file:
   a. In the Windows command prompt, retrieve the hash of the MSI package with the command:
   ```
   CertUtil -hashfile <filename> SHA256
   ```
   Replace *<filename>* with the name of the downloaded MSI package.
   b. Compare the result with the visible hash from:
   - The Stormshield SSL VPN website, **GPG Signature** button,
   - Your MyStormshield area, **SHA256** column in the download table.

   Hashes have to be identical.

Installing the Stormshield SSL VPN client

The Stormshield SSL VPN client can be installed through the following methods:

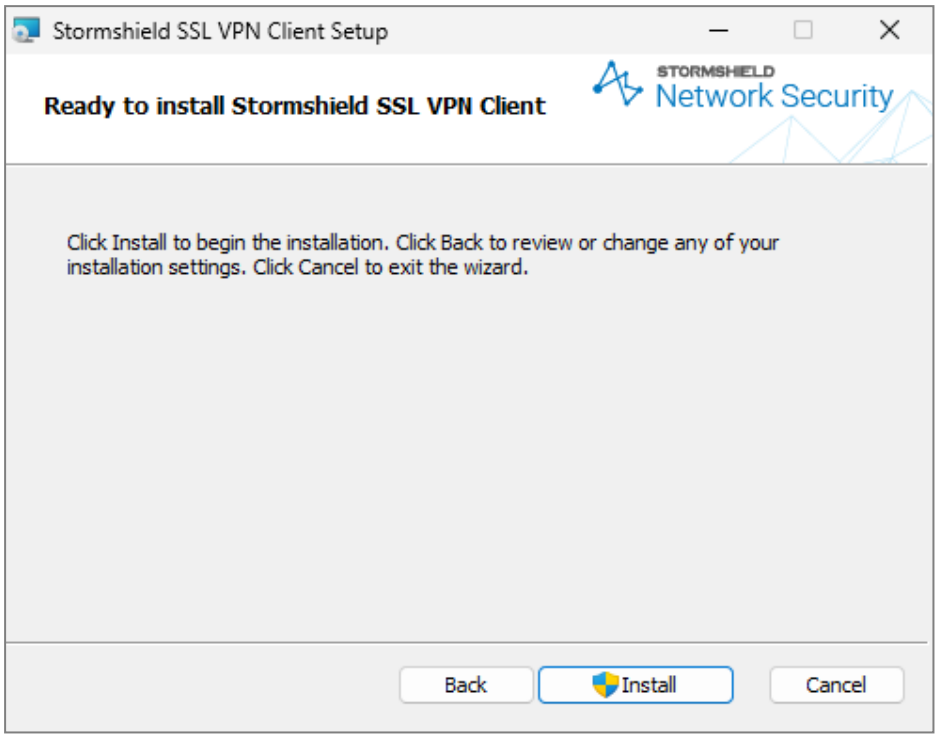
- Manual installation with the MSI package,
- Deployment via a group policy (GPO),
- Deployment via a script.

> **NOTE**
> When the Stormshield SSL VPN client is installed, it is installed for all users on the workstation.

Manual installation with the MSI package

You must be the local workstation administrator or enter the login and password of an administrator account in order to install the Stormshield SSL VPN client.

1. Run the MSI package that was downloaded earlier.
2. Follow the steps in the installation wizard.



Once it is installed, the Stormshield SSL VPN client will automatically start.

Deployment via a group policy (GPO)

1. Run the server manager on the domain controller.
2. In the upper menu bar, click on **Tools > Group Policy Management**.
3. In the list on the left, right-click on the Microsoft Active Directory domain name and select **Create a GPO in this domain, and link it here...**
4. Name the GPO and click on **OK**.
5. Right-click on the name of the GPO that you have just created, and select **Edit**.
6. In the window to edit the GPO, expand the menu on the left **Computer Configuration > Policies > Software Settings**.
7. Right-click on **Software installation** and select **New > Package**. Select the MSI package that was downloaded earlier.
8. Select **Advanced** deployment mode and click on **OK**.
9. Right-click on the package that you have just added, and select **Properties**.
10. If you wish to do so, you can rename this package installation instance in the **General** tab.
11. In the **Deployment** tab, click on **Advanced options...** and select **Ignore language when deploying this package**. Click on **OK**.
12. Click on **OK**.

The deployment will automatically run when a workstation connects to the corporate network. Once it is deployed, the Stormshield SSL VPN client will automatically start.

Deployment via a script

1. Open the Windows command prompt as an administrator.
2. Go to the folder containing the MSI package that was downloaded earlier.
3. Run this command to start the deployment:

```
msiexec /i <filename> /qn
```

   - Replace *<filename>* with the name of the downloaded MSI package.
   - Keep the **/qn** options in order for the deployment to take place silently without showing the progress bar. Use **/qb!** options to show the progress bar.

Once it is deployed, the Stormshield SSL VPN client will automatically start.

Updating the Stormshield SSL VPN client

The Stormshield SSL VPN client can be updated through the following methods:

- Manual update with the MSI package,
- Deployment of the update via a group policy (GPO),
- Deployment of the update via a script.

Matrix of updates to version 5

Original version	Information to take into account when updating to version 5
Version 2 Version 3	✗ The original version must be uninstalled before updating ✓ Address book entries are added to saved connections ✗ Imported connection profiles (.ovpn files) will be lost
Version 4	✓ Update possible without uninstalling original version ✓ Address book entries are added to saved connections ✗ Imported connection profiles (.ovpn files) will be lost
Version 5	✓ Update possible without uninstalling original version ✓ Saved connections retained

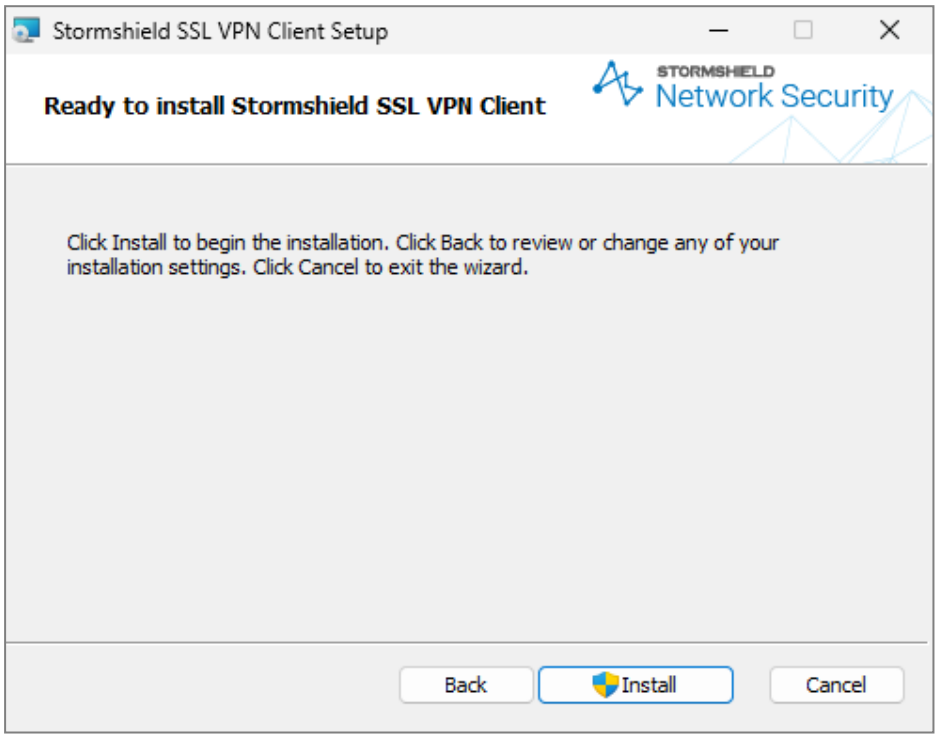
(*) As of version 5, the "**Address book**" is named "**Saved connections**".
During an update from version 4 or lower to version 5, address book entries are added to saved connections, either automatically, or by entering the address book password the first time that the Stormshield SSL VPN client starts up, if the address book is protected. The original address book is not modified, and will be kept at its original location.

IMPORTANT
Downgrades to a version lower than version 5 are not supported. If you still want to downgrade to Stormshield SSL VPN Client version 4, you must first uninstall version 5, and then install version 4.

Manual update with the MSI package

You must be the local workstation administrator or enter the login and password of an administrator account in order to install the Stormshield SSL VPN client update.

1. Run the MSI package of the new version that was downloaded earlier.
2. Follow the steps in the installation wizard.



Once it is installed, the Stormshield SSL VPN client will automatically start.

Deployment of the update via a group policy (GPO)

1. Run the server manager on the domain controller.
2. In the upper menu bar, click on **Tools > Group Policy Management**.
3. In the list on the left, right-click on the name of the GPO in question and select **Edit**.
4. In the window to edit the GPO, expand the menu on the left **Computer Configuration > Policies > Software Settings**.
5. Right-click on **Software installation** and select **New > Package**. Select the new MSI package that was downloaded earlier.
6. Select **Advanced** mode and click on **OK**.
7. Right-click on the package that you have just added, and select **Properties**.
8. In the **General** tab, rename this installation instance if necessary, by adding the Stormshield SSL VPN client version number, for example.
9. In the **Deployment** tab, click on **Advanced options...** and select **Ignore language when deploying this package**. Click on **OK**.

10. In the **Upgrades** tab:
    a. The installation instance of the previous package is shown with the caption **Upgrade**. Select it and click on **Remove**. This property has to be changed in order for the update to be launched correctly.
    b. Click on **Add...**, select the update package, et select **Uninstall the existing package, then install the upgrade package**. Click on **OK**.

    The installation instance of the previous package is now associated with the **Replace** operation.
11. Click on **OK**.

The update package is now ready to be deployed. The deployment will automatically run when a workstation connects to the corporate network. Once the update has been deployed, the Stormshield SSL VPN client will automatically start.

Deployment of the update via a script

1. Open the Windows command prompt as an administrator.
2. Go to the folder containing the MSI package that was downloaded earlier.
3. Run this command to start the update:
```
msiexec /i <filename> /qn
```
   - Replace *<filename>* with the name of the downloaded MSI package.
   - Keep the **/qn** options in order for the deployment to take place silently without showing the progress bar. Use **/qb!** options to show the progress bar.

Once the update has been deployed, the Stormshield SSL VPN client will automatically start.

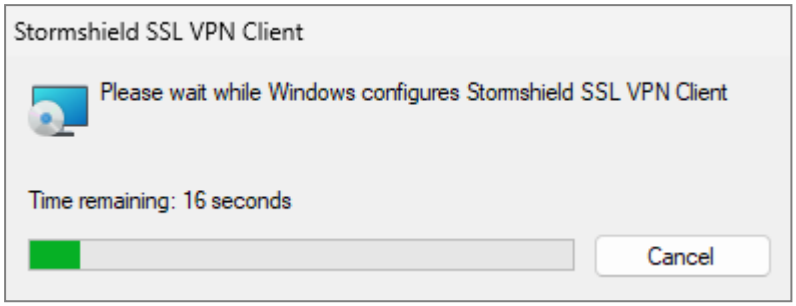
Uninstalling the Stormshield SSL VPN client

You must be the local workstation administrator or enter the login and password of an administrator account in order to uninstall the Stormshield SSL VPN client.

NOTE
Some files are persistent even after the Stormshield SSL VPN client has been uninstalled, such as log files, and the .book file, which contains saved connections.

1. Ensure that the Stormshield SSL VPN client is not running.
2. Go to the Windows **Start** menu and open **Settings**.
3. In Windows 11, go to **Applications** > **Installed applications**.
   In Windows 10, go to **Applications** > **Applications and features**.
4. In Windows 11, locate **Stormshield SSL VPN Client** and click on **...** > **Uninstall**.
   In Windows 10, select **Stormshield SSL VPN Client** and click on **Uninstall.**
5. Click once again on **Uninstall** to start uninstalling.

6. Wait while the Stormshield SSL VPN client uninstalls.



The Stormshield SSL VPN client is now uninstalled for all users on the workstation.

Installing on a Linux operating system

This section explains how to install and uninstall the Stormshield SSL VPN client on Linux operating systems.

Downloading the installer for Linux

1. The installation package of the Stormshield SSL VPN client can be downloaded from:
   - The Stormshield SSL VPN website at https://vpn.stormshield.eu/,
   - Your MyStormshield area in **Downloads > Downloads > Stormshield Network Security > SSL VPN**.

   The installation package is available in .deb format for Ubuntu distributions, and .rpm format for RHEL distributions.
2. Check the integrity of the downloaded file:
   a. In a terminal, retrieve the hash of the installation package with the command:
   ```
   sha256sum <filename>
   ```
   Replace *<filename>* with the name of the .deb or .rpm installation package that was downloaded.
   b. Compare the result with the visible hash from:
   - The Stormshield SSL VPN website, **GPG Signature** button,
   - Your MyStormshield area, **SHA256** column in the download table.

   Hashes have to be identical.

Installing the Stormshield SSL VPN client

> **NOTE**
> This section explains how to install the Stormshield SSL VPN client for Linux in command line interface.

Continue based on the relevant Linux distribution.

Installing in Ubuntu

1. Install the Stormshield SSL VPN client:
   ```
   sudo apt install ./<filename>
   ```
   - Replace *<filename>* with the name of the .deb packet downloaded in advance.
   - With the *apt* tool, you have to provide the file path of the packet to be installed. In the example, **./** indicates that the packet is available in the current folder.
2. With the default desktop environment, the  icon of the Stormshield SSL VPN client automatically appears in the system tray.

   If you have changed the configuration of the desktop environment or are using a different one, ensure that you show the Stormshield SSL VPN client icon in the system tray, for example by enabling options in the configuration of the desktop environment that you are using, or by installing an additional package.

3. If your OpenVPN gateway (the SNS firewall) provides a specific DNS configuration to use, the configuration is not natively applied by OpenVPN under Linux. You will need a local solution that can apply it.

   For example, if you use the default DNS resolution manager *systemd-resolved*:

   a. Install the packet **openvpn-systemd-resolved**:
   ```
   sudo apt install openvpn-systemd-resolved
   ```

   b. Create symbolic links so that the Stormshield SSL VPN client can use the script contained in this packet when opening and closing SSL VPN connections. Comply with the location and script names specified in the commands below.
   ```
   sudo ln -s /etc/openvpn/update-systemd-resolved /opt/stormshield/sslvpnclient/modules/ssl-vpn/etc/sslvpn_connect.sh
   sudo ln -s /etc/openvpn/update-systemd-resolved /opt/stormshield/sslvpnclient/modules/ssl-vpn/etc/sslvpn_disconnect.sh
   ```

Installing in RHEL

1. Manually add a repository to provide the **openvpn** dependency, which is not available by default in RHEL. For example, you can add the EPEL (**Extra Packages for Enterprise Linux**) repository:
   ```
   sudo dnf install https://dl.fedoraproject.org/pub/epel/epel-release-latest-9.noarch.rpm
   sudo dnf update -y
   ```
2. Install the Stormshield SSL VPN client:
   ```
   sudo dnf install ./<filename>
   ```
   - Replace *<filename>* with the name of the .rpm packet downloaded in advance.
   - With the *dnf* tool, you have to provide the file path of the packet to be installed. In the example, **./** indicates that the packet is available in the current folder.
3. With the default desktop environment, you need to install a package that makes it possible to display the Stormshield SSL VPN client icon in the system tray, such as the **gnome-shell-extension-appindicator** package. If you are using a different package, ensure that you display the Stormshield SSL VPN client icon in the system tray.
4. If your OpenVPN gateway (the SNS firewall) provides a specific DNS configuration to use, the configuration is not natively applied by OpenVPN under Linux. You will need a local solution that can apply it.

   You can, for example, use a script equivalent to the one in the **openvpn-systemd-resolved** package on Ubuntu.

   Once you have the script, you need to create symbolic links so that the Stormshield SSL VPN client can use it when opening and closing SSL VPN connections. Stormshield SSL VPN client scripts have to be placed in the location below and named as follows:
   ```
   /opt/stormshield/sslvpnclient/modules/ssl-vpn/etc/sslvpn_connect.sh
   /opt/stormshield/sslvpnclient/modules/ssl-vpn/etc/sslvpn_disconnect.sh
   ```

Uninstalling the Stormshield SSL VPN client

NOTE
Some files are persistent even after the Stormshield SSL VPN client has been uninstalled, such as log files, and the .book file, which contains saved connections.

Uninstalling in Ubuntu

1. Ensure that the Stormshield SSL VPN client is not running.
2. Uninstall the Stormshield SSL VPN client:

```
sudo apt remove sslvpnclient
```

Uninstalling in RHEL

1. Ensure that the Stormshield SSL VPN client is not running.
2. Uninstall the Stormshield SSL VPN client:

```
sudo dnf remove sslvpnclient
```

Installing on a macOS operating system

This section explains how to install and uninstall the Stormshield SSL VPN client on macOS operating systems.

Downloading the installer for macOS

1. The installation package (.pkg file) of the Stormshield SSL VPN client can be downloaded from:
   - The Stormshield SSL VPN website at https://vpn.stormshield.eu/,
   - Your MyStormshield area in **Downloads** > **Downloads** > **Stormshield Network Security** > **SSL VPN**.
2. Check the integrity of the downloaded file:
   a. In a terminal, retrieve the hash of the installation package with the command:
   ```
   shasum -a 256 <filename>
   ```
   Replace *<filename>* with the name of the downloaded .pkg file.
   b. Compare the result with the visible hash from:
   - The Stormshield SSL VPN website, **GPG Signature** button,
   - Your MyStormshield area, **SHA256** column in the download table.

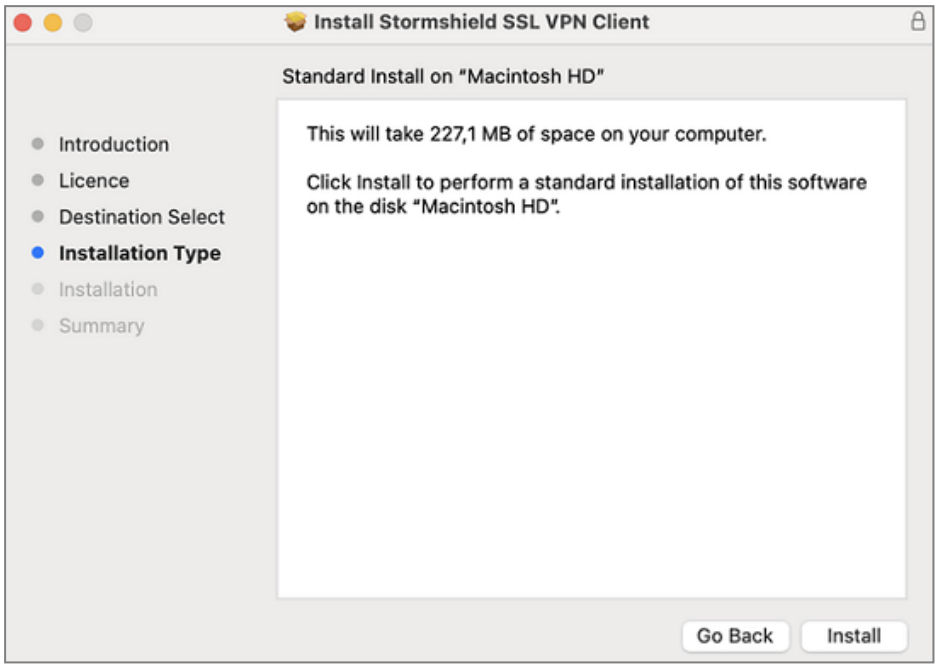
   Hashes have to be identical.

Installing the Stormshield SSL VPN client

The Stormshield SSL VPN Client can be installed either manually by running the .pkg installation package, or by using a mobile device management (MDM) solution. In this section, only the manual installation procedure is explained.

You must be the local workstation administrator in order to install the Stormshield SSL VPN client.

1. Run the installation packet (.pkg file) that was downloaded earlier.
2. Follow the steps in the installation wizard.



3. If your OpenVPN gateway (the SNS firewall) provides a specific DNS configuration to use, the configuration is not natively applied by OpenVPN under macOS. You will need a local solution that can apply it, such as a third-party script.

   Once you have the script, you need to create symbolic links so that the Stormshield SSL VPN client can use it when opening and closing SSL VPN connections. Stormshield SSL VPN client scripts have to be placed in the location below and named as follows:

```
/Applications/Stormshield/SSL VPN Client.app/Contents/MacOS/Modules/ssl-vpn/etc/sslvpn_connect.sh
/Applications/Stormshield/SSL VPN Client.app/Contents/MacOS/Modules/ssl-vpn/etc/sslvpn_disconnect.sh
```

Uninstalling the Stormshield SSL VPN client

You must be the local workstation administrator in order to uninstall the Stormshield SSL VPN client.

NOTE
Some files are persistent even after the Stormshield SSL VPN client has been uninstalled, such as log files, and the .book file, which contains saved connections.

1. Ensure that the Stormshield SSL VPN client is not running.
2. Go to the **Finder**, then go to the **Applications** folder.
3. Right-click on the Stormshield SSL VPN client icon, and click on **Send to Recycle bin**.
4. Empty the bin to delete the application.

Further reading

To configure and use the Stormshield SSL VPN client, refer to the **Stormshield SSL VPN client v5 user and configuration guide**.

To configure the SSL VPN service on the SNS firewall, refer to the **SSL VPN** section of the *SNS user guide* in the relevant version.

Additional information and responses to questions you may have about the Stormshield SSL VPN client are available in the **Stormshield knowledge base** (authentication required).

STORMSHIELD

documentation@stormshield.eu