



# **Smoothwall Certificate Guidance**

A Smoothwall certificate must be installed on all devices requiring Internet access. If a Smoothwall certificate is not installed, users will receive an error/warning message similar to the one shown below when accessing content which is decrypted by Smoothwall.

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8	There is a problem connecting securely to this wel	bsite.		
	The security certificate presented by this website was not issu	ied by a trusted	certificate authority.	e di
	Security certificate problems may indicate an attempt to fool server.	you or intercep	t any data you send to	o the
	You should close this webpage.			
	Click here to close this webpage.			
	More information			

The Smoothwall certificate can be downloaded from the links below:

Schools Smoothwall certificate 2021 - 2023 (for use up until the 4th April 2023)

https://sccwebassets.blob.core.windows.net/public/schools/https\_interception\_2021-2023.crt

Schools Smoothwall certificate 2023 – 2025 (for use on and after the 4<sup>th</sup> April 2023)

https://sccwebassets.blob.core.windows.net/public/schools/smoothwall\_inspection-2023-2025.crt

The following guidance to install the certificate in a Windows environment is provided as a supplement to information on the <u>Smoothwall website</u>. Further links have been provided on the <u>Smoothwall site</u> for a variety of different web browsers and operating systems. If you require further assistance with installing the certificate, please contact your IT support company.

Note: the following steps must be performed by a user with Administrative rights, specifically the user must have permissions to add a certificate to the Trusted Root Certification Authorities store.





### Installing the certificate on a standalone Windows computer

- 1) Download the Smoothwall certificate and save it to a suitable location.
- 2) Navigate to the location where you saved the Smoothwall certificate and double-click to open it. You may be presented with a security warning, as shown above. If so, click **Open**.



3) The certificate properties box will be displayed as shown above. Click on **Install Certificate** to start the **Certificate Import Wizard**.

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Welcome to the Certificate Import Wizard
This wizard helps you copy certificates, certificate trust lists, and certificate revocation lists from your disk to a certificate store.
A certificate, which is issued by a certification authority, is a confirmation of your identity and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.
Store Location
Content user     Content user
To continue, dick Next.

4) Select Local Machine and Click **Next**. You may need to enter a username and password which has permissions to add a certificate to the Trusted Root Certification Authorities store.







÷	Certificate Import Wizard	×
	Certificate Store Certificate stores are system areas where certificates are kept.	
	Windows can automatically select a certificate store, or you can specify a location for the certificate.	
	Place all certificates in the following store     Certificate store:     Browse	
	Next Canc	el

5) Choose Place all certificates in the following store as shown above, then click Browse.



6) Choose the Trusted Root Certification Authorities folder to expand the stores. Click OK.

←	🚰 Certificate Import Wizard	×
	Certificate Store Certificate stores are system areas where certificates are kept.	
	Windows can automatically select a certificate store, or you can specify a location for the certificate.	
	<ul> <li>Automatically select the certificate store based on the type of certificate</li> <li>Place all certificates in the following store</li> </ul>	
	Certificate store: Trusted Root Certification Authorities Browse	

7) Ensure the Certificate store detailed in the Certificate Import Wizard is set to **Trusted Root Certification Authorities** as shown above, then click **Next**. *If not, click on Browse and review the selection, by repeating step 6. If you do not install the certificate in this certificate store, the Smoothwall Certificate will NOT function correctly.* 





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#### **Completing the Certificate Import Wizard**

The certificate will be imported after you click Finish.

You have specified the following settings:							
Certificate Store Selected by User	Trusted Root Certification Authorities						
Content	Certificate						

		<u>F</u> inish Cancel
8)	Click Finish.	
		Security Warning
		You are about to install a certificate from a certification authority (CA) claiming to represent: SCC-SWALL-DOC-REPORT-01 Windows cannot validate that the certificate is actually from "SCC-SWALL-DOC-REPORT-01". You should confirm its origin by contacting "SCC-SWALL-DOC-REPORT-01". The following number will assist you in this process: Thumbprint (shal): 147B76BB 23F120EA 950A250C 0E1 C220A 3148065F Warning: If you install this root certificate, Windows will automatically trust any certificate issued by this CA. Installing a certificate with an unconfirmed thumbprint is a security risk. If you click "Yes" you acknowledge this risk. Do you want to install this certificate?
		<u>Y</u> es

- 9) On some older operating systems you may be prompted by a security warning similar to the one displayed above. Click **Yes** to confirm you wish to install the certificate.
- 10) Click **OK** to close the Certificate Import Wizard.
- 11) Click **OK** to close the certificate.

The certificate will now be installed successfully.

**NOTE:** If the Certificate icon has a red cross next to it, the installation has failed even though it is reported as being successful. The certificate will have been imported but will not be trusted. Please see the link to the Microsoft article below for further information and potential solutions.

https://technet.microsoft.com/en-us/library/cc754841.aspx#BKMK\_addlocal





## Deploying the Smoothwall certificate to Windows computers via group policy

If your school has a Microsoft Windows Server managing your computer accounts, and if an appropriate organisational structure in your Active Directory has been configured, you may be able to deploy the Smoothwall certificate to all Windows computers in your domain using group policy.

For the purposes of this guide, a domain called **School1.local** has been created with an organisational unit structure that contains a top level organisational unit called **School**. Within the **School** organisational unit there are further organisational units for managing either school computers, or school users. These are further broken down into office, student and teacher computer organisational units, and office, student and teacher user organisational units. The student users are further organised into organisational units of **KS1and2**, **KS3and4**, and **KS5and16**.



The following guidance is provided as a supplement to the guidance on the Smoothwall website and has been tested on Windows computers using Internet Explorer 11.

NOTE: This guide was conducted on a server running Microsoft Windows Server 2012 R2, thus some of the screenshot images in this guide may differ from what you see on your server.

- 1) Download the Smoothwall certificate and save it to a suitable location.
- 2) Open the **Group Management Console** on your server. You can search for this if required, as shown below.
- 3) The Group Management Console will be displayed, as shown below.





<u>II</u>		Group Policy Management
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Group Policy Management	Group Policy Management Contents Name	
	Forest: School1Jocal	

4) If required, click the arrow next to the Forest in the left-hand pane, so that it expands as shown below. Our primary organisational unit is called **School**, so we've selected and expanded that, so you can see the organisational units beneath.







				Group Policy Manageme	ent				- 0
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Policy Management art: School Llocal		School Computers	la constante de						
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Scheel1.local		Link Order	GPO	8	inforced Link Enabled	GPO Statue	WMI Fiter	Modified	Domain
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<ul> <li>Domain Controllers</li> <li>School</li> </ul>									
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a 🔛 Office	Create a GPO in this domain,	and Link it here							
p 📓 Students	the article of the								
El Teachers	Block Inheritance								
a Coffice	Group Policy Update								
a Internet an	Group Policy Modeling Wizar	d							
a 🛒 Students	New Organizational Unit								
a 2 KS1and2	View								
b Sland4	New Window from Here								
b 🛋 KS5and6	Delete								
I Teachers	Rename								
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O in this domain and link it to th	his container								
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5) As the certificate will be required on all computers, it should be applied to computer organisational units, rather than user organisational units. In this example, we'll create a GPO (Group Policy Object) which will be used to apply the certificate to the School Computers organisational unit. Right-click the School Computers organisational unit and choose Create a GPO in this domain, and Link it here...

	New GPO		X
Name: Smoothwall Certificate Source Starter GPO:			
(none)			~
		ОК	Cancel

6) A New GPO box will appear. Type a name for the GPO, for example Smoothwall Certificate as shown above, then click OK. The new policy will appear under the School Computers organisational unit as shown below.

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⊿ 🙀 Domains ⊿ ∰ Schooll.local ∬ Default Domain Policy ) 3 Domain Controllers	Links Displa	s In the second	nis location:	and OUs	School 1. local	s GPO:		
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<ul> <li>School Computers</li> <li>Smoothwall Certificate</li> <li>Sfice</li> <li>Students</li> <li>Teachers</li> <li>School Users</li> <li>School Users</li> <li>Stoffice</li> <li>Internet and Proxy Settings - Office</li> <li>Students</li> <li>Internet and Proxy Settings - K1and2</li> </ul>		ation School Con	nputers			No	Yes	Path School Jlocal/School /School Computers





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Group Policy Management Group Policy Management Group Policy Management Group Policy Management Group Policy Management Group Domain Policy Group Domain Policy Group Domain Controllers Group School Users Group Students Group Students Group Students Group Students Group Policy Objects Multi Eliver	Edit Enforced Link Enabled Save Report View New Window from Her Delete Rename Refresh Help	Smoothwall Certificate Scope Details Settings Dele Links Display links in this location: The following sites, domains, and Location	gation School I Jocal OUs are linked to this GPO: Enforced No	Link Enabled Yes	Path School1local/School/School Computers
<ul> <li>▷ iming Starter GPOs</li> <li>▷ iming Sites</li> <li></li></ul>		Security Filtering			
Group Policy Results		The settings in this GPO can only	apply to the following groups, us	ers, and computers:	

7) Right-click on the policy and choose **Edit**, as shown above. This will open the **Group Policy Management Editor**, as shown below.

<u>.</u>	Group Policy Mana	gement Editor	
File Action View Help			
Smoothwall Certificate [SCHOC Computer Configuration Policies Preferences User Configuration Policies Policies Preferences	Smoothwall Certificate [So Select an item to view its description.	CHOOL1DC.SCHOOL1.LOCA Name Computer Configuration	L] Policy
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		Computer Configuration Config	= t	<		There are no items	to show in this	view.			8

- 8) Under Computer Configuration, expand Windows Settings, Security Settings, Public Key Policies and choose Trusted Root Certification Authorities, as shown above.
- 9) Right-click on **Trusted Root Certification Authorities** and choose **Import...** as shown below.







Welcome to the Certificate Import Wizard	File to Import Specify the file you want to import.
This wizard helps you copy certificates, certificate trust lists, and certificate revolists from your disk to a certificate store.  A certificate, which is issued by a certification authority, is a confirmation of your and contains information used to protect data or to establish secure network connections. A certificate store is the system area where certificates are kept.  Store Location Current User E Local Machine	iation Elle name: Browse Browse Browse Browse Cryptographic Message Syntax Standard-PKCS #7 Certificates (.P76) Microsoft Serialized Certificate Store (.SST)
To continue, click Next.	

10) The **Certificate Import Wizard** will open as shown above on the left. Click **Next** to continue, then click **Browse** as shown above on the right. Navigate to the location where you saved the certificate. Select the certificate, as shown below, then click **Open**.

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Organize 👻 New f	older					1		0
Desktop	^	Name	Date modified	Туре	Size			
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This PC Desktop Documents Downloads Music Pictures Videos Local Disk (C:) DVD Drive (D:) I Capita (G:) RBUSS (R:) Data (Z:)	≡ R							
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	File <u>n</u> a	ime: https_interception_ca_certificate			¥	Certificate File (*. <u>O</u> pen	cer;*.crt) Cancel	► 





 Certificate Import Wizard
File to Import Specify the file you want to import.
Eile name: C:\Users\smoothwall\Desktop\https_interception_ca_certificate.ce Browse
Note: More than one certificate can be stored in a single file in the following formats: Personal Information Exchange-PKCS #12 (.PFX,.P12)
Cryptographic Message Syntax Standard-PKCS #7 Certificates (.P7B) Microsoft Serialized Certificate Store (.SST)
Next
Received

11) Click Next.

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Certificate Store Certificate stores are system areas where certificates are	kept.
Windows can automatically select a certificate store, or yo the certificate.	u can specify a location for
○ Automatically select the certificate store based on t	he type of certificate
lace all certificates in the following store	
Certificate store:	
Trusted Root Certification Authorities	Browse
	Next Cance

12) Ensure that the **Place all certificates in the following store** button is selected, and that the Certificate store is set as **Trusted Root Certification Authorities**, then click **Next**. *If not, cancel and return to step 8. If you do not install the certificate in this certificate store, the Smoothwall Certificate will NOT function correctly.* 





The certificate will be imported after you click Finish. You have specified the following settings:           Certificate Store Selected by User         Trusted Root Certification Authorities           Content         Certificate           File Name         C:\Users\smoothwall\Desktop\https_interception		
You have specified the following settings:           Certificate Store Selected by User         Trusted Root Certification Authorities           Content         Certificate           File Name         C: \Users \smoothwall\Desktop \https_interception	The certificate will be imported a	after you dick Finish.
Certificate Store Selected by User         Trusted Root Certification Authorities           Content         Certificate           File Name         C:\Users\smoothwall\Desktop\https_interception	You have specified the following	g settings:
Content Certificate File Name C: \Users \smoothwall \Desktop \https_interception	Certificate Store Selected by I	User Trusted Root Certification Authorities
File Name C: \Users\smoothwall\Desktop\https_interception	Content	Certificate
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# 13)ClickFinish



14) Click **OK** to close the Certificate Import Wizard.





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Smoothwall Certificate [SCHOOLIDC.SCHOOLILOCAL] Policy         ▲ Computer Configuration         ▲ Policies         ▶ Software Settings         ▲ Windows Settings         ▶ Mame Resolution Policy         ■ Scripts (Startup/Shutdown)         ▲ Besolution Policy         ■ Scripts (Startup/Shutdown)         ▲ Besolution Policy         ■ Local Policies         ▶ All Resistry         ▶ All Resources         ▶ All Resources         ▶ All Policies         ▶ Windows Firewall with Advanced Security         ▶ Windows Key Policies         ■ Public Key Policies         ■ Public Key Policies         ■ Dublic Advantic Certificate Request Settings         ■ Trusted Root Certification Authonities         ■ Trusted Root Certification Authonities         ■ Trusted Poople </td <td>Issued To Issued By</td> <td>Expiration Date Intended Purposes 23/02/2025 <all></all></td> <td>Friendly Name <none></none></td> <td>us Certifica</td>	Issued To Issued By	Expiration Date Intended Purposes 23/02/2025 <all></all>	Friendly Name <none></none>	us Certifica
		•		
Trusted Root Certification Authorities store contains 1 certificate.				

15) Back at the **Group Policy Management Editor** screen, you will see that the new policy has been created and is displayed in the right-hand pane, as shown above. Close the **Group Policy Management Editor**.

The certificate will be deployed to all computers in the target organisational units, and any subfolder organisational units you have below the target organisational unit. Computers will need to be rebooted at least twice. Alternatively, you can apply the settings to an individual computer in the target organisational unit by typing **gpupdate /force** from a command prompt on that computer, then rebooting the computer when prompted.