## Installing an SSL Certificate on an Apple OS X Device (Manually)

## Try these instructions first. The alternative instructions are after these ones.

When installing certificates manually onto devices which run Apple OS X, some additional steps are required to maintain maximum security. This involves installing the certificate into the correct keychain.

This guide assumes you have chosen the *System* keychain, but the steps should be very similar for the *login* keychain.

## Installing an SSL Certificate (as a Trusted Root Certification Authority)

- 1. Download the certificate file from the <u>James Hargest website</u> (E-learning/Wifi security certificate)
- 2. The certificate will download to your Downloads Folder. Double-click the certificate file.
- 3. The Add Certificate window will appear. Click **Install Certificate...**

Certificate	Do you want to add the certificate(s) from the file "Test_School_Jan_2017-2020.crt" to a keychain?	
	New root certificates should be added to the login keychain for current user, or to the System keychain if they are to be share	or the d by a
	users of this machine.	

Figure 1: The Add Certificates window - choose the Keychain in which to store the certificate

1. Choose a Keychain (use the login keychain if only one user will access the internet at James Hargest, for more users use the System keychain) and click **Add**.



Figure 2: The System Keychain selected

1. You will be asked to verify your Password to modify the Keychain. Enter your password and click **Modify Keychain**.

Enter your password to allow this.
User Name: User Name
Password:

Figure 3: The Keychain Access verification window

The Certificate is added to the Keychain.

- Ensure you can see the certificate in the list.
- 1. In *Keychains*, click **System** then, in *Category* click **Certificates** The *System - Certificates* are listed.

		Keychain Ac	cess	
Click to unlock th	ne System keychain.			Q Search
Keychains login Local Itame System System Roots	NAL_0000_N4LT Root certificate aut Expires: Tuesday, 2 This root certificat	<b>Testschool</b> hority June 2020 at 11:23:27 Ite is not trusted	' AM New Zealand Standard Time	
	Name	<ul> <li>Kind</li> </ul>	Expires	Keychain
	N4L 0000 N4LTestschool	certificate	2/06/2020, 11:23:27 AM	System
	Com.apple.systemdefault	certificate	21/06/2034, 12:55:30 AM	System
	com.apple.systemdefault	certificate	21/06/2034, 12:55:30 AM	System
	▶ 🔤 com.apple.kerberos.kdc	certificate	21/06/2034, 12:55:30 AM	System
	com.apple.kerberos.kdc	certificate	21/06/2034, 12:55:31 AM	System
Category				
All Items				
1. Passwords				
Secure Notes				
My Certificates				
Ø Kour				
📴 Certificates	2			
	+ i Copy		5 items	

Figure 4: The Keychain Access - System - Certificates list

## **Trusting the Certificate**

Double Click on the Certificate to trust.

•		Keychain Ac	cess	
Click to unlock th	e System keychain.			Q Search
Keychains login Local Items System System Roots	Centificate Control Control C	estschool ority June 2020 at 11:23:27 te is not trusted	AM New Zealand Standard Time	
	Name	Kind	Expirer	Keychain
	N4L_0000_N4LTestschool	certificate	2/06/2020, 11:23:27 AM	System
	com.apple.systemdefault	certificate	21/06/2034, 12:55:30 AM	System
	▶ 🔤 com.apple.kerberos.kdc	certificate	21/06/2034, 12:55:30 AM	System
	com.apple.kerberos.kdc	certificate	21/06/2034, 12:55:31 AM	System
Category				
All Items				
Passwords				
Secure Notes				
My Certificates				
🖗 Keys				
Certificates				
-				

Figure 5: The Keychain Access - System - Certificates list

The Certificate Detail window will be displayed.

1. Click on >Trust



Figure 6: The Certificate Detail window

The Trust section expands.

1. Click on the When using this certificate: drop down list, and choose Always Trust

	N4L_0000_N4LTestschool
Centificate Conti	00_N4LTestschool ificate authority ruesday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time ot certificate is not trusted
▼ Trust	
When using th	nis certificate Use System Defaults 😌
Secure Sockets	s Layer (SSL) no value specified 📀
Secure M	Aail (S/MIME) 🛛 no value specified 🛛 📀
Extensible Authenti	ication (EAP) no value specified 📀
IP Sec	curity (IPsec) no value specified
c	Code Signing no value specified
Tir	me Stamping no value specified
X.509	Basic Policy no value specified
▼ Details	
Subject Nan	ne
Count	ry NZ
Organizatio	on Spark New Zealand Trading Limited
Organizational Ur	nit Spark New Zealand Trading Limited
Common Ner	ne NAL 0000 NALTestschool
• •	N4L_0000_N4LTestschool
Certificate Root certific Expires: Tue This root	N4L_0000_N4LTestschool 0_N4LTestschool cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
Certificate Root certificate Expires: Tue Trust	N4L_0000_N4LTestschool 0_N4LTestschool cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
Certificate Continent	N4L_0000_N4LTestschool O_N4LTestschool cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted citificate:
Centificate Boot certification Expires: Tue This root Trust When using this	N4L_0000_N4LTestschool <b>0_N4LTestschool</b> cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted certificate: Use System Defaults 2
Centificate Control Control	N4L_0000_N4LTestschool  O_N4LTestschool  cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted  cottificate: Use System Defaults Always Trust Horder Hoster
Certificate Control Contentific Expires: Tue Trust When using this Secure Soc Secure Mail	N4L_0000_N4LTestschool O_N4LTestschool Cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
Certification M4L_0000 Root certification Expires: Tue This root Trust When using this Secure Soc Secure Mathematication Extensible Authematication	N4L_0000_N4LTestschool  O_N4LTestschool  cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted  certificate: Use System Defaults A(ways Trust Horder Hood ation (EAP) no value specified
▼ Trust When using this Secure Soc Secure Mai Extensible Authentica IP Secure	N4L_0000_N4LTestschool O_N4LTestschool Cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
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Trust When using this Secure Soc Secure Mail Extensible Authentica IP Secur Co Time X.509 Bi	N4L_0000_N4LTestschool C_N4LTestschool cate authority esoday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
Trust When using this Secure Soc Secure Mail Extensible Authentica IP Secur Co Time X.509 Bi Subject Name	N4L_0000_N4LTestschool Cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted Contificate: Use System Defaults Always Trust Horter Hast Horter Ha
Centification Secure Soc Secure Soc Secure Mail Extensible Authentication IP Secure Co Time X.509 Bi Subject Name Country	N4L_0000_N4LTestschool C_N4LTestschool cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
Centification Secure Soc Secure Soc Secure Mal Extensible Authentica IP Secure Co Time X.509 B Subject Name Country Organization	N4L_0000_N4LTestschool C_N4LTestschool cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted
Centificate Continue Continue Contentification Contentificati	N4L_0000_N4LTestschool C_N4LTestschool cate authority esday, 2 June 2020 at 11:23:27 AM New Zealand Standard Time certificate is not trusted

Figures 7 & 8: The Trust section and Drop-Down

All of the Drop-Downs will change to **Always Trust**.

Click on the Exit button (Red, top left corner of window).

N4L_0	000_N4LTestschool
Certificate Root certificate authority Expires: Tuesday, 2 June This root certificate is Trust	school y 2020 at 11:23:27 AM New Zealand Standard Time not trusted
When using this certificate:	Always Trust 📀 ?
Secure Sockets Layer (SSL)	Always Trust
Secure Mail (S/MIME)	Always Trust
Extensible Authentication (EAP)	Always Trust
IP Security (IPsec)	Always Trust
Code Signing	Always Trust
Time Stamping	Always Trust
X.509 Basic Policy	Always Trust
▼ Details	
Subject Name	
Country NZ	
Organization Spark New	v Zealand Trading Limited
Organizational Unit Spark New	Zealand Trading Limited

Figure 9: Everything marked as trusted

You will be asked for your password to verify the change.

1. Enter your password and **Click** the **Update Settings** button.



Figure 10: Confirm with your password

In the Certificate list, the Certificate should now show that it is trusted.

Keychains login Local Items System System Roots	Rote certificate is marked as trusted for all users				
	Name	~ Kind	Expires	Keychain	
	N4L_0000_N4LTestschool	certificate	2/06/2020, 11:23:27 AM	System	
	▶ □ com.apple.systemdefault	certificate	21/06/2034, 12:55:30 AM	System	
	com.apple.systemdefault	certificate	21/06/2034, 12:55:30 AM	System	
	▶ 🔜 com.apple.kerberos.kdc	certificate	21/06/2034, 12:55:30 AM	System	
	com.apple.kerberos.kdc	certificate	21/06/2034, 12:55:31 AM	System	
Category					
All Items					
Passwords					
Secure Notes					
Mu Cartificator					
Kene					
Contillantas					
Certificates					
	+ Copy		5 items		

Figure 11: The Certificate List

1. Close Keychain Access.