## Creating Self Signed SSL Certificates on IIS 6.0 and Windows Server 2003

If you need to deploy and test your code in SSL environment on IIS 6.0 and Windows Server 2003, but you do not have a valid SSL certificate on your development / test server issued by a trusted third party Certificate Authority (since it costs money), you can easily do so by creating a self signed test certificate using a tool called SelfSSL which comes with IIS 6.0 Resource Kit Tools. SelfSSL is a console line application which is free to use :-). You can download IIS 6.0 Resource Kit Tools from <u>here</u>.

After downloading and executing this kit, make sure you either choose Complete installation option or if you choose Custom installation option, make sure you have selected the SelfSSL feature. See below step by step screen shots for the Custom installation option.

Step 1: Click Next.



Step 2: Choose I Agree and click Next.

allShield Wiz	ard			-
nd-User Lice Read the End- or "I Disagree"	nse Agreement Jser License Agreement ca	arefully and select eithe	er "I Agree"	Z
END-USI INTERNI KIT TOC	ER LICENSE AGR ET INFORMATIO PLS	EEMENT FOR N SERVICES 6	MICROSOF .0 RESOURC	Г Е
IMPORT Agreemer an individ the Micro includes of printed m	ANT-READ CARI at ("EULA") is a leg lual or a single enti- soft software that a omputer software a aterials, "online" o	EFULLY: This En gal agreement be ty) and Microso accompanies this and may include r electronic doce	nd-User Licen etween you (e ft Corporation EULA, whic e associated m imentation, a	ise ither n for h nedia, nd
IIShield —		CID	sagree	
		< Back	Next >	Canad

Step 3: Enter appropriate details and click Next.

InstallShield Wizard		×
Customer Information Please enter your information.		
<u>U</u> ser Name:		
Your Name		
<u>C</u> ompany Name:		
Your Company Name		
Install this application for:	vho uses this computer (all users) ne <u>u</u> ser specified in "User Name"	
Installomeld -	< Back No	ext> Cancel

Step 4: Choose Custom installation option if you just want to install SelfSSL else choose Complete installation option to install all features and click Next.

InstallShield W	/izard			×
Setup Type Choose the s	setup type that best suits your needs.			E.
Please selec	st a setup type.			
C Complet	e			
<b>B</b>	All program features will be installed	I. (Requires th	ie most disk spac	:e.)
• <u>Custom</u>	Choose which program features yo advanced users.	u want installe	ed. Recommende	ed for
InstallShield				;
		< <u>B</u> ack	<u>N</u> ext >	Cancel

Step 5: Enter the installation location and click Next.

InstallShield Wizard	×
Choose Destination Location Select folder where Setup will install files.	
Setup will install the IIS 6.0 Resource Kit Tools in the follow	ing folder.
Destination Folder	
C:\Program Files\IIS Resources\	Browse
To install to a different folder, click Browse and select anoth	ier folder.
InstallShield	
<u> </u>	<u>N</u> ext> Cancel

Step 6: Select SelfSSL and click Next.

elect Features	
Choose the features Setup will install.	
Select the features you want to install, and clear the featu	res you do not want to install. Description Use SelfSSL to generate and
RemapUrl 1.0 SelfSSL 1.0 TinyGet 5.2 Web Capacity Analysis Tool 5.2 Web Capacity Analysis Tool Client 5.2 Web Capacity Analysis Tool Controller 5.2 Web Capacity Analysis Tool Controller 5.2 WFetch 1.3	install a self-signed SSL certificate. Only use this tool to create a secure private channel between your server and a limited user group such as in a software test environment.
Space Required on C: 332 K Space Available on C: 4334988 K	
normona -	

Step 7: Review settings and click Next.

nstallShield Wizard		×
Start Copying Files Review settings before copying files.		
Setup has enough information to start change any settings, click Back. If yo copying files.	copying the program files. If you o ou are satisfied with the settings, c	want to review or lick Next to begin
Current Settings:		
User Information: Your Name Your Company Name	v or at only at	-
The IIS 6.0 Resource Kit Tools will be	e installed for all the users on this o	computer.
Setup Type: CUSTOM: The IIS 6.0 Resource	ce Kit Tools will be installed with th	ne user-specified op
Destination Directory:		-
•		
nstallShield -		94mmmar e
	< <u>B</u> ack	xt> Cancel

Step 8: Click Finish.

InstallShield Wizard	
	InstallShield Wizard Complete Setup has finished installing the IIS 6.0 Resource Kit Tools on your computer.
	KBack Finish Cancel

Once you have successfully installed, click on Start > All Programs > IIS Resources > SelfSSL > SelfSSL to run the SelfSSL utility. On doing so, you should see the command prompt along with help instructions (see below screen shot).

🐼 SelfSSL		×
Microsoft (R) Se Copyright (C) 200	lfSSL Version 1.0 03 Microsoft Corporation. All rights reserved.	
Installs self-sig SELFSSL [/T] [/N	med SSL certificate into IIS. cn] [/K:key size] [/S:site id] [/P:port]	
Τ	Adds the self-signed certificate to "Trusted Certificates" list. The local browser will trust the self-signed certificate if this flag is specified	
∕N∶cn	Specifies the common name of the certificate. The computer name is used if not specified.	
/K:key size /U:validity days /S:site id /P:port /Q	Specifies the key length. Default is 1024. Specifies the validity of the certificate. Default is 7 days. Specifies the id of the site. Default is 1 (Default Site). Specifies the SSL port. Default is 443. Quiet mode. You will not be prompted when SSL settings are overwritten.	
The default behav	viour is equivalent with:	
selfssl.exe /N:C	N=IMANOMUMBAI2 /K:1024 /V:7 /S:1 /P:443	
C:\Program Files`	IIS Resources\SelfSSL>	•

If you simply type selfssl.exe and press enter, it would use the default settings to install the SSL certificate which are equivalent to:

/N:CN=<YOUR COMPUTER NAME> (common name of the certificate) /K:1024 (key length of the certificate) /V:7 (validity of the certificate in days) /S:1 (ID of the site to which the certificate needs to be installed) /P:443 (SSL port)

Type selfssl.exe and press enter, then type y and press enter again to confirm the installation (see screen shot below).

🔤 SelfSSL - selfssl.exe	
Installs self-sig SELFSSL [/T] [/N	med SSL certificate into IIS. cn] [/K:key size] [/S:site id] [/P:port]
/Τ	Adds the self-signed certificate to "Trusted Certificates" list. The local browser will trust the self-signed certificate if this flag is specified.
∕N∶cn	Specifies the common name of the certificate. The computer name is used if not specified.
/K:key size	Specifies the key length, Default is 1024.
/U:validity days /S:site id /P:port /Q	Specifies the validity of the certificate. Default is 7 days. Specifies the id of the site. Default is 1 (Default Site). Specifies the SSL port. Default is 443. Quiet mode. You will not be prompted when SSL settings are overwritten.
The default behav	viour is equivalent with:
selfssl.exe /N:C	N=IMANOMUMBAI2 /K:1024 /U:7 /S:1 /P:443
C:\Program Files Microsoft (R) Se Copyright (C) 20	AIIS Resources\SelfSSL>selfssl.exe LfSSL Version 1.0 03 Microsoft Corporation. All rights reserved.
Do you want to re	place the SSL settings for site 1 (Y/N)?y

The most important option here is the site id parameter and SelfSSL uses the site id 1 by default which maps to "Default Web Site".

To find the site id for any website in IIS 6.0 you can simply execute iisweb.vbs /query "<NAME OF THE WEBSITE>" from command prompt (see below screen shot).

🐼 Command Prompt				- 🗆 ×
C:\Documents and Settings\Administrator>iisw Connecting to serverDone. Site Name (Metabase Path)	/eb.vbs ∕q Status	uery "Default IP	Web Site Port	" Host
 Default Web Site (W3SVC/1)	STOPPED	ALL	======= 80	N∕A
C:\Documents and Settings\Administrator>				
				-

In the above screen shot, you can clearly see that I executed iisweb.vbs/query "Default Web Site" to find the site id for "Default Web Site" which is "W3SVC/1", however we are only interested in the text which follows "W3SVC/" which is "1".

Suppose you had another website by the name "RajTest" and you wanted to install a test SSL certificate having common name "RajTestCertificate" valid for 10 days to "RajTest" on port 444, you would first find the site id for "RajTest" by executing the following command at command prompt: **iisweb.vbs /query "RajTest"**. Once you know

the site id for "RajTest" (lets assume it was "1234567") you would execute the following command at the SelfSSL command prompt: selfssl.exe /N:CN=RajTestCertificate /V:10 / S:1234567 /P:444