

Intel[®] vPro[™] Technology

How to Purchase and Install Entrust* Certificates for Intel[®] AMT Remote Setup and Configuration



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Purchasing Entrust* Certificates for Intel® AMT Remote Setup and Configuration

Intel® Active Management Technology (Intel® AMT) must be setup and configured before you can use the remote manageability and security features. One method is to install Intel Setup and Configuration Software (Intel SCS) and then use *remote configuration*. Remote configuration uses Transport Layer Security (TLS) between the Intel SCS Remote Configuration Server and the remote PCs with Intel AMT firmware. The Intel AMT firmware is pre-loaded with TLS certificate thumbprints from six different certificate vendors so all you need to do is install a third-party certificate on the Remote Configuration Server. This document includes step-by-step instructions on how to purchase and install an Entrust* certificate that will match the pre-installed Entrust* thumbprint and allow you to use remote configuration and maintenance using Intel SCS.

1.1 Document Scope

This document does not include specific steps to install the Entrust certificate on other management consoles. For consoles that do not use Intel SCS 8, please refer to the vendor's documentation for installing the certificate. The steps used to purchase the certificate are the same for all management consoles.

1.2 Supported Intel[®] AMT Versions

The Entrust* certificates are supported in the following versions of Intel AMT:

• 7.0 and later

1.3 Intended Audience

This document is intended for Information Technology (IT) professionals who will be purchasing and installing the TLS certificates.

Readers should have a basic understanding of their IT infrastructure, especially Microsoft* Internet Information Service, the Microsoft Management Console, and a basic familiarity with TLS certificates.

1.4 Prerequisites

The Intel SCS User Guide provides information on the prerequisites for using the remote configuration service. Before starting this process, you should have the following:

- 1. Intel SCS Remote Configuration Service installed on a supported Microsoft* operating system
- 2. One or more domain names for your network (Microsoft* Workgroups are not supported)

- 3. Microsoft* Internet Information Service (IIS) running on the server that is hosting the remote configuration service
- 4. Account permissions to install the certificate

2 Create a Certificate Signing Request

The following instructions were captured using Microsoft* Internet Information Services (IIS) for Windows* Server 2008 R2.

To create a Certificate Signing Request (CSR), do the following:

1. On your Intel SCS remote configuration server, open Programs→Administrative Tools→Internet Information Services (IIS) Manager.



2. In the Internet Information Services (IIS) Manager, open the **Server Certificate** icon.



3. Choose Create Certificate Request... from the Actions menu.

Internet Information Services (II	S) Manager		
) 🖅 🖂 i 😰 🗸
File View Help			
File View Help Connections Second Start Page Start Page Sicss (VPRODEMO\tyroadmin) Application Pools Sites	Server Certific Use this feature to request and server can use with Web sites of Name A scs8.vprodemo.com	cates Imanage certificates that the Web configured for SSL. Issued To WMSvc-SCS8 scs8.vprodemo.com	Actions Import Create Certificate Request Complete Certificate Request Create Domain Certificate Create Self-Signed Certificate Pelp Online Help Online Help
	Features View 🕂 Content \	/iew	
Ready			• 1 .:

- 4. Fill-in the Distinguished Name Properties form:
 - **Common Name**: The common name or CN, for standard certificates, is the RCS server hostname plus a domain suffix. To determine if the certificate is valid, the client compares the domain portion of the Common Name to the value returned by DHCP option 15, or, if set, to the Secure DNS Suffix or Provisioning Server FQDN value set in the client's MEBX. For help in understanding the rules for determining if the two values match, and support for 2nd and 3rd level domains in each version of Intel AMT, refer to the <u>Domain Suffix Guide for Intel® AMT Remote Configuration</u> <u>Process</u>. If you are purchasing a wildcard certificate then you can use one certificate to span different branches in the domain forest. For wildcard certificates, use an asterisk followed by a domain suffix in the CN.

Example 1 (CN=RCS Server FQDN):

In this example, assume that the DHCP Option 15 has been set to "vprodemo.com," and that you did not set the Secure DNS Suffix or the Provision Server FQDN values in the client's MEBX.

Then, if your Remote Configuration Service (RCS) is running on SCS8.vprodemo.com, set CN=SCS8.vprodemo.com.

You can verify the DHCP Option 15 setting by running the SCSDiscovery utility (provided with Intel Setup and Configuration Software) on the client. The DHCP Option 15 setting is called the OSSpecificDNSSuffix.

Example 2 (CN=RCS server host with client DNS Suffix)

In this example, the DHCP option 15 value has been set to "vprodemo.edu" for the environment. If your Remote Configuration Service is running on myRCS.vprodemo.com, set the certificate CN=myRCS.vprodemo.edu.

- **Organization**: The name of the organization that is requesting the certificate and owns the domain
- Organizational Unit: Intel(R) Client Setup Certificate

Verify that the OU field is set to exactly "Intel(R) Client Setup Certificate" without the quote marks.

- **City**: The requesting organization's city
- **State**: The requesting organization's state
- **Country**: The requesting organization's country code

Request Certificate		? ×
Distinguished	Name Properties	
Specify the required informati as official names and they car	on for the certificate. State/province and City/locality must be specified not contain abbreviations.	
Common name:	SCS8.vprodemo.com	
Organization:	Intel Corporation	
Organizational unit:	Intel(R) Client Setur	
City/locality	Santa Clara	
State/province:	California	
Country/region:	US	
	Previous Next Finish Cano	el

5. Leave the Cryptographic Service Provider set to **Microsoft RSA SChannel Cryptographic Provider** and select **2048** as your key Bit length. Choose **Next**.

Request Certificate	? ×
Cryptographic Service Provider Properties	
Select a cryptographic service provider and a bit length. The bit length of the encryption key determines the certificate's encryption strength. The greater the bit length, the stronger the security. However, a greater bit length may decrease performance.	
Cryptographic service provider:	
Microsoft RSA SChannel Cryptographic Provider	
Bit length:	
2048	
Previous Next Einish Ca	incel

6. Choose the "..." button to select a location. Enter a file name to store the certificate request and then choose **submit**. Click **Finish**.

Request Certificate	? X
File Name	
Specify the file name for the certificate request. This information can be sent to a certification authority for signing.	
Specify a file name for the certificate request:	
C:\certs\Entrust_vPro_CSR	
Draviaus Novt Finish Con	cal
Previous Next Finish Can	

7. This file, Entrust_vPro_CSR in our example, will be used to submit your request to Entrust for an Intel AMT Setup and Configuration certificate. You can open the file in Notepad to view encrypted certificate request.



3 Send the Certificate Request to Entrust*

- 1. Go to the Entrust* web site: <u>http://www.entrust.net/</u>
- 2. Intel® vPro[™] Technology is supported on the following Entrust SSL certificates:
 - Advantage SSL Certificates
 - UC Multi-Domain SSL Certificates
 - Wildcard SSL Certificates

For this example, we will use **Advantage SSL Certificates**. From the Advantage SSL Certificates panel, choose **Buy Now**.



3. From the **Quote Order** menu, confirm **Advantage SSL** is chosen and choose **Buy Now**.

		support	Partners > About US > My Account		Chat Phon	e Blog
	Quote Order	Ó Provide CSR	OO	O Payment	Process Order	
Are you buying for a	server outside of U.S	., Great Britain or Cana	la? 🗋 🤰 Promotional Co	de/Purchase Code		Sub
Туре	Lifetime	Quantity	Description	Renew Certificate Price	New Certificate Price	Certificat Manageme Service Pri
Advantage SSL	• 1 Year •	1	 Includes 2 domains Server and client authentication support Unlimited re-issues 	\$232.00	\$239.00	\$209
		Buy More	Total Price	\$232.00	\$239.00	\$209.00
					10	
	Pur Sav	chasing multip e money. Incre	le SSL certificates? ase efficiency. Rollover for more 🕑	Ser.	T	

4. At the **Provide CSR** menu, enter a secure passphrase and paste the CSR in the window. The passphrase will be used later in the process.

Confirm the following:

- Lifetime of the certificate
- Certificate Type
- Desired signing algorithm

		hers > About Us > My Account Chat Phone Blog
	Quote Order Provide CSR F	Provide Contact Verify/Edit Provide Payment Process Order
Entor a naconh	rase for this order	
This passphras	e is required when renewing. Please keep it in a safe pl	ace.
✓ 8 Character	rs ♥ 1 upper case letter ♥ 1 lower-case letter ♥ <u>1</u>	Special Character ?
Tracking ID	Туре	Paste Certificate Signing Request (CSR), obtained from your server. CSR FAQ
1	Certificate Lifetime: 1 Year Certificate Type: Advantage SSL v Signing Algorithm: SHA1 v	BEGIN NEW CERTIFICATE REQUEST MILEJECCA3cCAQAwgZwxCzAJBQIVBAYTAI/TMRMwEQYDVQQ IDAADYWbzZm3ybmi MRQ.wEgYDVQQHDAIT/WS0YSBDbGFyYTEaMBgGA1UECgmRS W302WwgQ29yC39YVRP b24xi(JA68gNVBAAMIUJudGVsfFIpIENsaWVudCBTZXR1cCBDZX J0aWZ2PYZP0ZTEa MBgGa1LEAwwRUNDTCC52cHJvZGVbby5b20wggEMA0GCSq
		GSID JOUCEDAQUAANID DwAwqdEKAoIBAODYag7hkG7tbSII1M10EmWFmpdM1hqNdIv8
		You will be allowed to enter extra domains (SubjectAltNames) on the next screen
		You will be allowed to enter extra domains (SubjectAltNames) on the next screen Previous Cancel

Click Next.

5. Verify that the CSR fields are correct.

Quote Order	Provide CSR	OO Provide Contact Verify/Edit Provide Payment Process Order	
Certificate	Туре	CSR Content	
1	1 Year Advantage SSL	SCS8.vprodemo.com UserDN=cn=SCS8.vprodemo.com, ou=Intel(R) Client Setup Certificate,o=Intel Corporation, I=Santa Clara, st=California, c=US Domain(s) Include All Remove All SCS8.vprodemo.com Default \$0.00 Add a new domain	Valio Rep
			Cano cano ertificati uthoriti
			Contraction of the local division of the loc

6. At the **Provide Contact** menu, enter the contact information for Billing, Authorization, and Technical.

			Chat Phone Blo
0	•	0	00
Quote Order	Provide CSR Provide Conta	ct Verify/Edit	Provide Payment Process Order
Returning Customer?			
Enter an email address and passphrase from	a previous order and we will pre-pop	ulate the contact information	for you.
Contact Information			
Billing Contact Linda Harries		Required	[edit] [remove]
Authorization Contact Minh Pham		Required	[edit] [remove]
Technical Contact John Gardner		Required	[edit] [remove]
Note: Entrust requires you to provide differe	nt contacts for the authorization and	technical contacts.	
The information that was availed to Dataset i		- (F-1	
If you do not want to receive such inform	ation please check this box.	or Entrust products and set	vices that we think may be of interest to you.
			Previous
			Certifi

7. At the **Verify/Edit** menu, confirm all information are correct.

> Why Entrust > Product	s > Support	> Partners >	About Us >	My Account	Chat Phone Blog Er	
Quote Orde	r Provide CSR	Provide Conta	act Verify/E	dit Provide Payment	O Process Order	
The Authorization Contact is the	e default view. If you wi	ish to view the other	contacts please s	elect the "Review" link.		
Billing Contact Linda Harries ■			Required	[review]	[edit]	
Authorization Contact Minh Ph	am		Required	[review]	[edit]	
Technical Contact John Gardn	er		Required	[review]	[edit]	
Authorization Contac	et					
First Name		Minh				
Last Name						
Title/Position		vPro Support				
Email Address						
Phone Number						
Company Name		Intel Corporatio	n			
Address		200 Mission Co	llege Blv			
City/Town		Santa Clara	Santa Clara			
Country		United States	Ţ			
State/Province		California	Ţ			
Zip/Postal Code		95054				
Certificate Type	CSR Content					
1 1 Year Advantage	SCS8. vprodemo UserDN=cn=SC st=California, ca	o.com S8.vprodemo.com, or US	u=Intel(R) Client Se	tup Certificate,o=Intel Corpora	tion, I=Santa Clara, [Replace]	
	Domain(s)					
	SCS8.vproder	no.com				
Subscription Agreement(s)						
Entrust Certificate Services Subscriptio Attention- read carefully: this Entrust (carefully read this agreement and the under which you are acquiring a limited	n Agreement Certificate Services Subscripti CPS, as amended from time to 1 right to use the Certificate S	on Agreement ("Agreemer o time, which is incorpora Services.	nt") is a legal contract ted into this Agreemer	between the Subscriber and Entrust t and which collectively contain the	Before continuing, please terms and conditions	
under which you are acquiring a limited	UPS, as amended from time to I right to use the Certificate S	o time, which is incorpora Services.	ted into this Agreemer	and which collectively contain the	terms and conditions	

8. Fill in the appropriate payment information and then choose **Process Order**.

CLATIFIC ATES	SEC			> Advanced Search
> Why Entrust	> Products > Sup	port > Partners > About Us	> My Account	Chat Phone Blo
	Quote Order P	orvide CSR Provide Contact Ver	Ify/Edit Provide Payment	Process Order
Quantity		Туре	Unit Price	Total
1	1 Year Advantage S	BL	\$239.	00
			Subt	otal
			1	PST
Payment Method Card Type:				Select a credit card
Card #:				
Card #: Expiry:				10 2012
Card #: Expiry: Does the Billing A	ddress of this card match	the Billing Contact for the order?		10 2012 C Yes C No
Card #: Expiry: Does the Billing A How Did You Hear J	ddress of this card match About Us? [Plesse Select]	the Billing Contact for the order?		10 2012 C Yes C No Previous Procee C: C: Certific Autho C: Certific Certif
Card #: Expiry: Does the Billing A How Did You Hear <i>i</i>	ddress of this card match About Us? [Presse Select] Re Map > Misuse Form > C	the Billing Contact for the order?		10 2012 C Yes C No Previous Proce Catility Certification C

9. From the **Process Order** menu, you will see the order number.

Securely store the order number along with the passphrase you supplied during the online enrollment process. Verification of the order will take 3 to 5 business days, after which time you will then be sent instructions for picking up and installing your Advantage SSL Certificate(s).

If you wish to know the status of your order at any time simply enter your order number into the form at:

http://www.entrust.net/customer/tracking_form.cfm

	> Products	> Support	> Partners	> About Us > M	y Account	Chat Phon	e Blog
	Quote Order	Provide CSR	Provide Contact	t Verify/Edit	Provide Payment	Process Order	
Thank you fo	r your orde	r					
Your order number is:	12165084						
Upon successful valid	ation of your reques	t you will be sent inst	tructions for picking up	and installing your Certi	ficate(s).		
Order Tracking							
You can monitor the pr	rogress of your orde	er by visiting order tra	cking and typing in you	ır order number.			
Return to Entrust Certi	ficate Services						
						SECURED BL T	Certificati Authoriti
						and the second se	In the second s second second sec

10. A confirmation email is sent to the authorized contact. The authorized person is presented with a link to approve the consent form. Once approved, the process continues to the next phase: checking the Domain name, Corporation, and Final Phone Call.

Entrust SECURITY			> Advanced S	earch
> Why Entrust > Products > Support > Partners	> About Us	> My Account	Chat Phone	De la companya de la
Authorization Form for Entrust SSL Certificate				
Thank you for completing this form.				
			Entrust	Certifica Authori
>Blog > Twitter > Site Map > Misuse Form > CPS > Privacy Policy > Legal			Securing Digital Identities & Information	
© Copyright 2012 Entruste, Inc. All rights reserved.				LIBIO

11. Once the security verification process has been completed, a link to the certificate download page is provided with installation steps.

From the drop down list, **select server type** (IIS7 in our example), and then choose **Next**.

CERTIFIC NES	ŧ.	mote		r otop	0						
Installation Selec	tion >	Root Certificate	> Cha	in Certificate	> Se	rver Certificate	• >	Entrust S	iite Seal	>	Certificate Verific
	this installatio	n wizord, you will f	nd your Entrust	SSI certificate t	the Entrust	root/chain certifica	ate(s) an	d the HTML	code nece	ssary t	to display the Entrust
By stepping through	uns instanatio	in wizaru, you wiir i	nu your Entrust	ooe continouto, t							
By stepping through on the web site prot	ected by this ce	ertificate.	na your Entrust	COL CONTINUARD, I							
By stepping through on the web site prot By installing these c	ected by this ce ertificates onto	ertificate.) your server, you with	ill be able to pro	ovide seamless	secure acc	ess to your site.					
By stepping through on the web site prot By installing these c Please follow each	ected by this ce ertificates onto step carefully	or wizard, you with ertificate.) your server, you w to ensure that you	ill be able to pro	ovide seamless your certificate	secure acc e correctly.	ess to your site.					
By stepping through on the web site prot By installing these c Please follow each	ected by this ce ertificates onto step carefully	o your server, you with to ensure that you	ill be able to pro	ovide seamless I your certificate	secure acc correctly.	ess to your site.					
By stepping through on the web site prot By installing these c Please follow each Installation Select	ected by this ca ertificates onto step carefully ction) your server, you with to ensure that you	ill be able to pro	vide seamless	secure acc correctly.	ess to your site.					
By stepping througn on the web site prot By installing these c Please follow each Installation Select Select Certificate:	ected by this co ertificates onto step carefully ction	to ensure that yo mo.com (153848)	ill be able to pro	ovide seamless	secure acc	ess to your site.					
By stepping througn on the web site prot By installing these of Please follow each Installation Select Select Certificate: Select Server Type:	ected by this ce ertificates onto step carefully ction SCS8.vproder Microsoft IIS 7	n weak, you win i prificate. y your server, you w to ensure that you no.com (153848)	ill be able to pro	vide seamless your certificate	secure acc • correctly.	ess to your site.					
By stepping through on the web site prot By installing these of Please follow each Installation Select Select Certificate: Select Server Type:	ected by this co entificates onto step carefully ction SCS8.vproder Microsoft IIS 7	n weak you win in weak you win in weak you win in weak you way your server, you wito ensure that you to ensure that you no.com (153848)	ill be able to pro	vide seamless i your certificate	secure acc	ess to your site.					
By stepping through on the web site prot By installing these c Please follow each Installation Select Select Certificate: Select Server Type:	ertificates onto step carefully ction	no.com (153848)	ill be able to pro	your certificate	secure acc	ess to your site.					

12. From the **Root Certificate** menu, copy and paste the Root Certificate that is displayed into a text file. Save it as a .cer file. In this example, we named the file "Server_Certificate.cer".

armic 8		> (Char
Installation Selection > Root Certificate > Chain Certificate > Server Certifi	icate > Entrust Site Seal >	Certificate Verification
Instructions 1. A root certificate is likely already installed on the server. If so, double check that it matches the one listed h 2. Copy the information from right or use button(s) to the right to create text file(s) on your hard drive.	Root Certificate BEGIN CERTIFICATE- MIEKISCAXKGAWIBAGEOOF UFADCBIDEUMBIGA1UECh ZX0xQDA+BgNVBAsUN3d3 UFNMJA0CCBpbmIvenAul0 bWI0cyBawFLikzLTAJBgNV dHJ1c3QubmV0IExpbWI0ZV BAMTKKVudHJ1c3QubmV0IE Root Cert File	e+DANBgkqhkiG9w0BAQ MLRW50cnVzdC5u dy5ibnRydXN0Lm5idC9D J5iHJI24gKGxp BaSaTHChjKSAOTK5iEVu (QxMzAxBgNV CNicnRp2mijYXRpb24gQ P
FAQ		< Previous Next >
FAQ How is the Trusted Root Certificate installed on a Microsoft server?		< Previous Next >
FAQ How is the Trusted Root Certificate installed on a Microsoft server? Question:		< Previous Next >
FAQ How is the Trusted Root Certificate installed on a Microsoft server? Question: How is the Trusted Root Certificate installed on Microsoft server?		< Previous Next >
FAQ How is the Trusted Root Certificate installed on a Microsoft server? Question: How is the Trusted Root Certificate installed on Microsoft server? <u>NOTE</u> : These instructions apply to the following server types:		< Previous Next >
FAQ How is the Trusted Root Certificate installed on a Microsoft server? Question: How is the Trusted Root Certificate installed on Microsoft server? <u>NOTE</u> : These instructions apply to the following server types: <u>Microsoft IIS 6</u> Microsoft IIS 7 Microsoft Exchange 2007 (Windows Server 2008) Microsoft Exchange 2010 Microsoft Office Communications Server 2010 Microsoft ISA Microsoft ISA Microsoft Forefront TMG		< Previous Next >
FAQ How is the Trusted Root Certificate installed on a Microsoft server? Question: How is the Trusted Root Certificate installed on Microsoft server? NOTE: These instructions apply to the following server types: Microsoft IIS 6 Microsoft IIS 7 Microsoft Exchange 2007 (Windows Server 2008) Microsoft Exchange 2010 Microsoft Lync 2010 Microsoft ISA Microsoft Forefront TMG T		< Previous Next > Print FA

13. From the **Chain Certificates** menu, copy and paste the Chain Certificate that is displayed into a text file. Save it as a .cer file. In this example, we named the file "Chain_Certificate.cer".

le deve l'anne			
Instructions		Chain Certificate	
1. Both a chain root and a chain c	ertificate are being provided. Please note that both are needed.	BEGIN CERTIFICATE MIE9TCCA92gAviBAgIETA6MOTANBgkqhki0 UFADCBIDEUI/BIGA1UEChML RW50cmVzdC5uZX0xQDA+Bgt/VBAsUN3d3a dXN0Lm5idcB9UFNIMJA0OCEp bmNvcnAuIGJ5IHJIZI4gKCxpbWl0cyBsaWFIL gNVBASTHChJKSAvoTt5 IEVudHJ1c3QubmV0IExpbWl0ZWQxMzAxBgt 4	G9w0BAQ Iy5lbnRy .ikxJTAjB IVBAMTK ▶
		< Previous	Next >
FAQ		:	> Print FA
HAQ How is the Chain Certificate i Question: How is the Chain Certificate in <u>NOTE</u> : These instructions app Microsoft IS 7 Microsoft Exchange 2007 (Microsoft Exchange 2010 Microsoft Office Communic Microsoft Office Communic Microsoft Forefront TMG	installed on Microsoft IIS 7? Installed on Microsoft IIS 7? Dy to the following server types: Windows Server 2008) cations Server 2010		> Print FA

14. From the **Server Certificates** menu, copy the Server Certificate that is displayed and then paste it into a text file. Save it as a .cer file. In this example, we named the file "Server_Certificate.cer".

	Root Ceruncate > Chain Ceruncate > Server Cerunc	cate > Entrust Site Seal > Certificate Verification
Instructions		Server Certificate
 Your server certificate can be found copy the information from right or 	d in the box on the right. use button(s) to the right to create text file(s) on your hard drive.	BEGIN CERTIFICATE MIIFQDCCBCigAwlBAgIETB4SKJANBgkqhkiG9w0BAC [= UFADCBSTELMAKGATUE BhMCVMAFJUBJWVBAGTDUVudHJ1c3QsIEIuYy4xO TA3BgNVBAsTMHd3dy5i bnRydXN0Lm5idC9ycG5gaXMgaW5jb3Jwb3JhdGVki GJ5iHJIZmVyZW5jZTEF MB0CA1UECxMWKGMpIDIwMDkgRW50cnVzdCwgSW
		< Previous Next >
FAQ How is the Server Certificate in:	stalled on IIS 7?	< Previous Next > > Print FAQ

- 15. (Optional) Complete the next two steps, if desired:
 - Entrust Site Seal
 - Certificate Verification

4 Prepare the Certificate

1. In Internet Information Services (IIS) Manager, select the **Complete Certificate Request** on the Actions menu.

e View Help	Server Certif	ficates		Actions
				Import
SCS8 (VPRODEMO\itproadmin)	Use this feature to request an configured for SSL.	nd manage certificates that the Web	server can use with Web sites	Create Certificate Request Complete Certificate Request
±iii Sites	Name 🔺	Issued To	Issued By	Create Domain Certificate
	rcc9 vorodomo.com	WMSvc-SCS8	WMSvc-SCS8	Create Self-Signed Certificate
	scso.vprodeno.com	scso.vprodemo.com	DC1.vprodeno.com	
				Online Help
			Ŀ	1
			1	
V Console 1 - [Console	Root\Certificates - Current User\	Intermediate Certification Authorities	Certific	G;;

2. Navigate to the **Server Certificate** file that was saved as Server_Certificate.cer. Enter a Friendly name, and then choose **OK**.

Complete Certificate Request	? ×
Specify Certificate Authority Response	
Complete a previously created certificate request by retrieving the file that contains the certificate authority's response.	
File name containing the certification authority's response:	
C:\Users\itproadmin\Desktop\Entrust root and intermediate certs\Serve	
Friendly name:	
Entrust SSL	
ОК	Cancel

3. You will now see the Intel AMT Setup and Configuration Certificate in your Server Certificates list. Highlight this certificate and then choose **Export**... in the Actions menu.

📬 Internet Information Services (I	IS) Manager			
				🖬 🖾 🟠 I 🕲 👻
File View Help				
Connections				Actions
😪 - 🔚 🖄 😽	Server Certificat	tes		Import
Start Page SCS8 (VPRODEMO\itproadmin)	Use this feature to request and ma configured for SSL.	nage certificates that the Web s	server can use with Web sites	Create Certificate Request Complete Certificate Request
	Name 🔺	Issued To	Issued By	Create Domain Certificate
		WMSvc-SCS8	WMSvc-SCS8	
	Entrust SSL	SCS8.vprodemo.com	Entrust Certification A	Create Self-Signed Certificate
	scs8.vprodemo.com	scs8.vprodemo.com	DC1.vprodemo.com	View
				Export
				Renew
				X Remove
				Help
				Online Help
	Features View	,		Crime Hep
Ready				¶.:

4. Choose a location to export to, and then enter a strong password. (This password will protect the private key.) Re-enter the password to confirm the password.

Export Certificate	? ×
Export to:	
root and intermediate certs\Entrust_SSL_vPro.pfx	
Password:	
•••••	
Confirm password:	
•••••	
OK Cance	el

Choose OK.

5 Install the Certificate

This section will show you how to do the following:

- Install the root and intermediate certificates (these certificates form part of the chain from the certificate that you purchased.
- Install the pfx certificate that you purchased
- Verify that the certificate is installed correctly

5.1 Install the Root Certificate

The first step is to import the root certificate into the Current User Root Certificate Authorities Store of the service account for the RCS server.

- 1. Logon as the service account for the RCS server.
- Double-click the Root_Certificate.cer file where you saved it. Choose Install Certificate.

Certificate General Details Certification Path	×
Certificate Information This certificate is intended for the following purpose(s): • All issuance policies • All application policies	
Issued to: Entrust.net Certification Authority (2048) Issued by: Entrust.net Certification Authority (2048)	
Valid from 12/ 24/ 1999 to 7/ 24/ 2029	
Install Certificate Issuer Statement Learn more about certificates	
ОК	

3. Choose Place all certificates in the following store radio button and then select Trusted Root Certificate Authorities. Click OK then Next.

Certificate Import Wizard	x
Certificate Store	
Certificate stores are system areas where certificate	es are kept.
Windows can automatically select a certificate store the certificate.	e, or you can specify a location for
O Automatically select the certificate store base	ed on the type of certificate
Place all certificates in the following store	
Select Certificate Store	Browse
Personal	
OK Cancel B	ack Next > Cancel

🚟 Console1 - [Console Root\Certificates - Current User\Trusted Root Certification Authorities\Certificates] _ U × 🚔 File Action View Favorites Window Help _ 8 × 🗢 🔿 🗡 📅 🤞 띀 🗶 🗒 🛃 🖬 📋 Console Root Actions Issued To Issued By 🖃 🗊 Certificates - Current User Class 3 Public Primary Certification Authority Class 3 Public Primary Certifi Certificates 🕂 📔 Personal 🔄 Class 3 Public Primary Certification Authority 🛛 Class 3 Public Primary Certifi Trusted Root Certification Authorities More ... • Copyright (c) 1997 Microsoft Corp. Copyright (c) 1997 Microsof Certificates DC1.vprodemo.com DC1.vprodemo.com Entrust.ne... 🔺 \pm 📔 Enterprise Trust DC1.vprodemo.com DC1.vprodemo.com More ... DC1.vprodemo.com DC1.vprodemo.com ► Active Directory User Object Entrust.net Certification Authority (2048) Entrust.net Certification Aut 🛨 🚞 Trusted Publishers Equifax Secure Certificate Authority Equifax Secure Certificate A Go Daddy Class 2 Certification Authority Go Daddy Class 2 Certification GTE CyberTrust Global Root GTE CyberTrust Global Root 🛨 📔 Trusted People Microsoft Authenticode(tm) Root Authority Microsoft Authenticode(tm) Certificate Enrollment Requests Microsoft Root Authority Microsoft Root Authority Microsoft Root Certificate Authority Microsoft Root Certificate Ai 🔄 NO LIABILITY ACCEPTED, (c)97 VeriSign, I... NO LIABILITY ACCEPTED, (c 🔄 Thawte Timestamping CA Thawte Timestamping CA 🕼 WMSvc-SCS8 WMSvc-SCS8 Þ Trusted Root Certification Authorities store contains 16 certificates.

The certificate is now installed in the Trusted Root Certificate Authorities store.

5.2 Install the Chain Certificate

This step is to import the chain certificate into the Current User Intermediate Certificate Authorities Store of the service account for the RCS server.

1. Double-click the **Chain_Certificate.cer** file where you saved it. Choose **Install Certificate**.

Certificate X General Details Certification Path
Certificate Information
This certificate is intended for the following purpose(s): • All issuance policies • All application policies
* Refer to the certification authority's statement for details. Issued to: Entrust Certification Authority - L1C
Issued by: Entrust.net Certification Authority (2048)
Valid from 11/ 11/ 2011 to 11/ 11/ 2021
Install Certificate Issuer Statement Learn more about <u>certificates</u>
ОК

2. Choose **Place all certificates** in the following store radio button and then select **Intermediate Certificate Authorities**. Click **OK** then **Next**.

Certificate Import Wizard	×
Certificate Store	
Certificate stores are system areas where certificates	s are kept.
Windows can automatically select a certificate store, the certificate.	or you can specify a location for
C Automatically select the certificate store based	d on the type of certificate
Place all certificates in the following store	
Certificate store:	
Select Certificate Store	Browse
Select the certificate store you want to use.	
Personal Trusted Root Certification Authorities Enterprise Trust Intermediate Certification Authorities	
Active Directory User Object	
Show physical stores	
OK Cancel Bac	ck Next > Cancel

The certificate is now installed in the Intermediate Certificate Authorities store.

🚟 Console1 - [Console Root\Certificates - Curre	ent User\Intermediate Certification Authori	ities\Certificates]	
🚟 File Action View Favorites Window He	lp		_ 8 ×
🗢 🔿 🖄 📷 🖌 🖦 🗶 📾 🛃 🛛			
 Console Root Certificates - Current User Personal Trusted Root Certification Authorities Certificates Enterprise Trust Intermediate Certification Authorities Certificates Certificates Certificates Certificates Certificates Trusted Publishers Trusted Publishers Third-Party Root Certification Authorities Certificate Enrolment Requests Smart Card Trusted Roots 	Issued To Issued To DC1.vprodemo.com DC1.vprodemo.com DC2.ent.vprodemo.com Entrust Certification Authority - L1C Go Daddy Secure Certification Authority Microsoft Windows Hardware Compatibility PKI-ACS.vprodemo.com PKI-ACS.vprodemo.com Root Agency Www.verisign.com/CPS Incorp.by Ref. LIA	Issued By DC1.vprodemo.com DC1.vprodemo.com PKI-ACS.vprodemo.com Entrust.net Certification Aut Go Daddy Class 2 Certification Microsoft Root Authority DC1.vprodemo.com DC1.vprodemo.com Root Agency Class 3 Public Primary Certifi	Actions Certificates ▲ More ↓ Entrust Ce ▲ More ↓
		Þ	
Intermediate Certification Authorities store contains 11 of	certificates.		

5.3 Install the pfx Certificate

Next, the pfx certificate created earlier will be installed and chained to the intermediate certificate that you installed in the previous step. The .pfx certificate will be imported into the **Current User Personal Certificate Store**.

1. Double-click on the Entrust_SSL_vPro.pfx file where you saved it. Choose **Next**.

Certificate Import Wizard	×
File to Import	
Specify the file you want to import.	
File name:	
ase\Entrust root and intermediate certs\pfx\Entrust_SSL_vPro.pfx 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)	
Learn more about certificate file formats	
< Back Next > Cancel	

2. Enter in the password and select Mark Key as exportable and Include all extended properties. Choose Next.

Certificate Import Wizard	X
Password To maintain security, the private key was protected with a password.	
Type the password for the private key.	
Password:	
•••••	
Enable strong private key protection. You will be prompted every time the private key is used by an application if you enable this option.	
Mark this key as exportable. This will allow you to back up or transport your keys at a later time.	
✓ Include all extended properties.	
Learn more about protecting private keys	
< Back Next > Cance	

3. Leave the default to place automatically in **Personal certificate** store. Choose **Next**.

ificate I	mport Wizard
Certificate	e Store
Certifi	cate stores are system areas where certificates are kept.
Windo the ce	ws can automatically select a certificate store, or you can specify a location for rtificate.
œ	Automatically select the certificate store based on the type of certificate
C	Place all certificates in the following store
	Certificate store:
	Browse
earn more	e about <u>certificate stores</u>
	Rade Novet > Cana

4. Choose Finish.

Certificate Import Wizard		
	Completing the Wizard	Certificate Import
	The certificate will be impor	ted after you click Finish.
	You have specified the follo	wing settings:
	Certificate Store Selected	Automatically determined by t
	File Name	C: \Users \itproadmin \Desktop \
		Þ
	< Pade	Einich Concol
	< Back	

The certificate is now installed in the Current User Personal Certificates store.

5.4 Verify the Certificate Chain

1. To verify the chain, double-click the imported certificate. In this example **SCS8.vprodemo.com** issued by Entrust.



2. In the Certificate Information menu, confirm that there are no errors. Check that the private key corresponds to the certificate. Click the **Details** tab.

Certificate
General Details Certification Path
Certificate Information
This certificate is intended for the following purpose(s):
 Ensures the identity of a remote computer 1.2.840.113533.7.75.2 2.23.140.1.2.2
* Refer to the certification authority's statement for details.
Issued to: SCS8.vprodemo.com
Issued by: Entrust Certification Authority - L1C
Valid from 10/ 15/ 2012 to 10/ 16/ 2013
eq: the set of t
Learn more about certificates
OK

3. From the Details menu, select **Subject** and then verify the OU of **"Intel(R) Client Setup Certificate"** is present. Click the **Certificate Path** tab.

Certificate	X
General Details Certification Path	
Show: <a>All>	T
Field	Value
📴 Signature hash algorithm	sha1
🛅 Issuer	Entrust Certification Authority
📴 Valid from	Monday, October 15, 2012 11
Valid to	Wednesday, October 16, 201
📴 Subject	SCS8.vprodemo.com, Intel(R)
🛅 Public key	RSA (2048 Bits)
😨 Key Usage	Digital Signature, Key Encipher
Enhanced Key Usage	Server Authentication (1.3.6 💌
CN = SCS8.vprodemo.com OU = Intel(R) Client Setup Certifica O = Intel Corporation L = Dupont S = Washington C = US	ate
E Learn more about <u>certificate details</u>	dit Properties Copy to File
	ОК

4. Check that the certificate is mapped to the intermediate Certificate Authorities as shown. Double-click on the root cert **Entrust Certificate Authority (2048)**.

Certificate	×
General Details Certification Path	
View Certificate	
Certificate status:	
This certificate is OK.	
Learn more about <u>certification paths</u>	
ОК	

5. Verify there are no errors with the root certificate and then click **Details**.

Certificate	X
General Details Certification Path	
Certificate Information This certificate is intended for the following purpose(s): • All issuance policies • All application policies	_
Issued to: Entrust.net Certification Authority (2048)	-
Issued by: Entrust.net Certification Authority (2048)	
Valid from 12/24/1999 to 7/24/2029	
Issuer Statem	ent
C	Ж

6. In the **Details** tab, scroll down and highlight the **Thumbprint** field. The number must match what is shown below.

Certificate				×
General Details	Certification Path			
Show: <all></all>		•		
Field		Value		
Valid to	1	Tuesday, July 24,	2029 7:15:	
Subject	E	Entrust.net Certifi	cation Auth	
Public key	F	RSA (2048 Bits)		
Subject Key Id	lentifier 5	55 e4 81 d1 11 80	be d8 89 b9	
Key Usage	(Certificate Signing	, Off-line CR	
Basic Constrair	nts S	Subject Type=CA,	, Path Lengt	
Thumbprint alg	porithm s	sha1	_	
Thumbprint		50 30 06 09 1d 97	d4 f5 ae 39 💌	
50 30 06 0 7d 7d 65 2d	9 1d 97 d4 : 34 31	f <mark>5 ae 39 f7</mark>	cb e7 92	
Learn more about <u>c</u>	Edit	Properties	Copy to File	
			ОК	

This Intel AMT setup and configuration certificate can now be used with the Intel SCS remote configuration service (RCS) for remote configuration and maintenance of PCs with Intel AMT.

6 Verify that it Works

To verify that the certificate works in your environment, create a test environment with one or more Intel AMT capable PCs that have not previously been setup and configured. Follow the instruction in the Intel SCS documentation to try Host Based Configuration in Admin Control mode. If successful, then your certificate is installed correctly.

If you purchased a wildcard or UCC certificate, then you should repeat the tests in the other domains/subdomains.