Symantec Endpoint Protection End-User Guide

For Windows

Symantec Endpoint Protection (SEP) is the evolutionary successor to Symantec Anti-Virus (SAV). SEP provides the anti-virus protection of SAV but also significantly expands upon SAV in important ways. SEP provides protection against spyware and network attacks based on not only traditional exploit signatures, but also via firewalls, device control, application and network monitoring.

This document will guide the user through the installation process and introduce the most basic components of the SEP interface and provide insight as to what to expect from SEP's behavior.

LLNL is providing SEP for home use as a no-cost benefit for its' employees, collaborators, and summer students. The SEP software is provided as-is and this document as the exclusive means of support. **DO NOT CONTACT 4-HELP or any other support organizations at LLNL for support of this software.** The ONLY exception will be the case where the user is having difficulty downloading the SEP installation files from <u>access.llnl.gov</u>. You may report download problems to 4-HELP.

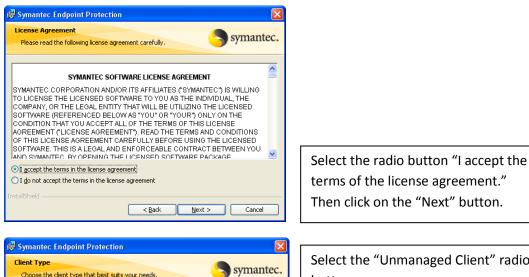
Installation

SEP is available for either 32-Bit or 64-Bit versions of Windows. Regardless of the operating system, the installation is essentially the same.

Run the "Setup.exe" file located in the root directory of the source files you obtained.



Select the "Next" button.

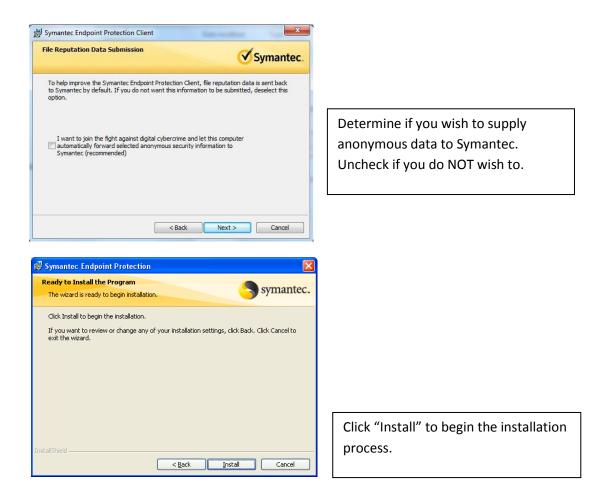




Select the "Unmanaged Client" radio button.

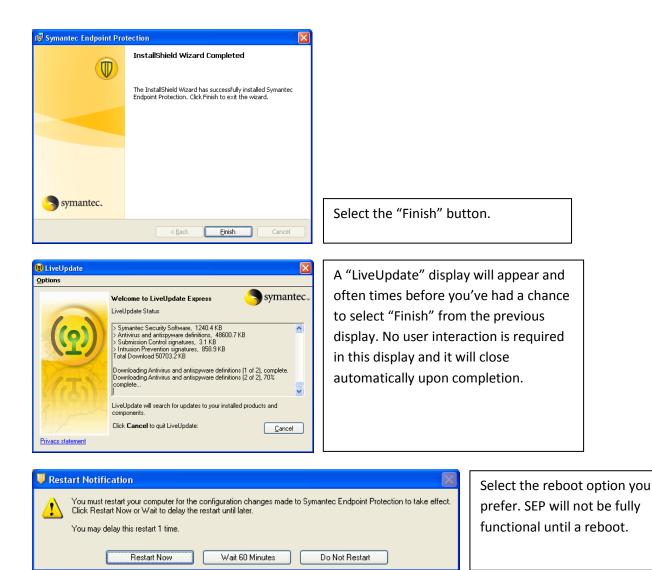


Select "Typical" for the installation type. A "Typical" installation will require approximately 624 Mb of hard drive space.





A progress indicator will be visible. Please wait until SEP is installed.



The installation is now complete. After a reboot, SEP will be fully functional.

SEP's Status:

As with SAV, the presence and status of SEP can be quickly determined by looking for the SEP gold shield icon in the Windows system tray. In the view below, the SEP client can be seen circled in RED. A visible gold shield indicates that SEP is installed and running on the client computer.



The red circle with slash indicates that a major problem exits or at least one component of SEP is disabled.



The yellow circle with an exclamation mark (!) indicates a minor problem; for example out-of-date virus definitions.



A gold-shield indicates that SEP is operating normally with no issues to report.

Viewing the SEP Interface:

Open Symantec Endpoint Protection

Undate Policy

More detail of the client can be viewed by launching the SEP interface. This can be done by right-mouse clicking the SEP icon in the system tray and selecting "Open Symantec Endpoint Protection".

Disable Syma	antec Endpoir	nt Protection	mouse	click on tl
🕖 Status - Symantec Endpoi	nt Protection			
	Status		ican scheduled for 12:38 PM here to reschedule.	Нер
Status		Your computer is protected	•	
Scan for Threats		No problems detected.		
Change Settings				
View Quarantine				
View Logs	The follow	ing Symantec Security components are	installed on your computer:	
LiveUpdate	<u>_</u>	Virus and Spyware Protectio Protects against viruses, malware, an Definitions: Wednesday, March 2	d spyware	Options
	<u> </u>	Proactive Threat Protection Provides zero-day protection against Definitions: Saturday, March 17,		Options
		Network Threat Protection Protects against Web and network th Definitions: Wednesday, March 2		Options
Symantec.				

use click on the SEP icon to access the SEP interface.

On a Windows XP system, you can also simply double-left

The full display of SEP includes indices on:

Antivirus & Antispyware Protection Status and definition date.

Proactive Threat Protection Status and definition date.

Network Threat Protection Status and definition date.

The horizontal green band and "Check Mark" indicate that all installed components of SEP are up-todate and functioning correctly.



Reactivating a Disabled Feature:

A horizontal red band indicates that a SEP component or feature needs attention. On the far right hand of the red banner a yellow "Fix" button will be displayed. Selecting the "Fix" button will usually resolve the issue. In the case below, the Network Threat Protection (NTP) has been disabled by the user.

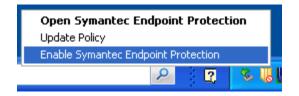
	Network	< Threat Protection is di	sabled.		
	Click Fix to	enable Network Threat Protection			
-					
	Network Threa	t Protection is disabled.			
X)	Click Eix to opphile Net	twork Threat Protection.		Fix	Th
-	CIEK FIX to enable he				Pr
	Technologies mantec protection technol	ogies are installed on your computer:			in
	Antivirus ar	A Antispyware Protection	On	Options	th
•	Definitions:	Thursday, June 17, 2010 r3			als
3		hreat Protection	On	Options	Ne
•	Definitions:	Thursday, June 17, 2010 r16			m
	Network Th Protects against ne	nreat Protection twork threats	Off	Change Settings	
	Definitions:	Tuesday, June 15, 2010 r2		View Application Settings View Network Activity	
				Enable Network Threat Protection	

The status of the Network Threat Protection (NTP) feature is also indicated in the area below the banner. By choosing the "Options" button next to NTP, you can also reactivate NTP by selecting "Enable Network Threat Protection" from the submenu.

Here, two issues are being flagged for attention; Network Threat Protection and File System Auto-Protect have been disabled. By selecting the "Fix All" button, both features can be reactivated.

Network Threat Protection is disabled. File System Auto-Protect is disabled. Click Fix All to fix all problems or click Deta		Fix All Details
There are multiple problems (2). File System Auto-Protect is disabled. Network Threat Protection is disabled. Click Fix All to fix all problems or click Details for more information. Protection Technologies	Fix All Details	You can also choose to re-enable features individually by selecting the specific
The following Symantec protection technologies are installed on your computer:		features' "Options" button and the
Antivirus and Antispyware Protection Protects against wruses, trolen horses, and sprware Definitions: Thursday, June 17, 2010 r3	Off Run Active Scan Change Settings View Logs	appropriate "Enable" sub-menu.
Proactive Threat Protection Provides zero-day protection against urknown threats Definitions: Thursday, June 17, 2010 r16	View File System Auto-Protect Statistics View Threat List Enable Antivrus and Antispyware Protection	
Network Threat Protection Protects against network threats Definitions: Tuesday, June 15, 2010 r2	Off Options	

A quick way to re-enable SEP is to simply to right-mouse click on the SEP icon in the system tray.



Disabling SEP or a Specific Feature:

Users can disable the Antivirus and Antispyware (AV/AS) and the Network Threat Protection (NTP) components of SEP by right-mouse clicking on the SEP icon in the system tray and selecting "Disable Symantec Endpoint Protection".

Disabling NTP may be useful if trouble-shooting a network based application that appears to not be working. Disable NTP only if necessary.

Disabling AV/AS is sometimes necessary to install software. **Disablement of AV/AS puts your system at** risk! Disable AV/AS only when absolutely necessary and only for as long as needed.



Disabling SEP may be necessary to trouble-shoot application issues or to install software. Avoid disabling SEP on public wireless networks. Disable SEP only if absolutely necessary!

The full SEP interface can be used to disable individual features similarly to how they where enabled by choosing the corresponding "Options" button and selecting "Disable..."



SEP Console, "Scan for threats" Menu:

You can also choose to run a scan immediately by selecting either "Active Scan" or "Full Scan". The "Active Scan" is relatively quick and will scan system memory, the registry and certain system files. "Full Scan" will in addition, scan every file on the system and consequently take longer to perform.

U Symantec Endpoint Prot	ection					
	Scan for threats					Help and Support
Status Scan for threats Change settings View quarantine View logs		Scan only the mos commonly infecter 1-2 minutes	st d areas.	Full Scan	Scan the entire cor 30-120 minutes ull Scan	
LiveUpdate	Scans Scans configured for this computer. Create a New Scan Scan Name Weekly Scheduled Scan	Enabled Yes	Type Full Scar		ien to Scan Weekly	Last Scan June 16, 2010 9:30 AM
	weeky scheuwed Scan		rul scar		**Eekiy	June 10, 2010 9.30 AM
Symantec.	< 11					>

Selecting either scan type will launch a scan and a visible progress indicator.

~~~ · · · · · · · · · · · · · · · · · ·	on 6/17/2010 emory and system   \system32\netui1.c	oadpoints for risks.		<b>.</b>
Filename	Risk	Action		Risk Type
<				>
<u>R</u> emove Risks Now	Details	Other <u>A</u> ctions	Pause Scan	Ca <u>n</u> cel Scan
les scanned: 277	Risks found: 0			

You can pause or cancel a scan you initiate or the weekly scan.

If a threat is found, you will be given the options:

"Remove Risk Now" = Removes or quarantines the threat.

"Details" = Provides additional information about the threat.

#### SEP Console, "View Quarantine" Menu:

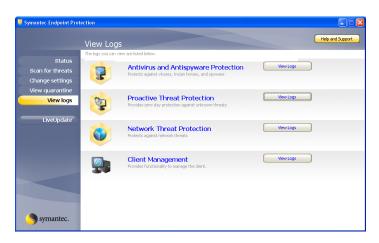
Threats not automatically repaired will be quarantined and displayed.

	View Quarantine				Help and Support
Status	Files and registry entries quaranti	ned, backed up, or rep	aired are listed below.		
Scan for threats	Risk	Filename	Туре	Original Location	Status
Change settings	EICAR Test String	eicar.com	Backup	C:\Documents and S	Infected
View quarantine					
View logs					
LiveUpdate					
	< 11				
	Restore Delete	Rescan	Al Export	Add Subm	đ
Symantec.	Purge Options				

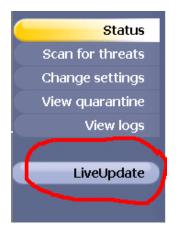
Of the user selectable options, you should choose "Delete".	

#### SEP Console, "View Logs" Menu:

All of SEP individual components log their activities which can be viewed from this interface.



#### SEP Console, "LiveUpdate" Menu:



"LiveUpdate" will update the definition files for: Antivirus and Antispyware Proactive Threat Protection Network Threat Protection Launching "LiveUpdate" is rarely needed since the computer will automatically update its' definition files.

In the rare case that you suspect your definitions are out of date, selecting "LiveUpdate" will launch the display shown below. The process of updating requires no user intervention and will close when complete.

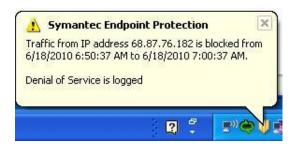


#### SEP Interaction: A Threat is Found!

Normally if a threat (virus or otherwise) is found, SEP will typically notify the user of the threat and what action has been taken. In the case of a virus, a display is presented, the virus is cleaned from the infected file (or the file is quarantined.) and SEP's actions are logged.

🚇 Sym	antec Endpoint Protection Notification	X
£	Scan type: Auto-Protect Scan Event: Risk Found! Security risk detected: EICAR Test String File: C:\Documents and Settings\clendenin1\eicartest\eicar.com Location: C:\Documents and Settings\clendenin1\eicartest Computer: ALTEREDBEAST User: clendenin1 Action taken: Pending Side Effects Analysis : Access denied Date found: Thursday, June 17, 2010 1:42:36 PM	
	<	>
	< Previous Next >	Close
Total not	ifications: 2 Currently displayed: 1	

#### SEP Interaction: Network Based Threat Detected



At times, you may see a small dialog box displayed above the SEP icon in the system tray. This can occur when SEP blocks access to a remote system due to a network threat. No intervention is required on your part. A remote system will remain blocked for ten (10) minutes

#### A Closer look at the NTP "Options" button:

An interesting applet can be launched that will display applications accessing the network. From the NTP "Options" button, select "View Network Activity...."



The Network Activity applet will launch...

	Incoming Traffic History	Л_Л_	- Blocked -	10		Attac	k History Graph	
4328 ox								
nning Applications:								
pplication Version	Path	Incoming Allowed	Incoming Blocked	Incoming Total	Outgoing Allowed		Outgoing Total	File Fingerprint
e ntoskrni.exe	C:\WINDOW5\system	(583,587,638)	0	(583,587,638)	(2,046,196,959)	0	(2,046,196,959)	00000000000
tmcsvc.exe	C:\Program Files LAN		0	3,506,738	33,009,886	0	33,009,886	000000000000
issuser.exe	C:\Program Files LAN		0	0	0	0	0	000000000000
svchost.exe	C:\WINDOWS\system		0	9,224,279	27,702,329	0	27,702,329	00000000000
jqs.exe	C:\Program Files Java		0	0	0	0	0	00000000000
lsass.exe	C:\WINDOWS\system		0	15,350,863	17,256,598	0	17,256,598	00000000000
spoolsv.exe	C:\WINDOWS\system		0	27,976	42,548	0	42,548	000000000000
policy.client.invoker.exe	C:\Program Files LAN		0	1,230,818	45,180	0	45,180	00000000000
collector.exe	C:\Program Files LAN		0	0	0	0	0	000000000000
pds.exe	C:\WINDOW5\system		0	240	576	0	576	00000000000
etisrv.exe	C:\WINDOW5\etilsrv		0	50,303	5,629	0	5,629	00000000000
nsrexecd.exe	C:\Program Files Lega		0	5,144,089	5,239,852	0	5,239,852	00000000000
winph15.exe	C:\Program Files\Win		0	2,719	873	0	873	00000000000
residentAgent.exe	C:\Program Files LAN		0	42,642	51,104	0	51,104	000000000000
winlogon.exe	C:\WINDOWS\system		0	14,380,484	6,214,206	0	6,214,206	00000000000
RD5Client.exe	C:\WINDOWS\system		0	0	0	0	0	000000000000
vmware-authd.exe	C:\Program Files\VMw		0	0	0	0	0	00000000000
SelfPatch.exe	C:\Program Files LLNL		0	373,397	200,237	0	200,237	000000000000
communicator.exe	C:\Program Files\Micr		0	20,159,143	7,255,902	0	7,255,902	00000000000
alg.exe	C:\WINDOW5\system		0	0	0	0	0	00000000000
explorer.exe	C:\WINDOWS\explor		0	62,702	89,881	0	89,881	00000000000
amstsc.exe	C:\WINDOW5\system		0	126,060,553	23,133,700	0	23,133,700	00000000000
msgsys.exe	C:\WINDOWS\system		0	0	0	0	0	000000000000
mqsvc.exe	C:\WINDOW5\system		0	0	0	0	0	00000000000
rcgui.exe	C:\Program Files LAN		0	0	0	0	0	00000000000
MM.EXE	C:\Program Files mee		0	302,048	156,291	0	156,291	00000000000
firefox.exe	C:\Program Files Mozil		0	597,501,507	34,551,873	0	34,551,873	00000000000
fsshclient.exe	C:\Program Files\F-Se		0	23,686	27,252	0	27,252	00000000000
	C:\Program Files Micr		0	8,451,409	12,377,888	0	12,377,888	00000000000
Sexplore.exe	C:\Program Files\Inte	2,867,265	0	2,867,265	806,771	0	806,771	00000000000

A graphical view of network activity will be provided and anything blocked will be noted in red on the graph.

Below the graphs, will be a list of applications utilizing the network. Note the respective information in the columns.

You can select an individual application, right-mouse click on it, and select "Connection Details" for port information and remote access information. Good stuff!

MM.EXE		C:\Pr C:\Pr
Sishclient.e	Large Icons Small Icons List	C:\Pr C:\Pr C:\Pr C:\Pr
	<ul> <li>Application Details</li> <li>Connection Details</li> </ul>	
	<ul> <li>Show Windows Services</li> <li>Show Broadcast Traffic</li> </ul>	

MM.EXE	TCP	CONNECT	1598	2001	0.0.0.0->128.115.41.7	4316	C:\Program Files\meetingmaker\I
firefox.exe	TCP	CONNECT	4212	80	0.0.0.0->80.67.74.53	4448	C:\Program Files\Mozilla Firefox\
🕘 firefox.exe	ТСР	LISTEN	3862	0	127.0.0.1->0.0.0.0	4448	C:\Program Files\Mozilla Firefox\
🕘 firefox.exe	(HTTP - World Wide Web)	LISTEN	3866	0	127.0.0.1->0.0.0.0	4448	C:\Program Files\Mozilla Firefox\
🕘 firefox.exe	TCP	CONNECT	3862	3863	127.0.0.1->127.0.0.1	4448	C:\Program Files\Mozilla Firefox\
🕘 firefox.exe	TCP	CONNECT	3863	3862	0.0.0.0->127.0.0.1	4448	C:\Program Files\Mozilla Firefox\
🕘 firefox.exe	TCP	CONNECT	3866	3867	127.0.0.1->127.0.0.1	4448	C:\Program Files\Mozilla Firefox\
🕘 firefox.exe	TCP	CONNECT	3867	3866	0.0.0.0->127.0.0.1	4448	C:\Program Files\Mozilla Firefox\
A second seco						· ·	

Note: Changing the display to "Connection Details" affects the display of all listed applications.

### **Off-site Altering of Windows SEP's Firewall Rules**

#### **Overview**

Symantec Endpoint Protection (SEP) for Windows has the ability to detect network characteristics that the client system is communicating on and to alter its' configuration in response to the network detected. This ability is called "location awareness". Location awareness is the key mechanism for how SEP on LLNL laptops and tablets alters its' firewall rules such that it's more trusting on LLNL networks and more protective when off-site.

SEP determines that the client is on-site by polling for authorized LLNL DNS servers. If these are detected, the firewall rules accept all network traffic that is sourced from typical networks on site. Otherwise, the firewall will be configured to be more protective in an off-site situation.

### **Off-site Firewall Rule Alterations**

Based on testing, you should not have problems accessing publically available networks that you might find in hotels, restaurants, or home networks. However, there is a chance that the SEP firewalls rules could block access to some public wireless networks or certain features of a home network. Assuming you have Windows administrative privileges on your laptop or tablet, and are logged on with those credentials, you can make changes to the SEP firewall if necessary.

To alter the SEP firewall rules (logged on with administrative rights) launch the SEP application by

icon in the system tray (lower right-hand corner near date and time display). clicking on the

Sometimes the system-tray icons are hiding behind the _____ icon. Click on the _____ icon to reveal the running applications.

Right click on which and select "Open Symantec Endpoint Protection".

The SEP application will launch and you'll see the SEP interface.



Options Look for the button aligned with the Network Threat Protection feature and click on it. From the fly-out menu, select "Configure Firewall Rules...."

Change Settings View Logs
View Application Settings
View Network Activity
Configure Firewall Rules
Disable all Network Threat Protection features

The firewall rules interface will launch and will list a set of firewall rules.

Rule Name	Hosts	Ports and Protocols	Action	Network Adapt	Scheduling	Screen Saver Mo	Applications
Block IPv6 (Ethernet type 0x86dd)	All hosts	ethernet type 34525; both inco	Block	All network ad	Scheduling is disa	Either On or Off	All applications
Block IPv6 (Ethemet type 0x0600) Block IPv6 over IPv4 (Teredo) Remote UDP port 3544	All hosts	UDP remote port(s) 3544; both	Block	All network ad	Scheduling is disa		All applications
<ul> <li>Block IPv6 over IPv4 (Teredo) Remote ODP port 3544</li> <li>Block IPv6 over IPv4 (ISATAP)</li> </ul>	All hosts	IP protocol type 41; both inco	Block	All network ad	Scheduling is disa		All applications
Block ICMPv6	All hosts	IP protocol type 41, both inco	Block	All network ad	Scheduling is disa		All applications
Allow EAPOL wireless traffic	All hosts	1 21 2	Allow	All network ad	Scheduling is disa		All applications
Allow BOOTP protocol	All hosts	ethernet type 0x888E; both inc UDP local port(s) 68,67; both i	Allow	All network ad	Scheduling is disa		
Allow BOOTP protocol     Allow UPnP Discovery from private IP addresses	All nosts 10 0 0 0-10 25	1 47 5 5		All network ad	Scheduling is disa		All applications
Allow UPhP Discovery from private IP addresses     Block UPhP Discovery	All hosts	UDP local port(s) 1900; both in		All network ad	Scheduling is disa		All applications
<ul> <li>Block UPnP Discovery</li> <li>Allow Web Service requests from private IP address</li> </ul>	All hosts 10.0.0-10.25	UDP local port(s) 1900; both in	Block	All network ad			All applications
	10.0.0.0-10.25	TCP local port(s) 5357,5358; b			Scheduling is disa		All applications
Allow Web Service requests from private IP address	All hosts	UDP local port(s) 5357,5358; b	Allow	All network ad	Scheduling is disa		All applications
Block Web Service requests part A		TCP local port(s) 5357,5358; b	Block	All network ad	Scheduling is disa		All applications
Block Web Service requests part B	All hosts	UDP local port(s) 5357,5358; b	Block	All network ad	Scheduling is disa		All applications
Allow Ipv4 LLMNR from private IP addresses	10.0.0-10.25	UDP local port(s) 5355; both in		All network ad	Scheduling is disa		All applications
Block Ipv4 LLMNR	0.0.0.1-255.25	UDP local port(s) 5355; both in	Block	All network ad	Scheduling is disa		All applications
Allow Ipv6 LLMNR	All hosts	UDP local port(s) 5355; both in	Allow	All network ad	Scheduling is disa		All applications
Allow Web Services Discovery from private IP addre	10.0.0-10.25	UDP local port(s) 3702; both in		All network ad	Scheduling is disa		All applications
V Block Web Services Discovery	All hosts	UDP local port(s) 3702; both in	Block	All network ad	Scheduling is disa		All applications
Allow SSDP from private IP addresses	10.0.0-10.25	TCP local port(s) 2869; both in	Allow	All network ad	Scheduling is disa		All applications
V Block SSDP	All hosts	TCP local port(s) 2869; both in	Block	All network ad	Scheduling is disa	Either On or Off	All applications
Allow IGMP traffic	All hosts	IP protocol type 2; both incomi	Allow	All network ad	Scheduling is disa	Either On or Off	All applications
Allow USB over IEEE802 (Ethernet type 0x892e)	All hosts	ethernet type 0x892E; both inc	Allow	All network ad	Scheduling is disa	Either On or Off	All applications
•							
Add Edit Delete							

Most of these rules may be difficult to interpret unless you have some technical networking background. If you suspect that a particular rule is problematic, simply uncheck the box next to it under the "Rule Name" column to disable it. You must also click the "OK" button to activate the changes.

For most users (and technicians for that matter) it will be easier to add a rule to grant access through the SEP firewall. The following steps will guide you through the process.

At the bottom of the interface click the Add... button.

An "Add Firewall Rule" template will launch. In the "Rule name" field enter a meaningful name. In this case we'll call it "Allow Firefox Web Access". Our intent with this example rule is to grant the Firefox browser complete network access.

📙 Edit Firewall Rule	<b>×</b>		
General Hosts Ports and Protocols Applications Scheduling			
Rule name			
Allow Firefox Web Access		- -	
Action			
Block this traffic     Allow this traffic			
Firewall settings			
Apply this rule to the following network adapter:			
All network adapters	•		
Apply this rule while the screen saver is:			
Either On or Off 🔹			
Record this traffic in the Packet Log			
Rule Summary: Allow both incoming and outgoing traffic to/from: All hosts. This applies to traffic from following protocols and ports: All IP protocol types. For these network adapters: All r adapters. The following applications will be affected by this rule: Firefox.		- - -	
OK Cancel	Help	-	
nder the "Action" header, select the O Allow this traffic ow select the Applications tabby near the top of the	radio buttor	1.	
آ			
our application list will be blank at this time. Select the $^{igl }$	Br	owse	button to
aunch a file navigator. We are looking for the executable	firefox.exe w	hich is usually loca	ted in the
C:\Program Files (X86)\Mozilla Firefox" directory. Naviga		-	
Then select the $\bigcirc$ pen $\checkmark$ button.			

Firefox should now be listed along with its' version number and path in the application list.

Conservation	Lineta	Desta an	d Protoco	1- /	Applications	O a b a abulia a		
General	Hosts	Ports an	a Protoco	ois /	Applications	Scheduling		
Applica	tions:				🔲 Displ	ay selected a	applications only	
Applic	ation		Version		Path			
2 🌒	Firefox		38.5.2		C:\Program F	iles (x86)\Mo	zilla Firefox\firefox.ex	ke
	Sele	ct All			Unselect	All	Browse.	

Click the OK button.

You should now see the "Allow Firefox Web Access" at the bottom of the rule lists.

Add Edit Delete									
4									
Allow Firefox Web Access	All hosts	All IP protocol types; both inco	Allow	All network ad	Sched				
Allow USB over IEEE802 (Ethernet type 0x892e)	All hosts		Allow	All network ad	Sched				
Allow IGMP traffic	All hosts	IP protocol type 2; both incomi		All network ad	Scheo				
Block SSDP	All hosts	TCP local port(s) 2869; both in	Block	All network ad	Sched				
Allow SSDP from private IP addresses	10.0.0-10.25	TCP local port(s) 2869; both in	Allow	All network ad	Scheo				
Block Web Services Discovery	All hosts	UDP local port(s) 3702; both in	Block	All network ad	Scheo				

Finally, click the **OK** button. The rule should now be active and Firefox will have access to the network.

You can do the same thing for any other browser or application that you wish to allow network access though the SEP's firewall.