]HackingTeam[

Remote Control System

Environment setup

Contents

1	VLAN:	s Configuration on Switch	3
	1.1	Connection schema between Firewall and Switch	4
	1.2	RCS Network Diagram	5
2	Firewa	all Initial Setup	6
3	How to	o create a firewall rule on SonicWall	16
4	Basic	Rules for RCS Environment	17
	4.1	Firewall Rules	17
	4.2	Firewall Rules with SonicWall	17
	4.3	How to configure Remote Access with SonicWall	22
	4.4	How to create remote access users with SonicWall	25

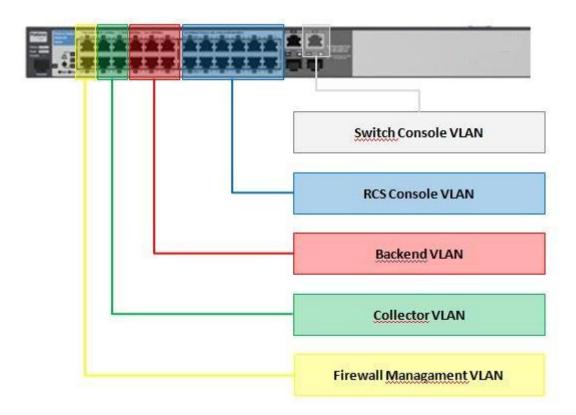
1 VLANs Configuration on Switch

The RCS environment requires 5 VLANs on a Switch.

These VLANs create a different logical LAN for each RCS components and for devices management.

On the switch you can create these VLANs:

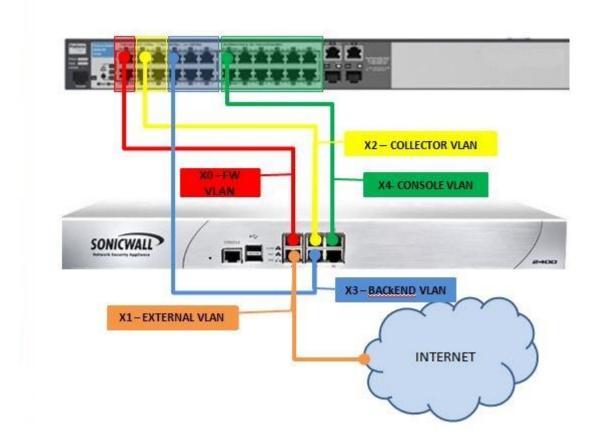
- RCS Console VLAN
- Backend VLAN
- Collector VLAN
- Firewall Management VLAN
- Switch Management VLAN



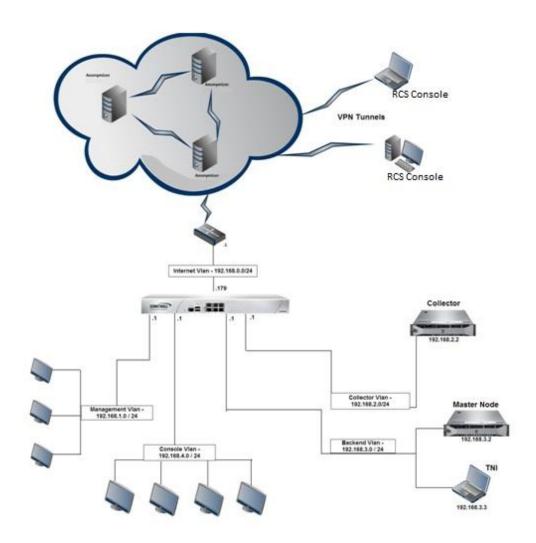
1.1 Connection schema between Firewall and Switch

On the firewall you have to configure one interface for each VLAN (except for Switch Console VLAN) and one interface for Internet .

Connect these interfaces to the right VLAN on the Switch as in the picture below:



1.2 RCS Network Diagram

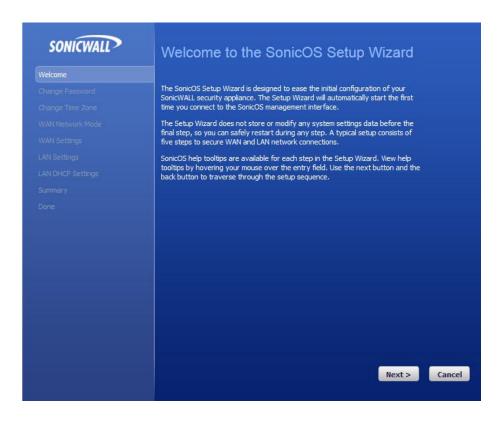


2 Firewall Initial Setup

This setup is based on SonicWall appliance NSA 2400MX.

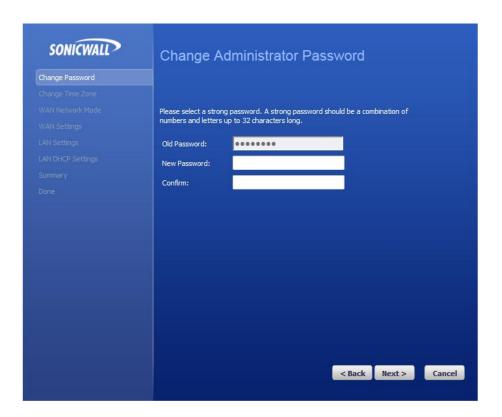
- 1. Set on your laptop an ip address belongs to 192.168.168.0/24 network
- 2. Enable popup on your browser
- 3. Connect the cable from your laptop to X0 on firewall
- 4. Connect to 192.168.168.168 (firewall default ip address) using a web browser as showed below
- 5. Follow the wizard:

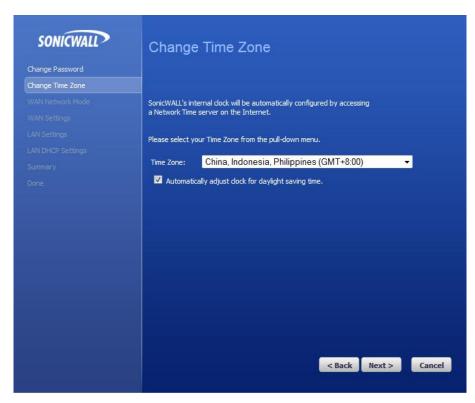




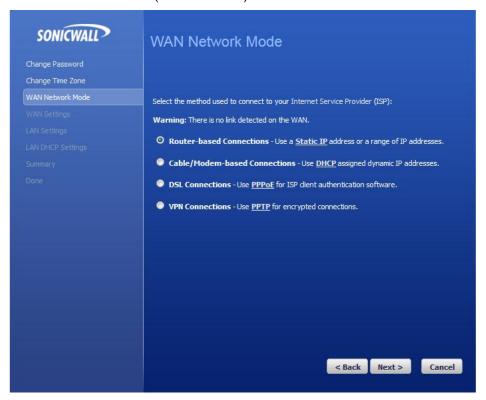
6. To set the new password, enter the old password in the Old Password field and the new password in the New Password field. Enter the new password again in the Confirm New Password field and click Update.

The SonicWALL default password is "password".



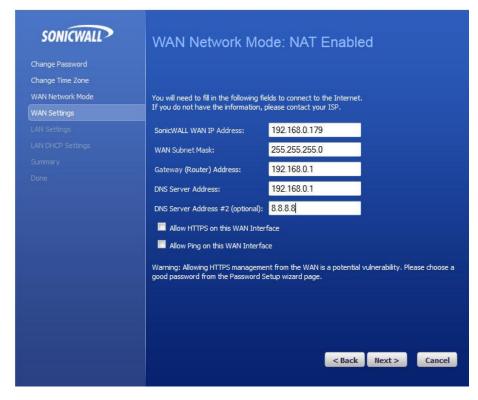


7. Select router-based Connection (recommended) for WAN interface connection

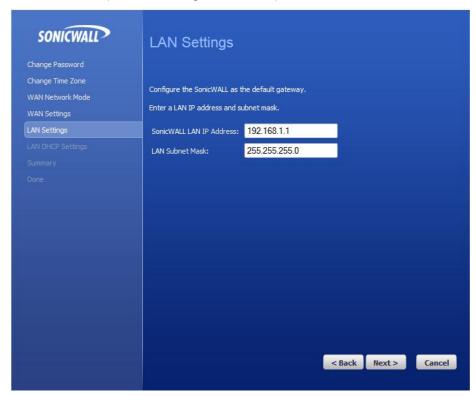


8. Configure WAN IP address. It is possible to use private ip address (as showed below) or a public IP Address, depend on your network design.

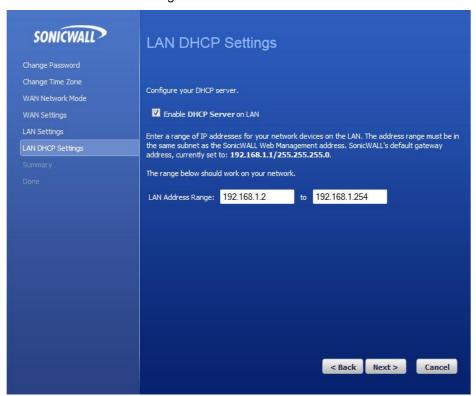
Configure the default gateway (internet router or internet firewall) and DNS



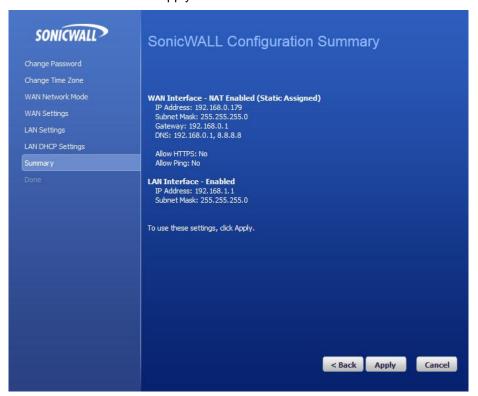
9. Configure LAN Network (Firewall Management VLAN)

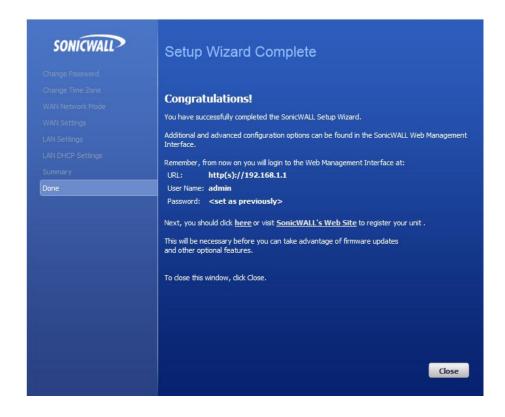


10. If needed enable DHCP on Management LAN



11. Complete the wizard and click on Apply





- 12. Set on your laptop an ip address belongs to 192.168.1.0/24 network.
- 13. Connect the cable from your laptop to X0 on firewall

14. Connect to firewall via browser:

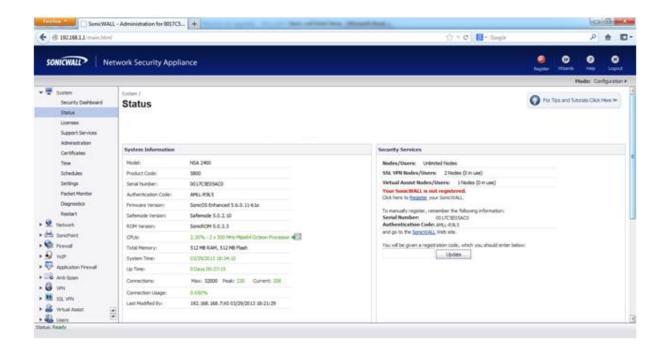
https://192.168.1.1 (Ip Address configured during the wizard)

user: admin

password: xxxx (Password configured during the wizard)



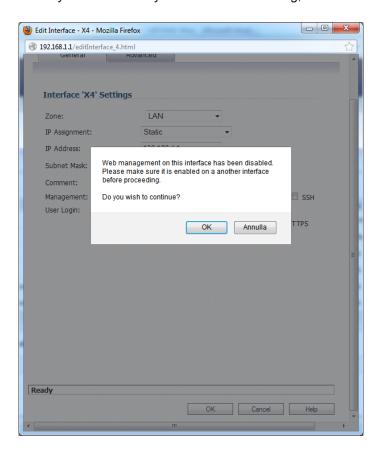
15. Click under Status and register your appliance (in order to do it connect X1, the external interface of the firewall to internet)

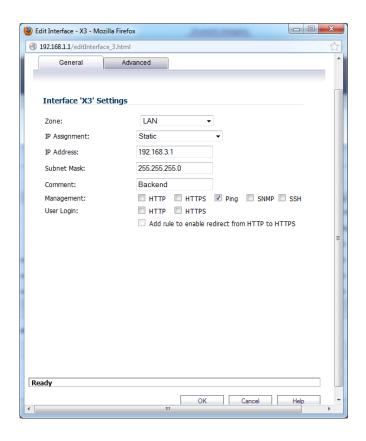


- 16. Go to "Network" → "Interfaces" and configure the other firewall interfaces as showed below:
 - X2 interface belongs to DMZ Zone. Its ip address must be on the same network of Collector
 - i. Flag only Ping under Management field.



- b. X3 interface belongs to LAN (Trusted) Zone. Its ip address must be on the same network of Backend
 - i. Flag only Ping under Management field.
 - ii. When you click on OK you will see this warning, click on OK to continue.

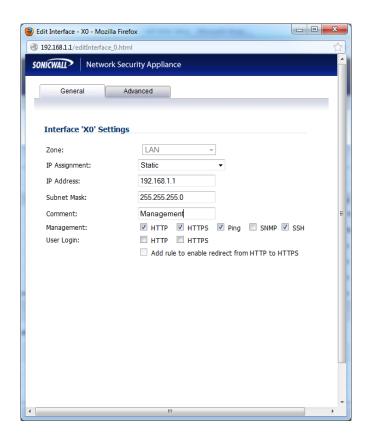




- c. X4 interface belongs to LAN (Trusted) Zone. Its ip address belongs to Console VLAN
 - i. Flag only Ping under Management field.
 - ii. When you click on OK you will see the warning, click on OK to continue.



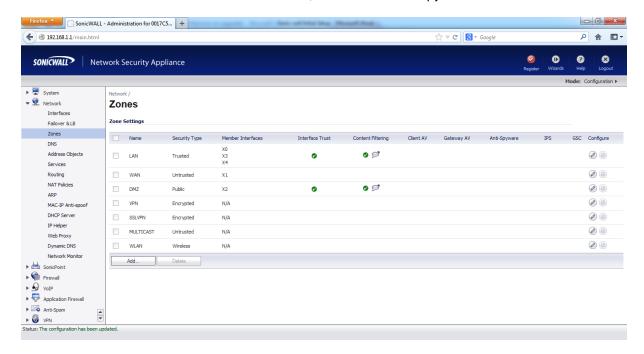
- d. X0 interface belongs to LAN (Trusted) Zone. Its ip could remains 192.168.1.1
 - i. Flag Ping, HTTP, HTTPS and SSH under Management field



e. Edit X1 interface and disable all flags under Management field



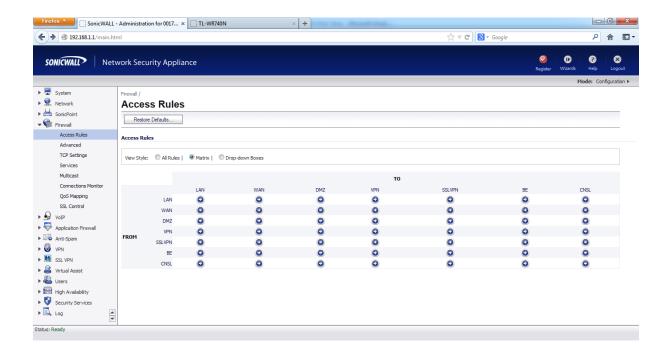
17. Go to Network → Zones and remove IPS, Antivirus and Antispyware functionalities



3 How to create a firewall rule on SonicWall

To create an access rule:

- 1. Log on to the SonicWALL firewall.
- 2. Click the Firewall button.
- Click Access Rules
- 4. Click the appropriate From And To Zone (such as WAN to LAN).



- 5. Click the Add button that appears at the bottom of the menu.
- 6. Specify the action to be taken to traffic matching the access rule's settings; Allow, Deny and Discard.
- 7. Select the appropriate service from the Service drop-down box.
- 8. Select the Source and Destination.
- 9. Check Enable Logging checkbox so you can see the log events related to the new access rule.
- 10. Click OK.

4 Basic Rules for RCS Environment

4.1 Firewall Rules

The following rules are required for RCS infrastructure:

Source	Destination	Service	Protocol	Port
Backend	Any	DNS	UDP	53
Backend	Any	NTP	UDP	123
Backend	Collector	HTTPS	TCP	443
Backend	Collector	HTTP	TCP	80
CNSL	Any	HTTPS	ТСР	443
CNSL	Any	HTTP	TCP	80
CNSL	Any	DNS	UDP	53
CNSL	Any	ICMP	ICMP	
CNSL	Collector	RDP	TCP	3389
CNSL	Backend	RDP	ТСР	3389
CNSL	Backend	HTTPS	ТСР	443
CNSL	Backend	TCP_444	TCP	444
Collector	Any	DNS	UDP	53
Collector	Any	HTTP	ТСР	80
Collector	Any	HTTPS	TCP	443
Collector	Any	NTP	UDP	123
Collector	Backend	HTTPS	ТСР	443
Anonymizer(s)	Collector	HTTP	TCP	80

4.2 Firewall Rules with SonicWall

The following rules are required for RCS infrastructure with SonicWall (configured as described above) firewall and Remote Access VPN.

BE = BackEnd

DMZ = Collector

CNSL = Console

LAN = Management VLAN for Firewall

WAN = External LAN or Internet

	Source	Destination	Service	Action
[BE]> [LAN]				
	Any	Any	Any	Deny
[BE]> [WAN]				
	BE Subnets	Any	DNS	Allow
	BE Subnets	Any	NTP	Allow
	Any	Any	Any	Deny
[BE]> [DMZ]				
	BE Subnets	DMZ Subnets	HTTP	Allow
	Any	Any	ICMP	Allow
	Any	Any	Any	Deny
[BE]> [VPN]				
	WAN Remote Access Network	Any	Any	Allow
[BE]> [BE]				
	Any	All X3 Management IP	Ping	Allow
	Any	Any	Any	Allow
[BE]> [CNSL]				
	Any	Any	ICMP	Allow
	Any	Any	Any	Deny
[CNSL]> [LAN]				
	Any	Any	Any	Deny
[CNSL] -> [WAN]				
	CNSL Subnets	Any	HTTPS	Allow
	CNSL Subnets	Any	HTTP	Allow
	CNSL Subnets	Any	DNS	Allow
	CNSL Subnets	Any	ICMP	Allow
	Any	Any	Any	Deny
[CNSL]> [DMZ]				
	CNSL Subnets	DMZ Subnets	RDP	Allow
	Any	Any	ICMP	Allow
	Any	Any	Any	Deny
[CNSL]> [VPN]				
	WAN Remote Access Network	VPN DHCP Clients	Any	Allow
	WLAN Remote Access Network	Any	Any	Allow
	WAN Remote Access Network	Any	Any	Allow
[CNSL]> [BE]				

	Source	Destination	Service	Action
	CNSL Subnets	BE Subnets	RDP	Allow
	CNSL Subnets	BE Subnets	HTTPS	Allow
	CNSL Subnets	BE Subnets	TCP_444	Allow
	Any	Any	ICMP	Allow
	Any	Any	Any	Deny
[CNSL] > [CNSL]				
	Any	All X4 Management IP	Ping	Allow
	Any	Any	Any	Allow
[DMZ]> [LAN]				
	Any	Any	Any	Deny
[DMZ]> [WAN]				
	DMZ Subnets	WAN Subnets	DNS	Allow
	DMZ Subnets	Any	HTTP	Allow
	DMZ Subnets	Any	HTTPS	Allow
	DMZ Subnets	Any	NTP	Allow
	DMZ Subnets	Any	ICMP	Allow
	Any	Any	Any	Deny
[DMZ]> [DMZ]				
	Any	All X2 Management IP	ICMP	Allow
	Any	Any	Any	Allow
[DMZ]> [VPN]				
	WAN Remote Access Network	Any	Any	Allow
	WLAN Remote Access Network	Any	Any	Allow
[DMZ]> [BE]				
	DMZ Subnets	BE Subnets	HTTPS	Allow
	Any	Any	ICMP	Allow
	Any	Any	Any	Deny
[DMZ]> [CNSL]				
	Any	Any	ICMP	Allow
	Any	Any	Any	Deny
[LAN]> [LAN]				
	Any	All X4 Management IP	Ping	Allow
	Any	All X3 Management IP	Ping	Allow
	Any	All X0 Management IP	Ping	Allow
	Any	All X0 Management IP	SSH Management	Allow

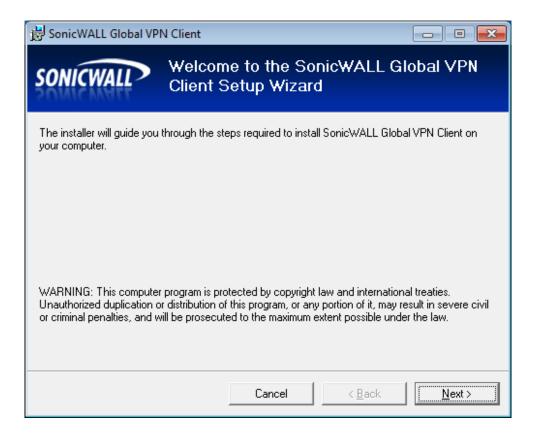
	Source	Destination	Service	Action
	Any	All X0 Management IP	HTTPS Management	Allow
	Any	All X0 Management IP	HTTP Management	Allow
	Any	Any	Any	Allow
[LAN]> [WAN]				
	Any	Any	Any	Allow
[LAN]> [DMZ]				
	Any	Any	Any	Allow
[LAN]> [VPN]				
	WAN Remote Access Network	Any	Any	Allow
	WLAN Remote Access Network	Any	Any	Allow
[LAN]> [BE]				
	Any	Any	Any	Allow
[LAN]> [CNSL]				
	Any	Any	Any	Allow
[VPN]> [LAN]				
	Any	All X0 Management IP	SSH Management	Allow
	Any	All X0 Management IP	HTTPS Management	Allow
	Any	All X0 Management IP	HTTP Management	Allow
	Any	All X4 Management IP	SNMP	Allow
	Any	All X4 Management IP	Ping	Allow
	Any	All X3 Management IP	SNMP	Allow
	Any	All X3 Management IP	Ping	Allow
	Any	All X0 Management IP	SNMP	Allow
	Any	All X0 Management IP	Ping	Allow
	Any	WAN	Remote Access Network	Any
	Any	WLAN	Remote Access Network	Any
[VPN]> [WAN]				
	Any	WAN Remote Access Network	Any	Allow
	Any	WLAN Remote Access Network	Any	Allow
[VPN]> [DMZ]				
	Any	All X2 Management IP	SNMP	Allow

	Source	Destination	Service	Action
	Any	All X2 Management IP	Ping	Allow
	Any	WAN Remote Access Network	Any	Allow
	Any	WLAN Remote Access Network	Any	Allow
[VPN]> [VPN]				
	Any	WAN Remote Access Network	Any	Allow
	WAN Remote Access Network	Any	Any	Allow
	Any	WLAN Remote Access Network	Any	Allow
	WLAN Remote Access Network	Any	Any	Allow
[VPN]> [BE]				
	Any	WLAN Remote Access Network	Any	Allow
	Any	WAN Remote Access Network	Any	Allow
[VPN]> [CNSL]				
	Any	All X4 Management IP	SSH Management	Allow
	Any	All X4 Management IP	HTTPS Management	Allow
	Any	All X4 Management IP	HTTP Management	Allow
	VPN DHCP Clients	WAN RemoteAccess Network	Any	Allow
	Any	WLAN RemoteAccess Network	Any	Allow
	Any	WAN RemoteAccess Network	Any	Allow
[WAN]> [LAN]				
	Any	Any	Any	Deny
[WAN]> [WAN]				
	WAN Interface IP	Any	IKE	Allow
	Any	WAN Interface IP	IKE	Allow
[WAN]> [DMZ]				
	Anonymizer-1	WAN Interface IP	HTTP	Allow
	Anonymizer-2	WAN Interface IP	HTTP	Allow
	Anonymizer-3	WAN Interface IP	HTTP	Allow
	Any	Any	Any	Deny
[WAN]> [BE]				
	Any	Any	Any	Deny
[WAN] -> [CNSL]				

Source	Destination	Service	Action
Any	Any	Any	Deny

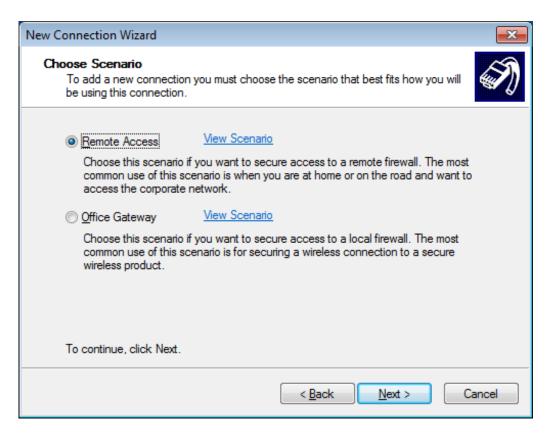
4.3 How to configure Remote Access with SonicWall

On the remote laptop copy the SonicWall Global VPN client, launch the GVCSetup64_4.7.3.0403_EN file and follow the setup:

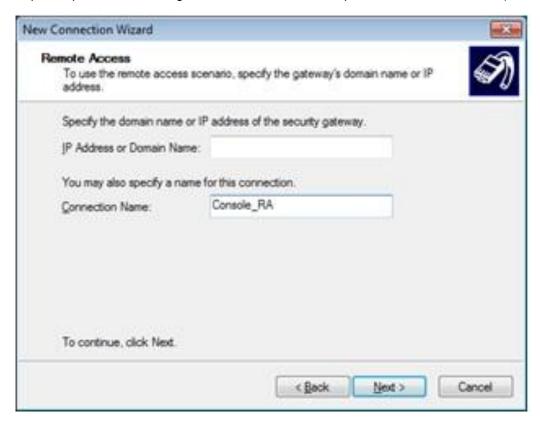








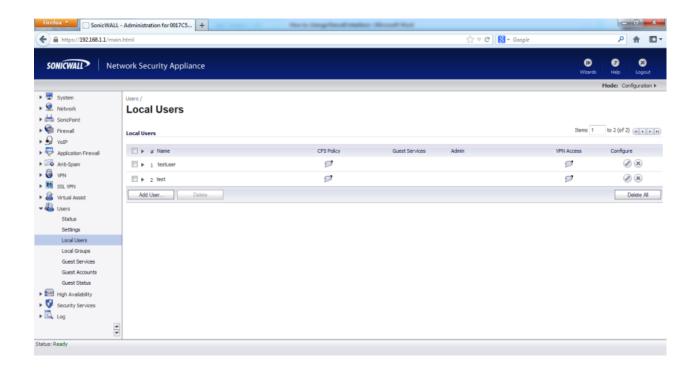
Under Ip address or Domain name put the public ip address of the firewall (Ip address of X1 interface, in case of public ip address is configured on the firewall, or the ip address of internet router)



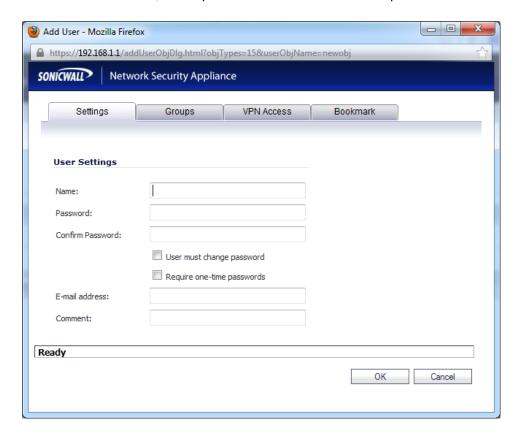


4.4 How to create remote access users with SonicWall

- 1. Connect to the firewall console (https://192.168.1.1)
- 2. Click Users → Local users → Add User



3. Write a new username, a new password and a confirm of new password under Settings :



4. Under Groups select the group for the new user. You could use the default groups. The member of the group "Trusted Users" can use the remote access VPN.

