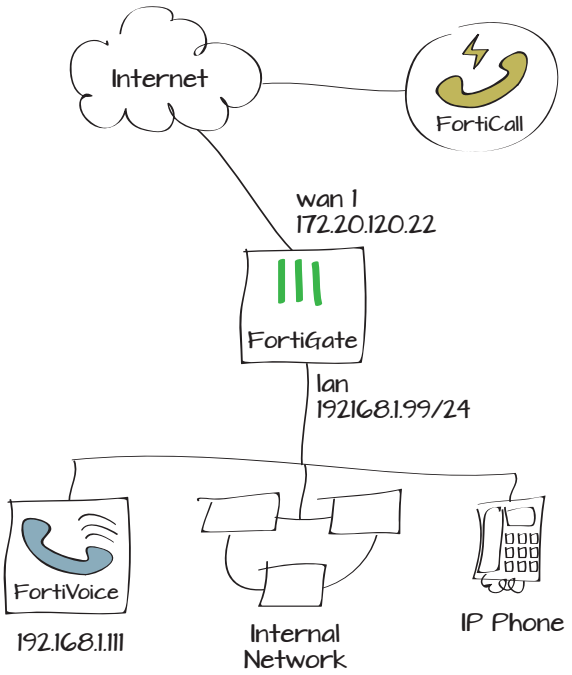
Allowing VoIP calls using FortiVoice and FortiCall

This example sets up inbound and outbound Voice over IP (VoIP) calls using Session Initiation Protocol (SIP) through the FortiGate unit, using a FortiVoice unit and FortiCall services.

1. Setting up a FortiCall account
2. Configuring the FortiVoice unit
3. Configuring the FortiGate unit for outbound SIP calls
4. Configuring the FortiGate unit for inbound SIP calls
5. Results



Setting up a FortiCall account

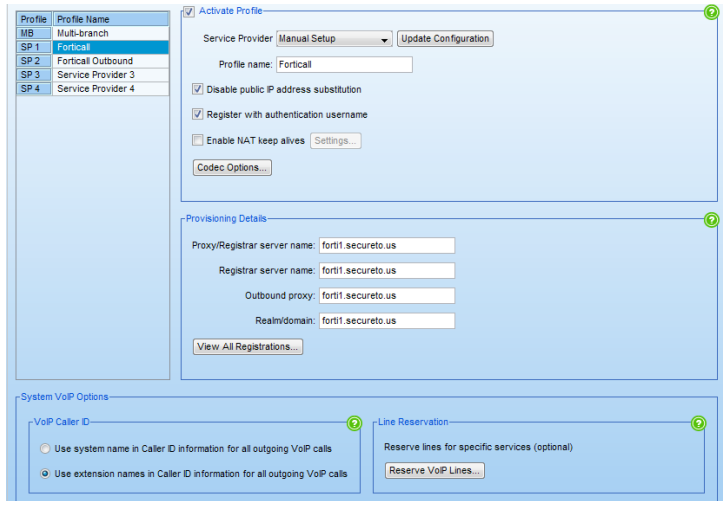
Go to www.forticall.com and follow the set up instructions. When the account is set up, you will be provided with information to activate your account. You will also need to choose a phone number for inbound calls.

Configuring the FortiVoice unit

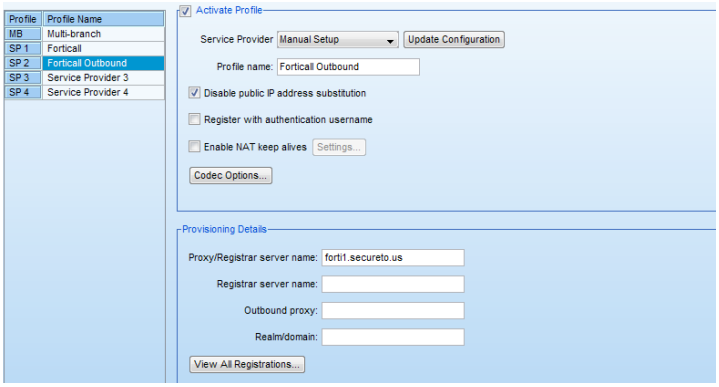
Insert the CD into the CD-ROM drive, the FortiVoice Install main window will appear within 20 seconds. Click Install FortiVoice and follow the instructions.

Open the FortiVoice Management software

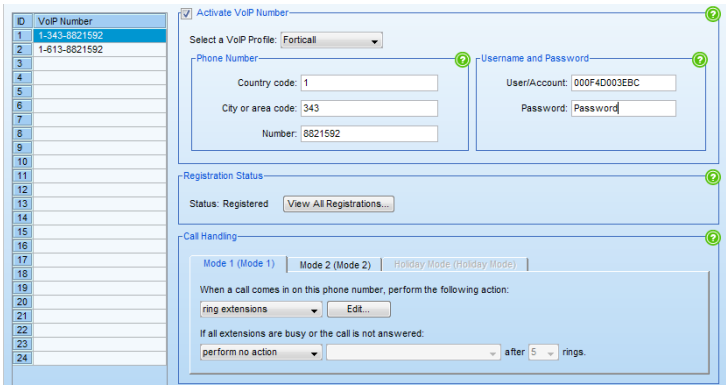
Go to **Global Settings > VoIP Configuration** and set up a service provider profile for inbound calls.



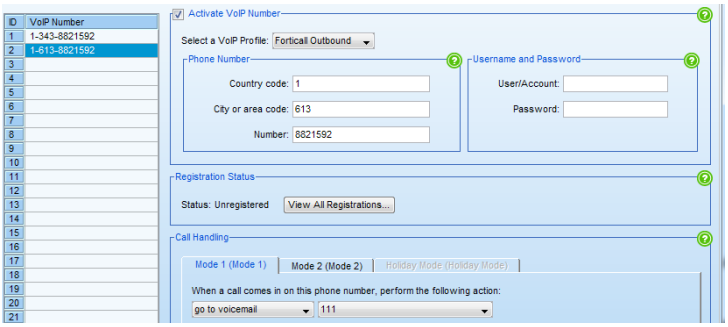
Set a service provider for outbound calls.



Go to **Lines and Greetings > VoIP Numbers** and set your phone number for inbound calls.



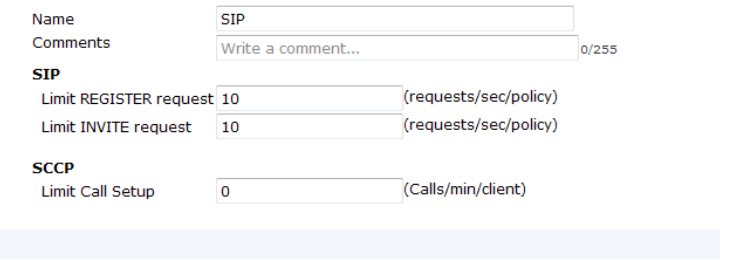
Set a phone number for outbound calls.



Configuring the FortiGate unit for outbound SIP calls

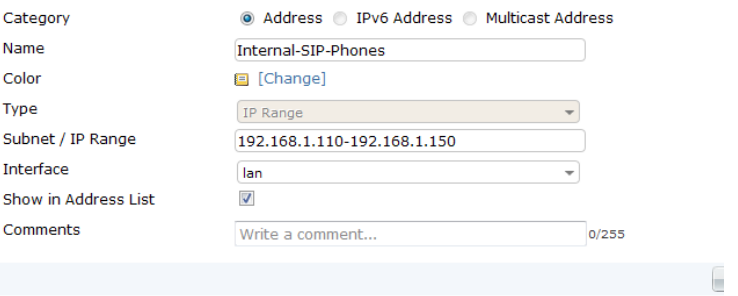
Go to **Security Profiles > VoIP > Profiles**.

Create a new profile and set the **Limit REGISTER request** and **Limit INVITE request.**



Go to **Firewall Objects > Address > Address**

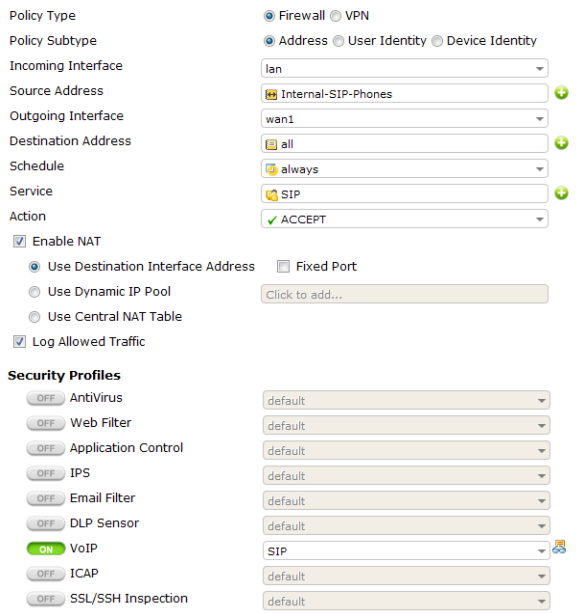
Create an IP range for SIP phones.



Go to **Policy > Policy > Policy**.

Create a policy allowing outbound SIP traffic. Set **Incoming Interface** to LAN, **Source Address** to the new firewall address, and **Outgoing Interface** to your Internet-facing interface.

Under **Security Profiles**, enable **VoIP** and set it to use the new profile.

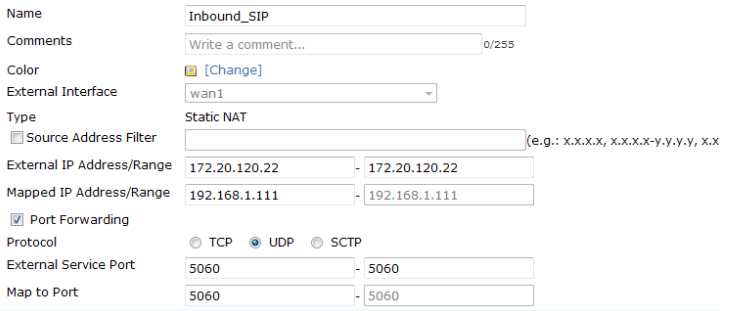


Make sure you place this security policy on the top of the policy list.

Configuring the FortiGate unit for inbound SIP calls

Go to **Firewall Objects > Virtual IPs > Virtual IPs**

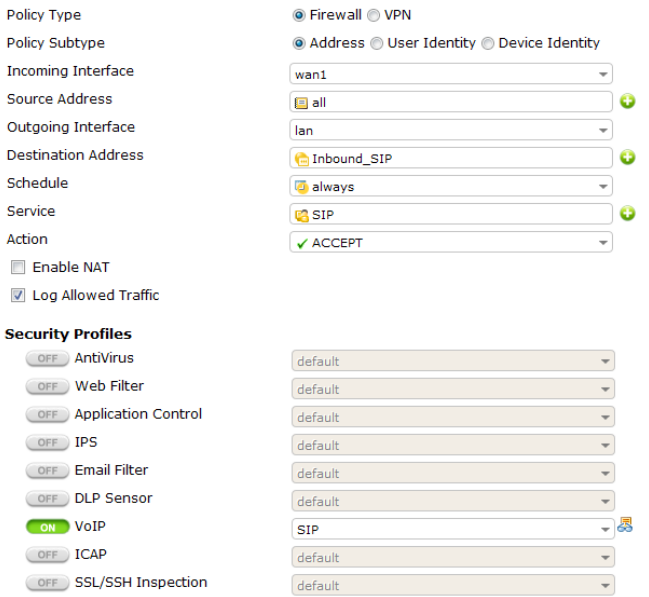
Create a new virtual IP mapping the external IP on the **wan1** interface of the FortiGate to the internal IP of the FortiVoice on UDP port 5060.



Go to **Policy > Policy > Policy**.

Create a policy allowing inbound SIP traffic. Set **Incoming Interface** to your Internet-facing interface, **Outgoing Interface** to LAN, and **Destination Address** to the new virtual IP.

Enable **VoIP** and set it to use the new profile.



Results

Go to **System > Dashboard > Status** and add the **VoIP Usage** widget.

When the widget appears, verify **Voice Calls.**

	SIP	SCCP
Voice Calls		
Currently Active Calls	0	0
Total Calls (since last reset)	5	0
Calls Failed/Dropped/Unanswered	0	0
Calls Succeeded	5	0

Go to **Log & Report > Traffic Log > Forward Traffic** to verify that both inbound and outbound SIP traffic is occurring**.**

Dst	Sent / Received	Policy ID	
172.20.120.22	574 B / 787 B	3	SIP
66.11.10.43	14.79 KB / 20.84 KB	2	SIP
172.20.120.22	44.65 KB / 34.70 KB	3	SIP
172.20.120.22	40.69 KB / 31.42 KB	3	SIP
66.11.10.43	110.16 KB / 107.42 KB	3	SIP
172.20.120.22	2.20 KB / 1.70 KB	3	SIP
66.11.10.43	15.10 KB / 19.15 KB	2	SIP
66.11.10.43	205.27 KB / 201.37 KB	2	SIP
172.20.120.22	4.64 KB / 3.97 KB	3	SIP
172.20.120.22	6.29 KB / 5.34 KB	3	SIP
66.11.10.43	215.43 KB / 215.04 KB	3	SIP
66.11.10.43	1.37 MB / 1.77 MB	2	SIP

Select an entry for details.

Dst	172.20.120.22	**Virtual Domain**	root
Received	787	**Source Country**	United States
Sent / Received	574 B / 787 B	**Dst NAT Port**	5060
Duration	29	**Sent**	574
Application Details		**Service**	SIP
Protocol	17	**Destination Country**	Reserved
Dst Port	5060	**roll**	65530
Status	✓	**Timestamp**	Wed Jan 30 11:52:03 2013
Tran Display	dnat	**Sequence Number**	11819
Policy ID	3	**Src Interface**	wan1
Src	66.11.10.43	**Dst NAT IP**	192.168.1.111
Sent Packets	1	**Level**	notice
Src Port	5060	**logid**	13
Sub Type	forward	**Threat**	
Received Packets	2	**Date/Time**	11:52:03 (Wed Jan 30 11:52:03 2013)
Dst Interface	lan		