

Interoperability between Netasq – Innovaphone PBX

End Users are more and more demanding the possibility to use his mobile device like own PBX phone number. The solution is not easy even if could be very simple from customer point of view.

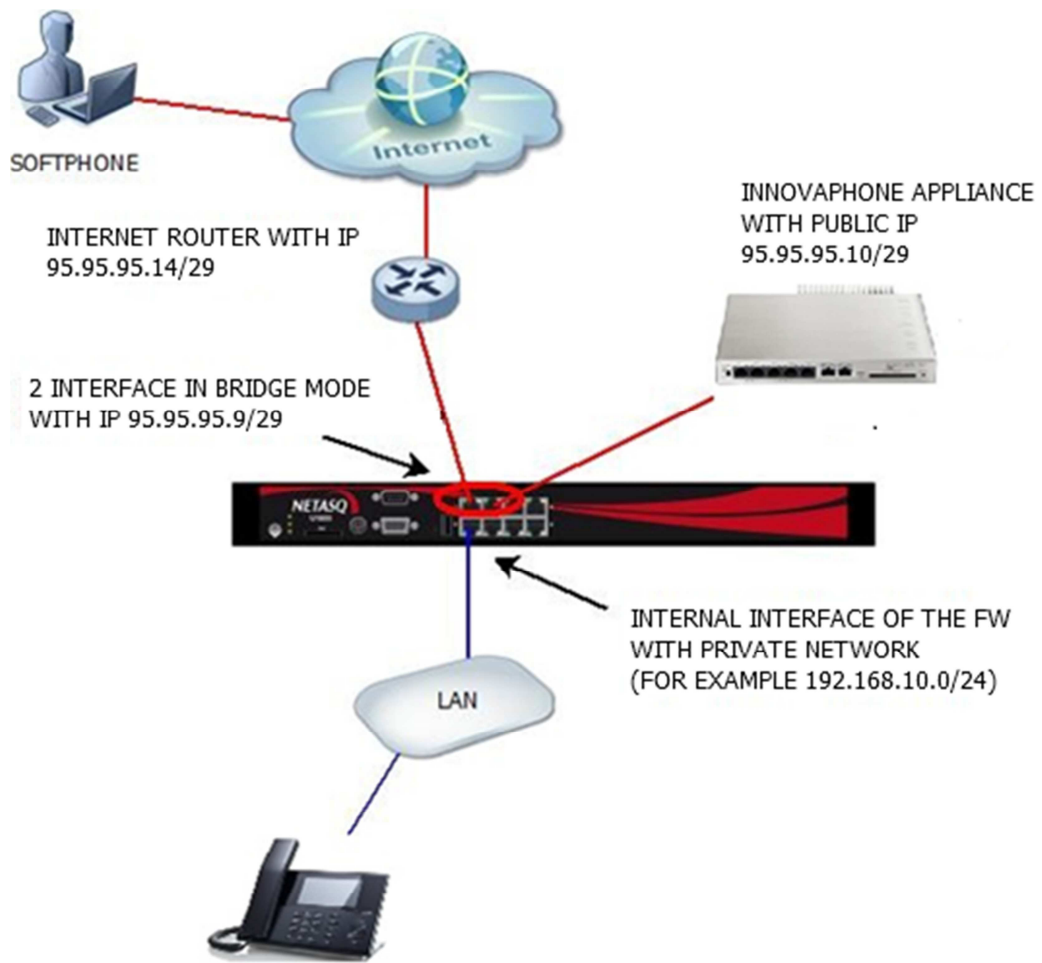
Most of the customer use VPN IPSEC protocol in order to open a secure tunnel from their smartphone to the internal network of the company but this lead to a problem related to the fact that battery becomes low after some hour. For this reason there should be a correct infrastructure in order to manager SIP registration directly from internet.

In this article we are going to see different kind of configuration that we can have with FW Netasq and Innovaphone VOIP platform depending on the number of public ip available.

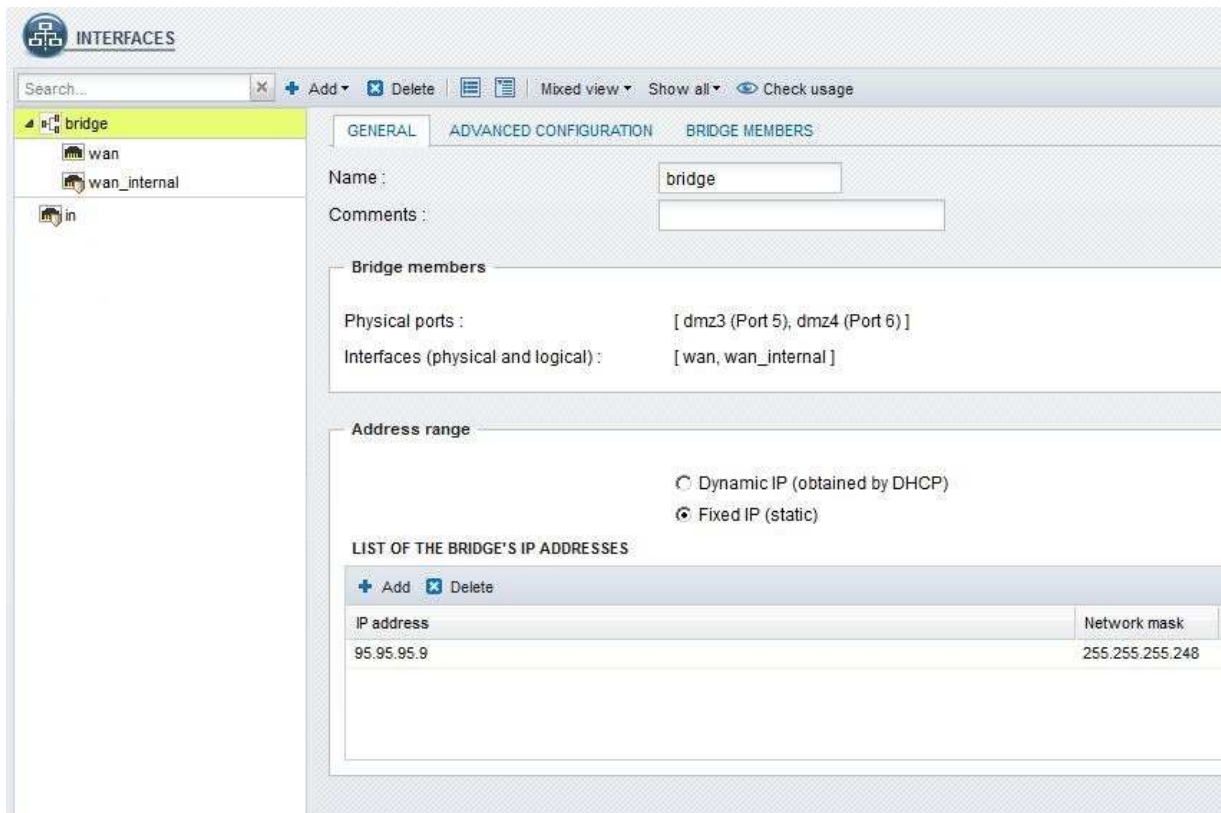
FW Netasq will open and close RTP port dynamically!

WITH MORE THAN ONE PUBLIC IP AVAILABLE:

If we have more than one public ip available we can decide to assign one to Innovaphone appliance and build a configuration like this one:

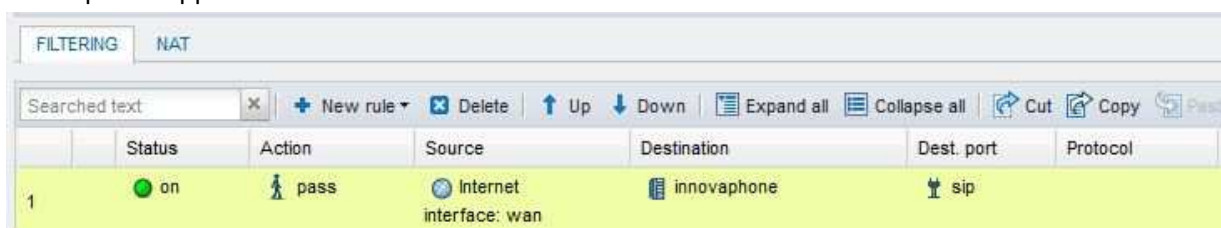


As you can see the FW is configured in hybrid mode with 2 interfaces in bridge and 1 in routing.

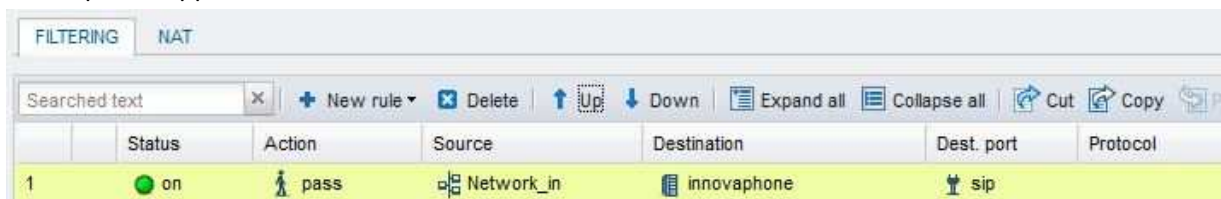


Thanks to this configuration we can protect and write filter rule for the private network and also for host that have public ip like Innovaphone appliance.

In fact if we would like that our softphone connected in internet, will be able to register on our Innovaphone appliance we need to write a filter rule like this:



In same way if we would like that internal phone connected to the LAN will be able to register on Innovaphone appliance we need to create a rule like this:

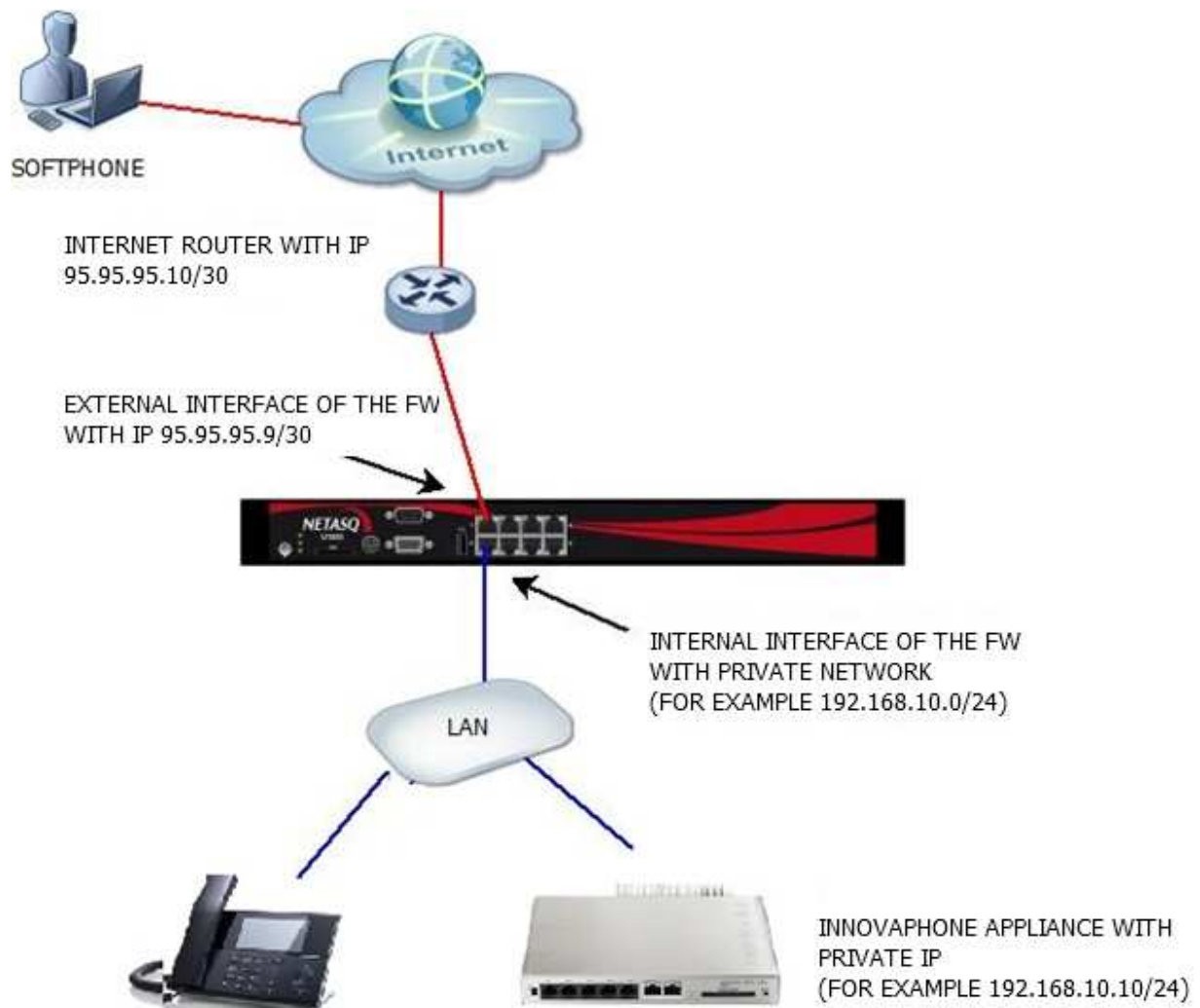


As you can see the filter rule allow only 5060(SIP) because FW will dynamically open connection that will carry RTP traffic.

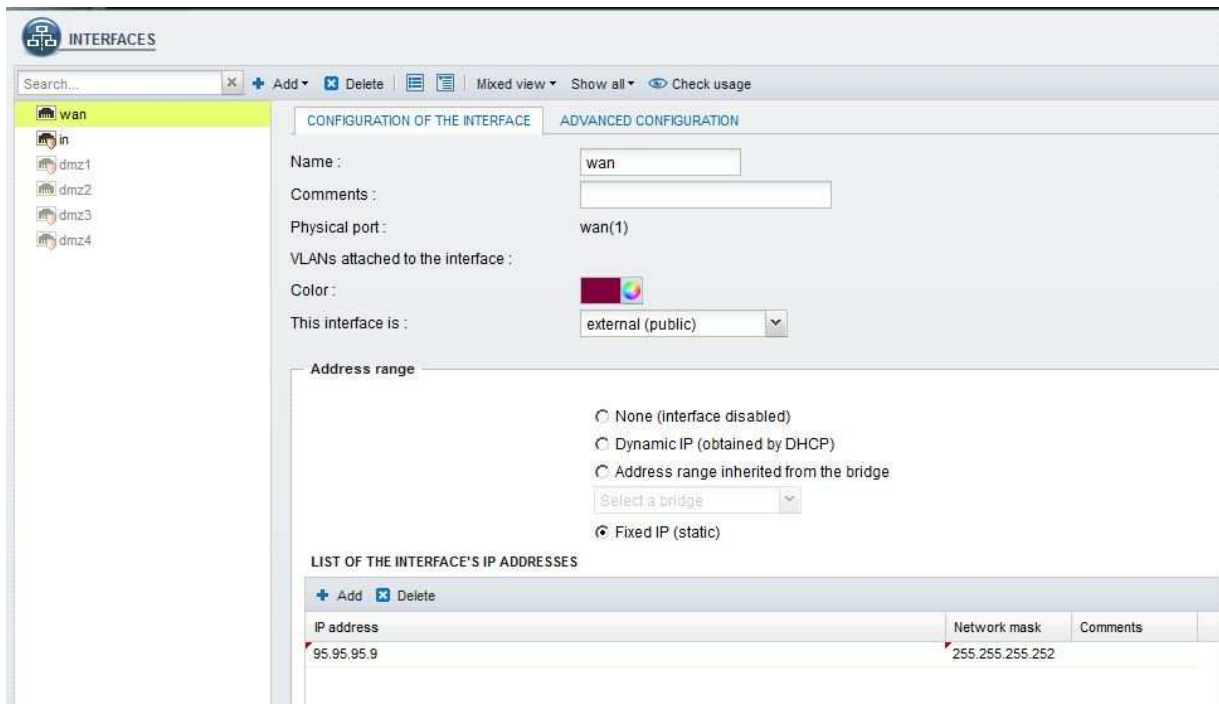
On Innovaphone is mandatory to enable RTP proxy so all RTP flow will be managed by Innovaphone appliance.

WITH ONLY ONE PUBLIC IP AVAILABLE:

If we have only one public ip available we must connect Innovaphone appliance into our internal network and build a configuration like this:



As you can see FW is configure in routing mode with 1 external interface and 1 internal interface.

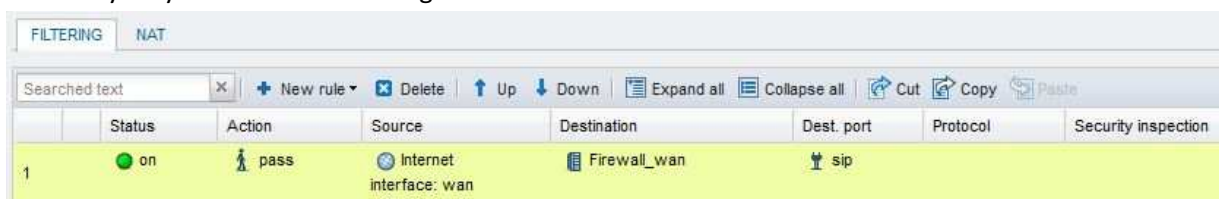


Due to the fact that Innovaphone appliance is connected to our internal network we need to configure a NAT rule that allow us to publish Innovaphone appliance on internet.

The NAT rule should be like this one:



Obviously only NAT rule is not enough because we need to create also a filter rule like this:



These 2 rules above allow traffic coming from softphone, located in internet, to Innovaphone server, but we should create also filter rule that allow Innovaphone server to go on internet.

The filter rule that we need to create is this one:

FILTERING NAT							
Status	Action	Source	Destination	Dest. port	Protocol	Security inspection	
1	on	pass	innovaphone_privato	internet	sip		

NAT rule is this one:

FILTERING NAT							
Original traffic (before translation)				Traffic after translation			
Status	Source	Destination	Dest. port	Source	Src. port	Destination	Dest. port
1	on	innovaphone_privato	Internet interface: wan	Firewall_wan	ephemeral_fw	Any	

On Innovaphone is mandatory to enable RTP proxy so all RTP flow will be managed Innovaphone appliance. And is suggested to follow security rule describe on this link (you need to be Innovaphone reseller in order to be able to visit this link) [http://wiki.innovaphone.com/index.php?title=Howto-localized:Protezione da Brute Force Attacks %28%29](http://wiki.innovaphone.com/index.php?title=Howto-localized:Protezione_da_Brute_Force_Attacks_%28%29)

General Interfaces IP4 IP6 Services **PBX** Gateway Maintenance

Config Objects Registrations Calls SOAP myPBX Dyn-PBXs

PBX Mode **Master**

System Name Use as Domain

PBX Name

Unknown Registrations - With PBX Pwd only

Music On Hold URL

External Music On Hold

Response Timeout

Dial Complete Timeout

No of Regs w/o Pwd.

Recall Timeout

Max Call Duration (h)

Group Default Visibility Online Status Presence Dialog Info Ids

Enable External Transfer

No CLIR on internal calls

RTP Proxy

Generate CDRs

Route Root-Node External Calls to on Master or Slave with License Only

Route PBX-Node External Calls to

Route Internal Calls to

Escape Dialtone from

Moreover registration from softphone needs to be done using Proxy Domain Name that must be the same as System Name of the PBX.

This configuration increase security level of the SIP registration process.

KNOWN ISSUE: due to the fact that we must use RTP Proxy is mandatory to use one of the following GW
IP800 – IP810 – IP3010 – IP6010 – IP0010 - IPVA