Scenario 2

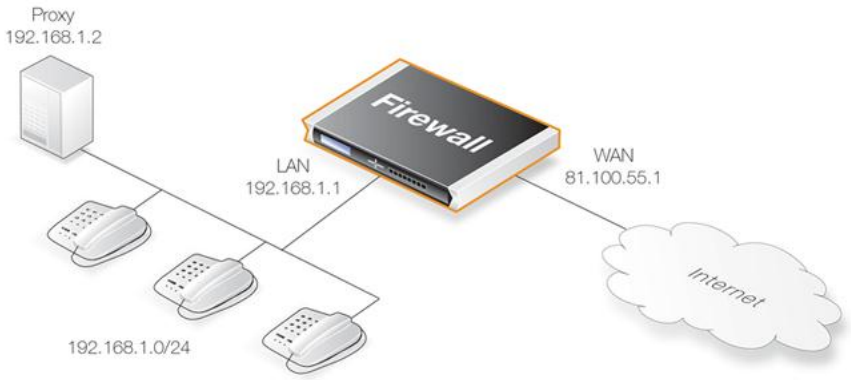
Protecting proxy and local clients - Proxy on the same network as clients

The SIP session is between a client on the local, protected side of the NetDefend Firewall and a client which is on the external, unprotected side. The SIP proxy is located on the local, protected side of the NetDefend Firewall and can handle registrations from both clients located on the same local network as well as clients on the external, unprotected side. Communication can take place across the public Internet or between clients on the local network.

Scenario 2

Protecting proxy and local clients - Proxy on the same network as clients

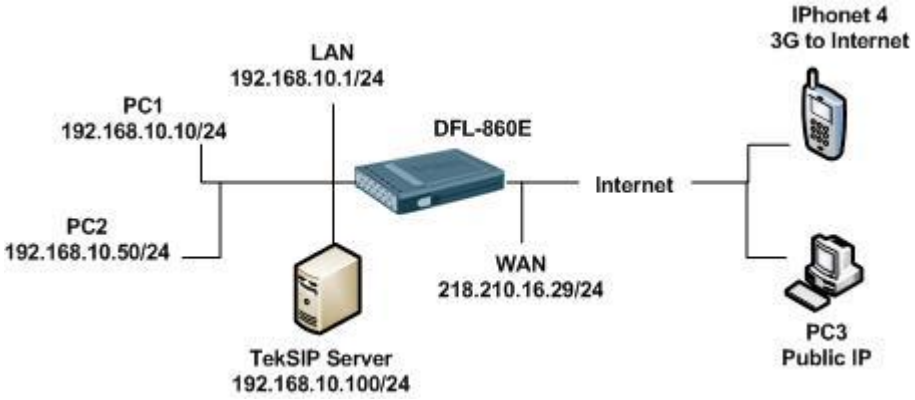
In this scenario the goal is to protect the local clients as well as the SIP proxy. The proxy is located on the same, local network as the clients, with SIP signalling and media data flowing across two interfaces. This scenario is illustrated below.



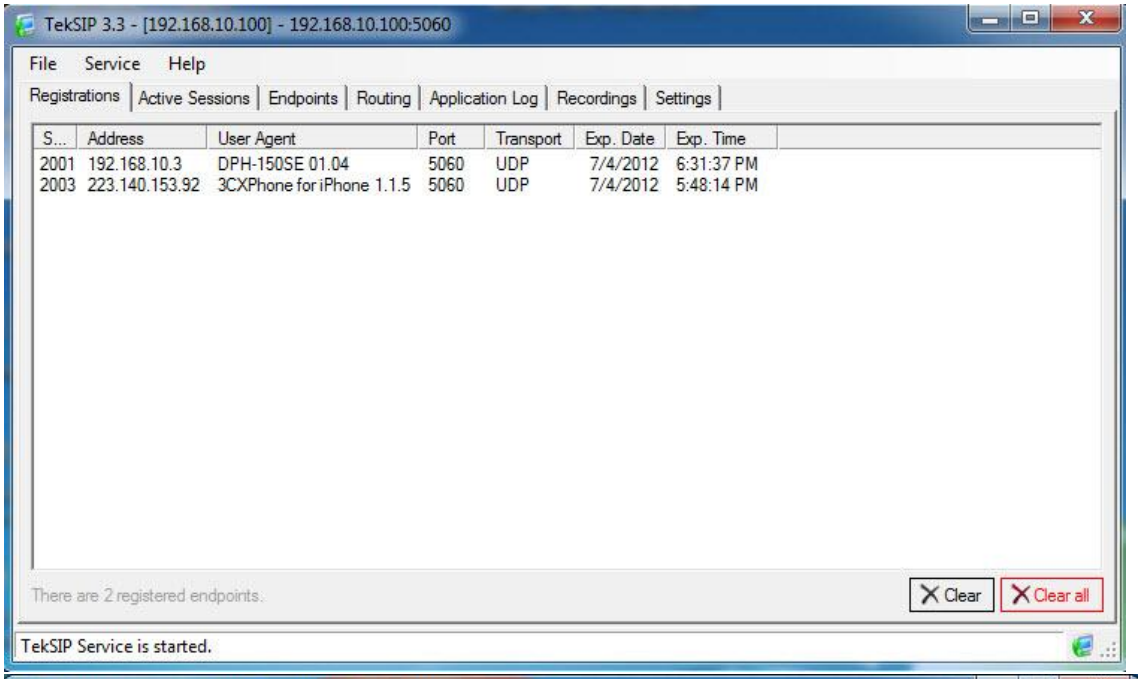
This scenario can be implemented in two ways:

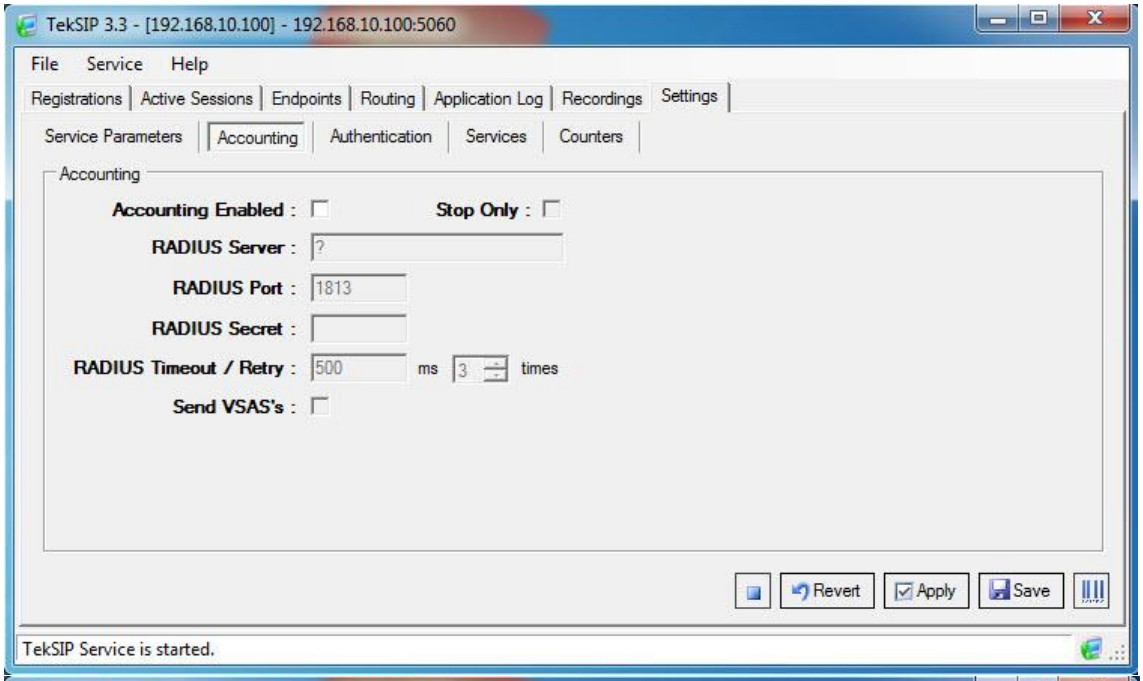
- Using NAT to hide the network topology.
- Without NAT so the network topology is exposed.

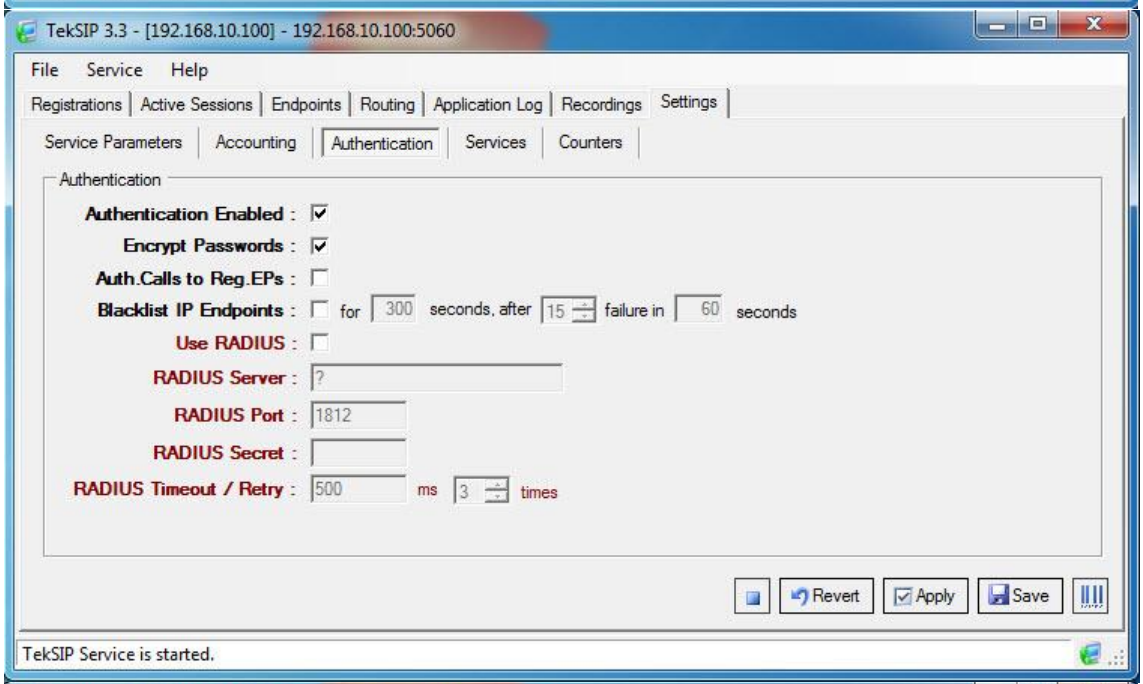
[Topology]

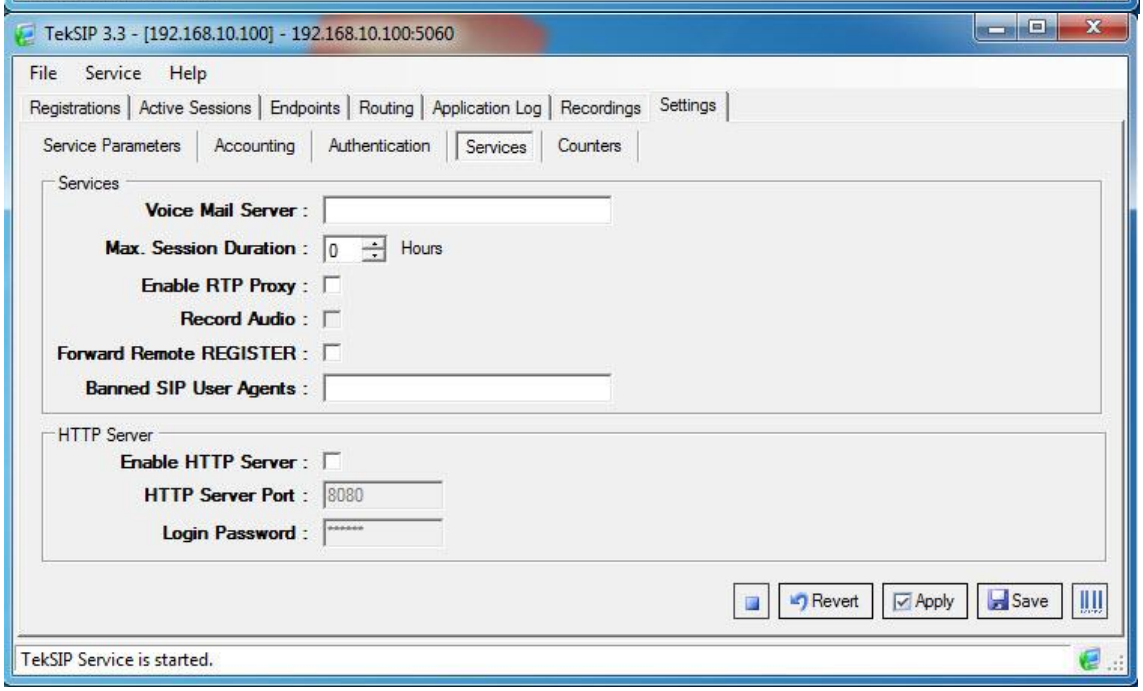


[TekSIP Server Setup] The TekSIP server is the default setup.




TekSIP 3.3 - [192.168.10.100] - 192.168.10.100:5060
File Service Help
Registrations Active Sessions Endpoints Routing Application Log Recordings Settings
Service Parameters Accounting Authentication Services Counters
Accounting
Accounting Enabled :
Stop Only :
RADIUS Server : ?
RADIUS Port : 1813
RADIUS Secret :
RADIUS Timeout / Retry : 500 ms 3 times
Send VSAS's :
Revert Apply Save
TekSIP Service is started.


TekSIP 3.3 - [192.168.10.100] - 192.168.10.100:5060
File Service Help
Registrations Active Sessions Endpoints Routing Application Log Recordings Settings
Service Parameters Accounting Authentication Services Counters
Authentication
Authentication Enabled :
Encrypt Passwords :
Auth.Calls to Reg.EPs :
Blacklist IP Endpoints : for 300 seconds, after 15 failure in 60 seconds
Use RADIUS :
RADIUS Server : ?
RADIUS Port : 1812
RADIUS Secret :
RADIUS Timeout / Retry : 500 ms 3 times
Revert Apply Save
TekSIP Service is started.

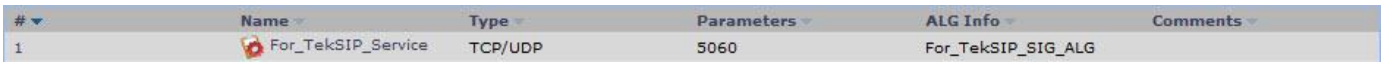

TekSIP 3.3 - [192.168.10.100] - 192.168.10.100:5060
File Service Help
Registrations Active Sessions Endpoints Routing Application Log Recordings Settings
Service Parameters Accounting Authentication Services Counters
Services
Voice Mail Server :
Max. Session Duration : 0 Hours
Enable RTP Proxy :
Record Audio :
Forward Remote REGISTER :
Banned SIP User Agents :
HTTP Server
Enable HTTP Server :
HTTP Server Port : 8080
Login Password :
Revert Apply Save
TekSIP Service is started.

[DFL-860 Setup]

1. Objects > ALG with AV/WCF – Default setup.

#	Name	Type	Parameters	Comments
1	For_TekSIP_SIG_ALG	SIP ALG		

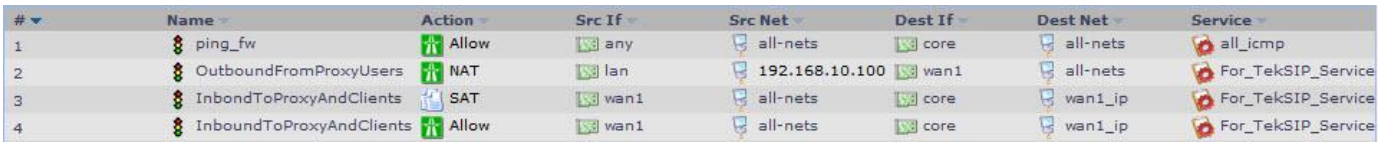
2. Objects > Services



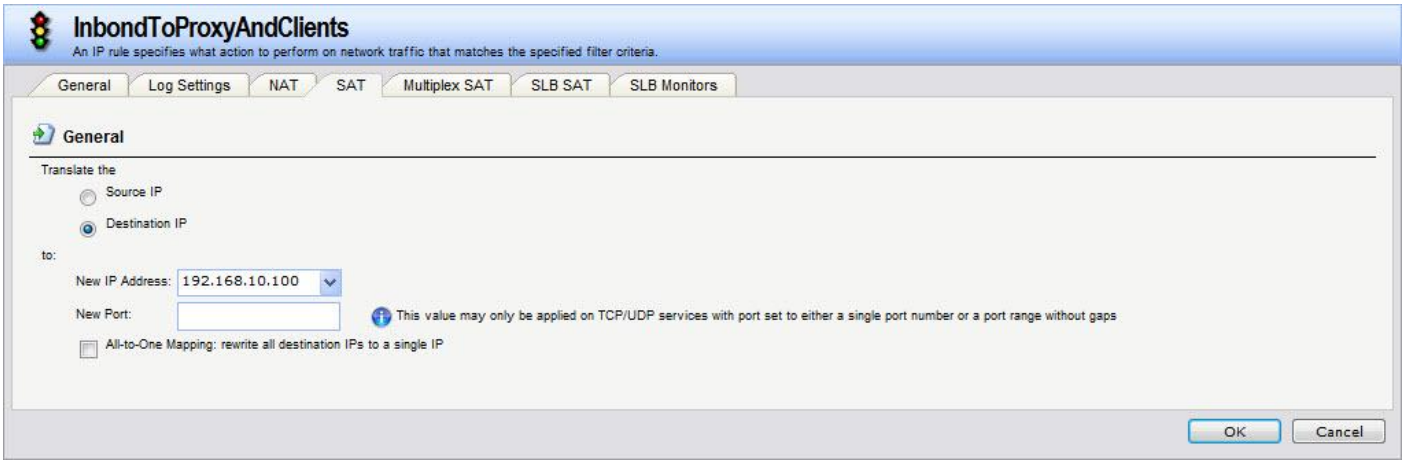
#	Name	Type	Parameters	ALG Info	Comments
1	For_TekSIP_Service	TCP/UDP	5060	For_TekSIP_SIG_ALG	

3. Rules > IP Rules

#	Name	Action	Source interface	Source network	Destination interface	Destination network	Service
1	allow_standard	NAT	lan	lannet	wan1	all-nets	all_services



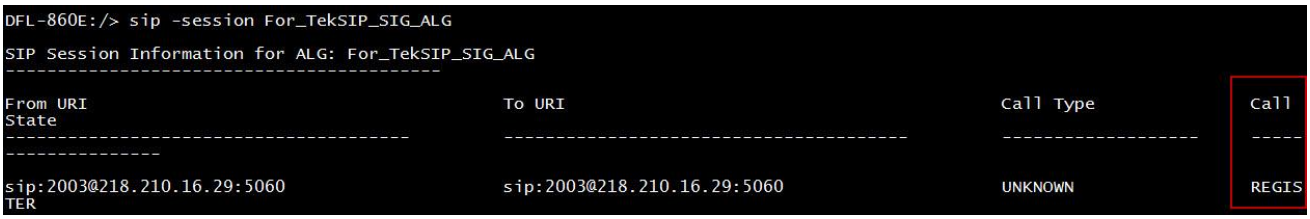
#	Name	Action	Src If	Src Net	Dest If	Dest Net	Service
1	ping_fw	Allow	any	all-nets	core	all-nets	all_icmp
2	OutboundFromProxyUsers	NAT	lan	192.168.10.100	wan1	all-nets	For_TekSIP_Service
3	InbondToProxyAndClients	SAT	wan1	all-nets	core	wan1_ip	For_TekSIP_Service
4	InboundToProxyAndClients	Allow	wan1	all-nets	core	wan1_ip	For_TekSIP_Service



[Console command]

We can use this command to confirm three of different type on the session call.

1. When SIP account registered



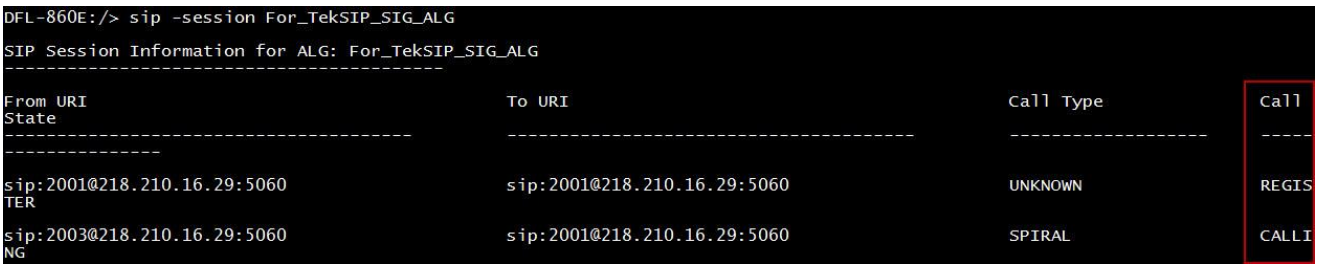
```
DFL-860E:/> sip -session For_TekSIP_SIG_ALG

SIP Session Information for ALG: For_TekSIP_SIG_ALG
-----------------------------------------

From URI                                 To URI                                   Call Type          Call
State
---------------------------------------- ---------------------------------------- ------------------ -----
---------------

sip:2003@218.210.16.29:5060              sip:2003@218.210.16.29:5060              UNKNOWN            REGIS
TER
```

2. When session calling.



```
DFL-860E:/> sip -session For_TekSIP_SIG_ALG

SIP Session Information for ALG: For_TekSIP_SIG_ALG
-----------------------------------------

From URI                                 To URI                                   Call Type          Call
State
---------------------------------------- ---------------------------------------- ------------------ -----
---------------

sip:2001@218.210.16.29:5060              sip:2001@218.210.16.29:5060              UNKNOWN            REGIS
TER

sip:2003@218.210.16.29:5060              sip:2001@218.210.16.29:5060              SPIRAL             CALLI
NG
```

3. When SIP account communicate.

```
DFL-860E:/> sip -session For_TekSIP_SIG_ALG

SIP Session Information for ALG: For_TekSIP_SIG_ALG
-----------------------------------------

From URI                                 To URI                                   Call Type          Call
State
---------------------------------------- ---------------------------------------- ------------------ -----
--------------

sip:2001@218.210.16.29:5060              sip:2001@218.210.16.29:5060              UNKNOWN            REGIS
TER

sip:2003@218.210.16.29:5060              sip:2001@218.210.16.29:5060              SPIRAL             CONFI
RMED
```

4. When session disconnection.

```
DFL-860E:/> sip -session For_TekSIP_SIG_ALG

SIP Session Information for ALG: For_TekSIP_SIG_ALG
-----------------------------------------

From URI                                 To URI                                   Call Type          Call
State
---------------------------------------- ---------------------------------------- ------------------ -----
--------------

sip:2002@218.210.16.29:5060              sip:2002@218.210.16.29:5060              UNKNOWN            REGIS
TER

sip:2002@218.210.16.29:5060              sip:2003@218.210.16.29:5060              SPIRAL             TERMI
NATED
```

We can use this command to confirm the already registration account and account source IP.

```
DFL-860E:/> sip -registration show For_TekSIP_SIG_ALG


          SIPALG REGISTRATION TABLE for ALG: For_TekSIP_SIG_ALG
          ****************************************************
            SNo           : 001
            AOR URI       : sip:2003@192.168.10.100:5060
            Dependent URI: sip:2003@223.140.153.92:5060
            Contact URI   : sip:2003@223.140.153.92:5065
            Binding URIs  : sip:2003@223.140.153.92:5060
            Life Time     : 0720s
            ------------------------------------------------------
            SNo           : 002
            AOR URI       : sip:2002@192.168.10.100:5060
            Dependent URI: sip:2002@218.210.16.27:5060
            Contact URI   : sip:2002@218.210.16.27:5060
            Binding URIs  : sip:2002@218.210.16.27:5060
            Life Time     : 3600s
            ------------------------------------------------------
```

In the scenario 2 only outside user information will be show in this command the inside LAN user will not show in. The LAN net user **must** use SIP server **private IP** to register. That's why this command will not show the LAN net user register information in the console because only registration on the **SIP Public IP** will be record.

[Test Result]

1. PC1/PC2/PC3/IPhone4 register at the same time.
2. The PC1/PC2/PC3 can call to IPhone4 and communicate is work fine and the IPhone4 can call back too.
3. The PC1 call to PC2 and communicate is work fine.
4. Outside in and inside out are works fine.

END