OpenScape 4000

How to Configure SIP Trunk for enviaTEL Germany

Table of Contents

Table of History

Date	Version	Changes
17.11.2021	1.0	Initial Creation

Information

The enviaTEL SIP-Trunk will be released for the first time with OpenScape 4000 V8R2 / V10R0.

OS4K version: V10 R0.28
Certified LW version: A9.035
Certified SBC version: V10 R1.04.02

Release of Profile: A9.109

Certification

Tested Scenarios:

Provider <–> OpenScape 4000
Provider <–> OpenScape SBC <–> OpenScape 4000

Provider Topology: Registered Trunk

Trunk Configuration Data provided by envia-TEL

Trunk Name: enviaTEL enVoice IP-range (bis 2021)

Used platform:
Cirpack MultiNodeB v4.2j17
Cirpack Access-SBC v4.3

Trunk connection: Registered Trunk

Transport Protocol: UDP

Signaling IP: 193.98.115.6 (ngn-pbx.enviatel.net); **Signaling Port**: 5060

Media IP: 193.98.115.240/28; **Media Ports**: 30000 – 38192

Supported Connectivity: SBC with public IP, SBC with private IP behind NAT (static public internet IP is required)

Documentation: Technische Richtlinie IP-Anlagenanschluss

The trunk data will be provided via email similar like this:

Details für die Einrichtung des Telefoniedienstes (SIP)[2]:

Benutzername:	0342[redacted]
Passwort:	[redacted]
Registrar:	ngn-pbx.enviatel.net
Ortskennzahl:	034298

Note:
EnviaTEL planes to release a new platform beginning of 2022, which requires re-certification

OpenScape 4000 Configuration

See Service Documentation OpenScape 4000 – Document: IP Solutions for details.

AMOs (Certification Example)

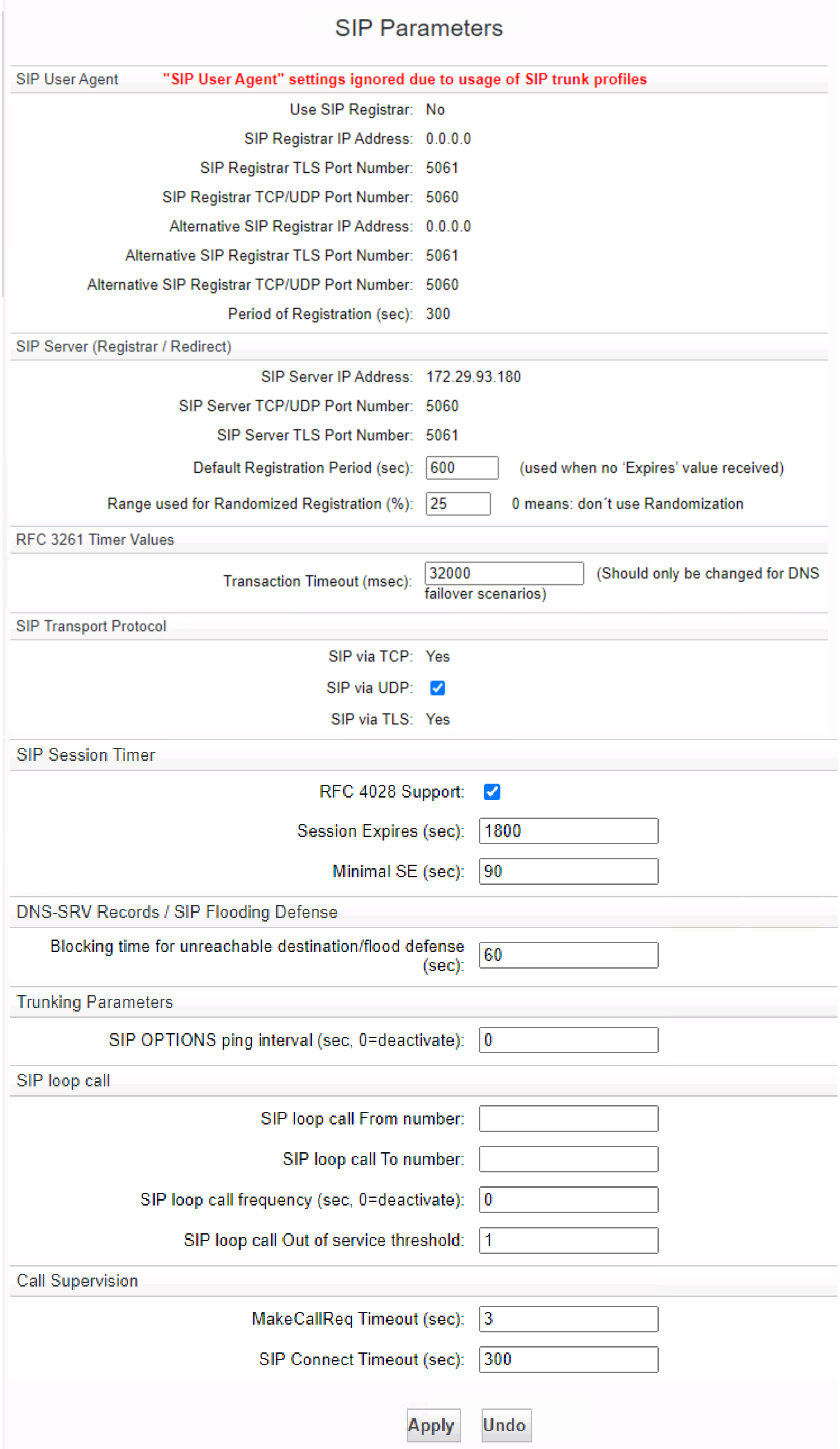
Note: Certification specific example – for general description see Service-Documentation.

M2 1 EINR-BUEND:211,"SIP AMT",30,0,*,1,ON,0,0,NEUTRAL;
M2 1 EINRICHTEN-COP:201,IMEX,FBKW,FBKW;
M2 1 AENDERN-COP:201,COPZU,,,,UNAB,"SIP AMT üBER SBC";
M2 1 EINRICHTEN-COT:210,MVLT&UELM&SAAO&BLOC&LOKN&OLCR&TSCS&VKNN&NOFT&ANZR&SUPN&NOCI&NOCT&RMVN&KTON;
M2 1 EINR-COSSU:,300,,,,,,,,;
M2 1 AEND-COSSU:COS,300,FBKW&QVKW&GESP&GEZ&AULEXT&MSN;
M2 1 AEND-COSSU:COS,300,AULERU;
M2 1 AEND-COSSU:COS,300,,FBKW&QVKW&GRUBE&MSN&MULTRA;
M2 1 AEND-COSSU:COS,300,,,FBKW&QVKW&GRUBE&MSN&MULTRA;
M2 1 AENDERN-COT:210,COTZU,,UNAB,"210 - SIP AMT TEST";
M2 2 EINR-TDCSU:NEU,1-90-001-0,210,201,1,0,300,9,9,"
",0,ECMAV2,8,,KEINE,,,,GDTR,N,AMT,KEINE,N,0,,00,0,,,,10,VIELE,1-1-211,2,1,1,LEER,210,10,N,,,,,,16,8,1,10,2,EC&G711&G729AOPT,,211,AB,J,TRADITIO,0,60,60,HG3550CO,1&&30,N,1,,0,0,0,0,0,N,1-1-130,KEINE;
M2 1 EINR-RICHT:LRTGNEU,2100,ALLE,"IP NOTRUF   ",211,1-1-210,NEIN,NEIN,FIX,,,PP300,,,,,JA,JA,,1-1-211,NEUTRAL,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN;
M2 1 EINR-RICHT:LRTGNEU,2101,ALLE,"IP ORT   ",211&&213,1-1-211,NEIN,,FIX,,,PP300,,,,,JA,NEIN,,1-1-211,NEUTRAL,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN;
M2 1 EINR-RICHT:LRTGNEU,2102,ALLE,"IP NATIONAL   ",211&&213,1-1-211,NEIN,,FIX,,,PP300,,,,,JA,NEIN,,1-1-211,NEUTRAL,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN;
M2 1 EINR-RICHT:LRTGNEU,2103,ALLE,"IP INTERNAT   ",211&&213,1-1-213,NEIN,,FIX,,,PP300,,,,,JA,NEIN,,1-1-211,NEUTRAL,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN,NEIN;
M2 1 EINRICHTEN-LODR:2100,,,,ECHOFELD,3;
M2 1 EINRICHTEN-LODR:2100,,,,ECHOFELD,4;
M2 1 EINRICHTEN-LODR:2100,,,,NPI,ISDN,UNKNOWN;
M2 1 EINRICHTEN-LODR:2100,,,,ENDE;
M2 1 EINRICHTEN-LODR:2101,,,,ZIFFSEND,034298;
M2 1 EINRICHTEN-LODR:2101,,,,ECHOFELD,3;
M2 1 EINRICHTEN-LODR:2101,,,,ECHOFELD,4;
M2 1 EINRICHTEN-LODR:2101,,,,NPI,ISDN,UNKNOWN;
M2 1 EINRICHTEN-LODR:2101,,,,ENDE;
M2 1 EINRICHTEN-LODR:2102,,,,ZIFFSEND,0;
M2 1 EINRICHTEN-LODR:2102,,,,ECHOFELD,4;
M2 1 EINRICHTEN-LODR:2102,,,,ECHOFELD,5;
M2 1 EINRICHTEN-LODR:2102,,,,NPI,ISDN,UNKNOWN;
M2 1 EINRICHTEN-LODR:2102,,,,ENDE;
M2 1 EINRICHTEN-LODR:2103,,,,ZIFFSEND,00;
M2 1 EINRICHTEN-LODR:2103,,,,ECHOFELD,4;
M2 1 EINRICHTEN-LODR:2103,,,,ECHOFELD,5;
M2 1 EINRICHTEN-LODR:2103,,,,NPI,ISDN,UNKNOWN;

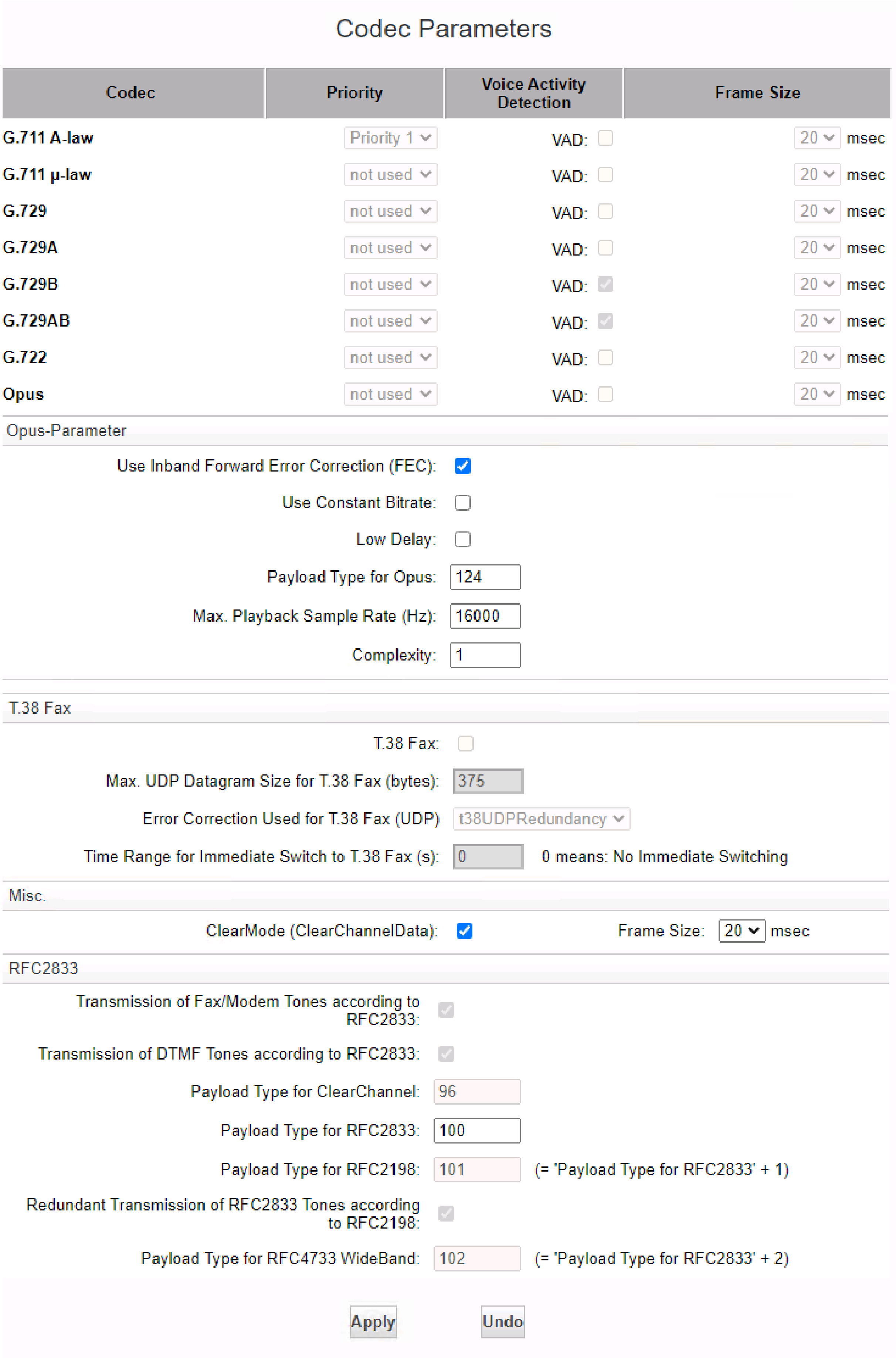
```
M2 1 EINRICHTEN-LODR:2103,,,,ENDE;
M2 1 EINRICHTEN-LDAT:2100,ALLE,1,,211,2100,1,,1,LEER,,,4,,,,,,,,,,,;
M2 1 EINRICHTEN-LDAT:2101,ALLE,1,,211,2101,1,,1,LEER,GEBAKT&PUBNUM,,4,,,,,,,,,,,;
M2 1 EINRICHTEN-LDAT:2102,ALLE,1,,211,2102,1,,1,LEER,GEBAKT&PUBNUM,,4,,,,,,,,,,,;
M2 1 EINRICHTEN-LDAT:2103,ALLE,1,,211,2103,1,,1,LEER,GEBAKT&PUBNUM,,4,,,,,,,,,,,;
M2 1 EINR-LPROF:"NOTRUF",1,2100,100;
M2 1 EINR-LPROF:"AMT ORT",1,2101,101;
M2 1 EINR-LPROF:"AMT ISDN NATIONAL",1,2102,102;
M2 1 EINR-LPROF:"AMT ISDN INTERNAT",1,2103,103;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-0-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-1-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-2-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-3-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-4-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-5-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-6-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-7-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-8-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-00-9-Z,0&1,,103,,7,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-1-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-2-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-3-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-4-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-5-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-6-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-7-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-8-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-0-9-Z,0&1,,102,,4,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-1-10,0&1,,100,,1,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-1-12,0&1,,100,,1,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-1-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-2-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-3-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-4-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-5-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-6-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-7-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-8-Z,0&1,,101,,2,,,,NEIN;
M2 1 EINRICHTEN-LDPLN:LCRMUST,0,0-W-9-Z,0&1,,101,,2,,,,NEIN;
```

Gateway Configuration

SIP Parameter



Codec Parameter



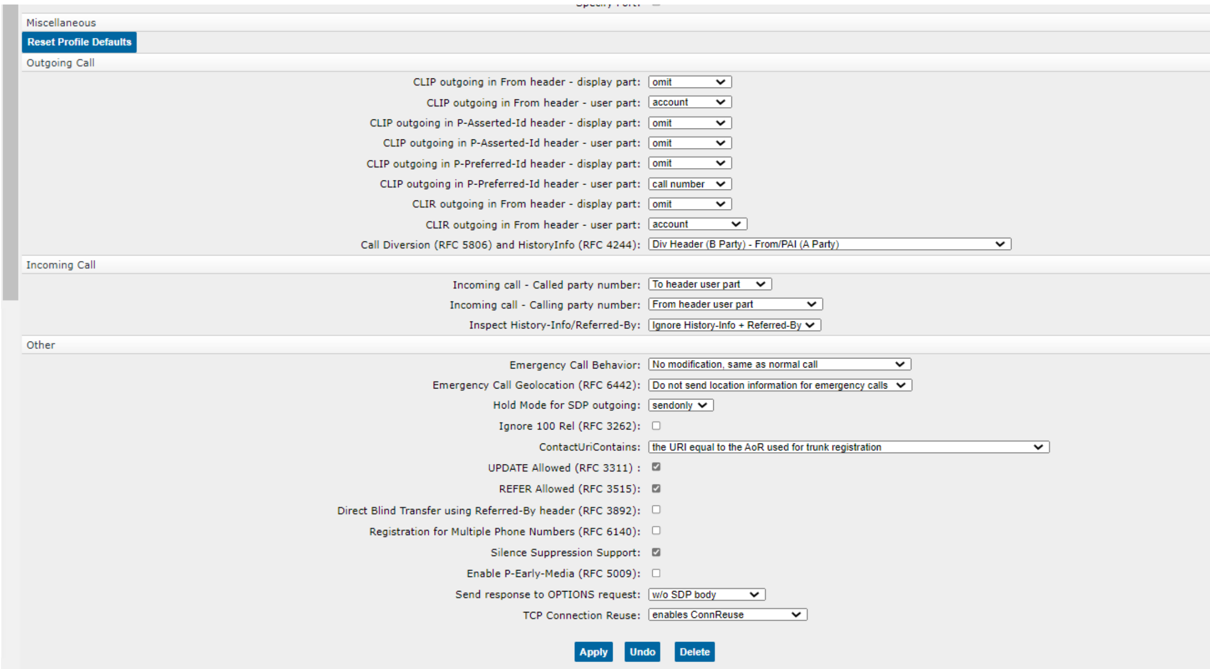
SIP trunking Profile – direct connectivity

Profile Name:	**envia TEL**
User Notes:	
Activate Trunk Profile:	☐
Account/Authentication Required:	☑
Remote Domain Name:	ngn-pbx.enviatel.net
IP Transport Protocol:	UDP (used for O/G call establishment)
Default PAI:	(for outgoing "Anonymous" and CLIP "default PAI" profiles)
Security	
Released Security Level:	No Security
Registrar	
Use Registrar:	☑
IP Address / Host name:	ngn-pbx.enviatel.net
Specify Port:	☐
Reregistration Interval (sec)	480
Proxy	
IP Address / Host name:	ngn-pbx.enviatel.net
Specify Port:	☐
Outbound Proxy	
Use Outbound Proxy:	☐
IP Address / Host name:	
Specify Port:	☐
Port:	0
Inbound Proxy	
Use Inbound Proxy:	☐
IP Address / Host name:	
Specify Port:	☐

SIP trunking Profile – connectivity via OS – SBC

Registrar	
Use Registrar:	☐
IP Address / Host name:	
Specify Port:	☐
Reregistration Interval (sec)	480
Proxy	
IP Address / Host name:	<SBC ip-address>
Specify Port:	☑
TCP/UDP Port:	<SBC core-port>
TLS Port:	0
Outbound Proxy	
Use Outbound Proxy:	☐
IP Address / Host name:	
Specify Port:	☐

SIP trunking profile – parameter (both deployments):

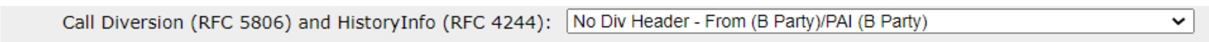


Account-Name

Account Name: Benutzername
Authorization Name: Benutzername
Password: Passwort

CLIPNoScreeing

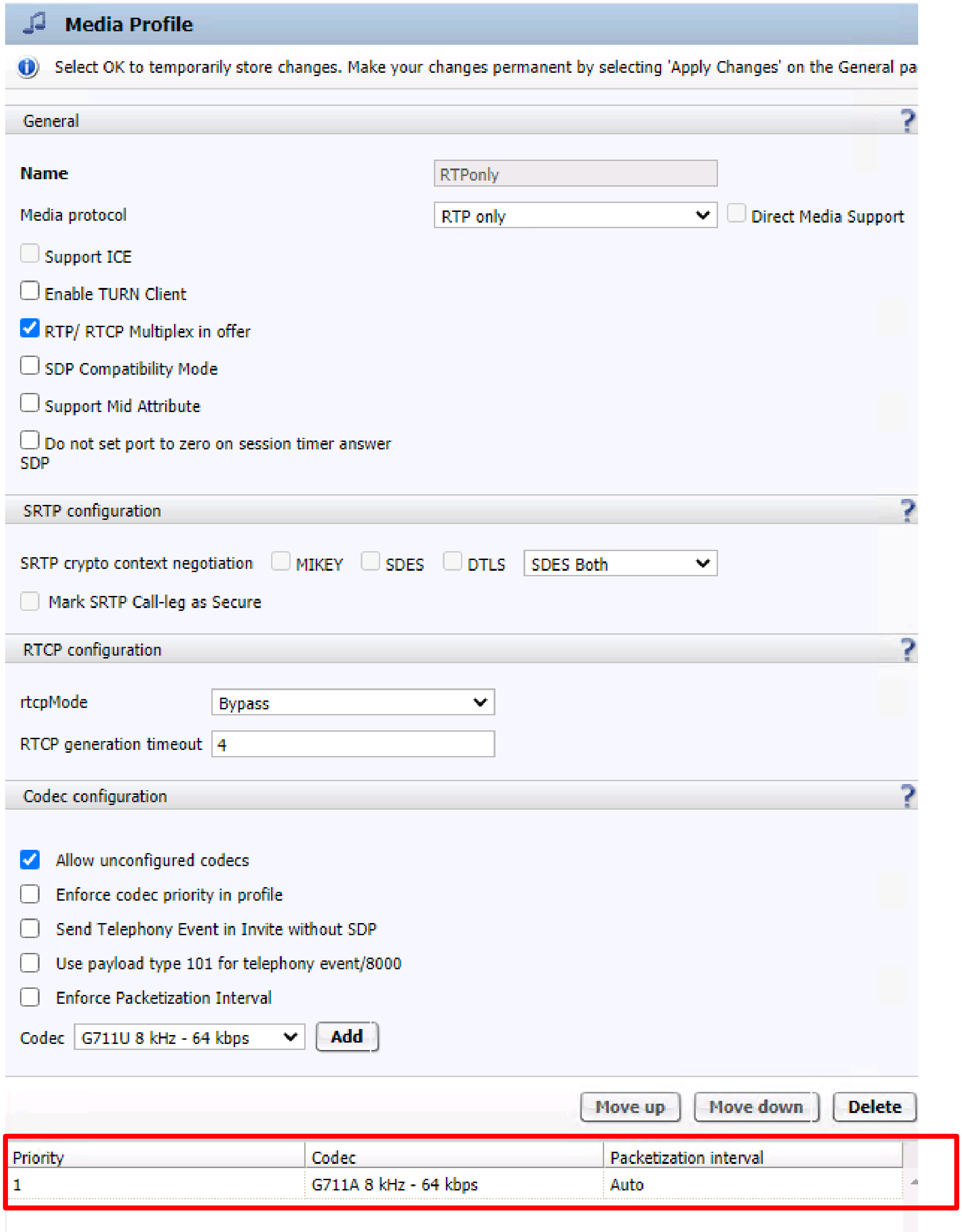
If the customer has not ordered the provider feature “CLIPNoScreening”, then the parameter “Call Diversion“ needs to be changed via WBM GUI to the following value:



OpenScape SBC Configuration

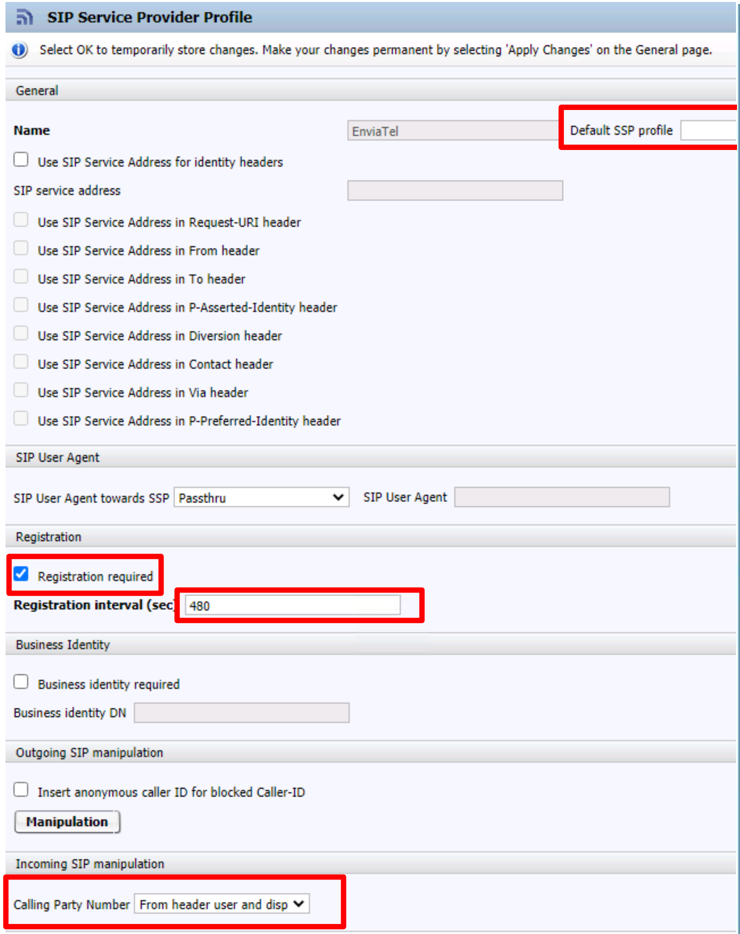
Media Profile

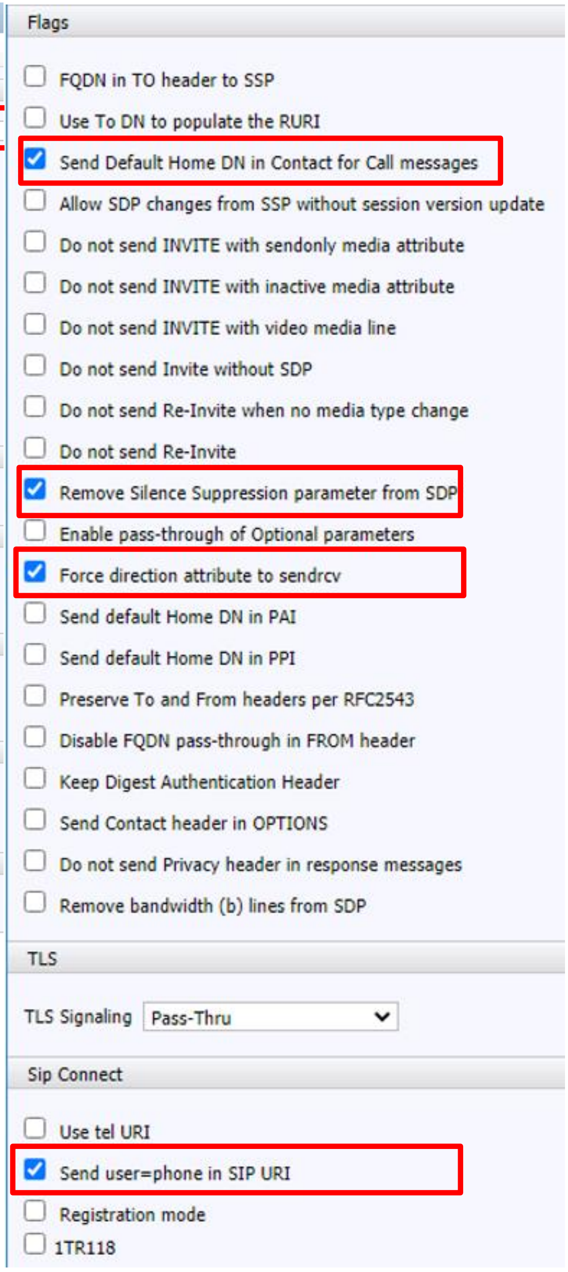
- **Media protocol**: RTP only
- **RTP/ RTCP Multiplex in offer**: enable
- **Codec List**: G.711A



SIP Service Provider Profile

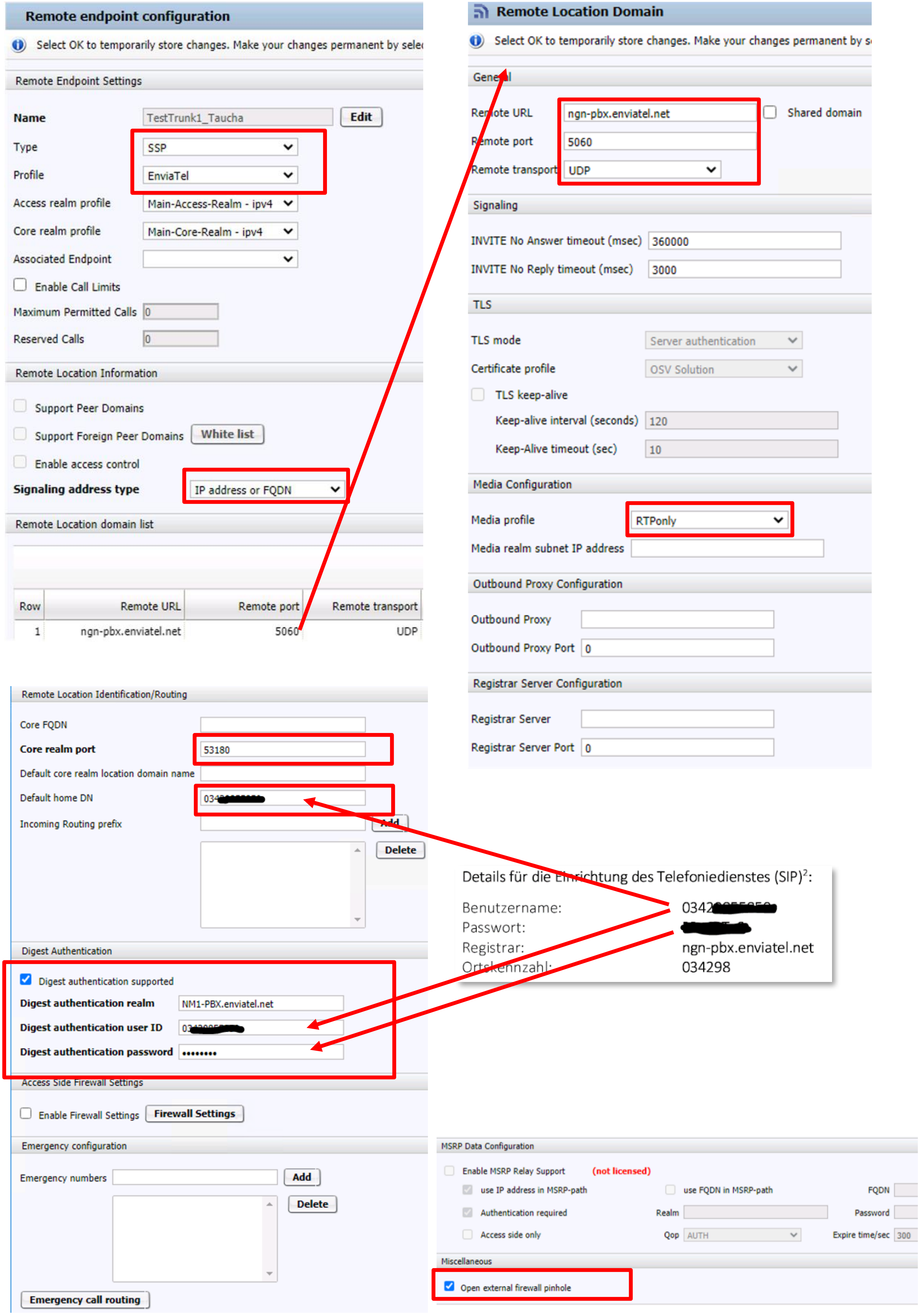
- **Default SSP profile:** empty
- **Registration required:** enable
- **Registration interval (sec)**: 480
- **Incoming SIP manipulation - Calling Party Number:** From header user and display name part
- **Flag - Send Default Home DN in Contact for Call messages:** enable
- **Flag – Remove Silence Suppresion parameter from SDP:** enable
- **Flag – Force direction attribute to sendrcv:** enable
- **Flag – Send user=phone in SIP URI:** enable





Remote Endpoint Configuration

Fill all red marked fields.



Known limitations and restrictions:

- Provider does not analyze the Diversion header. That means the forwarding-to party gets only the number of the caller and not the forwarders number additionally.
- In rarely cases the provider presents a connected number in PAI for outgoing calls. This number is in national format and is shown on the OS4K phone. This number missed the PNAC (0). OS4K is not able to manipulate this number and add the PNAC in front.
  Therefore the Connected Party update must be disabled with the COT Parameter ANZR
- Provider does not support Fax via T.38
- Fax is transparent transmitted via G.711. Fax was not tested in the certification.

Appendix

Supported Numbering Formats

Incoming: Called Party (TO): National prefixed + national number (0…)

Incoming: Calling Party (FROM): International prefixed number (0049…)for international calls
National prefixed number (0…)for national and local calls
Incoming: Account (REQUEST): Trunk Account number (in national format)

Outgoing: Called Party (REQUEST, TO): International prefixed number (0049…)for international calls
National prefixed number (0…)for national and local calls

Outgoing: Calling Party (PPI): National prefixed number (0…)
Outgoing: Account (FROM, Contact): Trunk Account number (in national format)

Outgoing Emergency Call - Called Party (REQUEST, TO): <emergency number>

Outgoing Emergency Call - Calling Party (PPI): National prefixed number (0…)
Outgoing Emergency Call - Account (FROM, Contact): Trunk Account number (in national format)

Outgoing OPTIONs: Provider doesn’t support receiving OPTIONs

Incoming OPTIONs: Provider doesn’t monitor the trunk via OPTION

Call examples:

International Incoming Call:

```
User Datagram Protocol, Src Port: 5060, Dst Port: 65060
Session Initiation Protocol (INVITE)
    Request-Line: INVITE sip:03429855850@172.18.216.68:65060;transport=udp SIP/2.0
    Message Header
        Call-ID: 00938-LO-89025488-58821fb04@NM1-PBX.enviatel.net
        [Generated Call-ID: 00938-LO-89025488-58821fb04@NM1-PBX.enviatel.net]
        Contact: <sip:193.98.115.6:5060>
        Content-Type: application/sdp
        CSeq: 127295897 INVITE
        From: "003232070880" <sip:003232070880@NM1-PBX.enviatel.net;user=phone>;tag=00938-NB-89025489-5a0277a75
        Max-Forwards: 58
        Record-Route: <sip:193.98.115.6:5060;lr>;session=1172
        To: <sip:034298558510@ngn-pbx.enviatel.net;user=phone>
        Via: SIP/2.0/UDP 193.98.115.6:5060;branch=z9hG4bK-BAOC-1b354370-7936a4e5
        Allow: ACK,BYE,CANCEL,INFO,INVITE,REFER,REGISTER,UPDATE
        User-Agent: TAUTAS/01 (NBE)
        Content-Length: 246
    Message Body
        Session Description Protocol
            Session Description Protocol Version (v): 0
            Owner/Creator, Session Id (o): anonymous 163540317600 163540317600 IN IP4 193.98.115.6
            Session Name (s): SIP Call
            Connection Information (c): IN IP4 193.98.115.251
            Time Description, active time (t): 0 0
            Media Description, name and address (m): audio 36950 RTP/AVP 8 101
            Bandwidth Information (b): AS:82
            Media Attribute (a): rtpmap:8 PCMA/8000/1
            Media Attribute (a): rtpmap:101 telephone-event/8000
            Media Attribute (a): fmtp:101 0-15
            Media Attribute (a): ptime:20
            Media Attribute (a): sendrecv
            [Generated Call-ID: 00938-LO-89025488-58821fb04@NM1-PBX.enviatel.net]
```

National Incoming Call:

```
User Datagram Protocol, Src Port: 5060, Dst Port: 65060
Session Initiation Protocol (INVITE)
    Request-Line: INVITE sip:03429855850@172.18.216.68:65060;transport=udp SIP/2.0
    Message Header
        Call-ID: 30991-SW-868442fc-68d77ab12@NM1-PBX.enviatel.net
        [Generated Call-ID: 30991-SW-868442fc-68d77ab12@NM1-PBX.enviatel.net]
        Contact: <sip:193.98.115.6:5060>
        Content-Type: application/sdp
        CSeq: 85990614 INVITE
        From: "089700720104" <sip:089700720104@NM1-PBX.enviatel.net;user=phone>;tag=30991-EZ-868442fd-1b0dd2873
        Max-Forwards: 56
        Record-Route: <sip:193.98.115.6:5060;lr>;session=8037
        To: <sip:034298558510@ngn-pbx.enviatel.net;user=phone>
        Via: SIP/2.0/UDP 193.98.115.6:5060;branch=z9hG4bK-LBFN-16d5916b-02af52ea
        Allow: ACK,BYE,CANCEL,INFO,INVITE,REFER,REGISTER,UPDATE
        User-Agent: TAUTAS/01 (NBE)
        Content-Length: 246
    Message Body
```

National Outgoing Call:

```
> User Datagram Protocol, Src Port: 65060, Dst Port: 5060
v Session Initiation Protocol (INVITE)
  > Request-Line: INVITE sip:089700720104@ngn-pbx.enviatel.net:5060;transport=udp SIP/2.0
  v Message Header
    > Via: SIP/2.0/UDP 172.18.216.68:65060;branch=z9hG4bK00b8.b0301aba8c882e35f89d875f055445ef.0;i=16110
      Max-Forwards: 69
    > Contact: <sip:03429855850@172.18.216.68:65060;transport=udp>
    > To: <sip:089700720104@ngn-pbx.enviatel.net:5060;transport=udp>
    > From: <sip:03429855850@ngn-pbx.enviatel.net:65060;transport=udp>;tag=f718a1fe62
      Call-ID: b3837eb64a91d679
      [Generated Call-ID: b3837eb64a91d679]
    > CSeq: 319523306 INVITE
      Session-Expires: 1800
      Min-SE: 90
      Allow: INVITE, ACK, OPTIONS, BYE, CANCEL, REGISTER, REFER, INFO, PRACK, UPDATE
      Content-Type: application/sdp
    >  [truncated]Proxy-Authorization: Digest username="03429855850",realm="NM1-PBX.enviatel.net",nonce="00853
      Supported: 100rel, timer
      User-Agent: OpenScape 4000 -  SoftGate
    > P-Preferred-Identity: <sip:034298558510@172.18.216.68>
      Content-Length: 299
    > X-Siemens-OSS: OpenScape SBC V10 R1.04.02-1
  v Message Body
    v Session Description Protocol
        Session Description Protocol Version (v): 0
      > Owner/Creator, Session Id (o): MxSIP 131114 1741549248 IN IP4 172.29.93.180
        Session Name (s): SIP Call
      > Connection Information (c): IN IP4 172.18.216.68
      > Time Description, active time (t): 0 0
      > Media Description, name and address (m): audio 38940 RTP/AVP 8 100 101 0
      > Media Attribute (a): rtpmap:8 PCMA/8000
      > Media Attribute (a): rtpmap:100 telephone-event/8000
      > Media Attribute (a): fmtp:100 0-15,32-36,49
      > Media Attribute (a): rtpmap:101 red/8000
      > Media Attribute (a): fmtp:101 100
      > Media Attribute (a): rtpmap:0 PCMU/8000
        Media Attribute (a): sendrecv
        Media Attribute (a): rtcp-mux
        [Generated Call-ID: b3837eb64a91d679]
```

Emergency Call:

```
> User Datagram Protocol, Src Port: 65060, Dst Port: 5060
v Session Initiation Protocol (INVITE)
  > Request-Line: INVITE sip:112@ngn-pbx.enviatel.net:5060;transport=udp SIP/2.0
  v Message Header
    > Via: SIP/2.0/UDP 172.18.216.68:65060;branch=z9hG4bK696b.12e7225cc762c0b5df59cd9255011ed3.0;i=8443
      Max-Forwards: 69
    > Contact: <sip:03429855850@172.18.216.68:65060;transport=udp>
    > To: <sip:112@ngn-pbx.enviatel.net:5060;transport=udp>
    > From: <sip:034298558510@ngn-pbx.enviatel.net:65060;transport=udp>;tag=235e5c3ff1
      Call-ID: 34d97cfa9a61b080
      [Generated Call-ID: 34d97cfa9a61b080]
    > CSeq: 708282156 INVITE
      Session-Expires: 1800
      Min-SE: 90
      Allow: INVITE, ACK, OPTIONS, BYE, CANCEL, REGISTER, REFER, INFO, PRACK, UPDATE
      Content-Type: multipart/mixed;boundary=level-0
    >  [truncated]Proxy-Authorization: Digest username="03429855850",realm="NM1-PBX.enviatel.net",nonce="891050670ad4667c74f1
      Supported: 100rel, timer
      User-Agent: OpenScape 4000 -  SoftGate
    > P-Preferred-Identity: <sip:034298558510@172.18.216.68>
      User-to-User: 000000303040f601f2ff4b41524c2d4c4945424b4e45434854205354522e20;encoding=hex;purpose=isdn-network;content=
      Geolocation: <cid:10@172.29.93.180>
      Geolocation-Routing: no
      Content-Length: 1076
    > X-Siemens-OSS: OpenScape SBC V10 R1.04.02-1
  > Message Body
```

Registration:

SBC -> Provider (Register)

```
> User Datagram Protocol, Src Port: 65060, Dst Port: 5060
v Session Initiation Protocol (REGISTER)
    > Request-Line: REGISTER sip:ngn-pbx.enviatel.net:5060;transport=udp SIP/2.0
    v Message Header
        > Via: SIP/2.0/UDP 172.18.216.68:65060;branch=z9hG4bK3ddf.906e9b466b67875a7374358f706285e0.0;i=3
          Expires: 480
          User-Agent: SIP alive check
          Call-ID: ff4251c4
          [Generated Call-ID: ff4251c4]
        > From: <sip:03429855853@ngn-pbx.enviatel.net>;tag=fe4f67e
        > CSeq: 1 REGISTER
          Max-Forwards: 70
        > To: <sip:03429855853@ngn-pbx.enviatel.net>
        > Contact: <sip:03429855853@172.18.216.68:65060;transport=udp>;expires=480
          Content-Length: 0
```

Provider -> SBC (401 Unauthorized)

```
> User Datagram Protocol, Src Port: 5060, Dst Port: 65060
v Session Initiation Protocol (401)
    > Status-Line: SIP/2.0 401 Unauthorized
    v Message Header
          Call-ID: ff4251c4
          [Generated Call-ID: ff4251c4]
        > CSeq: 1 REGISTER
        v From: <sip:03429855853@ngn-pbx.enviatel.net>;tag=fe4f67e
            > SIP from address: sip:03429855853@ngn-pbx.enviatel.net
              SIP from tag: fe4f67e
        v To: <sip:03429855853@ngn-pbx.enviatel.net>;tag=00-07812-867e55ae-1ba8aead0
            > SIP to address: sip:03429855853@ngn-pbx.enviatel.net
              SIP to tag: 00-07812-867e55ae-1ba8aead0
        v Via: SIP/2.0/UDP 172.18.216.68:65060;received=172.18.216.68;rport=65060;branc
              Transport: UDP
              Sent-by Address: 172.18.216.68
              Sent-by port: 65060
              Received: 172.18.216.68
              RPort: 65060
              Branch: z9hG4bK3ddf.906e9b466b67875a7374358f706285e0.0
              i=3
        v WWW-Authenticate: Digest realm="NM1-PBX.enviatel.net",nonce="867e536f23fd566c
              Authentication Scheme: Digest
              Realm: "NM1-PBX.enviatel.net"
              Nonce Value: "867e536f23fd566c41b4542336ea24d2"
              Opaque Value: "867dcea12c6d707"
              Stale Flag: false
              Algorithm: MD5
          Server: TAUTAS/01 (NBE)
          Content-Length: 0
```

SBC -> Provider (Register)

```
> User Datagram Protocol, Src Port: 65060, Dst Port: 5060
v Session Initiation Protocol (REGISTER)
  > Request-Line: REGISTER sip:ngn-pbx.enviatel.net:5060;transport=udp SIP/2.0
  v Message Header
    > Via: SIP/2.0/UDP 172.18.216.68:65060;branch=z9hG4bK054d.4f409225d9e426ca5cba16e69ea34bdb.0;i=3
      Expires: 480
      User-Agent: SIP alive check
      Call-ID: 126901b6
      [Generated Call-ID: 126901b6]
    > From: <sip:03429855850@ngn-pbx.enviatel.net>;tag=8772f002
    > CSeq: 2 REGISTER
      Max-Forwards: 70
    > To: <sip:03429855850@ngn-pbx.enviatel.net>
    > Contact: <sip:03429855850@172.18.216.68:65060;transport=udp>;expires=480
      Content-Length: 0
    v  [truncated]Authorization: Digest username="03429855850", realm="NM1-PBX.enviatel.net", nonce="8
        Authentication Scheme: Digest
        Username: "03429855850"
        Realm: "NM1-PBX.enviatel.net"
        Nonce Value: "867e536f23fd566c41b4542336ea24d2"
        Authentication URI: "sip:ngn-pbx.enviatel.net:5060;transport=udp"
        Digest Authentication Response: "793ebe7a11c7266cc9150924e5818de1"
        Algorithm: MD5
        Opaque Value: "867dcea12c6d707"
```

Provider -> SBC (OK)

```
> User Datagram Protocol, Src Port: 5060, Dst Port: 65060
v Session Initiation Protocol (200)
  > Status-Line: SIP/2.0 200 OK
  v Message Header
      Call-ID: ff4251c4
      [Generated Call-ID: ff4251c4]
    v Contact: <sip:03429855853@172.18.216.68:65060>;expires=480
      > Contact URI: sip:03429855853@172.18.216.68:65060
        Contact parameter: expires=480
    > CSeq: 2 REGISTER
    v From: <sip:03429855853@ngn-pbx.enviatel.net>;tag=3a0536f9
      > SIP from address: sip:03429855853@ngn-pbx.enviatel.net
        SIP from tag: 3a0536f9
    v To: <sip:03429855853@ngn-pbx.enviatel.net>;tag=00-07560-867e565e-0cb7b6dc1
      > SIP to address: sip:03429855853@ngn-pbx.enviatel.net
        SIP to tag: 00-07560-867e565e-0cb7b6dc1
    v Via: SIP/2.0/UDP 172.18.216.68:65060;received=172.18.216.68;rport=65060;bran
        Transport: UDP
        Sent-by Address: 172.18.216.68
        Sent-by port: 65060
        Received: 172.18.216.68
        RPort: 65060
        Branch: z9hG4bK0ddf.a2adeef57fb1058d2dafd4fd301f6be5.0
        i=3
      Server: TAUTAS/01 (NBE)
      Content-Length: 0
```