A MITEL
PRODUCT
GUIDE

# Unify OpenScape Voice

## OpenScape Voice with RedSky E911

OpenScape Voice

07/2024

Mitel

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# 1 Configuring OSV for Integration with RedSky

## 1.1 Introduction

RedSky Anywhere Service acts as a SIP Service Provider for emergency calls and distributes the E911 call to the Local PSAP. SIP connectivity is done via an SBC. This document describes how to install RedSky Anywhere in OpenScape solutions.

**NOTICE:**

Red Sky 6.4.5 (20150430-1732 rev 18941)is released with OSV V8 onwards.

**NOTICE:**

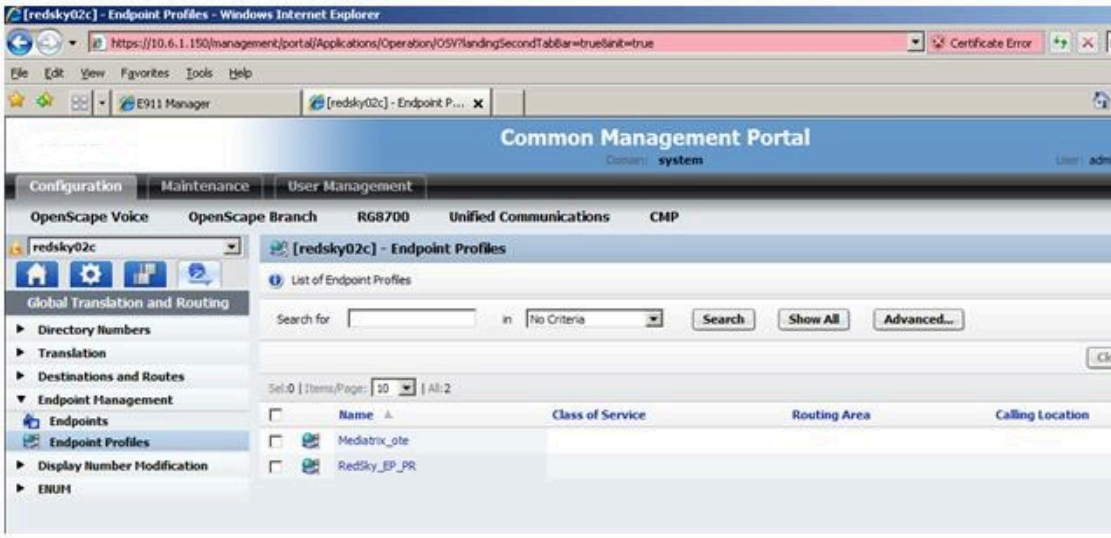
TLS cannot be used with Red Sky until further notice.

## 1.2 Endpoints for RedSky E911 Manager

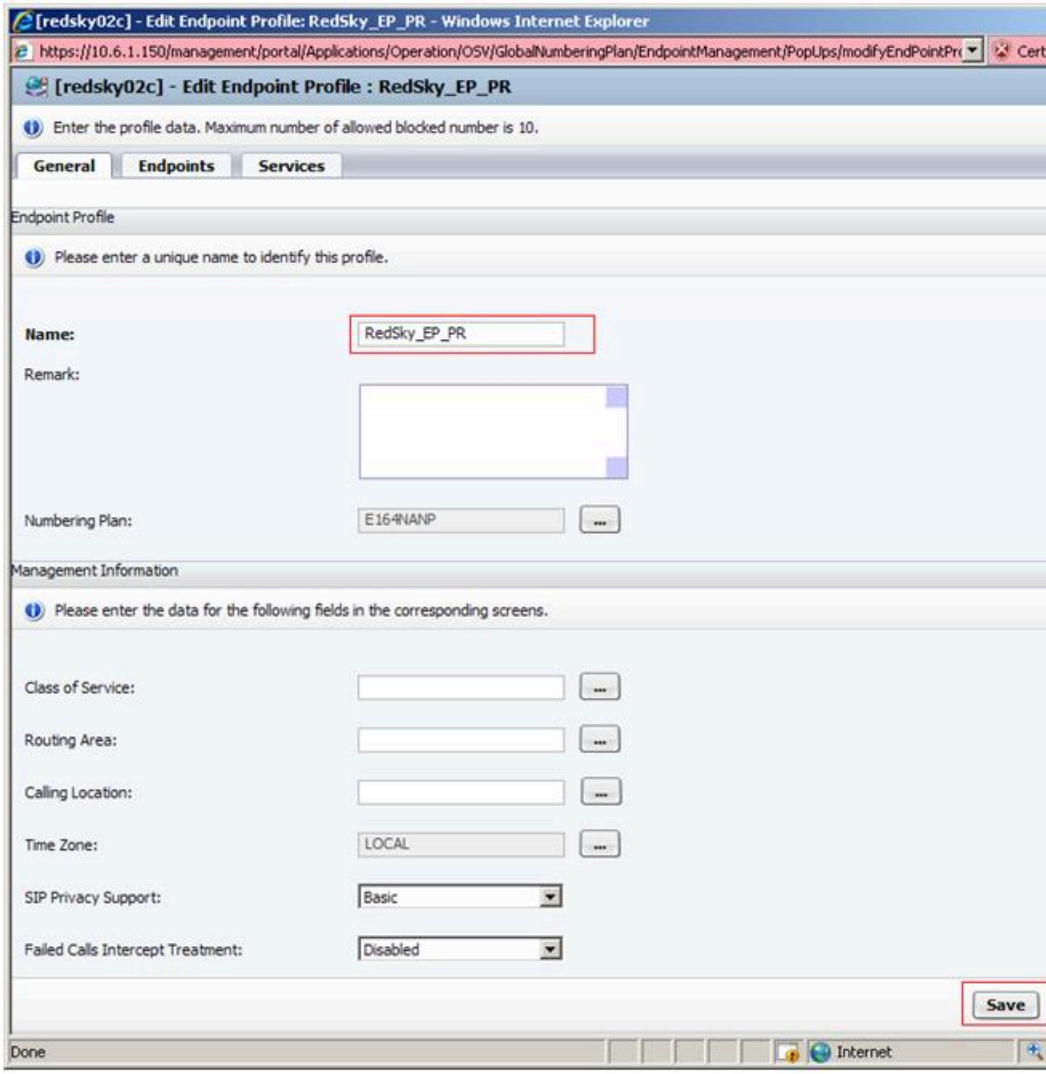
The RedSky E911 Manager server can be a cluster or a simplex. In case it's a cluster it behaves in active/standby mode. Both active and standby nodes need to be configured as SIP endpoints on OSV.

**Create Endpoint Profile for RedSky E911 Mgr**

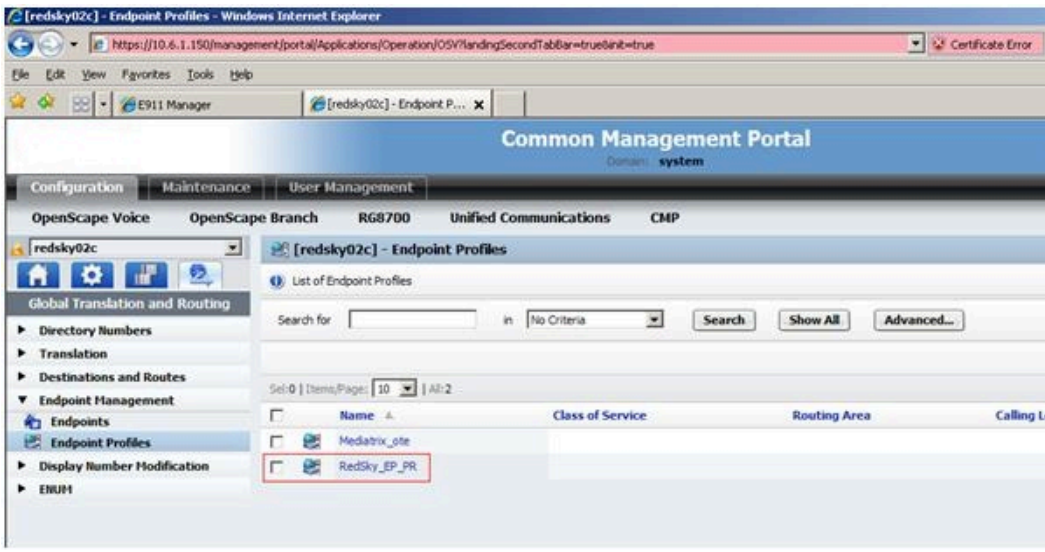
Go to **Configuration ->Openscape Voice->Global Translation and Routing->Endpoint Management->Endpoint Profiles** and press the **Add** button:




Give a name, and click **Save**.

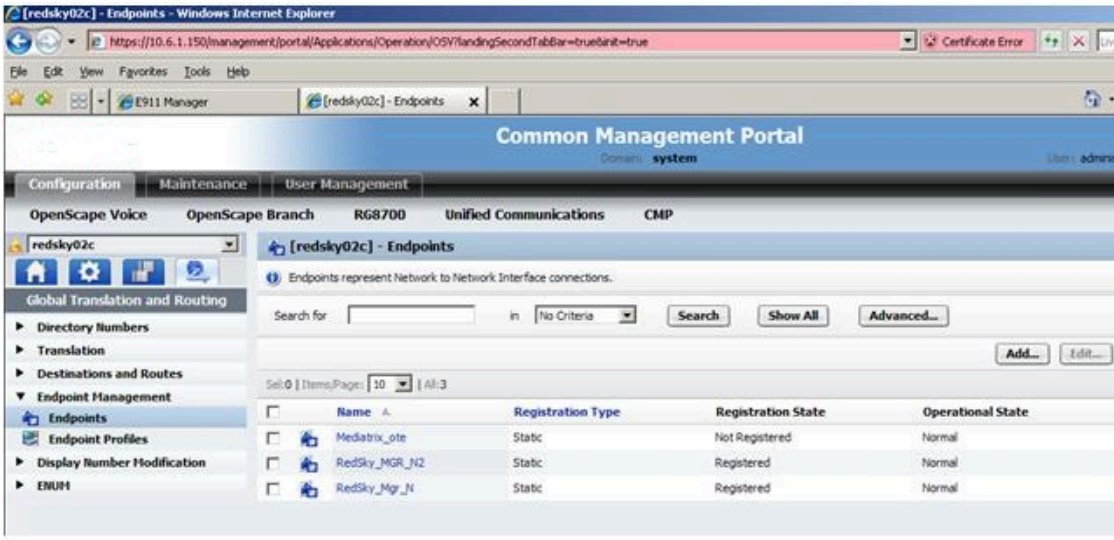



Verify that the endpoint profile has been created:

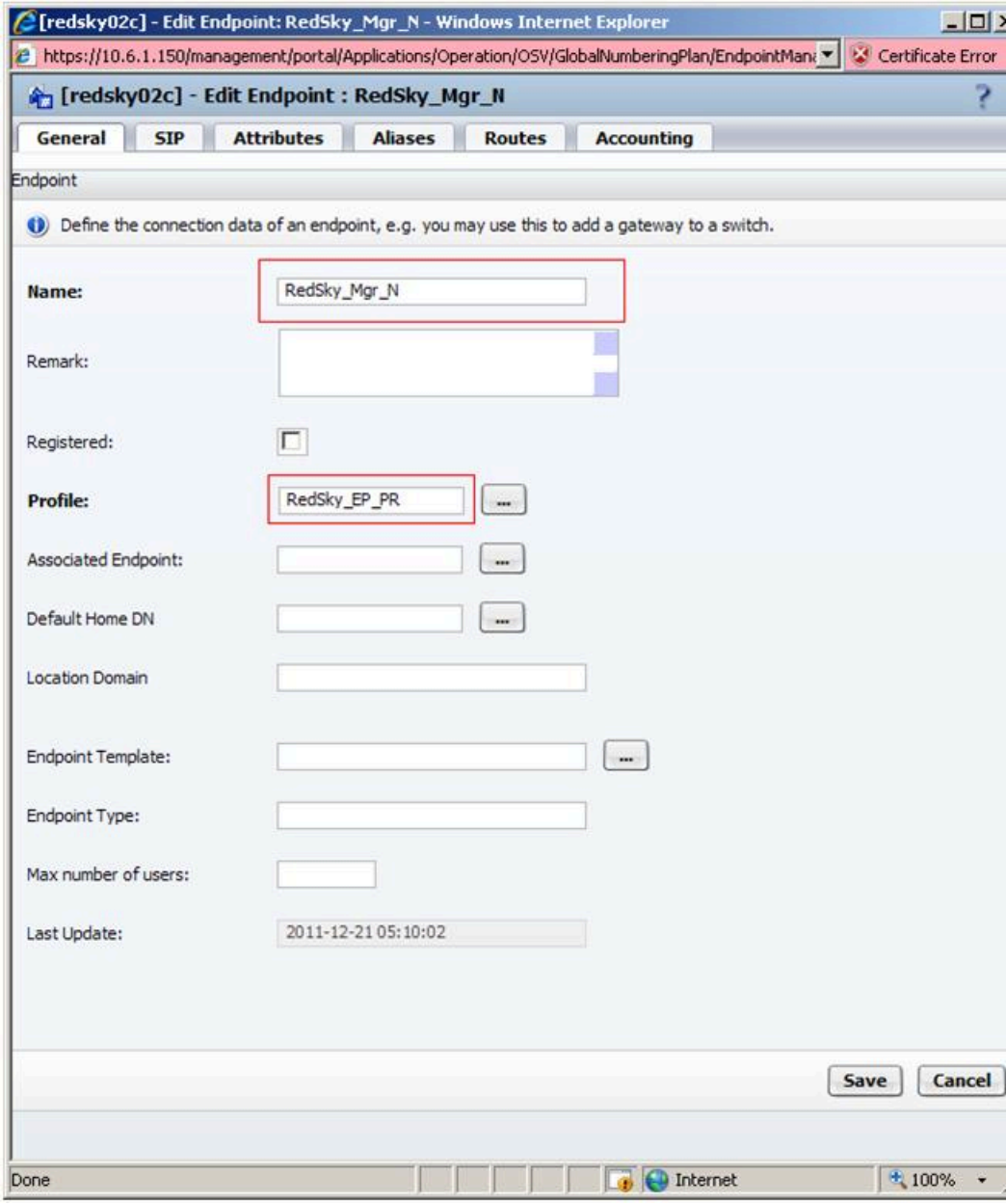


**Create Endpoints for the two RedSky E911 Manager nodes**

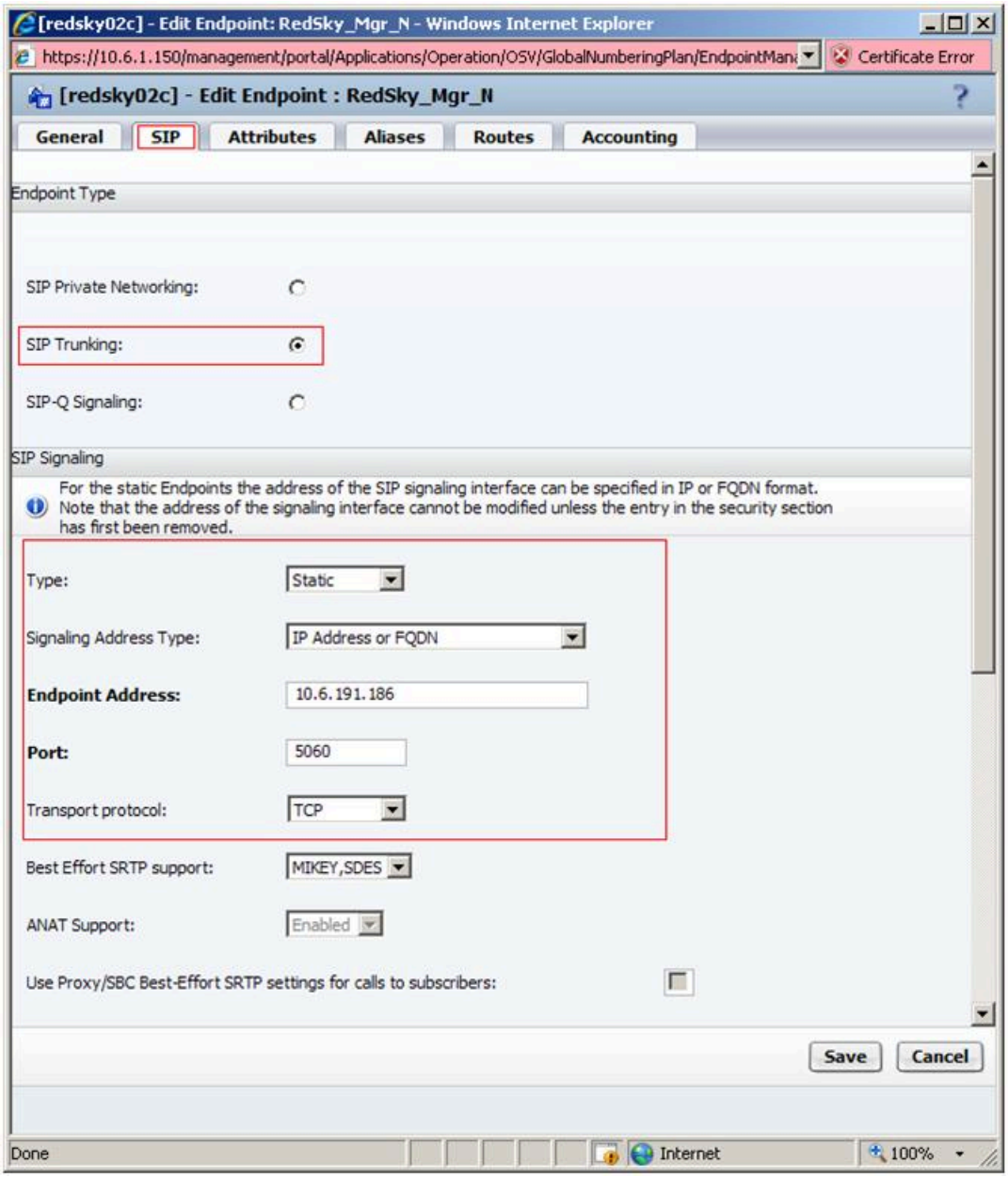
Go to **OpenScape Voice->Global Translation and Routing->Endpoint management->Endpoint** and press the **Add** button:




In the **General** tab, give the name and select the **Profile** that was created in the previous steps:

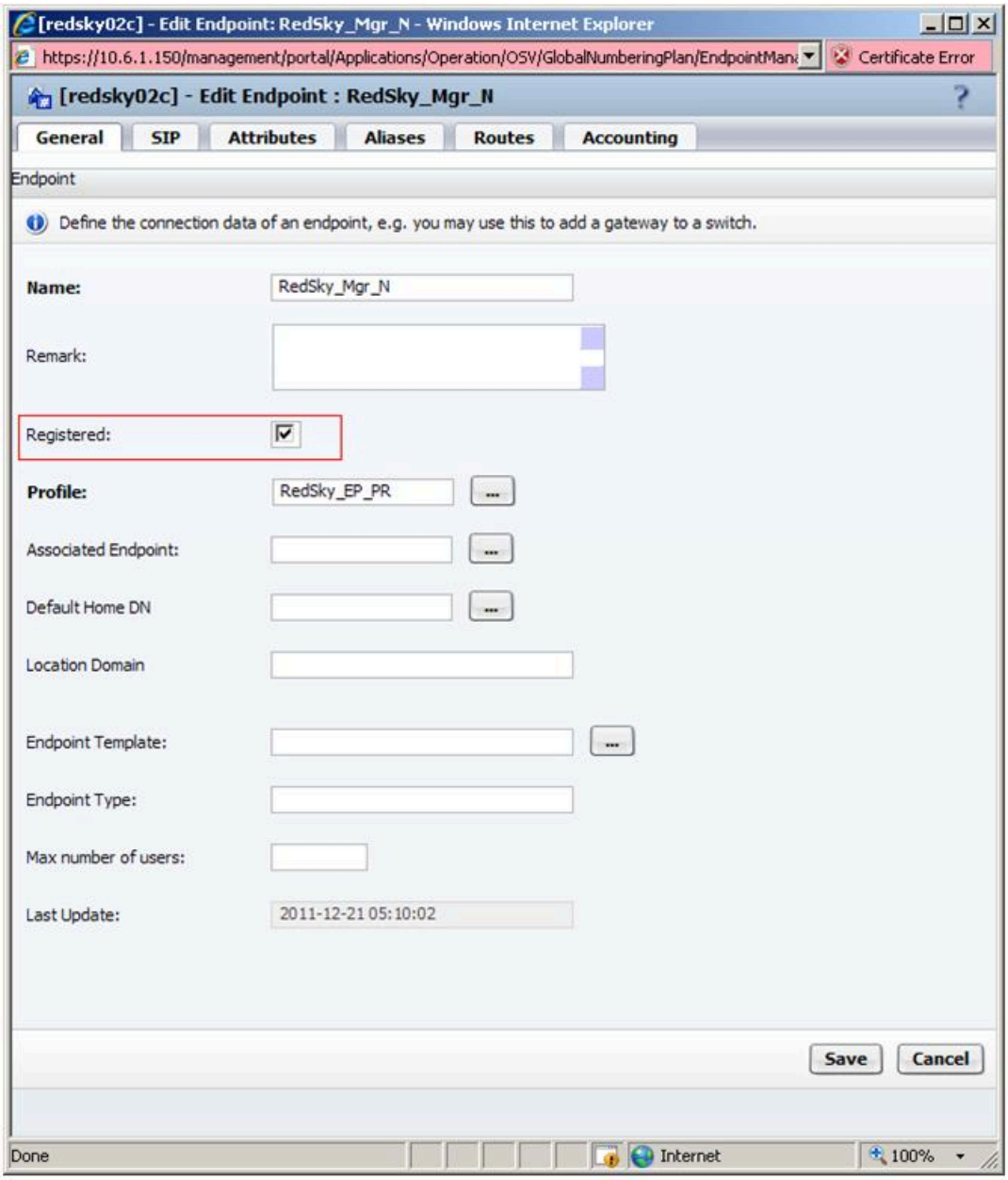



In the **SIP** tab, check the **SIP Trunking** radio button, select **Static Type,** enter the **Endpoint Address**, **Port** and **Transport protocol** (**TCP** or **TLS**):




Go to **Aliases** tab and **Add Name: 10.6.191.186:5060**


Go back to the **General** tab and check the **Registered** box and then press **Save** button:




Follow the same instructions to create the RedSky E911 Manager node2 (RedSky_Mgr_N2).

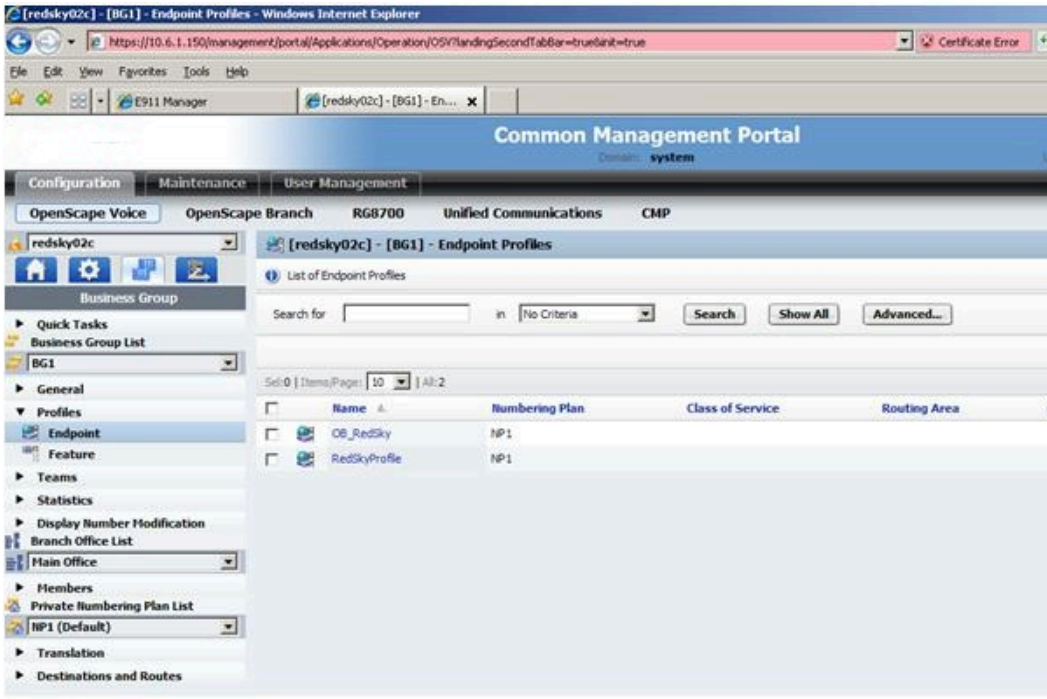
## 1.3 Creating Destination/Routes, Endpoints for the RedSky ANS

RedSky Anywhere Service acts as a SIP Service Provider for emergency calls and distributes the E911 call to the Local PSAP. SIP connectivity is done via an SBC.

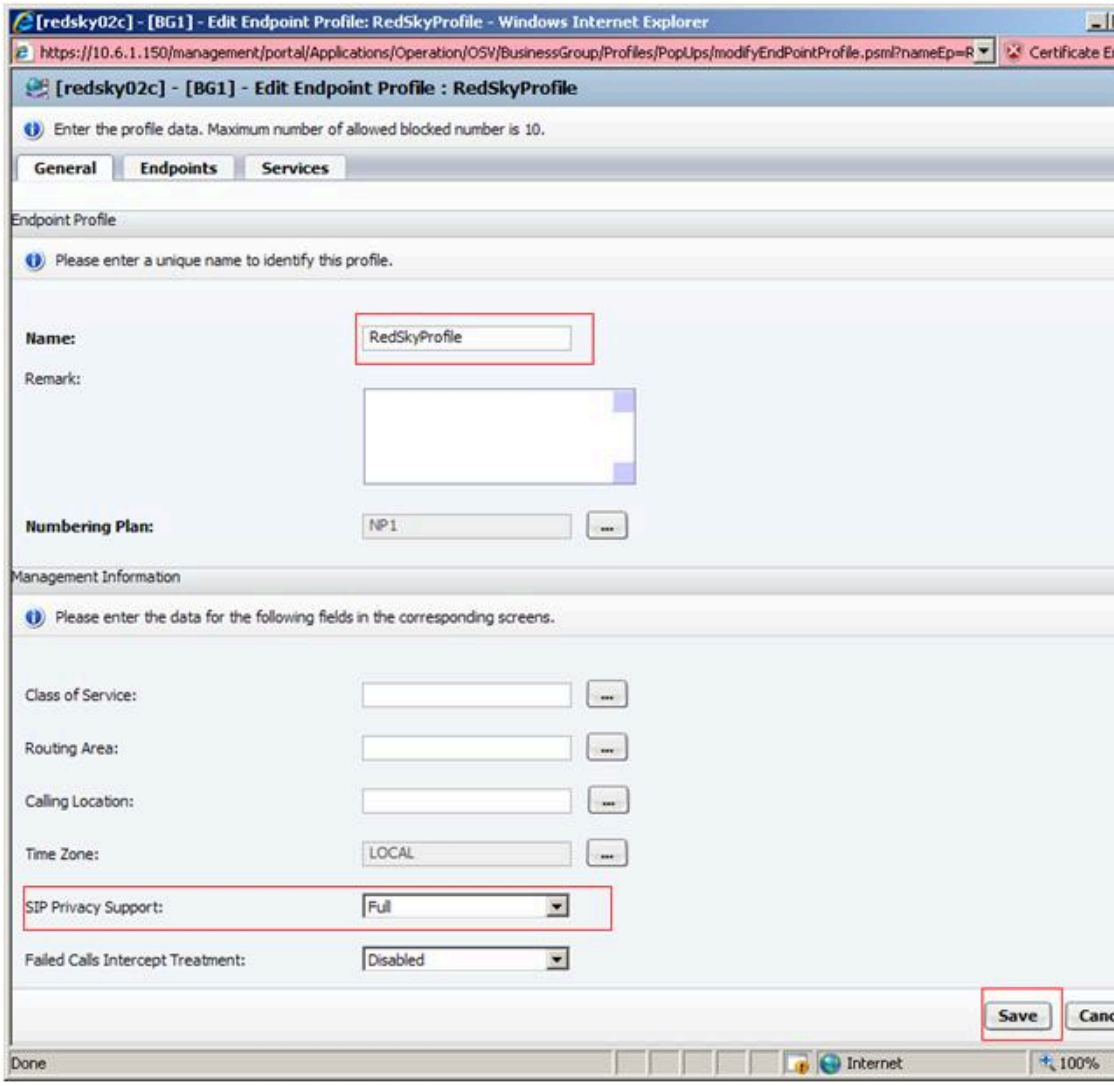
**Create Endpoint Profile for Redsky ANS.**

Go to **Openscape Voice->Business Group->Profiles->Endpoint**

Create endpoint profile.

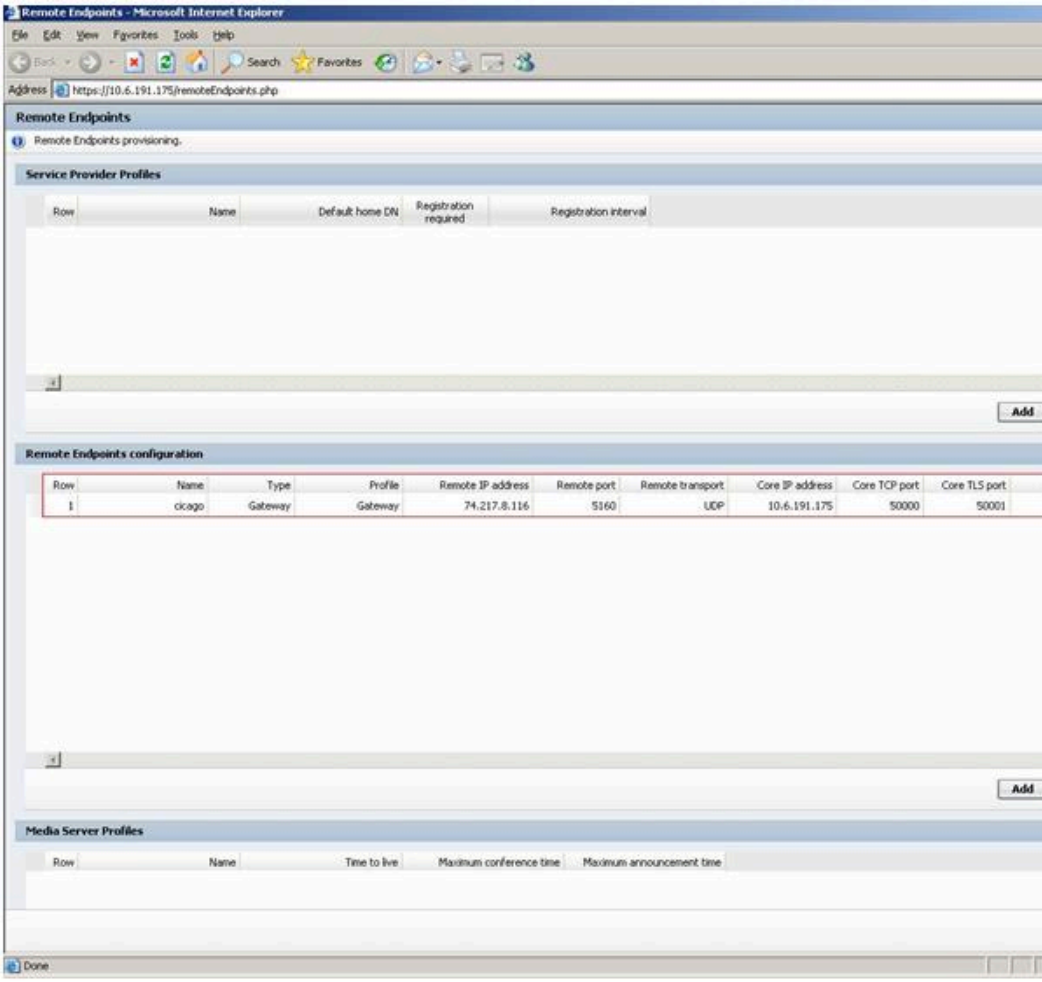



Give a **Name**, set **SIP Privacy Support** to **Full** and click **Save**.



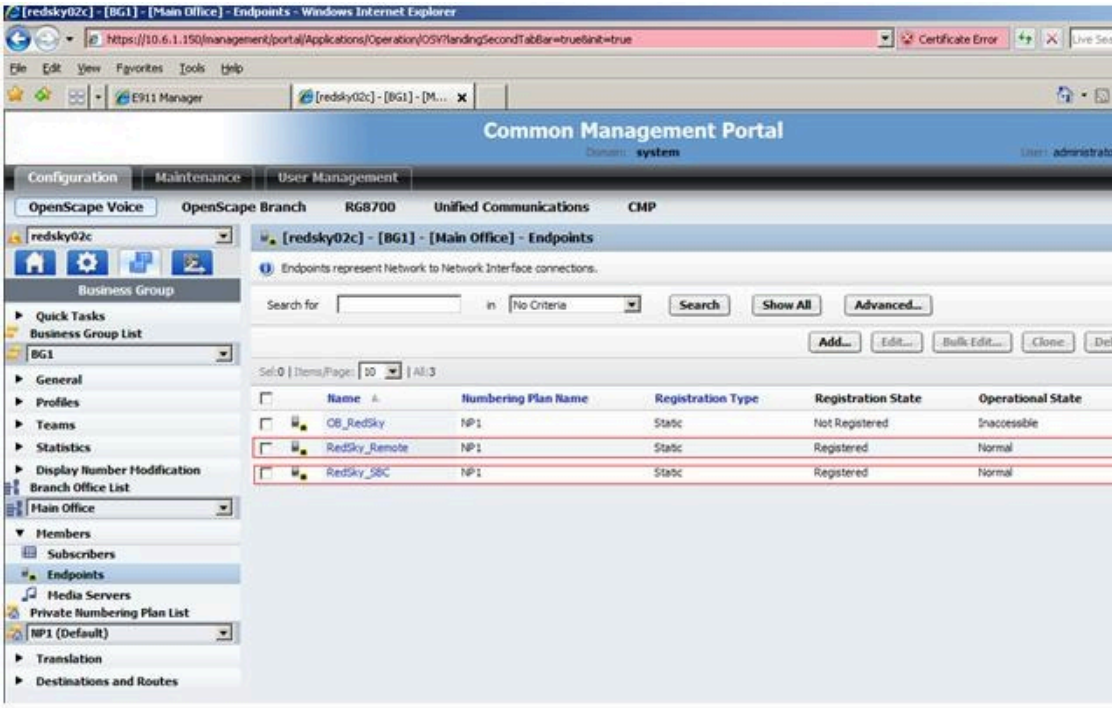

## Create Route in Central SBC

In this example we used central SBC connection (VOIP connection). Alternatively, we can use PSTN/ISDN connection. We first create a map table in SBC with the **IP** of the remote device, **remote port** and also the **IP of the core** device and **the core port.**



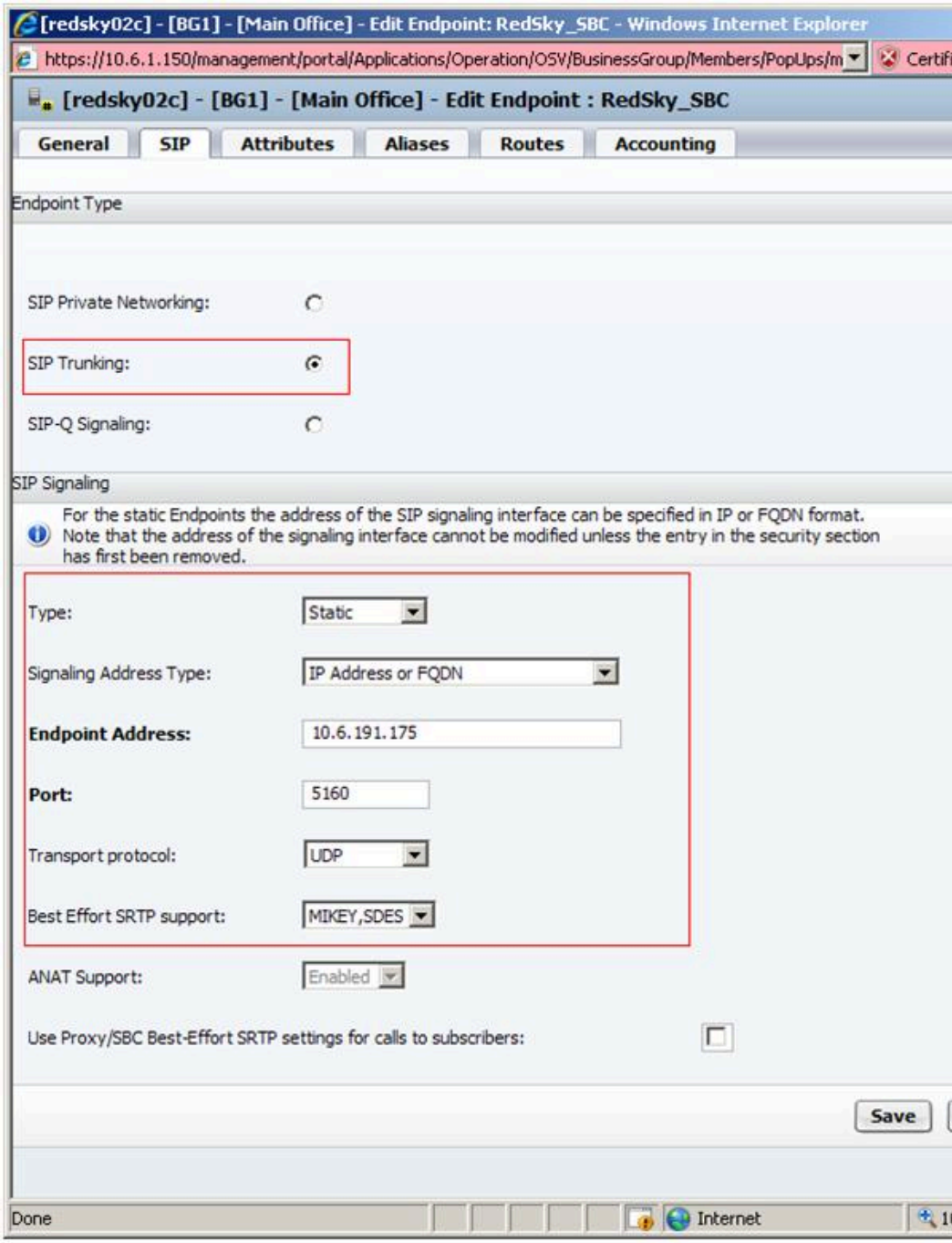

**Create endpoints for SBC connection.**

To create an endpoint go to **OpenScape Voice->Business Group->Members->Endpoints**:

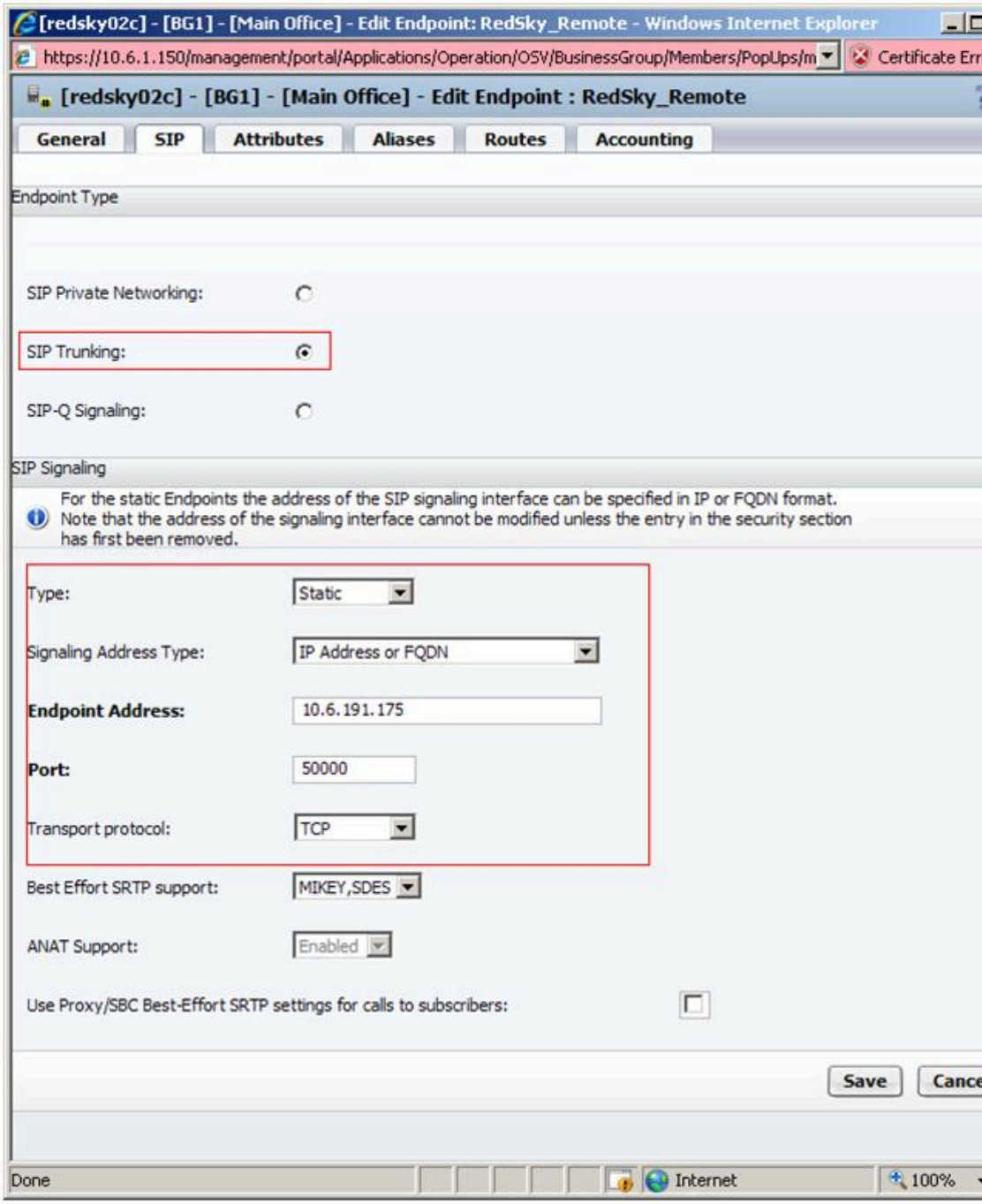



Select the endpoint profile created before in the general tab of the endpoint

Select **SIP Trunking, UDP** and specify the **Port.** Also add the IP alias in the **Aliases** tab and check the **Registered** box in the General tab.




Second endpoint should be configured as follows

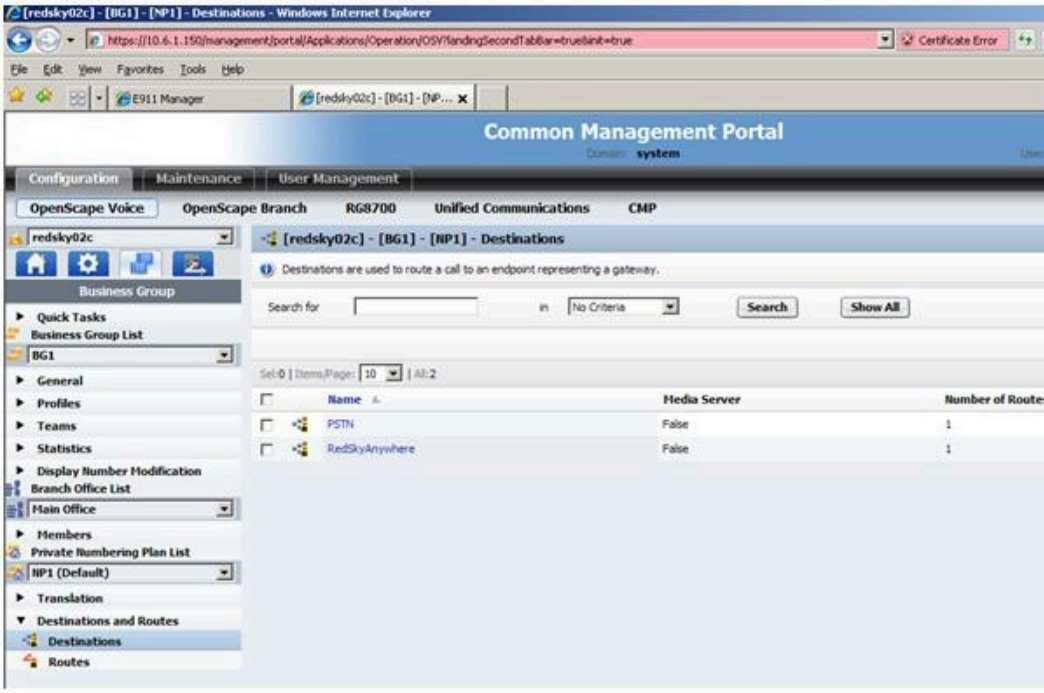



Select the endpoint profile that was created in the previous steps in the **General** tab of the endpoint.

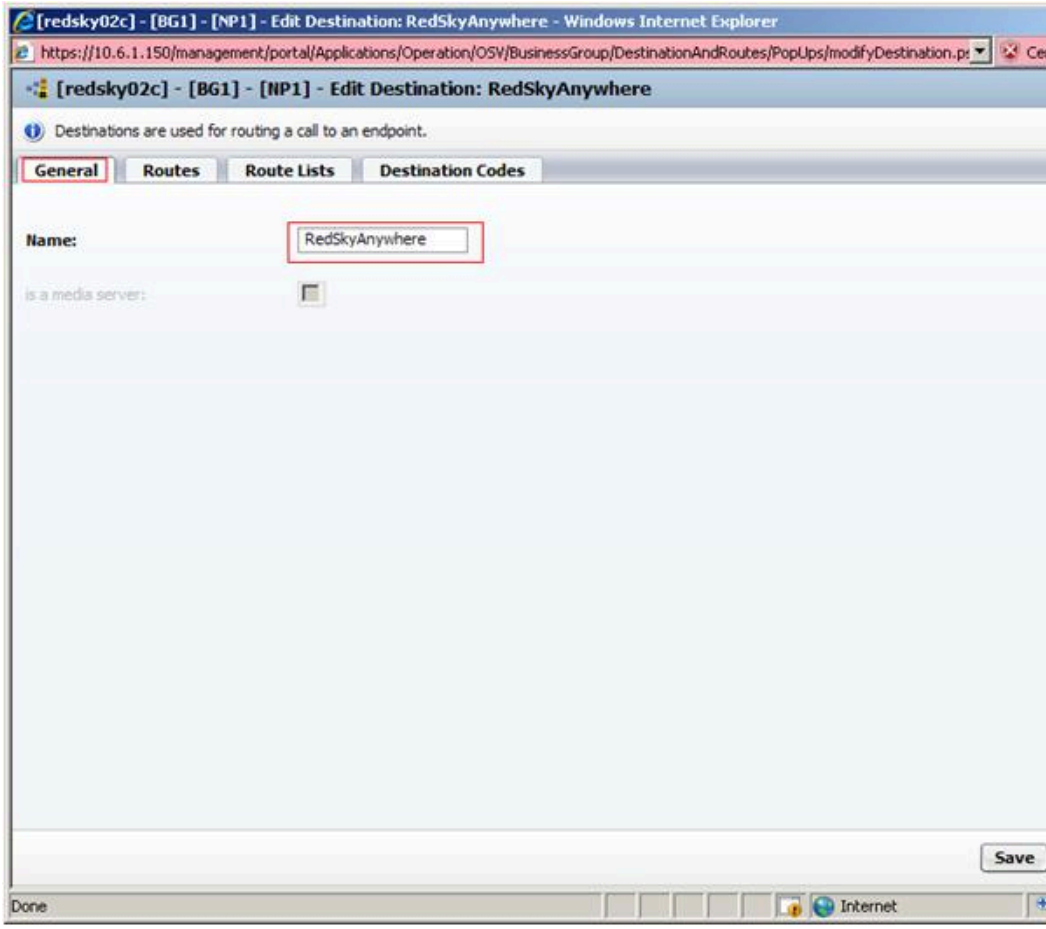
Select **Sip Trunking, TCP** and specify the **Port.** Add IP alias in the **Aliases** tab and check **Registered** box in the General tab.

**Create Destination/Routes.**

Go to **OpenScape Voice->Business Group->Destinations and Routes->Destinations->Add:**

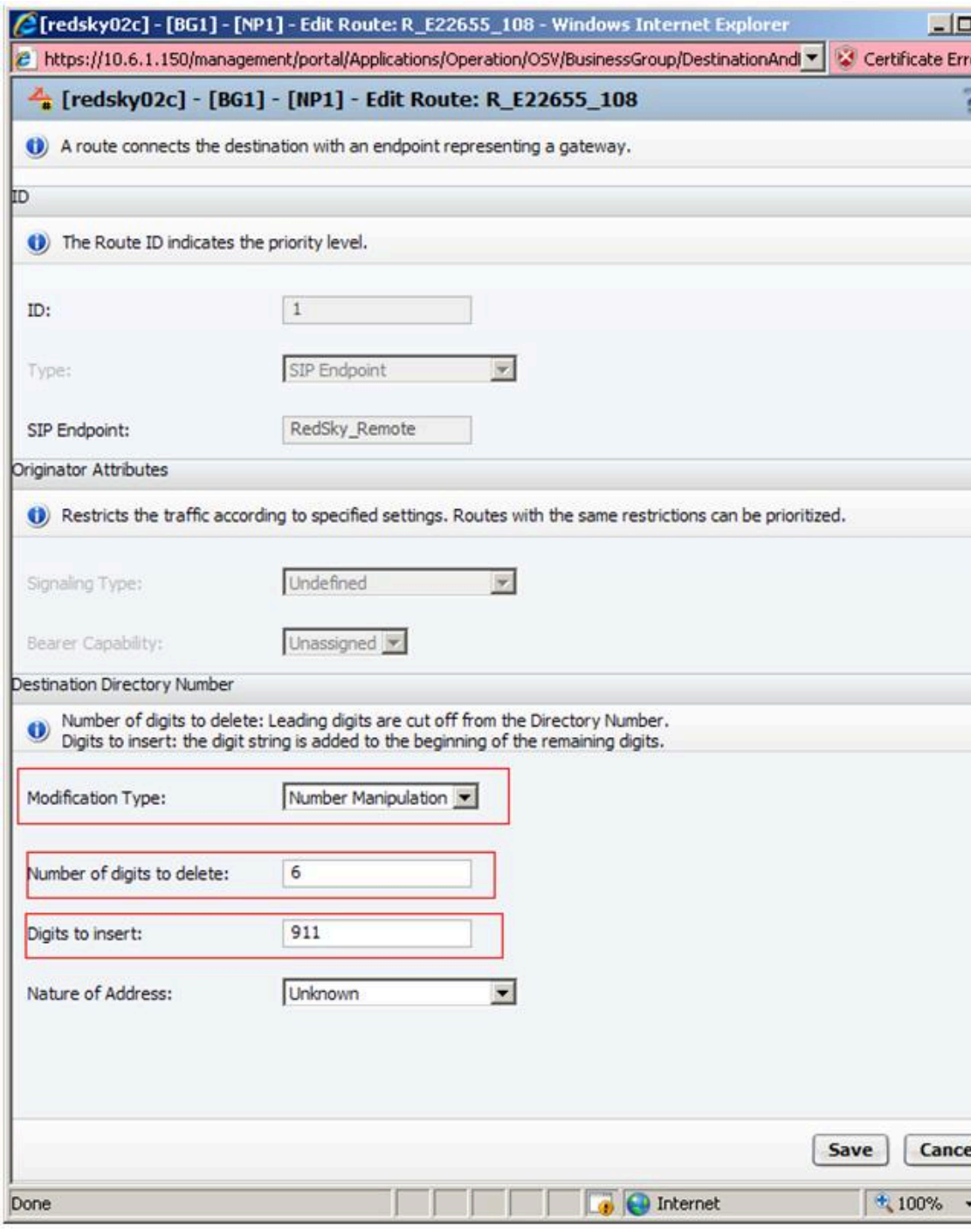



Go to **General** tab and specify **Name** for the destination:

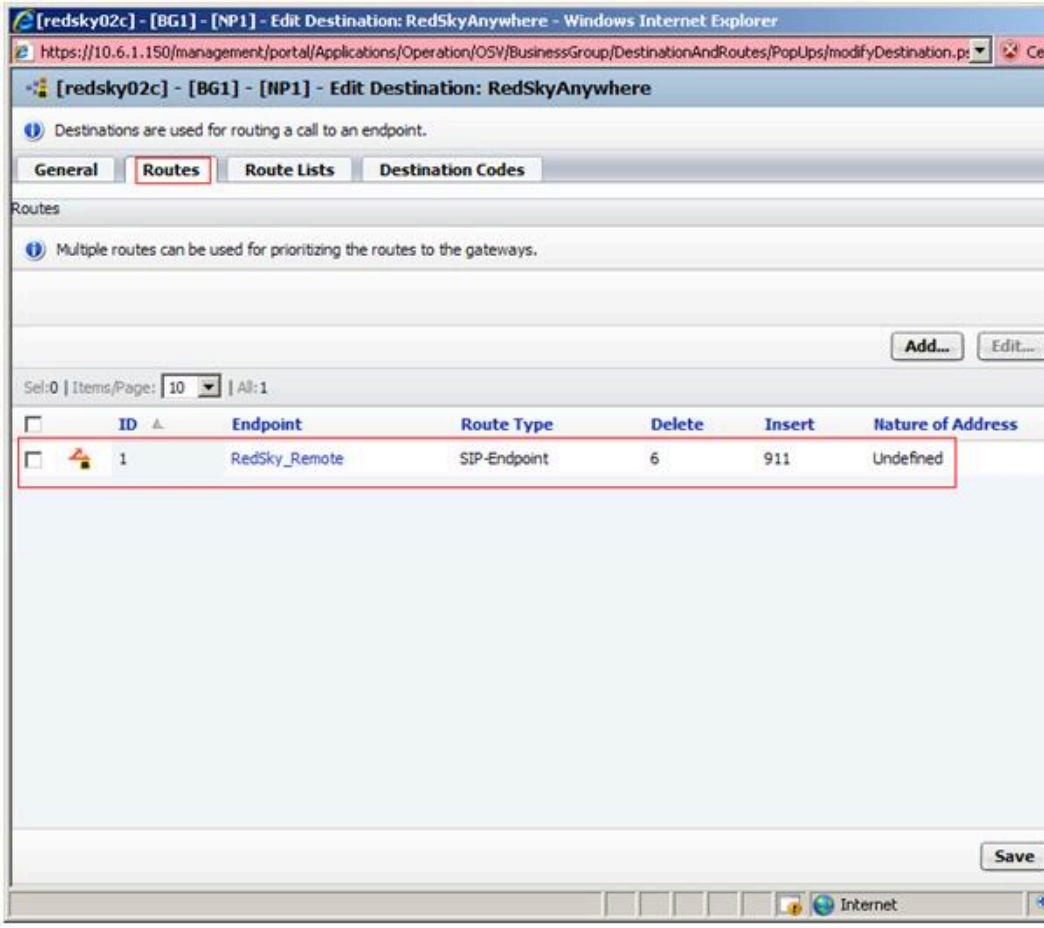



Go to **Routes** tab and add the endpoint created for the RedSky ANS SBC:

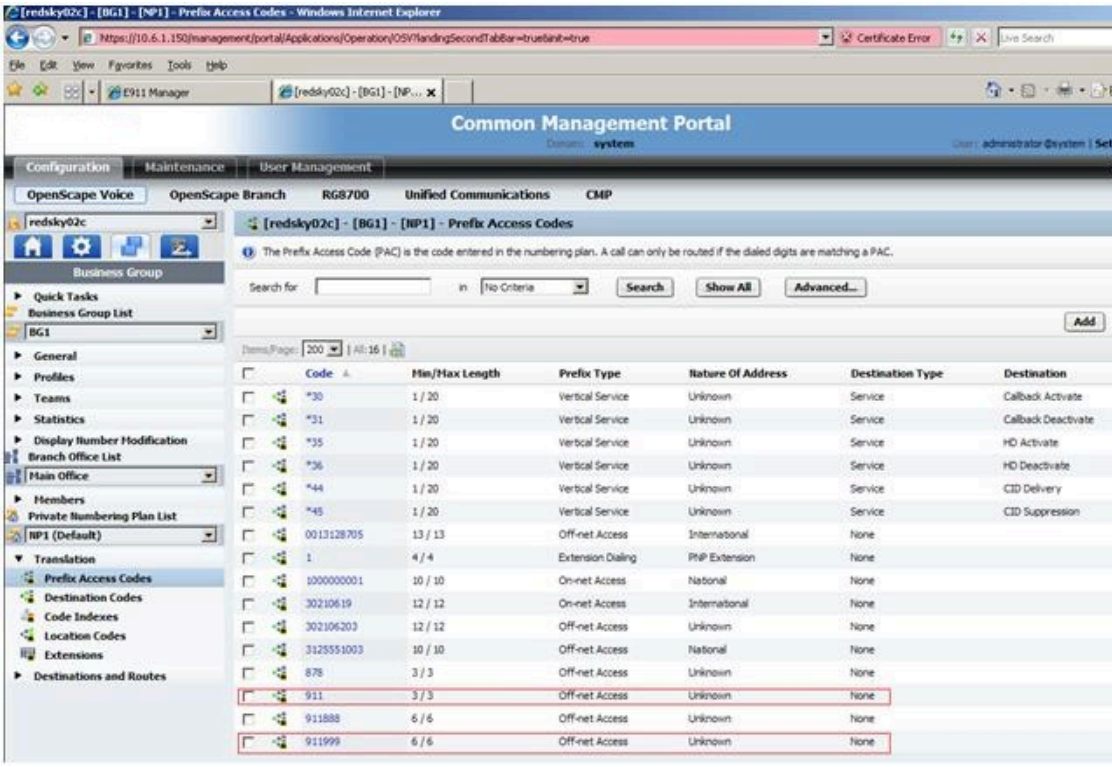
- Change the modification type to number manipulation.
- Number of digits to delete: **6**
- Digits to insert: **911**
- Nature of address: **Unknown**



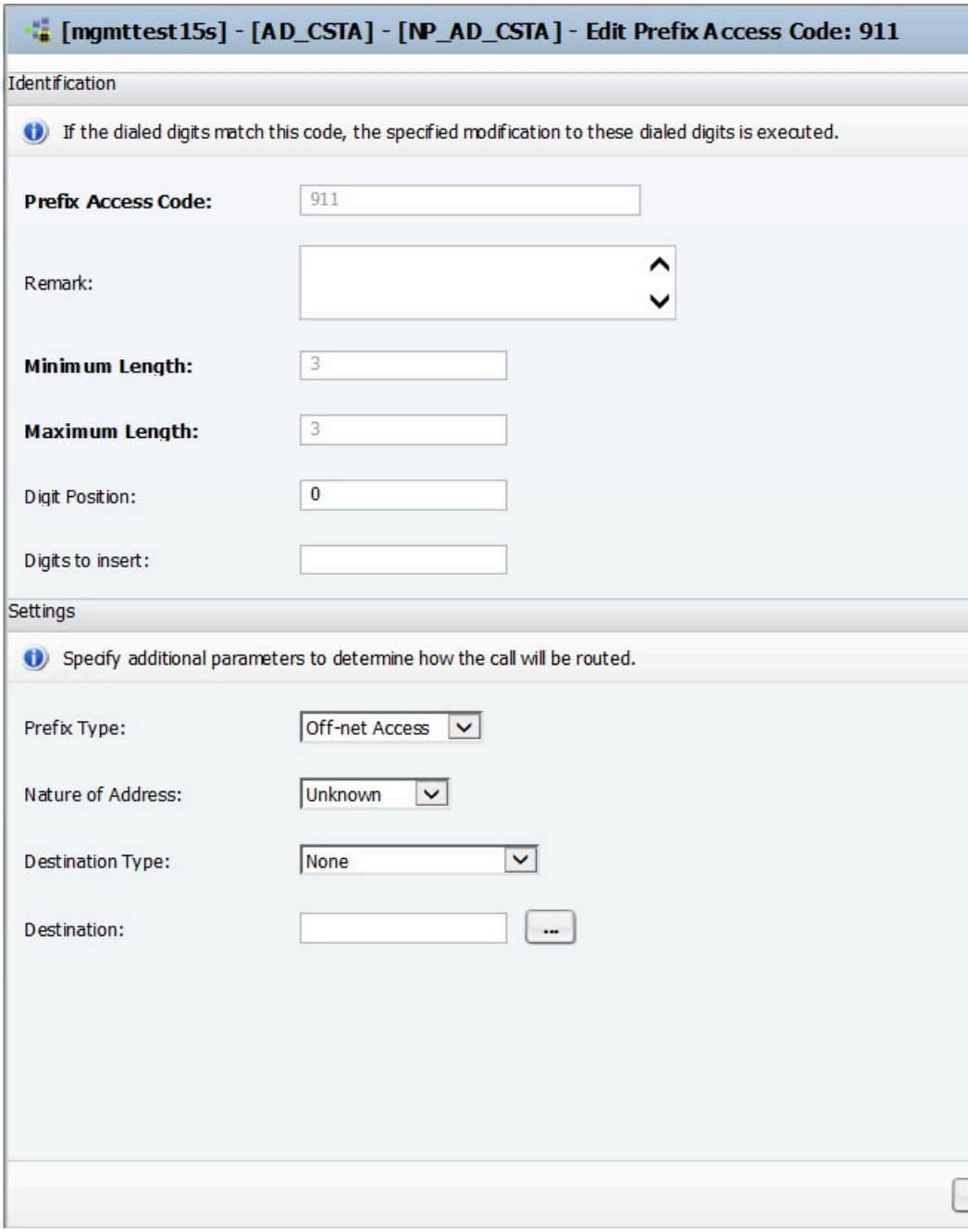

Verify that the route added successfully.

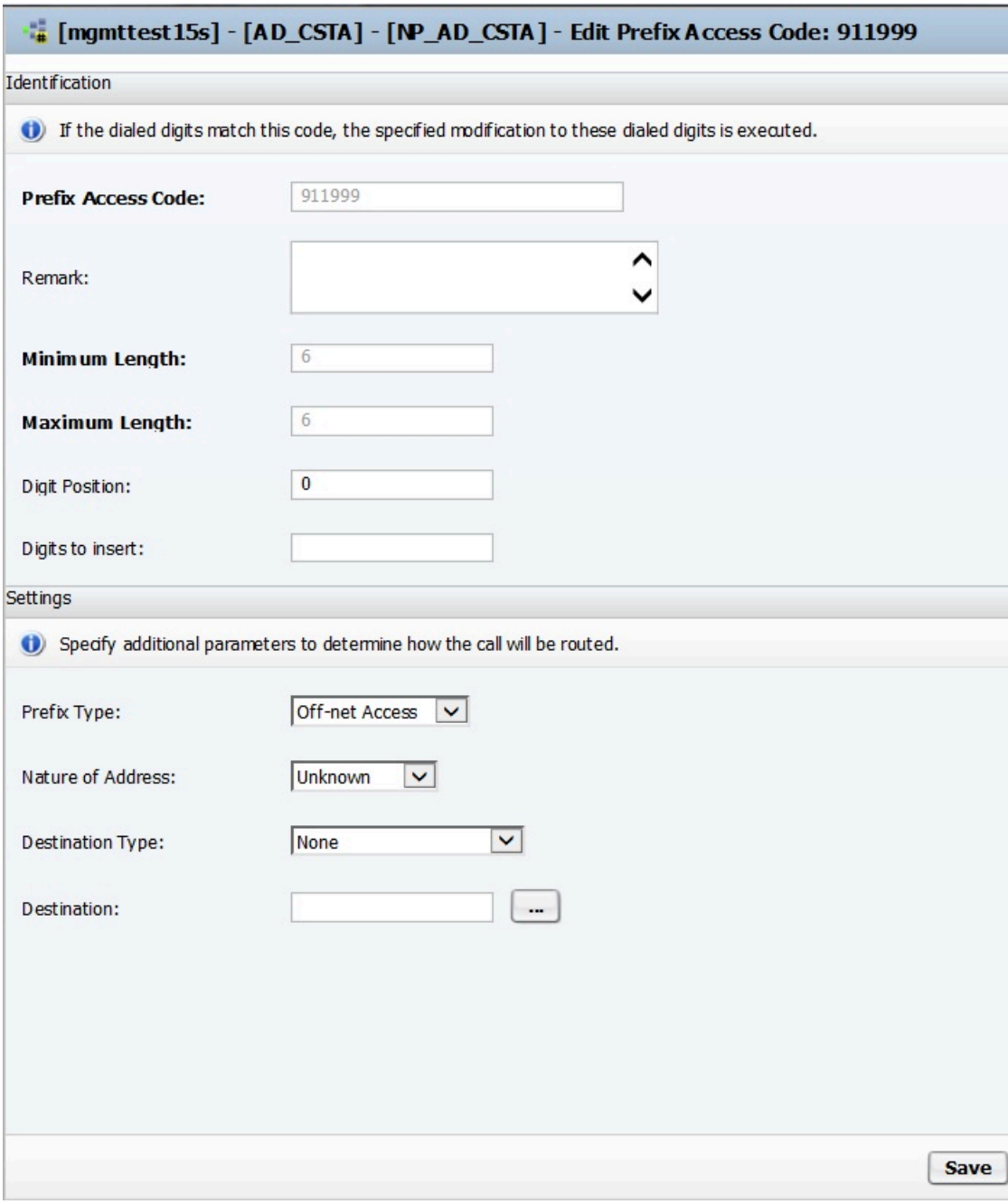



Go to **OpenScape Voice->Business Group->Translation->Prefix Access Codes->Add:**

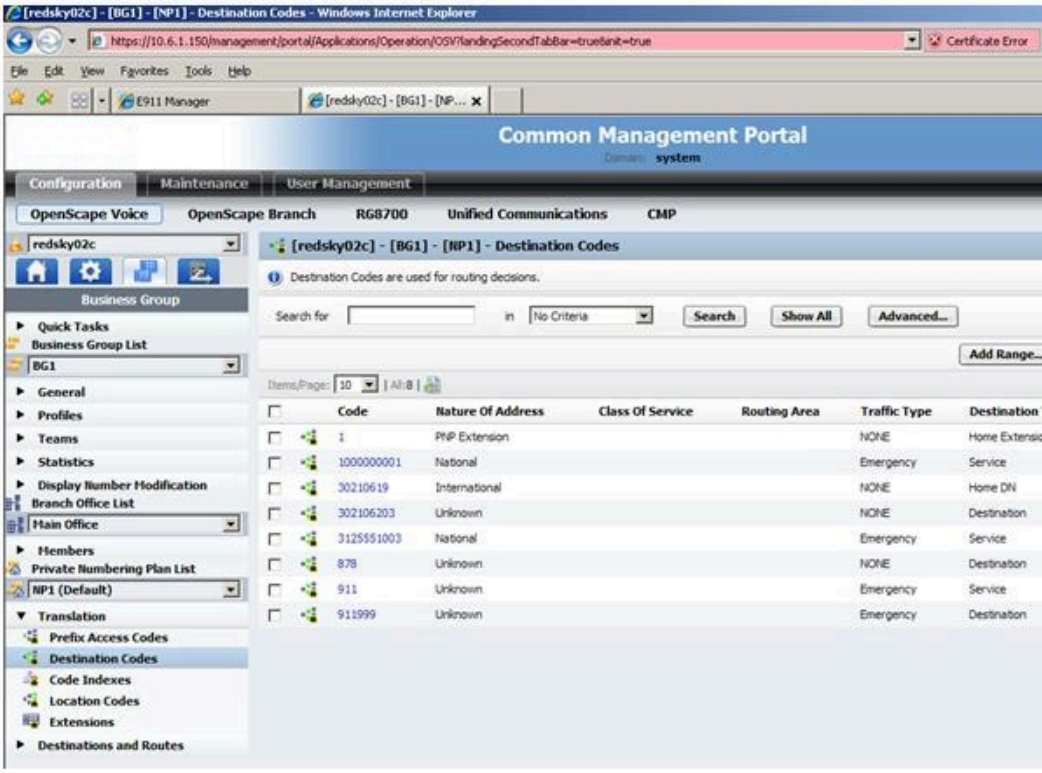



Create **PAC's** for **911**, **911999**


[mgmttest15s] - [AD_CSTA] - [NP_AD_CSTA] - Edit Prefix Access Code: 911
Identification
If the dialed digits match this code, the specified modification to these dialed digits is executed.
Prefix Access Code:
911
Remark:
Minimum Length:
3
Maximum Length:
3
Digit Position:
0
Digits to insert:
Settings
Specify additional parameters to determine how the call will be routed.
Prefix Type:
Off-net Access
Nature of Address:
Unknown
Destination Type:
None
Destination:
...

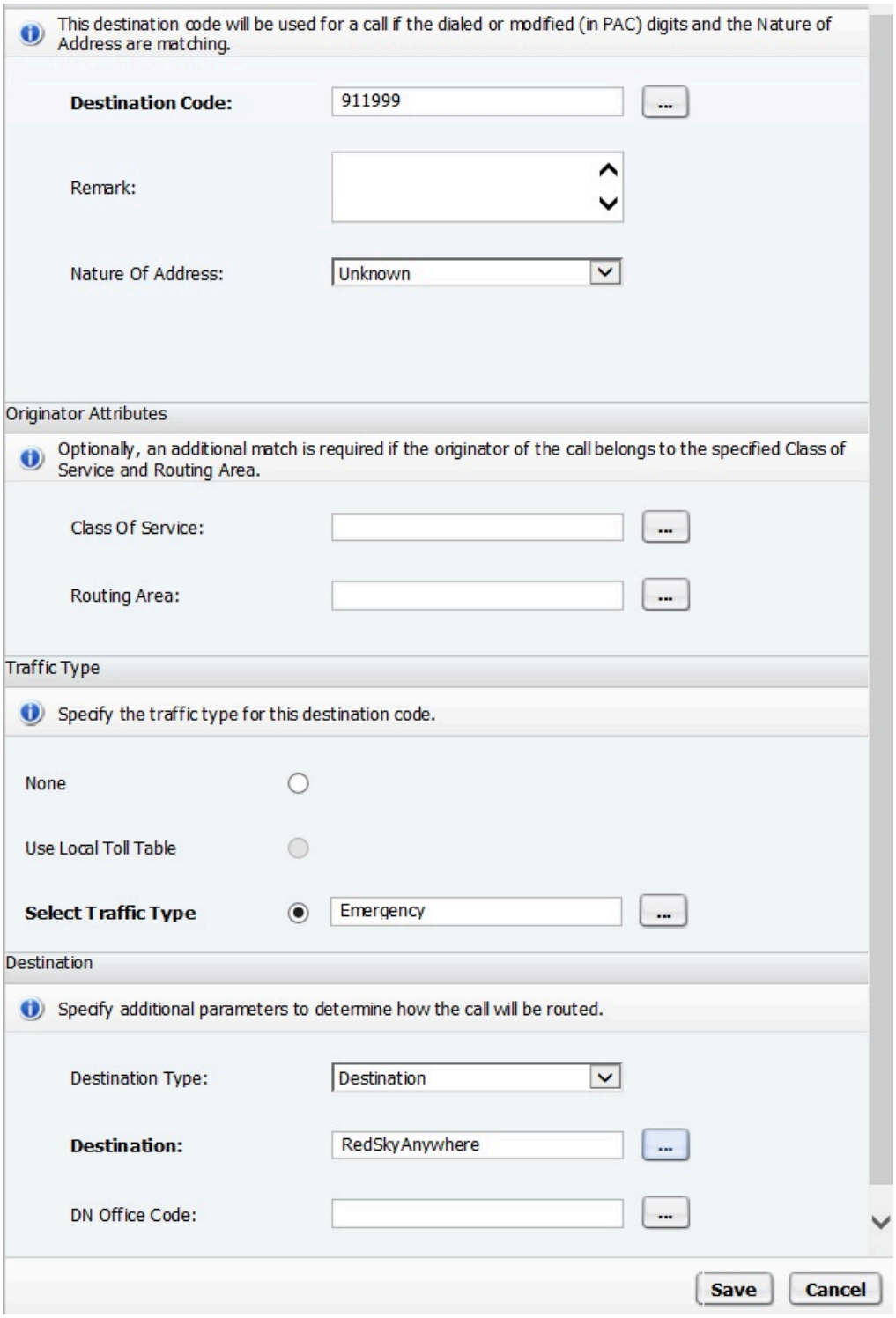



Go to **OpenScape Voice->Business Group->Translation->Destination Codes->Add...**

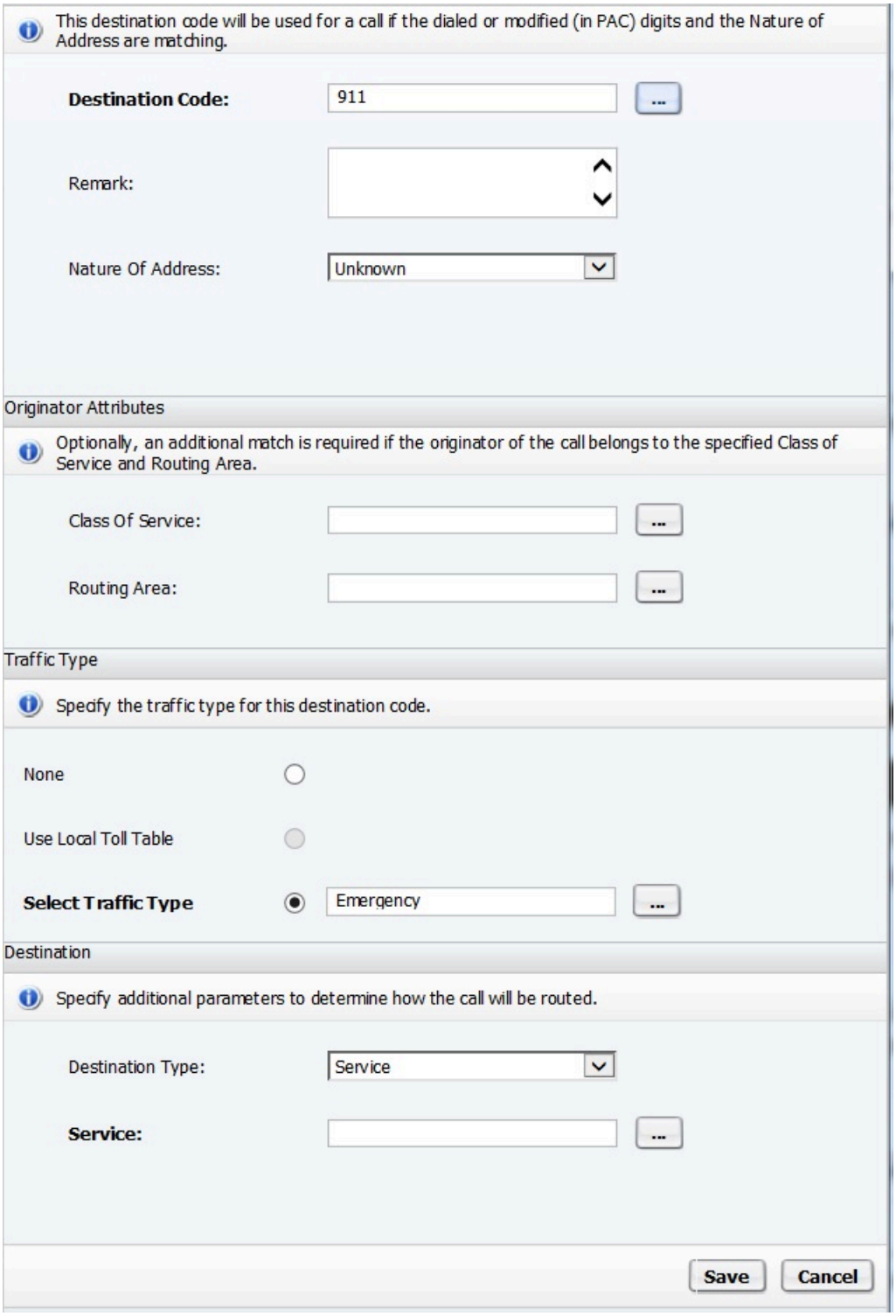



Create **Destination Code** for 911, 911999 that leads to **RedSkyAns** Destination:

Destination code for **911999**



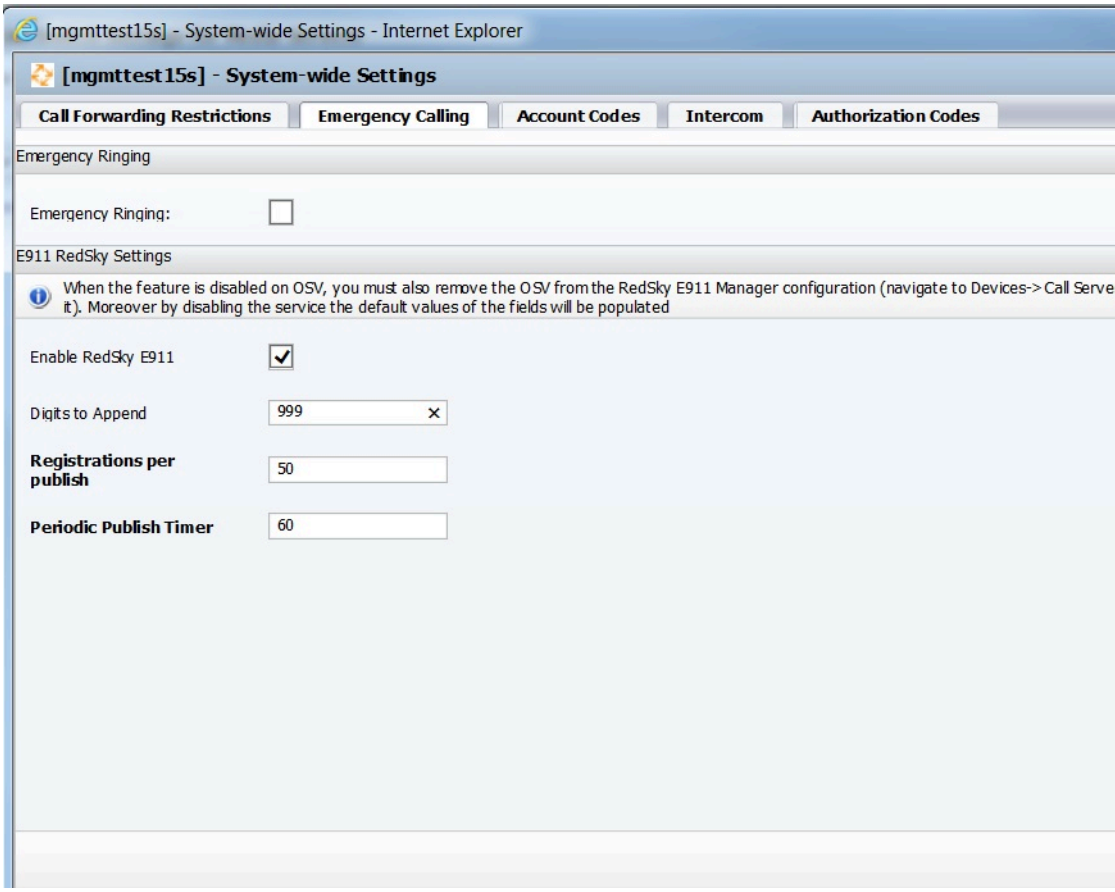

Destination code for **911**




## 1.4 Enable RedSky Service

Go to **OpenScape Voice-> Administration->Feature Settings ->System-wide->Emergency Calling** and

- Select **Enable RedSky E911.**
- Enter **999 Digits to Append.**




## 1.5 Configure RedSky ELINs to Route to E911 Callback Service

For each of the RedSky ELINs a Prefix Access Code and a Destination Code need to be created that will route to the E911 Callback Service:

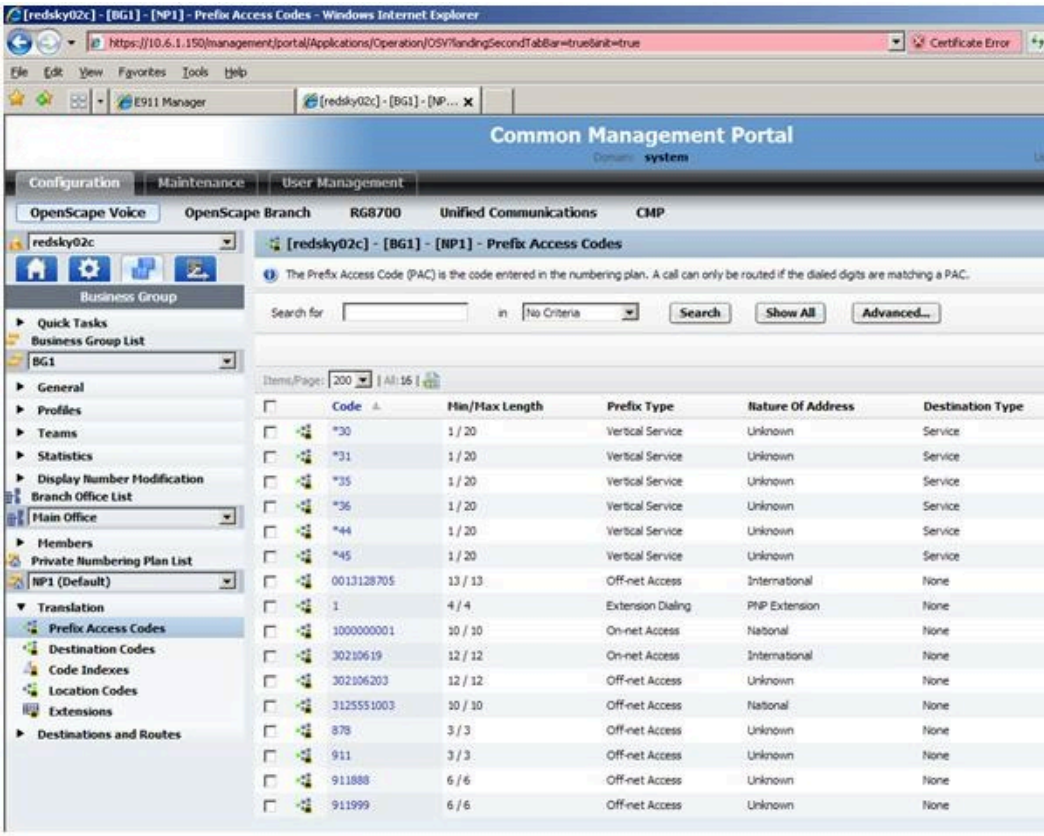
---

**NOTICE:**

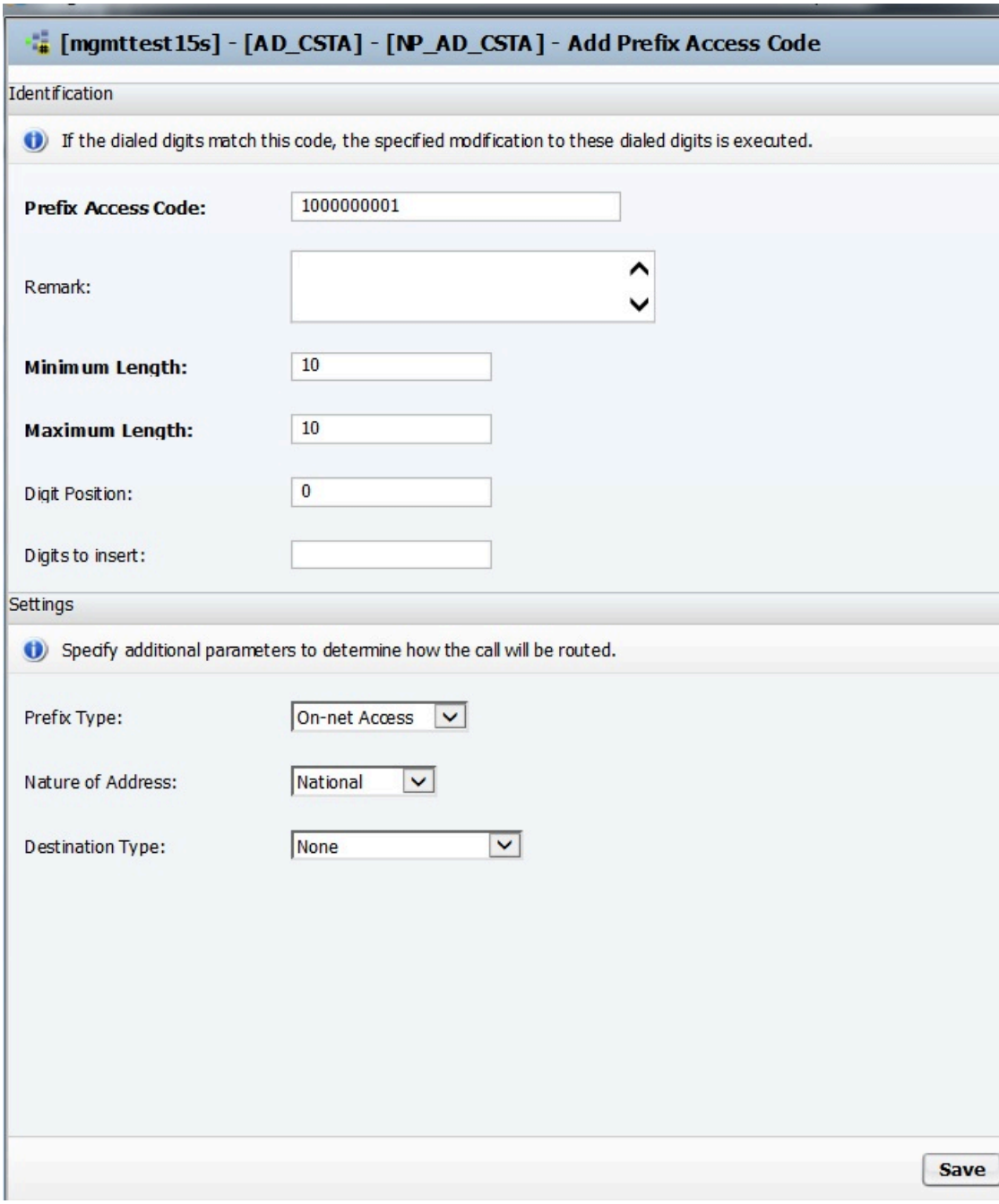
If no ELIN or an empty ELIN is returned from RedSky E911 Manager for a published registration, OSV shall republish the registration when the re-registration occurs

---

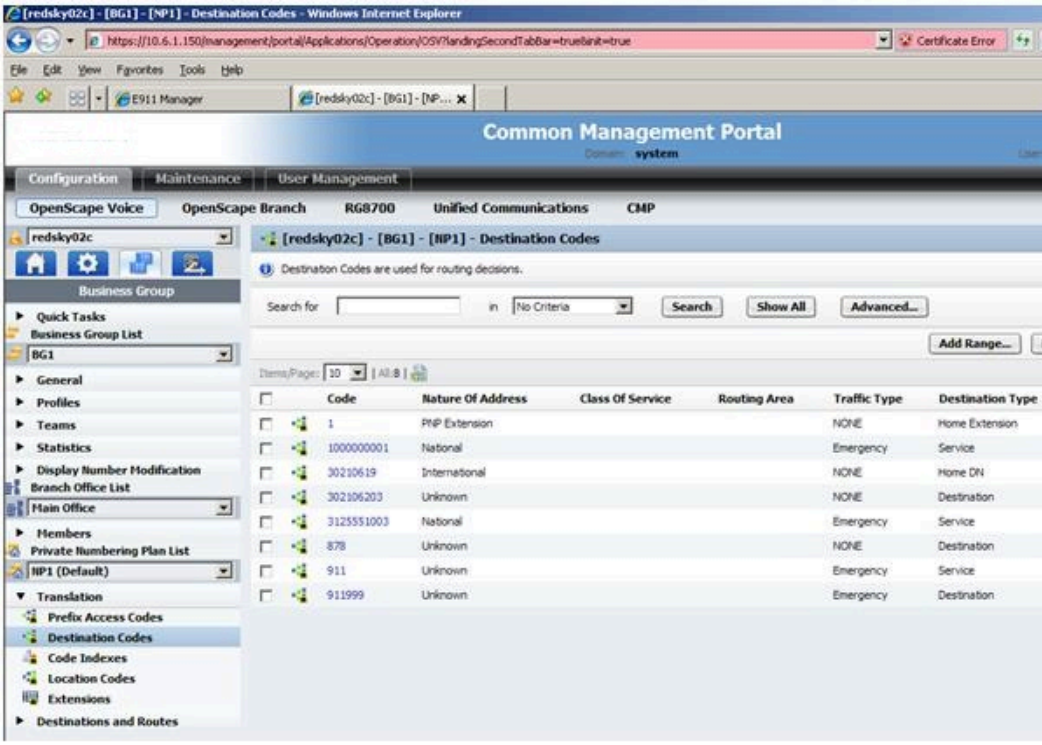
Go to **OpenScape Voice->Business Group->Translation->Prefix Access Codes->Add...**



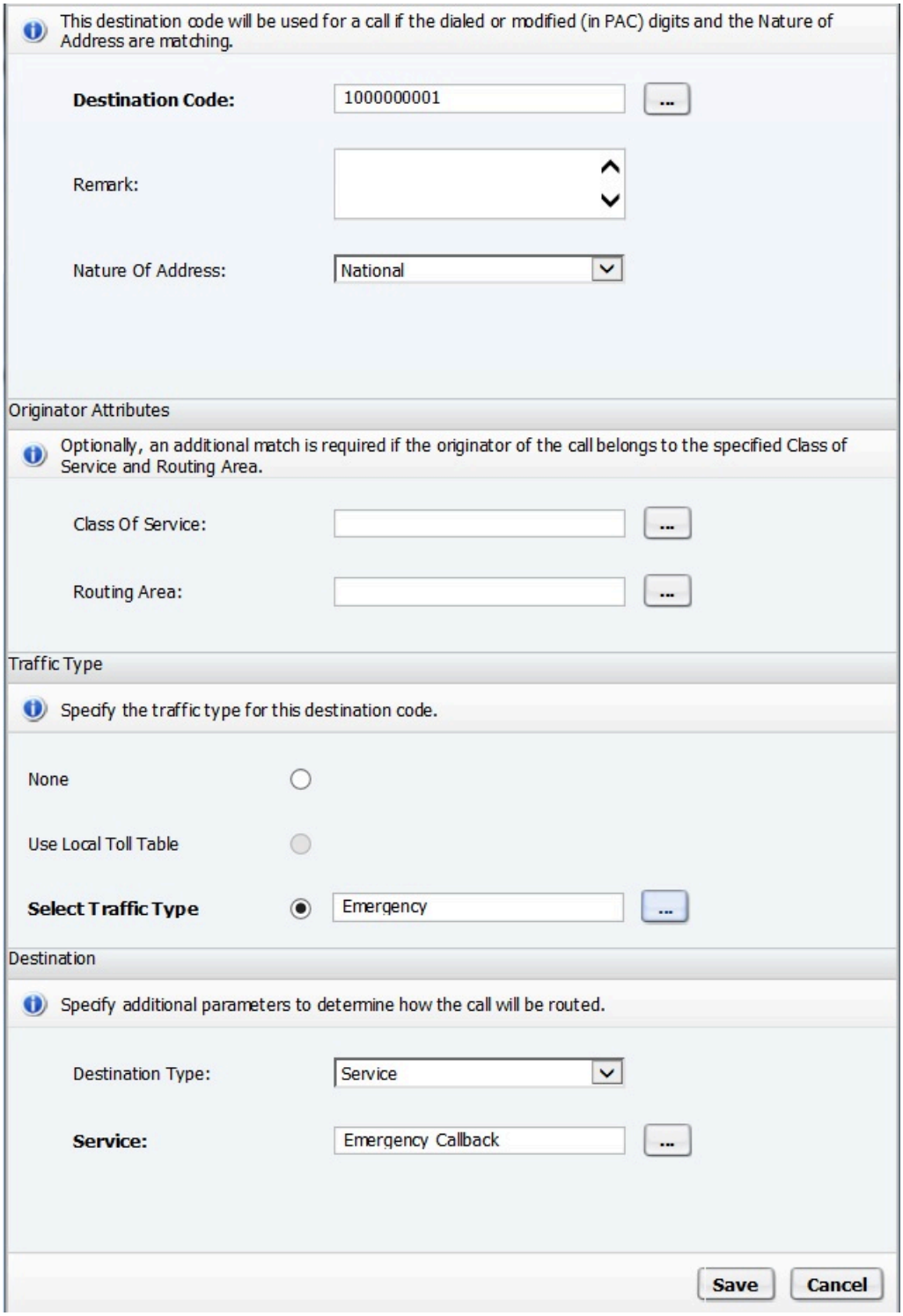

Create **PAC** for ELIN (e.g. 1000000001):




Go to **OpenScape Voice->Business Group->Translation->Destination Codes->Add:**



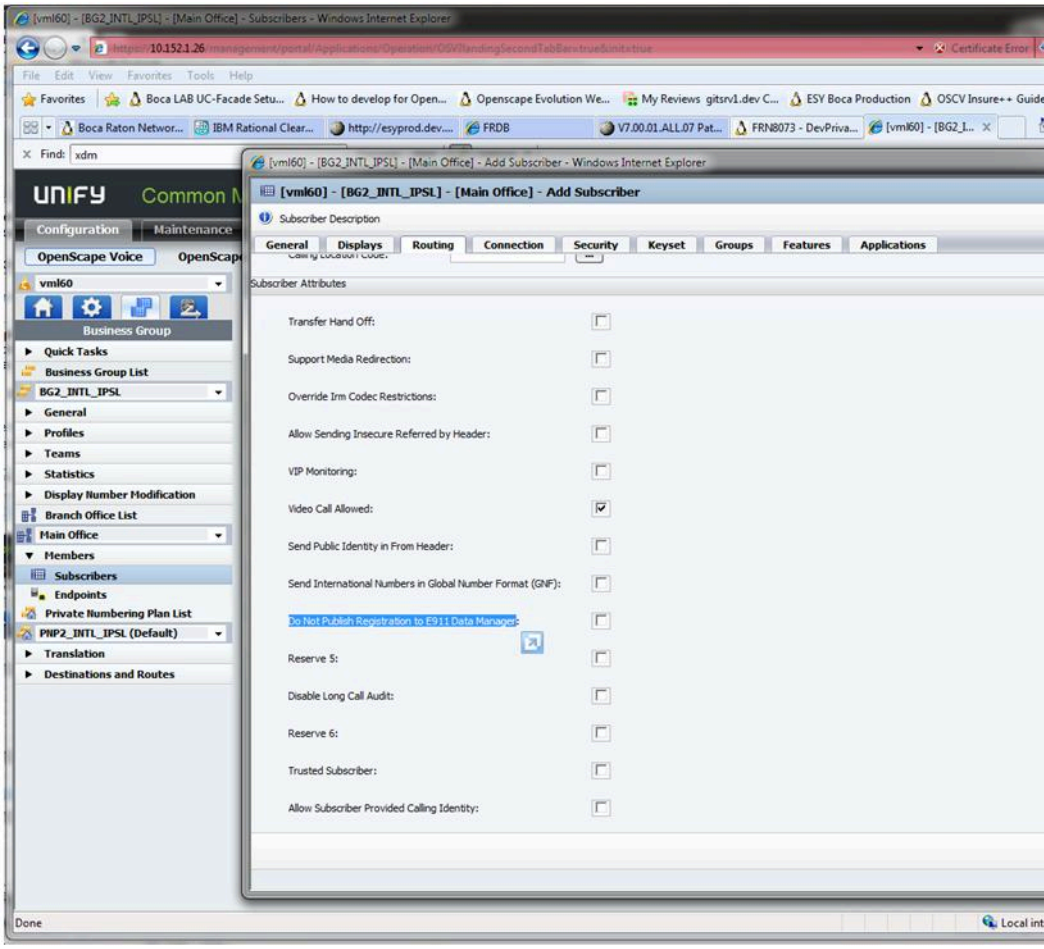

Create **Destination Code** 1000000001




## 1.6 Do Not Publish to E911DM Setting for Subscribers

In cases where it is not desired to have OSV forward a subscriber's registrations to E911DM, the "Do Not Publish Registration to E911 Data Manager" attribute may be selected for the specific Subscriber.

Go to **OpenScape Voice->Business Group->Members->Subscribers>Routing**



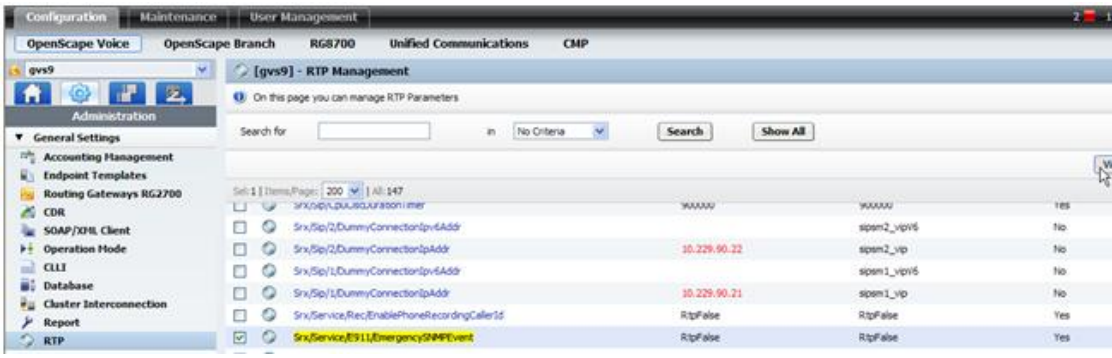

## 1.7 Configure E911 SNMP Traps to Send to RedSky

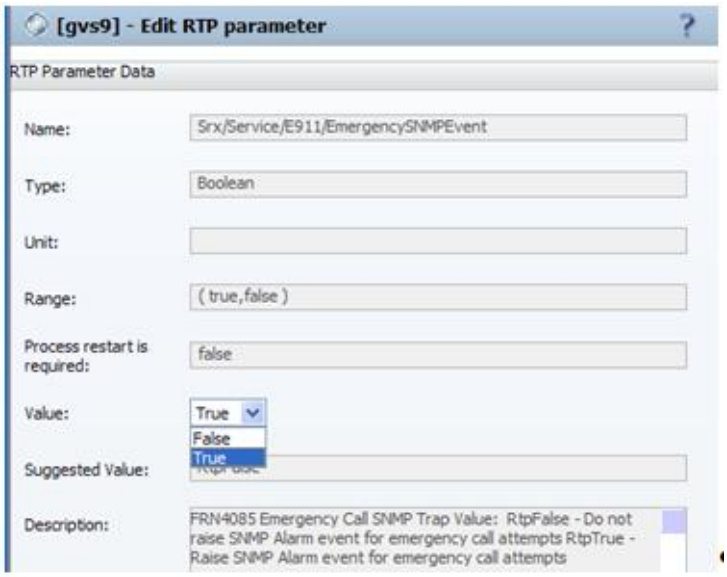
The configuration explained in this section is only required if the RedSky's Emergency On-Site Notification feature is being used in your deployment.

### 1.7.1 Enabling the E911 Emergency SNMP Event 250

The RTP parameter **Srx/Service/E911/EmergencySNMPEvent** by default is set to a value of RtpFalse. If and SNMP trap for event 250 is needed to be sent from the OpenScape Voice server to RedSky each time a subscriber initiates a E911 call this parameter must be change to a value of **RtpTrue**.

- **OpenScape Voice->Administration->General Settings->RTP->**
- Select the check box for the RTP parameter name **Srx/Service/E911/EmergencySNMPEvent** and select the "**View / Edit**" button to modify.
- Select the **True** option for the "Value:" field and select the **Save** button.




For more details on the E911 SNMP trap event 250, refer to section 6 of the "*OpenScape Voice V8, Design and Planning Manual, SIP Network Planning, Planning Guide*"

## 1.7.2 Configure the E911 Emergency SNMP Event 250 RedSky Destinations

For each RedSky E911 Manager Node endpoint that is created an SNMP Event Filter must be created specifically for event 250 only with a severity level of Warning. This is done via CLI.

```
startCli 2 -> 1 -> 14 for createSnmpEventFilter
       ipAddr: <IP address on one of the RedSky nodes>
       eventSets[0] <end: <Return>>: 250
       eventSets[1] <end: <Return>>: <press enter>
       severities[0] <EVT_SEV_CRITICAL: 1,
                      EVT_SEV_MAJOR: 2,
                      EVT_SEV_MINOR: 3,
                      EVT_SEV_WARNING: 4,
                      EVT_SEV_INFORMATION: 5,
                      EVT_SEV_CLEAR: 6,
                      end: <Return>>: 4
       severities[1] <EVT_SEV_CRITICAL: 1,
                      EVT_SEV_MAJOR: 2,
                      EVT_SEV_MINOR: 3,
                      EVT_SEV_WARNING: 4,
                      EVT_SEV_INFORMATION: 5,
                      EVT_SEV_CLEAR: 6,
                      end: <Return>>: <press enter>
       snmpVersion <EVT_SNMP_TRAP_V1: 1,
                    EVT_SNMP_TRAP_V2c: 2,
                    EVT_SNMP_TRAP_V3: 3>: 2
       trapDestPort <(1..32767)> (default: -1): 162
```

**NOTICE:**

Do not define the RedSky E911 Manager node IP addresses in the OpenScape Voice server node.cfg's SNMP Servers section as this would result in all alarms traps being sent to RedSky and not just event 250 which is specific for E911 calls.

Example of a RedSky SNMP Event Filter:

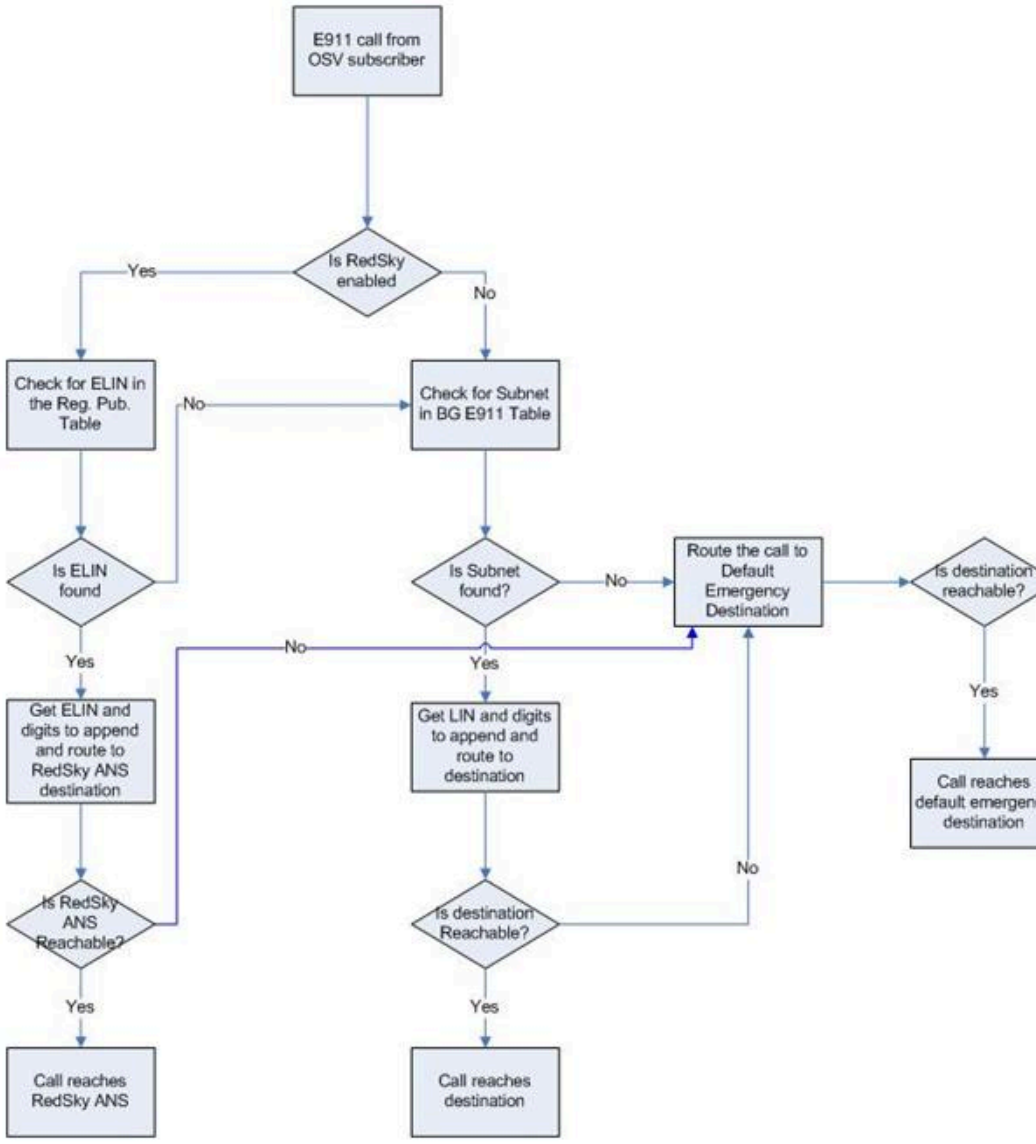
```
startCli 2 -> 1 -> 17 to getSnmpEventFilters
        ipAddr: <IP address on one of the RedSky nodes>
        trapDestPort: 162
        eventSets: 250
        severityLevels: 4
        snmpVersion: 2
        lastTransId: 0
```

## 1.8 Making Emergency Calls in OSV

When an emergency call is originated by an OSV subscriber, the emergency call service shall follow the logic below:

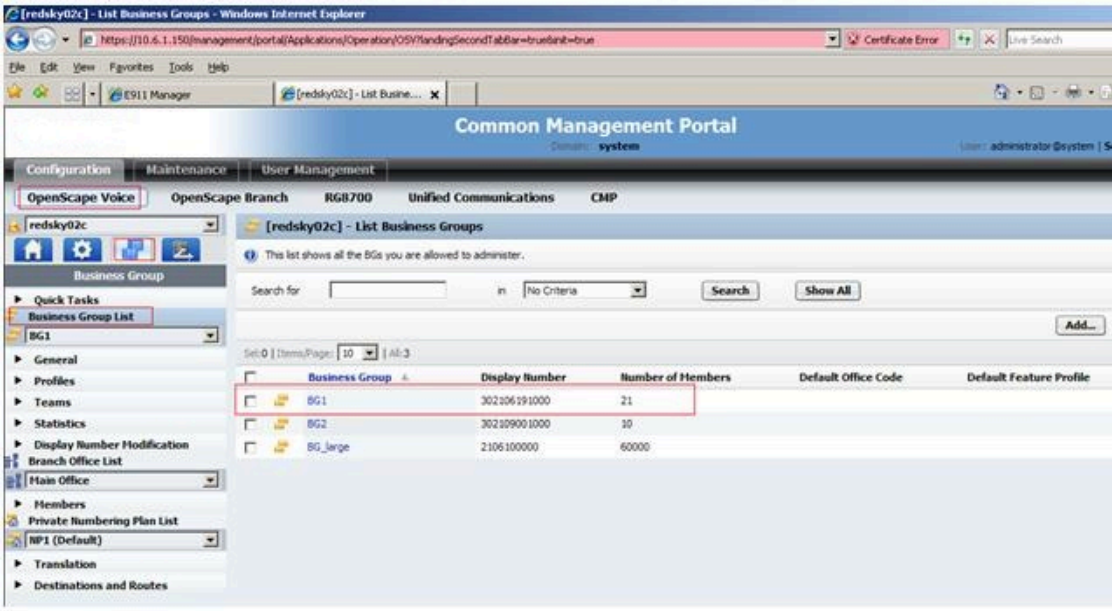
Check if integration with RedSky is enabled.

- If not, then search in the E911 BG Subnet entries in order to find the subnet
  - If no subnet is found, route the call to the default emergency destination
  - If a subnet is found, route the call to the provisioned destination
  - If the RTP parameter Srx/Service/E911/EmergencySNMPEvent is set to RtpTrue an SNMP trap for event 250 will be sent to each configured SNMP Event Filter
  - If the RTP parameter Srx/Service/E911/EmergencySNMPEvent is set to RtpFalse no SNMP trap will be sent
- If yes, then check for the ELIN in the new table
  - If an ELIN is found, insert the ELIN in the CPN and PAI headers and route the call to the provisioned route for the RedSky Anywhere service
  - If an ELIN is not found, search in the E911 BG Subnet entries in order to find the subnet
  - If the RTP parameter Srx/Service/E911/EmergencySNMPEvent is set to RtpTrue an SNMP trap for event 250 will be sent to each configured SNMP Event Filter
  - If the RTP parameter Srx/Service/E911/EmergencySNMPEvent is set to RtpFalse no SNMP trap will be sent

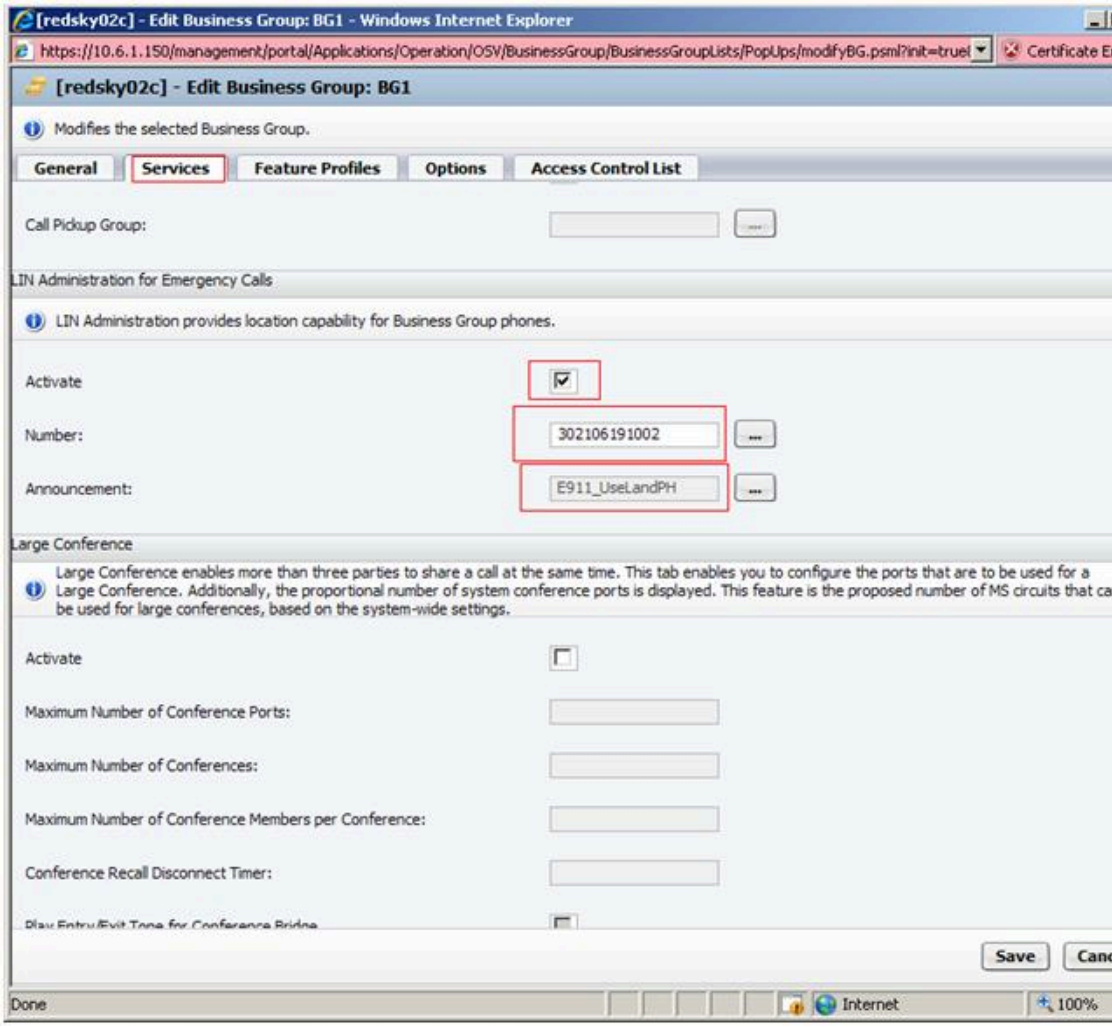



If OSV does not find ELIN then it should route the call to E911 BG Subnet entries. To create E911 BG Subnet you have to enable E911 emergency calling first in OSV. To do this,

Go to **Configuration->OpenScape Voice->Business group->Business Group** list.

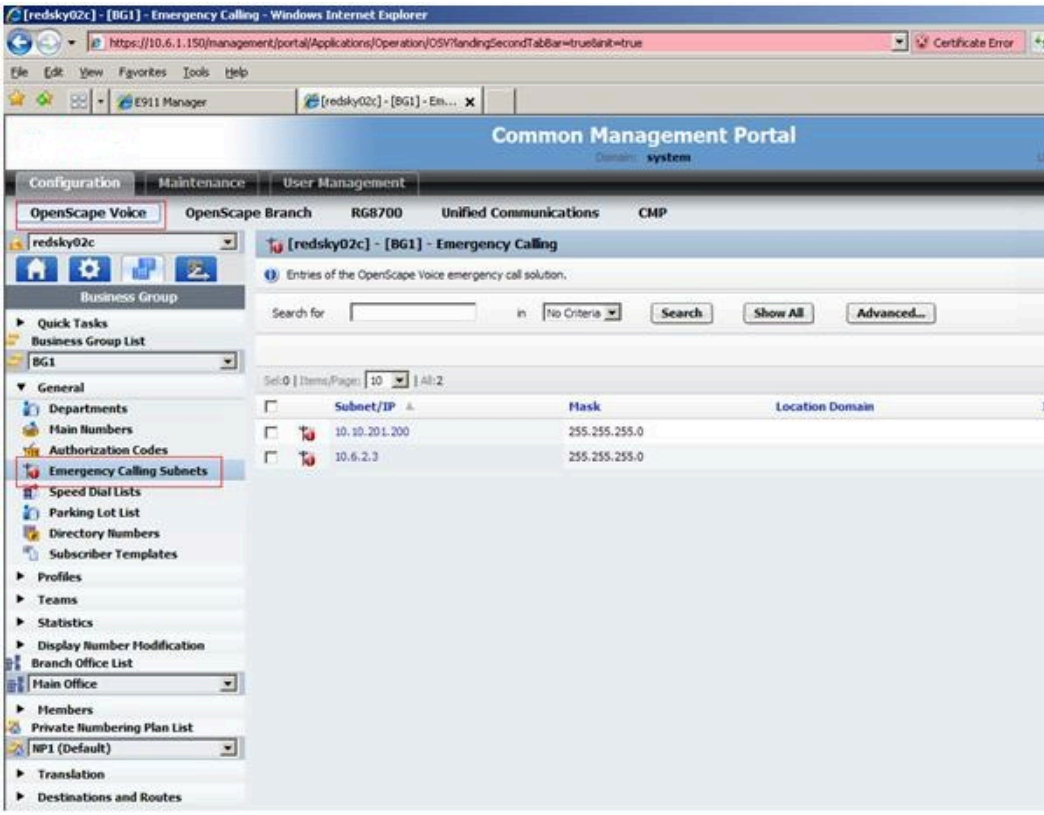



Select BG and go to **Services** tab, **Activate** E911 service, select a **Number** for default emergency destination and select E911 **Announcement**.

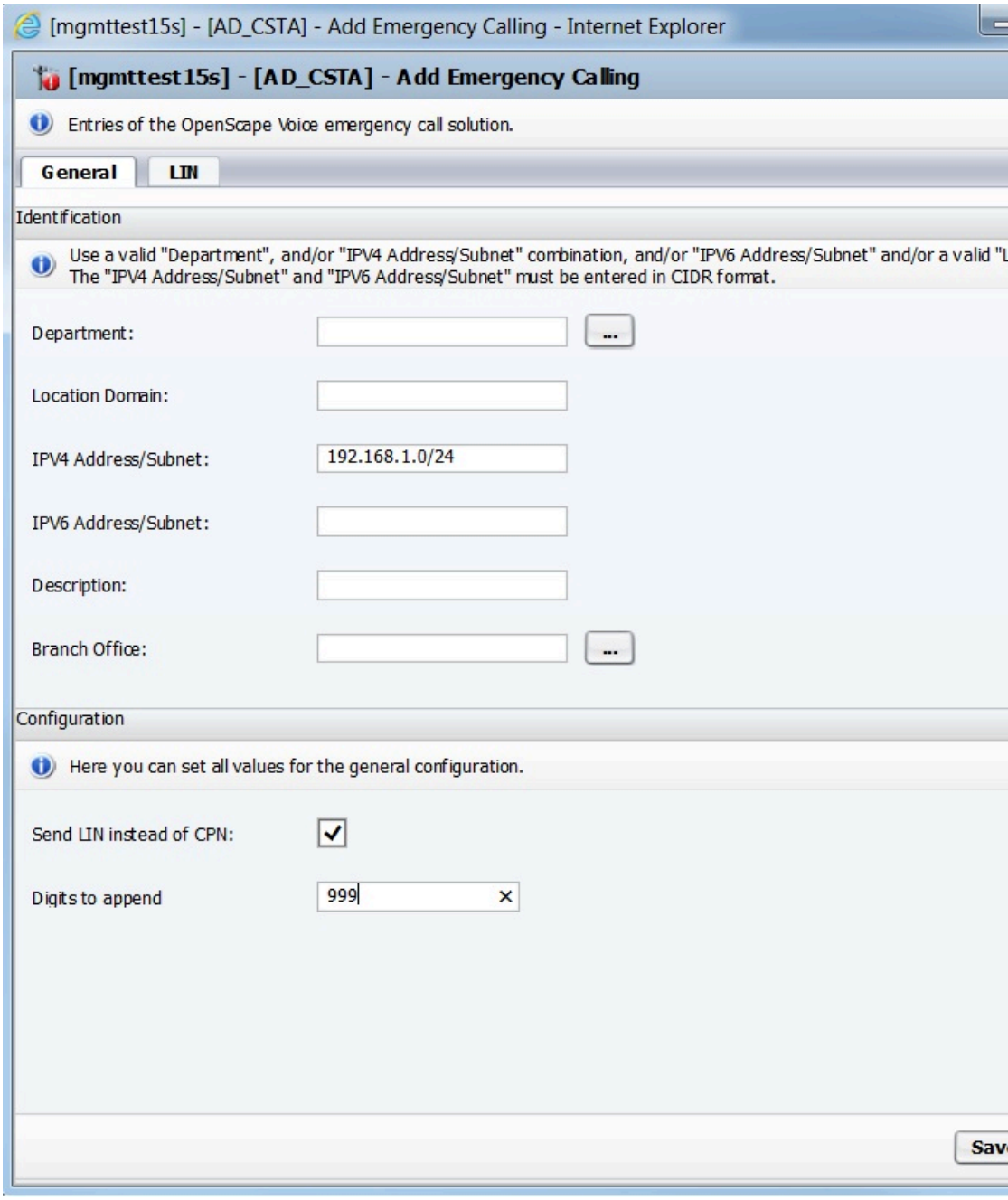


To create E911 BG Subnet entries go to **Openscape Voice->Business Group->General->Emergency Calling Subnets.**

Select **Add...**

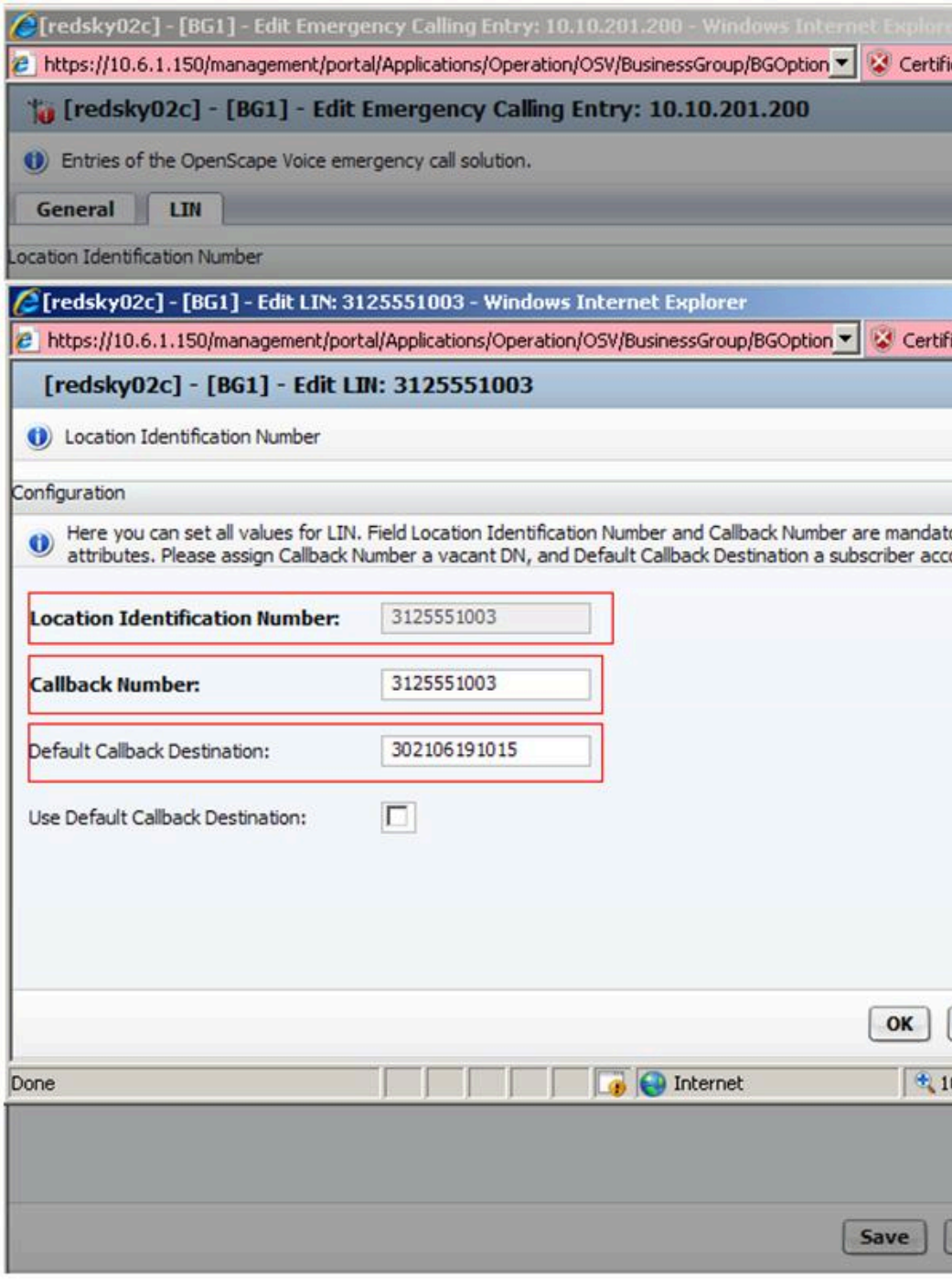



Give a value to the parameter **IPV4 Address/Subnet** in CIDR format, enable **send LIN instead of CPN** and give the **Digits to append**.




Go to **LIN** tab and select **Add**.

Give the **Location Identification Number** (LIN). Fill in **Callback Number** and **Default Callback Destination**. Select **OK** and then **Save.**


[redsky02c] - [BG1] - Edit Emergency Calling Entry: 10.10.201.200 - Windows Internet Explorer
https://10.6.1.150/management/portal/Applications/Operation/OSV/BusinessGroup/BGOption
[redsky02c] - [BG1] - Edit Emergency Calling Entry: 10.10.201.200
Entries of the OpenScape Voice emergency call solution.
General
LIN
Location Identification Number
[redsky02c] - [BG1] - Edit LIN: 3125551003 - Windows Internet Explorer
https://10.6.1.150/management/portal/Applications/Operation/OSV/BusinessGroup/BGOption
[redsky02c] - [BG1] - Edit LIN: 3125551003
Location Identification Number
Configuration
Here you can set all values for LIN. Field Location Identification Number and Callback Number are mandat
attributes. Please assign Callback Number a vacant DN, and Default Callback Destination a subscriber acc
Location Identification Number: 3125551003
Callback Number: 3125551003
Default Callback Destination: 302106191015
Use Default Callback Destination:
OK
Done
Internet
Save

# 2 DCMP and RedSky

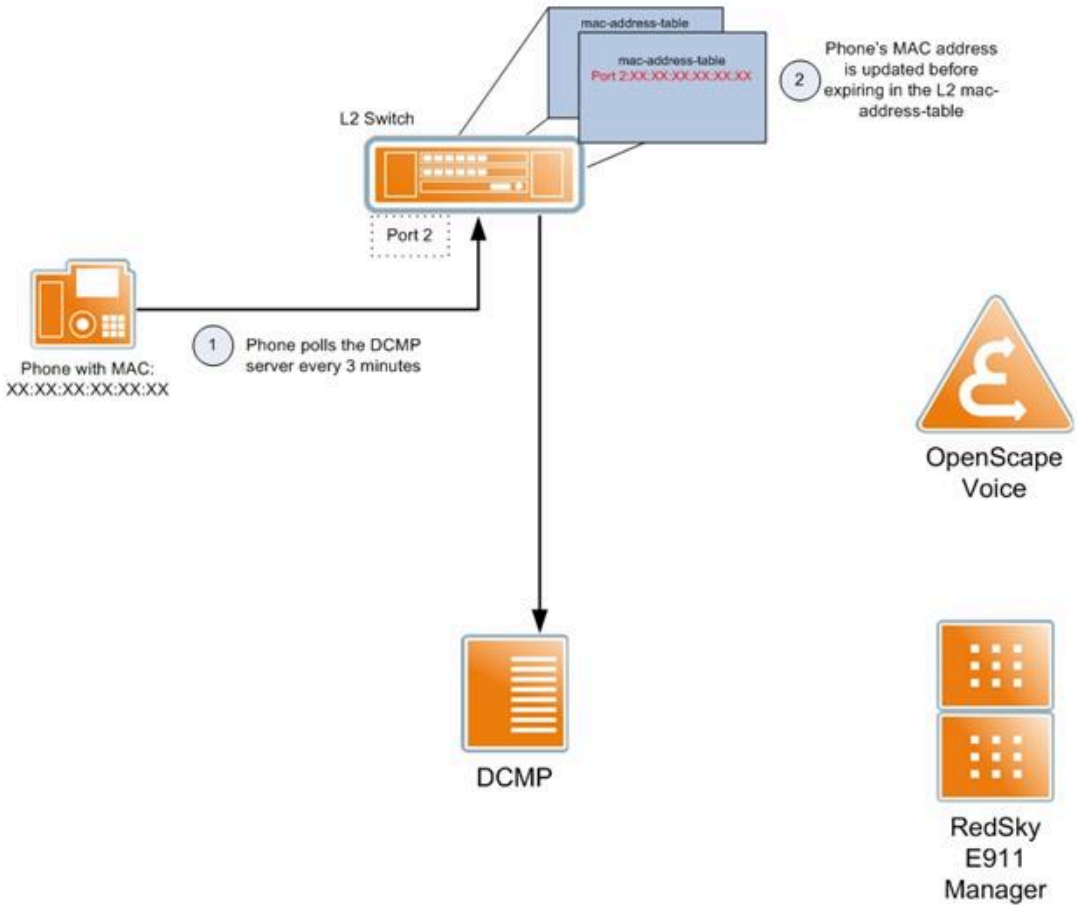
## 2.1 DCMP Implementation

**NOTICE:**

It is necessary to implement DCMP (**DLS Contact Me Proxy**) in order to have full functionality.

There are some cases where RedSky E911 Manager will attempt to perform network discovery not triggered by the device's registration. Such cases may include network discovery performed by RedSky E911 Manager on pre-configured periods (e.g. daily or weekly) for synchronization purposes or when RedSky E911 Manager is restarted. In such cases, the devices may be inactive for a long time when the network discovery is performed and the L2 mac-address-table may have flushed the MAC address of the device due to inactivity.

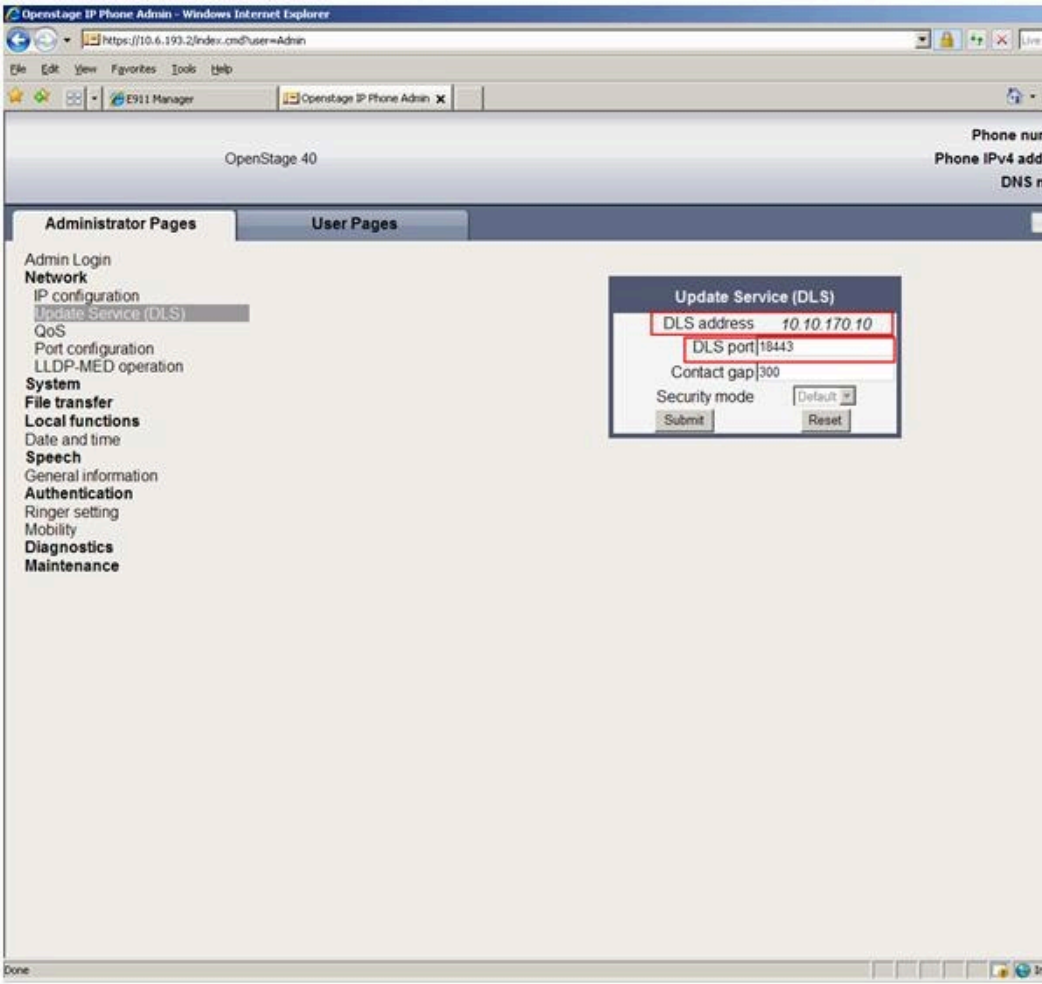
If the MAC address of a device has been flushed from the L2 switch mac-address-table then the network discovery will fail. In order to overcome this problem there have been proposed a workaround that will prevent the mac-addres-tables from flushing the MAC addresses of the idle devices:



## 2.2 Phones - DCMP - DLS Configuration

OpenStage firmware V2R2.47.2 and above is required.

Openstage phones should be configured to have the IP of the DLS.



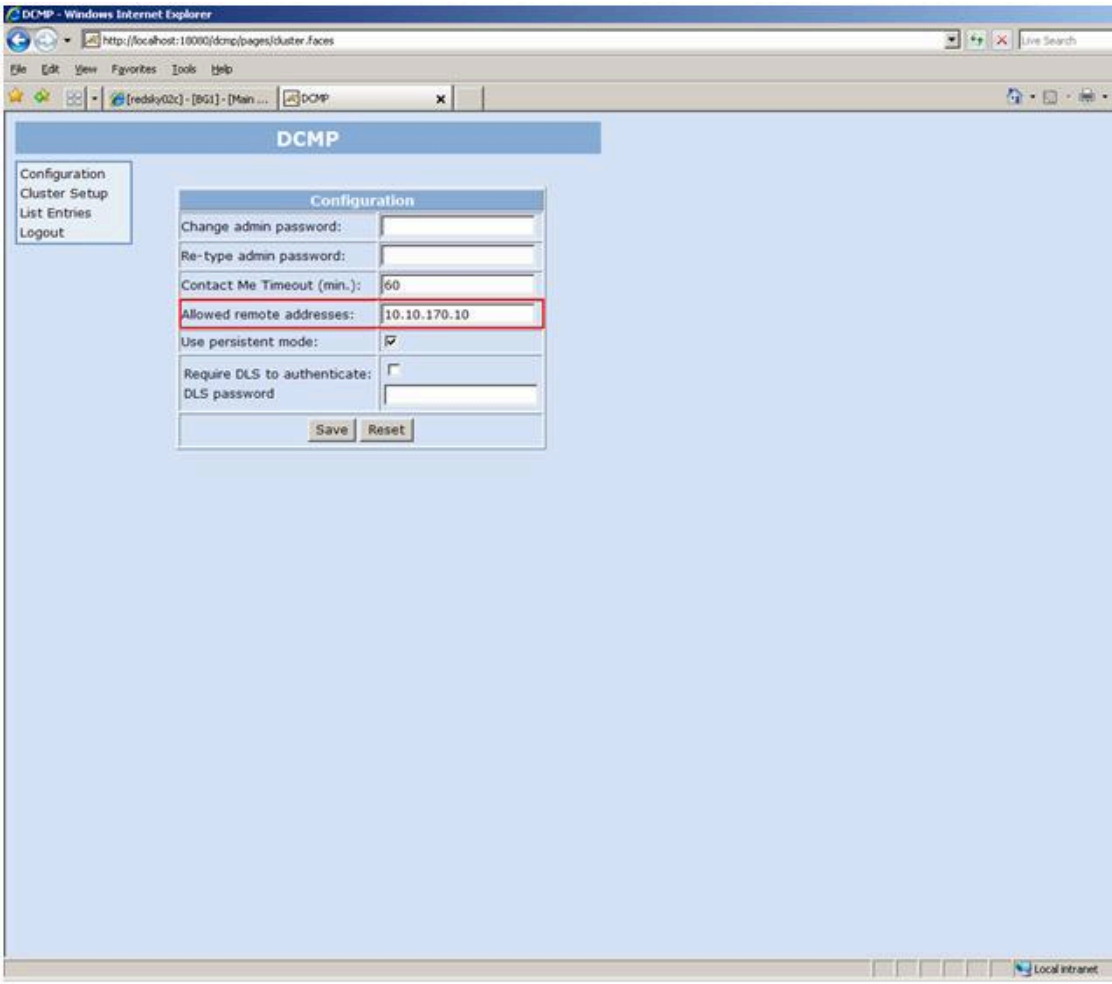

DCMP should be installed in the same server with DLS or should act on a different server.

In this example DCMP acts in a different server with DLS.

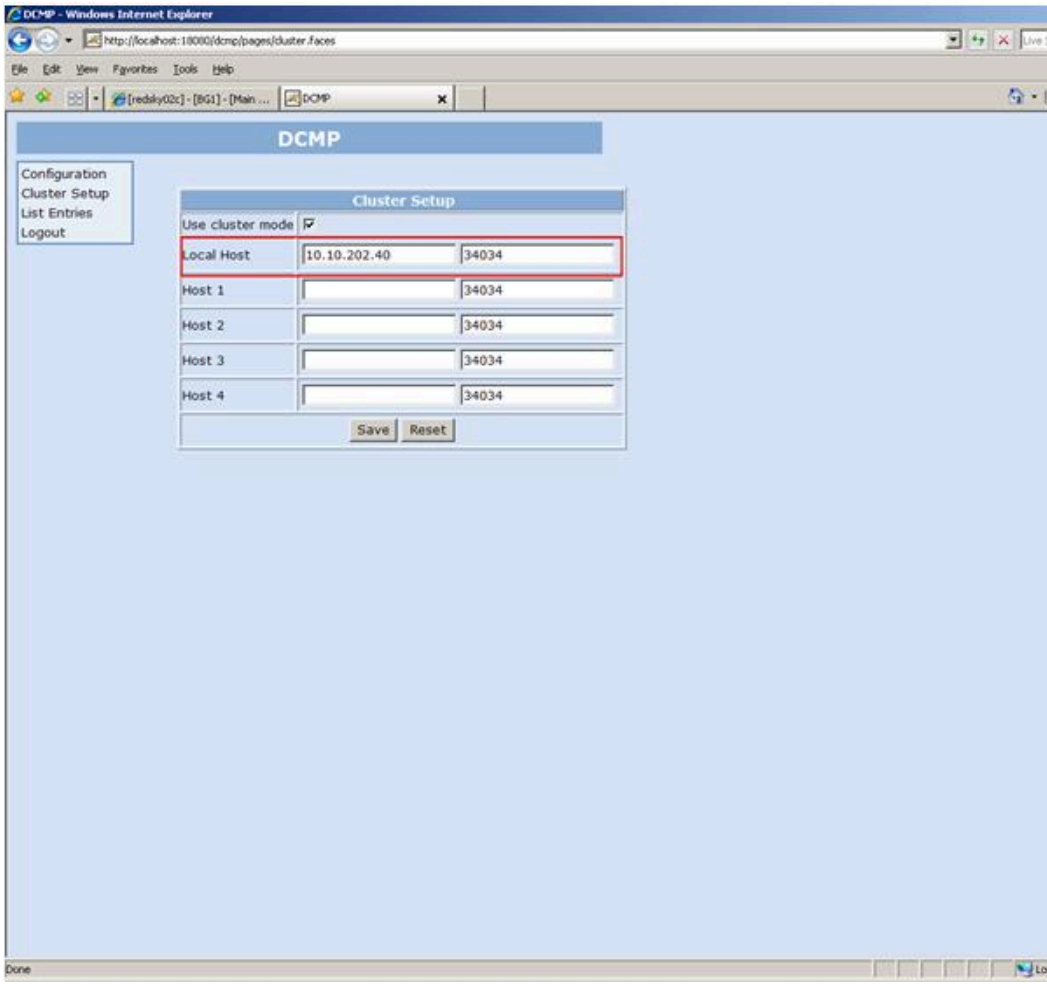
After the installation of DCMP, login:

`http://localhost:18080/dcmp/`

In the configuration menu add the IP of DLS.



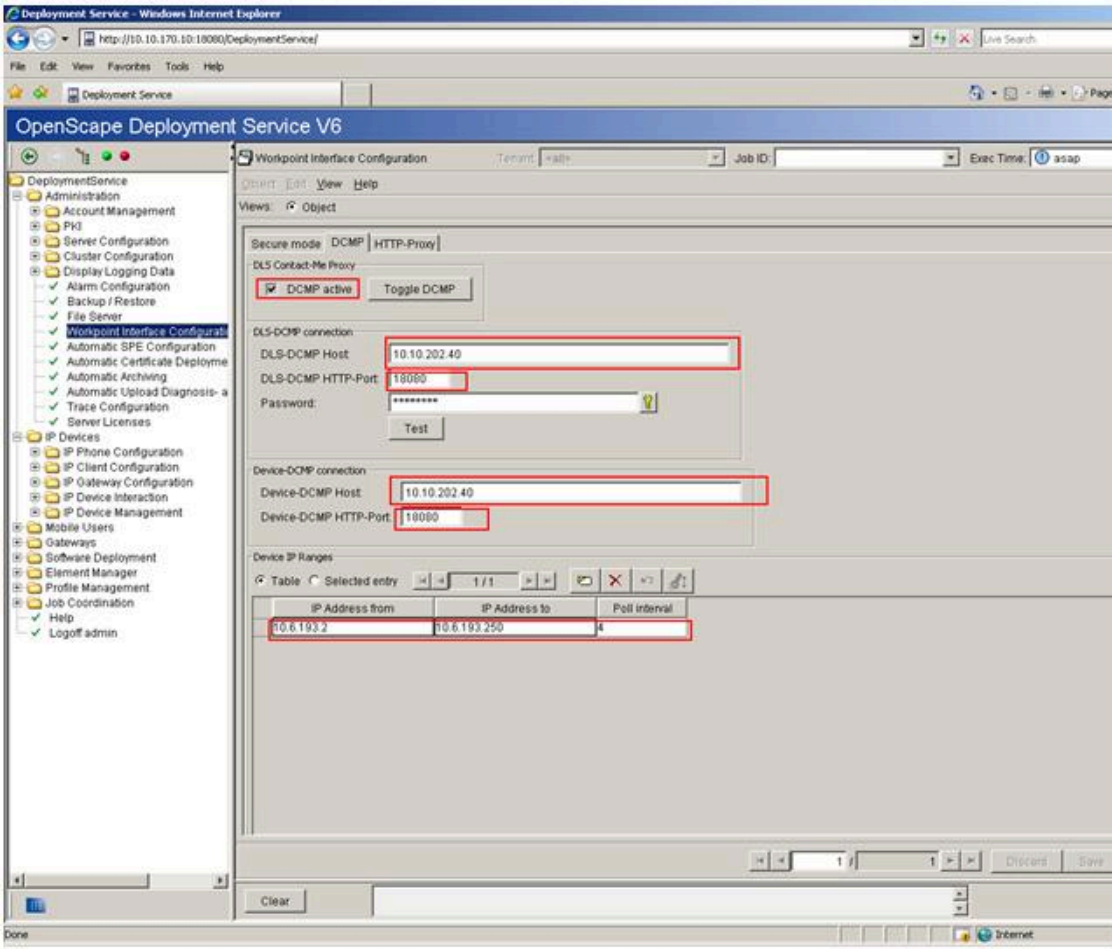

In the Cluster setup menu add the IP of DCMP.




In the Deployment Service go to **Administration ----> Workpoint Interface Configuration**

**Activate DCMP** and fill in the IP of the DCMP server in port 18080 for the **DLS-DCMP host** and **Device –DCMP host**.

Give the **IP range** of the phones that DCMP will act and set the **Poll Interval** less than 5 minutes.


Deployment Service - Windows Internet Explorer
OpenScape Deployment Service V6
Workpoint Interface Configuration
DeploymentService
Administration
Account Management
PKI
Server Configuration
Cluster Configuration
Display Logging Data
Alarm Configuration
Backup / Restore
File Server
Workpoint Interface Configurati
Automatic SPE Configuration
Automatic Certificate Deployme
Automatic Archiving
Automatic Upload Diagnosis- a
Trace Configuration
Server Licenses
IP Devices
IP Phone Configuration
IP Client Configuration
IP Gateway Configuration
IP Device Interaction
IP Device Management
Mobile Users
Gateways
Software Deployment
Element Manager
Profile Management
Job Coordination
Help
Logoff admin
Secure mode
DCMP
HTTP-Proxy
DLS Contact-Me Proxy
DCMP active
Toggle DCMP
DLS-DCMP connection
DLS-DCMP Host
10.10.202.40
DLS-DCMP HTTP-Port
18080
Password:
Test
Device-DCMP connection
Device-DCMP Host
10.10.202.40
Device-DCMP HTTP-Port
18080
Device IP Ranges
IP Address from
IP Address to
Poll interval
10.6.193.2
10.6.193.250
Clear

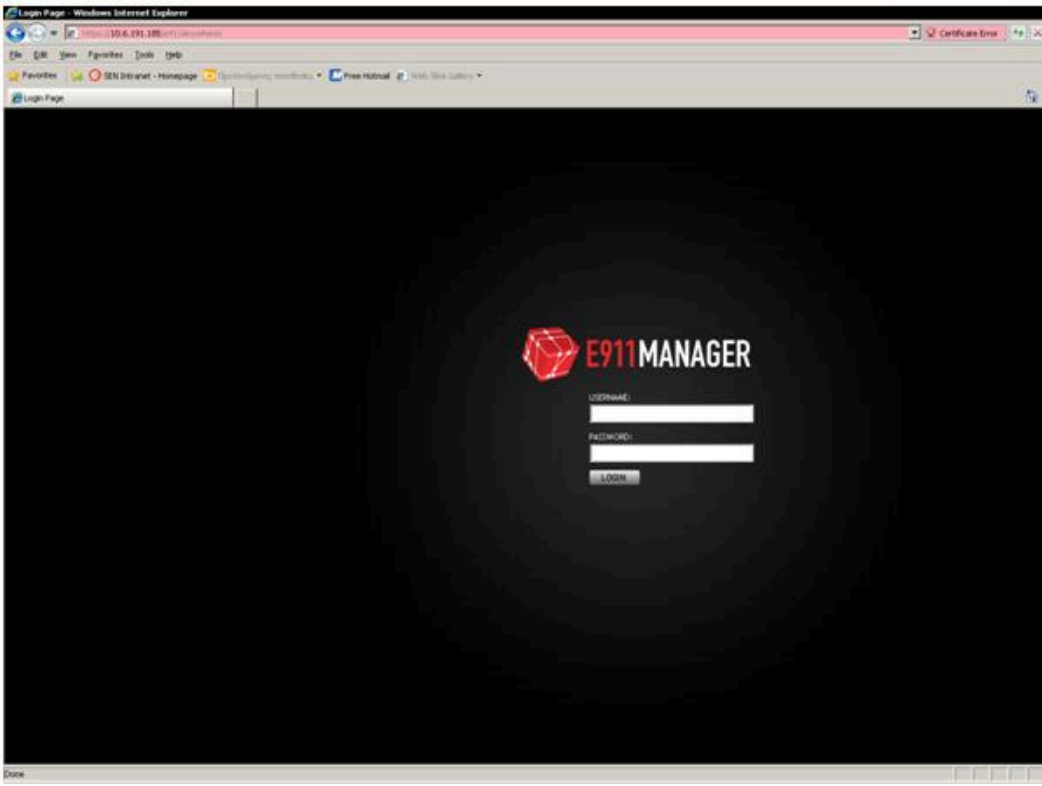
# 3 Configuring RedSky for Integration with OSV

## 3.1 Add Call Server

To configure OSV switch in RedSky manager, login to the active RedSky server as followed:

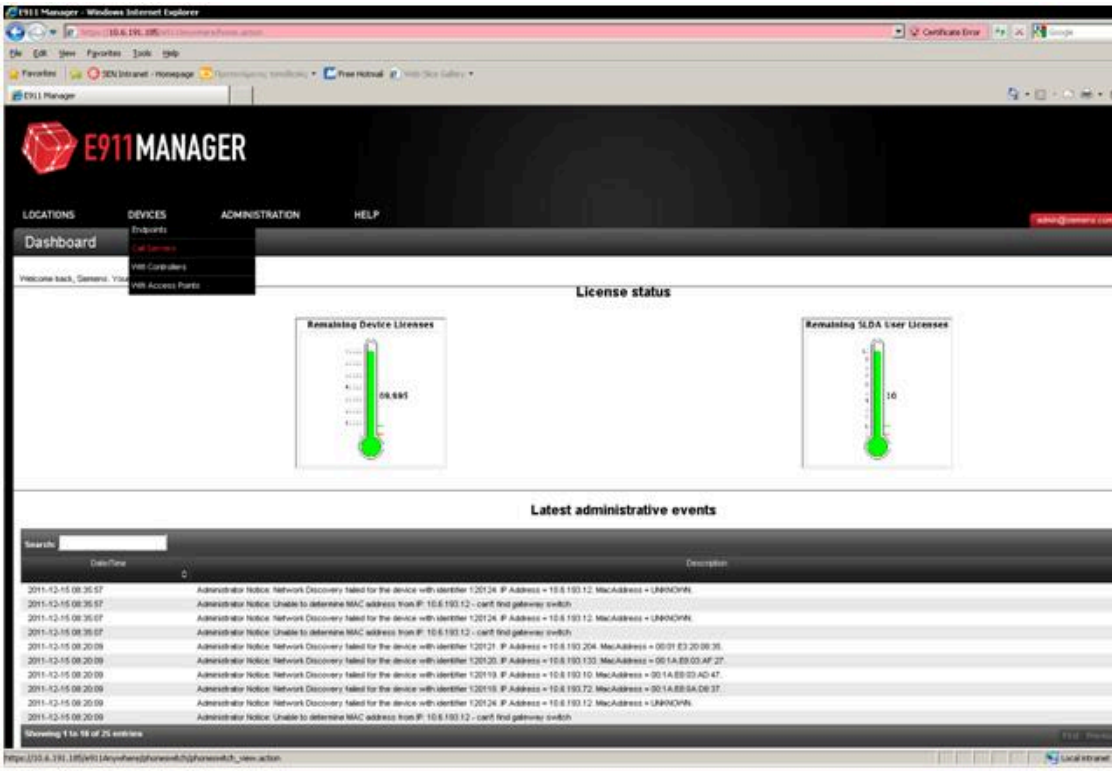
https://xxx.xxx.xxx.xxx/e911Anywhere/

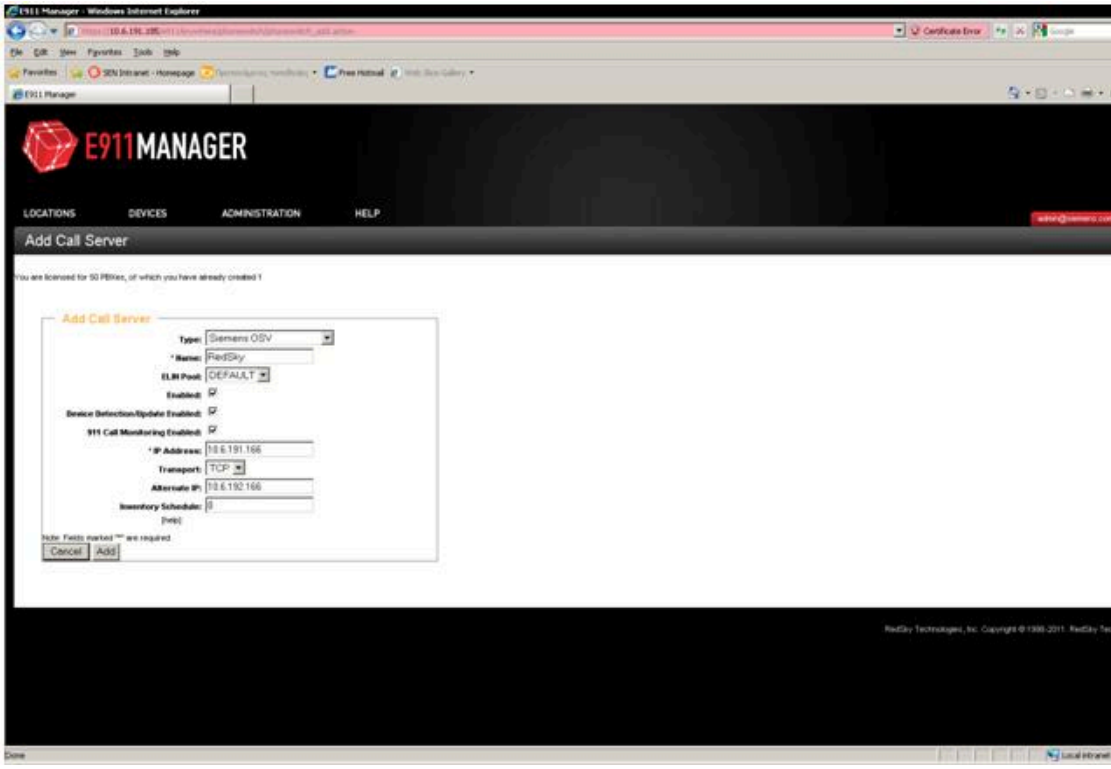
You are required to enter **username** and **password**.




To add OSV switch:

Go to **Devices->Call server** and press **add call server**


E911MANAGER
LOCATIONS
DEVICES
ADMINISTRATION
HELP
Dashboard
Endpoints
Call Servers
VoIP Controllers
VoIP Access Points
License status
Remaining Device Licenses
Remaining SLDA User Licenses
Latest administrative events


E911MANAGER
LOCATIONS
DEVICES
ADMINISTRATION
HELP
Add Call Server
Add Call Server
Type: Siemens OSV
* Name: RedSky
ELIN Pool: DEFAULT
Enabled:
Device Detection/Update Enabled:
911 Call Monitoring Enabled:
* IP Address: 10.6.191.166
Transport: TCP
Alternate IP: 10.6.192.166
Inventory Schedule:
Cancel
Add

Select

- **Type:** Siemens OSV

  **NOTICE:**

  RedSky may rename it to Unify OSV to agree with the rebranded name of the company.

- **Name:** Give a name
- Check the boxes “enabled” “**Device Detection/Update Enabled**” “**911 call monitoring enabled**”
- In the **IP address** field add **sipsm IP** of the OSV primary node.
- **Transport protocol** should be either **TCP** or **TLS**
- **Alternate IP** should be **sipsm of the secondary node** of OSV (in case of cluster).
- In the **Inventory Schedule** you should **set the time that RedSky will send SUBSCRIBE** in the OSV.

The format should be similar to the following:

Format: Second Minute Hour Day Month Weekday

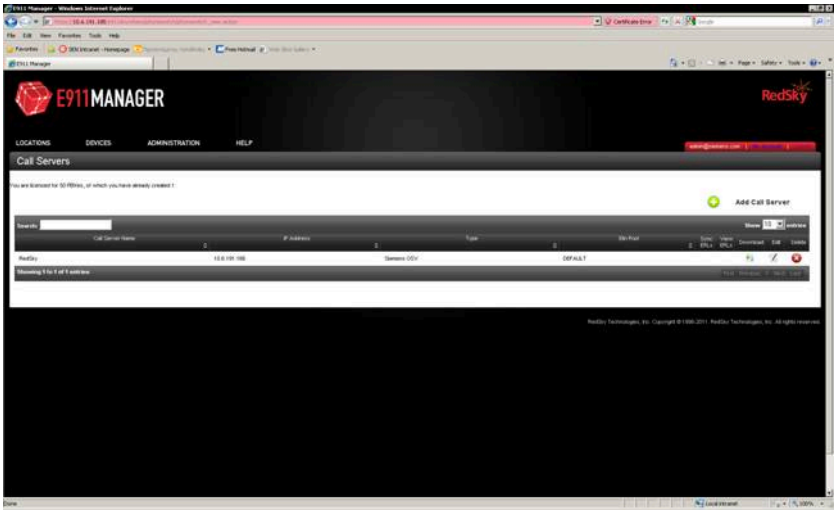
Some format examples:

12:30 am every day: 0 30 0 * * ?

First of the month at 1 am and 1 pm: 0 0 1,13 1 * ?

Tuesday and Thursday at midnight: 0 0 0 ? * TUE,THU

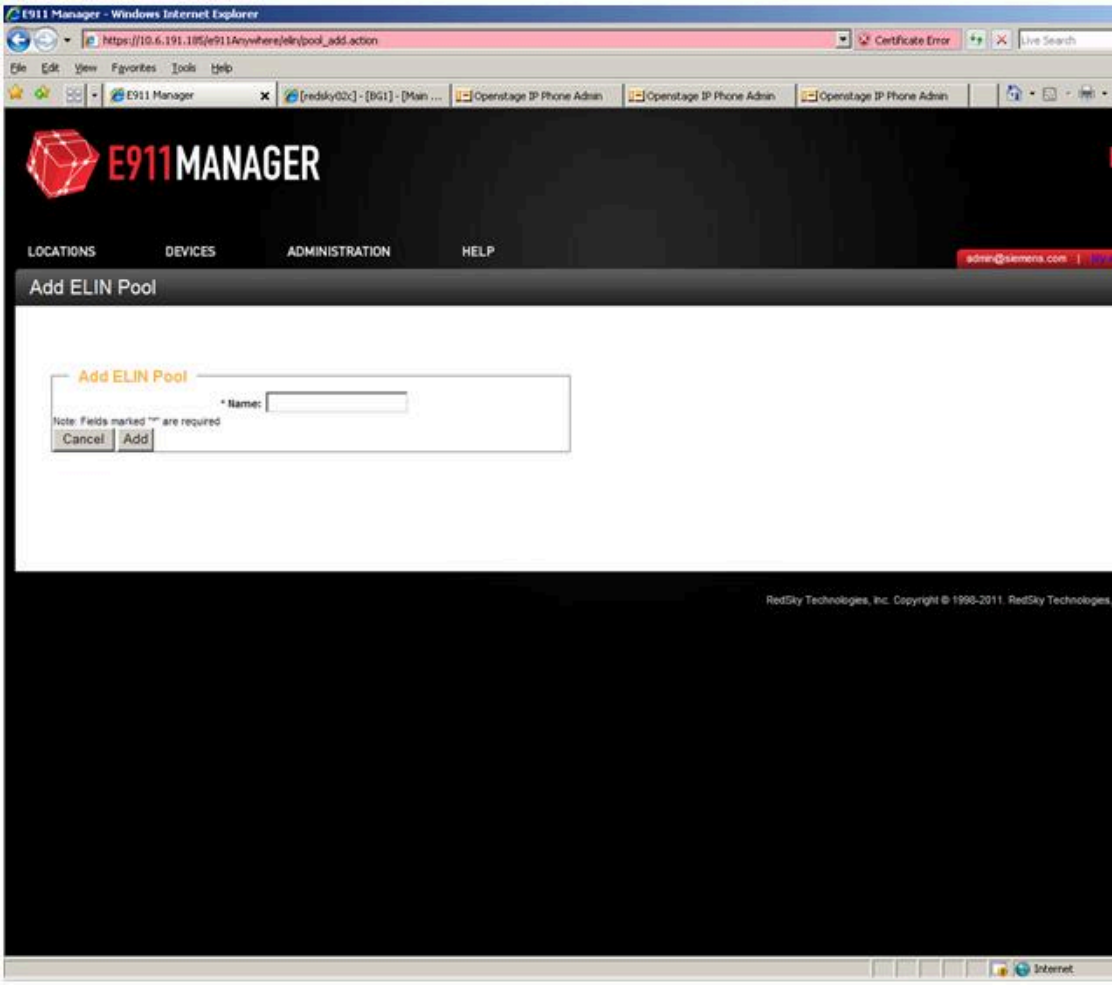
Press **Add.**




## 3.2 Create Locations and ELINS

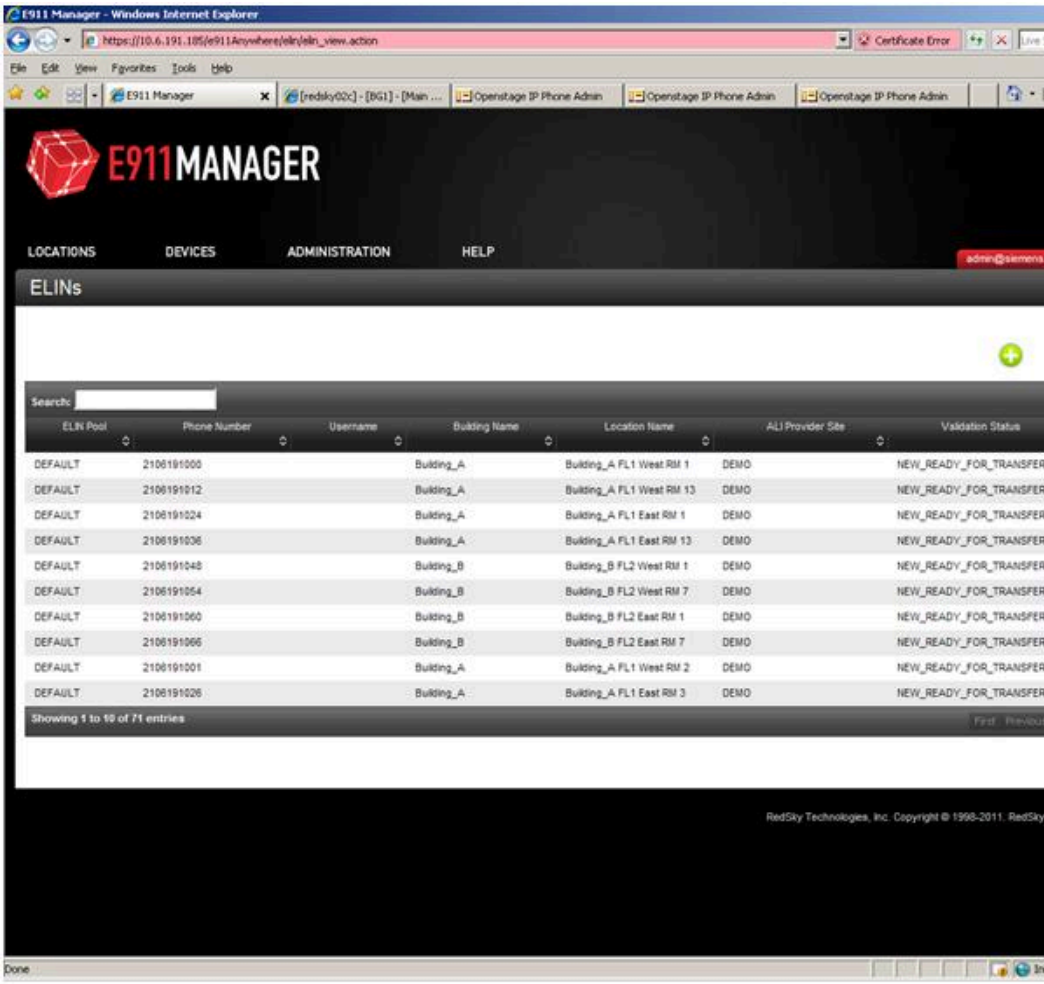
### 3.2.1 Add ELIN Pool and Create ELINS

To create ELIN pools go to **Locations->ELIN pool**




In the next step ELINS are created for every location.

**NOTICE: This setting can be done only from RedSky engineer.**

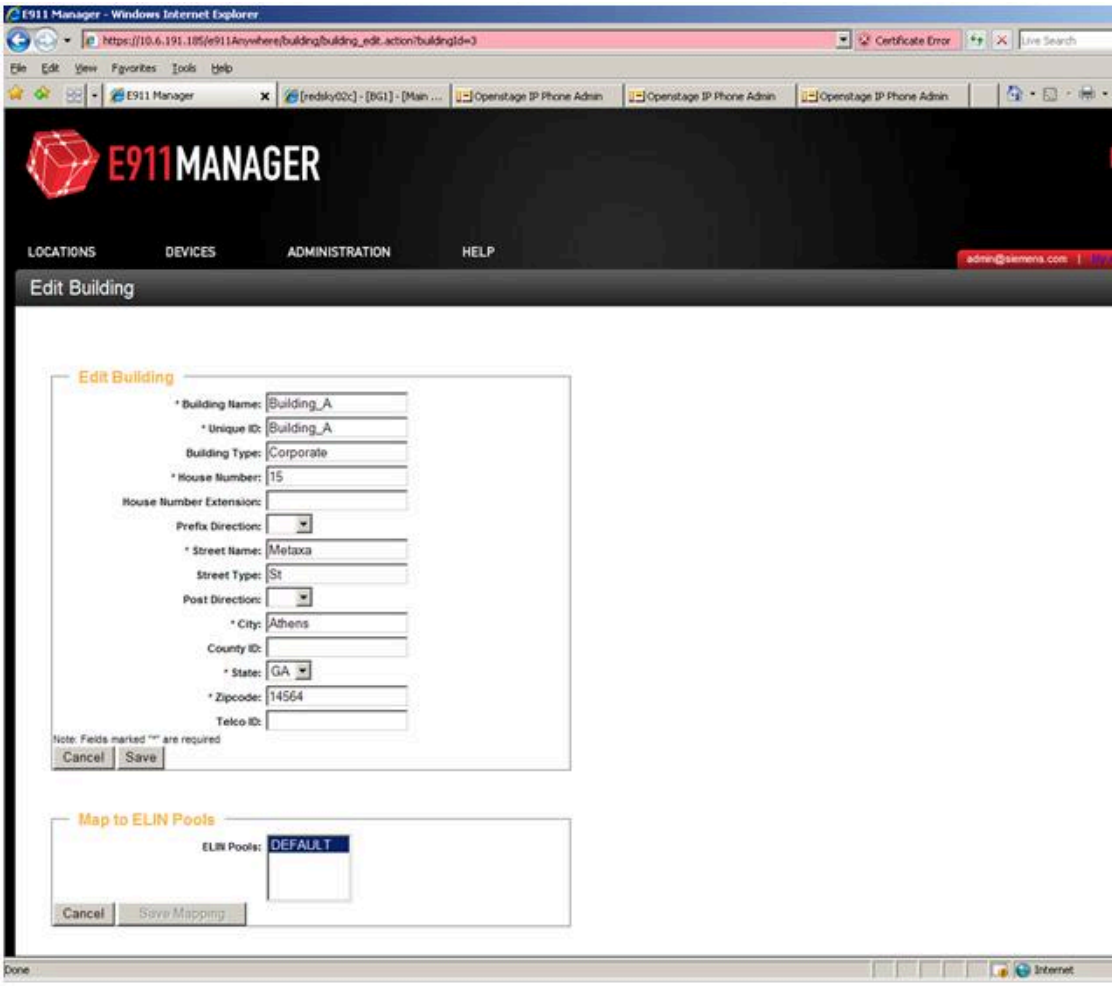



**NOTICE:**

The static changes in RedSky E911 Manager are published asynchronously to OSV. If for example the ELIN of a discovered registration is changed in RedSky E911 Manager's GUI, RedSky E911 Manager will publish the new ELIN to OSV.

## 3.2.2 Create Building Location

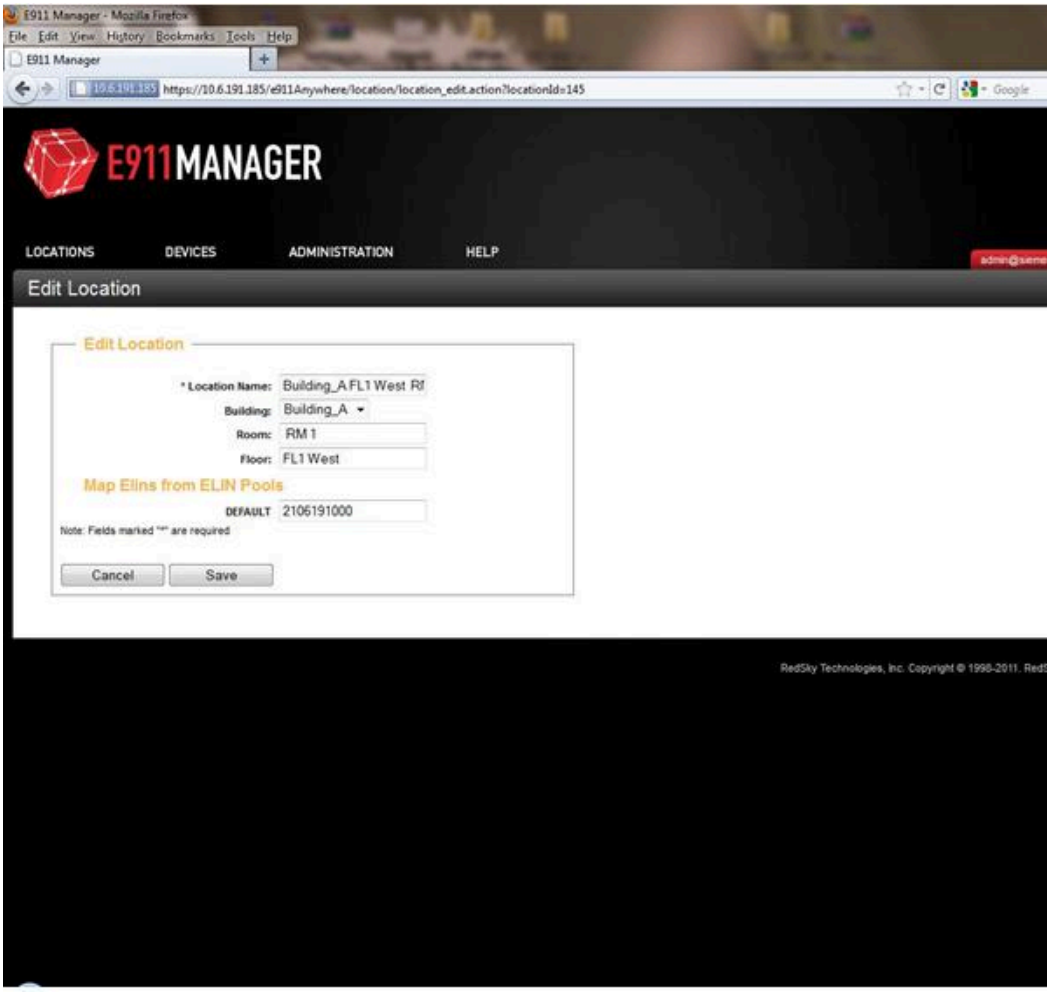
To add locations go to **Locations->Buildings->Add Building**




Enter information based on building location.

## 3.2.3 Create Room/Floor Locations

To create Room/Floor locations go to **Locations->Rooms/Floors**



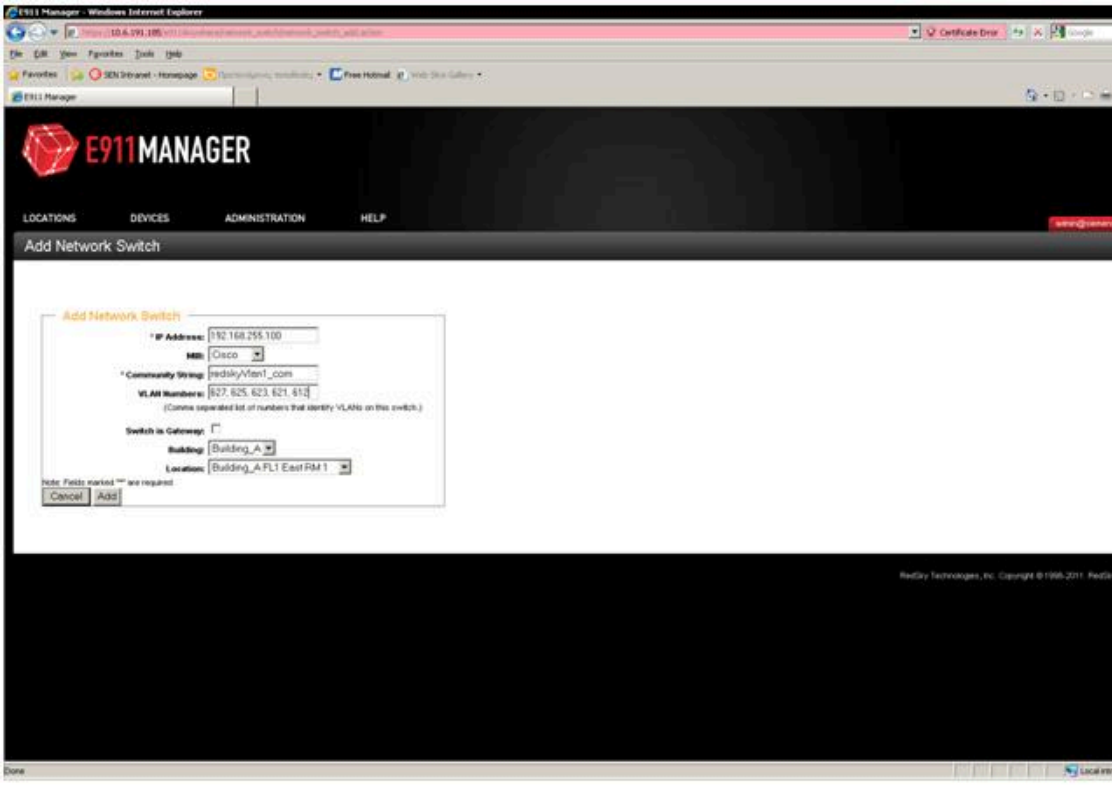

S**pecify Location Name, Building, Room, Floor** and **ELIN**

## 3.3 Network Discovery/IP Ranges

### 3.3.1 Network Discovery

To add network switch

Go to **Locations ->Network Switches-> Add Network Switch**



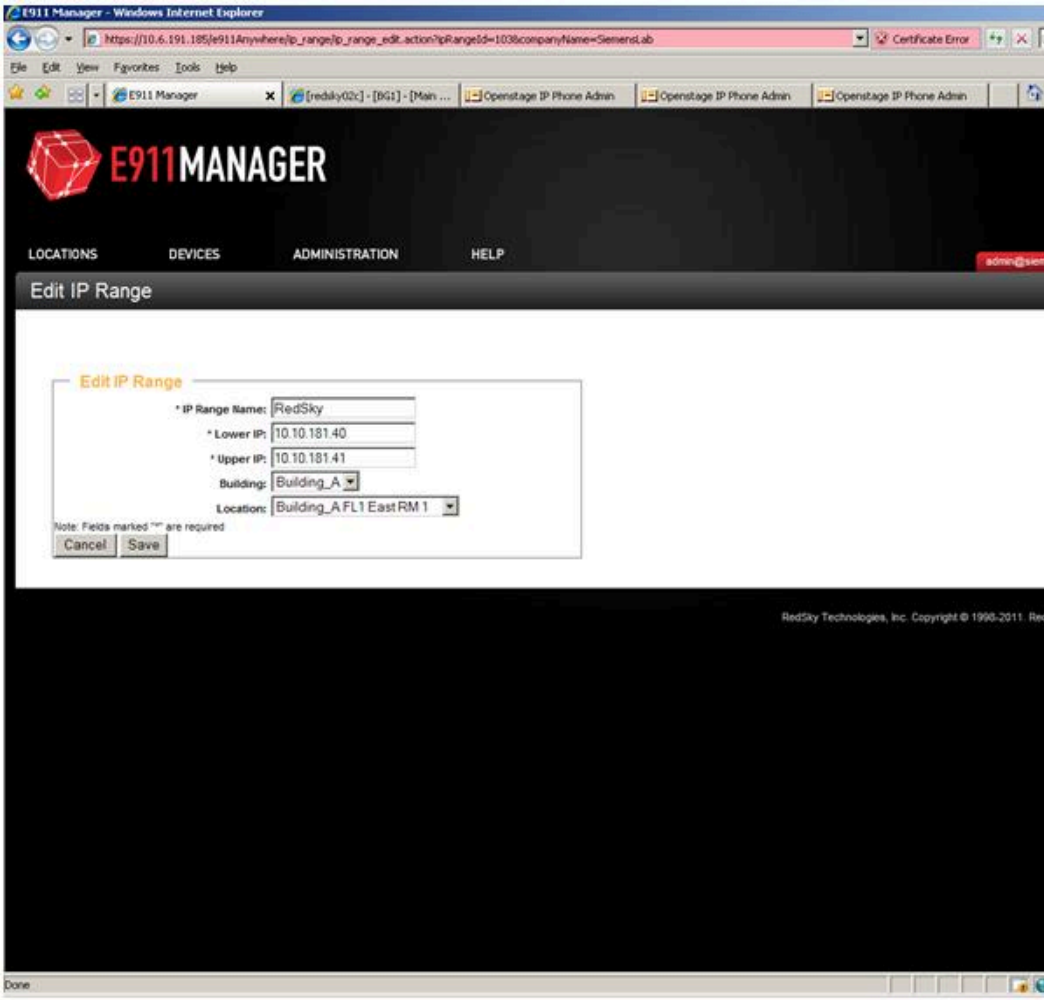

Depending on the network configuration you will require to add L2 switch. (Optionally you can add L3 switch of the network).

RedSky manager has to know the switch that the phones are plugged into, in order to do the network discovery. In this example we are using L2 switch for network discovery.

- **IP address:** the IP address of the switch
- **MIB:** choose one switch between extreme, juniper, Cisco or bridge if you want to add bridge switch.
- **Community string:** add community string name of the switch
- **VLAN numbers:** add vlan id of your network switch
- **Switch is gateway:** check if the network switch is a gateway switch. Add the appropriate subnet
- **Building:** Select the appropriate building from the drop-down menu
- **Location:** Select the location.

## 3.3.2 IP Ranges

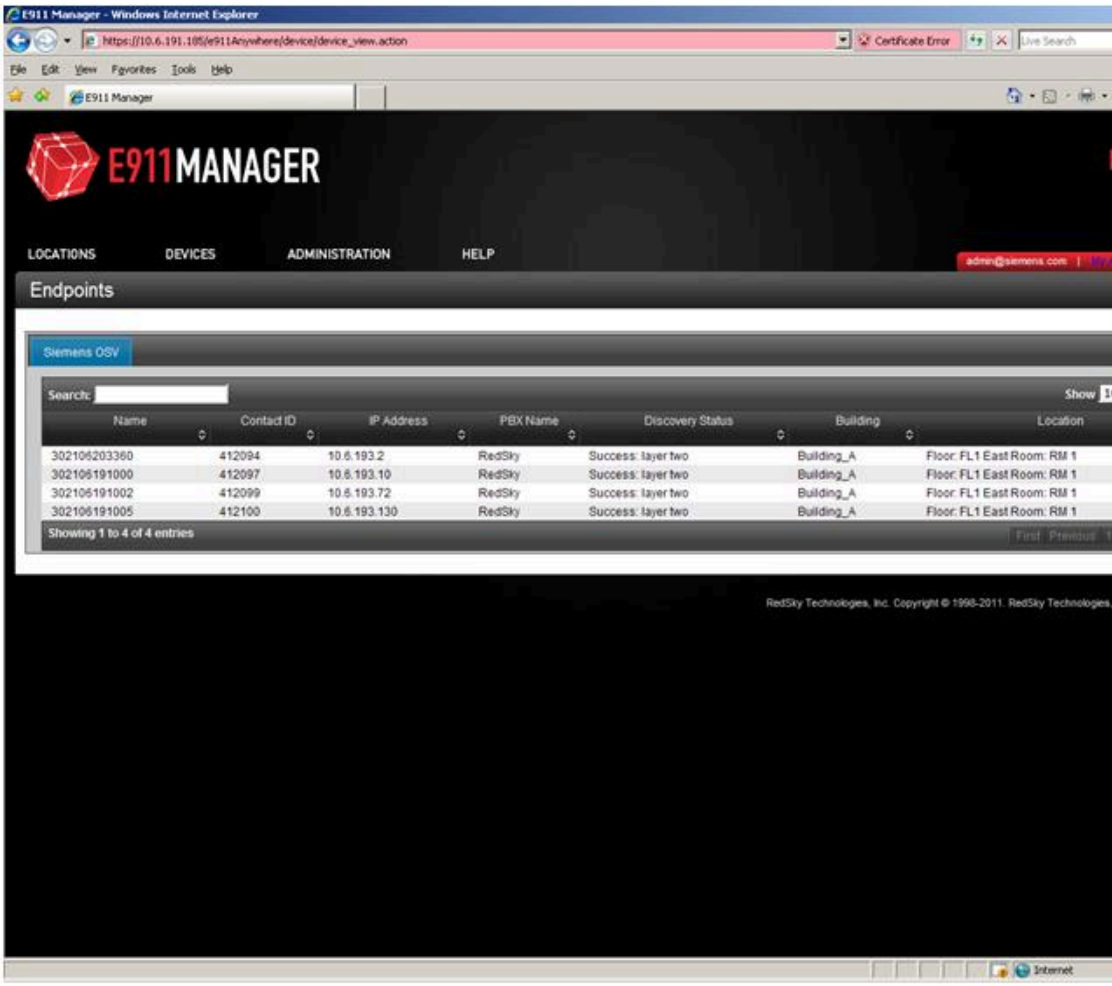
To add IP Ranges go to Locations->IP Ranges->Add Range




Give a name in **IP Range Name**. In **Lower IP** add the lowest IP of the range and the **Upper IP** of the range respectively. Also specify the building and location of the IP range. You can create multiple IP ranges based on the network.

## 3.4 Discovered Devices

To verify that OSV phone devices is discovered from RedSky go to **Devices->Endpoints**




**NOTICE:**

Users registered behind an SBC (in isolated network (i.e. RedSky Manager does NOT have access to L2 switch)) should use IP ranges in order to discover the IP of the SBC.

# 4 Restrictions

## 4.1 Redundancy Limitations

In Redsky Manager (version 6.4) redundancy is limited and in some cases the servers are unable to come back into service after restarting or shutting them down.

The aforementioned cases are described below.

- **Primary/Secondary** state:
  - Secondary node restarts and the sync-connectivity gets established. Both nodes are accessible (http and functionality).
  - Primary node restarts but there is no sync-connectivity (http and functionality). Secondary node becomes primary and is accessible (http and functionality). The state becomes **Primary/Down**.
- **Primary/Down** state:
  - No Secondary node is available and Primary node restarts. This results in both nodes to be inaccessible (http and functionality). In order to establish connectivity on both nodes and return to **Primary/Secondary** state the steps in Recovery Procedures need to be followed.
- **Both Redsky nodes restart or switch on** simultaneously:
  - This results in both nodes to be inaccessible (http and functionality). In order to establish connectivity on both nodes and return to **Primary/Secondary** state the steps in Recovery Procedures need to be followed.

## 4.2 Recovery Procedures

This Section details procedures for bringing a cluster node back into service after it has recovered from having been in a failed state.

### 4.2.1 Recovery from a Complete Power Failure of all nodes

If all nodes have had a power reset, follow these steps to recover the cluster:

1) Power-on all nodes.
2) Login to the pgpool admin interface on any node:

   http://<host>:8081/pgpoolAdmin
3) Under **Node Info.** the status for all nodes should be “Down”.
4) SSH into your nodes and examine the file **/etc/pgpool-II/config_for_script**. Look for the line starting with “MASTER_HOST=”. This line indicates which node is considered the “Master” node.
5) SSH into the master node and start Postgres:

   ```
   sudo service postgresql-9.3 start
   ```
6) Login to the pgpool admin interface on the master node. Under **Node Info.** master node’s status should be “Down, Running as primary server, postgres: up”.
7) Click the **Return** button for the master node.

8) The status for the master node should change to “Up. Connected. Running as primary server. postgres: up”.
9) At this point the master node database is fully recovered. SSH into this node and restart all Redsky services:

   - `sudo service sailfin restart`
   - `sudo service premise_services restart`
   - `sudo service eon_email_alerter restart`

   All Redsky services should now be available on the master node.
10) Click **Recovery** for the secondary node in the pgpool admin interface.
11) After a few seconds, the pgpool node status for the secondary node should change to “Up. Connected. Running as standby server. postgres: up”.
12) SSH into your secondary node and ensure postgres is running:

    ```
    sudo service postgresql-9.3 start
    ```
13) Restart all Redsky services on the secondary node following the same procedure as in step 9.

    The secondary node is now fully recovered.

## 4.2.2 Restart of a Secondary Node

If a secondary node have had a power reset, follow these steps to return the node to service:

1) Login to the pgpool admin interface of your primary node. Under **Node Info.** secondary node’s part of the status should be “postgres: down”.
2) Click **Recovery** for the secondary node.
3) After a few seconds, the pgpool node status for the secondary node should change to “Up. Connected. Running as standby server. postgres: up”.
4) SSH into the secondary node and ensure postgres is running:

   ```
   sudo service postgresql-9.3 start
   ```
5) SSH into the secondary node and restart all Redsky services:

   - `sudo service sailfin restart`
   - `sudo service premise_services restart`
   - `sudo service eon_email_alerter restart`

   All Redsky services should now be available on the secondary node.

## 4.2.3 Primary Node Failover

If the primary node have had a power reset, the secondary node will take its place and become the new primary node. Follow the steps below to bring the former primary node back into the cluster as a secondary node:

1) Login to the pgpool admin interface of the **new** primary node:

   ```
   http://<host>:8081/pgpoolAdmin
   ```
2) Under **Node Info.** the status of the former primary node should be “Down”.

3) Click the **Recovery** button for the secondary node.
   - If the recovery is successful, the status should change to “Up. Connected. Running as standby server. postgres: Up”. Proceed to step 5.
   - If you receive the error “pcp_recovery_node command error occurred” then you must manually recover the node. Proceed to step 4.
4) Manual Recovery:
   a) SSH as root into the node and edit the file at /etc/pgpool-II/config_for_script.
   b) Change the line starting with “MASTER_HOST=” so that it now designates the current primary node as the master host.
   c) Switch to the postgres user by executing:

      ```
      su postgres
      ```

   d) Go to the /var/lib/pgsql directory:

      ```
      cd /var/lib/pgsql
      ```

   e) Execute the following command (replacing ##.#.##.### with your secondary host):

      ```
      bash -x 9.3/data/basebackup-stream.sh /var/lib/
      pgsql/9.3/data ##.#.##.### /var/lib/pgsql/9.3/data
      ```

   f) The node should now show “Up. Connected. Running as standby server. postgres: Up” under state field in the pgpool admin interface.
5) Your cluster should now be fully recovered following a failover.
6) Restart all Redsky services on your new secondary/standby node:
   - `sudo service sailfin restart`
   - `sudo service premise_services restart`
   - `sudo service eon_email_alerter restart`

   All Redsky services should now be available on the master node.