e911 API

Available in V4.6.0 starting with V4.6.7
The Enhanced 911 (E911) functionality has been implemented for handling emergency situations. Administrators can perform the required set up in order for Uniteme and Unite users to be able to call the 911 number when needed. The functionality uses location based technology to pin point the location of 911 callers and connect them to the appropriate public resources.

About E911

The system to automatically associates a location with the origin of the call. This location may be a physical address or other geographic reference information such as X/Y map coordinates. In sipXcom, administrators are able to define physical locations and link them to users. Physical locations have a DID/ELIN (Emergency Location Identification Number) that will be sent out to the 911 dispatcher. Based on the called ID sent operators will be able to dispatch emergency services directly to the user's location.
Notes:

- E911 is a system used only in North America.
- Calls made to other emergency telephone numbers are not supported.

Using E911 REST API

sipXcom also defines a REST API to perform CRUD operations on the Emergency Resource Location (ERL) table and also to link users to locations. This API may be used by third parties in order to update the ERL data in the PS-ALI database (Private Switch/Automatic Location Identification). It also helps administrators update in bulk the locations table and link users to locations.
The following resources for the E911 API are only available for users with administration rights:
Emergency Resource Location (ERL)

- View list of ERLs
- Filter ERLs by ELIN
- Filter ERLs by user name
- Filter ERLs by user groups
- Filter ERLs by the number of assigned phones
- Update ERLs for one or multiple phones
- Update ERLs for one or multiple phone groups

Registrations

- View registrations for an IP
- View registrations for a Line/Extension

Phones

- View list of phones
- View list of phones changed since dd/mm/yy

Emergency Resource Location (ERL)

View list of ERLs

Resource URI: /erls
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
elin	ELIN number.
location	Caller location.
addressInfo	Address details.
description	Optional description.

Specific Response Codes: N/A
HTTP Method: **GET**
Returns a list with all the ERLs defined in the system.
Example: XML format
<e911Locations>
<e911Location>
<elin>12345678</elin>
<location>Building A, Floor 5, Room 1</location>
<addressInfo>23 Merivale Road, Ottawa 90210, Canada, Building A, Floor 5, Room 1</addressInfo>
</e911Location>
<e911Location>
<elin>87654321</elin>
<location>Building A, Floor 5, Room 3</location>
<addressInfo>23 Merivale Road, Ottawa 90210, Canada, Building A, Floor 5, Room 3</addressInfo>
<description>Some optional description</description>
</e911Location>
</e911Locations>
HTTP Method: PUT
Save a list of ERLs.
HTTP Method: POST
Update a list of ERLs.
Unsupported HTTP Method: DELETE

Filter ERLs by ELIN

Resource URI: /erl/elin/{elin}
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
elin	ELIN number.
location	Caller location.
addressInfo	Address details.
description	Optional description.

Specific Response Codes: N/A
HTTP Method: **GET**
Returns the ERLs with the specified ELIN.
Example: XML format
<e911Location>
<elin>12345678</elin>
<location>Building A, Floor 5, Room 1</location>
<addressInfo>23 Merivale Road, Ottawa 90210, Canada, Building A, Floor 5, Room 1</addressInfo>
<description />
HTTP Method: PUT
Update the ERL with the specified ELIN
HTTP Method: DELETE
Delete the ERL with the specified ELIN
Unsupported HTTP Method: POST

Filter ERLs by user name

Resource URI: /erl/user/{username}
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
location	
elin	ELIN number.

addressInfo	
description	Short description of the ERL.

Specific Response Codes: N/A
HTTP Method: **GET**
Returns the ERL linked to the user identified by the user name. Data is plain text and represents the ELIN of the ERL.
Example: XML format only
<e911Location>
<location> New York, 14 Wall Street, CM Building, 5th floor </location>
<elin> 444444 </elin>
<addressInfo> 55 Felix Street, New York </addressInfo>
<description> Recommended to use the entrance on the west wing </description>
</e911Location>
HTTP Method: PUT
Update the ERL of the user. PUT data is plain text and represents the ERL, for example, 123456.
HTTP Method: DELETE
Set the user ERL to NONE.
Unsupported HTTP Method: POST

Filter ERLs by user groups

Resource URI: /erl/group/{groupname}
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
location	
elin	ELIN number.
addressInfo	
description	Short description of the ERL.

Specific Response Codes: N/A
HTTP Method: **GET**
Returns the ERL identified with the user group
Example: XML format
<e911Location>
<location> New York, 23 Broad Street, A&B Building, 6th floor </location>
<elin> 333456 </elin>
<addressInfo> 15 Hills Street, New York </addressInfo>
<description> none </description>
</e911Location>
HTTP Method: PUT
Updates the ERL of the user group
Unsupported HTTP Method: POST

Filter ERLs by the number of assigned phones

Resource URI: /erl/phone/{serial_number}[,{serial_numer2},...]

Default Resource Properties
The resource is represented by the following properties when the GET request is performed:

Property	Description
location	
elin	ELIN number.
addressInfo	
description	Short description of the ERL.
serial	

Specific Response Codes: N/A
HTTP Method: **GET**
Retrieves a list with the locations for the phone/s.
Example: XML format
<e911Locations>
<e911Location>
<location>location1</location>
<elin>11111111</elin>
<addressInfo>address info</addressInfo>
<description/>
<serial>0004f280aaaa</serial>
</e911Location>
<e911Location>
<location>location2</location>
<elin>22222222</elin>
<addressInfo/>
<description>description</description>
<serial>0004f280bbbb</serial>
</e911Location>
</e911Locations>
Unsupported HTTP Method: PUT, POST, DELETE

Update ERLs for one or multiple phones

Resource URI: /erl/phones
Default Resource Properties: N/A
Specific Response Codes: N/A
HTTP Method: **PUT**
update locations for one or multiple phones.
Examples: XML format
<phones>
<phone>
<elin>LOCATION1_ELIN</elin>
<serial>0004f280aaaa</serial>
</phone>
<phone>
<elin>LOCATION2_ELIN</elin>
<serial>0004f280bbbb</serial>
</phone>
</phones>
Specifying an empty ELIN will set the location to NONE
<phones>
<phone>
<elin>LOCATION1_ELIN</elin>
<serial>0004f280yyyy</serial>
</phone>
<phone>
<elin></elin>
<serial>0004f280yyyy</serial>
</phone>
</phones>
Return Values: List with the updated locations. Specifying a wrong ELIN or serial will return a 400 error. The system updates the correct phones with correct data, and provide an error message with the phones that could not be updated.
Unsupported HTTP Method: GET, POST, DELETE

Update ERLs for one or multiple phone groups

Resource URI: /erl/phonegroup/{groupName}
Default Resource Properties
The resource is represented by the following properties when the GET request is performed:

Property	Description
location	Physical location of the phone group.
elin	ELIN number.
addressInfo	Address information.
description	Short description.

Specific Response Codes:
HTTP Method: **GET**
Retrieves locations for phone groups
Example: XML format
<e911Location>
<location>Mike's Office</location>
<elin>11111</elin>
<addressInfo>Str Dr Iacob Felix 55, Bucuresti Sector1</addressInfo>
</e911Location>
HTTP Method: PUT
Updates locations for phone gropus
HTTP Method: DELETE
Deletes location for phone groups.
Unsupported HTTP Method: POST

Registrations

Filter registrations by IP

Resource URI: /reg/ip/{ip}
Default Resource Properties
The resource is represented by the following properties when the GET request is performed:

Property	Description
id	Unique identification number of the
timestamp	
localAddress	
identity	
uri	
callID	
contact	
binding	
qvalue	
instanceID	Unique identification number of the instance.
gruu	
shardID	
path	
cseg	
expirationTime	
instrument	
expired	Displays **True** or **False**.

Specific Response Codes: N/A
HTTP Method: **GET**
Returns registrations for the given IP
Example: JSON format only

[1]

0: {
_id: {
$oid: "53ece9c9c9dbca3ae42b0c9c"
}
-
timestamp: 1408035273
localAddress: "192.168.2.93/RegDB::_bindingsNameSpace"
identity: "201@ezuce.ro"
uri: "sip:201@ezuce.ro"
callId: "ce9f17b8-f65e3fef-8725ec82@192.168.2.55"
contact: "<sip:201@192.168.2.55;x-sipX-nonat>"
binding: "sip:201@192.168.2.55"
qvalue: ""
instanceId: ""
gruu: ""
shardId: 3
path: ""
cseq: 46
expirationTime: 1408037748
instrument: "0004f2acf001"
expired: false
}
-
Unsupported HTTP Method: PUT, POST, DELETE

Filter registrations for lines

Resource URI: /reg/line/{line}
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
id	Unique identification number of the
timestamp	
localAddress	
identity	
uri	
callID	
contact	
binding	
qvalue	
instanceID	Unique identification number of the instance.
gruu	
shardID	
path	
cseg	
expirationTime	
instrument	
expired	Determines...Displays **True** or **False**.

HTTP Method: **GET**
Returns registrations for the given Line / Extension
Example: JSON format only

[1]

0: {
_id: {
$oid: "53e9fae1981c85c27cb59838"
}
-
instrument: ""
instanceId: ""
callId: "vU6HMrOMktGUJriyZRJuY.RpLxAEiAZ6"
binding: "sip:206@192.168.2.101:49102"
uri: "sip:206@ezuce.ro"
localAddress: ""
shardId: 2
gruu: ""
contact: "<sip:206@192.168.2.101:49102;ob;x-sipX-nonat>"
cseq: 19033
qvalue: ""
timestamp: 1407843041
path: ""
expirationTime: 1407843915
expired: false
identity: "206@ezuce.ro"
}
Unsupported HTTP Method: PUT, POST, DELETE

Filter registrations by mac

Resource URI: /reg/mac/{mac}
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
id	Unique identification number of the
timestamp	
localAddress	
identity	
uri	
callID	
contact	
binding	
qvalue	
instanceID	Unique identification number of the instance.
gruu	
shardID	
path	
cseg	
expirationTime	
instrument	
expired	Determines...Displays **True** or **False**.

Specific Response Codes: N/A
HTTP Method: **GET**
Returns registrations for the given Line / Extension
Example: JSON format only

[2]

0: {
_id: {
$oid: "53ece9c9c9dbca3ae42b0c9c"
}
-
timestamp: 1408035273
localAddress: "192.168.2.93/RegDB::_bindingsNameSpace"
identity: "201@ezuce.ro"
uri: "sip:201@ezuce.ro"
callId: "ce9f17b8-f65e3fef-8725ec82@192.168.2.55"
contact: "<sip:201@192.168.2.55;x-sipX-nonat>"
binding: "sip:201@192.168.2.55"
qvalue: ""
instanceId: ""
gruu: ""
shardId: 3
path: ""
cseq: 46
expirationTime: 1408037748
instrument: "0004f2acf001"
expired: false
}
Unsupported HTTP Method: PUT, POST, DELETE

Phones

View phones list

Resource URI: /phones
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
serial	Serial number of the phone.
elin	ELIN number.

Specific Response Codes: N/A
HTTP Method: **GET**
Retrieves list of phones
Example: XML format
<phones>
<phone>
<serial>0004f280cdbd</serial>
<elin>33333</elin>
</phone>
<phone>
<serial>123456789129</serial>
<elin>33333</elin>
</phone>
<phone>
<serial>0004f2acf001</serial>
<elin>123111</elin>
</phone>
</phones>
Unsupported HTTP Method: PUT, POST, DELETE

View list of phones that have changed since dd/mm/yy

Resource URI: phones/{date}
Default Resource Properties:
The resource is represented by the following properties when the GET request is performed:

Property	Description
serial	Serial number of the phone.
elin	ELIN number.

Specific Response Codes: N/A
HTTP Method: **GET**
Retrieve list of phones that have changed since the specified date. The date format is mm/dd/yyyy/hh/mm/ss and represents the following: month/day/year /hour/minutes/seconds with the hour in 24h format
(Example: phones/01242014162700)
Example: XML format
<phones>
<phone>
<serial>0004f280cdbd</serial>
<elin>33333</elin>
</phone>
</phones>
Unsupported HTTP Method: PUT, POST, DELETE