Istra Platform

version 9.0

Platform Owner CRM API

Istra SP, Istra Mobile, Residential, Pbx Trunking

PREAMBLE

Centile Istra platform can be released in different configurations, depending on the Customer needs. In consequence, some dissimilarities may occur between the web admin User Interfaces and features described in this Guide and the ones you get.

Table Of Contents

Server Configuration

- MyCrm web application must be enabled on a running Jetty server.
- User who wants to use myCrm must have the CRM rights enabled in the user Web Administration page.

CRM access

HTTP requests :

Actions :

- **<u>Login</u>** : Create REST session. The login operation requires an authentication header and provides an application token given in the response header "X-Application". This token must be set on all futur requests "X-Application" headers of this session .

- **<u>Get terminals</u>** : List all terminals available of the logged user.

- **<u>Create listener</u>** : Create a new listener with an arbitrary name on a given terminal for call events.

- **<u>Listen</u>** : Link session with a given listener : This operation will create a web socket session.

- **<u>Place call</u>** : Place a call with a given terminal to a destination.

Actions urls :

- **<u>Login</u>** : **POST** http://<SERVER>/restletrouter/v1/service/Login
- **<u>Get terminals</u>** : **GET** http://<SERVER>/restletrouter/v1/crm/GetTerminals
- **<u>Create listener</u>** : **POST** http://<SERVER>/restletrouter/v1/service/EventListener/bean
- **<u>Listen</u>** : **GET** http://<SERVER>:/restletrouter/v1/crm/CallLine
- **<u>Place call</u>** : **GET** http://<SERVER>/restletrouter/v1/crm/PlaceCall

Needed Headers for login :

- Content-Type : application/json
- X-Application : myCrm
- Basic authentication with Username=ENDUSER:<USER_LOGIN> and Password=<USER_PASSWORD>

Needed Headers for other requests :

- Content-Type : application/json
- X-Application : myCrm;<TOKEN>
- Cookie : myCrm_SESSIONID=<SESSION_ID>

Parameters :

- **<u>Login</u>** : NONE.
- **<u>Get terminals</u>** : NONE.
- **<u>Create listener</u>** :
  ↘ {"name":"<LISTENER_NAME>"}
  ↘ {"terminalId":"<TERMINAL_ID>"}
- **<u>Listen</u>** :
  ↘ listenerName=<LISTENER_NAME>
  ↘ terminalId=<TERMINAL_ID>
- **<u>Place call</u>** :
  ↘ terminalId=<TERMINAL_ID>
  ↘ destination=<DESTINATION>"

Call Flow to create the web socket on a session :

- Login :

Request
POST restletrouter/v1/service/Login
X-Application: myCrm
Authorization: Basic <AUTHORIZATION>
Content-Type: application/json

Response
Set-Cookie: myCrm_SESSIONID=<SESSION_ID>;Path=/restletrouter;HttpOnly
X-Application: myCrm;<TOKEN>

- Retrieve user terminals list using GetTerminals :

Request
GET restletrouter/v1/crm/GetTerminals
Content-Type:application/json
X-Application:myCrm;<TOKEN>

Response content
[
{
"deviceModel": "SIP generic device",
"terminalId": "<TERMINAL_ID>"
}
]

- Create listener <LISTENER_NAME> for the terminal <TERMINAL_ID>.

Request
POST restletrouter/v1/service/EventListener/bean
Content-Type:application/json
X-Application:myCrm;<TOKEN>
Content
{"name":"<LISTENER_NAME>"}
{"terminalId":"<TERMINAL_ID>"}

Response content
{
"name":"<LISTENER_NAME>",
"restUri":"v1/service/EventListener/bean/<LISTENER_NAME>"
}

- Bind this session to the created listener <LISTENER_NAME> and start the web socket.

Request
GET restletrouter/v1/crm/CallLine?listenerName=<LISTENER_NAME> &terminalId=<TERMINAL_ID>
Content-Type:application/json
X-Application:myCrm;<TOKEN>

Call events :

- callAlerting
  - ↘ callId
  - ↘ type (external/internal)
  - ↘ acdId (acd pstn)
  - ↘ displayLabel
  - ↘ displayNumber
  - ↘ displayNumberE164
- callRinging
  - ↘ callId
  - ↘ type (external/internal)
  - ↘ acdId (acd pstn)
  - ↘ displayLabel
  - ↘ displayNumber
  - ↘ displayNumberE164
- callTalking
  - ↘ callId
  - ↘ Incoming (true/false)
  - ↘ type (external/internal)
  - ↘ acdId (acd pstn)
  - ↘ displayLabel
  - ↘ displayNumber
  - ↘ displayNumberE164
  - ↘ talkCause (answer/unHold)
- callDropped
  - ↘ callId
  - ↘ Incoming (true/false)
  - ↘ type (external/internal)
  - ↘ acdId (acd pstn)
  - ↘ displayLabel
  - ↘ displayNumber
  - ↘ displayNumberE164
  - ↘ ringingTime (in milliseconds)
  - ↘ talkingTime (in milliseconds)
  - ↘ dropCause (disconnect/rejected/transferred/busy/noAnswer/unavailable/error)
- callHeld
  - ↘ callId

Call events examples :

```
{
  "listenerName": "CallLines",
  "item": [
    {
      "acdId": "0900000171",
      "callId": "-428",
      "displayLabel": "ACD-171-S-0",
      "displayNumber": "104",
      "displayNumberE164": "104",
      "event": "callRinging",
      "incoming": true,
      "type": "internal"
    }
  ]
}
```

```
{
  "listenerName": "CallLines",
  "item": [
    {
      "acdId": "0900000171",
      "callId": "-428",
      "displayLabel": "ACD-171-S-0",
      "displayNumber": "104",
      "displayNumberE164": "104",
      "event": "callTalking",
      "incoming": true,
      "talkCause": "transferred",
      "type": "internal"
    }
  ]
}
```

```
{
  "listenerName": "CallLines",
  "item": [
    {
      "acdId": "0900000171",
      "callId": "-428",
      "displayLabel": "ACD-171-S-0",
      "displayNumber": "104",
      "displayNumberE164": "104",
      "dropCause": "transferred",
      "event": "callDropped",
      "incoming": true,
      "ringingTime": "262",
      "talkingTime": "81",
      "type": "internal"
    }
  ]
}
```

Error Codes

- **401**

```
{
        "code": "MYCRM_ERR_403",
        "message": "user extension not allowed for myCRM"
}
```

- **403**

```
{
        "code": "ROUTER_ERR_400",
        "message": "cookie session doesn't match authorisation sent"
}
```

- **400**

```
{
        "message":"bad terminal ID",
        "exceptionId":"restletapi_exception_1402060415874",
        "code":"ERR_0",
        "firstMessage":"bad terminal ID",
        "info":{
                "type":{
                        "id":"ERR_0",
                        "msg":"Bad Request"
                }
        }
}
```

- **512**

```
{
        "message":"Terminal out of service",
        "exceptionId":"restletapi_exception_1402060959373",
        "code":"ERR_100",
        "firstMessage":"Terminal out of service",
        "info":{
                "type":{
                        "id":"ERR_100",
                        "msg":"Invalid State"
                },
                "model":"terminal",
                "value":"OutOfService",
                "property":"state"
        }
}
```

- **503**

```
{
        "code": "ROUTER_ERR_503",
        "message": "IPTC not started"
}
```

Examples

Login

Request

POST /restletrouter/v1/service/Login

X-Application: myCrm

Authorization: Basic RU5EVVNFUjpjaGF0ZmllbGQ6MDAwMA==

Content-Type: application/json

Response

Set-Cookie: myCrm_SESSIONID=3353130538180092770;Path=/restletrouter;HttpOnly

X-Application: myCrm;cf1c4912-f82b-4957-8bf6-dd8ee9025b1a

Get terminals

Request

GET http://localhost:8078/restletrouter/v1/crm/GetTerminals

Content-Type:application/json

X-Application:myCrm;cf1c4912-f82b-4957-8bf6-dd8ee9025b1a

Response

[{"deviceModel":"SIP generic device","terminalId":"5985841581756135023"}]

Create Listener

Request

POST http://localhost:8078/restletrouter/v1/service/EventListener/bean

Content-Type:application/json

X-Application:myCrm;cf1c4912-f82b-4957-8bf6-dd8ee9025b1a

Content-Length:57

Payload :

{"name":"CallLines"}

{"terminalId":"5985841581756135023"}

Response

{"name":"CallLines","restUri":"v1/service/EventListener/bean/CallLines"}

Listen

Request
GET http://localhost:8078/restletrouter/v1/crm/CallLine?listenerName=CallLines&terminalId=5985841581756135023 Content-Type:application/json X-Application:myCrm;cf1c4912-f82b-4957-8bf6-dd8ee9025b1a
Response

Place call

Request
GET http://localhost:8078/restletrouter/v1/crm/PlaceCall?terminalId=5985841581756135023&destination=555 Content-Type:application/json X-Application:myCrm;cf1c4912-f82b-4957-8bf6-dd8ee9025b1a
Response