# GLG API Description

## 1. Zone operations:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| error code | error code name | error code description | zone add | zone delete | zone update | zone view |
| -1 | Failed | Failed | 1 | 1 | 1 | 1 |
| 0 | Success | Success | 1 | 1 | 1 | 1 |
| -3 | NoPrivileges | User has no Privileges | 1 | 1 | 1 | 1 |
| -6 | ZoneExists | Zone already exists for account holder | 1 | 0 | 0 | 0 |
| -5 | ZoneIncorrect | Zone is incorrect | 1 | 0 | 1 | 0 |
| -4 | TypeInvalid | type is invalid | 1 | 0 | 1 | 0 |
| -9 | ZoneNotAvailable | Zone not available | 0 | 1 | 1 | 1 |
| -12 | ZoneOperationFailed | Zone operation failed | 1 | 0 | 1 | 0 |
| -13 | ShapeInvalid | Shape is invalid | 1 | 0 | 1 | 0 |
| -14 | InputMissing | Input missing | 1 | 1 | 1 | 1 |
| -15 | NoDataPrivileges | User has no data privileges | 0 | 1 | 1 | 0 |
| 401 | UNAUTHORIZED | this error is shown automatically by the spring framework when user credentials are not valid | 1 | 1 | 1 | 1 |

### 1.Zone add

Endpoint: */zones*

*Method: @POST*

Request body:

|  |
| --- |
|  |
| { |
| "name": "z33a53", |
| "shape": { |
| "location": { |
| "type": "Polygon", |
| "coordinates": [ |
| [ |
| [ |
| 35.873746, |
| 32.016454 |
| ], |
| [ |
| 35.875763, |
| 32.011728 |
| ], |
| [ |
| 35.871364, |
| 32.010614 |
| ], |
| [ |
| 35.869545, |
| 32.014089 |
| ], |
| [ |
| 35.873746, |
| 32.016454 |
| ] |
| ] |
| ] |
| } |
| }, |
| "type": 1 |
|  |
| } |

Returns zone\_id from mongo database

### 2.zone delete

/zones/{id}

*Method:* @DELETE

Request body: no body

Returns zone\_id from mongo database

### 3.zone update

|  |
| --- |
| Endpoint: /zones/{id}  *@PUT*  Request body: |
| { |
| "name": "az", |
| "shape": { |
| "location": { |
| "type": "Polygon", |
| "coordinates": [ |
| [ |
| [ |
| 35.873746, |
| 32.016454 |
| ], |
| [ |
| 35.875763, |
| 32.011728 |
| ], |
| [ |
| 35.871364, |
| 32.010614 |
| ], |
| [ |
| 35.869545, |
| 32.014089 |
| ], |
| [ |
| 35.873746, |
| 32.016454 |
| ] |
| ] |
| ] |
| } |
| }, |
| "type": 1 |
|  |
| } |

### 4.zone view

Endpoint: /zones/{id}

*Method:* @GET

## 2. Cell operations

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  | cells\_bulk | cell add | cell delete | cell update | cell view |
| -1 | Failed | Failed | 1 | 1 | 1 | 1 | 1 |
| 0 | Success | Success | 1 | 1 | 1 | 1 | 1 |
| -3 | NoPrivileges | User has no Privileges | 1 | 1 | 1 | 1 | 1 |
| -13 | ShapeInvalid | Shape is invalid | 1 | 1 | 0 | 1 | 0 |
| -14 | InputMissing | Input missing | 1 | 1 | 1 | 1 | 1 |
| -16 | CellOperationFailed | Cell operation failed | 1 | 1 | 0 | 1 | 0 |
| -17 | CellExists | Cell exists | 1 | 1 | 0 | 1 | 0 |
| -18 | CellIncorrect | Cell incorrect | 0 | 0 | 0 | 1 | 0 |
| -19 | CellNotAvailable | Cell not available | 0 | 0 | 1 | 1 | 1 |
| 401 | UNAUTHORIZED | this error is shown automatically by the spring framework when user credentials are not valid | 1 | 1 | 1 | 1 | 1 |

### 1.cell bulk

|  |
| --- |
| Endpoint: */cells\_bulk*  *Method: @POST*  Request body: |
| [{ |
| "cid": "1211", |
| "address": "cell\_143881", |
| "lac": "312", |
| "range": 1167.0,       "serving-node":"serv", |
|  |
| "rat": 123.0,  "mcc": 322,  "mnc": 455, |
| "min-rx-level": 234.0, |
| "power-level": 345.0, |
| "antenna-type": "omni", |
| "cell-direction-angle": 120.0, |
| "location": { |
| "type": "Point", |
| "coordinates": [ |
| -72.2546124, |
| 42.9287768 |
| ] |
| }, |
| "is-archived": **false** |
| } |
| , |
| { |
| "cid": "123", |
| "address": "cell\_143881", |
| "lac": "312", |
| "range": 1167.0, |
| "serving-node":"serv", |
| "rat": 123.0,  "mcc": 322,  "mnc": 455, |
| "min-rx-level": 234.0, |
| "power-level": 345.0, |
| "antenna-type": "omni", |
| "cell-direction-angle": 120.0, |
| "location": { |
| "type": "Point", |
| "coordinates": [ |
| -72.2546124, |
| 42.9287768 |
| ] |
| }, |
| "is-archived": **false** |
| } |
|  |
| ] |

### 2. cell add

|  |
| --- |
| Endpoint: /cells  *Method:* @POST  Request body: |
| { |
| "cid": "5323a3aaa3ak2aaaaa", |
| "address": "address", |
| "lac": "312", |
| "range": 1167.0, |
| "serving-node":"serv", |
| "rat": 123.0,  "mcc": 322,  "mnc": 455, |
| "min-rx-level": 234.0, |
| "power-level": 345.0, |
| "antenna-type": "omni", |
| "cell-direction-angle": 120.0, |
| "location": { |
| "type": "Point", |
| "coordinates": [ |
| -72.2546124, |
| 42.9287768 |
| ] |
| } |
| } |

### 3. cell delete

Endpoints: /cells/{id}

*Method:* @DELETE

### 4.cell update

Endpoint: */cells/{id}*

*Method: @PUT*

Request body:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| { |  |  | |  |
| "cid": "5323a3aaa3ak2aaaaa", | | |
| "address": "address", | |  |
| "lac": "312", | |  | |  |
| "range": 1167.0, | |  | |  |
|  | |  | |  |
| "serving-node":"serv",   "rat": 123.0,  "mcc": 322,  "mnc": 455, | |  | |  |
| "min-rx-level": 234.0, | |  |
| "power-level": 345.0, | |  |
| "antenna-type": "omni", | |  |
| "cell-direction-angle": 120.0, | | |
| "location": { | |  | |  |
| "type": "Point", | |  |
| "coordinates": [ | |  |
| -72.2546124, | |  |
| 42.9287768 | |  | |  |
| ] |  |  | |  |
| } |  |  | |  |
| } |  |  | |  |

### 5.cell view

*Method: @GET*

Endpoint: */cells/{id}*

## 3. Location and event

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | location | event |
| -1 | Failed | Failed | 1 | 1 |
| 0 | Success | Success | 1 | 1 |
| -3 | NoPrivileges | User has no Privileges | 1 | 1 |
| -14 | InputMissing | Input missing | 1 | 1 |
| -15 | NoDataPrivileges | User has no data privileges | 0 | 1 |
| -20 | NoEvents | No events for this user |  |  |

### 1.LOCATION

|  |
| --- |
| Endpoint: */location*  *@POST*  Request body: |
| { |
| "msisdns":["962790000000", "1"]  // one of the below      "pos-method": "GMLC Location"      "pos-method": "SS7MAP Location"      "pos-method": "Location Update" |
| } |

In case of “GMLC Location” the result is:

{

    "result": [

        {

            "position": {

                "time": "20210428092200",

  "location": "<Point srsName=\"www.epsg.org#4326\">\r\n<coord>\r\n<X>32 0 48N</X>\r\n<Y>35 52 27.8E</Y>\r\n</coord>\r\n</Point>\r\n"

            },

            "msisdn": "962790000000",

            "status-code": 200,

            "status-desc": "Success"

        }

    ],

    "status-code": 0,

    "status-description": "Success"

}

In case "SS7MAP Location":

Success:

{

    "result": [

        {

            "position": {

                "cid": "1458",

                "address": "cell\_143881",

                "lac": "312",

                "range": 1167,

                "rat": 123,

"mcc": 202,

"mnc": 10,

  "serving-node":"serv",

                "min-rx-level": 234,

                "power-level": 345,

                "anntena-type": "omni",

                "cell-direction-angle": 120,

                "location": {

                    "type": "Point",

                    "coordinates": [

                        35.87034,

                        32.017243

                    ]

                },

                "is-archived": **false**,

                "mcc": 202,

                "mnc": 10,

                "age-of-location": 99,

                "\_id": ObjectId("5f3cf35b7e61037765a418d8")

            },

            "locator-response-code": 1,

            "locator-response-desc": "ATI Response received successfully",

            "msisdn": "962790000000",

            "status-code": 200,

            "status-desc": "Success"

        }

    ],

    "status-code": 0,

    "status-description": "Success"

}

Failure:

{

    "result": [

        {

            "position": {

                "mcc": -1,

                "mnc": -1,

                "age-of-location": -1,

                "cell-id": -1,

                "lac": -1

            },

            "locator-response-code": -2002,

            "locator-response-desc": "TimeOut Error",

            "msisdn": "962790000000",

            "status-code": 2000,

            "status-desc": "Failed"

        }

    ],

    "status-code": 0,

    "status-description": "Success"

}

In case "Location Update":

Success:

{

    "result": [

        {

            "position": {

                "cid": "86",

                "address": "cell\_11161603",

                "lac": "54122",

                "range": 1000,

                "rat": 123,

"mcc": 322,

"mnc": 455,

     "serving-node":"serv",

                "min-rx-level": 234,

                "power-level": 345,

                "anntena-type": "omni",

                "cell-direction-angle": 120,

                "location": {

                    "type": "Point",

                    "coordinates": [

                        35.874386,

                        32.013335

                    ]

                },

                "is-archived": **false**,

                "\_id": ObjectId("5f3cf35c7e61037765a4192e")

            },

            "msisdn": "962790000000",

            "status-code": 200,

            "status-desc": "Success"

        }

    ],

    "status-code": 0,

    "status-description": "Success"

}

Failure:

{

    "result": [

        {

            "msisdn": "922790000000",

            "status-code": 2000,

            "status-desc": "Failed",

            "position": **null**

        }

    ],

    "status-code": 0,

    "status-description": "Success"

}

### 2.EVENT

|  |
| --- |
| Endpoint: */*historical\_events  *@POST*  Request body: |
| { |
| "offset": 1, |
| "limit": 10, |
| "msisdns": [ |
| "962790000000" |
| ], |
| "start-time": "1990/7/1 00:00:00", |
| "end-time": "2025/7/1 00:00:00", |
| "events": [ |
| { |
| "type": "Location Update" |
| }, |
| { |
| "type": "Cell Enter" |
| }, |
| { |
| "type": "Zone Enter" |
| } |
| ],  "search-expression": "{$or:[{'event.details.Served\_number': '962797804088'}, {'event.details.new\_lac':1}]}" |
| } |

3. prepare historical query

Endpoint: /prepare\_historical\_query

@POST

Request body:

{

    "msisdns": ["962795646679"],

    "start-time": "2000/02/11 12:10:00",

    "end-time": "2022/05/05 12:00:00",

    "events": []

}

Result:

{

    "result": [

        {

            "query-id": "59f1918d-00db-4504-94bb-b895ec299c1b"

        }

    ],

    "status-code": 0,

    "status-description": "Success"

}

4. get historical query

Endpoint: / get\_historical\_query

@POST

Request body:

{

    "token": "59f1918d-00db-4504-94bb-b895ec299c1b",

    "offset": 1,

    "limit": 20

}

### 4. Zones Protections

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  | agents | zones protections |
| -1 | Failed | Failed | 1 | 1 |
| 0 | Success | Success | 1 | 1 |
| -3 | NoPrivileges | User has no Privileges | 1 | 1 |
| -14 | InputMissing | Input missing | 0 | 1 |
| -15 | NoDataPrivileges | User has no data privileges | 0 | 1 |
| -22 | ZoneProtectionDoesntExist | No zone protection exists | 0 | 1 |

### 1. GET AGENTS

Endpoint: */agents*

*@GET*

Request body: no body

b.zones protections

### 1. CREATE

Endpoint: /zones\_protection

@POST

Request body:

{

 "zone-id": "601ba795f0b55976cd7aa42o",

 "protection-type":1,

 "condition-type":1,

 "direction":0,

 "action-id": 1,

"action": {///check below

},

 "msisdn-list": ["123"]

}

**Action has 3 forms as below:**

    "action": {

        "type": "http",

        "parameters": {

            "http-rest-url": "",

            "http-request-type": "POST",

            "http-request-body": "body",

            "headers": [

                {

                    "Content-Type": "application/x-www-form-urlencoded"

                },

                {

                    "Content-Type": "application/x-www-form-urlencoded"

                }

            ]

        }

    },

Or

    "action": {

        "type": "email",

        "parameters": {

            "email-from": "",

            "email-cc": "",

            "email-subject": "",

            "email-body": "body",

            "agents": [

                13,

                14

            ]

        }

    },

Or

    "action": {

        "type": "sms",

        "parameters": {

            "sms-sender": "",

            "sms-type": "",

            "sms-body": "body",

            "agents": [

                13,

                14

            ]

        }

    },

### 2. DELETE

Endpoint: /zones\_protection/{id}

@DELETE

Request body:

### 3. UPDATE

Endpoint: /zones\_protection/{id}

@DELETE

Request body:

Same as create

### 4.GET

Endpoint: /zones\_protection/{id}

@GET

Request body: no body

5. Get

Check if a zone protection exists for a specific zone

Endpoint: /zones\_protection/exists/{zone\_id}

@GET

Request body: no body

### 4. Event Monitoring

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  |  |  | create | delete | update | get |
| -1 | Failed | Failed | 1 | 1 | 1 | 1 |
| 0 | Success | Success | 1 | 1 | 1 | 1 |
| -3 | NoPrivileges | User has no Privileges | 1 | 1 | 1 | 1 |
| -15 | NoDataPrivileges | User has no data privileges | 1 | 1 | 1 | 1 |
| -23 | *EventMonitoringDoesntExist* | No event monitoring exists | 0 | 1 | 1 | 0 |
| -21 | *InputsInvalid* | inputs are invalid | 1 | 0 | 1 | 0 |

### CREATE

Endpoint: /event\_monitoring

@POST

Request body:

{

    "name": "e1",

    "desc": "desc1",

    "condition": {//any json works

        "events.type": "Zone Enter"

    },

  "web-condition": {

            "test": 1

        },

    "action": {

        "type": "http",

        "parameters": {

            "http-rest-url": "",

            "http-request-type": "POST",

            "http-request-body": "body",

            "headers": [

                {

                    "Content-Type": "application/x-www-form-urlencoded"

                },

                {

                    "Content-Type": "application/x-www-form-urlencoded"

                }

            ]

        }

    },

    "start-time": "2012-10-01 12:00:00",

    "end-time": "2012-10-01 12:00:00",

“rule-source”: 1

}

Rule source: 1 means invoked from MLP

Or

{

    "name": "e1",

    "desc": "desc1",

    "condition": {//any json works

        "events.type": "Zone Enter"

    },

    "action": {

        "type": "email",

        "parameters": {

            "email-from": "",

            "email-cc": "",

            "email-subject": "",

            "email-body": "body",

            "agents": [

                13,

                14

            ]

        }

    },

    "start-time": "2012-10-01 12:00:00",

    "end-time": "2012-10-01 12:00:00",

“rule-source”: 1

}

Or

{

    "name": "e1",

    "desc": "desc1",

    "condition": {//any json works

        "events.type": "Zone Enter"

    },

    "action": {

        "type": "sms",

        "parameters": {

            "sms-sender": "",

            "sms-type": "",

            "sms-body": "body",

            "agents": [

                13,

                14

            ]

        }

    },

    "start-time": "2012-10-01 12:00:00",

    "end-time": "2012-10-01 12:00:00",

“status”: 1,

“rule-source”: 1

}

Returns id of database record

{

    "result": 185,

    "status-code": 0,

    "status-description": "Success"

}

### DELETE

Endpoint: /event\_monitoring/{id}

@DELETE

Request body: no body

Returns id of database record

{

    "result": 185,

    "status-code": 0,

    "status-description": "Success"

}

### UPDATE

Endpoint: /event\_monitoring/{id}

@PUT

Request body: same as create

Returns id of database record

{

    "result": 185,

    "status-code": 0,

    "status-description": "Success"

}

### GET

Endpoint: /event\_monitoring/{id}

@GET

Request body: no body

Returns

{

    "result": {

        "id": 264,

        "account\_holderID": 7,

        "userID": 14,

        "condition": {

            "events.type": "Zone Enter"

        },

        "desc": "desc1",

        "name": "e1",

        "action": {

            "type": "email",

            "parameters": {

                "agents": [

                    13,

                    14

                ],

                "email-cc": "",

                "email-body": "body",

                "email-from": "",

                "email-subject": ""

            }

        },

        "status": 0,

        "web-condition": {

            "test": 1

        },

        "start-time": "2012-10-01 11:00:00.0",

        "end-time": "2012-10-01 11:00:00.0",

"rule-source": 1

    },

    "status-code": 0,

    "status-description": "Success"

}