SAMSUNG

Knox Manage Getting Device Location using APIs

SiDi

Introduction

The objective of this guide is to show how Knox Manage (KM) APIs can be used to get device location information.
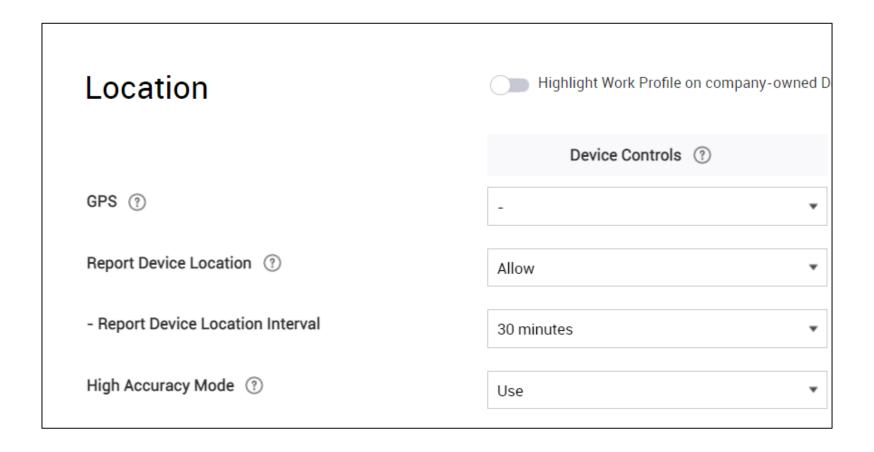
The examples described in this guide were run using Postman tool and relies on Knox Manage version 21.6.

Pre requisites:

- Device enrolled in KM

- Location policy configured in KM and assigned to the device

- API Client created in KM

1- Set a Location Policy to Device

- Before call KM APIs to get location data from the device, it is required to set a proper location policy under KM´s Menu Profile and assign it to the device.
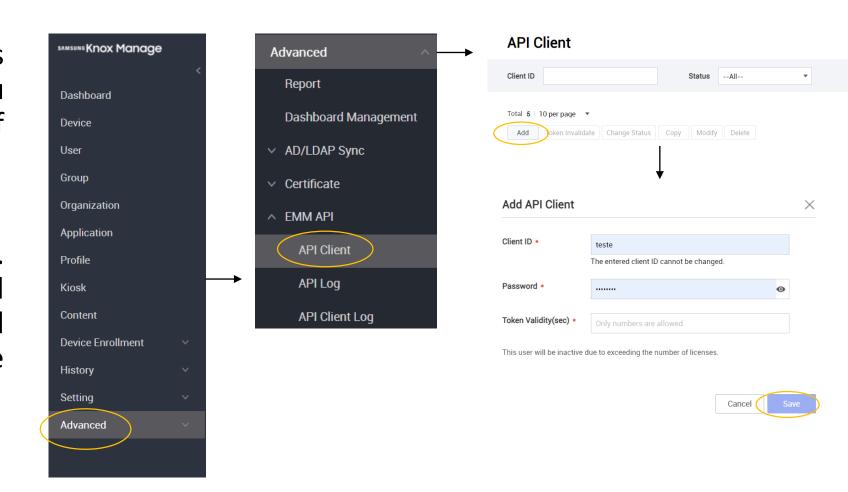
Location

Highlight Work Profile on company-owned D

	Device Controls
GPS	-
Report Device Location	Allow
- Report Device Location Interval	30 minutes
High Accuracy Mode	Use

2- Create the API Client

- Create an API Client at KM´s admin Portal. To do this, you must be an administrator of your Knox Manage tenant.

- This is a one-time operation. Take notes of "Client ID" and "Password" info as they will be used later to generate the authentication token via API.
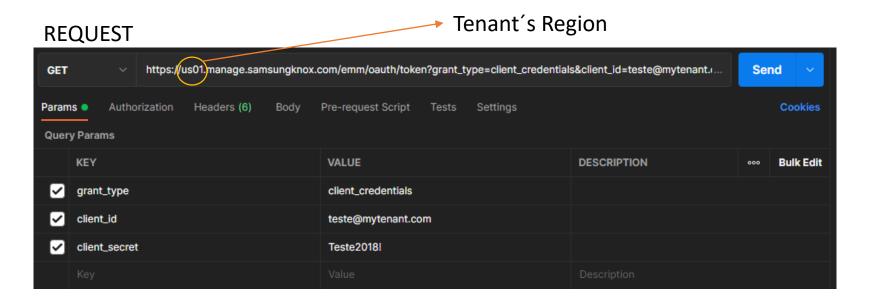
3- Generate the Authentication Token

Once API Client was created at KM´s console, call API below to obtain a bearer token:

- URL: https://{Your Region}.manage.samsungknox.com/emm/oauth/token
- Method GET
- Required parameters:
  - **client_id** - the Client ID defined when API client was created appended with @[KM´s tenant].
  - **client_secret** - the Password defined when API client was created.
  - **grant_type** - must be set to **client_credentials**

API Documentation at: https://docs.samsungknox.com/devref/knox-manage/index.html#section/Authentication/Generate-a-Token

3- Generate the Authentication Token

REQUEST

Tenant´s Region

RESPONSE

Access token to be used
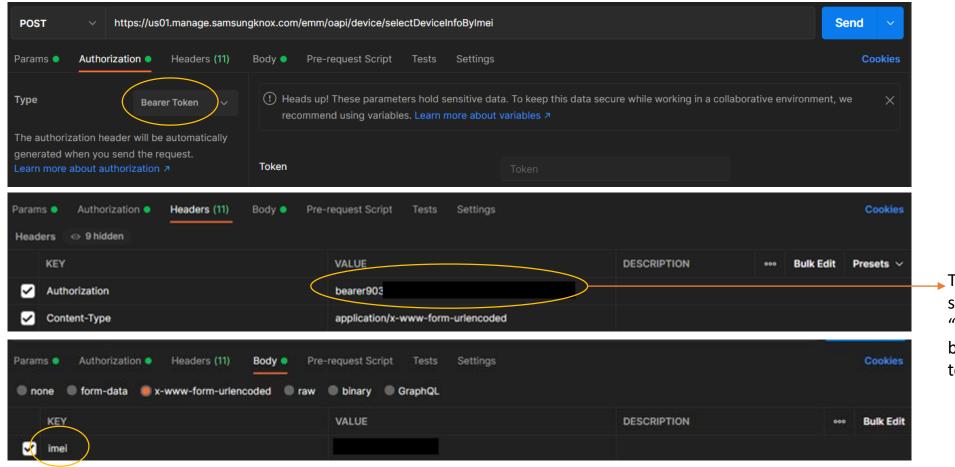to call other APIs

4- Get Device Detail By IMEI

- This API is to query the Enrolled Device Detailed Information by IMEI.
- With this API it will be possible to get "device Id" and "mobileId" info, which are necessary parameters to be used in the Get Device Location API.

  - URL: https://{Your Region}.manage.samsungknox.com/emm/oapi/device/selectDeviceInfoByImei
  - Method: POST
  - Authorization: Bearer-authentication
  - Request Body Schema: application/x-www-form-urlencoded
  - Body: imei

API Documentation at https://docs.samsungknox.com/devref/knox-manage/index.html#operation/selectDeviceInfoByImei

4- Get Device Detail By IMEI – Request

The authorization start with "bearer" followed by the access token

4- Get Device Detail By IMEI – Response

5- Get Device List

- This API is to query the Device Information List enrolled.

- This is another option to get the "device Id" and "mobileId" parameters but for all enrolled devices.

    - URL: https://{Your Region}.manage.samsungknox.com/emm/oapi/device/selectDeviceList
    - Method: POST
    - Authorization: Bearer-authentication
    - Request Body Schema: application/x-www-form-urlencoded

API Documentation at https://docs.samsungknox.com/devref/knox-manage/index.html#operation/selectDeviceList

5- Get Device List – Request

5- Get Device List – Response
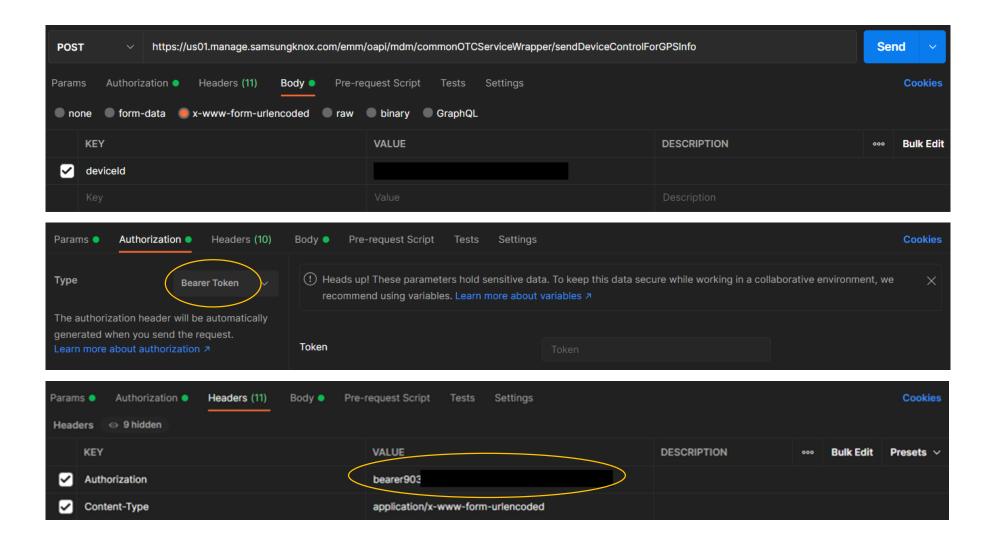
```
Content type
application/json

                         Copy    Expand all    Collapse all

  "resultCode": "0",
  "resultMessage": "No Error",
- "resultValue": {
      "deviceId": "string",
      "mobileId": "string",
      "userId": "string",
      "deviceStatus": "string",
      "platform": "string",
      "phone": "string",
      "macAddress": "string",
      "deviceVersionName": "string",
      "ownerShip": "string",
      "deviceModel": "string",
      "deviceKind": "string",
      "deviceModelKind": "string",
      "imei": "string",
      "serialNumber": "string",
      "lastConnectionDate": "2019-08-24T14:15:22Z",
      "isDeviceLock": "string",
```
```
      "updated": "2019-08-24T14:15:22Z",
      "created": "2019-08-24T14:15:22Z",
      "enrolledType": "string",
      "managementType": "string",
      "knoxId": "string",
      "battery": "string",
      "mobileSentData": "string",
      "mobileReceivedData": "string",
      "wifiSentData": "string",
      "wifiReceivedData": "string",
      "clientProfileId": "string",
      "clientProfileName": "string",
      "clientProfileUpdated": "2019-08-24T14:15:22Z",
      "isRooting": "string",
    - "groupList": [
          "string"
      ],
    - "groupIdList": [
          "string"
      ],
      "orgName": "string",
      "orgCode": "string",
      "agentProfileId": "string",
      "agentProfileName": "string",
      "agentProfileUpdated": "string"
  }
```

6 – Collect Current Location Command

- Before get device´s location data, it is necessary to send a command to trigger Device´s current location.

    - URL: https://{Your Region}.manage.samsungknox.com/emm/oapi/mdm/commonOTCServiceWrapper/sendDeviceControlForGPSInfo
    - Method: POST
    - Authorization: Bearer-authentication
    - Request Body Schema: application/x-www-form-urlencoded
    - Body: deviceId

6 – Collect Current Location Command – Request

6 – Collect Current Location Command – Response

Content type

application/json

Copy   Expand all   Collapse all

```
{
    "resultCode": "0",
    "resultMessage": "No Error",
  - "resultValue": {
        "commandId": "fd5b6064c9071dc95bc9e4dee47a4a8e
    }
}
```
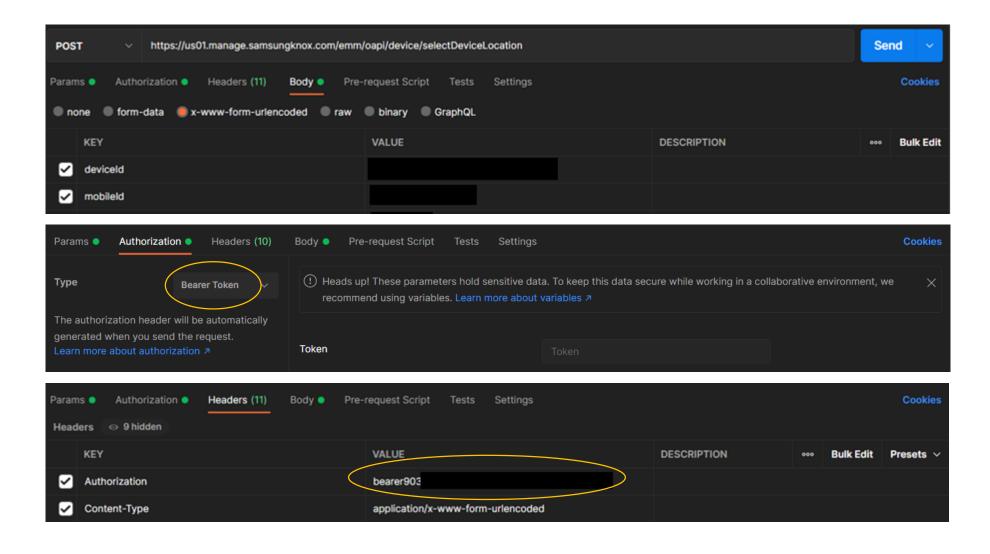
7 – Get Device Location

- Once previous steps were performed, it is possible to call this API to query the GPS Information of the Device.

  - URL: https://{Your Region}.manage.samsungknox.com/emm/oapi/device/selectDeviceLocation
  - Method: POST
  - Authorization: Bearer-authentication
  - Request Body Schema: application/x-www-form-urlencoded
  - Body: deviceId or mobileId

deviceId required	string Device ID.
mobileId required	string Device Name.

API Documentation at https://docs.samsungknox.com/devref/knox-manage/index.html#operation/selectDeviceLocation

7 – Get Device Location – Request

7 – Get Device Location – Response

Body   Cookies (3)   Headers (14)   Test Results   Status: 200 OK

Pretty   Raw   Preview   Visualize   JSON ∨

```
1   {
2       "resultValue": {
3           "altitude": "583.7000122070312",
4           "latitude": "-22.7117492",
5   >       "updated": {...
15          },
16          "longitude": "-46.9786387"
17      },
18      "resultCode": "0",
19      "resultMessage": "No Error"
20  }
```

8 – Get Device Location History

- It is also possible to check history of device´s location.

    - URL: https://{Your Region}.manage.samsungknox.com/emm/oapi/device/selectDeviceLocationHistory
    - Method: POST
    - Authorization: Bearer-authentication
    - Request Body Schema: application/x-www-form-urlencoded
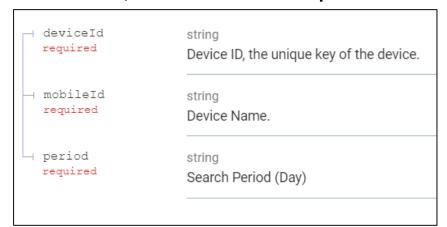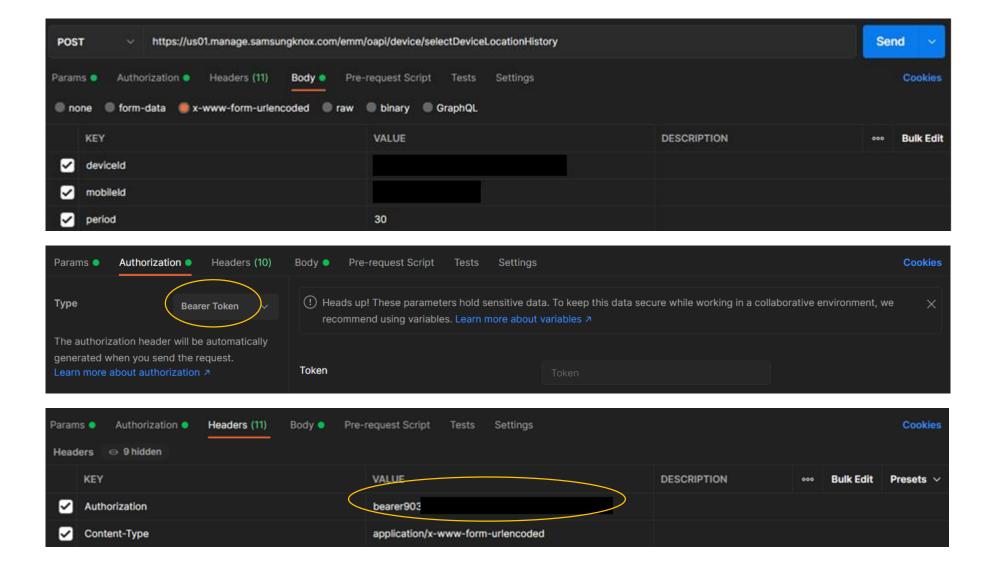   - Body: DeviceId, mobileId and period

deviceId required	string Device ID, the unique key of the device.
mobileId required	string Device Name.
period required	string Search Period (Day)

Api Documentation at https://docs.samsungknox.com/devref/knox-manage/index.html#operation/selectDeviceLocationHistory

8 – Get Device Location History – Request

8 – Get Device Location History – Response

```
Content type
application/json

                                          Copy    Expand all    Collapse all
{
    "total": "1",
  - "locationList": [
      - {
              "latitude": "39.990912172420714",
              "longitude": "116.32715863448607",
              "altitude": "null",
              "locationInfoUpdated": "1608197241989"
          }
      ]
}
```

SAMSUNG Knox Manage

For more information on Knox Manage, please visit
https://www.samsungknox.com/en/solutions/it-solutions/knox-manage