



Oracle Analytics Cloud

Rest API



Oracle Analytics Cloud – Rest API

Prerequisites

- ✓ BI Service Administrator role in Oracle Analytics Cloud to manage snapshots using REST APIs.
- ✓ OCI User
- ✓ Object Storage Bucket for Storing Snapshot
- ✓ OCI IAM policy that enables your Oracle Analytics Cloud instance to access the storage bucket

➤ *E.g. Allow any-user TO manage objects IN compartment myOAC-compartment where `request.principal.id='ocid1.analyticsinstancedev.oc1.iad.test.aaaaaaaabbbbbbbccccccddd ddddeeeeeefffffffgggggggghhhh'`*



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Authentication

✓ Create Confidential Application

➤ [Refer Here](#)

✓ Get a Bearer Token

```
➤ curl --request POST \
  --url 'https://<IDCS-instance>.identity.oraclecloud.com/oauth2/v1/token' \
  --header 'authorization: Basic encoded clientID:ClientSecret>' \
  --header 'content-type: application <base64 n/x-www-form-urlencoded; charset=UTF-8' \ -d
  'grant_type=password&username=<username>&password=<password>&scope=<scope copied from resource section in
  IDCS confidential application>'
```

Instructions:

Base 64 conversion Command :- echo -n ClientID:ClientSecret | base64

For IDCS Instance :- OCI OAC Home Page →Additional Details →Domain URL

✓ Increase Bearer Token Expiry Time

✓ Generate an API Signing Key



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Authentication - Increase Bearer Token Expiry Time

- Increase Access token expiration in OCI Domain – Oracle cloud service of Analytics Instance

Identity → Domains → <Your Domain> → Oracle Cloud Services



OAuth configuration

Edit OAuth configuration

Resource server configuration

Resource server configuration for this application is enabled

Configure application APIs that need to be OAuth protected

Access token expiration (seconds): 864000

Allow token refresh: Allowed

Refresh token expiration (seconds): 86400

Primary audience: https://dwtzkdakvglibgvz45j6afwdco

Secondary audience:

Edit OAuth configuration

Resource server configuration

Configure application APIs that need to be OAuth protected

Access token expiration (seconds)

864000

☒ Allow token refresh

Select if you want to use the refresh token that you obtain when using the Resource Owner, Authorization Code, or Assertion grant types.

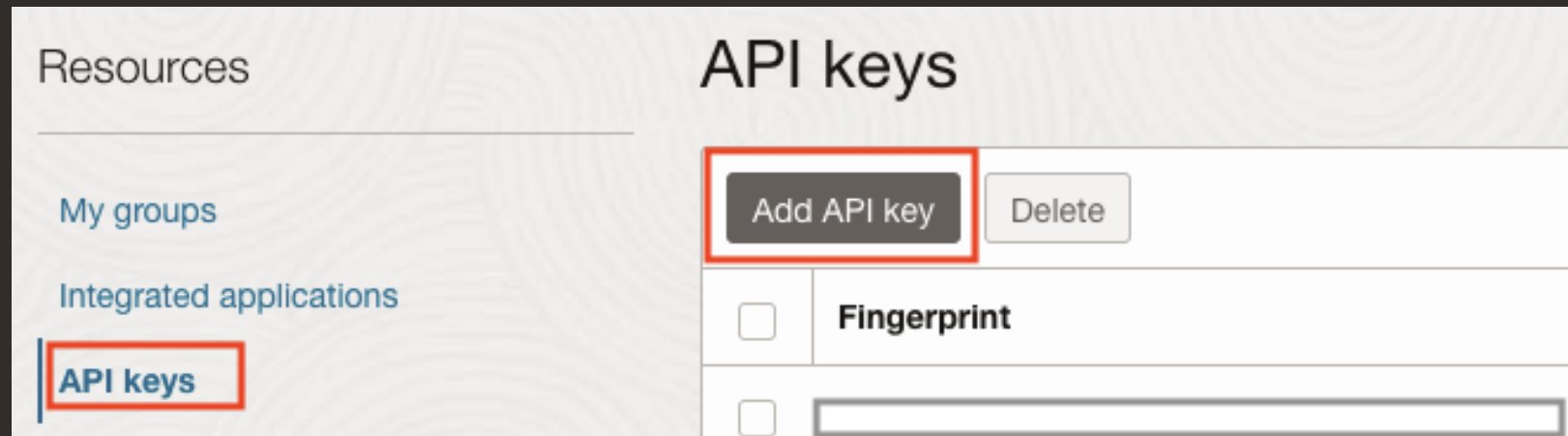
Refresh token expiration (seconds)

86400

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Authentication -Generate an API Signing Key

Identity → My Profile → API Keys



➤ Encode the downloaded private key in wrap in Base64 format

➤ `cat myprivate-key.pem | base64 -w 0 > mywrapped-private-key.pem`

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Migration Process

- ✓ Create Snapshot
- ✓ Register Snapshot
- ✓ Restore Snapshot



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Migration Process – Create Snapshot

✓ Create Snapshot Json File

```
{
  "type": "CREATE",
  "name": "<myfirstsnapshot>",
  "storage": {
    "type": "OCI_NATIVE",
    "bucket": "<mynsnapshot-bucket>",
    "auth": {
      "type": "OSS_AUTH_OCI_USER_ID",
      "ociRegion": "<us-ashburn-1>",
      "ociTenancyId": "",
      "ociUserId": "<your tenancy OCID>",
      "ociKeyFingerprint": "<your fingerprint key>",
      "ociPrivateKeyWrapped": "<your wrapped private key>"
    }
  },
  "bar": {
    "uri": "file:///myfolder/myfirstsnapshot.bar",
    "password": "snapshotPassword123"
  }
}
```



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Migration Process – Create Snapshot

✓ Create Snapshot

```
curl -i --header "Authorization: Bearer <token>" --header "Content-Type: application/json" --request POST  
https://<hostname>/api/20210901/snapshots -d @<snapshot.json>
```

(Note the work Request ID)

✓ Check work Request Status

```
curl -i --header "Authorization: Bearer <token>" --request GET https://<hostname>/api/20210901/workRequests/<work Request ID>
```



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Migration Process – Register Snapshot

✓ Create Snapshot Json File

```
{
  "type": "REGISTER",
  "name": "<myfirstsnapshot>",
  "storage": {
    "type": "OCI_NATIVE",
    "bucket": "<mynsnapshot-bucket>",
    "auth": {
      "type": "OSS_AUTH_OCI_USER_ID",
      "ociRegion": "<us-ashburn-1>",
      "ociTenancyId": "",
      "ociUserId": "<your tenancy OCID>",
      "ociKeyFingerprint": "<your fingerprint key>",
      "ociPrivateKeyWrapped": "<your wrapped private key>"
    }
  },
  "bar": {
    "uri": "file:///myfolder/myfirstsnapshot.bar",
    "password": "snapshotPassword123"
  }
}
```



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Migration Process – Register Snapshot

✓ Register Snapshot

```
curl -i --header "Authorization: Bearer <token>" --header "Content-Type: application/json" --request POST  
https://<hostname>/api/20210901/snapshots -d @<snapshot.json>
```

(Note the work Request ID)

✓ Check work Request Status

```
curl -i --header "Authorization: Bearer <token>" --request GET https://<hostname>/api/20210901/workRequests/<work Request ID>
```

(Note Snapshot Id)



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Migration Process – Restore Snapshot

✓ Create Snapshot Json File

```
{
  "snapshot": {
    "id": "594f99ba-3924-4b86-a3be-37376580071c",
    "password": "snapshotPassword123"
  }
}
```

✓ Restore Snapshot

```
curl -i --header "Authorization: Bearer <token>" \
--header "Content-Type: application/json" --request POST https://<hostname>/api/20210901/system/actions/restoreSnapshot -d
@<snapshot.json>
```

✓ Check work Request Status

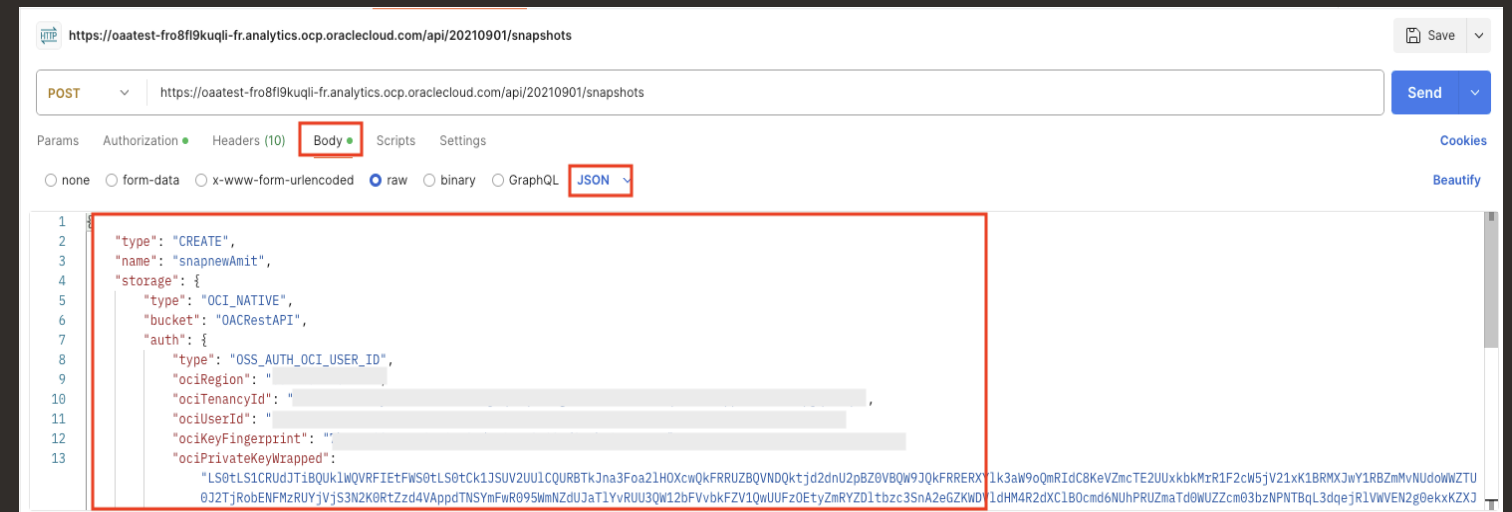
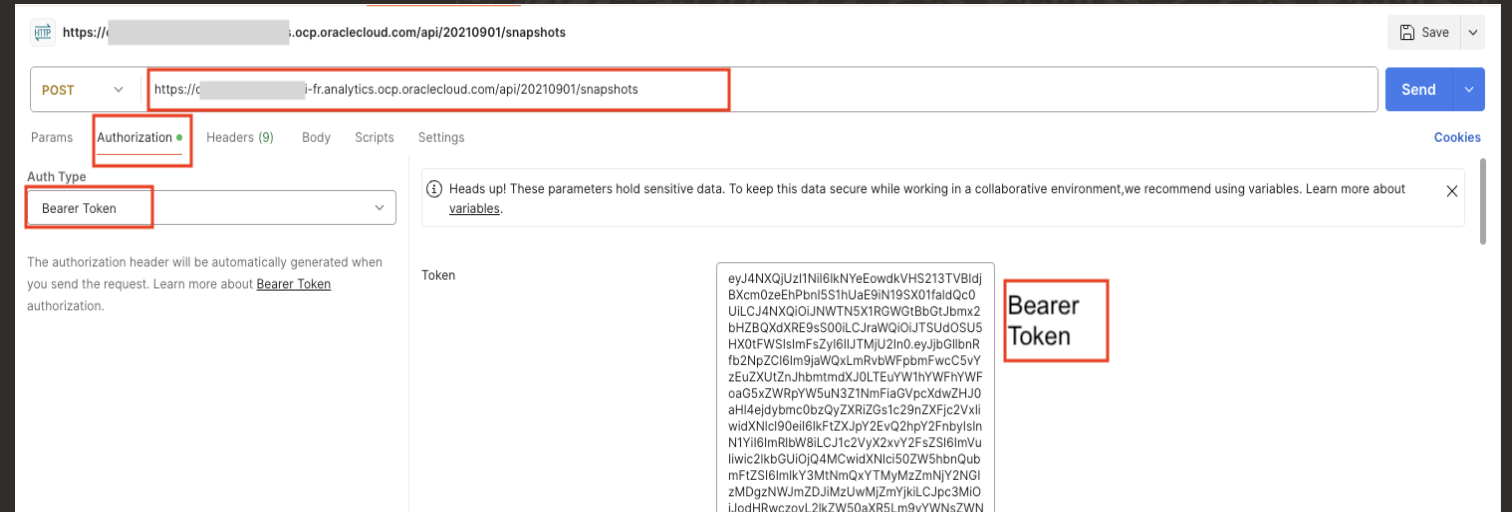
```
curl -i --header "Authorization: Bearer <token>" --request GET https://<hostname>/api/20210901/workRequests/<work Request ID>
```



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Rest API Execution using Postman

- Authorization – Bearer Token
- Body – JSON File



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Documentation

- ✓ [Oracle Analytics Cloud Rest API Documentation](#)
- ✓ [Oracle Analytics Cloud Rest API Blog](#)



Q&A



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