

Getting Started with Cloud Data Profiling REST API

Abstract

This tutorial describes the Cloud Data Profiling REST API method, syntax, and examples that help you understand how to use the APIs.

Supported Versions

- Cloud Data Profiling February 2024

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Overview

Use the Data Profiling REST API to interact with the Data Profiling Service through API calls. You can use the REST API to perform tasks and submit or get details for your organization. For example, you can perform tasks such as creating, deleting, and updating queries and profiles.

REST API Versions

Informatica Intelligent Cloud Services supports the platform REST API version 2 and version 3 resources, and service-specific resources.

You can log in to Informatica Intelligent Cloud Services using the platform REST API version 2 or version 3 login resource. The version of any subsequent resource that you use does not need to match the version of the login resource that you use to log in.

The following are differences between REST API version 2 and version 3 calls:

Format

You can use the following formats depending upon which API version you use:

- Version 2 supports XML and JSON calls.
- Version 3 supports JSON calls.

Login URL

Use one of the following login URLs:

- For version 2, use: https://dm-{POD_region}.informaticacloud.com/ma/api/v2/user/login
- For version 3, use: https://dm-{POD_region}.informaticacloud.com/saas/public/core/v3/login

Your POD (Point of Deployment) region is based on the location of your Informatica Intelligent Cloud Services data center. Use one of the following POD regions:

- For North America, use us.
- For Europe, use eu.
- For Asia, use ap.

The POD region is included in the URL you receive when you register with Informatica Intelligent Cloud Services.

Base URL

The login response includes the base URL that you must include in subsequent calls. The name of the base URL attribute that is included in the response depends on the API version that you use to log in, for example:

- In a version 2 response, the attribute name is `serverUrl`.
- In a version 3 response, the attribute name is `baseApiUrl`.

The base URL includes the POD that your organization uses. In the following example, the POD is `usw3`:

```
https://usw3.dm-us.informaticacloud.com/saas/public/core/v3/login
```

Request URL

The URL that you use in requests differs between the version 2 and version 3 resources, for example:

- For version 2 resources, use <SERVERUR>/api/v2/.
- For version 3 resources, use <BASEAPIURL>/public/core/v3/.

Session ID

The login response includes a session ID that you must include in headers during the session. You can use the same session ID for version 2 and version 3 resources. The name of the attribute for session ID in the login response depends on the API version that you use to log in. Use one of the following attributes:

- For version 2 resources, use IDS-SESSION-ID in the header.
- For version 3 resources, use INFA-SESSION-ID in the header.

Profiling Tutorial

In this tutorial, you complete the following tasks using the Cloud Profiling REST API:

1. Log in to Informatica Intelligent Cloud Services
2. List all profiles
3. Identify the right profile
4. Explore profile definition
5. Create a profile
6. Run a profile
7. Monitor a profile
8. View profile results
9. Create and run queries
10. Manage profile runs
11. Manage profile jobs
12. Delete a profile
13. Update a profile
14. Identify recent profile runs
15. Suggest a new profile name
16. Identify the unique rule id
17. View run details of a profile
18. View run details of a profile task

Prerequisites

Before you create a profile, you need to perform the following steps:

Create a new connection

Use this REST API call to create a connection of any type, for example, Oracle or ODBC. You can create a data profiling task using the source connection. Alternatively, you can create connections in Administrator.

The following table lists the API parameters to create a new connection:

Property	Value
URL	Enter a URL to create a connection. Use the following format: https://usw3.dm-us.informaticacloud.com/saas/api/v2/connection
Method	POST
Body	<pre> "@type": "connection", "name": "Oracle_Connection", "runtimeEnvironmentId": "010YJH25000000000001", "host": "<your connection host>", "database": "<database of your connection>", "codepage": "UTF-8", "type": "Oracle", "port": 1522, "username": "<username>", "password": "<Password>", "connParams": { "CryptoProtocolVersion": "TLSv1.2", "keyStore": "<Keystore file location with filename and extension>", "keyStorePassword": "<Keystore password>", "encryptionMethod": "SSL", "ValidateServerCertificate": "True", "trustStore": "<trustore file location with filename and extension>", "trustStorePassword": "yourPassword4", "HostNameInCertificate": "QA18C4", "Metadata Advanced Connection Properties": "ValidateServerCertificate=0;LoginTimeout=300; ConnectionRetryCount=5; ConnectionRetryDelay=5", "Run-time Advanced Connection Properties": "ValidateServerCertificate=0;LoginTimeout=300; ConnectionRetryCount=5; ConnectionRetryDelay=5" } </pre>

Create a project or folder

Use this REST API call to create projects and folders. You can create projects and folders to organize the profiling data.

The following table lists the API parameters to create a new project:

Property	Value
URL	Enter a URL to create a project. Use the following format: https://usw3.dm-us.informaticacloud.com/frs/v1/Project
Method	POST
Body	<pre> {"name": "Project", "description": ""} </pre>

The following table lists the API parameters to create a new folder:

Property	Value
URL	Enter a URL to create a folder. Use the following format: <code>https://usw3.dm-us.informaticacloud.com/frs/v1/Projects('#projectId#)/Folders</code>
Method	POST
Body	<code>{"name":"foldername","description":""}</code>

Retrieve a project ID

Use this REST API call to retrieve a project ID from the available projects and folders. You need to specify the project ID during profile creation so that you can organize your data profiling tasks.

The following table lists the API parameters to retrieve available projects for a profile:

Property	Value
URL	Enter a URL to fetch the project ID. Use the following format: <code>https://usw3.dm-us.informaticacloud.com/frs/v1/Projects?\$filter=(name eq '<projectName>')</code> For example, <code>https://usw3.dm-us.informaticacloud.com/frs/v1/Projects?\$filter=(name eq 'project_Orderdetails')</code>
Method	GET

Sample response

After you make the API call, you need to search for the project name in the response, and then copy the project ID.

The project ID is highlighted in the following response example:

```
{
  "@odata.context": "$metadata#Projects",
  "value": [
    {
      "id": "2Nw2tVk5djQeSFNDrgg1ob",
      "name": "Employee_Details",
      "description": "",
      "owner": "8x2xReMdLMdbbFg2kaRyyA",
      "createdBy": "8x2xReMdLMdbbFg2kaRyyA",
      "lastUpdatedBy": "8x2xReMdLMdbbFg2kaRyyA",
      "lastAccessedBy": "8x2xReMdLMdbbFg2kaRyyA",
      "createdTime": "2020-02-13T18:13:34Z",
      "lastUpdatedTime": "2020-02-13T18:13:34Z",
      "lastAccessedTime": "2020-02-13T18:13:34Z",
      "expiresBy": "2038-01-18T00:00:00Z",
      "parentInfo": [
        {
          "parentId": "7cCn5thwWFLhizoSosphKL",
          "parentName": "REG",
          "parentType": "Space"
        }
      ],
      "documentType": "Project",
      "contentType": "Binary",
      "documentState": "COMPLETE",
      "aclRule": "org",
      "subcontainerCount": 0,
    }
  ]
}
```

```

        "customAttributes": null,
        "repoInfo": null,
        "isSourceControlled": false,
        "checkedOutById": null
    }
}
]
}

```

Retrieve a connection ID

Use this REST API call to request the available connections for the profile creation. You need a connection to the source object so that you can create a data profiling task.

The following table lists the API parameters to retrieve available connections for a profile:

Property	Value
URL	Enter a URL to fetch the connection Id. Use the following format: <code>https://usw3.dm-us.informaticacloud.com/frs/v1/Spaces('SYS')/Documents?filter=(documentType eq 'SAAS_CONNECTION')</code>
Method	GET

Sample response

After you make the API call, you need to search for the connection name in the response, and then copy the connection ID.

The connection ID is highlighted in the following response example:

```

{
  "@odata.context": "$metadata#Documents",
  "value": [
    {
      "id": "h40VFSvMcCpj1CEHDMHLgY",
      "name": "ORA_SRC",
      "description": null,
      "owner": "4W7k7eaQOKub1SWbP32qCv",
      "createdBy": "4W7k7eaQOKub1SWbP32qCv",
      "lastUpdatedBy": "4W7k7eaQOKub1SWbP32qCv",
      "lastAccessedBy": "4W7k7eaQOKub1SWbP32qCv",
      "createdTime": "2020-10-29T12:35:00Z",
      "lastUpdatedTime": "2020-10-29T12:35:00Z",
      "lastAccessedTime": "2020-10-29T12:35:00Z",
      "expiresBy": "2038-01-18T00:00:00Z",
      "parentInfo": [
        {
          "parentId": "bynSJ9htKIALQPHWHUrnW1",
          "parentName": "SYS",
          "parentType": "Space"
        },
        {
          "parentId": "1eTiMw87SE3f5LsNfQ6Z8D",
          "parentName": "_SYSTEM_PROJECT",
          "parentType": "Project"
        },
        {
          "parentId": "anEbYk7U5aPgluVbKR8qwj",
          "parentName": "_SYSTEM_FOLDER",
          "parentType": "Folder"
        }
      ],
      "documentType": "SAAS_CONNECTION",
      "contentType": "JSON",
      "documentState": "COMPLETE",
      "aclRule": "org",
      "subcontainerCount": 0,
      "customAttributes": {
        "stringAttr": [

```

```

        "name": "CONNECTION_TYPE",
        "value": "ORACLE"
    },
    {
        "name": "CONNECTION_SUB_TYPE",
        "value": ""
    },
    {
        "name": "CONNECTION_INSTANCE_NAME",
        "value": ""
    }
],
"numberAttrs": [],
"dateAttrs": []
},
"repoInfo": {
    "repoParams": [],
    "repoPath": null,
    "repoHandle": "0111100B000000000000J",
    "frsPath": null
},
"isSourceControlled": false,
"checkedOutById": null
}}
}

```

Retrieve objects in a connection

Use this REST API call to request the available objects in a connection. You run a profile on the source objects.

The following table lists the API parameters to retrieve objects from a flat file connection:

Property	Value
URL	Enter a URL to fetch objects in a connection. For example, https://usw3.dm-us.informaticacloud.com/saas/api/v2/connection/source/0100000B0000000000004?searchPattern=
Method	GET

Sample response

```

[
  {
    "@type": "connListItem",
    "id": "0",
    "name": "ALL_DQ_Source1.csv"
  },
  {
    "@type": "connListItem",
    "id": "1",
    "name": "Azure_DW_CP_All_Datatype.csv"
  },
  {
    "@type": "connListItem",
    "id": "2",
    "name": "CP_ALL_SUPPORTED_DATATYPE.csv"
  },
  {
    "@type": "connListItem",
    "id": "3",
    "name": "CP_CLEANSE_ALL_STEPS.csv"
  },
  {
    "@type": "connListItem",
    "id": "4",

```



```

        "name": "CUSTOMERS_0.csv"
    },
    {
        "@type": "connListItem",
        "id": "5",
        "name": "CUSTOMERS_1000000.csv"
    },
    {
        "@type": "connListItem",
        "id": "6",
        "name": "CUSTOMERS_1250000.csv"
    },
    {
        "@type": "connListItem",
        "id": "7",
        "name": "CUSTOMERS_1500000.csv"
    },
    ],
]

```

Retrieve fields in an object

Use this REST API call to request the available fields in an object. The profile runs on the selected fields to extract column statistics.

The following table lists the API parameters to retrieve fields in an object from a flat file connection:

Property	Value
URL	Enter a URL to fetch an object from a flat file connection. Use the following format: https://usw3.dm-us.informaticacloud.com/saas/api/v2/connection/source/0100000B00000000000004/field/CP_ALL_SUPPORTED_DATATYPE.csv
Method	POST
Body	<code>{"@type":"flatFileAttrs","delimiter":",","textQualifier":"\"","escapeChar":"", "firstDataRow":2,"headerLineNo":1}</code>

The following table lists the API parameters to retrieve fields in an object from an Oracle connection:

Property	Value
URL	Enter a URL to fetch an object from an Oracle connection. Use the following format: https://usw3.dm-us.informaticacloud.com/saas/api/v2/connection/source/0100000B0000000000000C/field/CP_ALL_SUPPORTED_DATATYPE?validateFields=false
Method	POST
Query String Parameters	<code>validateFields=false</code>

Sample response

```

[
  {
    "@type": "field",
    "id": -1,
    "name": "VARCHAR2_COL",
    "type": "nstring",
    "uniqueName": "VARCHAR2_COL",
    "label": "VARCHAR2_COL",
    "parentObject": "CP_ALL_SUPPORTED_DATATYPE.csv",
  }
]

```

```

    "pcType": "UNISTRING",
    "precision": 255,
    "scale": 0,
    "columnIndex": 0,
    "isKey": false,
    "isExternalId": false,
    "isSfIdLookup": false,
    "isNullable": true,
    "isUnique": false,
    "isCreateable": false,
    "isUpdateable": true,
    "isFilterable": true,
    "isCalculated": false,
    "showLabel": true,
    "naturalOrder": 0,
    "linkedFields": [],
    "relatedInfos": [],
    "references": []
  },
]

```

Retrieve a profile ID

Use this REST API call to request the available profiles in the organization.

The following table lists the API parameters to retrieve available profile jobs.

Property	Value
URL	Enter a URL to fetch available profile jobs. Use the following format: https://usw3.dm-us.informaticacloud.com/saas /profiling-service/api/v1/profile
Method	GET

Sample response

After you make the API call, you need to search for the profile name in the response, and then copy the profile ID.

The profile ID is highlighted in the following response example:

```

[
  {
    "id": "033f72cb-fd70-4bdd-8ad2-376a41670e27",
    "profileKey": 126,
    "version": 0,
    "name": "FFConnectionsList_Check4697169",
    "orgId": "7zmpu0DNPkAk1XvmGgxSEI",
    "description": "Creatin",
    "frsId": "4ZIE81BXmzslJdf1hLFB0N",
    "frsProjectId": "7Rs1Dt7gmK1loZmnheL7kA",
    "connectionId": "cV3icFm4uMScXbp2k44fOH",
    "createdBy": "8qPaKBgSQV2jN2V9O08DO4",
    "createdByName": "DQQA_R35POD3_USER1",
    "createTime": 1601883225651,
    "updatedBy": "8qPaKBgSQV2jN2V9O08DO4",
    "updatedByName": "DQQA_R35POD3_USER1",
    "updateTime": 1601883225653,
    "isFilterEnabled": null,
    "samplingOptions": {
      "id": null,
      "rows": -1,
      "samplingType": "ALL_ROWS"
    },
    "drillDownType": "ON"
  },
]

```

```

    "id": "06b3a271-6e99-47e0-a733-64210bd86632",
    "profileKey": 511,
    "version": 1,
    "name": "CreateDictionaryUsingAllValuesOfVarcharColumn1837479",
    "orgId": "7zmpu0DNPkAk1XvmGgxSEI",
    "description": "",
    "frsId": "euzY070jUUSj8HdJsLshEh",
    "connectionId": "52fFSjJOp61koaaUyZtisR",
    "createdBy": "8qPaKBgSQV2jN2V9008DO4",
    "createdByName": "DQQA_R35POD3_USER1",
    "createTime": 1603554782224,
    "updatedBy": "8qPaKBgSQV2jN2V9008DO4",
    "updatedByName": "DQQA_R35POD3_USER1",
    "updateTime": 1603554830660,
    "isFilterEnabled": null,
    "samplingOptions": {
      "id": null,
      "rows": -1,
      "samplingType": "ALL_ROWS"
    },
    "drillDownType": "ON"
  }
]

```

Log in to Informatica Intelligent Cloud Services

You can log in to Informatica Intelligent Cloud Services using the platform REST API version 2 or version 3 login resource. The version of any subsequent resource that you use does not need to match the version of the login resource that you use to log in.

You can use the v2 resource to log in to the organization using your Informatica Intelligent Cloud Services user account.

POST request

To log in using version 2 of the Informatica Intelligent Cloud Services API, use the following URL:

```
https://dm-{POD_region}.informaticacloud.com/ma/api/v2/user/login.
```

Before you make REST API calls, you must authenticate yourself with your username and password.

Enter the following parameters in the REST API client to connect to the Data Profiling host and receive a session ID and Server URL:

Property	Value
URL	Enter a URL to log in to Informatica Intelligent Cloud Services. Use the following format: <code>https://dm-us.informaticacloud.com/ma/api/v2/user/login</code>
Method	POST
username	Data Profiling username. For example, Jsmith
password	Data Profiling password. For example, YourPassword@123

The following image displays a sample login section:

User Login

POST <https://dm-ap.informaticacloud.com/ma/api/v2/user/login>

YOUR REQUEST HISTORY

STATUS	PATH	USER AGENT	TIME	
200	/ma/api/v2/user/l...	API Explorer	5/18/2022 11:31 AM	>>
200	/ma/api/v2/user/l...	API Explorer	5/18/2022 11:29 AM	>>

Page 1

BODY PARAMS

username string Username	<input type="text" value="DQQA_R33APJ_US"/>
password string Password	<input type="text" value="Password@1234"/>

RESPONSE

200 OK	↗
-----------	-------------------

LANGUAGE

Shell Node Ruby JavaScript C

```
CURL
REQUEST
Examples
1 curl --request POST \
2 --url https://dm-ap.informaticacloud.com/ma/api/v2/user
3 --header 'Accept: application/json' \
4 --header 'Content-Type: application/json' \
5 --data '
6 {
7   "username": "DQQA_R33APJ_USER2",
8   "password": "Password@1234"
9 }
10 '
```

Try It!

```
RESPONSE 200 Log
1 {
2   "id": "0109RV03000000000002",
3   "orgId": "0109RV",
4   "orgUuid": "0jj2iJxjBoSdD5QVvdItOa",
```

POST response

The login response includes the session ID and base URL that you need to include in subsequent REST API calls.

After you enter the login parameter values and make the API call, the response includes the following information that you need to include in the header of subsequent REST API calls:

- **serverUrl**. The base URL that you use in all version 2 resource URIs except for login, for example: /api/v2/job
- **icSessionId**. A REST API session ID that you include in the header for version 2 REST API calls. The session ID expires after 30 minutes of inactivity. If the session ID expires, log in again to continue working with the REST API. For information on retrieving session status details, see Session IDs.

The following image displays the **serverUrl** and **icSessionId**:

```
RESPONSE 200 Log

1
2  "id": "0109RV0300000000002",
3  "orgId": "0109RV",
4  "orgUuid": "0jj2iJxjBoSdD5QVwdIt0a",
5  "name": "DQQA_R33APJ_USER2",
6  "description": "",
7  "createTime": "2020-03-31T08:00:19.000Z",
8  "updateTime": "2021-11-22T15:41:19.000Z",
9  "createdBy": "ma",
10 "updatedBy": "System built-in user",
11 "sfUsername": null,
12 "firstName": "test",
13 "lastName": "user",
14 "title": "SE",
15 "password": "*****",
16 "phone": "*****",
17 "emails": "*****@informatica.com",
18 "timezone": null,
19 "serverUrl": "https://apse1.dm-ap.informaticacloud.com/saa
20 "icSessionId": "8Bre2pNa4QhhiHh2yHdBis",
21 "securityQuestion": "In what city was your first job?",
22 "securityAnswer": "*****",
23 "uuid": "k2BCxeSkNIx1L4WdJg3K0j",
24 "forceChangePassword": false,
25 "roles": [
26   {
27     "name": "Admin",
28     "description": "Role for performing administrative tas
29   },
30 ]
```

Submit URL Parameter

Modify the URL and pass the URL to all the APIs.

1. Copy the "serverUrl" from your login response as shown in the following image:

```
18  "timezone": null,
19  "serverUrl": "https://apse1.dm-ap.informaticacloud.com/saas"
20  "icSessionId": "8Bre2pNa4QhhiHh2yHdBis",
```

2. Modify the URL to include "dqprofile" in the URL and exclude "https://" and "/saas" from the URL. For example, if the login response is "https://usw3.dm-us.informaticacloud.com/saas", modify "use3.dm-us.informaticacloud.com" to "use3-**dqprofile**.dm-us.informaticacloud.com"

3. Paste the modified URL in the text box as shown in the following image:

Submit URL Parameter

Enter credentials to pass the URL parameter to all APIs

1. Copy "serverUrl" or "baseApiUrl" from your login response and modify the URL to include "-dqprofile" in the URL and exclude "https://" and "/saas" from the URL. For example, if the login response is "<https://usw5.dm-us.informaticacloud.com/saas>", modify "use5.dm-us.informaticacloud.com" to "use5-dqprofile.dm-us.informaticacloud.com"
2. Paste the modified URL in the text box.
3. Click Submit to pass the parameter to all the Profiling APIs.

Note: Refresh the page if you cannot see the input box to paste the URL.

4. Click **Submit** to pass the parameter to all the Profiling APIs.

Note: If you do not use the Developer Portal to submit the Server URL, use the Server URL as the prefix in the API calls in the third-party API portals.

List all profiles

You can view all the existing profiles that you created.

GET request

Use the GET method to fetch the list of profiles that a user created.

The following table lists the parameter that you need to specify to view all the profiles:

Property	Value
URL	Enter a URL to fetch the list of profiles. Use the following format: https://usw3-dqprofile.dm-ap.informaticacloud.com/profiling-service/api/v1/profile
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API response code

200 OK

API response

```
[
  0:{
    "id":"ee99c41e-779b-4846-92a0-6047e26e5823"
    "profileKey":2676
    "version":0
    "name":"Profile_1"
    "orgId":"bk5LnFlx32ZjYMsTbXYN6z"
    "description":"Creating profile using Automation."
    "frsId":"c1xE0UmYfwwgFzu8CCNmQ2"
```

```

"connectionId": "5abzn0mlerWcY4LBDPHXer"
"createdBy": "3vC7otmqf3weY98g8jzuG2"
"createdByName": "USER4"
"createTime": 1596601754485
"updatedBy": "3vC7otmqf3weY98g8jzuG2"
"updatedByName": "USER4"
"updateTime": 1596601754488
"isFilterEnabled": NULL
"samplingOptions": {...}
"drillDownType": "ON"
}
1: {...}
2: {...}
3: {...}
4: {...}
5: {...}
]

```

Find the exact profile

Find the exact profile job if multiple profiles with the same name exist in different folders.

GET request

Use the GET method to fetch the exact profile.

The following table lists the parameter that you need to specify to find the exact profile:

Property	Value
URL	Enter a URL to fetch the right profile. Use the following format: https://usw3-dqprofile.dm-ap.informaticacloud.com/profiling-service/api/v1/profile
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>
frsProjectName	Name of the project that contains the folders and profiles.
frsFolderName	Name of the folder that contains the profiles.
name	Name of the profile.
exactMatch	Specify true if you want to search for a profile with its exact name.

API response code

200 OK

API response

```

[
  {
    "id": "bd65f226-5c26-4348-88bd-dfc6be65ac4a",
    "profileKey": 24428,
    "version": 1,
    "name": "Profile_2",
    "orgId": "d2axWRuaa6zffjGfvwWWQf",
    "description": "Creating profile using Automation.",
    "frsId": "310N0zDWccJkY40yGhwOIR",
    "frsProjectId": "7v6XDfrInjqlP4KO0AUlo3",
    "frsFolderId": "4rYOVAakQPtfG716rzlpeS",
    "connectionId": "fMxoRXfkpcG147mi76z4uk",
    "createdBy": "1vcXL5Kw7jNgTUNO7sS9gF",
    "createdByName": "User4",
  }
]

```

```

"createTime": 1610906983086,
"updatedBy": "lvcXL5Kw7jNgTUNO7sS9gF",
"updatedByName": "User4",
"updateTime": 1610906983305,
"isFilterEnabled": null,
"runtimeOptions": {
  "id": "5ecafclb-7cad-4a1c-9d74-62ac8e096a19",
  "scheduleId": null,
  "runtimeEnvironmentId": null,
  "defaultEmailNotification": true
},
"source": {
  "id": "510df11b-e4fc-4a73-8259-ca8d739f6667",
  "name": "Oracle_source",
  "fields": [
    {
      "id": "e93b787a-49e2-47ba-8ad4-95dd1c94bb1f",
      "name": "LONG_COL",
      "dataType": "decimal",
      "precision": 38,
      "scale": 0,
      "pcType": "HIPRECDECIMAL",
      "order": 19,
      "isDeleted": false,
      "isMetadataUpdated": false
    }
  ],
  "dataSourceType": "UNSET",
  "sourceType": "DATASOURCE"
},
"profileableFields": [
  {
    "id": "3c8c9108-3143-4a27-9609-cff24e93cdb4",
    "isDeleted": false,
    "columnKey": 10011,
    "sourceName": "Oracle_Source",
    "fieldName": "TIMESTAMP_COL",
    "fieldType": "DATASOURCEFIELD"
  },
  {
    "id": "9c205cc3-8e17-408a-99bf-4385d3bb83cf",
    "isDeleted": false,
    "columnKey": 10032,
    "sourceName": "Oracle_Source",
    "fieldName": "DEC_COL",
    "fieldType": "DATASOURCEFIELD"
  },
  {
    "id": "bc3030eb-3a2f-4163-910a-e5e32dc081f4",
    "isDeleted": false,
    "columnKey": 10010,
    "sourceName": "Oracle_Source",
    "fieldName": "DATE_COL",
    "fieldType": "DATASOURCEFIELD"
  }
],
"samplingOptions": {
  "id": null,
  "rows": -1,
  "samplingType": "ALL_ROWS"
},
"drillDownType": "ON"
}

```

```
]
```


Explore profile definition

View the profile definition information such as general asset information, source details, formatting options, sampling options, profileable fields, and drilldown type.

GET request

Use the GET method to fetch profile definition information based on the profile ID.

The following table lists the parameters that you need to specify to explore profile definition:

Property	Value
URL	Enter a URL to fetch the profile definition. Use the following format: <code>https://usw3-dqprofile.dm-ap.informaticacloud.com/profiling-service/api/v1/profile/<ID></code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.

API response code

200 OK

API response

```
{
  "id": "ee99c41e-779b-4846-92a0-6047e26e5823"
  "profileKey": 2676
  "version": 0
  "name": "ALL_COLUMN"
  "orgId": "bk5LnFlx32ZjYMsTbXYN6z"
  "description": "Creating profile using Automation."
  "frsId": "c1xEOUmYfwwgFzu8CCNmU2"
  "connectionId": "5abzn0mlerWcY4LBDPHXer"
  "createdBy": "3vC7otmqf3weY98g8jzuG2"
  "createdByName": "USER4"
  "createTime": 1596601754485
  "updatedBy": "3vC7otmqf3weY98g8jzuG2"
  "updatedByName": "USER4"
  "updateTime": 1596601754488
  "lastRunKey": 1
  "isFilterEnabled": NULL
  "runtimeOptions": {
    "id": "4b4d8cbc-c0fe-4686-b300-e5a7b8d3e206"
    "scheduleId": NULL
    "runtimeEnvironmentId": NULL
    "defaultEmailNotification": true
  }
  "source": {
    "id": "3a054fc3-12b3-42ed-94f1-558cfb66b200"
    "name": "SUPPORTED_DATATYPE"
    "fields": [...]
    "dataSourceType": "UNSET"
    "sourceType": "DATASOURCE"
  }
  "profileableFields": [
    0: {
```

```

    "id":"cfa05374-c70e-4d97-b895-a67a15e0040e"
    "isDeleted":false
    "columnKey":10008
    "sourceName":"SUPPORTED_DATATYPE"
    "fieldName":"CHARACTERVARYING_COL"
    "fieldType":"DATASOURCEFIELD"
  }
  1:{...}
  2:{...}
  3:{...}
  4:{...}
]
"samplingOptions":{
  "id":NULL
  "rows":-1
  "samplingType":"ALL_ROWS"
}
"drillDownType":"ON"
}

```

Create a profile

Create a data profiling task to determine the characteristics of columns in a source object, such as value frequency, patterns, and data types. Data profiling tasks are also called profiles.

Prerequisite

Ensure that you have created a connection to the data source before you create a profile. To create a connection using REST APIs, see the ["Prerequisites" on page 4](#) section.

In this tutorial, create a profile named **Profile_Employee_2** using an Oracle connection.

POST request

Use the POST method to create a profile.

The following table lists the parameters that you need to specify to create a profile:

Property	Value
URL	Enter a URL to create a profile. Use the following format: <code>https://usw3-dqprofile.dm-ap.informaticacloud.com/profiling-service/api/v1/profile</code>
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API parameters

The following table lists the important query parameters exposed for this API:

Parameter	Description	Example value
Name	Name of the Data Profiling asset.	Profile_Employee_2
orgId	A system-generated field that specifies the organization ID of the user.	8bK8rrYo6bLdbS29jujik

Parameter	Description	Example value
Description	Description of the Data Profiling asset.	Employee Details.
frsProjectId	Specifies the ID of the project where the profile task is stored. To retrieve the frsProjectId, see the "Prerequisites" on page 4 section.	2Nw2tVk5dJQeSFNDrgglob
ConnectionID	Specifies the connection ID to connect to the data source. To retrieve the ConnectionID, see the "Prerequisites" on page 4 section.	h40VFSvMcCpj1CEHDMHLgY
SourceType	Type of source.	DATASOURCE
isDeleted	This indicates that the columns are no longer profileable.	False
fieldType	The source field type whether it can be a rule output port (MAPPLETFIELD) or source column (DATASOURCEFIELD).	DATASOURCEFIELD
SourceName	The source object to create the profile on. To view source objects in a connection, see the "Prerequisites" on page 4 section.	EMPLOYEES
Field Name	Profileable columns. To view the list of profileable columns, see "Prerequisites" on page 4 section.	JOB_ID, LAST_NAME, FIRST_NAME

API response code

201 created.

API example in JSON format

```
{
  "examples": {
    "oracleCreateRequestExample": {
      "value": {
        "name": "Profile_Employee_2",
        "description": "Employee Details",
        "frsProjectId": "2Nw2tVk5dJQeSFNDrgglob",
        "connectionId": "h40VFSvMcCpj1CEHDMHLgY",
        "isFilterEnabled": true,
        "runtimeOptions": {
          "scheduleId": null,
          "runtimeEnvironmentId": null,
          "defaultEmailNotification": true,
          "profileAdvProps": {
            "maxTopN": null,
            "maxPatterns": null,

```

```

    "maxPatternThresholdPercent": null,
    "maxRanks": null,
    "inferDateTime": true,
    "detectOutliers": true,
    "maxColumnsPerMapping": null,
    "minNoOfRowsForSplitMapping": null,
    "maxMemory": null,
    "maxPercentMemory": null,
    "defaultBufferBlockSize": null,
    "dtmBufferSize": null,
    "lineSequentialBufferLength": null,
    "stopOnErrors": null
  }
},
"source": {
  "name": "EMPLOYEES",
  "fields": [
    {
      "name": "JOB_ID",
      "dataType": "varchar",
      "precision": 10,
      "scale": 0,
      "pcType": "STRING",
      "order": 6
    },
    {
      "name": "LAST_NAME",
      "dataType": "varchar",
      "precision": 25,
      "scale": 0,
      "pcType": "STRING",
      "order": 2
    },
    {
      "name": "FIRST_NAME",
      "dataType": "varchar",
      "precision": 20,
      "scale": 0,
      "pcType": "STRING",
      "order": 1
    }
  ]
},
"rules": [
  {
    "name": "is_null",
    "description": null,
    "frsId": "40MVIkdn5GSc4TthVjPYCH",
    "inFields": [
      {
        "name": "input_1",
        "label": null,
        "dataType": "string",
        "precision": 50,
        "scale": 0
      }
    ],
    "outFields": [
      {
        "name": "is_null",
        "label": null,
        "dataType": "string",
        "precision": 100,
        "scale": 0
      }
    ],
    "ruleType": "RULE_SPECIFICATION"
  }
],
"dataSourceType": "ORACLE",
"properties": {

```

```

    "dataSourceType": "ORACLE"
  },
  "sourceType": "DATASOURCE"
},
"profileableFields": [
  {
    "frsId": "40MVIkdn5GSc4TthVjPYCH",
    "inputFieldMappings": [
      {
        "dataSourceFieldName": "SSN",
        "inFieldName": "input_1",
        "isDeleted": false
      }
    ],
    "outputFieldMappings": [
      {
        "datatype": "string",
        "outFieldName": "is_null",
        "label": null,
        "isDeleted": false
      }
    ],
    "ruleType": "RULE SPECIFICATION",
    "fieldType": "MAPPLETFIELD"
  },
  {
    "sourceName": "EMPLOYEES",
    "fieldName": "FIRST_NAME",
    "fieldType": "DATASOURCEFIELD"
  }
],
"filters": [
  {
    "isEnabled": true,
    "name": "employee id greater than 100",
    "description": "employee id greater than 100",
    "fieldFilters": [
      {
        "columnName": "EMPLOYEE_ID",
        "operator": "GREATER_THAN",
        "value": "100"
      }
    ],
    "filterType": "SIMPLE"
  }
],
"samplingOptions": {
  "rows": -1,
  "samplingType": "ALL_ROWS"
},
"drillDownType": "ON"
}
}
}
}
}

```

Run a profile

You can run the profile to extract column statistics, patterns, data types, value frequencies, and outliers for columns and rules.

POST request

Use the POST method to run a profile.

The following table lists the parameters that you need to specify to run a profile:

Property	Value
URL	Enter a URL to run a profile. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/profile/id/execute

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.

API response code

200 OK

API response

```
{
  "profileRunId":
  "c47bf0ba-ff07-4235-85db-c82d17c5ad45"
  "profileJobId":
  "67f6b06a-a830-4b46-a137-e047c8087176"
}
```

Monitor a profile

You can monitor the jobs for the data profiling tasks that you run. Monitor to learn how to view and monitor jobs that are running or have run in Data Profiling.

Get Job by ID

Gets the Data Profiling job details based on the job ID.

GET request

Use the GET method to monitor a profile.

The following table lists the parameters that you need to specify to monitor a profile:

Property	Value
URL	Enter a URL to monitor a profile. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/job/id

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
Id	The unique identifier of the Data Profiling job Id. For example, 67f6b06a-a830-4b46-a137-e047c8087176 Copy the Job ID from the run profile API response.

API response code

200 OK

API response

```
{
  "id":
  "67f6b06a-a830-4b46-a137-e047c8087176"
  "name":
  "Simple profile - run - 1"
  "type":
  "PROFILING_PC"
  "orgId":
  "7zmpu0DNPKAk1XvmGgxSEI"
  "createTime":
  1604475123078
  "startTime":
  1604475123200
  "endTime":
  1604475192442
  "status":
  "COMPLETED"
  "createdBy":
  "8qPaKBgSQV2jn2V9008DO4"
  "errorMessage":
  "No errors encountered."
  "jobSteps":[
  0:{
    "id":
    "e624dcd7-ea69-41e7-903c-869a5e169149"
    "name":
    "Generating data profiling mappings."
    "jobStepType":
    "GENERATE_PROFILING_WORKFLOW"
    "orgId":
    "7zmpu0DNPKAk1XvmGgxSEI"
    "sequence":
    1
    "createTime":
    1604475123519
    "startTime":
    1604475132503
    "endTime":
    1604475134035
    "errorMessage":
    "No errors encountered."
    "status":
    "COMPLETED"
    "dtmStats":
    NULL
  }
  1:{
    "id":
    "90b4fad1-ceaf-413b-aa06-e8537ee0bf23"
    "name":
    "s_profiling_562_1_1"
    "jobStepType":

```

```

"PROFILING_MAPPING"
"orgId":
"7zmpu0DNPkAklXvmGgxSEI"
"sequence":
2
"createTime":
1604475134013
"startTime":
1604475139509
"endTime":
1604475186399
"errorMessage":
"No errors encountered."
"status":
"COMPLETED"
"dtmStats":
{"firstError":"No errors encountered.,"targetSuccessRows":961,"transformationStats":
[{"rejectedRows..."
}
2:{
"id":
"a6f5bfa4-7462-4687-a436-ca25c5db2563"
"name":
>Loading data from staging area to metric store"
"jobStepType":
"STAGING_TO_STORE"
"orgId":
"7zmpu0DNPkAklXvmGgxSEI"
"sequence":
3
"createTime":
1604475134012
"startTime":
1604475189114
"endTime":
1604475190646
"errorMessage":
"No errors encountered."
"status":
"COMPLETED"
"dtmStats":
NULL
}
3:{
"id":
"30c2fffd1-f707-4bdc-8391-243edc236d20"
"name":
>Fetching the source row count"
"jobStepType":
"ROWCOUNT_FETCH"
"orgId":
"7zmpu0DNPkAklXvmGgxSEI"
"sequence":
0
"createTime":
1604475123517
"startTime":
1604475127637
"endTime":
1604475130592
"errorMessage":
>No errors encountered."
"status":
"COMPLETED"
"dtmStats":
{"firstError":"TT_11132 Transformation [ROW_COUNT_EXPRESSION] had an error evaluating
output column ..."
}
]
}

```


View profile results

After you run a profile on a source object, the results include the column statistics, such as Number of distinct, non-distinct, and null values, Percentage of distinct, non-distinct, null, zero, and blank values, Documented and inferred data types, and Number of patterns.

In this tutorial, you can view all the profiled columns and view the results of a column.

List all columns

Displays all the columns and rules and their statistics in the profile run.

GET request

Use the GET method to list all columns in a profile.

The following table lists the parameters that you need to specify to view all columns in the profile run:

Property	Value
URL	Enter a URL to view all columns in the profile run. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/metric-store/api/v1/odata/Profiles('profileid')/Columns</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileid	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the Profileid, see the "Prerequisites" on page 4 section.

API response code

200 OK

API response

```
{
  "@odata.context":
  "$metadata#Columns"
  "value": [
    0: {
      "columnKey":
      10001
      "runKey":
      1
      "columnName":
      "NATIONALCHARACTER_COL"
      "columnId":
      "2d5e1e62-64ab-4385-a0e0-00801b163996"
      "columnType":
      "DATASOURCEFIELD"
      "averageValue":
      NULL
      "minimumValue":
      "0"
      "maximumValue":
```

```

"u"
"maxLength":
1
"minLength":
1
"standardDeviation":
NULL
"nulCount":
47
"nulPercent":
83.93
"zeroCount":
0
"zeroPercent":
0
"blankCount":
0
"blankPercent":
0
"totalRows":
56
"totalSum":
NULL
"distinctCount":
3
"distinctPercent":
5.36
"duplicateCount":
6
"duplicatePercent":
10.71
"documentedDataType":
"nchar(2)"
"totalPatterns":
2
"topPatternPercent":
83.93
"isConflictingInfDocumentDataType":
false
"containLineFeeds":
false
"containLeadTrailSpaces":
false
"isValueFreqOutlier":
false
"isPatternOutlier":
false
"profileKey":
562
"order":
15
}
1:{
...
}
2:{
...
}
}
}

```

Get Column By ID

Displays the detailed profile results for a column. In this tutorial, you can view the column details of the **CountryName** column.

GET request

Use the GET method to view detailed column profile results.

The following table lists the parameters that you need to specify to view detailed column profile results:

Property	Value
URL	Enter a URL to view column profile results. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/metric-store/api/v1/odata/Profiles('profileId')/Columns('columnId')</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.
ColumnID	The unique identifier of the column in the Data Profiling asset. For example, c5c51e8d-14b9-4d0d-a956-b643c72cd87b Copy the column ID from the list all columns API response.
runKey	Indicates the run key of the profile run. Select 1.

API response code

200 OK

API response

```
{
  "@odata.context":
  "$metadata#Columns"
  "columnKey":
  10038
  "profileKey":
  514
  "runKey":
  1
  "columnName":
  "CountryName"
  "columnId":
  "c5c51e8d-14b9-4d0d-a956-b643c72cd87b"
  "columnType":
  "DATASOURCEFIELD"
  "averageValue":
  NULL
  "minimumValue":
  "CA"
  "maximumValue":
  "UNITED KINGDOM "
  "maxLength":
  48
  "minimumLength":
  2
  "standardDeviation":
  NULL
  "nulCount":
  1
}
```

```

"nulPercent":
2.17
"zeroCount":
0
"zeroPercent":
0
"blankCount":
0
"blankPercent":
0
"totalRows":
46
"totalSum":
NULL
"distinctCount":
17
"distinctPercent":
36.96
"duplicateCount":
28
"duplicatePercent":
60.87
"documentedDataType":
"flat_string(255)"
"totalPatterns":
7
"topPatternPercent":
30.43
"isConflictingInfDocumentDataType":
false
"containLineFeeds":
false
"containLeadTrailSpaces":
false
"isValueFreqOutlier":
true
"isPatternOutlier":
true
"order":
41
}

```

Get inferred patterns by column ID

Displays inferred patterns and their frequency and percentage for each column.

GET request

Use the GET method to view the inferred patterns for the column

The following table lists the parameters that you need to specify to view the inferred patterns for the column:

Property	Value
URL	Enter a URL to view the inferred patterns for the column. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/metric-store/api/v1/odata/Profiles('profileid')/Columns('columnid')/Patterns

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.
ColumnID	The unique identifier of the column in the Data Profiling asset. For example, c5c51e8d-14b9-4d0d-a956-b643c72cd87b Copy the column ID from the list all columns API response.

API response code

200 OK

API response

```
{
  "@odata.context":
  "$metadata#Patterns"
  "value": [
    0: {
      "domainType":
      "Pattern"
      "profileKey":
      3277
      "runKey":
      1
      "nullCount":
      3
      "nullPercent":
      5.36
      "totalRows":
      56
      "isConflictingInfDocumentDataType":
      false
      "columnKey":
      10001
      "domainValue":
      "XXXX"
      "inferredDatatype":
      "String(11) [100.00%]"
      "satisfiedCount":
      3
      "satisfiedCountPercent":
      5.36
      "rowIdentifier":
      0
      "domainName":
      NULL
      "patternLabel":
      "X(4)"
      "isOutlier":
      NULL
    }
    1: {
      ...
    }
    2: {
      ...
    }
    3: {
      ...
    }
  ]
}
```

```

}
4:{
...
}
]
}

```

Get Inferred Datatypes by Column ID

Displays the inferred data type.

GET request

Use the GET method to view the inferred data types for the columns.

The following table lists the parameters that you need to specify to view the inferred datatypes for the column:

Property	Value
URL	Enter a URL to view the inferred datatypes for the column. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/metric-store/api/v1/odata/Profiles('profileid')/Columns('columnid')/DataTypes</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.
ColumnID	The unique identifier of the column in the Data Profiling asset. For example, c5c51e8d-14b9-4d0d-a956-b643c72cd87b Copy the column ID from the list all columns API response.

API response code

200 OK

API response

```

{
  "@odata.context": "$metadata#DataTypes"
  "value": [
    0: {
      "columnKey": 10001
      "profileKey": 3221
      "runKey": 1
      "totalRows": 56
      "inferredDatatype": "String(11)"
      "frequency": 53
      "frequencyPercent": 100
      "rowIdentifier": 0
      "isCommittedDatatype": true
      "format": NULL
    }
  ]
}

```

```
}
```

Get Top N value frequencies by column ID

Displays the value frequency of the column.

GET request

Use the GET method to view the value frequency of the columns.

The following table lists the parameters that you need to specify to view the value frequency of the column:

Property	Value
URL	Enter a URL to view the value frequency of the column. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com /metric-store/api/v1/odata/Profiles('profileId')/Columns('columnId')/ValueFrequencies</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.
ColumnID	The unique identifier of the column in the Data Profiling asset. For example, c5c51e8d-14b9-4d0d-a956-b643c72cd87b Copy the column ID from the list all columns API response.

API response code

200 OK

API response

```
{
  "@odata.context":
  "$metadata#ValueFrequencies"
  "value": [
    0: {
      "frequency":
      3
      "columnValue":
      NULL
      "rowIdentifier":
      0
      "isOutlier":
      true
      "percent":
      5.35714
      "length":
      NULL
    }
    1: {
      "frequency":
      3
      "columnValue":
      NULL
      "rowIdentifier":
```

```

0
  "isOutlier":
  true
  "percent":
  5.35714
  "length":
  NULL
}
2:{
...
}
3:{
...
}
]
}

```

Export profile results

Exports the profile results to a Microsoft Excel file.

GET request

Use the GET method to export the profile results.

The following table lists the parameters that you need to specify to export the profile results to a Microsoft Excel file:

Property	Value
URL	Enter a URL to export the profile results to a Microsoft Excel file. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/metric-store/api/v1/Profiles('{profileid}')/Export</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the profileID, see the "Prerequisites" on page 4 section.
runKey	Indicates the run key of the profile run. Select 1.
range	Choose All Columns to export the results for all the columns, or choose Selected Columns and select one or more columns to export the results for the chosen columns.
fileFormat	By default, the fileFormat is set to Excel .

API response code

200 OK

Create and run queries

You can create and run one or more queries on the source object. You can view the query results, update, and delete queries in Data Profiling.

You need the **Query - Create** privilege to create queries, and the **Query - Submit** privilege to run queries and view query results.

Creates Query

Creates a query on the source object.

POST request

Use the POST method to create a query on the source object.

The following table lists the parameters that you need to specify to create a query on the source object:

Property	Value
URL	Enter a URL to create a query on the source object. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
name	Enter the name of the query.
operator	The logical operator to aggregate multiple query results. Select AND or OR as the logical operator.
columnType	The source, mapplet output, or profileable column on which the query is generated. Select PROFILEABLECOLUMN , DATASOURCEFIELD , or MAPPLETFIELD as the column type.
columnID	The unique identifier of the column based on the column type in the Data Profiling asset. For example, <code>c5c51e8d-14b9-4d0d-a956-b643c72cd87b</code> Copy the column ID from the list all columns API response.
operationType	The search criteria, such as percentage of unique values in columns, column pattern, or column data type. Select VALUE , PATTERN , or DATATYPE as the operation type. When you select the Pattern operator, Data Profiling shows the inferred patterns for the current profile run. When you select Data Type operator, Data Profiling shows the documented data type and inferred data types in the current profile run. Data Profiling does not show any inferred pattern if you select a column that is not included in the latest profile run. In this case, you can enter a pattern.
valueFunctiontype	Choose an operator to filter the search results. You can select Equals, Not Equals, Less Than, Less Than or Equals, Greater Than, Greater Than or Equals, Between, In, Not In, Is Null, Is Not Null, Patterns, Data Types, Starts With, Ends With, or Contains operator for a condition.
values	Enter the string values as necessary.

Property	Value
queryType	Choose PERSISTENT to query on the profile source. Choose DRILLDOWN to view the filtered drill down results.
profileId	The unique identifier of the Data Profiling asset on which the query runs. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the profileId, see the "Prerequisites" on page 4 section.
connectionID	Specifies the flat file connection ID to connect to the data source. Data Profiling runs the query on the runtime environment associated with the flat file connection. To retrieve the connectionID, see the "Prerequisites" on page 4 section.

Sample request

```
{ "description": "", "name": "A1", "operator": "AND", "profileId": "b9b05365-3790-494d-82f4-352a211feae2", "queries": [ { "$id": "infa-cp-13", "operationType": "VALUE", "valueFunctiontype": "EQUAL", "values": [ "Hi I am good" ], "columnId": "517cda8b-76d0-4446-b751-17337644139a", "columnName": "varchar_col", "columnType": "DATASOURCEFIELD" }, { "queryType": "PERSISTENT" } ] }
```

API response code

200 OK

Get Query Result

Gets the query results.

GET request

Use the GET method to view the query results.

The following table lists the parameters that you need to specify to view the query results:

Property	Value
URL	Enter a URL to view the query results. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query/{queryId}/queryResults

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
queryID	Enter the unique identifier of the query.

API response code

200 OK

Get Query by Id

Gets the query results based on the query ID.

GET request

Use the GET method to view the query results based on the query ID.

The following table lists the parameters that you need to specify to view the query results based on the query ID:

Property	Value
URL	Enter a URL to view the query results based on the query ID. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query/{id}

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	Enter the unique identifier of the query.

API response code

200 OK

Lists all Query by Data Profile Asset

Lists the query results based on the profile ID.

GET request

Use the GET method to list the query results based on the profile ID.

The following table lists the parameters that you need to specify to list the query results based on the profile ID:

Property	Value
URL	Enter a URL to list the query results based on the profile ID. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileId	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the profileId, see the "Prerequisites" on page 4 section.

API response code

200 OK

Execute drill down or query on profile

Executes the drill down or query operation on the profile.

POST request

Use the POST method to execute the drill down or query operation on the profile.

The following table lists the parameters that you need to specify to execute the drill down or query operation on the profile:

Property	Value
URL	Enter a URL to execute the drill down or query operation on the profile. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query/{id}/execute

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	Enter the unique identifier of the query.

API response code

200 OK

Update Query

Updates the query.

PUT request

Use the PUT method to update a query.

The following table lists the parameters that you need to specify to update a query:

Property	Value
URL	Enter a URL to update a query. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query/{id}

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	Enter the unique identifier of the query to be updated.
name	Enter the name of the query.
operator	The logical operator to aggregate multiple query results. Select AND or OR as the logical operator.
columnType	The source, mapplet output, or profileable column on which the query is generated. Select PROFILEABLECOLUMN , DATASOURCEFIELD , or MAPPLETFIELD as the column type.

Property	Value
columnID	The unique identifier of the column based on the column type in the Data Profiling asset. For example, c5c51e8d-14b9-4d0d-a956-b643c72cd87b Copy the column ID from the list all columns API response.
operationType	The search criteria, such as percentage of unique values in columns, column pattern, or column data type. Select VALUE , PATTERN , or DATATYPE as the operation type. When you select the Pattern operator, Data Profiling shows the inferred patterns for the current profile run. When you select Data Type operator, Data Profiling shows the documented data type and inferred data types in the current profile run. Data Profiling does not show any inferred pattern if you select a column that is not included in the latest profile run. In this case, you can enter a pattern.
valueFunctiontype	Choose an operator to filter the search results. You can select Equals, Not Equals, Less Than, Less Than or Equals, Greater Than, Greater Than or Equals, Between, In, Not In, Is Null, Is Not Null, Patterns, Data Types, Starts With, Ends With, or Contains operator for a condition.
values	Enter the string values as necessary.
queryType	Choose PERSISTENT to query on the profile source. Choose DRILLDOWN to view the filtered drill down results.
profileId	The unique identifier of the Data Profiling asset on which the query runs. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the profileId, see the "Prerequisites" on page 4 section.
connectionID	Specifies the flat file connection ID to connect to the data source. Data Profiling runs the query on the runtime environment associated with the flat file connection. To retrieve the connectionID, see the "Prerequisites" on page 4 section.

Sample request

```
{ "id": "4785a121-0dc5-4e61-99c4-8217f2165602", "description": "", "name": "All", "operator": "AND", "profileId": "b9b05365-3790-494d-82f4-352a211feae2", "queries": [{"id": "58d5f674-29d2-40af-8035-7a98dd16da30", "columnType": "DATASOURCEFIELD", "columnId": "e75e7103-4503-4fa3-acc9-61a80a596a07", "columnName": "char_col", "operationType": "VALUE", "valueFunctiontype": "EQUAL", "values": ["Hi I am good"]} ], "queryType": "PERSISTENT" }
```

API response code

200 OK

Delete Query

Deletes the query.

DELETE request

Use the DELETE method to delete the query.

The following table lists the parameters that you need to specify to delete the query:

Property	Value
URL	Enter a URL to delete the query. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/query/{id}</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	Enter the unique identifier of the query to be deleted.

API response code

200 OK

Manage profile runs

You can list details of the profile runs, delete profile runs by profiling Id, and get profiling run details by profiling Id.

List all RunDetail

You can view all the profile runs for a profile.

GET request

Use the GET method to view profile runs.

The following table lists the parameters that you need to specify to view all columns in the profile run:

Property	Value
URL	Enter a URL to view all columns in the profile run. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/runDetail</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileId	The unique identifier of the Data Profiling asset. For example, <code>908ed64e-cfd0-4544-bb69-5f5414e2f18b</code> . To retrieve the profileId, see the "Prerequisites" on page 4 section.

API response code

200 OK

API response

```
[
  0: {
    ...
  }
]
```

```

1:{
  "profileId":
  "20b84ac7-6dcb-4d30-a9f7-6c3c41549983"
  "jobId":
  "fd3ee432-90f4-4563-bc4a-5066bfaf32b7"
  "id":
  "0fa855e9-664c-4a56-8997-b5f2c16a60b1"
  "runKey":
  11
  "samplingType":
  "ALL_ROWS"
  "samplingRows":
  -1
  "status":
  "COMPLETED"
  "runDetailStatus":
  NULL
  "startTime":
  1610608118375
  "endTime":
  1610608154159
  "executionTime":
  35784
  "createdTime":
  1610608118364
  "createdBy":
  "3vC7otmqf3weY98g8jzuG2"
  "createdByName":
  "USER4"
  "isFilterEnabled":
  false
  "filterName":
  NULL
  "rowsProcessed":
  56
  "numberOfDSColumns":
  1
  "numberOfRules":
  NULL
  "numberOfMappletColumns":
  NULL
  "numberOfColumns":
  36
  "runCostInMB":
  0.01122761
  "isDetectOutlier":
  false
}
2:{
...
}
3:{
...
}
}
]

```

Delete runs by data profile asset

You can delete one or more profile runs for a profile. When you delete a profile run, Data Profiling deletes the profile results for the profile run from the profiling warehouse. You can delete a profile run to reclaim the storage space in the profiling warehouse.

DELETE request

Use the DELETE method to delete a profile run.

The following table lists the parameters that you need to specify to delete a profile run:

Property	Value
URL	Enter a URL to delete a profile run. Use the following format: https://usw3-dqprofile.dms.informaticacloud.com/profiling-service/api/v1/runDetail

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ProfileID	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the ProfileId, see the "Prerequisites" on page 4 section.
runDetailIds	Profile run detail ID. Enter the ID of the profile run that you want to delete. For example, 31dc9585-b5e5-4191-8875-c3d49a249574. Copy the id from the List all RunDetail API response.

API response code

204 No content

API response

```
[
  0:{
    "profileId":
    "20b84ac7-6dcb-4d30-a9f7-6c3c41549983"
    "jobId":
    "1781053e-7bae-4294-bdeb-0945e01252ce"
    "id":
    "31dad319-3887-4fbd-8250-341e8f41adcb"
    "runKey":
    NULL
    "samplingType":
    NULL
    "samplingRows":
    NULL
    "status":
    NULL
    "runDetailStatus":
    "DELETED"
    "startTime":
    NULL
    "endTime":
    NULL
    "executionTime":
    NULL
    "createdTime":
    NULL
    "createdBy":
    NULL
    "createdByName":
    NULL
    "isFilterEnabled":
    NULL
    "filterName":
    NULL
    "rowsProcessed":
    0
    "numberOfDSColumns":
    NULL
    "numberOfRules":
```



```

NULL
"numberOfMappletColumns":
NULL
"numberOfColumns":
NULL
"runCostInMB":
NULL
"isDetectOutlier":
NULL
}
]

```

Get Run Detail by ID

You can view run details of a profile run.

GET request

Use the GET method to view details of the profile run based on the profile run ID.

The following table lists the parameters that you need to specify to delete a profile:

Property	Value
URL	Enter a URL to view details of the profile run based on the profile run ID. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/runDetail/id

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	The unique identifier of the profiling run ID. For example, 0fa855e9-664c-4a56-8997-b5f2c16a60b1 Copy the jobid from the List all RunDetail API response.

API response code

200 OK

API response

```

{
  "profileId":
  "20b84ac7-6dcb-4d30-a9f7-6c3c41549983"
  "jobId":
  "fd3ee432-90f4-4563-bc4a-5066bfaf32b7"
  "id":
  "0fa855e9-664c-4a56-8997-b5f2c16a60b1"
  "runKey":
  11
  "samplingType":
  "ALL_ROWS"
  "samplingRows":
  -1
  "status":
  "COMPLETED"
  "runDetailStatus":
  NULL
  "startTime":
  1610608118375
  "endTime":
  1610608154159
  "executionTime":

```

```

35784
"createdTime":
1610608118364
"createdBy":
"3vC7otmqf3wey98g8jzuG2"
"createdByName":
"USER4"
"isFilterEnabled":
false
"filterName":
NULL
"rowsProcessed":
56
"numberOfDSColumns":
1
"numberOfRules":
NULL
"numberOfMappletColumns":
NULL
"numberOfColumns":
36
"runCostInMB":
0.01122761
"profiledFields":[
...
]
"isDetectOutlier":
false
}

```

Manage profile jobs

Data Profiling creates a job when you run a data profiling task. You can view the Data Profiling job details, stop a job, resume a stopped job, and download session logs for the steps executed on the agent.

Get Job by Id

Gets the Data Profiling job details based on the job ID.

GET request

Use the GET method to view the Data Profiling job details based on the job ID.

The following table lists the parameters that you need to specify to view the Data Profiling job details based on the job ID:

Property	Value
URL	Enter a URL to view the Data Profiling job details based on the job ID. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/job/{id}</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
ID	Enter the unique identifier of the Data Profiling job.

API response code

200 OK

Get Running Jobs by Profile Id

Gets the details of a Data Profiling job based on the Profile ID.

GET request

Use the GET method to view the details of a Data Profiling job based on the Profile ID.

The following table lists the parameters that you need to specify to view the details of a Data Profiling job based on the Profile ID:

Property	Value
URL	Enter a URL to view the details of a Data Profiling job based on the Profile ID. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/job/runningJobs/{profileid}

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileid	The unique identifier of the Data Profiling asset. For example, 908ed64e-cfd0-4544-bb69-5f5414e2f18b To retrieve the profileid, see the "Prerequisites" on page 4 section.

API response code

200 OK

Stop Job

Stops the Data Profiling job.

GET request

Use the GET method to stop the Data Profiling job.

The following table lists the parameters that you need to specify to stop the Data Profiling job:

Property	Value
URL	Enter a URL to stop the Data Profiling job. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/job/stop

API parameters

The following table lists the optional query parameters exposed for this API:

Property	Value
jobID	Enter the unique identifier of the Data Profiling job to be stopped.
jobStepID	Enter the unique identifier of the step executed on the Data Profiling job.
jobType	Choose the type of job to be stopped.

API response code

200 OK

Resumes Job

Resumes the Data Profiling job.

GET request

Use the GET method to resume the Data Profiling job.

The following table lists the parameters that you need to specify to resume the Data Profiling job:

Property	Value
URL	Enter a URL to resume the Data Profiling job. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/job/resume

API parameters

The following table lists the optional query parameters exposed for this API:

Property	Value
jobID	Enter the unique identifier of the Data Profiling job to be resumed.
jobStepID	Enter the unique identifier of the step executed on the Data Profiling job.
jobType	Choose the type of job to be resumed.

API response code

200 OK

Get session logs

Downloads the session logs for the Data Profiling job steps executed on the agent.

GET request

Use the GET method to download the session logs for the Data Profiling job steps executed on the agent.

The following table lists the parameters that you need to specify to download the session logs for the Data Profiling job:

Property	Value
URL	Enter a URL to download the session logs for the Data Profiling job. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/job/getSessionLogs/{jobStepId}

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
jobStepID	Enter the unique identifier of the step executed on the Data Profiling job.

API response code

200 OK

Delete a profile

You can delete a profile based on the profile ID. Use this API call to delete a profile along with all the profiling runs.

In this tutorial, you can view all the profiled columns and view the results of a column.

DELETE request

Use the DELETE method to delete a profile.

The following table lists the parameters that you need to specify to delete a profile:

Property	Value
URL	Enter a URL to delete a profile. Use the following format: <code>https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/profile/id</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
profileid	The unique identifier of the Data Profiling asset. For example, <code>908ed64e-cfd0-4544-bb69-5f5414e2f18b</code> . To retrieve the profileid, see the "Prerequisites" on page 4 section.

API response code

204 No content

Update a profile

You can change the profile definition, add or remove filters, add or remove rules, edit schedule details, edit the email address for notifications, and edit advanced options.

Update an existing profile to include a verifier to an existing profile.

To include a verifier, you need to perform the following steps:

1. Perform the following GET call:

```
https://usw3.dm-us.informaticacloud.com/frs/v1/Documents('<documentID>')
```

The documentID is the frsId of a rule.

2. Navigate to **nativedata > documentblob** in the API Response as shown in the following sample:

```
{
  "@odata.context": "$metadata#Documents/$entity",
  "id": "8ThGKZS2NeLlnDpGVdJw6x",
  "name": "verifier_asset",
  "description": "verifier description",
  "owner": "1vcXL5Kw7jNgTUNO7sS9gF",
  "createdBy": "1vcXL5Kw7jNgTUNO7sS9gF",
  "lastUpdatedBy": "1vcXL5Kw7jNgTUNO7sS9gF",
  "lastAccessedBy": "1vcXL5Kw7jNgTUNO7sS9gF",
  "createdTime": "2021-01-15T20:13:03Z",
  "lastUpdatedTime": "2021-01-18T13:43:20Z",
}
```

```

"lastAccessedTime": "2021-01-18T13:43:20Z",
"expiresBy": "2038-01-18T00:00:00Z",
"parentInfo": [
  {
    "parentId": "7cCn5thwWFLhiZoSosphKL",
    "parentName": "REG",
    "parentType": "Space"
  },
  {
    "parentId": "1o6t1YLAVL4jcR0thsaIET",
    "parentName": "DEFAULT",
    "parentType": "Project"
  },
  {
    "parentId": "7kltpW4eBsSdaUuQHkXxeD",
    "parentName": "Folder1",
    "parentType": "Folder"
  }
],
"documentType": "VERIFIER",
"contentType": "Binary",
"documentState": "VALID",
"aclRule": "org",
"subcontainerCount": 0,
"customAttributes": {
  "stringAttrs": [],
  "numberAttrs": [],
  "dateAttrs": []
},
"repoInfo": {
  "repoParams": [],
  "repoPath": "",
  "repoHandle": "8ThGKZS2NeLlnDpGVdJw6x",
  "frsPath": ""
},
"isSourceControlled": false,
"checkedOutById": null,
"nativeData": {
  "id": "8ThGKZS2NeLlnDpGVdJw6x",
  "documentBlob": "{\n\"name\": \"verifier_asset\", \"description\": \"Verifier description\n\", \"type\": \"AV\", \"logicalModel\": {\n\"mode\": \"Multiline\", \"inputFields\": [{\n\"name\n\": \"FormattedAddressLine1\", \"precision\": 128, \"groupId\": \"Multiline\", \"friendlyName\n\": \"Formatted Address Lines 1\"}, {\n\"name\": \"Country#NAME#1\", \"precision\": 50, \"groupId\n\": \"Multiline\", \"friendlyName\": \"Country 1\"}], \"outputFields\": [{\n\"name\n\": \"OUT#Organization#COMPLETE#1\", \"precision\": 128, \"groupId\": \"AddressElements\n\", \"friendlyName\": \"Organization 1\"

```

3. From the response fetch the **Inputfields** and **Outputfields** details.
4. Fetch the profile that you want to update using the [“Explore profile definition” on page 17](#) API call.
5. Add the Input fields and output fields under the profileable fields section as shown in the following sample JSON:

```

{
  "createdByName": "john",
  "samplingOptions": {
    "samplingType": "ALL_ROWS",
    "id": null,
    "rows": -1
  },
  "updatedBy": "jAXvnn4fdEnbXZYApFIM04",
  "updatedByName": "john",
  "description": "Creating profile using Automation.",
  "updateTime": 1599650798292,
  "profileableFields": [
    {
      "fieldName": "MULTILINE_ADDRESS",
      "isDeleted": false,
      "id": "18e57c30-97f7-4cc0-9b3d-20afb8701f55",
      "sourceName": "CP_AV_MULTILINE_SRC",
      "columnKey": 10001,

```

```

"fieldType": "DATASOURCEFIELD"
}, {
"frsId": "3w3mlyAVC9dkGv7tdieha9",
"isDeleted": false,
"ruleType": "VERIFIER",
"inputFields": [{
"dataSourceFieldName": "MULTILINE_ADDRESS",
"inFieldName": "Formatted Address Lines 1",
"isDeleted": false
}],
"fieldType": "MAPPLETFIELD",
"outputFields": [{
"isDeleted": false,
"outFieldName": "Organization 1"
}]
}],
"source": {
"sourceType": "DATASOURCE",
"name": "CP_AV_MULTILINE_SRC",
"id": "633a5065-5c35-4324-a296-9ccc6dd215c4",
"fields": [{
"pcType": "STRING",
"isDeleted": false,
"dataType": "varchar",
"precision": 100,
"name": "COUNTRY",
"scale": 0,
"id": "f4754aa4-dd96-4f45-901e-f71c2af81e99",
"isMetadataUpdated": false,
"order": 1
}, {
"pcType": "STRING",
"isDeleted": false,
"dataType": "varchar",
"precision": 255,
"name": "MULTILINE_ADDRESS",
"scale": 0,
"id": "6cb2baee-3afc-4d1f-9b9d-85961df3936e",
"isMetadataUpdated": false,
"order": 0
}],
"dataSourceType": "UNSET"
},
"drillDownType": "ON",
"version": 0,
"orgId": "1LNZt1DIRhulOG5Tvm9JG8",
"profileKey": 43620,
"frsId": "3NgJyVCd9anj2a1iBDj1eq",
"runtimeOptions": {
"runtimeEnvironmentId": null,
"id": "9ff035e2-8e0d-4c43-8557-130500fab52c",
"scheduleId": null,
"defaultEmailNotification": true
},
"createdBy": "jAXvnn4fdEnbXZYApFIM04",
"createTime": 1599650798287,
"name": "CP-3738_Profile_Execution_With_Verifier_45010",
"connectionId": "4hIEd9LwM9gbGTh3jJ28E2",
"id": "5ed3f875-fa31-4a66-aa0b-38eb61e28b",
"isFilterEnabled": null
}

```

6. Submit the updated JSON in the body and perform a PUT call with the following API: <https://usw3.dms.us.informaticacloud.com/profiling-service/api/v1/profile/{{profileId}}>

The following table lists the comparison between the sample JSON for a profile with and without rules:

Sample JSON of a profile without rules	Sample JSON of a profile with rules
<pre>{ "createdByName": "john", "samplingOptions": { "samplingType": "ALL_ROWS", "id": null, "rows": -1 }, "updatedBy": "jAXvnn4fdEnbXZYApFIM04", "updatedByName": "john", "description": "Creating profile using Automation.", "updateTime": 1599650798292, "profileableFields": [{ "fieldName": "MULTILINE_ADDRESS", "isDeleted": false, "id": "18e57c30-97f7-4cc0-9b3d-20afb8701f55", "sourceName": "CP_AV_MULTILINE_SRC", "columnKey": 10001, "fieldType": "DATASOURCEFIELD" }], "source": { "sourceType": "DATASOURCE", "name": "CP_AV_MULTILINE_SRC", "id": "633a5065-5c35-4324-a296-9ccc6dd215c4", "fields": [{ "pcType": "STRING", "isDeleted": false, "dataType": "varchar", "precision": 100, "name": "COUNTRY", "scale": 0, "id": "f4754aa4-dd96-4f45-901e-f71c2af81e99", "isMetadataUpdated": false, "order": 1 }, { "pcType": "STRING", "isDeleted": false, "dataType": "varchar", "precision": 255, "name": "MULTILINE_ADDRESS", "scale": 0, "id": "6cb2baee-3afc-4d1f-9b9d-85961df3936e", "isMetadataUpdated": false, "order": 0 }], "dataSourceType": "UNSET" }, "drillDownType": "ON", "version": 0, "orgId": "1LNZt1DIRhul0G5Tvm9JG8", "profileKey": 43620, "frsId": "3NgJyVCd9anj2aliBDj1eq", "runtimeOptions": { "runtimeEnvironmentId": null, "id": "9ff035e2-8e0d-4c43-8557-130500fab52c", "scheduleId": null, "defaultEmailNotification": true }, "createdBy": "jAXvnn4fdEnbXZYApFIM04", "createTime": 1599650798287, "name": "CP-3738_Profile_Execution_With_Verifier_45010", "connectionId": "4hIEd9LwM9gbGTh3jJ28E2", "id": "5ed3f875-fa31-4a66-aa0b-38eb61e28b", }</pre>	<pre>{ "createdByName": "john", "samplingOptions": { "samplingType": "ALL_ROWS", "id": null, "rows": -1 }, "updatedBy": "jAXvnn4fdEnbXZYApFIM04", "updatedByName": "john", "description": "Creating profile using Automation.", "updateTime": 1599650798292, "profileableFields": [{ "fieldName": "MULTILINE_ADDRESS", "isDeleted": false, "id": "18e57c30-97f7-4cc0-9b3d-20afb8701f55", "sourceName": "CP_AV_MULTILINE_SRC", "columnKey": 10001, "fieldType": "DATASOURCEFIELD" }], { "frsId": "3w3mlyAVC9dkGv7tdieha9", "isDeleted": false, "ruleType": "VERIFIER", "inputFields": [{ "dataSourceFieldName": "MULTILINE_ADDRESS", "inFieldName": "Formatted Address Lines 1", "isDeleted": false }], "fieldType": "MAPPLETFIELD", "outputFields": [{ "isDeleted": false, "outFieldName": "Organization 1" }], "source": { "sourceType": "DATASOURCE", "name": "CP_AV_MULTILINE_SRC", "id": "633a5065-5c35-4324-a296-9ccc6dd215c4", "fields": [{ "pcType": "STRING", "isDeleted": false, "dataType": "varchar", "precision": 100, "name": "COUNTRY", "scale": 0, "id": "f4754aa4-dd96-4f45-901e-f71c2af81e99", "isMetadataUpdated": false, "order": 1 }, { "pcType": "STRING", "isDeleted": false, "dataType": "varchar", "precision": 255, "name": "MULTILINE_ADDRESS", "scale": 0, "id": "6cb2baee-3afc-4d1f-9b9d-85961df3936e", "isMetadataUpdated": false, "order": 0 }], "dataSourceType": "UNSET" }, "drillDownType": "ON", "version": 0, "orgId": "1LNZt1DIRhul0G5Tvm9JG8", </pre>

Sample JSON of a profile without rules	Sample JSON of a profile with rules
<pre>"isFilterEnabled": null }</pre>	<pre>"profileKey": 43620, "frsId": "3NgJyVCd9anj2a1iBDj1eq", "runtimeOptions": { "runtimeEnvironmentId": null, "id": "9ff035e2-8e0d-4c43-8557-130500fab52c", "scheduleId": null, "defaultEmailNotification": true }, "createdBy": "jAXvnn4fdEnbXZYApFIM04", "createTime": 1599650798287, "name": "CP-3738_Profile_Execution_With_Verifier_45010", "connectionId": "4hIEd9LwM9gbGTh3jJ28E2", "id": "5ed3f875-fa31-4a66-aa0b-38ebeb61e28b", "isFilterEnabled": null }</pre>

Identify recent profile runs

You can use the `lastSuccessfulRunKey` API call to return the latest run key of a profile based on the project or folder that you specify.

POST request

Use the POST method to return the run key value for the most recent successful profile run of a profile.

The following table lists the parameters to specify:

Property	Description
URL	Enter a URL to identify recent successful profile runs. Use the following format: <code>https://[HostName]/profiling-service/api/v1/profile/lastSuccessfulRunKey</code>
IDS-SESSION-ID	REST API session ID for the current session. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Description
profileId	The unique identifier of the Data Profiling asset. For example, <code>e5441ea1-325a-4cb4-b70e-16253c6b7840</code>
profileName	Name of the profile.
frsProjectName	Name of the project that contains the folders and profiles.
frsFolderName	Name of the folder that contains the profiles.

API response code

200 OK

API response

2

Identify the unique rule id

You can use the `getRuleIds` API call to identify the unique ID of the rule that is associated with a profile.

POST request

Use the POST method to return the unique ID of a rule that is associated with a profile.

The following table lists the parameters to specify:

Property	Description
URL	Enter a URL to return the unique ID of a rule that is associated with a profile. Use the following format: <code>https://[HostName]/profiling-service/api/v1/profile/getRuleIds</code>
IDS-SESSION-ID	REST API session ID for the current session. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Description
profileId	The unique identifier of the Data Profiling asset. For example, <code>908ed64e-cfd0-4544-bb69-5f5414e2f18b</code>
profileName	Name of the profile.
frsProjectName	Name of the project that contains the folders and profiles.
frsFolderName	Name of the folder that contains the profiles.
ruleName	Name of the rule.
columnId	The unique identifier of the column.
columnName	Name of the column.
ruleProject	Name of the project that contains the saved rule.
ruleFolder	Name of the folder that contains the profile and rule.
frsRuleId	The unique identifier of the rule.

API response code

200 OK

API response

```
{
  "frsRuleId": "9U6EuvtV7VMeLtlBQVi9aD",
  "ruleId": "a6c75af6-67f6-46fc-beea-6e6ec8c2f626"
```

```
}
```

Suggest a new profile name

You can use the `newProfileName` API call to get a suggested name for a new profile based on the available profiles in a project or folder that you specify. The API call suggests profile names in ascending order based on the following naming convention: `Profile<number>`. For example, if Data Profiling contains a profile named `Profile31`, then the API call returns `Profile32` as the next suggested profile name.

GET request

Use the GET method to view a suggested profile name.

The following table lists the parameters to specify:

Property	Description
URL	Enter a URL to suggest a profile name. Use the following format: <code>https://[HostName]/profiling-service/api/v1/profile/newProfileName?frsProjectName=projectname&frsFolderName=foldername</code>
IDS-SESSION-ID	REST API session ID for the current session. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Description
<code>frsProjectName</code>	Name of the project that contains the folders and profiles.
<code>frsFolderName</code>	Name of the folder that contains the profiles.

API response code

200 OK

API response

```
Profile32
```

Run details of a profile

You can use the `topNrun` API call to identify the profile runs that consume the largest amount of storage space.

GET request

Use the GET method to identify the profile runs that consume the largest amount of storage space.

The following table lists the parameters to specify:

Property	Value
URL	Enter a URL to identify the profile runs that consume the largest amount of storage space. Use the following format: <code>https://[HostName]/profiling-service/api/v1/runDetail/topNrun?limit=n</code>
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
Limit	Enter an integer value to limit the number of profile runs that the call identifies. The call identifies ten profile runs if you do not enter an integer value.

API response code

200 OK

API response

The total cost is less than 10 KB if the **totalCostInMB** value is 0.00 MB. The minimum value in totalCostInMB is 0.01 MB or 10 KB.

```
{
  "profileId": "605192fd-048a-443a-876f-47bb1edff07b",
  "runDetailId": "19c0a14d-ae39-402e-a9ee-d1d1b3c70bc0",
  "runKey": 1,
  "runCostInMB": "4.25",
  "createdTime": "2022-04-21 06:59:26.824",
  "startTime": "2022-04-21 06:59:26.86",
  "endTime": "2022-04-21 07:01:43.286",
  "profileName": "check profile name top N profile runs",
  "projectName": "Story CP-8099",
  "folderName": "topNprofilingtasks"
}
```

Run details of a profile task

You can use the `topNProfiletask` API call to identify the profile tasks that consume the largest amount of storage space.

GET request

Use the GET method to identify the profile tasks that consume the largest amount of storage space.

The following table lists the parameters to specify:

Property	Value
URL	Enter a URL to identify the profile tasks that consume the largest amount of storage space. Use the following format: <code>https://[HostName]/profiling-service/api/v1/runDetail/topNProfiletask?limit=n</code>
IDS-SESSION-ID	REST API session ID for the current session. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API parameters

The following table lists the important query parameters exposed for this API:

Property	Value
Limit	Enter an integer value to limit the number of profile tasks for which the call returns information. The call identifies ten profile tasks if you do not enter an integer value.

API response code

200 OK

API response

The total cost is less than 10 KB if the **totalCostInMB** value is 0.00 MB. The minimum value in totalCostInMB is 0.01 MB or 10 KB.

```
{
  "profileId": "605192fd-048a-443a-876f-47bb1edff07b",
  "totalCostInMB": "8.49",
  "profileName": "check profile name top N profile runs",
  "projectName": "Story CP-8099",
  "folderName": "topNprofilingtasks"
}
```

Enable CLAIRE insights

Insights is a method for discovering data quality issues in your data. The issues can range from anomalous data values to complex inconsistencies. Insights in Data Profiling automates the process to detect data quality issues. The CLAIRE™ artificial intelligence engine provides insights and generates recommendations for your data that you can approve or reject.

Enable CLAIRE

POST method

Use the POST method to create a profile with CLAIRE configuration. You can enable CLAIRE to generate insights recommendations for your data that you can approve or reject.

The following table lists the parameter that you need to specify:

Property	Value
URL	Enter a URL to fetch the right profile. Use the following format: https://usw3-dqprofile.dm-us.informaticacloud.com/profiling-service/api/v1/profile
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

API response code

201 Created

Request body

```
{
  "connectionId": "4sTCN6J0Ea3b3wge6etcm4",
  "description": "Creating profile using Automation.",
  "drillDownType": "ON",
  "name": "CreateProfileWithProfilingService_667523",
  "profileableFields": [
    { "fieldName": "VARCHAR2_COL", "isDeleted": false, "sourceName":
      "CP_ALL_SUPPORTED_DATATYPE", "fieldType": "DATASOURCEFIELD" }
  ],
  "samplingOptions":
    { "samplingType": "ALL_ROWS" }
  ,
  "runtimeOptions": {
    "profileAdvProps":
      { "enableClaireAnomalyDetection": true }
    ,
    "defaultEmailNotification": true
  },
  "source": {
    "dataSourceType": "UNSET",
    "fields": [
      { "dataType": "varchar", "isDeleted": false, "name": "VARCHAR2_COL", "order": 0,
        "precision": 20, "scale": 0, "pcType": "STRING" }
    ],
    "name": "CP_ALL_SUPPORTED_DATATYPE",
    "sourceType": "DATASOURCE"
  },
  "frsProjectId": "0x0o7gZMYfxbEhZbV92y4q"
}
```

In the **createProfile** request body, you can set the **enableClaireAnomalyDetection** option to true in the **runtimeOptions** Json object.

The following is an example of the **runtimeOptions** Json object configuration:

```
"runtimeOptions": {
  "profileAdvProps": {
    "enableClaireAnomalyDetection": true
  },
  "defaultEmailNotification": true}
```

Retrieve insights from a profile

GET method

Use the GET method to retrieve insights from a profile.

The following table lists the parameter that you need to specify:

Property	Value
URL	Enter a URL to fetch insights for a profile. Use the following format: <code>https://<ProfileBaseURI>/metric-store/api/v1/odata/Profiles('ProfileId')/Insights</code>
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

Response body

```
{
  "@odata.context": "$metadata#Insights",
  "value": [
    { "columnKey": 10001, "confirmationStatus": "Approved", "appliedColumn": "VARCHAR2_COL",
      "insightId": "1000", "insightType": "Completeness Check", "profileKey": 6085,
      "insightScore": "High", "insightStatement": "Data appears incomplete. The column
      includes one or more null, blank, or empty values or values that contain only zeros." }
    ,
    { "columnKey": 10001, "confirmationStatus": null, "appliedColumn": "VARCHAR2_COL",
      "insightId": "1001", "insightType": "Column Length Deviation", "profileKey": 6085,
      "insightScore": "High", "insightStatement": "The length of the data values in the column
      has a high standard deviation." }
    ,
    { "columnKey": 10001, "confirmationStatus": null, "appliedColumn": "VARCHAR2_COL",
      "insightId": "1015", "insightType": "Column Token Deviation", "profileKey": 6085,
      "insightScore": "Medium", "insightStatement": "The number of tokens in the column has a
      high standard deviation." }
  ]
}
```

API response code

200 OK

Approve or reject insights

PATCH method

Use the PATCH method to approve or reject the insights.

The following table lists the parameter that you need to specify:

Property	Value
URL	Enter a URL to fetch insights for a profile. Use the following format: <code>https://dqprofile-qa-pod1.mrel.infaqa.com/metric-store/api/v1/Profiles('157166de-dcd5-4839-bca9-967049dc3a29')/Insights</code>
IDS-SESSION-ID	REST API session ID for the current session. Use in most REST API request headers. For example, <code>k1CIHW6BvWmeFFw1Qg7q84</code>

Request body

```
{
  "curatedInsights": [
```

```
{ "confirmationStatus": "Approved", "insightId": 1001, "columnKey": 10001 }
]
```

Note: You can fetch the insightId and columnKey values from the response body of the **Retrieve insights from a profile** API call.

Response body

```
[
  {
    "10001":
      { "profileId": "157166de-dcd5-4839-bca9-967049dc3a29", "columnId": "10001", "message":
        "Success", "status": "200 OK", "insightId": "1001" }
  }
]
```

API response code

200 OK

Author

Sabha S, Amit Anand, Nijher Parmveer Singh, and Das Anirban