ANSIS HTTP API

Contents

Public Methods

All public methods can be accessed without registration. They expose what data can be retrieved with ANSIS, and in general represent the information you find through the ANSIS Portal website.

Catalogue Summary

Returns a JSON array of metadata describing the available data catalogues, including ID, file size and the time of the last update.

Endpoint:

GET	https://apim-ansis-hrm-test-ae.azure-api.net/site-catalogue/v1/catalogue-summary

Response Body Format:

```
[
    {
        "name": "Example_provider",
        "lastModified": "2025-04-23T07:20:47+00:00",
        "lengthBytes": 8061904
    }
]
```

Provider Catalogue

Returns the catalogue for the provider specified in the {ID} parameter in JSON format. Valid IDs are provided via the "name" field of the Catalogue Summary methods response.

Endpoint:

GET	https://apim-ansis-hrm-test-ae.azure-api.net/site-catalogue/v1/provider/{ID}

Response Body Format:

The response body is a JSON array of GeoJSON features, one for each soil site. On each site, the following properties exist:

- `years`: A two element array of integers representing the time range where data has been observed at this site.
- `isRestricted`: A Boolean that when true indicates data requests for this site will be redacted unless access has been granted by the data provider. Restrictions are set per soil project, so sites at the same project + provider combo will have the same restriction flag.
- `isHydrated`: A Boolean showing whether the data is "Hydrated" in the SDR and can be speedily retrieved using the varied data retrieval methods.
- `years`: A two element array of integers representing the time range where data has been observed at this site.
- `properties`: An array of the codified/enumerated soil properties that were observed at this site. Use the **Property Definitions** method to find the full definition of each property.
- `project`: The ID of the soil project the site belongs to.
- `site`: The ID of the site. Combined with the provider ID to make a primary key that uniquely identifies a single site.

- `provider`: The ID of the data provider who holds this site.

```json
[
    {
        "type": "Feature",
        "geometry": {
            "type": "Point",
            "coordinates": [
                147.5622271128266,
                -42.6141100110716
            ]
        },
        "properties": {
            "years": [
                1999,
                1999
            ],
            "properties": [
                "0",
                "3",
                "3-0",
            ],
            "isRestricted": false,
            "isHydrated": true,
            "project": "soil_soilco",
            "site": "0",
            "provider": "Example_provider"
        }
    }
]
```

Property Definitions

Returns a JSON object/dictionary documenting all valid enumerations used in the properties field used in ANSIS provider catalogues. Each enumeration is documented with its standard ANSIS json code/path, the property name and the ID of child members of that property.

Endpoint:

GET	https://apim-ansis-hrm-test-ae.azure-api.net/site-catalogue/v1/definitions

Response Body Format:

```json
{
    "3-0": {
        "code": "./ansis.json/data/siteVisit/soilProfile/soilLayer/chemical/ph",
        "name": "pH",
        "members": [
            "3-0-0",
            "3-0-1",
            "3-0-2"
        ]
    }
}
```

Data Requests

Fetch Access Token

Returns an access token required for all data requests to authenticate the user. Requires a password and username to be sent along with other fields in a form encoded body.

Endpoint:

GET	`https://b2cansishrmtestae.b2clogin.com/b2cansishrmtestae.onmicrosoft.com/B2C_1A_RO PC_AUTH/oauth2/v2.0/token?grant_type=password`

Request Body Format:

username	{USERNAME}
password	{PASSWORD}
grant_type	password
scope	openid 44040d13-769e-4567-8bbe-b2109b42c939
client_id	44040d13-769e-4567-8bbe-b2109b42c939
response_id	token id_token

Response Body Format:

```
{
    "access_token": "ACCESS TOKEN VALUE",
    "token_type": "Bearer",
    "expires_in": "18000",
    "id_token": "ID TOKEN VALUE"
}
```

Fetch Single Site (SDR)

Returns the full ANSIS JSON data for a given single site as specified by the provider ID + site ID primary key. Only available on sites that have the isHydrated flag in the catalogue set to true. Requires the `Authorization` header to be the `access_token` granted by a Fetch Access Token response.

Endpoint:

GET	`https://apim-ansis-hrm-test-ae.azure-api.net/sdr-public/v1/SingleSite?provider={PROVIDER ID}&site={SITE ID}`

Create Query Request

Initiates an ANSIS data request for multiple sites, using the JSON body to specify what sites. Requires the `Authorization` header to be the `access_token` granted by a Fetch Access Token response.

Endpoint:

POST	`https://apim-ansis-hrm-test-ae.azure-api.net/ansis-external-api/query-requests/v2/create-query-request`

Request Body Format:

The request body takes a JSON object with the following parameters. If sites are specified, only the sites specified will have their full data returned, otherwise the other properties will be used to filter the data that will be retrieved. If both are specified, priority will be given to the sites specified and the additional filters will not be applied. A body containing no filters and no specified sites is invalid.

minYear	The earliest year to include data from. Nullable integer.
maxYear	The latest year to include data from. Nullable integer.
providers	A set of provider IDs to request data from. Nullable string array.
propertyGroups	A list of properties as defined in the Property Definitions to filter sites with as a requirement. Nullable string array.
bounds	A set of four lat/long pairs that define a polygon that results must be within. Nullable.
sites	A set of specific sites to retrieve. Nullable array of objects. Each object must contain a "provider" string property, and a "sites" property containing an array of site ID strings.
useSDR	Toggle to set whether data can be speedily retrieved from the SDR if available, or if all data must come directly from the providers services. Non nullable boolean.

```json
{
    "minYear": 1909,
    "maxYear": 2013,
    "providers": [
        "Example_provider"
    ],
    "propertyGroups": [
        "3-0"
    ],
    "bounds": [
        [
            [
                147.9569212046403,
                -40.021246219604436
            ],
            [
                147.9569212046403,
                -40.13983481753067
            ],
            [
                148.0719133795693,
                -40.08056633680312
            ],
            [
                147.9569212046403,
                -40.021246219604436
            ]
        ]
    ],
    "sites": [
        {
            "provider": "Tasmania",
            "sites": [
                "5246",
                "5124"
```

```
            ]
        }
    ],
    "useSDR": true
}
```

Response Body Format:

The endpoint will respond with a 200 Success code with the following body. The identifier at the end of the body can later be used to check on the status of the request and retrieve response files.

```
New request submitted: 28d89560-38e0-41f1-b043-e06d5bd97cd4
```

Check Request Status (Single)

Returns the status of a request created using the Create Query Request method. Requires the `Authorization` header to be the `access_token` granted by a Fetch Access Token response.

Endpoint:

GET	https://apim-ansis-hrm-test-ae.azure-api.net/ansis-external-api/query-requests/v2/get-query-request-status?requestId={REQUEST_ID}

Response Body Format:

Data is returned in JSON format. The sdrRequest and harmoniserRequest objects are of the same format and will be populated if your request is retrieving data from the SDR or Harmoniser, respectively, else null. The status string indicates if your request is Queued, Processing, Completed or in Error state. The files array lists completed ANSIS JSON files that can be downloaded with the Download Response File method.

```
{
    "sdrRequest": {
        "status": "Completed",
        "files": [
            "016a7af7-92aa-40bc-863e-a3e7c9ce2a64"
        ]
    },
    "harmoniserRequest": {
        "status": "Completed",
        "files": [
            "7211ae23-f7df-45a0-81c0-83fa9e3053ca"
        ]
    }
}
```

Check Request Status (All)

Returns all requests created with the Create Query Request method. Requires the `Authorization` header to be the `access_token` granted by a Fetch Access Token response. The response is formatted as a JSON array of the response bodies as specified in Check Request Status (Single).

Endpoint:

GET	https://apim-ansis-hrm-test-ae.azure-api.net/ansis-external-api/query-requests/v2/get-all-query-requests-statuses

Download Response File

Downloads an ANSIS JSON response file with an ID as given by either Check Request Status method responses. Requires the `Authorization` header to be the `access_token` granted by a Fetch Access Token response.

Endpoint:

GET	`https://apim-ansis-hrm-test-ae.azure-api.net/ansis-external-api/query-requests/v2/download-response?fileId={FILE ID}`

Cancel Query Request

Cancels and deletes a request. If the request is already completed it is only deleted. Requires the `Authorization` header to be the `access_token` granted by a Fetch Access Token response.

Endpoint:

GET	`https://apim-ansis-hrm-test-ae.azure-api.net/ansis-external-api/query-requests/v2/cancel-query-request?requestId={REQUEST ID}`

Glossary

Catalogue – A full listing of site data that can be retrieved for a given data provider, in JSON format. Does not contain any data values, instead only documenting what data values can be requested from what soil sites.