# API for Price Data v1 (Direct Sales)

## Overview

An API to download or upload price data stored in binary object attributes used by [price model data tables](price model data tables).

The API supports both JSON and XML formats. Existing price data stored in XLS or XLSX formats will get transformed into XML or JSON prior to download, as specified in the header.

Price data uploaded using the API can only be stored as JSON or XML, as specified in the storage format property of the payload. Specifying EXCEL will fall back to the default format silently to maintain compatibility in a typical get/post sequence. Upload and download of XLS or XLSX formats is only supported using the UI.

### API General Info

#### Response Content Type

It is possible to switch between `json` and `xml` response types by setting an `Accept` header to either `application/json` or `application/xml` respectively.

#### Successful Responses

##### Response Codes

- **200** - The request was executed successfully and the server returned some data. The return content type is specified inside a response header called `content-type`. Example content types are `application/xml`, `application/json`, `application/zip` and `text/plain`.
- **204** - The request was executed successfully and the server returned no data. If the `Location` header was present then the server responded with a redirect.

#### Error Responses

If the API call resulted in an error then the error code will be returned along with the error object in the response body. The error object contains the attributes listed below:

- **type** - type of the error
- **cause** - the root cause of the error
- **message** - message containing details of the related error
- **uuid** - a unique identifier of the error which also may appear in the exception logs
- **timestamp** - the time of the error

**Note**: For chunked responses, the socket will be closed prematurely if an error occurs after the initial chunk containing the status code has been sent.

**Response Codes**

- **400** - The request contains invalid parameters or there are invalid settings. Consult the error message and/or check Administration for invalid settings.
- **401** - The user is not authenticated.
- **403** - The user is not authorized access to the specified endpoint.
- **404** - The specified endpoint does not exist or a request parameter is invalid. Consult the error message.
- **405** - The specified endpoint does not support the requested operation. Consult the error message.
- **409** - The specified endpoint is in a state incompatible with the requested operation. Consult the error message.
- **500** - Unknown error occurred while processing the request. Consult the CPQ logs for more information.
- **504** - The specified concurrent calls limit was exceeded and the server was not able to serve the response in a specified timeout limit. That error is always served with the xml body containing the description.

# Endpoints by Category

## Price Data

### GET /api/pricedata/v1/[type]/[id]/[attribute]

Retrieve price data from an object

| Parameter | Type | Description |
|-----------|------|-------------|
| type | String | The type of the object holding the attribute |
| id | String | The identifier of the object holding the attribute |
| attribute | String | The name of the attribute which contains the binary price data |
| *Result* | [Pricedata](Pricedata) | the price data associated with the given attribute |

### POST /api/pricedata/v1/[type]/[id]/[attribute]?priceData=[priceData]

Upload price data to an object

| Parameter | Type | Description |
| --- | --- | --- |
| type | String | The type of the object holding the attribute |
| id | String | The identifier of the object holding the attribute |
| attribute | String | The name of the attribute which contains the binary price data |
| priceData | [Pricedata](Pricedata) | The price data formatted as JSON or XML. The structure should be the same as is received when retrieving price data |
| *Result* | String | A reference to the updated object |

## Data Types by Category

### Price Data

#### Pricedata

A price data input and output.

JSON    XML

```
{
  "items" : [
    {
      "attributes" : [
        {
          "name" : "",
          "value" : ""
        },
        ...
      ]
    },
    ...
  ],
  "storageFormat" : "JSON" // (Optional) Determies the storage forma
Set to JSON or XML during upload. Default: JSON.
Note: EXCEL is not supported during upload but may appear during dow
}
```