

# DOCUMENTATION

## **BDNA Data Platform 5.4**

### **API Reference**

**June 9, 2017**

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Technopedia APIs are integrated with the BDNA Data Platform. These APIs offer access to the Technopedia Catalog, Normalize data, and the Private Catalog data based upon each customer's license.

## Introduction

Welcome to the BDNA Data Platform API!

BDNA Data Platform APIs are designed to adhere to REST principles. Our APIs have predictable, resource-oriented URLs, and use HTTP response codes in order to indicate API errors. The API will return all responses in JSON format.

BDNA Data Platform APIs provide an easy-to-use interface when accessing the Technopedia Catalog and Normalize data. These APIs offer full CRUD functionality within Technopedia's Catalog. They also provide complete Retrieve functionality for Normalize data.

This version of the Data Platform APIs also has a Private Catalog function. The Private Catalog allows users to create, update, and delete their own proprietary content when utilizing Technopedia data.

## Authentication

The BDNA Data Platform APIs support both LDAP/AD and Windows Local User Authentication.

The client application must first login via the Login API. The Login API will generate an authorization token that remains valid for 24 hours.

- For additional resource requests, send this authorization token in the HTTP Header.
- The JSON payload for the Login API must contain both a username and password.

To obtain the authorization token, the HTTP POST is:

`http://Hostname of the Data Platform Server/bdna-api/api/Login`

## Headers Example

```
Content-Type: application/json
```

```
Accept: application/json
```

## Payload in JSON Format

Make sure to include the JSON format curly braces at the beginning and end of the username/password example below.

```
{"UserName": "yourusername", "Password": "youruserpassword"}
```

The above request results in a response containing the authorization token. Always pass this authorization token as a HTTP Header when submitting subsequent requests to the APIs. The authorization token remains valid for 24 hours from the time of generation. After the first 24 hours, the client application must login to the API again using the steps above in order to obtain a new authorization token.

## Authorization

Authorization occurs at three levels: Role, Feature, and Content Pack Subscription. If authorization fails at any of these three levels, the user will get a “401 Unauthorized” response along with a message indicating where the request failed.

### Role Level

Users should have the User Console Viewer role in order to make GET API requests.

Users will require the User Console Editor role or the Platform Administrator role in order to make PUT, POST, and DELETE API requests.

### Feature Level

In order to retrieve Normalize data via APIs, the Data Platform license key should have the Normalize feature enabled. Without the Normalize feature enabled, users will only have access to the Technopedia APIs. In order to create, update, and delete private or proprietary data, the Data Platform license key should also have the Private Catalog feature enabled.

### Content Pack Subscription Level

Access to the Technopedia Content Pack APIs depends upon a user’s previously arranged subscription level. The Data Platform license key enables GET access to the Technopedia Catalog APIs by default.

## Private Catalog

The Private Catalog is a new feature of the BDNA Data Platform 5.0. It is designed to assist customers who wish to use their own proprietary data in conjunction with Technopedia's vast resources, all the while keeping their own data private. Users can perform a variety of important functions with the Private Catalog, including:

1. Enhance a customer's view of Technopedia's public data with additional private data. For example, update the price of a software product with additional proprietary information.
2. Create and manage privately-defined catalog objects that only approved customers can see.
3. Create and track internally developed applications for in-house purposes.

## API Request Headers

All requests to the API must contain the following three HTTP headers:

Content-Type: application/json

Accept: application/json

Authorization-Token: your authorization token obtained from api/login

## API Response

The BDNA Data Platform APIs use conventional HTTP response codes to indicate the success or failure of an API request. Generally, codes in the 2xx range indicate success, whereas codes in the 4xx range typically indicate an error that resulted from the information provided (i.e. a parameter was missing or there was an authentication failure). Codes in the 5xx range usually indicate an internal error.

When a response comes back, pay close attention to the HTTP Status Code and the Response Payload.

- HTTP Status Code - This describes the status of the response at a protocol level.
- Response Payload - This provides further details about the body of the response where applicable.

## Response Formats

All responses are returned using JSON. JSON is a lightweight serialization language that is compatible with many different languages. JSON is syntactically correct JavaScript code, meaning you can use the Javascript eval() function to parse it.

## HTTP Status Code

The BDNA Data Platform APIs use standard HTTP status codes to indicate the success or failure of API calls.

Error Code	Meaning
200	OK
201	Created – This response indicates a successful POST.
202	Accepted
204	NoContent – This response indicates a successful PUT (update).
205	ResetContent
206	Partial Content
301	Moved
302	Redirect
400	BadRequest
401	Unauthorized – This may occur if you do not have either the correct role, feature level, or subscription for a specific set of content pack information.
403	Forbidden
404	NotFound – This means that the specified resource could not be found.
405	MethodNotAllowed – This occurs if you try to access a resource with an invalid method.
406	NotAcceptable – This results from requesting a non-JSON format.
408	RequestTimeout
410	Gone



500	InternalServerError
501	NotImplemented
502	BadGateway
503	ServiceUnavailable – This means that the site may be temporarily unavailable or offline due to maintenance. Please try again later.
504	GatewayTimeout
505	HttpVersionNotSupported

Technopedia APIs are based on OData (Open Data Protocol).

OData is a data access protocol for the web. As an OASIS standard, OData defines best practices when building and consuming RESTful APIs. It provides a uniform way to query and manipulate datasets.

OData RESTful APIs are easy to consume. BDNA Data Platform APIs support Version 4 of the OData protocol.

The OData metadata is a machine-readable description of the data model of the APIs. It enables the creation of powerful generic client proxies and tools.

To implement client applications in .NET, Java, JavaScript, Python, C++, and other platforms, please see the list of OData libraries here: <http://www.odata.org/libraries/>.

## Supported OData Query Options

To retrieve all software products manufactured by Microsoft, along with the count of the result:

```
http://servername/bdna-api/odata/CAT_SW_PRODUCT?$filter=CAT_MANUFACTURER/MANUFACTURER eq 'Microsoft' & $count=true
```

In the above request \$filter and \$count are called OData system query options. The two query options are separated by &.

The system query options and its value should be separated by = without any spaces before and after the equal, like in \$filter=CAT\_MANUFACTURER/MANUFACTURER eq 'Microsoft'

For example, \$filter = CAT\_MANUFACTURER/MANUFACTURER eq 'Microsoft' would result in a 400 Bad Request error with the message "The query parameter '\$filter ' is not supported."

The common OData query options supported by Data Platform API Get requests are \$expand, \$filter, \$select, \$count, \$orderby, \$skip, and \$top.

All values specified for the OData Query options are case-sensitive.

The following is an evaluation order for the system query options:

Prior to applying any server-driven paging:

- \$filter
- \$count
- \$orderby
- \$skip
- \$top

After applying any server-driven paging:

- \$expand
- \$select

The system query options and its value should be separated by a = without any space before and after the =.

The system query options are separated by & at the same level. For instance, when multiple system query options are specified, they must be separated by &, unless the system query options are nested using parenthesis.

System query options can be nested in a variety of ways. For example, within the \$expand system query option, we can nest \$filter, \$select, and another \$expand.

The maximum expansion depth varies from one API resource to another, but it is always good practice not to exceed an expansion depth of 2.

## **\$expand**

The OData \$expand system query option indicates the related entities that **MUST** be represented inline within the response.

The value of the \$expand query option is a comma-separated list of navigation property names. Optionally, it can also provide a parenthesized set of expand options for filtering, sorting, selecting, paging, or expanding the related entities. The navigation property names are case sensitive.

For example, to retrieve software products and expand on the related entity CAT\_MANUFACTURER:

`http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$expand=CAT_MANUFACTURER`

To retrieve software products, expand on the related entity CAT\_MANUFACTURER and only select MANUFACTURER (i.e. name) and TIER from CAT\_MANUFACTURER.

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$top=2&$expand=CAT_MANUFACTURER($select=MANUFACTURER, TIER)
```

The CAT\_SW\_PRODUCT API has the following navigation/related entities that utilize the OData \$expand in order to bring those entities in-line with the response for CAT\_SW\_PRODUCT:

- CAT\_MANUFACTURER
- CAT\_TAXONOMY2012

### **\$select**

The \$select system query option requests that the service return only the properties requested by the client. The service returns the specified content, if available, along with any available expanded navigation properties. It may also return additional information.

The value of the \$select query option is a comma-separated list of properties. The property names are case-sensitive.

### **Example**

To retrieve software products, display only the SOFTWARE and FAMILY:

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$select=(SOFTWARE, FAMILY)
```

## \$filter

The OData \$filter system query option restricts the set of items returned.

### Example

To retrieve software products where the product name contains 'office':

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$filter=contains(SOFTWARE,  
'Office')&$count=true
```

The following table lists all the supported operators for a \$filter query option:

### Logical Operators

Operator	Description	Example
Eq	Equal	/CAT_MANUFACTURER?\$filter=MANUFACTURER eq 'Microsoft'
Ne	Not equal	/CAT_SW_PRODUCT?\$filter=SOFTWARE ne 'Office'
Gt	Greater than	/CAT_SW_PRICING?\$filter=AVG_PRICE gt 100
Ge	Greater than or equal	/CAT_SW_PRICING?\$filter=AVG_PRICE ge 100
Lt	Less than	/CAT_SW_PRICING?\$filter=AVG_PRICE lt 200
Le	Less than or equal	/CAT_SW_PRICING?\$filter=AVG_PRICE le 100
And	Logical and	/CAT_SW_PRICING?\$filter=AVG_PRICE le 200 and AVG_PRICE gt 100.5
Or	Logical or	/CAT_SW_PRICING?\$filter=AVG_PRICE le 50.5 or AVG_PRICE gt 200
Not	Logical negation	/CAT_SW_PRODUCT?\$filter=not endswith (CAT_MANUFACTURER/MANUFACTURER, 'soft')

**Arithmetic Operators**

Operator	Description	Example
Add	Addition	/CAT_HW_PRICING?\$filter=AVG_PRICE add 5 gt 10
Sub	Subtraction	/CAT_HW_PRICING?\$filter=AVG_PRICE sub 5 gt 10
Mul	Multiplication	/CAT_HW_PRICING?\$filter=AVG_PRICE mul 2 gt 2000
Div	Division	/CAT_HW_PRICING?\$filter=AVG_PRICE div 2 gt 4
Mod	Modulo	/CAT_HW_PRICING?\$filter=AVG_PRICE mod 2 eq 0

**Grouping Operators**

Operator	Description	Example
( )	Precedence grouping	/CAT_HW_PRICING?\$filter=(AVG_PRICE sub 5) gt 10

**String Functions**

Function	Example
bool endswith(string p0, string p1)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=endswith(SOFTWARE, &'bat') eq true
bool startswith(string p0, string p1)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=startswith(SOFTWARE, 'Acro') eq true
int length(string p0)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=length(SOFTWARE) eq 19
int indexof(string p0, string p1)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=indexof(SOFTWARE, 'robat') eq 1
string substring(string p0, int pos)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=substring(SOFTWARE, 1) eq 'croat'
string substring(string p0, int pos, int length)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=substring(SOFTWARE, 1, 2) eq 'cr'
string tolower(string p0)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=tolower(SOFTWARE) eq 'acrobat'
string toupper(string p0)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=toupper(SOFTWARE) eq 'ACROBAT'
string trim(string p0)	http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?\$filter=trim(SOFTWARE) eq 'Acrobat'

**Date Function**

Function	Example
int day (DateTime p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_REL_LIFECYCLE?\$filter=day(GENERAL_AVAILABILITY) eq 11">http://DataPlatformServer/bdna-api/odata/CAT_SW_REL_LIFECYCLE?\$filter=day(GENERAL_AVAILABILITY) eq 11</a>
int month (DateTime p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_REL_LIFECYCLE?\$filter=month(GENERAL_AVAILABILITY) eq 12">http://DataPlatformServer/bdna-api/odata/CAT_SW_REL_LIFECYCLE?\$filter=month(GENERAL_AVAILABILITY) eq 12</a>
int year (DateTime p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_REL_LIFECYCLE?\$filter=year(GENERAL_AVAILABILITY) eq 2012">http://DataPlatformServer/bdna-api/odata/CAT_SW_REL_LIFECYCLE?\$filter=year(GENERAL_AVAILABILITY) eq 2012</a>
date date (DateTime p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_MANUFACTURER?\$filter=date(LAST_MODIFIED_DATE) gt 2015-01-01&amp;\$count=true">http://DataPlatformServer/bdna-api/odata/CAT_MANUFACTURER?\$filter=date(LAST_MODIFIED_DATE) gt 2015-01-01&amp;\$count=true</a>

**Math Functions**

Function	Example
double round (double p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=round(AVG_PRICE) eq 37d">http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=round(AVG_PRICE) eq 37d</a>
decimal round (decimal p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=round(AVG_PRICE) eq 37">http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=round(AVG_PRICE) eq 37</a>
double floor(double p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=floor(AVG_PRICE) eq 37d">http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=floor(AVG_PRICE) eq 37d</a>
decimal floor (decimal p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=floor(AVG_PRICE) eq 37">http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=floor(AVG_PRICE) eq 37</a>
double ceiling (double p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=ceiling(AVG_PRICE) eq 37d">http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=ceiling(AVG_PRICE) eq 37d</a>
decimal ceiling (decimal p0)	<a href="http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=ceiling(AVG_PRICE) eq 37">http://DataPlatformServer/bdna-api/odata/CAT_SW_PRICING?\$filter=ceiling(AVG_PRICE) eq 37</a>



### **\$count**

An OData \$count system query option with a value of true, specifies that the total count of items within a collection matching the request are returned along with the result.

### **\$skip**

An OData \$skip system query option specifies a non-negative integer n that excludes the first n items of the queried collection from the result. The service returns items starting at position n+1.

### **\$top**

The OData \$top system query option specifies a non-negative integer n that limits the number of items returned from a collection. The service returns the number of available items up to, but not greater than, the specified value n.

## **API Naming Convention**

All API resource URLs are case sensitive. The APIs are named after the corresponding object name in the Publish database. Publish is the database for Technopedia.

### **CAT\_P**

An API name that starts with CAT\_P\_ indicates that it is a Private Catalog API. These types of APIs allow users to POST, PUT, and DELETE. The CAT\_P objects in the database contain only the private data provided by the customer.

### **CAT\_T**

An API name that begins with CAT\_T\_ indicates that it is a Technopedia Catalog API. These APIs only allow GET requests. The data in CAT\_T objects in the database is kept up-to-date with BDNA's Technopedia Catalog with the Technopedia Sync feature.

### **CAT\_**

An API name that starts simply with CAT\_ (indicates Catalog) is a combination of the Technopedia Catalog (i.e. CAT\_T) and the Private Catalog (i.e. CAT\_P).

## GET

The GET HTTP method is used to retrieve data from both the Technopedia Catalog and the Private Catalog.

### Retrieve All Records

To GET all software products, the API query is:

`http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT`

This will result in an array of CAT\_SW\_PRODUCT records paginated with 100 records per page.

The response is a JSON object that contains the following keys:

- "@odata.context" – This contains the URL of the metadata document in ATOM format.
- "value" – This is either a JSON array (square brackets) or a single JSON object (curly brackets).
- "@odata.nextLink" – This contains the URI for the next set of records.

### Retrieve All Records with Count

To GET all software products along with the total count of those software products, the API is:

`http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$count=true`

This will result in an array of CAT\_SW\_PRODUCT records paginated with 100 records per page.

The response is a JSON object that contains the following keys:

- "@odata.context" – This contains the URL of the metadata document in ATOM format.
- "@odata.count" – This contains the total count.
- "value" – This is either a JSON array (square brackets) or a single JSON object (curly brackets).
- "@odata.nextLink" - This contains the URI for the next set of records.

## Retrieve All Records Matching a Specified Criteria

All OData query options described in the “[Supported OData Query Options](#)” can be applied to GET requests.

## Retrieve a Specific Record by ID

To retrieve a single software product by ID, the API query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT(946994)
```

This will result in a single record with CAT\_SW\_PRODUCT\_ID 946994.

The response is a JSON object that contains the following keys:

- "@odata.context" – This contains the URL of the metadata document in ATOM format.
- "value" – This is a single JSON object (curly brackets).

## Private Catalog Indicators from a GET Response

Each record from a GET request contains the following three attributes: IS\_PRIVATE, PRIVATE\_FLAG, and PRIVATE\_TYPE.

### IS\_PRIVATE

IS\_PRIVATE will display either 'Y' or 'N'.

- A value of 'N' indicates that the record is a public Technopedia entry that has not been altered with private information.
- A value of 'Y' indicates that the record is either.

## **PRIVATE\_FLAG**

PRIVATE\_FLAG has one of three values: 0, 1, and 2.

- 0 indicates that the record is "Not Modified."
- 1 indicates that the record is a "Modified Technopedia entry."
- 2 indicates that the record is a "Proprietary entry."

## **PRIVATE\_TYPE**

This contains a description of the PRIVATE\_FLAG.

## **POST**

The POST HTTP method generates proprietary object resources. All proprietary objects are part of the Private Catalog.

POST is only applicable on API endpoints that start with CAT\_P\_.

Private Catalog object resources use negative numbers for ID fields.

A HTTP status code 201 is returned upon successful completion.

If the POST fails with a 400 Bad Request along with additional error messages in the payload, investigate the following troubleshooting issues:

- The user may be trying to create a duplicate entry.
- Some required columns may have missing values.
- There may be incorrect column names or incompatible values for the column datatype.
- An incorrect JSON format may be in use.

The actual reason for any issues is indicated in the error message within the JSON response.

## PUT

The PUT HTTP method updates or modifies data values for any object resource. This applies to both the public Technopedia Catalog and the Private Catalog.

PUT is only applicable on API endpoints starting with CAT\_P\_. You will need to know the unique ID of the resource that you want to modify.

The URL should contain the value of the unique resource ID in parenthesis. This is located next to the resource name. See below for an example.

```
http://DataPlatformServer/bdna-api/odata/CAT_P_SW_PRODUCT(946994)
```

In this instance, 946994 is the CAT\_SW\_PRODUCT\_ID of the software product that will be modified.

In addition to having the ID in parenthesis next to the resource name in the URL, the JSON payload should also contain the ID of the resource. In accordance with the example above, the payload should contain the following:

```
{"CAT_SW_PRODUCT_ID":946994, "FAMILY":"foo"}
```

The above API request with this JSON payload modifies the software product resource that corresponds to CAT\_SW\_PRODUCT\_ID 946994. It also modifies the value of the FAMILY attribute for the resource.

A successful PUT request results in a HTTP Status code 204 No Content with an empty JSON payload, indicating that the update operation completed successfully.

To see the modified object for the software product ID in the above example, do a GET on CAT\_SW\_PRODUCT. See below for an example.

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT( 946994 )
```

This API query will result in a single record that reflects the updates made on one or more attributes on the software product object with the ID 946994. For this record, the column IS\_PRIVATE will be “Y” and the PRIVATE\_FLAG will be 1. This information indicates that this ID corresponds to a Technopedia object that has one or more of its columns modified in the Private Catalog.

## DELETE

The DELETE HTTP method deletes data from the Private Catalog.

The Private Catalog consists of two parts: Proprietary Resource Objects, and Privately Modified Technopedia Resource Objects.

- Proprietary Resource Objects consist of entirely of private proprietary information, and are assigned negative IDs.
- Privately Modified Technopedia Resource Objects are Technopedia objects containing public information, but they have also had one or more attribute values modified with private information.

The CAT\_P\_TAXONOMY2012 does not allow Cascade Delete on Private Catalog data. If a taxonomy has dependent sub-children or a sub-taxonomy, then deletion of this taxonomy won't execute until all dependent data has first been deleted. All Private Catalog end-points support Cascade Delete except Taxonomy.

### Deleting a Proprietary Resource Object

Deleting a Proprietary Resource Object permanently removes the resource from the Private Catalog. This method requires a parameter called Cascade, which takes either 'Y' or 'N' as a value. The default value for cascade is 'Y,' indicating yes.

The parameter setting cascade=y deletes the Private Catalog Object. These objects are indicated by the negative ID value listed in parenthesis, and the same applies to all of its children objects.

The parameter setting cascade=n successfully deletes the Private Resource Object, but only if the resource does not have any children objects. If it has any children objects, the DELETE operation returns unsuccessfully with a message indicating that there are children objects under this resource object.

For example, see the DELETE operation on the following request below:

```
http://DataPlatformServer/bdna-api/odata/CAT_P_MANUFACTURER(-100)?cascade=y
```

This will delete the proprietary manufacturer with ID -100 and all of its children.

A successful DELETE operation will return a 204 No Content.

## Deleting a Privately Modified Technopedia Resource Object

Deleting a Privately Modified Technopedia Resource Object will reset the proprietary values for that object back to their original public Technopedia values. The cascade parameter does not apply in this case.

If one or more column values were modified for the manufacturer with CAT\_MANUFACTURER\_ID 4460, then the DELETE on the following API request is:

```
http://DataPlatformServer/bdna-api/odata/CAT_P_MANUFACTURER(4460)
```

This will reset the modified Technopedia manufacturer object with ID4460 back to the original Technopedia column values.

## Pagination

BDNA supports the OData system query options \$top and \$skip in order to help manage the quality of response data returned in a call.

Responses that include only a partial set of the items identified by the request URL must contain a link allowing for the retrieval of the next partial set of items. This link is called a “Next Link.” The final partial set of items does not contain a Next Link.

## Delta

To retrieve a list of records created since a particular date, the query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_MANUFACTURER?$filter=date(CREATE_DATE) gt  
2015-01-01&$count=true
```

To retrieve a list of records created or modified since a particular date, the query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_MANUFACTURER?$filter=date(LAST_MODIFIED_DATE) gt  
2015-01-01&$count=true
```

## Normalize APIs

GET API access is available for all Normalize data. API names correspond to the Normalize object names listed in the Publish database.

Below is a list of APIs that provide access to Normalize data.

API Name	Expands To
DISC_ALL_OS	DISC_COMPUTERSYSTEM, DISC_OS_CAT_MAP, MATCH_HOST_HW_PROD_MODEL, MATCH_HOST_CPU, MATCH_HOST_OS
DISC_CDROMS	DISC_ALL_OS
DISC_COMPUTERSYSTEM	DISC_ALL_OS, DISC_ALL_OS , MATCH_TASK_DET , DISC_CS_CAT_MAP, MATCH_INVENTORY
DISC_CONSOLE_USAGE_MAXGROUP	
DISC_CONSOLE_USER	
DISC_CPUS	DISC_ALL_OS
DISC_CS_CAT_MAP	DISC_COMPUTERSYSTEM, MATCH_TASK_DET, MATCH_INVENTORY
DISC_DISK_PARTITIONS	DISC_ALL_OS
DISC_GUID	
DISC_HDDS	DISC_ALL_OS
DISC_HOSTS	MATCH_TASK_DET, MATCH_INVENTORY
DISC_HOSTS_USERLOGON	
DISC_LOGICAL_DISKS	DISC_ALL_OS
DISC_MISSING_HOSTS	MATCH_TASK_DET, MATCH_INVENTORY
DISC_MONITORS	DISC_ALL_OS
DISC_NICS	DISC_ALL_OS



DISC_OS_CAT_MAP	DISC_ALL_OS, MATCH_TASK_DET, MATCH_INVENTORY
DISC_PUBLISHED_RECORDS_STATS	MATCH_TASK_DET, MATCH_INVENTORY
DISC_VIDEO_CONTROLLERS	DISC_ALL_OS
DISC_VIRTUAL_HOSTGUEST	DISC_ALL_OS
DISC_WINDOWS_SERVICES	DISC_ALL_OS
MATCH_HARDWARE	
MATCH_HOST_CPU	DISC_ALL_OS
MATCH_HOST_HW_IBM_PVU	DISC_ALL_OS
MATCH_HOST_HW_PROD_MODEL	DISC_ALL_OS, CAT_HW_PRODUCT, MATCH_INVENTORY, MATCH_TASK_DET
MATCH_HOST_OS	DISC_ALL_OS
MATCH_HOST_SW_INSTANCE	
MATCH_HOST_SW_PROD	DISC_ALL_OS, CAT_SW_RELEASE
MATCH_HOST_SW_PROD_DET	DISC_ALL_OS
MATCH_INVENTORY	
MATCH_SOFTWARE	
MATCH_SOFTWARE_METERING	DISC_ALL_OS
MATCH_SW_RECENTLY_USED_APPS	DISC_ALL_OS
MATCH_TASK_DET	MATCH_INVENTORY

**Technopedia APIs (GET) List**

The following list displays Technopedia APIs.

**Catalog APIs**

API Name	Expands To
CAT_INDUSTRYTAG	
CAT_INDUSTRYCODES	
CAT_INDUSTRYTAGWITHCODES	CAT_INDUSTRYCODES, CAT_INDUSTRYTAG
CAT_COMPATIBILITY	
CAT_CPU_MODEL	CAT_MANUFACTURER
CAT_CURRENCY	
CAT_HW_MODEL	CAT_MANUFACTURER, CAT_HW_PRODUCT, CAT_TAXONOMY2012
CAT_HW_PRODUCT	CAT_MANUFACTURER, CAT_TAXONOMY2012
CAT_HW_PRODUCT_TAG_MAP	CAT_TAG
CAT_MFR_TAG_MAP	CAT_TAG
CAT_MANUFACTURER	CAT_INDUSTRYTAG
CAT_SW_PRODUCT	CAT_MANUFACTURER, CAT_TAXONOMY2012
CAT_SW_PRODUCT_LINK	CAT_SW_PRODUCT, CAT_FORMER_SW_PRODUCT, CAT_LATER_SW_PRODUCT, CAT_OLDEST_SW_PRODUCT , CAT_LATEST_SW_PRODUCT, CAT_SW_PREMISE, CAT_SW_CLOUD
CAT_SW_PRODUCT_TAG_MAP	CAT_TAG
CAT_SW_VERSION_GROUP	CAT_SW_PRODUCT

CAT_SW_VERSION	CAT_SW_PRODUCT, CAT_SW_VERSION_GROUP
CAT_SW_EDITION	CAT_SW_PRODUCT
CAT_SW_RELEASE	CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_EDITION
CAT_SW_RELEASE_LINK	CAT_SW_RELEASE
CAT_SW_SUITE	CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_SW_SUITE_COMPONENT	CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_SUITE, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_SW_REL_PLATFORM	CAT_SW_RELEASE
CAT_TAG	
CAT_TAXONOMY2012	CAT_TAXONOMY2012_TAG_MAP
CAT_TAXONOMY2012_TAG_MAP	CAT_TAG
CAT_TO_BE_DELETED_UUID	

### Content Pack APIs

The following list shows all Content Pack APIs.

API Name	Expands To
CAT_SW_REL_LIFECYCLE	CAT_SW_RELEASE
CAT_SW_REL_LIFECYCLE_CALC	CAT_SW_RELEASE
CAT_OS_SYSTEM_REQUIREMENTS	CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_RELEASE
CAT_SUPPORT_POLICY	CAT_MANUFACTURER
CAT_SUPPORT_STAGE	CAT_SUPPORT_POLICY
CAT_SW_REL_SUPP_STAGE	CAT_SUPPORT_STAGE, CAT_SW_RELEASE
CAT_WINDOWS7_COMPATIBILITY	CAT_COMPATIBILITY, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_WINDOWS7_COMPATIBILITY	CAT_COMPATIBILITY, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_WINDOWS8_COMPATIBILITY	CAT_COMPATIBILITY, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_WINDOWS10_COMPATIBILITY	CAT_COMPATIBILITY, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_WINDESKTOP_COMPATIBILITY	CAT_COMPATIBILITY, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE

CAT_WINSERVER_COMPATIBILITY	CAT_COMPATIBILITY, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_APPS_COMPATIBILITY	CAT_MANUFACTURER, CAT_SW_EDITION, CAT_SW_PRODUCT, CAT_SW_RELEASE, CAT_SW_VERSION, CAT_APPCOMP_MANUFACTURER, CAT_APPCOMP_SW_EDITION, CAT_APPCOMP_SW_PRODUCT, CAT_APPCOMP_SW_RELEASE, CAT_APPCOMP_SW_VERSION
CAT_SW_PRICING	CAT_CURRENCY, CAT_TAXONOMY2012, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_DEJACODE_OPENSRC_SW	CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_SUITE, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_DEJACODE_OPENSRC_SW_KWD	CAT_DEJACODE_OPENSRC_SW
CAT_DEJACODE_OPENSRC_SW_LIC	CAT_DEJACODE_OPENSRC_SW
CAT_HW_MODEL_POWER	CAT_HW_MODEL
CAT_HW_MODEL_PROFILE	CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_HW_PRODUCT, CAT_HW_MODEL
CAT_HW_LIFECYCLE	CAT_HW_MODEL
CAT_HW_LIFECYCLE_CALC	CAT_HW_MODEL_

CAT_HW_LIFECYCLE_CALC	CAT_HW_MODEL_
CAT_HW_PRICING	CAT_CURRENCY, CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_HW_PRODUCT, CAT_HW_MODEL, CAT_HW_MODEL_PROFILE
CAT_CPU_LICENSING	CAT_CPU_MODEL
CAT_CPE_HARDWARE	CAT_MANUFACTURER, CAT_HW_PRODUCT, CAT_HW_MODEL, CAT_HW_MODEL_PROFILE
CAT_CPE_SOFTWARE	CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_CPE_URI	CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE, CAT_HW_PRODUCT, CAT_HW_MODEL, CAT_HW_MODEL_PROFILE, CAT_CPE_HARDWARE, CAT_CPE_SOFTWARE
CAT_CPE_CVE	CAT_CPE_URI, CAT_CVE
CAT_CVE	
CAT_HW_LIC_PRODUCT	CAT_MANUFACTURER, CAT_HW_PRODUCT, CAT_HW_MODEL, CAT_HW_MODEL_PROFILE, CAT_TAXONOMY2012
CAT_HW_LIC_MODEL	CAT_MANUFACTURER, CAT_HW_PRODUCT, CAT_HW_MODEL, CAT_HW_MODEL_PROFILE, CAT_HW_LIC_TYPE, CAT_HW_LIC_UPS, CAT_HW_LIC_PRODUCT
CAT_HW_LIC_TYPE	



## CAT\_HW\_LIC\_TYPE

## CAT\_HW\_LIC\_UPS

CAT_HW_LIC_ADDITIONAL_HW	CAT_HW_LIC_MODEL, CAT_MANUFACTURER, CAT_HW_PRODUCT, CAT_HW_MODEL
--------------------------	---

CAT_HW_LIC_ADDITIONAL_SW	CAT_HW_LIC_MODEL, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
--------------------------	---

## CAT\_HW\_LIC\_CHARACTERISTICS

CAT_HW_LIC_CPU	CAT_CPU_MODEL, CAT_MANUFACTURER, CAT_HW_LIC_MODEL
----------------	--

CAT_HW_LIC_MFRPARTNO_LPRICE	CAT_CURRENCY, CAT_HW_LIC_MODEL
-----------------------------	--------------------------------

CAT_MFRPARTNO	CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE, CAT_HW_PRODUCT, CAT_HW_MODEL, CAT_HW_MODEL_PROFILE
---------------	---

## CAT\_PLATFORMS

CAT_SW_LIC_PRODUCT	CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE, CAT_PLATFORMS
--------------------	---

CAT_SW_LIC_RELEASE	CAT_SW_LIC_PRODUCT, CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE, CAT_PLATFORMS
CAT_SW_LIC_ADDITIONAL_SW	CAT_SW_LIC_RELEASE, CAT_MANUFACTURER, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE
CAT_SW_LIC_DIST_MEDIA	
CAT_SW_LIC_DIST_MEDIAS	CAT_SW_LIC_DIST_MEDIA
CAT_SW_LIC_ENVIRONMENT	
CAT_SW_LIC_ENVIRONMENTS	CAT_SW_LIC_ENVIRONMENT
CAT_SW_LIC_LANGUAGE	
CAT_SW_LIC_LANGUAGES	CAT_SW_LIC_LANGUAGE
CAT_SW_LIC_MAINT_GRADE	
CAT_SW_LIC_MAINT_GRADES	CAT_SW_LIC_MAINT_GRADE
CAT_SW_LIC_METRIC	
CAT_SW_LIC_METRICS	CAT_SW_LIC_METRIC
CAT_SW_LIC_MFRPARTNO_LPRICE	CAT_CURRENCY, CAT_SW_LIC_RELEASE
CAT_SW_LIC_PRICE_LEVEL	CAT_MANUFACTURER
CAT_SW_LIC_PRICE_LEVELS	CAT_SW_LIC_PRICE_LEVEL



CAT_SW_LIC_PRICING	CAT_MANUFACTURER
CAT_SW_LIC_PRICINGS	CAT_SW_LIC_PRICING
CAT_SW_LIC_PROGRAM	CAT_MANUFACTURER
CAT_SW_LIC_PROGRAMS	CAT_SW_LIC_PROGRAM
CAT_SW_LIC_TYPE	
CAT_SW_LIC_TYPES	CAT_SW_LIC_TYPE
CAT_SW_LIC_UPGRADE_FROM	CAT_SW_LIC_RELEASE, CAT_MANUFACTURER, CAT_TAXONOMY2012, CAT_SW_PRODUCT, CAT_SW_EDITION, CAT_SW_VERSION_GROUP, CAT_SW_VERSION, CAT_SW_RELEASE

### Medical Device Content Pack APIs

The following list contains Medical Device Content Pack APIs.

API Name	Expands To
CAT_CONN_TYPE_STD	CAT_CONN_TYPE_STDVER, CAT_CONNECTIVITY
CAT_CONN_TYPE_STDVER	CAT_CONN_TYPE_STD, CAT_HW_MODEL_CONN_STDVER
CAT_CONNECTIVITY	CAT_CONN_TYPE_STD
CAT_FDA_RECALL	CAT_MFR_RECALL
CAT_FDA	CAT_HW_MODEL_FDA
CAT_GMDN	CAT_HW_MODEL_GMDN
CAT_GUDID	CAT_HW_MODEL_GUDID
CAT_HW_MODEL_CONN_STDVER	CAT_CONN_TYPE_STDVER
CAT_HW_MODEL_EXTENDED	
CAT_HW_MODEL_FDA	CAT_FDA
CAT_HW_MODEL_GMDN	CAT_GMDN
CAT_HW_MODEL_GUDID	CAT_GUDID
CAT_HW_MODEL_MDS2	CAT_MDS2
CAT_HW_MODEL_MFR_RECALL	CAT_MFR_RECALL
CAT_HW_MODEL_UMDNS	CAT_UMDNS
CAT_MDS2_SW_RELEASE	CAT_MDS2, CAT_SW_RELEASE
CAT_MDS2	CAT_HW_MODEL_MDS2, CAT_MDS2_SW_RELEASE
CAT_MFR_RECALL_CODE_INFO	CAT_MFR_RECALL

CAT_MFR_RECALL_CODEINFOTYPE	CAT_MFR_RECALL_CODE_INFO
CAT_MFR_RECALL	CAT_FDA_RECALL, CAT_HW_MODEL_MFR_RECALL, CAT_MFR_RECALL_CODE_INFO
CAT_UMDNS	CAT_HW_MODEL_UMDNS

### Technopedia Subscription Information APIs

The following list contains Subscription Information APIs.

API Name	Expands To
BDNA_CP	
BDNA_CP_API	BDNA_CP
BDNA_CP_UI	BDNA_CP
BDNA_TECHNOPEDIA_TAG	

### Data Platform Metadata APIs

The following list contains Data Platform Metadata APIs.

API Name	Expands To
BDNA_TABS_METADATA	
CAT_CATEGORYSOURCE	
CAT_TAXCATSOURCE	CAT_TAXONOMY2012, CAT_CATEGORYSOURCE
CAT_UUID	
TECHNOPEDIA_VERSIONS	

### Modified Technopedia Object Values

The following list contains Modified Technopedia Object Values.

API Name	Expands To
CAT_P_TPVAL_CHANGE	

### Private Catalog API List

The following lists describe APIs that enable users to POST, PUT, and DELETE into the Private Catalog. All Private Catalog API names start with CAT\_P\_. This stands for Catalog Private.

#### Private Mapping APIs

Private Mapping APIs map Normalize data with proprietary entities from the Private Catalog.

- CAT\_P\_ADDREMOVEDATA => is used to map Normalize Add Remove entries to Private Catalog entries.
- CAT\_P\_EXEDATA => is used to map Exe data to Private Catalog entries.

#### Private Catalog APIs for the Technopedia Catalog

The following list displays Private Catalog APIs for the Technopedia Catalog.

CAT\_P\_CPU\_MODEL  
CAT\_P\_CURRENCY  
CAT\_P\_INDUSTRYCODES  
CAT\_P\_INDUSTRYTAG  
CAT\_P\_INDUSTRYTAGWITHCODES  
CAT\_P\_HW\_PRODUCT\_TAG\_MAP  
CAT\_P\_HW\_PRODUCT  
CAT\_P\_HW\_MODEL  
CAT\_P\_MANUFACTURER  
CAT\_P\_MFR\_TAG\_MAP  
CAT\_P\_PLATFORMS  
CAT\_P\_SW\_PRODUCT  
CAT\_P\_SW\_PRODUCT\_LINK

CAT\_P\_SW\_PRODUCT\_TAG\_MAP  
CAT\_P\_SW\_VERSION  
CAT\_P\_SW\_VERSION\_GROUP  
CAT\_P\_SW\_EDITION  
CAT\_P\_SW\_RELEASE  
CAT\_P\_SW\_RELEASE\_LINK  
CAT\_P\_SW\_REL\_PLATFORM  
CAT\_P\_SW\_SUITE  
CAT\_P\_SW\_SUITE\_COMPONENT  
CAT\_P\_TAXONOMY2012\_TAG\_MAP  
CAT\_P\_TAXONOMY2012

### **Private Catalog APIs for Content Packs**

The below list shows Private Catalog APIs for Content Packs.

CAT\_P\_APPS\_COMPATIBILITY  
CAT\_P\_CPU\_LICENSING  
CAT\_P\_HW\_MODEL\_POWER  
CAT\_P\_HW\_MODEL\_PROFILE  
CAT\_P\_HW\_LIFECYCLE  
CAT\_P\_HW\_PRICING  
CAT\_P\_HW\_LIC\_PRODUCT  
CAT\_P\_HW\_LIC\_MODEL  
CAT\_P\_HW\_LIC\_ADDITIONAL\_HW  
CAT\_P\_HW\_LIC\_ADDITIONAL\_SW  
CAT\_P\_HW\_LIC\_CHARACTERISTICS  
CAT\_P\_HW\_LIC\_CPU  
CAT\_P\_HW\_LIC\_MFRPARTO\_LPRICE  
CAT\_P\_HW\_LIC\_TYPE  
CAT\_P\_HW\_LIC\_UPS  
CAT\_P\_OS\_SYSTEM\_REQUIREMENTS  
CAT\_P\_SUPPORT\_POLICY  
CAT\_P\_SUPPORT\_STAGE

CAT\_P\_SW\_LIC\_PRODUCT  
CAT\_P\_SW\_LIC\_RELEASE  
CAT\_P\_SW\_LIC\_ADDITIONAL\_SW  
CAT\_P\_SW\_LIC\_DIST\_MEDIA  
CAT\_P\_SW\_LIC\_DIST\_MEDIAS  
CAT\_P\_SW\_LIC\_ENVIRONMENT  
CAT\_P\_SW\_LIC\_ENVIRONMENTS  
CAT\_P\_SW\_LIC\_LANGUAGE  
CAT\_P\_SW\_LIC\_LANGUAGES  
CAT\_P\_SW\_LIC\_MAINT\_GRADE  
CAT\_P\_SW\_LIC\_MAINT\_GRADES  
CAT\_P\_SW\_LIC\_METRIC  
CAT\_P\_SW\_LIC\_METRICS  
CAT\_P\_SW\_LIC\_MFRPARTNO\_LPRICE  
CAT\_P\_SW\_LIC\_PRICE\_LEVEL  
CAT\_P\_SW\_LIC\_PRICE\_LEVELS  
CAT\_P\_SW\_LIC\_PRICING  
CAT\_P\_SW\_LIC\_PRICINGS  
CAT\_P\_SW\_LIC\_PROGRAM  
CAT\_P\_SW\_LIC\_PROGRAMS  
CAT\_P\_SW\_LIC\_TYPE  
CAT\_P\_SW\_LIC\_TYPES  
CAT\_P\_SW\_LIC\_UPGRADE\_FROM  
CAT\_P\_SW\_REL\_LIFECYCLE  
CAT\_P\_SW\_REL\_SUPP\_STAGE  
CAT\_P\_SW\_PRICING  
CAT\_P\_WINDOWS7\_COMPATIBILITY  
CAT\_P\_WINDOWS8\_COMPATIBILITY  
CAT\_P\_WINDOWS10\_COMPATIBILITY  
CAT\_P\_WINSERVER\_COMPATIBILITY

## Technopedia API Examples

### Manufacturer

#### Attributes

COLUMN NAME	COLUMN LABEL	COLUMN DESCRIPTION	DATA TYPE	DAT A LENGTH	NULLA BLE	EDITA BLE	REQUI RED
CAT_INDUSTRYTAG_ID	Industry tag ID	The unique identifier for the industry tag.	NUMERIC	18	Y		
CAT_MANUFACTURER_ID	Manufacturer ID	The unique identifier for the manufacturer.	NUMERIC	18	Y	0	
CAT_MANUFACTURER_OWNER_ID	Manufacturer owner ID	The unique identifier of the owner or acquirer, if applicable.	NUMERIC	18	Y		
CITY	City	The city where the manufacturer is based. Typically, the headquarters location.	VARCHAR	256	Y	1	0

COUNTRY	Country	The country where the manufacturer is based. Typically, the headquarters location.	VARCHAR	256	Y	1	0
CREATE_DATE			DATE	7	Y	0	0
DATE_ACQUIRED	Date acquired	The date the manufacturer was acquired, if applicable.	VARCHAR	60	Y	1	0
DELETE_REASON			VARCHAR	500	Y	0	0
DESCRIPTION	Description	A brief description of the manufacturer.	VARCHAR	2000	Y	1	0
EMAIL	Email	The manufacturer email address.	VARCHAR	256	Y	1	0
EMPLOYEES	Employees	The number of employees.	NUMERIC	22	Y	1	0
EMPLOYEES_DATE	Employees date	The date in which the number of employees was collected.	DATE	7	Y	1	0
FAX	Fax	The manufacturer fax number.	VARCHAR	64	Y	1	0
FISCAL_ENDDATE	Fiscal end date	The manufacturer or vendor's fiscal year end date.	DATE	7	Y	1	0
IS_PRIVATE	Is Private?		VARCHAR	1	Y		
KNOWNAS	Also known as	Another name the manufacturer is known by, i.e. an abbreviation, nickname, etc.	VARCHAR	100	Y	1	0



LAST_MODIFIED_DATE			DATE	7	Y	0	0
LEGAL	Legal	The legal entity of the company (i.e., Corporation, Limited, etc.).	VARCHAR	64	Y	1	0
MANUFACTURER	Name	The manufacturer name (as listed on the official website).	VARCHAR	2000	Y	1	1
PHONE	Phone	The manufacturer telephone number.	VARCHAR	64	Y	1	0
PRIVATE_FLAG			NUMERIC	1	Y	0	0
PRIVATE_TYPE			VARCHAR	500	Y	0	0
PROFITS_DATE	Profits date	The date in which profit numbers and data were collected.	DATE	7	Y	1	0
PROFITS_PERYEAR	Profits per year	Annual profits (in millions, USD).	NUMERIC	22	Y	1	0
PUBLICLY_TRADED	Is Publicly traded?	Indicates whether a manufacturer or vendor is publicly traded.	VARCHAR	5	Y	1	0
REPLACEMENT_ID			NUMERIC	18	Y	0	0
REVENUE	Revenue	Latest annual revenue (in millions, USD).	NUMERIC	22	Y	1	0

REVENUE_DATE	Revenue date	The date in which the revenue number was collected.	DATE	7	Y	1	0
STATE	State	The state or province in which the manufacturer or vendor headquarters is located.	VARCHAR	256	Y	1	0
STREET	Street	The street address of the manufacturer or vendor headquarters.	VARCHAR	1000	Y	1	0
SYMBOL	Symbol	The company stock/ticker symbol (if publicly traded).	VARCHAR	2000	Y	1	0
TIER	Tier	Categorization of manufacturers based on priority and importance.	NUMERIC	22	Y	0	
TO_BE_DELETED			VARCHAR	1	Y	0	0
TO_BE_DELETED_ON			DATE	7	Y	0	0
WEBSITE	Website	The manufacturer's official website	VARCHAR	4000	Y	1	0
ZIP	Zip	The zip or postal code of the manufacturer or vendor headquarters.	VARCHAR	100	Y	1	0

### **Retrieve Manufacturer (CAT\_MANUFACTURER)**

To retrieve manufacturers that are only in the Private Catalog:

```
GET odata/CAT_MANUFACTURER
```

The API should use CAT\_MANUFACTURER in order to retrieve manufacturers from both the Technopedia Catalog and the Private Catalog. See below.

```
http://DataPlatformServer/bdna-api/odata/CAT_MANUFACTURER?$count=true
```

The above request will come back with a list of manufacturers, paginated by 100 records per page. To retrieve manufacturers only listed within the Private Catalog, the query should be as follows:

```
http://DataPlatformServer/bdna-api/odata/CAT_MANUFACTURER?$filter=IS_PRIVATE eq 'Y'
```

To retrieve the original Technopedia values of a manufacturer from the Technopedia Catalog after it has been edited with private data, the query would be:

```
http://DataPlatformServer/bdna-api/odata/CAT_T_MANUFACTURER(id of the manufacturer)
```

For more information about the GET HTTP method, please refer to the section “[GET](#).”

### **Create a Proprietary Manufacturer (CAT\_P\_MANUFACTURER)**

To create a proprietary manufacturer:

```
POST odata/CAT_P_MANUFACTURER
```

The POST HTTP method creates a new private/proprietary manufacturer. All proprietary objects are part of the Private Catalog.

The payload for the POST method does not have to contain all columns. Only the required columns must be in the payload.

Private Catalog object resources use negative numbers for ID fields.

Each Private Catalog object resource is assigned to an industry vertical by default.

A HTTP status code 201 is returned upon successful completion.

If the POST fails with a 209 Bad Request error message in the payload, it could be because there is no default industry vertical.

If the POST fails with a 406 Bad Request error message in the payload, it could be because there is more than one industry vertical. Extra post request will be need in order to assign this new private manufacturer to an industry vertical with the given ID: CAT\_P\_MFR\_TAG\_MAP API("CAT\_MANUFACTURER\_ID": -120, ...).

If the POST fails with a 400 Bad Request along with additional error messages in the payload, investigate the following troubleshooting issues:

- The user is trying to create a duplicate entry.
- Some required columns may have missing values.
- There may be incorrect column names or incompatible values for the column datatype.
- An incorrect JSON format may be in use.

### **Update an Existing Manufacturer (CAT\_P\_MANUFACTURER)**

To modify a proprietary Private Catalog manufacturer:

```
PUT odata/CAT_P_MANUFACTURER(CAT_MANUFACTURER_ID of the manufacturer to be modified)
```

Use the HTTP PUT method in order to update one or more values for an existing manufacturer. The manufacturer can be either a Technopedia Catalog public manufacturer or a Private Catalog proprietary manufacturer. A 204 No Content is returned upon a successful update. For more information on PUT, please refer to the section “[PUT](#).”

### **Delete an Existing Manufacturer (CAT\_P\_MANUFACTURER)**

```
DELETE odata/CAT_P_MANUFACTURER(CAT_MANUFACTURER_ID of the manufacturer to be deleted or  
reset)?cascade=y
```

DELETE can completely remove a Private Resource Object and its children from the Private Catalog. DELETE can also reset a Privately Modified Technopedia Resource Object back to its original Technopedia column values.

```
http://DataPlatformServer/bdna-api/odata/CAT_P_MANUFACTURER(-100)?cascade=y
```

This will delete the proprietary manufacturer with ID -100 and all its children.

```
http://DataPlatformServer/bdna-api/odata/CAT_P_MANUFACTURER(4460)
```

This will reset the modified Technopedia manufacturer object with ID 4460 back to its original Technopedia column values. For more information on the DELETE method, please refer to the section “[DELETE](#).”

### **TAPI**

Note that a TAPI connection will fail if a server running Normalize has FIPS enabled. TAPI is not compatible with a FIPS-enabled operating system. Enabling FIPS compliance will block the Normalize Technopedia API and prevent it from configuring properly.

## Taxonomy Change Process

The Taxonomy Change Process defines a clear methodology regarding Technopedia taxonomy changes and modifications. Changes can include introducing new categories, deprecating older categories, and modifying other product categories as needed. The process provides users with “advance notifications” when such changes are going to be made, so that they have enough time to adjust how they consume any Technopedia data that may be affected.

The Taxonomy Change Process includes the following features and benefits:

- A change in taxonomy will be reflected while still maintaining the old state during a transition period (i.e. the old entry is not immediately deleted).
- Users can identify which taxonomy is current, and will become the “default” taxonomy. Other taxonomies can also be deleted if desired.
- Software and hardware products can potentially have multiple product categories.
- Users can maintain any “non-current” categories during the transition period (i.e. 6 months or longer) within the Private Catalog.
- Users who don’t want to make any taxonomy changes will continue to see the “default” taxonomy in their current view.
- When multiple verticals are involved, each vertical requires a “current” product category. In the event of any data conflicts, non-IT verticals are prioritized (i.e. they will be listed as the “default”).
- Consistent Private Catalog behavior, i.e. never allowing Private Catalogs to be overwritten.

## Taxonomy Endpoints

### Technopedia Public Data

A Technopedia Public Data endpoint shows publicly-viewable product taxonomy relations as defined within Technopedia. Publish provides these taxonomy product relation “bridge” tables. A flag indicates the default product taxonomy relation per each vertical.

### Private Catalog

Private Catalog endpoints provide Private Catalog license users with a variety of features:

- The ability to add private product taxonomy relations.
- Taxonomy version number decreases each time there is a new product taxonomy relationship in a vertical (i.e. -1, -2, etc.).
- All private rows for a product vertical can be listed as “non-default,” which will use the public default as a result. Only one private product taxonomy per vertical can be listed as the “default.”
- New relation entries are automatically assigned as “default” and other product taxonomy relations are marked as “non-default,” unless otherwise specified.
- “Default/non-default” flags can be updated by users for private product taxonomy relations, but only one instance can be the “default” at a time, whereas all other instances can simultaneously be marked as “non-default.”

- Users can delete private product taxonomy relations as needed, but an error message will appear if other dependencies must be resolved first.

### **Technopedia Publish**

All existing private taxonomy product relations are added to the new bridge table by default and are automatically displayed. This table allows multiple product category combinations for each product. Publish also auto-generates a link that gives users backwards compatibility regarding any changes they have made.

### **Aggregates**

An aggregate endpoint shows the aggregate of public and private product taxonomy relations. Publish calculates up-to-date defaults across public and private catalogs.

### **Bridge Table APIs**

“CAT\_T\_” returns product tag taxonomy relations data from the public catalog.

“CAT\_P\_” stores customer private tag taxonomy mapping information.

“CAT\_” API returns aggregated data combining public and private relation mapping data.

Hardware Product relations:

- CAT\_HW\_PRODUCT\_TAXONOMY2012
- CAT\_T\_HW\_PRODUCT\_TAXONOMY2012
- CAT\_P\_HW\_PRODUCT\_TAXONOMY2012

Software Product relations:

- CAT\_SW\_PRODUCT\_TAXONOMY2012
- CAT\_T\_SW\_PRODUCT\_TAXONOMY2012
- CAT\_P\_SW\_PRODUCT\_TAXONOMY2012

### **API Methods**

When a user creates a new relation using the API “POST” method without specifying the “default” flag, the endpoints are automatically assigned as “default” and all other product vertical taxonomy combinations are labeled as “non-default.”

The “Taxonomy\_Default” flag can be modified using the API “PUT” method. When a user updates a product vertical taxonomy mapping to “default,” all other product vertical taxonomies will be changed to “non-default” automatically. Automated flag changes between “default” and “non-default” allows only one “default” taxonomy per combination. There can be as many “non-default” options as preferable, but only one “default” within a vertical at a time.

**Private Taxonomy Mapping APIs**

Private catalog end-point of the bridge tables are:

- CAT\_P\_SW\_PRODUCT\_TAXONOMY2012
- CAT\_P\_HW\_PRODUCT\_TAXONOMY2012

These endpoints allow customers to perform various options:

- Add and modify private product catalog vertical taxonomy relations using HTTP “POST” and “PUT” methods. The “TAXONOMY\_FIELD” version number decreases from each prior value when the product vertical taxonomy relation is defined (i.e. -1, -2, -3, etc.).
- Private API endpoints allow the deletion of private taxonomy mapping as defined by the customer, so long as there are no dependencies. Otherwise, an error message will appear.
- Delete “default” standalone taxonomies. If no new “default” is specified, the public default taxonomy will appear in the aggregated API:
  - CAT\_SW\_PRODUCT\_TAXONOMY2012
  - CAT\_HW\_PRODUCT\_TAXONOMY2012

**Aggregate Taxonomy Mapping APIs**

The Hardware and Software Product Taxonomy APIs display all public and private mappings, but only one taxonomy can be listed as “default” per each vertical combination.

Aggregated catalog endpoint of the bridge tables are:

- CAT\_SW\_PRODUCT\_TAXONOMY2012
- CAT\_HW\_PRODUCT\_TAXONOMY2012

**Supported HTTP Methods of Taxonomy APIs**

Table 1: API & Supported HTTP Methods

API	Supported HTTP Method
CAT_T_SW_PRODUCT_TAXONOMY2012	GET
CAT_P_SW_PRODUCT_TAXONOMY2012	POST, PUT, DELETE
CAT_SW_PRODUCT_TAXONOMY2012	GET

Table 1: API &amp; Supported HTTP Methods

API	Supported HTTP Method
CAT_T_HW_PRODUCT_TAXONOMY2012	GET
CAT_P_HW_PRODUCT_T_TAXONOMY2012	POST, PUT, DELETE
CAT_HW_PRODUCT_TAXONOMY	GET

**Software Product**



The following list describes software product attributes.

### Attributes

COLUMN NAME	COLUMN LABEL	COLUMN DESCRIPTION	DATA TYPE	DATA LENGTH	NULLABLE	EDITABLE	REQUIRED
ALIAS		The former name of the software product.	VARCHAR	2000	Y	0	0
CAT_MANUFACTURER_ID	Manufacturer ID	The manufacturer's unique identifier.	NUMERIC	18	Y	1	1
CAT_SW_PRODUCT_ID	Product ID	CAT_SW_PRODUCT table's unique identifier.	NUMERIC	18	N	0	
CAT_TAXONOMY_2012_ID	Taxonomy	The BDNA Taxonomy's unique identifier.	NUMERIC	18	Y	1	1
COMPONENT	Component	The component of the software product (if applicable).	VARCHAR	2000	Y	1	0
CREATE_DATE		The date when row was first created.	DATE	7	Y	0	0
DELETE_REASON		The reason the entry must be deleted, i.e. duplicate or inaccurate values.	VARCHAR	500	Y	0	0

DESUPFLAG		A flag that indicates the entry is no longer supported by the vendor. The date when the entry first went unsupported will obviously be in the past.	VARCHAR	10	Y	0	0
DISCONTINUEDFLAG		flag that indicates the entry has been discontinued by the vendor. The discontinued date will be in the past. The entry may or may not be supported by the vendor.	VARCHAR	10	Y	0	0
FAMILY	Family	The brand or family in which the software product belongs (if applicable).	VARCHAR	2000	Y	1	0
IS_PRIVATE	Is Private?		VARCHAR	1	Y	0	
IS_SUITE	Is Suite?	A flag that indicates whether the software product is a suite or not.	NUMERIC	22	Y	1	0
LAST_MODIFIED_DATE		The date when the last modification on the row was made.	DATE	7	Y	0	0
NFAMILY		A flag to indicate whether the brand or family name should be included in the full product name.	NUMERIC	22	Y	0	0
PLICSABLE		A flag to indicate whether the software product is licensable or not.	NUMERIC	22	Y	0	0

PRIVATE_FLAG			NUMERIC	1	Y	0	0
PRIVATE_TYPE			VARCHAR	500	Y	0	0
REPLACEMENT_ID		The unique identifier of the replacement entry that replaces a duplicate entry slated for deletion.	NUMERIC	18	Y	0	0
SOFTWARE	Product	The name of the software product.	VARCHAR	2000	Y	1	1
TO_BE_DELETED		Determine if this should be recorded, i.e. Y or N.	VARCHAR	1	Y	0	0
TO_BE_DELETED_ON		The date when this record will be deleted.	DATE	7	Y	0	0
VENDOR_CATEGORY	Vendor Category	Products Vendor Category	VARCHAR	255	Y	1	0

### Retrieve Software Product (CAT\_SW\_PRODUCT)

To retrieve software products from both Technopedia Catalog and Private Catalog, the API is CAT\_SW\_PRODUCT:

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$count=true
```

The above request would come back with a list of software products, paginated by 100 records per page.

To retrieve software products from both the Technopedia Catalog and the Private Catalog, use the API CAT\_SW\_PRODUCT.

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$count=true
```

The above request returns a list of software products, paginated by 100 records per page.

To retrieve a single software product, the query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT(CAT_SW_PRODUCT_ID of the software product to query)
```

To retrieve software products that are only listed in the Private Catalog, the query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$filter=IS_PRIVATE eq 'Y'
```

To retrieve software products that are only listed in the Technopedia Catalog (and have not been edited with private values) the query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_SW_PRODUCT?$filter=IS_PRIVATE eq 'N'
```

To retrieve the original Technopedia values of a software product from the Technopedia Catalog after it has been edited with private data, the query is:

```
http://DataPlatformServer/bdna-api/odata/CAT_T_SW_PRODUCT_(CAT_SW_PRODUCT_ID of the software product)
```

For more information about the GET HTTP method, please refer to the section “[GET](#).”

### Create a Proprietary Software Product (CAT\_P\_SW\_PRODUCT)

To create a proprietary software product under an existing manufacturer and taxonomy:

```
POST odata/CAT_P_SW_PRODUCT
```

The payload should be in JSON format, representing a CAT\_SW\_PRODUCT object.

You can create a software product under either an existing manufacturer or a private manufacturer.

First create the private manufacturer if you intend to create a software product under a private manufacturer (unless the private manufacturer already exists). You will also require the ID of the private manufacturer.

### **Update an Existing Software Product (CAT\_P\_SW\_PRODUCT)**

To modify an existing software product:

```
PUT odata/CAT_P_SW_PRODUCT(CAT_SW_PRODUCT_ID of the software product you wish to modify)
```

Use the HTTP PUT method to update one or more values for an existing software product.

A 204 No Content is returned upon completion of a successful update.

For more information on PUT, please refer to the section “[PUT](#).”

### **Delete an Existing Software Product (CAT\_P\_SW\_PRODUCT\_)**

```
DELETE http://DataPlatformServer/bdna-api/odata/CAT_P_SW_PRODUCT(CAT_SW_PRODUCT_ID of the software product to be deleted)?cascade=y
```

DELETE can completely remove a Private Resource Object and its children from the Private Catalog. DELETE can also reset a Privately Modified Technopedia Resource Object back to its original Technopedia column values.

For more information on the DELETE method, please refer to the section “[DELETE](#).”