

API for Installed Base v1 (Direct Sales)

Overview

The API for Installed Base lets you manage all the different objects related to the installed base.

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

Asset

GET /api/installedbase/v1/account/[account]/asset

Return all Asset objects for the given account

Parameter	Type	Description
account	String	The account id
<i>Result</i>	List< Asset >	Assets for the account

POST /api/installedbase/v1/account/[account]/asset?body=[asset]

Post a new Asset object for the given account

Parameter	Type	Description
account	String	The account id
body	Asset	The Asset object to create
<i>Result</i>	Empty	

PUT /api/installedbase/v1/account/[account]/asset?body=[asset]

Update a Asset object for the given account

Parameter	Type	Description
account	String	The account id
body	Asset	The Asset object to update
<i>Result</i>	Empty	

GET /api/installedbase/v1/account/[account]/asset/[id]

Get a single Asset object for the given account and id

Parameter	Type	Description
account	String	The account id
id	String	The Asset id
<i>Result</i>	Asset	The Asset object

DELETE /api/installedbase/v1/account/[account]/asset/[id]

Delete a single Asset object for the given account and id

Parameter	Type	Description
account	String	The account id
id	String	The Asset id
<i>Result</i>	Empty	

Bulk Operations

GET /api/installedbase/v1/account/[account]/bulk-read

Get the full installed base information for the given account

Parameter	Type	Description
account	String	The weak reference to the account resource.
<i>Result</i>	BulkData	

POST /api/installedbase/v1/account/[account]/bulk-update?body=[bulkData]

Set the full installed base information for the given account. These attributes in the Post body control if existing objects are replaced with the ones in this request: replaceLocations, replaceSystems, replaceAssets, replaceMeters, replaceUsages, replaceForecasts.

Parameter	Type	Description
account	String	The weak reference to the account resource.
body	BulkData	
<i>Result</i>	Empty	

Forecast

GET /api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/forecast

Return all Forecast objects for the given account, asset and meter

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
<i>Result</i>	List< Forecast >	Forecast for the meter

POST

/api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/forecast? body=[forecast]

Post a new Forecast object for the given account, asset and meter

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
body	Forecast	The Forecast object to create
<i>Result</i>	Empty	

PUT

**/api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/forecast?
body=[forecast]**

Update a Forecast object for the given account, asset and meter

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
body	Forecast	The Forecast object to update
<i>Result</i>	Empty	

GET

/api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/forecast/[year]

Get a single Forecast object for the given account, asset, meter and year

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
year	Integer	The Forecast id
<i>Result</i>	Forecast	The Forecast object

DELETE

/api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/forecast/[year]

Delete a single Forecast object for the given account, asset, meter and year

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id

Parameter	Type	Description
year	Integer	The Forecast id
<i>Result</i>	Empty	

Location

GET /api/installedbase/v1/account/[account]/location

Return all Location objects for the given account

Parameter	Type	Description
account	String	The account id
<i>Result</i>	List< Location >	Locations for the account

POST /api/installedbase/v1/account/[account]/location?body=[location]

Post a new Location object for the given account

Parameter	Type	Description
account	String	The account id
body	Location	The Location object to create
<i>Result</i>	Empty	

PUT /api/installedbase/v1/account/[account]/location?body=[location]

Update a Location object for the given account

Parameter	Type	Description
account	String	The account id
body	Location	The Location object to update
<i>Result</i>	Empty	

GET /api/installedbase/v1/account/[account]/location/[id]

Get a single Location object for the given account and id

Parameter	Type	Description
account	String	The account id
id	String	The Location id
<i>Result</i>	Location	The Location object

DELETE /api/installedbase/v1/account/[account]/location/[id]

Delete a single Location object for the given account and id

Parameter	Type	Description
account	String	The account id
id	String	The Location id
<i>Result</i>	Empty	

Meter

GET /api/installedbase/v1/account/[account]/asset/[asset]/meter

Return all Meter objects for the given account and asset

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
<i>Result</i>	List< Meter >	Meters for the account and asset

POST /api/installedbase/v1/account/[account]/asset/[asset]/meter?body=[meter]

Post a new Meter object for the given account and asset

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
body	Meter	The Meter object to create

Parameter	Type	Description
<i>Result</i>	Empty	

PUT /api/installedbase/v1/account/[account]/asset/[asset]/meter?body=[meter]

Update a Meter object for the given account and asset

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
body	Meter	The Meter object to update
<i>Result</i>	Empty	

GET /api/installedbase/v1/account/[account]/asset/[asset]/meter/[id]

Get a single Meter object for the given account, asset and id

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
id	String	The Meter id
<i>Result</i>	Meter	The Meter object

DELETE /api/installedbase/v1/account/[account]/asset/[asset]/meter/[id]

Delete a single Meter object for the given account, asset and id

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
id	String	The Meter id
<i>Result</i>	Empty	

System

GET /api/installedbase/v1/account/[account]/system

Return all System objects for the given account

Parameter	Type	Description
account	String	The account id
<i>Result</i>	List< System >	Systems for the account

POST /api/installedbase/v1/account/[account]/system?body=[system]

Post a new System object for the given account

Parameter	Type	Description
account	String	The account id
body	System	The System object to create
<i>Result</i>	Empty	

PUT /api/installedbase/v1/account/[account]/system?body=[system]

Update a System object for the given account

Parameter	Type	Description
account	String	The account id
body	System	The System object to update
<i>Result</i>	Empty	

GET /api/installedbase/v1/account/[account]/system/[id]

Get a single System object for the given account and id

Parameter	Type	Description
account	String	The account id
id	String	The System id

Parameter	Type	Description
<i>Result</i>	System	The System object

DELETE /api/installedbase/v1/account/[account]/system/[id]

Delete a single System object for the given account and id

Parameter	Type	Description
account	String	The account id
id	String	The System id
<i>Result</i>	Empty	

Usage

GET /api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/usage

Return all Usage objects for the given account, asset and meter

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
<i>Result</i>	List< Usage >	Usage for the meter

POST /api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/usage?body=[usage]

Post a new Usage object for the given account, asset and meter

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
body	Usage	The Usage object to create

Parameter	Type	Description
<i>Result</i>	Empty	

**PUT /api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/usage?
body=[usage]**

Update a Usage object for the given account, asset and meter

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
body	Usage	The Usage object to update
<i>Result</i>	Empty	

GET

/api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/usage/[year]

Get a single Usage object for the given account, asset, meter and year

Parameter	Type	Description
account	String	The account id
asset	String	The asset id
meter	String	The meter id
year	Integer	The Usage id
<i>Result</i>	Usage	The Usage object

DELETE

/api/installedbase/v1/account/[account]/asset/[asset]/meter/[meter]/usage/[year]

Delete a single Usage object for the given account, asset, meter and year

Parameter	Type	Description
account	String	The account id

Parameter	Type	Description
asset	String	The asset id
meter	String	The meter id
year	Integer	The Usage id
<i>Result</i>	Empty	

Data Types by Category

Asset

Asset

```
JSON XML
{
  "id" : "",
  "description" : "",
  "system" : "",
  "location" : "",
  "attributes" : {
    "key" : ""
  }
}
```

Bulk Operations

BulkData

```
{
  "replaceLocations" : false,
  "locations" : [
    {
      "id" : "",
      "description" : "",
      "attributes" : {
        "key" : ""
      }
    },
    ...
  ],
  "replaceSystems" : false,
  "systems" : [
    {
      "id" : "",
      "description" : "",
      "location" : "", // The id of the location of the system
      "mainAssetId" : "", // (Optional) The id of the main asset of
      "systemMeterId" : "", // (Optional) The id of the main meter f
      "attributes" : {
        "key" : ""
      }
    },
    ...
  ],
  "replaceAssets" : false,
  "assets" : [
    {
      "id" : "",
      "description" : "",
      "system" : "",
      "location" : "",
      "attributes" : {
        "key" : ""
      }
    },
    ...
  ],
  "replaceMeters" : false,
  "meters" : [
    {
      "id" : "",
      "description" : "",
      "asset" : "", // The id of the asset that this meter is attach
      "meterType" : "",

```

Not used with endpoints that specify the meter in the path.

```
    "lastReading" : "",
    "lastReadingDate" : "",
    "attributes" : {
      "key" : ""
    }
  },
  ...
],
"replaceUsages" : false,
"usages" : [
  {
    "year" : 1, // The year of the usage measurement
    "asset" : "",
    "meter" : "",
    "jan" : 1,
    "feb" : 1,
    "mar" : 1,
    "apr" : 1,
    "may" : 1,
    "jun" : 1,
    "jul" : 1,
    "aug" : 1,
    "sep" : 1,
    "oct" : 1,
    "nov" : 1,
    "dec" : 1,
    "fullYear" : 1 // The total for the year
  },
  ...
],
"replaceForecasts" : false,
"forecasts" : [
  {
    "year" : 1, // The year of the forecast measurement
    "asset" : "",
    "meter" : "",
    "jan" : 1,
    "feb" : 1,
    "mar" : 1,
    "apr" : 1,
    "may" : 1,
    "jun" : 1,
    "jul" : 1,
    "aug" : 1,
    "sep" : 1,
    "oct" : 1,
    "nov" : 1,
    "dec" : 1,
```

```
    "fullYear" : 1 // The total for the year
  },
  ...
]
}
```

Forecast

Forecast

```

JSON XML
{
  "year" : 1, // The year of the forecast measurement
  "asset" : "",
  "meter" : "",
  "jan" : 1,
  "feb" : 1,
  "mar" : 1,
  "apr" : 1,
  "may" : 1,
  "jun" : 1,
  "jul" : 1,
  "aug" : 1,
  "sep" : 1,
  "oct" : 1,
  "nov" : 1,
  "dec" : 1,
  "fullYear" : 1 // The total for the year
}
```

Location

Location

```

JSON XML
{
  "id" : "",
  "description" : "",
  "attributes" : {
    "key" : ""
  }
}
```

Meter

Meter

```
JSON XML
{
  "id" : "",
  "description" : "",
  "asset" : "", // The id of the asset that this meter is attached to
  // Not used with endpoints that specify the meter in the path.
  "meterType" : "",
  "lastReading" : "",
  "lastReadingDate" : "",
  "attributes" : {
    "key" : ""
  }
}
```

System

System

```
JSON XML
{
  "id" : "",
  "description" : "",
  "location" : "", // The id of the location of the system
  "mainAssetId" : "", // (Optional) The id of the main asset of the system
  "systemMeterId" : "", // (Optional) The id of the main meter for the system
  "attributes" : {
    "key" : ""
  }
}
```

Usage

Usage

```
{
  "year" : 1, // The year of the usage measurement
  "asset" : "",
  "meter" : "",
  "jan" : 1,
  "feb" : 1,
  "mar" : 1,
  "apr" : 1,
  "may" : 1,
  "jun" : 1,
  "jul" : 1,
  "aug" : 1,
  "sep" : 1,
  "oct" : 1,
  "nov" : 1,
  "dec" : 1,
  "fullYear" : 1 // The total for the year
}
```