

Open Catalog Interface (OCI): Manual for Open Icecat XML and Full Icecat XML

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This document describes the XML method of Icecat's Open Catalog Interface (OCI): a set of standards and file formats used in the Icecat XML repository. In summary, it gives the basics of how to use the Icecat repository or how to publish data to Icecat conforming this OCI.

Other Integration Methods

If you want to integrate product data without frames, conforming your CSS, then use [Icecat Live](#), which is the modern variant of the good-old [URL](#) integration method. If you want to have full control over the data, then make use of the XML (read further below), [JSON](#), or [CSV](#) download methods. [See the full overview of methods and manuals.](#)

Further, check out the [Add-On page for popular platforms](#) already integrating Icecat data, which we regularly update.

Are you interested in adding product reviews? Then check out our [reviews manual](#).

Brand owners that look into pushing data into Icecat, please, look into our [Push-API](#) or for manual data-entry Icecat's [Free Vendor Central](#).

Important Notes about Icecat XML

1. In case of Open Icecat, please check the Open Icecat sections.

2. The links and files in the download directories are to be downloaded with scripts (from server to server). If you try to download them via your browser, you may sometimes experience memory problems. This does not mean that on our side the data is not accessible or correctly available. In case you experience any problem, contact us via the [contact form](#).
3. We show by default a daily index file when you only enter the directory name. This, because it is more efficient for testing and viewing in a browser. To get the complete index file with products for Open Icecat users and all described products for Full Icecat users, include in the path the full file name of the complete index: files.index.xml (in Open Icecat or Full Icecat).
4. Some brands have a restrictive syndication policy, in which they allow access to certain digital assets or other product data only to authorized resellers. In general, it is therefore good to [request authorization from brands](#) with which you have established formal relations via the Icecat website.

After a rip of our general site, an IP address may be temporarily blocked. A rip is not acceptable as it may hurt site performance and can be a copyright infringement.

Advantages of upgrading to Full Icecat

The JSON interface may be accessed by all Icecat Data (XML, CSV or JSON) users, with at least an Open Icecat account. Open Icecat users can access the data of the [sponsoring brands](#). Full Icecat users can access the data of [all brands](#) in the Icecat database, and get a [free Vendor Central \(PIM\)](#) service included.

However attractive the free Open Icecat database is, the Full-Icecat database still contains many, many more brands:

10,000s (see <https://icecat.biz/menu/vendors/index.htm>). If you want specific brands to be included into free Open Icecat, please, recommend Icecat to your manufacturer contacts.

[Read more about the main advantages of Full Icecat over free Open Icecat](#) and [see the Icecat Subscription Plans](#).

In case you want to upgrade to Full Icecat, please [contact us](#) via the contact form, or click on the “request Full Icecat access” link after the [User Login](#).

Open Icecat Fair Use Policy

We require any user of Open Icecat product data – in a free Open Icecat subscription or as part of the Full Icecat data – to respect the [Open Icecat Fair Use Policy](#).

Explicitly relevant for website development is:

- to mention explicitly the “Specs Icecat” on all product datasheets, with a link to the Icecat.biz web site
- to include explicitly an “AS IS” disclaimer, an example of which can be found at <https://www.icecat.biz/menu/disclaimer/index.htm> (available in several languages).

International Standards Supported

Apart from XML, Icecat is compliant with an increasing number of international standards. [See here a quick overview of such supported standards](#).

Coverage analysis

To decide to make use of Full Icecat or Open Icecat it may be important to analyze the coverage of your portfolio or the portfolio of your supplier. You can always ask us to give you an overview of the coverage of (stock) portfolio of your

suppliers (i.e., distributors) at any given moment. We strive to cover at least 90% of the stock portfolio (stock > 1) of mainstream distributors and work together with partners to monitor this coverage daily.

If you want to analyze coverage, you can do two things:

1) Register and upload your catalog to [Icecat](#) via the Login. In the match analysis, you get the match percentages back for Full Icecat and Open Icecat. And you can get a list of unrecognized products. An advantage is that you can also optionally display your offers -using this method- on the Icecat.biz price comparison sites. NOTE: if you follow this method, Icecat also provides you automatically with your private Icecat index.

2) If you do in-depth coverage analyses, please use the following matching file, which is a plain dump of everything in our catalog: https://data.Icecat.biz/prodid/prodid_d.txt.gz (a very large file with all known products in the Icecat database, described and standardized or not in gzipped archive). *NOTE: Market presence=Y in the matching file indicates that we notice that the product is currently present in at least one distributor's catalog. Quality=Icecat means that Icecat editors have standardized the data-sheet. Quality=SUPPLIER means that the data-sheet comes from a manufacturer's CMS (or a brand editor created a product data-sheet manually via [Icecat PIM](#)), and might be queued for standardization. Quality=NOEDITOR means that our editors did not create a data-sheet yet, nor did we auto-import manufacturer data; so, it is only the raw data as we received it from channel partners.*

TIP: discuss with the Icecat team a service level for your portfolio.

1. Icecat Repositories

The Full Icecat XML repository is a set of product data files and an index file, which includes all pointers to individual product files and gives some basic information as timestamp updated, content quality level, etc. The Icecat XML repository contains product information for products of all brands, and categories that subscribers want us to support. The current content can be best reviewed on the public Icecat [website](#)

The Open Icecat repository is the part of the Icecat XML repository that is sponsored by manufacturers and is provided for free to the channel. Open Icecat is distributed under the [Open Content License Agreement](#). Which brands are included in Open Icecat? The most recent list is [here](#). Open Icecat is also useful during development and testing.

2. Directories

2.1 Access

To obtain access to the repository, you will need a login/password, provided to you by Icecat. If you don't have these, please [register](#) online for free Open Icecat. *NOTE: During the registration you need to choose for the Live (url, JS) or Data (xml, json, csv) version. If you want to make use of XML, make sure that you choose the Open Icecat Data subscription. You can always change this afterwards, or create a second subscription for the Live version (URL links to hosted data-sheets) method. For Full Icecat access, a separate contract is needed. You can request this contract [here](#).*

Take care that you provide us with the right IP addresses of your content servers, as the access is secure. You can test the login/password combination by entering it by hand in the BASIC HTTP authorization pop-up screen, which appears automatically when the directory URL is entered. In this case,

we need to have added the IP address of your workplace as well to your profile. If you don't know this IP address, just type in your browsers <https://www.whatismyip.com/> or <https://www.getip.com/> and fill it in the IP addresses field after Login via the Icecat website (multiple IPs need to be entered space separated).

Of course, for professional use, server access need to be set up. In case of little experience in this field, we advise you to make use of the URL versions (links to pictures and datasheets) or ask us for assistance.

2.2 Individual Product XML (Meta) Requests (real-time)

For smaller catalogs and for testing XML with small data-sets, it may be handy to make use of our realtime interface (URL2XML) for retrieving Product XML from the (Open) Icecat repositories.

The general format of the call is:

Requesting a product XML by Brand and Product code:

```
https://data.Icecat.biz/xml_s3/xml_server3.cgi?prod_id=<prod_id>;vendor=<vendor_name>;lang=<lang>;output=<output>
```

or

Requesting a product XML by GTIN (EAN or UPC):

```
https://data.Icecat.biz/xml_s3/xml_server3.cgi?ean_upc=<EAN or UPC>;lang=<lang>;output=<output>
```

Where:

prod_id – the manufacturer product code of the requested product, **vendor_name** – name of the manufacturer of the requested product, **ean_upc** – the EAN or UPC code to identify a product,

lang – [the language code](#) (INT – for the international/standardized repository, EN, NL, FR – for local ones),

output – the type of the response. It can be productxml (the product xml file) and metaxml (the index or meta information on the Brand + ProdID/M_Prod_ID or EAN/UPC).

For example, if you need to get an xml file of product 'WM527 mouse Bluetooth Laser 1600 DPI Right-hand'. Manufactured by DELL, with product number WM527-BK, in English, the call will be:

```
https://data.Icecat.biz/xml_s3/xml_server3.cgi?prod_id=WM527-BK;vendor=dell;lang=en;output=productxml
```

In case you want to retrieve data on the basis of an EAN or UPC code:

```
https://data.Icecat.biz/xml_s3/xml_server3.cgi?ean_upc=5397063929863;lang=en;output=productxml
```

The meta data:

```
https://data.Icecat.biz/xml_s3/xml_server3.cgi?prod_id=WM527-BK;vendor=dell;lang=en;output=metaxml
```

XML Server 3 access works via the basic HTTP authorization, also used for other HTTP requests.

TIP 1: Use the Presentation_Value parameter in localized data-sheets for display of a data-sheet, and use the standardized Value parameter for search & compare on standardized values.

TIP 2: LocalValue is a transformation of the international Value according to the local dictionary and the applicable Metric/Imperial value system. Especially, for local applications, we advise to use LocalValue for search & compare functionalities

2.3 Open Icecat (free) directories, for batch processing

Open Icecat users have access to:

<https://data.Icecat.biz/export/freexml/<lang>>

for access to the standardized data files (QUALITY=ICECAT).

Where <lang> stands for [language code](#)

TIP: use the standardized files for searching & comparing.

Please, note, where QUALITY = SUPPLIER only the original product data as imported from a manufacturer's CMS is available, the respective data-sheet is not yet standardized by our editors. When standardized, the parameter changes to QUALITY = Icecat.

The language-specific product data-files are found here:

https://data.Icecat.biz/export/freexml/<lang>/<product_id>.xml

where <lang> stands for [language code](#) and <product_id> stands for Icecat product ID

Please, note that this language-specific content contains the standardized content (same as in INT), which is entered by our editors. Or, if no standardized data is yet available, it contains just the original data (Quality=Supplier) imported from the CMS of a manufacturer or entered manually via the Icecat PIM by the manufacturer.

In general, we follow the ISO 639-1 two-character country codes, except when a code can not be unambiguously tied to a language. So we use for example EN_SG, and EN_IN to identify Singapore English and Indian English respectively

TIP: we advise the language-specific product content (Presentation_Value) purely for the display of product data-sheets, not for search & comparison. For search & comparison,

we advise the standardized product content of the Value parameter from the /INT or local language directory. We advise LocalValue for country-specific search & compare applications.

TIP: Open Icecat is also useful for testing purposes before you upgrade to Full Icecat. The technical structures are 100% compatible with those of Full Icecat.

2.4 Full Icecat directories, for batch processing

Full Icecat contains all product data of all 10,000s of brands supported. Often provided with service levels and coverage guarantees. For the Full Icecat subscribers, a separate directory structure is in place:

`https://data.Icecat.biz/export/level4/<lang>`

Where <lang> stands for [language code](#).

Please, note, where QUALITY = SUPPLIER only the original product data as imported from a manufacturer's PIM is available, the respective data-sheet is not yet standardized by our editors. When standardized, the parameter changes to QUALITY = ICECAT.

The language-specific product data-files are found here:

`https://data.Icecat.biz/export/level4/<lang>/<product_id>.xml`

where <lang> stands for [language code](#) and <product_id> stands for Icecat product ID.

TIP: We advise the language-specific product content (Presentation_Value parameter) purely for the display of product data-sheets, not for search & compare. For that, we advise the standardized product content (the Value parameter) in both the /INT and the respective local language directories. For country-specific applications we advise LocalValue in stead of the international Value.

2.5 Languages supported and their codes

Currently, we support most world languages and European languages: in total more than 55 languages or locales (country-language combinations). Our intention is to support eventually all languages. [See our overview of supported languages and locales](#). If you feel that your language or the language that you need is missing, feel free to [contact us](#). Probably we can work something out.

In general, we follow the language codes as given by the [ISO 639-1 standard](#). However, in some cases, we choose the simpler two-character country codes. For example, when it's obvious to which language code it relates (e.g., BR for Brazilian-Portuguese, or US for US English).

2.6 Use Gzip/mod_deflate

As files become bigger and bigger, and the number of files is growing fast, we support the gzipping of all interface files. Instead of doing this per file individually, we applied gzipping to all interface files automatically (mod_deflate). To benefit from it, you have to add one parameter to your calls.

About mod_deflate: mod_deflate transports our interface files as compressed gzip data, but will show it transparently in its original format in modern browsers.

To benefit in your server scripts from gzip, you must use in any HTTP request this additional parameter:

Accept-Encoding: gzip

It will enforce gzipping!

Example:

```
GET /export/level4/EN/10.xml HTTP/1.1
```

Host: prf.Icecat.biz

Accept-Encoding: gzip

User-Agent: Firefox/1.0

2.7 Use of HTTP like FTP, and an example of C# script to download files

We often get questions like can we use FTP instead. Actually, this is really not necessary as http has very similar capabilities to FTP.

Here is example code in C# to download files. You can use it also in ASP.NET code. We tested it and it works ok:

```
public static Byte[] DownloadIcecatFile()
{
    string strDownloadURL
="https://data.Icecat.biz/export/freexml/EN/480237.xml";
    string strUser = "Your Login to Icecat Repository";
    string strPWD = "Your Password to Icecat Repository";
    // Creating an instance of a WebClient
    WebClient req = new WebClient();
    // Creating an instance of a credential cache,
    // and passing the username and password to it
    CredentialCache cache = new CredentialCache();
    cache.Add(new Uri(strDownloadURL), "Basic", new
    NetworkCredential(strUser, strPWD));
    req.Credentials = cache;
    Byte[] fileData = req.DownloadData(strDownloadURL);
    return fileData;
}
```

In Classic ASP, MSXML2.ServerXMLhttp can be used Some details are present [here](#)

3. Index files *.index.xml

3.1 Purpose

The purpose of the index files is to find the right product XML files for a given product. The matching between any portfolio and Icecat catalog has to be based on unique product identifiers and Icecat support few options:

- **Brand + Product code** – The “key” is always Brand name + Product code. The combination of these identifiers should give a perfect hit.
- **GTIN (EAN / UPC)** – These numerical identifiers are also available in XML index files at Icecat and can be used as a unique identifier for matching a product. Indication “IsApproved=1” means that we received a GTIN either from the manufacturer or from three independent distributor feeds. In all other cases, we tag a GTIN as “IsApproved=0”.
- **Brand + Distributor Product code** – Icecat Catalog has an extensive and dynamically updated database of Product code mappings between product identifiers that comes from different distributors all over the world and the original manufacturer product codes. It opens an ability to make a matching by using a distributor Product code (M_Prod_Id) in combination with a brand name.

3.2 Index Types

There are four types of index files in our XML-OCI:

files.index.xml or .csv – An index file with references to product data-sheets in Open Icecat and with references to all described product data-sheets in Full Icecat

Path:

<https://data.icecat.biz/export/level4/<lang>/files.index.xml.gz> or [files.index.csv.gz](https://data.icecat.biz/export/level4/<lang>/files.index.csv.gz)

daily.index.xml or .csv– a smaller index file with only

references to the new or changed product data-sheets of the respective day

Path:

https://data.icecat.biz/export/level4/<lang>/daily.index.xml.gz or csv.gz

on_market.index.xml or .csv – an index file with only the products that are currently on the market, as far as we can see that based on 100s of distributor and reseller price files

Path:

https://data.icecat.biz/export/level4/<lang>/on_market.index.xml.gz or csv.gz

Tip: use the on_market index file, in case that you think the full index file is too big for you to process or too inefficient. DISCLAIMER: if our monitor for your market is incomplete, the on_market index file is probably too incomplete for your purposes.

nobody.index.xml or .csv – an index file with the products that are or were on the market for which we only have basic market data, but no complete data-sheet.

Path:

https://data.icecat.biz/export/level4/<lang>/nobody.index.xml.gz or csv.gz

Tip: In case that you want to recategorize your products, for which we have no data-sheet (QUALITY=NOEDITOR), make use of the nobody index file

vertical.files.index.xml An index file with references to products that are in **files.index.xml** but limited to specific vertical. More information regarding vertical index files can be found [here](#)

Path:

https://data.icecat.biz/export/level4/<lang>/<verticalID>.vert

ical.files.index.xml.gz

Important note:

- `<lang>` stands for [language code](#)
- `<verticalID>` stands for the ID of a root category. You can find more information [here](#)
- **level4** – to access Full Icecat. In case of Open Icecat, use **freexml**.
- The structure of complete `files.index.xml` and `daily.index.xml` are identical for a user's convenience.

Files include the index information for each product and gives the path to the XML product file. Below is an example of a file tag in the index file:

```
- <ICECAT-interface xsi:noNamespaceSchemaLocation="http://data.icecat.biz/xsd/files.index.xsd" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
- <files.index Generated="20191101011028">
- <file Limited="No" Date_Added="20050715000000" HighPicHeight="1719" HighPicWidth="3000" HighPicSize="1313386"
HighPic="http://images.icecat.biz/img/gallery/39118_6529493415.jpg" Product_View="52587" Model_Name="Adaptec SCSI RAID 2120S Card" On_Market="1"
Catid="175" Prod_ID="AA850A" Supplier_id="1" Quality="SUPPLIER" Updated="20191031005351" Product_ID="39118"
path="export/freexml.int/INT/39118.xml">
- <EAN_UPCS>
<EAN_UPC IsApproved="1" Value="0808736496339"/>
</EAN_UPCS>
- <Country_Markets>
<Country_Market Value="BE"/>
<Country_Market Value="US"/>
</Country_Markets>
</file>
</files.index>
</ICECAT-interface>
```

The **On_Market** attribute indicates that a product is still on the market (`On_Market="1"`) or not seen on the market anymore (`On_Market="0"`).

Per product, Icecat provides also the GTIN (EAN or UPC) codes, used for logistical purposes. It is possible that there are multiple GTINs (EANs or UPCs), as this varies with packaging or importers.

Further, we provide the **Product code** variants, used in the market, in a sub-list (`M_Prod_ID`).

Finally, the `<Country_Market Value="US"/>` indicates that we see the product at the moment in the catalogs of US channel partners. This tag can be useful to limit your view on the index file, in case you don't have distributor imports to do

that.

The **Model_Name** attribute contains the product name. The **Product_View** attribute indicates how many times the current product is requested.

We refresh **files.index.xml** and **daily.index.xml** every day. You can use **daily.index.xml** to update only the data in your local database that has changed or is new in the Icecat database. **files.index.xml**, you can use the first time for a full import of needed product information of active data-sheets for Open Icecat users and all existing data-sheets for Full Icecat users, and for the regular analysis of coverage of your product database.

Historic and obsolete products can be downloaded via the real-time interface.

TIP 1: download ONLY the xml files that you actually need for your shop or application by using a daily catalog export from your ERP or shop (or actually the daily imports from your distributors/suppliers) as a filter. It is useless to import all the global product data files if you only operate in one geographic area or have an assortment limited to a certain category.

TIP 2: check the timestamps to only download files that have changed or check only for new files, to improve update performance cycles.

TIP 3: the daily index file also includes the list of product codes that are removed the day before (QUALITY=REMOVED). We remove product data-sheets, for example, when editors map them away. You can use it for cleansing your catalog.

3.2 *.index.xml DTD

The latest version of the DTD is [here](#)

Each product has its own data file in XML format. Its location is defined by the attribute "path" in the *.index.xml.gz. The file content includes all the available product information for the respective product.

The "Prod_ID" attribute is a manufacturer's unique identifier for a product, often called Brand Product Code (Manufacturer Part Number, code de fabricant, Produkt-Kode, artikelnummer, etc). In combination with the "supplier_id" (i.e., the brand identifier) it is the unique key to select a product's XML file via Icecat's internal identifier ("Product_id").

M_Prod_ID consists of one or more manufacturer product code(s) that are present in distributor or partner feeds but are mapped to the original (correct) Prod_ID.

The EAN_UPC sub-list lists the GTIN codes (EAN or UPC) that refer to this product. There can be multiple codes, as these are logistical codes depending on packaging types and geography.

On_Market (1=Yes, 0=No) indicates whether Icecat sees a product somewhere on the market or not. The Country_Market lists the individual markets (countries), where Icecat sees that the product is present. This indication can be used to limit the view on our index file.

DISCLAIMER: Our market view is always imperfect as we depend on the data of connected channel partners and distributors.

Catid is Icecat's internal category identifier. For example Catid="151" refers to Notebooks. For every category there is a second, external, category identifier based on [UNSPSC](#). In the reference files or the product XML the meaning of categories can be found.

"Quality" attribute values:

SUPPLIER – This content is received from a brand's PIM or

entered manually by a brand editor via the [Icecat PIM](#), and is not yet standardized by an Icecat editor. The language-specific directories are likely to contain the full (unstandardized) data-sheet.

ICECAT – This content is entered and/or standardized by Icecat editors. Such standardized data is present in the INT directory *and* the language-specific directories.

NOEDITOR – The content is received from a merchant (in most cases one of the 100s of distributors we are daily “polling”) and may be parsed. Editors haven’t described this product yet. Icecat doesn’t export the NOEDITOR data in XML to 3rd parties.

4. Additional data

4.1 Brand name mapping data

To help you with matching distributor data to the Icecat rich content, we are publishing the mappings of used variants of manufacturer names to the Icecat Supplier_ID

You can find this file in your repository, named `supplier_mapping.xml`.

- Open Icecat:
`http://data.icecat.biz/export/freexml/<lang>/supplier_mapping.xml`
- Full icecat:
`http://data.icecat.biz/export/level4/<lang>/supplier_mapping.xml`

Where `<lang>` stands for [language code](#)

Within this file, you’ll find the match between different manufacturer name variations and the original manufacturer name. The format is self-explanatory. The DTD for the message format is available [here](#).

4.2 Manufacturer part number mappings

Different distributors often produce different manufacturer part numbers (MPN) for the same product.

To help you correct the MPNs from different distributors and to help you to get the best coverage, we are publishing the available MPN mappings to the official MPN. In every repository directory, the file with product mappings is published in the index files (files.index.xml, etc.).

OBSOLETE METHOD product_mapping.xml:

INT/product_mapping.xml

EN/product_mapping.xml

etc...

Note: We advise not to use product_mapping.xml files anymore as it has an obsolete structure. All product mapping data is already present in the XML index files.

4.3 References

In product XML feeds, you will find a lot of structures, which are included as references in the product data files, e.g. categories, features, measures (units), etc.

The reference files are present in the /refs/ subdirectory. For example, for Full Icecat, at <https://data.Icecat.biz/export/level4/refs/> and for Open Icecat at <https://data.Icecat.biz/export/freexml/refs/>

The included files (entities) are:

- CampaignsList.xml
- CategoriesList.xml.gz
- CategoryFeatureIntervalsList.xml
- CategoryFeaturesList.xml.gz

- DistributorList.xml.gz
- FeatureGroupsList.xml.gz
- FeatureLogosList.xml.gz
- FeatureValuesVocabularyList.xml.gz (translations of certain frequent feature values)
- FeaturesList.xml.gz
- LanguageList.xml.gz
- LogisticsDataList.xml
- MeasuresList.xml.gz
- RelationsList.xml
- SupplierProductFamiliesListRequest.xml.gz
- SuppliersList.xml.gz

Almost all files are present in Gzipped format. The typical use of the files is in combination with data from the INT (international) directory, not the localized directories as there the language-specific values are already automatically applied to the product XML files

4.3.1 Campaigns list

Brand products can have campaigns for specific period. CampaignsList.xml has the list of all assigned campaigns.

Example:

```
- <ICECAT-interface>
- <Campaigns>
- <Campaign LandingPage="" CountryCodes="NL" Country="Netherlands" Updated="2009-11-26 17:41:01" EndDate="1261177199" StartDate="1259535600"
Name="Stars in Business Deals" User_ID="5" ID="17">
  <Title>HP Stars in Business Deals</Title>
  - <Motivation>
  - <![CDATA[
    Profiteer tot en met 18 december 2009 van de Stars in Business deals en ontvang nu tijdelijk bij de HP ProBook 4510s notebook pc 3 HP accessoires cadeau ter wa
    van € 70,- exclusief BTW: HP notebook tas, HP reismuis, McAfee beveiligingssoftware (18 maanden abonnement)

    Deze aanbieding geldt alleen indien u het bundel artikelnummer BVQ495EA1 bestelt.
  ]]>
  </Motivation>
- <ImagesList>
  <Image ID="17" ThumbPic="http://images.icecat.biz/img/campaign_thumbs/17-2776.jpg" LogoPic="http://images.icecat.biz/img/campaign/17-
  2776.jpg"/>
  </ImagesList>
- <ProductsList>
  <Product Name="4710s" ID="3797412" Product_View="0" Clicks="0" Link="" Vendor="HP" ProdId="VQ495EA#ABH"/>
  <Product Name="ProBook 4710s Notebook PC Bundle" ID="3887084" Product_View="0" Clicks="0" Link="" Vendor="HP" ProdId="BVQ495EA1"/>
  </ProductsList>
</Campaign>
</Campaigns>
</ICECAT-interface>
```

4.3.2 Categories List

This chunk provides information on Icecat categories. Each category may be either searchable or not. Searchable

categories may be used for product lookup by product feature values, as Icecat editors systematically maintain data integrity to allow smart searches.

Searchable="1": This category may be used for product lookup in product list lookup request

Searchable="0": This category is not made searchable (in our own product finder tools)

"Score" attribute in the response reflects the category usage statistic. The higher number means the higher the usage level. For example:

```
- <CategoriesList>
- <Category Visible="0" UNCATID="43160000" ThumbPic="" Searchable="0" Score="114668888" LowPic="" ID="2">
- <Versions>
  <UNSPSC date_added="2019-02-07 09:26:48" version="20.0601" code="43230000"/>
</Versions>
<Description ID="548795" langid="1" Value="Instructions for a computer's processor to perform specific operations e.g. system software such as Windows and iOS, application software such as internet browsers and apps."/>
<Keywords ID="331" langid="1" Value=""/>
<Name ID="3727364" langid="1" Value="Software"/>
- <ParentCategory ID="2833">
  - <Names>
    <Name ID="3729373" langid="1" Value="Computers & Electronics"/>
  </Names>
</ParentCategory>
</Category>
</CategoriesList>
```

4.3.3 Category feature list request

This chunk provides information about features that are assigned to every single category and which are used for describing products in the category.

Each searchable feature will have LimitDirection attribute defined, which will give advice for finding a "better" feature value, either < or >. E.g. for feature "Hard disk capacity" it would be > relation, and for the feature "Write seek" it would be < relation.

LimitDirection="0": The relation is undefined

LimitDirection="1": The relation is <

LimitDirection="2": The relation is >

LimitDirection="3": The relation is =

Class="0": Key feature

Class="1": Extra feature – tech details

Possible feature values may be restricted to a limited set of values. In that case possible values for the combination Category-Feature are listed in container RestrictedValue.

4.3.4 Features list

Example:

```
- <FeaturesList>
- <Feature Type="numerical" ID="5" DefaultDisplayUnit="0" Class="0">
- <Descriptions>
  <Description ID="577544" langid="0">The clock rate is the fundamental rate in cycles per second (measured in hertz) at which a computer performs its
  most basic operations such as adding two numbers. There are more factors</Description>
</Descriptions>
- <Measure ID="18" Sign="MHz">
- <Signs>
  <Sign ID="9" langid="1">MHz</Sign>
</Signs>
</Measure>
- <Names>
  <Name ID="1291" langid="1">Processor frequency</Name>
</Names>
- <RestrictedValues ValueSorting="0">
  <RestrictedValue/>
</RestrictedValues>
</Feature>
</FeaturesList>
```

4.3.5 Language list

Example:

```
- <LanguageList>
- <Language Sid="2" ShortCode="EN" ID="1" Code="english">
- <Countries>
  <Country ID="7" Code="GB" System_Of_Measurement="metric"/>
  <Country ID="69" Code="CA" System_Of_Measurement="metric"/>
  <Country ID="39" Code="AU" System_Of_Measurement="metric"/>
  <Country ID="101" Code="GI" System_Of_Measurement="metric"/>
  <Country ID="21" Code="IE" System_Of_Measurement="metric"/>
  <Country ID="242" Code="IM" System_Of_Measurement="metric"/>
  <Country ID="171" Code="NZ" System_Of_Measurement="metric"/>
</Countries>
  <Name ID="1" langid="1" Value="English"/>
</Language>
</LanguageList>
```

4.3.6 Measure list (units)

Example:

```

- <MeasuresList>
- <Measure ID="57">
  <Descriptions/>
  <!-- This is self closable tag which means there are no descriptions available-->
  - <Names>
    <Name ID="2415" langid="1">Gigabyte per hour</Name>
  </Names>
  <Sign>GB/h</Sign>
  - <Signs>
    <Sign ID="40" langid="1">GB/h</Sign>
  </Signs>
</Measure>
<!--Another example-->
- <Measure ID="71">
  - <Descriptions>
    <Description ID="1533" langid="1">The lux is the SI unit of illuminance and luminous emittance. It is used in photometry as a measure of the intensity, as perceived by the human eye, of light that hits or passes through a surface.</Description>
  </Descriptions>
  - <Names>
    <Name ID="5071" langid="1">lux</Name>
  </Names>
  <Sign>lx</Sign>
  - <Signs>
    <Sign ID="54" langid="1">lx</Sign>
  </Signs>
</Measure>
</MeasuresList>

```

4.3.7 Relations list

Icecat has dynamic relations (x-sells). They based on the product sets, manually defined. One product set relates to another one.

Example:

```

- <RelationGroup description="x-sells CaseLogic products" name="CaseLogic" ID="22">
  - <Relation name="notebooks (15.4)" ID="216">
    - <SourceIncludeRules>
      - <Rule ID="1273">
        <Supplier ID="148"/>
        <Prod_id value="PNC15"/>
      </Rule>
    </SourceIncludeRules>
    - <DestinationIncludeRules>
      - <Rule ID="901">
        <Category ID="151"/>
        - <Feature ID="944" exact="less">
          - <![CDATA[
            15.4
          ]]>
        </Feature>
        <Start_date value="2008-06-30"/>
        <End_date value="2009-12-31"/>
      </Rule>
    </DestinationIncludeRules>
    - <DestinationExcludeRules>
      - <Rule ID="5141">
        <Supplier ID="292"/>
      </Rule>
    </DestinationExcludeRules>
  </Relation>
</RelationGroup>

```

4.3.8 Supplier product families list request

This chunk provides the list of supplier product families.

Each product family may have information about it's Name, Description in different languages, and category.

4.3.9 Supplier list request (manufacturers)

From Supplier list users can identify if brand belongs to Full or Open Icecat.

Example:

```
- <SuppliersList>
- <Supplier Sponsor="1" Name="HP" LogoOriginalSize="31133"
LogoOriginal="http://images.icecat.biz/img/brand/original/1_9a451c84f85c44d78ae79a1712706fe9.jpg" LogoHighPicSize="31058" LogoHighPicWidth="200"
LogoHighPicHeight="200" LogoHighPic="http://images.icecat.biz/img/brand/high/1_43ebe562b309447dbbf377fd5adf41e3.jpg" LogoMediumPicSize="0"
LogoMediumPicWidth="0" LogoMediumPicHeight="0" LogoMediumPic="" LogoLowSize="31058" LogoLowPicWidth="200" LogoLowPicHeight="200"
LogoLowPic="http://images.icecat.biz/img/brand/low/1_577ba75b274e4917bf27f4ff5fc609be.jpg" LogoPicSize="10201" LogoPicWidth="75" LogoPicHeight="75"
LogoPic="http://images.icecat.biz/img/brand/thumb/1_91e0e5b25690437cb026012c624a00ad.jpg" ID="1">
- <Names>
<Name Name="HP" langid="1"/>
</Names>
</Supplier>
</SuppliersList>
```

4.3.10 Popularity of products

We log all Icecat product requests (real-time requests by end-users and xml requests). This data gives a product popularity indication, useful for sorting products and analyzing market trends. This popularity data is [daily published](#)

4.3.11 Standardized Product Summary Description

In response to questions from different clients, we have created a Standardized Product Summary Description. The local versions are here:

- https://data.icecat.biz/export/level4/<lang>/product_overview.txt
- https://data.icecat.biz/export/level4/<lang>/product_overview.txt.gz

Where <lang> stands for the [language code](#). Column 1 is the Icecat ID, and column 2 and 3 give a short and a long standardized product summary description.

The short summary of column 2 is created as follows:

<brand name> + <Model name> + <product family, if present> + <key feature value 1..5 + unit>

The extended summary of column 3 is created as follows:

```
<brand name> + <Model name> + <product family, if present> +  
<name feature group 1> + <related key feature values + units>  
<name feature group ..> + <related key feature values + units>  
<name feature group n> + <related key feature values + units>
```

TIP: Think about the guarantees that you get from your suppliers (distributors), based on errors made in their product descriptions. It may still be smart to make use of these supplier (distributor) texts in the ordering process for this reason.

5. Product XML data file

5.1 Repository file DTD

The XML repository files comply to the standard Icecat XML response DTD, which is located [here](#):

Please, note that the tag “No=” (example: No=”100090”) is a Priority indicator. The higher the number the more important the feature or feature group is considered to be for buyer orientation. Thus, we advise you to sort features and feature groups by priority, to get a more customer-friendly user presentation.

Product code is a deprecated field, earlier it used as product response status. Now, product code always equals 1.

5.2 XML Schema definitions

Each Icecat XML has its XSD definition, you can see it as 2 mandatory attributes in the root XML tag.

You can find the basic information about XML Schema [here](#). Icecat XSD sources are located at <https://data.Icecat.biz/xsd/>. They can be used for Icecat XMLs validation.

5.3. Example product XML

You can check Icecat product XML example [here](#) for EN local

```
<!-- source: Icecat.biz 2019 -->
<ICECAT-interface xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:noNamespaceSchemaLocation="http://data.icecat.biz/xsd/ICECAT-interface_response.xsd">
  <Product Code="1" HighPic="http://images.icecat.biz/img/gallery/img_357655_high_1482430439_5085_3788.jpg" HighPicHeight="1795" HighPicSize="382788" HighPicWidth="1599"
  ID="357655" LowPic="http://images.icecat.biz/img/gallery_lows/img_357655_low_1482430440_5532_3788.jpg" LowPicHeight="200" LowPicSize="21384" LowPicWidth="178" Name="Toaster
  HD2618/00" Pic500x500="http://images.icecat.biz/img/gallery_mediums/img_357655_medium_1482430439_751_3788.jpg" Pic500x500Height="500" Pic500x500Size="98573"
  Pic500x500Width="445" Prod_id="HD2618/00" Quality="ICECAT" ReleaseDate="2006-09-25"
  ThumbPic="http://images.icecat.biz/img/gallery_thumbs/img_357655_thumb_1482430441_507_3788.jpg" ThumbPicSize="1993" Title="Philips Aluminium Collection Toaster HD2618/00">
  <CategoryFeatureGroup ID="6490" No="0">
    <FeatureGroup ID="5">
      <Name ID="4867" langid="1" Value="Display"/>
    </FeatureGroup>
  </CategoryFeatureGroup>
  <CategoryFeatureGroup ID="1919" No="11">
    <FeatureGroup ID="14">
      <Name ID="5023" langid="1" Value="Weight & dimensions"/>
    </FeatureGroup>
  </CategoryFeatureGroup>
  <CategoryFeatureGroup ID="1921" No="55">
    <FeatureGroup ID="27">
      <Name ID="5049" langid="1" Value="Power"/>
    </FeatureGroup>
  </CategoryFeatureGroup>
  <CategoryFeatureGroup ID="1922" No="80">
    <FeatureGroup ID="0">
      <Name ID="5073" langid="1" Value="Technical details"/>
    </FeatureGroup>
  </CategoryFeatureGroup>
  <CategoryFeatureGroup ID="1920" No="66">
    <FeatureGroup ID="36">
      <Name ID="5181" langid="1" Value="Colour"/>
    </FeatureGroup>
  </CategoryFeatureGroup>
  <CategoryFeatureGroup ID="28326" No="0">
    <FeatureGroup ID="116">
      <Name ID="78852" langid="1" Value="Packaging content"/>
    </FeatureGroup>
  </CategoryFeatureGroup>
</ICECAT-interface>
```

Notes:

- **Presentation_Value** is the processed value as can be displayed in a data-sheet. It is based on the international (but localized) feature value with the localized measure unit and localized decimal separator (comma or dot depending on the country) or – if the international value is absent – on the language-specific value. Also, it contains automatically transformed unit (for e.g. “665 mm is being transformed to more friendly “66,5 cm” or “66.5 cm” depending on the country).
- **LocalValue** is a local transformation of our international Value attribute. It applies the local dictionary to Value and transforms values according to local standards. As in Value attribute LocalValue contains value of the feature and measurement unit as a separate attributes.

5.4. Other asset tags: 3D, bullet points, and Product Variants

[Icecat supports 3D objects and Product Variants.](#)

[Bullet points are available through a separate tag.](#)

See for a full overview: [Digital Asset Types as Represented in Icecat's Open Catalog Interfaces.](#)

6. Possible Error Messages

You can see all the error messages that you can get while using XML files from Icecat via the following [link](#)