OPC Marketplace Guideline

Release 1.00.00

2022-05-13
OPC FOUNDATION

OPC Marketplace
FOREWORD

This document describes the Marketplace on the OPC Foundation Website and the usage of such. It is intended for Marketing Representatives and Product Managers.

Copyright © 2022, OPC Foundation, Inc.

Revision Table

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>Feb 02, 2022</td>
<td>First version</td>
</tr>
</tbody>
</table>
OPC Marketplace

1. Purpose and Scope

This document describes the usage of the OPC Marketplace for a OPC Foundation member. The document assumes that the reader of this document has the role of a Marketing Representative or Product Manager for this company on the OPC Foundation Website.

2. OPC Marketplace Backend for vendors

The backend for our member companies is providing the mechanisms and tools to manage the products associated with company. This includes adding new, editing existing and deleting obsoleted products.

Finding the backend

The marketplace backend or management interface is only accessible by certain user roles. The roles having access are product owners and marketing representatives. The login link can be found in the top right corner on the OPC Foundation website.
After successfully logging in with a user having the Product Owner or Marketing Representative role, an “Admin” link will be appearing on the top right corner. This link brings the user to the company management system where, depending on the roles of the user, company details but also the products can be managed. The Marketplace can be found by clicking on the *Manage Products* button.
Product Overview

The initial screen being displayed is the product overview. It lists the specified product information to provide feedback about the completeness to the vendors and an overall status.
Adding new products

New products can be entered by clicking on the *Add new product manually* button at the end of the page. This opens a new page with an empty product entry form, where all necessary information can be provided.

General product information

The first set of information are general information about the product. All fields have a tooltip with further information about the requested information. With a mouse over the question mark the tooltip is being displayed. The marketplace allows to provide product information in multiple languages. For further information about the languages please check the *Multiple Languages* section.
An important detail is the *product release date* which allows to enter product details before the information is shared with the public. Only once this date is passed, the product will show up in the list of available products.

**Markets and industries**
While some products are being created independent from certain markets and industries others are explicitly built for such. The Marketplace allows vendors to select specific markets a product applies to by selecting an option from the dropdown. If the product is market independent, the option *All Markets* needs to be selected. Visitors of the marketplace have the opportunity to filter the provided products to limit results being displayed. This filter will display products exactly matching the selected industry before displaying the *All Markets* products. We encourage the vendors to select the applicable markets rather than using the *All Markets* option, to have the product displayed earlier in the list.

**Categories and subcategories**
Products are being categorized by providing a list of defined categories vendors can select from. Those categories can be nested to allow a further detailed categorization of the products in the marketplace. A product can only be in one category. If the product can be used in multiple subcategories, please select the most appropriate parent. E.g., a *Logic Controller* which can be used as *PLC* and *DCS* should select the parent category *Logic Controller*. 
Interfaces
OPC UA has many different core functionalities. In the Marketplace those core functionalities are described as interfaces. A product can support any number and combination of interfaces.

Profiles and Facets
After selecting the supported interfaces, tabs for those will be displayed. In OPC UA features are being described in so called profiles and facets. The general expectation is that every product is matching a profile defined by OPC UA. This is also being considered the case for not hardware-based products like services or tools. In case of services like e.g., training or testing services it is expected to indicate the supported list of profiles which are covered by the service.
Clicking inside a field will open a selection dialog helping with the selection of the supported profiles. On the left-hand side first the supporting specification or specification group needs to be selected. In case of the application profiles this is one of the OPC UA versions. A product is being built against a specific version of the OPC UA specification which also identifies the set of profiles being available in this version. This selection will then display any available profiles for the selected specification version. A product can support any number of profiles by selecting multiple entries. The filter at the top of the field allows easy filtering to find the desired profiles quicker.
Save product information
The Marketplace addresses the fact, that product owners may need to collect additional information from the product team to provide all necessary information.

The *Save Draft* option does allow to store any level of entered information without making the information publicly available. After clicking the button, the Marketplace will provide a summary of missing required information but will still save the entered information.

*Save & Publish* will also validate the entered information but requires all required information to be entered. After this, the product will be available to all visitors of the Marketplace as the *Product Release Date* has been passed.

Requesting new Market/Industry
The OPC Foundation knows that our members and their products are being used in a big variety of markets and industries. The OPC Marketplace provides an initial list of industries where the OPC UA adoption is already on a very high level and products are being provided by our member companies. New markets and industries can be requested at the bottom of the list. Requesting a new market will send a notification to the OPC Foundation officials who will review the request and decide whether the requested option is being added. In the meantime, this option is being selected for this product while being marked as [DRAFT].
Requesting new Category or subcategory

The OPC Foundation knows that our members and their products are being used in a big variety of areas. The OPC Marketplace provides an initial list of categories where the OPC UA adoption is already on a very high level and products are being provided by our member companies. New categories and subcategories can be requested at the bottom of the list. Requesting a new category will send a notification to the OPC Foundation officials who will review the request and decide whether the requested option is being added. In the meantime, this option is being selected for this product while being marked as [DRAFT].
Multiple Languages

OPC technology is successful in different regions of the world. With OPC UA having become a national standard in multiple countries like Japan and China, the Marketplace supports the same languages as the OPC Foundation website. As not all fields have language specific content, only specific fields are available to provide language depended information. If the visitor of the Marketplace is looking at a language where not all information is provided, it will default to the English texts. The English texts are always expected to be entered.
Existing products

Modifying product entry
During the lifetime of a product details will change and new features are being implemented. This is even more true when integrating an evolving standard like OPC UA which continues to be enhanced and extended to cover new use-cases and state-of-the-art technologies. In order to modify details for your existing products, just navigate to the OPC Marketplace backend and search for the product to be modified. On the right-hand side, you’ll find two actions where the pencil symbol (highlighted below) is opening the product modification form, where all details for this product can be updated.
Deleting a product
Over the years products may be obsoleted or replaced by others. For such cases the OPC Marketplace also allows to delete products. On the right-hand side, you’ll find two actions where the “x” (highlighted below) is removing the product from the OPC Marketplace.

After clicking the symbol for deleting a product, a confirmation box will appear at the top of the browser to confirm removing the product from the OPC Marketplace.

Important: Once the deletion is confirmed, this action cannot be undone!
3. Certification Status

Certified products are specially highlighted in the OPC Marketplace. With displaying the certification state and its detailed information prominently, the OPC Foundation helps vendors to indicate their great commitment to the OPC technology. Because the OPC Foundation is encouraging end-users to choose certified products for a positive user experience, this information is provided directly in the product view.
Provided information

The OPC Marketplace displays the scope of the certification, allowing end-users to easily determine if their desired functionality has been part of certification testing.

Certification icons

Certified
The green checkmark indicates that the product is currently certified and matches the OPC Foundation expectations on quality and usability. The OPC Foundation recommends only to use such marked products in productive environments.

Expired
The stylized clock in the icon is indicating, that the product has been certified in the past and has been matching the quality and usability expectations of the OPC Foundation at the time of certification. But the product has not been re-certified to extend the certification state.
Not certified
Products which have not been certified ever have this indicated by a light gray cross. Those products have never successfully passed testing in a certification test lab of the OPC Foundation and therefore the OPC Foundation cannot provide any notion of the quality or usability of the product.

Numbers of certifications
The number in the top right corner is indicating the number of certifications associated with this product. A high number therefore indicates that this product is available to the market for a longer duration and has been recertified multiple times. This indicates not only a high level of quality and usability but also a strong commitment of the vendor to the OPC UA technology.

Entering certification information
Certification information is protected information and therefore will be entered by OPC Foundation officials after successful certification of a product. If you’ll find a mistake in the information shown at your product, please get in contact with compliance@opcfoundation.org.

4. OPC Marketplace View
The OPC Marketplace uses state of the art designs which adopt to the current browser and display size. With providing those different options, the OPC Foundation is sure to provide the best user experience for any platform you or the end users are utilizing for looking at the OPC Marketplace.
Views

Table

This table view provides a good overview for all users of the OPC Marketplace of the OPC UA ecosystem. With details about the products like the exact supported Application Profiles, categories of the product and certification information, the user gets all important information for a larger list of products on the first sight.

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>MEMBER</th>
<th>APPLICATION PROFILES</th>
<th>CATEGORY</th>
<th>SUBCATEGORY</th>
<th>CERTIFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>KingHistorian</td>
<td>WellinTech Co. Ltd.</td>
<td>UACore 1.03 Embedded UA Server Profile</td>
<td>Data Logger</td>
<td>Historian</td>
<td>3</td>
</tr>
<tr>
<td>Automation Runtime</td>
<td>B&amp;R Industrial Automation GmbH</td>
<td>UACore 1.04 Minimum UA Client Profile</td>
<td>Controller</td>
<td>PLC</td>
<td>3</td>
</tr>
<tr>
<td>SIMATIC NET OPC Server</td>
<td>Siemens AG</td>
<td>UACore 1.03 Embedded UA Server Profile</td>
<td>Gateway</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>IBH Link UA</td>
<td>IBHsoftec GmbH</td>
<td>UACore 1.03 Standard UA Server Profile</td>
<td>Gateway</td>
<td>Edge Devices</td>
<td>2</td>
</tr>
<tr>
<td>Controllers PFC100 &amp; PFC200</td>
<td>WAGO Kontakttechnik GmbH &amp; Co. KG</td>
<td>UACore 1.03 Embedded UA Server Profile</td>
<td>Controller</td>
<td>PLC</td>
<td>3</td>
</tr>
<tr>
<td>SIMATIC S7-1500 PLC Family</td>
<td>Siemens AG</td>
<td>UACore 1.04 Embedded 2017 UA Server Profile</td>
<td>Controller</td>
<td>PLC</td>
<td>3</td>
</tr>
</tbody>
</table>

It also allows to select the actual columns being displayed, so visitors can focus on what is important to them. The columns can be modified by clicking on “Column options” in the top right corner.
This will open a pop-up dialog where columns like the category, subcategory or the certified state can be hidden.

**Note:** When the display resolution or browser size is not big enough to show the table properly, the OPC Marketplace will automatically switch to the tile view discussed below.

With the expanding icon on the right-hand side this view allows to display information about the desire product in line while not losing the context and current filters.
Those inline product details include all the different information about a product including links to the product page and a direct link to the product on the company’s website. Very important information are also the details about the latest certification and the supported profiles. That information is being matched with each other so also on the profiles tab, you’ll find an indication of the certification state of the supported profiles.

Only the marked profiles have successfully been tested while others were not part of the latest certification. A full list of all previous certifications including all their certification scopes can be found when opening the product page. The history of certification is indicating the continues commitment of the company into the OPC UA technology and the desire of the vendor to provide the best quality to their customers.

The UA Capacities provides a mechanism to get a feeling for the quantity structures for the OPC UA technology in the product. Details like the maximum number of session or monitored items are important to end-users and can be indicated to them for the products.
Tiles
For smaller screens, like mobile phones or tablets, where a table view is not appropriate, the OPC Marketplace will automatically switch to a tile view. This view provides a good overview of the existing products and services without going into technical details. It is a great view to get a feeling for the OPC ecosystem and the committed companies.
Filters

When looking for products in such a long list of products, filters are an important mechanism. The OPC Marketplace allows different kind of filters to help finding products matching the desired feature set. With providing non-technical filters like the certification status, product categories and industries the product has been built for as well as the opportunity to filter based on technical requirements like the exact profiles needed, the OPC Marketplace provides all visitors what is needed.

Certified

This filter will reduce the list of products to only show products which are currently certified. In the OPC ecosystem certification is an optional step vendors can take. Because only certified products have proven that their quality and usability match the high expectations of the OPC Foundation, the OPC Foundation recommends only to use certified OPC products in your projects. This filter option can be found on the top right corner of the OPC Marketplace.

Categories

Filtering for categories of products is an important detail to find the desired kind of product. The OPC Marketplace is a very dynamic system while maintaining an intuitive usage. As a result, while products can specify subcategories with multiple levels, the filter listed here will only show categories, where a minimum of 5 products have been specified for the subcategories. If this limit is not met, only the parent category is being displayed and available for filtering.
Markets and Industries
Filtering for markets and industries are important due to different industry requirements. Filtering for Markets will show all products being specific to this market as well as all products which have been built market independent.

Application Profiles
This allows a generic filtering to find products which are either providing OPC UA data or consuming it without looking at the exact profile they are supporting.

UA Capabilities
This provides a generic filtering based on OPC use-cases to allow filters without the need to know the technical details on the exact desired profiles.
Transport
This allows a generic filtering to find products matching a certain architecture and transport.

More technical filters
The more technical filters are addressing the need of OPC UA experts and purchasing departments to look for products matching a specific list of profiles and facets. For those filters the OPC Marketplace knows about the profile hierarchy and will not only show products which have specified the exact profile but also profiles, which include the desired ones.
Search

The search option on the top right will allow to easily find products of a certain vendor or a specific product in the list. The available fields for the searching are the company name and product name of the products. All other fields are being omitted from the search.