FOCUS ONREAL DESIGN AUTOMATE THEREST

Microsoft Dynamics NAV – SOLIDWORKS integration

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CUSTOMTOOLS

NAV integration to SOLIDWORKS Plug-in
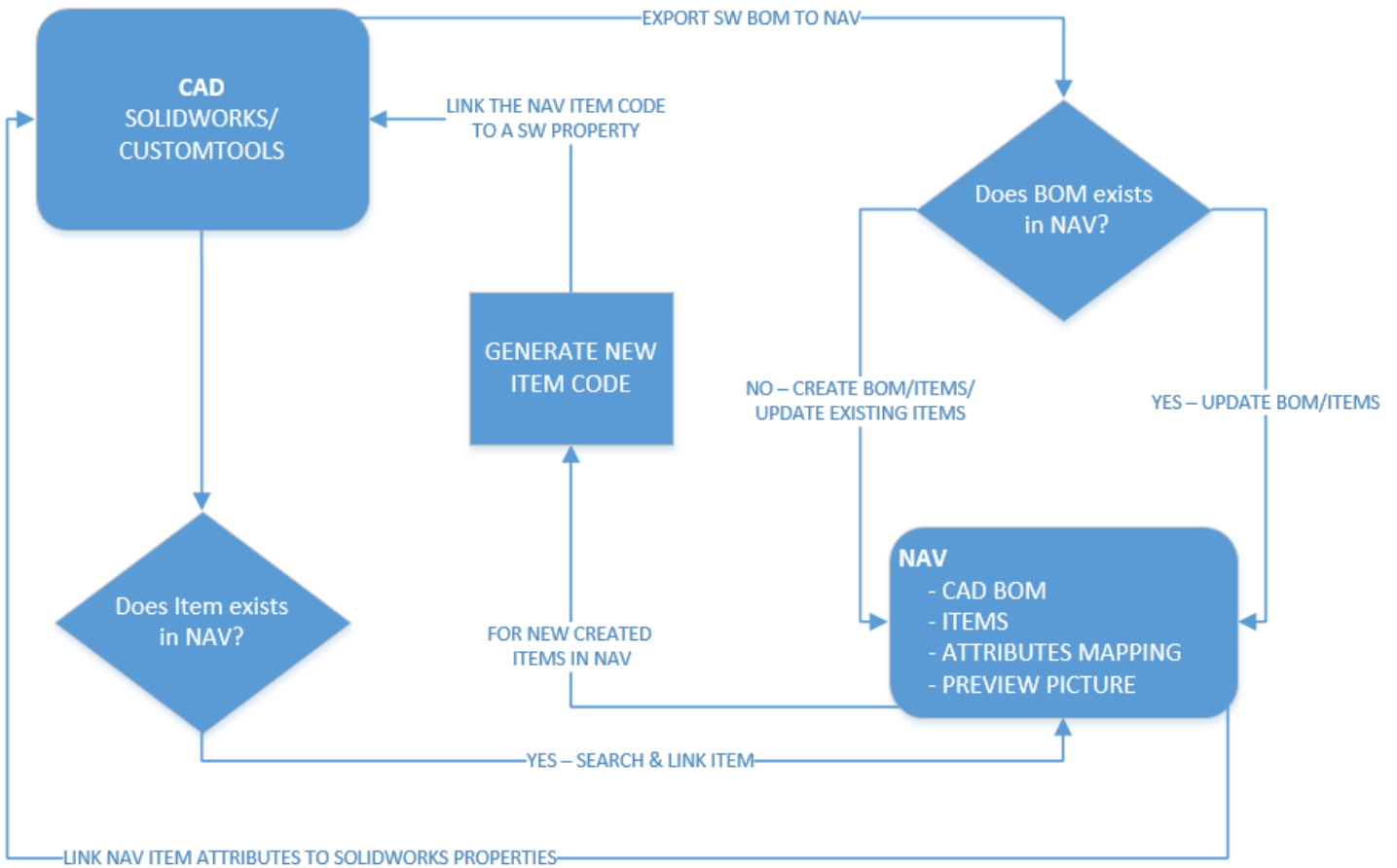
Requirements from NAV:

From NAV 2009 onward.

Features:

- Exporting data from SOLIDWORKS to NAV:
    - o Export your SOLIDWORKS BOM to NAV
    - o Create new items inside NAV
    - o Create new items in NAV when SOLIDWORKS files are revised
    - o Generate new item codes in NAV
    - o Mapping SOLIDWORKS properties to attributes of items in NAV
    - o Update existing BOMs and Items in NAV
    - o Adding SOLIDWORKS Document preview to NAV

- Importing data from NAV to SOLIDWORKS
    - o Search and link NAV item with SOLIDWORKS Custom Properties
    - o Possibilities to search data from multiple tables inside NAV
    - o Link content of your drop down in SOLIDWORKS with data retrieved from NAV

Communication diagram:

CAD
SOLIDWORKS/
CUSTOMTOOLS

EXPORT SW BOM TO NAV

LINK THE NAV ITEM CODE
TO A SW PROPERTY

Does BOM exists
in NAV?

GENERATE NEW
ITEM CODE

NO – CREATE BOM/ITEMS/
UPDATE EXISTING ITEMS

YES – UPDATE BOM/ITEMS

Does Item exists
in NAV?

NAV
- CAD BOM
- ITEMS
- ATTRIBUTES MAPPING
- PREVIEW PICTURE

FOR NEW CREATED
ITEMS IN NAV

YES – SEARCH & LINK ITEM

LINK NAV ITEM ATTRIBUTES TO SOLIDWORKS PROPERTIES

Exporting data from SOLIDWORKS to NAV

Creating BOMs and items inside NAV

CUSTOMTOOLS can be used to automate the creation of your SOLIDWORKS BOM and items inside NAV. The entire SOLDIWORKS BOM can be exported in 2 clicks to NAV. The information written into NAV can be mapped with your own SOLIDWORKS properties defined with CUSTOMTOOLS.

Benefits of using CUSTOMTOOLS:

- Can be customized based on customers' specifications
- Eliminate data entry errors
- Remove a lot of manual data entries
- Higher consistency between SOLIDWORKS data and NAV data
- Important time savings
- Higher data quality

Export your SOLIDWORKS BOM to NAV

1. SOLIDWORKS Assembly ready to be exported to NAV.
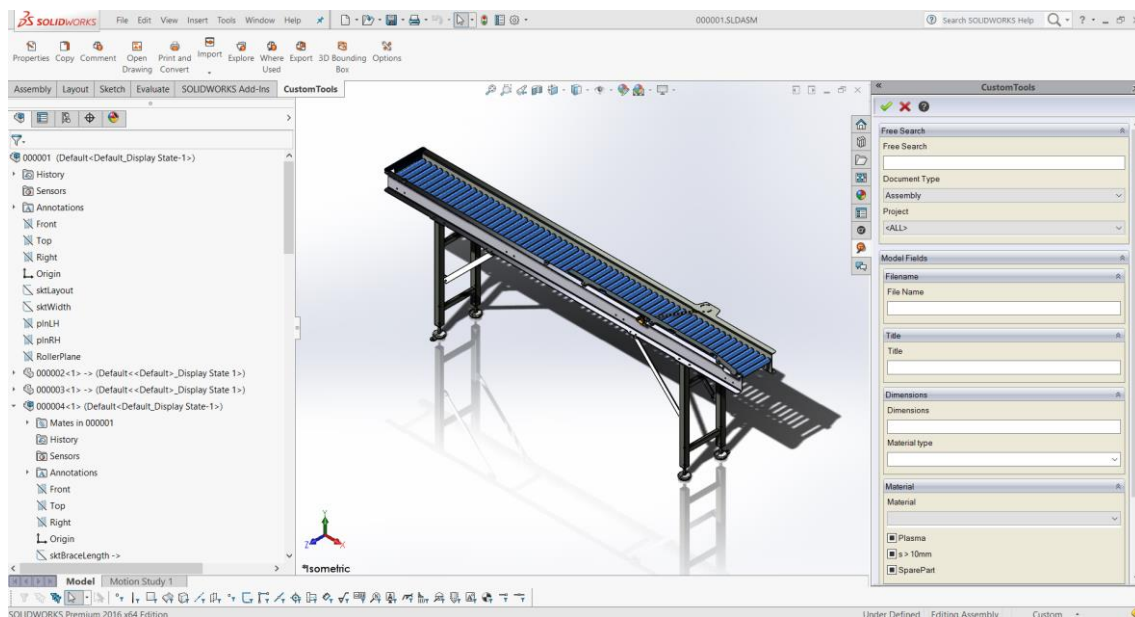
2. If you are using multiple companies in NAV, then CUSTOMTOOLS offers you the possibility to select the company where to perform the export (e.g. In this case, ATR Soft Oy has been selected).
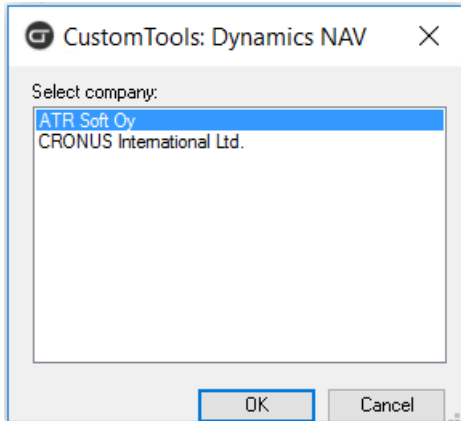
3. Information displayed to the SOLIDWORKS users before exporting the SOLIDWORKS BOM to NAV. Some data can be retrieved automatically from SOLIDWORKS (e.g. Quantity) and others are defined with the Custom properties in CUSTOMTOOLS (e.g. Item number, description). Also a color code can be used to retrieve the item status from NAV, in case items are created or updated in NAV.
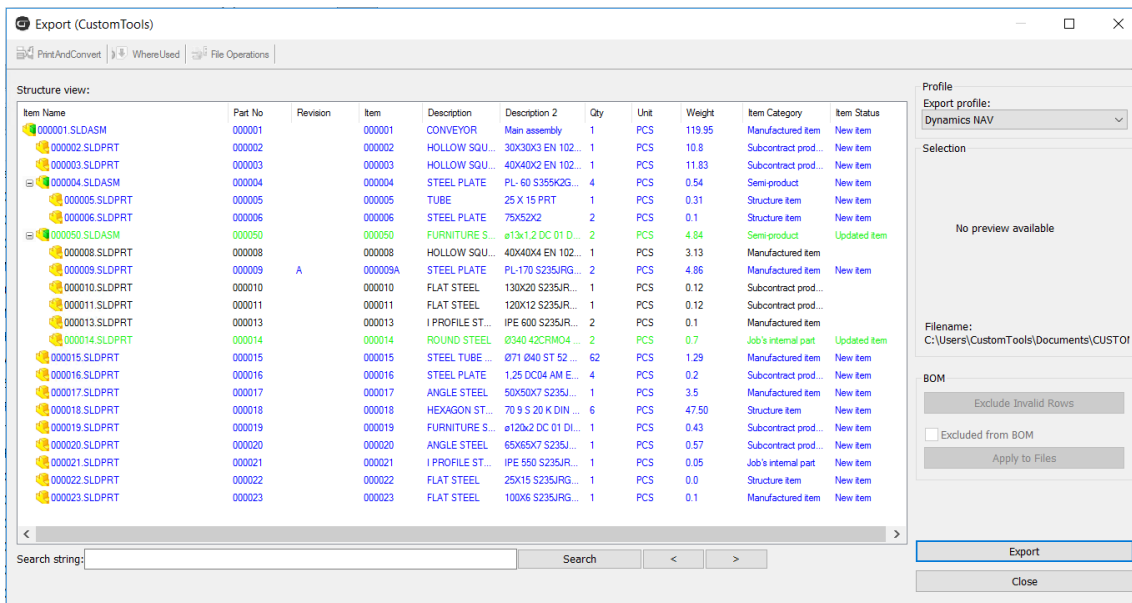
4. SOLIDWORKS BOM Exported to NAV. The BOMs are automatically added into NAV

5. BOM Structure inside NAV

Create new items inside NAV

With CUSTOMTOOLS the users have two different ways of creating new items inside NAV.

Typically, the creation of new items is done during the BOM Export. If an item does not exist, then CUSTOMTOOLS will automatically create it during the export. In that approach multiple items can be created at the same time in NAV. The Item code is generated inside NAV by using the NAV or CUSTOMTOOLS sequencing and sent back as a SOLIDWORKS property.

Items can also be created individually if a user exports an individual SOLIDWORKS part to NAV.

1. New items can be created in NAV during the BOM export to NAV or individually by using the same export dialog.

Create new items in NAV when SOLIDWORKS files is revised

As NAV does not support revision, if an item that already exists in NAV and that is already linked to a SOLIDWORKS file is revised in SOLIDWORKS then CUSTOMTOOLS will create a new item inside NAV. The new item created in NAV will associate the item number of the revised file with the revision number defined in your custom properties. In the Export dialog the revised item will appear as a new item.

Generate new item codes in NAV

Item numbers can be generated by using a CUSTOMTOOLS sequences or by retrieving the next available item numbers from NAV.

Mapping SOLIDWORKS properties to attributes of items in NAV

NAV item attributes can be automatically populated with SOLIDWORKS properties defined in CUSTOMTOOLS.

Update existing BOMs and Items in NAV

Visualize modified rows

In this example, rows marked as Green corresponds to Items or BOMs that already exist inside NAV but will be updated (e.g. If the description has been modified in SOLIDWORKS). Status in NAV can be retrieved from NAV (e.g. here as the items will be modified the Item status is Updated Item).

Visualize new rows

Rows marked as Blue corresponds to Items that do not exist yet inside NAV and will be created during the export to NAV. Status in NAV can be retrieved from NAV (e.g. here as the items will be created the Item status is New Item). NAV Items that have been revised in SOLIDWORKS are

marked as new items.

Visualize existing rows

Rows marked as Black corresponds to Items/BOMs that already exist inside NAV and that have not been modified in SOLIDWORKS.

CUSTOMTOOLS

Adding SOLIDWORKS Document preview to NAV

Depending on the type of NAV licenses that you are using we can insert a preview picture of the SOLIDWORKS part inside the NAV Item.
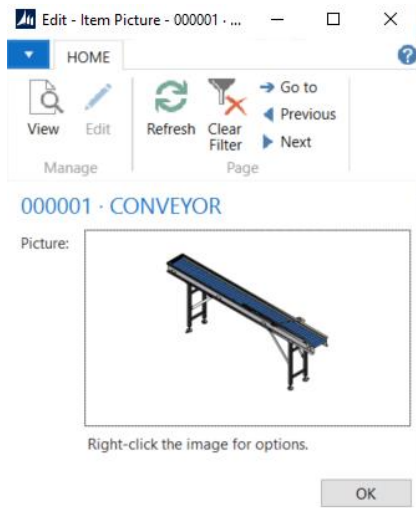
Importing data from NAV to SOLIDWORKS

Search and link NAV item with your SOLIDWORKS Custom Properties

In case an item already exists inside NAV, the SOLIDWORKS users can search for the corresponding NAV item directly from SOLIDWORKS by using CUSTOMTOOLS. CUSTOMTOOLS offers a live search in NAV from your custom properties. You can create your own NAV search groups in CUSTOMTOOLS. Search groups can be used to retrieve values from different columns of the same table in NAV.

Item's information from NAV can be linked or copied into the SOLIDWORKS properties. If information of a linked item is modified inside SOLIDWORKS (e.g. Description), then the information will be updated inside NAV during the export.
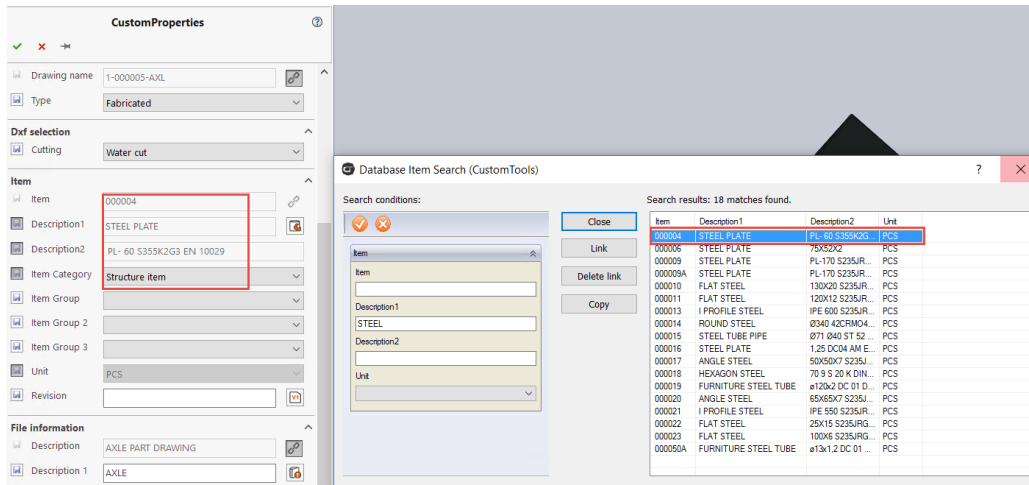
Possibilities to search data from multiple tables inside NAV

Custom properties of your SOLIDWORKS documents can be linked to different table inside NAV.

Allowing users to search and link NAV data to custom properties from different tables.

Link content of your drop down in SOLIDWORKS with data retrieved from NAV

Content available in the drop down menu of your custom properties can be linked to directly to drop down menu defined in NAV, enabling the users to access live data from NAV.