



AUCOTEC
Create Synergy – Connect Processes

Engineering Base

Potential Wizard

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1 About the Potential Wizard

The potential wizard can be used only if one of the following licenses is available:

- Engineering Base Cable Logic
- Engineering Base Cable Logic VOBES
- Engineering Base Cable Pro

It offers the functionality for optimally creating and editing potentials using name elements.

The generated potential terms can be graphically visualized in the diagram via potential tags. In the network context menu, either you select the menu item Auto potential tags or you place potential tags manually on connections.

Prerequisites

On the database level, the **device master data** must contain a specification catalog that includes a subfolder **Excel Worksheets** under the folder **Materials** that contains the xml files listed in the following. The specification catalog containing these files for the potential wizard must be specified in the project properties.

- potential_class.xml: with the available potential classes
- potential.xml: with the available potential designations
- potential_allocation.xml: with the available usage coordinates

The term created via the usage coordinates is just like the potential class and the potential selection part of the potential designation and is stored in the attribute Field of application. If the file "potential_allocation.xml" is not present, then as an alternative to the usage coordinates you can also use the "circuit diagram info" input to enter a diagram reference in the potential name and thereby to create unambiguous potential names.

The use of the diagram reference not only ensures the unambiguousness of potential names within a project but also keeps them when individual projects are merged to form a total project.

1.1 Defining potentials

You can use the **Potential Wizard** to create new potentials and to modify existing ones.

How to configure potentials

1. In the **Engineering Base Explorer**, select a potential in the folder **Functions** or the folder **Functions**.
2. Click on one of the context menus **Potential Wizard** or **Select Assistant**, select **Potential Wizard** and click on **Start**.

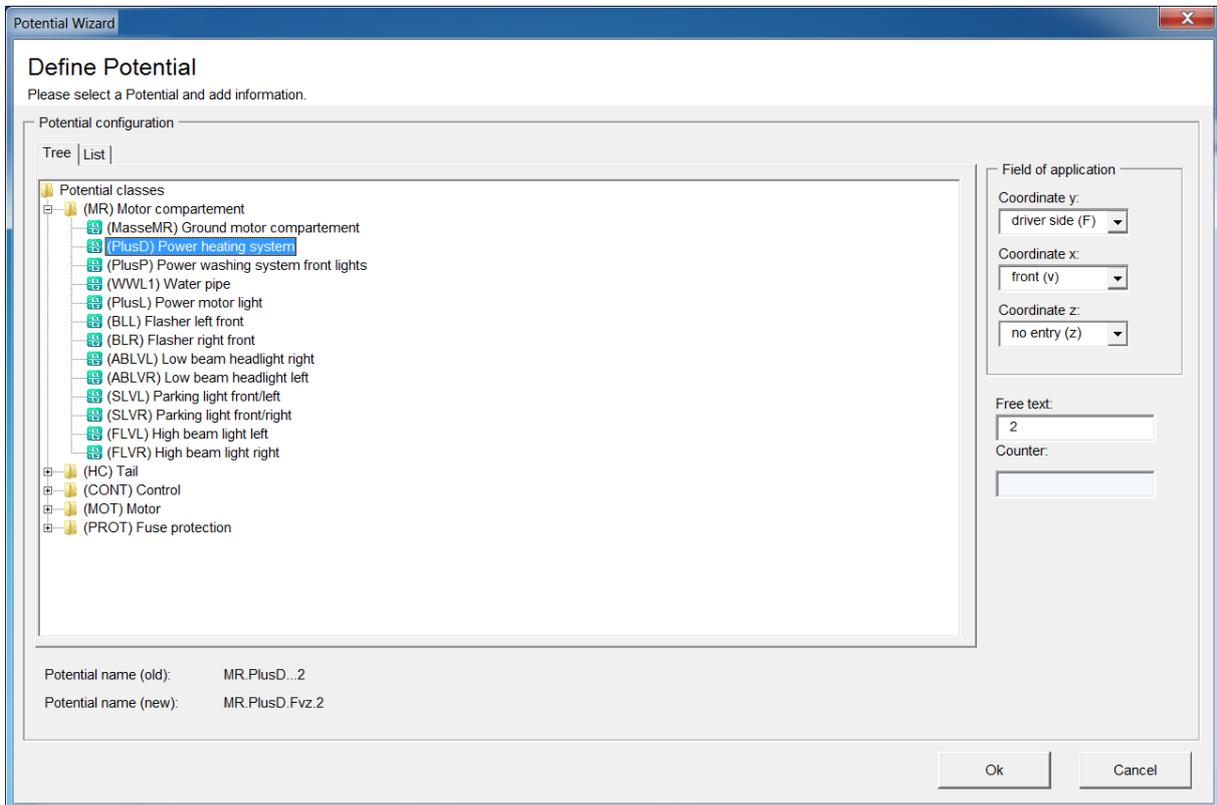
The wizard is started, and the dialog Potential configuration is opened. For displaying potentials, you have the choice between a tree and a list structure.

3. Click on **Ok** to close the dialog and to accept the entries or click on **Cancel** to discard them.

1.1.1 Potential display as tree structure

Use the tag **Tree** to display the potentials as tree structure.

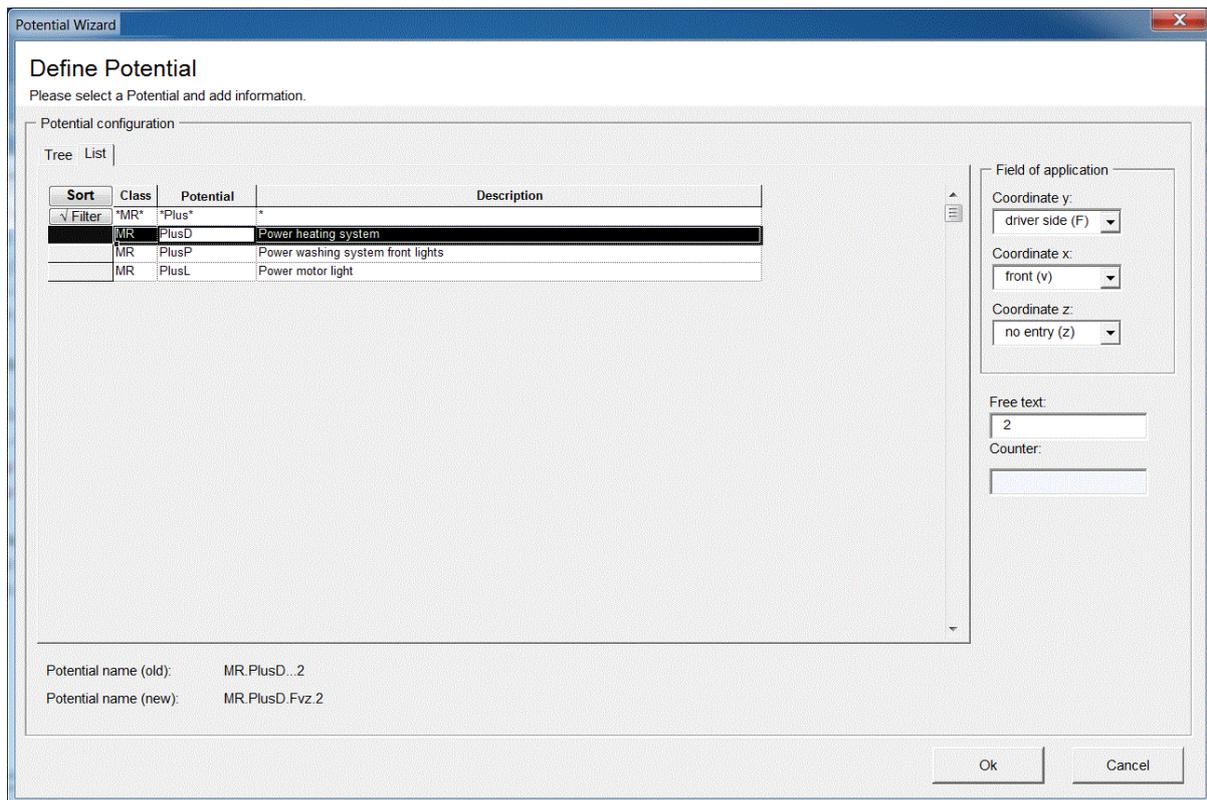
When you select a potential, then it is adopted into the preview **Potential name (new)** together with its potential class. The new potential name is then completed by means of the selected coordinate elements or a text element from **Free text** or **Counter**.



1.1.2 Potential display as list structure

Use the tag **List** to display the potentials with their potential classes in the form of a flat list.

The list variant is equipped with wildcard filter functionality for all displayed fields. When you select a list element, then associated field elements are adopted into the preview
Potential name (new): The new potential name is then completed by means of the selected coordinate elements or a text element from **Free text** or **Counter**.



When you start the wizard, the cursor is positioned in the field **Potential** so that you can immediately enter a search. When you select a potential object from the selection set, then this is selected and imported into the preview of the potential name. If this view remains selected upon quitting the wizard, then it is preselected when the same user re-starts the wizard.

1.2 Completing new potential names

The unambiguousness of a potential term can be enforced by adding usage coordinates or appending a non-editable Counter or a **Free text** component:

The image shows three sequential screenshots of the 'Field of application' configuration window. Each window has a 'Coordinate y:' dropdown, a 'Coordinate x:' dropdown, and a 'Coordinate z:' dropdown. Below these are fields for 'Free text' and 'Counter'.

- First screenshot:** 'Coordinate y:' dropdown is open, showing options: left (l), center (m), right (r), driver side (F) (highlighted), co-driver side (B), no entry (y), and (- empty -). 'Free text' contains '2' and 'Counter' is empty.
- Second screenshot:** 'Coordinate x:' dropdown is open, showing options: front (v) (highlighted), middle (m), rear (h), no entry (x), and (- empty -). 'Free text' contains '2' and 'Counter' is empty.
- Third screenshot:** 'Coordinate z:' dropdown is open, showing options: top (o), center (m), bottom (u), no entry (z) (highlighted), and (- empty -). 'Free text' is empty and 'Counter' is empty.

e.g. Potential name (new): MR.PlusD.Fvz.2

The **Counter** and the **Free text** respectively is set only if the **Potential name (new)** matches another existing potential name but not if it matches the **Potential name (old)**.

1.3 Port associations distributed over several projects

The potential wizard is integrated into the functionality of the project-spanning port associations and uses the database switch **Portlink** to ensure potential consistency also in networks spanning several projects. If the status = "2" of the portlink switch is set, then for each potential change, following writing of the attribute values, a consistency routine is called by the potential wizard for carrying out the change in the affected networks. The potential wizard can only be terminated if the consistency routine with the changed potential data issues a success message. If the consistency could not be ensured for all projects, then the potential change must be undone.