

MagiCreate – User guide

MagiCreate is an easy-to-use tool for advanced modelling of MEP products and components. This user guide describes the main functions of the modelling tool.

With MagiCreate, MagiCAD users can create tailored databases, model completely new products and modify existing ones by editing product properties, dimensions and technical data.

All databases and products created with MagiCreate are supported by MagiCAD for AutoCAD and MagiCAD for Revit from the version 2014.11 onwards.

MagiCreate can be downloaded and installed from the Tools section of the MagiCAD

Download Portal:

<https://portal.magicad.com/Download/GetProductCategoryList?categoryId=6>

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Starting MagiCreate

When starting MagiCreate, you can select one of the following two options:

1. Create a new database by clicking the **CREATE NEW** button.
2. Open an existing, previously-edited database by selecting one of the quick links displayed in the *Open recent database* list, or browse for another database by clicking the **OPEN ANOTHER DATABASE** button.

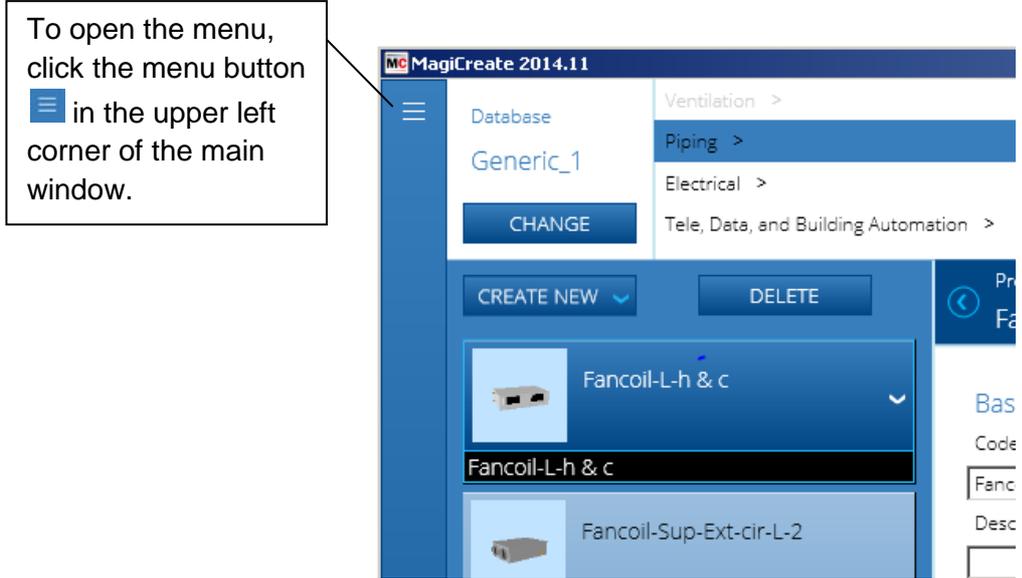


2. Select an existing database using the quick links, or browse for another one by clicking the **OPEN ANOTHER DATABASE** button.

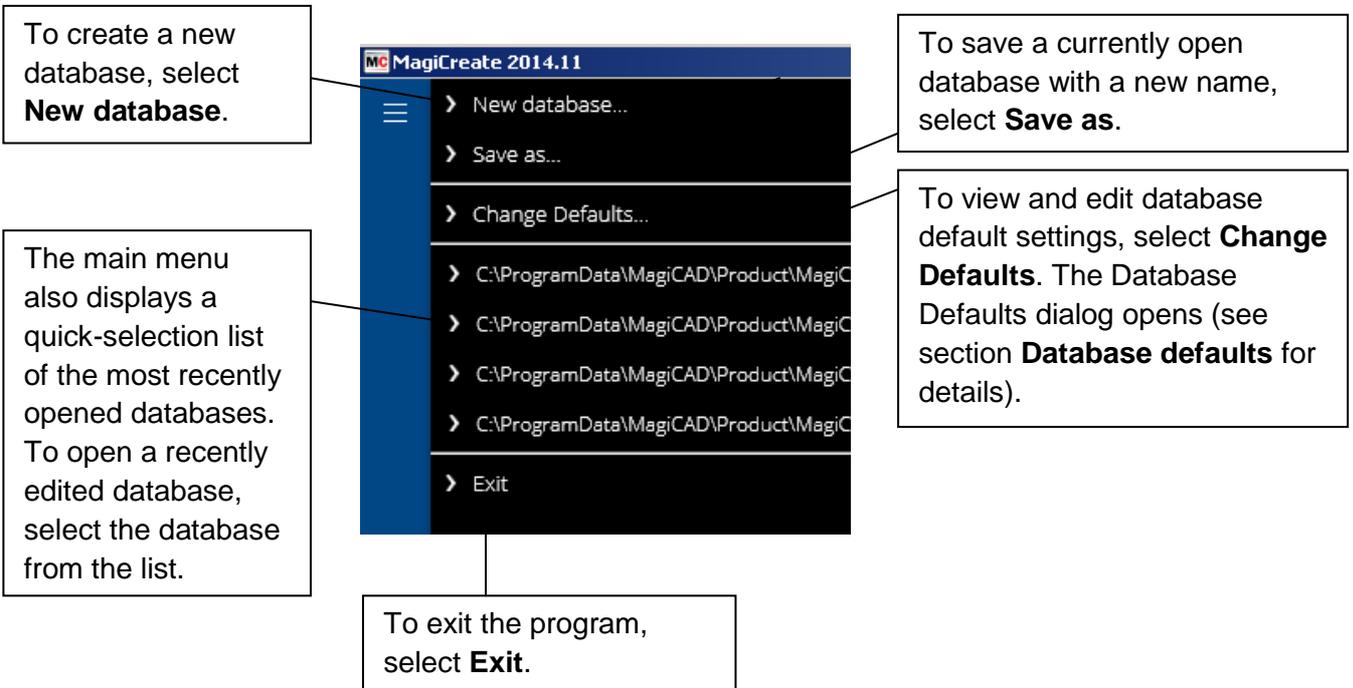
1. Click the **CREATE NEW** button to create a new database.

MagiCreate menu

This section describes the items and functionality of the MagiCreate main menu.



The main menu displays the following options.



Database defaults

In the *Database Defaults* dialog, the user can view and edit general database properties and make changes to database default settings.



The **Manufacturer** field defines the name of the database (e.g. manufacturer brand name or company name). The database will be catalogued under this name in the MagiCAD Product Browser, Bills of Materials, etc.

The **Website** field defines a web address (e.g. company website) from which the user viewing the manufacturer's product database in the MagiCAD Product Browser can find additional product information and contact details.

The **Password** field allows you to protect the database from modifications and further editing using a password.

The **Use templates with new products** checkbox must be selected if you want to use generic products as templates for new products. Deselect this option if you want to create a new product based on existing 3D geometry.

The **Default language** control selects the default language for displaying user-defined product description texts when multiple language versions have been defined.

The **User interface language** control defines the language of the MagiCAD user interface.

Adding new products to a selected database

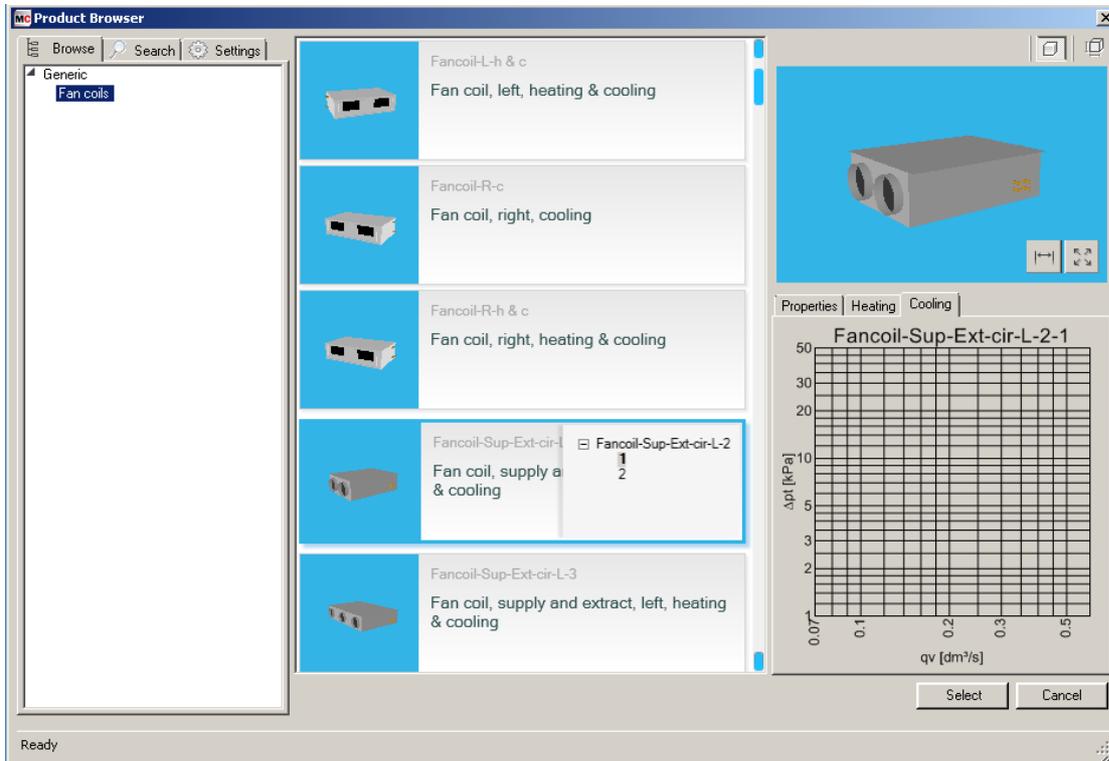
Creating a new product to a selected database requires you to carry out the following three steps:

1. First select a product category (e.g. **Piping**, **Electrical**, etc.)
2. Then select the product group (e.g. **Fan coil units**, **Pumps**, etc.)
3. And finally click the **CREATE NEW** button.

A new product is added to the database.

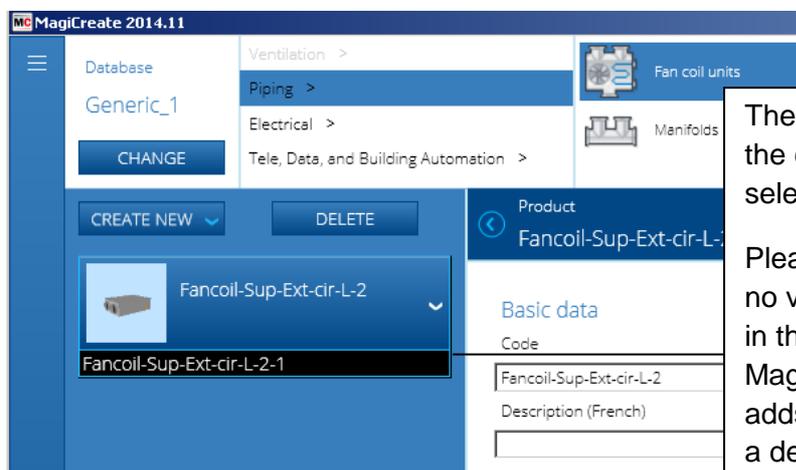


After clicking the **CREATE NEW** button, the Product Browser window will open. In the Product Browser window, you can select an existing generic product as a template for the new product.



You can select which content and product variants you want to include in the product template. You can also leave out all variants by not selecting any. After selecting the content to be included in the template, click **OK**.

Clicking **OK** adds the product and the selected variants into the database.



The product is added to the database with the selected variants.

Please note that if no variants were included in the product template, MagiCreate automatically adds one variant using a default variant name.

Viewing and modifying existing products

To view and edit a product, select the product or one of its variants. Most of the technical data is variant-specific and can only be accessed by selecting the variant.

To remove a variant, select the variant and click the **DELETE** button.

The *Code* field allows you to modify the variant name.

The **SAVE** button is only enabled if the latest modifications have not yet been saved.

Select a variant to view and access its properties.

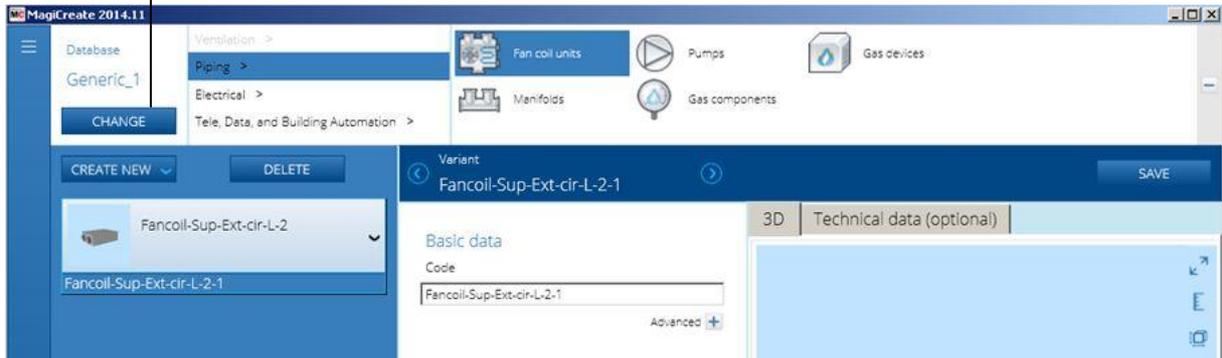
Description	Label	Value
Case width	A	690
Length	L	880
height	H	270
Spigot distance	A1	300
Cooling supply pipe diameter	PCS	15
Cooling return pipe diameter	PCR	15
Heating supply pipe diameter	PHS	15
Heating return pipe diameter	PHR	15
Extract duct size	DE1	200
Supply duct 1	DS1	200
Supply duct 2	DS2	200
Pipe position X	PX	142
Pipe position Z	PZ	153
Pipe distance X	PDX	65
Pipe distance Z	PDZ	40

The dimensions of the variant can be modified by editing the values in this table. For optional and more advanced technical data modifications, please see section **Advanced variant-specific data**.

Switching to another database

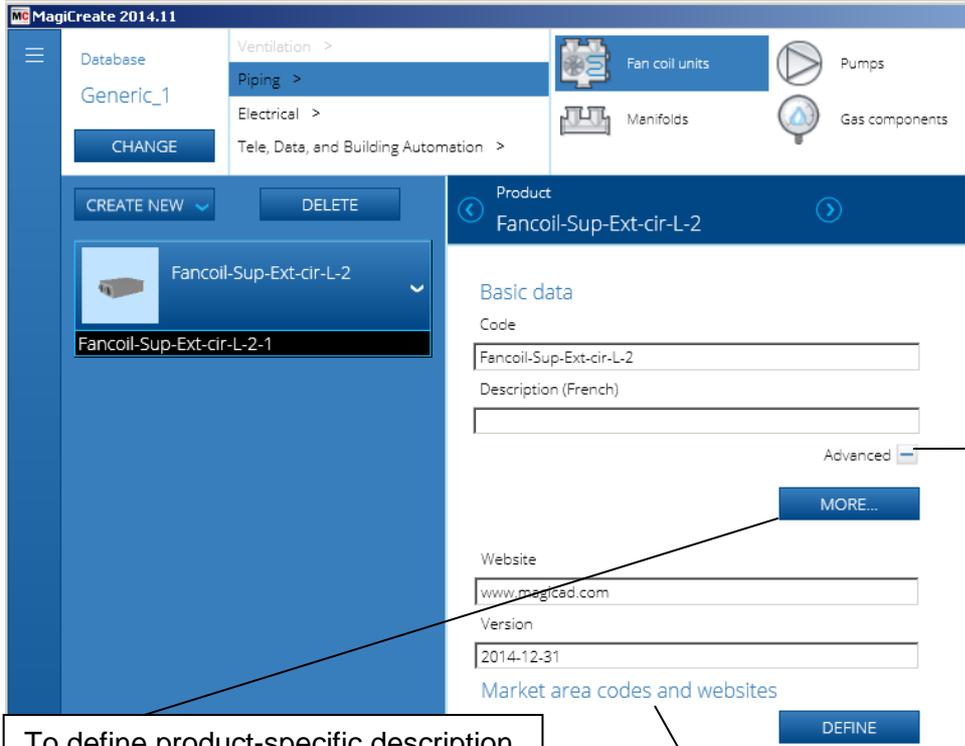
You can switch to another database without closing the program.

Click the **CHANGE** button and select another database.



Advanced product-specific data

On the product level, a product has certain general properties which are shared by all of the product's variants.



To access advanced product-specific data, click the +/- button.

To define product-specific description texts in multiple different language versions, click the **MORE** button to open the *Descriptions* dialog.

Descriptions	
Language	Description
English	Fan coil, supply and extract, left, heating & cooling
German	
French	
Russian	
Chinese	

Click the link **Market area codes and websites** to define different product codes and websites for different market areas.

Market area codes and websites			
Market area	Website	Code	Available
Great Britain			<input type="checkbox"/>
Finland			<input type="checkbox"/>
Sweden			<input type="checkbox"/>
Germany			<input type="checkbox"/>
Norway			<input type="checkbox"/>
France			<input type="checkbox"/>
Spain			<input type="checkbox"/>
Italy			<input type="checkbox"/>
Poland			<input type="checkbox"/>
Denmark			<input type="checkbox"/>
Czech Republic			<input type="checkbox"/>

Advanced variant-specific data

Most of the technical data is variant-specific and can only be defined and modified on the variant level. The optional technical data varies between different product types.

Below you can see an example of the technical data contained by a fan coil variant.

The selected fan coil variant has both heating and cooling properties. By selecting the relevant tab, you can edit the variant's heating and cooling properties.

The screenshot shows the MagiCAD 2014.11 interface. The left sidebar displays a database with 'Generic_1' and a list of fan coil units, including 'Fancoil-Sup-Ext-cir-L-2' and 'Fancoil-Sup-Ext-cir-L-2-1'. The main window is titled 'Variant Fancoil-Sup-Ext-cir-L-2-1' and has tabs for '3D' and 'Technical data (optional)'. The 'Technical data (optional)' tab is active, with sub-tabs for 'Heating' and 'Cooling'. A graph titled 'Fancoil-Sup-Ext-cir-L-2-1' plots pressure drop Δp_t [kPa] on the y-axis (logarithmic scale from 1 to 50) against flow rate q_v [dm³/s] on the x-axis (logarithmic scale from 0.05 to 0.3). Below the graph are input fields for 'min q_v ' (0.04 dm³/s), 'max q_v ' (0.3 dm³/s), 'min Δp_t ' (1 kPa), and 'max Δp_t ' (50 kPa). A table below these fields shows a specific data point: q_v [dm³/s] = 0.1 and Δp_t [kPa] = 12.

This control allows you to modify pressure drop data. The pressure drop curve in the diagram above will be updated accordingly.

These controls allow you to define maximum and minimum values for the diagram above.

Creating products without using templates

To create a new product without using an existing template as a basis, carry out the following three steps:

1. First deselect the **Use templates with new products** checkbox in the *Database defaults* dialog and click **OK**.
2. Then click the **CREATE NEW** button and select **PRODUCT** from the drop-down options.
3. And finally select a suitable 3D geometry from the list of 3D geometries found in the current database.

Database defaults

Manufacturer: General database_1

Website: www.magicad.com

Database password: [Empty]

Use templates with new products

Default language: French

User interface language: English

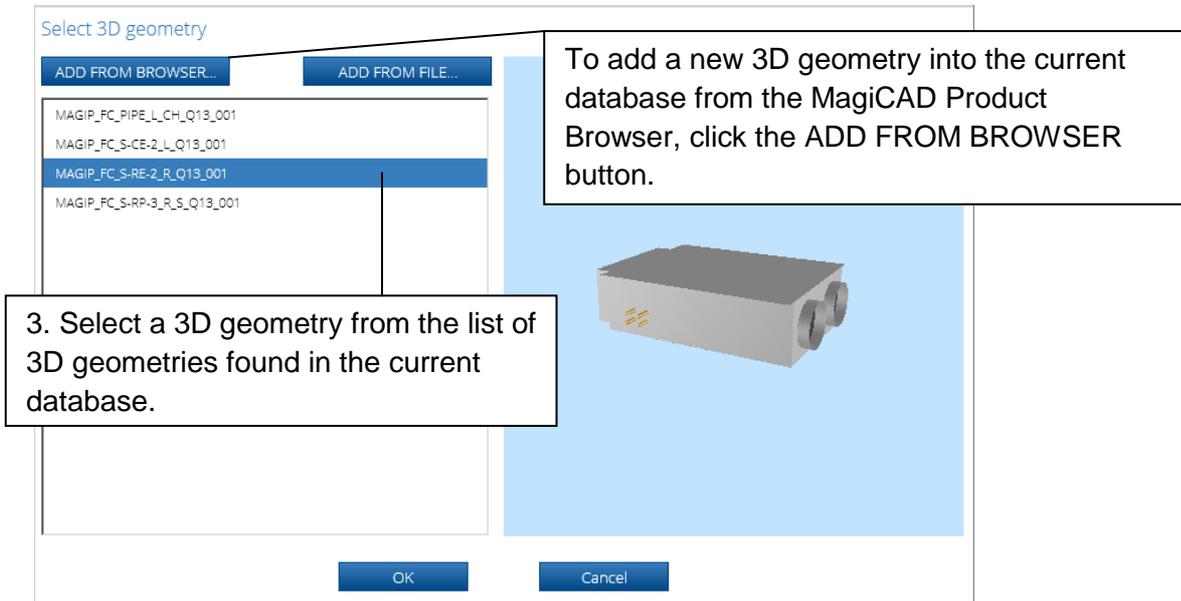
OK Cancel

1. Deselect the **Use templates with new products** checkbox to create a new product based on existing 3D geometry. Click **OK**.



2. Click the **CREATE NEW** button and select **PRODUCT** from the drop-down options.

When **PRODUCT** is selected from the **CREATE NEW** drop-down options, the *Select 3D geometry* window opens.



Select a suitable 3D geometry and click **OK**.

MagiCreate displays the new product with one automatically created variant. Since only the 3D geometry data exists, the user must enter all other relevant product and variant-specific data manually.

