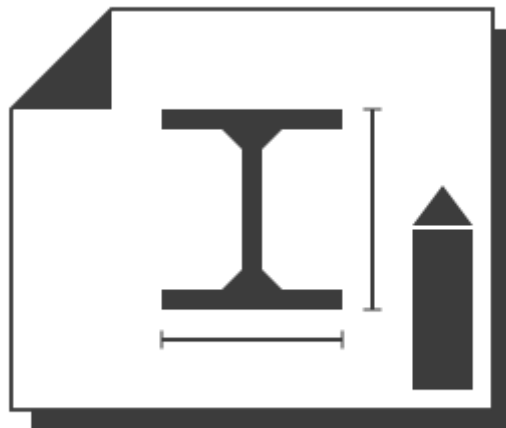# CT DrawingMaker / CT DrawingMakerEx

(version 1.0.3)

User Manual

Revision 2019/03/28

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ABOUT CT DRAWINGMAKER

Software is an add-in for *Autodesk® Inventor®* that creates drawings for standard profiles as pipes, rods, angles etc.

HOW TO USE IT

The drawing creation command is executed from the context menu. The configuration takes place in the settings form, which is available in the ribbon as *DrawingMaker* button in the settings panel (*CT Tools Tab*).

The extension is applied only to standard profiles - it will not work with more complicated parts. For such parts, the command does not appear in the context menu.

The Generator (available only in the extended version - *DrawingMakerEx)* works as a module where you specify only the path to the folder. It uses the same functions and settings as the command in the context menu.
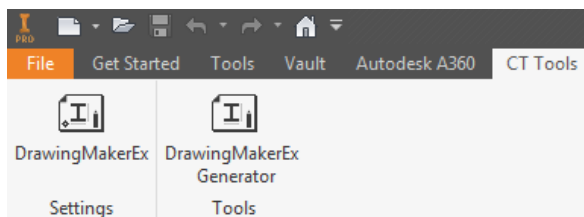
INSTALLATION

Double-clicking the installation file will start the program. *Windows®* will consider this a breach of security and will ask if you trust the software provider. If you want to use this extension, you will have to answer yes.
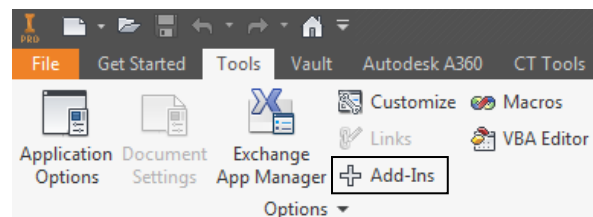
UNINSTALL

The uninstall procedure is the same as for other programs in *Windows®*. It depends on the version of operating system . However in most cases it's service "Programs and Features" in Control Panel.

HOW TO ACTIVATE THE ADD-IN

After installing the add-in, *Inventor®* should be re-opened. During opening *Inventor®* will ask if add-in should be block or not. Always there is possibility to block or unblock add-in manually. To do this simply go to the *Add-in Manager* in *Tools* Tab and check or uncheck *Load Behavior* .
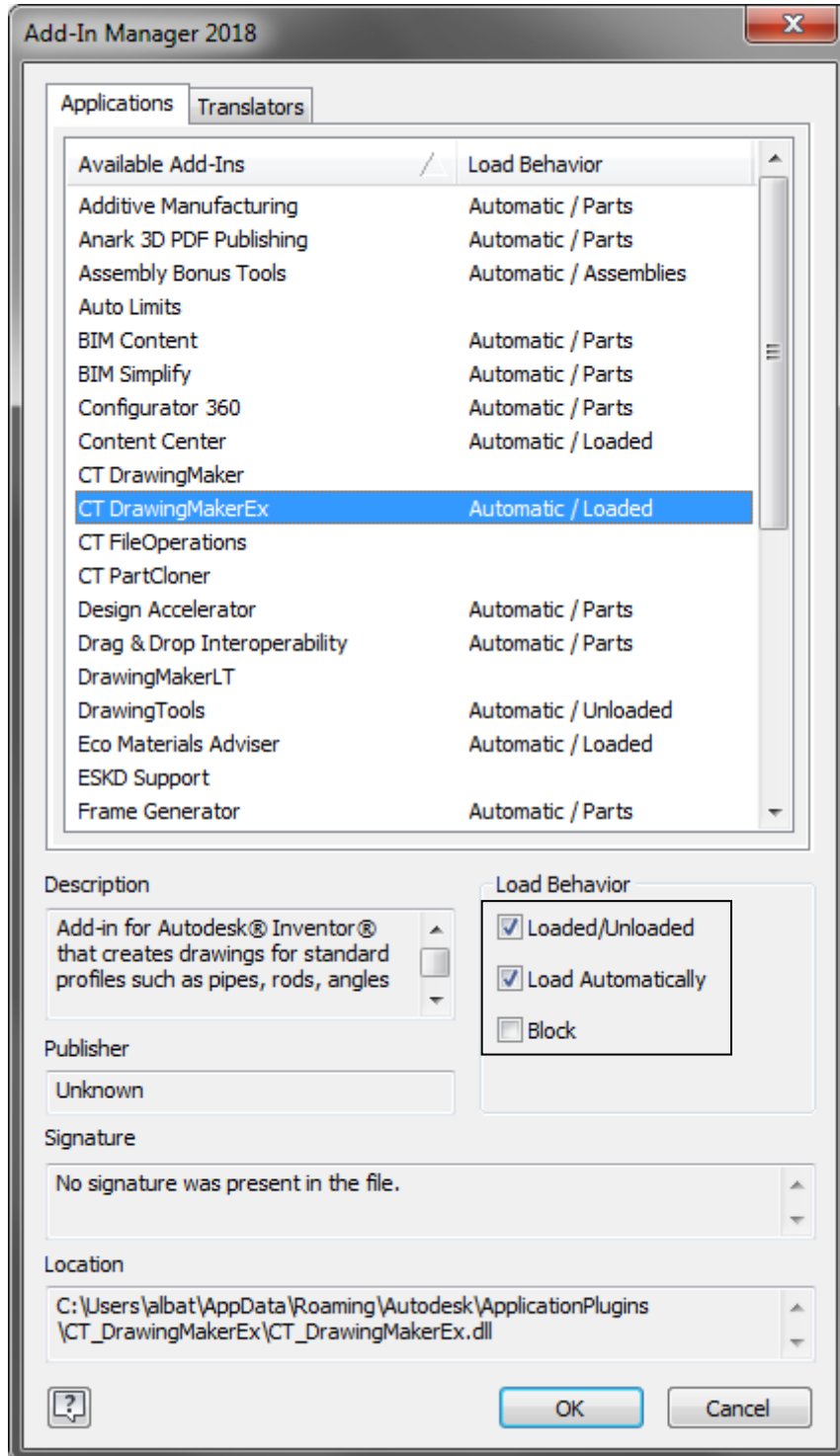

Correctly activated add-in.   Access to Add-In Manager

When add-in is active there should be a extra tab called *CT Tools* with two panels *Settings* and *Tools*. Each panel should contain one button.
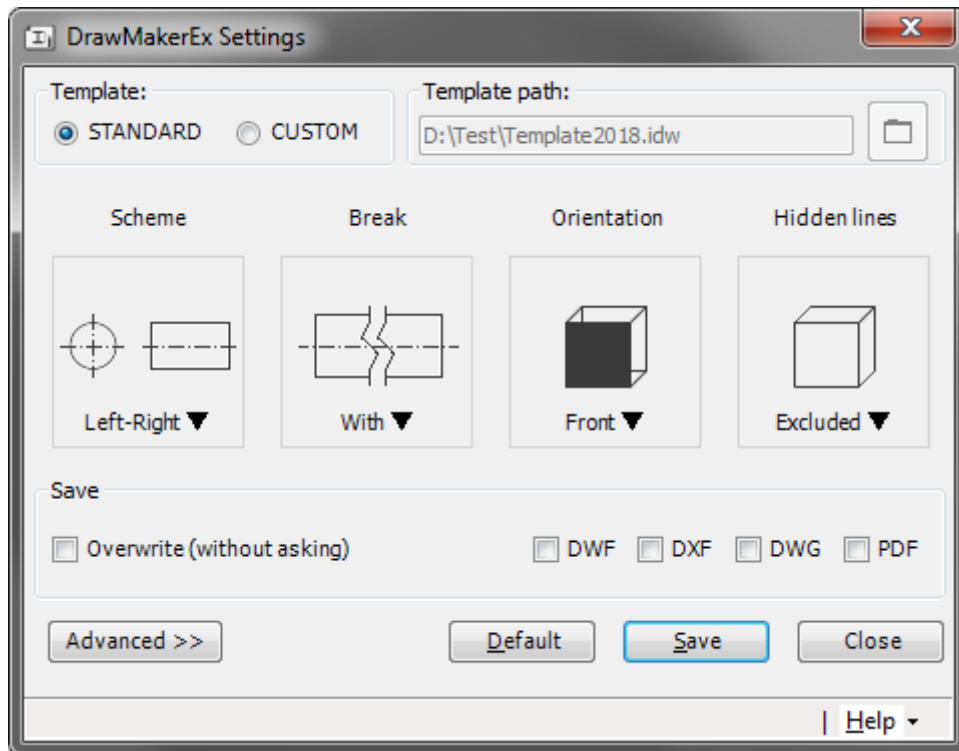
Note: Two panels and two buttons only apply to the DrawingMakerEx version. Standard version contains only settings.

DRAWINGMAKER INTERFACE DESCRIPTION

The add-in has two access icons in the ribbon interface. One is used to open the settings, the other to open the generator (generator is only available in Ex version).

SETTINGS FORM

Template - Decides which drawing template will be used to create drawings. In the situation when *Standard* is selected - the template will be taken from Inventor's settings.

Template path - Active when the *custom* template is selected. It's the path to the IDW template file.

Break - If selected the break will be included in the side view.

Orientation - The orientation of the model from which the base view will be made.

Hidden lines - Decides if views should included hidden lines or not.

Overwrite (without asking) - Ignores the question for all output files during creating (if drawing exists will be overwritten).
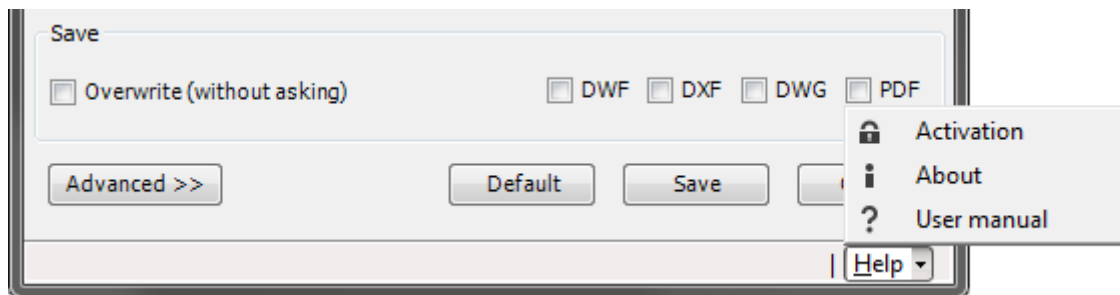
DWF / DXF / DWG / PDF - Additional export to those formats.

Advanced - Shows / Hides advanced settings.
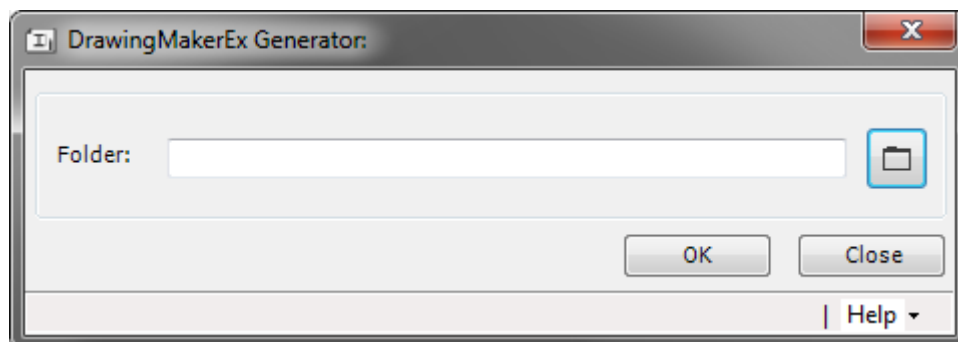
HELP

Additional menu is situated in the right bottom corner of the main form and it is dropdown menu.

🔓   -   Opens the activation form

ℹ   -   Opens information about add-in

？   -   Opens user manual file

GENERATOR FORM

This form is included only in *extended* version (*DrawingMakerEx*) and is used to automatically create drawings for models in the selected folder.
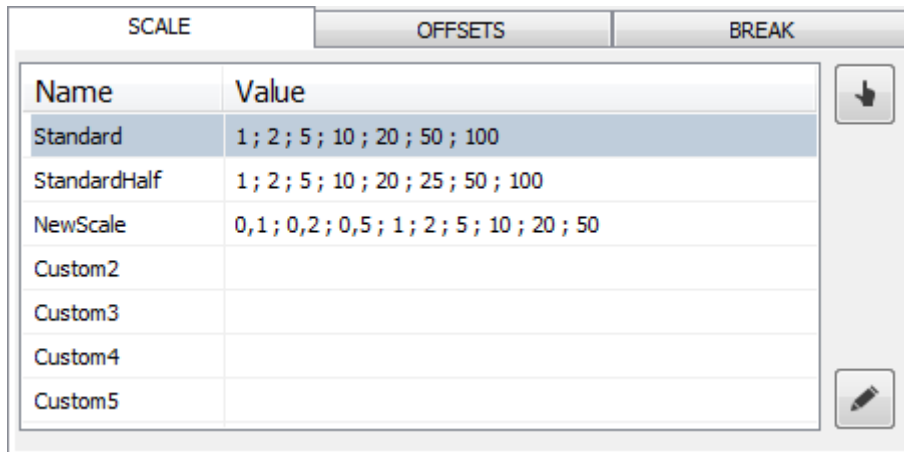

Note: Settings from *SETTING FORM* are used in whole extension. This applies to both invoking the command from the context menu and using the generator.
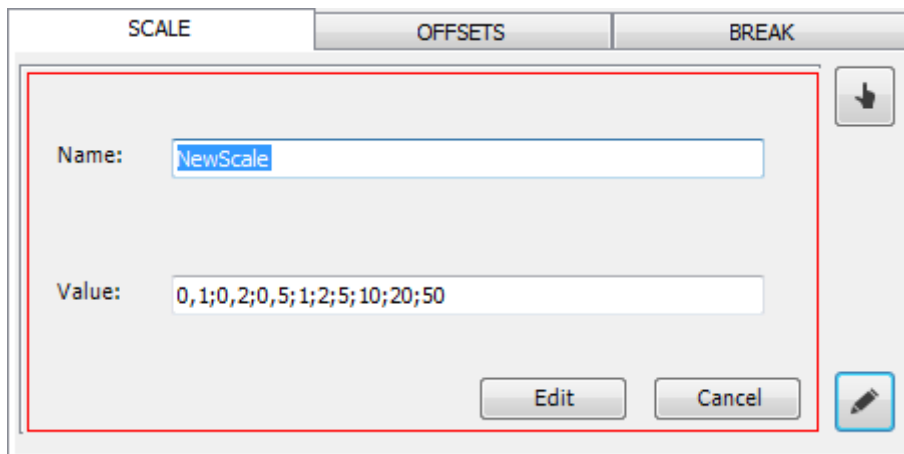
ADVANCED SETTINGS

Advanced settings are used to change the parameters of the created drawing.

SCALE

In this tab it is possible to choose one of the available scales as well as create your own. First two are permanently definable and cannot be changed. The rest of the items is available to the user. To select scale you can use a double-click or a hand icon. If you want to edit the scale, select one from the list and click the pen button.

When you edit the scale, you must to fill two fields. One for the name, the second for the value. The name has no restrictions but the value should contain only acceptable characters, such as numbers and separator ";" for individual values.

Beware, although there is a special function that sorts and corrects numbers, you should NOT use any *cosmic values*. This can cause an error in the algorithm.

The value on the scale is the divisor of the number 1. So 1 : 1 means the real dimensions of the part.

- When you enter number 5, you will get 1 : 5 - real size of the model will be divided by 5.
- When you want to get the 2 : 1 scale, you should enter the value: 0,5. According to:

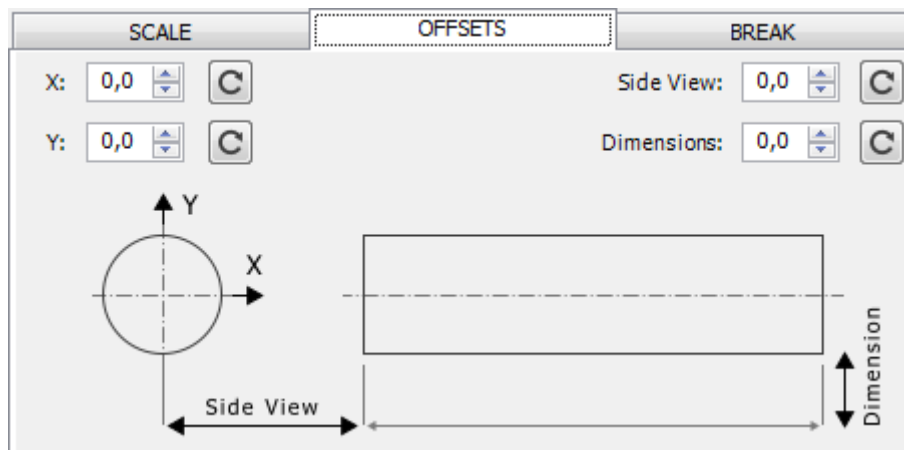Y : 1, where Y is multiplier of real dimension, X is needed value. X = 1 / Y

Y = 2; X = 1 / 2 = 0.5

or just use the table below:

Scale	Value	Scale	Value
50 : 1	0.02	1 : 50	50
25 : 1	0.04	1 : 25	25
20 : 1	0.05	1 : 20	20
12.5 : 1	0.08	1 : 12.5	12.5
10 : 1	0.1	1 : 10	10
7.5 : 1	0.13	1 : 7.5	7.5
5 : 1	0.2	1 : 5	5
2.5 : 1	0.4	1 : 2.5	2.5
2 : 1	0.5	1 : 2	2
1 : 1	1	1 : 1	1

OFFSETS

Offsets are used when you want to move elements such as the base view, side view or distance of dimensions from the views.

X, Y - offset for the base view position

Default values = 0.

If Y > 0 then the base view will be moved to up.

If Y < 0 then the base view will be moved to down.

If X > 0 then the base view will be moved to right.

If X < 0 then the base view will be moved to left.

Note: It is not dependent on the selected scheme. The offset directions are always fixed.

Side View - offset for the distance between the base view and the side view

Default value = 0.

If Side View > 0 then the side view will be moved away from base view.

If Side View < 0 then the side view will be moved closer to the base view.

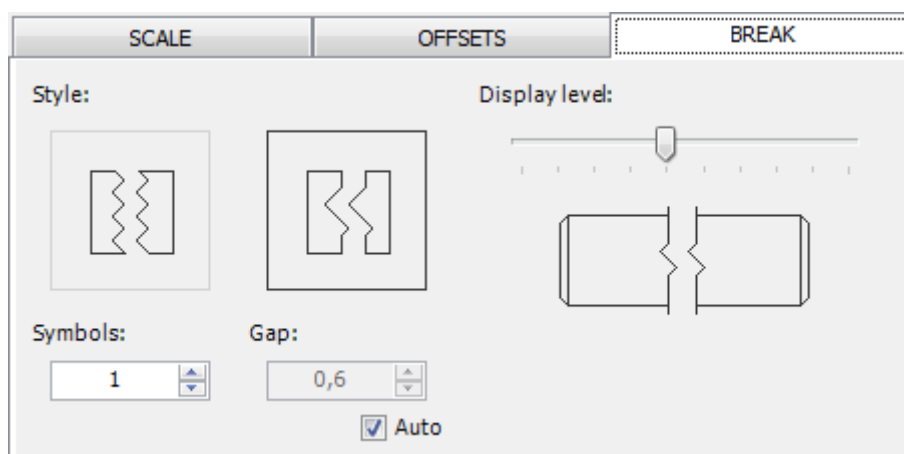**Dimensions** - offset for dimensions positions from views

Default value = 0.

If Dimensions > 0 then all the dimensions will be moved away from views.

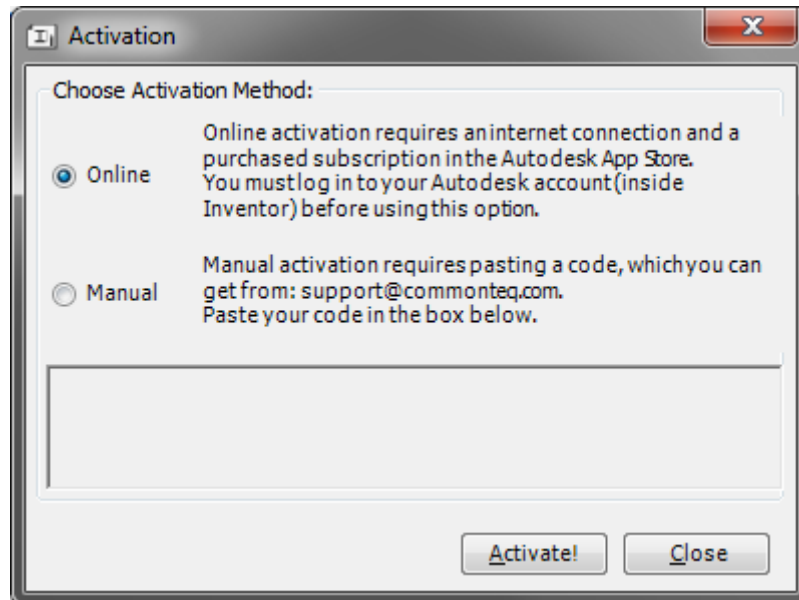If Dimensions < 0 then all the dimensions will be moved closer to the views.

BREAK

Break defines all available parameters for this feature in Inventor. All of those work in the same way as in the program (Note: Only different is that the *Gap* is this case is in cm unit).
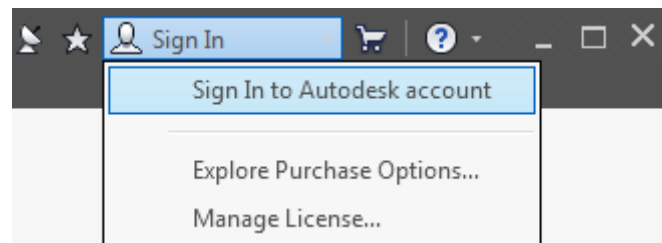
REACTIVATION OF THE ADD-IN

When the subscription expires, you can restore it in the activation form. There are two methods:

Online - requires an internet connection and user must be logged in to Autodesk account.

When the user is logged in, just click the activation button. If the subscription is purchased, the activation will proceed automatically.

Manual - it is an alternative method that requires a special key. Paste the key into the text window and press the activation button. This method does not need internet access.

IMPORTANT ISSUES

PROBLEM WITH CREATING DIMENSIONS

The algorithm recognizes the type of profile based on the base view. It is important that this projection is in the position as in models in the ContentCenter database (XY Plane). The algorithm copes with twisted views by 90, 180, 270 degrees, but the problem is at other values. In case the models are drawn parallel / perpendicular to the main planes, the orientations **in the settings should be changed.**