CT PartCloner
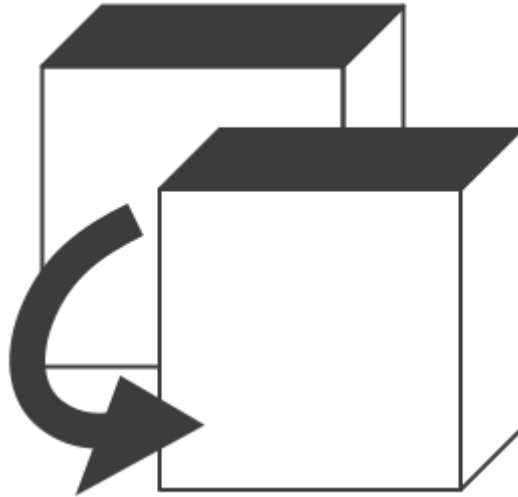
(version 1.0.4)

User Manual

Revision 2018/09/10

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ABOUT CT PARTCLONER

Software is an add-in for *Autodesk® Inventor®* which allows to automatically copy parametric parts along with parameter, name and iProperties updates.

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.
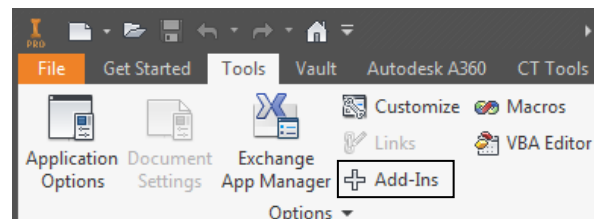
UNINSTALL

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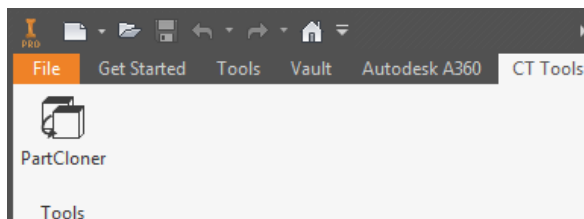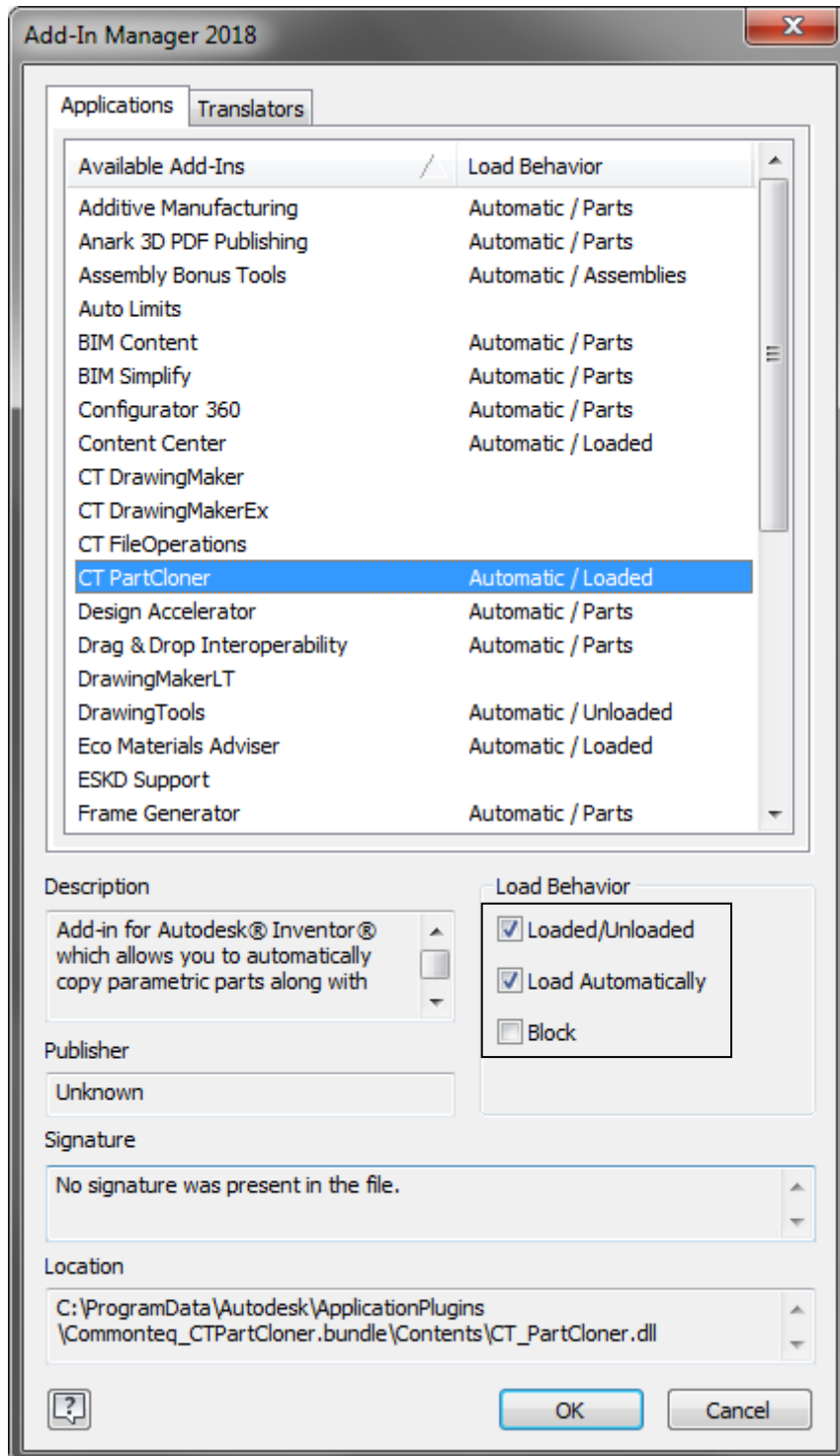
Correctly activated add-in.	Access to Add-In Manager

When add-in is active there should be an extra tab called *CT Tools* with new button *PartCloner*.

Add-In Manager 2018

Applications | Translators

Available Add-Ins	Load Behavior
Additive Manufacturing	Automatic / Parts
Anark 3D PDF Publishing	Automatic / Parts
Assembly Bonus Tools	Automatic / Assemblies
Auto Limits	
BIM Content	Automatic / Parts
BIM Simplify	Automatic / Parts
Configurator 360	Automatic / Parts
Content Center	Automatic / Loaded
CT DrawingMaker	
CT DrawingMakerEx	
CT FileOperations	
CT PartCloner	Automatic / Loaded
Design Accelerator	Automatic / Parts
Drag & Drop Interoperability	Automatic / Parts
DrawingMakerLT	
DrawingTools	Automatic / Unloaded
Eco Materials Adviser	Automatic / Loaded
ESKD Support	
Frame Generator	Automatic / Parts

Description

Add-in for Autodesk® Inventor®
which allows you to automatically
copy parametric parts along with

Load Behavior

☑ Loaded/Unloaded

☑ Load Automatically

☐ Block

Publisher

Unknown

Signature

No signature was present in the file.

Location

C:\ProgramData\Autodesk\ApplicationPlugins
\Commonteq_CTPartCloner.bundle\Contents\CT_PartCloner.dll

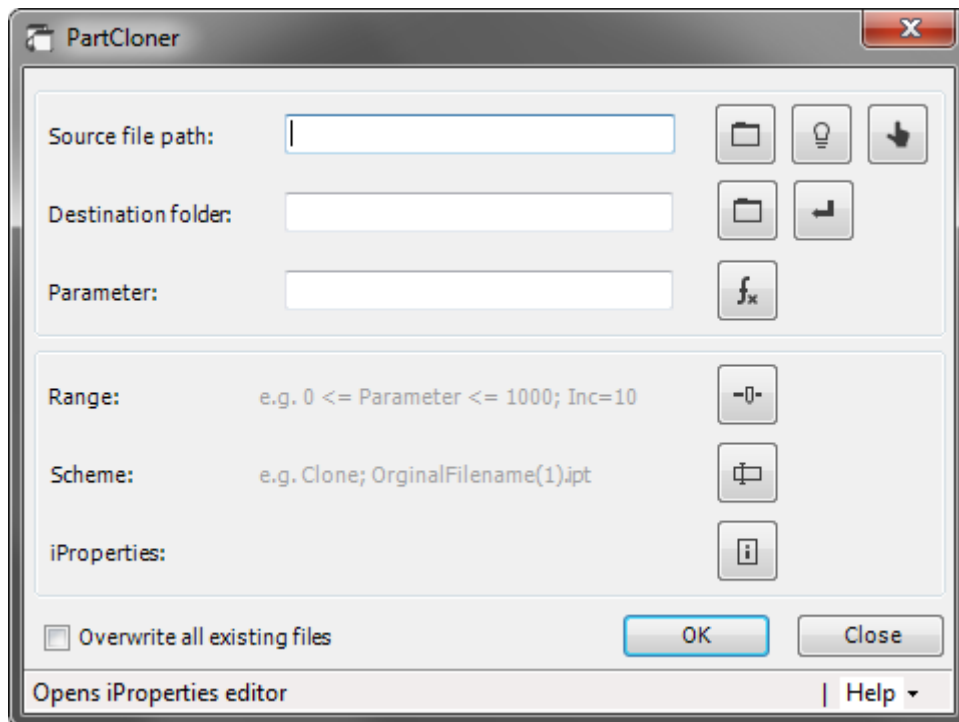[?]   OK   Cancel

PARTCLONER INTERFACE DESCRIPTION

To open main form, click on the icon *PartCloner* in *CT Tools* Tab.

MAIN FORM

Main form has several buttons and a few textboxes.

Source file path - The path to the file that will be copied / cloned.

Destination folder - All cloned files will go to this folder.

Parameter - The name of the parameter that will be modified during cloning.

Range - The range of values for the parameter from minimum to maximum value with increment.

Scheme - Scheme of names for output (cloned) files.

iProperties - Built-in iProperties editor. Allows to enter a value into a specific property.

Overwrite all existing files - ignores the question for all output files during cloning (if they exist with the same name).

- Opens the file browser to select source file / destination folder

- Gets the active document (Part) from Inventor® and as assigns it as a source file

- Allows to select source file from Assembly

- Destination folder the same as for source file

- Opens *Parameter selection* form

- Opens *Specify range* form

- Opens *Scheme Editor* form which allows to choose or modify naming for output files

- Opens *iProperties Editor*

OK   -   Starts copy files
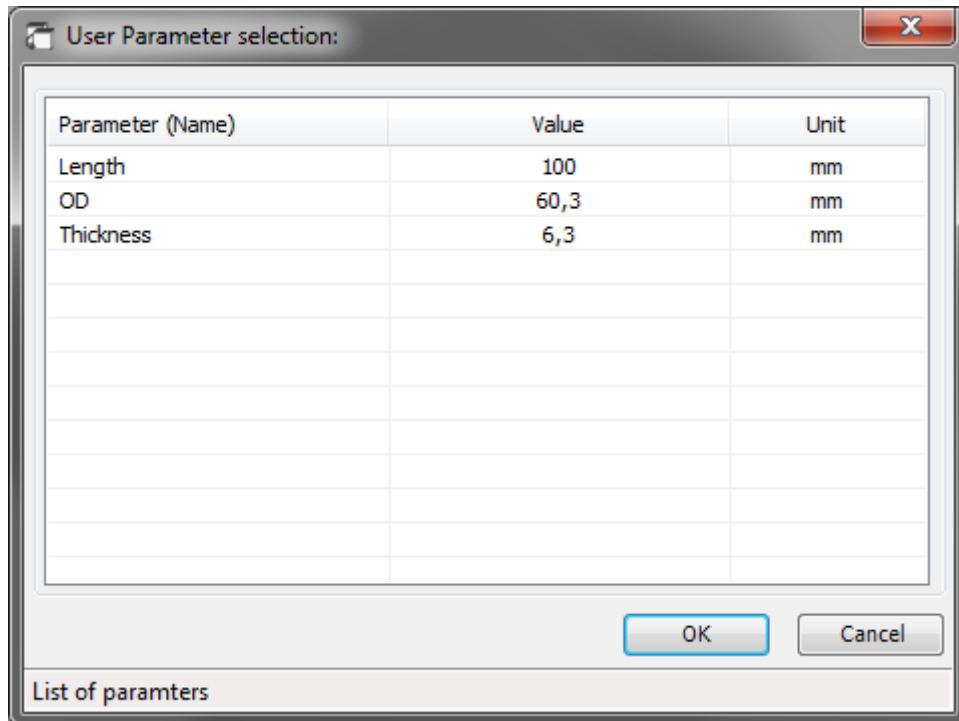
Close   -   Closes the main form

HELP

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

- Opens the activation form

- Opens information about add-in

- Opens user manual file

- Opens *Settings Form*
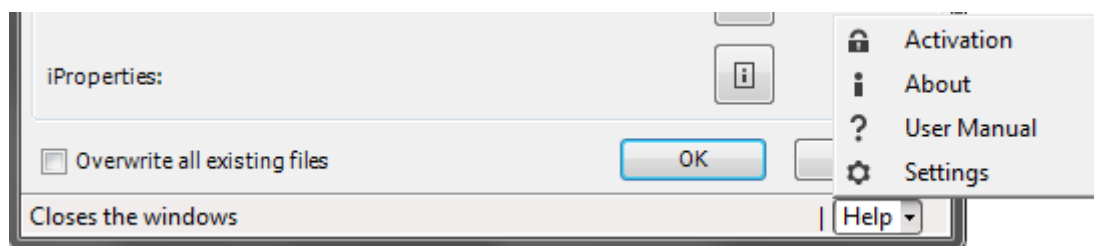
PARAMETRIC SELECTION FORM

The form allows to choose a parameter that will be modified during cloning **(only User Parameters are available**) . Parameter can be select by double click or select by OK button.
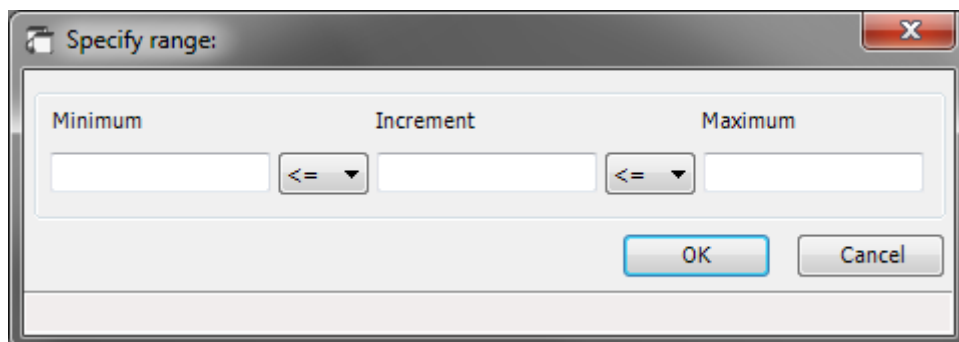

Note: The form can be opened only when the source file path is correct.

SPECIFY RANGE FORM

The form allows to choose a range for parameter. It's described by the minimum, maximum value and increment value.

Note: The form can be opened only when the parameter is selected.

None of the values cannot be negative. There is also a limitation about number of decimal places (decimal precision is from range 0 - 6). This can be changed in the settings. Example:

Decimal precision	Value
0	60
1	60,3
2	60,33
6	60,333333

It is also possible to choose whether the value should be in the range or not.

<=	Bigger or equal
<	Only bigger

SCHEME EDITOR FORM

The form allows to adjust naming for output files. Three schemes are available at the moment.
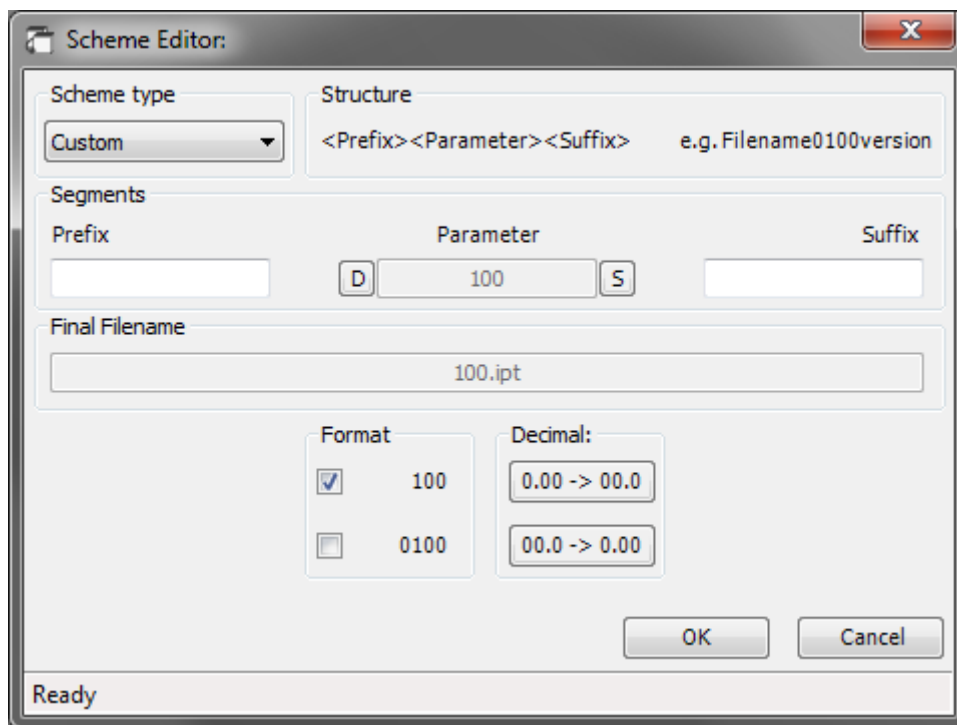
Note: The form can be opened only when the parameter is chosen and the range is specified.

Not all fields are available at once. This depends on the selected scheme.

Scheme type - Allows to switch between schemes (*Clone*, *Sequence*, *Custom*).

Structure - Description of how the output file will be named.

Prefix - Input field (is enabled when *Sequence* or *Custom* scheme is selected).

Suffix - Input field (is enabled when *Custom* scheme is selected).

Parameter - Information field about value of parameter which is used to create *Final Filename*.

S - Button that switches the value of *Parameter* (between minimum and current value).
    This allows to compare how the file will be named.

D - Button that switches the value of *Parameter* to default (current value and current decimal place).

Final filename - Shows a sample name of the output file.

Format group:

> **100** - If checkbox is checked the selected format is *normal*.

> **0100** - If checkbox is checked the selected format is *leading zero*.

Decimal point group:

> 0.00 -> 00.0 - Button moves the comma by one place to right (multiplies by 10)

> 00.0 -> 0.00 - Button moves the comma by one place to left (divides by 10)

Note: *Format* and *Decimal point* groups do not interfere in parameter value. They changes only the way how value will be displayed in the name.

Naming structure for schemes:

Scheme type	Structure	Example
Clone	<OrginalFilename>(<FileNumber>)	Part(1).ipt
Sequence	<Prefix><FileNumber>	Cloned-1.ipt
Custom	<Prefix><Parameter><Suffix>	PartSize60,3B.ipt

iPROPERTIES EDITOR FORM

It's built-in iProperties editor. Allows to enter a value into a specific property.
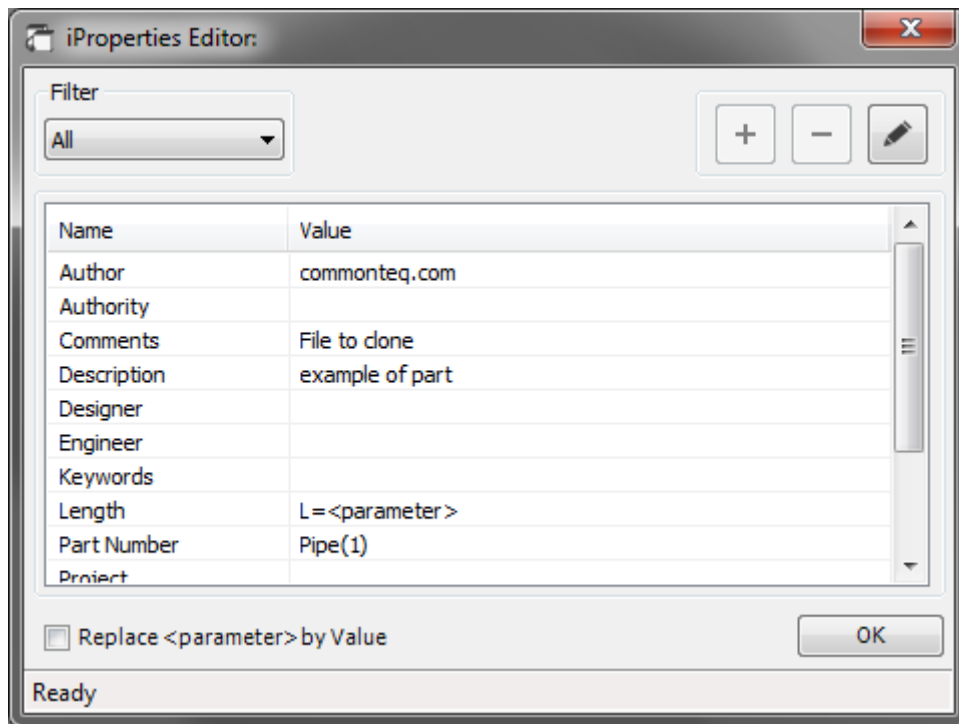
Note: The form can be opened only when the source file path is correct.

Filter: Allows to switch between type of filtering (*All, Summary, Project, Custom*).
The filtering is a mapping of property groups from Inventor®.

List of property: The list of properties available in the file.

Replace <parameter> by value: Allows to replace *<parameter>* expression by the parameter value in all properties during cloning.

+   -   Allows to add a new custom property

−   -   Allows to remove custom property

✎   -   Allows to edit existing property

The Buttons *Add* and *Remove* are available only when the filter is set to *Custom*.

Property Add Form:

Property Edit Form:

Note: While editing, the name of property cannot be changed, only the value.

Example: The cloned part is a pipe and user want to have the length of it in the description. Property should be changed to:"Pipe L<parameter>" and the checkbox *Replace <parameter> by value* should be checked. During cloning, the algorithm will replace *<parameter>* expression with the current value of the parameter.

Value	Description
10	Pipe L10
152	Pipe L152
1445	Pipe L1445

SETTINGS FORM

The form can be opened from additional menu (right bottom corner in Main Form). It allows to set the decimal precision which is used in the *Range Form* and *Scheme Form*.
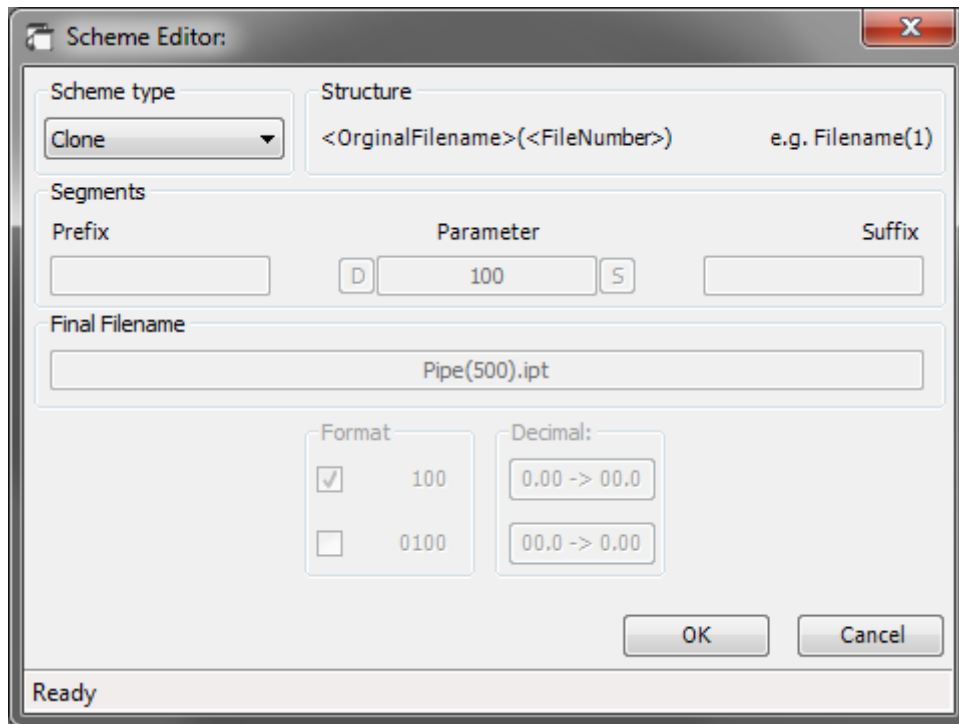
Default setting for Decimal Precision is: 3
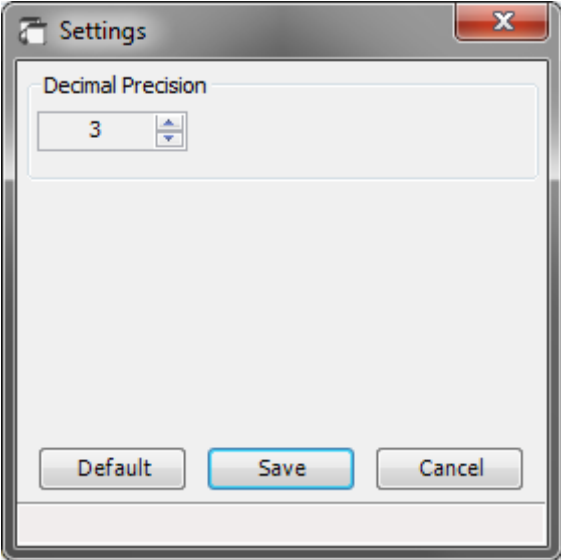
HOW USE SCHEMES

CLONE

This scheme is the simplest way to clone the file. There is no additional options. Each output file will get the same name as source file with copy number.

Example:

Source file: *Pipe.ipt*

Range: From 1 to 100 with increment 2. This will give 50 output files.
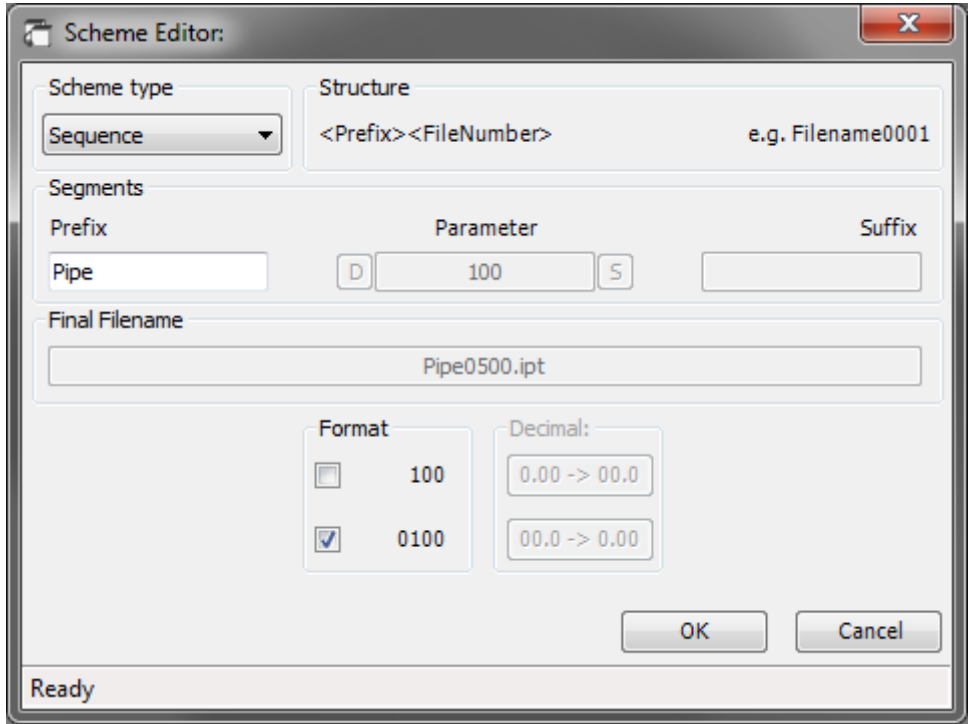
Output files:

First file: *Pipe(1).ipt*

Last file: *Pipe(50).ipt*

Files in the middle: *Pipe(2).ipt*; *Pipe(3).ipt* and so on

SEQUENCE

This scheme has two additional options compare to *Clone* (*Prefix* and *Format*). *Prefix* allows to put any expression which can be used as a filename, while *Format* guarantee that filenames in all cases can have the same length (by using leading zero in the file number).

Example:

Source file: *SomePart.ipt*

Range: From 1 to 1000 with increment 1.

Prefix: *Pipe*

Output files:

File number	Name	
	Format 100	Format 0100
1	Pipe1.ipt	Pipe0001.ipt
15	Pipe15.ipt	Pipe0015.ipt
255	Pipe255.ipt	Pipe0255.ipt
1000	Pipe1000.ipt	Pipe1000.ipt

CUSTOM

This scheme allows to create any type of name for files. The biggest difference is that instead of the file number, it uses the parameter value. In addition, this value can be adjusted using *Format* and *Decimal point*. *Format* has the same function as in previous scheme (allows to display the value as *normal* or as *leading zero*). The second option lets adjust the value by moving comma in both ways.
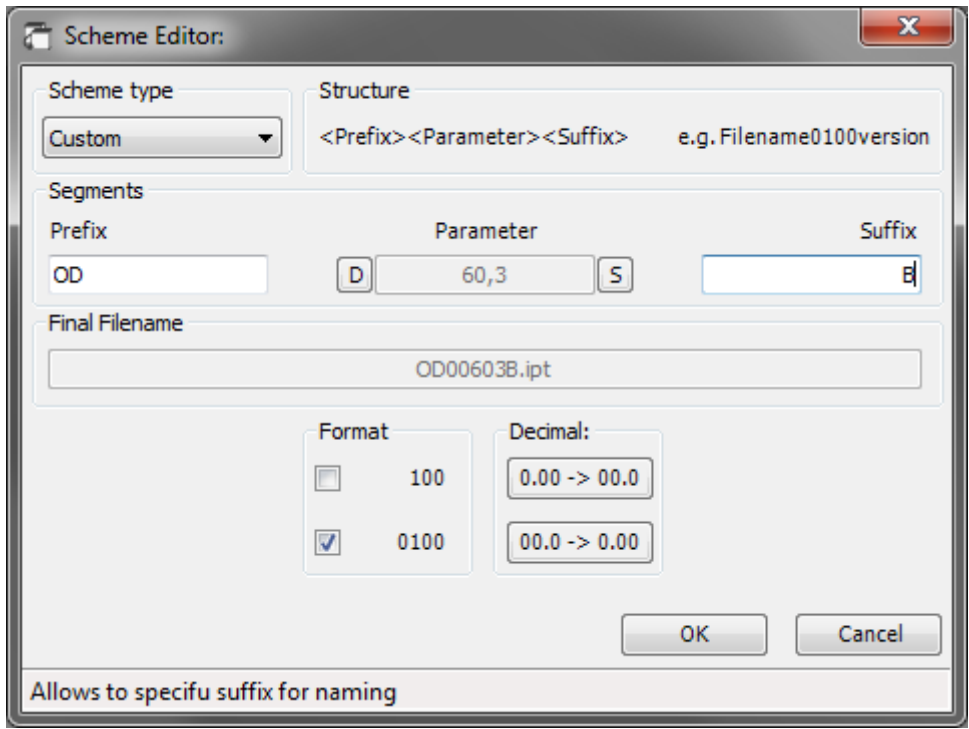
Example:

Source file: *SomePart.ipt*

Range: From 60,3 to 100,3 with increment 20

Prefix: OD   Suffix: B

Output files:

| Parameter value	Decimal point in normal position		Decimal point moved to right	
	Format 100	Format 0100	Format 100	Format 0100
60,3	OD60,3B.ipt	OD060,3B.ipt	OD603B.ipt	OD0603B.ipt
80,3	OD80,3B.ipt	OD080,3B.ipt	OD803B.ipt	OD0803B.ipt
100,3	OD100,3B.ipt	OD100,3B.ipt	OD1003B.ipt	OD1003B.ipt

Note: Decimal point can be used it both side however number of step depends of decimal precision from the settings.

REACTIVATION OF THE ADD-IN

When the subscription expires, you can restore it in the activation form. There are two methods:
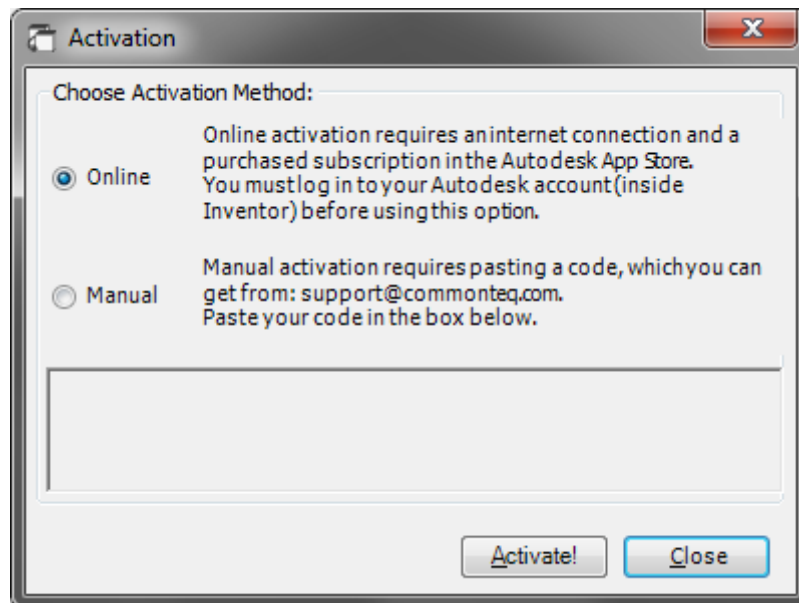
Online - requires an internet connection and user must be logged in to Autodesk account.
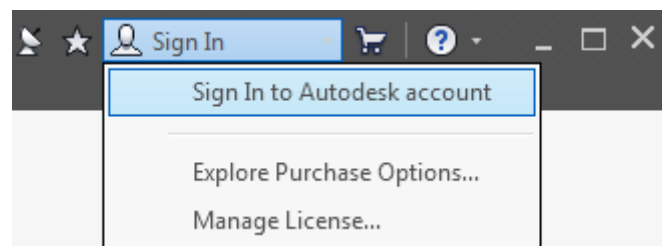
When the user is logged in, just click the activation button. If the subscription is purchased, the activation will proceed automatically.

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.