# creo® parametric 4.0

## Quick Reference Card

creo®

ptc

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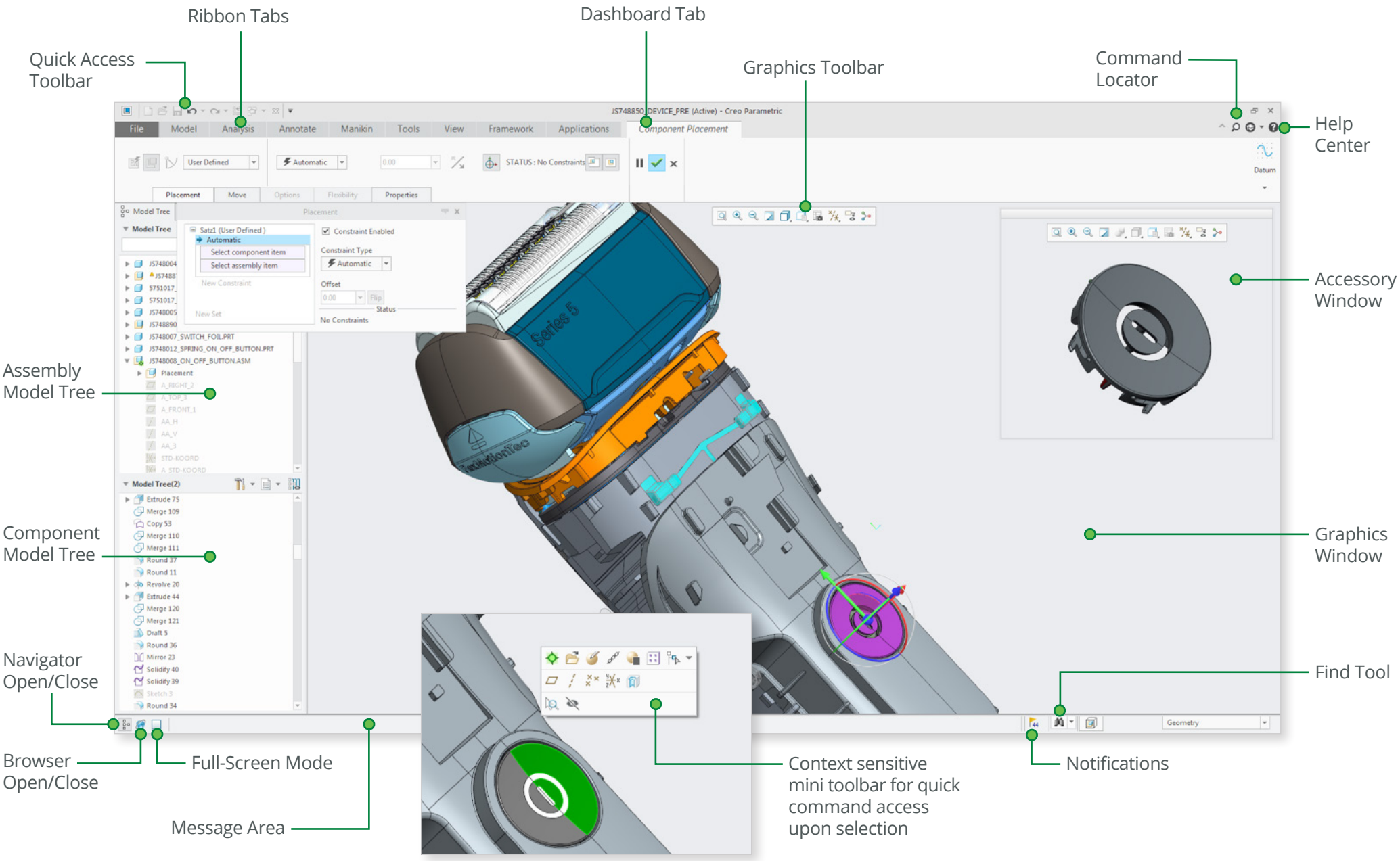
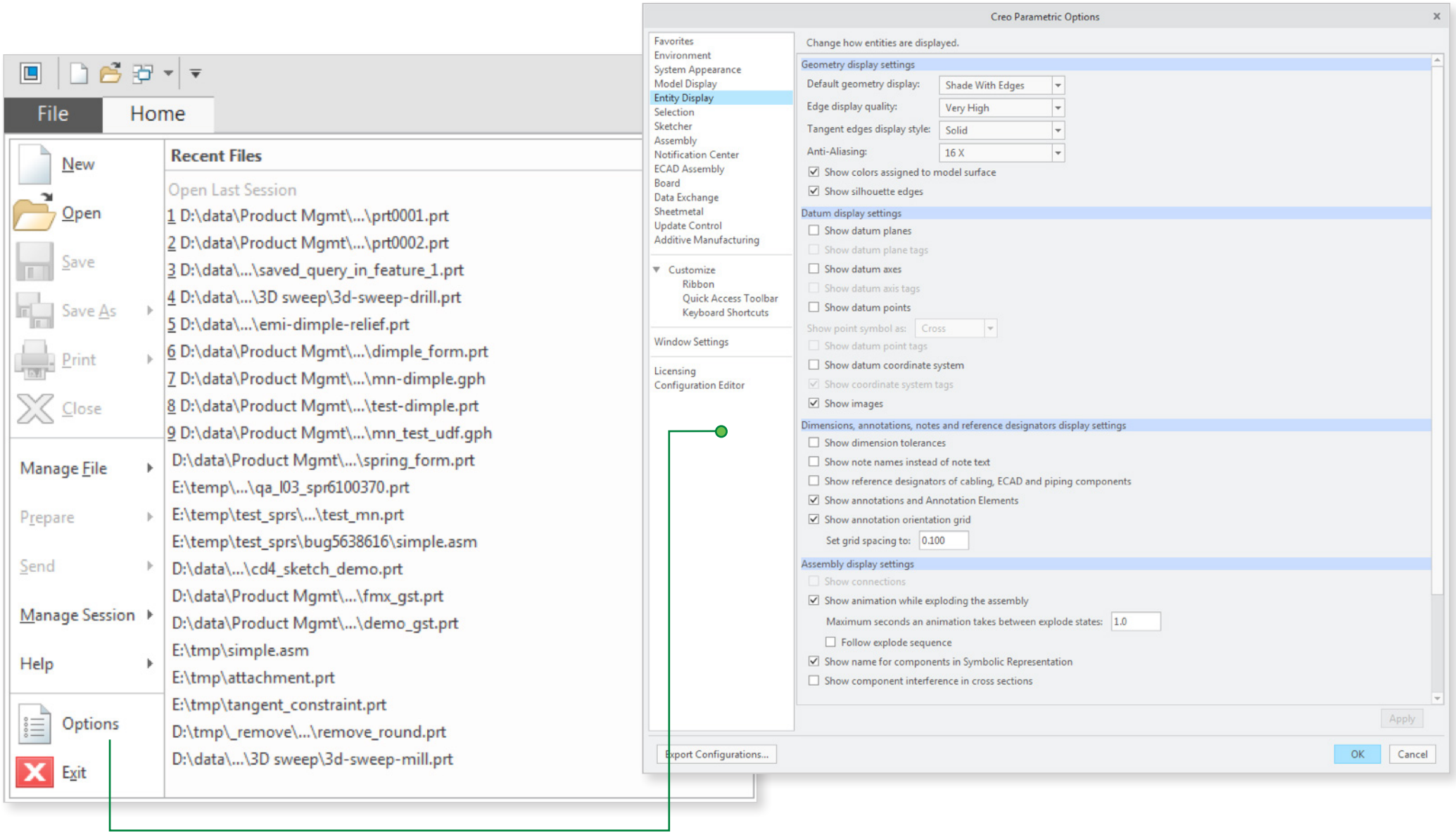
# User Interface





# File Menu

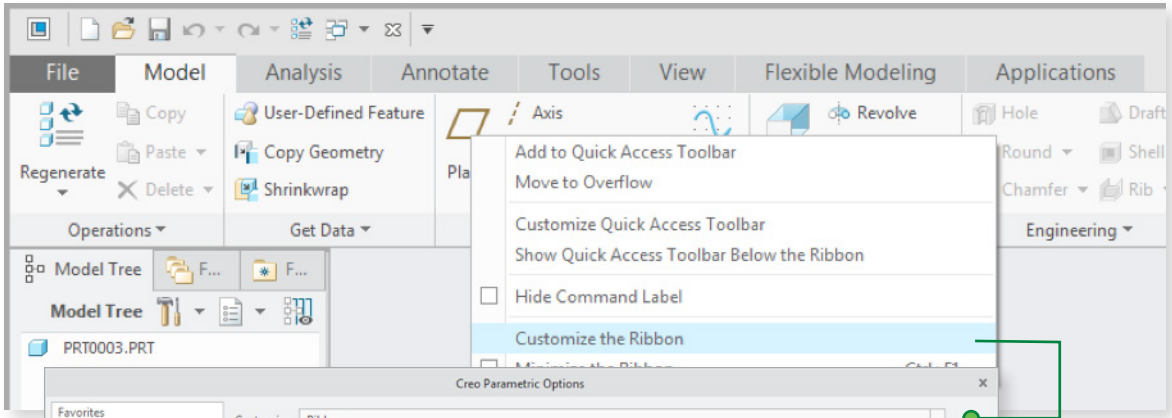


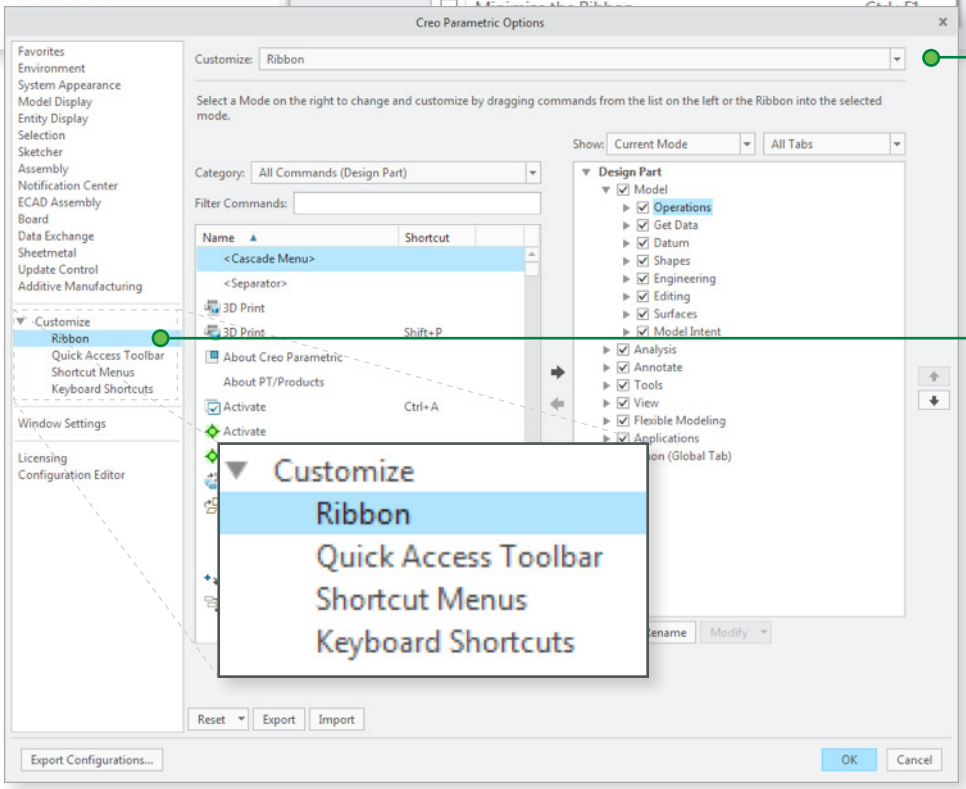

File
Home
New
Open
Save
Save As
Print
Close
Manage File
Prepare
Send
Manage Session
Help
Options
Exit
Recent Files
Open Last Session
1 D:\data\Product Mgmt\...\prt0001.prt
2 D:\data\Product Mgmt\...\prt0002.prt
3 D:\data\...\saved_query_in_feature_1.prt
4 D:\data\...\3D sweep\3d-sweep-drill.prt
5 D:\data\...\emi-dimple-relief.prt
6 D:\data\Product Mgmt\...\dimple_form.prt
7 D:\data\Product Mgmt\...\mn-dimple.gph
8 D:\data\Product Mgmt\...\test-dimple.prt
9 D:\data\Product Mgmt\...\mn_test_udf.gph
D:\data\Product Mgmt\...\spring_form.prt
E:\temp\...\qa_l03_spr6100370.prt
E:\temp\test_sprs\...\test_mn.prt
E:\temp\test_sprs\bug5638616\simple.asm
D:\data\...\cd4_sketch_demo.prt
D:\data\Product Mgmt\...\fmx_gst.prt
D:\data\Product Mgmt\...\demo_gst.prt
E:\tmp\simple.asm
E:\tmp\attachment.prt
E:\tmp\tangent_constraint.prt
D:\tmp_remove\...\remove_round.prt
D:\data\...\3D sweep\3d-sweep-mill.prt
Creo Parametric Options
Favorites
Environment
System Appearance
Model Display
Entity Display
Selection
Sketcher
Assembly
Notification Center
ECAD Assembly
Board
Data Exchange
Sheetmetal
Update Control
Additive Manufacturing
Customize
Ribbon
Quick Access Toolbar
Keyboard Shortcuts
Window Settings
Licensing
Configuration Editor
Change how entities are displayed.
Geometry display settings
Default geometry display: Shade With Edges
Edge display quality: Very High
Tangent edges display style: Solid
Anti-Aliasing: 16 X
Show colors assigned to model surface
Show silhouette edges
Datum display settings
Show datum planes
Show datum plane tags
Show datum axes
Show datum axis tags
Show datum points
Show point symbol as: Cross
Show datum point tags
Show datum coordinate system
Show coordinate system tags
Show images
Dimensions, annotations, notes and reference designators display settings
Show dimension tolerances
Show note names instead of note text
Show reference designators of cabling, ECAD and piping components
Show annotations and Annotation Elements
Show annotation orientation grid
Set grid spacing to: 0.100
Assembly display settings
Show connections
Show animation while exploding the assembly
Maximum seconds an animation takes between explode states: 1.0
Follow explode sequence
Show name for components in Symbolic Representation
Show component interference in cross sections
Apply
Export Configurations...
OK
Cancel

# UI Customization

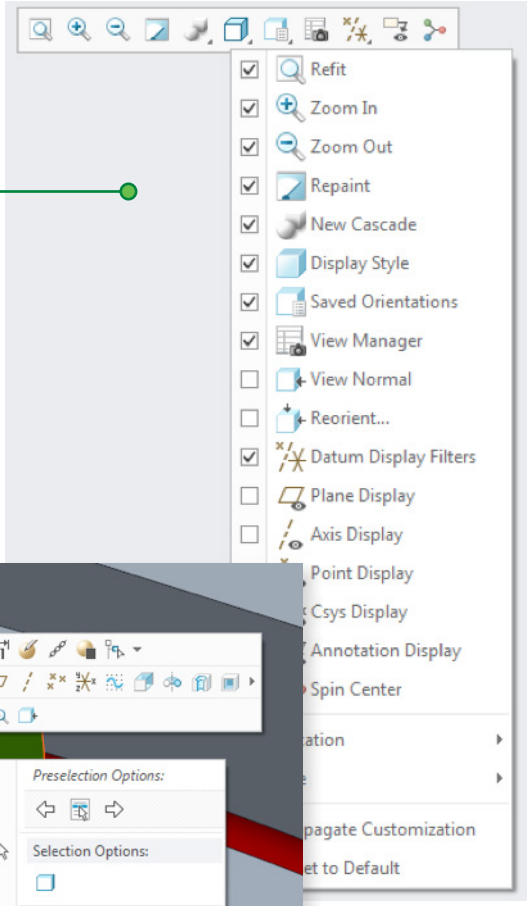
## Common dashboard controls

Right-click on a command to add to Quick Access Toolbar or access ribbon customization dialog.

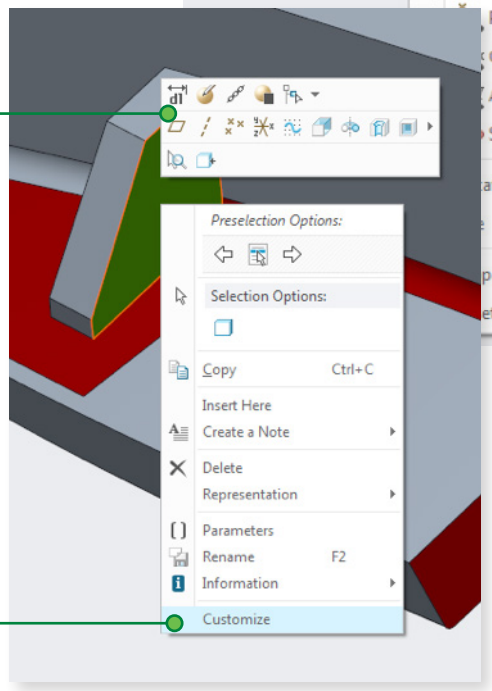



Right-click to edit the Graphics Toolbar




Mini Toolbar



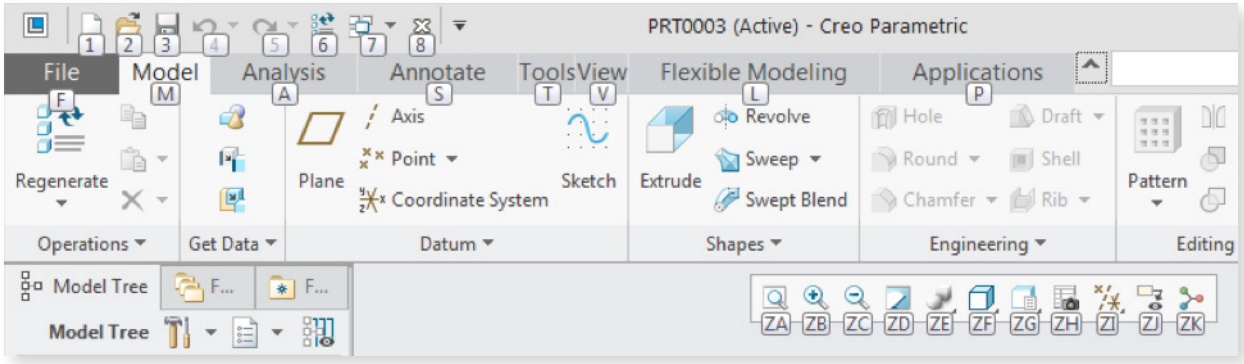

Choose customize from RMB or mini tooblar to customize shortcut menus

# Keyboard shortcuts

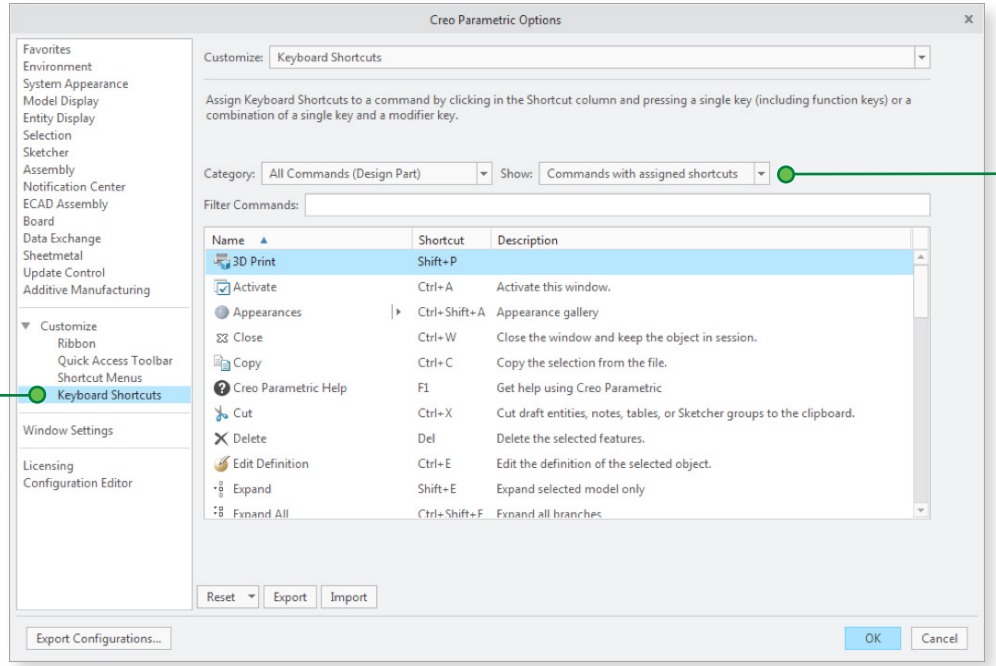


## Key tips

Press ALT key to activate key tips.




Keyboard shortcut customization




Filter options

## Key shortcuts

You can use standard keyboard shortcuts in Creo Parametric. For example:

- Regenerate — Ctrl + G
- New file — Ctrl + N
- Open file — Ctrl + O
- Save file — Ctrl + S
- Find — Ctrl + F
- Delete — Del
- Copy — Ctrl + C
- Paste — Ctrl + V
- Undo — Ctrl + Z
- Redo — Ctrl + Y
- Repaint — Ctrl + R
- Standard view — Ctrl + D

Copy/Paste shortcuts are also available in Assembly Mode

# Selection and mouse control

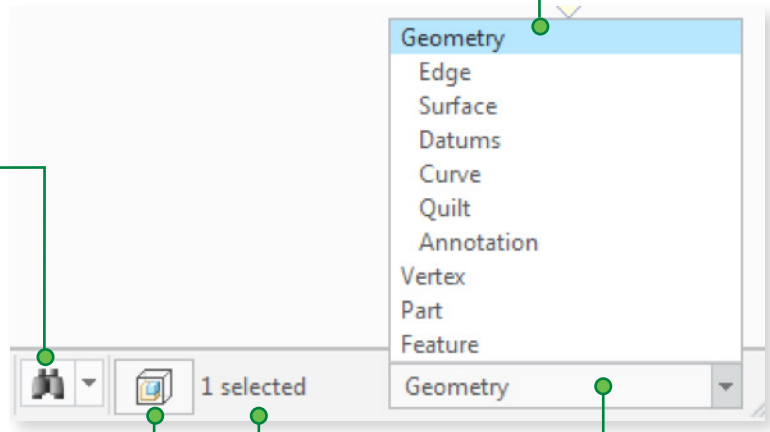


## Mouse control

- Highlight geometry — Over geometry
- Query to next item — Until highlighted
- Select highlighted geometry
- Add or remove items from selection — Ctrl
- Construct chains or surface sets — Shift
- Clear selection — On background

## Filters limit the scope of selection

**Default selection filter:** Geometry
When selecting geometry, extended context (feature or part) operations are available.To select features or parts directly, use ALT+LMB or switch filter




**Find tool**
Geometry Search Tool (available for Flexible Modeling and Datum Reference Features)

Active filter

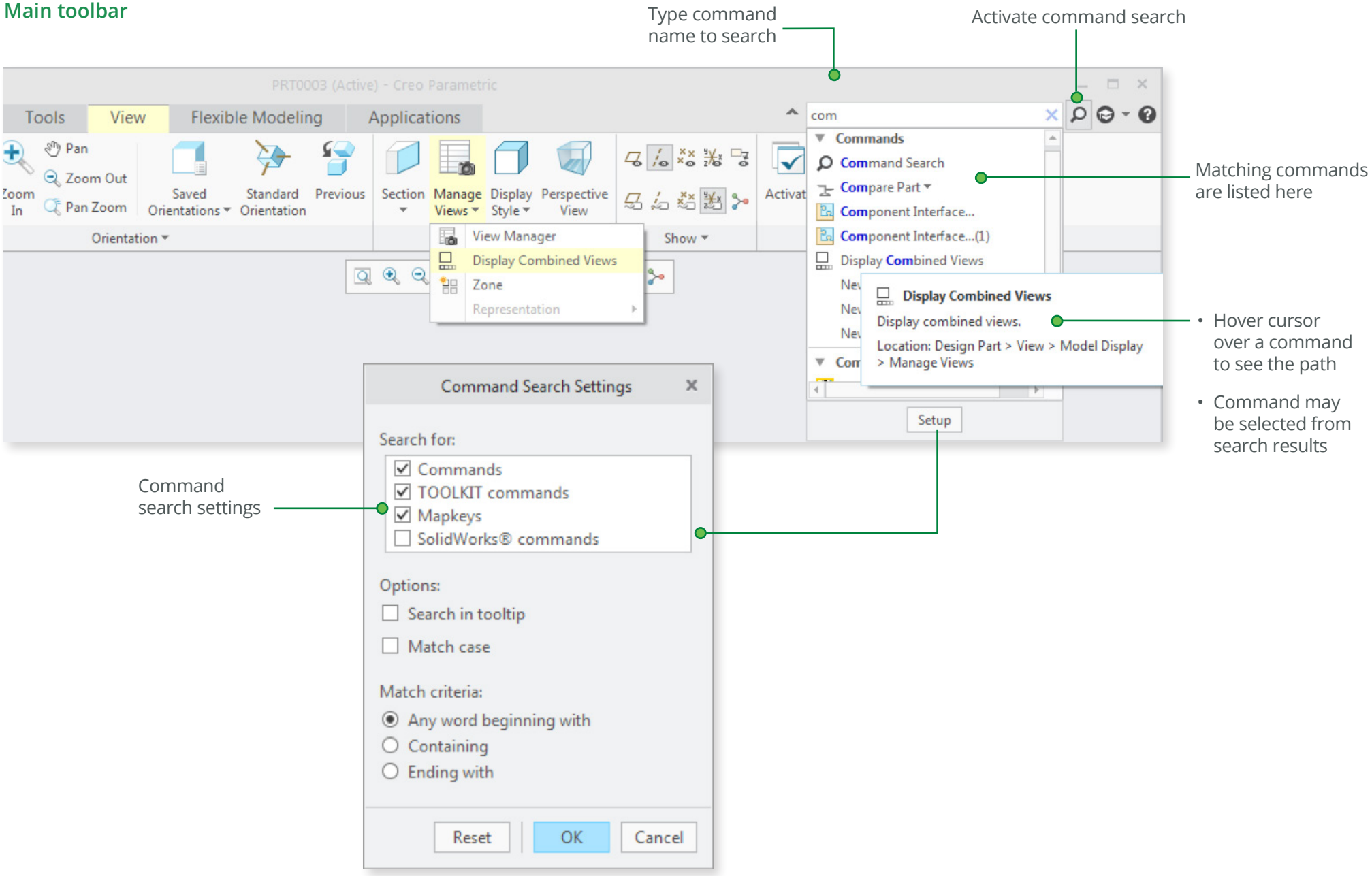
Select using 3D box

Tip: double-click to view items in selection window

# Command Locator



## Main toolbar



# Common dashboard controls



**Feature**

Solid

Surface

**Hole**

Standard

Simple

**Round**

Set Mode

Transition Mode

**Depth**

Blind

Symmetric

Through all

To next

Through until

To selected

**Material**

Flip direction

Remove material

Thicken sketch

**Controls**

Pause Tool

No preview

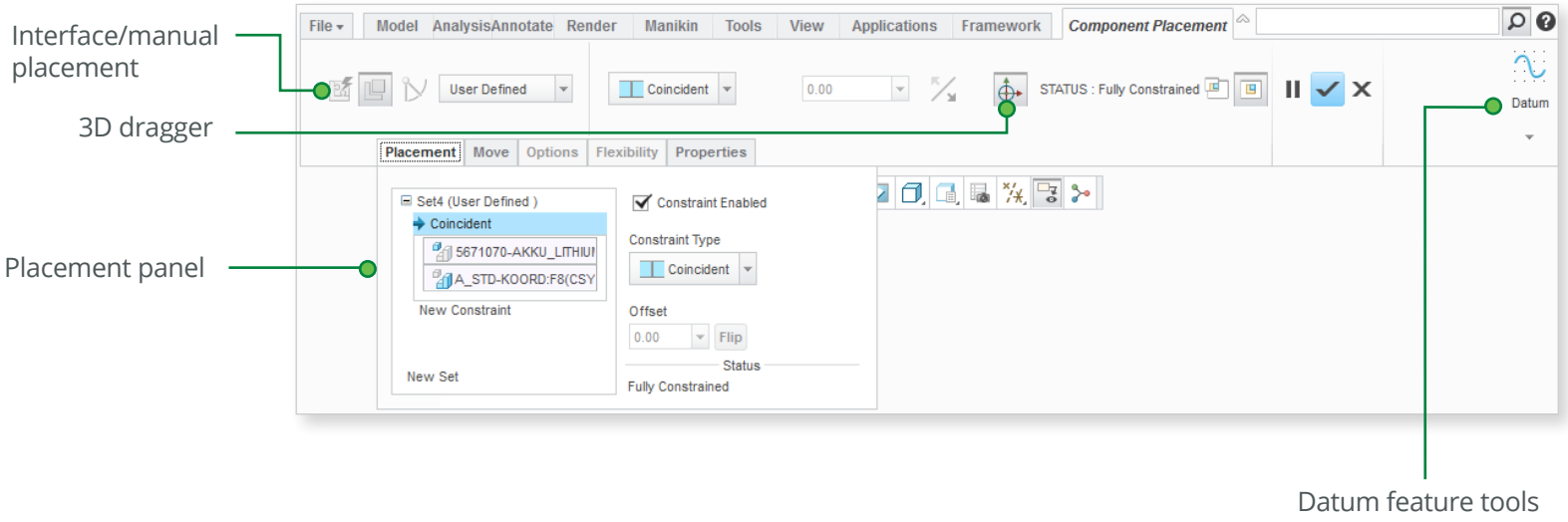
Un-attached preview

Attached preview

Verify mode

Complete

Cancel



# Orienting the Model



## Dynamic viewing

### 3D Mode

Hold down the key and button. Drag the mouse.

- Spin
- Pan Shift
- Zoom Ctrl
- Turn Ctrl

### 2D Mode

- Pan
- Zoom Ctrl

### 2D & 3D Mode

Hold down the key and roll the mouse wheel.

- Zoom
- Fine Zoom Shift
- Coarse Zoom Ctrl

## Using the Spin Center

Click the icon in the Main Toolbar to enable the Spin Center:

- Enabled – The model spins about the location of the spin center
- Disabled – The model spins about the location of the mouse pointer

## Using Orient Mode

Click the icon in the Main Toolbar to enable Orient mode:

- Provides enhanced Spin/Pan/Zoom Control
- Disables selection and highlighting
- Right-click to access additional orient option
- Use the shortcut: CTRL+SHIFT+Middle-click

## Using Component Drag Mode in an Assembly

Click the icon in the Main Toolbar to enable Component Drag Mode:

- Allows movement of components based on their kinematic constraints or connections
- Click a location on a component, move the mouse, click again to stop motion
- Middle-click to disable Component Drag mode
- Use the shortcut: CTRL+ALT+Left Mouse and drag

## Component placement controls

Allows reorientation of components during placement

- Component Drag Ctrl Alt
- Spin Ctrl Alt
- Move Ctrl Alt

### Object Mode

Provides enhanced Spin/Pan/Zoom Control:

1. Enable Orient mode
2. Right-click to enable Orient Object mode
3. Use Dynamic Viewing controls to orient the component
4. Right-click and select Exit Orient mode

# Model appearance

## Changing model appearance
## Assign appearance

### Object-action

1. Select Surface/Quilt/Intent Surface/Part
2. Select Appearances button pull-down
3. Select/create desired appearance

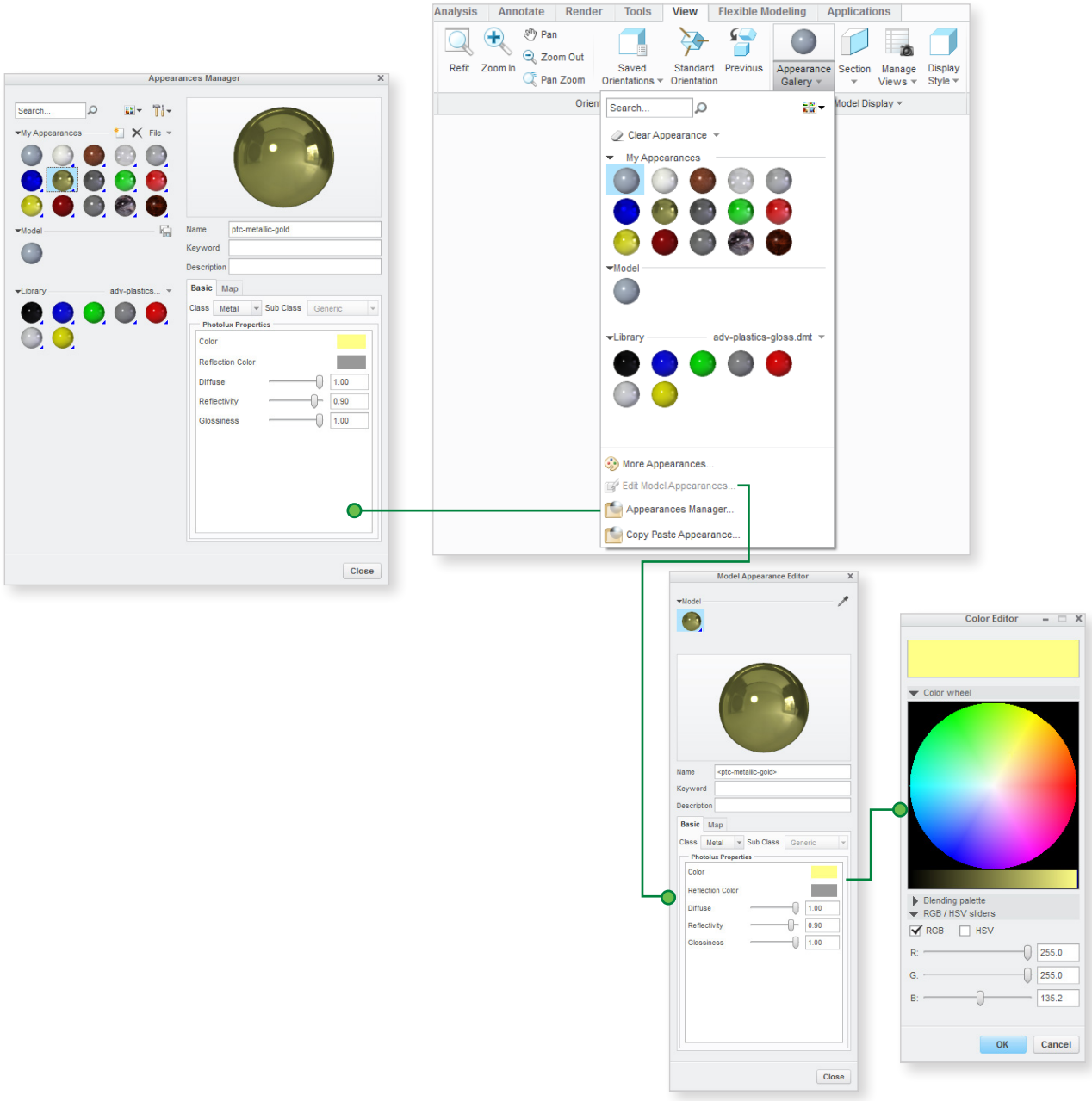
### Action-object

1. Select Appearance button pull-down
2. Select/create desired appearance
3. Select Surface/Quilt/Intent Surface/Part

### Edit Appearances in the current model

1. Select Edit Model Appearances from the Appearance pull-down menu
2. Adjust appearance attributes using draggers
3. Select Map tab to map images and textures.

To edit texture placement, select surface using color-picker




## Manage appearances

- Build a custom library of appearances
- Include pre-defined plastics or metals library appearances
- Edit/create/delete appearances in the custom library palette
- Define/save/retrieve custom appearance (*.dmt) files

# Advanced selection: chain & surface set construction



## DEFINITIONS

### General definitions

**Chain**

A collection of adjacent edges and curves that share common endpoints. Chains can be open-ended or closed-loop, but they are always defined by two ends.

**Surface set**

A collection of surface patches from solids or quilts. The patches do not need to be adjacent.

### Methods of construction

**Individual**
Constructed by selecting individual entities (edges, curves, or surface patches) one at a time. This is also called the One-by-One method.

**Rule-based**
Constructed by first selecting an anchor entity (edge, curve, or surface patch), and then automatically selecting its neighbors (a range of additional edges, curves, or surface patches) based on a rule. This is also called the Anchor/Neighbor method.

## CONSTRUCTING CHAINS

### Multiple chains

1. Construct initial chain
2. Hold CTRL
3. Select an edge for new chain
4. Release CTRL down
5. Hold down SHIFT
6. Complete new chain from selected edge

### Individual chains

**One-by-One**

To select adjacent edges one at a time along a continuous path:

1. Select an edge
2. Hold down SHIFT
3. Select adjacent edges
4. Release SHIFT

### Rule-based chains

**Tangent**

To select all the edges that are tangent to an anchor edge:

1. Select an edge
2. Hold down SHIFT
3. Highlight Tangent chain (Query may be required)
4. Select Tangent chain
5. Release SHIFT

**Boundary**

To select the outer-most boundary edges of a quilt:

1. Select a one-sided edge of a quilt
2. Hold down SHIFT
3. Highlight Boundary chain (Query may be required)
4. Select Boundary chain
5. Release SHIFT

### Surface loop

To select a loop of edges on a surface path:

1. Select an edge
2. Hold down SHIFT
3. Highlight Surface chain (Query may be required)
4. Select Surface loop
5. Release SHIFT

### From-To

To select a range of edges from a surface patch or a quilt:

1. Select the From edge
2. Hold down SHIFT
3. Query to highlight the desired From-To chain
4. Select From-To chain
5. Release SHIFT

# Advanced selection: chain & surface set construction



[Continued]

## CONSTRUCTING SURFACE SETS

### Individual surface sets

#### Single surfaces

To select multiple surface patches from solids or quilts one at a time:

1. Select a surface patch
2. Hold down CTRL
3. Select additional patches (Query may be required)
4. Release CTRL

### Rule-based surface sets

#### Solid surfaces

To select all the surface patches of solid geometry in a model:

1. Select a surface patch on solid geometry
2. Right-click and select Solid Surfaces

#### Quilt surfaces

To select all the surface patches of a quilt:

1. Select a surface feature
2. Select the corresponding quilt

#### Loop surfaces

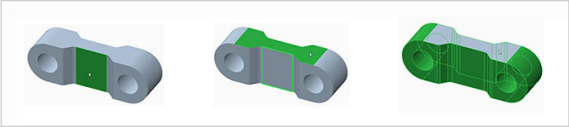
To select all the surface patches that are adjacent to the edges of a surface patch:

1. Select a surface patch
2. Hold down SHIFT
3. Place the pointer over an edge of the patch to highlight the Loop Surfaces
4. Select Loop Surfaces (the initial surface patch is de-selected)
5. Release SHIFT

#### Seed and boundary surfaces

To select all surface patches, from a Seed surface patch up to a set of Boundary surface patches:

1. Select the Seed surface patch
2. Hold down SHIFT
3. Select one or more surface patches to be used as boundaries
4. Release SHIFT (all surfaces from the Seed up to the Boundaries are selected)



### Excluding surface patches from surface sets

To exclude surface patches during or after construction of a surface set:

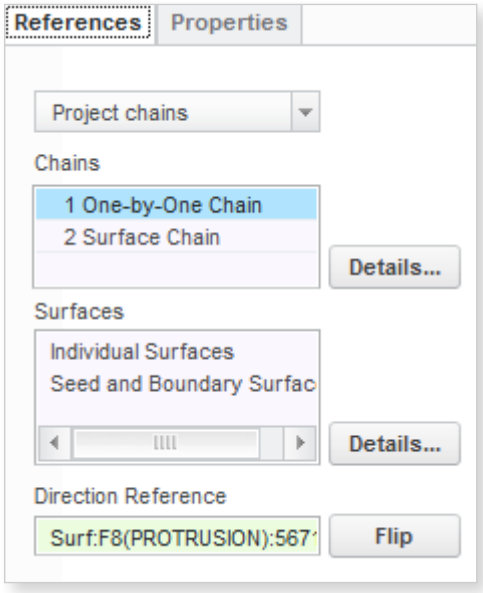
1. Construct a surface set
2. Hold down CTRL
3. Highlight a patch from the surface set
4. Select the patch to de-select it
5. Release CTRL

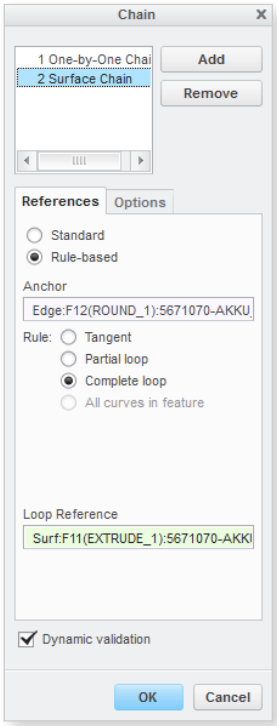
# Advanced selection: chain & surface set construction

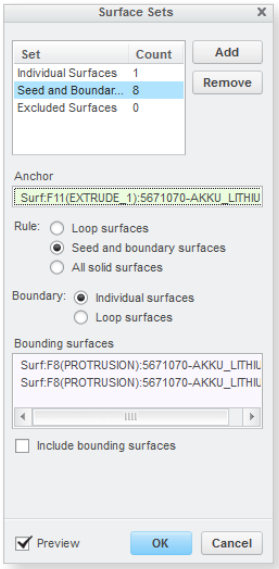
[Continued]

## Constructing chains & surface sets using dialog boxes

To explicitly construct and edit chains & surface sets, click Details next to a collector:

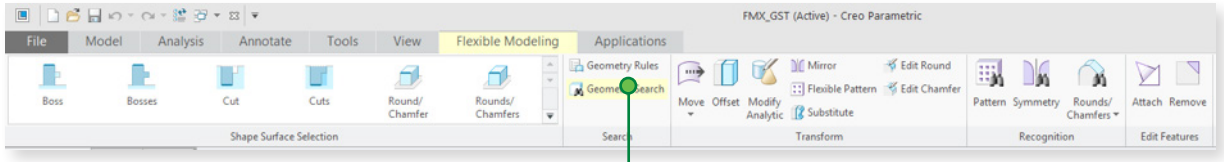


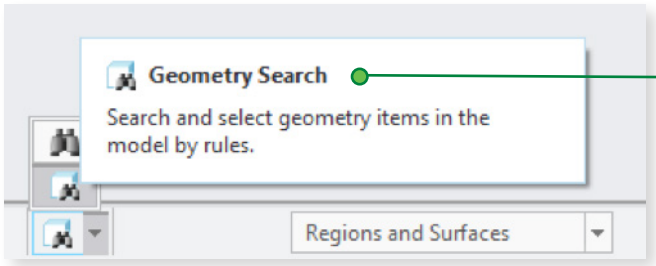



# Advanced selection: geometry search tool

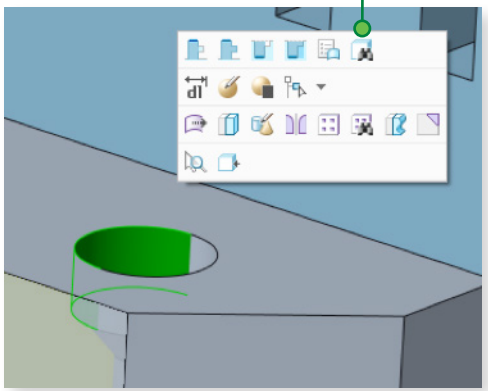


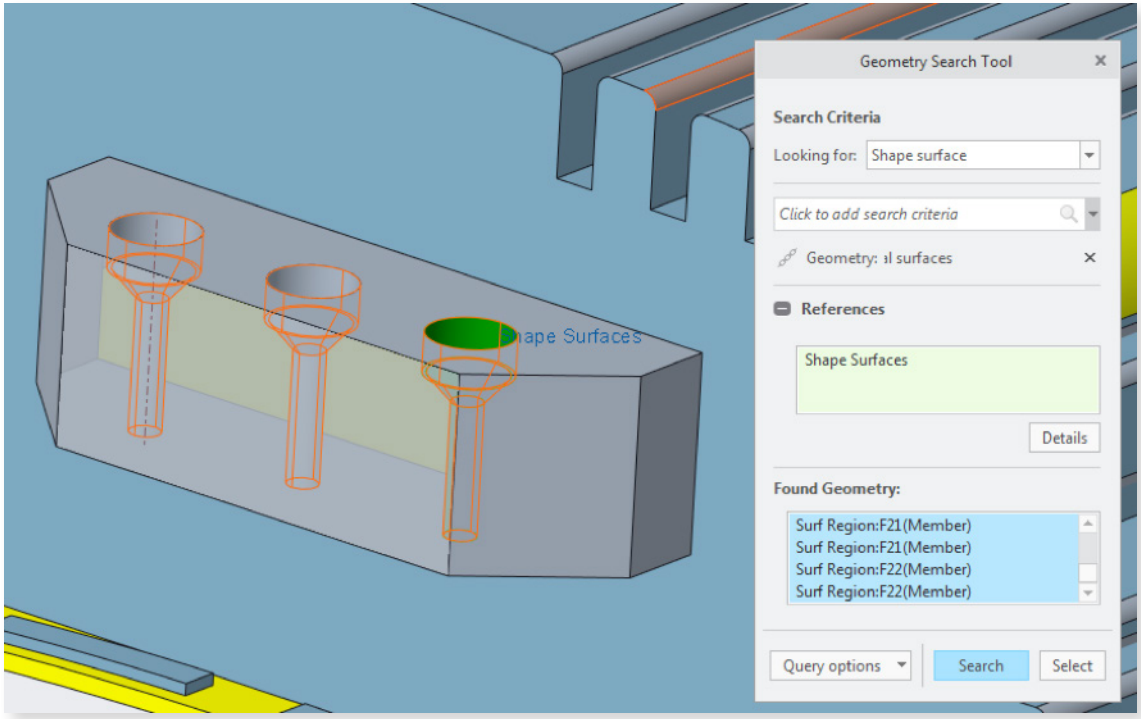



Invoke geometry search

Shift + F



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