

PTC®

creo® parametric

QUICK REFERENCE CARD

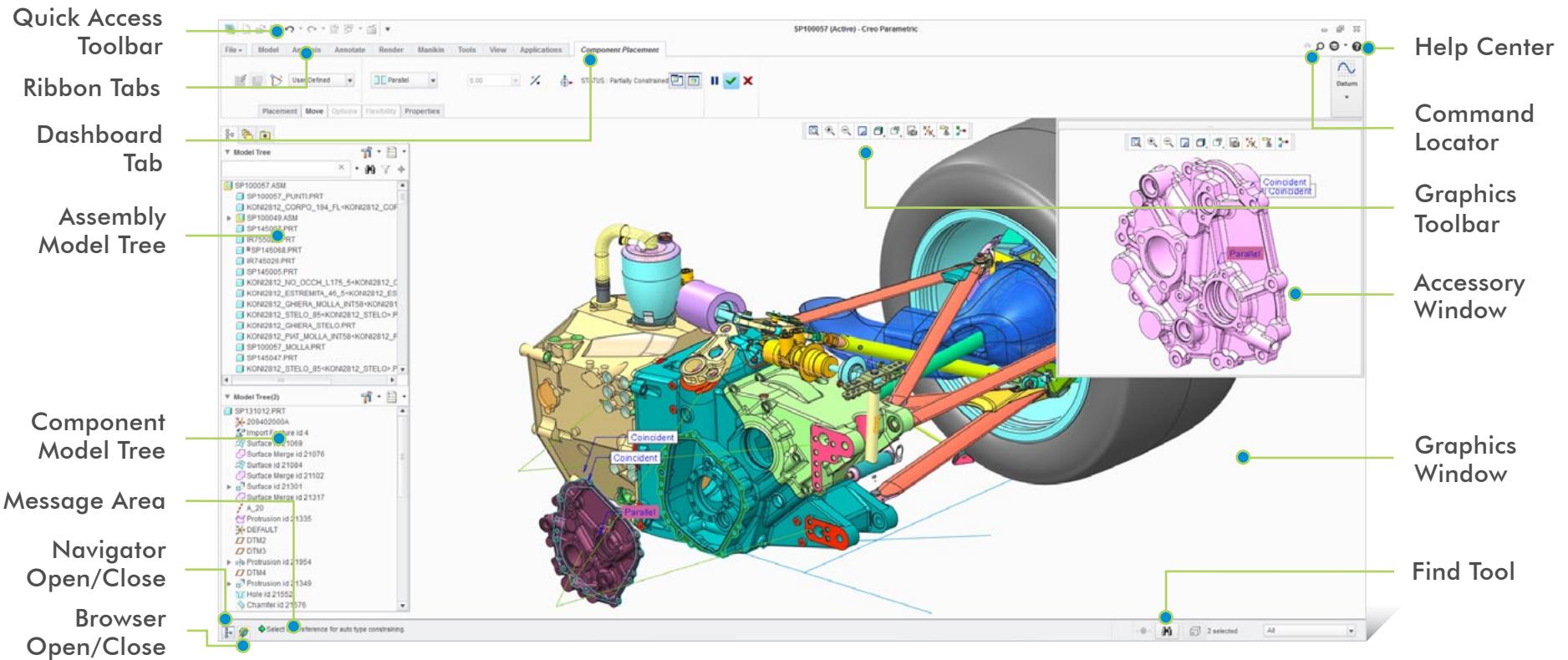




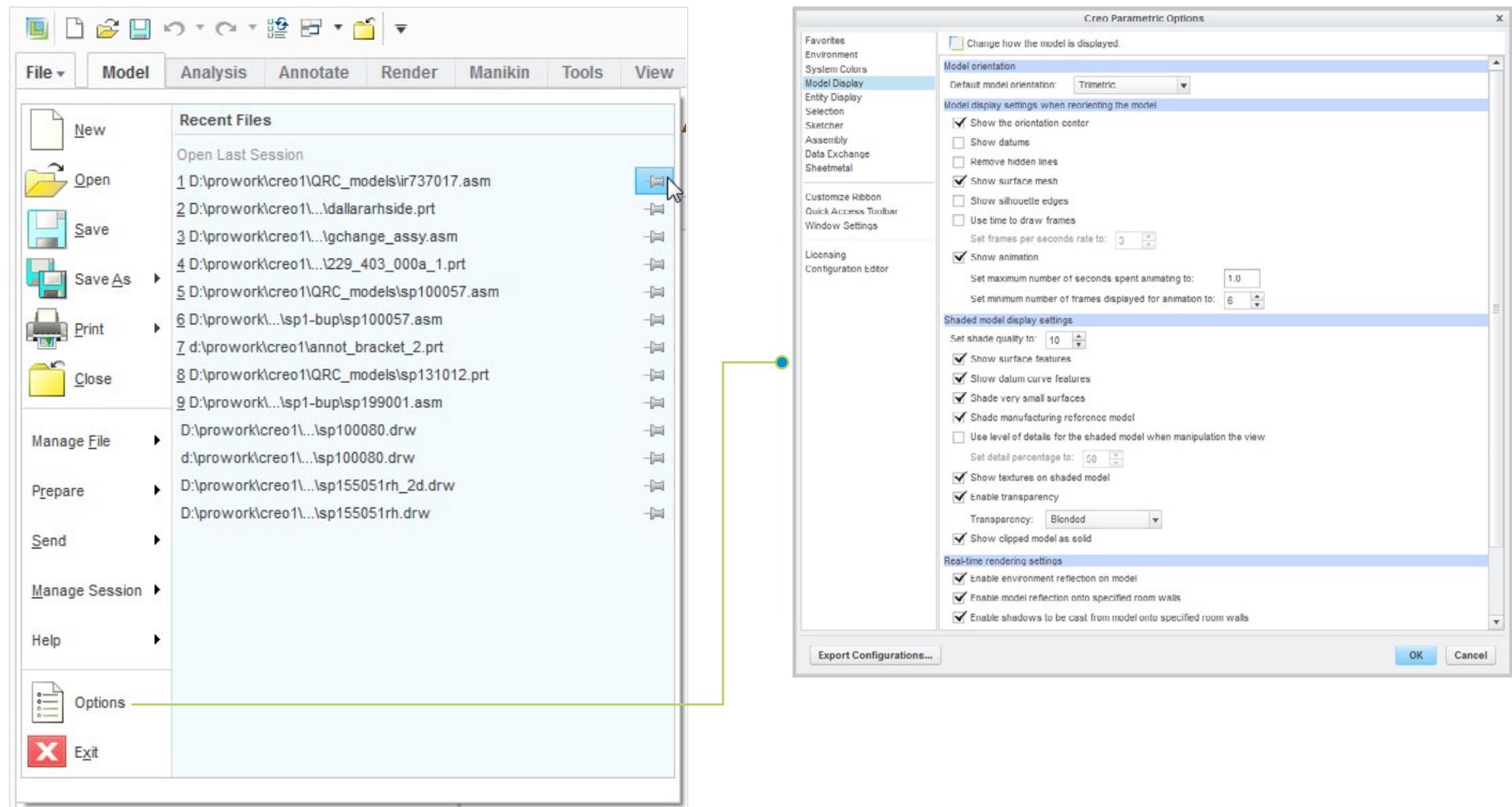
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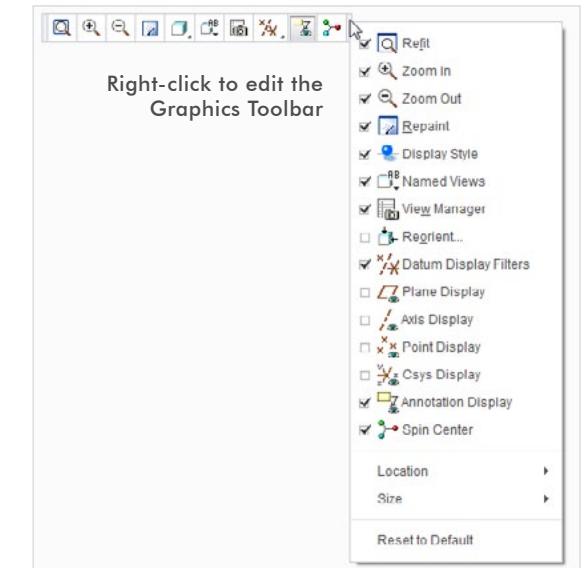
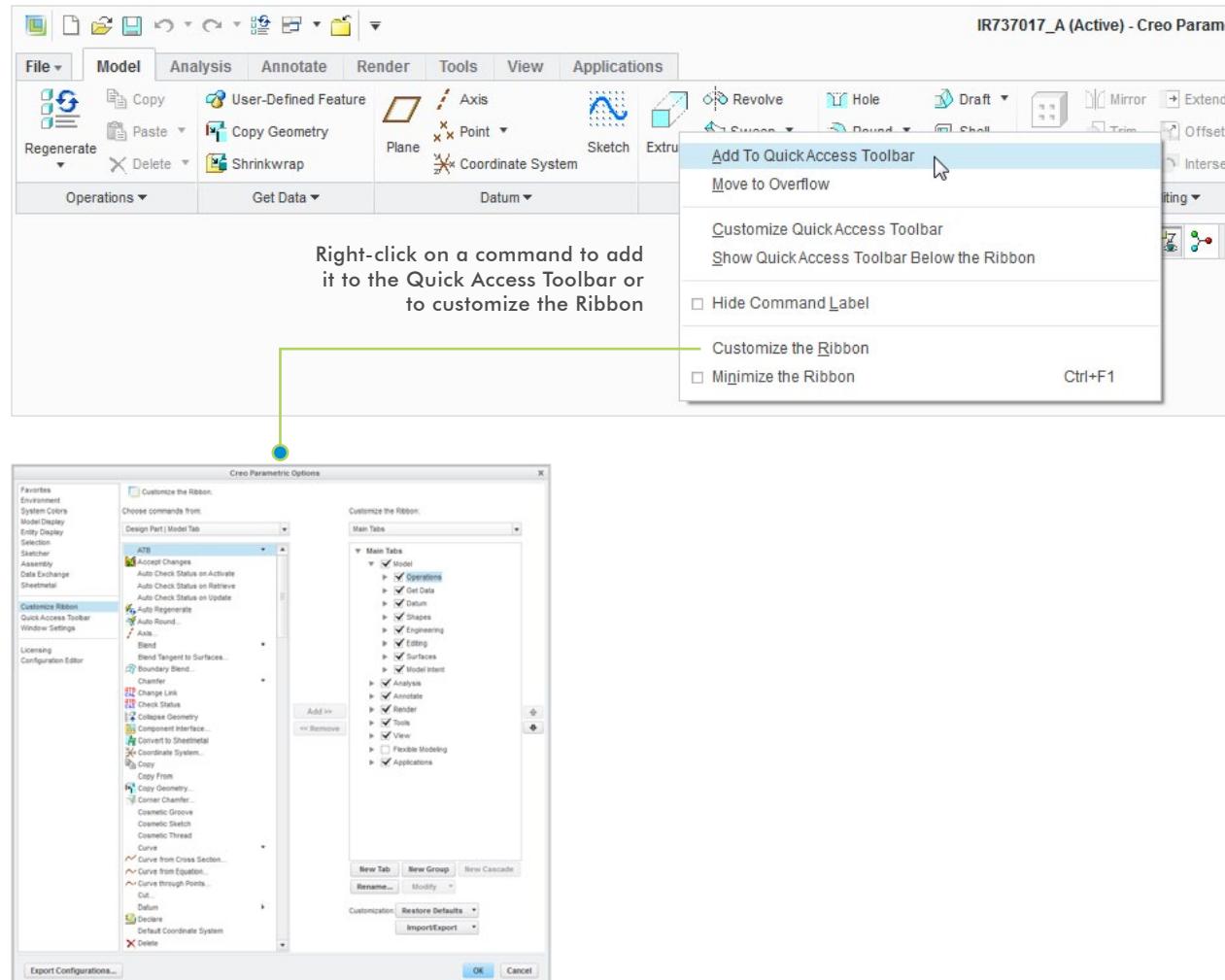
User interface



File menu

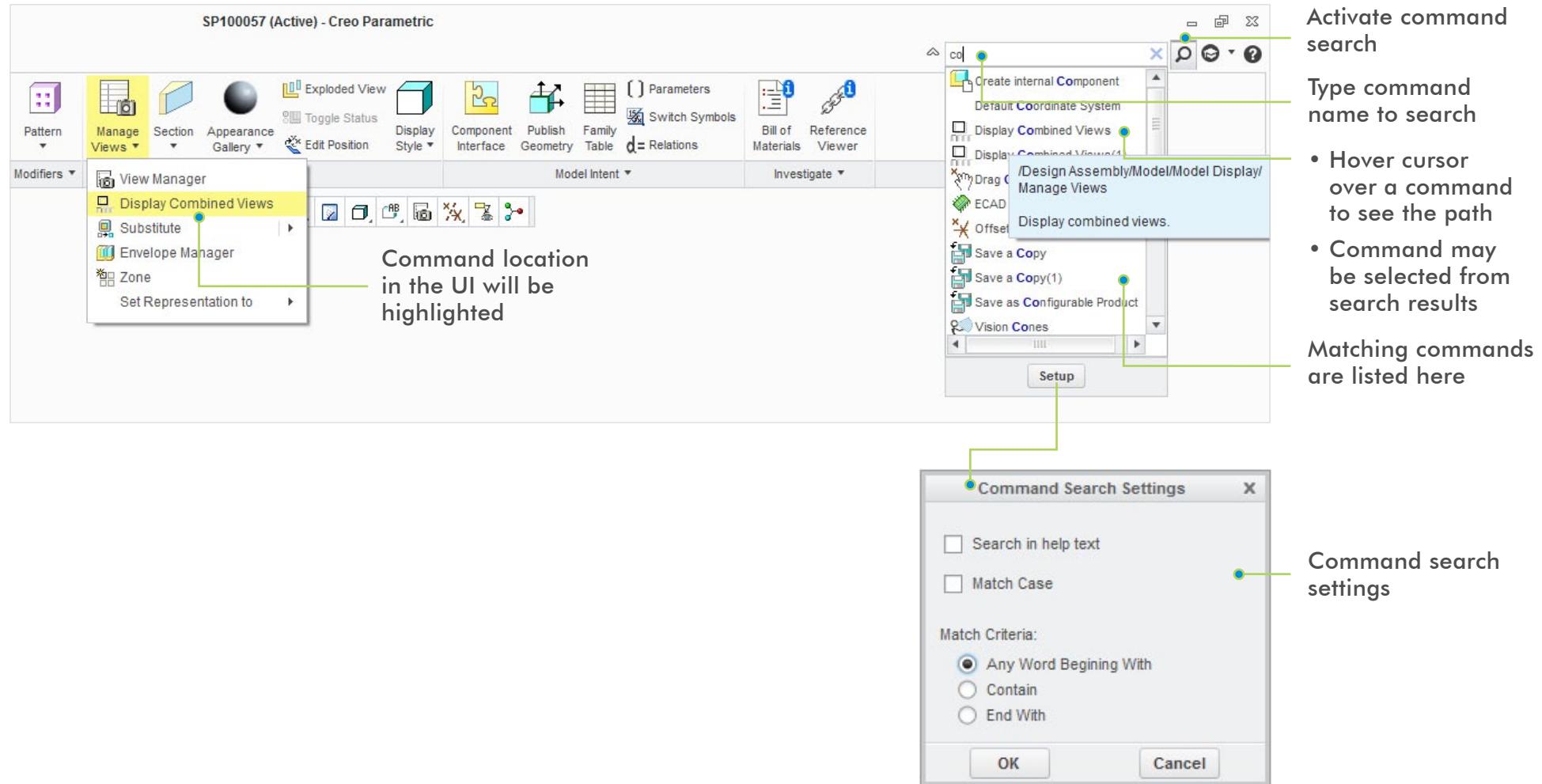


UI customization



Command locator

Main toolbar





Selection and mouse control

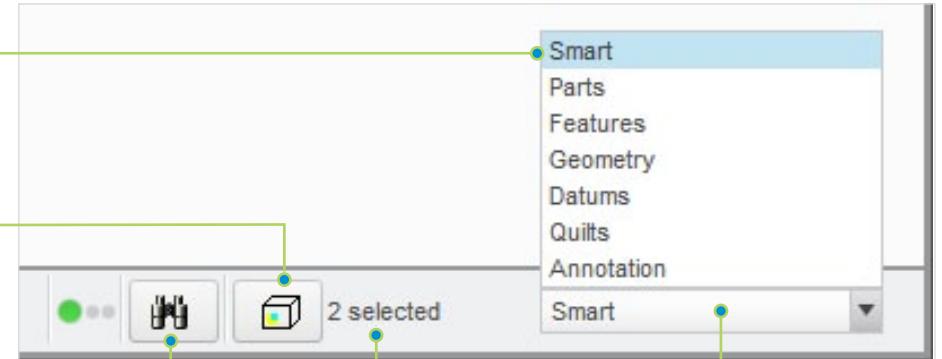
Mouse control

- 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

Smart Filter (2level filter)

Example: Select a feature first, then select geometry (Surface/edge/vertex) from the feature



Select using 3D box

Find tool

Tip: Double-click to view items in selection window

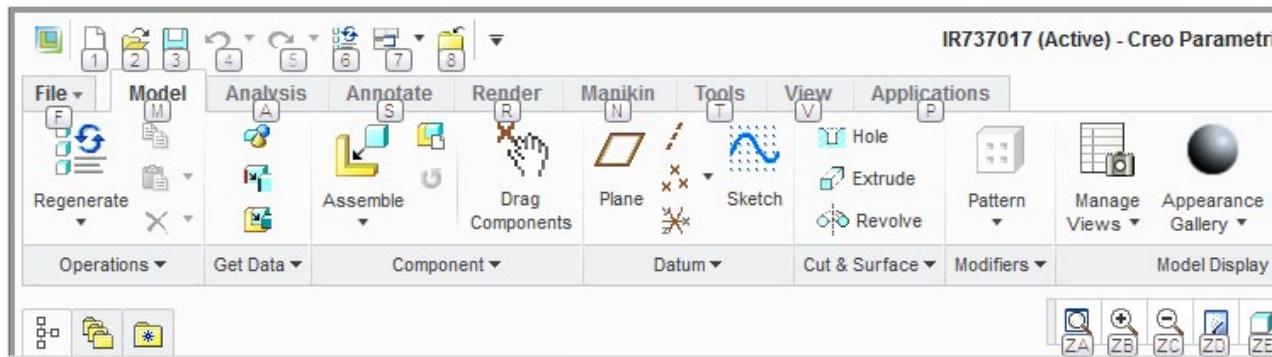
Active filter



Keyboard shortcuts

Key tips

Press ALT key to activate key tips



Keyboard 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.



Common dashboard controls

Feature	Hole	Round	Depth	Material	Controls
Solid Surface	Standard Simple	Set Mode Transition Mode	Blind Symmetric Through all To next Through until To selected	Flip direction Remove material Thicken sketch	Pause Tool No preview Un-attached preview Attached preview Verify mode Complete Cancel

Interface/manual placement
3D dragger

Placement panel

Datum feature tools

The screenshot shows the Creo Parametric interface with the following elements highlighted:

- File**: Top-left menu.
- Model**: Top menu item.
- Analysis**: Top menu item.
- Annotate**: Top menu item.
- Render**: Top menu item.
- Manikin**: Top menu item.
- Tools**: Top menu item.
- View**: Top menu item.
- Applications**: Top menu item.
- Component Placement**: Active tab.
- Placement**: Tab in the Placement panel.
- Move**: Tab in the Placement panel.
- Options**: Tab in the Placement panel.
- Flexibility**: Tab in the Placement panel.
- Properties**: Tab in the Placement panel.
- Set1 (User Defined)**: Constraint list.
- Coincident**: Constraint type.
- 164-432-116A:SurfF8(F)**: Constraint object.
- MOD-GCHANGE-HOUSE**: Constraint object.
- New Constraint**: Constraint creation button.
- New Set**: Set creation button.
- Constraint Enabled**: Checkmark.
- Constraint Type**: Coincident dropdown.
- Offset**: Value input field (0.00) and Flip button.
- Status**: Fully Constrained.
- Allow Assumptions**: Checkmark.
- Fully Constrained**: Status message.
- STATUS : Fully Constrained**: Overall status message.
- Pause Tool**: Control icon.
- No preview**: Control icon.
- Un-attached preview**: Control icon.
- Attached preview**: Control icon.
- Verify mode**: Control icon.
- Complete**: Control icon.
- Cancel**: Control icon.
- Datum**: Right-side panel.

Orienting the model

Dynamic viewing

3D Mode

Hold down the key and button. Drag the mouse.

- Spin



- Pan



- Zoom



- Turn



2D Mode

- Pan



- Zoom



2D & 3D Mode

Hold down the key and roll the mouse wheel.

- Zoom



- Fine Zoom



- Coarse Zoom



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 options
- 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



- Spin



- Move



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

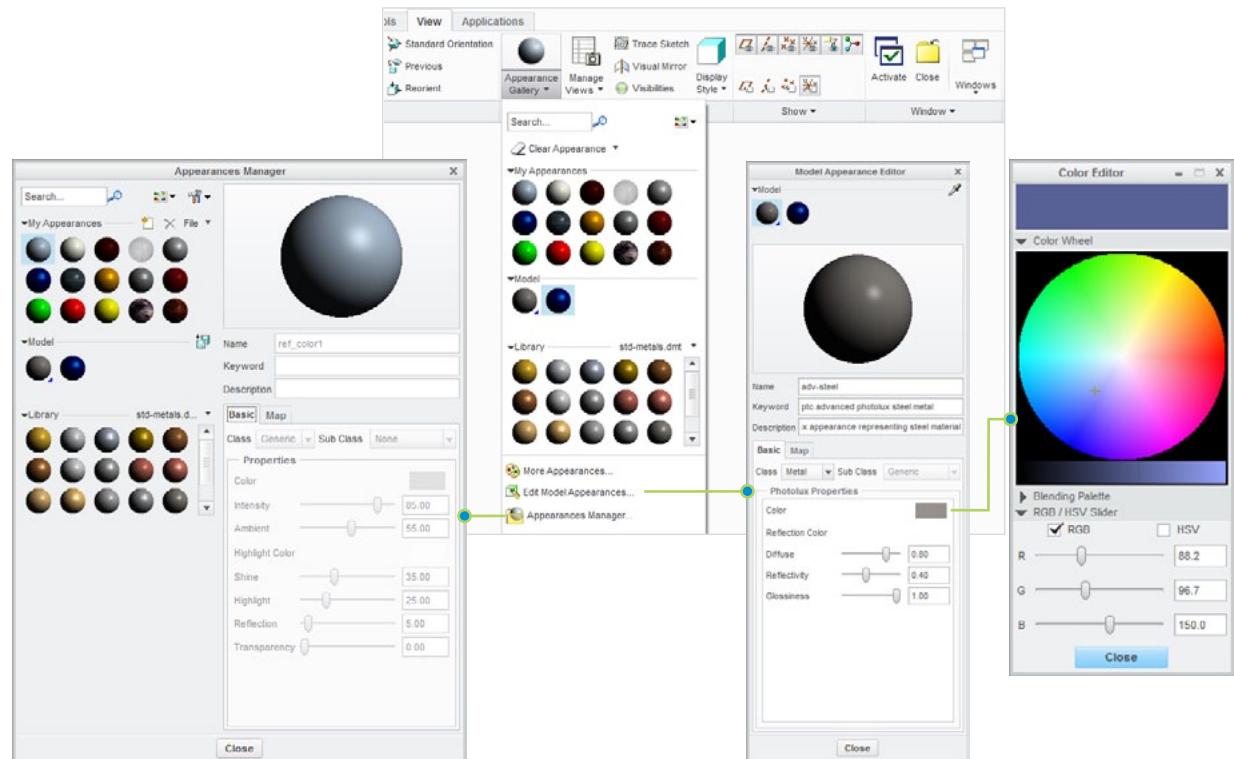
1. Select Appearance button pull-down
2. Select/create desired appearance
3. Select Surface/Quilt/Intent Surface/Part

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

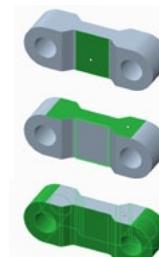
To select all the surface patches that are adjacent to the edges of a surface patch:

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)



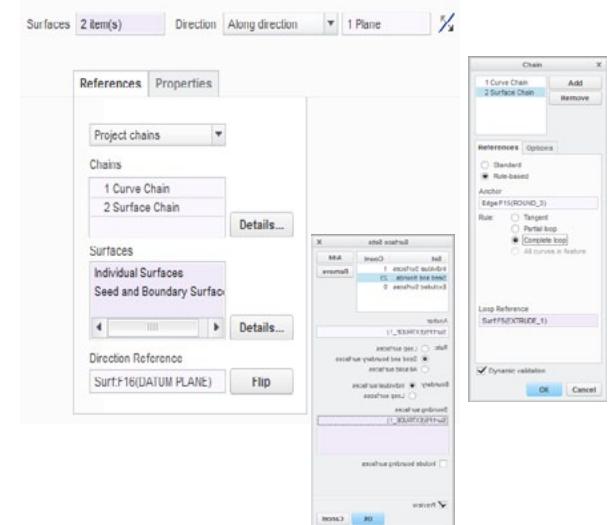
Excluding surface patches from surface sets

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

Constructing chains & surface sets using dialog boxes

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



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