PTC® PRODUCT & SERVICE ADVANTAGE®

PTC® Creo® Parametric™ Quick Reference Card

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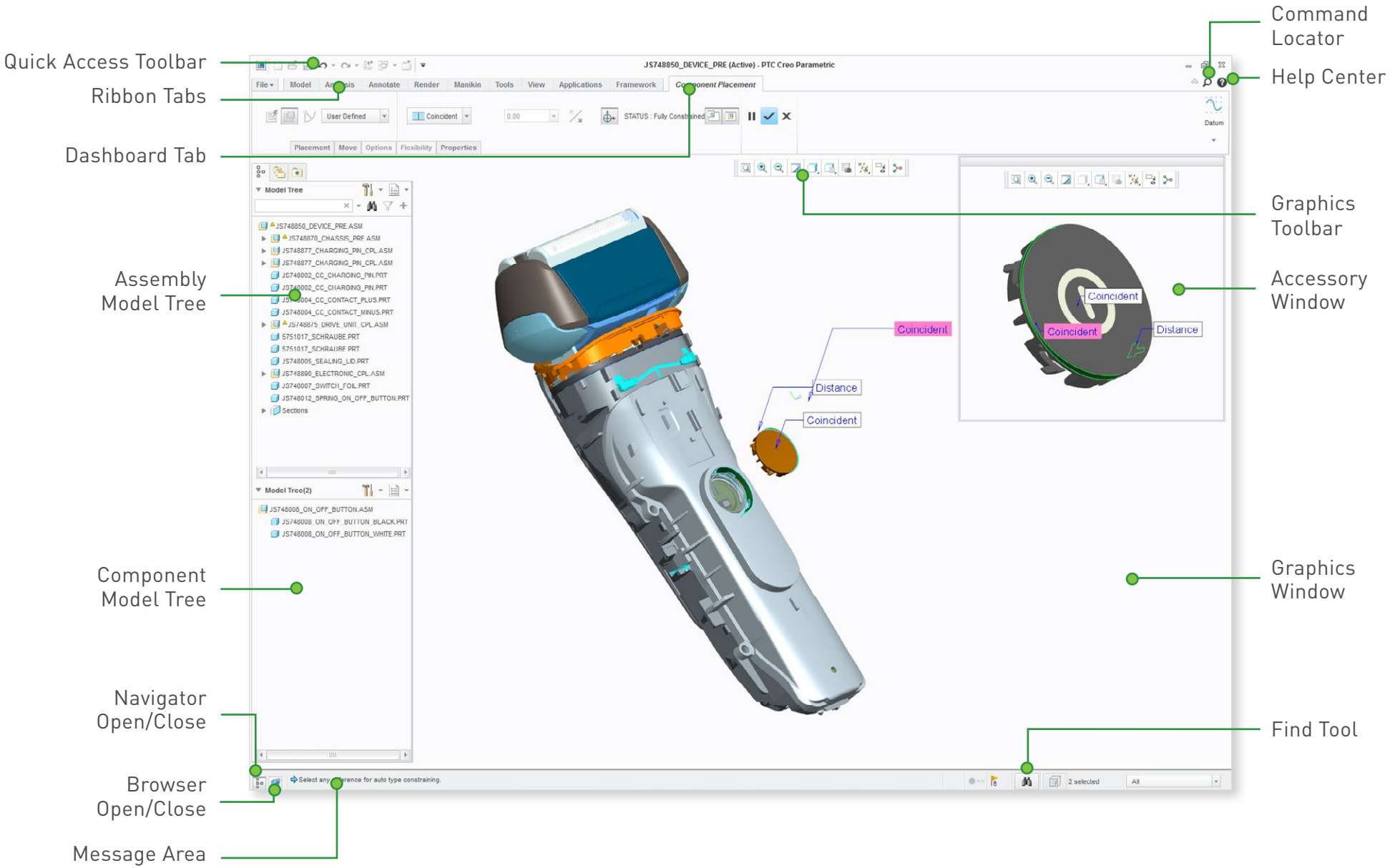
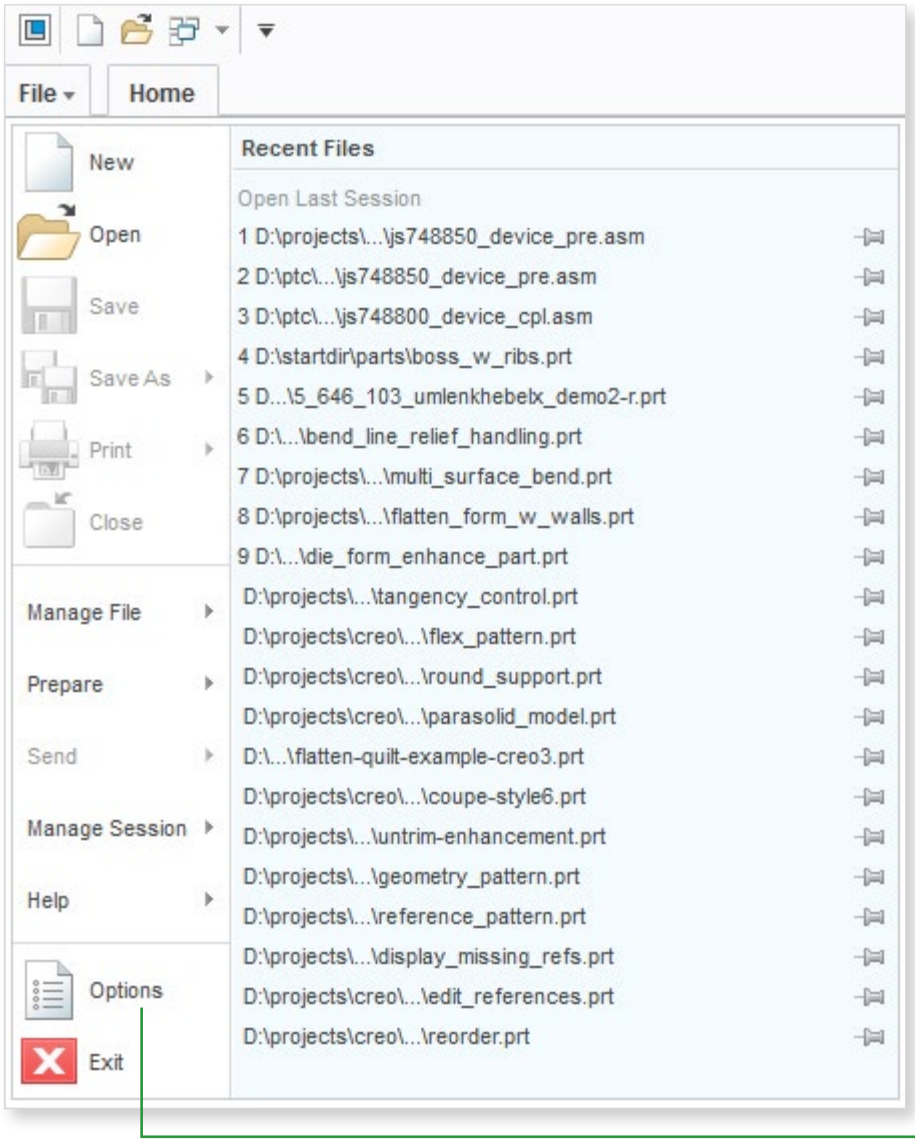
User Interface



File Menu


File
Home
New
Open
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Save As
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Manage File
Prepare
Send
Manage Session
Help
Options
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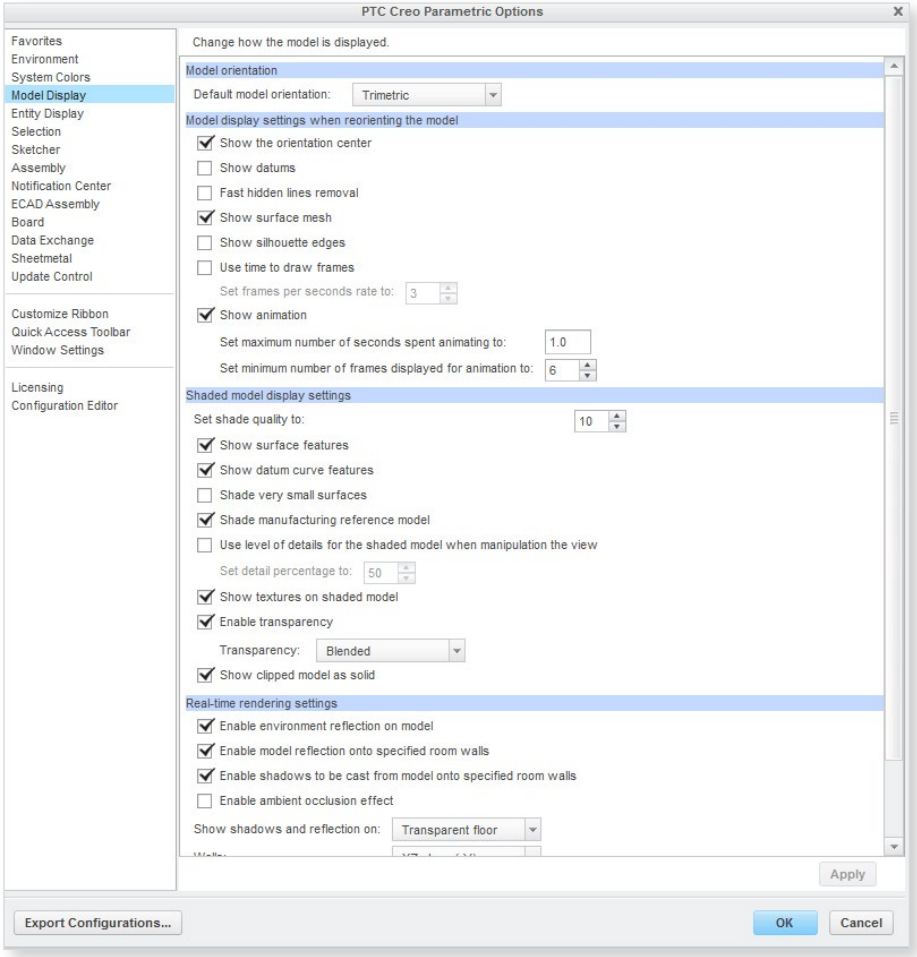
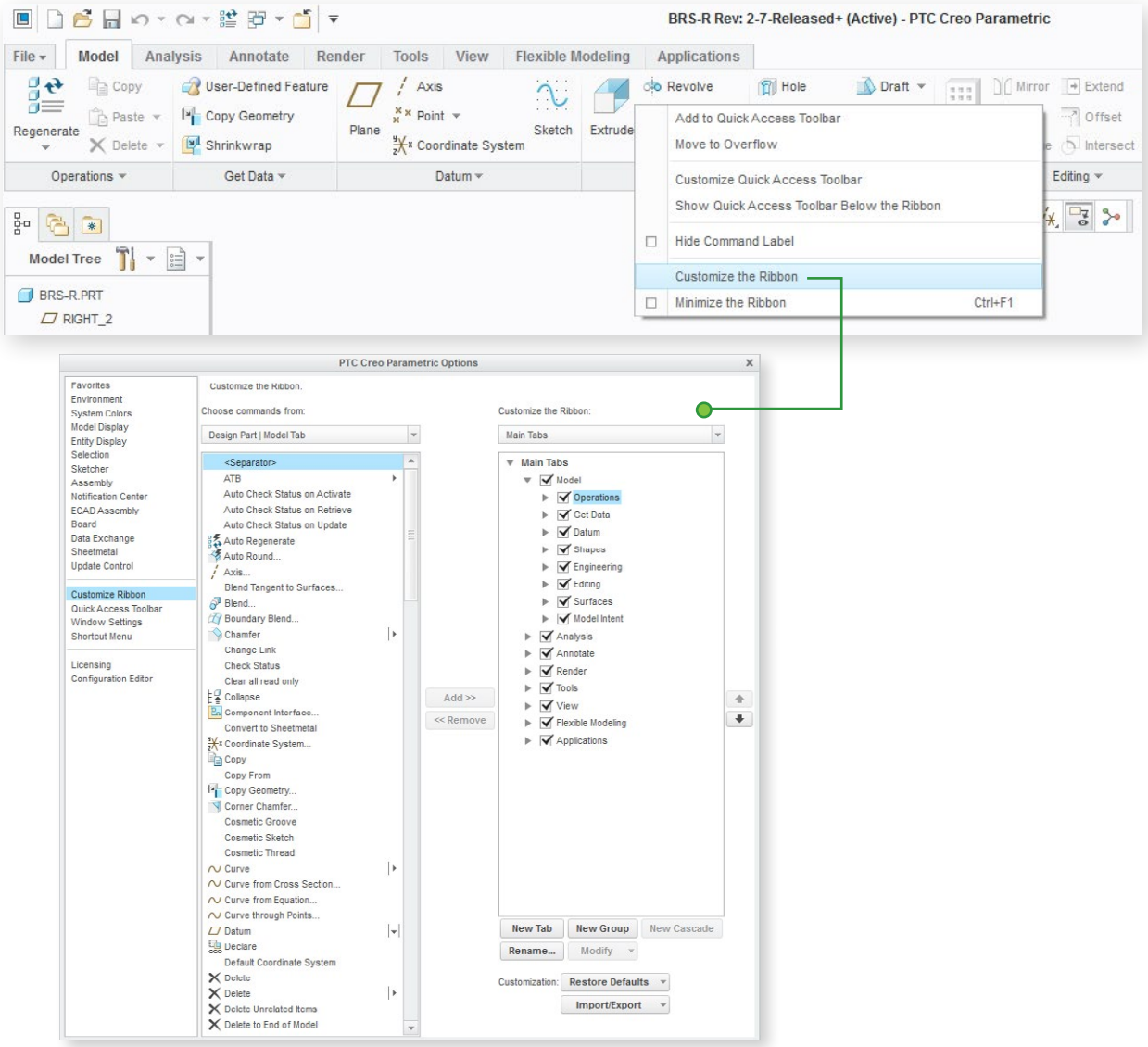
Recent Files
Open Last Session
1 D:\projects\...\js748850_device_pre.asm
2 D:\ptc\...\js748850_device_pre.asm
3 D:\ptc\...\js748800_device_cpl.asm
4 D:\startdir\parts\boss_w_ribs.prt
5 D...\5_646_103_umlenkhebelx_demo2-r.prt
6 D:\...\bend_line_relief_handling.prt
7 D:\projects\...\multi_surface_bend.prt
8 D:\projects\...\flatten_form_w_walls.prt
9 D:\...\die_form_enhance_part.prt
D:\projects\...\tangency_control.prt
D:\projects\creo\...\flex_pattern.prt
D:\projects\creo\...\round_support.prt
D:\projects\creo\...\parasolid_model.prt
D:\...\flatten-quilt-example-creo3.prt
D:\projects\creo\...\coupe-style6.prt
D:\projects\...\untrim-enhancement.prt
D:\projects\...\geometry_pattern.prt
D:\projects\...\reference_pattern.prt
D:\projects\...\display_missing_refs.prt
D:\projects\creo\...\edit_references.prt
D:\projects\creo\...\reorder.prt

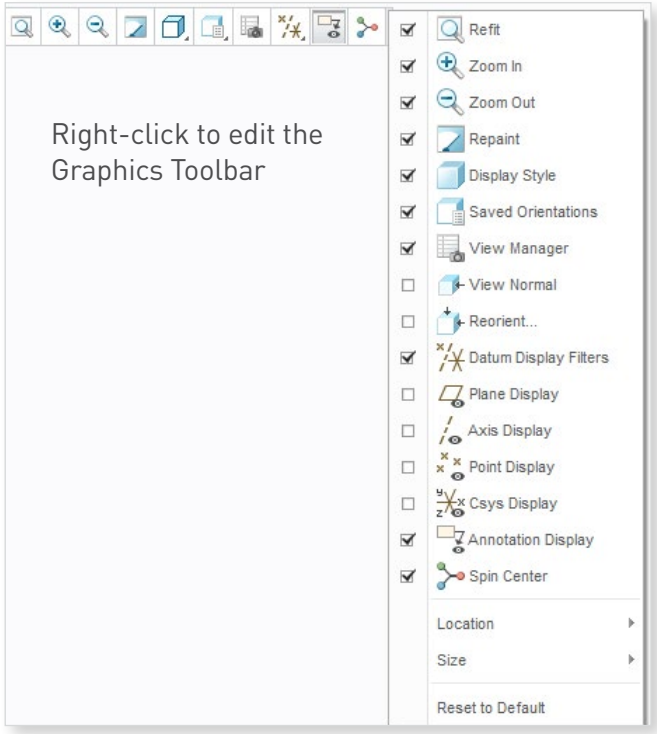

PTC Creo Parametric Options
Favorites
Environment
System Colors
Model Display
Entity Display
Selection
Sketcher
Assembly
Notification Center
ECAD Assembly
Board
Data Exchange
Sheetmetal
Update Control
Customize Ribbon
Quick Access Toolbar
Window Settings
Licensing
Configuration Editor
Change how the model is displayed.
Model orientation
Default model orientation: Trimetric
Model display settings when reorienting the model
Show the orientation center
Show datums
Fast hidden lines removal
Show surface mesh
Show silhouette edges
Use time to draw frames
Set frames per seconds rate to: 3
Show animation
Set maximum number of seconds spent animating to: 1.0
Set minimum number of frames displayed for animation to: 6
Shaded model display settings
Set shade quality to: 10
Show surface features
Show datum curve features
Shade very small surfaces
Shade manufacturing reference model
Use level of details for the shaded model when manipulation the view
Set detail percentage to: 50
Show textures on shaded model
Enable transparency
Transparency: Blended
Show clipped model as solid
Real-time rendering settings
Enable environment reflection on model
Enable model reflection onto specified room walls
Enable shadows to be cast from model onto specified room walls
Enable ambient occlusion effect
Show shadows and reflection on: Transparent floor
Apply
Export Configurations...
OK
Cancel

UI Customization

Common dashboard controls

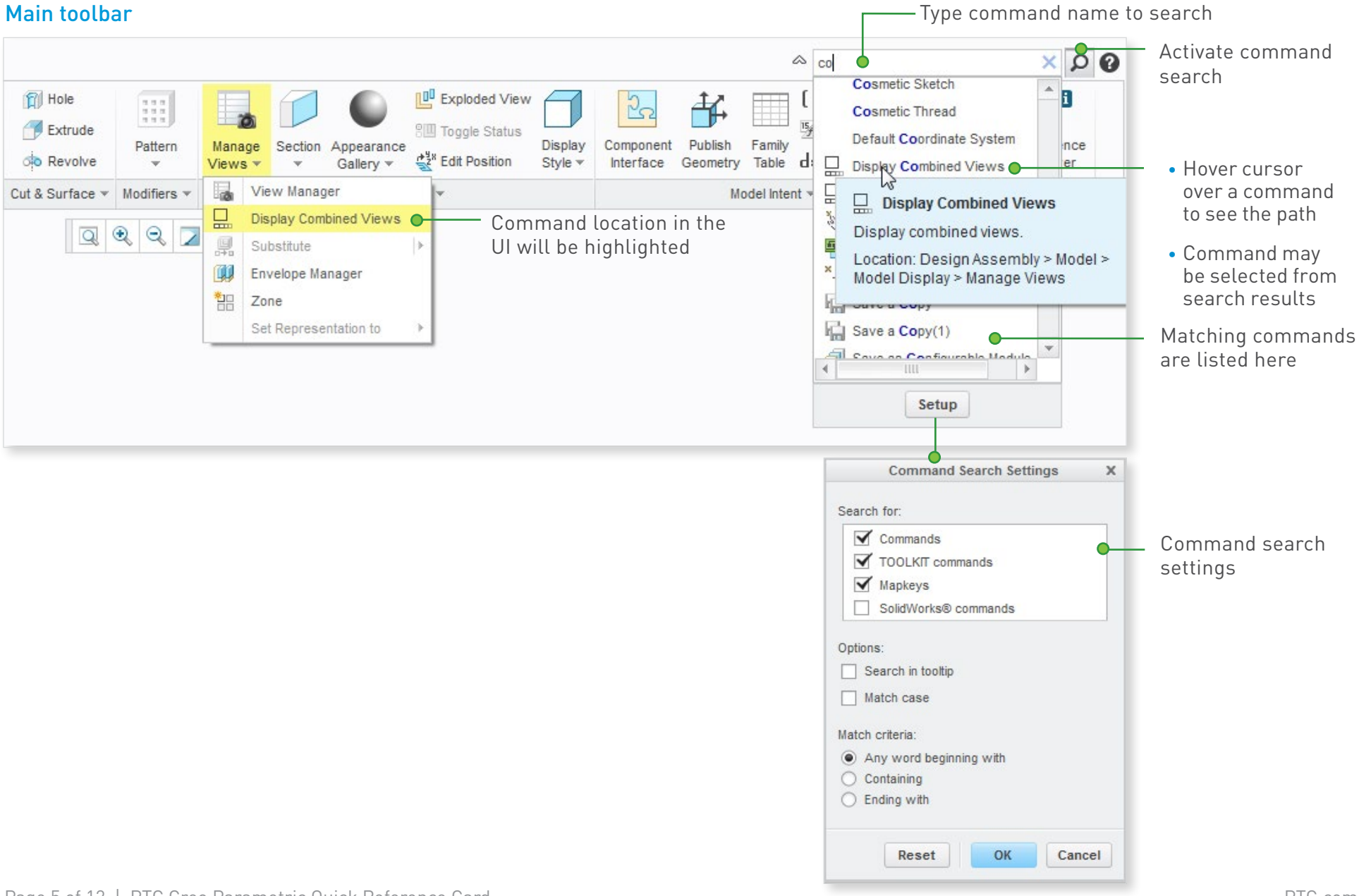
Right-click on a command to add to Quick Access Toolbar or access ribbon customization dialog.





Command Locator

Main toolbar

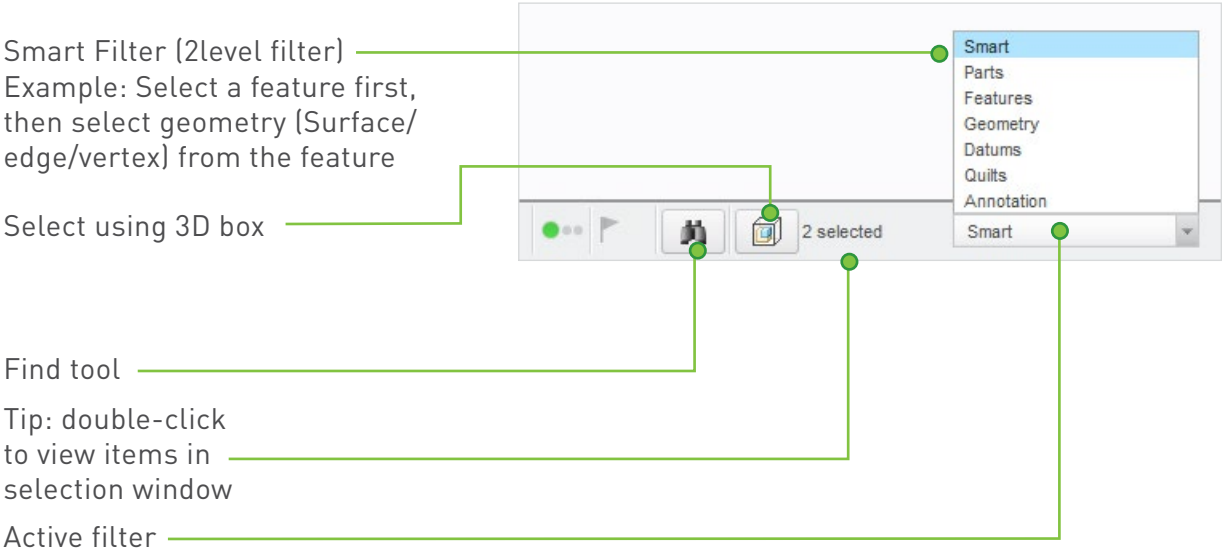


Selection and mouse control

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

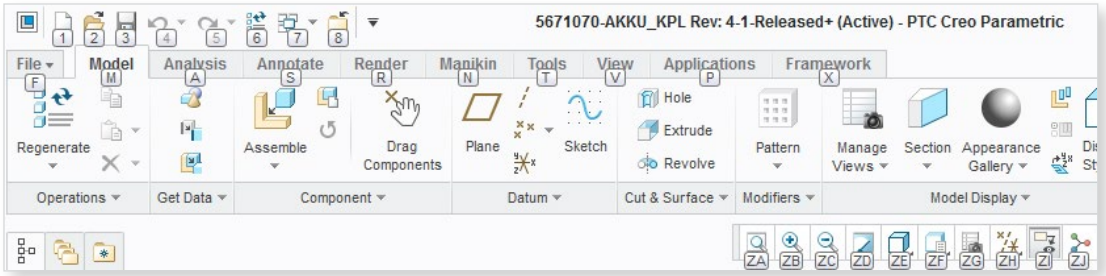
Filters limit the scope of selection



Keyboard shortcuts

Key tips

Press ALT key to activate key tips.



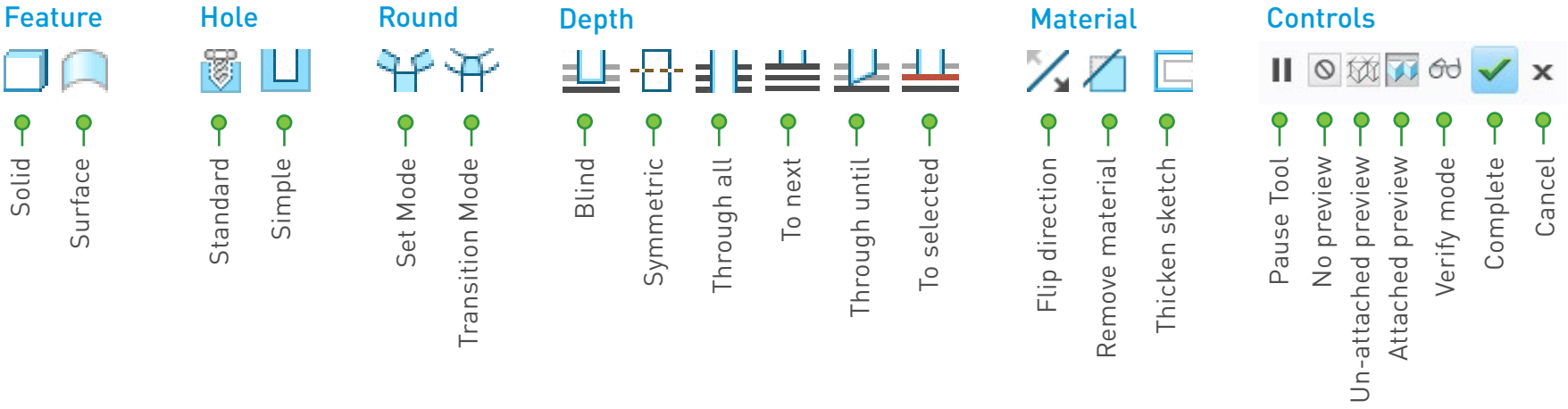
Key shortcuts

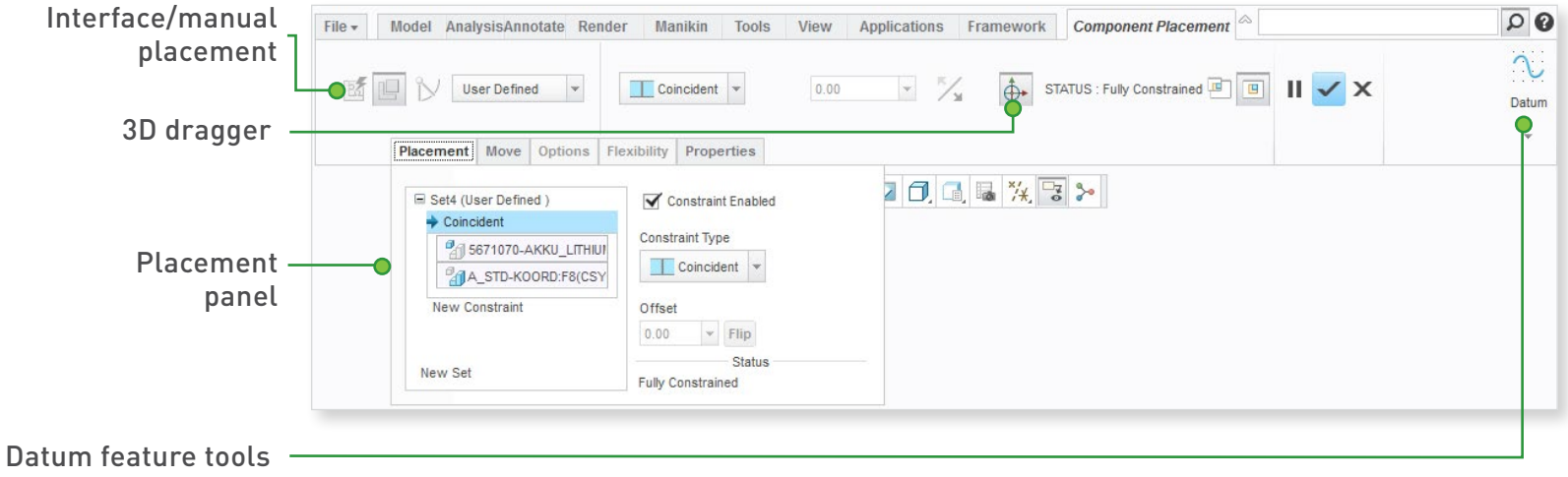
You can use standard keyboard shortcuts in PTC Creo Parametric. For example:

- 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





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 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 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

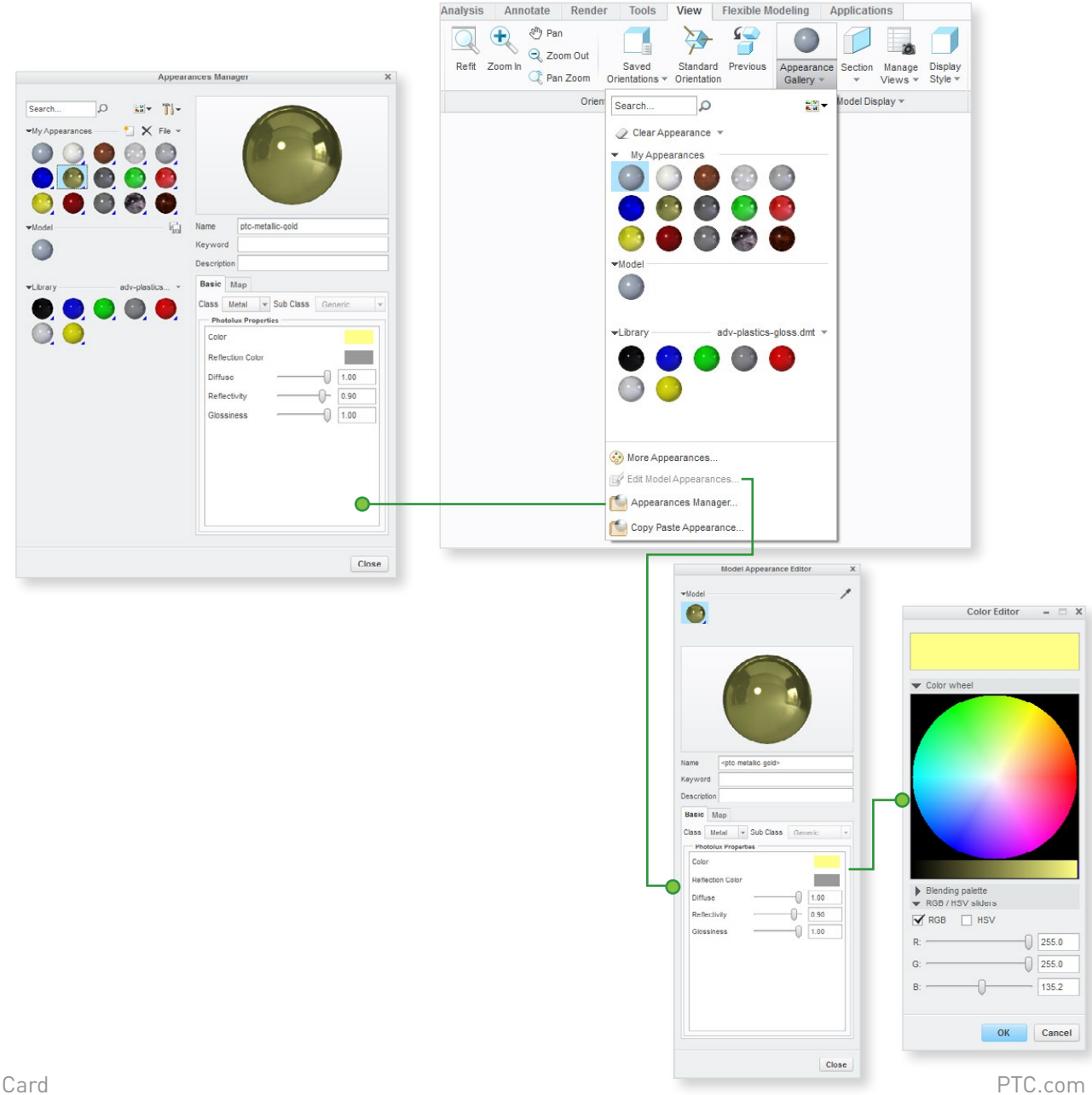
Edit Appearances in the current model

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

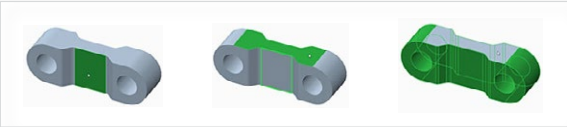
To select all the surface patches that are adjacent to the edges of a surface patch:

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

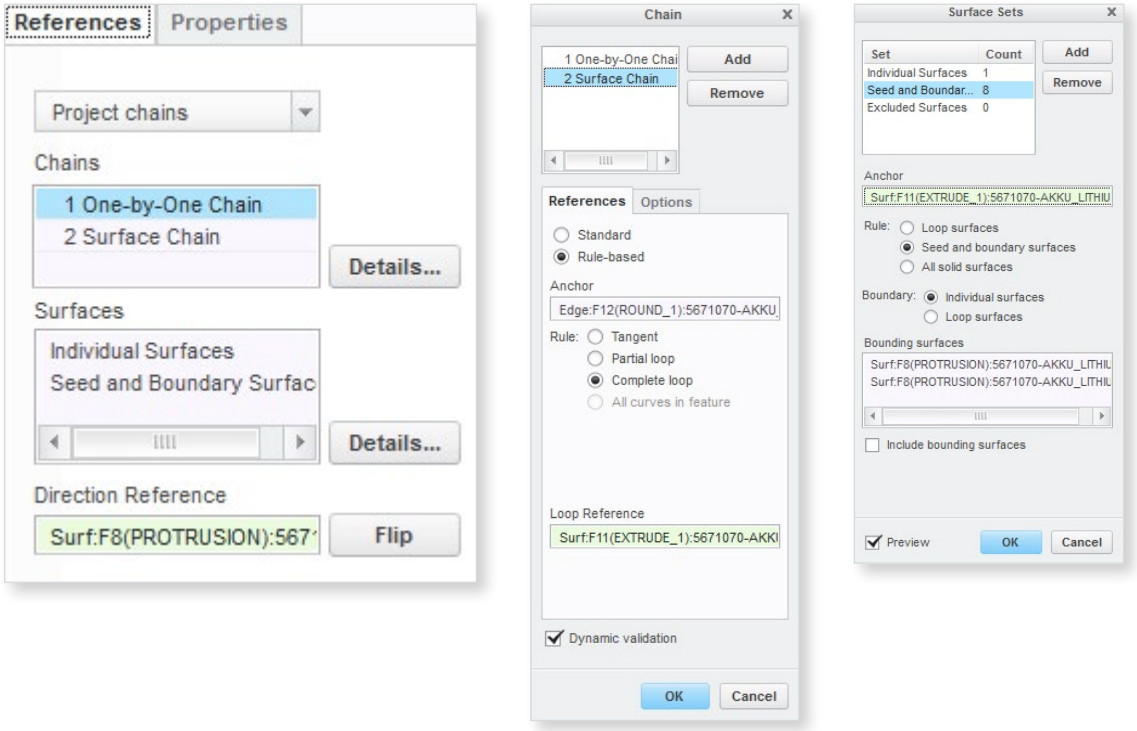
To exclude surface patches during or after construction of a surface set:

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:



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