spScan 2018.1

Upgrade News
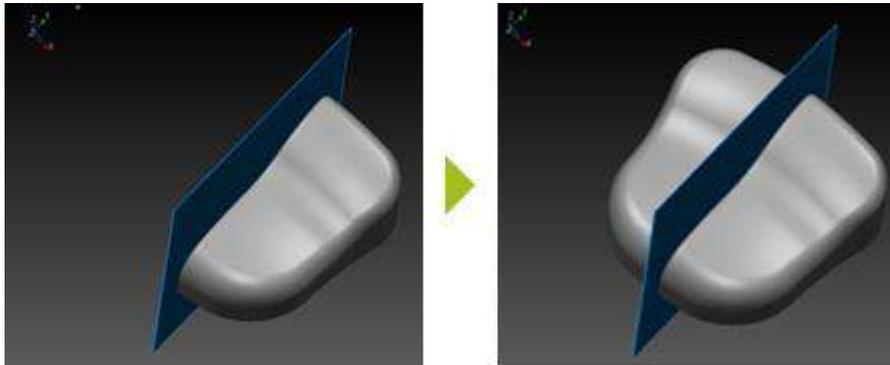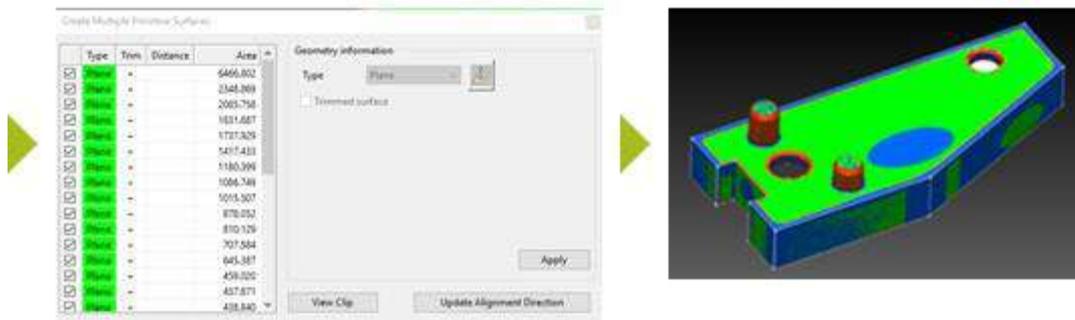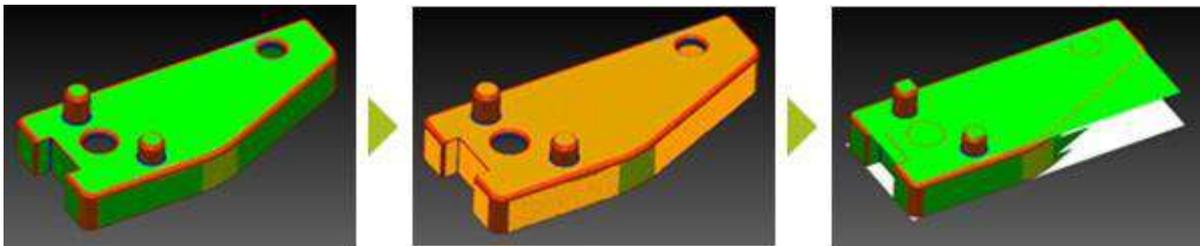
New Features

[Polygon Mesh]-[Mirror Copy]

Create inverted polygon meshes against a reference plane.

[Surface]-[Create Multiple Primitive Surfaces]

Create multiple primitive surfaces (plane, cylinder, cone) at once.
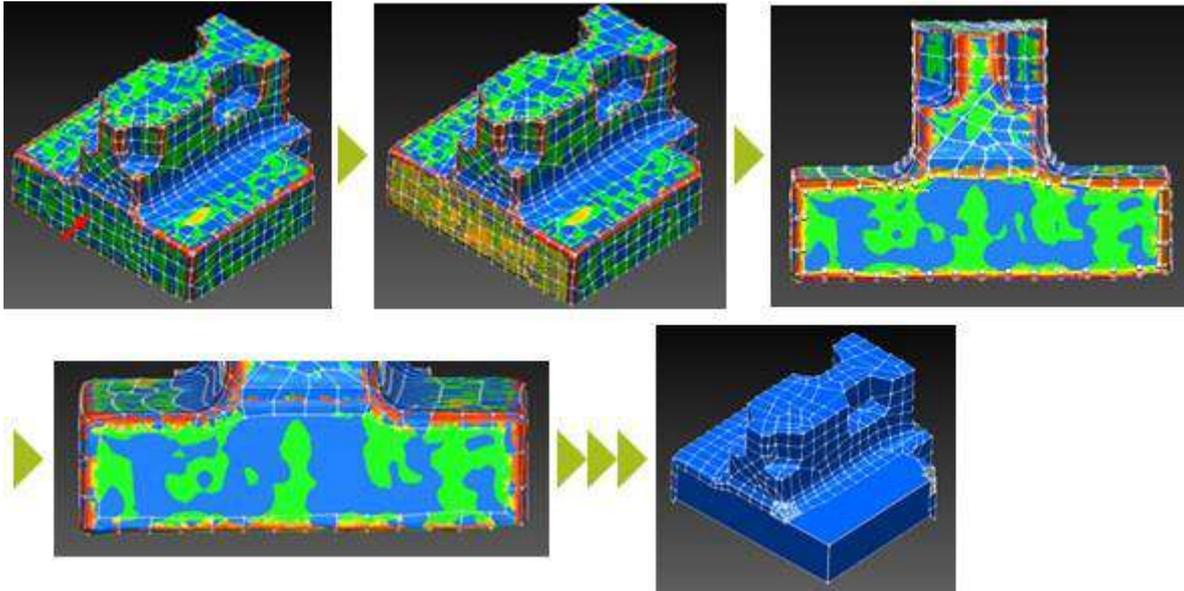

[Help]-[Handbook]

Opens a spScan handbook where operation example for each menu is compiled. Use this when you cannot open operation example PDF from the respective help pages.
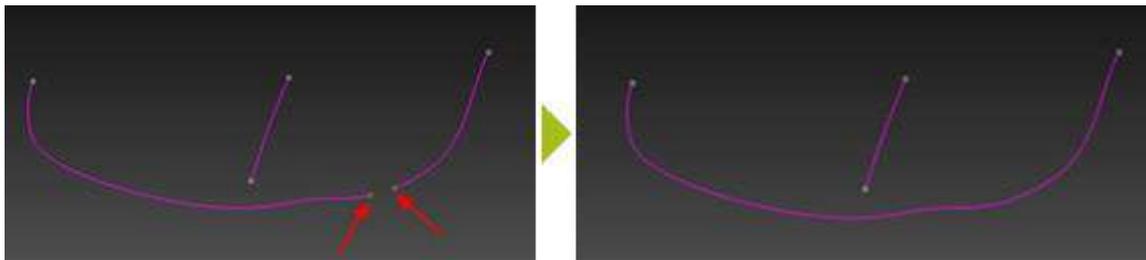
[Demo]-[Replace Patches]

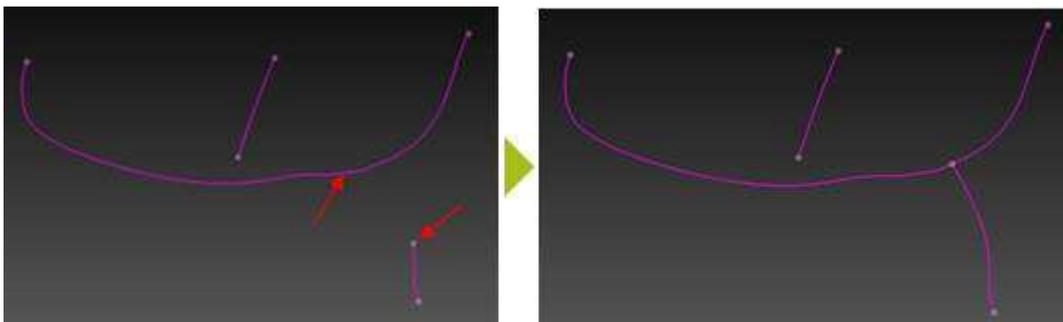Multiple patches can now be replaced by a plane or a spline surface.

[Demo]-[Virtual Intersection Curve]-[Edit Virtual Intersection Curves]

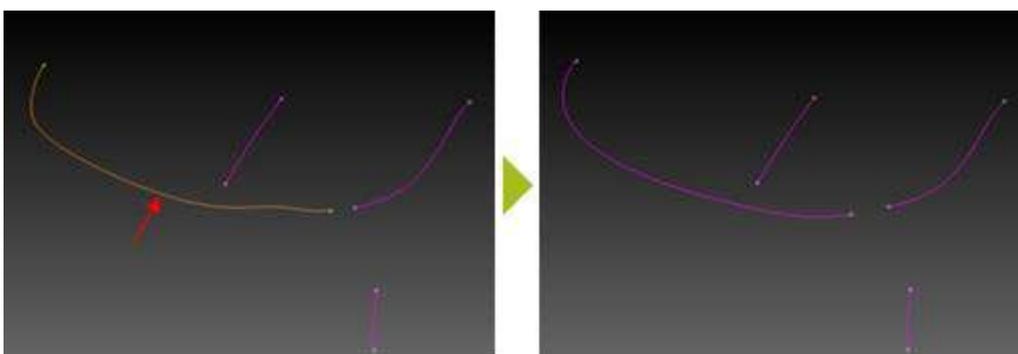Added a virtual intersection curve edition feature (Connect curves, Extend to an intersection, Smooth curves).
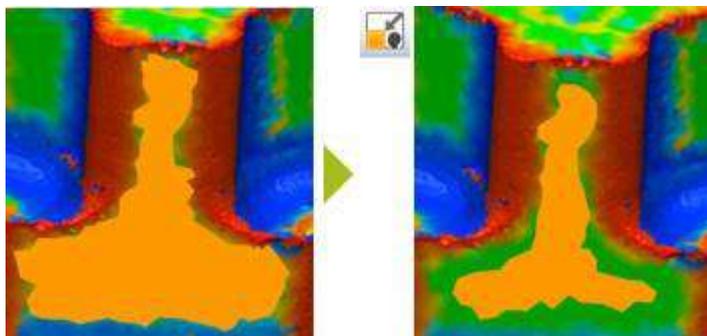
- Connect curves

- Extend to an intersection

- Smooth curves
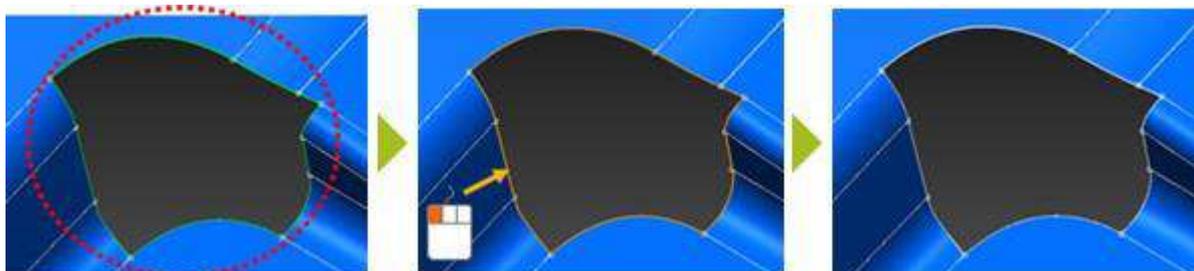
Improved Features

[Selection] toolbar [Shrink without dividing]

When selecting polygon mesh, the selection range can be shrank so that continuing selected region is not divided while selecting polygon meshes.

[Tool]-[Create Face Topology]

Added an option to select looped curves automatically.

[Curve]-[Edit Curve]

- [Smart Filter] is added to the selection toolbar. Through this feature, you can exclude the curves behind polygon meshes from a selection target.
- When continuous curves are not selected, error parts will be displayed.
- Mouse pointer snapping function is disabled during a view operation.

[Curve]-[Edit Control Point]

Optimized the initial value of the constraining condition of an outer edge.

[Curve]-[Remove Curve]

- [Smart Filter] is added to the selection toolbar. Through this feature, you can exclude the curves behind polygon meshes from a selection target.
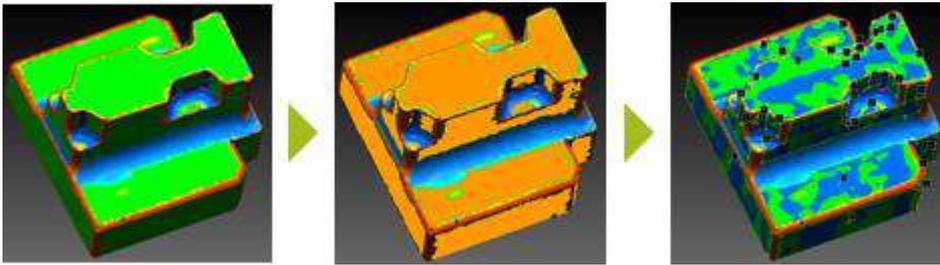- [Keep topology] option is now obsolete.

[Curve]-[To Circular]

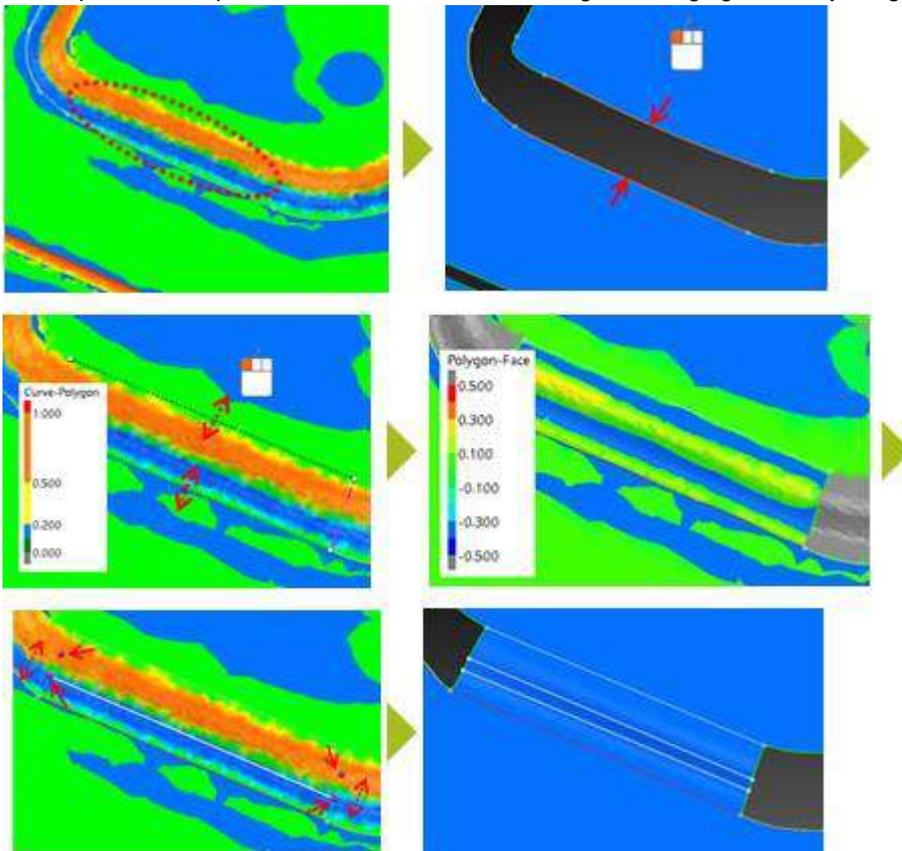When there is only one vertex in a loop, a vertex is added.

[Surface]-[Create Multiple Surfaces]

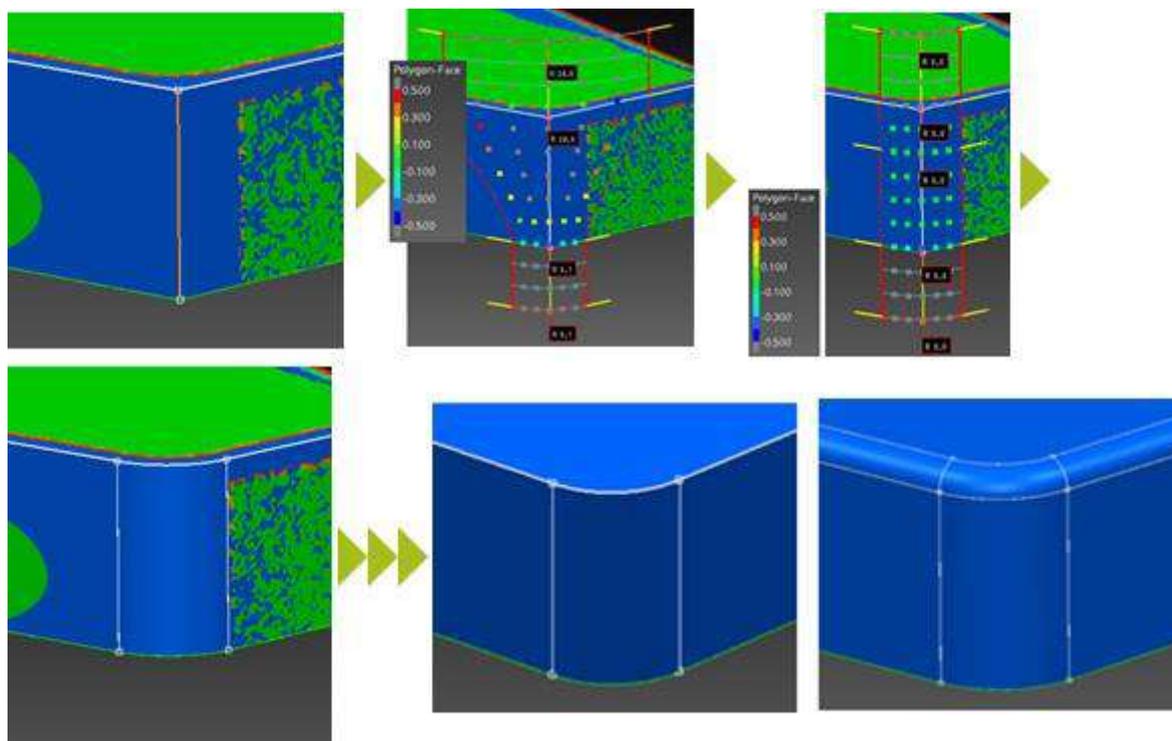You can now select polygon meshes and create surfaces.

[Surface]-[Create Fillet Surface]

- Added an option to auto divide a surface when creating S-shaped fillet.
- Optimized the position of vertices that are the target of merging when adjusting section line.

[Surface]-[Create Fillet Surface with Radius]

- Fillet surface can be created with the edge that's been corner edged. (Integrated [Demo]-[Create Fillet Surface with Radius (Sharp Edge)] and the menu.)
- When updating distance analysis, a preview will be displayed. Therefore, [Update distance(Polygon-Surface)] option has been integrated to [Fit] option.

[Surface]-[Edging]

Number of errors due to edging of primitive shapes have been reduced after the process has been reviewed.
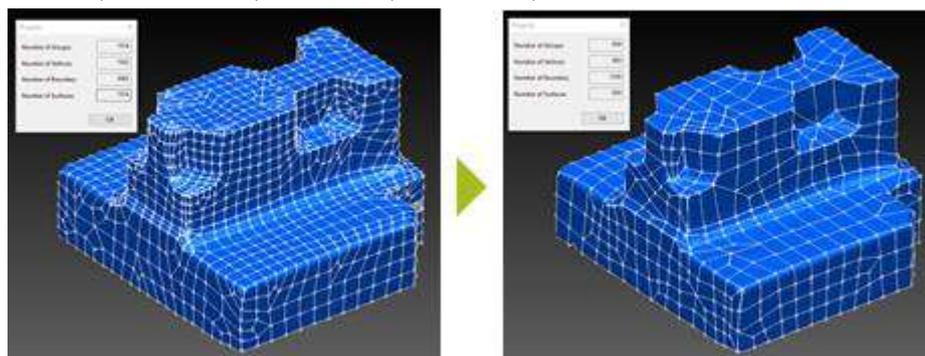
[Surface]-[Copy]-[Rotate]/[Surface]-[Copy]-[Mirror]

Added an option to remove the original shape of a copy.
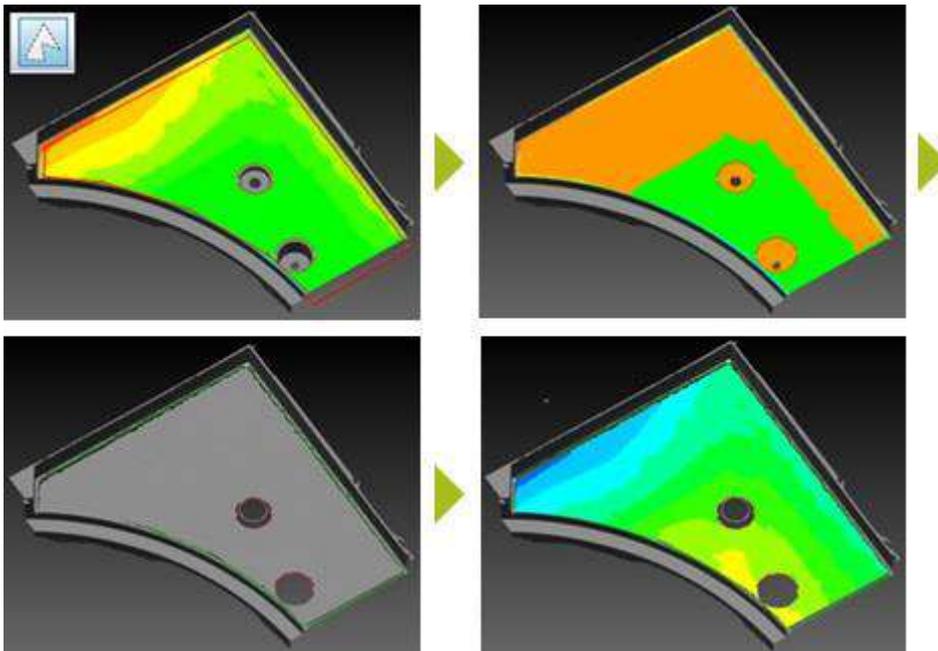
[Surface]-[Patch]-[Create Patch]

- The message regarding automatic adjustment of projection accuracy is no longer displayed.
- Division number of a patch is reduced by improving the division algorithm.

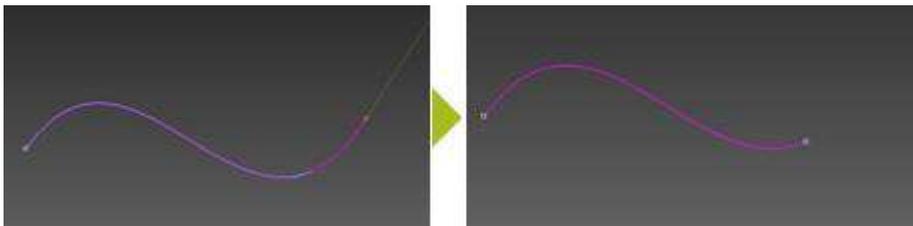2017.1: (1514 surfaces) -> 2018.1: (654 surfaces)

[Demo]-[Polygon Estimated Deformation]

- Now you can morph just a part of polygon mesh.
- Now you can morph proportionally to the amount of the error.
- Now you can calculate errors with normals of polygon meshes in consideration.

[Demo]-[Edit Curve]-[Extend Curve]

- Now you can specify a negative value (shrinking curve).
- The guide curve is now highlighted.
- The length of a guiding curve can be modified.
- A closed curve can no longer be selected.

[Demo]-[Virtual Intersection Curve]-[Auto Create Virtual Intersection Curve]

- Enhanced the algorithm and improved extraction rate.
- Extraction through polygon mesh selection is now possible.

[Demo]-[Edit Sharp Edge]

When continuous curves are not selected, error parts will be displayed.

[Demo]-[Create Surface]-[Extrude Surface]

To avoid data inconsistency, a loop with only one side can no longer be extruded.

Resolved Issues

[Polygon Mesh]-[Auto Edit to Create Patch]

Addressed issue where spScan stops.

[View]-[Store Appearance]

When another menu is running, the execution from the tree view's context menu has been limited because it could potentially corrupt data.

[Tool]-[Auto Build Topology]

Addressed issue where spScan sometimes stops when this menu is executed after importing a free curve.

[Surface]-[Create Primitive Surface]

Addressed issue where spScan stops when the plane's taper angle is left blank.

[Surface]-[Edging]

- Addressed issue of sometimes not being able to cancel the selection of a curve when edging fails.
- Addressed issue where edging is done at a narrower range than the selected range.

[Surface]-[Create Fillet Surface]

Addressed issue where surface creation fails under certain option settings.

[Surface]-[Patch]-[Create Patch Domain]

Addressed issue where a curve is projected to the back of polygon mesh.

[Demo]-[Edit Curve]-[Extend Curve]

- Addressed issue where sometimes circular arc cannot be extended.
- Addressed issue where spScan stops when extension method is switched to circular arc.

[Demo]-[Fit Multiple Surfaces to Polygon Mesh]

Addressed issue where the view is not refreshed after surface fitting.

[Demo]-[Edit Surface]-[Cut with Plane]

Addressed issue where a curve is deformed.

[Demo]-[Fairing Surfaces (Control Points)]

Addressed issue where setting outer edge constraint to [Free] throws exception error.

Developer

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