

spScan 2018.1

Upgrade News

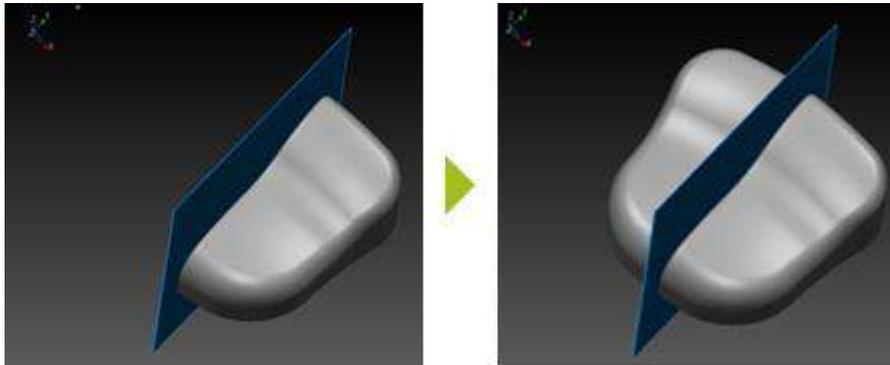
2018/06

[spScan 2018.1.0]

New Features

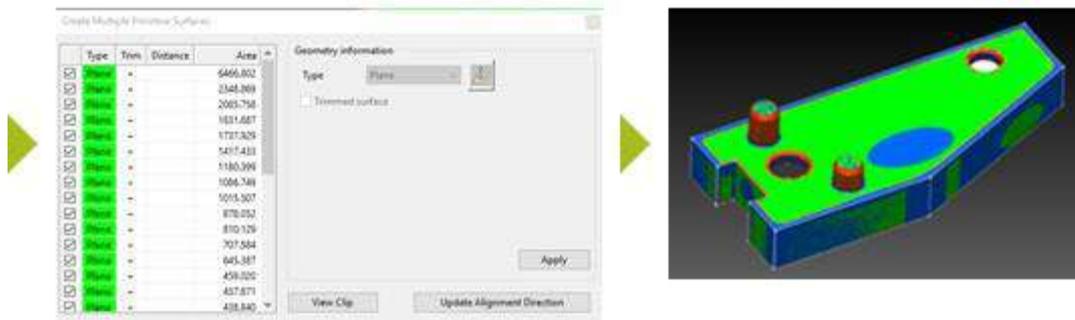
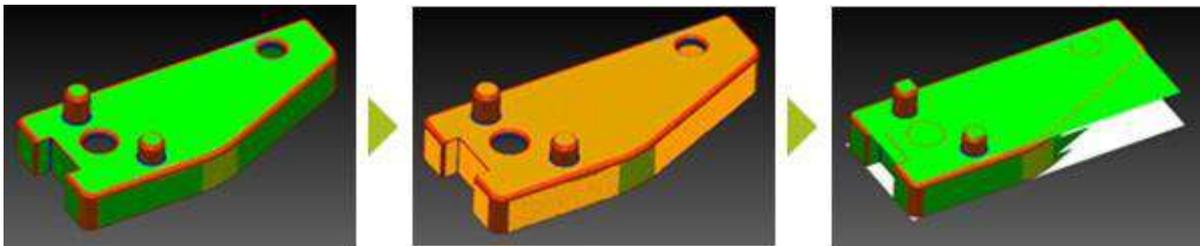
[Polygon Mesh]-[Mirror Copy]

Create inverted polygon meshes against a reference plane.



[Surface]-[Create Multiple Primitive Surfaces]

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



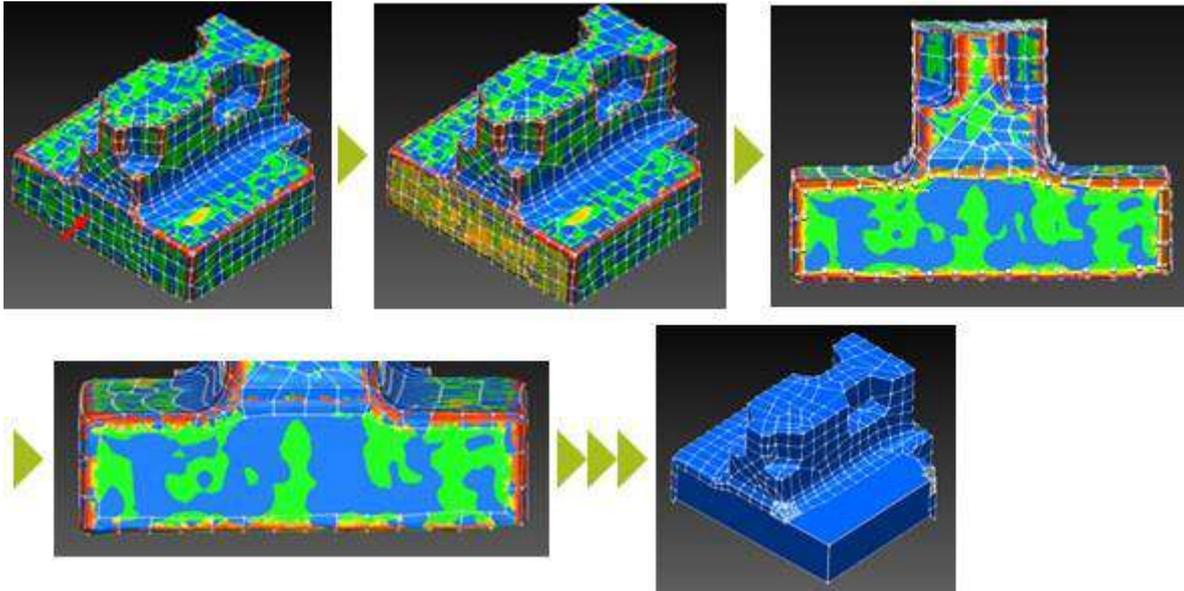
[Help]-[Handbook]

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]

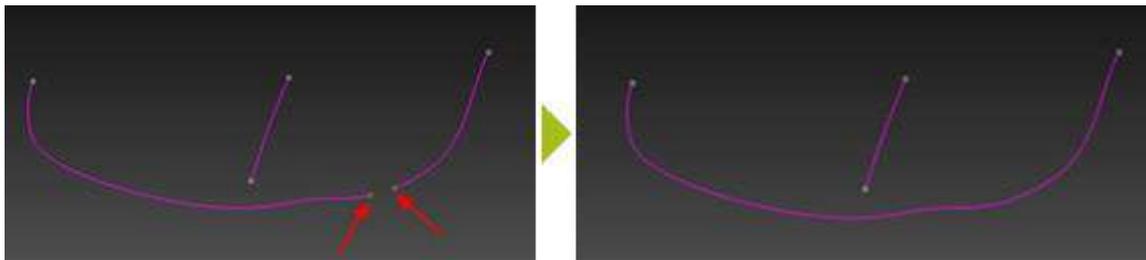
Multiple patches can now be replaced by a plane or a spline surface.



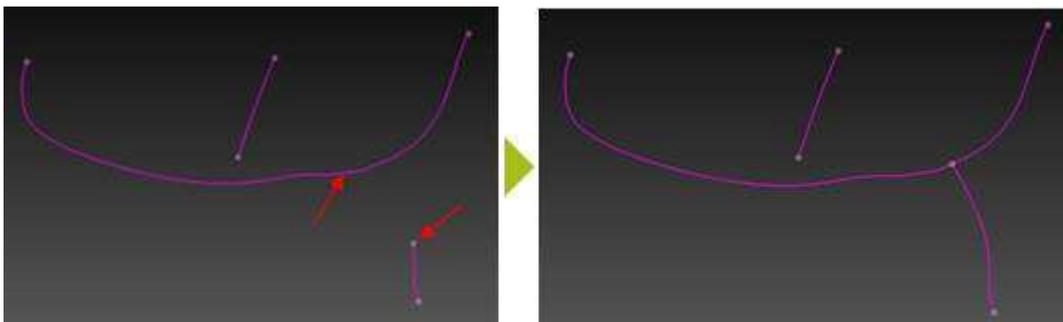
[Demo]-[Virtual Intersection Curve]-[Edit Virtual Intersection Curves]

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

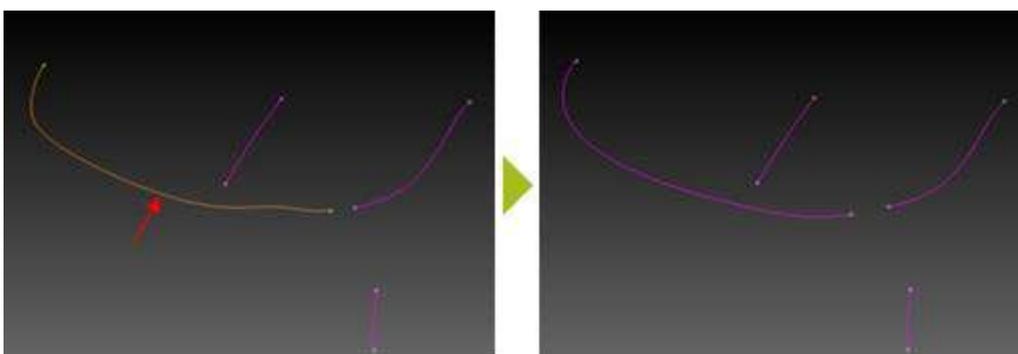
- Connect curves



- Extend to an intersection



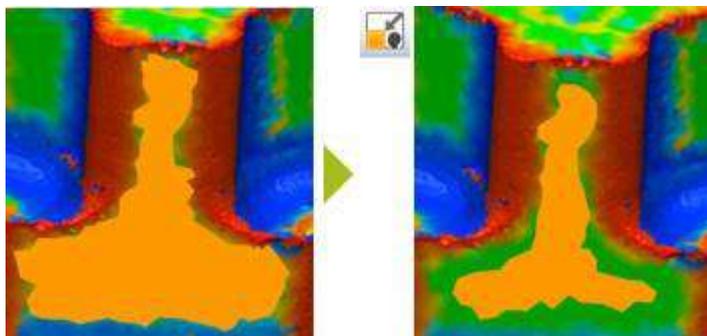
- Smooth curves



Improved Features

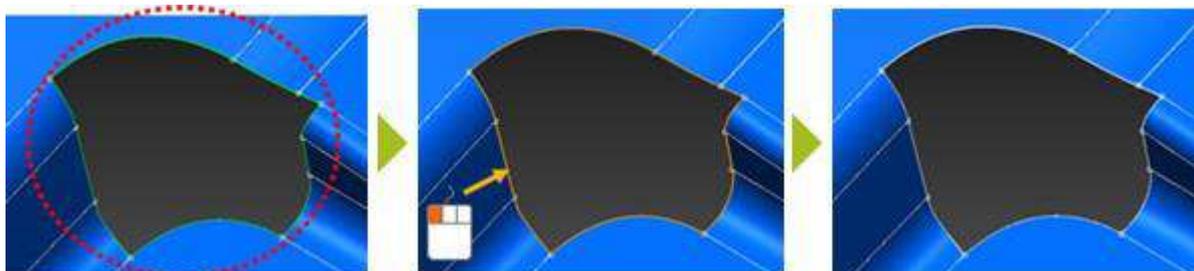
[Selection] toolbar [Shrink without dividing]

When selecting polygon mesh, the selection range can be shrunk 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.

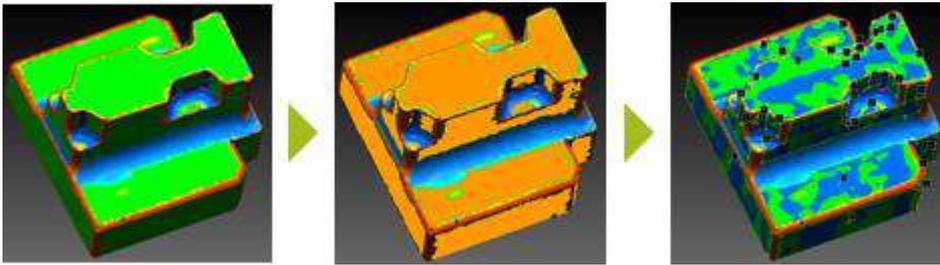
[Curve]-[To Circular]

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



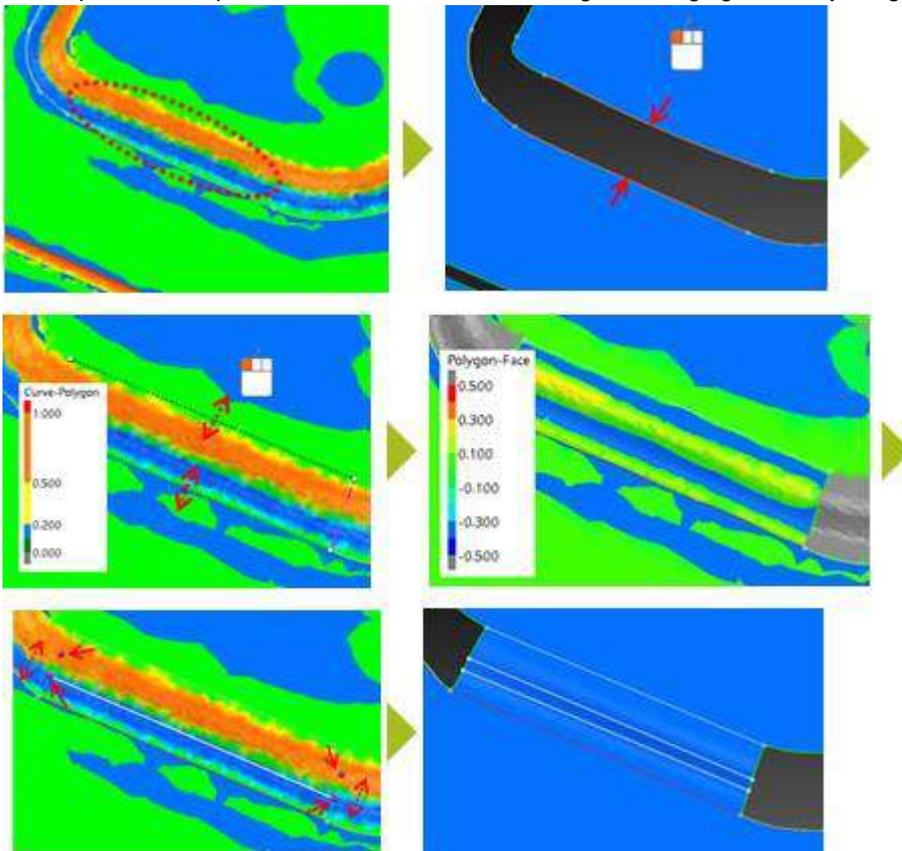
[Surface]-[Create Multiple Surfaces]

You can now select polygon meshes and create surfaces.



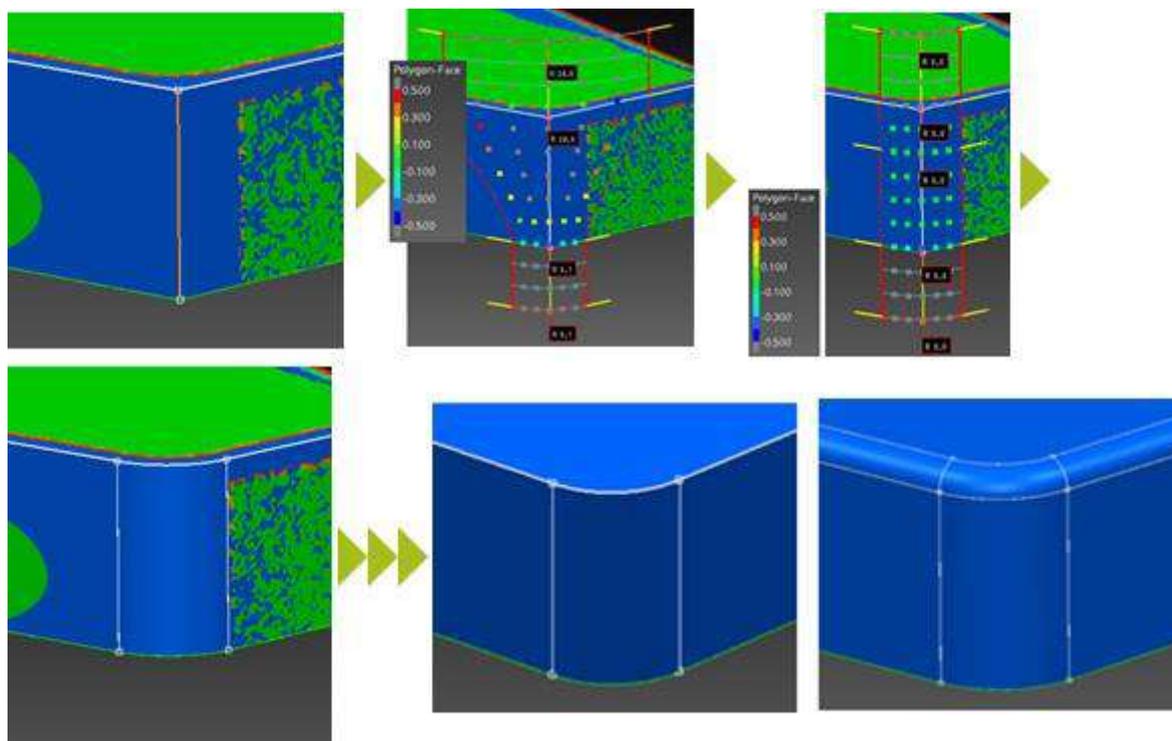
[Surface]-[Create Fillet Surface]

- 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.

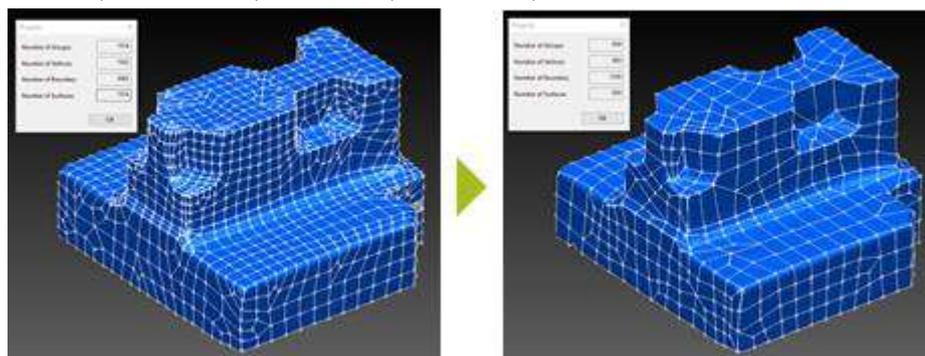
[Surface]-[Copy]-[Rotate]/[Surface]-[Copy]-[Mirror]

Added an option to remove the original shape of a copy.

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

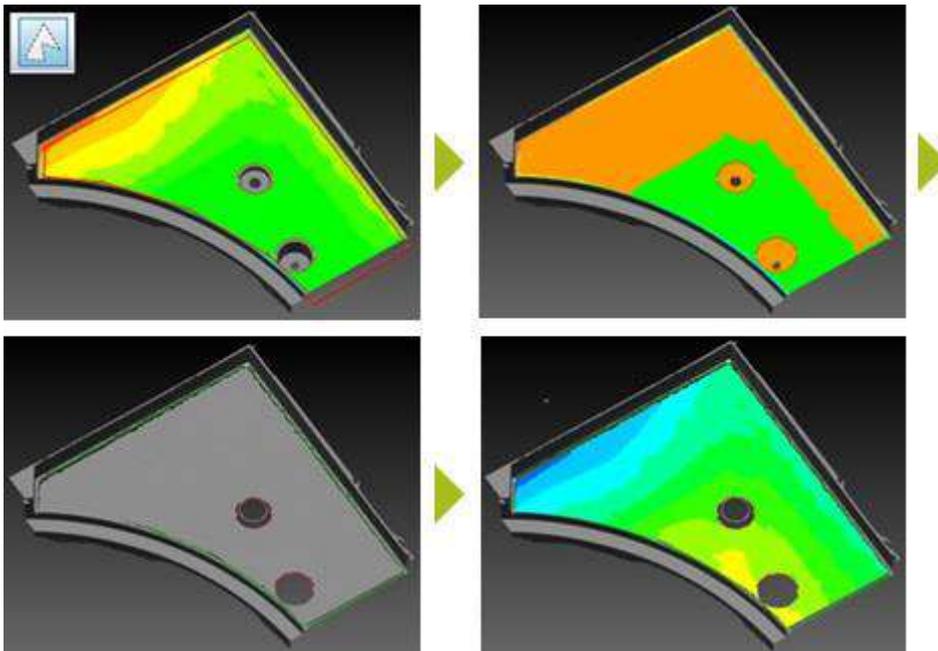
- The message regarding automatic adjustment of projection accuracy is no longer displayed.
- Division number of a patch is reduced by improving the division algorithm.

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



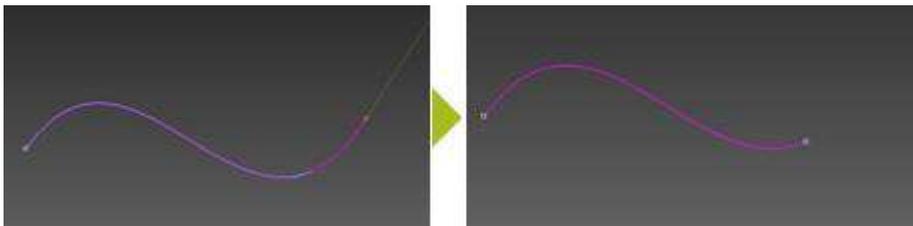
[Demo]-[Polygon Estimated Deformation]

- 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

Armonicos Co., Ltd.

Hamamatsu ACT Tower 21st floor, 111-2 Itaya-machi, Naka-ku,
Hamamatsu City, Shizuoka Prefecture 430-7721 Japan TEL: (+81)53-459-1000 FAX: (+81)53-459-1155

E-mail : spscan@armonicos.co.jp

- The copyright of this product as well as this documentation belongs to Armonicos Co., Ltd.
- This product and documentation can be used only under management of a registrant based on the software licensing agreement of this product.
- No copy, duplication, reproduction of part or all of this product and documentation shall be made without the consent of Armonicos Co., Ltd.
- The contents indicated by the specification of this product and the documentation may be changed without a prior notice.
- All company names and product names in this product and documentation are trademarks or registered trademarks of their respective companies.
- Compliance with Applicable Laws regarding Exports: Please do not use the product, or related information, technologies and materials, or goods and services made from the product, or related information, technologies (collectively, "Products") for the following purposes.
 1. Exporting the Products from Japan (including taking the Products out of Japan, indirectly exporting the Products through trading agencies, and disclosing the Products to non-residents in Japan) to a person who intends or is likely to intend to use the Products for developing, manufacturing, using or storing (collectively, "Development") nuclear weapons, biological weapons, chemical weapons or missiles (collectively, "Weapons of Mass Destruction" or "WMD") or other military purposes.
 2. Using the Products yourself for the purpose of Developing WMD or for other military purposes, or providing the Products to a person who have such purposes outside of Japan.