

spScan 2027.1

Upgrade News

Improved Features/Specification Changes

[Demo] - [Create Surface] - [Create Loft Surface]

- Added a function to create loft surfaces.

[File] - [Import] - [CAD] - [STEP]

- Added support for importing free curves.

[File] - [Export] - [CAD] - [IGES]

- Added support for exporting primitive elements.

[File] - [Export] - [CAD] - [STEP]

- Added support for exporting free curves.

[Edit] - [Element Attribute Settings]

- Enabled changing the number of decimal places for various annotations.

[Edit] - [Grid Settings]

- Enabled changing the font, color, and size of numbers.

[Group] - [Expand]

- Enabled the use of "Obverse" during selection.

[Curve] - [Create Free Curve]

- Changed the default setting of "Distance (Polygon-Curve)" in "Analysis Display" to ON.

[Curve] - [Create Free Curve (Innerloop)]

- Changed the default setting of "Distance (Polygon-Curve)" in "Analysis Display" to ON.

[Curve] - [Create Outline]

- Enabled parallel translation of virtual planes using the arrow controls on the plane handle.

[Curve] - [Create Reference Section Curves]

- Enabled parallel translation of virtual planes using the arrow controls on the plane handle.
- Enabled auto-update for preview curves.

[Curve] - [Create 2D Curves]

- Enabled selecting elements to apply constraints using rectangle selection.
- Enabled batch setting and clearing of horizontal and vertical constraint annotations.

[Curve] - [Insert Curve]

- Changed the default setting of "Distance (Polygon-Curve)" in "Analysis Display" to ON.

[Surface] - [Create Multiple Surfaces]

- Changed the default setting of "Smooth Curves" in "Post-Process" to ON.

[Surface] - [Create Multiple Base Surfaces]

- Changed the default setting of "Smooth Curves" in "Post-Process" to ON.
- Reduced the creation time for cylinders and cones by over 50% (performance acceleration).

[Surface] - [Create Surface]

- Enabled collapsing certain dialog items to display the entire dialog.
- Changed the default setting of "Smooth Curves" in "Post-Process" to ON.
- Added a guide message display when curve projection fails due to an insufficient number of control points.

[Surface] - [Create Primitive Surface]

- Changed the default setting of "Smooth Curves" in "Post-Process" to ON.
- Added setting items for "Align Direction" and "Rounding of Coordinate Value."
- Reduced creation steps/time for cylinders and cones by over 50% (performance acceleration).

[Surface] - [Create Fillet Surface with Radius]

- Added an automatic base surface extension process when creating fillet surfaces with radius.

[Surface] - [Copy] - [Rotate]

- Changed behavior so that if there are overlapping areas in the copied shape, a message is displayed only once.

[Surface] - [Remove Surface]

- Addressed selection behavior so that surfaces hidden behind polygons are no longer selected when "Visible" is ON.
- Reduced startup time for the Visible Selection function.

[Surface] - [Create Extrude Surface]

- Added an option to choose an extrusion method that passes through the original curve when applying draft angles.
- Enabled selection of continuous curves.

[Surface] - [Mirror] - [Mirror Plane Settings]

- Enabled parallel translation of virtual planes using the arrow controls on the plane handle.

[Demo] - [Polygonize CAD]

- Enabled specifying accuracy.
- Enabled execution even when polygons already exist.

[Demo] - [Reshape Outer Edge (Plane)]

- Enabled parallel translation of virtual planes using the arrow controls on the plane handle.
- Enabled flipping the normal direction of virtual planes.

[Demo] - [Cut Surface]

- Enabled selecting islands to split.
- Added a progress bar.

[Demo] - [G2] - [Create G2 Surface]

- Added a process to reduce the utilization rate of polygons near surface boundaries when creating G2 continuous surfaces, improving continuity between surfaces.

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

- When "Remove surface behind plane" is specified, all selected surfaces on the back side can now be removed.

[Demo] - [Obsolete Menus] - [Create Multiple Primitive Surfaces]

- Changed the default setting of "Smooth Curves" in "Post-Process" to ON.

[Help] - [About spScan]

- Changed the copy button to an icon.
- Specify Rotation Center
- Added an icon display at the center of rotation during view rotation.

Pre-selection

- Accelerated the highlighting process for selected curves.

Addressed Issues

[File] - [Import] - [CAD] - [IGES]

- Addressed an issue where spScan crashed during import due to specific formats of IGES surface data.

[View] - [Show/Hide] - [Show Curve Only]

- Addressed an issue where non-curve elements were not hidden.

[Polygon] - [Merge]

- Addressed an issue where polygon colors turned black when performing Undo after execution.

[Polygon] - [Fill Hole]

- Addressed an issue where spScan crashed during hole filling due to specific STL data.

[Curve] - [Create Reference Section Curves]

- Addressed an issue where curve splitting failed even when "Trim at Intersection" was ON.

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

- Addressed an issue where patch area curves were not created on polygon boundaries even when "Exclude polygon Boundary" was OFF.

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

- Addressed an issue where patch splitting became unavailable.
- Addressed an issue where patch splitting produced inconsistent results.

[Surface] - [Patch] - [Repatch]

- Addressed an issue where moving vertices to polygons with different normal directions using Ctrl + Pick or Ctrl + Drag during patch vertex editing was disabled.

[Surface] - [Create Multiple Base Surfaces]

- Addressed an issue where cylindrical elements could not be identified correctly in certain cases.
- Removed the incorrect display of the "Pick Shape to Align Direction" button that appeared when creating free curve elements.
- Addressed an issue where executing "Create Multiple Base Surfaces" with view clipping active caused the view clip settings to reset.

[Surface] - [Create Surface]

- Addressed an issue where data became corrupted under specific circumstances during surface creation preview.

[Surface] - [Create Primitive Surface]

- Addressed an issue where cylindrical elements could not be identified correctly in certain cases.
- Addressed an issue where previously used values were altered (rounded to integer values).

[Surface] - [Create Fillet Surface with Radius]

- Addressed an issue where adjacent surfaces were sometimes deleted when "Create Blend Part" was enabled.

[Surface] - [Edging]

- Addressed an issue caused by base surface size during edging.

[Surface] - [Copy] - [Move]

- Addressed an issue where previously used values were altered (rounded to integer values).

[Surface] - [Copy] - [Mirror]

- Addressed an issue where pressing the "Pick" button after deselecting all items reselected the surfaces that were selected prior to deselection.
- Addressed an issue where selecting all items took a long time to complete.

[Surface] - [Remove Surface]

- Addressed an issue where an exception could occur depending on how "Visible" was toggled.

[Surface] - [Stitch Surfaces]

- Addressed an issue where curves continuous with stitched curves could no longer be selected in other curve menus.

[Surface] - [Create Extrude Surface]

- Addressed an issue where the normal direction of extrude surfaces was reversed in specific cases.
- Addressed an issue where creating extrude surfaces using continuous free curves failed.
- Addressed an issue where base surfaces were distorted when creating drafted extrude surfaces.
- Addressed an issue where previously used values were altered (rounded to integer values).

[Surface] - [Create Surface of Revolution]

- Addressed an issue where spScan crashed upon executing surface revolution when using a 4K display.

[Surface] - [Surface Repair Tools] - [Connect Surfaces Using Bridge]

- Addressed an issue where intersecting bridge surfaces were incorrectly detected as topology errors upon creation.

[Surface] - [Surface Repair Tools] - [Recreate Surfaces]

- Addressed an issue where sharp edges were undone after surface recreation.
- Addressed an issue where an exception occurred when faces adjacent to the recreated surface did not contain surfaces.

Help Page

- Addressed an issue where the light bulb icon could not be clicked in certain menus:
 - [Tools] - [Auto Build Topology]
 - [Surface] - [Stitch Surfaces]
 - [Polygon] - [Auto Edit]
 - [Analyze] - [Boundary (Surfaces)]
 - [Demo] - [Import IGES (Free Curve)]
 - [Demo] - [Polygonize CAD]
- Addressed an issue where pressing the space bar immediately after launching a menu activated help page for the following menus:
 - [Analysis] - [Control Point]
 - [Analysis] - [Show Scale]
 - [Analysis] - [Distance] - [Distance (Polygon Mesh and Polygon Mesh)]
 - [Analysis] - [Check Surface Uncreated Part]
 - [Analysis] - [Number of Curves]
 - [Analysis] - [Inner Loop]
 - [Analysis] - [Remove Annotation]

Specify Rotation Center

- Addressed an issue where the picked position using Alt + Left Click did not set the intended center of rotation.

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