spScan 2023.1

Upgrade News

Enhanced Features & Specification Changes

Changes in supported OS

- Supported OSs are: Windows 10 Pro (64bit), Windows 11 Pro (64bit), Windows Server 2016 Standard (64bit), and Windows Server 2012 R2 Standard (64bit).

  - Windows 11 Pro (64bit): Newly supported

  - Windows 8.1 Pro (64bit): No longer supported

[Edit]-[Move to Surface Phase]

- Added a feature to move from Polygon Mesh Phase to Surface phase.

[Edit]-[Back to Polygon Mesh Phase]

- Changed the menu location of [Back to Polygon Mesh Phase].

  Previously: [Surface]-[Patch]-[Back to Polygon Mesh Phase]

  New: [Edit]-[Back to Polygon Mesh Phase]

[View]-[Show/Hide]-[Show/Hide Polygon Mesh]

- Accelerated the speed when switching between show/hide.

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

- Accelerated the speed when switching between show/hide.

[View]-[Show/Hide]-[Show/Hide Surface]

- Accelerated the speed when switching between show/hide.

[View]-[Show/Hide]-[Show Free Curves Only]

- Added a feature to display free curves alone.

[Polygon Mesh]-[Thin-Out]

- Accelerated the thin-out processing time.

[Curve]-[Create Outline]

- Accelerated the creation time.

[Curve]-[Create Outline (Rotation Projection) ...]

- The outline of selected polygon meshes can now be rotated and projected onto a plane.

[Curve]-[Create 2D Curves]

- Dimension constraint can now be attached from UV reference coordinate axes.

[Curve]-[Project Curve]

- The original free curves used during projection can now be retained after projection.

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

- Added [Few] and [Min] when specifying the number of control points of a Patch Surface.

- Changed the smoothing coefficient for a patch surface.

   New: [Weak] (Old: Standard), New: [Standard] (Old: Strong), New: [Strong] (Added a stronger smoothing configuration).

[Surface]-[Patch]-[Quadrangulate Polygon Mesh]

- Added logic to apply polygon remesh quadrilateralization technique to perform patch segmentation.

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

- Accelerated the creation time.

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

- Added [Few] and [Min] when specifying the number of control points of a Patch Surface.

- Estimated time is now displayed in the progress bar when creating patches.

- Changed the smoothing coefficient for a patch surface.

New: [Weak] (Old: Standard), New: [Standard] (Old: Strong), New: [Strong] (Added a stronger smoothing configuration).

[Surface]-[Create Multiple Base Surfaces]

- When "Align Orientation" is turned on and the created primitive shape is far from the polygon, the position and tilt can now be corrected using the polygon as a reference.

- Modified the logic of automatic extraction of planar elements.

- Changed the location of [Select All] checkbox in the Create Multiple Base Surfaces dialog.

[Surface]-[Edging]

- Removed the dialog box for selecting conditions for automatic edge correction.

- Automatic edge correction can now be automatically processed without selecting.

[Surface]-[Create PinPoint]

- Accelerated automatic search time for blend parts right after startup.

[Surface]-[Extrude Surface]

- A solid can be created when the edges of an extrusion are on the same plane.

- The original free curve used as the extrusion element can be automatically removed after creating the face of an extrusion.

[Surface]-[Create Surface of Revolution]

- A rotational body can be created even with self-intersecting curves.

  Error annotation labels are displayed on the self-intersecting surfaces.

[Analyze]-[Export spGauge Viewer Light]

- Error color map information can now be exported as viewer data for spGauge Viewer Light.

[Demo]-[Analyze]-[Check Curve Terminal Direction]

- Faulty curves with abrupt inversion deformation of curve vectors near the curve ends can now be checked.

[Demo]-[Analyze]-[Check if Fairing Curves are completed]

- Multiple curves can be simultaneously deformed by editing control points. It is like applying [Curve]-[Edit Control Point] on multiple curves at the same time.
- Moving the vertex of a curve that intersects multiple curves will deform the intersecting curves at the same time.

[Demo]-[Tool]-[Freeze Curve...]

- You can now add a fixed attribute to a group of curves that you do not want to deform. Curve deformers such as [Edit Curve] will no longer be able to select the fixed curves.

[Demo]-[Edit Surface]-[Convert to &Interpolated Surface]

- Trimmed surfaces with three sides can now be split and created as three interpolated surfaces.

[Demo]-[Circular Ring &Fairing...]

- Circular light sources can now be projected onto a surface to check the condition of the surface. Smooth surfaces can also represent projected curves smoothly.
- By specifying a range of projected curves with oscillations or deformations, the surface can be deformed so that the projected curves in the specified range are smoother.

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

- Added a feature to reverse the normal (front-back) direction of a cutting plane.
- The direction of the cutting plane can now be specified by angle.

Color Bar

- The default size of the color bar has been increased.

- The "height" and "width" of the color bar can now be changed.

- The color bar can now display an error histogram.

Resolved Issues

[File]-[Save As]

Addressed issue where scands files failed to be saved when creating a large number of surfaces, such as when creating patch surfaces.

[File]-[Save]

Addressed issue where scands files failed to be overwritten when creating a large number of surfaces, such as when creating patch surfaces.

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

Addressed issue where curves could not be shared during CAD import.

[Curve]-[Create 2D Curves]

- Addressed issue where the original state could not be restored without pressing Ctrl + z twice after adding a constraint.
- Addressed issue where the menu was closed when adding a constraint.

[Surface]-[Create PinPoint]

Addressed issue where it took a long time for a dialog to appear immediately after startup when there were many objects to be blurred.

[Surface]-[Create Surface of Revolution]

- Addressed issue where the locations of self-intersections were misjudged.
- Addressed issue where plane elements of a rotated surface shape were not recognized as planar by [Analyze]-[Geometry Information].
- Addressed issue where an exception error occurs when clicking "OK" after the "Curves are not continuous" message box.

[Demo]-[Create Surface]-[Create Sweet Surface]

Addressed issue where sometimes a surface that did not pass through a section line was created when "Maintain Parallelism" was used.

[Demo]-[Auto Create Curve (Polygon Edge)]

Addressed issue where sometimes an exception error occurred when the command is executed.

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

Addressed issue where surfaces near polygon ends would disappear.

R-stop-curves should be two lines of curves.

Addressed issue where, when the message "Select two sets of curves with consecutive R stop lines" appears, even after clicking "OK" and correcting the selection, an error message "An exception occurred. The process will be aborted and returned to the previous state," appears, terminating the command.

Selecting polygon mesh

Addressed issue where the selection filters "Visible Selection" and "Surface Selection" could not be applied when selecting a brush.

Color Bar

Addressed issue where the color bar display was partially obscured when the window size was changed.

Select

Addressed issue where highlighting took a long time when many elements were selected at the same time when performing a function that required selection of curves or surfaces.

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