Skip to content

Active Spline

Reference

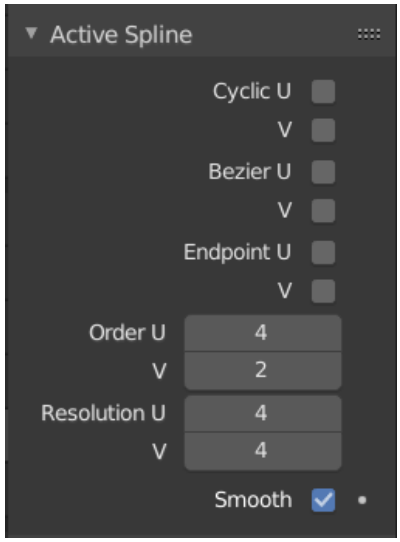
Mode:
Edit Mode

Menu:
Properties ▸ Curve ▸ Active Spline

See also

Active Spline for curves.

The *Active Spline* panel is used in Edit Mode to control properties of the currently selected spline.

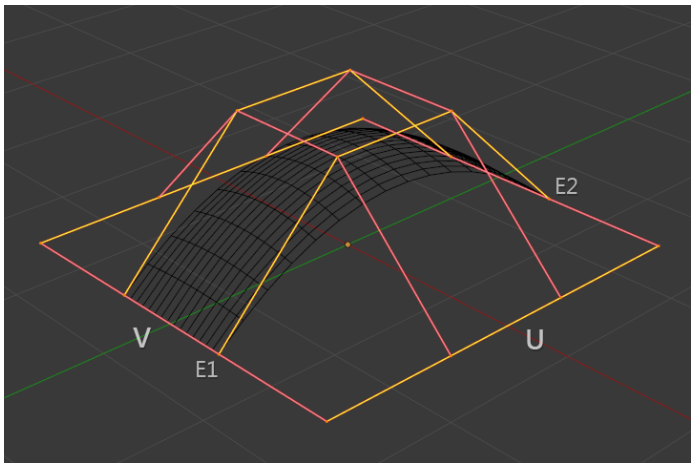


Active Spline panel.

Cyclic U/V
Like curves, surfaces can be closed (cyclical) or open, independently in both directions, allowing you to easily create a tube, torus or sphere shap and they can be viewed as "solids" in *Edit Mode*. This can be set per interpolation axis.

Bézier U
Makes the surface act like a Bézier curve. The control points act like *Free* handles of a Bézier curve. Depending on the *Order*, 3 or 4 control poi form one spline segment. This can be set per interpolation axis.

Endpoint U/V
Makes the surface contact the end control points. This can be set per interpolation axis.



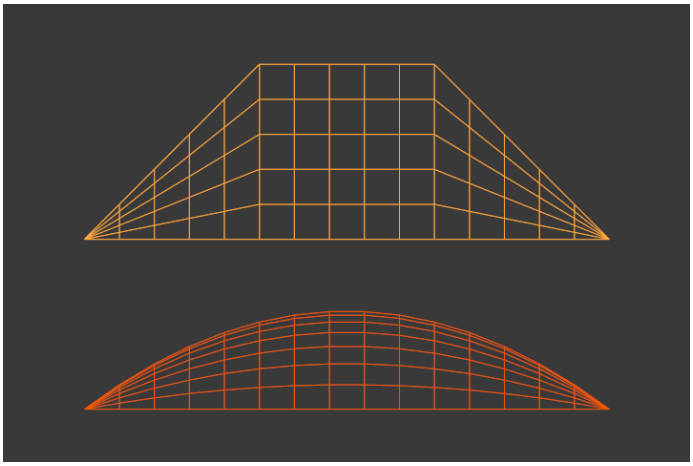
Endpoint U.

In the image below, the U interpolation axis is labeled as “U” and the V interpolation axis is labeled as “V”. The U’s interpolation axis has been se to *Endpoint* and as such the surface now extends to the outer edges from E1 to E2 along the U interpolation axis.

To cause the surface to extend to all edges, *Endpoint* would be set for the V’s axis as well.

Order U/V

This property is the same as with NURBS Curves; it specifies how much the control points are taken into account for calculating the curve of the surface shape. For high Orders 1 the surface pulls away from the control points, creating a smoother surface by assuming that the *Resolution U/V* high enough. For lowest Orders 2 the surface follows the control points, creating a surface that tends to follow the grid cage.



Order 2 and Order 4 surface.

For illustration purposes, in both Fig. “Order 2 and Order 4 surface.”, the knot vectors were set to *Endpoint*, causing the surface to extend to all edges.

You can set independently the order for each interpolation axis, and like curves, it **cannot** be lower than 2, and higher than 6 or the number of control points on the relevant axis.

Resolution U/V

Alters the resolution of each segment by changing the number of subdivisions. This can be set per interpolation axis.

Smooth

Use Smooth Shading for any 3D geometry.