NURBS Surface Components

CVs

Like curves, NURBS surfaces have CVs that control the shape of the surface. Each patch has a certain number of CVs, controlled by the degree of the curve. To increase the number of CVs you can insert extra isoparms or increase the degree of the surface.

Isoparms

Isoparametric curves (or isoparms) are lines running along the surface in the U and V directions, showing the shape of the surface as defined by the CVs.

Hulls

As a surface gets more Isoparms you might lose track of the order of the Isoparms and CVs. To show the relationship between the isoparms and CVs, Maya can draw lines between them. These lines are called hulls.

Patches

The area enclosed by four adjacent isoparms is called a patch.

Surface point

Any point on a surface that defines a U and V direction.