

LISTA DEI COMPONENTI DI VIZ PRO

Componente	Menu	Descrizione
AND	Math	Boolean ADD
Add	Math	Add two numbers/vectors/matrices
Add texture	Material	Add two textures A and B
Appens List	List	Append a list to the back of another list
Arc 3 Point	Primitive	Create an arc from points A, B, C
Average Plane	Plane	Create a plane that is the average of a set of points
Box	Primitive	Create a box on a plane
Brep Components	Brep	Decompose a Brep into its components
Brep Source	Source	Import Breps from the modeler
Center	Analysis	Compute the center of geometry
Chamfer	Shape	Build chamfers on the edges of a shape
Checker texture	Material	Checker from two textures A and B
Circle	Primitive	Create a circle on a plane
Circle 3 points	Primitive	Create an circle from points A, B, C
Circle Texture	Material	Circle from two textures A and B
Circular Pipe	Shape	Create a pipe by sweeping a circle along a curve
Clean Multilist	Multilist	Remove null elements from a multi-dimensional list
Color	Color	Create a color from its components
Color Component	Color	Extract color components r, g, b, a
Common	Shape	Boolean intersection (common parts) of Brep solids
Compare	Math	Boolean comparison of two numbers
Compound	Brep	Create a compound out of multiple shapes
Concatenate String	String	Concatenate strings of text
Cone	Primitive	Create a cone on a plane
Conical Surface	Primitive	Create a conical surface on a plane
Container	Container	Container for other nodes
Cross Product	Vector	Compute the cross product of vectors A and B
Curve Binomial	Analysis	Evaluate a curve binormal at a certain parameter t
Curve Closed	Analysis	Check if a curve is closed
Curve Closed Point	Analysis	Find the closest point on the curve from point P
Curve Continuity	Analysis	Find parameter intervals where the curve have the specified continuity
Curve Curvature	Analysis	Evaluate a curve curvature vector at a certain parameter t
Curve Derivatives	Analysis	Evaluate curve derivatives at a certain parameter t
Curve Domain	Analysis	Extract the parameter domain of a curve
Curve End	Analysis	Evaluate the end point on a curve
Curve Length	Analysis	Compute the length of a curve
Curve Length Domain	Analysis	Compute the length of a curve within the parameter domain
Curve Length Parameter	Analysis	Compute the length of a curve before and after parameter t
Curve Normal	Analysis	Evaluate a curve normal at a certain parameter t
Curve Parameter Length	Analysis	Compute parameter t for a certain length from the start of the curve
Curve point	Analysis	Evaluate a curve at a certain parameter t
Curve Start	Analysis	Evaluate the start point on a curve

Componente	Menu	Descrizione
Curve Target	Analysis	Evaluate a curve tangent at a certain parameter t
Curve Torsion	Analysis	Evaluate a curve torsion at a certain parameter t
Curve on Surface	Analysis	Project a curve on a surface
Curves Min Distance	Analysis	Find the points at the minimum distance between two curves
Cut	Shape	Boolean subtraction of multiple Brep solids
Cylinder	Primitive	Create a cylinder on a plane
Cylindrical Surface	Primitive	Create a cylindrical surface on a plane
Deepen List	Multilist	Create a multi-list by moving the lists to a higher dimension
Delaunay Triangulation	Mesh	Generate a triangulation of a set of points
Div	Math	Divide two numbers/vectors/matrices
Divide Curve	Curve	Divide a curve into segments of equal length
Domain	Domain	Create a domain from its minimum and maximum
Domani 2d	Domain	Create a domain from its minimum and maximum
Domani 2d Components	Domain	Decompose a 2d domain into its components U, V
Domani Components	Domain	Decompose a domain into its components min, max
Dot Product	Vector	Compute the dot product of vectors A and B
Draft	Shape	Create a draft surface along a wire
Ellipse	Primitives	Create an ellipse on a plane
Evolved	Shape	Create an evolved shape by sweeping a profile shape along a closed rail
Expression X	Math	Math expression on the X variable
Expression XV	Math	Math expression on the X and Y variables
Extents	Analysis	Compute the extents (min, max) of geometry
FBM Texture	Material	Procedural FBM noise texture
Face From Wire	Brep	Create a face from a closed wire
Face Holes	Brep	Adds holes to a face
Face Islands	Brep	Adds islands inside the holes of a face
Fillet	Brep	Adds islands inside the holes of a face
Filter List	List	Split a list in two based on the condition being true or false
Filter Multilist	Multilist	Split a multilist in two based on a condition
Flatten Multilist	Multilist	Flatten a multi-dimensional list into a one-dimensional list
Fuse	Shape	Boolean union of multiple Brep solids
Fx	Math	Mathematical function on one variable x
Fxy	Math	Mathematical function on two variables x, y
Gamma Texture	Material	Change the gamma correction
Generic Input	Input	Widget to input various type of values
Geometry Display	Display	Display geometry in the viewport
Graph Function	Math	Define a function by drawing a graph
Gref Sink	Sink	Export geometry references to the modeler
Gref Source	Source	Import geometry references from the modeler
Half Space	Shape	Create an infinite solid, bounded by a surface
IGES File	File	Load an IGES file
Image File	Image	Load an image file
Image Texture	Material	Create a texture from an image
Input	Container	Creates an input attribute in the parent graph
Insert List	List	Insert the items of a list into another at the specified location
Interpolate Curve	Curve	Create a curve passing through points
Interpolate Texture	Material	Interpolate between two textures A and B

Componente	Menu	Descrizione
Iso Curve	Surface	Create the U and V iso-parametric curves passing by uv
Line	Primitive	Create a line from two points A and B
Line Sink	Sink	Export curves as lines to the modeler
Line Source	Source	Import lines from the modeler
List Head	List	Get the first item (head) of the list
List Size	List	Get the number of items in the list
List Tail	List	Get the last item (tail) of the list
Loft	Shape	Loft multiple curves into a surface/solid
Map Multilist	Multilist	Map items in a multilist to another locations in the multilist
Match All	List	Match all elements of list A to all elements of list B
Match long	List	Match two lists using the longest of the two
Match Short	List	Match two lists using the shortest of the two
Material	Material	Create a material
Material Component	Material	Extract material components
Material Sink	Sink	Export materials to the modeler
Material Source	Source	Import materials from the modeler
Max	Math	Find the maximum of two numbers/vectors/matrices
Merge Point	Point	Merge points withing a certain tolerance
Middle Path	Shape	Compute the middle path (wire) of a pipe-like shape
Min	Math	Find the minimum of two numbers/vectors/matrices
Mirror	Transform	Mirror geometry
Move	Transform	Translate geometry
Mul	Math	Multiply two numbers/vectors/matrices
Multiply Texture	Material	Multiply two textures A and B
NAND	Math	Boolean NAND
NOR	Math	Boolean NOR
NOT	Math	Boolean NOT
Negate	Math	Multiply by -1 a number/vector/matrix
Non Uniform Scale	Transform	Scale geometry non-uniformly
Normal Projection	Shape	Project a curve or wire onto a surface
Normalize Vector	Vector	Compute the unit length vector with the same direction as V
Numeric Input	Container	Creates an numeric input attribute in the parent graph
OR	Math	Boolean OR
Offset List	List	Shift items in a list by a certain offset
Offset Shape	Shape	Create a shape parallel to the given shape
Offset Wires	Brep	Offset a wire or the wires of a face
Orient	Transform	Orient geometry to align to a target plane
Osculating Circle	Transform	Compute the curve osculating circle at a certain parameter t
Osculating Plane	Transform	Create the curve osculating plane at a certain parameter t
Output	Container	Creates an output attribute in the parent graph
Pick by index	List	Pick elements in a list by index
Pipe	Shape	Create a pipe by sweeping a profile shape along a rail
Plane	Plane	Create a plane from origin and X, Y axis
Plane 3 Points	Plane	Create a plane passing through points A, B, C

Componente	Menu	Descrizione
Plane Components	Plane	Decompose a plane into its components origin, x axis, y axis, normal
Plane origin Normal	Plane	Create a plane from origin and normal
Plane XY	Plane	Create a XY plane
Plane YZ	Plane	Create a YZ plane
Plane XZ	Plane	Create a ZX plane
Point	Point	Create a point from its coordinates
Point Components	Point	Extract point components x, y, z
Point Inside Wire	Analysis	Check if point is inside a closed wire
Point Label	Display	Display text at a certain location
Point List	Display	Display lists of points
Point Sink	Sink	Export points to the modeler
Point to Curve	Curve	Create a curve passing through points
Polygon	Primitive	Create a polygonal line through a set of points
Preview	Display	Preview data
Prism	Shape	Create a prism by sweeping a shape along a vector
Radial Grid	Grid	Create a grid of radial cells
Random	Sequence	Create a list of random numbers or points if the domain is 2d
Range	Sequence	Create a range of numbers
Range List	List	Create a sublist of items within the specified index range
Rectangle	Primitive	Create a rectangle on a plane
Rectangle From Domain	List	Create a sublist of items within the specified index range
Rectangular Grid	Grid	Create a grid of rectangular cells
Remesh	Brep	Recompute the polygonal mesh
Replace List	List	Replace the items of a list at the specified location
Reverse List	List	Reverse the order of items in a list
Revolve	Shape	Create a shape by revolving a shape around an axis
Rotate	Transform	Rotate geometry around a center and axis
Ruled Surface	Surface	Create a ruled surface between two curves
STEP File	File	Load a STEP file
STL File	File	Load a STL file
Sample Texture	Material	Sample texture color at uv location
Save IGES	File	Save shape to an IGES file
Save Image	File	Save image to file
Save STEP	File	Save shape to a STEP file
Save STL	File	Save shape to an STL file
Save Text	File	Save text to a file
Scale	Transform	Scale geometry
Section	Shape	Section shapes
Series	Sequence	Create a series of numbers
Shape Area	Analysis	Compute the area of geometry
Shape Volume	Analysis	Compute the volume of geometry
Shell Sink	Sink	Export shells to the modeler as meshes
Simplify Multilist	Multilist	Simplify a multilist by removing the common path prefix
Slider	Input	Slider Node
Solid Texture	Material	Texture of solid color
Solid List	List	Sort a list by key

Componente	Menu	Descrizione
Sphere	Primitive	Create a sphere on a plane
Split List	List	Split a list at the specified index
Split Shape	Shape	Split faces using wires
Sub	Math	Subtract two numbers/vectors/matrices
Surface Domanin	Analysis	Extract the parameter domain of a surface
Surface From Point	Surface	Create a surface from scattered points
Surface Normal	Analysis	Evaluate a surface normal at a certain uv coordinate
Surface Plane	Analysis	Create a plane tangent at the surface uv coordinate
Surface Planes	Analysis	Create a grid of planes tangent to the surface
Surface Point	Analysis	Evaluate a surface at a certain uv coordinate
Tangent Plane	Analysis	Create a plane at a certain parameter t, tangent to the curve and with normal N
Tangent Planes	Analysis	Create planes tangent to the curve at equally distant intervals and with normal N
Test	Input	Text input
Text File	File	Load a text file
Text Sink	Sink	Output text to the modeler
Texture Image	Image	Convert a texture into an image
Thick Solid	Shape	Create a thick solid by removing faces
Thicken Shape	Shape	Add thickness to a face/shell/solid
Tileable Texture	Material	Make a texture repeatable in tiles
Torus	Primitive	Create a torus on a plane
Transform Texture	Material	Change texture's size, rotation and translation
Transpose Multilist	Multilist	Switch rows with columns for a 2-dimensional multilist
Trim Curve	Curve	Trim a curve with parameters in the specified domain
Trim Surface	Surface	Trim a surface using a parameter subdomain
Turbolence Texture	Material	Procedural turbulence noise texture
Unflatten Multilist	Multilist	Unflatten a list back into a multi-dimensional list
Vector	Vector	Create a vector from its components
Vector 2 Points	Vector	Compute the vector between points A and B
Vector Components	Vector	Decompose a vector into it's components x, y, z
Vector Label	Display	Display vector with text
Vector Lenght	Vector	Compute the length of a vector
Voronoi Diagram	Mesh	Compute the Voronoi diagram of a set of points
Wedge	Primitive	Create a wedge on a plane
Windy Texture	Material	Procedural windy noise texture
Wire	Brep	Create a wire out of curves/edges/wires
Wire Source	Source	Import wires from the modeler
Wire Vertices	Brep	Extract the vertices of a wire
X Axis	Vector	Create a unit vector along the x axis
XOR	Math	Boolean XOR
Y Axis	Vector	Create a unit vector along the y axis
Z Axis	Vector	Create a unit vector along the z axis