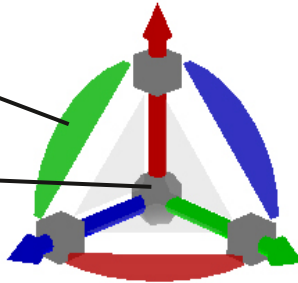


Point Edit Navigation Controls

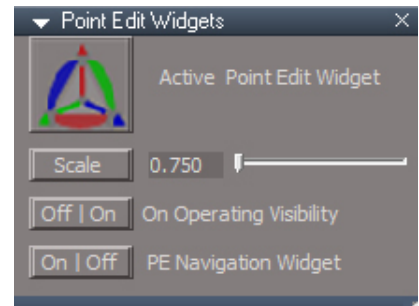
LB to rotate about the selection center
RB to rotate about the Axis

LB + Drag - Moves selected element in X and Y
MB + Drag - Moves the widget
Ctrl + LB click - Opens the Point Edit Widget's Preferences



Bars, Triangles, Cubes and Arcs

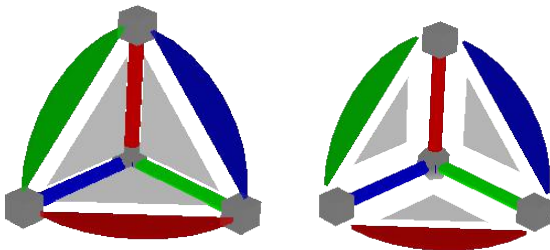
Ctrl + LB click opens their Mouse settings
P + LB click sets the Axis to the selected Face, Edge, or Vertex
P + RB click moves and rotates the Axis to the selected Face
P + MB click moves the Axis to object center and rotates the Axis to the selected Face
Period + move - Hides UnSelected elements
Comma + move - UnHides All elements
O + LB click Toggles - Mesh Object Coordinate Mode



Scale - resize the widget
On Operating Visibility -
On = can see the widget element while dragging
Off = widget invisible while dragging

Shift + LB click in empty 3D Space deactivates Object widgets - Move, Rotate, Scale

Shift + LB click any surface = switch to other Point Edit Widgets



i + move any surface = Help

pe and nav widget preferences/settings - On Operating Visible on/off clears undo history and only effects the active widget ⚠

CTRL SPACE = Point Edit Widget Toolbar

Camera Controls

i + move any surface = Help

Shift + LB click any surface = switch camera widget

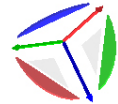
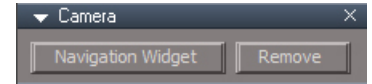
LB = Spin Left & Right
ALT + LB = Rotate Left/Right Up/Down
RB - Tilt Up & Down
Alt + RB = Tilt Left & Right / Bank

LB = Move Left/Right Up/Down
RB = Forward & Backward

LB = Move Left & Right
LB + Alt = Move Move Left/Right Up/Down
RB = Move Up & Down
Ctrl + LB = open navigation widget panel

FOV
LB + Drag = Adjust FOV
LB = View from Camera
RB = Reset FOV
RB Drag = New View from Camera

Custom Camera Widget



Shift + LB click any surface = switch camera widget

LB = Look Around
RB - Roll camera

LB = Move Left/Right Up/Down
RB = Forward & Backward

LB = Move Left & Right
LB + Alt = Move Move Left/Right Up/Down
RB = Move Up & Down
LB click = camera view

FOV
LB + Drag = Adjust FOV
Mouse Wheel = Adjust FOV

Original Camera Widget

Background Controls

b + i + mouse move = help

Wheel - Move view In and Out

Shift + Wheel - Zoom (FOV) and Move view In and Out

Ctrl + Shift + MB Drag - Zoom view (FOV)

MB Drag - Rotate view around selection or scene center if no selection

Ctrl + MB Drag - Move view up down left and right in screen space

Shift + MB Drag - Look around

Ctrl + MB Click - Look At Selection

MB DbClick - Look at and fill the view with the current object selection or Point Edit selection

Shift + MB Click - Moves the view to show all objects in the scene

Comma + LB Drag - Shows All hidden items

Period + LB Drag - Hides All Except the selected items

Default Context Controls

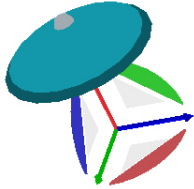
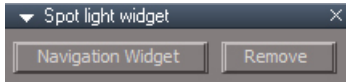
ALT + LB - Select Locked objects

Esc + move - Unselect

CTRL SHIFT V = View Toolbar

Spotlight Controls

LDrag - up down left right
RDrag - forward backward
Ctrl + LClick - preferences panel



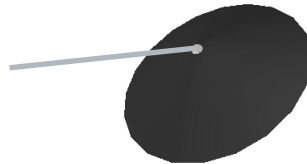
LDrag - look around
RDrag - roll

LDrag - change angle
MWheel - change angle
LClick - switch to light view
RClick - reset angle
RDrag - new light view
MClick - unlookat

RClick in space opens the selected spotlight panel

Spotlight Controls in view mode

LDrag move up/down left/right
RDrag move forward/backward
RClick close light view

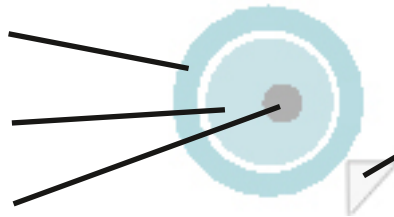


Spotlight View Controls

LDrag & MWheel - Angle
LClick - Light View
RClick - Reset Angle

LDrag - Rotate
RDrag - Rotate Origin

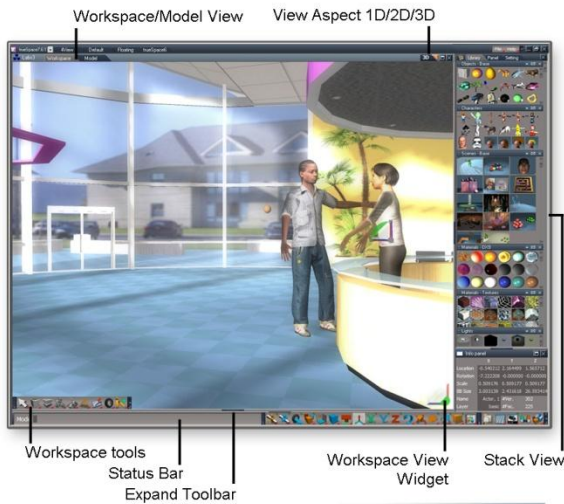
LDrag - Move
RDrag - Up & Down
RClick - Close



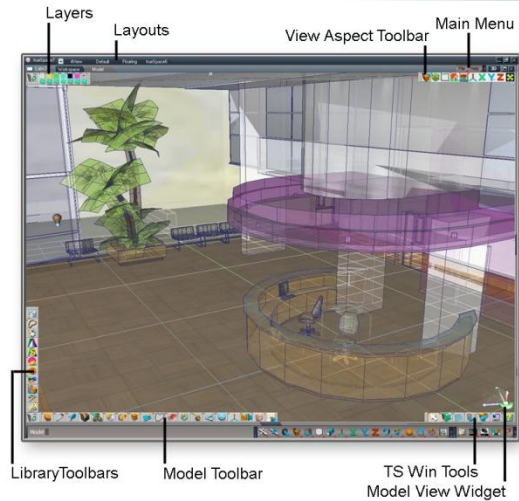
LClick - Cycle Light View
MClick - Close at Location
RClick - Previous View
RDrag - New Light View
Shift - LClick - Cycle Light Views +
i + move - Light View Widget Help

CTRL SHIFT L = Light Toolbar

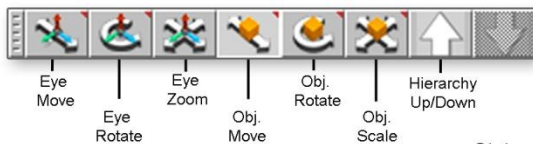
Workspace View



Model View

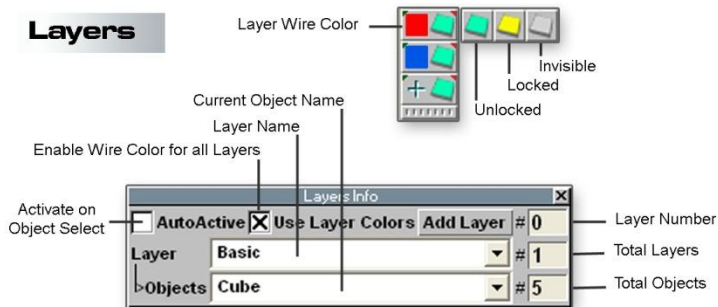


Nav Tools

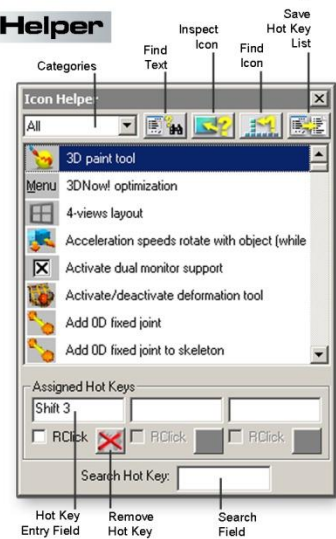


Status

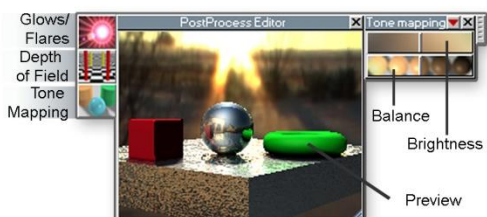
Layers



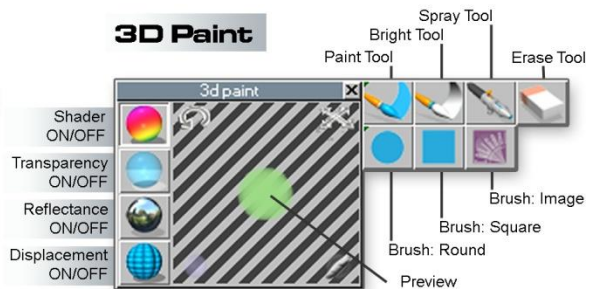
Icon Helper



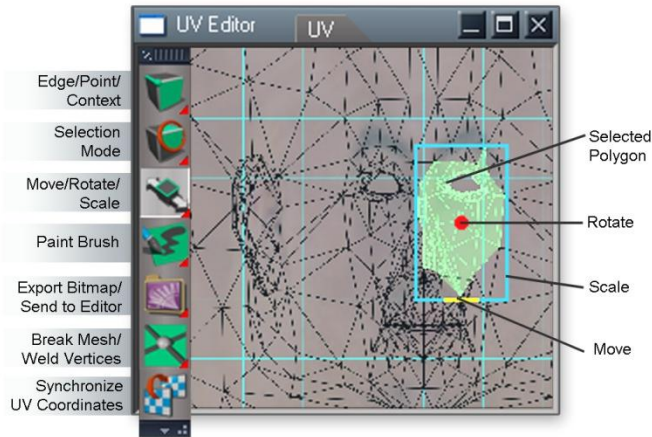
Post Process Editor



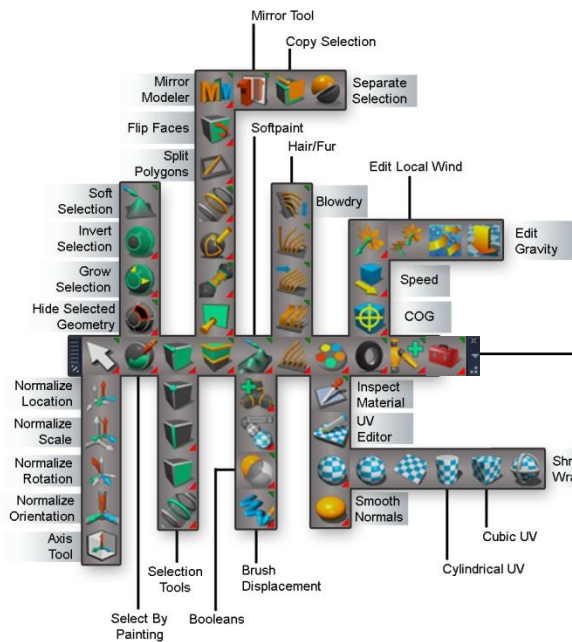
3D Paint



Workspace UV Mapping Editor



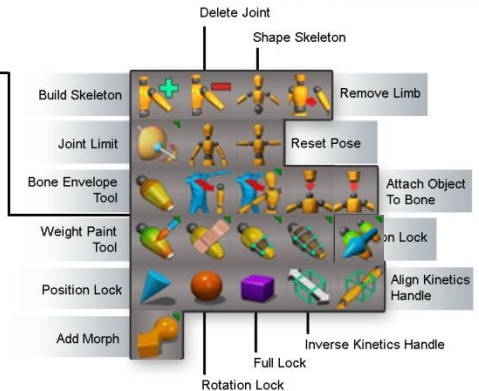
Workspace Toolbar



Preferences

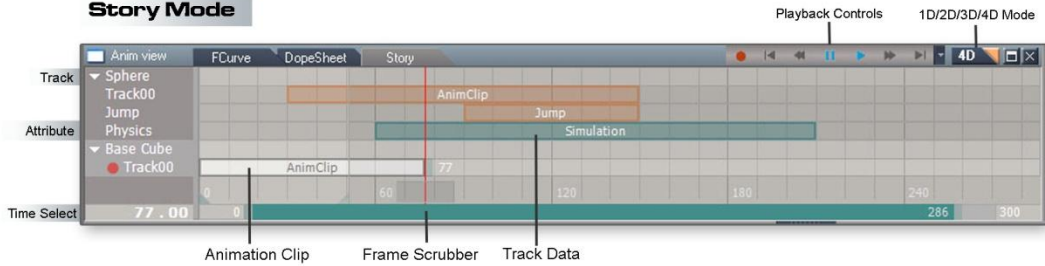


Character Animator

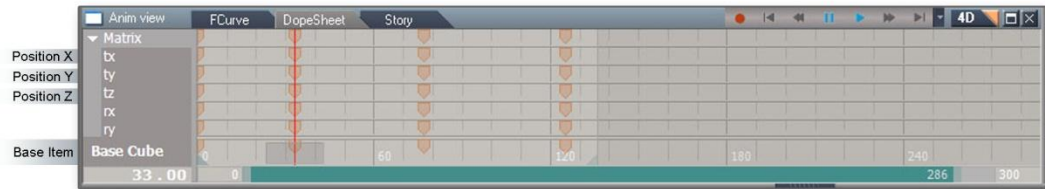


Animation Editor

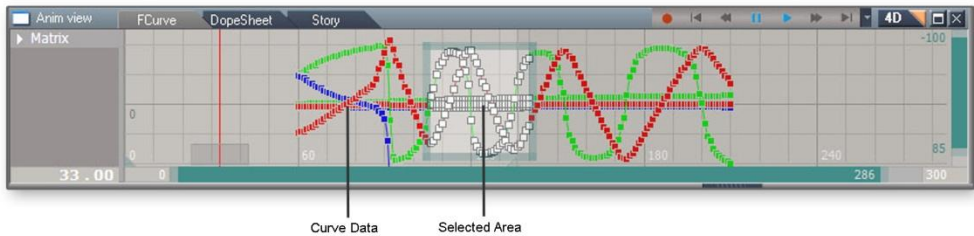
Story Mode



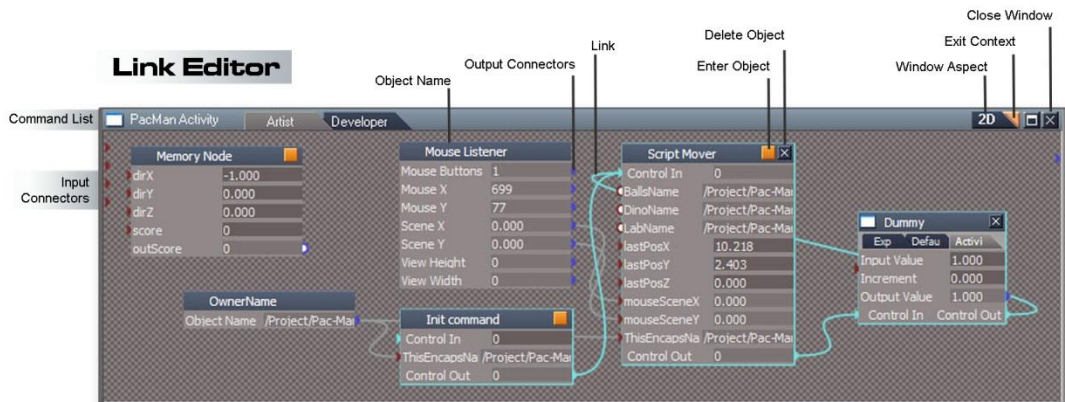
DopeSheet Mode

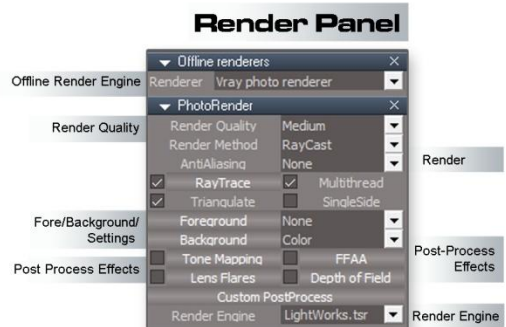
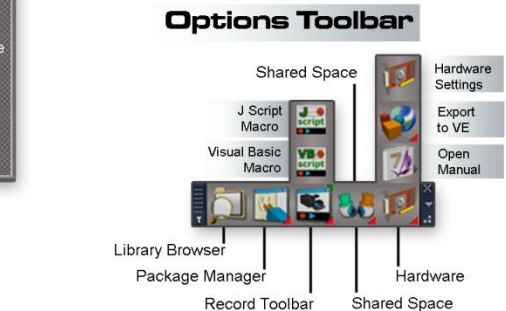
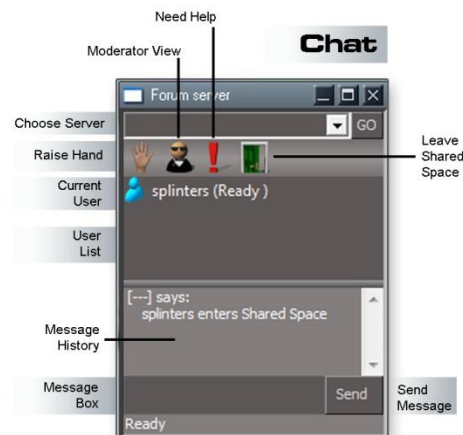
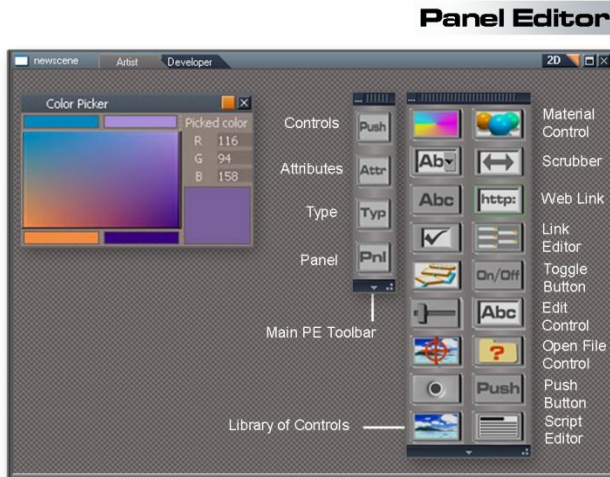
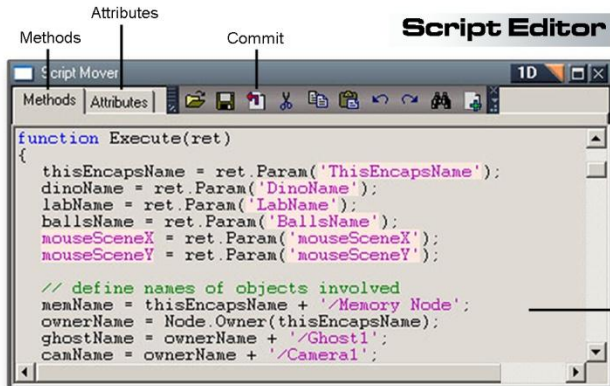


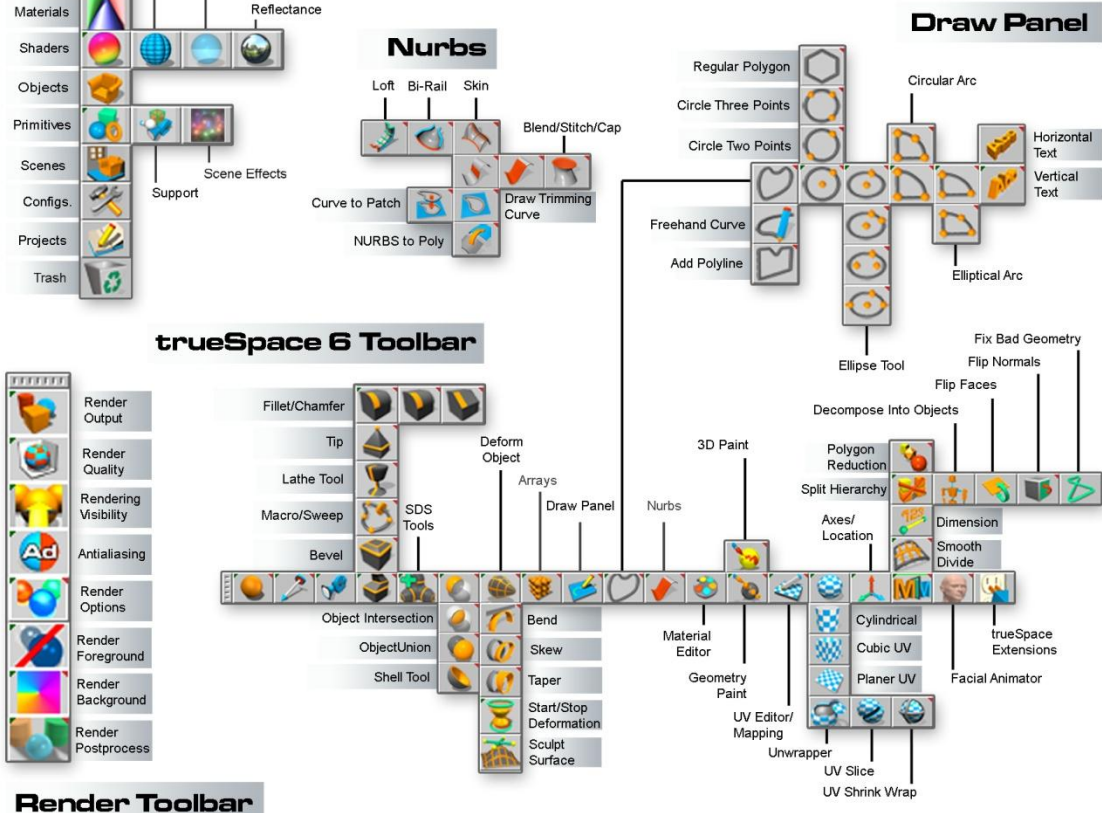
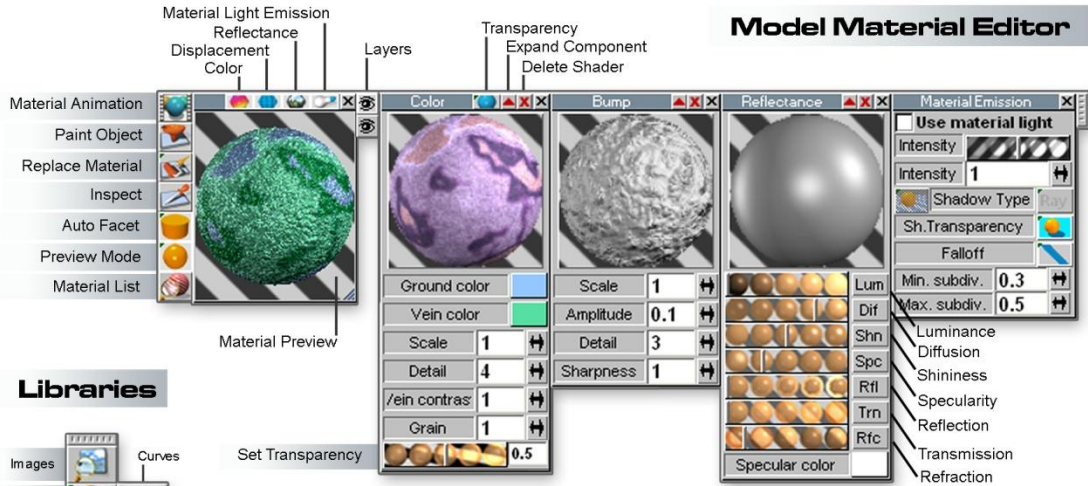
FCurve Mode



Link Editor







Chapter 1 Introduction

The trueSpace Unofficial Updates are a collection of bug fixes and scripts to enhance the capabilities of trueSpace 7.61 Beta and Std(Rosetta) versions of the software. This manual is a documentation of those changes and includes some corrections and additions to the original manual.

This document has the same chapter numbers and subheadings as the original manual so that items are easily cross referenced between the two. The final chapter of this document has information on new tools that were not added to the existing toolbars.

This manual is best viewed using a web browser that has been setup to open pdf documents within it's own window.



Warning - indicator that an action has some cost or undesirable side effects



Informational - helpful information, tips and mild warnings



[More Information](#)



Internal Link - connects related items together

"Same icon as ..." - Is a kind of warning that an icon image has been copied but does not have the same function as the original button.



Bottom Toolbar New Scene and Context



New Scene

This removes all objects from your Workspace and starts you off with a fresh scene. It will first prompt you to save your work by pressing no and saving it to a library or to continue and clear the scene.

RMB is New Scene plus close web server, close layers and delete marker widgets



Reset to Default Context

Opens a dialog to confirm the reset to default context. System reset operation.

RMB old behavior resets to default context without any warning or dialog choice.



Save current state

open save as dialog to Save a Context (ctx) file

2.4.5 Preset Shortcuts

trueSpace comes with a set of predefined shortcuts for Workspace, Link Editor, and some that work in every view. The following table shows the list of these predefined shortcuts plus all extras added.

For an up to date list of shortcuts use the Shortcuts Runner  [More Information](#) 

Global Shortcuts

Key	Description
CTRL F1	3D Window
CTRL F2	Link Editor
CTRL F3	Command Prompt
CTRL F4	Command History
CTRL F5	Output Console
CTRL F6	Status View
CTRL F7	Animation View
CTRL F8	Package Manager
CTRL F9	Scene View
CTRL F11	Library Browser
CTRL F12	Shared Space
SHIFT CTRL R	Reset to Default Context
SHIFT CTRL N	Generate New Space
LEFT	Select Previous object
RIGHT	Select Next object
DOWN	Select first encapsulated object
UP	Select object encapsulator
SHIFT CTRL RIGHT	Look at Next object
SHIFT CTRL LEFT	Look at Previous object

Global Shortcuts

Key	Description
Z	Start Move tool
X	Start Rotate tool
C	Start Scale tool
A	Camera Move tool
S	Camera Rotate tool
D	Camera Fov tool
SHIFT X	X lock
SHIFT Y	Y lock
SHIFT Z	Z lock
F1	World Coordinates
F2	Object Coordinates
F3	Screen Coordinates
F4	Tangent Coordinates
F5	X lock
F6	Y lock
F7	Z lock
F8	Reset View

3D Window Shortcuts

Key	Description
CTRL SHIFT V	View Toolbar
CTRL SHIFT O	Object Navigation Toolbar
DELETE	Delete selected object
CTRL K	Delete selected object
CTRL I	Inspect Material
CTRL R	Render to file
LEFT	Select Previous object
RIGHT	Select Next object
DOWN	Select first encapsulated object
UP	Select object encapsulator
Z	Start Move tool
X	Start Rotate tool
C	Start Scale tool
NUMPAD7	Rotate Roll -1
NUMPAD9	Rotate Roll +1
NUMPAD1	Rotate Pitch -1
NUMPAD3	Rotate Pitch +1
NUMPAD0	Rotate Yaw -1
DECIMAL	Rotate Yaw +1
CTRL NUMPAD7	Rotate Roll -45
CTRL NUMPAD9	Rotate Roll +45
CTRL NUMPAD1	Rotate Pitch -45
CTRL NUMPAD3	Rotate Pitch +45
CTRL NUMPAD0	Rotate Yaw -45
CTRL DECIMAL	Rotate Yaw +45
NUMPAD5	Normalize Rotation

NUMPAD8	Move -Y 1/10
NUMPAD4	Move -X 1/10
NUMPAD6	Move +X 1/10
NUMPAD2	Move +Y 1/10
CTRL NUMPAD8	Move -Y 1
CTRL NUMPAD4	Move -X 1
CTRL NUMPAD6	Move +X 1
CTRL NUMPAD2	Move +Y 1
PAGEUP	Move +Z 1/10
PAGEDOWN	Move -Z 1/10
CTRL PAGEUP	Move +Z 1
CTRL PAGEDOWN	Move -Z 1
HOME	Normalize Location
A	Camera Move tool
S	Camera Rotate tool
D	Camera Fov tool
SHIFT X	X lock
SHIFT Y	Y lock
SHIFT Z	Z lock
F1	World Coordinates
F2	Object Coordinates
F3	Screen Coordinates
F4	Tangent Coordinates

Point Edit Shortcuts

Key	Description
ESC	Cancel PE selection
DELETE	Delete selected Elements
SHIFT DELETE	Collapse Loop
CTRL K	Delete
CTRL C	Copy selection
CTRL F	Form Face
TAB	Point Edit Widget On
V	Select Vertices
F	Select Faces
E	Select Edges
L	Select Face Loops
T	Select Context
F4	Tangent
Shift I	Invert Selection
SHIFT A	Select Connected
SHIFT C	Convert Selection
SHIFT S	Smooth Selection
SHIFT O	Outline Selection
Q	Quad Divide Selection Faces
SHIFT Q	Smooth Quad Divide Selection
CTRL Q	Quadrify Selected polygons
M	Mirror Selection
CTRL M	Mirror Modeler
SHIFT B	Form Polygonal Bridge

SHIFT	Merge polygons
H	Hide Selected geometry
SHIFT H	Hide Unselected geometry
U	Show All hidden geometry
ADD	Add SDS
SUBTRACT	Remove SDS
CTRL D	Dynamic Sweep
CTRL S	Sweep selected Face
CTRL B	Bevel tool
CTRL T	Tip selected Face
CTRL P	Add Polygons
CTRL E	Add Edges
CTRL V	Add Vertices
CTRL L	Add Loop
CTRL W	Weld geometry together
CTRL H	Heal Vertices
CTRL O	Optimize Triangulation
1	Select by Painting
2	Select by Rectangle
3	Select by Lasso
4	Select by Move
5	Soft Selection
6	Select by Material
7	Select Edge Loops
8	Select Face Loops

Animation Editor Shortcuts

Key	Description
DELETE	Delete object
CTRL C	Copy object
CTRL X	Cut object
CTRL V	Paste object
CTRL A	Select All
CTRL U	Clear Selection
CTRL Z	Undo
CTRL SHIFT Z	Redo
SHIFT LEFT	Previous Keyframe
SHIFT RIGHT	Next Keyframe
K	Set Keyframe
CTRL LEFT	Previous Frame
CTRL Right	Next Frame
SHIFT HOME	Start Frame
SHIFT END	End Frame
CTRL HOME	Play
CTRL END	Pause
NUMPAD7	Rotate Yaw
NUMPAD9	Rotate Yaw
NUMPAD1	Rotate Roll

CTRL R = Render to File
CTRL O = Render Animation

Link Editor Shortcuts

Key	Description
DELETE	Delete selected object
CTRL Z	Undo
CTRL SHIFT Z	Redo
CTRL C	Copy selected object
CTRL SHIFT C	Copy selection
L	Lock selection
U	Unlock selection
LEFT	Select Previous object
RIGHT	Select Next object
DOWN	Select first encapsulated object
UP	Select object encapsulator
CTRL SHIFT LEFT	Select Previous object
CTRL SHIFT RIGHT	Select Next object
HOME	Current scene in Link Editor
NUMPAD9	Maximize
NUMPAD3	Minimize
NUMPAD5	Center All
NUMPAD1	Zoom All
MULTIPLY	Iconize All
SUBTRACT	Minimize All
ADD	Maximize All
DIVIDE	Arrange All
ESC	Object tool

Clinton Toolbar Shortcuts

Key	Description
L	Lock selection
U	Unlock selection
SHIFT L	Workspace Layers 4

Clinton Point Edit Shortcuts

Key	Description
SPACE	Point Edit Toolbar
SHIFT SPACE	Point Edit Toolbar 2

Popup Shortcuts

Key	Description
CTRL SPACE	Point Edit Widget Toolbar
CTRL SHIFT P	Point Edit Widget Toolbar

UV Editor

Key	Description
CTRL Z	Undo
CTRL SHIFT Z	REDO

Info panel

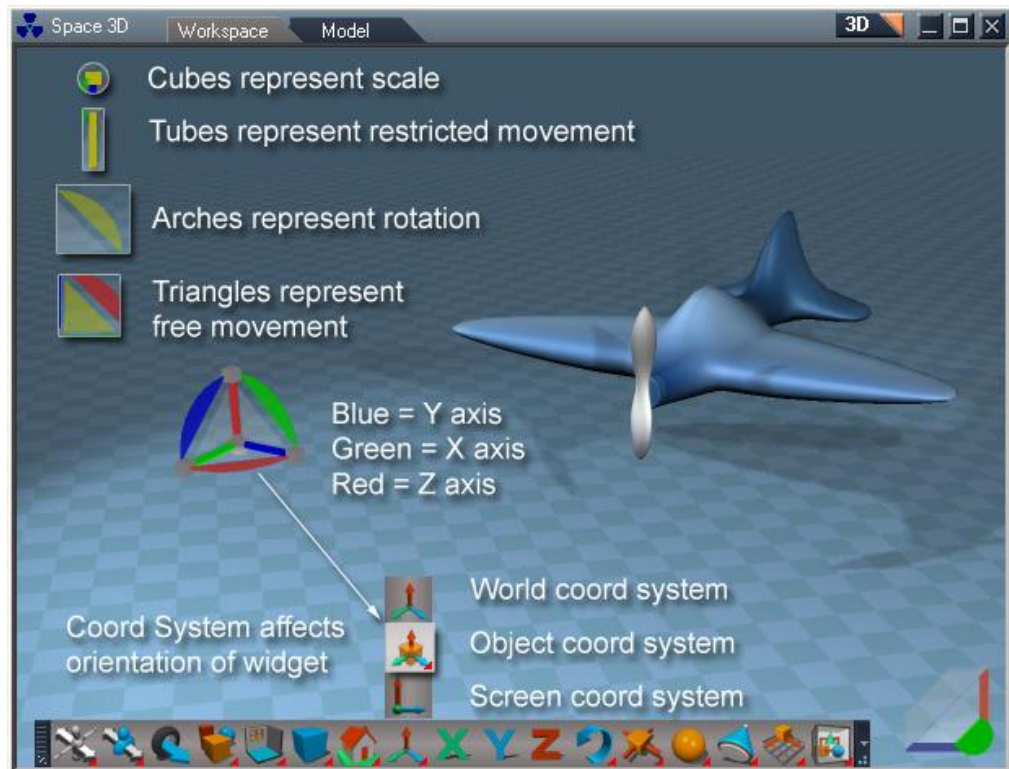
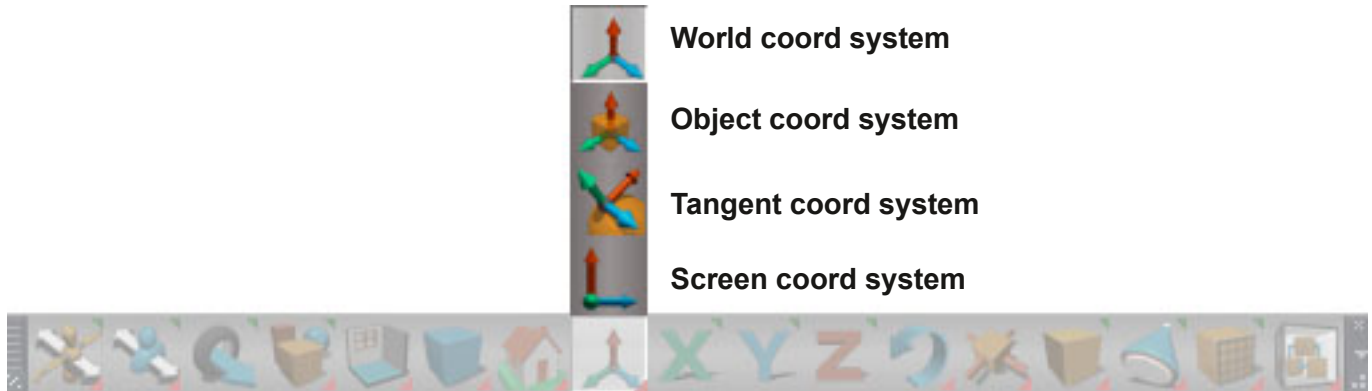
Key	Description
CTRL Z	Undo
CTRL SHIFT Z	REDO

Shortcuts Runner

 [More Information](#) 

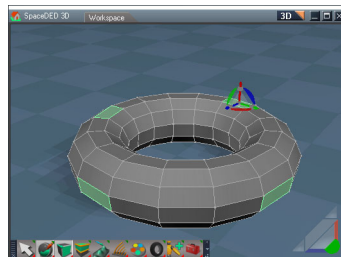
Link Editor	
Key	Description
<i>Mouse buttons</i>	
RMB	Zoom ALL/Move to Top Left
RMB + Drag	Zoom In/Out
MMB	Center selection
MMB + Drag	Move
CTRL + MMB	Up one level
MMW	Scroll Up and Down

2.5.1 Using Widgets

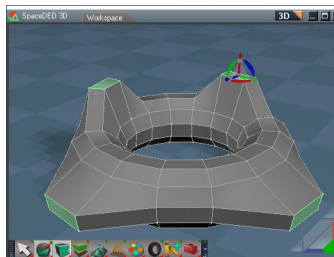




Tangent Coordinate System is useful for point edit modeling. The object navigation widget in tangent mode behaves the same as in world coord mode.
The tangent Coordinate system is not documented in the original manual.



Before move



After move

When 2 or more unconnected elements are selected the widget will be centered on one of the elements and each of the elements will move as if they each have an individual widget with the z handle aligned with the normal direction of the element and that moves with the visible widget. The elements will each move, rotate and scale individually instead of from a shared central location.

When 2 or more meshes are in point edit mode together and the selection has elements from two or more of the meshes, the rotation and scale will be centered on the widget and the elements do not move as individuals.

When a single edge or point is selected the tangent coordinate behaves the same as the object coord system.

When a single face is selected it behaves almost identically to the object coord. At some angles the widget will be slightly rotated on the z axis.

If 2 adjacent elements are selected the tangent widget is the same as object widget. This includes two points joined by an invisible triangle edge.

The object navigation widget will line up with the first selected object when in object coord mode.



Toggle Object Coordinate Mode

[More Information](#)

2.6 Stack View

Info Panel

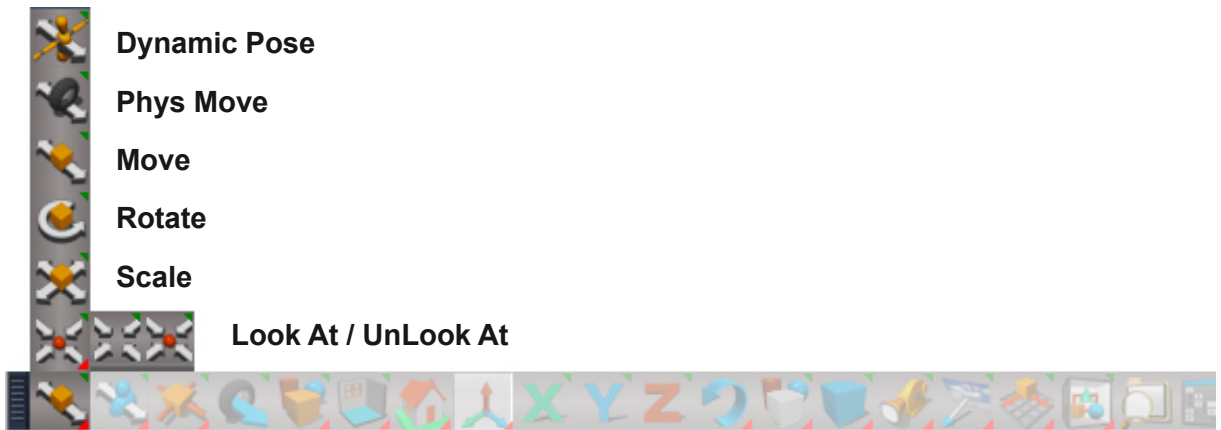
math expressions can be used in the numeric input fields:

+, -, *, /, sin, cos, arcsin, arcos, ln, log, exp, sqrt, PI

Info panel			
	X	Y	Z
Location	-9.957	5.851	4.273
Rotation	0.000	-0.000	0.000
Scale	1.000	1.000	1.000
BB Size	12.040	2.000	7.245
Name	Cube #Ver. 30		

2.7 3D View – Workspace

2.7.1 Object Navigation Tools



Object Move Press the Move button to activate the tool
- RMB to exit tool.



Object Rotate Press the Rotate button to activate the tool
- RMB to exit tool.
Ctrl + LB click - Yaw rotate selected mesh object +45 degrees
Alt + LB click - Yaw rotate selected mesh object -45 degrees



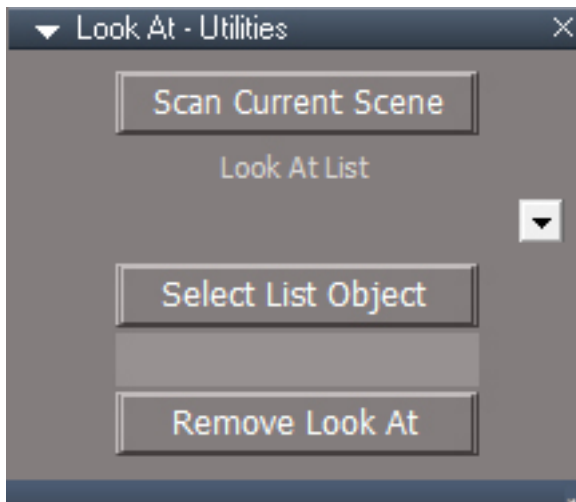
Object Scale Press the Scale button to activate the tool.
- RMB to exit tool.



Object Look At

This command is used to make an object, camera, or light continually realign itself to remain pointed at another object.

RMB - open Look At - Utilities panel.



Scan Current Scene - populate the Look At List with all scene items that are looking at another scene object.

Select List Object - select the scene item from the list.

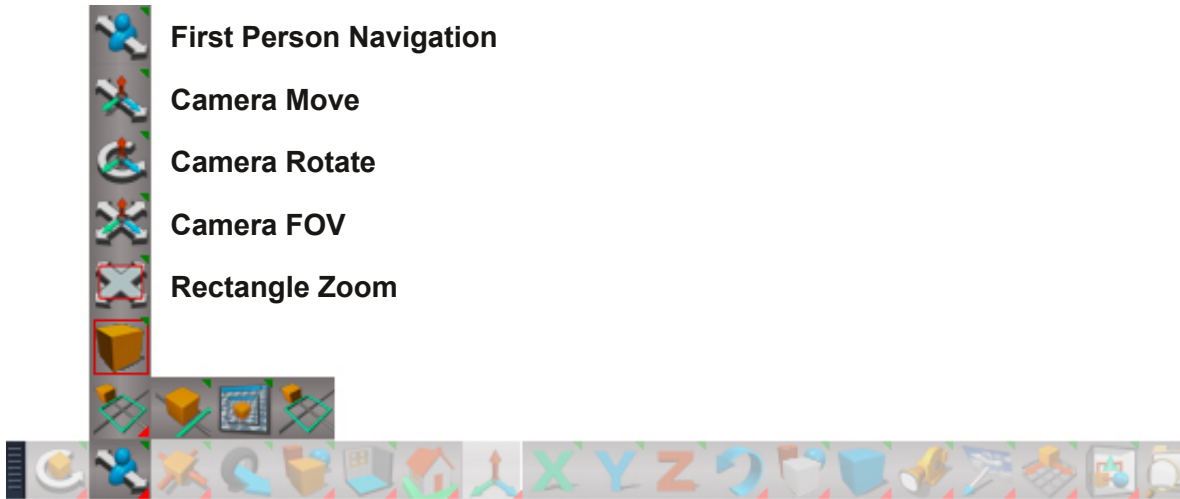
Remove Look At - same as Object UnLook At button.



Object UnLook At

To use UnLook At, select the object that is to be freed then click the button to remove the Look At constraint.

2.7.2 View Navigation Tools



Unofficial Update Bottom Toolbar



Camera Move - RMB to exit tool



Camera Rotate - RMB to exit tool



Camera FOV - RMB to exit tool



Zoom To Selection - LMB = Zoom to Selection / RMB = Zoom to next object

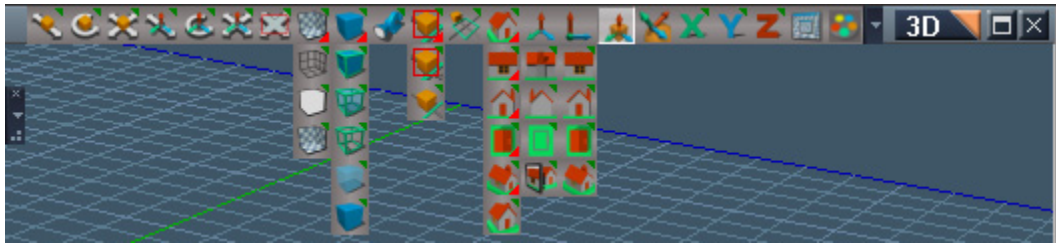


Look At Selection Left-Click on the tool places the active Workspace view so the current selection is in the center of the viewing area.
- RMB select next object and look at it.



Look At Selection All Windows - RMB reset view all windows.

Main View Toolbar



Unofficial Update Main View Toolbar



Perspective View



Isometric

Perspective and Isometric include a RMB action to rotate the view in 90 degree increments. The view positions and orientations are relative to the default view position not the current view position and orientation.



Open New 3D View - includes a version of the main view toolbar



Open Material Editor



Set Camera - RMB switch to perspective view.

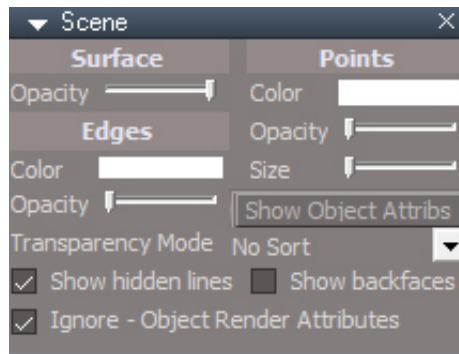


Zoom To Selection - RMB reset view.

The view buttons in the Main View Toolbar will change the active 3D view or they will change the main 3D view if there are no active 3D views.

All of the toolbars with View icons (and some other icons) work like this

2.7.4 Render Preferences Presets



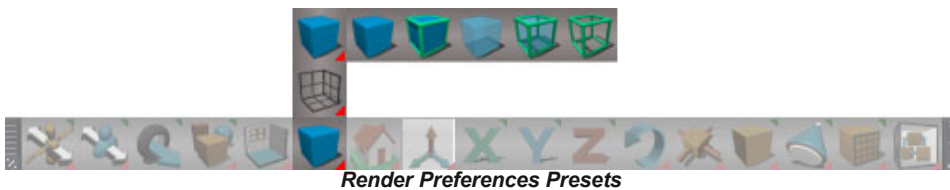
Show Object Attribs

LMB = Shows the first selected object's ORA panel in Settings

RMB = Closes any panels opened in Settings

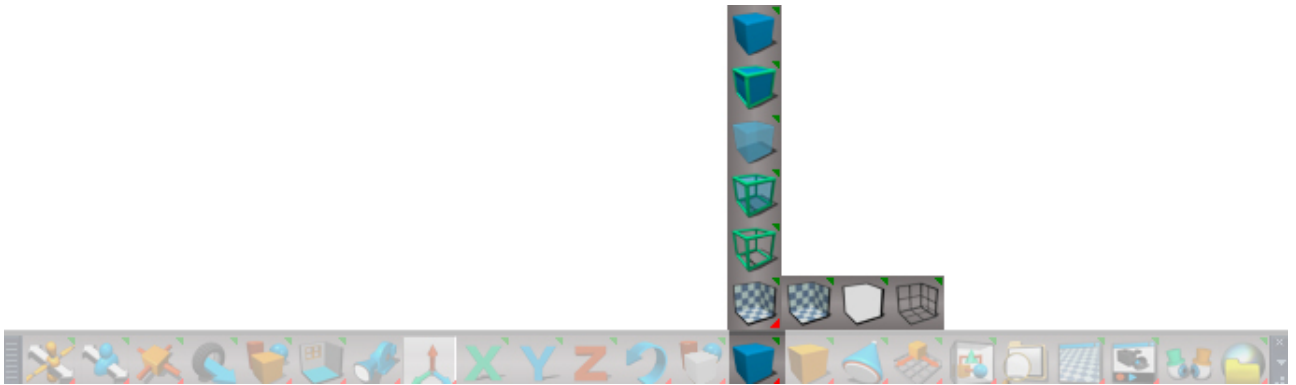
Only allows one panel at a time to be displayed. Restricted selection to a single item

With this icon group you can set the real-time render modes.



All the buttons in the render preferences and ground display preferences will change the active 3D window.

RMB will change all 3D windows.



Unofficial Update Render Preferences Presets

Draw as Solid

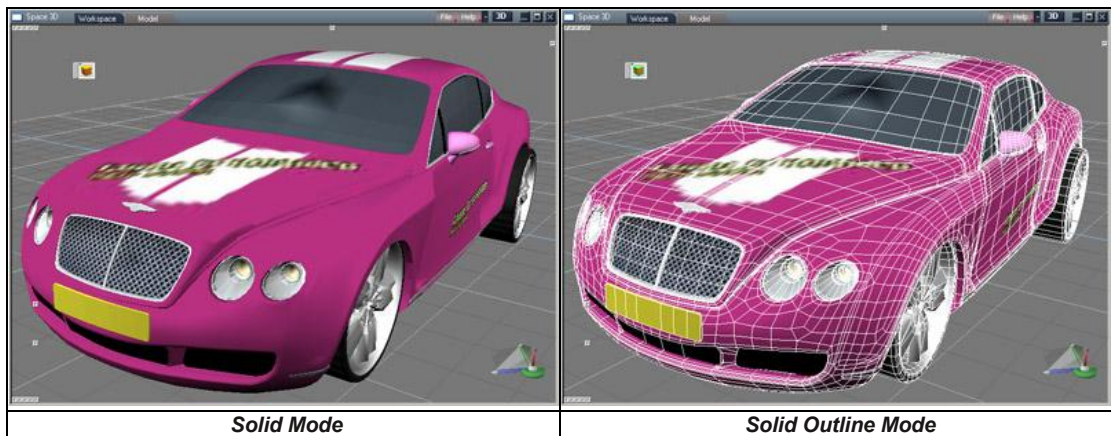


trueSpace will render all objects in your scene as completely opaque, shaded, and preview rendered.

Draw as Solid Outline



trueSpace will render the objects just as in solid mode and also outline the edges and vertices of the objects.

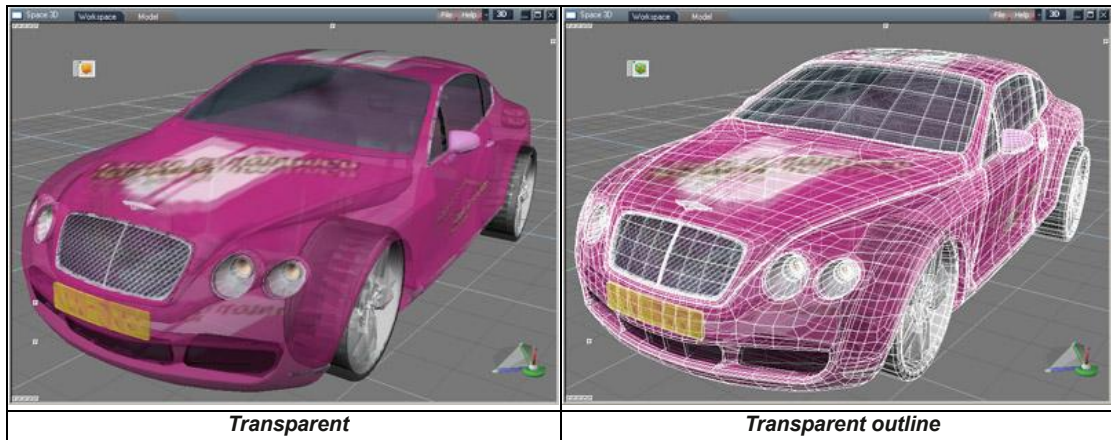


Draw as Transparent

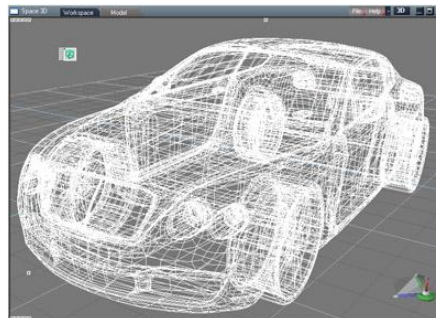
This will allow you to partially see through objects.

Draw Transparent Outline

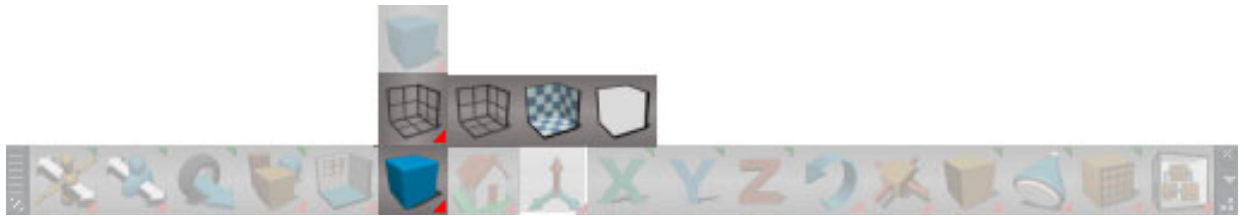
This is similar to Draw as Transparent, with the added function of highlighting all vertices and edges.

**Draw as Wireframe**

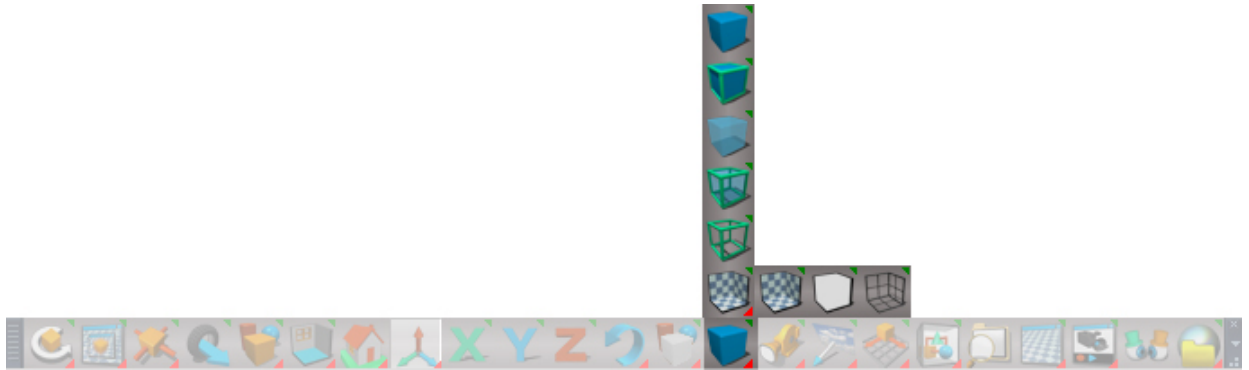
Draw the polygon edges with transparent faces



Wireframe



Ground Display Mode



Unofficial Update Ground Display Mode



Ground Solid



Ground None



Ground Wire

The Render Preferences Ground settings also has a **TwoSided** ground which is the same as solid but with a visible bottom surface.

All the buttons in the render preferences and ground display preferences change the active 3D window.

RMB will change all 3D windows for these buttons.



Show Selected



will erase undo history if any NURBS objects are in the selection



Hide Selected



Hide Unselected



Show Cameras and Lights - show all cameras and lights



Hide Cameras and Lights - hide all cameras and lights



Show All

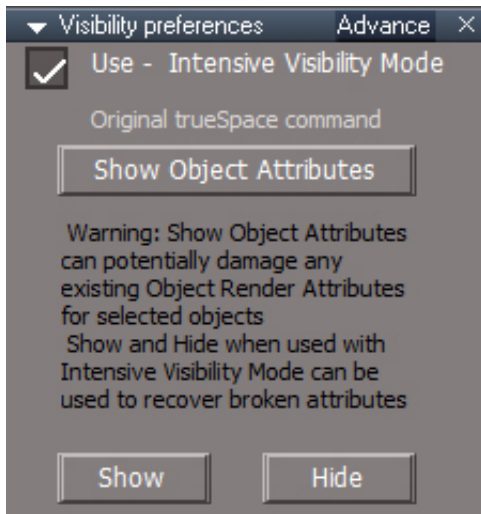


will erase undo history if any NURBS objects are in the scene



Hide All

RClick on the buttons opens the Visibility preferences panel.



Use - Intensive Visibility Mode - the internal structure of scene items will be rebuilt to ensure proper behavior of the visibility show/hide buttons. This can be extremely slow if Show All or Hide All is run with a large number of items in the scene. In these cases run a Show All or Hide All with this option enabled once and disable it for future runs.

Show Object Attributes - the original unmodified action - see section 2.7.4, Show Object Attribs button of Render Preferences panel



Background shortcuts

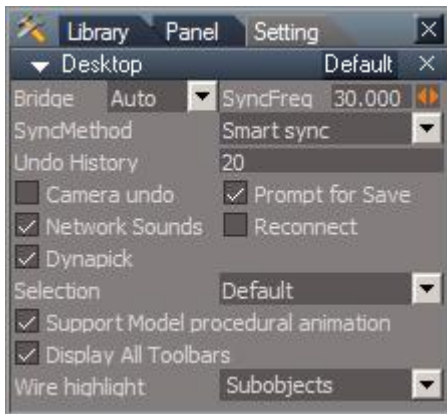
Period + LB Drag - Hide Unselected (Isolate Selected)
Comma + LB Drag - Shows All

[More Information](#)

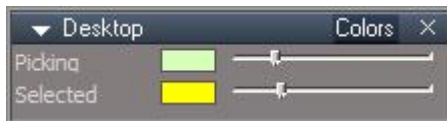
show / hide tools can be found in the view popup toolbar

[More Information](#)

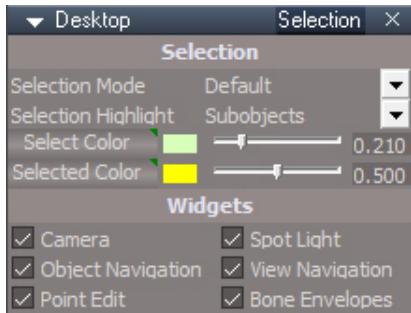
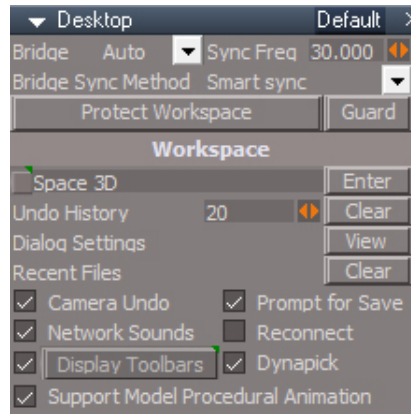
2.7.6 Desktop Preferences



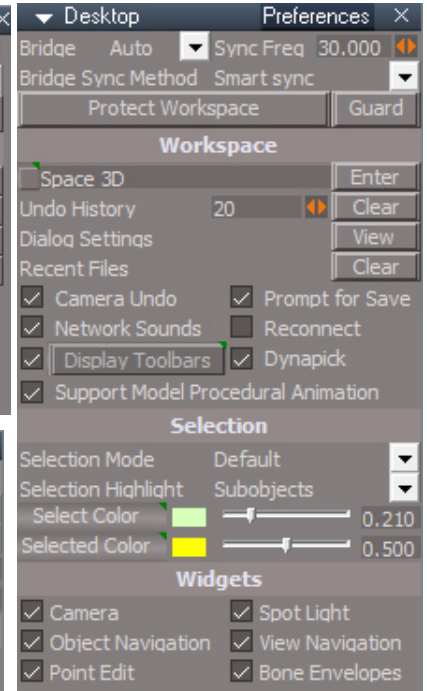
Desktop Default



Original Colors Aspect.



Unofficial Update Desktop Panels



Protect Workspace - Opens the Protect Workspace and Synchronize panels

Guard – opens the Guard panel [More Information](#)

Scene naming - small button LMB copies the scene name into the text input field, RMB sets the text input field to “Space 3D”,

Enter - rename the scene based on the text input field.

Clear – clear undo history

View - open the dialog settings panel

Clear – clear recent files list

Display Toolbars button and checkbox – uncheck to only show the 3D toolbars in the active 3D window. Press the button to restore normal behavior.

Picking Select and Selected Color reset buttons – RMB to reset, LMB no effect

Picking Select Color: Double click to Set the selected object wire color.

Selected Color: Double click to Set selected object wire color.