

Installation and Main Working Window

The **Menu Bar** becomes visible when you place your mouse at the top of your screen. The menu bar contains: the File, Edit, View, Model, Texture, Animation, Window, and Help menus.

2D Image Palette
Thumbnails of images in your project.

Edit/View
Edit mode shows the active photo and 3D wireframe objects. View mode shows a 3D preview of the model.

Camera Crosses
Let you move the camera along X, Y, and Z axes.

Camera Trackball
Lets you rotate the camera in any direction.

Creation tab
Contains 3D primitives used to define the 3D elements of your photo.

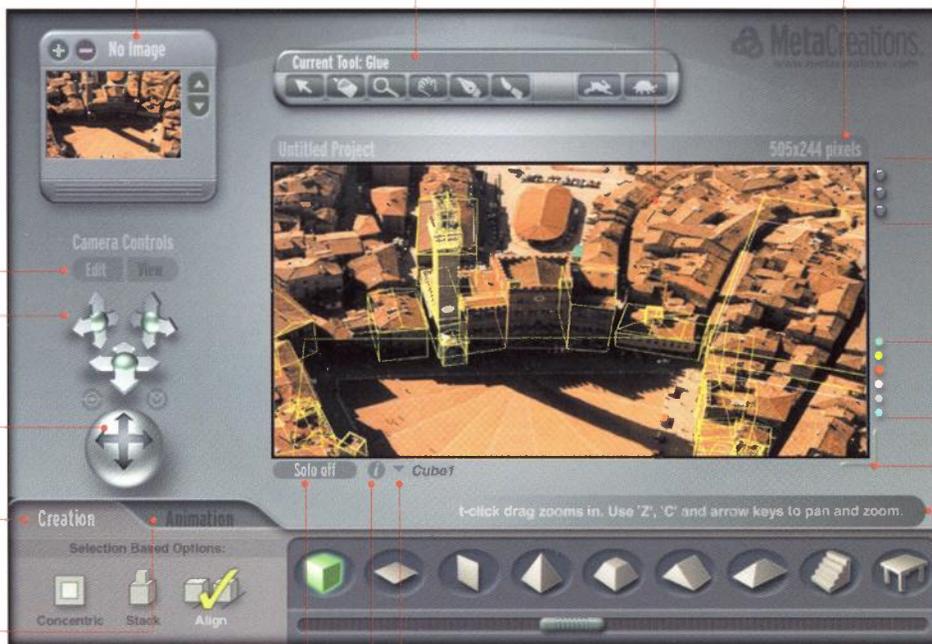
Click to view Animation tab
Contains controls for creating and previewing animations.

Floating Toolbar

Project Window

Display size in pixels.

Double-click to enter numerically



Display Options

- Shadows
- Background Image
- Stress

Color Selectors

- Background Color
- Selected Object
- Unselected Object
- Stress Color
- Shadow Color
- Selected Constraint Color

Resizing Grip

Status Tips

Solo Mode button
Dims all but the selected object.

Displays selected Object by name
Popup allows user to select another object from list.

Object Information button
Brings up information about the currently active object.

System Requirements

WINDOWS Windows 95, Windows 98, Windows NT; 32MB free RAM (48+MB recommended); 50MB of hard-disk space; 16 bit color (24 bit recommended); CD ROM drive (for install).

MAC OS Power PC; System 8.0 or higher; 32MB free RAM (48+MB recommended); 50MB hard-disk space; 16 bit color (24 bit recommended); CD ROM drive (for install).

Installing Canoma

For Windows Users:

1. **Launch Windows.**
2. **Insert the Canoma CD-ROM** into your computer's CD-ROM drive. The Install Canoma dialog appears.
3. **Double-click the Canoma icon.**
4. **Follow the instructions provided by the installer.** The installation dialog displays an important ReadMe.
5. **Click Yes** after reading the complete ReadMe.

For Macintosh Users:

1. **Insert the Canoma CD-ROM** into your computer's CD-ROM drive. The Install Canoma dialog appears.
2. **Double-click the Canoma icon.**
3. **Follow the instructions provided by the installer.** The installation dialog displays an important ReadMe.
4. **Click Accept** after reading the complete ReadMe.

CANOMA™

QUICK
REFERENCE
CARD

 **MetaCreations**
The Creative Web Company
www.metacreations.com

Building Models

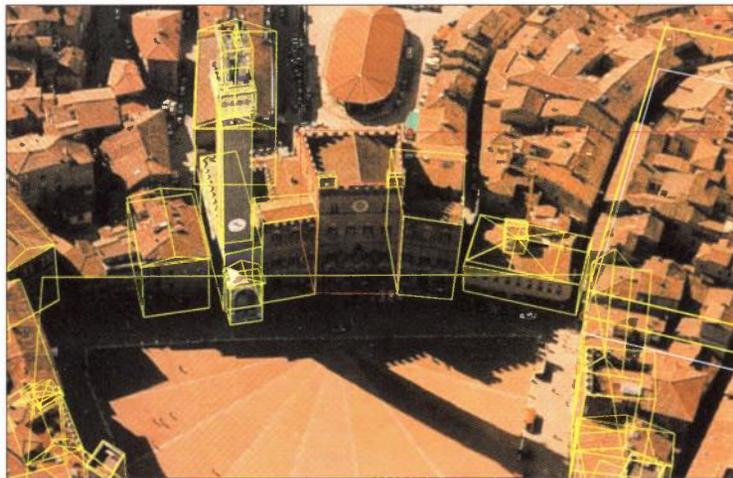
Concentric alignment will align new object concentrically with selected object.

Stack new object on top of currently selected object.

Alignment Tool aligns the orientation of new object to the selected object.

Primitives available to use alone or in combinations to build 3D objects.

Slider is used to browse through the available primitives.



- Current Background Image
- Wireframes of objects. Use Pins, Beads, and Glue to affix an object to the image. The image will provide texture for the objects.
- Pins** are used to affix wireframe corners to picture elements.
- Beads** are used for aligning edges, usually when corners aren't available.

Current Tool: Glue

- Select/Move/Pin or Bead Tool
- Glue Tool Use glue to align objects precisely
- Zoom In/Zoom Out Tool
- Pan Tool
- Add or Delete Points to or from editable contour objects.

Click on the "i" button under the document window to view the **Object Information** dialog.

Object Name — Click and type to name object.

Alignment Attributes Are Selection Based Options in the Creation tab and are set when an object is created.

Object information

Object name:

Primitive type: *Cube*

Alignment

Concentric with: *None*
 Stacked above: *None*
 Rotational align to: *None*

Rotate 90° around Y-Axis
 Unfix Y (height) Parameter
 Unfix all Orientation
 Unfix all Parameters

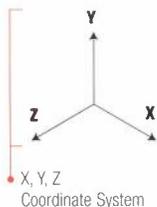
Cancel Apply

- Rotates object 90°
- Releases Y constraint
- Releases all constraints
- Releases all orientations

Cancel changes

Apply changes

Viewing Projects



Camera Controls

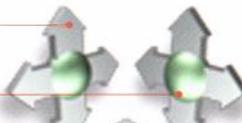
Switch between Edit mode and 3D Preview mode by clicking the toggle buttons. Clicking on any of the Camera Controls automatically puts you into 3D Preview mode.

Camera Control

Edit & View toggle buttons



Y-Z Cross controls vertical and Depth motion



X-Y Cross controls horizontal and vertical motion



X-Z Cross controls horizontal and Depth motion



Banking Control rotates camera on the y-axis simulating a tilted horizon or banking effect.

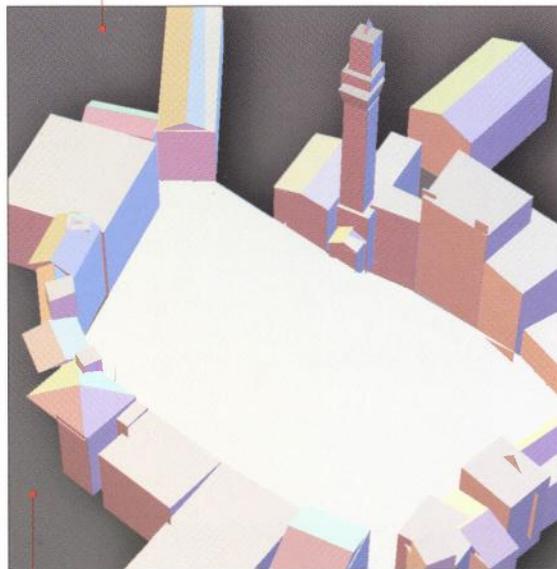


Field of View acts like a wide-angle lens.

Camera Trackball Lets you rotate the camera in any direction, around any axis.



Preview your 3D objects in the document window in View mode. Objects that have had textures applied to them will appear textured in View mode. See next panel to see some textured objects.



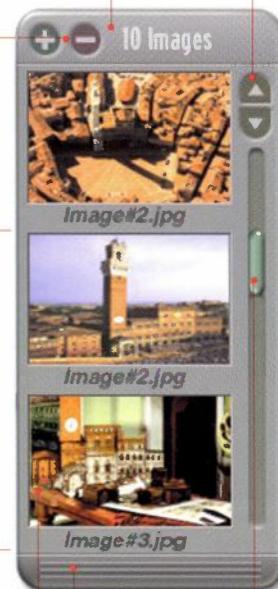
In-View Navigation Controls—Click and drag right inside the Project Window while in 3D Preview Mode to move forward, backward, and turn left and right. These controls are useful for moving around in large environments like interiors or city scenes. If you press the Ctrl key while you click-drag, you can slide up, down, left and right. (see Keyboard Shortcuts for complete commands.)

2D Image Palette

Displays thumbnails of images in project.

Move through images to select.

Add or delete images



Tray opens to reveal available project photos.

Scroll bar
Scroll up and down through the available images.

Grip and drag downward to open tray.

To **Reset the Camera** click on the desired image thumbnail in the 2D image tray.



Select/
Move/Pin or
Bead Tool

Zoom In/
Zoom Out
Tool

Pan
Tool

Texture Pen — Click on an
object face to edit in a 2D program,
such as Painter or Photoshop.

Adding Texture to Scene

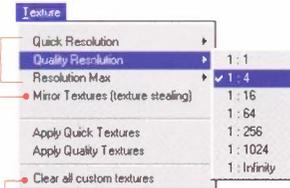
Texture Controls let you generate textures for your model based on your photos. You can choose Quick or Quality and high or low resolution textures.



Apply Quick Texture

Apply Quality Texture

Resolution options are found in the Texture menu.

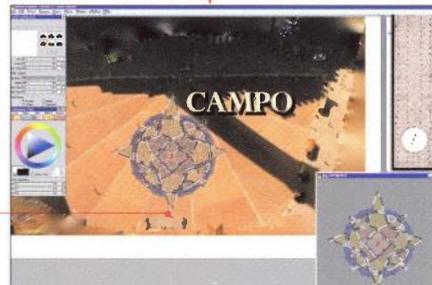
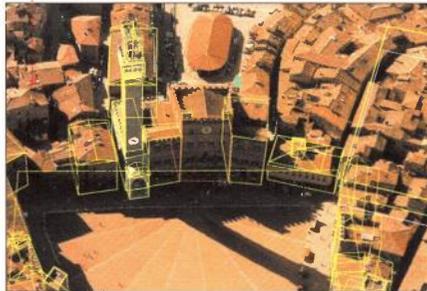


Removes all textures from all objects.

Uses texture from another side of an object where the back of the object is not visible in the source photos.

Quality texturing compensates for brightness differences between photos that can show up as seams and also fills in white gaps for which there is no available information. Quality texturing takes longer, uses more memory and looks better than Quick texturing.

Preview your 3D objects in the document window in View mode after the textures have been generated.

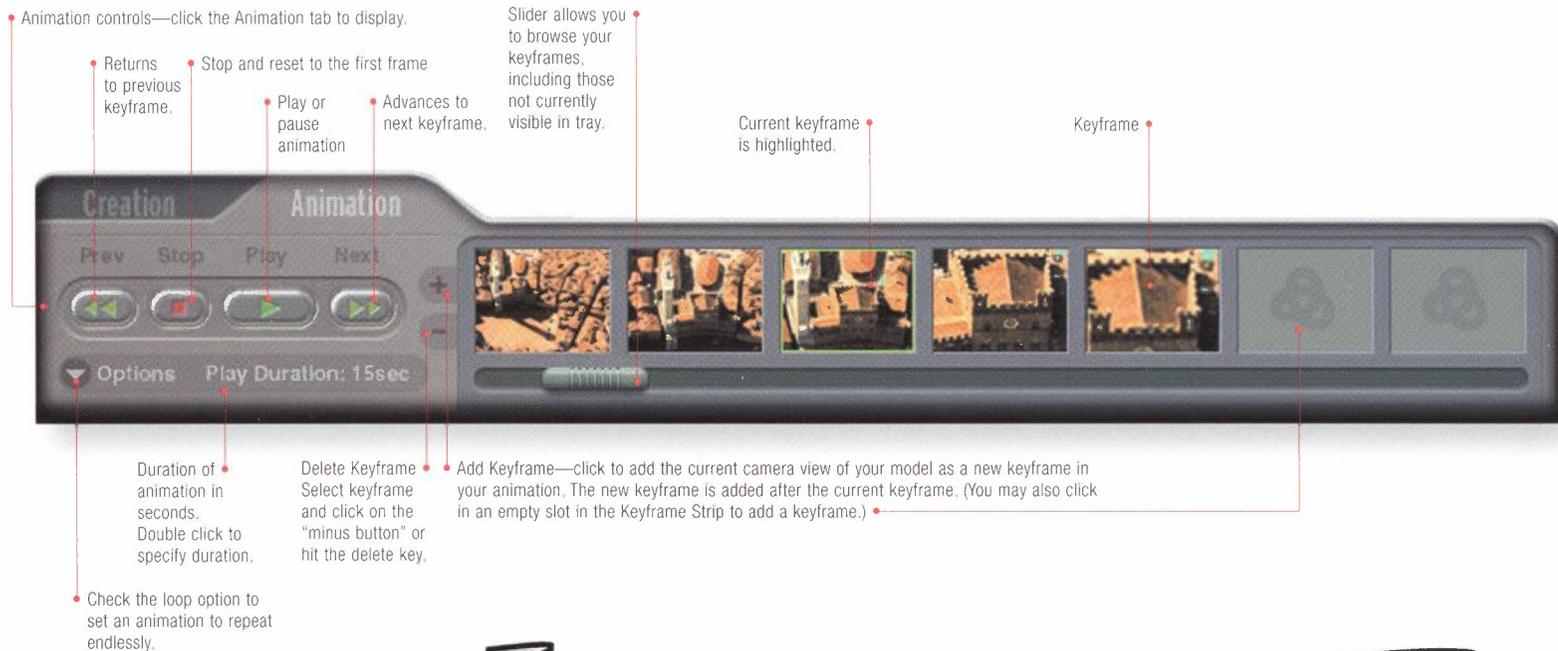


Edit texture in Painter or Photoshop

Apply edited texture



Animation



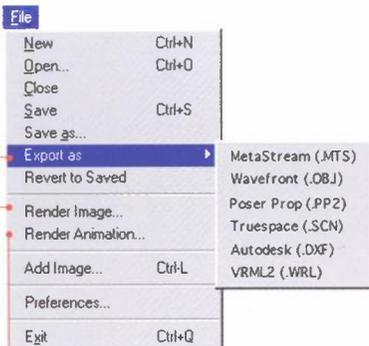
Creating Animations

- Complete the model.
- Decide how the camera should move in order to view the model.
- While viewing the model, create keyframes, which indicate how the camera position or orientation has changed.
- Review the animation, using the Animation Preview Controls.
- Render the animation as a QuickTime movie, or as a set of frames.



When creating animations such as zoom-ins it is a good idea to map a higher resolution image to the face of the object being approached. Canoma uses this higher resolution image, so that as you get closer to the object the texture still appears crisp and clear.

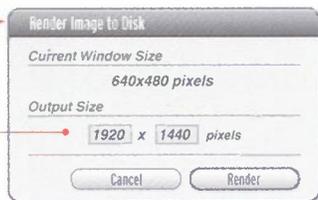
Export options are located in the File menu. These options provide a variety of 3D export environments.



Render Animation to Disk allows you to set the output size and access the QuickTime movie settings.



Render Image will save the image to your hard disk as a 2D image of the current view in your document window.



Output size—specify in pixels the output resolution the image is to be rendered at. Output size may be keyed into the boxes provided.

UNIVERSAL

MAC

WIN

File

Open	⌘-O	Ctrl+O
Save	⌘-S	Ctrl+S
New	⌘-N	Ctrl+N
Load Image	⌘-L	Ctrl+L
Quit	⌘-Q	Ctrl+Q
Contextual Menus	Ctrl-Click	Right mouse button

Clicking over constraint or selection will give you the following options:

- Delete Pin or Bead (depending on type)
- Delete Glue (if present)
- Delete constraints of selection in this image
- Delete all constraints of selection
- Delete selection

Edit

Undo	⌘-Z	Ctrl+Z
Redo	⌘-Y	Ctrl+Y
Delete Selection	Delete	Delete
Duplicate	⌘-D	Ctrl+D
Duplicate Aligned	Shift+⌘-D	Shift+Ctrl+D
Get Info	⌘-I	Ctrl+I

Select

Select Previous Photo	PgUp	PgUp
Select Next Photo	PgDn	PgDn
Select First Photo	Home	Home
Select Last Photo	End	End
Select Image 1-9	1-9	1-9
Select Image 10	0	0
Show Only Selection	⌘-space	Ctrl+space

View

Toggle edit/view mode	TAB	TAB
Pan Left	Left Arrow	Left Arrow
Pan Right	Right Arrow	Right Arrow
Pan Up	Up Arrow	Up Arrow
Pan Down	Down Arrow	Down Arrow
Reset View	Enter	Enter
Pan Left	a	a
Pan Right	d	d
Pan Up	e	e
Pan Down	x	x
Reset View	s	s
Zoom In	c	c
Zoom Out	z	z
Pan Left	Keypad 4	Keypad 4
Pan Right	Keypad 8	Keypad 8
Pan Up	Keypad 6	Keypad 6

Pan Down	Keypad 2	Keypad 2
Reset View	Keypad 5	Keypad 5
Zoom In	Keypad +	Keypad +
Zoom Out	Keypad -	Keypad -

Tool Modifiers

Zoom In	Zoom Tool	Zoom Tool
Zoom Out	Option-Zoom Tool	Alt-Zoom Tool
Add/Delete Point	Edit Point Tool	Edit Point Tool
Edit Texture	Edit Texture Tool	Edit Texture Tool
Erase Edits	Option-Edit Text.	Alt-Edit Texture
Previous Frame	Prev Button	Prev Button
Start (First Frame)	Opt-Prev Button	Alt-Prev Button
Next Frame	Next Button	Next Button
End (Last Frame)	Opt-Next Button	Alt-Next Button

Modifiers While Creating Primitives

Aligned	Shift	Shift
Stacked	Option	Alt
Concentric	⌘	Ctrl

In-View Navigation Controls

Move Forward	Click+Drag Up
Move Backward	Click+Drag Down
Turn Left	Click+Drag Left
Turn Right	Click+Drag Right
Move Up	Ctrl+Click+Drag Up
Move Down	Ctrl+Click+Drag Down
Slide Left	Ctrl+Click+Drag Left
Slide Right	Ctrl+Click+Drag Right
Switch to Pan Tool	Space

Animation

Record Keyframe	⌘-R	Ctrl R
Play / Pause	⌘-A	Ctrl-A
Stop	ESC	ESC

Miscellaneous

Abort	ESC	ESC
Mirror Textures	⌘-M	Ctrl-M



The Creative Web Company
www.metacreations.com