AVatar LAB

3D Character Creation for Adobe® Atmosphere™ Worlds

Reviewer's Guide

Curious Labs

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" Avatar Lab is a fun, easy to use tool that enables everyone to create their personalized virtual counterpart in cyberspace. It opens a door to online 3D worlds, allowing you to explore Adobe Atmosphere communities, wearing an avatar that expresses exactly who you are or who you want to be. "

Steve Cooper

President
Curious Labs

Curious Labs™
an EGISYS company

Facts and Contacts

Product Name
Product Summary

Curious Labs Avatar Lab

Avatar Lab™ is a creative new product that allows users to create 3D virtual people (avatars) for use in Adobe® Atmosphere™ online 3D worlds. Users can create thousands of unique avatars using pre-made body parts and can create virtual representations of themselves or others using photographs to quickly create a realistic head. *Avatar Lab* also includes many custom props, allowing users to fully customize their avatars. Further, users can create custom materials using color, textures, and transparency. Avatars can include up to eight custom user-controlled animations. Completed Avatars are published to the popular Viewpoint format for previewing and use in Adobe Atmosphere worlds where they can explore and communicate with other users in the same world. *Avatar Lab* is the only product that allows users to create articulated bendable avatars.

For even more power and flexibility, we recommend Poser 4™ with the Pro Pack™, both by Curious Labs. *Avatar Lab* can save avatars as Poser scene (PZ3) files.

Target Markets

Avatar Lab is both powerful and easy for anyone to use – even children. Anyone who wants to create an online personality for themselves for use in exploring Adobe Atmosphere worlds without having to use a complex software application must get *Avatar Lab*.

Company Information

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Pricing

Introductory Price: **US $29**
(through 12/19/01)
Suggested Retail Price: **US $69**
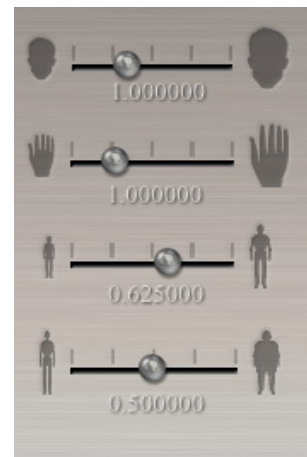
*(International prices vary; contact the appropriate distributor or Curious Labs at **sales@curiouslabs.com**.)*

Availability

NOW

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Facts and Contacts, cont'd

System Requirements
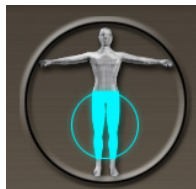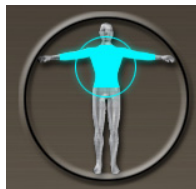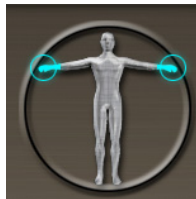
Minimum

Computers meeting these minimum requirements will allow users to create and save avatars. To preview or use avatars in Adobe Atmosphere worlds, users' PCs must also meet the "recommended" system requirements, below.

- Pentium processor

- Windows 98, ME, NT4 (SR-3 or later), 2000, or XP Pro

- 64MB RAM

- 16-bit color display with 800x600 resolution

- 100MB free hard drive space

- QuickTime Player 5.0 (available from http://www.apple.com/quicktime/download)

Recommended

Computers meeting both the minimum and recommended system requirements allow creating and saving avatars, previewing them, and using them in 3D interactive Adobe Atmosphere worlds.

- Atmosphere free browser plug-in (includes Viewpoint installer) to enable browsing 3D worlds and viewing published avatars

- Internet Service Provider account that allows for FTP and Web hosting of avatar files to publish and distribute them via the Web

- Internet Explorer 5.0 or higher Web Browser (available at http://www.microsoft.com/windows/ie/downloads/ie6/download.asp)

- 24-bit or higher graphics display

Technical Support

Curious Labs offers convenient Web, email, and phone support options allowing users to contact technical support with questions about installation, configuration, or functionality.

- **Web Support:** The answers to many questions are available by visiting our Web site 24 hours a day at **http://www.curiouslabs.com**.

- **Email Support**. Users may also complete the online email support form available at **http://www.curiouslabs.com/support**. Please be sure to include the product serial number when emailing us for support.

- **Phone Support:** Curious Labs offers phone support between the hours of 9AM and 5PM Pacific Time by dialing **(831) 462-8902**. Please be sure to have the product serial number ready when calling for support.

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Documentation

- **International Support:** Please contact the local distributor for international support. To locate the nearest distributor, please check our Web site at **http://www.curiouslabs.com**.

Avatar Lab includes the following full-color documentation:

- **Avatar Creator's Handbook:** This electronic manual appears on the CD in Adobe Acrobat (PDF) format.

For more *Avatar Lab* information, tutorials, and examples, please visit us at **http://www.curiouslabs.com**.

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Avatar Lab Background and Overview

History

Poser has evolved significantly since its beginning in 1995. Poser 1 was originally created to help 2D artists by providing poseable 3D reference figures. 3D users saw Poser as a great way to incorporate figures into 3D worlds and requested that Poser be given animation capabilities. Poser 2 addressed this need and brought the program to a new level. Poser 3 also responded to user requests, delivering a substantial update with a new, easy-to-use interface, vastly improved new figures, and many advanced features. Poser 4 refined many of the features of Poser 3 and previous versions and brought the Poser line to full maturity. The addition of Pro Pack brought many professional features such as custom figure creation and integration with popular 3D packages within reach of both professional and lay users. *Avatar Lab* builds on the success of Poser while bringing the power of online interactive 3D experience within reach of the average computer user.

About Avatar Lab
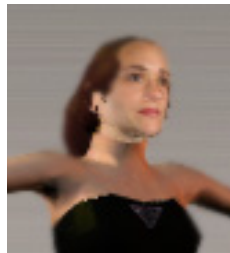
Avatar Lab signifies an expansion of the Poser/Pro Pack brand. It is a tool for creative empowerment, allowing entry into a complex world where its users can tell their stories, express themselves, and unlock their creative spirits via whimsical or realistic 3D "virtual people" or avatars. This access is affordable and can be mastered with an absolute minimum of effort. Novice users can use *Avatar Lab*'s pre-made content and default materials to create thousands of avatars in just a few minutes, while slightly more advanced users can create virtual representations of themselves or anyone using two photographs and an intuitive interface. More advanced users can customize the appearance of their avatars by using custom materials, texture maps, and transparency.

Avatar Lab is unique in that the avatars created using this application are fully articulated and bendable, making them able to move through virtual worlds in a natural-looking way as opposed to the "cardboard sign" appearance of avatars created using other applications. It includes dozens of pre-made animations (walks, waves, etc.) that the user can apply to their avatars, up to eight per avatar. Once in the online world, the user can toggle each assigned animation on and off, adding a high level of interactivity to their online sessions.

Key Features

Simple Avatar Creation Process

Avatar Lab uses an intuitive five-step avatar creation process:

1. Select Body Parts: Mix and match from a variety of heads, torsos, hands, legs, and feet.

2. Custom Face: Use two photographs (front and side) to create a realistic 3D head of the user or anyone.

3. Props: Add props (including hair) to give added personality and realism to the avatar.

4. Materials: Add custom colors, textures, and/or transparencies to create a truly unique look.

5. Animation & Publication: Add and preview up to eight interactive animation sets to allow avatars to interact with their online world. Publish completed avatars to the popular Viewpoint format for insertion into Adobe Atmosphere worlds.

Pre-made Body Parts

Cyclops Head

Dog Head

Dragon Head

Elephant Head

Avatar Lab includes many body parts, which can be mixed and matched to create truly custom avatars. Body parts include:

• Heads: From aliens to toucans, *Avatar Lab* includes 26 heads.

• Torsos: Bikini? Shark? Why not? *Avatar Lab* includes 18 torsos.

• Hands: From claws to pincers, users can select from 8 hands and can use different left and right hands.

• Legs: Whether it's chicken legs or robotic limbs, users have 22 leg choices.

• Feet: As with the hands, users can select different left and right feet from the 18 available choices.

Just using the stock body parts, *Avatar Lab* allows users to create over 200 *million* unique avatars – And this doesn't include available body part scaling, props, custom heads, or materials. With *Avatar Lab*, the possibilities are literally endless!

Body Adjustments

Users can scale their avatars as follows:

• Head & Hand Size: Head and hand sizes can range from shrunken to greatly oversized. Heads and hands can be scaled independently.

• Height: Control the avatar's height, from infant to fashion model.

• Weight: Specify the avatar's weight, from slim to Rubenesque.

Custom Heads

Want to create a virtual self? Friend? Celebrity? Users can create realistic 3D heads of themselves or anyone they wish using two photographs (front and side) of their selected subject. Photos should be as orthogonal (straight-angled) as possible, however *Avatar Lab*'s powerful image-processing algorithm allows users to create heads if the photos are slightly 'off'.

Users can browse to locate the current front and side images and are asked

to click certain points (ear lobe, chin, mouth, etc.) while loading the images to help the algorithm generate a head. Once the head is created, users can take advantage of a simple interface that allows them to fine-tune the head to fit the image, with highly realistic results. If the subject has short hair, the user can opt to simply use the head or, if the subject has long hair, the user can add hair props in the prop stage.

Props

Avatar Lab contains numerous props grouped by body part. For example, head props consist of various hairstyles, horns, hats, etc. while hand props consist of mitts, purses, etc. Users can also select from a variety of general-purpose props, including several generic geometric shapes than can have custom materials added.

Props can also be *parented*, that is, assigned to a body part. Parented props retain the same position relative to their assigned body part during aniamtion. For example, placing a ball in the avatar's hand and parenting the ball to the hand will cause the ball to remain in the avatar's hand as the hand moves around.

Custom Materials

Each avatar and most props can be given a custom look and feel. This canbe accomplished in three ways:

- Color: Users can select the color of any of the avatar's listed material groups (such as skin, etc.) using a standard color picker.

- Texture: Adding an image will make the selected material appear "patterned", that is, the image will wrap around the specified object(s). Advanced users can take advantage of texture maps and their favorite photo/illustration tools to create texture images that precisely conform to the underlying object(s).

- Transparency: Transparencies are grayscale images that determine the opacity of the specified object based on color. For example, if a portion of a transparency imag is white, the corresponding portion on the object will appear transparent. As with textures, users can use transparency maps to precisely control the transparency of their objects.

Interactive Animations

Once created, avatars will not be static objects. Users can select up to eight controllable animations (such as walks, waves, etc.) that other users will see when the avatar is loaded into an online world. These animations add interactivity, realism, and personality to users' online presences.

In the online world, each applied animation will have its own START and STOP button, allowing users to toggle each animation on and off at will. Additionally, *Avatar Lab* also supports additional Atmosphere animations/ effects (spin, appear/disappear, etc.) for even more interactivity.

Easy Avatar Publishing

Once a user completes her or his avatar, s/he can publish it directly to an FTP site for loading into one or more online worlds and can save all work to their local hard drives. Users can also save *Avatar Lab* files as Poser scene (PZ3) files, which can be edited using Poser.

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Features and Benefits

Feature:
Wide Array of Body Parts

Avatar Lab includes a wide assortment of body parts that users can mix and match simply by selecting a body area (head, torso, hands, legs, or feet) and double-clicking their desired selection. Unlike other 3D applications that require a user to have some 3D knowledge, *Avatar Lab* requires absolutely no special knowledge or experience and provides its full functionality to novices and experts alike.

Benefit:
Create Over 200 Million Unique Avatars

Many applications force the user to make a trade off between simplicity and functionality or variety*. Avatar Lab* smashes that barrier by providing a vast amount of customizability at the user's fingertips. Using nothing more than stock body parts, *Avatar Lab* users can create over *200 million* (that's right, *two hundred million*) unique avatars. No other 3D application comes close to allowing this kind of creative expression in such an affordable, easy to use format- And we haven't even discussed *Avatar Lab's* powerful customization features!

Feature:
Scalable Avatars

Each person is different. *Avatar Lab* takes this into account by allowing users to scale the relative sizes of the avatar's head and hands, height, and body weight. Short, tall, lean, or stocky, users can adjust their virtual persona's physique using four intuitive slider bars located right in the avatar creation stage.

Benefit:
Customize Avatar Appearance

By allowing users to customize their avatars' physical characteristics, users can add realism, whimsy, or both. For example, if a user is creating a virtual representation of her/himself, s/he can adjust the avatar's body to more closely match her/his own real body (or the body s/he'd rather have!). Or, s/he can have fun experimenting. Either way, *Avatar Lab* makes it easy!

### Feature:
Create Custom Heads

Users having two photos (front and side) of themselves or someone they'd like to see online can use these two photos and a simple interface to create a customized 3D head for the avatar!

Benefit:
Build a Realistic Online Presence

Avatars are becoming increasingly popular for uses such as entertainment and virtual assistants. Today, there are systems in place where people can have their bodies scanned inside a special booth and converted into a 3D avatar. While producing extremely accurate results, these systems are expensive and require users to stand still for extended periods while the scan is in progress.

By contrast, *Avatar Lab* brings much of the same power to the average person on their own PC in the comfort and privacy of their home or office. All users need are two photographs and less than five minutes to create a convincing 3D head with their unique facial features. *Avatar Lab* makes it easy to put one's self online!

Feature:

Selectable Materials
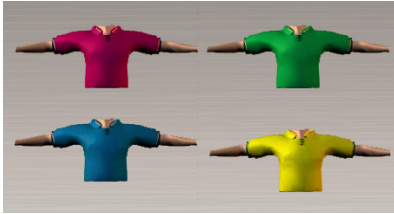
Want a custom logo, color, or text to display on the avatar? Custom materials add a unique touch to avatars, from clothing styles to skin coloration. Each avatar has a materials list, which can be customized using the color picker and/or by using textures and/or transparencies. Users can choose to use any image they like or, for professional-looking results, they can use the included texture maps to control exactly how the texture will appear. A *texture map* is a set of two-dimensional coordinates that determine how a 2D image will wrap around and appear on a 3D object.

As mentioned above, users can also opt to include transparency in their custom materials. *Transparency maps* are similar to texture maps except that they use grayscale values to determine an object's opacity. By using transparency maps, users can create intricate patterns or completely customized looks for their avatars.

Benefit:

Give Avatars that Unique Look

The combination of body parts, body scaling, personalized heads, and materials means that *Avatar Lab* truly brings powerful professional 3D tools to everyday users and allows them to express themselves in nearly infinite ways. Custom materials using color, texture maps, and transparency maps give each avatar a totally custom look.

Feature:

Interactive Animations

Users can add up to eight animations to each avatar including a stance, walk, and up to six custom actions such as waves, humorous movements, etc. Each animation is user-controllable within Adobe Atmosphere worlds: users can toggle each animation on and off at will. For example, a user could walk up to a friend's avatar and wave 'hello'. Animations are added using simple pull-down menus- no special knowledge required!

Benefit:

Add Interactivity to Online Experiences

Online 3D is growing ever more interactive and personalized. Body language is an important form of individualization and communication, and, until recently, was missing from most online 3D communities. *Avatar Lab* brings true individuality to each user's online presence.

Feature:

Viewpoint Format Publishing

Avatar Lab publishes avatars to the increasingly popular Viewpoint Experience Technology format. Viewpoint objects exist in 3D space and can be animated and controlled by the user with minimal effort. This format adapts to network and computer performance and allows excellent 3D output suitable for many types of personal and professional products.

Benefit:

Expandable Avatar Functionality

As the Viewpoint format expands and matures, avatars created using *Avatar Lab* will be able to be incorporated into an ever-widening assortment of applications, meaning that *Avatar Lab* will continue growing in usability across an ever-widening spectrum of uses.

Feature:

Ease of Use

Curious Labs designed *Avatar Lab* to be extremely user friendly. The avatar creation process is divided into five intuitive stages, which, if followed, can produce stunning results in minutes. *Avatar Lab* brings the power of 3D and online interaction into the mainstream!

Benefit:

Fast, Easy, Fun Avatar Creation

Expert or novice, young or old, *Avatar Lab* lets virtually anyone express their creativity and individuality by creating high-quality online personas in minutes.

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Features
Overview

- Easy 5-step process.
- Complete libraries of pre-made heads, hands, torsos, legs, feet, hair, and props.
- Personalized face-mapping technology.
- Custom textures and colors.
- Rotate view to see the avatar from any angle.
- Complete, straightforward documentation.
- Publish directly to the web.
- Complete list from data sheet
- Save avatars as Poser scene (PZ3) files, which can be edited in Poser and re-imported to *Avatar Lab*

The 5-Step Avatar Process Explained

Step 1: Build Avatars

- Select from a wide variety of heads, torsos, hands, legs, and feet.
- Apply left and right pieces individually. Mix and match.
- Use intuitive sliders to adjust head size, hand size, avatar height, and body style.
- See the avatar take shape immediately as body parts are added and modified.
- Want to make a change? No problem. Just select a new body part to replace the old one.

Step 2: Add Custom Faces

- Interactively create a virtual representation of anyone using advanced face-mapping technology.
- Simply load two photos – front and side views – pick a few match-points, and *Avatar Lab* does the rest. One can even use photos taken from slight angles.
- Use nearly any popular graphic format for the photos.
- Zoom and pan the images for finer control while creating the custom head.
- Point-alignment tools allow users to easily fine-tune the actual 3D head and face shapes.

Step 3: Add Props

- Add a different hairstyle, or even facial hair to the character.
- Add pre-made props and accessories.
- Position, rotate, and scale props in 3D space with the easy to use tools.
- Attach props to a specific body part.
- Select from a full library of props such as a soda can, cane, flashlight, top hat, and many more!

Step 4: Create Custom Materials

- Create custom materials for any body part or prop.
- Use the Material Color picker to select a base color for objects
- Add custom texture maps (images) to reproduce virtually any material (such as denim jeans or banana peels)
- Use transparency maps to create realistic texture additions such as an insignia on a t-shirt, or a patch on jeans.
- See changes immediately.
- Modify existing texture maps or create completely new ones using one's favorite paint or photo-editing application.
- *Avatar Lab* supports a wide variety of popular graphical file formats for textures.

Step 5: Action

- Add up to 8 distinct actions to an avatar using intuitive pull-down menus.
- Use these controls later in Atmosphere to bring the characters to life.
- Preview each action.
- Invoke selected actions for each character through controls in Adobe Atmosphere.
- Preview avatars directly in the Viewpoint player, as an Adobe Atmosphere file, or view it in a browser.
- Publish an avatar directly via FTP.
- Save finished avatars and works in progress.