FantaMorph 5

CREATE FANTASTIC PHOTO MORPHING MOVIES

Version 5.4.2   May 31, 2013

Table of Contents

Chapter 1 Introducing

Chapter 2 Getting Started

Chapter 3 How to…

Chapter 4 Hints and Tips

Chapter 1

Introducing

What is a Morph?

Image morphing is a useful visualization technique. It is often used for educational or entertaining purposes. Image morphing techniques have been widely used in creating special effects for television commercials, music videos such as Michael Jackson's Black or White, and movies such as Willow and Indiana Jones and the Last Crusade.

Image morphing is an image processing technique used to compute a transformation, that is, a metamorphosis, from one image to another. The process is called "morph" for short. The idea is to create a sequence of intermediate images, which when put together with the original images, represents the transition from one image to the other.

In a morphing sequence between two faces, the middle image often looks strikingly life-like, as a real person, but clearly it is neither the person in the first or in the second image. See below. The image in the middle is half influenced by the left and half influenced by the right image.

The morphed pictures in sequence can be shown as a dynamic process like a movie. The result can be very interesting.

Morphing between two images achieves the best results if the images are roughly of the same shape and colors, e.g. morphing from a tree to a cat may not result in such a good transition as when morphing from one face to another. In this case the middle image might look strange since it got no equivalence in the real world. (Although, sometimes, this is just what we are looking for.)

What is Abrosoft FantaMorph?

With Abrosoft FantaMorph, **creating fantastic image morphs and warp movies** has never been easier and faster! You can do everything a professional animation director does to create amazing images and animations. FantaMorph supports most image formats including BMP, JPEG, TIFF, PNG, PSD, GIF, TGA, PCX, and even professional 32-bit with alpha formats. Exporting to Image Sequence, AVI, Animated GIF, Flash, Screen Saver, Standalone EXE and other formats are supported. You can crop, rotate, flip, adjust color, add caption or some cool effects for the source images and the final movie, all with FantaMorph's built-in tools, without having to go to any additional software.

FantaMorph takes advantage of hardware acceleration, and the rendering speed easily goes up to several hundred FPS (Frames Per Second). The high speed makes it possible to play final effects in real time without exporting to a file. The new interface with skin is cool in looks, streamlined in function, and a joy to work with! The Pro/Deluxe edition supports creating multiple morph, which makes it a breeze to create long movies with multiple source images. You can also find some advanced tools like Feature Curve, Shape Curve, Track Curve, Camera, etc. in Pro/Deluxe to create professional, gorgeous and exciting morphing effects.

Three innovative add-ins, Face Extractor, Face Locator and Face Mixer, were added to the Deluxe edition. With these intelligent, powerful and novel tools, **morphing faces or mixing multiple faces into one** has never been easier and faster! With Face Extractor, the program can automatically extract the face portion from an image. With Face Locator, the program can now automatically detect the facial features (eyes, nose, mouth, etc.) and place key dots on appropriate positions, this will extremely save your time. With Face Mixer, you can mix two or more pictures into one. In most cases, we use Face Mixer to compose a virtual face with multiple real faces. Please try to fuse different pictures of your favorite stars, your friends and family, men, women, children or any people into a wonderful, awesome or funny face. It's just plain fun!

What can you create with FantaMorph?

With Abrosoft FantaMorph, you can create morph movies between any two images:

Source images:
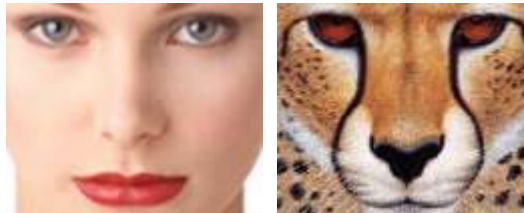
Morphing sequence:
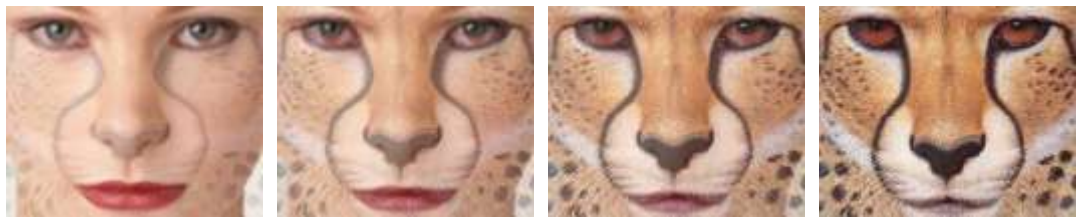
Morph movie:

Morph movie with add-on effects:

Professional morph movie using 32-bit with alpha images:

With Abrosoft FantaMorph, you can create an animated warp from a single source image.

Beginning with version 3.5, you can easily create a multiple morph from a series of images.

Beginning with version 3.5.5, you can compose a virtual face with multiple real faces. Only available in FantaMorph Deluxe.
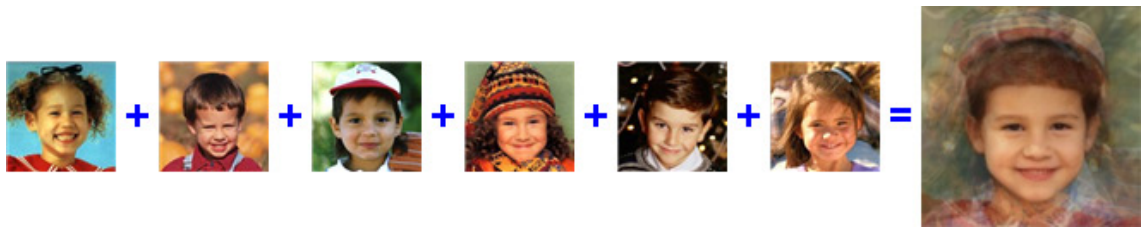
Beginning with version 5, you can create layer morph that makes multiple morphs running in different layers simultaneously. Only available in FantaMorph Deluxe.

Why Using FantaMorph?

Because morphing pictures and movies has never been easier and faster! Abrosoft FantaMorph is based on a simple concept: a powerful and professional morphing software, yes, but simple enough to be used by even non professionals. When tools allow for expression of creativity based on ideas and inspiration and not on technical expertise, everyone benefits. FantaMorph is so easy to use that you will be limited only by your imagination and your ability to create or obtain good material to morph. Make your own morphing movie! Unleash your creative spirits!

Easy to use workspace

- Great looking interface with skin

- Almost all features are accessible in main interface

- Full view, edit only, preview only, frame sequence, dual view, full screen mode

- Project wizard

- Supports full Drag & Drop

- Zoom/pan source images and preview simultaneously

- 10 built-in, smooth, dot styles

- Blinking dots pairs when mouse is over them

- Unlimited Undo/Redo

- Support keyboard shortcuts and mouse wheel scrolling

- Visual open project

- More, more, more...

Powerful features

- The fastest rendering engine, fully supports OpenGL hardware acceleration

- Real-time preview, real-time playback

- Imports/Exports 32-bit image with alpha formats: BMP, TIFF, PNG, PSD, TGA

- Export as Image Sequence, AVI, QuickTime, Animated GIF, Flash, HTML, Screen Saver and EXE

- Create sequence morph and layer morph

- Crop, rotate or flip, adjust color, add caption or filters for source images and movie

- Professional morphing control tools: Feature/Shape/Master/Track curve and Camera

- Create amazing effects with Background, Mask, Foreground, Transition, Light, Trail, Radial and Sound

- Print source images, preview and frame sequence, supports print preview

- Automatically detect facial features and place key dots on appropriate positions

- Compose a virtual face with multiple real faces

- More, more, more...

What's New

Version 5.4

- **New:** Sequence Filter

- **New:** Sequence Caption

- **New:** Export QuickTime Movie (only available in Deluxe)

- **New:** Supports FME and FMD format when export Image Sequence (only available in Deluxe)

- **New:** Keyboard shortcuts for Transform

- **New:** Keyboard shortcuts for Sequence submenus

- **New:** Customized 32-Bit background

- **New:** Clear Recent Project List menu

- **New:** Can turn on/off AutoRecover and set interval in Edit Options

- **Fixed:** Menu fade ghost on Preview window (only appears on Windows XP)

- **Fixed:** Display incomplete image when editing Movie Filter/Caption for Layer Morph

- **Fixed:** Auto Update problem on Windows Vista/7

- **Fixed:** Zoom/Pan outside dots

- **Fixed:** Zoom/Pan in Preview Only and Dual View mode

- **Fixed:** Show outside zone in Magnifier

- **Changed:** Transform handles shape changed for each mode

- **Changed:** Morph Track display mode changed when zooming

- **Changed:** Default source image size limit changed to 1920 x 1080

- **Changed:** Preview slider doesn't affect Face Mixer

Version 5.0

- **New Layer Morph** - Have multiple morphs running in different layers simultaneously. This makes it possible to create very professional and stunning morphs.

- **Improved Rendering Engine** - You can get more sharp and clear morphing image quality with the improved rendering engine.

- **New Face Extractor** - New face extractor is much more accurate and faster than ever before.

- **New Face Locator** - New face locator is much more accurate and faster than ever before.

- **New Face Model** - You can use a customized face model to create face morphs.

- **New Sequence List Panel** - With the new sequence list panel you can easily add, delete, move, link, duplicate sequences.

- **New Camera** - Now you can create intuitional camera tracks, control proportions of each key frame.

- **New Dual View mode** - FantaMorph can now work perfectly on dual monitors.

- **Splittable Workspace** - The three main panels, Image 1, Image 2 and Preview, are splittable now.

- **Separate Sequence Effects** - Each sequence can have different effects now.

- **New sequence effect: Trail** - With Trail you can add a motion blur or motion trail effect for a sequence.

- **New sequence effect: Radial** - With Radial you can add a radiating rays effect for a sequence.

- **Use Camera on Movie/Sequence Effects** - You can use camera on a movie/sequence effect to make a still effect being animated.

- **Modeless Movie/Sequence Windows** - All movie/sequence windows are modeless now, so that you can have them always visible along with the main interface.

- **New Master Curve** - With the new master curve you can easily control the transparency to create a fade in/out in a sequence.

- **Improved Track Curve** - The start point and end point can be moved to anywhere now, for professional users, this makes it possible to create Anti-Faces and Caricatures.

- **New Dots Transform** - You can now rotate, skew and flip selected dots.

- **Improved Crop Tool** - You can now rotate arbitrary angle and crop, and crop to outside the source images.

- **New Sound Controls** - There are a few new controls for sound: cut, repeat, fade in/out.

- **New Reverse Option** - There is a new Reverse option for mask/transition effect.

- **Outside Dots** - You can now place key dots outside source images.

- **Caption Shadow** - You can now add shadows for caption.

- **Import PhotoShop PSD Files** - You can now import PhotoShop PSD files.

- **Adjust Skin Hue** - You can change the skin to your favorite color.

- **Auto Update** - With Auto Update, you can keep the program up to date automatically.

Feature List

Below is a list of all the features and benefits of FantaMorph. (Note that some features are only supported in FantaMorph Pro or Deluxe.)

File Format

- **Import** - BMP, JPEG, TIFF, PNG, PSD, TGA, PCX, GIF, WMF, EMF, AVI, includes 32-bit with alpha BMP, TIFF, PNG, PSD, TGA

- **Export Image** - BMP, JPEG, TIFF, PNG, TGA, PCX, GIF includes 32-bit with alpha BMP, TIFF, PNG, TGA

- **FME/FMD** - Import/export FME (FantaMorph Editing Frame) and FMD (FantaMorph Point File)

- **Export Movie** - AVI (uncompressed, compressed, 32-bit), QuickTime, Animated GIF, SWF, HTML, Screen Saver, Standalone EXE

Source Images Edit

- **Import** - From Open File dialog with preview; drag and drop from built-in image viewer; drag and drop from other applications

- **Crop** - Drag and drop to crop; free size or maintain aspect ratio; crop to outside

- **Rotate** - 180°, 90° CW, 90° CCW , arbitrary angle

- **Flip** - Flip Horizontal, flip Vertical

- **Adjustment** - Brightness, contrast, red, green, blue, hue, saturation, negative, gray

- **Filter** - Smooth, bur, Gaussian blur, zoom blur, radial blur, sharpen, emboss, mosaic, oil paint, splash, cylinder, whirl, pinch

- **Caption** - Add caption for each source image, set font name, size, color, border, alignment , shadow and position

- **Swap** - Swap two source images

- **View** - Smoothly scale from 12.5% to 800%, mouse wheel scrolling to scale up to 1600%

- **Grid** - Allow show/hide grid

- **Undo/Redo** - Allowed for all features of source images edit

Key Dots

- **Style** - Total 10 normal styles and 10 highlighting styles;

- **Color** - Any chosen, single color for all dots; or cycle through 8 basic colors (red, yellow, blue, green, cyan, purple, white, black)

- **Effect** - Anti-aliasing; can set alpha (transparency) from 64 to 255

- **Line** - Connect any two dots with a line segment; group and organize key dots with lines

- **Highlight** - Highlight a dot pair when mouse over a dot; Highlight all connected dots and lines when mouse over a line (click not necessary)

- **Show** - Allow show/hide key dots, lines, triangle mesh and morph track

Key Dots Edit

- **Edit Tools** - 6 edit tools; supports keyboard shortcuts; use Spacebar to switch to Hand tool; use ALT key to switch between zoom in/out

- **Add** - Combine the two options "Auto Add Corresponding Dot" and "Auto Jump to Corresponding Dot" to get your own favorite dot adding mode

- **Delete** - Right-click to delete one dot directly

- **Move** - Drag & Drop to move one dot

- **Add Line** - Directly add a series of dots connected by a line; connect any two dots with a line segment

- **Insert Dot** - Insert a dot into a line segment

- **Delete Line** - Delete a line segment and break the connected dots

- **Move Line** - Drag & Drop a line segment along with all connected dots and lines

- **Multiple** - Rectangle marquee to select; hold SHIFT/ALT to add/subtract selection; click a line segment to select; move, scale, rotate, skew, flip, copy, cut, delete, paste multiple dots with connected lines

- **Select All** - Select all dots

- **Clear All** - Clear all dots

- **Matching** - Automatically manage corresponding dots; show paired dots and unpaired dots with different colors; automatically generate corresponding dots on suitable positions

- **Magnifier** - Magnifies the area under and around the mouse cursor up to 4x

- **Undo/Redo** - Allow for all features of key dots edit

- **Dots Count** - 2048 max

Sequence

- **Length** - 2 to 999 frames; set length by frames or by time

- **Prolong Begin and End Views** - Set the prolonged frames of Image 1 and Image 2 separately from 0 to 999 frames

- **Add** - Add a continued sequence where Image 2 of the previous sequence becomes Image 1 of the new sequence; add a blank sequence

- **Delete** - Delete a sequence

- **Duplicate** - Duplicate a sequence

- **Visibility** - Show/hide a sequence

- **Name** - Give a name for a sequence

- **Move** - Move a sequence up/down, bring to top or send to bottom of the sequence list

- **Connect** - Make two adjacent sequences connected seamlessly

- **Frame Copy** - Copy a source image with its key dots to another sequence

- **Curve** - Use Feature/Shape/Master/Track curve to control the morph process; choose from curve library; customize curve

- **Camera** - Pan/zoom/rotate each morphing frame through a customized track; change proportion; preview Camera effect in real time; load and save

- **Effect** - Back color, background, mask, foreground, transition, light, trail, radial; set different effects for each sequence

- **Filter** - Smooth, bur, Gaussian blur, zoom blur, radial blur, emboss, mosaic, oil paint, splash, cylinder, whirl, pinch; set different filters for each sequence

- **Caption** - Add caption for the whole movie, set font name, size, color, border, alignment, shadow and position; set different captions for each sequence

- **Morph Type** - 7 morph types (Morph Image 1 to Image 2, Morph and Hold Image 1, Warp Image 1, Warp Image 2, Fade Out Image 1, Fade In Image 2, Direct)

- **Morph Type Options** - 2 morph type options

Movie

- **Size** - Matching with source images; 6 fixed size or any custom size

- **Length** - Unlimited (only limited by your system resource)

- **Effect** - Set back color, background, mask, foreground, light, sound for the whole movie

- **Adjustment** - Brightness, contrast, red, green, blue, hue, saturation, negative, gray

- **Filter** - Smooth, bur, Gaussian blur, zoom blur, radial blur, emboss, mosaic, oil paint, splash, cylinder, whirl, pinch

- **Caption** - Add caption for the whole movie, set font name, size, color, border, alignment , shadow and position

- **Preview** - Preview all the sequences or only one sequence; preview morphing effects of current frame in real time; fast scroll to preview all frames from 0% to 100% in 1% increments; mouse wheel scrolling to preview all frames one by one; preview in full screen

- **Preview Background** - Checkerboard background instead of pure black background

- **View** - Smoothly scale from 12.5% to 800%, mouse wheel scrolling to scale up to 1600%; zoom/pan source images and preview windows simultaneously

- **Play** - Play morphing movie in real time without exporting to a file

- **Play Control** - Play/pause; Go to the first, the last, the previous, the next frame; auto loop; auto reverse

- **Play Speed** - 1 to 60 frames per second

Effects

- **Background** - Single color; or any chosen image; can set opacity from 0 to 100

- **Mask** - 256 level grayscale bitmap (could use any image to create strange effect); can set intensity from -100 to 100

- **Foreground** - 32-bit with alpha image; can set opacity from 0 to 100

- **Transition** - 256 level grayscale bitmap; can adjust transition border from 0 to 100

- **Light** - 256 level grayscale bitmap; can adjust bright intensity and dark intensity from 0 to 100

- **Trail** - Motion trail; motion blur; can set trail color and intensity from 0 to 100

- **Radial** - Can set radial color and intensity from 0 to 100

- **Sound** - Supports WAV and MP3 format; export to AVI, Flash, Screen Saver and EXE; repeat, cut, fade in/out

- **Adjust** - Can set camera for each visual effect

Export

- **Export Frame** - Export current morphing frame to a image file or FME or FMD

- **Export Range** - All sequences; current sequence; sequence range

- **Export Movie** - Export morphing movie to image sequence files, AVI movie, Animated GIF, Flash movie, Web page, Screen Saver, Standalone EXE

- **Export Image** - Export optional 32-bit image; set DPI for exported image files

- **Export AVI** - Choose a codec to export compressed AVI, export uncompressed AVI or 32-bit AVI

- **Export QuickTime** - Only available in FantaMorph Deluxe version 5.1.6 or later

- **Export Animated GIF** - Export looping or non-looping, opaque or transparent Animated GIF

- **Export Flash** - Export looping or non-looping Flash; add a URL to the resulting Flash

- **Export Size** - Depends on display card if hardware acceleration is enabled, or up to 16384 x 16384 pixels when hardware acceleration is disabled

- **Export Frame Rate** - 1 to 60 frames per second; 29.97 fps for NTSC AVI movies

- **JPEG, Flash Quality** - 0 to 100

- **Cancel Export** - Allowed

- **Export Reverse Frames** - Export reverse morphing frames to movie

- **Export Source Video Clip** - Export source video clips

- **Remove Duplicated Frame** - Eliminate the duplicated frame from the end or the beginning of two adjacent sequences

- **Auto Save Before Export** - Automatically save current project before export

- **Auto Open after Export** - Automatically open resulting file with the system associated program

- **Delete Results** - Can delete result file(s) directly

- **Share Results** - Launch default email program to send result file(s)

Printing

- **Print** - Print source images, preview and all morphing frames

- **Settings** - Add captions; change position, size; Page Setup

- **Print Preview** - What-you-see-is-what-you-get (WYSIWYG) display

Tools

- **Diagnose Morphing Capacity** - Test preview and export capacities of your computer

- **Test Morphing Performance** - Test image morphing performance of your computer

- **New Project Wizard** - Create a morph project by this step 1-2-3 wizard

Add-Ins

- **Image Viewer** - Fast preview all supported format images with thumbnails; supports drag and drop

- **Image Sequence Packer** - Pack a series of all supported format images to create a new movie

- **Face Extractor** - Automatically extract the face portion from an image

- **Face Locator** - Automatically detect the facial features (eyes, nose, mouth, etc.) and place key dots on appropriate positions

- **Face Model** - Customize the face model for feature detection; remove unwanted dots; highlight important dots

- **Face Mixer** - Mix the feature/shape of multiple real faces to compose a virtual face

- **Face Library** - Collect and store source images along with key dots in a classified library

User Interface

- **Skin** - Choose a skin from 3 built-in skins: Standard, MAC, Blue

- **Custom Skin** - Import FantaMorph Skin Files (.fms)

- **Split** - Split Image 1 & 2 & Preview area

- **View Mode** - Switch to one of 6 view modes (Full, Edit Only, Preview Only, Frame Sequence, Dual View, Full Screen) at any time; support dual monitor

- **Language** - Supports multi-languages

Advanced

- **Memory Management** - Intelligent memory management technique, load unlimited or huge source images in one project

- **Morphing Server** - Integrate FantaMorph into your own application

System Resuirements

Abrosoft FantaMorph has been designed to work with Microsoft Windows® 98, ME, NT4, 2000, XP, Vista, 7 (both 32-bit and 64-bit) or later.

Minimum Requirements

- Pentium® class CPU - 350 Mhz

- True color video card - 800x600, 24Bit

- 64 MB RAM

- Microsoft Windows® 98 or NT 4.0 SP6

Recommended Requirements

- Pentium® 4 or AMD Athlon – 1G Mhz or more

- True Color Video Card with OpenGL acceleration - 1024x768, 32-bit

- 512 MB RAM

- Microsoft Windows® XP or later

Installing and Uninstalling

You can install FantaMorph from an executable file downloaded from the Internet or a CD (it's an option when you purchase the product on the Internet).

To install FantaMorph from an executable file

1. Download the latest version of FantaMorph from the Internet.

2. Save the installer program FantaMorphSetup.exe to a location on your hard drive (e.g., C:\temp).

3. Run the installer program by double-clicking on it.

4. Follow the instructions of the installer program to install FantaMorph.

To install FantaMorph from a CD-ROM

1. Insert the CD into the CD-ROM drive.

2. Click the Start button and click Run | Browse.

3. In the Look in drop down list, select the CD drive.

4. Select FantaMorphSetup.exe.

5. Click Open.

6. Click OK to run the installation. Follow the instructions in the Install wizard.

After you install FantaMorph on your computer, an application shortcut icon is placed on the desktop and in the Start menu.

To uninstall FantaMorph from your system

1. Click the Start button, and then click Settings | Control Panel.

2. Double-click Add/Remove Programs.

3. Select Abrosoft FantaMorph.

4. Click Change/Remove. Follow the instructions in the Uninstall wizard.

Product Registration

Abrosoft FantaMorph is distributed as SHAREWARE, also known as TBYB (TRY BEFORE YOU BUY) software. Registration gives you the right to use our products after the trial period, access priority technical support and receive many helpful resources available only to registered users. The risk of purchasing is absolutely zero, because we offer a **30-day money-back guarantee**. If for any reason you are not satisfied with our product, your full purchase price will be refunded! Your support is important to us. It will encourage us to develop, to continue to improve our products.

There are 2 licenses to choose from: **Single-User License** and **Site License**.

- **Single-User License** - If you have purchased a Single-User License, this software may be installed on a maximum of two computers, so long as it is only running on one system at any time. For example, a single user may have one installation at home and one installation at the office for use only by the licensee.

- **Site License** - If you have purchased a Site License for commercial or educational use, the software can be used within a corporate or educational LAN without any restrictions.

You may choose from 3 editions of FantaMorph: **FantaMorph SE** (Standard Edition), **FantaMorph Pro** (Professional Edition) and **FantaMorph Deluxe** (Deluxe Edition). See product comparison below.

Product Comparison

All the three editions, FantaMorph SE, FantaMorph Pro and FantaMorph Deluxe use the same setup program. Unregistered users may try all the functions of our software for a period of thirty days after downloading the setup program, FantaMorphSetup.exe. Refer to the chart below to see which features will be retained after purchasing the FantaMorph SE or Pro license, or purchase FantaMorph Deluxe to access all features.

Features	SE	Pro	Deluxe
1. **Import format** BMP, JPEG, TIFF, PNG, PSD, TGA, PCX, GIF, WMF, EMF, AVI	✔	✔	✔
2. **Export image format** BMP, JPEG, TIFF, PNG, TGA, PCX, GIF	✔	✔	✔
3. **Export frame** Export current morphing frame to one image file	✔	✔	✔
4. **Export Movie** Export morphing movie to image sequence files, AVI movie, Animated GIF, Flash movie, Web page, Screen Saver, EXE	✔	✔	✔
5. **Built-in Image Viewer** Fast preview all supported format images with thumbnail	✔	✔	✔
6. **Built-in image edit tool** Supports crop, rotate, flip, adjust source image	✔	✔	✔
7. **Key dots style** Total 10 smooth key dots style with transparency	✔	✔	✔
8. **Key dots color** Any single color for all dots or cycle through 8 basic colors	✔	✔	✔
9. **Single key dot edit** Add, delete, move	✔	✔	✔
10. **Multiple key dots edit** Rectangle marquee to select, move, scale, rotate, skew, flip, copy, cut, delete, paste	✔	✔	✔
11. **Line edit** Add, delete, move line; connect key dots by lines; select all dots connected to a line	✔	✔	✔
12. **Real-time preview** Preview morphing effects of current frame in real time; fast scroll to preview all frames	✔	✔	✔
13. **Real-time playback** Play morphing movie in real time with some playback controls	✔	✔	✔
14. **View modes** Full View, Edit Only, Preview Only, Frame Sequence, Full Screen mode	✔	✔	✔

		Col1	Col2	Col3
15.	**User interface** 3 built-in skins; import FantaMorph Skin Files; adjust skin hue	✔	✔	✔
16.	**Printing** Print source images, preview and all morphing frames; WYSIWYG print preview	✔	✔	✔
17.	**Dual View Mode** Show the edit window and preview window on dual monitors separately		✔	✔
18.	**Add Filters** Add filters for source images		✔	✔
19.	**Add Caption** Add caption for source images		✔	✔
20.	**Sequence Morph** Morph more than two images in a single project, directly edit/preview/export the whole morph		✔	✔
21.	**Export AVI source video** Export all frames of the AVI source videos to resulting files		✔	✔
22.	**Movie Effects** Decorate movie with background, mask, foreground, light and sound		✔	✔
23.	**Feature/Shape/Master curve** Completely control the morph process of feature, shape and transparency		✔	✔
24.	**Preview 32-bit morphs** Show a checkerboard background when preview/play 32-bit morphs		✔	✔
25.	**Import/Export 32-bit with alpha images** BMP, TIFF, PNG, TGA		✔	✔
26.	**Image Sequence Packer** Pack a series of images into a new movie		✔	✔
27.	**Accurate Edit** Show triangle mesh and morph track to edit key dots accurately		✔	✔
28.	**Layer Morph** Have multiple morphs running in different layers simultaneously in one project			✔
29.	**Track Curve** Use nonlinear morph tracks instead of linear ones			✔

30.	**Camera** Pan/zoom/rotate each morphing frame under a customized track, just like see the morph from a moving camera			✓
31.	**Sequence Effect/Filter/Caption** Decorate a sequence with effect, filter and caption			✓
32.	**Add Filter/Caption for Movie** Add filter/caption for the whole morph movie			✓
33.	**Intelligent Memory Management** Using intelligent memory management makes it possible to load unlimited or huge source images in one project			✓
34.	**Import/Export FMD files** Import/export FantaMorph Point Data (.fmd) where each row is x-y coordinates data of a key dot			✓
35.	**Export Frame to FME/FMD** Export an intermediate morphing frame to FantaMorph Editing Frame (.fme) or FantaMorph Point Data (.fmd)			✓
36.	**Export 32-bit AVI** Export 32-bit AVI files, you can then import them into other video editing software as overlay video clips			✓
37.	**Export Transparent Animated GIF** Export a transparent morph to a transparent animated gif file			✓
38.	**Face Extractor** Automatically extract the face portion from all the source images in a project			✓
39.	**Face Locator** Automatically detect the facial features (eyes, nose, mouth, etc.) and place key dots on corresponding positions			✓
40.	**Face Mixer** Mix the feature/shape of multiple real faces to compose a virtual face			✓
41.	**Face Library** Collect and store source images along with key dots in a classified library			✓
42.	**Export QuickTime Movie** Export morphing animation to QuickTime movie (version 5.1.6 or later)			✓

Product Registration

You need to register the 30-day trial program to make it to be a registered (full) version. Launch FantaMorph, click the "Register" on the startup window.
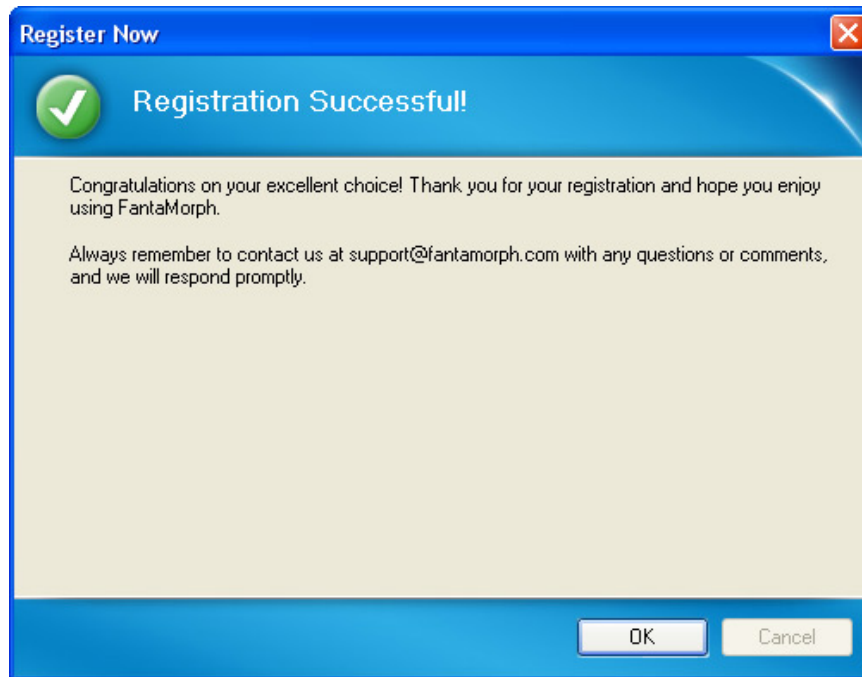

Then, enter you full name and the serial number you received in the registration email, press "OK". Note, please don't type the serial number manually, just copy it by pressing CTRL+C and then paste it to the text box by pressing CTRL+V.

Now the program is registered. You can use all the features of FantaMorph without any limitations.

Contact Us

Web Site

- Product: http://www.fantamorph.com

- Company: http://www.abrosoft.com

E-Mail

- General information: info@fantamorph.com

- Technical Support: support@fantamorph.com

- Sales: sales@fantamorph.com

- Press: press@fantamorph.com

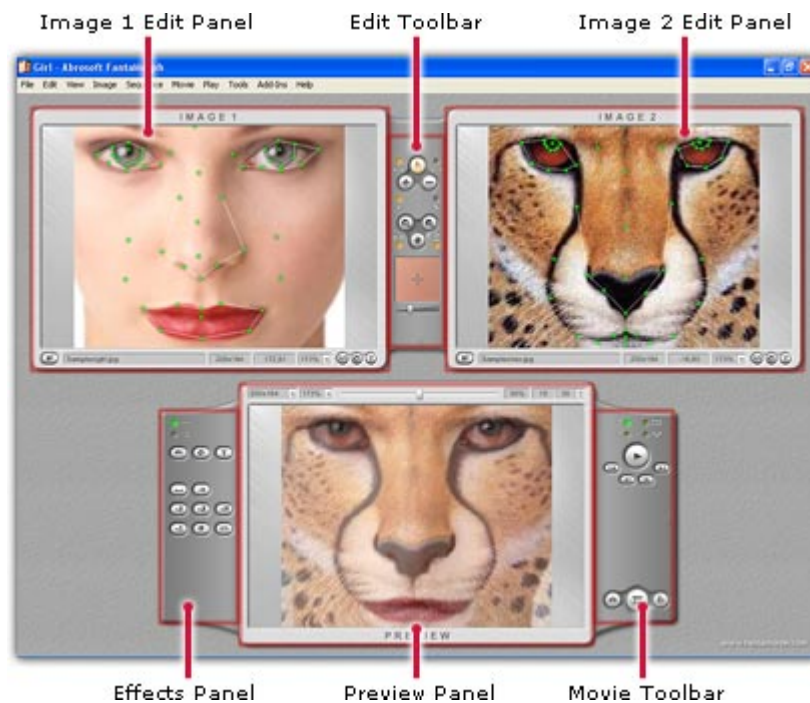- Web information: webmaster@fantamorph.com

Chapter 2

Getting Started

About the User Interface

The main interface of FantaMorph is clean, simple, and yet easy to understand and quite comfortable to use.

Main Interface

There are 6 parts on the main interface.

- **Image 1 Edit Panel** - Edit source image "Image 1" and key dots at here.

- **Image 2 Edit Panel** - Edit source image "Image 2" and key dots at here.

- **Edit Toolbar** - Contains 6 edit buttons, 6 edit options and a magnifier.

- **Preview Panel** - Displays the morph effects in real time at here, also contains the movie size and length controls.

- **Effects Panel** - Quickly choose the effect tools for sequence or movie.

- **Movie Toolbar** - Contains 5 play buttons, 2 play options and 3 export buttons.

FantaMorph is a skinable software. There are 3 built-in skins, you can also import additional skin files at any time. If you like, you can even create your own interface.

Select Built-in Skin

1. Choose Tools/Choose Skin. A dialog box opens.

2. Select one from the Standard, MAC and Blue options.

3. Then, click OK. The interface immediately displays your chosen skin.

Import Skin File

1. Choose Tools/Import Skin File. A dialog box will open.

2. Select a FantaMorph skin file (*.fms) from your disks.

3. Again, click OK. The interface immediately switches to this skin.

Remarks

- You can download more skin files from our web site at http://www.fantamorph.com/skin.html.

- If you want to create your own skins and win a free product, see more info on our site at http://www.fantamorph.com/free.html.

About the View Mode

There are 6 view modes in FantaMorph, each useful for a different purpose.

Full View Mode

As a default, the edit panel, displaying both source images, and the preview panel, displaying the resulting morph, are presented in the main interface. Press the **F5** key or choose the **View/Full** menu to set this view mode at any time.

Edit Only Mode

For large source images or for more precise editing, press the **F6** key or choose the **View/Edit Only** menu to set this view mode.

Preview Only Mode

You may switch view to this mode after all edit work has been completed. Press the **F7** key or choose the **View/Preview Only** menu to set this view mode. Preview Only Mode

provides the largest area for viewing your morph. Turn on the **Auto Loop** switch, press the **Play** button and enjoy your morph now!


Frame Sequence Mode

Now you can view all the frames of a morph without exporting to a series of images, this will help you to know the details of the morph process. Press the **F8** key or choose the **View/Frame Sequence** menu to set this view mode.

Dual View Mode

For professional users, now you can have the edit window and preview window work on dual monitors separately. Press the **F9** key or choose the **View/Dual View** menu to set this view mode.
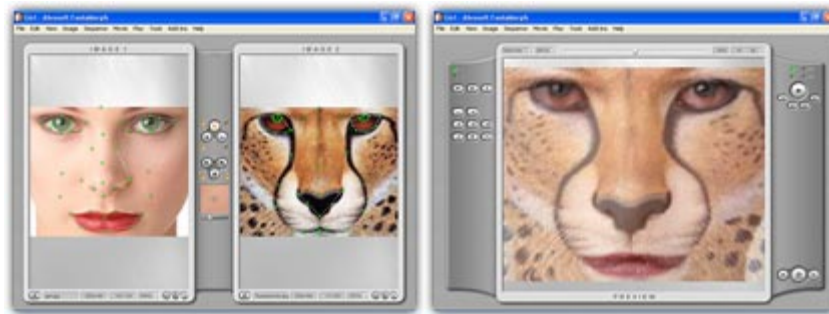
Full Screen Mode

Now you can view and play a morph in full screen mode, this will help you to see the full morph as big as possible when design. Press the **F11** key or **ALT + Enter** key choose the **View/Full Screen** menu to set this view mode, press the **ESC** key to quit this mode.

For professional users, if you enter the Dual View mode first and then enter the Full Screen mode, you can have the edit window and full screen preview work on dual monitors separately.

Lesson 1 - Import Source Image

We begin by selecting two images to morph, a beginning image and a final image.

1. Click the **Import Image 1** button (**❶**) on the edit panel or choose **Image/Import Image 1** menu.

2. In the Import Image 1 window, choose a single image file. There is a preview panel on the right to help you make your selection. Your choice for image 1 will be the start image of the morph. In this example, the "girl.jpg" sample image, which is included with the FantaMorph package for demonstration purposes, will serve as the start image.

3. The selected image appears in the image 1 area in the main interface.

4. Click the **Import Image 2** button (❷) on the edit panel or choose **Image/Import Image 2** menu. Then in the import image window, select "leo.jpg" sample image to serve as the final image of the morph. You now have two images loaded into the image area.

Note, the morph movie will be created using default parameters; the middle frame will be shown immediately. Because we have not added any key dots, the middle frame is simply a cross-dissolve between the two images. We will improve the morph in the following lessons.

Lesson 2 - Edit Source Image

Sometimes, we don't wish to morph an entire image. Particularly with digital camera images, you will find that you only wish to work with a portion of the image. You don't need to use any other software: FantaMorph's built-in crop tool can help you.

1. Click the **Crop Image 1** button (❶) for image 1 or click the **Crop Image 2** button (❷) for image 2 on the edit panel, you can also choose the **Image/Crop** menu.

2. In the **Crop Image 1** window, the selected Portion (❶) can be dragged directly and resized by dragging one of the 8 cropping handles around it. The unselected portion (❷) shown with blue mask will be removed.
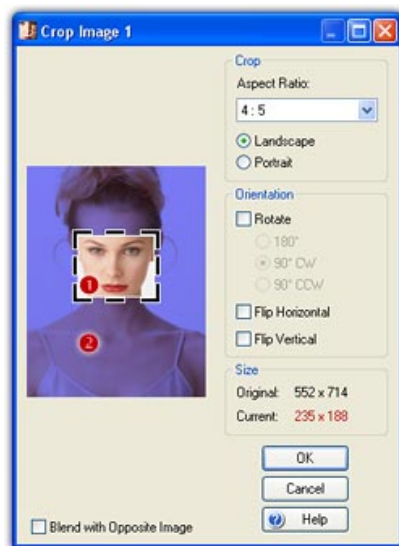
3. We have now cropped two source images and the morph movie has been recreated automatically at a size suitable for those images. Note, these two source images may be of different sizes cropped, and they will still be resized to fit the morph movie.

4. There is another useful tool for image adjustment. With it, you can adjust brightness, contrast, hue, saturation, color balance, etc. You can also add some filters such as blur, sharpen, emboss, etc. Beginning with version 4.0, you can also add caption on source images without having to use any other software.

Lesson 3 - Edit Key Dots

The most important element in producing morphs is to place key dots on both source images in order to define how the morph process will operate. It's good to place dots on the major elements of a morphing image (for example, when morphing a face image, the major elements include eyes, nose, mouth, etc.). In this lesson, we'll start by placing dots around the eyes of both images.

1. Confirm that the edit tool "**Add Dot**" (❶) is selected, then move mouse to the corner of the eye (❷).

2. Click the left mouse button. A dot will appear on image 1, and a corresponding dot will appear on image 2. Note that for each click on either image, a corresponding dot will appear automatically on the opposite image. In most cases, you will need to move the corresponding dot to a suitable position.

3. Add three more dots for the remaining corners of both eyes. Remember, the more dots you place on the elements of your image, the better your morph result will be, so feel

free to continue adding dots to further defined the eye shapes. Note that all dots are the same color by default. You can turn on the **"Color Cycle"** switch from the **Tools/Edit Options** menu, then 8 basic colors will cycle across the dots. This feature helps you to more easily distinguish corresponding dot pairs.

4. When you move the cursor directly over a dot on image 2, the cursor will become a 4 way arrow to indicate that the dot can now be dragged. You may drag it to the position corresponding to the partner dot's location. Notice that the movie morph will change accordingly as each key dot is created or moved. This synchronous change is great for checking if the location of a dot is correct. Please look at the portion in the red box below. This feature is one of the most exciting features of FantaMorph!

5. After more key dots were added in the same manner, the preview at 50% is much better aligned. We used a total of 52 dots for this example, but more dots are always better. If you like, go ahead and add 10, 50 or even more dots to your own morphs. The more you add, the better the alignment and the better the morph will be.

Lesson 4 - Advanced Edit

We have just used the **Add Dot** tool; the other tools are also useful for advanced editing.

Edit Dots

There are 3 edit tools (❶) on the toolbar.

- **Edit Dots** (↖): Rectangle marquee to select a group of dots, then you can move, scale, rotate, skew, flip, cut, delete, copy or paste by using mouse or choosing a corresponding Edit submenu.

- **Add Dot** (✦): As described in Lesson 3, you can use this tool to add a key dot and move it to a correct location. It's the most used tool.

- **Delete Dot** (➖): You can use this tool to delete any useless dot. Just move the cursor on the dot and click.

Remarks

- You can delete a dot under the cursor at any time by simply *right-clicking* without having to choose the Delete Dot tool.

Edit Lines

You can use lines to group and organize the key dots. Just choose the **Dot Mode** (❷) to add dots or **Line Mode** (❸) to add lines.

- **Add** (✚): Continuously click the left mouse button to add a series of key dots connected by a series of line segments. Hold the CTRL key and click somewhere to finish the line and generate the last dot; hold the SHIFT key and click somewhere or right-click somewhere to terminate the line and don't generate any new dot.

- **Connect** (✚): If you click on a blank place, a new dot will be generated; if you click on existed dots, you can connect them with lines. Please note that you can connect a dot to any other dot.

- **Insert** (✚): If you place a new dot on a line segment, the dot will be inserted into the line.

- **Delete** (➖): Move cursor on a line segment and click to delete the line segment, the two dots connected by the line segment will not be deleted. If, however, you delete a dot, all lines connected to the dot will be deleted automatically.

- **Edit** (➤): You can drag a line segment to move it, all joint lines as well as the connected dots will be moved together. If you click on a line, all key dots connected to the line will be selected, you can then move, scale, cut, delete or copy them.

Remarks

- Adding lines will not affect the final morphing effects, but it makes the key dots grouped and organized clearly.

Edit Options

There are 2 options for dot adding.

- **Auto Add Corresponding Dot** (🔴): If this option is checked, for each click on either image, a corresponding dot will automatically appear at the most suitable position on the opposite image. Occasionally, in order to get a corresponding dot appeared on the same position as the original dot, you need to hold the ALT key when add the original dot. This is useful for adding boundary dots for a warp. If this option is unchecked, you can add key dots on each source image separately.

Generally, the automatically added dot is not located at the correct position, so you have to drag it to the position corresponding to the partner dot's location.
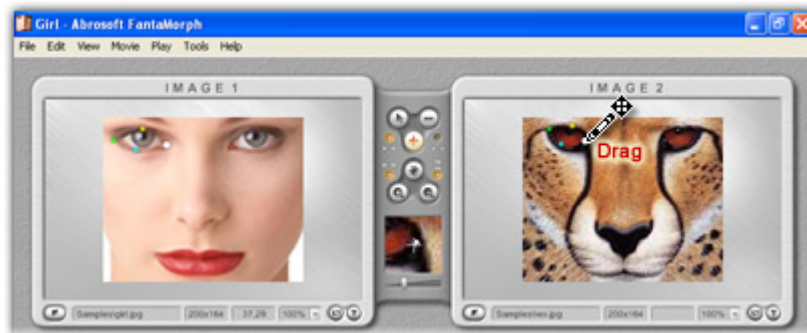
If **Auto Add Corresponding Dot** is off, you can add key dots on each source image separately. For each click on either image, the program won't automatically generate a corresponding dot on the opposite image.

If there is a single dot on an image, when you move the mouse cursor over the opposite image, the dot will blink to indicate which one should be matched pairs. Just move the cursor to the corresponding position and click, a pair of dots will be done without any drag & drop process. A single dot is presented as "Unpaired Dot"

(by default, with red color), but a pair of dots will be presented as "Paired Dot" on the two source images (by default, with green color). Repeat this step to make all the unpaired dots paired.

- **Auto Jump to Corresponding Dot** (❺): If this option is checked, when you added a dot on an image, the mouse cursor will automatically jump to corresponding position on the opposite image.

Remarks

- You can combine the two options to get your own favorite dot adding mode. For example, if **Auto Add Corresponding Dot** is off but **Auto Jump to Corresponding Dot** is on, you will get the fastest dot adding mode.

View Tools

There are 3 view tools (❻) on the toolbar.

- **Zoom In** (🔍), **Zoom Out** (🔍): Choose these tools and click anywhere of the source images or preview, the viewport can be smoothly scaled from 12.5% to 800%. You can press the ALT key to switch between these two tools temporarily.

- **Hand** (✋): When a viewport can't hold an image wholly, a horizontal or a vertical scroll bar will appear. You can drag the viewport by mouse or use the scroll bars to show a needed part of the image. You can press the Spacebar to switch to this tool temporarily when any other tool has been chosen.

Remarks

- You can use these tools not only on the source images, but also on the preview.

- You can adjust viewport at any time by *mouse wheel scrolling* without having to choose these view tools, and the viewport can be smoothly scaled up to 1600% by mouse wheel scrolling.

View Options

There are 2 options for simultaneous viewport adjusting.

- **Zoom/Pan Sources Simultaneously** (⑦): When you zoom/pan any one of the two source images, the program will zoom/pan the other one simultaneously.

- **Zoom/Pan Preview Simultaneously** (⑧): When you zoom/pan any one of the two source images, the program will zoom/pan the preview simultaneously, and vice versa.

Remarks

- In most cases, it is recommended to make both the options checked. In this way all windows can be located at the same position automatically.

Magnifier

The Magnifier (⑨) magnifies the area under and around the mouse cursor when you are working within the source or target image. This enable you to have good precision on delicate operation such as adjustment without having to zoom in and out continuously. You can also drag the Magnifying Power Slider to change the magnifying power from 1x to 4x.

Lesson 5 - Working with Movie

Previous lessons have covered the topics necessary to work with dots. There are some a few things we need to know about movies.

1. First, click the **Movie Size** control (❶) on the preview panel or choose the **Movie/Size** menu to confirm the movie size.
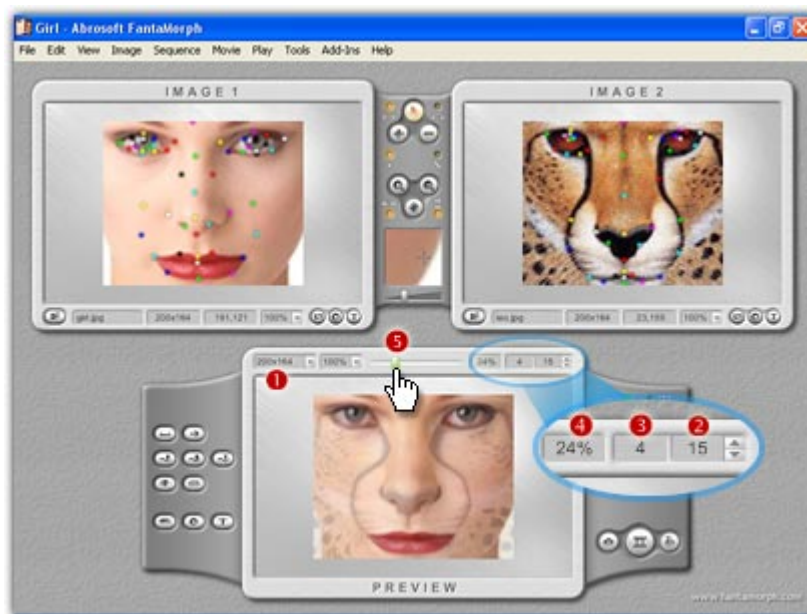
2. Its default value is the same size as **Image 1**. You can choose any fixed value offered in the popup menu.
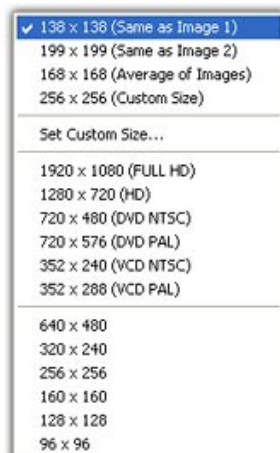
Or you may set it to any desired value through **Set Custom Size**. In the subsequent window as shown below, enter any desired **Custom Size** value of the movie. You can turn on the **Constrain Proportions** switch, in this way when you input a new value as the width (height), the other dimension will be calculated automatically to keep the same proportion.

3. The default frame count is 15 (you can change this in the **Edit Options** window). If you want a smoother, more detailed morph result, simply add more frames. Click the **Movie Frames** box (❷) on the preview panel, then input a new frame count and press the Enter key. Alternately, click the **Movie Frames Spin Button** (❷) to increase or decrease the frame count by one. Note, when the preview is working for a sequence, all the adjustments is for the sequence, and the maximum frame for a sequence is 999; when the preview is working for the whole movie, all the adjustments is for the whole movie, and the maximum frame is unlimited for a movie.

4. The most important control is the **Preview Slider Bar** (❺). Each morph frame from the first to the last can be previewed easily by simply dragging the **Preview Slider**. For example, if you position the slider at the center, you will preview the frame representing the middle of the morph. If you position the slider all the way to the right, you will preview the final frame of the morph, which is essentially Image 2.

5. The current frame number will be shown in the **Current Frame** box (❸), and the current morphing percent will be shown in the **Morphing Percent** box (❹), it's especially useful for professional users. Besides, not only morph frame but also any desired percent of the morph can be previewed from 0% to 100% in 1% increments by dragging the **Preview Slider**.

Lesson 6 - Real-time Playback

By taking advantage of hardware acceleration of modern graphics cards, FantaMorph achieves "Real-time Playback" which means you can preview/play the final morphing effects in real time while editing.

1. You can set the Preview Only mode using the **F7** key or the **View/Preview Only** menu.

2. There are two useful options which control play, the **Auto Loop** and the **Auto Reverse** (❶). Turn on the **Auto Loop**, and the morph will repeatedly play until you press the **Pause** button. Turn on the **Auto Reverse** to make the morph cycle from start to end, then reverse from end to start.

   There are two additional options for a Sequence Morph, the **Auto Play All** and the **Auto Switch**. By default, the program only plays the current sequence, but if you turn on the **Auto Play All**, you can preview all the sequences one by one. Turn on the **Auto Switch**, the program will automatically switch to each sequence while playing.

3. There is also a group of control buttons (❷). The largest button is the **Play/Pause** switch. Clicking it will start or stop playing. The other 4 buttons will preview the first, the last, the previous or the next frame.

4. As a default, the preview speed is 15 fps (frames per second). If you are running FantaMorph on a higher-performance computer, you may increase the preview speed up to 30 fps, for example.

5. Remember that you edit your work while the morph movie is playing, which means you will immediately see the effects on your final morph.

6. You can set the Full Screen mode using the **F11** or **ALT** + **Enter** key or the **View/Full Screen** menu, this will help you to see the full morph as big as possible when design. Press the **Spacebar** to play/pause the morph in full screen, or press the **ESC** to quit the full screen mode.

Lesson 7 - Add Effects

We have just created a normal morph. To create more exciting, stunning and unique effects, now you need to use other powerful tools. You can find a group of controls (❶) on the movie effects panel. Some are for sequence effects, and the others are for movie effects.

Movie Effects

There are 4 tools available for movie.

- **Project Type**: Click the Sequence Morph switch (↔) or Layer Morph switch (⇒) or choose the Movie/Project Type menu to set the project type.

- **Movie Effect** (➖): Click this button or choose the Movie/Effect menu to set the movie effect.

- **Movie Filter** (✳): Click this button or choose the Movie/Filter menu to set the movie filter.

- **Movie Caption** (T): Click this button or choose the Movie/Caption menu to set the movie caption.

Sequence Effects

There are 10 tools available for sequence.

- **Sequence Length** (⊷): Click this button or choose the Sequence/Length menu to set the sequence length.

- **Morph Type** (→): Click this button or choose the Sequence/Morph Type menu to set the morph type.

- **Feature Curve** (⤳): Click this button or choose the Sequence/Feature Curve menu to set the feature curve.

- **Shape Curve** (⤳): Click this button or choose the Sequence/Shape Curve menu to set the feature curve.

- **Master Curve** (⤳): Click this button or choose the Sequence/Master Curve menu to set the master curve.

- **Track Curve** (⤳): Click this button or choose the Sequence/Track Curve menu to set the track curve.

- **Camera** (◉): Click this button or choose the Sequence/Camera menu to set the camera.

- **Sequence Effect** (⇒): Click this button or choose the Sequence/Effect menu to set the sequence effect.

- **Sequence Filter** (⚙): Click this button or choose the Sequence/Filter menu to set the sequence filter.

- **Sequence Caption** (π): Click this button or choose the Sequence/Caption menu to set the sequence caption.

<u>Remarks</u>

- The unavailable buttons will be hidden in SE or Pro, you can access all the buttons only in Deluxe.

Lesson 8 - Export Morph Result

You may enjoy real-time morph playing in FantaMorph, but in most cases, you will want to export the morph result. Exported files may be shared with friends or used with other software. There are 3 ways to export a morph: exporting a snapshot of the current morph frame as an image file; exporting the whole morph to a sequence of image files or a movie file; or direct printing.

Export Current Frame

1. Drag the **Preview Slider** to the position indicating the image you want to export. For instance, positioning the Preview Slider to the center causes the preview to take half its features from image 1 and half from image 2. To export the current frame, you may click the **Export Current Frame** button (❶) on the Movie Toolbar or choose **File/Export Current Frame** menu.
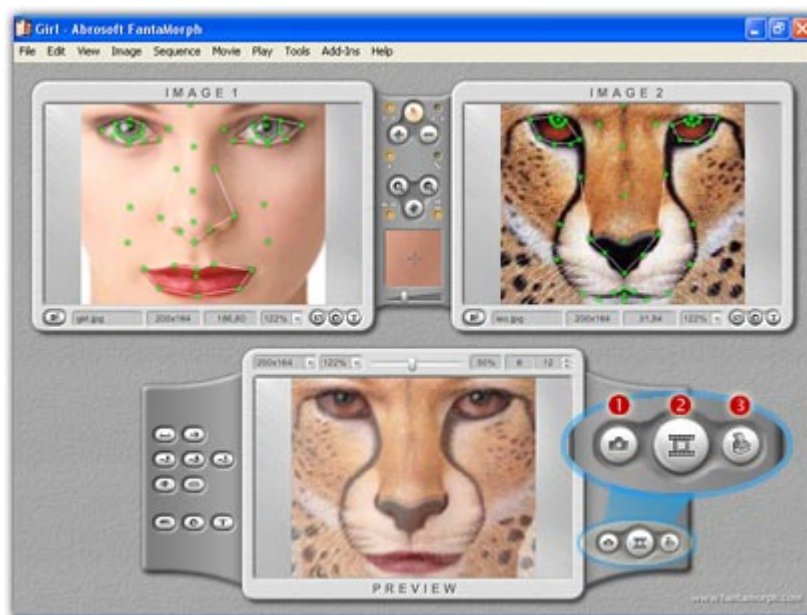
2. In the export interface, enter a file name and choose an image format (BMP, JPEG, TIFF, PNG, TGA, PCX, GIF) for the export file. Below is a morphed picture exported

in JPEG format. Notice that you may change JPEG export quality from the option window.
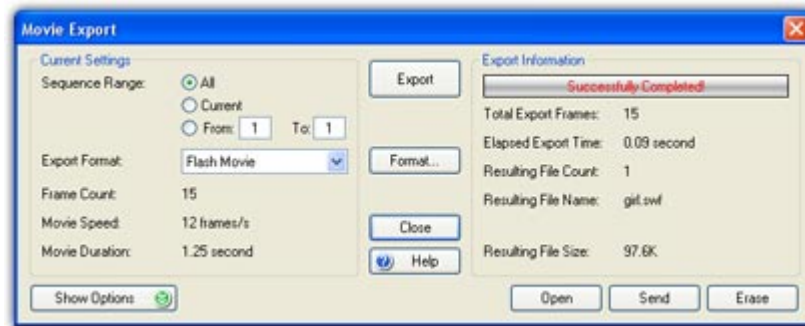

Export Movie

1. In most cases, movie will be your chosen export form. Click the **Export Movie** button (❷) on the Movie Toolbar or choose **File/Export Movie** menu, the Movie Export Window below will appear. Then you can select one of the 8 export methods (Image Sequence, AVI Movie, QuickTime, Animated GIF, Flash Movie, Web Page, Screen Saver and Standalone EXE) offered in the format list. Click the "Export" button to start export.

2. All controls are disabled during the export process except the **Cancel** Button. Pressing Cancel will interrupt the export process, and no export will be created.

3. As FantaMorph renders each frame, you will see it appear in the Preview window. Once done, export information will be displayed on the Movie Export window. As you can see, it took only 0.09 second to render our 15 sample frames for the morph and the resulting file size is only 97.6K. The export speed is relative to movie size, number of key dots, add-on effects and your computer's performance.

4. As a default, the resulting file will automatically open with the system associated program after export. This is helpful for immediately inspecting the resulting quality.

Print

Click the **Make Lenticular Prints** button (❸) on the Movie Toolbar you'll find an interesting way to print your morph animation on lenticular sheet so that you will be able to hold the printed picture in your hands, take it everywhere, and show it anytime. Learn more about our CMP service at http://www.fantamorph.com/cmp.

You can also choose the File/Print Preview menu to print with your own printer.

Lesson 9 - Create Sequence Morph

In most cases, we create a morph between two images, but you can also morph more than two images in a single project easily.

A morph between two images is called a **Sequence**, a movie consists at least one sequence, and you may create as many sequences as you want (for Pro, limited by your system resource; for Deluxe, this will be unlimited).
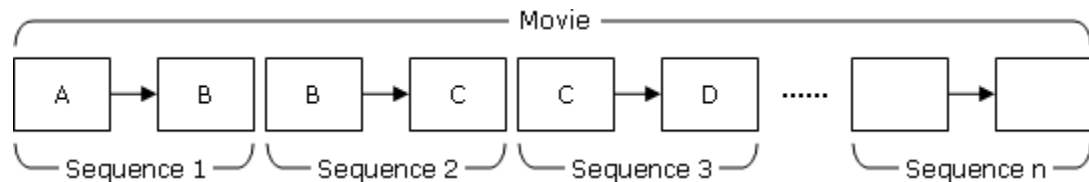

Assume we have a series of source images, called A, B, C, D, E, F, etc. As shown in above figure, you can create a long movie consisting of the morph A to B, then B to C, then C to D, and so on. In most cases, the beginning image of the next sequence is the same as the ending image of the previous sequence, so the final movie is looks smooth. However, you can place any image in any sequence, so the final movie can be consisting of the morph A to B, then C to D, then E to F, and so on, it looks a little jumpy though.

There are 4 ways to create a multiple morph, see "How to Morph More than Two Images". In this lesson we introduce how to create a multiple morph step by step manually.

1. Create the first sequence that morphs A to B as introduced in previous lessons. Press F2 key or choose the **View/Sequence List** menu to display the sequence list.
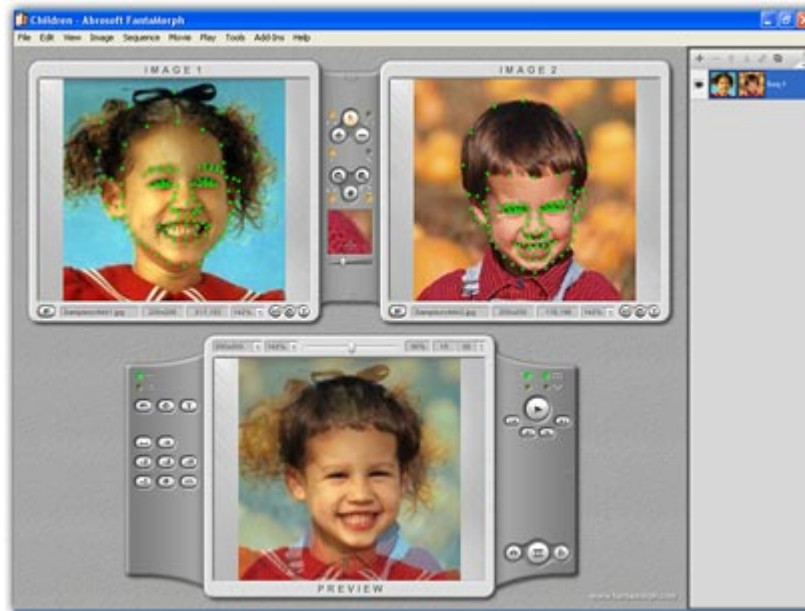
2. Choose the **Sequence/Add Sequence** menu, the second sequence will be automatically created where the Image 1 is a duplicate of Image 2 of the first sequence. Note, if you choose the **Sequence/Add Blank Sequence** menu, the second sequence will be automatically created where both the Image 1 and Image 2 are blank, then you can import any new image for them.

3. Now import C as Image 2, then add/delete/move key dots to finish the second sequence. Please note the changes in the Sequence List window.

4. Repeat Step 2, 3, load all the source images to this project and set them for corresponding sequence. In this example, we use 6 source images and finally got 5 sequences as shown below.

5. Please note that there are two additional options on the preview panel, the **Auto Play All** (❶) and the **Auto Switch** (❷). By default, the program only plays the current sequence, also, dragging the **Preview Slider** (❸) can only present each frame of the

sequence. But if you turn on the **Auto Play All**, you can preview all the sequences one by one smoothly. Turn on the **Auto Switch**, the program will automatically switch to the corresponding sequence while playing or dragging the **Preview Slider**.

6. When you export a sequence morph, there is a new option **Sequence Range** on the Export window as shown below. Choose **All** (default) to export the whole movie, choose **Current** to export only the current sequence or you can set a **From ... To** sequence range to export.

Lesson 10 - Create Layer Morph

Layer Morph is the most important feature of FantaMorph version 5. By using Layer Morph, you can 1) compose a morph with many parts, where each part can be morphed independently; 2) decorate a simple morph to create gorgeous effects; 3) make many morphs running simultaneously.

Creating a layer morph is very similar to creating a sequence morph. The difference between them is that in a sequence morph, all the sequences run one by one in sequence, but in a layer morph, all sequences run simultaneously at different layers. The first sequence is the top layer over all others, while the last sequence is the bottom layer under all others.
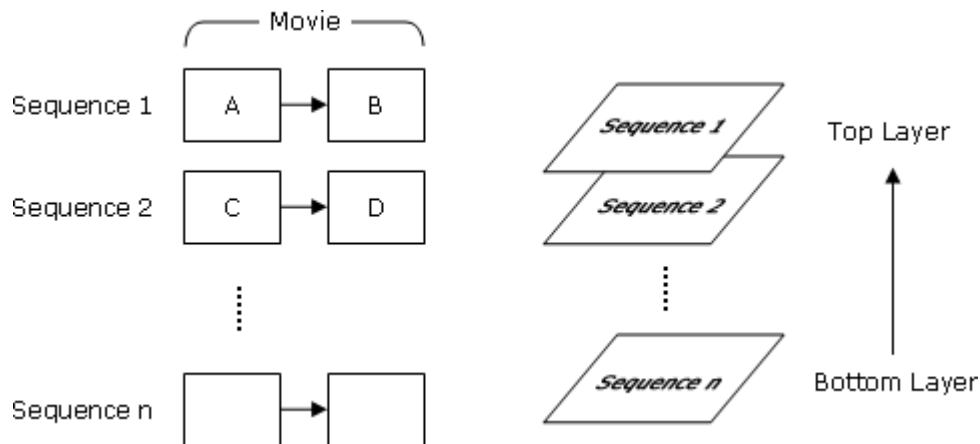

Assume we have a series of source images, called A, B, C, D, E, F, etc. As shown in above figure, you can create a layer morph consisting of the morph A to B, C to D, E to F, and so on. In the final morph, all sequences work simultaneously, and we see the first morph A to B at the front, while the last morph is at the back.

1. Create the first sequence that morphs A to B as introduced in previous lessons. Press F2 key or choose the **View/Sequence List** menu to display the sequence list.
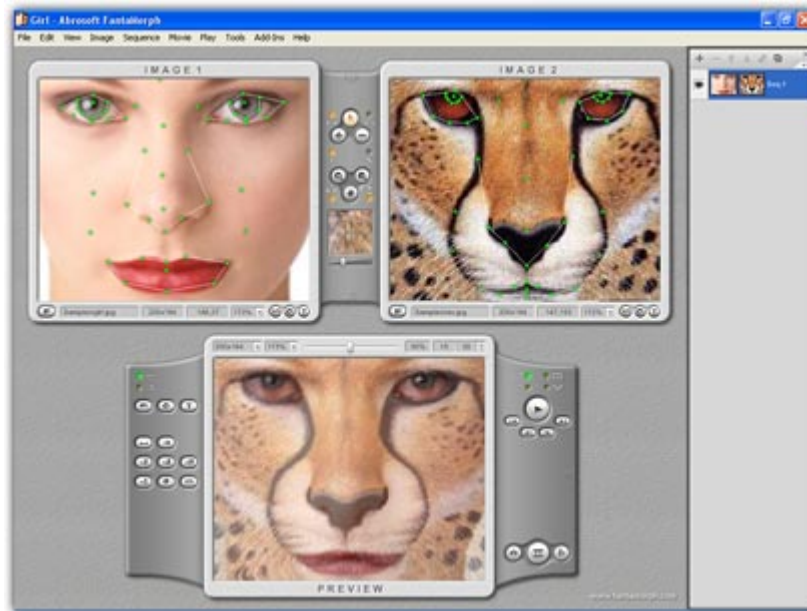
2. By default, the project is a sequence morph so the **Sequence Morph** option (❶) is highlighted. Before create a layer morph, please choose the **Movie/Project Type/Layer Morph** menu or directly click the **Layer Morph** option (❷) on the effects panel.
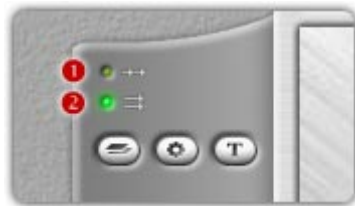
3. Choose the **Sequence/Add Sequence** menu to start to create a new sequence. Note, for layer morph, using the **Add Sequence** menu is the same as using the **Add Blank Sequence** menu. Also, on the sequence list panel, the new sequence appears over the others.
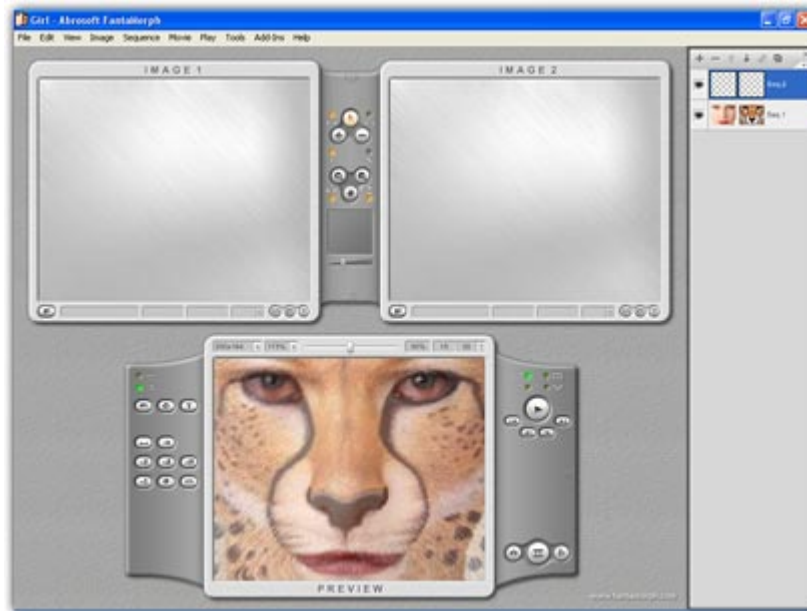
4. Repeat Step 3 to create other sequences. In this tutorial we simply create two duplicated layers. Now we have total 3 sequences, but we can only see the first one because it is opaque and covers up the others.
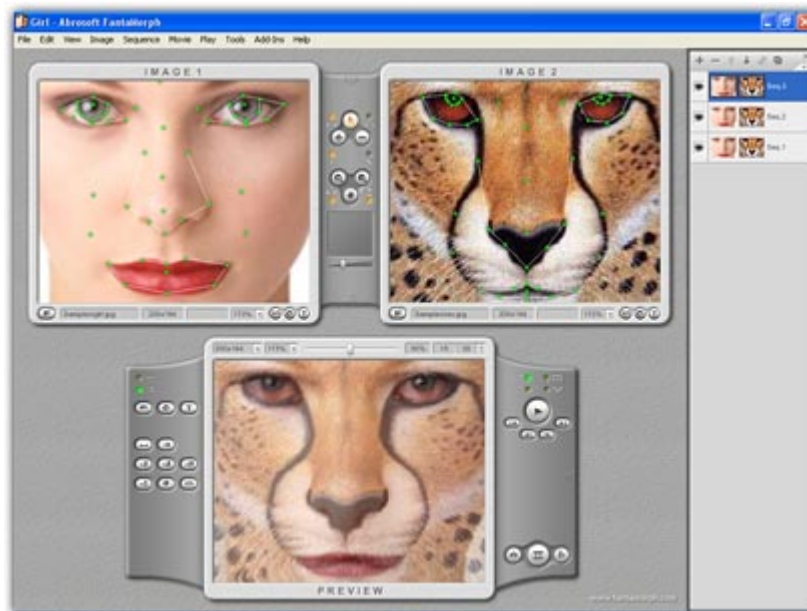
5. If you use 32-bit transparent morphs for upper layers, they will overlay on lower layers. But when you use normal opaque morphs for upper layers, you have to use Camera or Mask to show up the lower layers. In this example as shown below, we use

the Camera tool to place different layers at different positions, so now we can see the stack of layers clearly and how they work simultaneously.
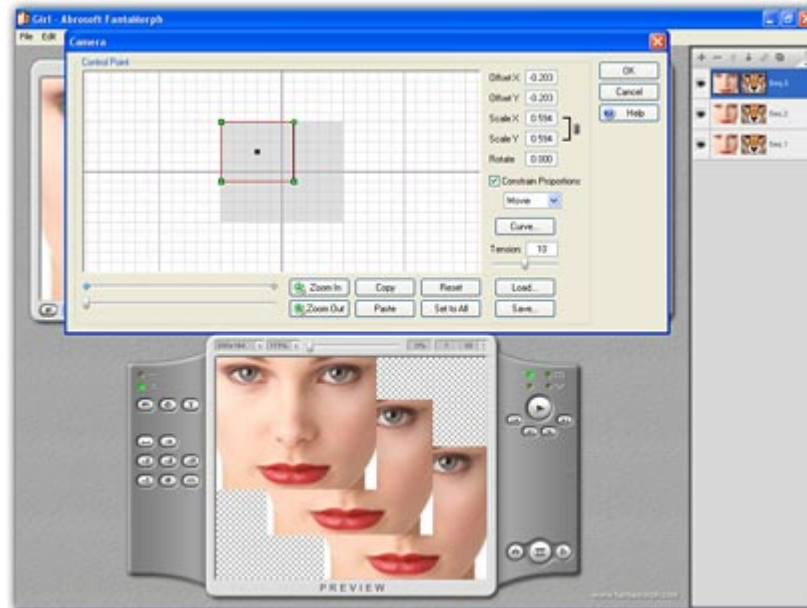
6. You can use the sequence list panel to adjust the layer order, change the layer visibility, copy source images from one sequence to another, etc.

Remarks

- More layers will result in slower preview speed.

- You can switch a project between Sequence Morph and Layer Morph at any time.

- Layer Morph is only available in FantaMorph Deluxe.

Chapter 3

How to…

How to Use Project Wizard

FantaMorph offers a Project Wizard that is a great start point for beginners. You can easily create your first morph by this step 1-2-3 wizard. If you are familiar with the program, you can freely create your morphs by following the process described in Lesson 1-9.

1. On the welcome window, you can choose one task from "Open an existing project" or "Create a new project". You can quickly load one of the three recent projects by clicking a bar on the right side. If you don't want to use the wizard at startup of the program, just check the "Don't show this wizard again". You can still launch the wizard by choosing the **File/New Project Wizard** menu at any time.

2. Choose project type you want to create. If you choose "Warp", "Sequence Morph" or "Layer Morph", the subsequent dialog boxes will be a little different from those ones in step 3 & 4 for "Morph".

3. Now you should import two source images for "Morph", or only one image for "Warp", or a series of images for "Sequence Morph" and "Layer Morph".

4. Now you can crop, adjust source images or add caption if needed, or else just press "Next" button to bypass this step.
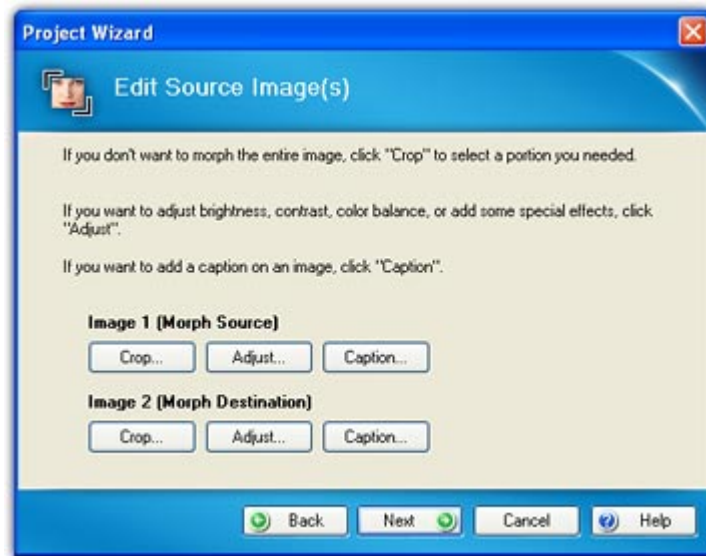
5. Now you need to set the movie size and length. You can choose any fixed value offered in the Movie Size list, or you may set it to any desired value by choosing the button "Set Custom Size". The default frame count value is 15, if you want a smoother, more detailed morph result, simply add more frames. If you want to set the movie length by duration, just click the "Set Duration" button.

6. At this point, you have some choices to decorate the final movie. If you want to do this later, just press the "Next" button.
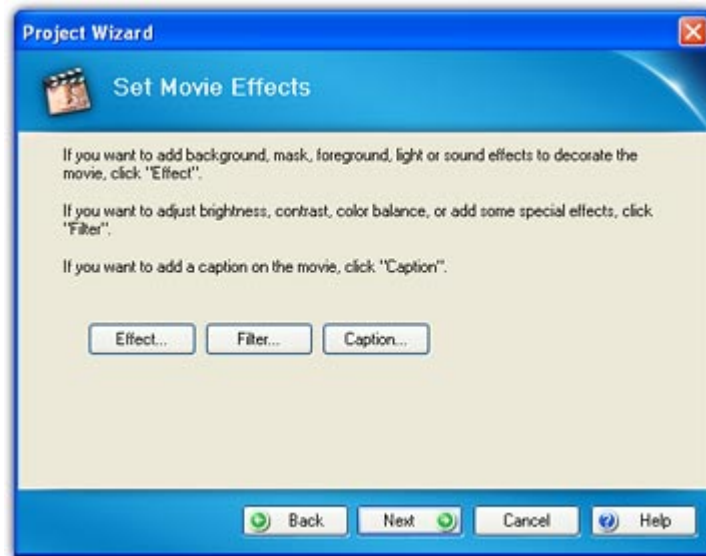
7. The morph movie has been now created. Because you have not added any key dots, the morph is simply a cross-dissolve between the two source images. Now, click the "Finish" button to exit the wizard, and start the most important work that is to place key dots on both source images in order to define how the morph process will operate.

   In FantaMorph Deluxe, a "Face Locator" button will appear on this page. Click it to automatically place key dots on images of human face.

How to Import Source Image

There are 5 ways to import source image into FantaMorph.

Button or Menu

As described in Lesson 1, the simplest way is to click **Import Image** button or the **Image/Import Image** menu, then choose an image file from the Import Image window as shown below.
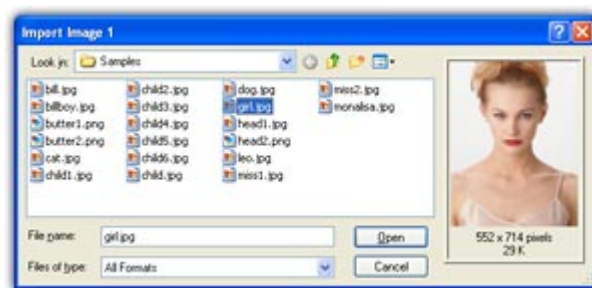
Source Panel

Double click directly on one of the two source panels to launch the Import Image window.

Drag from Built-in Image Viewer

When choosing from many source files, finding a particular source image may be difficult. In this case, press the **F9** key or choose the **Add-Ins/Image Viewer** menu, and the image viewer will appear. Adjust its window size and position as suited for viewing. Use this simple, fast tool with thumbnail previews to explorer all supported image resources on your disks. Click on the desired file and drag it to the image area in the main interface.

Drag from External Program

You may also drag an image file to the main interface from an external program such as Windows Explorer or ACDSee.

Drag from Face Library

Beginning with version 4.0, you can drag a face from the Face Library to the image area in the main interface. In this way you can also get the aligned key dots that have been stored in Face Library.

How to Crop Source Image

As descried in Lesson 2, you can use the built-in crop tool to select any desired portion of an image. Drag any of the 8 cropping handles to resize the selected portion (❶). The blue-tinted portion (❷) will be removed. At the right are other advanced controls, described below.
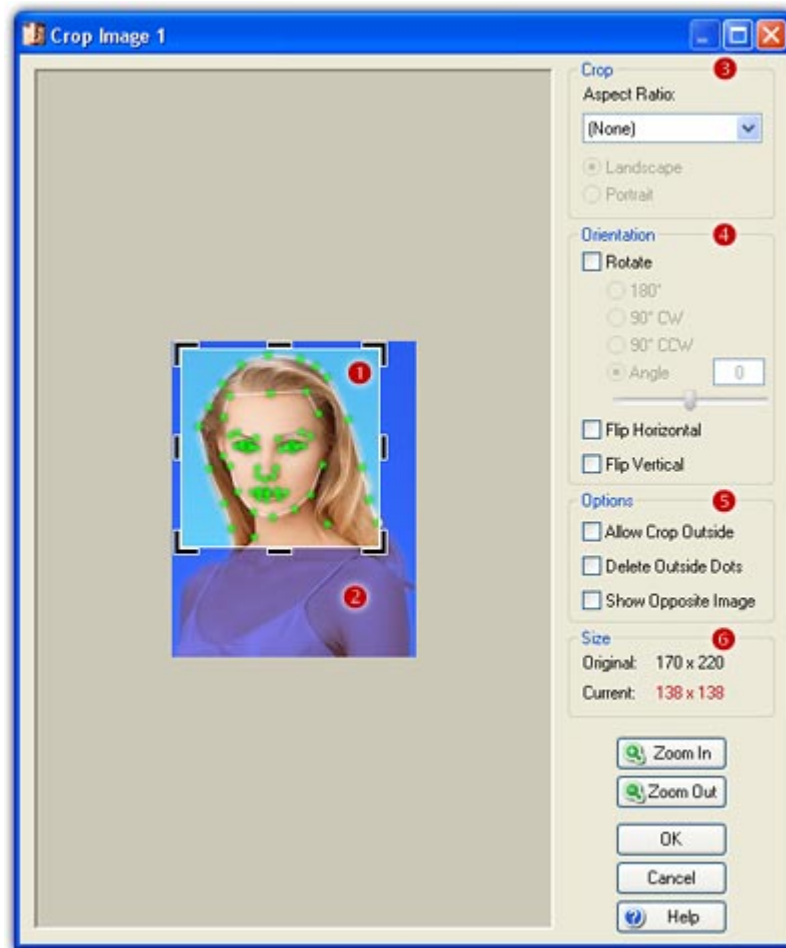
Control the Aspect Ratio

By default, you can freely drag the cropping handles to select arbitrary size of image. It is recommended that the source images should have the same aspect ratio to avoid image distortion. The simplest method is to choose the same aspect ration from the **Aspect**

Ratio Box (❸) by cropping each source image. Note, if you have previously set the movie size, "**Match to movie**" is the best choice. The **Landscape** and the **Portrait** options will cause the aspect ratio to be reversed when cropping takes place.

```
(None)
1 : 1
3 : 2
4 : 3
5 : 4
16 : 9
16 : 10
Match to Movie
```

Rotate, Flip

Rotating is useful for aligning some digital camera images. Flipping may create a desired effect, and may also be used to bring images into closer alignment. Use the **Rotate** and **Flip Switches** (❹) to perform these actions.

- **Rotate**: Allows rotation of image in 90 degree increments. 3 values may be specified:

  - **180°**: Allows 180° rotation of the image.

  - **90° CW**: Allows 90° clockwise rotation of the image.

  - **90° CCW**: Allows 90° counter clockwise rotation of the image.

  - **Angle**: Allows arbitrary rotation by any desired angle from -180° to 180°.

- **Flip Vertical**: Produces vertical mirroring of the image.

- **Flip Horizontal**: Produces horizontal mirroring of the image.

Options

Here are three options in the **Options** (❺) frame.

- **Allow Crop Outside**: If this option is checked, you can crop to outside area. Note, cropped outside area will be transparent.

- **Delete Outside Dots**: If this option is checked, all dots located outside of the selected portion will be removed after cropping.

- **Show Opposite Image**: The option can help you determine the corresponding portion of the opposite source image.

Info about Size

You can see info about the original image size and the current cropping size in the **Size** Frame (❻).

Remarks

- When cropping an image to which you have already added dots, dots located within the selected portion are displayed in normal style, but dots located outside the selected portion are highlighted.

- Key dots will be rotated or flipped along with an image which is rotated or flipped.

- You can move the selected area to a new position on the original image by dragging with the mouse or by using keyboard shortcuts.

How to Add Filters

You can use this built-in tool to make adjustments and add effects to the source images, each sequence and the whole movie. To adjust Image 1 or Image 2, click the **Adjust** button on the edit panel or choose the **Image/Adjust** menu. To adjust each sequence, click the **Sequence Filter** button on the movie effects panel or choose the **Sequence/Filter** menu. To adjust the whole movie, click the **Movie Filter** button on the movie effects panel or choose the **Movie/Filter** menu.

There are total 22 filters in FantaMorph where 9 filters for color adjustment (brightness, contrast, red, green, blue, hue, saturation, negative, gray) and 13 for image effect (smooth, bur, Gaussian blur, zoom blur, radial blur, sharpen, emboss, mosaic, oil paint, splash, cylinder, whirl, pinch). The best way to understand these effects is to try them out. Choose effects alone or in various combinations to discover what is best for your purpose.
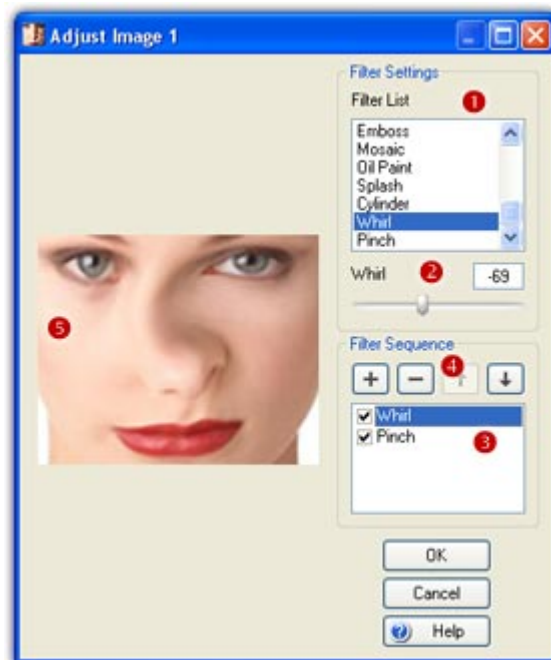
Filter Settings

Choose a Filter from the Filter List (❶). Then you can adjust the filter parameter (❷) by dragging the slider or entering values into the text box.

Filter Sequence

You can add up to 10 filters to the Filter Sequence (❸). There is a button group used to edit image sequence (❹). You can add (+) the current filter to the sequence, you can select one and then delete it (-), move it up (up arrow), or move it down (down arrow) by clicking the appropriate edit button. Please note that the order you add filters is important because different order will result in different effect. In the filter sequence, you can turn on/off a filter temporarily to compare the effect before and after use that particular filter. Any changes will be represented on the preview window (❺) in real time.

Remarks

- You can only use 16 filters in FantaMorph SE.

- Sequence/Movie Filter is only available in FantaMorph Deluxe.

- If the preview speed becomes slow after you add filters to the movie, you can turn off the "Preview Movie Filter Effects" option temporarily in the Edit Options window.

How to Change View Scale

There are 4 ways to change the view scale of the sources, preview or frame sequence.

View Tools

As described in Lesson 4, there are 3 view tools on the toolbar. Choose the tool **Zoom In** (🔍) or **Zoom Out** (🔍) and click anywhere of the source images or preview, the viewport can be smoothly scaled from 12.5% to 800%. Choose the tool **Adjust Viewport** (✋) and drag the viewport by mouse or use the scroll bars to show a needed part of the window. There is also a Magnifier on the toolbar that magnifies the area under and around the mouse cursor when you are working within the source or target image. Besides, you can drag the Magnifying Power Slider to change the magnifying power, or directly press the key "N" to decrease or "M" to increase the magnifying power.

View Scale List

You can simply drop down the view scale list on the sources and preview window, then choose a suitable item.
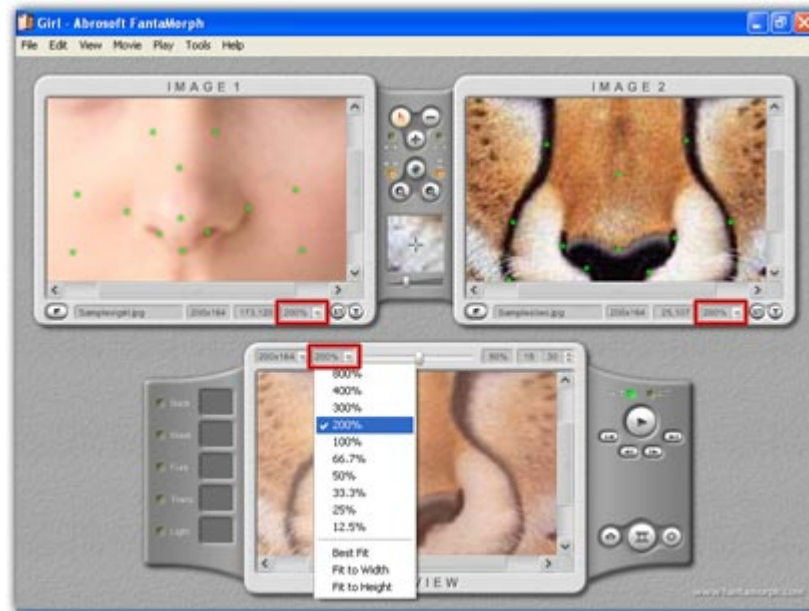
Mouse Wheel Scrolling

Beginning with version 3.0, using mouse wheel scrolling is allowed, this makes some operations more quick and comfortable. Move the mouse cursor to a desired position inside the sources or preview windows, then roll the mouse wheel up to zoom out or roll the mouse wheel down to zoom in.

Keyboard Shortcuts

It is also a fast way to change the view scale of the sources and preview when your mouse has no wheel. Press the key "," to zoom out the current viewport under the cursor, press the key "." to zoom in, or press the key "/" to set the view scale to "Best Fit". Particularly, when you working on Frame Sequence view mode, press the key "," will decrease the frame thumb size, press the key "." will increase the frame thumb size, or press the key "/" to fit all frames to only one page if possible.

How to Use 32-bit with Alpha Images

FantaMorph supports the import and export of 32-bit with alpha images in BMP, TIFF, PNG and TGA formats to create professional effects. Most images used in computing are based on 24 bits, specifying the red, green and blue values at each particular point on the image. These 24-bit images are fully opaque, thus anything under them will be hidden. A 32-bit image has an additional 8-bit alpha channel, which is used to specify transparency. Such images can be smoothly blended with other images.

The left image below is an example of a 32-bit image. The portion filled with the small checkerboard grid represents transparency. The image containing transparent areas can be laid over a single color image, like the middle image, or over any other image, as seen at the right. In both cases, the background shows through the transparent area.

You can use 32-bit images within FantaMorph, or export 32-bit morph results for use with other graphic or video software. The example below uses two 32-bit PNG images blending with a flower image as the background and a radial style bitmap as the mask. The result is amazing!

How to Add Caption

To add caption for Image 1 or Image 2, click the **Caption** button on the edit panel or choose the **Image/Caption** menu. To add caption for each sequence, click the **Sequence Caption** button on the movie effects panel or choose the **Sequence/Caption** menu. To add caption for the whole movie, click the **Movie Caption** button on the movie effects panel or choose the **Movie/Caption** menu.

Font

You can choose font name, size, color, border size and color, font style and alignment here (❶). Any changes will be presented on the preview window (❹).

Shadow

You can set shadow angle, distance, color and size here (❷). When shadow size is zero, no shadow added.

Text

Enter caption text here (❸). Please note that you can type text with multiple lines.

Position

You can simply move cursor on the caption (⑤) and drag it to a suitable position, or you can directly enter a normalized position data.

How to Set Movie Length

As described in Lesson 9, a morph between two images is called a **Sequence**, a movie consists one or more sequence. You should set the length for each sequence of a movie. For Sequence Morph, the movie length is the sum of all the sequences length; for Layer Morph, all sequences should have the same length, and the movie length is the same as the sequence length.

Click the **Sequence/Length** menu and the window below will open.
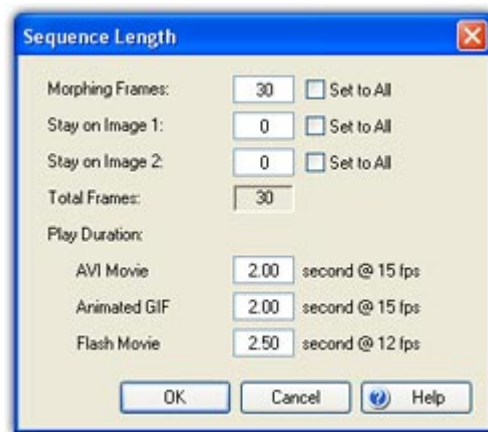
1. You can find the number of morphing frames, prolonged frames of Image 1 and Image 2 and total frames of the current sequence. Unlike you can only set **Stay on Ends** for both the beginning and ending images in early versions of FantaMorph, now you can set the prolonged frames for the beginning and ending images separately.

   Total Frames = Stay on Image 1 (frames) + **Morphing Frames** (frames) + **Stay on Image 2** (frames)

2. The valid range of morphing frames is 2 to 999. The valid range of prolonged frames is 0 to 999.

3. If you want to the length change of the current sequence applies to all other sequences in the project, please turn on the option **Set for All Sequences** after the corresponding frame number.

4. You can also find the play duration of three main formats: AVI, Animated GIF, and Flash. Since you can set the movie speed for each format in Export window, the play durations may be different from each other.

5. As you input a new value in any one of Frames or Play Duration boxes, the other values will be automatically recalculated.

Play Duration (second) = **Total Frames** (frames) **/ Movie Speed** (frames / second)

Click the **Movie/Length** menu and the window below will open.

1. The movie length is the sum of all the sequences length, so you generally don't need to set the movie length directly.

2. If you change the movie length, each sequence length will be automatically scaled up or down to fit the new movie length.

How to Choose Morph Type

With FantaMorph, you can create "morph" movies between any two images, you can also create "warp" movies from a single source image. There are total 7 types you may choose from.

Morph Image 1 to Image 2

It is the most used type for creating morphs.

Morph and Hold Image 1

This is a special type only used for creating "Portion Morph". When you use a 32-bit with alpha image as Image 2, choose this type so that the Image 1 won't be faded out as opposed to that if choose the above type. As you can see in the sample below, it looks like only a portion of Image 1 is morphing to Image 2.

Warp Image 1

In most cases, when you want to create a "warp", you can use only one source image as both the Image 1 and Image 2. However, it's also allowed to create a "warp" between any two images. As you can see in the sample below, Image 1 is warping to the shape of

Image 2, but the feature of Image 2 is not presented as opposed to that if choose the type "Morph Image 1 to Image 2".

Warp Image 2

As you can see in the sample below, Image 2 is warping from the shape of Image 1, but the feature of Image 1 is not presented.

Fade Out Image 1

It is a simple but useful effect that Image 1 is fading out to black.

Fade In Image 2

It is a simple but useful effect that Image 2 is fading in from black.

Direct

You won't see any morphing or warping effect if you choose this type. Normally, this is just that Image 1 stays there and Image 2 directly appears at the end of the morph. But if you set a Transition in Sequence Effect, you'll be able to create a nice photo slide show.

Morph Options

- **Remove Triangles Connected to Corners**: FantaMorph generally add 4 corners automatically while triangulating. If this option is checked, all triangles connected to 4 corners will be removed. In other words, FantaMorph will not use 4 corners for triangulation. This option is useful when you want to create a backdrop effect for the source image without alpha channel.

- **Re-triangulate for Each Frame**: FantaMorph generally triangulates the source images at the first frame of the morph. If this option is checked, FantaMorph will re-triangulate each intermediate frame.

How to Use Curve

If you are familiar with morphing technique, you may know its kernel is: morph = deform the shape & cross-dissolve the feature. In earlier versions, both the deformation and cross-dissolve were performed linearly. Now with the new controls Feature Curve and Shape Curve, you can freely control the morph process of feature and shape.

Feature Curve

Default feature curve is linear, so at 0% of the morph, it has 100% of girl's feature and 0% of leopard's feature; at 25%, it has 75% of girl's feature and 25% of leopard's feature; at 50%, it has 50% of girl's feature and 50% of leopard's feature; at 75%, it has 25% of girl's feature and 75% of leopard's feature; finally, at 100%, it has 0% of girl's feature and 100% of leopard's feature. See the frame sequence below.

Leopard's feature will appear quickly when using a convex curve, see below. Look at the middle frame of the morph, it has only 25% of girl's feature but has 75% of leopard's feature.

Leopard's feature will appear slowly when using a concave curve, see below. Look at the middle frame of the morph, it still has 75% of girl's feature but has only 25% of leopard's feature.

Shape Curve

Default shape curve is linear, so the girl's shape is deformed to leopard's shape linearly, see below. Look at the middle frame of the morph, it has 50% of girl's shape and 50% of leopard's shape.

Leopard's shape will appear quickly when using a convex curve, see below. Look at the middle frame of the morph, it has only 25% of girl's shape but has 75% of leopard's shape.

Leopard's shape will appear slowly when using a concave curve, see below. Look at the middle frame of the morph, it still has 75% of girl's shape but has only 25% of leopard's shape.

You can apply a feature curve and a shape curve to a morph at the same time, this will make countless morphing effects.

Edit Curve

Choose the **Sequence/Feature Curve** menu to open the Feature Curve window, or **Sequence/Shape Curve** menu to open the Shape Curve window.
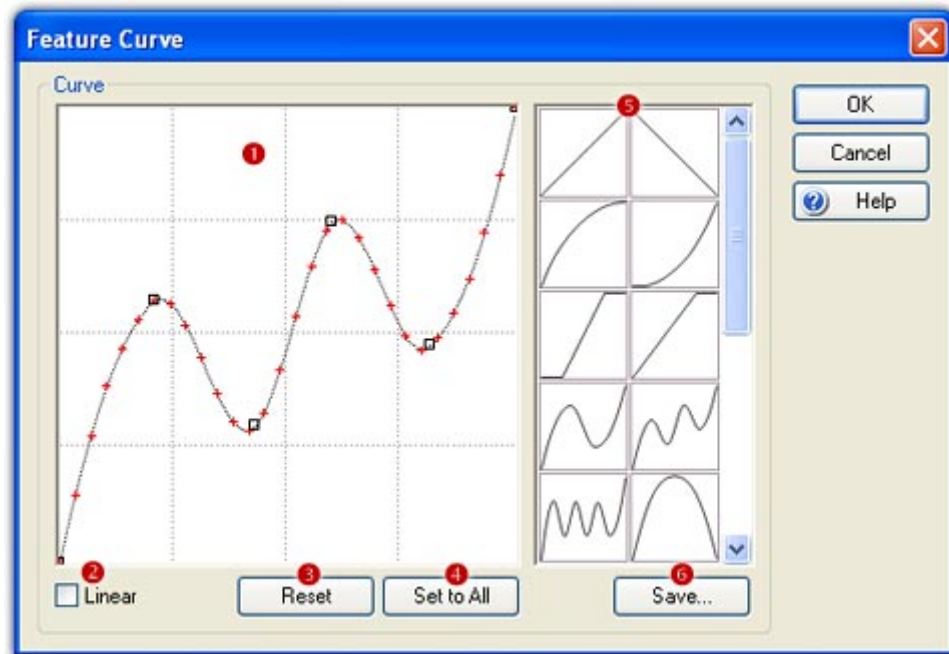
FantaMorph 5 offers a new control, Master Curve, which can control the transparency of the morph. With Master Curve, you can easily make a fade in effect at the beginning of the sequence, or a fade out effect at the end of the sequence. Choose the Sequence/Master Curve menu to open the Master Curve window.
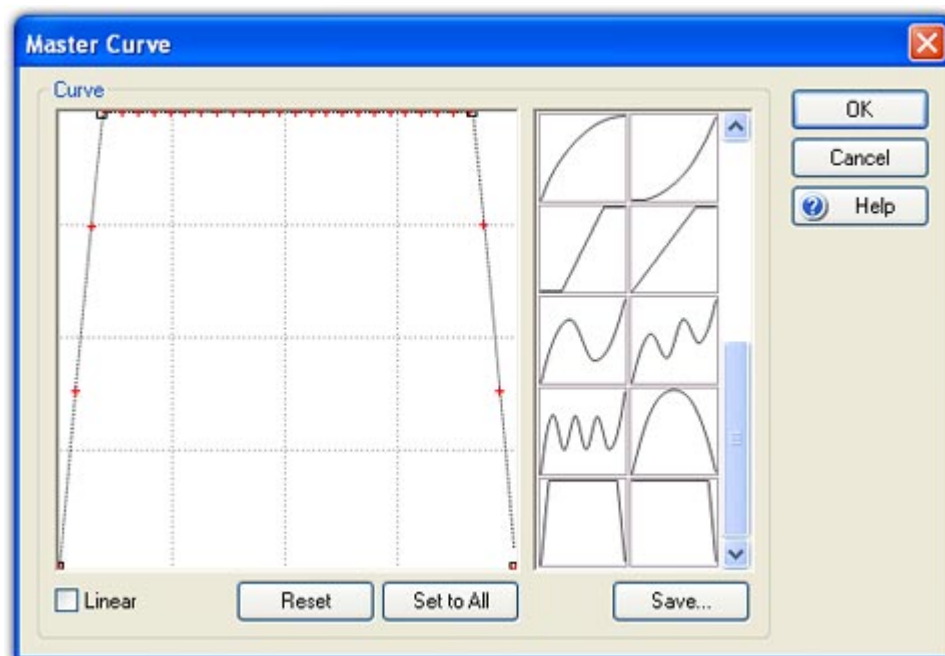
The curve is specified by an array of control points. A curve passes smoothly through each point in the array. There are at least two control points on a curve. The red crosses on the curve mark the positions of each frame.

- **Add Point**: Click anywhere in the working area (❶) to add one control point.

- **Move Point**: Drag and drop a control point to move it.

- **Delete Point**: Right-click a control point to delete it.

- **Linear**: Make the Linear option (❷) checked will result in a line strip.

- **Reset**: Click the Reset button (❸) to clear the current settings and back to the original status.

- **Set to All**: Click the Set to All (❹) button to apply this curve to all sequences in the current project.

Curve Library

- **Load Curve**: Load a curve in the curve library (❺) by double-clicking, then it will be displayed in the working area immediately.

- **Save Curve**: Click the Save button (❻), the current curve in the working area will be saved to the bottom of the curve library.

- **Delete Curve**: Select a curve in the curve library, then press Del key to delete it.

Remarks

- You can open and edit all Curve windows at the same time.

- You can edit the curve while the morph movie is playing, which means you will immediately see the effects on your final morph.

- In FantaMorph Deluxe, you can also use this window to set different curves for camera.

How to Use Track Curve

Although you can apply a Shape Curve to a morph, the actual moving track of a key dot from Image 1 to Image 2 is still a straight line. Now you can use a real curve as morph track instead of previous straight lines. You'll find that you can easily create very different and amazing morphs with Track Curve. Choose the **Sequence/Track Curve** menu to open the Track Curve window.
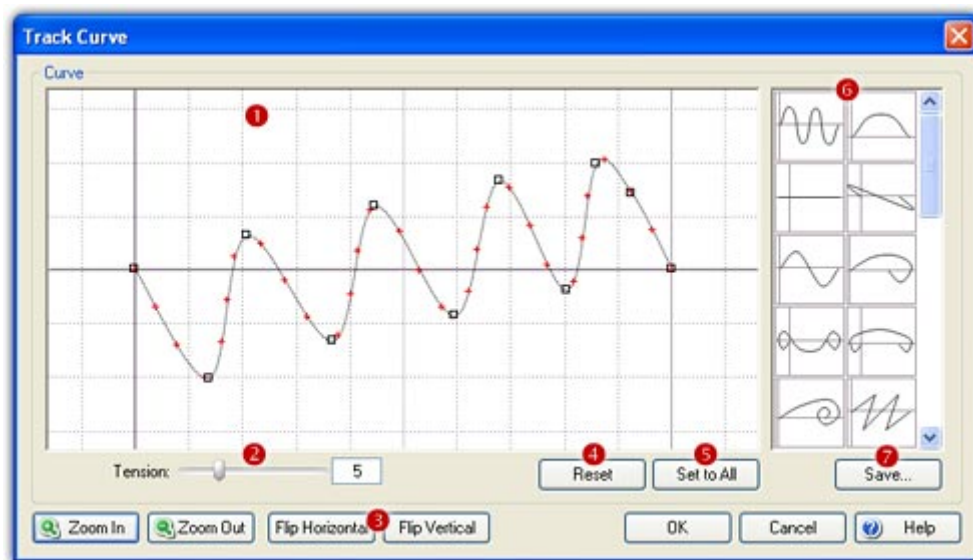
Edit Curve

The track curve is specified by a sequence of control points and smoothly passes through each point in the sequence. There are at least two control points on a curve. The red cross on the curve marks the position of each frame. You can zoom the workspace by using mouse wheel scrolling or clicking the Zoom In or Zoom Out button, and you can drag and drop to pan the workspace.

- **Add Point**: Click anywhere in the workspace (❶) to add one control point.

- **Delete Point**: Right-click a control point to delete it.

- **Move Point**: Drag and drop a control point to move it.

- **Tension**: Drag the slider (❷) to adjust the curve tension or directly type a value from 0 to 20.

- **Flip**: Click the **Flip Horizontal** or **Flip Vertical button** (❸) to produce horizontal or vertical mirroring of the curve.

- **Reset**: Click the Reset button (❹) to clear the current settings and back to the original status.

- **Set to All**: Click the Set to All (❺) button to apply this curve to all sequences in the current project.

Curve Library

- **Load Curve**: Load a curve in the curve library (❻) by double-clicking, then it will be displayed in the workspace immediately.

- **Save Curve**: Click the Save button (❼), the current curve in the workspace will be saved to the bottom of the curve library.

- **Delete Curve**: Select a curve in the curve library, then press Del key to delete it.

Remarks

- You can launch Track Curve as well as Feature/Shape Curve window at the same time.

- You can edit the curve while the morph movie is playing, which means you will immediately see the effects on your final morph.

- Track Curve is only available in FantaMorph Deluxe.

How to Use Camera

With the Camera tool, you can pan/zoom/rotate each morphing frame through a customized track. This makes it possible to set a moving viewpoint to see the morphing process. Choose the **Sequence/Camera** menu to open the Camera window below. You can also use Camera to make movie/sequence effects animated.
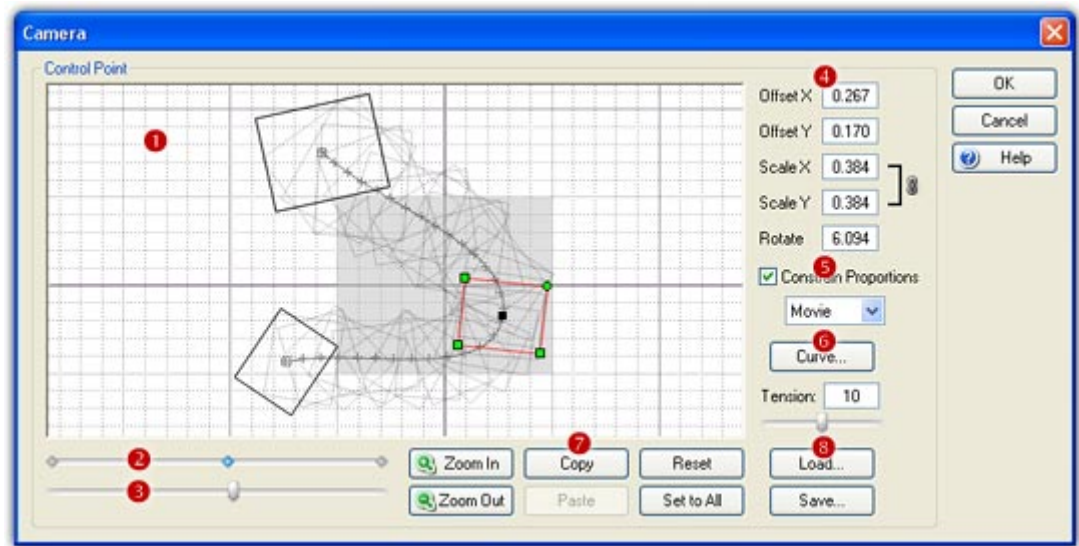
1. You can edit and preview the Camera in the workspace (❶). The camera is specified by a sequence of control points and smoothly passes through each point in the sequence, just like the Track Curve.

2. Each control point defines a key frame with a group of offset/scale/rotate status, and all other frames will be automatically calculated according to the key frames. You can find the relative position of the control points on the ruler (❷), click a point on the ruler or directly click a key frame on the workspace to start to edit it. Beginning with version 5.2, you can directly click on the ruler to add a key frame.

3. Drag the preview slider (❸) to preview the camera track, you can preview the final morph on the main interface synchronously.

4. You can zoom the workspace by using mouse wheel scrolling or clicking the **Zoom In** or **Zoom Out** button, and you can drag and drop to pan the workspace.

5. The gray rectangle region in the center of the workspace indicates the movie location. Drag anywhere inside a key frame to move it, drag any of the 3 square handles to resize the frame, and drag the circle handle to rotate the frame. The actual offset/scale/rotate parameters (④) will be calculated automatically while dragging. You can also type the desired parameters manually. Note, a negative ScaleX will result in a horizontal flip, and a negative ScaleY will result in a vertical flip.

6. You can use the Constrain Proportions option (⑤) to set the proportion of a key frame to be the same as Movie, Image 1 or Image 2. If this option is unchecked, you can set an arbitrary proportion for the key frame.

7. Choose a Curve button (⑥) to set a curve for camera track. This will result in a nonlinear camera track.

8. You can use the Copy and Paste button (⑦) to copy the current status parameters and then paste to other key frame. Click the Reset button to clear the current settings and back to the original status. Click the Set to All button to apply this camera to all sequences in the current project.

9. You can the Load and Save button (⑧) to save the current camera to load it later.

Remarks

- You can set different camera for each sequence in a project.

- You can edit the camera while the morph movie is playing, which means you will immediately see the effects on your final morph.

- Camera is only available in FantaMorph Deluxe.

How to Use Add-on Effects

There are 6 add-on effects to decorate the movie: background color, background, mask, foreground, light, and sound. Choose the **Movie/Effect** menu to open the window below.
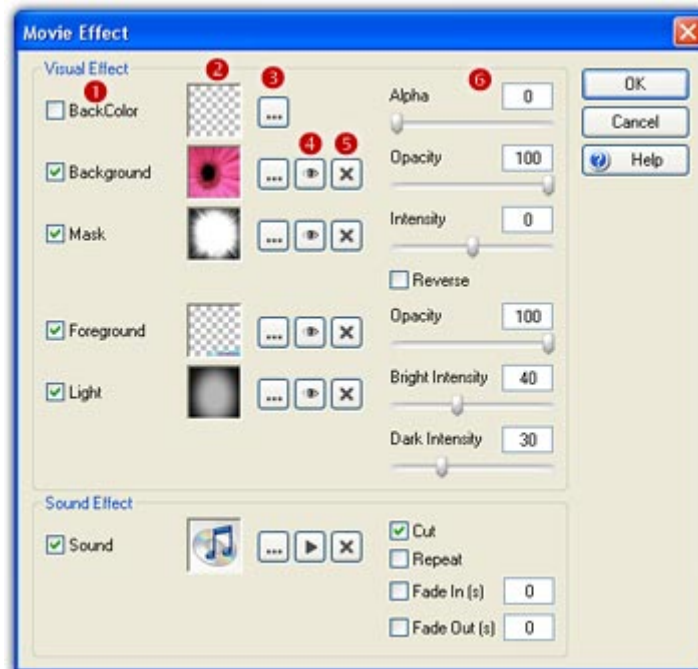
There are 8 add-on effects you can use to decorate the sequence: background color, background, mask, foreground, transition, light, trail, radial. Each sequence can have different effects. Choose the **Sequence/Effect** menu to open the window below. You can use movie effects and sequence effects simultaneously in a project, the difference between them is that a movie effect acts on the whole movie zone but a sequence effect only acts on the camera zone. So, we generally use sequence effects along with camera.
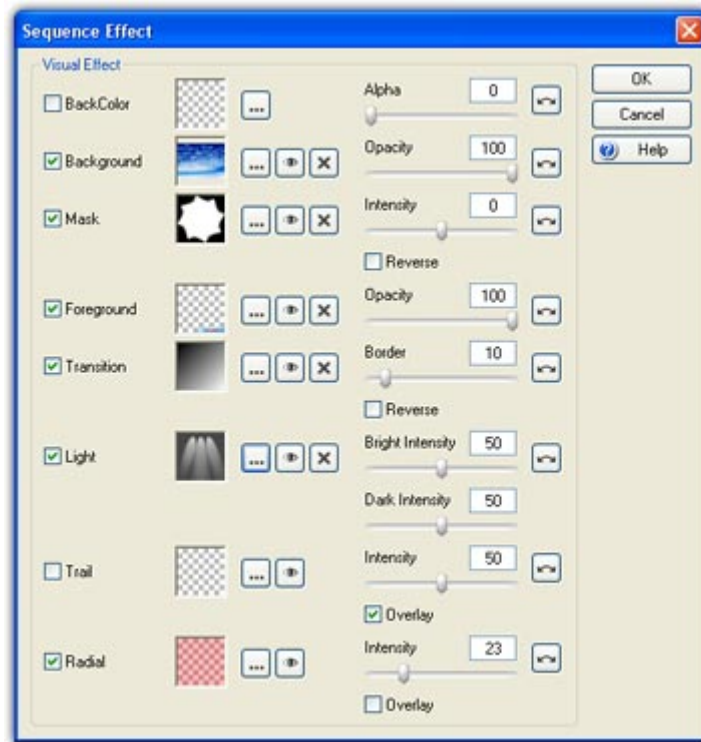
Background

If the source images are 32-bit with alpha, the morph can be smoothly blended with any single color or any other image as a background. If the source images are not 32-bit (in most cases, you will find 24-bit images), you must first use a mask, otherwise, the background will be invisible.

1. Click the **Select Effect** button (❸), then choose an image file as the Background. A small thumbnail of this image will be show as the **Effect Icon** (❷), and the **Effect Switch** (❶) will be checked to indicate the background is being used.

2. You may click the **Set Effect Camera** button (❹) to set a camera track for the Background effect.

3. You may turn on/off the **Effect Switch** or click **Effect Icon** at anytime to enable or disable the Background effect.

4. You can double click the **Effect Icon** or click the **Select Effect** button again to load another image to see the effect.

5. If you do not want to use the Background displayed, right-click the **Effect Icon** or click the **Clear Effect** button (⑤) to clear it.

6. In addition, you can select a pure color as background color. Note that the background image can be blended with the BackColor. It's a useful way to change the hue of the background image.

7. Each effect has its own **Effect Parameter** (⑥). You can adjust the background transparency.

Mask

The mask image should be 256 level grayscale bitmap. The brightness of every pixel of the mask image will be applied to the transparency of the corresponding pixel of the morph. That means a white pixel will cause the corresponding morph pixel to be opaque, a black pixel will cause a fully transparent pixel, and various levels of gray will cause corresponding levels of transparency. In a word, when you add a mask to a morph, the morph will take on the mask shape. You can adjust the mask intensity or have the white/black reversed.

Foreground

The foreground should be a 32-bit with alpha image that you choose to overlay on the morph to make a photo frame, graphics caption or other such effect. You can adjust the foreground transparency.

Transition

The transition image should be a 256 level grayscale bitmap. The brightness of every pixel of the transition image will be applied to the dissolving sequence of the corresponding pixel of the morph. That means a dark pixel will cause the corresponding

morph pixel to be dissolved a little early, while a bright pixel will cause the corresponding morph pixel to be dissolved a little late. Tick the Reverse option to make the white/black reversed. You can adjust the transition border, the larger border you set, the smoother transition will be.

Light

The light image should be a 256 level grayscale bitmap. The brightness of every pixel of the light image will be applied to the brightness of the corresponding pixel of the morph. That means a bright pixel will cause the corresponding morph pixel to be a little brighter, a dark pixel will cause the corresponding morph pixel to be a little darker. You can adjust brightness intensity and darkness intensity separately.

Trail

If the Overlay option is checked, using Trail will result in a motion blur effect. If the Overlay option is unchecked, using Trail will result in a motion trail effect. You should use Trail for 32-bit morph or along with Camera, or else you may won't see the motion blur/trail effect. You can set a half transparent color for the trail to adjust the hue of the motion blur/trail. You can adjust intensity to get heavy/light motion blur, or long/short motion trail.

Radial

Using Radial will result in a radiating rays effect. The rays will be over the morph if Overlay is checked, or under the morph if Overlay is unchecked. You can set a half transparent color for the rays. You should use Radial for 32-bit morph or along with Camera, or else you may won't see the radial effect. You can adjust intensity to get long/short rays.

Sound

Add a WAV or MP3 file to a morph. Click the **Play** button to play it after load. The sound is always played at the start of the morph. If the sound is longer than the movie and you want to it stop on the end of movie, just tick the Cut option. If the sound is shorter than the movie and you want to it repeat over and over again, just tick the Repeat option. Also, you can tick Fade In and Fade Out option and set the fading length. The sound can be exported into AVI, QuickTime, Flash, Screen Saver or EXE.

Remarks

- As described in "Drag and Drop Images", you can use the drag & drop feature to load images for effects.

- Using too many effects will affect the performance of preview and export.

- Some outdated display drivers won't be able to render the add-on effects properly.

- Sequence Effect is only available in FantaMorph Deluxe.

How to Morph More than Two Images

There are 4 ways to create a morph with more than two images.

Use the Project Wizard

The simplest way to create a morph with multiple images is to use the Project Wizard. Choose the File/New Project Wizard menu, when the program asks you for the project type, please choose "Sequence Morph" or "Layer Morph".

First click the Add button to choose a series of images for Source Image Sequence. You can then select one or multiple images from the list, then delete, move up, move down and duplicate by clicking the appropriate edit buttons.

Once the image sequence is prepared, click "Next" button, the program will create a sequence morph or layer morph by following the image sequence through. Then, add key dots for each image. That's all!

The difference between Sequence Morph and Layer Morph is, for example, you have chosen 6 source images called A, B, C, D, E and F, then you will get 5 sequences for Sequence Morph, A to B, B to C, C to D, D to E, and E to F, but you will get only 3 sequences for Layer Morph, A to B, C to D, and E to F.

Add Sequences Manually

If you want to create a multiple morph step by step manually, please see Lesson 9.

Combine Multiple Projects

Choose the File/Append Project menu to combine another project with the current one, repeat this operation to combine multiple projects into one.

Use the Image Sequence Packer

This method is just for any earlier version before 3.5, you can ignore it if you're now using version 3.5 or later.

Assume you have chosen five source images, called A, B, C, D, E, for your morph. You are preparing to make a flash movie, and you want to produce 15 morphed frames between each two successive source images. It is relatively easy to create a long morph movie using these 5 images by following the following steps.

1. Make project "Morph1" by importing A as "Image 1" and B as "Image 2", then export the resulting image sequence in your chosen format. (For this example, we will use JPEG.) You now have 15 image files named Morph101.jpg, Morph102.jpg, and so on, through Morph115.jpg.

2. Swap source images from the Edit menu. Now B is "Image1" and A is "Image 2", then import C as "Image 2" and save the project as "Morph2". Adjust key dot positions on C; add new key dots, or delete key dots, as necessary. Export this image sequence to get files named Morph201.jpg through Morph215.jpg.

3. Repeat step 2, using source images C and D and saving the project as "Morph3".

4. Again, repeat step 2, using source images D and E and saving the project as "Morph4".

5. Run "Image Sequence Packer" from the Tools menu, adding all 60 images, Morph101.jpg through Morph115.jpg, Morph201.jpg through Morph215.jpg, Morph301.jpg through Morph315.jpg and Morph401.jpg through Morph415.jpg. Choose the "Flash Movie" option, then press the "Start Pack" button. That's all it takes! See more about "How to Use Image Sequence Packer".

How to Use Sequence List

When you create a Sequence Morph as described in Lesson 9, or a Layer Morph as described in Lesson 10, you can press F2 key or choose the **View/Sequence List** menu to launch the Sequence List window as below.

1. Each sequence is presented as a row in the list, and two source images of a sequence are presented as an image icon separately in the row.

2. Click on a row to make it to be the current sequence. A blue background indicates the current sequence.

3. Each sequence can have a name, double click on the name to edit it.

4. Click the eye icon to change the visibility of a sequence. An invisible sequence will not included in the final morph. Hold SHIFT key and click the eye icon to switch between show only this sequence/show all other sequences except this sequence.

5. Use Sequence menu or the buttons on the top of the Sequence List window to edit (add, delete, move up, move down, link, duplicate) the sequence list.

Remarks

- For Sequence Morph, use the link button to make Image 1 of the current sequence is the same as Image 2 of the last sequence.

- For Layer Morph, the first sequence is the top layer, the last sequence is the bottom layer.

- Double click directly on an image icon to launch the Import Image window.

- Drag a row to move the sequence position.

- Drag an image icon to another image icon (even in another sequence) to duplicate the source image.

How to Use Image Sequence Packer

The built-in **Image Sequence Packer** tool provided in FantaMorph Pro and Deluxe is very useful for creating long morphs with three or more source images. See more about "How to Morph More than Two Images".

1. Choose the **Add-Ins/Image Sequence Packer** menu to open the packing window.
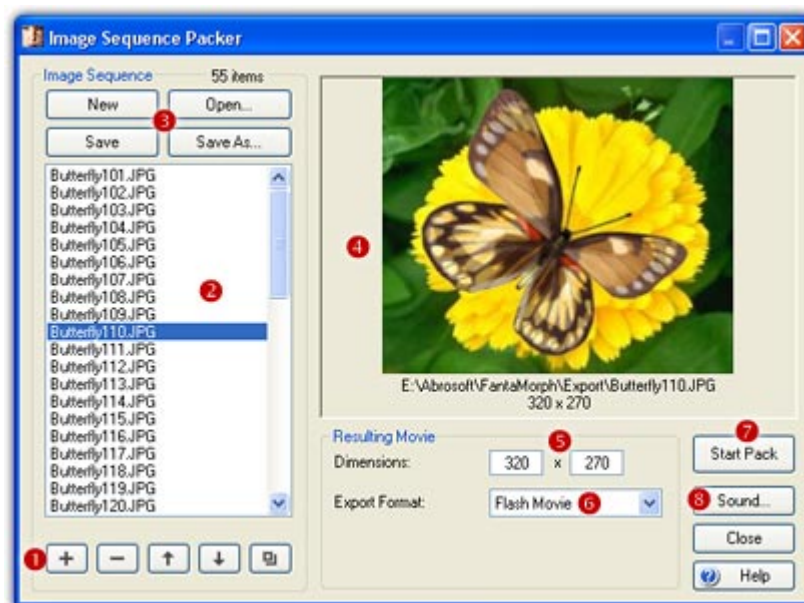
2. There is a button group for the edit image sequence (❶). First Click the **Add Image(s)** button and choose a series of images to add to the **Image List** (❷). In most cases, these images will be previously morphed pictures exported from FantaMorph, but may be from any source. The number of items added will be shown directly above the image list.

3. You can select one or multiple images from the list, then delete, move up, move down or duplicate by clicking the appropriate edit buttons.

4. There is a button group for saving the finished image sequence (❸).

5. Click to select one image in the list. It will be previewed in the **Preview Panel** (❹), and its size will be set into the **Movie Dimensions box** (❺) for the resulting movie.

6. You can add as many images to the list as you desire. Each image listed will become one of the frames of the resulting movie.

7. Choose one format option from the **Movie Format List** (❻), then click the **Start Pack** button (❼). As FantaMorph packs each image to the movie, you will see it appear in the Preview Panel.

8. Choose the **Sound** button (❽) to add a background sound/music in WAV or MP3 format.

Remarks

- You can pack images of various formats and sizes. However, you will have better results using image sequences of the same size, as created by FantaMorph.

- You can easily change the export size of the resulting movie, but the chosen size should have the same aspect ratio as the images found in the image sequence.

- Beginning with version 3.5, you can directly morph more than two images in a single project without using Image Sequence Packer.

How to Choose Export File Format

There are 8 export file types in FantaMorph, each useful for a different purpose.

- **Image Sequence**: Each frame of morph will be saved as an individual file in one of the following formats: BMP, JPEG, TIFF, PNG, TGA, PCX, GIF. In most cases, JPEG is the best choice. In FantaMorph Pro or Deluxe, when you use 32-bit source images and plan to use the morph result in other video editing software, you should tick "Export 32-Bit Image" in the Export window and choose BMP, TIFF, PNG or TGA format.

- **AVI Movie**: Common-used, high-quality video format on Windows platform. Good for importing into movie editing software such as Adobe Premiere or VCD/DVD authoring software or uploading to YouTube. To avoid overlarge file sizes, tick "Export Compressed AVI" in the Export window and use any installed video codec (such as MPEG-4 codec from www.divx.com) to compress your movies into smaller files. Tick "Export 32-Bit AVI" in the Export window to export 32-bit avi files which can be easily overlaid on other video clips in other video editing software.

- **QuickTime Movie**: Common-used, high-quality video format on Mac platform. Good for importing into movie editing software such as iMovie or Final Cut. You must install the free QuickTime for Windows to support QuickTime movie export. Only available in FantaMorph Deluxe version 5.1.6 or later.

- **Animated GIF**: Good for web pages, because all browsers can display this animation format well. It's also good for importing into Microsoft PowerPoint or uploading to your personal space such as MySpace, CherryTap or PhotoBucket. Please note that the quality is lower because Gif's support only 256 colors.

- **Flash Movie**: Best for web pages, very small and high quality. Best choice for sharing with friends by e-mail. It's also good for importing into Microsoft

PowerPoint or uploading to your personal space such as MySpace, CherryTap or PhotoBucket.

- **Web Page**: Export as Flash format and generate a HTML file at the same time. You can then play the flash movie at its original size with Internet Explorer.

- **Screen Saver**: Create standard screen savers to show morphing effects. It's an interesting way to enjoy your proud morphs and share with your friends.

- **Standalone EXE**: Create a standard Windows .exe program. It's an easy way to enjoy your proud morphs and share with your friends because they can view your morphs without having to install FantaMorph or other player programs.

How to Export

As described in Lesson 8, click the **Export Movie** button on the Movie Toolbar or choose **File/Export Movie** menu, the Movie Export Window below will appear.
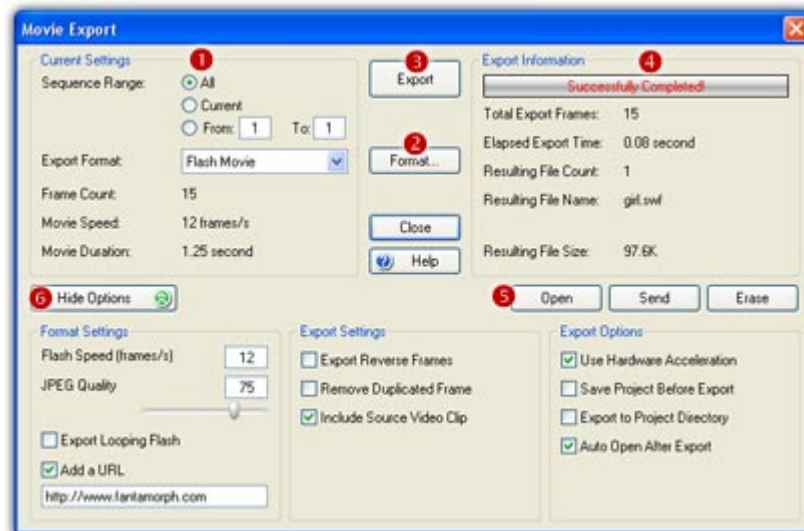
Current Settings

In the **Current Settings** frame (❶), you can choose export all sequences, only the current sequence, or a sequence range. You can select one of the 7 export formats (Image Sequence, AVI Movie, Animated GIF, Flash Movie, Web Page, Screen Saver and Standalone EXE) offered in the format list. You can also find the info about movie length, speed, and duration. Click the **Format** button (❷) to learn more about the export format.

Export

Now you can click the **Export** button (❸) to start export. When export, you can click the **Cancel** button to cancel the export process, and no resulting files will be created. You can click the Export button more than once to export the same morph as different format or using different settings.

Export Information

In the **Export Information** frame (❹), you can see the percentage on the progress bar during the export process, once done, further information about the elapsed time and resulting files will be displayed.

Manage Results

There is a group of buttons (❺) to mange the resulting files.

- **Open**: Click this button to open the resulting file with the system associated program.

- **Send**: Do you want to share your proud morphs with your friends? Just click this button and then fill in the destination email address.

- **Erase**: If the result is not satisfied, simply click this button to delete the resulting file(s).

Options

Click the **Show/Hide Options** button (❻) to show/hide the export settings and options. By default, you see a simple and clean export interface as the option items are hidden.
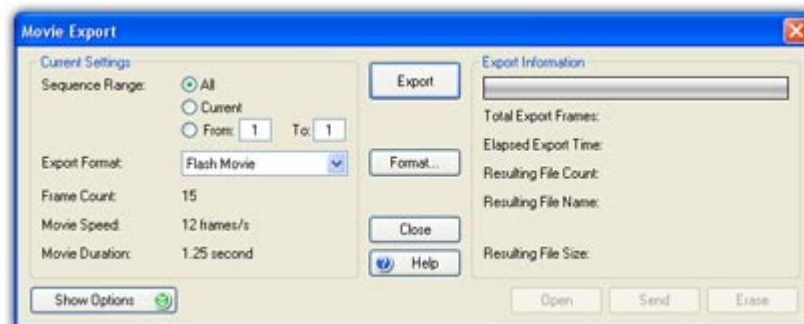
Format Settings

You can set some parameters for the current format. Each format has its own parameters.

- **JPEG Quality**: Affects the quality of exported JPEG images and flash movies. The default value is 75. The bigger the value is set, the higher the export quality will be, as well as the more rapidly the export file size will increase. Try to set it to different value, and investigate the quality and size of the export file to get an appropriate value for it.

- **Image Resolution**: You can set the DPI value for the exported still images if you will use them for printing. The default value is 0 which means each image format will use its own default resolution.

- **Export 32-Bit Image**: If this option is checked, you can export 32-bit with alpha images in BMP, PNG, TIFF or TGA format.

- **AVI Speed**: Set the frame rate of exported AVI files from 1 to 60 frames per second. The default value is 15.

- **Export Compressed AVI**: If this option is checked, you can use any installed video codec to compress AVI movies into smaller files. In most cases, make this option unchecked and you can export uncompressed AVI files directly. It is strongly recommended to create uncompressed AVI files if you want to import the results into video editing software.

- **Export 32-Bit AVI**: If this option is checked, you can export 32-bit with alpha AVI movies. You can then import 32-bit AVIs into video editing software as overlay video clips.

- **GIF Speed**: Set the frame rate of exported GIF files from 1 to 60 frames per second. The default value is 15.

- **Export Looping Animated GIF**: If this option is checked, the resulting Animated GIF files will be looping.

- **Export Transparent GIF**: You can export a transparent morph to a transparent Animated GIF file if this option is checked.

- **Transparency Threshold**: Use this value to control the transparent area in the resulting file. The pixels which alpha is lower than the threshold will be transparent.

- **Flash Speed**: Set the frame rate of exported Flash files from 1 to 60 frames per second. The default value is 12.

- **Export Looping Flash**: If this option is checked, the resulting Flash files will be looping.

- **Add an URL to Flash**: When you export a morph in Flash format, you can add a URL to the resulting Flash movie so that the viewers can easily reach the URL with just one click. It's especially useful for web designers.

Export Settings

- **Export Reverse Frames**: Some additional frames will be appended to the resulting movie for smooth playing loop. For instance, normal exported frames are No.1, 2, 3, ..., 15 frame, then the No.14, 13, 12, ..., 2 frame will be appended after No. 15 frame if this option is checked.

- **Include Source Video Clip**: If this option is checked, all frames of the source AVI videos can be exported to resulting morphs. Note, this option is only available in FantaMorph Pro and Deluxe.

- **Remove Duplicated Frame**: Eliminate the duplicated frame from the end or the beginning of two adjacent sequences.

Export Options

- **Use Hardware Acceleration**: When hardware acceleration is enabled, you can get the best export performance. But you should disable this function if your system has problem with hardware acceleration. Besides, the maximum export size depends on display card if hardware acceleration is enabled, in most cases it

is less than 4096 x 4096 pixels. So if you want to export very large images for print, you also need to turn off this switch so that you can export images up to 16384 x 16384 pixels.

- **Save Project Before Export**: If this option is checked, the current project will be auto saved before export.

- **Auto Open After Export**: If this option is checked, the resulting file will be automatically opened with the system associated program after export.

- **Export to Project Directory**: If this option is checked, the exported results will be located in the project directory instead of the export directory. This makes you to save a source project as well as its resulting files in the same directory.

How to Print

With FantaMorph, you can directly print source images, preview frame or even all morphing frames, without having to go to any additional software.

When you working on any view mode, choose the **File/Page Setup** menu to select paper size and orientation, adjust margins, etc. Choose the **File/Print** menu to start printing. The 4 view modes can be printed as shown below from left to right: Full View, Edit Only, Preview Only, Frame Sequence.

FantaMorph supports what-you-see-is-what-you-get (WYSIWYG) print preview, so you can choose the **File/Print Preview** menu before print.
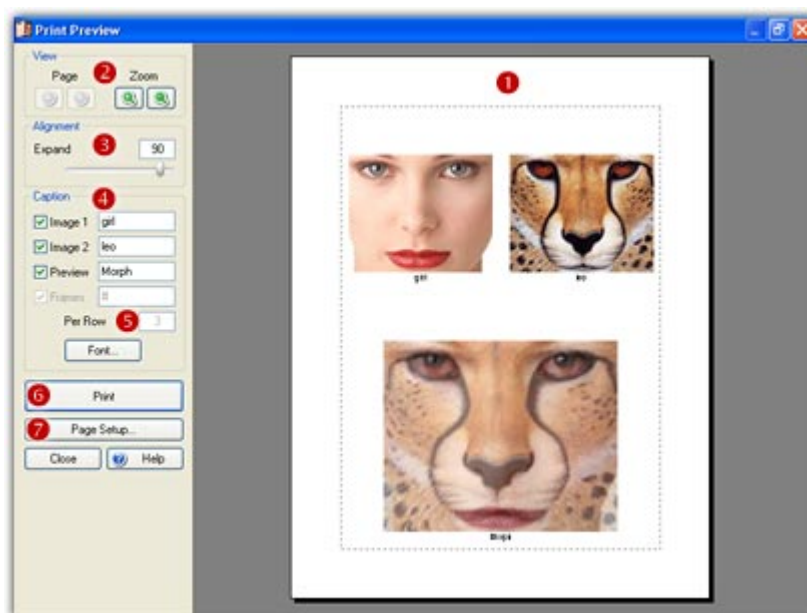
1. Preview Page (❶) will be displayed on the center of the preview window. The margins of the page will be presented as dotted lines.

2. Adjust view (②). If the number of pages is more than one, you can use the two buttons under **Page** to select a page to preview. You can use the two buttons under **Zoom** to zoom in/out the preview.

3. Adjust size (③). You can use the two buttons under **Expand** to make the objects larger or smaller, in other words, make the space between objects fewer or more.

4. Add captions (④). You can type any text after **Image 1**, **Image 2**, **Preview**, **Frames** as the captions for source images, preview, and frame sequence separately. Please note that you should use the special symbol "#" to mark the frame number for printing the frame sequence. Click the **Font** button to set the font style, size, color, etc.

5. Adjust frames per row (⑤). For printing the frame sequence, you can set the number of frames per row. Printing more frames in one row will result in smaller frames and fewer pages printed.

6. If the preview is satisfied, click the **Print** button (⑥) to start printing.

7. Click the **Page Setup** button (⑦) to select paper size and orientation, adjust margins, etc. The preview will be automatically rearranged after page setup.

How to Create Warp Movies

With Abrosoft FantaMorph, you can create morph movies between any two images, or you can create warp movies from only one image. You will find that making warps is somewhat easier than creating morphs. Create warps at warp speed!

To create a warp effect, first load the same image to Image 1 and Image 2.

Place one dot on the source image and FantaMorph automatically places another dot on the corresponding coordinates of the target image. For example, if we want to warp the baby's nose, we first add a dot to the area of the nose.

Leaving the dot in its original position "anchors" that area of the image preventing that part of the image from being morphed. Moving it from its original position will create a warp effect.

Moving a dot warps the entire image, which may not be the result you desire. It is very important to anchor portions of the image using **Boundary Dots**. As shown below, we've added dots to the nose as warp geometry (blue line). Then, we added dots around the nose area as a boundary (white line). Note: the lines are for illustration purposes only and won't be displayed in FantaMorph.
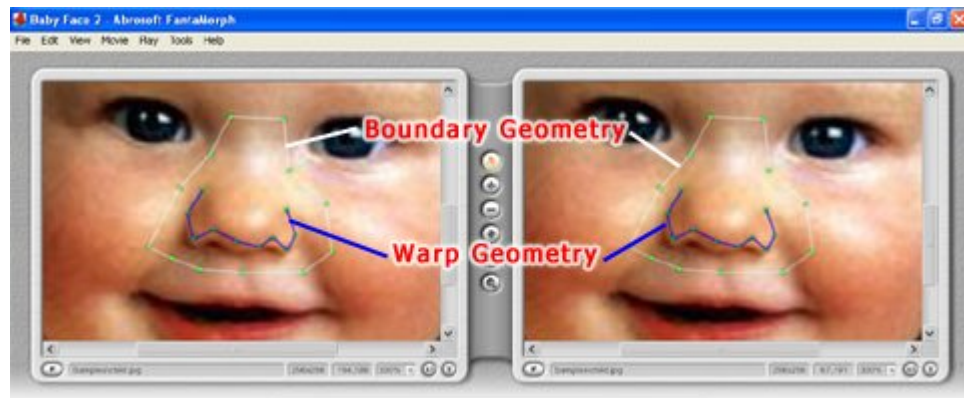
Now, you can freely drag the warp dots on Image 2 from source geometry positions (blue line) to target geometry positions (red line) to obtain a warp effect. As you see, only the area inside the boundary (white line) will be warped, while the area outside the boundary won't be changed.
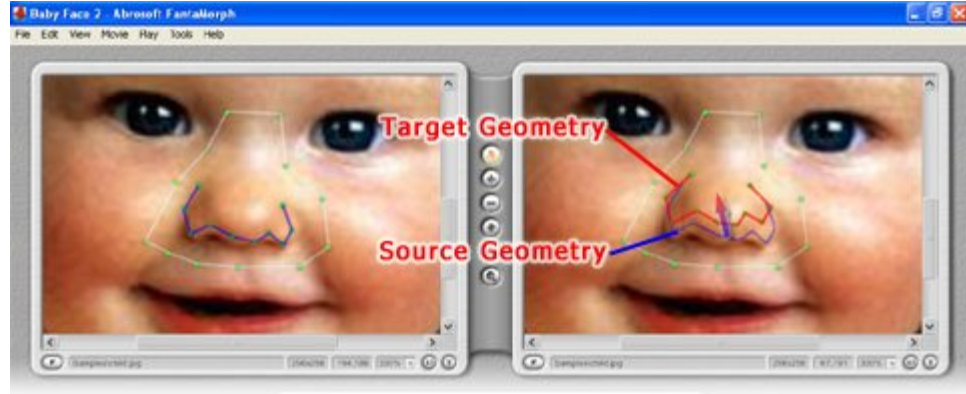
How to Morph AVI Videos

You can import AVI video files as Image 1 or/and Image 2, this makes it possible to morph between two AVI videos. All frames of the source videos can be exported to resulting morphs.

For example, we have two AVI source videos, AVI #1 and AVI #2, as shown below. Note, here we posted their Flash copy just for saving your bandwidth, they are absolutely AVI files in the project.

1. First, we should import them into FantaMorph. As described in Lesson 1, in the **Import Image 1** window, choose AVI #1, the last frame of AVI #1 will be shown on the right of the window.

2. Click the **Open** button, the last frame of AVI #1 will appear in the image 1 area in the main interface. Also, in the **Import Image 2** window, choose AVI #2, the first frame of AVI #2 will be shown on the right of the window. Then, the first frame of AVI #2 will appear in the image 2 area in the main interface after you click the Open button. Now we have two images (the last frame of AVI #1 and the first frame of AVI #2) loaded into the image area, add some key dots just like morph between two still images.
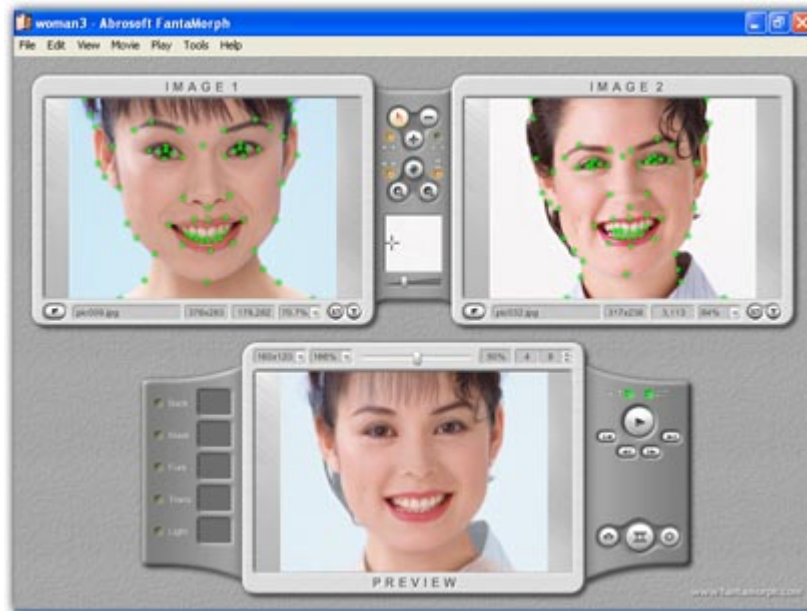
3. When you want to export the morph, just note there is an additional option **Include Source Video Clip** in the Export window. When this option is on, all the frames of AVI #1 and AVI #2 will be included in the resulting morph. Note, this feature is only supported in FantaMorph Pro and Deluxe.
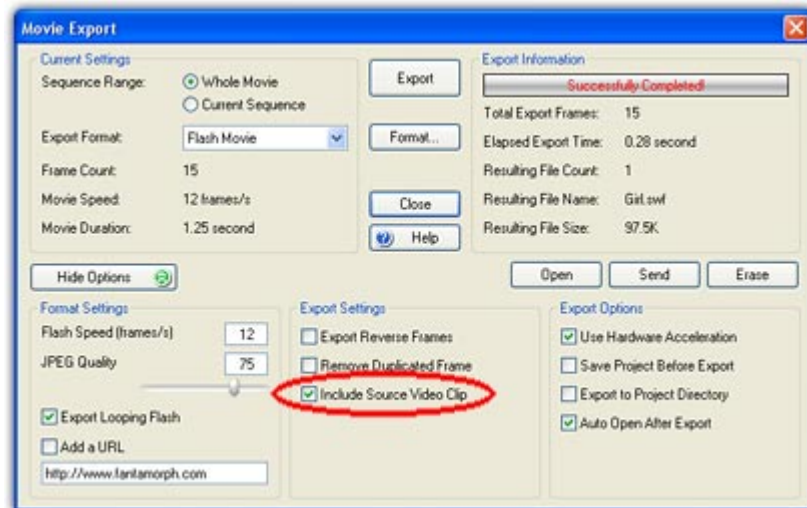
In the final morph below, first you see AVI #1, then AVI #1 morphs to AVI #2, next AVI #2...

Remarks

- Now you can only import uncompressed AVI videos or some sort of compressed AVI videos if you have corresponding codecs.

- Now you can only morph from the last frame of AVI #1 to the first frame of AVI #2.

- There is a trick to join two AVI videos into one AVI file. After import the two AVI source videos, just set the frame number to 2 and export the morph as AVI without adding any key dots.

How to Create a Morph for VCD/DVD

It's a great idea to add some stunning morphing effects to a movie and burn it onto a VCD or DVD. Just note these points below.

First, set a correct movie size. You should choose the "720 x 480 (DVD NTSC)" for creating a DVD in NTSC system, or "352 x 288 (VCD PAL)" for creating a VCD in PAL system, etc.
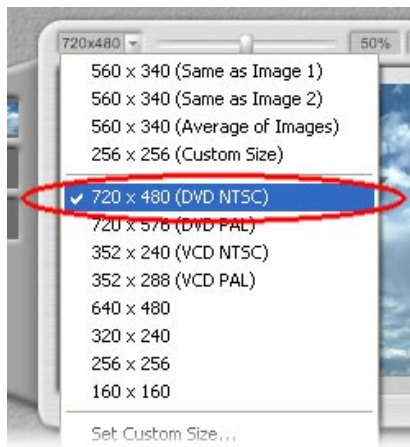
Second, set the AVI speed to 29.97 fps instead of the default 15 fps in the Export Options window. Note, the 29.97 fps is for NTSC system, you should set the AVI speed to 25 fps for PAL system.
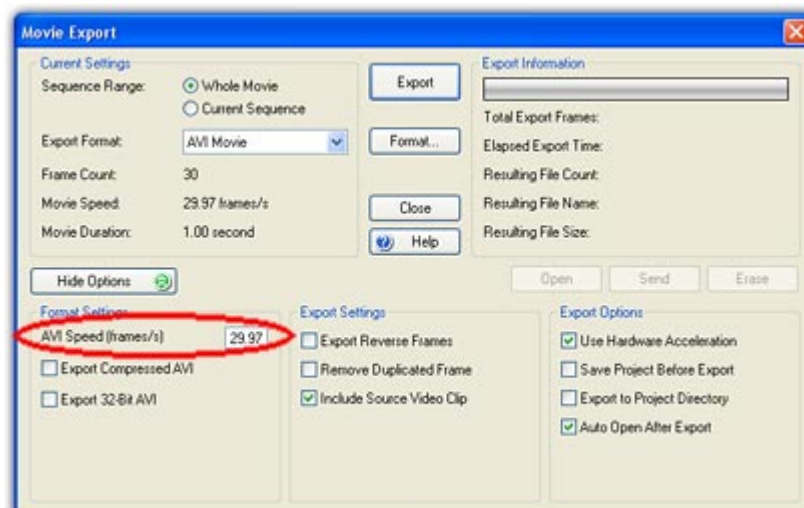
Last, export the morph as AVI format. It is recommended to export uncompressed AVI files. Just make the "Export Compressed AVI" unchecked or you should choose the compressor "Full Frames (Uncompressed)" if the video codec choosing dialog pops.

Now, you can import the exported AVI file into video editing software or burning software to make a VCD or DVD.

How to Use Face Extractor

When creating a face morphing or composing a virtual face using Face Mixer, you will find that you only wish to work with the face portion of the images and don't wish to use entire images. Although you can use the built-in crop tool to select the desired face portion of an image, it is not an easy work. Especially after you change the movie size, you have to re-crop all the source images to keep the aspect ratio, otherwise the movie will be distorted.

With the intelligent tool, Face Extractor, the program can automatically extract the face portion from all the source images in the project using an extracting template. This will also ensure that all the face portions are aligned to a similar structural position.

1. Before you can use Face Extractor, create a morph project with the source images. Note, you should set the desired final movie size before the next steps.

2. Choose the **Add-Ins/Face Extractor** menu to open the window below.
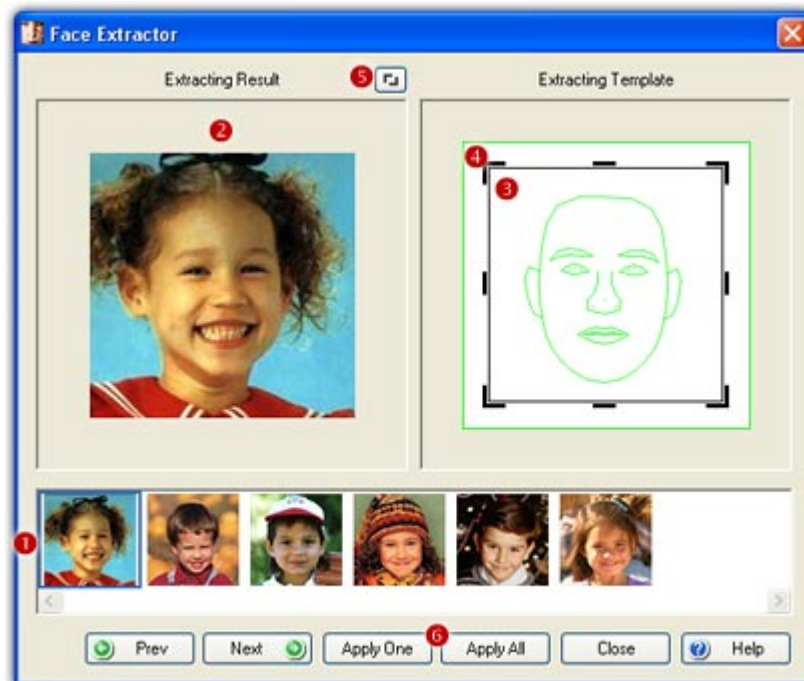
3. All the source images in current project are listed here (❶). Click a thumbnail to start to extract the face portion from the source image. You can also click the **Prev/Next** button to load the previous or next source image.

4. The extracting result will be presented in the left window (❷). Only the extracted portion will be used for the morph.

5. By default, Face Extractor will extract the face portion from an image as close as it can. However, you can freely adjust the position and size of the face portion relative to the final movie using the extracting template in the right window. The portion inside the black box indicates the face portion (❸), and the whole white area inside the green box indicates the final movie (❹). Hereby you can adjust the position and size of the face portion to create the extreme close-up, close-up, medium close-up etc. effects.

6. Once the extracting template is changed by any following adjustment, a corresponding extracting result will be presented in the left window in real time.

   - **Adjust Size**: You can freely drag the 8 cropping handles to change the size of face portions.

   - **Adjust Position**: Move cursor inside the black box and drag it to change the position of face portions.

7. Sometimes the extracting result may be incorrect due to the head position, facial expression, illumination etc. or you want to choose another face instead of the selected face from the photo, just double-click the left window or click the **Edit** button (❺). On the edit window below, you can select the desired face portion and make it as close to the face template (displayed with the green lines) as possible.

8. When all the extracting results are satisfied, click the **Apply All** button (⑥) to apply the results to the project.

9. When a new source image added to the project, please launch Face Extractor to preview and adjust the extracting result, you then need to click the **Apply One** button (⑥) to apply the result only to the new source image.

Remarks

- Since Face Extractor automatically extract face portion from source images, there are some requirements for the pictures it can work with. To achieve the best extracting result, the pictures should be taken full-faced and oriented vertically with good lighting conditions. The variation of head position, facial expression, illumination etc., will cause the extracting result unsatisfied or even unacceptable.

- If the result automatically extracted is unsatisfied, you have to use the built-in crop tool to select the correct portion manually. See more about "How to Crop Source Image".

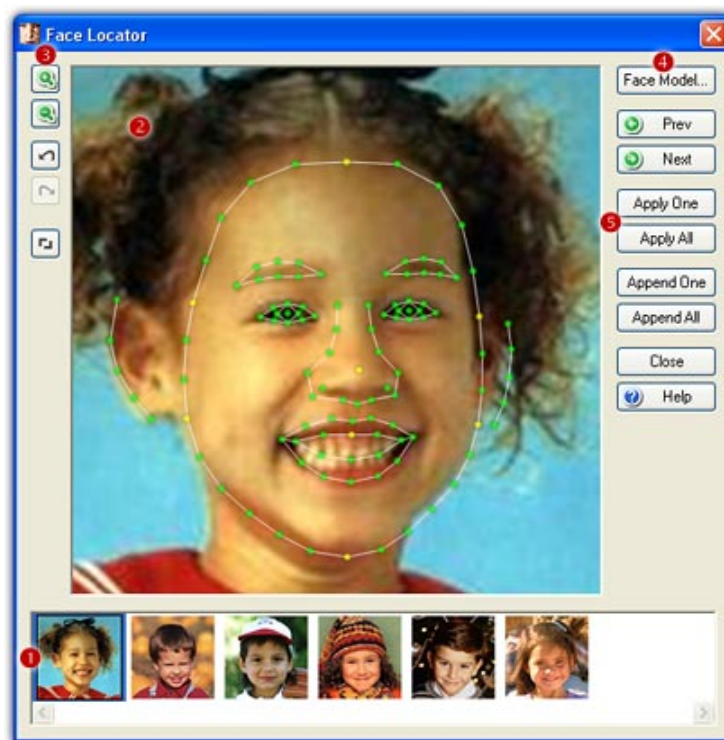- Face Extractor is only available in FantaMorph Deluxe.

How to Use Face Locator

When morphing from one face to another, the program can automatically detect the facial features (eyes, nose, mouth, etc.) and place key dots on appropriate positions. This will extremely save your time.

1. Choose the **Add-Ins/Face Locator** menu to open the window below.

2. All the source images in current project are listed here (❶). Click a thumbnail to start to locate the facial features on the source image. You can also click the **Prev/Next** button to load the previous or next source image.

3. The locating result will be presented in the left window (❷). By default, total 112 key dots will be placed on a face, and this will make the final morphing result very smooth.

4. To achieve more accurate locating result, you can do a little manual adjustments. Use these tool buttons (❸) to zoom in/out, undo/redo, and set face location. There are two

modes when edit a dot: Intelligent and Manual. Press the Shift key to switch between the two modes.

- **Intelligent**: When you move cursor over a dot and drag it to move this dot to its accurate position, the other dots will be automatically move to their ideal positions. Our intelligent face feature extraction engine will help you align key dots very quickly. After you move a couple of dots to their accurate position, you may find that all the dots have been aligned. Note, in Intelligent mode, you can hold the CTRL key and drag a dot to switch to Manual mode temporarily.
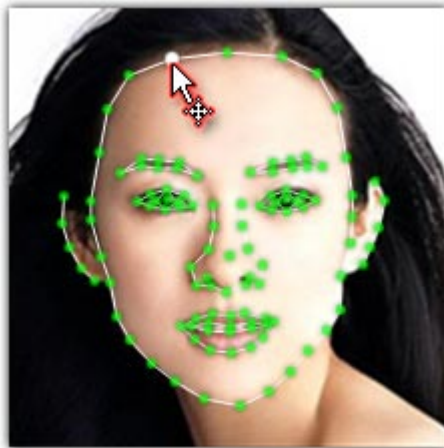
- **Manual**: When you drag a dot to its accurate position, only this one dot will be moved and the other dots won't be changed. Note, in Manual mode, you can hold the CTRL key and drag a dot to switch to Intelligent mode temporarily.
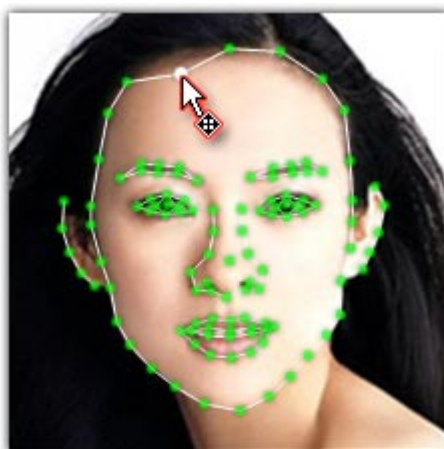
In both Automatic and Manual mode, you can move cursor over a line and drag it to translate all the key dots connected by the line.

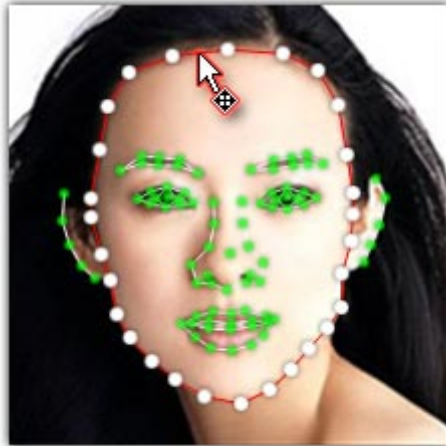5. By default, a 112-dot face model is implemented. If you don't need all the 112 key dots, for example, sometimes you don't want to place key dots on ears or forehead, just click the **Face Model** button (❹) to customize the face model. See more about "How to Customize Face Model".

6. When all the locating results are satisfied, click the **Apply All** button (❺) to apply the results to the project. You can still edit the key dots in the main interface when needed.

7. When a new source image added to the project, please launch Face Locator to preview and adjust the locating result, you then need to click the **Apply One** button (❺) to apply the result only to the new source image.

8. If there are two or more faces on a source image, you need to apply key dots on the first face, and then launch Face Locator again, detect/edit key dots on the second face, and click the **Append All** or **Append One** button.

Remarks

- Since Face Locator locates facial features automatically, there are some requirements for the pictures it can work with. To achieve the best locating result, the pictures should be taken full-faced and oriented vertically with good lighting

conditions. The variation of head position, facial expression, illumination, age and race etc., will cause the locating result unsatisfied or even unacceptable.

- Face Locator is only available in FantaMorph Deluxe.

How to Customize Face Model

By default, you can use 112 dots max to define a face. More dots you use, better morphing quality will be, but you have to spend more time to adjust each dot when needed. Now you can customize the face model by using all or just a part of the 112 standard dots. For example, you may don't need to use the dots of ears and forehead, or you may simplify the structure of eyebrows, eyes, mouth, etc.

1. To customize the face model, click the **Face Model** button on the Face Locator and the window below will appear.
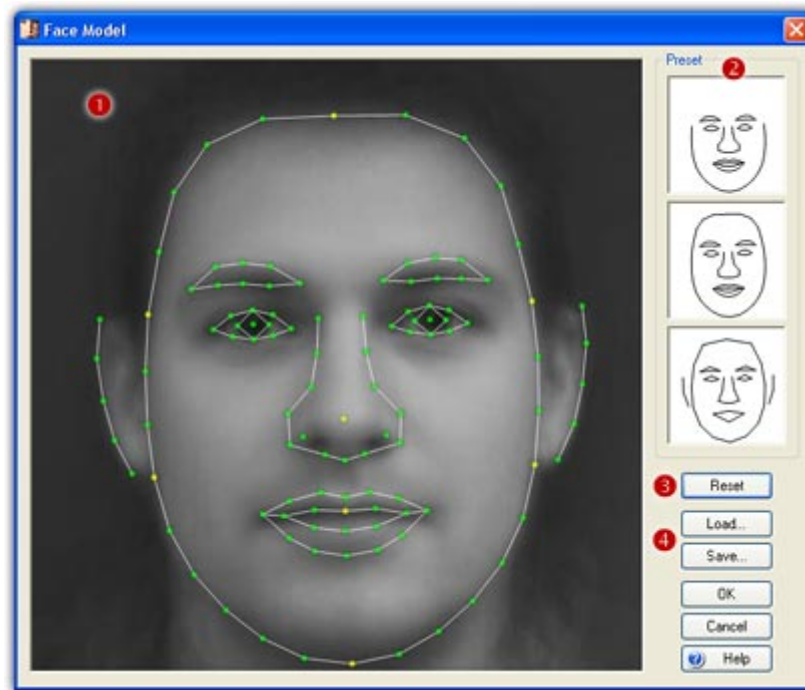
2. You can simply choose a face model from the Preset list (❷), and the face model will be showed in the Edit Area (❶).

3. You can edit dots and lines of the face model. Note, only the dots will be concerned with the morphing process, but the lines will help you recognize the face structure.

- **Dot**: Right click a dot to make it used/unused. Hold the CTRL key and click a dot to make it highlighted/normal. Highlighted dots can help you recognize important features positions.

- **Line**: Right click on a line to delete it. Click a dot and then click the other one to create a line between the two dots.

4. Whenever you want to restore to the default 112 dots model, just click the **Reset** button (❸).

5. You can save your own face model to a .fmo file and load it later by clicking the **Load/Save** button (❹). Note, the program will automatically load the customized face model when it restarts next time.

How to Use Face Mixer

With Face Mixer, you can mix two or more pictures into one. In most cases, we use Face Mixer to compose a virtual face with multiple real faces. Please try to fuse different pictures of your favorite stars, your friends and family, men, women, children or any people into a wonderful, awesome or funny face. It's just plain fun!

1. Before you can use Face Mixer, create a Morph project with two source images or a Multiple Morph project with multiple source images.

2. Choose the **Add-Ins/Face Mixer** menu to open the window below. All the source images in current project will be listed here (❶).
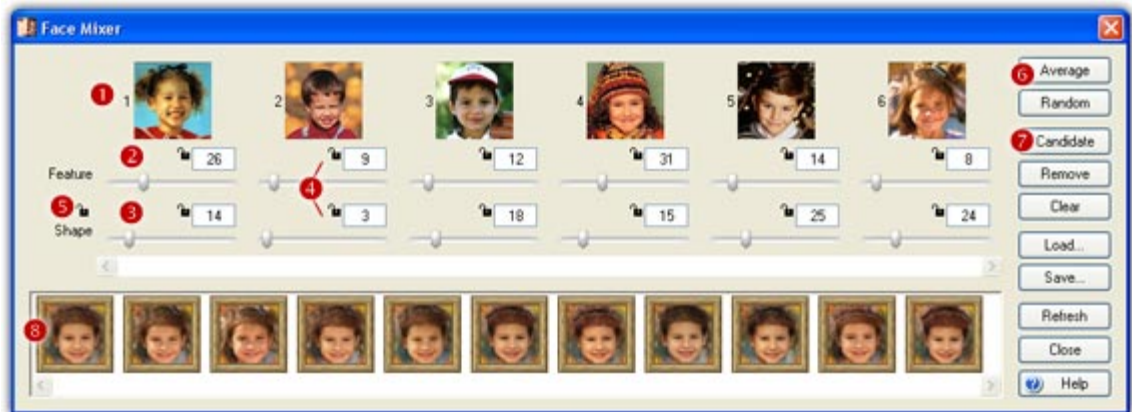
3. For each source image, you can adjust the percentage of **Feature** (❷) and **Shape** (❸) separately by directly typing a new value from 0 to 100 or dragging the slider.

4. There is a **Value Lock** (❹) in front of each percentage value. Click the icon to lock/unlock it. You can only adjust the unlocked values and the locked values are always protected.

5. Click the **Shape Lock** (❺) to lock/unlock it. When Shape Lock is locked, all the shape percentage values are locked and will be always equal to corresponding feature percentages.

6. Click the **Average** or **Random** button (⑥) to get an average or random percentage for each source image. You can easily get unlimited fantastic results by clicking the Random button.

7. After you get an interesting result, click the **Candidate** button (⑦) to place it into the Candidate Library (⑧). You can then click an icon in the Candidate Library to restore it. You can click the **Remove** button to remove a candidate from the library or directly click the **Clear** button to clear the whole library.

8. Click the **Load** or **Save** button to load/save a .fmx file that stores the current mixing status as well as the Candidate Library.

9. The resulting image is always presented in the Preview window on the main interface. Since you can still operate the main interface even if Face Mixer is loaded, sometimes you may need to reload the composing result by clicking the **Refresh** button (⑧).

10. You can export the composing result to a still image file by clicking the **Export Current Frame** button or choosing **File/Export Current Frame** menu. See more about "Export Current Frame".

11. You can directly print the resulting image by choosing the **File/Print Preview**. See more about "How to Print".

Remarks

- All the source images should have the same number and order of key dots. So, it is recommended to use Face Locator to place key dots automatically.

- If you need to append more key dots to hair, neck, etc. after use Face Locator, please add these dots in the same order for each source image.

- Face Mixer is only available in FantaMorph Deluxe.

How to Use Face Library

With this new add-in, you can easily collect and store source images (especially for the portrait photos) along with key dots in a classified library. You can then simply drag some objects from the library to create a new morph or face composite without any new editing work.

1. To store a face in the library, choose the **Image/Save to Face Lixbrary** menu. The face with its aligned dots will be stored in the root directory of the library.

2. Choose the **Add-Ins/Face Libray** menu to open the window below.

3. There is a button group (❷) used to manage the Face Directory (❶). You can choose the **Add** button (+) to create a new directory, choose the **Delete** button (-) to delete a directory (must empty), or choose the **Rename** button (I) to rename a directory.

4. To classify the faces temporarily stored in the root directory, just drag the faces from Face Library (❸) to a destination directory (❶).

5. There is a button group (❹) used to manage the faces in Face Library. You can click the **Delete** button (-) to delete a face from Library. Note, the source image file of the face won't be deleted. Click the **Rename** button (I) to rename the selected face in Face Library.

6. When you want to reload the stored faces to a new project, you can simply drag a face from the Face Library to the source images area in the main interface. In this way you can create a new morph or face composite very quickly.

Remarks

- Face Library is only available in FantaMorph Deluxe.

Chapter 4

Hints and Tips

Edit Options

You can choose the **Tools/Edit Options** menu to set some advanced options. Whenever you want to restore the default settings, just click the **Reset** button.
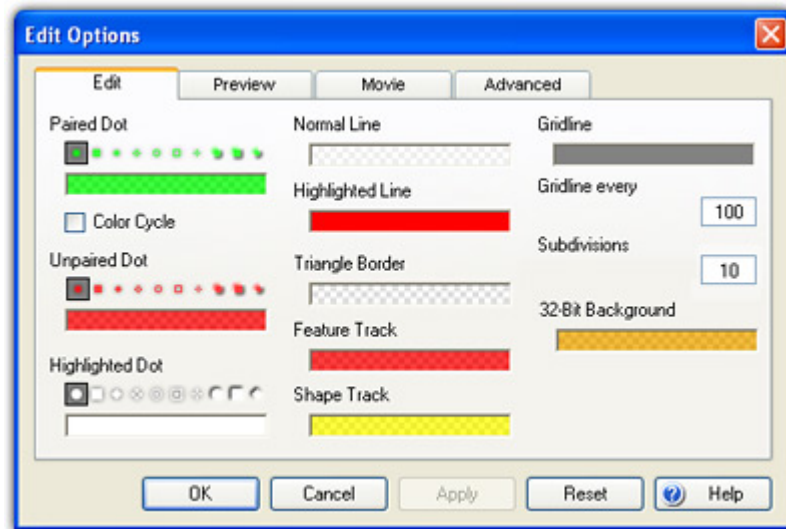
Edit

You can set the style of Paired, Unpaired, Highlighted Dot, Normal Line, Highlighted Line, Triangle Border, Feature Track and Shape Track separately as described below.

- **Style**: Click somewhere in the **Dots Style Bar** to choose one of the 10 styles.

- **Color**: Click the Color Box, then choose a color from the FantaMorph's choose color dialog. Note, it is recommended to select a bright color for highlight.

- **Color Cycle**: Turning on this option will cause 8 basic colors (red, yellow, blue, green, cyan, purple, white, black) cycle across the dots. Otherwise, all dots are the same color just selected. Only effect for normal style.

- **Gridline Every**: Enter a value for the grid spacing.

- **Subdivisions**: Enter a value by which to subdivide the grid.

- **32-Bit Background**: Set a semi-transparent color to change the hue of the 32-bit checkerboard background, or directly use an opaque color.

Preview

- **Use Hardware Acceleration**: When hardware acceleration is enabled, you can get the best preview performance. But you should disable this function if your system has problem with hardware acceleration.

- **Auto Loop and Auto Reverse**: The Auto Loop and Auto Reverse switches will be automatically turned on once a movie has been created.

- **Preview Movie Filter Effects**: If the preview speed becomes slow after you add filters to the movie, you can turn off this option temporarily.

- **Frame Thumb Size**: This value will be used when creating frame thumbs in Frame Sequence view mode.

- **Preview Speed**: You should set this value according to the performance of your computer. The default value is 15.

Movie

- **Source Image Size Limit**: Using too large source images will waste system resource, it's useless and should be avoided. Any image over the size limit will be automatically resized to fit the limit.

- **Default Movie Size**: Choose one of the 12 size modes. The default value is "Same as Image 1".

- **Custom Size**: Create movie with your custom size as you like.

- **Frame Thumb Size**: This value will be used when creating frame thumbs in Frame Sequence view mode.

- **Default Frames**: This value will be used when creating movie initially. The default value is 15.

Advanced

- **Save AutoRecover Info Every**: Save the project automatically at intervals of 1 - 10 minutes, so that you can recover it in case of the FantaMorph program crashes accidently.

- **Intelligent Memory Management**: Using this intelligent memory management technique makes it possible to load unlimited or huge source images in one project. Only available in Deluxe.

- **Reserved Memory Space**: Reserve some memory space for other applications. Generally, FantaMorph will use as much memory as possible. When you load too much source images in one project, FantaMorph will automatically adjust its own memory usage and never use the reserved memory space.

Drag and Drop Images

You can use the standard Open Dialog to import images into FantaMorph, but in most cases, it is easier to drag and drop an image as the source image or the effects image.

As described in "How to Import Source Image", you can drag an image from the built-in image viewer and drop to the source images area in the main interface. You may also drag an image file from an external program such as Windows Explorer or ACDSee.

When you open the Sequence Effect or Movie Effect window, you can also drag an image file from the built-in image viewer or an external program to the Effect Icon area to set the effect.
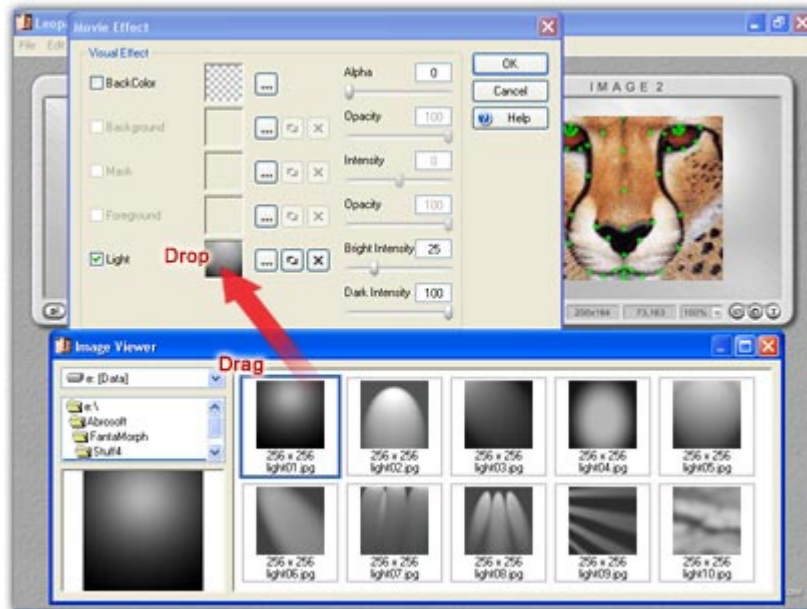
Beginning with version 4.0, you can drag a face from the Face Library to the source images area in the main interface. In this way you can also get the aligned key dots that have been stored in Face Library.

Mouse Wheel Scrolling

Using mouse wheel scrolling makes some operations more quick and comfortable.

Zoom Viewport

Move the mouse cursor to a desired position inside the sources or preview windows, then roll the mouse wheel up to zoom out or roll the mouse wheel down to zoom in.

Scroll Preview

Move the mouse cursor to anywhere outside the sources and preview windows, then roll the mouse wheel up to view the previous frame or roll the mouse wheel down to view the next frame.

Mouse Wheel Scrolling is applicable not only for the main interface, but also for almost all pop-up windows if you see scroll bars there.

Keyboard Shortcuts

Below is a list of all the keyboard shortcuts in the main interface:

Feature	Shortcut
Show this help	F1
Show Sequence List	F2
Swap frames	F3
Show/hide grid	Ctrl + G
Show/hide dots	Ctrl + D
Show/hide lines	Ctrl + L
Show/hide triangles	Ctrl + T
Show/hide morph track	Ctrl + M
Switch to Full View mode	F5
Switch to Edit Only mode	F6
Switch to Preview Only mode	F7
Switch to Frame Sequence mode	F8
Switch to Dual View mode	F9
Switch to Full Screen mode	F11 or Alt + Enter
Open Image Viewer	Ctrl + F1
Open Image Sequence Packer	Ctrl + F2
Open Face Extractor	Ctrl + F3
Open Face Locator	Ctrl + F4
Open Face Mixer	Ctrl + F5
Open Face Library	Ctrl + F6
Edit tool	E

Add Dots tool	A
Del Dots tool	D
Hand tool	H
Zoom In tool	T
Zoom Out tool	W
Switch between Zoom In/Out tool	Alt
Switch to Hand tool	Spacebar
Decrease magnification times	N
Increase magnification times	M
Zoom out	Ctrl+- or ,
Zoom in	Ctrl+= or .
Best Fit	Ctrl+0 or /
Actual Size	Alt+Ctrl+0 or *
Fit Width	Alt + Right
Fit Height	Alt + Down
Feature Curve	Shift + Ctrl + F
Shape Curve	Shift + Ctrl + S
Master Curve	Shift + Ctrl + M
Track Curve	Shift + Ctrl + T
Camera	Shift + Ctrl + C
Sequence Effect	Shift + Ctrl + E
Scale selection	Ctrl + H
Rotate selection	Ctrl + R
Skew selection	Ctrl + K
Create new project	Ctrl + N

Visual Open project	Ctrl + O
Save project	Ctrl + S
Undo	Ctrl + Z
Redo	Ctrl + Y
Cut	Ctrl + X
Copy	Ctrl + C
Paste	Ctrl + V
Delete	Del
Select all	Ctrl + A
Move selected dots by 1 pixel	Arrow key
Move selected dots by 10 pixel	Ctrl + Arrow key
Add sequence	Ctrl + Ins
Duplicate sequence	Ctrl + J
First sequence	Ctrl + Home
Last sequence	Ctrl + End
Previous sequence	Page Up
Next sequence	Page Down
Bring to top	Shift + Ctrl +]
Send to bottom	Shift + Ctrl + [
Move up	Ctrl +]
Move down	Ctrl + [
Play/Pause	Ctrl + P
Set movie effects	Ctrl + E
First frame	Home
Last frame	End

Previous frame	Ctrl + B
Next frame	Ctrl + F

Below is a list of all the keyboard shortcuts in the Crop/Camera/Effect/Caption window:

Feature	Shortcut
Move selecting portion by 1 pixel	Arrow key
Move selecting portion by 10 pixels	Ctrl + Arrow key

Frequently Asked Questions

1. Which edition of FantaMorph is right for me?

You may choose from 3 editions of FantaMorph: FantaMorph SE (Standard Edition), FantaMorph Pro (Professional Edition) and FantaMorph Deluxe (Deluxe Edition).

In addition to those found in FantaMorph SE, FantaMorph Pro offers the following features:

- **Create Sequence Morph** - Long morph movies created from more than two source images can be produced. (See additional details in question 2, below.)

- **Supports 32-bit Format** - When using 32-bit source image file with alpha (BMP, PNG, TIFF, TGA, PSD), 32-bit with alpha morphs will result, which can be used alone or imported into other advanced video editing software to produce additional effects.

- **Movie Add-on Effects** - Decorate movie with background, mask, foreground, light and sound.

- **Feature/Shape/Master Curve** - Professional users can completely control the feature, shape and transparency changing process.

So, choose FantaMorph SE if you are sure that the features above won't be necessary for your work, and that you will never work with more than 2 source images. If you wish to create professional effects or expect to make longer movies with multiple source images, showing such things as a baby's growing process, FantaMorph Pro is a better choice.

In addition to those found in FantaMorph Pro, FantaMorph Deluxe offers the following features:

- **Create Layer Morph** - Have multiple morphs running in different layers simultaneously in one project. This makes it possible to create very professional and stunning morphs.

- **Track Curve** - Use nonlinear morph tracks instead of linear ones.

- **Camera** - Pan/zoom/rotate each morphing frame under a customized track, just like see the morph from a moving camera.

- **Sequence Effect** - Decorate a sequence with effect, filter and caption.

- **Face Extractor** - With Face Extractor, the program can automatically extract the face portion from an image.

- **Face Locator** - When morphing from one face to another, the program can automatically detect the facial features (eyes, nose, mouth, etc.) and place key dots on appropriate positions. This will extremely save your time.

- **Face Mixer** - Compose a virtual face with multiple real faces. You can adjust the Feature/Shape proportion of each face to get unlimited results.

- **Intelligent Memory Management** - Using intelligent memory management makes it possible to load unlimited or huge source images in one project.

- More powerful features, see the chart of Product Comparison in Product Registration.

So, FantaMorph Deluxe is the best choice if you want to create unique and amazing morphs.

2. Can I produce morphs from more than two images?

Yes, if you are using FantaMorph Pro or Deluxe! See "How to Morph More than Two Images".

3. Why is the speed slower than "real-time"?

FantaMorph uses a rendering engine which makes use of OpenGL hardware acceleration. OpenGL is an industrial graphics standard and is supported by most modern video cards. If your video card supports this feature, morph speed can be very fast, even reaching hundreds of frames per second. But, if your video card is old, morph speed may be under 15 frames per second. In this case, updating your video card is recommended.

4. Why I am unable to get any picture at all in the Preview Window when Image1 and Image 2 are loaded?

Your system has some problems with OpenGL hardware acceleration.

First, please choose Start/Control Panel/Display/Settings, make sure the Color quality is "Highest (32 bit)" if possible.

Second, you should update your display driver. For example, if you are using a NVIDIA card, please download the latest driver from NVIDIA site at http://www.nvidia.com, install it, restart Windows, and then try out FantaMorph again.

Last, if the problem is still not resolved, click the Tools/Edit Options menu, on the Options window, turn off the Use Hardware Acceleration switch, restart FantaMorph and try again.

5. Which format is the best for export?

There are 7 export formats in FantaMorph, each useful for a different purpose. See "How to Choose Export Format".

6. Can I add dots to both images individually or just to one image at a time?

If the "Auto Add Corresponding Dot" option is toggled on, every dot you add to one image will automatically result in a corresponding partner dot on the opposite image. If the "Auto Add Corresponding Dot" option is toggled off, you can add dots to both

images individually. You may add paired dots and unpaired dots in one project, but only paired dots will be able to affect the morph.

7. Why all my dots are the same color?

As a default, all dots are the same color. But you can turn on the "Color Cycle" switch in the option box, causing 8 basic colors to cycle across the dots. Note that the 9th dot you add will therefore be the same color as the 1st, the 10th the same as the 2nd, and so on. To help distinguish individual dots and correctly locate their partner dot, simply move your cursor over a chosen dot. That dot and its partner in the second image will be highlighted.

8. What do I do with my completed morphs?

Use your morph images or morph movies to grab people's attention or to have a good time - create web graphics and enhance your web site, email morphs to friends and family to make them laugh, burn on morphs to VCD for enjoying on TV, create a unique online greeting, post your morphs on the Internet, add more life to your presentations. If you are a professional user, use your morphs in music video, advertisement, teleplay, movie, education courseware, and countless other great ways!

If your morph is unique and exciting, and you want to share it with other FantaMorph users, you might consider submitting it to us at info@fantamorph.com for display.

9. Can I import the FantaMorph's results into video editing software to make a VCD/DVD?

Of course! Just follow the following steps.

Step 1: Set the movie size to "352 x 240 (VCD NTSC)" or "720 x 480 (DVD NTSC)". For PAL system, set "352 x 288 (VCD PAL)" or "720 x 576 (DVD PAL)".

Step 2: Set the AVI speed to 29.97 fps instead of the default 15 fps in the Options window. For PAL system, set 25 fps.

Step 3: Export the morph as AVI format. It is strongly recommended to choose the compressor "Full Frames (Uncompressed)".

Step 4: Now, you can import the exported AVI file into video editing software to make a VCD/DVD.

10. Why doesn't my morph look natural?

While morphs can be produced in many different ways, FantaMorph uses what is termed the "key dots method." It is effective, fast, and easy to use, but it also has some limitations. Dots pairs must be in the same logical positions, otherwise, the result may be unconvincing. In this case, carefully adjust dot positions which define the affected areas.