



Life Forms & LightWave 3D: Creating Motion for LightWave

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About this document

This document explains how to use Life Forms Studio 3.0 with LightWave 3D. It also contains short examples of how to use LightWave and Life Forms together. This document has three parts:

- The Introduction section - gives background information about Life Forms.
- The Tutorial section - gives short examples of how to use Life Forms.
- The User Guide section - gives key procedures and reference information for using Life Forms with LightWave 3D.

Introduction



Where does Life Forms fit?

Life Forms can be used with LightWave 3D & Inspire 3D. Both models and motion can be brought from Life Forms into these programs and vice versa.

Depending on your project and your personal preferences you may use Life Forms in various points in your production process. It could be used to:

- speed up keyframing
- edit motion captured data
- apply motion capture data to character's bones or geometry
- plan your mocap sessions
- prototype and previsualize during the early stages of the production cycle.

Life Forms is also used as a source of models and premade motion sequences.

Using Life Forms for fast keyframing.

Life Forms straight-forward interface simplifies the task of keyframing. Because it has fast redraw Life Forms gives you instant feedback allowing you to work faster and more spontaneously.

Using Life Forms as a source of motion data

Aside from the 600 + keyframed variations and 140 + motion captured animations from the **PowerMoves CD**, you can use Life Forms for keyframing your own animations and for generating walk sequences with the **Walk Generator**. Life Forms is also supported by the PowerMoves - the On-line 3D Content series.



Using Life Forms to edit proprietary motion capture data

You may be working in a project that has its own captured data sets. Life Forms will import motion data output in the BioVision Hierarchical file format and the Acclaim file format. You can use Life Forms to create looping sequences, combine sequences, rotate paths, and blend the motion data.

How do I use Life Forms & LightWave 3D?

Life Forms imports and exports motion data to LightWave via the 3DS file format. This allows you to:

- 1 Bring a Life Forms animations into LightWave for rendering.
- 2 Create motion for segmented characters build in LightWave.
- 3 Create motion for PuppetMaster sections. See [LW_Puppetmaster.pdf](#).

What does Life Forms do?

Using Life Forms requires you to bring the LightWave scene into another package. You may be asking, “Is it worth it?”. There are several reasons, but here are two that users have told us about:

- Life Forms is an easy and cost-effective way to edit and work with motion capture data
- Life Form’s streamlined and effective keyframing interface makes it possible to block out motion sequences quickly.
- Life Form is a source motion data.

Life Forms editing functions allow you to recombine, blend, and edit frame ranges. You can also thin motion data and apply premade sequences before exporting motion data into LightWave 3D. These features allow you to use motion capture more creatively. Here are some of Life Form’s features.

Fast Keyframing

Life Forms makes it easy to keyframe by keyframing the *whole body* rather than the objects that make up the body. By representing the whole body as a keyframe in the Timeline, Life Forms makes it easy to select keyframes for copying, and pasting. Life Forms also has a Pin-to-floor command that puts the figure on the floor so you don’t have to worry about aligning the figure to the floor at each keyframe.



Smart Paste Functors

Life Form is an excellent tool for blending and combining animations. In Life Forms you combine animations by pasting keyframes from one animation to another. Life Forms adjusts the path for you.

In addition to the automatic adjustment in the path or location keyframes, Life Form's is able copy and paste motion from selected joints only. For example, this allows you to combine the arm action from one animation with the leg action from another.

Editing a range of frames

Applying a relative offset or absolute rotation to a joint over a range of frames is very easy to do in Life Forms. You would use this feature when you want to apply a small change to all frames in the animation. For example, you can apply a relative rotation to the figure's upper back joints so that it bends over a little during the entire walk cycle.

Copy and paste to different skeletons

Motion data is never wasted in Life Forms. You can reuse the motion data by applying it to different models.

Source of animation content

Aside from the 600 + keyframed variations and 140 + motion captured animations from the **PowerMoves Library CD** that comes with Life Forms Studio 3.0. In addition to the PowerMoves CD, Life Forms is complemented by the **PowerMoves - Online 3D Content series**. This product consists of 3D models and motion sets that you can purchase on-line from <http://www.credo-interactive.com>.

In addition to premade motions, Life Forms can be used for keyframing your own animations and transitions, and for generating walk sequences using the procedural **Walk Generator**.

Thinning mocap data

In Life Forms, you can reduce the density of motion capture data by deleting or thinning keyframes. You may, for example, instruct Life Forms to remove one keyframe for every 5 keyframes.

Slow down mocap animation easily

To slow down an action simply select a range of frames in the graphical timeline, and then expand the selection. While you are expanding the selection, the status box in the Timeline window shows how much the animation has slowed down.



The motion editing features described here are explained more fully in the User Guide.

Tutorials



About the Tutorials

This section contains several tutorials for using Life Forms to create character motion for LightWave scenes.

Tutorial 1: Animating custom models.

Tutorial 2: Bringing Life Forms animations into LightWave 3D for rendering.

Tutorial 3: Using Bones motion data from Life Forms.

Note: This tutorial was tested with LightWave 3D v5.6

For the tutorials you need:

- **LightWave 3D 5.5 or later.**
- **Life Forms Studio 3.**
- **Latest LWS plug-ins from Credo Interactive Inc.** We may release improved versions of the LightWave import and export plug-ins from time to time. The plug-ins have these filenames:
 - for the Windows computers : LWS.out.dll and LWS.in.dll.
 - for Macintosh computers: LWS.in and LWS.out

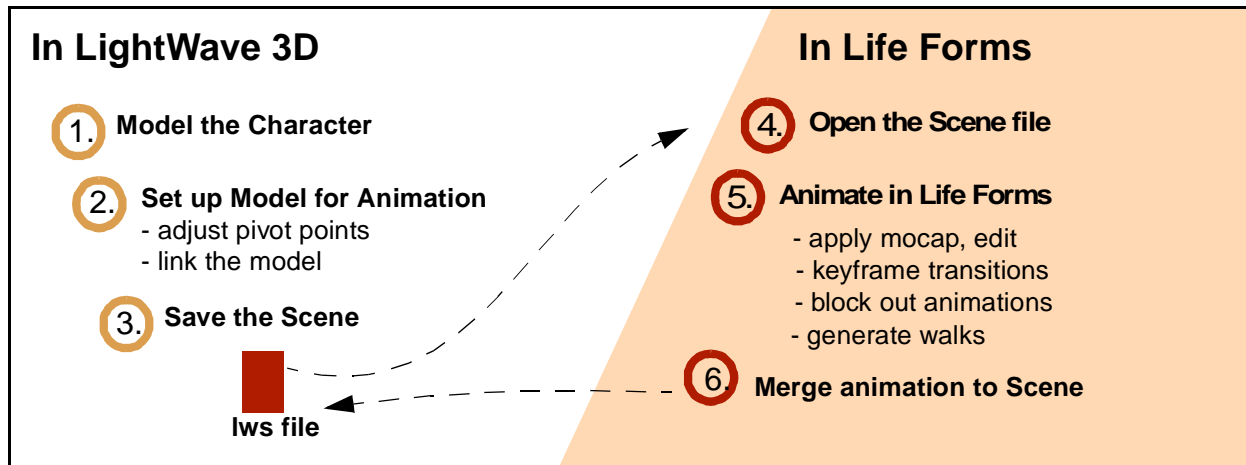
Tutorial 1: Animating Custom Models

This tutorial explains how to make a model ready for animation in Life Forms. Life Forms can only animate models with the following characteristics:

- Models must be segmented,
- Objects must be hierarchically linked,
- Objects have correct pivot points.



The process is as follows:.



Part I: Making the Model animation-ready

1 Setting up the Segmented Model

In LightWave, build or import a segmented model. Rotate the arm objects so that they lie on either side of the body in the normal standing position. Zero out any rotations that you have applied.

2 Setting the pivot points

Before it can be animated, you must set its pivot points so that each object rotates correctly in relation to its parent.

3 Link the objects

Link the object, making the pelvis the root object. Information about linking and setting pivot points is found in the LightWave User Guide.

4 Remove all but one Null root object

Unlike LightWave, Life Forms requires that each model has **only one root object**. So you must make sure that the model has only one root or null object.

5 Save the file as a LightWave scene file (LWS)

Before saving the model in a scene file, we recommend that you turn off all IK settings and remove all frames of animation.

Life Forms provides several Life Forms-ready models in the Life Forms format (.lfa). These models are found in the Model Gallery, PowerMoves CD & PowerModels CD.

Part 2: Applying Motion in Life Forms

1 Open the LWS file in Life Forms

Choose **File menu > Open**. In the Open dialog box, select LightWave in the File type menu. Select the LWS file and click OK.



2 Select the Content Directory

You need to select the Content directory when you open LWS file for the first time. In the Import dialog box, click Content directory.

In the Select Content directory dialog box, do one of the following things depending on whether you are using a Macintosh or Windows computer:

- **WINDOWS:** In the **Specify Content directory dialog box**, browse and locate the folder that contains the Object folder and other resource folders for your LightWave projects. In order for Life Forms to recognize this folder as the Content directory, you must click on any file in the Content directory and click Open. Any file will do. Life Forms will not alter that the file. If you do not have a file in the Content directory, please put one there and repeat this step.
- **MACINTOSH:** In the Specify Content directory dialog box, browse and locate the folder that contains all the object folders for the scene. For example, if object files for the scene is stored in the **subdirectory of Humans folder**. In the Specify Content directory dialog box, select the Humans folder and click “Select Content directory”. Click Open.

3 Paste Motion Capture data

- Open a motion captured animation, for example **Exercise.lfa**.
- Copy all frames from Exercise.lfa animation. Do this by clicking in the grey panel on the left the animation’s Timeline. Then, choose **Edit menu > Copy**.
- Click on the first frame of the destination file. This positions the insertion point at the first frame.
- Choose **Edit menu > Paste Defaults** submenu. Check that paste **Relative Location** and **Absolute Facing** is checked.
- Then, choose **Edit menu > Paste**.

4 Map the motion

The Joint Map editor will appear. This is where you match the source to the destination joints. By doing so, you are telling Life Forms how to apply motion data from one model to another.

Repeat the copy and paste procedure to apply the motion data from **HipHip.lfa** (also found in the Tutorial folder) after the first sequence.

5 Open the LightWave Export dialog box

In Life Forms, choose **File menu > Export**. In the Export file type, click the LightWave icon.

6 Select the Merge option

Click the **Merge** checkbox. Then, click the Merge File button.

This opens the dialog box that lets you locate the source LWS file.

7 Locate the LWS file to Merge into

Find and select the LWS file that contains the model you created in LightWave 3D. Click **Open**.



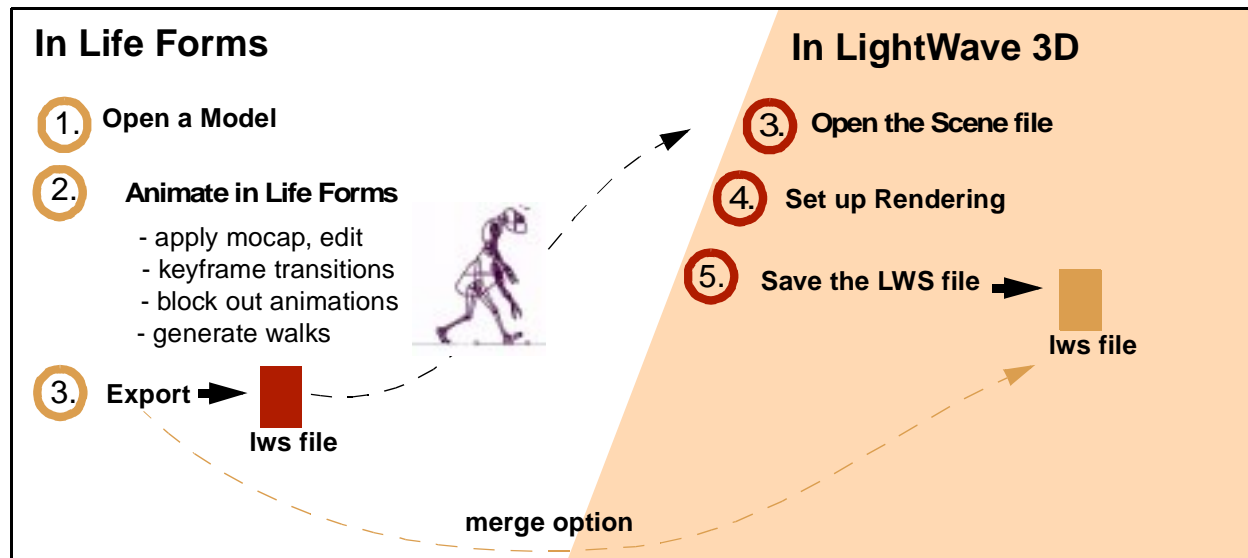
In the Export dialog box, select merge the motion data to the source LWS file. In the Save dialog box, name and save the new LWS file.

Merging motion data inserts keyframes without affecting other scene elements such as colour, texture and lighting in the source LWS file.

Tutorial 2: Bringing animations into LW

This example explains how to export a Life Forms animation as a LWS file for rendering in LightWave 3D.

The process is as follows:



- 1 **Open a Life Forms file (LFA)**
Choose File menu > Open. In the Open dialog box, browse and select a **Sundancer.lfa**.
- 2 **Animate the model**
Animate the model by generating a walk, keyframing or pasting premade motions to it. See **Sundancer_move.lfa**.
- 3 **Open the LightWave export dialog box**
Choose File menu > Export. In the Export dialog box, select the LightWave icon in the Export Format list.
- 4 **Select the Export options**
Click the Geometry checkbox.
- 5 **Set the Content Directory.**
Click the Content Directory button. In the Select Content Directory dialog box, do one of the following:



- **WINDOWS:** In the **Specify Content directory dialog box**, browse and locate the folder that contains the Object folder and other resource folders for your LightWave projects. In order for Life Forms to recognize this folder as the Content directory, you must click on any file in the Content directory and click Open. Any file will do. Life Forms will not alter that the file in anyway. If you do not have a file in the Content directory, please put one there and repeat this step.
- **MACINTOSH:** In the Specify Content directory dialog box, browse and locate the folder that contains all the object folders for the scene. For example, if object files for the scene is stored in the **subdirectory of Humans folder**. In the Specify Content directory dialog box, select the Humans folder and click “Select Content directory”. Click Open.

6 Export the file

In the Export dialog box click OK. The Save dialog box will appear, name and save the file.

See **Sundancer_move.lws**. You can open this file in LightWave for rendering.



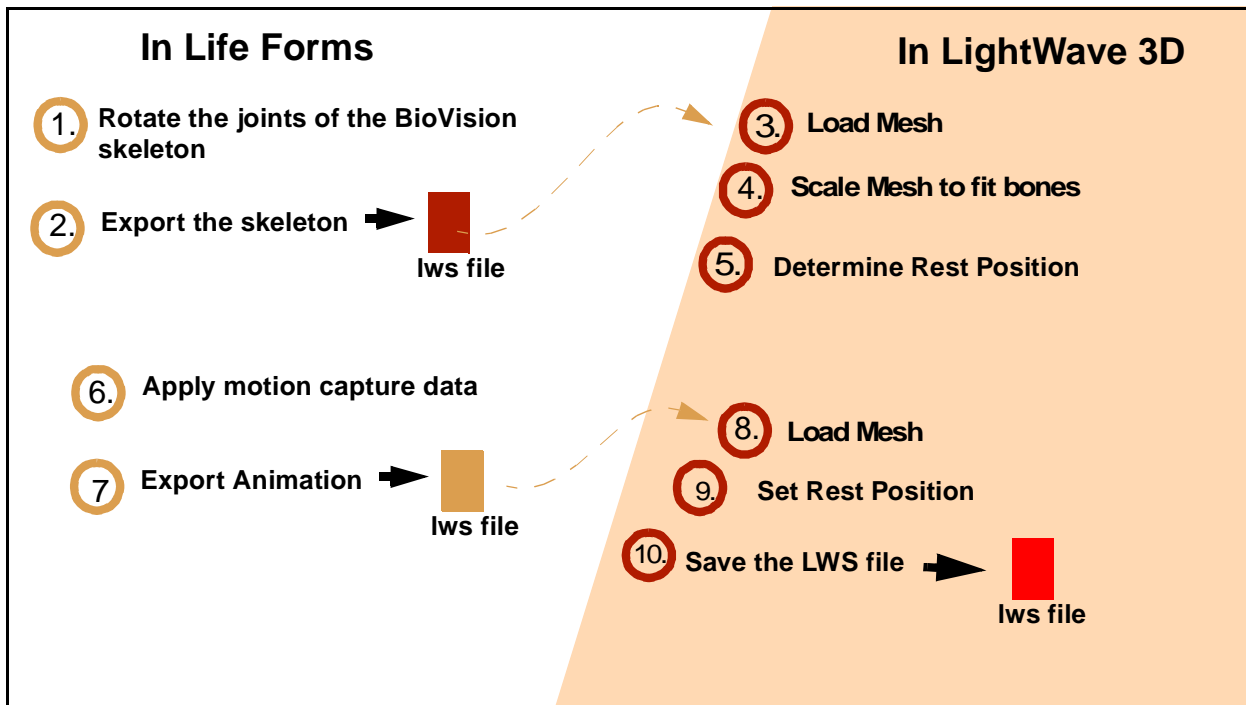
Tutorial 3: Using Bones motion data

Motion data can be exported as bones from Life Forms and applied to a single-skin mesh models.

Because LightWave bones are aligned in the +Z axis, it is difficult to paste motion capture and premade animations to them. Thus, even though you can import LightWave bones into Life Forms, we do not recommend doing so at this time. We currently are improving the Joint Map editor in Life Forms to enable you to paste motion data to LightWave skeletons in Life Forms. While you cannot paste motion to bones, you can, however, animate the skeleton by keyframing.

If you must use single-skin meshes and bones, the simplest way to apply Bones motion data to a mesh is described in this tutorial. This process involves adjusting the mesh to fit the bones, and setting the rest position of the bones to fit the mesh. You can also use Puppet Master for animating single-skin meshes.

The process can be summarized as follows:



A few notes about bones:

Before we get started, you should know the following about using bones:

- In LightWave, a mesh is attached to a skeleton by replacing the root null object of the skeleton with the Mesh object (i.e. the LWO file for the character).



- Bones and the Mesh must fit together well. If you have Life Forms you can scale the height of the bones and its animation. If you do not, you will have adjust the size of the Mesh.
- Adjusting the proportions of the limb lengths is not recommended because this may alter the motion.
- You can set the Rest position of the bones so that they fit the Mesh. Setting the Rest position involves applying rotations to the arm and leg bones so that they lie within the Mesh. We explain how later.
- Adjusting the bone strengths and applying joint compensation can improve the way that meshes are deformed by bones.
- You can add bones to stiffen or stabilize parts of the mesh so that they are not affected by other nearby bones.

Part 1: Adjusting the Mesh

1 Open Bones.lfa

In Life Forms, choose File menu > Open. Select **Bones.lfa**. Click OK.

2 Rotate the skeleton to fit the mesh

The motion captured animations that come with Life Forms are imported from BioVision mocap files. Thus the bones in these files have the same default position of the BioVision skeletons — that is they have arms down and to the side. This position is may not be the same as the default position of your mesh.

In order to fit the Mesh to the skeleton it helps to rotate the arms and thigh bones of the skeleton to the approximate position of the Mesh.

Do this by:

- In the Timeline window, double-click in Frame one.
- Open the Figure editor choosing **Window > Figure Editor**. You will see the skeleton in the Figure Editor window.



- Select the right upper arm and click the **Z Rotation** dial to rotate it to the desired position. Repeat this for the left upper arm, left and right thigh.

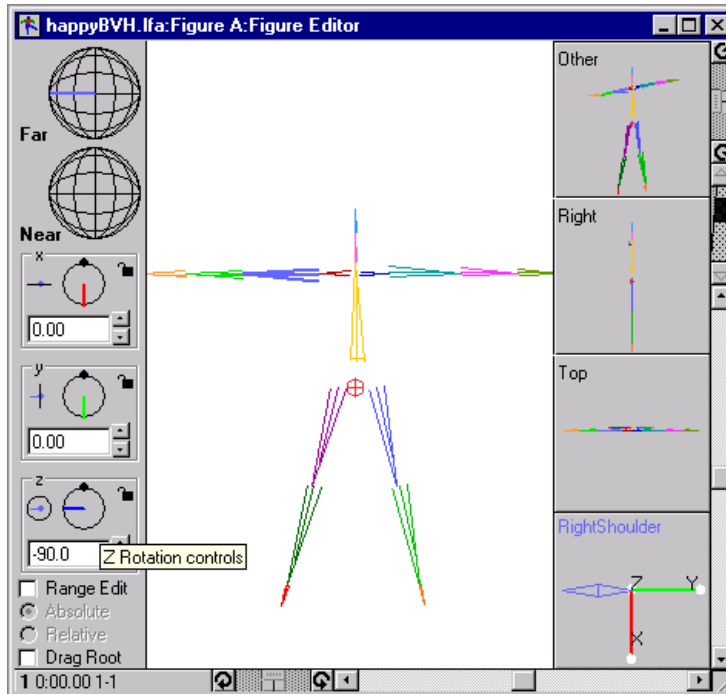
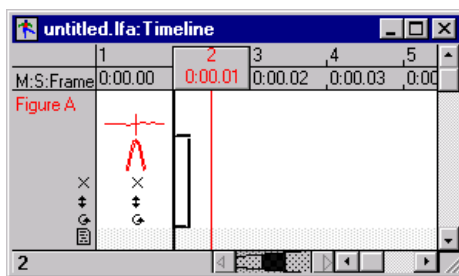


Figure Editor window

Notice that an icon of the figure's shape appears in the first frame of the Timeline. This means that you have keyframed the figure's shape.



Timeline window

3 Open the Export dialog box

Choose **File menu > Export**.

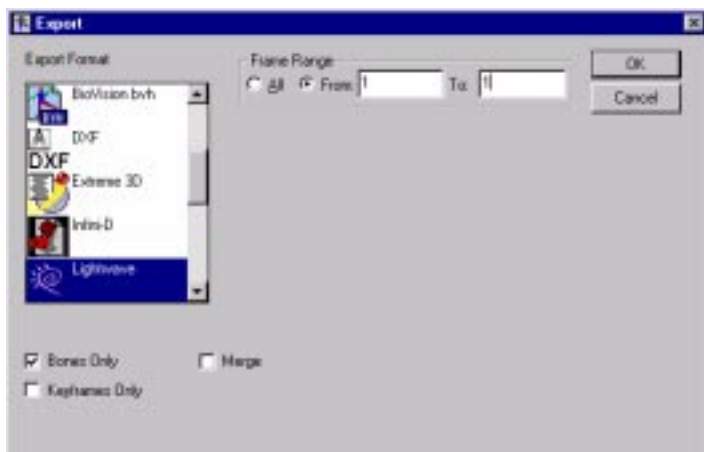
4 Select the Export options

- In the Export Format list, select LightWave LWS.
- Check Bones Only.
- Export Frame One only.



5 Click OK

6 Name and save the LWS file



Export dialog box

7 Open the LWS file

In LightWave, open the LWS file.

8 Replace the Null object with a Mesh

Replace the null root object of the skeleton with the Mesh object. To do this:

- Select the null object
- Open the Object dialog box by clicking the **Replace Object** button. The mesh is now bound to the bones, and are affected by the mesh. The Mesh may be distorted by the bones. This will be fixed when you set the rest position of the upper arms.

9 Overlay the Mesh and bones

Open the Modeler and select the Mesh. Move the mesh so that it is centered on the skeleton.

10 Resize the Mesh

In the modeller, select the mesh and scale it to fit the skeleton. Check each change using the **Put** button and switch to Layout mode.

Keep resizing and positioning the mesh in the Modeler, checking the effect in layout mode until the mesh and bones fit properly.

11 Save the Adjusted Mesh.



Part 2: Determining the Bone rest position

Adjusting the Bone rest position makes it possible to attach bones from this skeleton to the mesh.

1 Determining the rest position

In LightWave, rotate the bones until they fit properly within the mesh. Write down the **H, P and B values** of upper arms.

2 Export Motion data from Life Forms

In Life Forms, open **Exercise.lfa**. Choose **File menu > Export**. In the Export dialog box, select the following options:

- Frame range - **All**
- **Bones only** checkbox
- Click **OK**

3 Open the LWS file

In LightWave, open the LWS file exported in the previous step.

4 Replace the Null object with a Mesh

Replace the null root object of the skeleton with the Adjusted mesh object you saved in Part 1.

5 Set the correct Rest position

In LightWave, open the Object panel. Click **Object Skeleton**, select the joint and click **Rest Position**. Enter the **H, P, B values** you recorded in step 10.

6 Adjust the Bones strength

Refine the interaction between the bones and mesh by adjusting bones strength and rest lengths. Pinching can be controlled using Joint compensation.



User Guide



Installing the LWS plug-ins

Credo may make improvements to its plug-ins from time to time. Please check our website for the latest versions of the plug-ins you are using. The LightWave plug-in consists of 4 files. These files must be added to the correct folders to enable Life Forms to read and write LightWave scene files. The following lists the correct file folders for the LightWave plug-in files.

For Windows computers

File	Move to
LWS.in.dll	Life Forms folder /Plug-ins folder
LWS.out.dll	Life Forms folder /Plug-ins folder
ScnMan.dll	Life Forms folder
ObjMan.dll	Life Forms folder

For Macintosh computers:

File	Move to
LWS.in	Life Forms folder /Plug-ins folder
LWS.out	Life Forms folder /Plug-ins folder
ScnMan.lib	Life Forms folder
ObjMan.lib	Life Forms folder



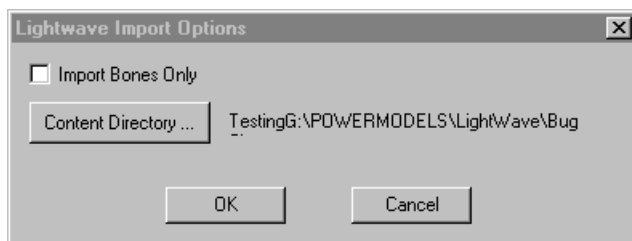
Import Options

When importing a LWS scene file you may choose to import just bones from the scene.

Please note that Life Forms cannot paste motion data to LightWave bones at the present time. You can however animate the bones by keyframing. We are making improvements that will make it possible to apply premade and motion capture motion data to LightWave bones.

Importing or Opening a LWS file

- 1 Choose **File menu > Open**.
- 2 In the File types drop-down menu, select **LightWave.LWS**.
- 3 Browse and select the LWS file.
- 4 The following dialog box appears:



- **Select Import Bones Only** checkbox when you have set up bones for animating a single-mesh model. The geometry of a single-mesh model (i.e. not segmented) is usually quite large and takes a long time to import. Since Life Forms does not deform meshes we do not need to import it. Hence, click **Import Bones Only**.
 - **Do not select Import Bones Only** checkbox when you want Life Forms to read in scene objects, segmented models and Puppet sections from the LWS file.
- 5 In the Import Options dialog box, click **Content Directory**.
 - 6 Do one of the following:
 - **WINDOWS:** In the **Specify Content directory dialog box**, browse and locate the folder that contains the object files for the scene. Click on one of the object (.lwo) file to select it. Click Open.
 - **MACINTOSH:** In the Specify Content directory dialog box, browse and locate the folder that contains all the object folders for the scene. Click Open.
 - 7 In the Import Options dialog box, click **OK**.



Note: The zero angle position of bones imported from LightWave 3D is such that the skeleton lies on the floor facing upwards. You can't change the zero angle position, but you can give the skeleton a default shape or position that will make it easier to work with. See [“Setting the Default Shape” on page 22](#).

Export Options

Life Forms gives you the following options when exporting motion as a LWS file:

- Export with Bones Only.
- Export with Geometry Only.
- Export Keyframes Only.
- Merge to existing LWS file.

Merging motion data

You can import a LWS file in Life Forms, animate the scene objects and models and insert the keyframe data into the original LWS file by using the Merge Option. The merge process preserves all the material, lighting and camera set up in the LWS file. It is highly recommended.

When you do a Merge, you are inserts the keyframe data from the Life Forms animation to corresponding hierarchies in the LightWave scene file and saves it as a new LightWave scene file. If Life Forms cannot find the identical bone or object hierarchy in the LightWave scene file you are merging to the export will fail.

Merge scenarios

There are two types of Merge scenarios:

- **Type I:** Merging to a LWS file originally created in LightWave 3D
- **Type II:** Merging to a LWS file previously exported from Life Forms.

What's the difference between these scenarios? How do I choose which Merge process to use?

Scenario for using Type II

After exporting a LightWave LWS file from Life Forms which contains both motion and geometry, you can merge motion data to this file without re-exporting the geometry. If this is what you want to do, then you should choose the second merge scenario: Merging to a LWS file exported from Life Forms.

Scenario for using Type I

If you have a model in a LightWave scene file, and you imported it into Life Forms for animation, you must merge the motion data to the original scene using Merge Type I. This process is outlined in Tutorial 1: Animating Custom Models.

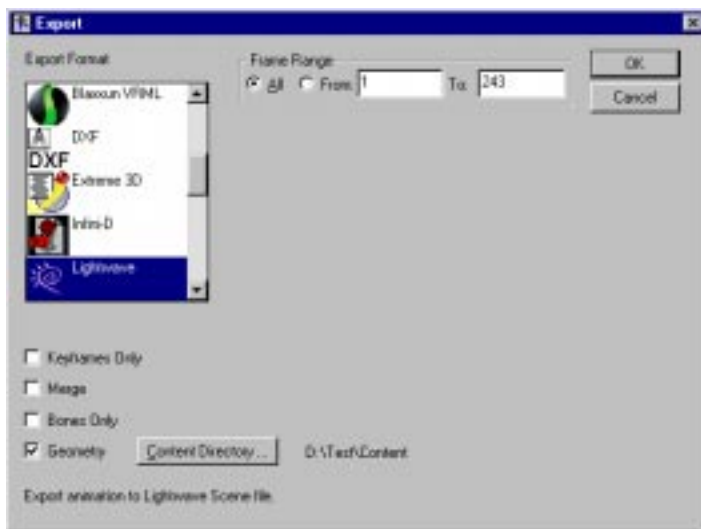
If you are unsure which Merge type to use, check the joint names of the model or skeleton in the Life Forms animation you are exporting. Do this by selecting a joint



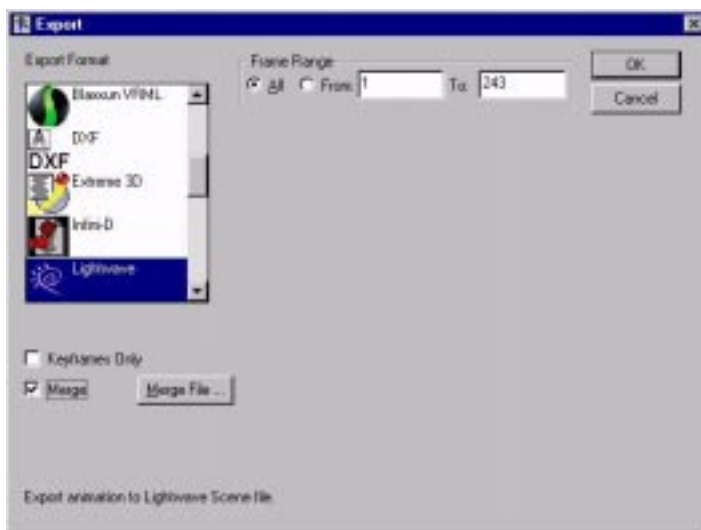
in the Figure editor window. The joint's name is displayed in the Joint Axis Indicator panel in the Figure editor. If the joint name has “.lwo” in it you should use Merge type I. If not choose Merge type II.

Type I: Merging to a LWS file created in LightWave

- 1 Click on any window of the animation you want to export. Then, choose **File menu > Export**.
- 2 In the Export dialog box, select **LightWave** from the **Export Format** list as shown.



- 3 Click **Merge File...** button.
- 4 Select the LWS file that you want to merge the motion data to.



- 5 Choose whether or not to export **Keyframes Only** as follows:



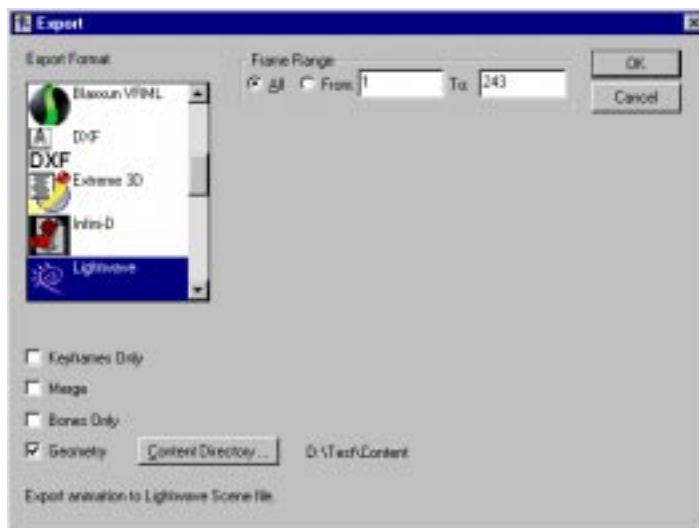
- Select **Keyframes Only** to export only the Keyframe data.
- Do not select **Keyframes Only** if you want to export all frames as keyframes.

Note : When you export keyframes only, the animation is easier to work with in **LightWave 3D**. However, the motion may not be exactly the same as in **Life Forms**.

- 6 Click **OK**.
- 7 Name and Save the **LWS** file.

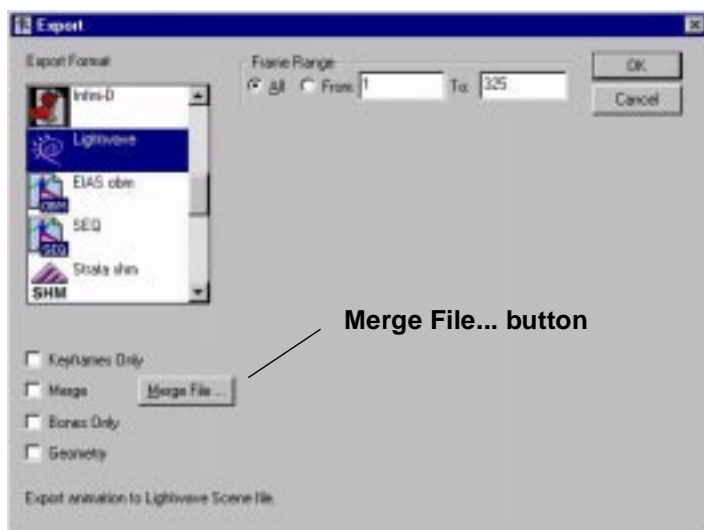
Type II: Merging to a **LWS** file created in **LightWave**

- 1 Click on any window of the animation you want to export. Then, choose **File menu > Export**.
- 2 In the **Export** dialog box, select **LightWave** from the **Export Format** list as shown.





- 3 Clear all the Export option checkboxes.



- 4 Then, click **Merge File... button**.
- 5 Select the LWS file that you want to merge the motion data to.
- 6 Choose whether or not to export **Keyframes Only** as follows:
 - Select **Keyframes Only** to export only the Keyframe data.
 - Do not select **Keyframes Only** if you want to export all frames as keyframes.

Note : When you export keyframes only, the animation is easier to work with in LightWave 3D. However, the motion may not be exactly the same as in Life Forms.
- 7 Click **OK**.
- 8 Name and Save the LWS file.

Exporting Bones to a LWS file

You can export the motion as a set of bones. This is useful for exporting motion capture skeletons as LightWave bones. In LightWave 3D, you can then load a mesh and attach bones to it.

- 1 In Life Forms, click on the animation's windows to make it select it.
- 2 Choose **File menu > Export**.
- 3 In the Export dialog box, select **LightWave** from the **Export Format** list.
- 4 Click the **Bones Only** checkbox.
- 5 Choose whether or not to export **Keyframes Only** — By default Life Forms exports all frames as keyframes. Exporting only Keyframes instead of all



frames makes the animation easier to manipulate in LightWave 3D. However, the animation may not be exactly the same as in Life Forms.

- 6 Click **OK**. Name and save the LWS file.

Exporting Geometry to a LWS file

You can export the model geometry and the motion data as a LightWave scene file. Each object in the Life Forms animation will be exported as a LWO object file.

- 1 In Life Forms, click on the animation's windows to make it select it.
- 2 Choose **File menu > Export**.
- 3 In the Export dialog box, select **LightWave** from the **Export Format** list.
- 4 Click the Geometry checkbox.

- 5 **Set the Content Directory.**

Click the Content Directory button. In the Select Content Directory dialog box, do one of the following:

- **WINDOWS:** In the **Specify Content directory dialog box**, browse and locate the folder that contains the Object folder and other resource folders for your LightWave projects. In order for Life Forms to recognize this folder as the Content directory, you must click on any file in the Content directory and click Open. Any file will do. Life Forms will not alter that the file in anyway. If you do not have a file in the Content directory, please put one there and try again.

Note: Life Forms cannot recognize a folder when it is empty. Allow Life Forms to “see” the folder by moving any file into it. It doesn't matter what the file is.

- **MACINTOSH:** In the Specify Content directory dialog box, browse and locate the folder that contains all the object folders for the scene. For example, if object files for the scene is stored in the **subdirectory of Humans folder**. In the Specify Content directory dialog box, select the a folder and click “Select Content directory”. Click Open.
- 6 Choose whether or not to export **Keyframes Only** — By default Life Forms exports every frame a keyframe. Exporting only Keyframes instead of all frames makes the animation easier to manipulate in LightWave 3D.
 - 7 Click **OK**. Name and Save the file.



Life Forms exports a LWS file to the Content directory and creates an Objects folder there. It exports all LWO files for this scene file to a subfolder of the Objects folder.

Reducing the number of keyframes

Keyframe-dense data can be difficult to manipulate. By reducing the number of keyframes you will make the scene file smaller. You also make the animation easier to modify in LightWave. To reduce the number of keyframes exported, you should:

- Use the **Thin Keyframes** command.
- Choose export **Keyframes Only** when exporting LWS files from Life Forms. If you do not check Keyframes Only, Life Forms creates a keyframe for every frame of the animation when it writes the LWS file.

To thin a motion captured animation

- 1 Select the range frames you want to thin.**

In the Timeline window in Life Forms, hold down the SHIFT key and click on the first frame in the range. Scroll to the last frame in the range and click on it. The range of frames you selected should now be enclosed.

- 2 Open the Thin Keyframes dialog box**

Choose **Edit menu > Thin Keyframes**. You can thin some motions more than others. For a simple motion sequence you may choose to keep as few as 1 keyframe every 5 frames. You'll have to experiment to determine the ideal ratio.

- 3 Experiment to determine the ideal ratio**

Click **Play** in the Control Panel and examine the quality of the animation. Click **Edit menu > Undo** if you are not satisfied with the result.

Setting the Default Shape

It is helpful to be able to reset the figure to a predefined neutral shape. In Life Forms this shape is referred to as the figure's default position. The default position is an arbitrary pose or shape that you determine. When you set the figure's default position you are not modifying the model's geometry or zero angle position.

To set the model's default shape

- 1** In Life Forms, double-click on the figure in the Stage window to open the Figure editor window.
- 2** Position the joints to the desired default position in the Figure editor window.



- 3 Select the entire figure by double-clicking it.
- 4 Choose **Edit menu > Set Default Shape**.

Considerations

- 1 Models must be polygonal meshes
- 2 Models must have only one null root object when imported into Life Forms.
- 3 Only the root of a hierarchy may contain translations, when importing LWS file with animation.
- 4 Importing Scene files with Motion data into Life Forms is generally NOT recommended.
- 5 Merging animation to Scene files that contain motion data is NOT recommended.
- 6 Life Forms does not read LightWave's IK settings from the Scene file.

Feedback

If you have suggestions or corrections to make email them to info@credo-interactive.com.