SOFTIMAGE®|XSI™

Version 1.0

Using SOFTIMAGE®|3D with SOFTIMAGE|XSI

Using SOFTIMAGE|3D with SOFTIMAGE|XSI was written by Maggie Kathwaroon, edited by John Woolfrey, and formatted by Luc Langevin.

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Contents

Roadmap

About This Guide

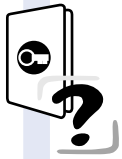
Using SOFTIMAGE®|3D with SOFTIMAGE®|XSI™ describes the SOFTIMAGE|3D data you can import into XSI.

- *Chapter 1: Fundamentals of Importing*—introduces you to the ways you can import data into XSI and provides an overview to the **Import from SI|3D Scene/Model** command.
- *Chapter 2: Preparing for Import into XSI*—tells you about some of the major differences between SOFTIMAGE|3D and XSI and helps you choose what to import for re-use in XSI.
- *Chapter 3: Importing a SOFTIMAGE|3D Scene*—shows you a typical scene-file import and uncovers the hiding places of some of your scene elements.
- *Chapter 4: Conversion Table*—summarizes what XSI currently imports when you choose the **Import from SI|3D Scene/Model** command.

For the sake of brevity and clarity, from here on SOFTIMAGE|XSI will be referred to as XSI.

Where to Find Information

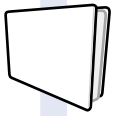
The XSI package includes a comprehensive set of learning materials. Use this Roadmap to find the information you need to get up and running quickly and effectively.



Start with the ***Setup Guide*** to install and license all components.
Setup Online Help is also available as you go through the process.
We recommend you choose Custom install so that you can perform the tutorials.

Refer to ***Release Notes***, an online listing of known problems and limitations for this version. Also includes workarounds and supplemental information. Access through the web at **www.softimage.com > support**.

Follow the ***Guided Tour*** (available from the Online Library CD).
This is a set of videoclips that provide overviews of features and tools.

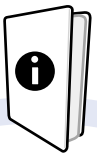


Work through ***Tutorials*** to learn the features in the context of basic productions.
This is a full-color set of lessons showing you step-by-step how to perform typical tasks.
You can install the scenes from the Software CD. (Choose Custom install when installing XSI). Then choose the **Content** option to install the Tutorials project.

The Softimage Discussion Group

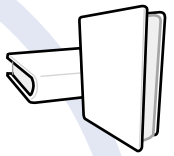
You can join the worldwide network of Softimage users exchanging ideas and techniques by e-mail. To find out more, e-mail **majordomo@softimage.com.** Leave the Subject line empty and type the word "help" in the body of your mail message.

The ***Global Index & Glossary*** is an index to all user guides and *Tutorials*; a glossary of terms; and a list of books, videos, and web sites related to the 3D animation industry.



The **user guides** contain conceptual information and procedures on how to use specific tools. These comprise**:**

- Fundamentals
- Animating
- Modeling & Deformations
- Shaders, Lights & Cameras
- Rendering



The Online Library CD
The Online Library contains the Guided Tour and all the XSI and some mental ray documentation in electronic form in both PDF and HTML formats. (See next page for how to use.)

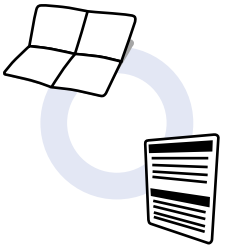
Online Help
On-screen reference information on interface elements, commands, and parameters. There are two ways to access it:

- Click the **?** button in any property editor or tool view.
- Choose **Help > Contents and Index** from the main-menu bar.

Using SOFTIMAGE|3D with SOFTIMAGE|XSI provides tips and techniques about using the two software packages. (Available from the Online Library CD and **softimage.com > support** only)

HTML Scripting Reference
An HTML-based reference help on the syntax for all scripting commands and arguments. It appears in your default HTML browser. Click on the icon (above) to open the script editor, then click **Help > Scripting Reference** or press **F1**.

Pin up the ***XSI Interface Layout*** and the ***Quick Reference Card*** to help you become familiar with the interface and keyboard shortcuts.



Using the Online Library

The Online Library contains the *Guided Tour* and all the XSI and some mental ray documentation in electronic form in both PDF and HTML formats.

For full-text searching and printing, we recommend PDF format. If you do not have Acrobat Reader installed, you can install it it free of charge from the Online Library CD: Follow the instructions in the readme file on the CD.

To access the Online Library

1. Insert the Online Library CD in your disk drive.
2. Open one of the following documents:
   - **mainmenu.pdf** (PDF format)
   - **mainmenu.htm** (HTML format)

Document Conventions

The following are ways that information is displayed in the XSI documentation.

Typography Conventions

Type style	Usage
Bold	Menu commands, dialog-box and property-editor options, and file and directory names.
Italics	Definitions and emphasized words.
`Courier`	Text that you must type exactly as it appears. For example, if you are asked to type `mkdir style`, you would type these characters and the spacing between words exactly as they are appear in this book.
>	The arrow (>) indicates menu commands (and subcommands) in the order that you choose them: *Menu name* > *Command name*. For example, when you see **File** > **Open**, it means to open the **File** menu and then choose the **Open** command.

Visual Identifiers

These icons help identify certain types of information:

Notes are used for information that is an aside to the text. Notes are reminders or contain important information.

Tips are useful tidbits of information, workarounds, and shortcuts that you might find helpful in a particular situation.

The 3D icon indicates information about differences in workflow or concepts between SOFTIMAGE|3D and XSI. You will find these very helpful when working with the two products.

Warnings are used when you can lose or damage information, such as deleting data or not being able to easily undo an action. Warnings always appear *before* you are about to do such a task!

Keyboard and Mouse Conventions

XSI uses a three-button mouse for most operations. These are referred to as the *left*, *middle*, and *right* mouse buttons. In many cases, you will use the different buttons to perform different operations; always use the left mouse button unless otherwise stated.

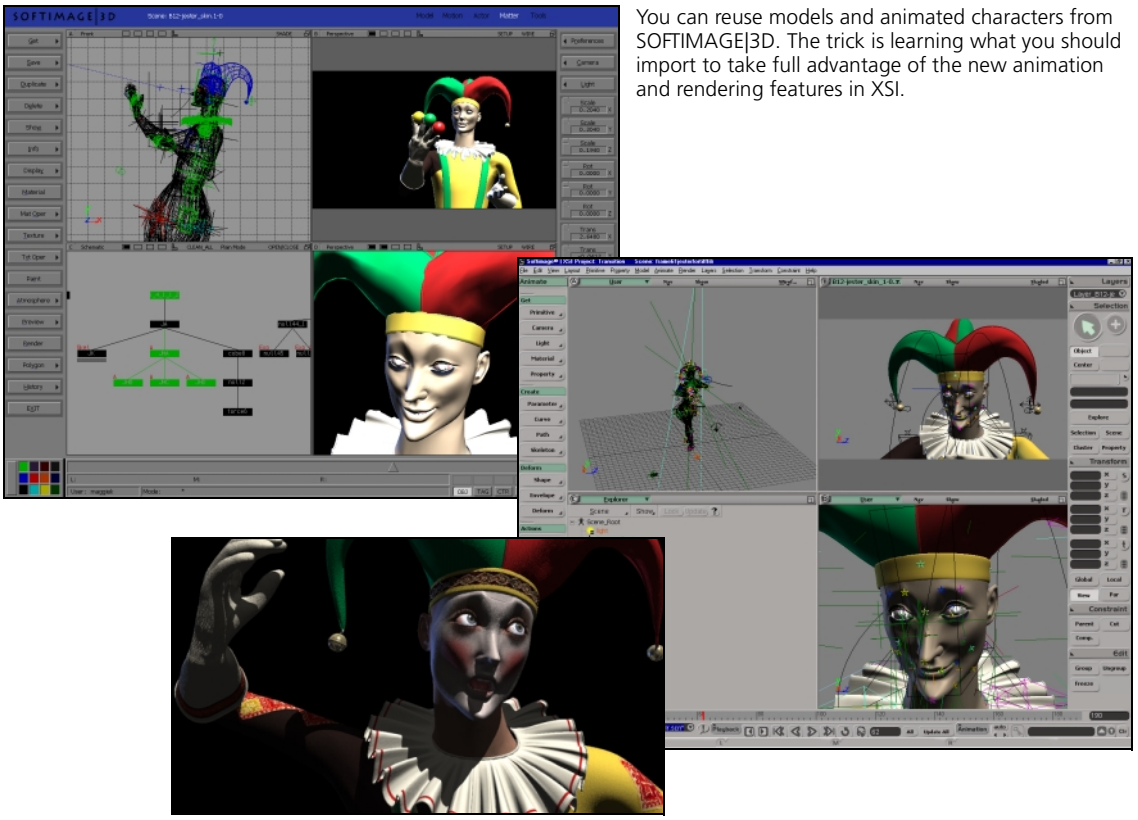
The two-button mouse is not supported in XSI.

This table shows the terms relating to the mouse and keyboard.

When this term is used...	**...it means this**
Click	Quickly press and release the left mouse button. Always use the left mouse button unless otherwise stated.
Middle-click	Quickly press and release the middle mouse button of a three-button mouse.
Right-click	Quickly press and release the right mouse button.
Double-click	Quickly click the left mouse button twice.
Shift+click, Ctrl+click, Alt+click	Hold down the Shift, Ctrl, or Alt key as you click a mouse button.
Drag	Hold down the left mouse button as you move the mouse.
Alt+*key,* Ctrl+*key,* Shift+*key*	Hold down the first key as you press the second key. For example, "Press Alt+Enter" means to hold down the Alt key as you press the Enter key.

Chapter 1 Fundamentals of Importing

This chapter introduces you to the ways you can import data into XSI and provides an overview to the **Import from SI3D Scene/Model** command.



You can reuse models and animated characters from SOFTIMAGE|3D. The trick is learning what you should import to take full advantage of the new animation and rendering features in XSI.

XSI provides a robust scene and model importer that preserves much of what you have already created in SOFTIMAGE|3D. This guide is designed to help you make informed decisions about what you can and should import from SOFTIMAGE|3D for re-use in XSI.

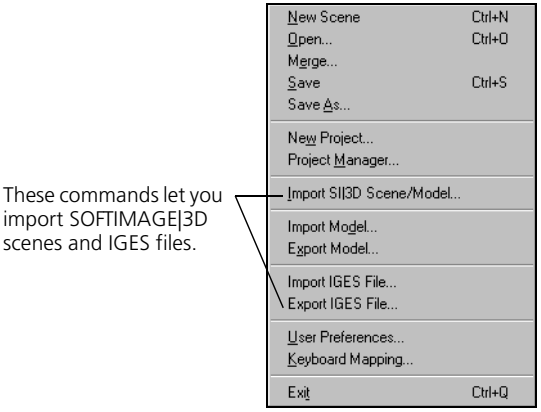
About the Scenes Used in This Guide

The scenes used to illustrate the concepts described in this guide are from *Tightrope*, a five-minute, all CG–animated short film, written and directed by Daniel Robichaud of Digital Domain. Two characters, The Jester and The Suit, encounter each other on a tightrope. One playful, the other not, their encounter has a lasting impact on them both. For more information and stunning stills from this short, visit www.d2.com/tightrope/main.html.

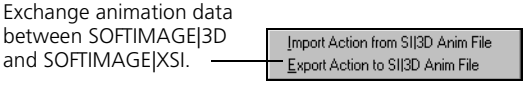
Exchanging Data: An Overview

Version 1.0 of XSI provides three pathways to exchange information between it and SOFTIMAGE|3D.

- **File > Import SI3D Scene/Model** reads a ***.dsc** or ***.hrc** file and imports it into XSI.
- **File > Import/Export IGES File** reads an ***.iges** or ***.igs** file and imports it into XSI.



- **Sources > Import/Export Action from/to SI3D Anim File** in the Animate toolbar reads ***.ani** and ***.key** files and applies them to hierarchies already imported or created in XSI.



This document deals with the **Import SI3D Scene/Model** command. Refer to the XSI user guides for information about the other options mentioned above.

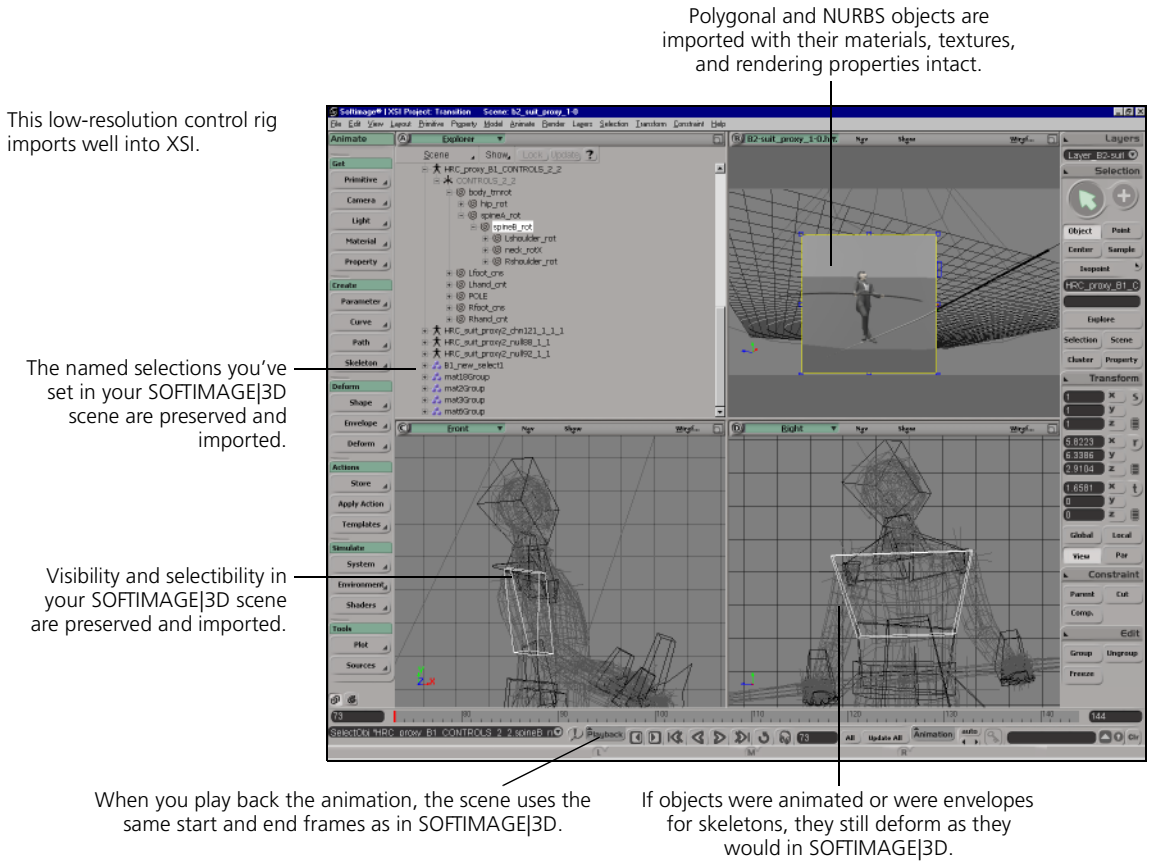
Before You Begin

Before importing scenes and objects into XSI, you should become familiar with this new software. Try the lessons in the *Tutorials* book. Consult the user guides—they often give you additional information about how SOFTIMAGE|3D differs from XSI.

Look for this symbol in the XSI user guides. They accompany information relevant to SOFTIMAGE|3D users.

What Gets Imported: An Overview

When you import a scene from SOFTIMAGE|3D, most of its contents are imported. When the importer encounters an object that is not supported in XSI, it will often convert it to one that is. For example, you cannot create Patch objects in XSI, so the importer converts these to NURBS objects, which are supported.



Where to Go from Here

Chapter 2: Preparing for Import into XSI on page 19 helps you select the elements most appropriate for re-use in XSI.

Chapter 3: Importing a SOFTIMAGE|3D Scene on page 31 shows you a typical scene file import and uncovers the hiding places of some of your scene elements.

Chapter 4: Conversion Table on page 41 provides details about what is imported and what isn't.

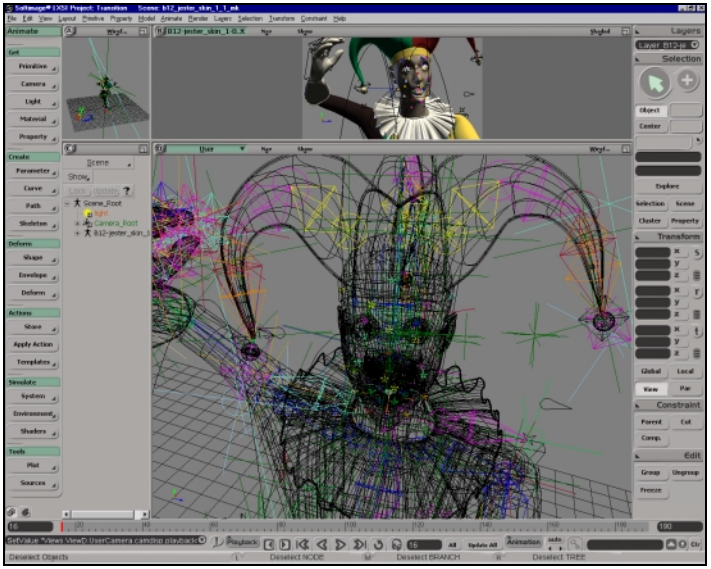
Chapter 2 Preparing for Import into XSI

This chapter tells you about some of the major differences between SOFTIMAGE|3D and XSI and helps you choose what to import for re-use in XSI.

The **File** > **Import SI3D Scene/Model** command imports almost everything contained in your SOFTIMAGE|3D scene. However, depending on what you want to do, you may find it better to import only the elements you need or only the elements that will allow you to build your scene "the XSI way." For example, you cannot connect imported material properties to other nodes in XSI's render tree. If you want to shade and render your scene in XSI, importing materials and textures may not be your best choice.

The following sections describe the major differences between SOFTIMAGE|3D and XSI as well as the pros and cons of importing various elements from SOFTIMAGE|3D.

Character Rigs



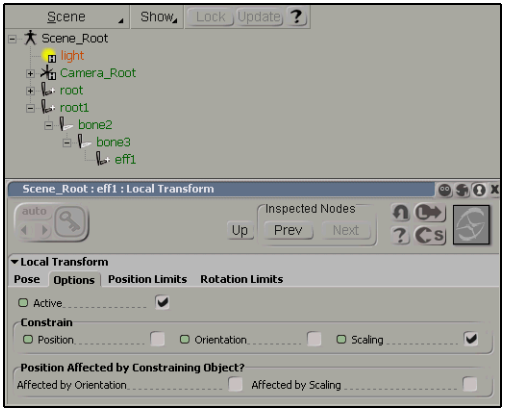
You can import a NURBS or polygonal character and continue to animate it as you would in SOFTIMAGE|3D. However, articulated chains imported from a SOFTIMAGE|3D scene retain their original hierarchical structure, which means that an effector's orientation and position will be global, not local.

XSI offers a better solution for character rigging: When you create chains in XSI, the effector is the child of the chain root. This allows you to create local animation on the effector that can be translated with the root. In other words, you can drag the entire hierarchy without the effector wanting to "stick" to the scene's global coordinates as they do in SOFTIMAGE|3D. You no longer have to constrain a null to the effector and parent it to the chain root.

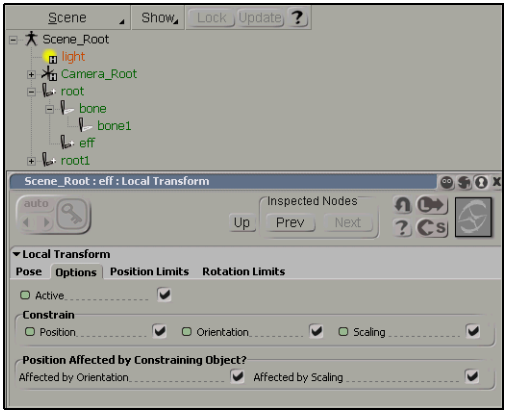
You can convert SOFTIMAGE|3D skeletons to XSI ones by reparenting the effectors and changing the effector's properties (see below). However, if the skeleton is animated, its animation is global and you'll need to copy all the fcurves to local coordinates (you can do this from the Animation Editor), which in most cases, may be a daunting task.

If you want to rig your character completely in XSI, you can simply import the model in its default pose.

For more information about animating with skeletons, refer to the XSI *Animating* guide.



What an imported SOFTIMAGE|3D articulated chain looks like: The effector is parented to the last bone in the chain and only inherits scaling from its immediate parent when it's transformed locally.



What an articulated chain looks like in XSI:
The effector is parented to the first bone in the chain, and it inherits position, orientation, and scaling from its immediate parent when it's transformed locally.

Preserving Envelope Weights on Patch Objects

If you import your SOFTIMAGE|3D character but its envelope is Patch, the importer will convert the object to NURBS and reset the envelope weighting, which will delete any weight modification you've done to the envelope. You can, however, avoid this by doing the conversion yourself in SOFTIMAGE|3D and importing the converted object.

To preserve envelope weights on Patch objects

1. Save the envelope weights using the **Skin** > **weightCopy** command in the Actor module.
2. Convert the object to a NURBS or polygonal object using the **Effect** > **Convert** command in the Model module.
3. Apply the envelope weights to the converted object using the **Skin** > **weightPaste** command in the Actor module.

For more information about these commands, refer to the SOFTIMAGE|3D *Reference Guide*.

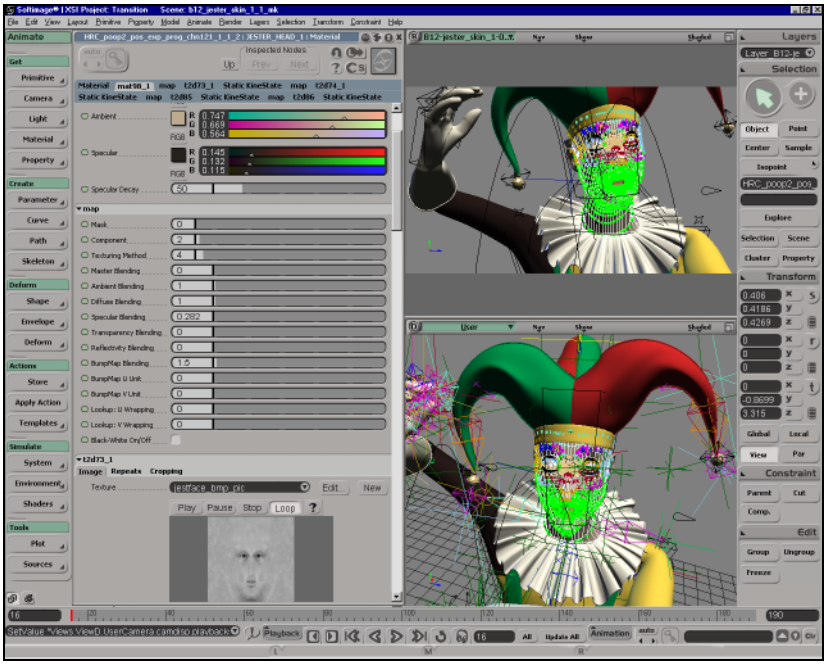
Materials, Textures & Shaders

Any material or texture attribute you've applied to a model will import into the Material property page, which you can access from the explorer.

Materials in XSI don't have quite the same function as they do in SOFTIMAGE|3D. What were called *materials* are now more accurately named *surface shaders*.

The Material node in the explorer acts like a container for all of the possible shaders that can be applied to an object.

Notice that the texture imports as a material property.



You can modify the imported parameters. You cannot, however, build a render tree from these parameters; that is, you cannot add additional textures or nodes to augment the effect. If you want to do this, delete the imported material and replace it with one of the new XSI surface shaders and build from there as described in *Applying and Editing Shaders* in Chapter 2 of the XSI *Shaders, Lights & Cameras* guide.

SOFTIMAGE|3D mental ray® Shaders

The importer supports all of the SOFTIMAGE|3D mental ray shaders. However, like imported material parameters, you cannot use the render tree to augment the effect; you can only modify the imported parameters.

Shading and Rendering Plug-ins

Objects modified by Softimage plug-ins (such as RenderMap and SetVertexColour) will import.

Any object with a "persistent" effect (anything that had parameters that you could modify using **Info** > **Custom Effect**) will import into XSI, but the parameters will not. You will see the object, but the plug-in is no longer available to modify the parameters. There are two exceptions to this: ToonAssistant and FXDirector. Because these effects are based on mental ray shaders, if you freeze the effects before importing them, you will be able to continue modifying the shader parameters in XSI. If you do not freeze the effects, the shader parameters are not imported into XSI.

Note that freezing the effect will delete any animation you've applied using the plug-in.

Third-Party Plug-ins

Third-party persistent effects will not import into XSI.

Third-Party Plug-ins Based on mental ray Shaders

The importer will not import shader parameters from third-party plug-ins based on mental ray shaders.

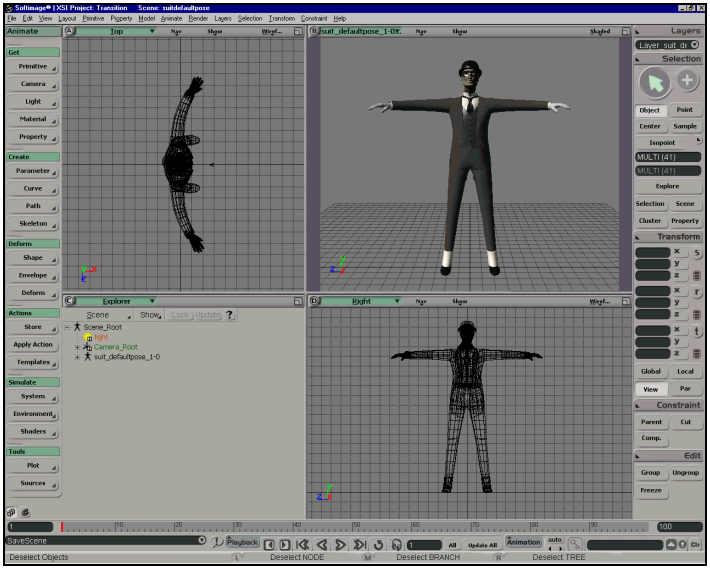
Everything's a Shader!

XSI uses mental ray version 2.1 rendering software for all shading and rendering attributes. Some SOFTIMAGE|3D attributes will be converted to mental ray 2.1 shader parameters (some camera parameters, for example). There may be instances when animated parameters do not import properly. This may be caused by there being no one-to-one relationship between a SOFTIMAGE|3D attribute and a mental ray 2.1 parameter. Non-animated properties, however, should import correctly.

UV Texture Manipulation

XSI version 1.0 does not offer the same level of polygon UV texture manipulation that SOFTIMAGE|3D does (via its Paint tool). You may want to complete UV texture manipulation in SOFTIMAGE|3D before importing the object into XSI.

Models



Importing NURBS or polygonal models is the simplest starting point and will allow you to take full advantage of XSI's IK, surface shading, and rendering capabilities.

Completing Polygonal Models in SOFTIMAGE|XSI

XSI version 1.0 does not offer the same number of polygonal modeling tools as SOFTIMAGE|3D does. You may want to complete your polygonal model in SOFTIMAGE|3D before importing into XSI.

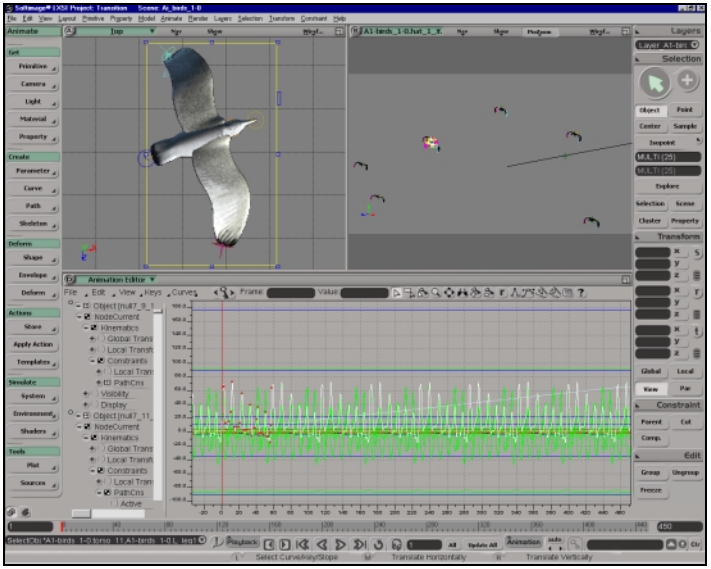
Modeling Plug-ins

Any object with a "persistent" effect (anything that had parameters that you could modify using **Info > Custom Effect**) will import into XSI, but the parameters will not. You will see the object, but the plug-in is no longer available to modify the parameters.

Third-Party Plug-ins

Third-party persistent effects will not import into XSI.

Animation



You can import most types of animation, but there are some things that either import oddly or don't import at all. Animated branch and node deformations (by curve or surface) import into XSI but do not look the same, although you can adjust them once they're imported.

Although wave, quickstretch, particle, collisions, simulations, and dynamics are not imported, you can create all these effects (or similar effects) in XSI.

Expressions and Constraints

SOFTIMAGE|3D expressions and constraints import into XSI. However, the order in which they are evaluated is different. For example, in SOFTIMAGE|3D you can apply a direction constraint to an object and also assign an expression to the object that controls its Y rotation. In XSI, you can do this as well, but only the constraint will work.

When you import into XSI an object that uses both a constraint and an expression, messages will appear in the command log suggesting how you can replace the constraints with expressions so that the object will behave as it did in SOFTIMAGE|3D. For example:

```
WARNING : "3093 - The following expression(s) could be created to compensate for a constraint:
WARNING : "3055 - PosConst_ExpY_1-0.cube1.kine.global.posx = PosConst_ExpY_1-0.cone1.kine.global.posx
WARNING : "3055 - PosConst_ExpY_1-0.cube1.kine.global.posz = PosConst_ExpY_1-0.cone1.kine.global.posz
WARNING : "3094 - CnsPos on cube1 could be replaced with the previous expression(s)
```

In the case of multiple constraints, the suggestion may not be appropriate. See *Before You Import a SOFTIMAGE|3D Scene* on page 33 for more information about the command log.

B-Spline Curves and Path Animation

Path animations on closed B-Spline curves may not import correctly. When it is converted to a NURBS curve, the first control point is not at the same position as the original curve. Convert the curve to NURBS in SOFTIMAGE|3D first—you'll have the same problem, but you can adjust it before importing.

Animating Plug-ins

Any object with a "persistent" effect (anything that had parameters that you could modify using **Info** > **Custom Effect**) will import into XSI, but the parameters will not. You will see the object, but the plug-in is no longer available to modify the parameters.

Third-Party Plug-ins

Third-party persistent effects will not import into XSI.

Chapter 3 Importing a SOFTIMAGE|3D Scene

This chapter shows you a typical scene-file import and points out the hiding places of some of your scene elements.

Before You Import a SOFTIMAGE|3D Scene

Before importing a scene or model into XSI, you may want to enable command logging. When you import a SOFTIMAGE|3D scene into XSI, messages appear in the command box in the lower-left side of the interface. The messages tell you about conversions that were made to certain objects.

You can also store these messages in a command log. This will be particularly useful when you're importing large and complex scenes. For information about storing the messages in a command log, see *The Command Log* in Chapter 7 of the XSI *Fundamentals* guide.

Importing the Scene

When you import a scene into XSI, it must be in ***.dsc** format, or ***.hrc** format.

Make sure the scene is in a SOFTIMAGE|3D database before importing it.

To import a scene created in SOFTIMAGE|3D

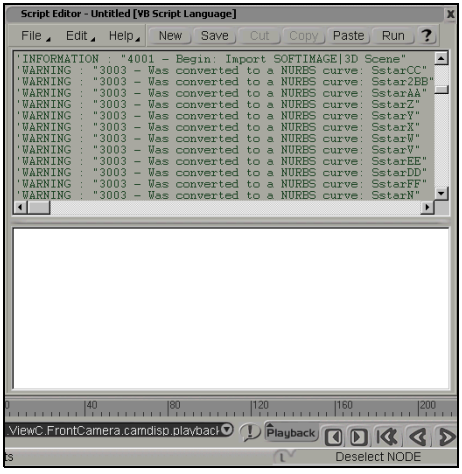
1. From the main-menu bar, choose **File** > **Import SI3D Scene/Model** to display a browser.
2. Navigate to the folder that contains the scene you want to import.

If the SOFTIMAGE|3D DatabaseDir. rsrc file is installed on your computer, use the **Path** button to display your SOFTIMAGE|3D databases. You can also drag and drop from the Windows NT Explorer.

3. Select the scene file to be imported. Its name appears in the **File name** text box.
   - To select a SOFTIMAGE|3D scene file (.dsc), make sure that the **Files Types** text box is set to Scene Files (*.dsc).
   - To select SOFTIMAGE|3D model file (.hrc), make sure that the **Files Types** text box is set to Model Files (*.hrc).
4. Click **Open**. The imported scene's contents are added to the current scene.

Watch the command box at the bottom of the interface. When the import is complete, you can display all the messages in the Script Editor. Click the exclamation point (!) icon to open the editor.

The Script Editor displays all the messages that occurred while the SOFTIMAGE|3D scene was being imported.



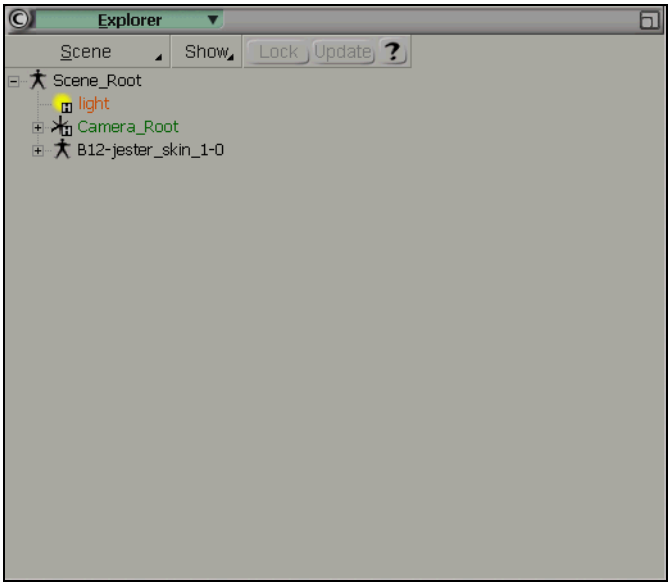
For more information about the Script Editor, see *Chapter 7: Commands & Scripts* in the XSI *Fundamentals* guide.

A First Look

This section shows you what happens when a SOFTIMAGE|3D scene is loaded into XSI.

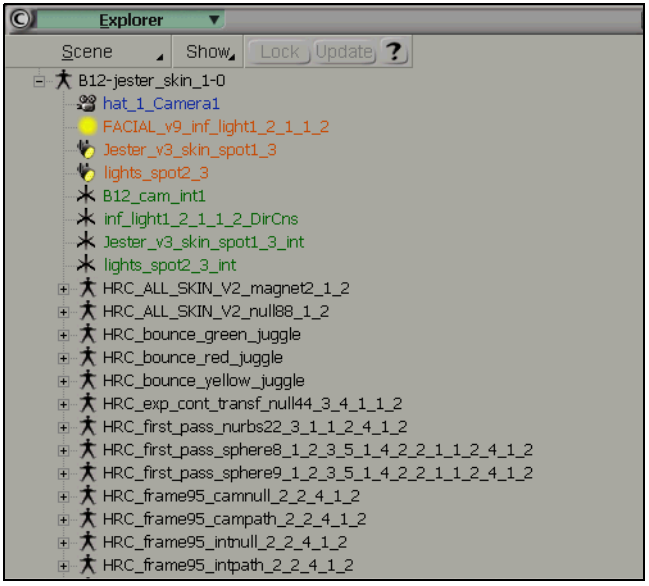
When you import your SOFTIMAGE|3D scene, the scene is placed in a new model, which you can see in the explorer.

You can select everything under this model and scale its contents relative the scene contents. If you want everything at the Scene level, drag and drop them on the Scene node.

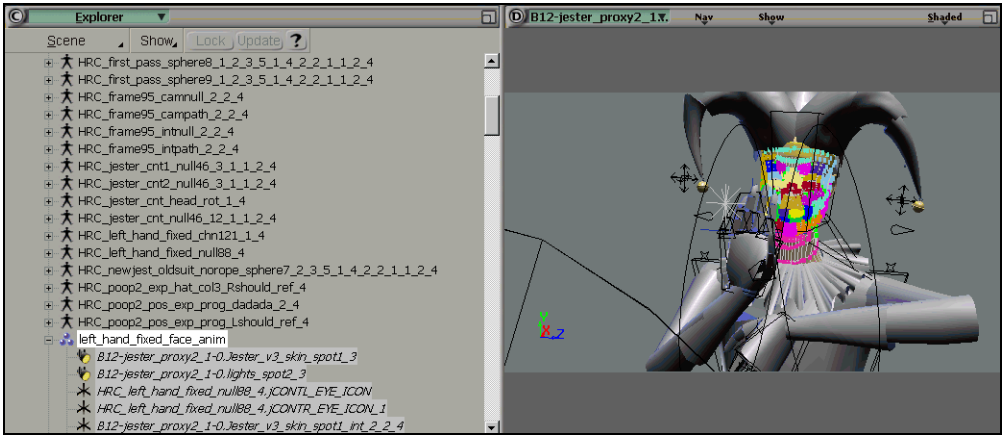


For more information about the concept of models in XSI, refer to the XSI *Fundamentals* guide.

When you expand the model node, you see the scene objects. Use the options in the **Show** menu to display even more information in the explorer.

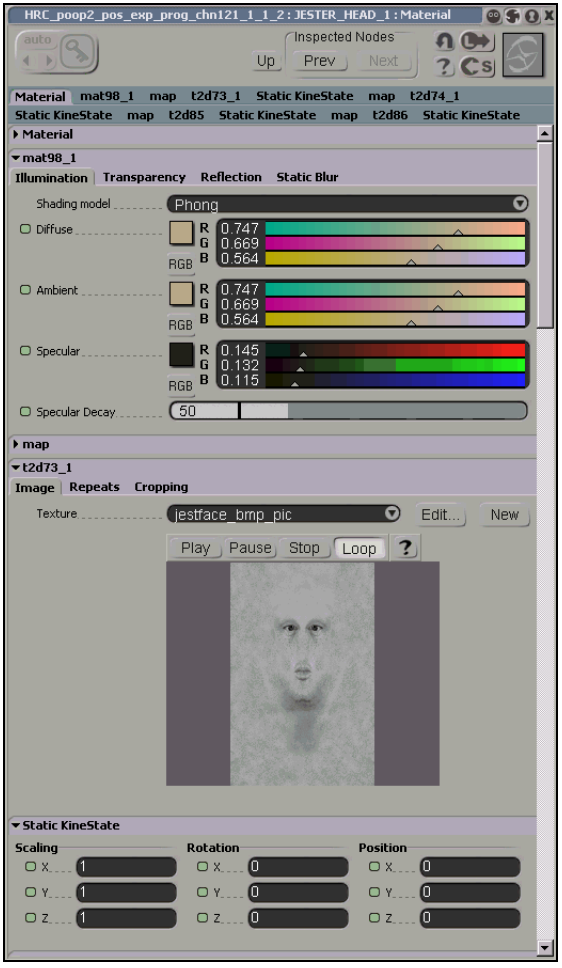


Many of the attributes that you applied to your objects, like selectibility, visibility, and named selections, are imported as well.



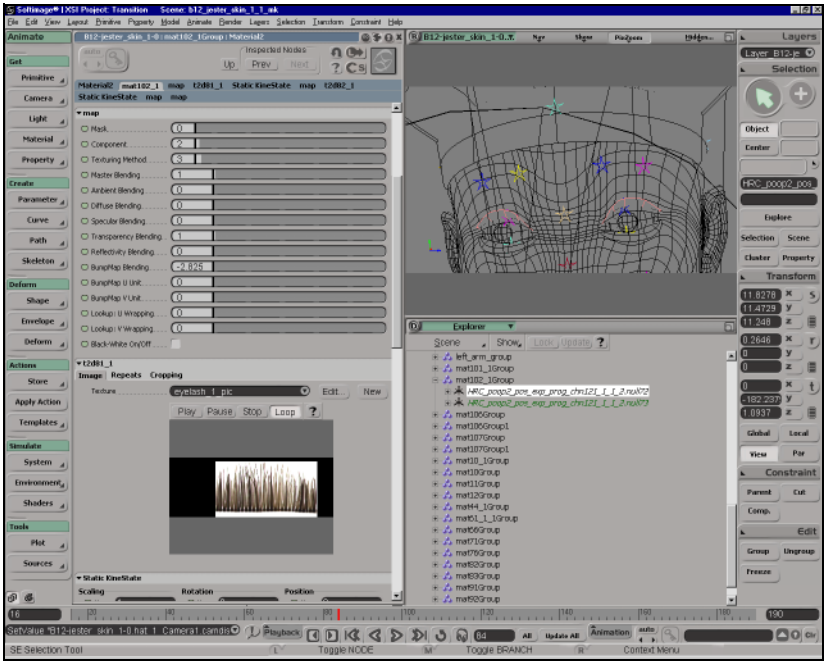
The previous example shows how a SOFTIMAGE|3D named selection is imported and displayed in the explorer. Named selections appear as group nodes in the explorer. Click on them to select the objects assigned to the selection.

Materials only appear if you choose to show them in the explorer—choose **Show** > **Materials** from the explorer. Textures appear only in the material's property page.


HRC_poop2_pos_exp_prog_chn121_1_1_2 : JESTER_HEAD_1 : Material
auto
Inspected Nodes
Up
Prev
Next
Material mat98_1 map t2d73_1 Static KineState map t2d74_1
Static KineState map t2d85 Static KineState map t2d86 Static KineState
Material
mat98_1
Illumination Transparency Reflection Static Blur
Shading model
Phong
Diffuse
R 0.747
G 0.669
B 0.564
RGB
Ambient
R 0.747
G 0.669
B 0.564
RGB
Specular
R 0.145
G 0.132
B 0.115
RGB
Specular Decay
50
map
t2d73_1
Image Repeats Cropping
Texture
jestface_bmp_pic
Edit...
New
Play Pause Stop Loop
Static KineState
Scaling
Rotation
Position
X 1
Y 1
Z 1
X 0
Y 0
Z 0
X 0
Y 0
Z 0

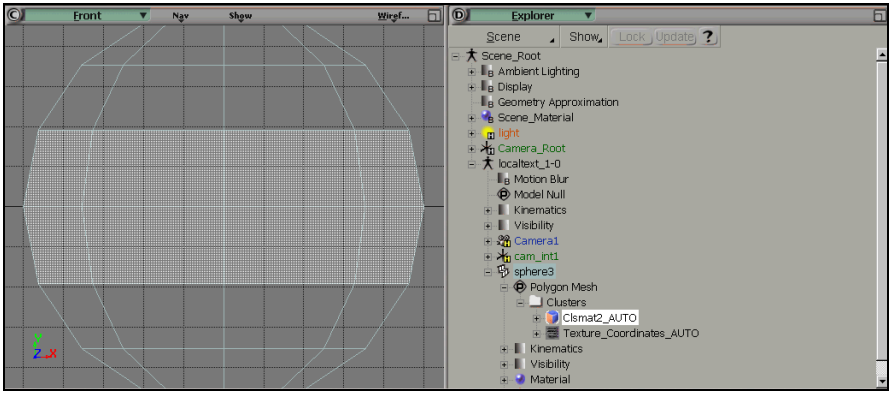
Shared materials appear as group nodes in the explorer. Click the node to see what objects share the material.

In an explorer choose **Show > Materials**, then double-click the group's material node to display its property page. In this case, the shared materials and textures for The Jester's eyelashes appear.



Local material and textures appear under the object's Cluster node.

Choose **Show > All Nodes**, then choose **Polygon Mesh > Clusters.**



Shaders

The importer supports all the SOFTIMAGE|3D shaders.

This table describes where to find the imported SOFTIMAGE|3D shader parameters:

3D shader type	How to find in XSI
Camera	Display the camera rendering properties.
Flares	Display the light properties.
Materials	Display material properties.
Output	Display the pass node.
Texture	Display material properties.
Volume	Display light properties.

Fog, Depth-fading & Ambience

Fog and depth-fading parameters are stored in the soft_fog shader. To see this shader, display **Passes** in the explorer, then choose to show **Local Properties** and **All Nodes**.

Ambience is converted to ambient lighting. This node is available at the **Scene** level in the explorer.

Improving Playback

If you have set your frame step to 0 in your SOFTIMAGE|3D scene, the importer does not set the equivalent playback setting in XSI. To improve playback in your imported scene, choose the **Playback** menu at the bottom of the screen (near the playback controls) and choose **Real-Time Playback**. Refer to the XSI *Animating* guide for more information about improving playback quality in XSI.

If Your Scene Is Too Bright

There is a default light in the XSI default scene. When you import your SOFTIMAGE|3D scene, the default light is not replaced. If your imported scene seems overly bright, delete the default light.

If Your Textures Appear to Be Flipped

Texture may appear flipped in the Textured view. When you draw a render region, the texture will appear correctly.

Chapter 4 Conversion Table

SI3D Scene/Model Importer

Here is a summary of what XSI currently imports when you choose the **Import from SI3D Scene/Model** command.

Models

Element	Imported?	Notes and exceptions	Workarounds
Polygon Meshes	Yes	If the polygonal object has holes, the importer triangulates the polygon mesh. May lose surface approximation attributes.	
NURBS (Surfaces and Curves)	Yes		
Patches	Yes	The object is converted to a NURBS surface. If the object was an envelope, the envelope weights are deleted. Clusters are also deleted.	See *Preserving Envelope Weights on Patch Objects* on page 23.
Linear, Bézier, Cardinal, and B-Spline Curves	Yes	The object is converted to a NURBS curve. Clusters are deleted.	
Text/Faces	Yes	The object is converted to polygon mesh.	In some cases, the object may import as a null. If this is the case, convert the object to polygon or NURBS in SOFTIMAGE|3D first.
Meta-Clay	Yes	The objects is converted to polygon mesh. Note that rigid envelopes do not import.	
Instances	Yes	Instances are expanded. Expressions and constraints are not copied to expanded instances.	If the imported instances display undesirable results in XSI, expand the instances in SOFTIMAGE|3D first and then re-import.
Relational Models	Yes	Relational models are imported, but the modeling relation is not preserved.	
Global Envelopes	Yes	If the envelope is a Patch object, the envelope weights are not imported.	See *Preserving Envelope Weights on Patch Objects* on page 23.
Local Envelope	Yes	If the envelope is a Patch object, the envelope weights are not imported. If you have applied deformation parameters or curves, these do not import.	See *Preserving Envelope Weights on Patch Objects* on page 23.
Automatic Envelope	Yes	If the envelope is a Patch object, the envelope weights are not imported.	See *Preserving Envelope Weights on Patch Objects* on page 23.
Rigid Envelopes	No		

Element	Imported?	Notes and exceptions	Workarounds
Grouped Skeletons	Yes	Objects grouped as a skeleton only import if they are assigned to an envelope.	If you import a scene which contains a null used as a skeleton and a local texture is applied, if converted from Patch, the textures appear to swim on the envelope. You may be able to resolve this problem by converting the object to polygon or NURBS in SOFTIMAGE|3D first.
Envelope Weights	Yes	If the envelope is a Patch object, the envelope weights are not imported.	See *Preserving Envelope Weights on Patch Objects* on page 23.
Bounding Volumes	Yes	Bounding volumes are imported as implicit primitives. Note that you cannot deform implicit geometry in XSI by manipulating its points.	
Shared Models	Yes		
Wireframe Colors	No		Note, however, that joint and vertex assignments colors are imported.

Materials, Textures & Rendering

Element	Imported?	Notes and exceptions	Workarounds
Materials	Yes	Local materials appear under the object's node > Polygon Mesh > Clusters. Shared materials appear under group nodes. If materials are shared, applied expressions may not be imported. Some animated properties may not import properly. This is due to the conversion that occurs when some SOFTIMAGE|3D attributes are converted to mental ray 2.1 parameters—there may not be a one-to-one correlation between all parameters.	
2D Textures	Yes	Local textures appear in the Material node found under the object's node > Polygon Mesh > Clusters > Polygons. If you have animated the textures, scaling, rotation, or transformation, its animation is not imported. Some animated properties may not import properly. This is due to the conversion that occurs when some SOFTIMAGE|3D attributes are converted to mental ray 2.1 parameters—there may not be a one-to-one correlation between all parameters.	

Element	Imported?	Notes and exceptions	Workarounds
3D Textures	Yes	Some animated properties may not import properly. This is due to the conversion that occurs when some SOFTIMAGE|3D attributes are converted to mental ray 2.1 parameters—there may not be a one-to-one correlation between all parameters.	
Camera	Yes	Some animated properties may not import properly. This is due to the conversion that occurs when some SOFTIMAGE|3D attributes are converted to mental ray 2.1 parameters—there may not be a one-to-one correlation between all parameters.	
Lights	Yes	Sun light-types are not supported. They're converted to Infinite lights. Area lights whose geometry is disabled will import with U and V values set to 0. Some animated properties may not import properly. This is due to the conversion that occurs when some SOFTIMAGE|3D attributes are converted to mental ray 2.1 parameters—there may not be a one-to-one correlation between all parameters.	
Depth-fading	Yes	Depth-fading is imported as the soft_fog shader. Some animated properties may not import properly.	
Fog	Yes	Fog is imported as the soft_fog shader.	
Ambience	Yes	Ambience is imported as ambient lighting.	
Palettes	No		
Render Settings	Yes		
Photon Director	Yes		
FXDirector	Yes		Freeze the effect before importing.
ToonAssistant	Yes		Freeze the effect before importing.

Animation

Element	Imported?	Notes and exceptions	Workarounds
Skeletons	Yes	Chains loaded from a SOFTIMGE|3D scene will retain their original hierarchical structure. The effectors' orientation and position will also remain global, not local.	See *Character Rigs* on page 22 for more information.
SRT Animation	Yes		
Cluster	Yes	Clusters are deleted unless they belong to a NURBS or polygon object. Expressions applied to clusters do not import.	
Shape	Yes	Shapes are converted to clusters. Expressions applied to shape-animated objects do not import.	
Lattice	Yes	Lattice animation is converted to cluster animation.	Lattice animation transition curves may not be exactly the same as in SOFTIMAGE|3D. Make sure extrapolation is set to weighted.
Path	Yes		If the original path is a closed B-spline, when it is converted to a NURBS curve, the first control point may not be at the same position as the original curve. Convert the curve to NURBS in SOFTIMAGE|3D first—you'll have the same problem, but you can adjust it before importing.
Constraints: positions, orientation, direction, scaling, bounding plane	Yes	In SOFTIMAGE|3D you could pick either another object (any other object) or use world space as the reference for the positional constraint. XSI only recognizes the parent object as a valid reference for a positional constraint.	
Constraints: Position and rotation limits	Yes		
Tangency	Yes	XSI only imports one type of tangency: if the object is on a path and is constrained to be tangent to the curve on that path. The two other types of tangency constraints available in SOFTIMAGE|3D (as described in the *SOFTIMAGE|3D Reference* guide under *Constraint > Tangency*) are not imported.	
Constraints: Cluster to object, Object to cluster	Yes	Object to cluster is imported as a cluster centre.	

Element	Imported?	Notes and exceptions	Workarounds
Constraints: Cluster centre, two and three points	Yes		
Constraints: Up vector	Yes	Imports if coupled with IK chain, path animation, direction constraint, or two point constraint.	
Normal to surface	No		
Expressions	Yes	The complete syntax is imported. If a variable is encountered it is expanded and placed in the expression syntax. However, "has relation" is not imported. Expressions applied to shape animated objects do not import. Expressions applied to clusters do not import. Expressions applied to instances are not imported. Expressions applied to materials and textures may not be imported.	
Fcurves	Yes	Deactivated fcurves (set in the DopeSheet) are imported as activated.	
Deformations	Yes	Deformations by curve and surface are imported, but may not display the same results.	
Wave	No		
Flock	Yes		
Dynamics	No		
Simulation	No		
Quick Stretch	No		
Controls	No		
Collisions	No		
Animated Booleans	No		
Channels	No		

Element	Imported?	Notes and exceptions	Workarounds
Audio	No		Refer to the command log for information about any sound files associated with the imported scene. Refer to the *Chapter 13: Audio* chapter of the XSI *Animating* guide for information about re-loading the audio file.
Actions	No		

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