

ANIMATION|INVASION

aiPrevis

Version 0.0.1

18/06/2010

Table of Contents

1 Introduction	3
What is aiPrevis?	3
2 What's New	3
2.1 Camera gate	3
2.2 FinalCut import	3
2.3 Avid EDL import	3
3 Installing aiPrevis	4
3.1 Installing scripts	4
3.2 Creating shelf button	4
3.3 Testing that things work	4
3.4 Possible problems	4
4 Basic Usage	5
4.1 Setting the sequence name	5
4.2 Creating a new shot	5
4.3 Creating a new camera	5
4.4 Linking a camera to a shot	5
4.5 Playblasting previews	5
4.6 Importing and exporting	6
5 Stereo Workflow	7
5.1 Turning on stereo	7
6 Pipeline Integration	7
6.1 FinalCut integration	7
6.2 Avid integration	7
6.3 Database integration	7
7 Mel Scripting	8
7.1 Useful commands	8
8 Wrap Up	9
8.1 Contact information	9

1 Introduction

1.1 *What is aiPrevis?*

AiPrevis is Maya tool that enables a sequence based pipeline. In production a lot of user time is often spent switching files to fix/update/replayblast/ect. This means a lot of wasted time during each day.

AiPrevis works by combining all the shots of a sequence in one Maya file. The basic idea is to base each sequence on locations/sets so that they and characters/props only have to be loaded once.

The added bonus of this is also that previs/layout/blocking becomes much faster as you can essentially cut your entire sequence and see it play directly in Maya. This means that things like hookups between shots are easy to adjust without having to switch files.

The tool is currently in use in Feature film and comercial productions.

That's about it.

1.2 *Important note!*

I am currently writing both the tool and this documentation so some things are not yet documented, and small bugs are present in the script :-)

2 What's New

Here is a list of the new functionality.

2.1 *Camera gate*

2.2 *FinalCut import*

2.3 *Avid EDL import*

3 Installing aiPrevis

3.1 *Installing scripts*

First download the latest aiPrevis zip file from <http://www.anim.dk/opensource/aiPrevis/>

unzip into an empty folder and copy all scripts to your script folder.

3.2 *Creating shelf button*

Copy the following code to your *Maya Script Editor*:

```
python ("import sys");  
python("sys.path.append('SCRIPT_FOLDER')")  
python ("import aiPrevis_Import");  
source aiPrevis;  
aiPrevis_UI;
```

Change the SCRIPT_FOLDER to match where you put the scripts.

Then drag it to the shelf as a MEL button.

3.3 *Testing that things work*

Click your new button. This should open the ai Previs GUI. Choose a sequence name and click the create button at the bottom of the shot list to see that things are working.

3.4 *Possible problems*

The only thing that really could go wrong is if some of the scripts are missing or Maya is not able to find them. Look in the standard maya documentation for the relevant path fitting your version of Maya and operating system.

4 Basic Usage

4.1 *Setting the sequence name*

It is important to set the correct sequence name because this is being used when playblasting previews and exporting shots to FinalCut for instance.

If the sequence has not been set when launching the GUI a window will appear to allow you to do so.

You can also select **File > Set Sequence** from the menubar.

4.2 *Creating a new shot*

Click the **Create** button at the bottom of the shot list or select

Shots > Create Shot from the menubar. Then choose a name for your shot.

NOTE: The suggested naming is S#### (ex. S0010, S0020, S0030). The tool will append “_Shot” to the name to distinguish the shot node from other Maya nodes.

Set the correct start and the end frame and click the **Create New Shot** button.

NOTE: Overlength is currently not supported as it requires the use of animation layers in Maya 2010. It will be added as an option later on.

4.3 *Creating a new camera*

Click the **Create** button at the bottom of the camera list or select

Cams > Create Shot from the menubar.

Then choose a name for your camera and set the initial focal length.

NOTE: The suggested naming is Name (ex. CU, POV, Wide). The tool will append “_Camera” to the name to distinguish the camera node from other Maya nodes.

Now click the **Create New Camera** button.

4.4 *Linking a camera to a shot*

To make a shot use a specified camera, select the shot/camera in their respective lists and click the **Link** button below the shot list.

NOTE: The name of the camera will appear to the right of the shot as a reference.

4.5 *Playblasting previews*

To only do single or selected shots highlight them in the shot list and select **Preview > Playblast Selected Shots** from the menubar. This will make a single movie file for each shot.

To playblast an entire sequence as one file select **Preview > Playblast Entire Sequence** from the menubar.

If you want to do all shots and the sequence **Preview > Playblast For Edit**

NOTE: On Windows playblasting is done in AVI and on OSX it is Quicktime. Please remember to set the codec from within Mayas playblast gui before working.

4.6 **Importing and exporting**

To import series shots select **File > Import Shots** from the menubar. This will bring up a GUI.

NOTE: When importing XML from Final Cut the final cut sequence needs to be set up in a specific way to allow the aiPrevis tool to understand the shot information (read more about this in the "Pipeline Integration" chapter).

5 Stereo Workflow

5.1 **Turning on stereo**

NOTE: Stereo can only be used in Maya 2009 and above and currently only supports the off-axis stereo-mode.

6 Pipeline Integration

6.1 **FinalCut integration**

FinalCut is supported via the FinalCut XML format.

To make aiPrevis understand your FinalCut sequence without too much hassle we have come up with the following Rule:

“The track that only has text generator items on it is the one that defines the shots for a sequence.”

See the following FinalCut XML file for reference:

http://www.anim.dk/opensource/aiPrevis/Q0010_Example.xml

NOTE: The easiest way to make this work is to first Previs your sequence in aiPrevis and then export it to a FinalCut XML file. Then when you import that file, everything is already setup with references to the preview files and the shot-reference track.

6.2 **Avid integration**

EDL's can be read and written.

See the following EDL file for reference:

http://www.anim.dk/opensource/aiPrevis/Q0010_Example.edl

6.3 Database integration

Currently in development as part of the aiPipeline.

7 Detailed Feature list

7.1 *File > New Sequence*

This works as a Maya New Scene command with the addition of asking for a new sequence name. Use this if you want to start over completely.

7.2 *File > Reset Sequence*

Deletes any shots in the aiPrevisTool but leaves cameras and maya scene intact. (usefull if you want to continue a new sequence with similar assets and camera angles.)

7.3 *File > Set Sequence*

Change the name of the current sequence. It will also search through all shots and replace the old sequence name with the new name.

Ex. Q0010_C0010 becomes Q0020_C0010 ect.

7.4 *File > Import Shots*

Import a list of shots from an external file. Currently supported fileformats are: FinalCut XML (with a certain naming convention), and EDL files. If mode is set to adjust aiPrevis tool will match existing shots and change their length according to the data in the imported file.

8 Mel Scripting

8.1 *Useful commands*

9 Wrap Up

9.1 **Contact information**

To get in touch with feature requests, bugs or just anything at all write js@anim.dk

ANIMATION|INVASION web page:

<http://www.anim.dk>

aiPrevis web page:

<http://www.anim.dk/opensource/aiPrevis/>