

AUTODESK®
FBX®
2011

Key Features and Benefits

Autodesk® FBX® 2011 asset exchange technology helps facilitate higher fidelity data exchange between several Autodesk content creation packages, and provides new support for certain third-party and proprietary applications. Whether using FBX within an entertainment pipeline, or as part of a design production, files are more easily transferred, more data is retained, and workflows are more efficient. Moreover, games developers using the Unreal® Editor (UnrealEd) can directly import FBX files, while developers can now use Python™ programming language to integrate FBX technology into pipelines not based on C++. And, with a new file format, FBX 2011 helps deliver both faster read and write performance and a reduced memory footprint.

Top Features and Benefits

Animation Layers

Engage in improved workflows between Autodesk® Maya® 2011 software and Autodesk® MotionBuilder® 2011 software with extended support for animation layers to match the updated toolset in MotionBuilder 2011; baked evaluation of layers is also supported. In addition, auto key behaviors are now unified and the type is preserved between Maya and MotionBuilder.

Python Binding

Create and manipulate FBX data using Python. FBX technology can now be integrated into pipelines without the requirement to write C++ code.

FBX Importer for Unreal Editor

Create and animate models in Maya, Autodesk® 3ds Max® 2011 software, or Autodesk® Softimage® 2011 software, export as FBX, and then import them into the Unreal Editor; supports static and animated meshes and skeletons.

New File Format (v7)

Save time, disk space, and memory with a new file format that produces smaller files and offers improved read and write performance.

Instances

New support for instances helps eliminate unnecessary duplication of identical structures within a scene graph, helping increase efficiency.

FBX File Referencing

Directly reference FBX files within Maya 2011 and 3ds Max 2011, without the need to first convert them to the application's native format.

Autodesk Material Library

Exchange models between Autodesk applications that support both FBX and the Autodesk Material Library, namely 3ds Max 2011, Autodesk® 3ds Max® Design 2011 software, AutoCAD® 2011, Autodesk® Revit® Architecture 2011, and Autodesk® Showcase® 2011 software, allowing a one-to-one mapping of materials.

Sun and Sky Environment

Use FBX to seamlessly exchange Sun and Sky Environments between 3ds Max Design 2011 and Revit Architecture 2011.

Smooth Mesh Preview

Enhanced support for the Smooth Mesh Preview modeling technique available in both Maya 2011 and 3ds Max 2011 means lighter models can be transferred to games, and, with a Microsoft® DirectX® 11 enabled graphics card, automatically rendered at the required level of detail.

Levels of Detail (LOD)

Levels of detail can now be written to and read from FBX files in both Maya 2011 and 3ds Max 2011.

Other New Features

Autodesk FBX 2011 technology also has the following key features:

Enhanced SDK Documentation

Users of the FBX SDK will be better able to understand overall concepts, classes and their interactions, methods, and behaviors through enhanced documentation.

MotionBuilder Native FBX 2011 Support

MotionBuilder 2011 now supports the most recent version of FBX, helping to improve interoperability and provide support for more features.

Import/Export Progress Status

Import and export progress is now accessible through the FBX SDK; this has enabled a status bar to be implemented in Maya 2011, 3ds Max 2011, and the Apple® QuickTime® viewer, and is available to developers of certain third-party and proprietary tools.

Render Resolution

Render resolution height, width, and pixel aspect ratio can now be exported from Maya 2011 to Maya® Composite functionality, and from 3ds Max 2011 to 3ds Max® Composite functionality.

Light Attenuation

Transport attenuation parameters of lights between Maya 2011, 3ds Max 2011, and MotionBuilder 2011.

Image Planes

New support for camera front planes enables image planes to be seamlessly transferred between Maya 2011, Autodesk Mudbox™ 2011 software, and MotionBuilder 2011.

Resample Animation

A new option to force resampling of animation curves on export to a consistent time provides expected results for specific game pipelines.

For more information and documentation on Autodesk FBX 2011 asset exchange technology, visit www.autodesk.com/fbx-documentation .

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