

Getting Started with Programming in MotionBuilder

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AUTODESK®
MOTIONBUILDER 

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1.1 Help Documentation

Most Current Version of Documentation

The Python/OR SDK documentation is available to download off the Autodesk website or to view directly from the website as well. Maya's SDK Help provides developer resources including the Maya API Guide, the Maya API Reference, and information about working with QT and Python in Maya.

Download from here for the latest versions of the documentation:

www.autodesk.com/motionbuilder-sdkdoc-2012-enu

Documentation Structure

The MotionBuilder Help Documentation consists of the following .CHM documents:

1. **MotionBuilder Installation Guide**
2. **MotionBuilder User Guide**
 - Is designed to provide both reference and task-based information on every MotionBuilder window, editor and dialog box.
3. **MotionBuilder Open Reality SDK Help**
 - Umbrella File for A and B, so that you can search both at the same time.
 - A. *Open Reality SDK Developers Guide*
 - This documentation goes over the architecture and foundational knowledge needed to work with MotionBuilder from a programming level.
 - B. *Open Reality SDK Reference Guide*
 - This is the class definitions, member lists and header files.
4. **MotionBuilder Python Help**
 - Umbrella File for A and B, so that you can search both at the same time.
 - A. *Python Developers Guide*
 - This documentation goes over the Python Editor and the User Interface helper classes.

B. Python Reference Guide

- This is the class definitions, member lists and header files.

The Developers Guide is targeted more at discussing what ways to work with the Python/OR SDK, currently this documentation focuses on some workflows; it is aimed at being written in structured English so you can learn more.

The Reference Guide is targeted at the technically savvy individuals who just want to look at the classes and see what parameters and return values they need to work within the SDK.

However, you will find that you will likely be working out of both, since you will be accepting whatever information you can get your hands on since there is not a lot on the necessary workflows.

TIP: Just because you are a Python Programmer don't be shy to the OR SDK documentation because you will notice there is a lot more information in its Developers Guide which is still relevant to Python, and they are the same Vice Versa if you are a C++ programmer using the OR SDK, don't forget to use Python as a resource as well because it is applicable to C++ mostly too.

1.2 Code Samples

The examples that come with MotionBuilder are one of the better areas to learn from, especially in this current release there was a big effort put into creating more Python examples.

The sample Python examples are located here:

C:\Program Files\Autodesk\MotionBuilder 20xx\bin\config\Scripts

C:\Program Files\Autodesk\MotionBuilder 20xx\PythonScripting\Samples

The sample OR SDK examples are located here:

C:\Program Files\Autodesk\MotionBuilder 20xx\OpenRealitySDK\Samples

TIP: I am going to give you the same tip here as the documentation section, don't be shy looking for workflow information in the opposite language then you're working on because there are some samples only in OR SDK or only in Python. Just ignore the programming syntax and get an idea how to work with the classes and methods.

1.3 Additional Learning Resources

Autodesk MotionBuilder Programming Forums

- The AREA || Python
 - <http://area.autodesk.com/forum/autodesk-motionbuilder/python/>

- The AREA || OpenReality SDK
 - <http://area.autodesk.com/forum/autodesk-motionbuilder/open-reality/>

MotionBuilder Python Tutorials

- Creating Interactive MotionBuilder User Interface Tools by Christopher Evans
 - <http://chrisevans3d.com/tutorials/mbui.htm>
- MotionBuilder Driven Key Importer by Jason Parks
 - http://www.jason-parks.com/Pipeline_Tools/MotionBuilder_Scripts.html

Web Resources for Python

- Python.org the Official Location for Python information
 - www.python.org
- Download Python Software
 - <http://www.python.org/download/releases/>

Books

- Learning Python by Mark Lutz and David Ascher
- Programming Python by Mark Lutz
- Dive into Python by Mark Pilgrim
- Python.org gives you a whole list of good Python Books
 - <http://wiki.python.org/moin/IntroductoryBooks/>

1.4 Let us know about MotionBuilder Defects or Wish list Items

If you ever encounter something that does not work as it should in MotionBuilder or it causes the application to crash please let us know, we want to fix it, but we don't always know it's there, so you need to tell us.

Log all MotionBuilder Software defects here:

www.autodesk.com/motionbuilder-bugreport

Any items that you would like to see in MotionBuilder or are not exposed yet, log your wish list items here:

www.autodesk.com/motionbuilder-sug