

OpenStudio Version 1.8.0

Release Notes – 6/26/2015

These release notes describe version 1.8.0 of the OpenStudio software suite developed by the National Renewable Energy Laboratory (NREL), Buildings and Thermal Systems, Commercial Buildings Research Group, Tools Development Section, and associated collaborators. The notes are organized into the following sections:

- Where to Find OpenStudio Documentation
- Installation Notes
- Overview

Where to Find OpenStudio Documentation

- OpenStudio release documentation, including these release notes, tutorials, and other user documentation, is available at <https://www.openstudio.net/>.
- C++ API documentation is available at <https://openstudio-sdk-documentation.s3.amazonaws.com/index.html>.
- Measure development documentation is available at http://nrel.github.io/OpenStudio-user-documentation/measures/measure_writing_guide/.

Installation Notes

OpenStudio is supported on Windows 7 – 8.1, OS X 10.9 – 10.10, and 64-bit Ubuntu 14.04.

OpenStudio 1.8.0 supports EnergyPlus Release 8.3.0, which is bundled with the OpenStudio installer. It is no longer necessary to download and install EnergyPlus separately. However, an installer is available at <https://github.com/NREL/EnergyPlus/releases/tag/v8.3.0>. Other builds of EnergyPlus 8.3 are not supported by OpenStudio 1.8.0.

Installation Steps

- The OpenStudio SketchUp Plug-in requires [SketchUp 2015](#) (not available for Linux). The OpenStudio SketchUp Plug-in does not support older versions of SketchUp. SketchUp 2015 is available in 32 and 64-bit versions; the 32-bit version of OpenStudio on Windows will only work with the 32-bit version of SketchUp 2015, and the 64-bit version of OpenStudio will only work with the 64-bit version of SketchUp 2015.
- Download and install [OpenStudio](#).
- Setup a Building Component Library (BCL) account to access online building components and measures. [View instructions on how to setup your account and configure the key in OpenStudio](#).

Optional Installation Steps

- For Radiance integration, download and install [Radiance](#).

Overview

The most significant new feature in OpenStudio 1.8.0 is the addition of many new HVAC objects to the OpenStudio Model. The new types available in 1.8.0 include *HeaderedPumpsConstantSpeed*, *HeaderedPumpsVariableSpeed*, *TemperingValve*, *CoilPerformanceDXCooling*, *CoilCoolingDXTwoStageWithHumidityControlMode*, *CoilSystemCoolingWaterHeatExchangerAssisted*, *CoilSystemCoolingWaterHeatExchangerAssisted*, *GroundHeatExchangerHorizontalTrench*, *ThermalStorageIceDetailed*, *ChillerAbsorptionIndirect*, *ChillerAbsorption*. These new types are available through the OpenStudio API for use in measures as well as in the OpenStudio Application. Advanced tutorials on how to use each of these new objects may be available in the future.

Additionally, the ability to import IFC into OpenStudio via BIMserver has been added by the CBEI group from Penn State University. A tutorial on how to use this new functionality is available at http://nrel.github.io/OpenStudio-user-documentation/tutorials/tutorial_ifcimport/.

OpenStudio 1.8.0 includes several other minor features as well as many bug fixes. For a full list of changes included in OpenStudio 1.8.0, please see the [complete changelog](#).

Issue Statistics Since Previous Release

- 108 new issues were filed since the 1.7.0 release of OpenStudio (not including opened pull requests).
- 53 issues were closed since the 1.7.0 release of OpenStudio (not including closed pull requests).