

State of Tennessee BIM Standards

BIM Interoperability Tools Demonstration Content

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Overview

The following instructions are to be used with the associated XML files in the appropriate Revit BIM Interoperability Tools. They are a basic set of checks and configurations as demonstrated by CADD Microsystems on February 23, 2016. These checks should be in no way considered complete, and each only reflects a portion of the State of Tennessee's BIM Standards. The XML files for the demo were generated based on version 1.1 of the BIM Standards, and reflect both specific requirements outlined and settings assumed from examples, which may not be a specific requirement of the State of Tennessee.

COBie Extension

The Autodesk COBie Extension for Revit is a powerful Revit add-in that facilitates the collection and organization of COBie data in related model elements, as well as generates COBie compliant spreadsheets from the Revit model.

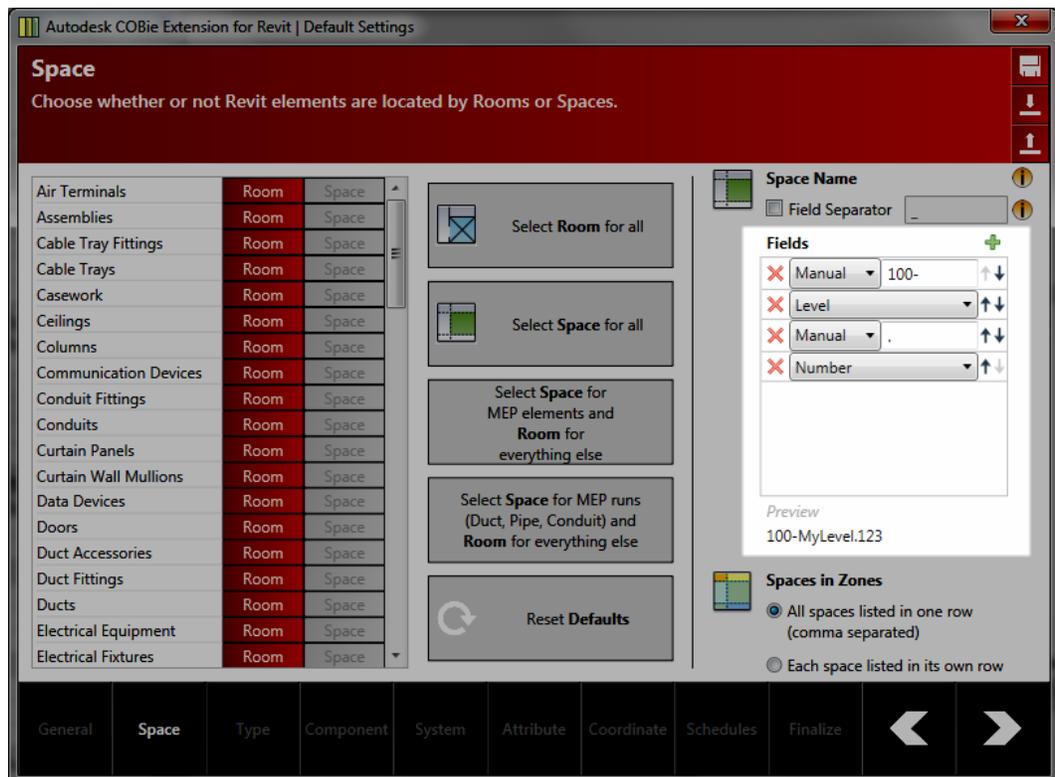
Details

The Settings for the COBie Extension are in the file “v.xml” which can be imported directly into the COBie Extension in any Revit model.

The specific settings updated are on the SPACE tab in the COBie Extension Settings menu. The “name builder” has been updated to match the State of Tennessee BIM Standards, with minimal input from the user.

The top field “Manual” will need to be updated per Revit model file to match the building number designated for the project. It is currently set to “100” to match the sample in the BIM Standards document, Appendix C. Each Revit model is intended to be a single building number, so each time the settings are imported, that field will need to be update to match the building number.

A recommended practice is to name the Revit Levels in the “LL” format. This syntax is what the Space “name builder” is expecting for automatic name generation.



Updating the Building Number in the “Manual” field and naming the levels in the LL format will allow for automatic Space name generation that matches the required format (ex. 100-12.1223).

The remaining tabs can be updated to more closely match the output needs of the BIM Standards as well, making the COBie Extension a valuable tool in collecting and exporting the necessary data.

Model Checker

The Autodesk Model Checker for Revit allows for the quick and automatic checking of BIM standards within a Revit model. The checks can then be exported for quick review by any third party.

Details

The file “Autodesk_ConfigurationFile.xml” is a Model Checker Configuration file with a single check. That check looks at Room Numbers for the following criteria:

- 4 digits long
- The first digit is either an upper case letter or a number from 0-9
- The remaining 3 digits are each numbers from 0-9

If any Room Number does not match this criteria, the Model Check will report a failure and list the offending Room.

Modifying the Model Check

The downloadable sample is simply an example of what can be accomplished automatically with the Model Checker. On the BIM Interoperability Tools website, you can also find the Autodesk Model Checker Configurator for Revit. The Configurator is able to open up Model Checker Configurator xml files and edit them. This can be used to add more individual checks to more closely match the State of Tennessee BIM Standards.