**Bos3d\_FME\_WorkbenchResources\_20231102.docx**

This file describes the FME workbench tools associated with the Boston3D City Model Project

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Tools for repairing and validating mesh models. These are used in the model import process to assure that models can make a loss-free round-trip between multipatch and OBJ format. See [Model Validation and Repair](https://www.cityschema.org/mmgt_validate)

* Multipatch2ModelStore\_Repair.fmw
* Multipatch2ModelStoreFlattenNormals.fmw   
  Useful for models that seem to be smoothed reflective, or with unwanted rounded edges
* ModelStore2Multipatch\_Validate.fmw

Tools for producing tiled archives and downloads. These tools write their data to a RepoCat\_Prep folder. The sketchup and terrain tools depend on GIS-based terrain folders that are also saved in RepoCat\_Prep

See: [ModelStore: Open Format Publishing and Archiving](https://www.cityschema.org/mmgt_modelstore/) (currently in work)

* Multipatch2ModelStore\_Archive.fmw  
  Creates modelstore collections from a geodatabase edition. Models from Existing\_MP and Approved\_MP are translated to tiled collections of zipped OBJ format models. Catalog information is saved.

**Create sketchup tiles**

* SkpModel\_from\_GDB\_20230925.fmw (One model at a time)
* Batch\_skpModel\_Worksheet\_Runner.fmw (Batch process)

**Create Terrain mesh as OBJ**

* Draped\_Terrain\_OBJ.fmw
* Batch\_Terrain\_OBJ\_Worksheet\_Runner.fmw

**Python Tools**

* arcpy\_mp2obj.py Runs the MultipatchtoModelstore workbench n Arcgis Pro model (does not work on John’s computer)
* arcpy\_obj2mp.py Runs the Modelstore to Multipatch workbench n Arcgis Pro model (does not work on John’s computer)
* load\_fmeobjects\_arcpy\_test.py These tools were created to troubleshoot John’s computer.
* load\_fmeobjects\_py\_test.py