## Add modeling for Meta classes

GMDM Issue #17

The GMDM IOP relied on a simple information model (and a single profile) of ‘meta’ classes – classes that provide context to instances of grid classes. The model addressed the main concepts of frameworks, the organization of models that fit in them, and the grouping of those models into cohesive assemblies. See the file **GMDM IOP Meta Modeling.docx** for a more detailed.

The following improvements to the meta information model were suggested during the IOP:

* Add a profile attribute to the InstanceSet class.

A ‘profile’ that groups classes/attributes to facilitate grid model assembly is different from a ‘profile’ that specifies the explicit classes/attributes/associations that are allowed as part of an InstanceSet. The former facilitates grid model data management and the latter enables syntax checking of data exchanged using an InstanceSet. The ModelSpec.profile attribute fulfills the first purpose and a InstanceSet.profile could fulfill the second. (The addition of the InstanceSet.profile would also allow the removal of the somewhat awkward Manifest.profile attribute.)

* Add a ModelSpec.AssemblySpec association to allow the definition of the types of Models that are to make up an Assembly.
* Add a ModelAuthority class (and remove the .producingAuthority attributes from Model and Assembly)
* The Manifest file was not particularly useful.