Hybrid Use Case (Metadata Services)

Story: An object in Fedora-Thing represents an absorption spectrometer measurement. Fedora-Thing manages an image and a numerical dataset for the object. The object also has something analogous to an external datastream representing the current state of metadata description of the object; this is maintained in an external system.

In this external system, a researcher goes through the collection by date and timestamps, selecting those objects generated by the same experiment, and assigns to all of them an investigation identifier, a project identifier, and her name as creator, thus updating the pre-existing metadata record. Each experiment typically includes several hundreds to thousands of objects. When these data are requested through Fedora it retrieves them from the external system, constructing the URL as necessary similarly to the existing Fedora service URL substitutions.

After enriching the whole collection in that way, the researcher searches for absorption spectra with certain characteristics (wavelength and curvature of peaks), and tags all objects in the result set as "good measurement". A result set may contain dozens to thousands of objects. The external system can have these changes archived as a version of the data by submitting a PUT to the relevant object-datastream resources, or it can POST a list of object-datastream resources to the repository resource to achieve the same in batch.

This arrangement may imply use of externally unique identifiers (eg UUIDs) and conventions for addressing services (eg ARK https://wiki.ucop.edu/display /Curation/ARK)

This use case compiles stories from:

- Objects can be associated with a descriptive metadata service
- Dynamic metadata : Fedora as a Semantic Object Store
- Use Case: Updating metadata fields of multiple objects
- Using the resources of the Semantic Web to describe repository contents