## **Proof of Concept ideas**

## Validation

This POC would focus on the mechanics of using an extension for the purpose of validation

- Pick a dead simple validation rule (e.g. required cardinality of a property)
- Pick a simple representation (serialization?) for the rule
- Specify responses that result from failed validation (4xx error?)
- Create an extension that filters all requests to Fedora, applying the simple validation rule
  - New objects
  - Modifications to objects
  - o Deletion?
- Verify that the extension produces the desired response

## Discoverability

This POC would focus on the mechanics of collecting and presenting the information necessary to make individual extensions discoverable

- Create dummy "hello world" extensions, exposed at defined URIs for certain kinds of objects
- · Have the framework provide a web resource that produces an (rdf) document links these dummy services
- · Verify that extensions are linked where appropriate

## Provenance Stream

This POC would leverage the existing audit mechanisms to produce a representation of the audit events for a Fedora object, as described in the use case evaluation

- Enable the fcrepo audit service such that audit records are deposited into the repository
- · Create an extension that provides a simple list of the URIs of resources that correspond to audit records
  - O Possibly as a thin wrapper over fcr:transform, if that is possible
- Verify the correctness of the contents of the list produced by the extension