Building a Trustworthy Repository


- Preservation is communication with the future
  - We package data, information and knowledge for use on future technologies
  - We use iRODS to ensure infrastructure independence

- Communication needs to be bi-directional
  - How do we answer questions asked by future archivists?
  - We verify assertions about the records through computer actionable policies

- Basic assertions are authenticity, integrity, chain of custody, and original arrangement (NARA)
ISO 16363:2012 Defines the Questions

- ISO 16363 defines 113 tasks for trustworthiness that require 47 management documents and 43 generated reports
  - Implemented policies to manage external documents (10), set repository parameters (8), set preservation attributes (7), audit preservation actions (23), implement preservation operations (30), and manage infrastructure (7)
  - Implemented the tasks as iRODS policies (81), policy functions (23), global variables (15), and preservation attributes (42)
  - Must log every external action, version every report, and audit every internal operation

- All policies available at