Building a Trustworthy Repository

- Reagan Moore, et al, "Trustworthy Policies for Distributed Repositories", Synthesis Lectures on information Concepts, Retrieval, and Services, Morgan & Claypool Publishers, 2016
- 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

https://github.com/DICE-UNC/policy-workbook/tree/master/ISO/Rules