

# All Your Rule Base Are Belong to Me

**Jewel H. Ward**

*Doctoral Student, UNC-CH SILS & DICE*

iRODS User Meeting

February 17-18, 2011  
Chapel Hill, NC USA

# Discussion Points

/ Meme & Disclaimer

/ Study Purpose

/ Policy Definition

/ Policy Example

/ Method

/ So What?

/ Confidentiality Protections

/ Overall Study Participation Requirements

/ Focus Group

/ Contact Information

# Meme & Disclaimer



# Study Purpose

## Project Title

“Factors in Machine-Level Policy Sharing within the integrated Rule-Oriented Data System (iRODS)” [UNC-CH IRB #11-0326]

## Purpose

To empirically examine the motivating and discouraging factors for machine-level policy sharing among iRODS users and partners.

## Participants

iRODS users, collaborators, and partners.

# Policy Definition

An informal, **generally natural language description of desired system behavior**. Policies may be defined for particular requirements, such as confidentiality, integrity, availability, safety, etc. (NASDAQ - [www.nasdaq.com/personal-finance/credit-card-glossary.stm](http://www.nasdaq.com/personal-finance/credit-card-glossary.stm)).

# Policy Example

Human Language Example – “Chain of Custody”

**ISO MOIMS-RAC B1.6 Repository obtains sufficient control over the Digital Objects to preserve them.**

The repository must have adequate control over the bits which make up the digital objects. This is necessary in order to ensure that the most basic type of preservation, namely bit preservation, is assured.

# Policy Example

Machine Language Example -- "Computer Actionable Rule"

```
Get Audit Info By Object Path | writeLine(stdout,'<?xml
version="1.0" encoding="ISO-8859-1"?>')##writeLine
(stdout,"<audit_trail>")##msilsData(*objPath,*objID,*foobar)
##msiGetAuditTrailInfoByObjectID(*objID,*BUF,*Status)
##writeBytesBuf(stdout,*BUF)##writeLine(stdout,"</
audit_trail>")|nop
```

```
*objPath=/foo/bar/audit-info.rtf
```

```
ruleExecOut
```

# Method

“We will begin the study with a **focus group** at an upcoming iRODS User Meeting. We will **analyze the focus group results** and **develop a questionnaire**. We will **examine users' written policies and core.irb file(s) for themes**. We will **examine** what is **written vs. what is actually implemented** in order to determine any **discrepancies**. We will **analyze these results, develop hypotheses, relate these hypotheses to existing theory** and **create a model**. We will **test** the model by **statistical analysis**, to **determine the validity** and the **strengths of the relationships**. Pending the results we will conduct **interviews** and/or a follow-up **questionnaire**, and then more **analysis**.” [UNC-CH IRB #11-0326]



# So What?

Top-down vs. Bottom up  
Develop Turnkey Solutions  
“First to Market”

# So What?

“While the primary idea behind establishing trusted repository audit mechanisms is to ensure that a repository actually **meets and enforces archival standards**, the other benefit of using standards is **reduced costs**. By creating a **standard set of machine-level automated repository policies** based on archival standards, **the amount of human intervention** needed in the digital preservation process **will be reduced** because these **policies may then be shared among and between communities**. This will **streamline the digital archive process** and potentially **reduce long-term costs**, thus aiding the longevity of the archive, as well as the integrity of the metadata and digital content it contains. **The fewer resources that archivists require to maintain an archive, the more likely an institution or organization is to maintain it for the indefinite long-term.**” [UNC-CH IRB #11-0326]

# Confidentiality Protections

**“Participants will not be identified in any report or publication about this study.** I will use coding and pseudonyms to maintain confidentiality of data. All files related to the study will reside in a password protected folder. The data will not be transmitted. It will reside on the PIs computer and will be backed up on a daily basis. Only the PI has access to the back up files. The PIs laptop requires knowledge of a master password to gain access to the PIs desktop. The keychain (on Mac OS X v.10.6.6) requires a separate password to access any password-protected files on the computer. **I will de-identify the data.** I will keep the identifiable file information on my computer, password protected, or in a locked filing cabinet.” [UNC-CH IRB #11-0326]

# Overall Study Participation

- Will recruit via iRODS-chat when IRB approved
- Must be an iRODS Data Grid Manager
- Must be willing to share all core.irb files
- Must be willing to share written/unwritten policies
- Must be willing to be interviewed (online, or phone)
- Be able to complete surveys online
- Est. time required for participation  $\leq$  8 hour day (estimated) between February 2011 and August 2012

# Focus Group

## Definition

A group of between 6-12 people convened by a facilitator and/or moderator to discuss ideas or topics, or provide opinions about, a particular topic, products, or system.

# Focus Group

- Must be an iRODS Data Grid Manager
- No requirement to continue with study (but that is preferred)
- Will recruit via iRODS-chat when IRB approved
- Plan to run locally (RTP, NC area in-person) and virtually (via a multi-site conference application, such as Skype)
- No onsite FG or recruitment today, IRB still pending

# Contact Information

Jewel Ward

Mobile (iPhone): 919.265.3755

[jewel\\_ward@unc.edu](mailto:jewel_ward@unc.edu)