UNC Information Technology Services - iRODS Poster

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The Research Computing unit at UNC Chapel Hill, a division of Information Technology Services (ITS), has been hosting several production iRODS servers for more than one year. These instances provide different sets of functionality and storage capabilities to a variety of groups both at UNC and collaborating institutions.

The Research Computing group in ITS is uniquely positioned to assist a large existing user base among many departments at UNC, as it provides the University with most of its HPC infrastructure. In addition to the computational capability provided by several large clusters, Research Computing hosts high performance storage and archiving systems.

A request to provide tape storage for an iRODS grid hosted by the Renaissance Computing Institute (RENCI) led to the first RECO iRODS server. This instance became part of the DICE Center's NARA prototype grid at RENCI, and continues to provide several collections with tape storage.

UNC's Institute for the Environment, long a user of RECO's services, looked to iRODS as a way of managing, storing, and distributing a large collection of federally generated data. This collection is made freely available to researchers worldwide through a browser front end. Leveraging the iRODS Java API, a web application allows users to search the collection's rich set of object-level metadata.

The Carolina Digital Repository, developed by the UNC University Library, is an institutional digital repository that leverages iRODS for its data store. ITS Research Computing is providing iRODS configuration assistance and hosts the iRODS server responsible for archival storage.

This presentation will provide an overview of how the Research Computing iRODS servers are configured differently for their varied collections, with an explanation of basic simple policy and maintenance rules.