



iRODS Requested Features

Key: B = Bug A = Completed Number = No. of user group requests
(0 indicates requests by users not present, etc.) User Meeting 3/24-26/2010

B	Add a Doxygen indexed version of iRODS source on the wiki for micro-services and helper functions.
B	Add object type to audit trail
B	Allow GSI authentication to non-ICAT-Enabled-Server without irodsUserName being set.
	Automate Dicom metadata extraction from binary files. Find misextractdicom
B	Fix UDP on Solaris.
B	Implement FITS header parsing and metadata loading. Find msiextractfits
B	Issues with symbolic links on FUSE mounted directory - copy symbolic links when directory structure is ignored
B	Post link to VBrower, links to Taverna and EGEE grid
B	Post on Wiki a list of the planned developments for Jargon.
B	Publish the complete iRODS network protocol.
18	Admin interface to list all current connections and the associated irods users. (keep with record of IP addresses)
16	Set access controls on rules and micro-services. Currently on users, collections, resources, metadata.
15	Editorial review of documentation
15	Document all APIs
15	icommand for checking ports (health check). Jargon admin will do this
15	icommands with tab completion
15	Installation - check for firewall interaction (notification of presence, like a ping on each port).
15	Links to Petashare, Urspace, Jux, 43 clients
15	Script for checking/updating IP address (5 locations).
15	Support transfer of multiple files using multiple I/O streams. Virtual ibun
12	Add regular expressions to i-commands (wild cards).
12	Use external identity management and external authentication
11	Management of rules within iCAT to enable versioning. Distribution of rules to core.irb file at each server.
11	Request for Shibboleth based authentication for new users (UNC) credential mapping / assign privilege according to Shibboleth role - TUCASI
10	A more general mechanism to access external databases. Admin will define location and specify SQL, client will be able to provide arguments. Independent of ICAT. Need a way for the information provided, or saved, to be integrated into the iRODS framework.
10	Add -P to irsync
10	Support for accented letters (metadata and filenames) - Taiwan
10	Support for dynamic IP address.
9	Export audit trails from iCAT and truncate
9	Have second notification list about upgrades that address vulnerabilities. Set up an iRODS admin mailing list.
9	irsync across physical resources to repair corruption - similar to irepl



9	Support for Java-based micro-services.
8	Multi-thread connection.
8	Policy consensus development
8	SHA-256 checksum, CRC checksum
8	Support checksums in Jargon (before transfer), <code>iput -k</code>
7	Add ability for a project PI to create rodsuser accounts for project members. Create accounts under groupadmin
7	Control number of connections on servers (batch jobs) - connection pool
7	Provide transaction based interaction with external workflow
7	Restrict ability of ASSIGN to change user name, user role, user permissions.
7	Support read-only view on selected columns in database
7	Use defined SQL commands that can be invoked through a micro-service.
7	Virtual ibun that concatenates files for transmission
7	Automatic failover to a secondary iCAT
6	Document the scheduling of rules in parallel, and use of delayed rules
6	Restart rule engine
6	Reload option for irodsctl script to behave like Apache reload
6	Active directory integration with Kerberos, documentation - Chris Jordan
6	Add ways to handle the comment fields for data, resources, users, metadata (icommand and micro-service)
6	Collaborator analysis tool for iRODS community
6	Create script for automating module creation. Provide default template for creating new Micro-service. Documentation
6	iDisk for iRODS - iDrop. The iDisk area is on your computer, and reliably synchs to a remote storage system periodically.
6	Implement queuing/client-backoff within Jargon
6	Manage list of connecting IP addresses to track denial of service
6	Manage queue of requests. Want to control maximum number of executing requests.
6	Metadata analysis tools for federated data grids
6	National dropbox. This is similar to iDisk, and provides a way to back up or share your files through a drag and drop interface.
6	Project analysis tools for domains using iRODS
5	Add AVU metadata to resource groups.
5	Create a Windows only environment, using SqlServer
5	Integration of logging into Jargon
5	Want to disable triggering of rules from a client by selected users
4	Ensure end-to-end audit of data sharing policy for pulling data into a secure environment
4	Federation of independent databases: NC B-prepared / EPA / structured information resource drivers
4	Integration with local metadata (schema), for remote database access
4	Integration with VCL policies - policy engine controlled by metadata, which constructs environment
4	Need drivers for a wide variety of databases for resources
4	Provide mechanism to synchronize rule bases across servers within a data grid.
4	Provide versioning support for rules.



4	Support a session shell in iRODS for iRODS comands, isession. Authenticate once.
4	Support adaptable security policies (change level of access based on situation).
4	Support local policy enforcement on database access (de-identification)
4	Support Perl-based Micro-services by including Perl interpreter in the Micro-service.
3	Create a Windows only environment, using Postgres and GSI (both now run on Windows)
3	List system generated metadata in iEXP
2	Admin interface to rename a resource.
2	Configure port numbers for data transfer. Support alternate IP address.
2	Driver for other types of databases for use by iCAT (DB2, SQLServer)
2	Native encryption of files, probably through remote execution. Transforms on data.
1	Add core.irb rule to check policy on iget. May want to return alternate version (redacted copy) of file.
1	Are there CIM common information models for accessing databases?
1	Automate creation of an account for new users. Example is GSI based access. Extend to LDAP/Kerberos
1	Create a VM build for use of iRODS in tutorials.
1	Decompress on the fly.
1	iRODS server for memory cache, RAM disk
1	Mechanism to test whether a community's client is compatible with iRODS protocol and version numbers
1	Modify icommands to use the zoneID:internal ID instead of the file name or add GUID
1	Provide a library of script-based micro-services
1	Support compressed files on disk for minimizing space. Could be done through a preProcForPut core.irb hook.
1	Support ticket-based access to iRODS.
1	When fail over to an alternate server, verify that the Rule engine will not have a conflict for a queued Micro-service. Related to versioning of rules and micro-services.
0	Create a VDT (Virtual Data Toolkit) version of iRODS.
0	Create digital signing registration to be able to track origin of files. Given signature, find original copy. Related to definition of an AIP
0	Create RDA interface to Sybase.
0	Develop Fortran API.
0	Develop Perl API.
0	Extensions to Jargon for UDP transport.
0	Improve webDAV caching of a working copy of a file correctly
0	Improve webDAV caching of a working copy of a file correctly (external)
0	Manage locks for collaborative editing (either on storage system, in metadata, or portal) - expensive
0	Port iCAT to Sybase.
0	Port SRB APIs on top of iRODS, will avoid having to rewrite many application scripts.
0	Port SRB scommands onto iRODS (remap options)
0	Support logical registration into iRODS. Ability to associate metadata with a name without requiring a file. Add an info file.
0	Support token-based identification such as SecureID. One-time passwords - offload to external authentication management



0	Which types of databases need to be supported?
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Completed Tasks	
A	Add links to WebDav environment on iRODS wiki, provides drag and drop access to files across windows.
A	Command to force execution on another server. msiremoteexec
A	Consider use of Google Code repository and other shareware sites. Automate. GitHub (Russell)
A	Create a collaboration environment for promoting development of iRODS. (done through DICF)
A	Create a Condor interface / port for iRODS (Stork)
A	For SRB to iRODS metadata migration, handle migration of SRB zones. How can multiple SRB zones be re-federated within iRODS easily? Limited scripts.
A	Hook for preProcForPut for medical applications.
A	icp between data grids (bug fixed)
A	Jargon parallel I/O
A	Mount a flash drive. Treat as a mounted collection.
A	Option to restrict irods admin access to specific hostnames/IP addresses.
A	Provide mechanism to add rule base extensions to a remote rule base.
A	Recursive upload of directories - icommands
A	Save RDA request results for use in a session, want to pass result list to another Micro-service. Put in a file.
A	Support mounting of a Webdav directory into iRODS. (done through DAVIS)
A	Support Python-based Micro-services by including Python interpreter in the Micro-service. Documentation
A	Support sequential transfers as one-hop, similar to parallel. Done for iput.
A	Support Soft Links in iRODS (supported in 2.3)
A	When compile, verify that only changed files are recompiled.