



iRODS Requested Features – User Group Meeting 2011

Type	Feature	No. Requests
Message Server	AMQP compliance for message format	100
Clients	LDAP support in iRODS for identity management - PAM/NSS Implies identification of users and groups	12
Clients	Support restart of large file transfer in input/iget from last successful buffer	12
Clients	Add Kerberos/AD support in Jargon	11
Security / Authentication	Support ticket-based access to iRODS for limited time and # accesses	11
Network Transfer	Extensions to Jargon for checksum verification on file transfer	10
Rule Engine	Early access to new version of Rule Engine	10
Clients	Communication between Object Storage and iRODS for policy information exchange	9
Clients	Generic control policies from iRODS to storage system	9
Clients	Mapping from iRODS audit trails to Premis Events	9
Network Transfer	Support transfer of multiple files using multiple I/O streams.	9
Clients	Resource monitoring system attributes for physical media	8
Clients	Add file soft links.	8
Clients	Encrypt all iRODS communication	8
Clients	ACLs on Micro-services	7
Clients	Export iRODS through CIFS	7
Table –driven resources	JSON format instead of common-separated-value	7
Clients	Metadata support associated with FUSE	6
Clients	ACLs on metadata	6
Clients	Need information published from iRODS back to Fedora Commons for events – through audit trails	6
Interfaces	Add regular expressions to i-commands (wild cards).	6
Clients	iExplore streaming interface to files, start display before entire file arrives	5
Clients	Set persistent executable permission on Fuse mounted files	5
File Manipulation	Decompress at client.	5
File Manipulation	Manage locks for collaborative editing (either on storage system, in metadata, or portal).	5
File Manipulation	Support compressed files end-to-end	5
Security / Authentication	Support token-based identification such as SecureID (part of PAM)	5
Table –driven resources	Export KML view of the iCAT Metadata Catalog	5
Clients	Request for JDK 1.7 compliance - future	4
File Manipulation	Checksum for compressed files	4
Interfaces	Develop Perl API.	4
Micro-services	Create script for automating module creation. Provide default template for creating new Micro-service.	4



Table –driven resources	KML data format for database results on spatial databases	4
Table –driven resources	Table-driven Resource access to SQLServer	4
Clients	PyRods support in Gforge (Univ Liverpool)	3
Clients	Synchronize very large files using partial data transfer restarts	3
Clients	Use SQL Server as an iCat catalog	3
Micro-services	Support Perl-based Micro-services by including Perl interpreter in the Micro-service.	3
Table –driven resources	Use SQL Server as an iCAT Metadata Catalog	3
File Manipulation	System level lock manager for core.irb, shared memory, collection (shared cache for rule engine)	2
Security / Authentication	Support a session shell in iRODS, issh	2
Table –driven resources	URI link to an external database through RESTful interface	2
Administration	Add ability for a project PI to create user accounts for group members. Groupadmin	1
Drivers and Access	Support mounting of a WebDAV directory into iRODS. (done through DAVIS)	1
iRODS Metadata Catalog (iCAT)	Create RDA interface to Sybase.	0
iRODS Metadata Catalog (iCAT)	Port iCAT to Sybase.	0
iRODS Metadata Catalog (iCAT)	Support Logical Registration into iRODS. Ability to associate metadata with a name without requiring a file.	0
Message Server	Integration of messages with workflow service	0
Table –driven resources	Client providing JSON format for iCAT query	0
Table –driven resources	Execute control on remote database procedures	0
Information	For SRB to iRODS metadata migration, handle migration of SRB Zones. How can multiple SRB Zones be re-federated within iRODS easily?	
Information	Port SRB APIs on top of iRODS, will avoid having to rewrite many application scripts.	
Information	Post link to VBrower, links to Taverna and EGEE grid.	
iRODS Metadata Catalog (iCAT)	Create signing registration to be able to track origin of files. Given signature, find original copy.	
Security / Authentication	Support client-level encryption and decryption of files. Store encryption keys. Consider a version with encryption done only during transfer. Data is stored unencrypted or encrypted.	
Table –driven resources	Cache for metadata.	
Micro-services	Support Python-based Micro-services by including Python interpreter in the Micro-service.	U. Liverpool
Server	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.	Table-driven resource
Installation	When compile, verify that only changed files are recompiled.	OK



iRODS Metadata Catalog (iCAT)	Save RDA request results for use in a session, want to pass result list to another Micro-service.	Obsolete
Clients	Support for load leveling.	LSU
Clients	For file movement, automate file caching, staging to final location or replication.	KEK
Rule base Management	Provide mechanism to add Rule Base extensions to a remote Rule Base.	In Progress
Rule base Management	Provide mechanism to synchronize Rule Bases across iRODS Servers within a Data Grid.	In Progress
Rule base Management	Provide versioning support for Rules.	In Progress
Windows	Create a Windows-only environment, using PostgreSQL and GSI (both now run on Windows)	In Progress
Windows	Create a Windows-only environment, using SqlServer	In Progress
Drivers and Access	Mount a flash drive.	imount
Clients	iFile command - file identification	GaTech
Installation	Create a VM build for use of iRODS in tutorials.	Example at NCSU
Network Transfer	Fix UDP on Solaris.	Done?
Clients	FUSE restriction on read-ahead, check that it is fixed.	Done
Development	Consider use of Google Code repository and other shareware sites.	Done
Development	Create collaboration environment for iRODS development (done).	Done
File Manipulation	Add core.irb rule to check policy on iget. May want to return alternate version (redacted copy) of file. Preprocess for get	Done
File Manipulation	Hook for preProcForPut for medical applications.	Done
Information	Add a Doxygen indexed version of iRODS source on the wiki.	Done
Information	Add links to Davis WebDAV environment on iRODS wiki, provides drag and drop access to files across windows.	Done
Information	Post on Wiki a list of the planned developments for Jargon.	Done
Interfaces	Develop Fortran API.	Done
iRODS Metadata Catalog (iCAT)	Automate Dicom metadata extraction from binary files.	Done
iRODS Metadata Catalog (iCAT)	Implement FITS header parsing and metadata loading.	Done
Network Transfer	Configure port numbers for data transfer.	Done
Network Transfer	Support sequential transfers as one-hop, similar to parallel.	Done
Server	Add AVU metadata to resource groups.	Done
Information	Publish the complete iRODS network protocol (in progress).	Document
File Manipulation	Support Soft Links in iRODS (supported in 2.3)	Collections
Administration	Restrict ability of ASSIGN to change user name, user role, user permissions.	Check
Clients	iRODS Eclipse File system accessed via iRODS URI	CDR
Server	Allow GSI authentication to non-iCAT Enabled Server without irodsUserName being set.	ARCS
Clients	Test on Centos, FreeBSD, Ubuntu, Solaris, 32-bit, 64-bit	All
File Manipulation	When fail over to an alternate server, verify that the Rule Engine will not have a conflict for a queued Micro-service.	?
Installation	Create a VDT (Virtual Data Toolkit) version of iRODS.	?
Interfaces	Create a Condor interface / port for iRODS.	?