120DS®

iRODS Roadmap 2025

Kory Draughn
Chief Technologist
iRODS Consortium

June 17-20, 2025 iRODS User Group Meeting 2025 Durham, NC



Sets the direction for upcoming development efforts.

Just approved by the iRODS Consortium Planning Committee.

Available at https://irods.org/roadmap



• Include ready-to-use tools for common tasks, out of the box

• Track and expose common metrics

• Improve approachability and accessibility



- Provide an administrative GUI with the server
 - Generate reports, query metrics, manage zones
- Improve server's ability to scale by taking advantage of hardware
- Make server more cloud-friendly
 - Decouple FQDN/hostname from servers
 - All servers run as a Catalog Service Provider
 - Centralize configuration
- Absorb the HTTP API into the server
- Absorb stable plugins into the server
- Replace all use of legacy parallel transfer with multi-1247 parallel transfer
- Make GenQuery2 the default GenQuery parser
- Parallelize resource rebalance operation
- Improve support for archive files



• Finish and release the Policy Composition rule engine plugin

Finish and release the Publishing capability plugin



Polish and release the HTTP API client libraries

• Implement **pam_interactive** authentication scheme for client libraries

Only applies to libraries speaking the iRODS protocol



• Optimize the HTTP API's upload performance for large files

• Optimize the S3 API's upload performance for large files



Fully automate release testing

Provide clear report of what was tested and what happened

Default test run to cover the server, plugins, clients, and integrations

Should run on consumer hardware



Questions?

https://irods.org/roadmap