Technology Update
## In The Last Year

<table>
<thead>
<tr>
<th>iRODS Release</th>
<th>Issues Closed</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1.9</td>
<td>38</td>
</tr>
<tr>
<td>4.1.10</td>
<td>24</td>
</tr>
<tr>
<td>4.2.0</td>
<td>275</td>
</tr>
<tr>
<td>4.2.1</td>
<td>34 + 36</td>
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</tbody>
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**Python Rule Engine Plugin**

**Python iRODS Client (PRC)**

**Cloud Browser**
Ongoing Development Work

- Python iRODS Client (PRC)
- Python Ingest Tool
- Lustre Integration
- QueryArrow Database Plugin
- Multipart Transfer, v5 API
- Cloud Browser
- Metadata Templates
- Swagger REST API
Upcoming Releases

- R Client Library (R-iRODS)
- AMQP Audit Rule Engine Plugin
- 4.1.11
- 4.2.2
- 4.3.0
Big Picture

4.2 was about sending things out
- Dynamic PEPs
- Pluggable Rule Engine
- Enterprise Messaging

4.3 (and friends) will be about bringing them back
- Facilitated by GQv2
Big Picture - GenQuery

Current GQ

* iRODS
* GQ
* SQL

Future GQv2

* iRODS
* GQv2
* SQL
* GraphDB
* MongoDB
* ...


Enterprise Messaging - Scatter

iRODS 4.2

Enterprise Message Bus

Audit Plugin
Rule Engine Plugin Interface
Audit Plugin

Compute Plugin
Index Plugin

Compute
Index
Triple Store

Big Picture

Metadata Virtualization - Gather

iRODS 4.3
GQv2 - Suite of Plugins
Virtualizing Metadata
Big Picture

Federation
Open Source Community Engagement

- Technology Working Group
- Metadata Templates Working Group
- Filesystem Integration Working Group
- Mime Types Integration Working Group
- GitHub Issues
- Pull Requests
- Chat List
- Consortium Membership