Updates

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National Scale CI efforts powered by iRODS

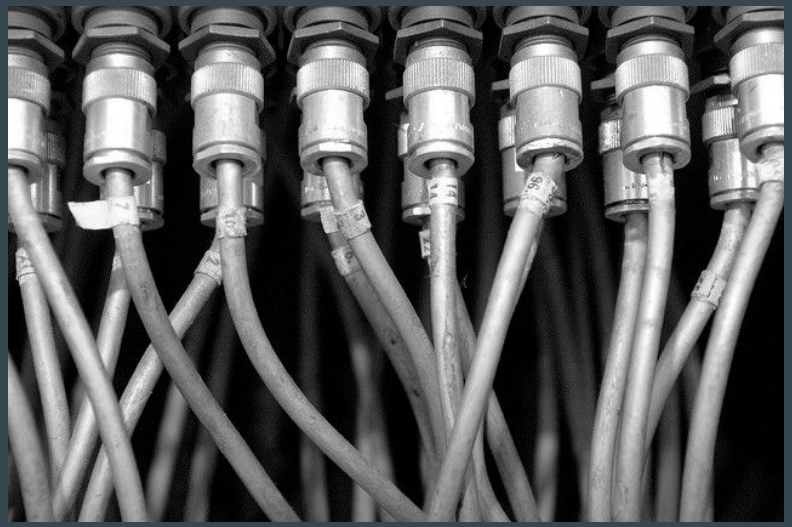
- Represent iRODS and CI built on iRODS to NSF and other research partners, employ as key architecture in ongoing domain research
- Apply policy management principles to multi-disciplinary research
- We'll hear from BRAIN-I
- We'll hear from CyVerse

Dogfooding....

- From research Cyberinfrastructure (CI) to production CI using the facilities and approaches pioneered in iRODS.
- Like iRODS, from build your own to cafeteria-style CI deployed to domains

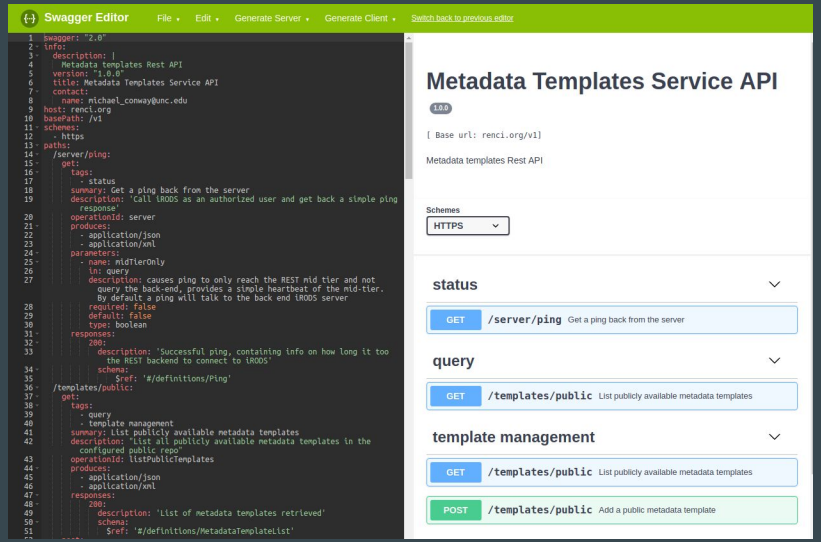
API and Improvements

- Prepare for V5 API and pluggable transport!
- New language bindings!
- Clean room Jargon2
  - Pluggable frameworks
  - Client-side extensible PEPs
  - NIO and standard i/o support
  - JMX exposed real time monitoring and tuning
  - ZeroMQ based instrumentation
  - Caching support and conn pooling
  - Thin declare and go zero install architecture
- Pluggable transport
  - Thin alternatives + pluggable transports including C level bindings



CI Service Interfaces

- Standardized REST interfaces across common CI services
- Swagger based specification
- Share-nothing microservices architecture
  - packaged for easy install
  - scalable and managable
- LOD support for iRODS data



New Services

- Metadata Templates
- Indexing Framework
- Virtual Collections
- Publishing Framework
- Expansion into standard interfaces (Infinispan, JCR, Spring Data)

New Interfaces

- Cloud Browser news
- REST API (core + extended) news
- CyVerse news
- Revisit desktop GUI/Agents