



# **iRODS Client Library: Python iRODS Client 1.1.4**

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Originally developed at CyVerse (then known as the iPlant Collaborative) in 2013 and contributed in 2014 to the newly established iRODS Consortium.

Now an established PyPI package, it is actively kept up to date with any iRODS API changes and is popular as a basis for many other projects.

Thank you to the 41 contributors and many users over the years.

## Tickets

- access iRODS objects via a ticket
- issue tickets for access by other users
- test for existence of tickets via GenQuery

## Rule Execution

- can now target rule engine instances
- test for rule errors via an RError (returned error) stack

## Choice of XML Parsers

- *SECURE\_XML* - less prone to exploits.
- *QUASI\_XML* - allows flexible character set for object names.
- *STANDARD\_XML* - the old standby.

## Path Normalization

```
>>> c = [ "/", zone, './home/', user ]
>>> session.query(Collection).filter(Like(Collection.name,
                                         iRODSPATH(*c, '%'))
                                     )
```

We can now:

- login in as the anonymous user, without a password
- use ticket access as the anonymous user
- use long PAM login tokens > 1024 characters
- access ticket and metadata APIs using ADMIN\_KW
- use the full checksum API in 4.2.11, 4.3.0
- get owner, timestamp, inheritance via Collection attributes
- change own password (or others' passwords as admin)

- improve parallel transfer performance
- allow relative object paths and cwd context for sessions
- continue working towards full coverage of the iRODS API

Questions?

