

ServiceX Front End Status

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SX Front End

[Github](#) (ssl-hep account)

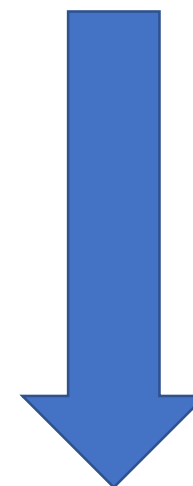
- Goals:
- Provide end-user pythonic access to ServiceX
- Layer common use case utilities
 - Copy data to local files (pandas/parquet)
 - Data Science Format Conversion
 - Pandas, Awkward
 - Consistent Ordering of Data
 - Progress Feedback
 - Credential Management
 - Caching Layer for easy reuse of identical queries

Many thanks to everyone that submitted PR's!

RC3 Status

RC3 Release (v2.1) is almost ready to go

- Token based Auth PR ready to be tested (last bit)
- Lots of new features since 2.0
 - Lots of technical debt (thanks Andrew, Ben, David, Marc!)
 - Ability to ignore the cache
 - Ability to handle root & xAOD credentials in credential config
 - RC3 Token, of course



When RC3 is released, final set of integration tests...

SX Front End

[Github](#) (David's Personal account)

- Goals:
 - High level integration tests
 - Acceptance test?
- Testing
 - Test uproot and xAOD backends
 - Make sure basic functionality is present
 - Tests ServiceX, frontend, basic func_adl and qastle queries
- Testing environment
 - Command line (with appropriate package dependencies)
 - Github CI (a public api with SX credentials as github secrets)
 - Docker Container

RC3 Status

RC3 Release is almost ready to go

- Waiting for new version of the frontend library

Next...

Frontend

Next release concentrates on usability & documentation

- Examples in tutorials or documentation
 - func_adl
 - TCut
 - Qastle generation
- Stress Testing
- Other end-user use cases that come up
- Multi-endpoint support in credential manager
 - 2 xAOD instances of ServiceX...

Further Out

- Analysis Facility Use Cases
 - E.G. streaming (do not copy data locally)
- Streaming by file to end user
 - To allow processing of data as it arrives on local machine, including caching

Testing

Next release concentrates on usability & documentation

- Examples in tutorials or documentation
- Moving this repo to ssl-hep
- Some ideas
 - Integrate into servicex command line?
- Build comparison of uproot and xaod backend
 - Unify func_adl access to backends

ServiceX

These are usability issues that show up in the API of the front-end

- Better management of the transformer image tag