## 



## **XRootD and tokens**

1 March 2023 Kyle Knoepfel (for the SciSoft team)

## XRootD and tokens (1)

- ROOT is built against XRootD client libraries.
- Thus far, all ROOT UPS builds provided by the SciSoft team have not been built with token support.
- The SciSoft team now has builds of XRootD 5.5.3 that support tokens through SciTokens.

Required changes to upstream XRootD code.

• If you stay current with art releases, you will have XRootD token support beginning with the next release of art-root-io (1.12.03 or later).

Timescale for art-root-io 1.12.03 has not been determined. Please contact us if you have immediate needs for XRootD token support.

• If you do not stay up-to-date with art releases, then things are trickier...



## XRootD and tokens (2)

- XRootD is a build-time dependency of ROOT.
- Rebuilding XRootD usually means ROOT and everything downstream of ROOT must be rebuilt.
- To get token support, any experiment software that relies on ROOT will need to be rebuilt with versions of ROOT that support token-aware XRootD builds.
- If your experiment cannot rebuild its software against token-aware ROOT/XRootD versions, XRootD-streaming access to ROOT files may no longer be possible.
- Please contact <u>scisoft-team@fnal.gov</u> for questions or guidance.
- Note that we are in communication with the FIFE team about this issue.

