

# XRootD Organization & Governance

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<http://xrootd.org>

# The **XRootD** Project

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- # We call it “project” because it is
  - A Community Driven Effort
- # As such it is managed by consensus
  - Three significant active roles exist
    - Two of which are defined
      - Principal Architect
        - Andrew Hanushevsky, SLAC
      - Release Manager
        - Guilherme Amadio, CERN
    - Developers, testers, re-packagers

# Principal Architect

# Role of the PA is to provide ...

- Consistency

- Avoid duplication of code and close variants

- Maximum reuse of internal components

- Evolution maintains good functional interplay

- Sustainability

- New features work together & have full utility

- The full framework remains practically maintainable

# Occurs during collaboration & code review

# Release Manager

- # Role of the RM is to provide quality code
  - Testing, coverage, performance
    - The RM is the final arbiter of what is released
      - This avoids squabbles and provides continuity
        - Of course, consensus is key here to make it work
        - Though collaborators sometimes stress this model
  - Historically, the RM also manages the client
    - Development, bug fixes, etc
    - This has been evolving

# Developers, Testers, Re-packagers

- # This is a very distributed “team”
  - We say “team” because people come & go
  - Estimates put it 1 to 5 FTEs at any time
- # However, there is a stable core team
  - Consist of Official Collaboration members
    - About 3 FTE
      - Essential to provide long term continuity
    - Project structure minimizes required core FTEs
      - A feat we managed to everyone’s surprise

# Community Participation

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- # Github issues page posts
  - Official record of bugs & enhancement reqs
- # OSG & WLCG meetings
- # Regular experiment meetings
- # Other discussions
  - Projects & co-dependent system devops
- # Unsolicited contributions
  - Patches and features

# The Work Plan

- # A continuous work plan model is used
  - Allows us to be nimble with a small group
  - What proceeds is constantly assessed
    - Based on impact, effort, & developer availability
- # Work may be farmed out to others
  - This is a collaborative undertaking
    - Scope is outlined
    - Interdependencies identified and lined up
    - Timeline expectations are discussed & agreed

# The Official Organization

- # Signed MOU to *officially* join the Project
  - This is a collaboration agreement
    - Organization agrees to provide actual resources
      - Currently: CERN, SLAC (founding member), UCSD
    - Any organization can join
      - Historically organizations come and go
        - That's expected as priorities change
  - The MOU's form the governance framework
    - Hence, we pick key people primarily from MOU's



# The Unofficial Organization

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- # That is the HEP community
  - Experiments, WLCG, OSG, IRIS/HEP, etc
- # They drive the future of the project
  - Mostly in articulating requirements
  - They also provide adhoc resources
    - Contributions which are essential
    - Testing & bug reports which are critical
- # Anyone using XRootD is a member

# Improvements?

- # This approach used since day 1 (>20 years)
  - It works well in a collaborative and distribute environment with constrained resources
- # Alternative suggestions always welcome
  - Though it's difficult to make radical changes
    - Given the number of inter-dependencies
      - Experiments and other HEP/non-HEP software systems
    - The need to provide long term continuity
- # In the end we all want **XRootD** to work