

Addressing Research Software Sustainability via Institutes

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- Research software is essential to modern research
- It requires ongoing human effort to sustain
 - Need to continually adapt to changes in dependencies, fix bugs, add new features
- Software sustainability institutes develop, maintain, & disseminate best practices for research software sustainability, and build community around them
 - SSI (UK, 2010 - present)
 - URSSI (US, planning started in 2018)
 - AuSSI (Australia, now planning)
- This can both reduce the amount of effort that is needed and create an environment where the effort is appreciated and rewarded
- Strengths of institutes for sustainability
 - Focus on academia & national labs: a government-funded activity aimed at government-funded institutions
 - Collaboration between institutes and communities: can work together under common vision to find common or customizable solutions
 - Leveraging research-specific concerns such as reproducibility and open science / open research
- Weaknesses of institutes for sustainability
 - Hard to impact industry (larger than academia, with different social practices & incentives)
 - Limited funding and limited time (as government funded projects)