

UXL CI Responsibilities

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UXL's CI State of Play

- CI is a requirement to move expected repositories to the UXL Foundation
- Some basic CI exists (page deployments etc)
- The CI requirements for projects to confidently accept public contributions is documented on GitHub
- A board for tracking open items on projects is also on GitHub

Codeplay's Role So Far

- Aaron Dron has been acting as GitHub Organisation administrator
- Codeplay has been taking the lead to document how to set up CI for UXL projects, and set up some initial infrastructure
- Codeplay has hosted some physical hardware that was to be used by the foundation
- Codeplay has been working with the likes of Arm to obtain more runners for projects

Codeplay is stepping back from these activities

- Aaron is no longer able to act as the GitHub organization admin
 - Robert Cohn stepped away from his UXL role a while back
- The hardware Codeplay was setting up will no longer be available
- The activities for documenting and establishing CI will cease
- We are seeking individuals or organizations to hand over these activities to

UXL CI Requirements

- Hosted hardware for combinations required by projects documented here
- A secure CI workflow configuration for testing external PRs on self-hosted hardware
- Dependency management and security scanning
- Sufficient hardware to test external PRs on all existing public repos
- Easy on-ramp for UXL members to self-host runners and add testing for their platform
- Documentation and knowledge base
- Well maintained and continuously improved

Available CI and Now Removed Infrastructure

| Owner | Туре | OS | Number | Active? | Notes |
|----------|---------------------------------|------------------------|-----------------------------|---------|---------------------------|
| GitHub | CPU x86 | Linux, Windows, Mac | Up to 500 concurrent | Yes | |
| GitHub | CPU AArch64 | Linux, Mac | Up to 500 concurrent | Yes | |
| Intel | Intel GPU Max 1550 | Linux | Varies depending on request | No | |
| Codeplay | CPU AArch64 | Linux | Cloud-based | No | Available until 31 May |
| Codeplay | Intel GPU Battlemage B580 | Linux | 1 | No | |

CI Requirements for projects so far

- Intel CPU (GitHub provides runners)
- Arm CPU (runners mostly in place)
- Intel GPUs (DevCloud/Tiber Cloud no longer available)
- Nvidia GPUs (none in place)
- AMD GPUs (none in place)

We are now back in a place where we need to find a way to establish this hardware for UXL projects

At the moment the projects will continue to test via internal infrastructure

Transition Planning

- Codeplay will publish any documentation that could be useful for CI
- Individuals need to step forward to take care of UXL GitHub Organisation Administration
 - John Melonakos has agreed to help but it would be good to see other organisations involved
- UXL Working Group needs to find a new owner for establishing public CI
- UXL members need to help find sources of public CI infrastructure

GitHub Organisation Administrator Role

- Management of user permissions (e.g adding write access for maintainers)
- Following best practices for user permission management
- GitHub repository administration
- Monitoring for security incident and vulnerability reports through GitHub
- Sharing details for specific runners with project maintainers

Public CI Infrastructure Work Package

- The Intel DevCloud/Tiber infrastructure removal means there is no template project for public CI (originally this was the plan as a way to document things)
- There would ideally be individuals from member organisations responsible for pushing various public CI tasks
- Seeking resources for public CI is also an important role

Call to Action

• Email John and Megan if you are interested in helping with any of these activities

- GitHub Organisation Admin
- Pushing forward public CI for projects to bring project independence