



Async Saving Improvements

Ashod Nakashian

Consultant



Collabora
Productivity

ash@collabora.com

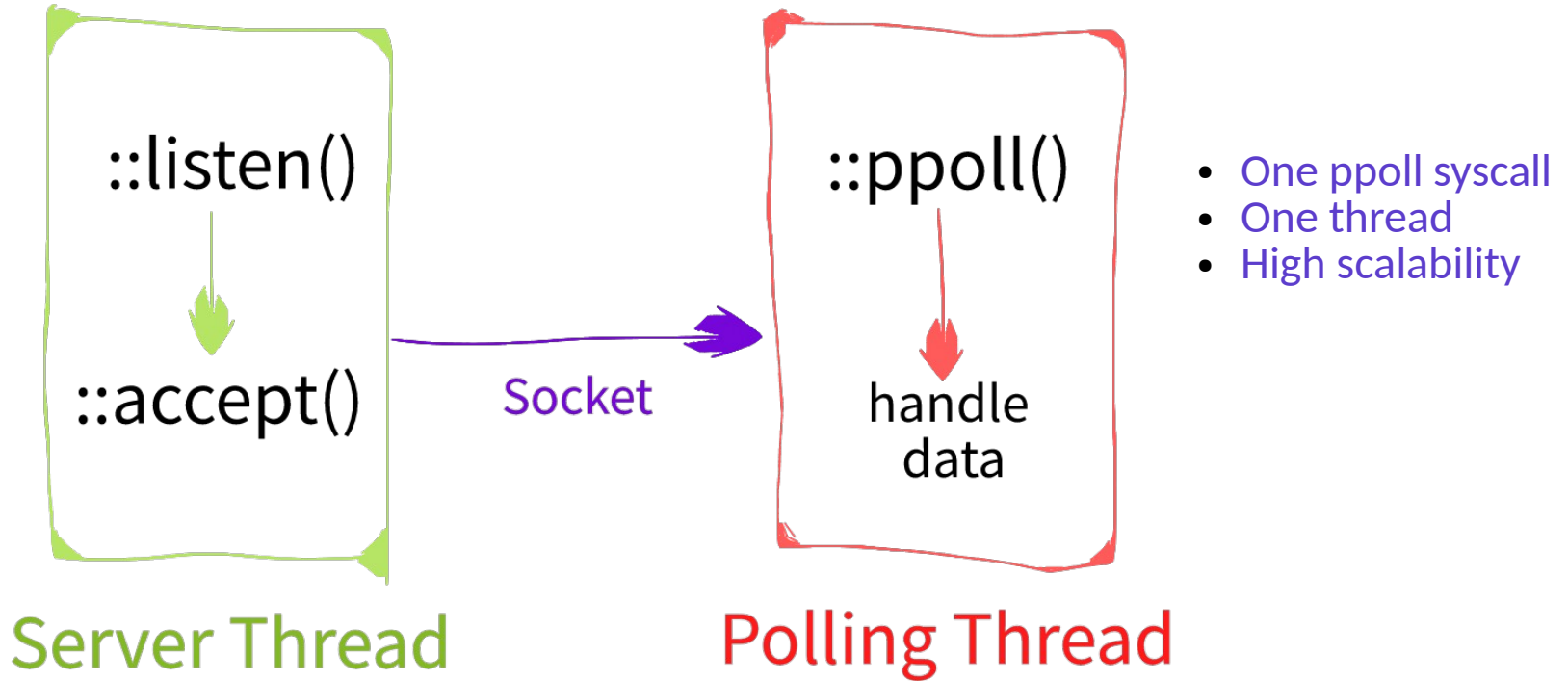


Background

Asynchronous Saving and Uploading

- Built on asynchronous sockets
- Shared socket polling, reduced overheads
- Reusable sockets

Low-Overhead Design



Improvements

Better Edge-Case Handling

- Last-client disconnection on document with conflict
 - Relies on Document Quarantine
- Track and report save and upload failures
 - Cap retry logic based on number of failures
- Optimizations to avoid excessive retrying upon failure
- Faster document unloading and reloading
- Better statistics and diagnostics
- New configuration settings

Timing-Sensitive Issues

Saving and Editing in Parallel

- Track modifying user activity to prevent closing immediately after saving
- New logic to track storage properties
 - Retrying failed upload attempts do not lose prior properties
 - Resolves a number of uncommon, but important, issues

Hardening

Validating and Preventing Regressions

- A host of new tests added specifically to create the issues resolved
- Improvements to the testing framework to be more capable, reduce false positives and negatives
- Stricter tests
- More Fuzzing to discover unknown issues



Thanks !

By Ashod Nakashian



@CollaboraOffice
hello@collaboraoffice.com
Collaboraoffice.com

