Contribution ID: **2** Type: **not specified**

Exploring Cloudflare Workers

Tuesday 4 June 2019 09:00 (45 minutes)

Cloudflare Workers is a serverless computing platform optimized to minimize latency to end users. Cloudflare runs every guest function in each server of its network's 175 points of presence, meaning code runs as close to the end user as possible, and is not confined to geographic regions. This requires overcoming a scalability challenge faced by container-based platforms: how to reduce each function's overhead enough to deploy them universally to a global server fleet.

The V8 JavaScript engine contains a solution: Isolates, a lightweight sandboxing technology. V8 Isolates allow Cloudflare Workers to use JavaScript and WebAssembly modules as serverless functions, minimizing overhead and providing a familiar language environment for web application developers. Workers reinforces this familiarity by implementing standardized JavaScript APIs found in browsers.

This talk examines the design of Cloudflare Workers, how it fits into the serverless computing landscape, and the problems Worker scripts can solve.

About the Author

Harris Hancock is a systems engineer who helps implement the Cloudflare Workers runtime environment, with a particular focus on the JavaScript API. He previously wrote communications middleware for an educational robotics startup, during which time he became a regular contributor to the Cap'n Proto RPC library. It was this interest in protocols and systems programming which lured him to Cloudflare in 2017.

Presenter: HANCOCK, Harris (Cloudflare)

Session Classification: Technology Outlook