



Request for Google V8 Developer Advocate

20240730 z/OS Open Tools



Google Chromium v8 port to z/OS Unix Subsystem (USS)

- z/OS Open Tools has an existing port of Google Chromium V8 Javascript Engine and has been upstreamed
- This endeavor requires additional components such as depot_tools, gn, ninja, etc.
- This ecosystem exists as ports for USS in z/OS Open Tools
- This is a proposal to Google to provide a developer advocate to help with maturity of this ecosystem

ASIDE: see last slide for some mainframe terms



Why Google Should Provide a Developer Advocate

Increase Market Share / Mainframe Modernization

This project can drive increased Google Compute Engine usage by supporting IBM z/OS (mainframe) workloads running on Google platforms:

- Broadcom's IBM z/OS emulators run on Google Compute Engine platforms
- Perhaps Google has other customers besides Broadcom who run emulators with a similar configuration. Eg. GCP hosted emulators
- Microsoft doesn't have any support for z/OS emulation

This is a multi-win situation

Google, z/OS Open Tools, IBM, Broadcom



Components and Upstream Status

- Gn
 - z/OS port is upstreamed and functional
- Ninja
 - z/OS Open Tools port exists and functional
 - Upstream not currently planned
 - Should we not address this?
- Depot_tools
 - z/OS Open Tools port is upstreamed.
 - Testing of the Change List (CL) in plan
 - [Current patch in in progress](#)
- V8
 - [Current patch merged](#)
 - z/OS Open Tools port exists and functional
- luci-go/auth
 - Binary is functional - resides in z/OS Open Tools
 - Waiting on IBM golang team to release source code



V8 USS port and Supported Platform Status

Ideally z/OS Open Tools would like to have this port as a first class package. Currently there are some linux on Z and AIX ports in place, but listed as “best effort/experimental”.

IBM has a process for open source component testing on USS. IBM will provide emulator access for testing to ensure a “Supported” port.

Although it is not currently available, the sign up form is [here](#)

If IBM can not provide access, Broadcom can provide this necessary interface to Google.



So what is USS?

The IBM mainframe is a server that runs on the IBM Z series hardware with the latest being the IBM z16. The server is capable of running multiple operating system concurrently, including z/OS, z/VM, and Linux. The z/OS operating system includes an integrated UNIX environment known as z/OS UNIX System Services, referred to as USS, that supports familiar linux tools some of which are provided by the z/OS Open Tools project simultaneously accessing z/OS capabilities as provided by IBM's base offerings.



Mainframe Terms

z/OS - the Operating System

IBM Z - the hardware

USS - Unix System Services

z/OS Unix - Alternative name for USS



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