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

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?

z/OS is IBM's mainframe operating system. It has the concept of a virtual machine where it can run various operating systems. One configuration is to run Linux. Another configuration is to run USS (Unix Sub System). USS is more tightly integrated into the mainframe OS. Unlike the pure linux configuration USS has the ability to provide libraries to applications running under z/OS. From one perspective USS is a standard terminal interface where you can ssh into and run your 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/

IBM Contacts

Shereen Ghobrial - Director - shereen@ca.ibm.com

Mike Fulton - IBM Distinguished Engineer - fultonm@ca.ibm.com

Igor Todorovski - z/OS Open Source Developer - itordorov@ca.ibm.com

Gaby Baghdadi - Software Developer - baghdadi@ca.ibm.com

Broadcom Contacts

Per Kroll - Senior Director R&D - per.kroll@broadcom.com

Michael Frank - R&D SW Mgmt - michael.frank@broadcom.com

Vidya Narayan - R&D SW Mgmt - vidya.narayan@broadcom.com

Scott Glenn - Principal SW Engineer - scott.glenn@broadcom.com

John F. Davis Principal SW Engineer - john.davis@broadcom.com