1. Open Container:

**Dependencies:** Go, Docker

**Runtime build:** Follow all the steps as described in <https://github.com/opencontainers/runc>

**Run command debug mode:** sudo runc --debug run mycontainerid

**Debug logs:** Printed to console

2. Gvisor:

**Dependencies:** Bazel, Python

**Runtime build:** Follow all the steps as described in <https://github.com/google/gvisor>

**Container Creation:** <https://gvisor.dev/docs/user_guide/quick_start/oci/>

**Run command debug mode:**

Ptrace mode: sudo runsc --debug-log=/tmp/runsc --debug run hello

Kvm mode: sudo runsc --debug-log=/tmp/runsc --debug --platform=kvm run hello

**Debug logs:** /tmp/runsc (delete the already existing ones to observe the latest ones)

3. Kata-Container:

**Dependencies:** Go version > 1.11.10, Docker

**Runtime build:** Follow all the steps as described in <https://github.com/kata-containers/documentation/blob/master/Developer-Guide.md>

**Run Command debug mode:** sudo docker run -ti --runtime kata-runtime busybox sh

**Debug logs:** sudo journalctl -t kata-runtime > logs.txt (the current debug statements get appended to already existing ones)

4. Firecracker:

Dependencies: Docker

Runtime build: Follow all the steps as described in

<https://github.com/firecracker-microvm/firecracker/blob/master/docs/getting-started.md>

**Run Command debug mode:** Nothing specific (but to get timestamp in alpine linux in nanoseconds we have to modify rootfs. Mount it and use eth0 of host to enable dns of guest)

**Debug logs:** Printed to console

**Network Setup:** [**https://medium.com/@Pawlrus/aws-firecracker-configure-host-guest-networking-b08b90d4f48d**](https://medium.com/@Pawlrus/aws-firecracker-configure-host-guest-networking-b08b90d4f48d)

Change Header **'accept:application/json' \ to 'Accept:application/json' \** in the above blog.