Clear Containers Update

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Clear Containers

- Hypervisor backed containers
- OCI container runtime
- QEMU (pc-lite)
- Clear Linux: Guest OS and kernel
- Hyper, Rkt, Huawei
Current Architecture

- Containerd
- containerd-shim
- cc-oci-runtime
- QEMU
- OCI Bundle
- 9pfs
- systemd
Limitations

- No docker exec support
- Wrong exit code
- Assume shell is available in the container bundle
- No clean Pod support
- No namespaces
New Architecture

- Containerd
- containerd-shim
- cc-shim
- cc-oci-runtime
- cc-proxy
- OCI Bundle
- 9pfs
- hyperstart
- QEMU
Future Plans

- Virtcontainers
- Device assignment (SR-IOV)
- Kubernetes/CRI/CRI-O
- Remove the tap <-> veth bridge
- AF_VSOCK
https://github.com/01org/cc-oci-runtime
https://github.com/sameo/virtcontainers