

DEVCONF.cz

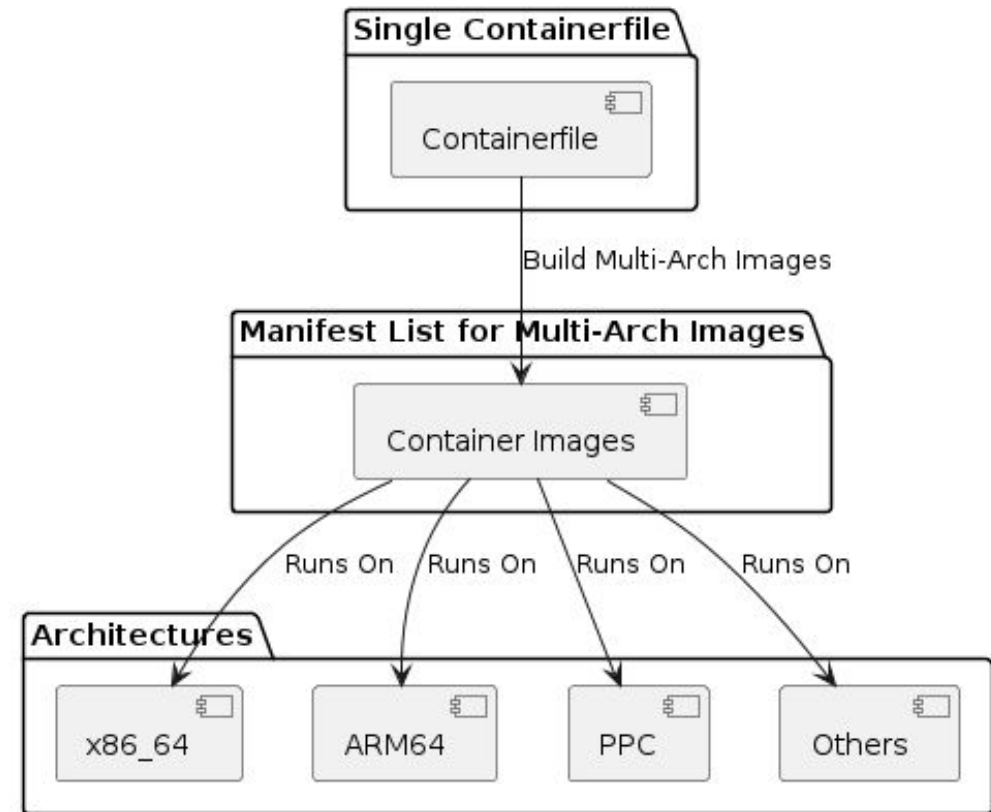
Let's Farm Out Our Image Builds!

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What is Multi-Arch? (and...what's a manifest list?)

- Images built for multiple architectures
- Compatibility with various hardware platforms
 - x86_64
 - ARM
 - PPC



Why Multi-Arch?

- Performance and Cost optimization
- Cross-platform development
- Support for Cloud and Edge Devices
- Easy migration between infrastructures
- Collaboration among Mac users & the way cooler Linux devs



**ONE
ARCHITECTURE**

**MULTIPLE
ARCHITECTURES**

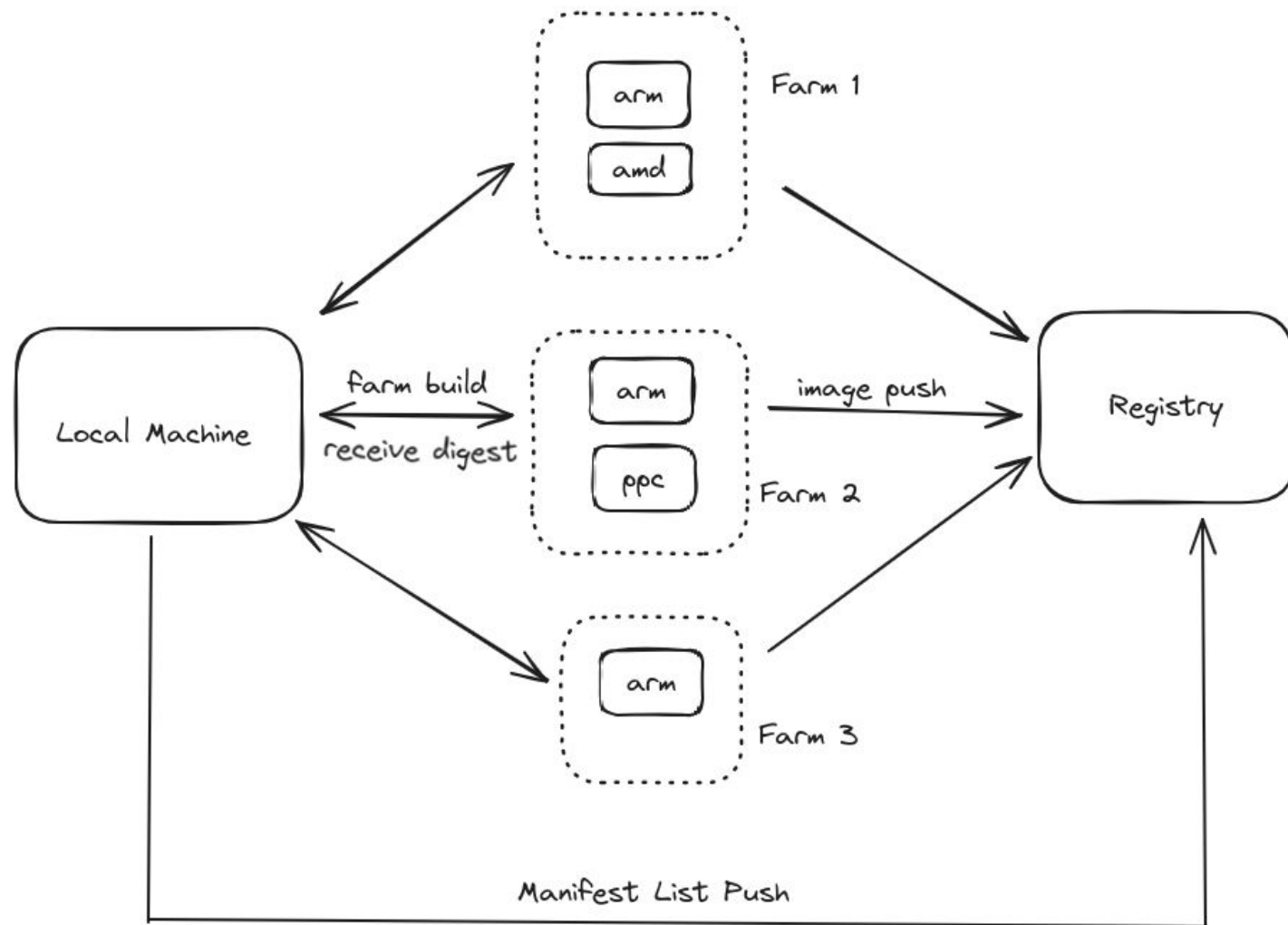
Current Solutions Include...

- Multiple build configurations
- Multiple images
 - Separate image pushed for each architecture
 - Confusing...
- Emulation
 - Qemu for cross builds
 - Poor performance



Podman Farm

- Nodes of target architecture in farm
 - VMs
 - Physical Machines
- Podman socket enabled on nodes
- Client sends build to target farm
- Built images pushed to registry
- Final manifest list pushed to registry



Demo!



AI, Edge, and Image based OS (bootc)

- AI applications are packaged, delivered, and deployed as OCI images
 - K8s in datacenters
 - Podman, Docker at the edge
- Future of AI Infrastructure is HYBRID
 - footprints, architectures, connected, disconnected
- AI application images are HUGE
- OS images packaged & delivered as OCI images

Farm build:
~2min 10s

Resources

- Asciiinema recording - <https://asciiinema.org/a/633052>
- Farm vs Non-Farm Demo: <https://youtu.be/535161RjopA>
- Docs - <https://docs.podman.io/en/latest/markdown/podman-farm.1.html>
- Blog - coming soon (should've been here already xD)

The background is a solid light purple color. Overlaid on this are several geometric shapes in different shades of purple. A large, dark purple circle is positioned on the left side. A medium-sized, medium-purple circle is located in the center. A smaller, bright purple circle is on the right side. A dark purple square is centered within the medium-purple circle. The text "Thank You!" is written in white, bold, sans-serif font, positioned to the right of the central square, overlapping the medium and bright purple circles.

Thank You!