OpenShift, Fedora Power!

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Today's Topics

1. Base
2. Toolchain
3. Binaries
4. Images
5. Infrastructure
6. Playbooks, CI and beyond

Base

Base

- Fedora has support for ppc64 since F 7(2007)
- And for ppc64le since Fedora 21(2014)
- Currently Fedora has near complete parity with other primary arches in the RPM world
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Base

- OpenShift is kubernetes based platform for running containers
- OpenShift Origin - https://openshift.org/
- Red Hat OpenShift Container Platform - https://openshift.com/

Toolchain

Toolchain

- Openshift, kube, cri-o, podman, moby,... written in Go
- GC and GCC-Go
- GCC-Go “supports” all arches that gcc do
- GC only some
- GC ported thanks to laboger and IBM

Toolchain

- Using gcc-go
- Using cross-compiled bootstrap compiler
- Demo

Binaries

Binaries

- “Everything” in Fedora RPM package
- Packaging macros and guidelines
- Custom builds scripts, patches
- etcd
- Binaries, that is enough right?

Images

Images

- Openshift needs container image(s) to run
- Regular deployments needs etcd and pod images oc cluster up needs multitude
- Tracking down all the images
- Building
- So we have images at docker hub, that is enough, right?

Infrastructure

Infrastructure

- Building images in reproducible and sustainable way
- Pushing them in to the registries for consumption
- Builder, registry

Infrastructure

- OSBS, OpenShift Build Service in conjunction with Koji - https://bit.ly/2Dkry00
- OSBS-box - https://bit.ly/2NqTJ1U
- Manifest lists
- Demo

Playbooks, CI and beyond

Beyond

- Deployment/”Installer” Ansible playbooks - https://bit.ly/2MOiRdH
- Standard set of s2i container images based on Fedora(with image streams)
- CI deployments and testing
- OpenPower lab in Brno
- https://red.ht/2PScsQU

Summary

- We have toolchain, binaries ready
- Finishing work on infrastructure to deliver core container image
- In near future Ansible playbooks for deployment and standard set of s2i container images
- Users, testers and contributors are welcome

Summary

- Container SIG https://bit.ly/2QOC6Y0
- CoreOS SIG https://bit.ly/2QLoAnP
- Go SIG https://bit.ly/2QLaMd4
- Big thanks to all folks involved in upstreams, porting and enablement notably cverna, laboger, jeyoung and countless others

Questions?

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