SINK update –
Does it still float?

sambaXP 2023

Ann-Sophie Qvarnström on flickr - https://flickr.com/photos/141281588@N05/51237632326/

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Questions!

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History

recap

2020

- First half:
  - Project prototype started as private projects/repos:
    - samba-operator
    - samba-container
  - sambaXP: introduction of the projects (Michael)
- Second half:
  - John joins
  - sambacc project started
  - SINK org created on github and repos moved there

2021

- First half:
  - Niels joins
  - sambaXP: project update (John and Michael)
  - First external contributions
- Second Half:
  - Sachin joins
  - Anoop joins

2022

- First half:
  - sambaXP: project update (John)
  - First release of container, sambacc, and operator
- Second half:
  - Shachar joins

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Project update highlights

Maturing the projects:

- Build a community: Attracting more external contributions.
- Code quality and test automation improvements
- New features
- Got rid of technical debt
- Created a release

Attracting external contributors

Additional external contributions:

- Dec 2022: more external contributions to operator
- Jan 2023: dmulder contributes to sambacc
- Sambacc gets added to opensuse
- Feb/April 2023: container: opensuse based container builds by dmulder.
- Opensuse publishes samba-container images
- A fair number of issues (bugs and feature requests) have been filed from people outside our immediate team

samba-container

- Opensuse as an optional base image

- Explicit choices of Fedora and CentOS as base image (OS_NAME= ...)

- Fedora base now at version 37

- New image: toolbox

- automation/tests/ci:
  - Mergify
  - Gitlint (commit messages)
  - Release v0.2: June 2, 2022
  - WIP: building images for Arm64 architecture.

sambacc

- Code quality: python type annotations
- Build script now supports different base distros
- Config validation with JSON Schema (http://json-schema.org/)
- Added TOML and YAML config file formats
- automation/test/ci:
  - Mergify
  - Gitlint
- Release: v0.2. May 25, 2022
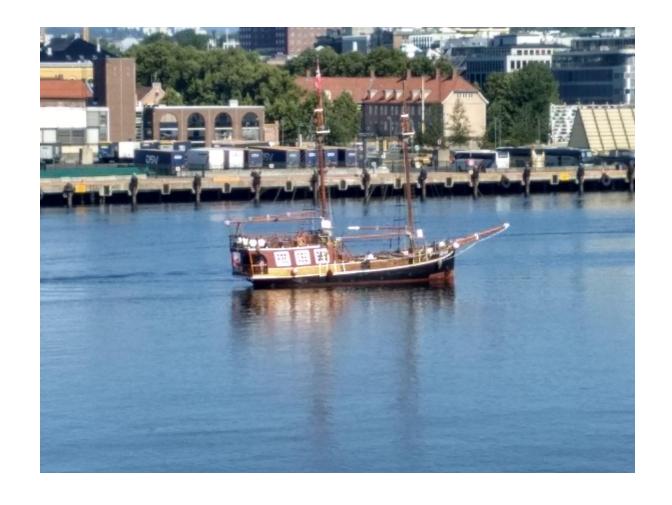- Continuously built and published RPMs in a COPR

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samba-operator

- automation/test/ci
  - Mergify
  - Gitlint
- release   v0.2. June 08, 2022
- Grouped shares
- Clustered shares with ctdb
- Improved support for openshift
- Documentation for our Custom Resources (CRs)

Off to new shores...

Introducing SIT – Samba Integration Tests

Introduced at sambaXP 2020/21: https://github.com/gluster/samba-integration

- Build nightly samba rpms for Fedora and centos from Samba master and release branches.
- Stand up a virtual test environment with gluster, samba, and ctdb
- Run select smbtorture tests against the env
- Using gluster's centosci resources
- Rpms from these builds initially used in SINK samba-container images

Recently:

- Brought the branches as new repos to the SINK org as SIT.
- Using the (new!) sama's centosci resources
- [WIP] Ceph instead of Gluster as storage backend of the test env.
- Using the rpms from these builds in samba-container(s)

SIT Project Repositories

- https://github.com/samba-in-kubernetes/samba-build

- https://github.com/samba-in-kubernetes/sit-environment

- https://github.com/samba-in-kubernetes/sit-test-cases

Questions?

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Time for some Demos

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Our demos

With a focus is on using the Samba containers without Kubernetes

Kubernetes may be in the organization name – But we're more than just that

Demo 1

- ▸ Showing a file server running under podman with systemd for service management
- ▸ This is a basic configuration that makes use of one running container and the most minimal sort of orchestration
- ▸ For a little spice – we'll be using CephFS VFS module for our backing storage
- ▸ For full notes, links, feedback, and questions – Go To: TODO[URL]
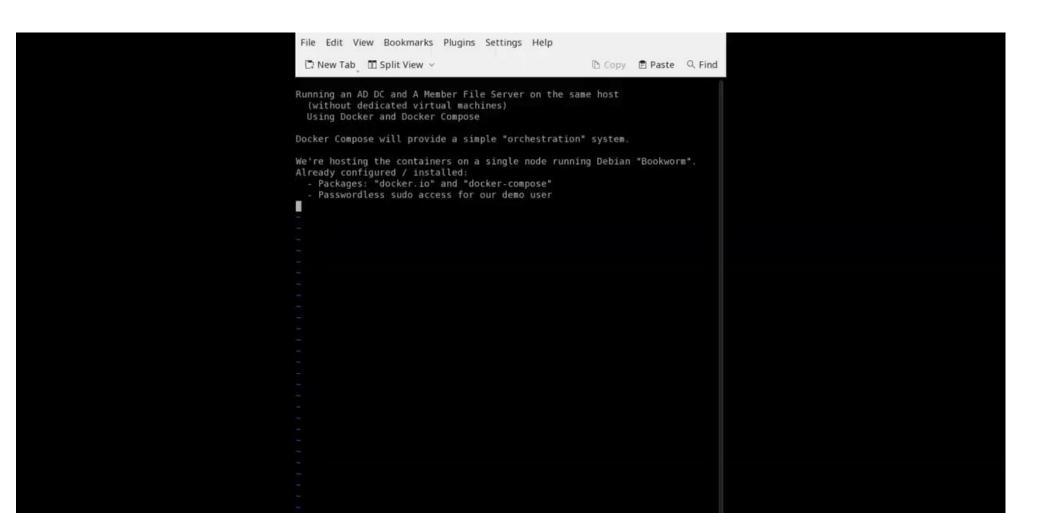
Demo 2

- ▸ Showing both an AD Domain Controller and file server running on the same node
- ▸ All isolation between the DC and file server happen at the container level
- ▸ Using docker-compose for minimal orchestration
- ▸ For full notes, links, feedback, and questions – Go To: TODO[URL]

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Demo 1


```
File   Edit   View   Bookmarks   Plugins   Settings   Help

 New Tab    Split View                              Copy    Paste    Find

Running a Single Samba Server container instance
 * Under podman
 * Using systemd
 * Exporting a CephFS sub-volume


The current setup:

A previously configured 3 node Ceph cluster (managed with cephadm).


A Fedora VM preinstalled with podman (and quadlet).

I've also preinstalled smbclient locally for quick testing
and enabled the firewall to permit smb trafic.

```

Demo2

Outlook

Short Term Plans

In the next three or so months

- ▸ Fully implement ARM64 builds for samba-operator and samba-container

- ▸ Create a v0.3 release

- ▸ Continue improving our technical and process documentation

- ▸ Add continuous testing on OpenShift

- ▸ Add custom Samba configuration options support to samba-operator

Longer Term Plans

The rest of 2023 and beyond

▸ Continue taking feedback from the community and implementing operator, container,
and other features

▸ Including the sambacc package in distribution repositories (Fedora, CentOS, …)

▸ Take advantage of Samba features such as:

·   Offline Domain Join (oft planned but always slips away)

·   Configurable xattr for NT ACLs

·   smbconf API

▸ Continue exploring opportunities for container platform support and integration

▸ Widen the base of platform integration testing in SIT

▸ And – we hope – much, much, more…

Continued Benefits to the Samba Community

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▸ Testing with unreleased Samba versions:
- SIT and "nightly" are exercising Samba master and unreleased branches
- Found and fixed an AD provisioning regression (MR #2991)

▸

How Can this Benefit Samba's Community?

▸ Integration into the "Cloud Native" Ecosystem

    ○ Possibly new users and contributors!

▸ Easier deployment & declarative configuration

    ○ New *kind* of users

▸ OS distribution agnostic deployments

▸ Chance for code cleanup and component segregation

Questions!

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Questions?

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