



EDGE X FOUNDRY™

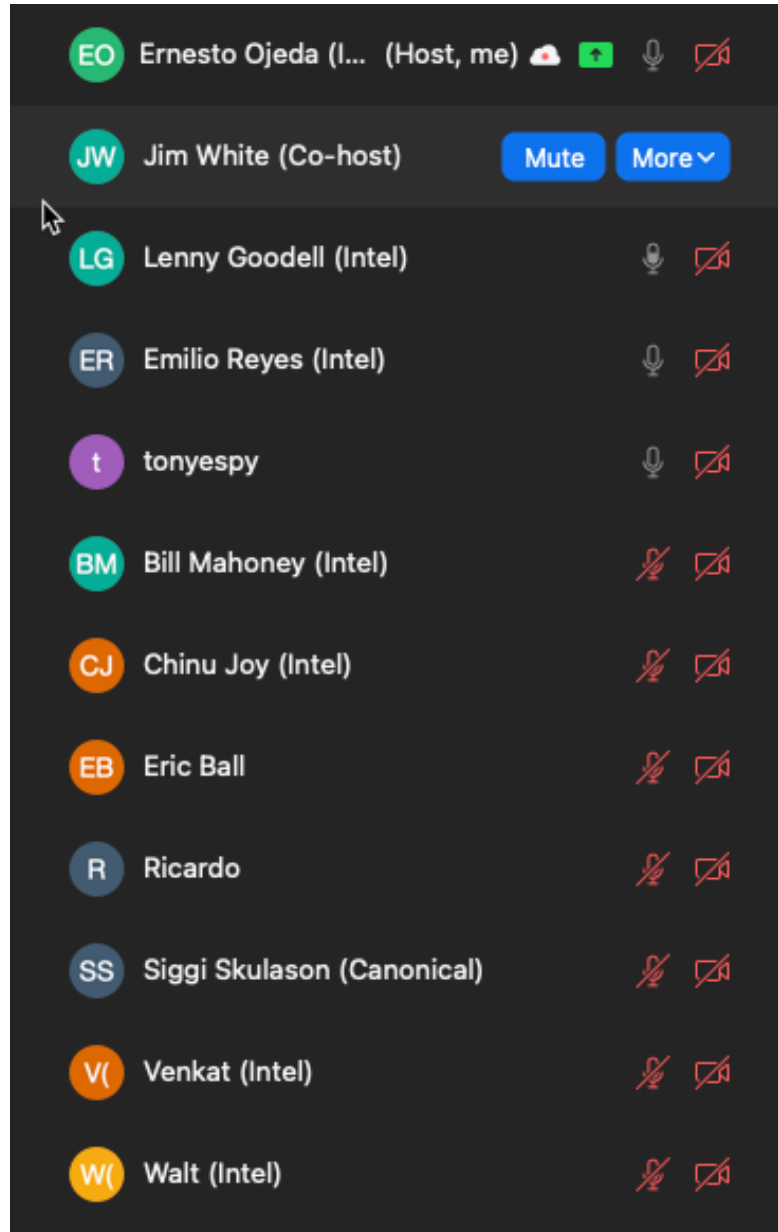
# DevOps Working Group

Thursday November 19, 2020

# Agenda

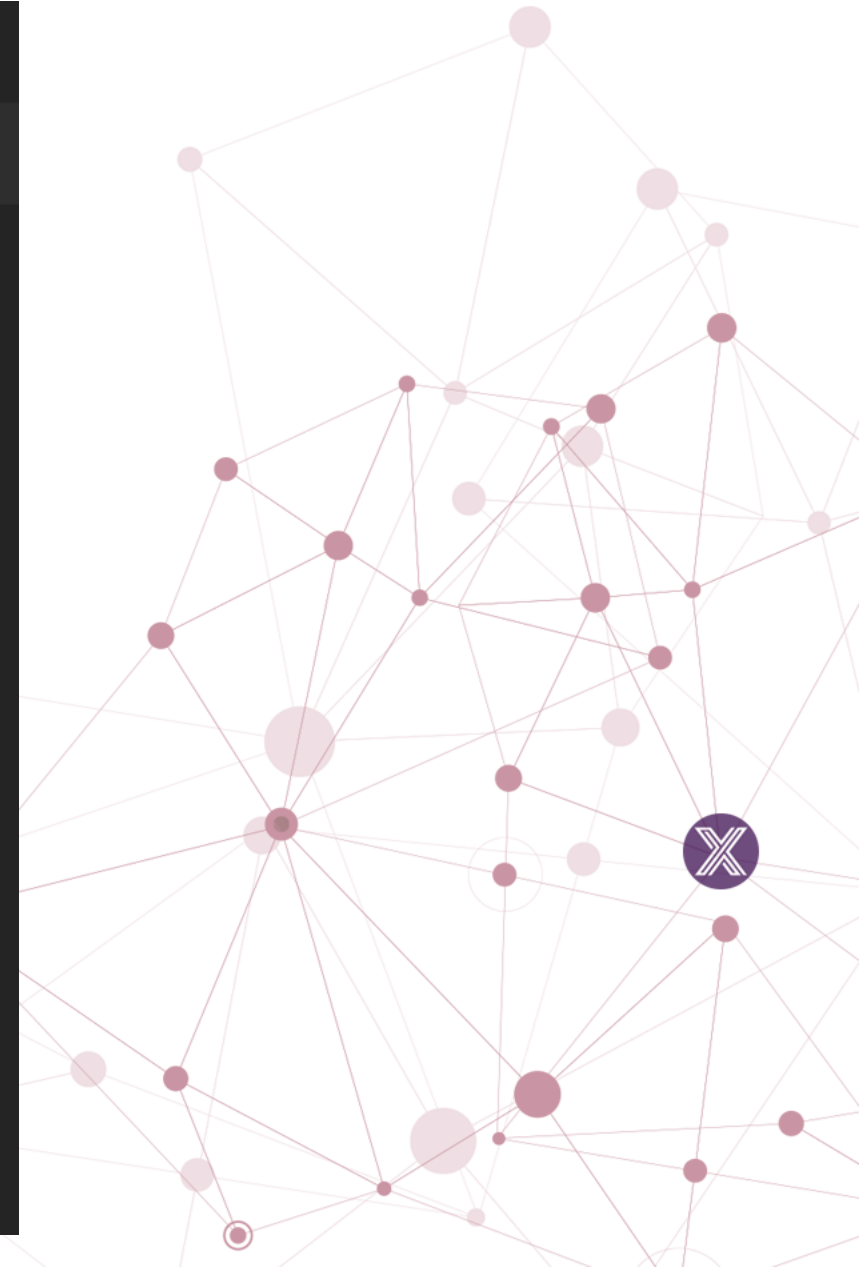
Time	Topic	Owner
5-10 Min	Hanoi Retrospective	Ernesto
10 Min	Official Docker Images	Venkat
<del>20 Min</del>	<del>Ireland Scope</del>	All
5 Min	AOB / Opens	All

# Attendees

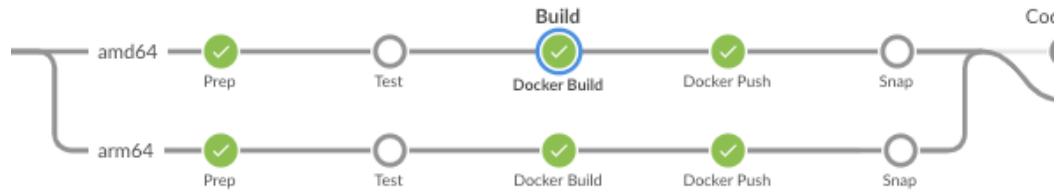


A screenshot of a Zoom meeting attendee list. The list is displayed on a dark background with white text. Each attendee is represented by a colored circular icon with their initials, followed by their name and affiliation. To the right of each name are icons for video, audio, and chat. The host and co-host are at the top, and other attendees follow. A mouse cursor is visible over the 'LG' entry.

Initials	Name	Role	Video	Audio	Chat
EO	Ernesto Ojeda	(Host, me)	📺	🔊	💬
JW	Jim White	(Co-host)	📺	🔊	More ▾
LG	Lenny Goodell	(Intel)	📺	🔊	💬
ER	Emilio Reyes	(Intel)	📺	🔊	💬
t	tonyespy		📺	🔊	💬
BM	Bill Mahoney	(Intel)	📺	🔊	💬
CJ	Chinu Joy	(Intel)	📺	🔊	💬
EB	Eric Ball		📺	🔊	💬
R	Ricardo		📺	🔊	💬
SS	Siggi Skulason	(Canonical)	📺	🔊	💬
V(	Venkat	(Intel)	📺	🔊	💬
W(	Walt	(Intel)	📺	🔊	💬



# Hanoi DevOps Highlights



## Overall Speed Improvements for edgex-go

Docker Build Times:

Before: 20m (Serial)

After: 4m (Parallel)

Snap builds:

Before: 45m

After: 15m

## Auto-Generated Documentation Website

edgexfoundry / edgex-global-pipelines

Search or jump to... Pull requests Issues Marketplace Explore

edgexfoundry / edgex-global-pipelines

Unwatch 8 Star 11 Fork 16

Code Issues 8 Pull requests 4 Actions Projects Wiki Security Insights

master edgex-global-pipelines / vars / edgeXBuildGoApp.groovy

Go to file

ernestojeda fix: Always run the codecov test/scan stages Latest commit f2a8db2 8 days ago History

6 contributors

614 Lines (546 sloc) 24.4 KB

```
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# Hanoi DevOps Deliverables

## Build Optimizations

- New faster build pipeline for edgex-go (build images in parallel)
- New edgex-cli build pipeline, create and publish edgex-cli binaries
- Snap build speed improvements for amd64 and arm64
- EdgeX Release optimization (rebuild artifacts)
- Facilitate the upgrade to Go 1.15
- Implement workaround for race condition testing for Go prior to v1.15

## Developer Enablement

- DevOps World presentation of edgex-global-pipelines
- Auto generation of documentation for edgex-global-pipelines
- EdgeX AWS ECS reference stack deployment

## New Pipeline Features

- Introduce concept of "build commits" to trigger rebuild of artifacts
- GitHub Release automation
- GitHub prune stale/pre-release git tags
- GitHub label/milestone sync (with throttling)
- SwaggerHub API global function

## Technical Debt/ DevOps Continuous Improvements

- Linting of groovy code in pipeline to avoid syntax failures
- Implement mocking of transitive functions in edgex-global-pipelines
- Cleanup and standardization of Mocking in unit tests
- Standardization use of `env.` across all pipelines
- Complete re-write of sample-service to enable full end-to-end testing of pipeline features
- git-semver bug fixes and more robust unit tests
- Generate report for stale docker images
- Standardization of ENTRYPOINT across all Dockerfiles in all repos

## DevSecOps

- Snyc scanning pre-release docker images
- Introduce process for vetting of OSS dependencies

## Releases

- Released 8 device services
- Geneva Dot release



# Hanoi Retrospective

## What went right?

- Performance increases were outstanding
- Release process went very smooth.
- DevOps and Dev teams more inline
- Kudos to Emilio for GitHub Releases
- Move to pipelines helped visualize errors more efficiently
- Kudos to more stable LF infra (network)

## What could have been better?

- Worry about DevOps pipeline complexity (documentation helps).
- Intermittent network failures (docker pulls)
- Couple of repos had master failures would be nice to have an overview before release.
- Lack of integration tests with device services
- Inconsistencies with repo pipeline capabilities
- Committer rights audit may be needed
- Code freeze 3 weeks? Leave at 3 weeks through the Ireland release.
- Implement formalized post-release process
- Update semver version to 2.0.0-dev.x

# Official Docker Images

Venkat Presentation



# Notes

