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DevOps Working Group

Thursday May 23, 2019



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Agenda

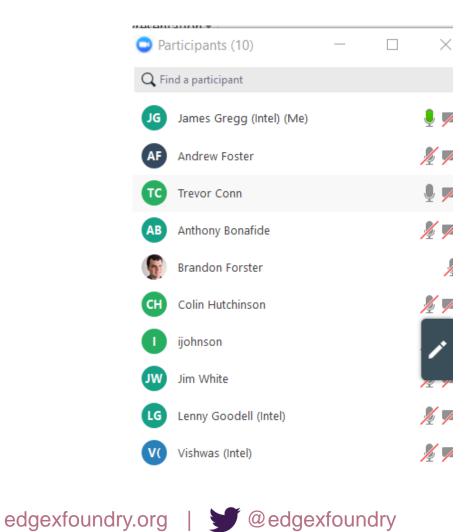
Time	Торіс	Owner
10 min	Work Review (GitHub Project)	James Gregg
10 min	Backlog Review	
10-15 min	Edinburgh Release	
10 min	Fuji Update: Clair / Klar Docker Image Scanning	
	Opens	All

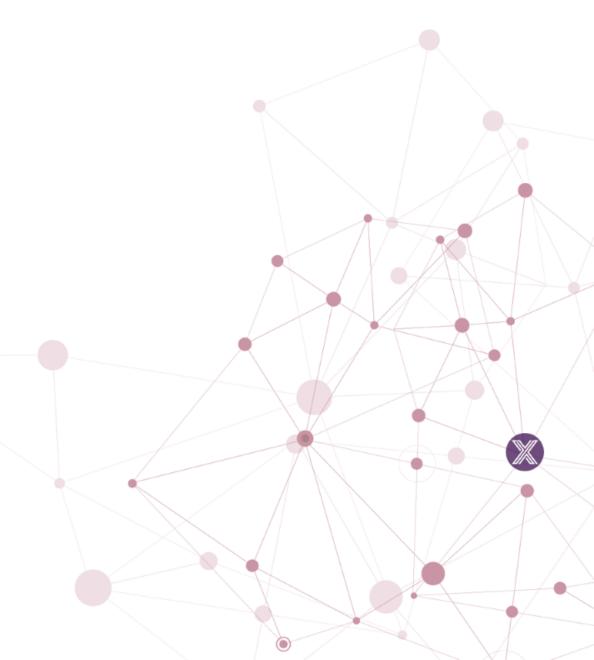




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Attendees





EdgeX DevOps WG Update

- LFTOOLS / Sigul undocumented flag for annotated tags
 - Eric Ball submitted PR to get the annotation flag documented in the README.
- Issues:
 - Roadmap for addressing technical debt not understood by Linux Foundation for build dependencies (python version)

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Codecov.io integration https://codecov.io/gh/edgexfoundry/edgex-go

→ C ☆ https://jenkins.edgexfoundry	.org/view/edgex-go/job/edgex-go-master-verify-go/2496/console
Apps 🥌 Home - Circuit Emp 💥 DevOps Working	G 🎧 Tasks 🝘 DevOps > My Dash 💊 Jenkins (CJE) 🥶 Cloud Security Hub 🥶 cloudhelper 🥶 codecov 2/8
enkins 🕨 edgex-go 🕨 edgex-go-master-verify-go	▶ #2496
	00:28:50.051> e7f1b9ad888f
	00:28:50.051 Step 18/18 : LABEL git_sha=bf071eb93585d77d2137b033bc8f71bceaa4bba0
	00:28:50.148> Running in 87379a28d032
	00:28:50.386 Removing intermediate container 87379a28d032
	00:28:50.386> 6eee966c23ce
	00:28:50.889 Successfully built 6eee966c23ce
	00:28:51.051 Successfully tagged edgexfoundry/docker-support-scheduler-go:bf071eb93585d77d2137b033bc8f71bceaa4bba0
	00:28:51.067 Successfully tagged edgexfoundry/docker-support-scheduler-go:1.0.0-dev
	00:28:51.256 [edgex-go] \$ /bin/bash /tmp/jenkins179427627521387056.sh
	00:28:52.499
	00:28:52.499
	00:28:52.499 /
	00:28:52.499 00:28:52.499 / \/ ` / \/ / \ / / /
	00:28:52.499 / _ (/ _ / _ / _ (/ _ / _ / _ / _ / _
	00:28:52.499 \ \ / \ . \ \ \ / \/
	00:28:52.499 Bash-8a28df4
	00:28:52.499
	00:28:52.499
	00:28:52.517 □[0;90m==>□[0m Jenkins CI detected.
	00:28:52.613 [0;90mproject root: [0m .
	00:28:52.750 Fixing merge commit SHA
	00:28:52.960 [0;32mYaml not found, that's ok! Learn more at [0m [0;36mhttp://docs.codecov.io/docs/codecov-yam

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Release Process Review

Enumerate Services in Release

1. Simple list of all services that will be in the release.

Release Process

1. Branch Cutting

- a. At some point before an official artifact release (at least 2 weeks). A release branch will be created off of the master branch.
- b. The master branch version will be rev'd to the desired version of a future release.
- c. Only bug and security fixes can now make it into the release branch unless truly exceptional.
- d. Jenkins jobs will be instantiated for the release branch.

2. Official Release

- a. A leading representative from a particular project will initiate the release by doing the following:
 - i. Email helpdesk@edgexfoundry.org with the following information:
 - 1. Link to Jenkins staging job that produced artifact to be released
 - 2. Type of artifacts to be released (jar, go bin, container)
- b. The EdgeX Release Engineer will release signed artifacts as requested and git tag the repository found at the sha checked out in the aforementioned Jenkins staging job.
- c. RE will push the tag to https://github.com/edgexfoundry/\$PROJECT_NAME
- d. Project representation will PATCH bump the version of the project in the release branch in prep for next patch.
- 2. Generate or update named release manifest
 - This is the document which will enumerate each service and version that will be contained in a named release.
- 3. Individual service release
 - Each individual service can release separately if they wish. If at any time a service is updated then we should also be sure to update the manifest.

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Edinburgh Release Planning

4/28 Code Freeze

Meeting 4/28 10:30AM PST

Afternoon – Working Session James set up a bridge



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Work Review

Helpdesk Ticket #	Description	Details	Status
69830	codecov.io config needed for edgex-go repo	Eric Ball has implemented codecov.io for edgex-go repo as of WW20	<mark>WIP</mark> (Eric)
		Additional repos identified to include SDK repos – hold off on additional repos for now until we have it working with edgex- go	
68377	failed job related to timeout waiting for	Eric Ball follow up with the team that	WIP
	SSH	owns VEXHOST – no progress	(Eric)
		Issue is with building new arm images –	Possible look at using a different OS for
		doesn't affect edgex builds	the builds
		decision to leave it open for now Circle	Proposal to use Ubuntu instead of Centos
71119	need to extend sigul to include additional	back with VEXHOST team – sigul enhancements included in release	ARM image <mark>Resolved</mark>
/1115	functionality – bugs identified with Iftools	last Thursday LFTOOLS release v0.23.1	(Eric)
	/ sigul	Lisa identified some defects	
	,	Sigul enhancements being worked by LF	
		resources with PR in Gerrit WW20	
71025	TIG Performance Issues identified during	Tests are working in Sandbox but	Resolved
	testing on Sandbox	introduced OMM problems with AWS	(Jordan)
		hosted TIG stack	×
		Redeployed the solution	THANK YOU JORDAN CONWAY !!
		LF Infrastructure team engaged to resize the instances.	Outstanding PR for ci-management #338
71084	Enable PyPI for EdgeX Jenkins caching of	SPIKE to see what it would take to enable	Resolved
	python dependencies	the PyPI Proxy for caching dependencies	THANK YOU ERIC BALL !!
		on Nexus	Pulled in Fuji scope!!!

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Backlog Review



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Meeting Minutes

- Need to include Andy in the pre-planning meeting
- Decision to EOL the California blackbox-testing jobs when Edinburgh jobs are updated.



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Fuji Planning

Scope Discussions



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Fuji – DevOps

In

 Static code analysis tool identified and integrated into the EdgeX Jenkins Pipeline for Docker image scanning

Explore SAST for true static code analysis to include additional tooling such as Fortify / Coverity

- Code and artifact signing with semantic versioning
- Fix Documentation edgex-go
 - Create a new repo for edgex-docs
- Build Performance Optimizations
 - Pipelines for EdgeX Foundry base build images
 - Basebuild images managed locally within Nexus
 - Leverage PyPi Proxy for local pip dependencies
 - ARM builds optimization leveraging different high CPU build nodes / OS (ARM Team)

Out

- Alternate deployment/orchestration
 - Beyond Docker/Snaps
 - Kubernetes
 - Kata Containers
 - .
- SonarQube SonarCloud is already in play in the LF Decision: wait to see what codecov.io offers
- Suggestion to rename all of the Jenkins "arm" jobs so as to differentiate 32bit / 64bit architectures
- Full Pipeline transformation for EdgeX services

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Edinburgh Release

Release Planning



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Edinburgh Dates

- Freeze Date May 28
- Release Date June 20



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Future Agenda Topics

WW14	Documentation migration – edgex-go user documentation
WW14	Topics for Fuji F2F Jenkins Pipelines for EdgeX services
WW15	Review Aqua Microscanner – Image scanning tool for Vulnerabilities
WW16	NVIDIA – Security tooling within CodePipeline (Trevor request) 4/18/19
WW17	
WW18	
	Demo Clair / Klar
	Athens Project – proxy server for go package dependencies
	Community Involvement



