DevOps Working Group

Thursday June 6, 2019

Agenda

Time	Topic	Owner
20 min	Edinburgh Release : Review Status / Discussion	James Gregg
10 min	Backlog / Fuji Scope	James Gregg
10 min	Other Business Items	All
10 min	Opens	All

Attendees

Participants (7)

JG James Gregg (Intel) (Me)

AF Andrew Foster

I ijohnson

J Jeremy_Phelps

JW Jim White

LG Lenny Goodell (Intel)

TC Trevor Conn

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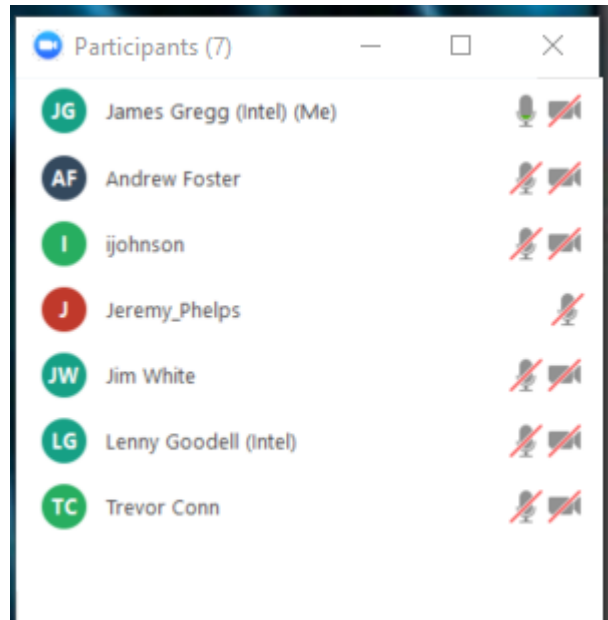
EdgeX DevOps WG Update

- Edinburgh Release
  - JJB Templates updated for repos
    - device-snmp-go Pipeline has outstanding PR (Jacob)
    - build issues with the edgex-ui-clojure - OOM jvm issues during build (Jacob) – Thank you Jacob / Jeremy – Great Collaboration via Slack!!
    - Codecov.io for edgex-go now included for merge jobs – Good job Lisa!!
      Follow up on this next week and look at the report.
      Add a story to add the codecov.io config for other repos and coordinate with LF Helpdesk
    - California jobs deleted

- Other Business:
  - Docker Hub statistics as discussed in the TSC call
    Monitoring Analytics fee based 3rd party
    Bring it back into the TSC

  Docker:

  - 58,000 new downloads
  - 4,500 new deployments
  - 130% increase over April

  - Roadmap for addressing technical debt not understood by Linux Foundation for build dependencies (python version)
    - One new thing on Python is that RHEL 8 has been released, which means CentOS 8 should be released soon. Once it is, we can standardize on 3.6 (centos 7 defaults to 3.4). Once that happens, it's going to open the door for moving everything forward, and dropping support for all versions `<3.6`

      Linux Foundation updates the images for the build images (common-packer)
      Nothing needs done with Ubuntu build images

  - Fuji Scope - Container Scanning (Clair Server landing request)
    - Update as of WW23 from LF Infrastructure team indicated the solution is still discussed internally as to the overall strategy for hosting K8s based services
    - Per TSC meeting – should have an update today – Approved for implementation but not resourced within LF (Jordan Conway). Will be implemented on the cloud, not on Linux Foundation infrastructure. Add details on timing to the ticket.

Edinburgh Release – Proposal for Change

- https://gist.github.com/dweomer/550d3740c0ebf5f2b4231a8d5b439a4f

- Jacob raised the issue with the current process and the proposal has been documented with a request for feedback from the EdgeX development community.
    - Decision:
      AR: (James)
      Review the feedback and bring back to the TSC for discussion / vote if needed.

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.

Work Review

Helpdesk Ticket #	Description	Details	Status
75648	Dedicated Clair server for EdgeX	Pending decision on strategy for K8s + cost / availability of resources with LF	WIP (Brett Preston)
68377	failed job related to timeout waiting for SSH	Eric Ball follow up with the team that owns VEXHOST – no progress Issue is with building new arm images – doesn't affect edgex builds decision to leave it open for now.. Circle back with VEXHOST team	WIP (Eric) Possible look at using a different OS for the builds Proposal to use Ubuntu instead of Centos ARM image
76461	Repo cleanup – core-config-seed-go		Resolved (Eric)
76501	Influxdb config requested for purpose of troubleshooting missing jmeter data	Not resolved per Andy.	Resolved (Jordan)

Backlog Review

Meeting Minutes

Fuji Scope of Work
- Update on LF Decision for landing new infrastructure for Clair server
- Approved but not resourced. Solution will be implemented on AWS not LF infrastructure.

- Open issue with LF on roadmap / plans to address python dependencies
  - Eric Ball informed that the plan is to wait until CentOS 8 is released
    - LF will update packer build images so no DevOps WG scope

Fuji Planning

Scope Discussions

Fuji – DevOps

In

- Static code analysis tool identified and integrated into the EdgeX Jenkins Pipeline for Docker image scanning (Clair Server)

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
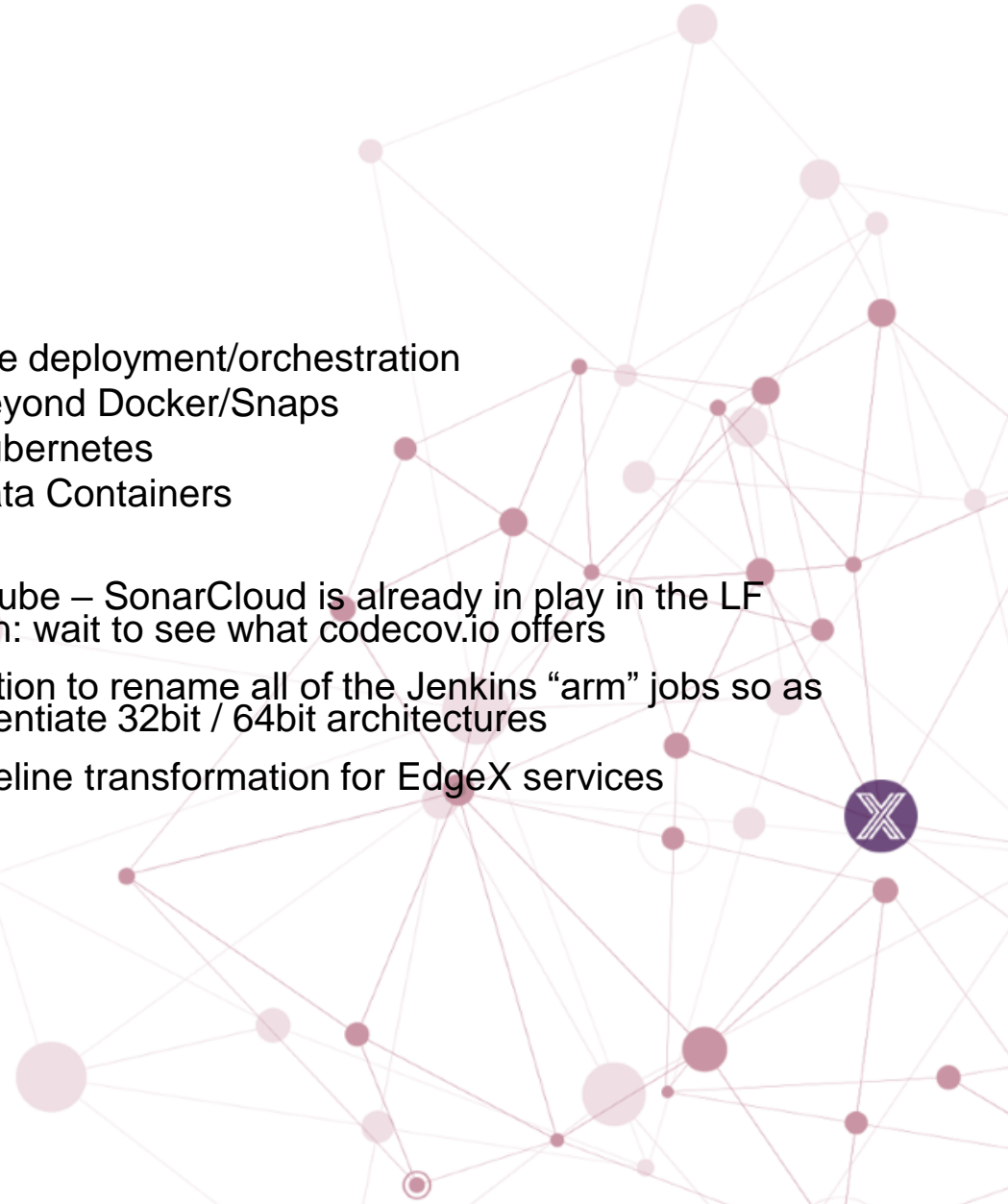
Edinburgh Release

Release Planning

Edinburgh Dates

- Freeze Date – May 28
- Release Date – June 20

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	
WW24	
WW	
	Athens Project – proxy server for go package dependencies
	Community Involvement