

DevOps Working Group Meeting

Thursday, March 21, 2019

Attendees:

James Gregg, Michael Hall, Cloud Tsai, Trevor Conn, Milin Jaiswal, Ernesto, Vishwas, Tony, Eric Ball, Lisa, Jim White

Agenda

Time	Item	Who
	DevOps WG	
10 min	Work Review (GitHub Project)	James Gregg
10 min	TIG Stack Update	James Gregg
10 min	Performance Testing	Andy Foster / Cloud Tsai
10 min	Demo Release Versioning	Lisa
	Opens / Help Needed	All

- **DevOps Work New / Old Review**

- **TIG Stack – WIP**

Discussion topic for today

- **Sigul – WIP**

Owner assigned - (Eric Ball)

According to update from Eric 3/19/19 – plan to include in current sprint with expected completion in time for Edinburgh release. This work is prioritized over codecov.io integration.

- **Full List of Device Services (Andy)**

Andy TSC update 3/20/19 – IoTech will contribute device-opcua-c and device-bacnet-c for Edinburgh – No known drop date per Cloud Tsai

- Eric Ball follow up with the team that owns VEXHOST re: #68377- **WIP** – Followup required with the remote team.

Additional network connectivity issues identified earlier this week with intermittent job failures.

- **Broken Builds for Delhi Documentation** – as reported by Michael Hall – ISSUE identified with lftools – **WIP** Still seeing issues as of 3/20/19

Proposal : Pin to earlier version or continue with Root Cause Analysis

Decision: Root Cause Analysis – plan to have this fixed with release for next Thursday

- App Functions SDK – **DONE**

- Ian Johnson identified several snap jobs for California release are failing – need to remove the stage jobs – **DONE**

- Review Kanban Board

Project Tasks - <https://github.com/edgexfoundry/ci-management/projects/2>

The screenshot shows a GitHub Kanban board for the 'edgexfoundry / ci-management' project. The board is organized into four columns: 'TODO' (8 items), 'In Progress' (4 items), 'Test/QA/Verification/Review' (1 item), and 'Done' (17 items). Each item is a card with a title, status, and author information.

- TODO (8 items):**
 - Build Automation for device-opcua-c BLOCKED - WAITING FOR CODE DROP (Added by jamesgregg)
 - Build Automation for device-virtual BLOCKED - WAITING FOR CODE DROP (Added by jamesgregg)
 - Build Automation for device-bacnet BLOCKED - WAITING FOR CODE DROP (Added by jamesgregg)
 - Automate the tagging of the go library modules (go-mod-messaging) #305 opened by jamesgregg
 - Automate the tagging of the go library modules (go-mod-core) #306 opened by jamesgregg
 - Automate the tagging of the go library modules (go-mod-registry) #307 opened by jamesgregg
- In Progress (4 items):**
 - Demonstrate use of semver for release tagging of repos. (Added by jamesgregg)
 - Sigul (GPG signed artifacts) - needs to be done with an automated (faceless service account does the actual signing on the artifact) #304 opened by jamesgregg
 - Blackbox test to verify sandbox connection to AWS hosted Influxdb endpoint #332 opened by jamesgregg
 - Configure edgex-go repo to use codecov.io #329 opened by jamesgregg
- Test/QA/Verification/Review (1 item):**
 - Land new infrastructure for TIG stack #298 opened by jamesgregg
- Done (17 items):**
 - Snap job failing for California branch - need to remove California stream from jib #330 opened by jamesgregg
 - docker edgex mongo image #280 opened by JPKWU
 - JJB needed for new Application Functions SDK #327 opened by jamesgregg
 - Clean Docker Hub of Image Name Collisions #195 opened by tscconn23
 - Modify the blackbox test for telegraf stack and J Meter #303 opened by jamesgregg
 - Allow subset of developers to trigger a Jenkins job manually #295 opened by jamesgregg
 - JJB changes to convert device-random-go to use go modules

- Help Desk Tickets

Open tickets Goto Ticket...

^ My open tickets

#	Subject	Status	Requestor	Owner
68377	failed job related to timeout waiting for SSH	open	Gregg, James R <james.r.gregg@intel.com>	eball (Eric Ball)
69422	need to extend sigul to include additional functionality	open	Gregg, James R <james.r.gregg@intel.com>	eball (Eric Ball)
69600	jenkins docs job fails for /edgex-go-docs-delhi-stage-docs lftools: command not found	open	Gregg, James R <james.r.gregg@intel.com>	eball (Eric Ball)
69830	codecov.io config needed for edgex-go repo	open	Gregg, James R <james.r.gregg@intel.com>	eball (Eric Ball)

● TIG Stack Update

On Mar 20, 2019, at 12:54 PM, Jordan Conway <jconway@linuxfoundation.org> wrote:

Hi All,

I've got an initial setup up and running at <https://stats.edgexfoundry.org> you can login with your LFID

There's no data now, but you can send Telegraf data to Influxdb at <http://stats.edgexfoundry.org:8086>

Influxdb endpoint is restricted to connections originating in the AWS edgex subnets and Vexxhost edgex and edgex-ci subnets as well as some LF administrative subnets for troubleshooting/monitoring.

This is not yet "production ready" as I built it out using small instances to keep costs low while the kinks are being worked out, it also still needs to have backups and monitoring enabled.

But hopefully you can spin up some sandbox tests with Telegraf enabled builds to see if it works as expected and then I can proceed with further steps to strengthen it and put the production ready stamp on it.

Once there is some sandbox data in it, I would like to run a few deployment tests to ensure that everything that should be persistent is persistent and that I can do updates without interruption.

Please let me know if there's anything you need to know or have any other questions.

Thank you,

Jordan Conway

Known Issues:

Authentication

OAuth with GitHub credentials initially fails with an error, but after approval from GitHub, allows authentication successfully after a 2nd attempt.

Additionally, we have noted that when users attempt to authenticate via Linux Foundation credentials only, it fails.

Password reset

This should be disabled for the Grafana dashboard.

Note: password reset process is managed outside of Grafana

<https://identity.linuxfoundation.org/> is where you'll need to go to reset your password.

Performance Monitoring / Alerts

SMTP is not enabled outbound.

Password reset requests through Grafana dashboard will not work.

There is no current scope for alerts based on certain criteria of performance.

Security Model

A small subset of users will be designated with admin privileges.

Admins can add users, invite users, add plugins, add dashboards etc..

Membership – role based and restricted to LDAP group to be defined (James / Eric)

Data Retention Policy - None

The database is still docker based Influxdb with persistent data shared across instances via an EFS mounted volume

Options: Purge the data at %frequency% vs. Redeploy a fresh stack

Given that the implementation uses EFS, the data will scale unlimited, which over time will incur cost for LF.

AR: James / Andy to follow up on this and understand the intent for each release and determine if we should consider purging data over time.

Data Encryption – Not a requirement as there is no sensitive data

- **Performance Testing**

“Spin up some blackbox tests with telegraf enabled...”

Next Steps: US3712 / Issue #332

As discussed in the last DevOps meeting –modified version of a blackbox test from sandbox
Need to confirm connectivity to the endpoint from sandbox blackbox test.

- **Automated Release Versioning**

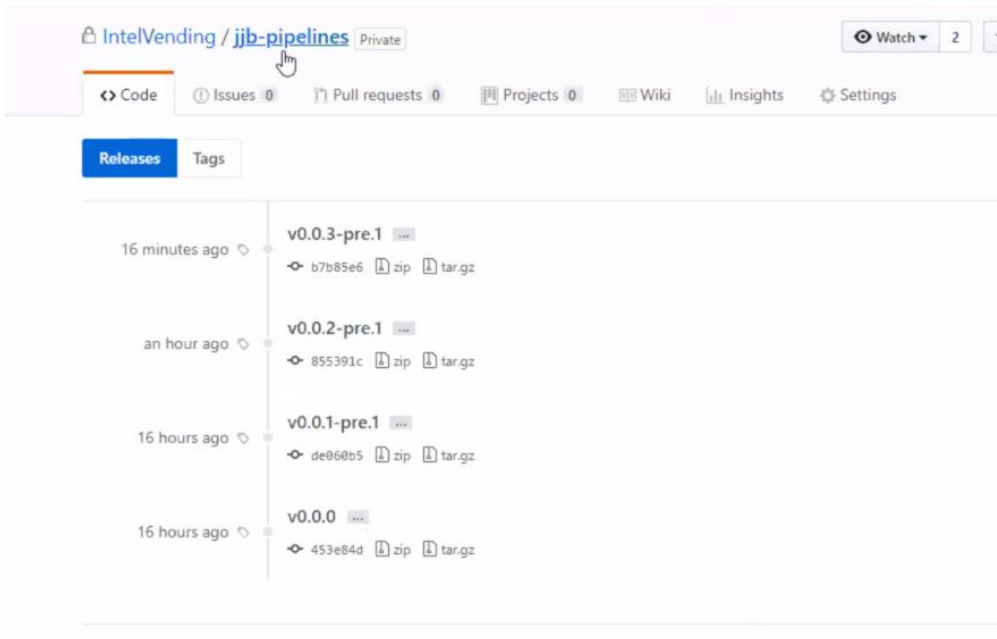
Lisa shared the good work on the automation for tagging go module repos. In the demo today we are exposed to a Jenkins Pipeline which simulates the EdgeX Jenkins verify and merge jobs as two separate Pipelines, each with stages to Clone, Test & Build, and Deploy.

Demo:

The screenshot displays the Jenkins web interface for a pipeline named 'device-sdk-go-master-merge-go'. The 'Stage View' section shows a table of stage execution times:

	Clone	Test & Build	Deploy
Average stage times: (Average full run time: ~1min)	20s	38s	3s
Mar 21 07:18 (commit)	24s	36s	6s
Mar 21 07:15 (commit)	15s	40s	413ms

Below the table, a 'Permalinks' section lists various build links such as 'Last build (#46) - 5 min 33 sec ago' and 'Last stable build (#39) - 14 hr ago'. On the right, a terminal window shows the output of a 'git status' command, indicating that the branch is up to date with 'origin/master' and that there are no untracked files.



Master branch now tagged v0.0.4-pre-1 after semver util runs with the tag as pulled from semver branch



Discussion:

Jenkinsfile is written in groovy.

JJB templates call the Jenkinsfile which is inside the same repo as the code.

It was noted that EdgeX Jenkins supports the use of Pipelines today.

Trevor references a recent article published on [go modules](#)

Suggests using directory structure in the repos that also need tagged ??

Use of PR with “bump” comments to autobump version tag seems “weird” per Tony.

Noted that PR comments are not visible on the git tree.

Lisa suggests a better option (preferred) is to use a “special commit message”.

There is a need to understand the Developer Workflow for end to end tagging that matches the additional scenarios called out for patching (major / minor).

We should iterate on this for another future demo which shows the end to end developer workflow to include branching and get it working with PRs.

Consider using Pipeline / semver for US3712 / Issue #332 for the next demo.

Ernesto noted that we could use semver inside a Freestyle job today as it’s a command line tool or wrap it up in Docker.

- *Note: Beyond the initial go module repo tagging, the additional scope for all of the EdgeX services would be scope for Fuji release.*

Next Steps:

- *Intel SDL for semver util – plans to meet with PSE (Jacob)*
- *Identify any missing dependencies (Lisa / Ernesto)*
- *Work with LF to get the dependencies installed on EdgeX Jenkins infrastructure (James)*

- **Opens**

Future Agenda Items

WW13	Topics for Fuji F2F Jenkins Pipelines for EdgeX services
WW18	Athens Project – proxy server for go package dependencies
	Community Involvement

