

Cloud Native SIG. 2018-09-17 Meeting

Face-2-face meeting at DevOps World | Jenkins World during the [Jenkins contributor summit](#) in San Francisco.

- Time: 9:00AM local time ...
- Meeting notes: yes (here)
- Video recording: no
- Remote call-in: unlikely

Link to this doc: <http://bit.ly/jw2018-cloud-native-bof>

Agenda

- 10:00AM - Project updates including Cloud Native SIG ones...
 - Oleg, Jesse - Cloud Native Jenkins project update
 - Ewelina, Nicolas - Jenkins Configurations as Code
- 1.00PM-3:00PM - Cloud Native SIG Meeting (BoF table)
 - All - [Shifting Gears](#) & Cloud Native SIG
 - Pham Vu Tuan - [Remoting over Kafka](#) presentation
 - Other topics (unconference)
- 3.30PM - Ignite Talks
 - Program will be discussed during the summit
 - Feel free to propose your ideas!
 - Current ideas:
 - Oleg Nenashev - "JCasC + Custom War Packager + Jenkinsfile Runner" combination for single-shot masters ([demo](#))
 - ...
- 5:00PM - Wrap-up
- 5:00 - 7:00 PM - Reception evening, staff the Ask the Expert booth in the exhibit hall
- 7:15PM Contributor dinner, all summit participants are invited

More info: <https://jenkins.io/blog/2018/07/25/contributor-summit/> . RSVP here: <https://www.eventbrite.com/e/jenkins-contributor-summit-san-francisco-tickets-48285340754>

Participants

- Oleg Nenashev - host
- Jesse Glick - host
- ...

Links

- Pluggable storage:
 - <https://jenkins.io/sigs/cloud-native/pluggable-storage/>
- External Artifact Manager
 - [JEP-202](#) - External Artifact Storage
- External Configuration Storage
 - [JEP-213](#) - External XML Configuration Storage
- External Logging:
 - [JEP-207](#) - External Build Logging support in the core
 - [JEP-210](#) - External log storage for Pipeline
 - [JEP-212](#) - External Logging API Plugin
 - [JEP-206](#) - Use UTF-8 for Pipeline build logs

Meeting notes

- Shifting gears:
 - <https://speakerdeck.com/onenashev/swiss-jam-state-of-jenkins-and-configuration-as-code>
- Feedback:
 - Jeff: Deployment to “Kubernetes on AWS”?
 - Jesse: GitOps?
 - Jeff: I would expect a step in Declarative Pipeline
 - Jesse: Jenkins X kinda addresses it,
 - more declarative definition of what should be deployed, rather than heavy/custom Pipeline work
 - Oleg: would be a “K8s Deploy Step” plugin or so. So far does not require changes in the architecture
 - Single-shot masters?
 - <https://jenkins.io/blog/2018/09/12/speaker-blog-a-cloud-native-jenkins/>
 - Demo by Oleg: <link>
 - Demo by Jesse:
 - Single-shot master
 - Kubernetes, EKS, S3, CloudWatch
 - Kubernetes Plugin for provisioning agents
 - Vishal, Adobe: How logs are browsed? Do I need to use CloudWatch UI
 - Now - yes. Still an open question how
 - Background:

- S3 backups of JENKINS_HOME. Jenkins used a lot of plugins and used to crash, so we needed solutions
 - 2000 instances
 - Our solution:
 - ES/Logstash for logs
 - Artifactory
 - Lots of artifacts, overload JENKINS_HOME
 - Interested in Apache Kafka for streaming logs
 - Logstash plugin does not do that
 - Performance (mirroring instead of direct communication)
- Jeff: This approach simplifies management of the things
 - Vishal: Same with Multi-Branch, higher level of management
 - Jeff: If something changes in node.js, jobs might succeed for the developer locally, but fail in Jenkins. This could solve this problem
- Vishal: Upgrade management. Build reproducibility. Imagine an enterprise with thousands of instances
 - Nazrul: If we hook up it with Configuration as Code?
 - Vishal: Yes, but how do I debug it when it fails?
 - Nazrul: environment preview
- Vishal: credentials?
 - External ones (K8s, CyberARK, ...)
 - Internal - keep a part of config-as-code and encrypt
- Cloud Native SIG:
 - How to join?...
 - Click links in <https://jenkins.io/sigs/cloud-native/>
 - Nazrul: Another way to contribute is to try the plugins
 - How to setup EKS?
 - Nazrul: Some guidelines on the CloudBees website
- Oleg: what if Cloud Native Jenkins is a WebUI-less master?
 - Jeff: Build logs are the most critical things
 - Oleg: problem is with annotations
 - Vishal: It would be a big jump for Jenkins
 - What if we had a separate master running and showing classic UIs?
 - Oleg: only for completed builds?
 - Vishal: hyperlink to an external service would be OK
 - Vishal: I would highly recommend keeping UI
 - Jeff/Vishal: Like taking BlueOcean out of Jenkins
 - Ryan: necessary to separate consoles

- Vu Tuan: Remoting over Kafka
 - slide link
<https://docs.google.com/presentation/d/1drRIDNvDKdBE-VuuLFXIWRB0NhSFr1aWrg2p8qrF3co/edit?usp=sharing?>
 - [GitHub](#)
 - JIRA long term plans: <https://issues.jenkins-ci.org/browse/JENKINS-53417>
 - <TODO: link and notes>
 - Vishal: security concerns for secret-driven connection
 - Oleg: also certificates and end-to-end encryption
 - Vishal: Nice for long-running agents, especially Windows
 - Nice for enterprise environments which already have Kafka
 - Logging over Kafka?
 - Oleg: It could be done, requires External Logging API work to be finalized
- PC: We have already started working on Pluggable Storage implementation for Azure.
 - Interested in details about Artifact management
 - Jesse: New versions allow to implement storages
 - JEP-202
 - JClouds under the hood to simplify the implementation
 - Pre-signed URLs for artifact submission
 - Azure: Our implementation is similar.
 - Jesse: links have expiration dates
 - Testing:
 - Jesse: Test suites in Artifact Manager
 - Oleg: Some experiments with Integration tests
 - Evergreen example
 - PC: We are interested to
- Jeff: Do you have a list of of tasks to pick?
 - Nope, but you can join and we will find

Action items