

ONAP Casablanca Process Improvements

Partners in crime

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Mission statement

Look at opportunities to Accelerate Release Cadence

Goals:

- Don't merge code that has not been tested
- Don't break the build
- Speed up the verify and the merge CI jobs
- More automated testing

Source:

https://wiki.onap.org/display/DW/ONAP+Beijing+Lesson+Learned+and+Casablanca+Process+Improvement



Items covered

- 1. CI-CD
- 2. Testing
- 3. Release milestones
- 4. Labs and Infrastructure
- 5. Code Coverage
- 6. Security and License
- 7. SLA



CI-CD (1/2)

- Self-commit:
 - automate Docker release version. Al: LF
 - Ensure we have at least 2 committers in each region
 - When time is critical (after RC0), allow PTLs to merge their change. This should also be applicable to LF IT (CI-Management). AI: TSC approval required
- Increase CI-Management committers list. AI: LF get approval
- CD: use of OPNFV Clover. Al: Helen/Integration
- Packaging: Al: LF+Gary-Michael
 - Improve Docker images build: incremental versus rebuild everything
 - Optimize Docker package (size, time to download)
 - Focus first on the most downloaded docker images (sdc, so aai,...)
 - Fact: 13 Docker templates in Beijing.

CI-CD (2/2)

- Standardize the build jobs (benefit: ease to add dependency): Al: LF.
- Daily Build: get back to daily build. Build only image on code changes.
 (once a week one full build). AI: PTLs

Testing (1/2)

- Improve time to get the full ONAP installed and started
 - Fact (Eric): currently up to 12 hours to debug
 - Fact (Gary): 1 hour for HC + 1 another hour to instantiate => 3 hours.
 - Al: Every project team effort
 - Better knowledge (training) of OOM + K8S + Helm AI: Who could provide training?
- Love to plug a vFW-vDNS automated testing in the verify jobs: Not realistic for Casablanca. Al: Gary to try
- Manual way to build Docker off on Verify job AI: ??

Testing (2/2)

- Look at how to architect for testability, and <u>debuggability</u>: Brian
 - The idea is how could we modify the helm chart setup so that we can enable a project to pull a new merge or verify Docker without the risk that they will lead to a broken helm install from failed terminating pods, pv, pvc, port conflicts etc.
 - Helm upgrade --set enabled=true/false has led to broken installs and the need to purge
 - Would be nice to be able to have projects in testing labs segmented so that project A's make project/make onap; docker stop/enabled=false/enabled=true doesn't cause other projects to be affected
 - Right now the teams use HEAT base for preliminary testing because that isolation maintains a more stable debugging environment particularly since developers don't run into the read only file system issues for various configuration files
 - While it is not the right solution in some sense the Amsterdam per project namespace was actually more forgiving - although in fairness we didn't use the Amsterdam OOM as much as we did the Beijing OOM

Release Milestone: Enforcement

- Enforcement: respect and act upon automated results (naming and shaming if criteria not met at Milestones) Al: Gildas
 - HealthCheck: must not be broken for more than 48 hours
 - Use case (vFW vDNS are automated): must not be broken for more than 48 hours
 - CSIT: must not be broken for more than 48 hours
 - Daily Build: must not be broken for more than 48 hours
 - What for new projects: HealthCheck after M4
 - Perform testing Staging and Prod env: Al Gary (to make proposal)

Note: These enforcement to start on TLabs at M2 for Casablanca and then increase lab coverage over time, over Release

Jira

• Converge toward 1 single template: Al Catherine-Gildas

Communications

- Make RocketChat the Official communication Channel in ONAP. AI: TSC Approval
- Wiki Improvement: need Volunteers. Have a team with some privileges to maintain WIKI. AI: LF Approval
- Sub-committee: AI: Lead to update during TSC or PTL meetings once a month
- Use Case: Al Alla to define roles and responsibilities

Labs and Infrastructure

Resource (hardware): RAM: 2.8 TB DISK: 9.8 TB VCPUs: 500 AI:
 TSC to bring issue to the Governing Board.

- Increase uplink speed on Windriver network (slicing 10 GB)
- Jenkins + Nexus (currently 8GB is minimum) AI: LF, make it faster
- Fact: Jenkins fails cost minimum 1/2 days (for US)

Code Coverage Proposal

- For Casablanca:
 - Remain at 50% code coverage as new code are added
 - Add JavaScript project AI: LF to ensure JS is covered not later than M1

Security and License

Steve to lead is his session

SLA

- SLA with LF: Idea Use JIRA to prioritize LF tasks
 - For accountability
 - To create transparency (like in all open source projects)
 - To avoid duplicates



谢谢