Infrastructure Utils

Welcome to Infrastructure Utils

Introduction

Welcome to the Infrastructure Utilities project page!

This project offers technical utilities and infrastructures for other projects to use.

JavaDoc is at https://javadocs.opendaylight.org/org.opendaylight.infrautils/oxygen/, getting started guide at https://docs.opendaylight.org/projects/infrautils/en/latest/getting-started-guide/features.html, developer guide at http://docs.opendaylight.org/en/latest/developer-guide/infrautils-developer-guide.html and specs at http://docs.opendaylight.org/en/latest/submodules/infrautils/docs/specs/index.html

We currently (as of May 2017) consider infrautils a low-level offset 0 project. As is now, it only depends on odlparent, and does not have dependencies to e.g. controller & mdsal or yangtools. This is intentional, as this would allow such projects to use utilities from infrautils (without causing circular dependencies among offset 0 projects).

We anticipate that e.g. the upcoming ready service may eventually want to be used by other offset 0 projects, and therefore want to be careful to not accidentally introduce dependencies from infrautils to other offset 0 projects.

Should there be a need to build utilities requiring such dependencies in the future (for example Cache layer for mdsal, YANG RPC for ready, etc.), we should discuss whether to create a new infrautils2 (?) project with dependencies to infrautils and other offset 0 projects, or put such utilities into existing projects such as e.g. genius

Documentation

This presentation given at the OpenDaylight Fluorine Developer Design Forum in March 2018 at ONS in LA gives a good overview of the project

(previously also this older presentation given at the OpenDaylight Oxygen Developer Forum in October 2017).

The Getting Started guide has further descriptions of the available features.

Planned Features (WIP)

Metrics enhancements

Project Facts

Project Creation Date: March 17, 2016

Lifecycle State: Incubation

Type: Kernel

Primary Contact: Faseela K <k.faseela@gmail.com>

Project Lead: Faseela K <k.faseela@gmail.com>

Committers:
Active:

- Faseela K <k.faseela@gmail.com>
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- Michael Vorburger <mike@vorburger.ch>
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IRC: freenode.net **#opendaylight-infrautils**

Meetings: If required, please email proposed agenda to kernel-dev list requesting meeting

Mailing List: kernel-dev@lists.opendaylight.org

Meetings: See Community Meetings

Repository: git clone https://git.opendaylight.org/gerrit/infrautils

Jenkins: jenkins silo

Open Bugs:

- open bugs

Future possible implementations

- direct OpenStack Ceilometer integration - looking for parties interested in contributing this!
- ..., Atlas, Datadog, Ganglia, Graphite, Influx, New Relic, SignalFx, StatsD, Wavefront, ...; via http://micrometer.io

Future tighter integrations with exsting ODL technical infrastructure

TODO (contributions welcome!):

- infrautils.jobcoordinator more extended metrics (it already has the basic ones), e.g. for labels per job key, and Timers for job execution, etc.
- monitored Executor ThreadPool related stuff
- Karaf Jetty server metrics
- ...

Logging with ExecutionOrigin ID

https://git.opendaylight.org/gerrit/#/q/topic:mdc

web API with OSGi and standalone implementation for (non-IT) e2e component tests and simple distribution

see https://git.opendaylight.org/gerrit/#/q/topic:simple-dist_web+(status:open+OR+status:merged)

Future Ideas

Tracing

Linux Foundation (LF) Cloud Native Computing Foundation (CNCF) Open Tracing for OpenDaylight and its north- and southbound!

Removed Features

Counters infrastructure

Create, update and output counters is a basic tool for debugging and generating statistics in any system. We've developed a counter infrastructure integrated into ODL which has already been successfully used with multiple products, and more recently in debugging and fixing the OpenFlow plugin /Java and LACP modules.

See Getting started with Counters and Presentation Slides from the ODL 2016 Developer Design Forum: [1] for more information about Counters.

Async infrastructure

Remove in https://git.opendaylight.org/gerrit/#/c/53215/ : The decision to split a service into one or more threads with asynchronous interactions between them is frequently dependent on constraints learned late in the development and even the deployment cycle. In order to allow flexibility in making these decisions we've developed an infrastructure which is configuration driven allowing agnostic code to be written under generic constrains which can then later be customized according to the required constraints.

Appendix

Helpful Links

- Project Proposal

Release Plans

The infrautils project does not publish forward looking release plans. This Wiki page does however have a "Completed & Available" and a "Planned Features (WIP)" section above. So whatever is in is in by cut off and makes it, what's not gets deferred to the next release. Parties interested in "Planned Features (WIP)" are welcome to contribute!

Aluminium

TSC-261 - Getting issue details...   STATUS

Magnesium

TSC-239 - Getting issue details... STATUS

Oxygen

- Oxygen Release Plan

Nitrogen

- Nitrogen Release Plan

Carbon

- Carbon Release Plan

Boron

- Boron Release Plan
    - Release Review
    - Developer Guide