Reduce the start up time

Proposed solutions (how are we trying to solve it?)

1. Lighty.io (https://lighty.io/)
   Started in July 2017 on late ODL carbon as PoC, quickly switched to Nitrogen,
   Currently available as stable release for ODL oxygen SR3 and ODL fluorine SR1
   under EPL-v1 license.
   See also (https://github.com/PantheonTechnologies/lighty-core)
   Used by Pantheon.tech on customer projects in production for over year.
   Lighty addresses most of the issues mentioned in problem statement and addresses
   all issues mentioned in "What are we trying to solve ?" chapter.
   Lighty.io supports the existing karaf based ODL deployments. Lighty.io provides
   following ODL components:
   - ODL core services: MD-SAL, Yangtools, Clustering, Infrautils
   - NETCONF
   - RESTCONF
   - AAA
   - Pantheon.tech is working on other components like OpenFlow, OVSDB, BGP, ...
   Lighty.io requires Java SE to run (no frameworks required) significantly reducing
   memory requirements and development / testing time. Lighty.io is first step on the
   way of ODL to microservice deployments.

2. OpenDaylight-simple
   Specific required next steps are that we need to get all openflowplugin and ovsdb
   services to fully run in the "simple" (= standalone Java) non Karaf environment. As of
   2018.11.27 there is active work ongoing related to this in OFP. If anyone would like
   to start doing the same for OVSDB, that would be really great. Your mission, should
   you choose to accept it, is to get rid of as much BP XML in OVSB as possible,
   replacing it with annotations - similar to the work currently ongoing in OFP.
   Once the switch from BP XML to annotation based DI is completed in OFP and/or
   OVSDB, you basically attempt to bring it all up by wiring everything together in a
   simple standalone environment; openflowplugin/simple/OpenFlowPluginWiring.java
   has an example of this, the first goal is for e.g.
   openflowplugin/simple/test/OpenFlowPluginWiringTest.java to pass. Sounds simple,
   but in practice one hits a number of missing injections which need to be ironed out
   step by step.
   The work is somewhat similar to those Component Tests, just kind of on a bigger
   scale; so anyone who has gotten familiar with that in the past should be able to jump
   on and help with this kind of work.
   The goal of this project is to eventually upstream all work done here into EXISTING
   OpenDaylight projects, and eventually have 0 code left. We do not anticipate this to
   become a new ODL (or external) project. Related up changes that are a result of this
   investigation are getting fed back into "upstream" ODL step by step.

On https://github.com/vorburger/opendaylight-simple/issues list a number of TBD.
Any help is very welcome!

Supporting existing karaf deployment

- Any approach taken will still support the existing karaf based ODL deployment
- We anticipate that, in the future, once more ground work to enable projects has been completed, ODL projects will be able to build both a distribution/karaf and a distribution/standalone.
- ~~Packages will be the same for any deployment and will contain abstraction layers~~

CSIT and build changes

- We believe that overall only minor changes are required to CSIT scripts (e.g. to skip Karaf boot feature tweaking; which won't be the same in a new standalone package), IFF the CLI commands continue to work which CSIT uses (this is possible in OpenDaylight-simple, not currently in Lighty.IO)
- Same impact on project specific functional tests ?

17 January 2019

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13 December 2018

- Juraj presented a conceptual approach to split the netvirt into microservices Presentation is here
- We had a discussion regarding how this should be done where we talked about creating multiple containers each with its own MDSAL which raises the question of how to sync all the different DBs?
- Luis raised the idea Lumina are looking at of dropping the strongly consistent requirement s for the DB
- **For the next meeting please propose topics to discuss and try and get the relevant stakeholders to join**
- IRC minutes: http://meetings.opendaylight.org/opendaylight-meeting/2018/simplifyingodl/opendaylight-meeting-simplifyingodl.2018-12-13-16.04.html

Action items (27 November 2018)

- Ariel will send an invite for the next meetings
- Everyone to fill up this doc
- Ariel to send a follow up mail to the community