

ALTO: Lithium: Release Review

Contents

- [Features](#)
- [Non-Code Aspects](#) (user docs, examples, tutorials, articles)
- [Architectural Issues](#)
- [Security Considerations](#)
- [Quality Assurance](#) (test coverage, etc.)
- [End-of-life](#) (API/Features EOled in Release)
- [Bugzilla](#) (summary of bug situation)
- [Standards](#) (summary of standard compliance)
- [Schedule](#) (initial schedule and changes over the release cycle)

Features

ALTO Model (odl-alto-model): provides a [YANG Model](#) of data instances and RPCs to support ALTO.

ALTO Provider (odl-alto-provider): provides an implementation of endpoint cost service (ECS) of ALTO.

ALTO Manager (odl-alto-manager): provides an interface to add/remove network maps and cost maps to ALTO, through a command line interface (CLI).

ALTO Northbound (odl-alto-northbound): provides a RESTful API based on the ALTO Protocol.

ALTO Host Tracker (odl-alto-hosttracker): provides an implementation of automatically generating network maps and cost maps using collected network host information (by I2switch).

Non-Code Aspects (user docs, examples, tutorials, articles)

- Docs
 - [User Guide](#)
 - [Developer Guide](#)

Architectural Issues

No architectural issues found

Security Considerations

We could use AAA to protect sensitive info or customized info, but choose to not, for simplicity.

Quality Assurance (test coverage, etc.)

Unit Tests coverage

- We are continuing to add more unit tests to improve the unit tests coverage ([Gerrit Patch](#)). These additions are not tracked by [Sonar](#) in the current release. We will add them in as soon as we can (i.e., as soon as after the Lithium build is blessed).

External tests have been conducted against the following operations:

- Access and manage maps using RESTCONF;
- Read *network map* and *cost map* using the *ALTO RESTful API*;
- Access and manage maps using *ALTO Manager*;
- Connect a mininet instance to ODL, run the **pingall** command, and read the corresponding maps from the *ALTO RESTful API*

End-of-life (API/Features EOled in Release)

There are no EOL APIs nor features in this release.

Bugzilla (summary of bug situation)

Standards (summary of standard compliance)

[RFC 7285](#): Application-Layer Traffic Optimization (ALTO) Protocol

Schedule (initial schedule and changes over the release cycle)

Multi-flow scheduler deferred to the next release; all other components finished as scheduled.