

BGP: Lithium: Release Plan

Contents

- [Introduction](#)
- [Release Deliverables](#)
- [Release Milestones](#)
- [Externally Consumable APIs](#)
- [Expected Dependencies on Other Projects](#)
- [Requests from Other Projects](#)
- [Compatibility with Previous Releases](#)
- [Themes and Priorities](#)
- [Other](#)

Introduction

During the Lithium code sprint we will focus more on BGP protocol, as most of the features will be done for BGP. We plan on to do some major structure refactoring, to reduce complexity and improve readability of the code. Secondary goals are keeping current with drafts as they evolve, bug fixes and performance/scale improvements.

Release Deliverables

Name	Description
BGP	<ul style="list-style-type: none">• Implementation of BGP Flowspec• Implementation of graceful restart• Support for segment routing for BGP• Implementation of various smaller RFCs
PCEP	<ul style="list-style-type: none">• Implementation of secure transport via PCEP• Expansion of base PCEP stack with monitoring tools for Path Computation Element• Updating drafts to newer versions
Models	<ul style="list-style-type: none">• Addition to base PCEP model: PCEP monitoring tools

Release Milestones

Milestone	Offset 1 Date	Deliverables		
M1	12/18/2014	Name	Status	Description
		Release Plan	Done	Candidate Release Plan
		PCEP - RFC5886	Done	Implement RFC5886 (A Set of Monitoring Tools for Path Computation Element (PCE)-Based Architecture)
		PCEP - segment routing draft	Done	Update PCEP segment routing draft implementation to newest version
		BGP - RFC4486	Done	Implement RFC4486 (Subcodes for BGP Cease Notification Message)
		BGP - RFC5492	Done	Implement RFC5492 (Capabilities Advertisement with BGP-4)

M2	1/29/2015	<table><tr><th>Name</th><th>Status</th><th colspan="2">Description</th></tr><tr><td>Release Plan</td><td>Done</td><td colspan="2">Final Release Plan</td></tr><tr><td>BGP - RFC6286</td><td>Done</td><td colspan="2">Implement RFC6286 (Autonomous-System-Wide Unique BGP Identifier for BGP-4)</td></tr><tr><td>BGP - RFC5004</td><td>Done</td><td colspan="2">Implement RFC5004 (Avoid BGP Best Path Transitions from One External to Another)</td></tr><tr><td>BGP - RFC5575</td><td>Done</td><td colspan="2">Implement RFC5575 (Flow Specification)</td></tr></table>			Name	Status	Description		Release Plan	Done	Final Release Plan		BGP - RFC6286	Done	Implement RFC6286 (Autonomous-System-Wide Unique BGP Identifier for BGP-4)		BGP - RFC5004	Done	Implement RFC5004 (Avoid BGP Best Path Transitions from One External to Another)		BGP - RFC5575	Done	Implement RFC5575 (Flow Specification)					
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Formal Release	6/25/2015	Name	Status	Description
		Deliverable Name	Deliverable Description	

Externally Consumable APIs

- concepts
- util
- bgp-parser-api
- bgp-parser-spi
- bgp-rib-api
- bgp-rib-spi
- pcep-api
- pcep-spi
- pcep-topology-api
- pcep-topology-spi
- pcep-tunnel-api
- programming-api
- programming-spi
- programming-topology-api
- programming-tunnel-api
- topology-api
- topology-tunnel-api
- rsvp-api

Expected Dependencies on Other Projects

None listed

Requests from Other Projects

None listed

Compatibility with Previous Releases

Deprecated: support for PCEP stateful in version 02. Deprecated: python PCC library

Themes and Priorities

Other

Primary Setup Contact : Dana Kutenicsova (dkutenic@[cisco.com](mailto:dkutenic@cisco.com))

CI Resource : Dana Kutenicsova (dkutenic@[cisco.com](mailto:dkutenic@cisco.com))