

BGP: Helium: Release Plan

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Introduction

During the Helium code sprint we will focus on delivering two major features:

- PCEP support for Segment Routing
- BGP support for route dissemination and passive connections

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">• Definition of API contract for BGP speaker• Implementation of BGP RIBs (AdjRibsIn, AdjRibsOut, LocRib) to allow for full BGP speaker functionality• Implementation of import/export policies• Statistics
PCEP	<ul style="list-style-type: none">• Added support for Segment Routing, updated implementations for newer versions of PCE Stateful and PCE-initiated LSPs drafts.• Statistics
Models	<ul style="list-style-type: none">• Model of a PCEP support for Segment Routing in YANG.• Model of a BGP-LS AdjRibIn/Out in YANG.

Release Milestones

Milestone	Date	Deliverables		
M1	5/12 /2014	Name	Status	Description
		Release Plan	Done	Candidate Release Plan
M2	6/09 /2014	Name	Status	Description
		Release Plan	Done	Final Release Plan
		API design of BGP speaker	Done	Speaker capability requires us to rework AdjRIBsIn class into a per-peer structure and MD-SAL writer. We will also need interfaces for export engine.
		BGP Update message serializer	Done	For the purpose of having a full BGP speaker, having a serializer for all parts of Update message is a must. This task also includes getting rid of using raw byte array in other parts of BGP serialization, that will also improve clearness of the code and performance.

M3	7/07 /2014	<table><tr><th>Name</th><th>Status</th><th>Description</th></tr><tr><td>Create model for AdjRibsIn /Out</td><td>Done</td><td>Similar to the LocRib model, we need a per-peer view of information which has been ingested (AdjRibIn) and which is to be advertized (AdjRibOut)</td></tr><tr><td>Support for Segment Routing</td><td>Done</td><td>For Helium, we are doing PCEP only. This includes extending the models to support SR paths and the related parsers/serializers.</td></tr><tr><td>Support for BGP statistics</td><td>Moved to Lithium</td><td>Simple per-connection/per-rib statistics, which can be quickly reviewed. Number of PDUs received/sent, time of last PDU send/received, negotiated session capabilities.</td></tr></table>			Name	Status	Description	Create model for AdjRibsIn /Out	Done	Similar to the LocRib model, we need a per-peer view of information which has been ingested (AdjRibIn) and which is to be advertized (AdjRibOut)	Support for Segment Routing	Done	For Helium, we are doing PCEP only. This includes extending the models to support SR paths and the related parsers/serializers.	Support for BGP statistics	Moved to Lithium	Simple per-connection/per-rib statistics, which can be quickly reviewed. Number of PDUs received/sent, time of last PDU send/received, negotiated session capabilities.			
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RC2	9/22 /2014	<table><tr><th>Name</th><th>Description</th></tr><tr><td>Release Review</td><td>Release Review Description</td></tr></table>			Name	Description	Release Review	Release Review Description											
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Formal Release	9/29 /2014	<table><tr><th>Name</th><th>Description</th></tr><tr><td>Deliverable Name</td><td>Deliverable Description</td></tr></table>			Name	Description	Deliverable Name	Deliverable Description											
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Expected Dependencies on Other Projects

Depends On	Dependency Description	Needed By	Is in Other Project Release Plan
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Compatibility with Previous Releases

This release is expected to break both binary and source-code level compatibility. All Java code plugins will need to be updated. Some RESTCONF clients may need updating. The precise amount of breakage will be established by API freeze.

Themes and Priorities

Versioning

0.4.0 - stable Helium version

Other

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

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