BGP Use Cases

Contents

- What is implemented/supported in ODL BGP
- How to configure ODL BGP
  - How to configure and use BGP segment routing
  - How to configure and use BGP Flows Specification
  - How to configure TCP-MD5 password for BGP
- How to view BGP data
- How to inject my routes and propagate them to the network
- I want to write a new extension to BGP
- I want to know how RFC<number> is implemented in ODL
- I want to see/use BGP session statistics. I want to close BGP session manually.
- I have an issue with ...

What is implemented/supported in ODL BGP

List of every RFC or draft implemented/supported can be found in release notes for your particular release. Check main site for latest release notes.

How to configure ODL BGP

User guide should resolve all your problems with BGP configuration.

How to configure and use BGP segment routing

Segment routing for BGP does not require any special configuration. If you have linkstate extension configured (which you have by default), BGP-SR is configured and supported implicitly. If you want to test it, insert routes with BGP-SR tlvs to ODL or command the router to do so.

How to configure and use BGP Flows Specification

BGP Flow specification does not require any user configuration. It is configured in ODL out-of-the-box, meaning ODL will send flowspec capability by default. If you want to test it, insert flowspec routes to ODL or command the router to do so.

How to configure TCP-MD5 password for BGP

Here you can find a guide on how to configure TCP-MD5 in BGP.

How to view BGP data

There are two RESTCONF pages that will show you learned BGP topology. You can learn about how to access them in this guide.

How to inject my routes and propagate them to the network

First, you need to configure special type of BGP peer - an application peer. Here is how you do it. Then you need to insert the routes, using this input as an example.

I want to write a new extension to BGP

Currently ODL BGP has two BGP extensions implemented, linkstate and flowspec, so if you want to start creating your own, check the code for these two extensions as well as this tutorial.

I want to know how RFC<number> is implemented in ODL

Developer guide should be your start and mandatory reading if you want to know how BGP is implemented in detail.

I want to see/use BGP session statistics. I want to close BGP session manually.

Here is a list of statistics and how to view them as well as how to manipulate with the BGP session.

I have an issue with ...

If you encounter something that does not match provided documentation, consult this troubleshooting site.