

# Traffic Steering using BGP Flowspec with SRv6 Policy

draft-jiang-idr-ts-flowspec-srv6-policy

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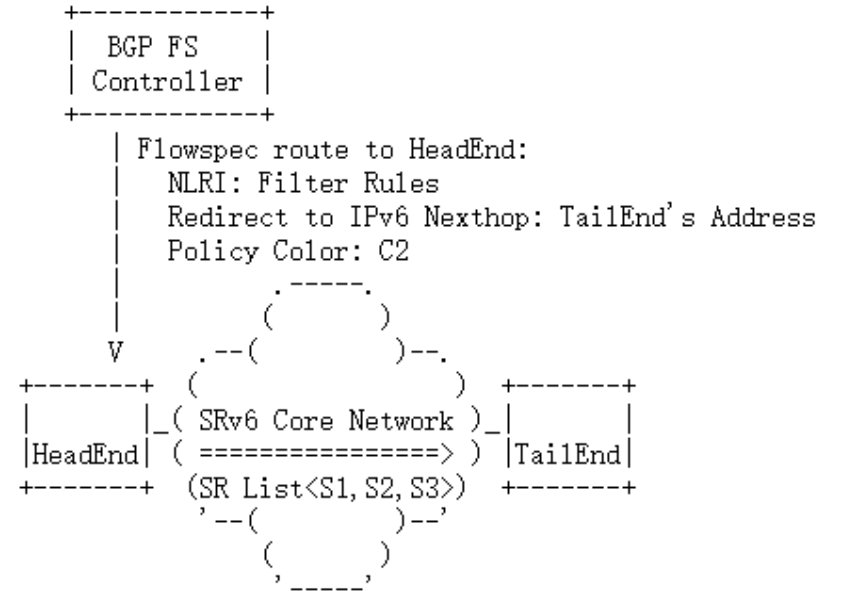
# History and Updates

- Presented at IETF#108/109 and got good feedback from WG
  - Thanks people below for their comments and suggestions
    - Jeffrey Haas, Kaliraj Vairavakkalai, Acee Lindem, John Scudder, Gunter Van De Velde and Improvement suggestions received during implementation and interoperability.
  - All comments have been addressed.
- Change Intended status from Standards Track to Informational
- Add one section for implementation and interoperability report

# Overview - Use Flowspec to steering traffic



Figure 1: Steering the Flow into SRv6 Policy (Option 1)



Note: S3 MUST be a USD-flavored SRv6 SID of the TailEnd

Figure 2: Steering the Flow into SRv6 Policy (Option 2)

- Basic idea: Flowspec NLRI + Redirect IP Action + Policy Color + PrefixSID (Optional); Using Nexthop from Redirect IP Action and Policy Color to associate with the SRv6 Policy (C, N).
- This work discusses the matching of global routing table prefixes;
- Only support the usage of one Redirect IP extended community + one Color extended community;
- Support both the cases of intra-AS and inter-AS traffic steering using this method;
- If the last SRv6 SID of the TailEnd device in the SRv6 Policy segment list is **USD-flavored**, then we can apply Option 2;
- Both 2 Options had been supported by multiple vendors.

# Running Codes and Successful Interop-Test

- Has been implemented on the following hardware devices, software implementations and SDN controllers.
- Multiple vendors had also successfully participated in the series of joint interoperability testing events hosted by China Mobile.
- The following hardware devices and software implementations had successfully passed the interoperability testing.

## Routers:

Vendors	Device Model	Version
Huawei	NE40-X8A	NE40E V800R021C00SPC091T
New H3C	CR16010H-FA	Version 7.1.075, ESS 8305
Ruijie	RG-N8010-R	N8000-R_RGOS 12.8(1)B08T1
ZTE	M6000-8S Plus	V5.00.10(5.60.5)

## Controllers:

Vendors	Device Model	Version
China Unitechs	I-T-E SC	V1.3.6P3
Huawei	NCE-IP	V100R021C00
Ruijie	RG-ONC-AIO-H	RG-ION-WAN-CLOUD_2.00T1
ZTE	ZENIC ONE	R22V16.21.20

# Next Steps

- Update the implementation report to the IDR wiki
- Any questions or comments are Welcomed
- Request WG Adoption

Thank you !