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 June 21, 2008

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**Dissemination of flow specification rules implementation report
draft-raszuk-idr-flow-spec-impl-00**

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Abstract

This document provides an implementation report for Dissemination of flow specification rules as defined in draft-ietf-idr-flow-spec-01. The editor did not verify the accuracy of the information provided by respondents or by any alternative means. The respondents are experts with the implementations they reported on, and their responses are considered authoritative for the implementations for which their responses represent.

Requirements Language

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119 \(Bradner, S.,](#)

["Key words for use in RFCs to Indicate Requirement Levels,"](#)
[March 1997.](#)) [RFC2119].

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1. Introduction

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Dissemination of flow specification rules BGP describes an extension to BGP which may be used to propagate information describing flows of data between BGP speakers. Such information may be needed to apply action on selected data flows through and beyond autonomous systems. Examples of such actions are: dropping, rate limiting, redirecting, monitoring etc
...

This document provides an implementation report for Dissemination of flow specification rules as defined in draft-ietf-idr-flow-spec-01
The editor did not verify the accuracy of the information provided by respondents or by any alternative means. The respondents are experts with the implementations they reported on, and their responses are considered authoritative for the implementations for which their responses represent.

2. Implementation Forms

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Contact and implementation information for person filling out this form:

Name: Craig Labovitz, Email: labovit@arbor.net , Vendor: Arbor Networks, Inc. Release: Peakflow SP

Name: Pedro Marques, Email: roque@juniper.net, Vendor: Juniper Networks Inc., Release: JUNOS 7.3

2.1. Dissemination of Information Compliance

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Does your implementation supports 0 octet length Next Hop in the MP_REACH_NLRI as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your implementation supports one and two octet of NLRI length field in the MP_REACH_NLRI as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your Flow Specification supports Destination Prefix component (Type 1) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your Flow Specification supports Source Prefix component (Type 2) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your Flow Specification supports IP Protocol component (Type 3) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your Flow Specification supports Port component (Type 4) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your Flow Specification supports Destination Port component (Type 5) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)?](#)

Arbor: YES

Juniper: YES

Does your Flow Specification supports Source Port component (Type 6) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your Flow Specification supports ICMP type component (Type 7) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your Flow Specification supports ICMP code component (Type 8) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your Flow Specification supports TCP flags component (Type 9) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your Flow Specification supports Packet length component (Type 10) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your Flow Specification supports DSCP component (Type 11) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your Flow Specification supports Fragment component (Type 12) as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your implementation assures strict type ordering of propagated components as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: YES

Juniper: YES

Does your implementation supports BGP's Capability Advertisement facility to exchange the Multiprotocol Extension Capability Codes as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: YES

Juniper: YES

Does your implementation supports dissemination of flow specification rules for IPv4 Unicast as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: YES, but not completely applicable (we are not a router)

Juniper: YES

Does your implementation supports dissemination of flow specification rules for VPNv4 Unicast as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: YES

Juniper: YES

2.2. Traffic filtering compliance

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Does your implementation supports ordered traffic filtering rules such that the order of two flow specifications is given by the comparison of NLRI key byte strings as defined by the memcmp() function is the ISO C standard ?

Arbor: YES, but not completely applicable

Juniper: YES

2.3. Validation procedure compliance

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Does your implementation supports flow routes validation per originator match with corresponding unicast route as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: N/A (we are not a router)

Juniper: YES

Does your implementation supports flow routes validation to make sure that there are no more specifics flow routes received from a different neighboring AS than the best-match unicast route as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: N/A

Juniper: YES

2.4. Traffic Filtering Actions compliance

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Does your implementation supports traffic-rate extended community filtering action as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: YES

Juniper: YES

Does your implementation supports traffic-action extended community filtering action as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: YES

Juniper: YES

Does your implementation supports redirect extended community filtering action as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: NO (but upcoming version will)

Juniper: YES

2.5. Monitoring compliance

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Does your implementation supports a mechanism to log the packet header of filtered traffic as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: N/A

Juniper: YES

Does your implementation supports a mechanism to count the number of matches for a given Flow Specification rule as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.)?

Arbor: N/A

Juniper: YES

2.6. Interoperable Implementations

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List other implementations that you have tested interoperability of Dissemination of flow specification rules Flow-Spec [\[I-D.ietf-idr-flow-spec\]](#) (Marques, P., Sheth, N., Raszuk, R., Greene,

[B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.](#)) with:

Arbor: Juniper

Juniper: Arbor

3. IANA Considerations

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This document makes no request of IANA.

Note to RFC Editor: this section may be removed on publication as an RFC.

4. Security Considerations

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Does your implementation supports flow routes rules to match the corresponding unicast routing paths for the relevant prefixes as defined in Flow-Spec [\[I-D.ietf-idr-flow-spec\] \(Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "Dissemination of flow specification rules," May 2009.\)](#)?

Arbor: N/A

Juniper: YES

5. Acknowledgements

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The authors would like to thank Yakov Rekhter and Danny McPherson for their comments.

6. References

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6.1. Normative References

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- [RFC2119] [Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels,"](#) BCP 14, RFC 2119, March 1997 ([TXT](#), [HTML](#), [XML](#)).
- [RFC4223] [Savola, P., "Reclassification of RFC 1863 to Historic,"](#) RFC 4223, October 2005 ([TXT](#)).
- [RFC4271] [Rekhter, Y., Li, T., and S. Hares, "A Border Gateway Protocol 4 \(BGP-4\),"](#) RFC 4271, January 2006 ([TXT](#)).

6.2. Informative References

[TOC](#)

[I-D.ietf-idr-flow-spec] Marques, P., Sheth, N., Raszuk, R., Greene, B., Mauch, J., and D. McPherson, "[Dissemination of flow specification rules](#)," draft-ietf-idr-flow-spec-09 (work in progress), May 2009 ([TXT](#)).

Authors' Addresses

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Full Copyright Statement

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