

Internet Engineering Task Force
Internet-Draft
Intended status: Informational
Expires: September 15, 2011

S. Tsuchiya, Ed.
Cisco Systems
S. Kawamura
NEC BIGLOBE, Ltd.
R. Bush
C. Pelsser
Internet Initiative Japan, Inc.
March 14, 2011

Route Flap Damping Deployment Status Survey
draft-shishio-grow-isp-rfd-implement-survey-01

Abstract

BGP Route Flap Damping [[RFC2439](#)] is a mechanism that targets route stability. It penalizes routes that flap with the aim of reducing CPU load on the routers.

But it has side-effects. Thus, in 2006, RIPE recommended not to use Route Flap Damping (see RIPE-378).

Now, some researchers propose to turn RFD, with less aggressive parameters, back on [[draft-ymbk-rfd-usable](#)].

This document describes results of a survey conducted among service provider on their use of BGP Route Flap Damping.

Status of this Memo

This Internet-Draft is submitted in full conformance with the provisions of [BCP 78](#) and [BCP 79](#).

Internet-Drafts are working documents of the Internet Engineering Task Force (IETF). Note that other groups may also distribute working documents as Internet-Drafts. The list of current Internet-Drafts is at <http://datatracker.ietf.org/drafts/current/>.

Internet-Drafts are draft documents valid for a maximum of six months and may be updated, replaced, or obsoleted by other documents at any time. It is inappropriate to use Internet-Drafts as reference material or to cite them other than as "work in progress."

This Internet-Draft will expire on September 15, 2011.

Copyright Notice

Copyright (c) 2011 IETF Trust and the persons identified as the

document authors. All rights reserved.

This document is subject to [BCP 78](#) and the IETF Trust's Legal Provisions Relating to IETF Documents (<http://trustee.ietf.org/license-info>) in effect on the date of publication of this document. Please review these documents carefully, as they describe your rights and restrictions with respect to this document. Code Components extracted from this document must include Simplified BSD License text as described in Section 4.e of the Trust Legal Provisions and are provided without warranty as described in the Simplified BSD License.

Table of Contents

1.	Survey Purpose	4
2.	Survey's target and period	4
2.1.	For Japan	4
2.2.	All	4
3.	Survey Results	4
3.1.	Q1.Do you use Route Flap Damping ?	4
3.1.1.	Japan	4
3.1.2.	All	4
3.2.	Q2.If you select No on Q1,why?	5
3.2.1.	Japan	5
3.2.2.	All	5
3.3.	Q3.If you select Yes on Q1,what parameter do you use?	5
3.3.1.	Japan	5
3.3.2.	All	5
3.4.	Q4.Do you know Randy Bush et. al's report "'Route Flap Damping Considered Usable?'"	5
3.4.1.	Japan	5
3.4.2.	All	6
3.5.	Q5.IOS's max-penalty is currently limited to 20K. Do you need this limitation to be relaxed to over 50K?	6
3.5.1.	Japan	6
3.5.2.	All	6
3.6.	Q6.If you have any comments, please fill this box.	6
3.6.1.	Japan	6
3.6.2.	All	6
4.	Summary of data	6
5.	Acknowledgements	7
6.	IANA Considerations	7
7.	Security Considerations	7
8.	References	7
8.1.	Normative References	7
8.2.	Informative References	7
Appendix A.	Additional Stuff	8

Authors' Addresses	8
--------------------	-------------------

1. Survey Purpose

RIPE published some recommendations such as RIPE-178 [[RIPE-178](#)], RIPE-210 [[RIPE-210](#)], RIPE-229 [[RIPE-229](#)] and RIPE-378 [[RIPE-378](#)].

The purpose of this survey is to understand the current usage and requirements of Route Flap Damping [[RFC2439](#)] among service providers.

2. Survey's target and period

2.1. For Japan

Target: Japan Network Operator Group janog@janog.gr.jp

Period: Jan 28,2011 - Feb 12,2011

2.2. All

Target: All operators that will answer the survey following the publication of this document.

Period: Mar 7,2011 - May 25,2011

Please open the following url and answer the questionnaire.

<https://www.surveymonkey.com/s/rfd-survey>

3. Survey Results

3.1. Q1.Do you use Route Flap Damping ?

3.1.1. Japan

Yes: 5

No: 13

1 respondent skipped this question

3.1.2. All

No results yet!

3.2. Q2.If you select No on Q1,why?**3.2.1. Japan**

Do not have the need: 3

Did not know about the feature: 2

No benefits expected: 3

Customers would complain:1

Because I read RIPE-378 [[RIPE-378](#)]:2

Other: 3

3.2.2. All

No results yet!

3.3. Q3.If you select Yes on Q1,what parameter do you use?**3.3.1. Japan**

Default parameters: 3

RIPE-178 [[RIPE-178](#)]: 0

RIPE-210 [[RIPE-210](#)]: 0

RIPE-229 [[RIPE-229](#)]: 0

Other: 3

1 person answered Q3, even if he selected "No" on Q1.

3.3.2. All

No results yet!

3.4. Q4.Do you know Randy Bush et. al's report ''Route Flap Damping Considered Usable?''**3.4.1. Japan**

Yes: 12

No: 7

One person skipped Q1, but answered Q4.

[3.4.2.](#) All

No results yet!

[3.5.](#) Q5.IOS's max-penalty is currently limited to 20K. Do you need this limitation to be relaxed to over 50K?

[3.5.1.](#) Japan

Yes: 10

No: 9

[3.5.2.](#) All

No results yet!

[3.6.](#) Q6.If you have any comments, please fill this box.

Free format

[3.6.1.](#) Japan

-Our peer seems to have damping enabled, and our prefix gets damped sometimes.

-We do not enable damping because we think that customers want a non-damped route.

-From the perspective of a downstream ISP, if our upstream told us that an outage occurred because a route was damped, I may call and ask "is it written in the agreement that you will do this?"

-We use damping pretty heavily

-I had RFD turned on until this morning when I discovered our router has CSCtd26215 issues. I would like to turn on a "useful" RFD.

[3.6.2.](#) All

No results yet!

[4.](#) Summary of data

From the survey we see that there are many service providers with RFD

disabled. The reason varies among providers, but it is clear that there are those who wish that RFD was made useful.

[[draft-ymbk-rfd-usable](#)] describes how to improve RFD with minor changes to some parameters. From the comments in the survey, the most significant fear of enabling RFD is its impact on customers.

5. Acknowledgements

We thank the 19 respondent to this survey.

6. IANA Considerations

This document has no actions for IANA.

7. Security Considerations

This document has no security considerations.

8. References

8.1. Normative References

[RFC2119] Bradner, S., "Key words for use in RFCs to Indicate Requirement Levels", [BCP 14](#), [RFC 2119](#), March 1997.

[RFC2439] Villamizar, C., Chandra, R., and R. Govindan, "BGP Route Flap Damping", [RFC 2439](#), November 1998.

8.2. Informative References

[I-D.ymbk-rfd-usable]
Pelsser, C., Bush, R., Patel, K., Mohapatra, P., and O. Maennel, "Making Route Flap Damping Usable", [draft-ymbk-rfd-usable-00](#) (work in progress), March 2011.

[RIPE-178]
Barber, T., Doran, S., Panigl, C., and J. Schmitz, "'RIPE Routing-WG Recommendation for coordinated route-flap damping parameters'", Feb 1998, [<ftp://ftp.ripe.net/ripe/docs/ripe-178.txt>](http://ftp.ripe.net/ripe/docs/ripe-178.txt).

[RIPE-210]
Barber, T., Doran, S., Karrenberg, D., Panigl, C., and J. Schmitz, "'RIPE Routing-WG Recommendation for coordinated

route-flap damping parameters", May 2000,
<<ftp://ftp.ripe.net/ripe/docs/ripe-210.txt>>.

[RIPE-229]

Panigl, C., Schmitz, J., Smith, P., and C. Vistoli, "RIPE Routing-WG Recommendations for Coordinated Route-flap Damping Parameters", Oct 2001,
<<ftp://ftp.ripe.net/ripe/docs/ripe-229.txt>>.

[RIPE-378]

Smith, P. and C. Panigl, "RIPE Routing Working Group Recommendations On Route-flap Damping", May 2006,
<<http://www.ripe.net/ripe/docs/ripe-378>>.

[Route Flap Damping Considered Usable?]

Pelsser, C., Maennel, O., Patel, K., and R. Bush, "Route Flap Damping Considered Useable", Nov 2011, <<http://ripe61.ripe.net/presentations/222-101117.ripe-rfd.pdf>>.

Appendix A. Additional Stuff

This becomes an Appendix.

Authors' Addresses

Shishio Tsuchiya (editor)
Cisco Systems
Shinjuku Mitsui Building, 2-1-1, Nishi-Shinjuku
Shinjuku-Ku, Tokyo 163-0409
Japan

Phone: +81 3 6434 6543
Email: shtsuchi@cisco.com

Seiichi Kawamura
NEC BIGLOBE, Ltd.
14-22, Shibaura 4-chome
Minatoku, Tokyo 108-8558
JAPAN

Phone: +81 3 3798 6085
Email: kawamucho@mesh.ad.jp

Randy Bush
Internet Initiative Japan, Inc.
5147 Crystal Springs
Bainbridge Island, Washington 98110
US

Phone: +1 206 780 0431 x1
Email: randy@psg.com

Cristel Pelsser
Internet Initiative Japan, Inc.
Jinbocho Mitsui Buiding, 1-105
Kanda-Jinbocho, Chiyoda-kun 101-0051
JP

Phone: +81 3 5205 6464
Email: cristel@iij.ad.jp

