

# BCOP Update

Deploy360 – Internet Society

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## What's a BCOP?

# Best Current Operational Practice

- A current document describing how to best achieve an operational practice agreed by subject matter experts and periodically reviewed by community

## BCOP activity around the world:

- Africa region: We started the initiative (BoF) at AFRINIC meeting in Côte D'Ivoire, lead by Douglas Onyango, doing the second BoF in Djibouti meeting
- Latin America: started a BCOP Task Force (Carlos Martínez Cagnazzo and Antonio Marcos Moreiras volunteered to run the effort)
- North America: NANOG BCOP Track established
- Europe: RIPE BCOP Task Force created, co-chaired by Benno Overeider and myself...
- Asia: BCOP Task Force started at JANOG, co-chaired by Seiichi Kawamura and Yoshinobu Matsuzaki, NZNOG BCOP starting up, lead by Dean Pemberton

## Websites

BCOP topics:

<http://www.internetsociety.org/deploy360/about/bcop/topics/>

What's going on around the world:

<http://www.internetsociety.org/deploy360/about/bcop/>

# Removing one of the next IPv6 speedbumps

- One of the first speed-bumps was addressed by RIPE-554
- Next speed-bump is lack of IPv6 knowledge at ISP helpdesks

IT helpdesk staff can be... difficult sometimes 😊



# HELPDESK

HAVE U TRIED TURNING IT OFF  
AND ON AGAIN?

BCC



# Removing one of the next IPv6 speedbumps

Title: ***“Generic IPv6 troubleshooting procedures for helpdesks around the world”***

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This document is intended to provide a starting point for technical support staff at ISPs or enterprise IT helpdesks in supporting IPv6. Problems with IPv6 are very rare, but fear of the unknown has prevented or delayed many organizations from rolling out IPv6 to their users, when all technical problems have been solved. While this document cannot encompass all possible problems, it should provide a solid first step for front-line support personnel.

## Tools used?

- **Fact 1.: We need to build a short and simple set of detect/explain/action scenarios that would help people at help desks identify and fix the issue**
- **Fact 2.: We need a simple online tool to detect the state of connectivity on the users computer**
- **Fact 3.: Test-ipv6.com is a very useful tool that detects the state of connectivity on the users computer**
- **So the idea emerged to bring Jason Fesler in the group and talk him into creating a special version of the tool meant specially for ISP helpdesks 😊**



## Tools used?



Test IPv6

FAQ

Mirrors

# Test your IPv6 connectivity.

For the Help Desk

Summary

Tests Run

Share Results / Contact

Your Internet help desk may ask you for the information below.

### Dual Stack

IPv4: Good, AS198644 - GO6 Zavod za IPv6 - go6

IPv6: Good, AS198644 - GO6 Zavod za IPv6 - go6

OtherSites: 51/51 good

IPv4 address: 91.239.97.10

IPv6 address: 2001:67c:27e4:1100:1194:2b33:7526:7193

More information about this page, including how to bookmark it: [faq\\_helpdesk.html](http://faq_helpdesk.html).



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  - 46t - Dual Stack, Possible Tunnel
  - 624 - 6to4
  - 64 - NAT64
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  - “slow”
  - “mtu” - “Possible MTU issues” Warning
  - “Site(s) with failed connectivity” Warning
5. IPv6 training for helpdesk
6. Conclusion
7. Operator’s specifics

## Example: one of the possible generic situations

Help desk code: **624**

6to4

IPv4: Good, AS65536, CableCo

IPv6: Good, 6to4, Preferred

IPv4 address: 192.0.2.1

IPv6 address: 2001:db8::1

## Example (continued):

**Interpretation:** “6to4” was used to provide an IPv6 address; and the host was configured to actively take advantage of this service. Any web site that has an IPv6 presence, will be reached using 6to4 instead of native IPv4. Modern operating systems do not prefer these kinds of tunnels by default. Be aware that the user might have a very old operating system or a non-default configuration.

**Action:** Have the user disable any automatic tunneling mechanisms that are active.

6to4 is a protocol that runs on the PC and tries to get IPv6 traffic through a public relay, using IPv4 as a temporary transport device. Public 6to4 relays offer no SLA; and published studies show approximately 15% failure rates.

## Example (continued):

Windows: Disable tunnel interfaces using <http://support.microsoft.com/kb/929852> (for example, Microsoft Fix it 50412).

If IPv6 is desired, configure IPv6 and test again. Verify the user has an IPv6 address, and a default route.

## Status and future work?

Document is in final pre-draft stage and will be currently submitted to

- RIPE BCOP TF and subsequently to RIPE IPv6 WG
- NANOG BCOP TF

**Join the mailing lists and contribute to discussion:**

**RIPE BCOP TF:** <https://www.ripe.net/mailman/listinfo/bcop>

**NANOG BCOP TF:** <http://bcop.nanog.org/>

**After we go through first few community consensus building cycles and document edits we MAY choose to submit it for comments also to other BCOP efforts in other continents depending on interest from other regions.**

# BCOP – Africa Update

## Highlights

**May 2013:** First presentation made by Jan

**Nov 2013:** Presentation and BoF during the AFRINIC meeting



# BCOP – Africa Update (ctd)

## Focus Areas

1. **Creation of mailing list**
2. **Creation of on-line repository of the BCOPs docs**
3. **Discuss and publish a couple of BCOPs before the next AFRINIC meeting**
  - a. *Subnetting & Security in IPv6*
  - b. *WiFi network for a hotel*
  - c. *Africa infrastructure challenges*
  - d. *Building IPv6 Lab*
4. **BoF & Update during next AFRINIC meeting**



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