Best Current Operational Practices – Efforts from the Internet Society

Deploy360 – Internet Society

Internet Society

About Me – A Quick History

Name: Jan Žorž

Founder of Slovenian Go6 Institute

Worked in Internet operations for 20+ years

13 years of IPv6 experience

Active and contributing member of RIPE and IETF communities

Primary co-author of RIPE-501/RIPE-554 IPv6 procurement BCP document

Co-author of RFC 6346 (A+P approach to IPv4 depletion)

Joined Internet Society Deploy360 Programme in December 2012

IPv6, DNSSEC, and Routing knowledge including tutorials, case studies, training resources, and more.

http://www.internetsociety.org/deploy360/

About Deploy360

The Challenge:

– The IETF creates protocols based on open standards, but some are not widely known or deployed

– Many people seeking to implement these protocols are confused by a lack of clear, concise deployment information

The Deploy360 Solution:

– Provide hands-on information to advance real-world deployment

– Work with technology experts to collect and create technical resources and openly distribute them to fast-following networks around the globe

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Next Areas of Work

- **Operator -to- IETF**
  Improving operational feedback into the IETF

- **Operator -to- Operator**
  Exploring the idea of creating a global repository of Best Current Operational Practices (BCOP)

These areas are related, but are being approached as separate areas of work.

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Process #1:
Increasing Operator Feedback into the IETF

IETF Operator Feedback – WHY THE IETF?

The IETF standardizes the protocols and services that vendors implement and Internet operators are supposed to deploy and use

The goal of the IETF is to make the Internet work better

"The mission of the IETF is to make the Internet work better by producing high quality, relevant technical documents that influence the way people design, use, and manage the Internet."

Source: http://www.ietf.org/

IETF Operator Feedback – THE CHALLENGE

We have observed an opportunity for improved communication between operators and the IETF

Without sufficient operator feedback, IETF standards may not always fit operators' needs

Standards could be better designed and implemented if more operators that actually use them in their real-world networks agreed on what they need and provided more feedback into the RFC process within the IETF

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IETF Operator Feedback – CURRENT SITUATION

We believe operators understand best what they need to run and improve their networks, however many operators do not participate in the IETF process

Why?

- Lack of manpower and time to tackle daily issues in the NOC and attend IETF meetings in person three times a year and/or participate in the working group mailing lists year-round

- Reliance on vendors to follow IETF proceedings and propose solutions to suit the operators' needs

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IETF Operator Feedback – CURRENT SITUATION

Operators have long-standing and effective operator group processes

The IETF has long-standing and effective standards-making processes

We must respect both of these unique processes to move forward and improve communications between operators and the IETF

Process #2:
Creating a Global Repository of Best Current Operational Practices

A Global BCOP Repository – THE CHALLENGE

Best current operational practices are shared between operators in many different ways:

- hallway conversations

- operator group presentations

- email lists

- web forum threads

- Personal relationships

- IRC/chats

A Global BCOP Repository – THE CHALLENGE

There is currently no quick and easy way for an operator to find and reference all of these best practices for immediate use in administering their local network

There is too much clutter in the IT landscape for network operators to easily find reliable, vetted, user-friendly documentation

There may be a need for a globally recognized document series that documents the best practices for operationalizing Internet technologies

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A Global BCOP Repository – SOLUTION IDEA

We believe an organized, neutral, and global repository of documents that describes best current operational practices could help:

- speed up deployment of IPv6 and DNSSEC

- make the routing infrastructure more resilient

- simplify network deployments for less traveled operators

These documents should be written by experienced operators and be globally accessible to everyone in an open and neutral location without fees

We are committed to assisting in the creation and promotion of a global repository

OVERALL SOLUTION IDEA

Let's create a discussion group inside RIR/NOG communities where operator-to-operator communication and creation of BCOP documents happens

The same group **COULD** be used for operators to communicate their needs and wants from the standards process

This BCOP process should be owned by operators' groups collectively around the globe

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Regional BCOP Groups – DISCUSSION TOPICS

Presentations from operators that lay out their issues using existing technology, protocols, standards, and implementations, resulting in creation of BCOP documents
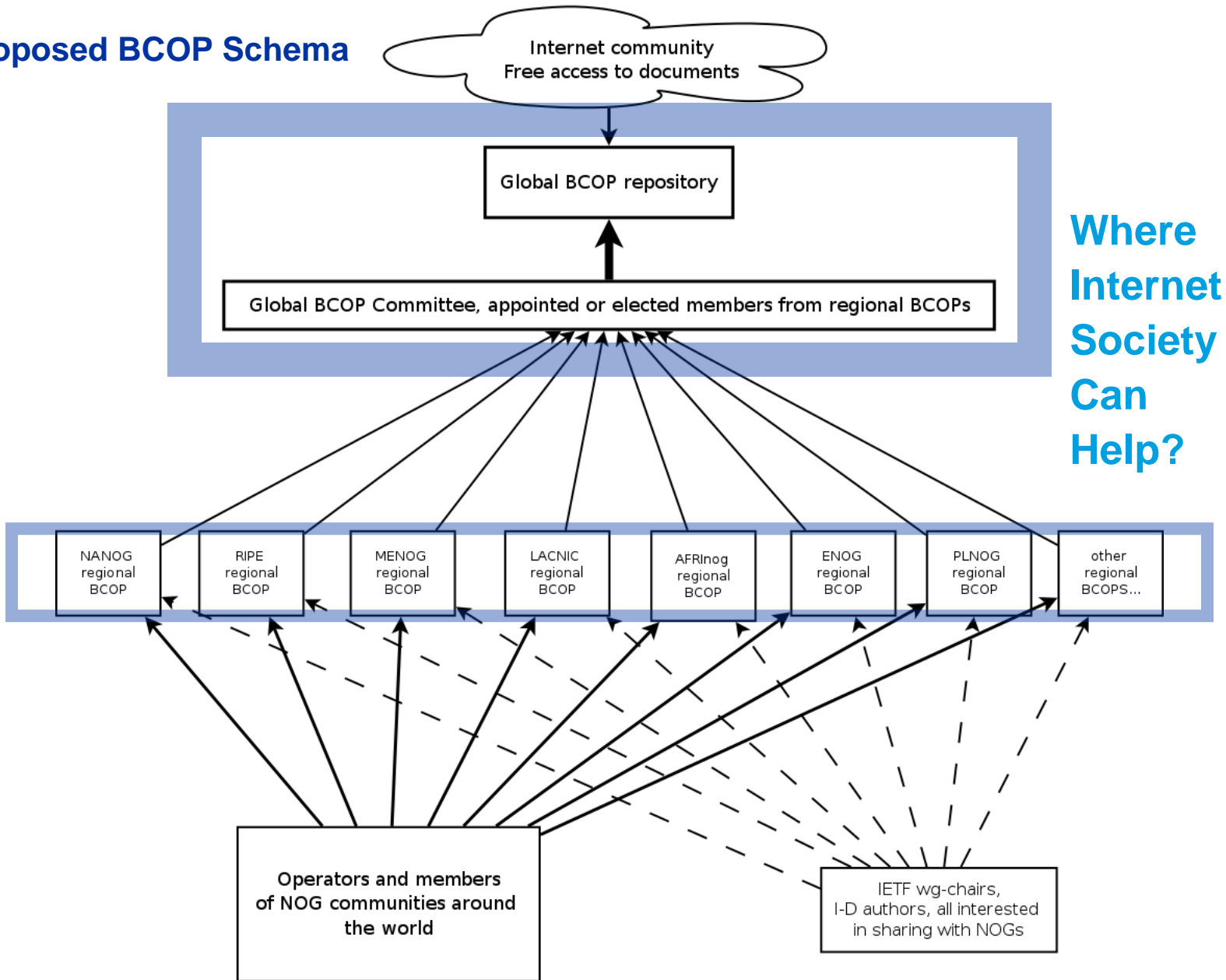
Open discussion of what operators need to ease the deployment of new technologies - features and mechanisms needed in the real world

Process owned by operators with content created by operators for other operators

Later, an additional purpose **MAY** be added in order to improve operator feedback to IETF

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Proposed BCOP Schema

Internet community
Free access to documents

Global BCOP repository

Global BCOP Committee, appointed or elected members from regional BCOPs

Where Internet Society Can Help?

| NANOG regional BCOP | RIPE regional BCOP | MENOG regional BCOP | LACNIC regional BCOP | AFRInog regional BCOP | ENOG regional BCOP | PLNOG regional BCOP | other regional BCOPS... |

Operators and members of NOG communities around the world

IETF wg-chairs, I-D authors, all interested in sharing with NOGs

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Advantages of global BCOP

Common understanding of best operational practices amongst operators worldwide

Documents created by operators may prevent governments from creating and mandating their own operational practices documents

Improved communication between operators globally

A Global BCOP Repository – Question nr. 1:

Who in this room is willing to participate in the BCOP process (and actually do some work)?

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A Global BCOP Repository – Question nr. 2:

Currently, we have no preference where the Global BCOP repository should reside.

Should it be:

- Neutral, free-format (we could start it under ISOC and then move elsewhere if needed)?

- Under IETF as a new RFC series?

- Under IETF as a free-format series?

- Somewhere else?

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Help Us Get Started This Week

Jan Žorž

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