

IGF: IPv6 Best Practice Forum 2016

Scope and Goals

Introduction

During the 2015 Best Practice Forum *Creating an Enabling Environment for IPv6 Adoption*, part of the Internet Governance Forum's intersessional work program, a group of volunteers from the global multi-stakeholder community came together over several months to share, collect and discuss different high level practices used around the world that help to promote and encourage the global adoption of the Internet Protocol version 6 (IPv6).

The end result of this open and iterative process, was an outcome document titled "**Creating an Enabling Environment for IPv6 Adoption.**" This document was discussed during a dedicated session at the 2015 IGF meeting in João Pessoa¹ and published on the IGF website.²

Last year's BPF addressed the question of "Why adopt IPv6?" and identified hurdles to its deployment. It focussed on the role that IPv6 Task Forces and capacity building initiatives play in encouraging IPv6 adoption. The BPF also collected best practices from the private sector, and addressed various approaches used by different governments, National Research and Education Networks, and Universities in promoting and deploying IPv6.

There is still opportunity to update the 2015 doc with recent examples to keep the document 'alive' without having a time-intensive review. We encourage all stakeholders to spread words about last year's BPF document on IPv6, as well as to share additional experience and successful case studies as the primary means of encouraging adoption.

In their conclusions, the BPF group suggested to continue the work on the IPv6 BPF in 2016 to address other elements of the IPv6 adoption, in particular the economic decision-making model and commercial incentives that lie behind a successful implementation of IPv6.

Scope

The IGF BPF on IPv6 will bring together representatives from different stakeholder communities and offer a great opportunity to look at the topic of IPv6 adoption with focus on economic element and business cases. The BPF will not replicate or duplicate work already undertaken by other groups (e.g. the substantive work or technical training done by Internet technical community). Rather, the BPF will take any such work as a starting point and input for the discussion. The BPF should focus on how stakeholders can help each other and exchange best practices.

¹ <https://youtu.be/zdixQYPWRTk>

² <http://www.intgovforum.org/cms/documents/best-practice-forums/creating-an-enabling-environment-for-the-development-of-local-content/581-igf2015-bpfipv6-finalpdf/file>

Goals for 2016

Last year's BPF on IPv6 focused on creating capacity building platforms and awareness raising, in the form of national and regional IPv6 taskforces and other initiatives. Building upon the conclusions of last year, the BPF on IPv6 organizers now suggest a focus on the *economic decisions* and *commercial drivers* behind the decision to adopt IPv6.

Problem statement

Feedback received from the participants to the IPv6 BPF last year, especially those with a technical community background, suggests that the decision to adopt IPv6 is not only a technical one, but that other economic factors play an important role.

Most of the networks that make up today's Internet are built and operated on a commercial basis, and must build IPv6 adoption into their business plan, accordingly. The same goes for not-for-profit and public sector network operators, who must also take into account the cost versus benefit when deciding to upgrade their networks to the new version of the Internet Protocol. The number of networks that support IPv6 today proves that IPv6 adoption is a technically feasible option for businesses. IPv6 adoption is on the rise - not only in the global North, but also in a number of states in the southern hemisphere and there appears to be little correlation to GDP and IPv6. There remains some questions such as:

- Why is there such a difference in IPv6 adoption in comparable markets?
- While cost is often cited as a reason not to adopt, why are commercial ISPs of all sizes deploying IPv6?

Some studies explore the "why and when" of IPv6 adoption³ or try and model the economic effects of IPv6 adoption versus the prolonged use of IPv4^{4,5}, but in general there is not that much documentation around the commercial aspects of IPv6 adoption, especially not based on specific positive cases of adoption. This will be the focus of the 2016 IPv6 BPF.

While a lot of technical documentation exists, together with a broad spectrum of technically focused capacity building activities, the 2016 BPF would like to invite people to share their commercial experiences with IPv6, with the aim of establishing a better understanding of the commercial and economic incentives that sit beneath a successful deployment of IPv6 in commercial as well as public sector networks and Internet services.

³ http://repository.upenn.edu/cgi/viewcontent.cgi?article=1759&context=ese_papers

⁴ http://www.caida.org/funding/ipv6-adoption/ipv6-adoption_proposal.xml

⁵ <http://www.rmv6tf.org/wp-content/uploads/2013/04/1-The-Cost-of-IPv4-IPv6-Transition.pdf>