

IPv6: The Next Big Bail-Out



InterComms talks to Latif Ladid of the IPv6 Forum



Latif Ladid, IPv6 Forum President.

Latif Ladid holds the following positions: President, IPv6 FORUM www.ip6forum.org, Chair, European IPv6 Task Force www.ipv6.eu, Emeritus Trustee, Internet Society www.isoc.org, Board Member IPv6 Ready & Enabled Logos Program and Board Member World Summit Award www.wsis-award.org.

Latif is a Senior Researcher at the University of Luxembourg "Security & Trust" (SnT) www.securityandtrust.lu on multiple European Commission Next Generation Technologies IST Projects: 6INIT, www.6init.org - First Pioneer IPv6 Research Project; 6WINIT, Euro6IX, www.euro6ix.org; Eurov6, www.eurov6.org;

NGNi, www.ngni.org; Project initiator of SEINIT, www.seinit.org and SecurIST, www.securitytaskforce.org.

Latif initiated the new EU project u-2010 to research Emergency & Disaster and Crisis Management, www.u-2010.eu, re-launched the Public Safety Communication Forum, www.publicsafetycommunication.eu, supported the new IPv6++ EU Research Project called EFIPSANS, www.efipsans.org and the new safety & Security Project using IPv6 called Secricom, www.secricom.eu and co-initiated the new EU Coordination of the European Future Internet Forum for member States called ceFIMS to start soon.

Latif is also a Member of 3GPP PCG (www.3gpp.org), 3GPP2 PCG (www.3gpp2.org), Vice Chair, IEEE ComSoc EntNET (www.comsoc.org/-entnet/), Member of UN Strategy Council, member of IEC Executive Committee, Board member of AW2I, Board Member of Nii Quaynor Institute for Research in Africa, and member of the Future Internet Forum EU Member States, representing Luxembourg: http://ec.europa.eu/information_society/activities/foi/lead/fif/index_en.htm.

Q: With IPv6 coming in to focus, what are the major problems the Service Providers will face if they do not deploy the service?

A: They will face the big parity readiness issues between IPv4 & IPv6, in other terms instead of having planned earlier for the integration of IPv6 through the refresh cycle during their past investments in new infrastructure, they will have to go into a fork-lift upgrade hastening into unpredictable costs in having all things updated at the same time. The first thing to do is upgrade the brains of the engineers to speak IPv6 in a similar way they spoke IPv4. About 10% of the worldwide ISPs, not counting the 3G and LTE mobile operators, are IPv6 ready or aware, some 10% at best of these offer IPv6 services. Earlier adopters are smiling now. Many ISP have not even considered to move to IPv6 and even some have turned off IPv6. NTT turned on IPv6 10 years ago and are now ranked number 2 in the world. Canadian Teleglobe (now Tata Networks) has been a pioneer in the deployment of IPv6 worldwide due to primarily one single passionate v6 advocate: Mr. Yves Pope. So, each ISP needs an IPv6 Pope!

Q: Will IPv6 help cover the digital divide or is this truly needed in the developed market places.

► **A:** Since the IPv4 address was enough to connect just 25% of the world population, it's abundantly clear that IPv6 will connect the rest of the 75%. The digital divide applies more to devices and indirectly to people, so you should talk about a technology divide where you will have billions of devices to be connected to the Internet and this is where the hidden issue is. You need billions of addresses to allow Internet of Things and Smart Grid solutions to work. The innovation will spread to all sectors that have not yet adopted the Internet in their products and business.

Q: How will IPv6 help with security of systems?

A: IPv6 will allow new security models because of restoration of the end to

end model for everyone. The end to end model was allowed only to those who had enough v4 addresses. The new Microsoft DirectAccess is a very good example how enterprise security should be deployed without having to go through VPN and costly key securities. Security houses are way behind to discover what IPv6 can do for them. They will find out when their engineers get some proper education.

Q: How is the Forum helping worldwide and can Service providers ask you for assistance?

A: The IPv6 Forum has over 70 chapters worldwide organising IPv6 Summits and hands-on workshops and key ISPs are always participating, if not leading, the show.

However, it's just the elite ISPs that join. The call to action is valid for everyone if they wish to remain in this business as the Internet grows and its sustainability depends on the address space.

We have just 7% left and the remaining address space is used by spammers and hackers, not good for business and government networks. It's called the dirty address space moving people into the dirty Internet.

Q: What are the timelines for IPv6 deployment?

A: The time line was yesterday. Anything else can be considered as a laggard approach or, in good American language: The Losers.

