



IST-2001-34056

Deliverable D4.3.4

"IPv6 Newsletter IV"

Contractual date of delivery to the October 2002

European Commission:

Actual date of delivery to the

European Commission

October 2002

Editor(s) M. Ford (BT), P. Christ (T-Systems)

Participant(s) 6LINK partners

Workpackage WP4

Title of Deliverable IPv6 Newsletter IV

Security Pub

Deliverable Type Website & Document

Version Issue 1

Number of pages 8

Abstract This deliverable provides a short summary of recent news from

the IPv6 IST community and beyond.

Keywords IPv6, IST, News



IPv6 Newsletter

October 2002 - Issue 4



This newsletter provides news and announcements from the IPv6-related projects and activities organised in the IST (Information Society Technologies) research programme of the European Commission. To hear more news about IPv6 developments within the IST programme and beyond, join the IST IPv6 Cluster! This is a free, public service. For joining instructions, please see our website. We would also greatly appreciate your feedback.

LATEST IST PROGRAMME NEWS

Towards Framework Programme Six

A second draft of the working programme was published on 18th October 2002. The first call is likely to be published on 17th December. Full proposals have to be submitted by 24th April 2003.

The second All-IPv6-World workshop was organised on 1st October. Possible IPv6 research and development areas for FP6 have been identified. Coordinators for each theme have been identified. The focus will be on services and applications. A people networking session for this group has been scheduled during IST2002, on November 5th. If you want more information, please contact jordi.palet@consulintel.es.

From 11 to 13 November, the European Commission will hold a major conference in Brussels to mark the launch of the EU's Sixth Framework Programme for research, which will cover the period from 2002 to 2006. More information is available from their website.

IPv6 at IST2002

IST 2002 will be held in Copenhagen on 4-6th November 2002. This will be the last big event of IST in FP5, and IPv6 will be one of the major issues. The IPv6 Cluster has organised a booth to accommodate demonstrations of several IPv6-related projects, including 6NET, 6POWER, 6WINIT, Android, Euro6IX, and LONG, among others. All the IPv6 related projects have cooperated in order to produce a special booklet with information about all their IPv6 activities, that also contains a view of IPv6 in FP5 and the expected initiatives in FP6. The IPv6 Cluster is also working to ensure IPv6 connectivity (fixed and wireless) for the event.

IST IPv6 CLUSTER MEETINGS

The next IST IPv6 Cluster meeting will be on 6th November in Copenhagen. The draft agenda and further details are available on the Cluster website. If you plan to attend this meeting, you must register in advance for security reasons. To do so, please send an email to matthew.ford@bt.com indicating your intention to attend.

IPv6 STANDARDISATION

Details of all IPv6-related standards activity since the last Standardisation Report are available here.

The second IPv6 Technology Standardisation Report is available from the IST IPv6 Cluster website. This report analyses the status of IPv6 standardisation as of August 2002 and highlights the key issues in various technology areas. The report includes developments in IETF, 3GPP and the RIRs. The next update will be available in December.

CONFERENCES AND WORKSHOPS

The 1st meeting of the IPv6 Task Force (2nd Phase) was held in Brussels on September 12th and attended by more than 50 participants. The status of IPv6 activities in Europe and Japan were presented including an IPv6 ISP business case, IPv6 security and privacy, and plans of the national IPv6 Task Forces. Information is available here.

The G6, a French association of IPv6 experts, the Aristote Association and GIP Renater, the French Research and Education Network, organised a joint conference on IPv6 deployment, usage of available applications and transition from IPv4 to IPv6. The conference "Where are we with IPv6?" was held on 28-30 October 2002 in Paris. More information is available here.

Forthcoming Events

A B3G conference, dedicated to the theme of mobile and wireless communication systems beyond 3G, will take place in Beijing from the 20th to the 22nd November. The conference will bring together European and Chinese participants with the objective of enabling partnerships to be established, notably in the context of the 6th Framework Programme as well as the Chinese Future Programme. Should you be interested in developing such partnerships, please consult the conference website.

© 6LINK www.6link.org Page 3 of 3

- T-Systems Nova has been invited to give a business talk on IPv6,
 "Connecting the Future", on 12th November in Berlin.
- Eurecom, Hitachi and Motorola are organising the 6th edition of a yearly Symposium, "Mobile Communication for Everyone - Anytime, Anywhere, Anybody", with the participation of an IPv6 keynote, "What about IPv6 in Europe?" in Nice, November 28-29th. The information is available here.
- The next Madrid Global IPv6 Summit will be held between 12-14th of May 2003, together with an ETSI IPv6 Plug-test. Make a note in your diary now as this will be a major IPv6 event. The information will soon be available here.
- Network + Interop event will be held 6-8th November 2002. The IPv6 pavillion is one of the main attractions. Projects and companies involved in IPv6 should use this opportunity for demonstrating their latest results. Contact: Patrick.cocquet@6wind.com for more details.
- At SAINT2003, European IPv6 research and deployment will be presented alongside projects and initiatives from the rest of the world.
 It's an IEEE Workshop, see this page for details.

LATEST NEWS

- Land speed record for a data transmission between Slovenia and Madrid using IPv6: On the 27th of September 675 megabytes of data were transmitted in 11.73 seconds from Lubljana to Madrid using IPv6. Although there is still no official ratification, this looks set to become a new record for a single channel transmission over IPv6. Researchers from RedIRIS, ARNES (the Slovenian Research and Education network), DANTE and Juniper were involved. The link, comprised of three segments (Slovenia to Austria, Italy to Switzerland, and Switzerland to Spain), was shared with common traffic from the European research centers, so there is still room for improvement from the current 483 Mbps to the maximum capacity of the links, 622 Mbps.
- Cambridge Silicon Radio announces IPv6-webserver on bluetooth chip
- ISP Andrews & Arnold announces IPv6 over DSL service
- NTT offering commercial IPv6 in Malaysia
- The Eurodemo Lab in Brussels has trialled the latest (commercially available) wireless devices in an IPv6 environment. A Compaq iPAQ 3870 device was used. The original Pocket Windows system was replaced with Linux to obtain IPv6 support. Three scenarios have been tested. The first scenario included the iPAQ with a PCMCIA expansion pack and Wireless LAN card. When the network supports IPv6, no additional device configuration is needed native IPv6 access is provided automatically. The second and third scenarios required tunnelling. IPv6 packets were placed inside IPv4 packets using the Freenet6 tunnelling service which proved to be very robust. The second scenario used the iPAQ built-in Bluetooth interface. This wireless technology has a very low power-consumption, allowing many

- hours of access, with speeds up to 700kbps. A notebook PC equipped with a Bluetooth and Ethernet interfaces was used. The third scenario was more complex since it included GPRS access. A Bluetooth interface, present both in the phone and the PDA was used to connect these two devices. The phone was used as a modem for accessing the Internet via the GSM/GPRS network. An IPv6-over-IPv4 tunnel was created using the Freenet6 service.
- Eurov6 (the European IPv6 Showcase) will be linked to the Japanese IPv6 Galleria showcase. The idea is to have as many demo rooms as possible with IPv6-enabled products and applications across Europe. Demo rooms will be in Madrid, Brussels, Switzerland and most likely Berlin. Please see the preliminary website.
- Global Crossing announced on 9th October that two European customers, XS4ALL, an innovative Dutch broadband ISP, and El Mundo, a major Spanish newspaper and electronic publisher, are beginning implementations of IPv6. More details here.
- XS4ALL has become the first broadband provider in the Netherlands to make its network ready for IPv6. More than 600 of XS4ALL's customers are already using IPv6, following a trial invitation this summer. More details here.
- Euro6IX will announce, during IST2002, that their network deployment is completed. See this page for further information.
- Upper Side are organising the 'Deploying IPv6' conference, endorsed by the IPv6 Forum, in Paris, from 3rd to 6th December. Details and registration are available here.
- On 16th September, 2002 the European Commission-initiated IPv6
 Task Force and the IPv6 Promotion Council of Japan forged a
 cooperation agreement to garner support for and to foster the
 promotion and deployment of IPv6. More details here.
- New publication announced on "Transition Towards IPv6 in Europe": 6LINK is inviting all projects in the IPv6 Cluster to participate in this publication. The table of contents will be presented at the next Cluster meeting (see above for details). It will include a discussion of IPv6 deployment in Europe, a section for projects and some interviews providing an outlook on the years to come. This book will be published at the end of Q1 2003. For more information, please contact peter.christ@t-systems.com.

FOR MORE REGULAR IPv6 UPDATES,

PLEASE JOIN THE 1ST IPv6 CLUSTER!



IPv6 Standards Update



October 2002 - Issue 4

This newsletter provides news and announcements from the IPv6-related projects and activities organised in the IST (Information Society Technologies) research programme of the European Commission. To hear more news about IPv6 developments within the IST programme and beyond, join the IST IPv6 Cluster! This is a free, public service. For joining instructions, please see our website. We would also greatly appreciate your feedback.

IPv6 STANDARDISATION

IETF activity since the last newsletter

New drafts

- IPv4 mapped address considered harmful
- IPv6 Addressing Architecture Support for mobile ad hoc networks
- ISATAP interactions with TSP
- Evaluation of Transition Mechanisms for Unmanaged Networks
- Transition Scenarios for 3GPP Networks
- MIPv6 Care of Address Option
- Mobile IPv6 Fast Handovers for 802.11 Networks
- IPv6 Enterprise Networks Scenarios
- ISP requirements for IPv6 unmanaged networks
- Intermediate version of MIPv6 base spec
- IPv6 Router Advertisement DNS resolver Option
- Firewalling Considerations for IPv6
- IPv6 Anycast Binding using Return Routability
- IPv6 Multicast Deployment Issues
- Localized Key Management for AAA in Mobile IPv6
- Embedding the Address of RP in IPv6 Multicast Address
- IPv6 for Large Access Providers
- Taxonomy of Route Optimization models in the Nemo Context
- Optimistic Duplicate Address Detection
- IPv6 Neighbor Discovery trust models and threats
- Proposed Solutions for ISATAP Operational Issues
- IPv6 over Fibre Channel
- Router Affiliation Protocol for v6-over-(foo)-over-IPv4
- IANA Allocation Guidelines for Values in IPv6 and Related Headers
- Security Considerations for 6to4

© 6LINK www.6link.org Page 6 of 6

- Moving from 6bone to IPv6 Internet
- IPv6 Prefix Options for DHCPv6
- Provider-Internal Aggregation based on Geography to Support Multihoming in IPv6

Updated drafts

- Linklocal Multicast Name Resolution (LLMNR)
- IP Version 6 Addressing Architecture
- IP Forwarding Table MIB
- A flexible method for managing the assignment of bites of an IPv6 address block
- IPv6 Flow Label Specification
- IPv6 Transition Solutions for 3GPP Networks
- Unmanaged Networks Transition Scope
- Transition Scenarios for ISP Networks
- Diameter Mobile IPv6 Application
- Teredo: Tunneling IPv6 over UDP through NATs
- Basic Socket Interface Extensions for IPv6
- Well known site local unicast addresses for DNS resolver
- Fast Handovers for Mobile IPv6
- An IPv6 Provider-Independent Global Unicast Address Format
- Application and Use of the IPv6 Provider-Independent Global Unicast Address Format
- IPv6 Fast Router Advertisement
- Securing MIPv6 Binding Updates Using Address Based Keys (ABKs)
- IGMPv3/MLDv2 and Multicast Routing Protocol Interaction
- Duplicate Address Detection Optimization using IPv6 Multicast Listener Discovery
- IP Version 6 over MAPOS
- Hop-by-Hop Local Mobility Agents Probing for Mobile IPv6
- Source Address Selection for Multicast Listener Discovery Protocol (RFC 2710)
- IPv6 Reverse Routing Header and its application to Mobile Networks
- An IPv6/IPv4 Multicast Translator based on IGMP/MLD Proxying (mtp)
- Advanced Sockets API for IPv6
- Using IPsec to Protect Mobile IPv6 Signaling between Mobile Nodes and Home Agents
- Traffic Engineering Extensions to OSPF version 3
- Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- 6to4 and DNS
- Intra-Site Automatic Tunnel Addressing Protocol (ISATAP)
- Hierarchical Mobile IPv6 mobility management (HMIPv6)
- Dynamic Host Configuration Protocol for IPv6 (DHCPv6)
- PPP IPV6 Control Protocol Extensions for DNS Server Addresses
- A Guide to Implementing Stateless DHCPv6 Service
- Latest Mobile IPv6 update

NOTE: There are two (2) Internet-Draft Cutoff dates for submissions prior to the upcoming IETF55 meeting:

October 28th: Cutoff for Initial Submissions (new documents)
All initial submissions(-00) must be submitted by Monday, October 28th, at 09:00 ET. Initial submissions received after this time will NOT be made available in the Internet-Drafts directory, and will have to be resubmitted.

November 4th: FINAL Internet-Draft Cutoff

All revised Internet-Draft submissions must be submitted by Monday, November 4th, 2002 at 09:00 ET. Internet-Drafts received after this time will NOT be announced NOR made available in the Internet-Drafts Directories.

FOR MORE REGULAR IPv6 UPDATES,

PLEASE JOIN THE 1ST IPv6 CLUSTER!

© 6LINK www.6link.org Page 8 of 8