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From:
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Broadband Forum Technical Committee Chair
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Date: September 17, 2009
Subject: IPv6 security in broadband networks

During our last meeting we have been discussing the specific use of IPv6 in a residential broadband environment. We believe the presence of duplicate link-local addresses may result in security issues. We can envision a number of scenarios whereby which this might happen.

An additional potential complication is that contrary to the assumptions in the IPv6 protocol suite – in particular RFC 4861 and RFC 4862 – a split-horizon model is employed in such environments. This implies that different IPv6 hosts will not be able to communicate directly at the Ethernet link-layer. Instead, host-host communication needs to cross an IP Edge Router.

We therefore believe this is a problem which the IETF SAVI working group may wish to address. We also ask you to evaluate the impact of "Duplicate Link Local Addresses". We have attached a revised Problem Statement on Duplicate Link Local Addresses, and would welcome your suggestions as to how this problem might be solved.

We look forward to hearing your response. Our next meeting is in Budapest, Hungary, November 30th-December 4th 2009.

Sincerely,

Gavin Young
Broadband Forum Technical Chair