
ITC - Loc/ID Separation SIG Report 2015

In the framework of ITC Special Interest Groups activities, the Locator/ID Separation SIG has been created in 2012, aiming at gathering and disseminating activities about the Locator/ Identifier Separation paradigm. The paradigm is instantiated in LISP (Locator/Identifier Separation Protocol) and the highlights of 2015/2016 activities concern the advances in the IETF LISP WG, the evolution of the OpenLISP implementation, and the growth of LISP deployments.

The LISP WG at the IETF, in the last year, has been rechartered. Beside completing the few remaining item of the previous charter, the new charter opens toward two main directions: standard track and multi-protocol support. The first action aim at transforming the current LISP specifications into standard track documents (from the current experimental track). This means to revise what has been proposed in light of deployment experience and revise the specification accordingly. Any experience feedback is welcome. The multi-protocol support aims creating a general purpose control plane able to support several Locator?identifier separation protocols and tunnelling solutions. Beyond LISP, it exists a whole plethora of tunnelling protocols, often based on the same principle of LISP, i.e., the separation of the identifier from the location. Yet, such solution lack of a control plane, hence the effort in adapting the LISP control plane to a more generic model, so to be used in other contexts.

The OpenLISP project (www.openlisp.org) is an open source implementation of the LISP protocol on FreeBSD platform. During 2015/2016 the implementation work mainly focused on the LISP control plane (<http://www.lisp.ipv6.lip6.fr>). As the only alternative to the Cisco implementation concerning LISP-DDT functionalities, the project has focused on improving the stability of such feature. LISPmob an alternative open-source implementation for Linux platforms has evolved into Open Overlay Router (<http://www.openoverlayrouter.org>). It is not just a simple renaming, the project aims at meeting the second objective of the LISP WG, i.e., have a generic solution to build flexible overlays, which may or may not based on the LISP data plane. The python based implementation lispers.net, has also evolved in a very feature reach implementation, which includes support for cryptography and several LCAF address types.

The LISP Beta Network (www.lisp4.net) has stabilised and paired by the LISP-Lab network. The LISP-Lab Project (cf., www.lisp-lab.org) is a French funded research project aiming at deploying a large LISP-based platform on which to develop new services.