

# Locator-Identifier Split in IETF HIP, IRTF HIPRG and IRTF RRG

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Discussions about significant changes of the basic TCP/IP protocol are very rare at the IETF. Still, if the technical issue is well understood, the IETF investigates alternatives with experimental protocols. One of these cases is the locator identifier split. The Internet protocol uses the IP address for two purposes: as identifier of a terminal (host) and as routing information for packets sent to this host. Initially, this explicit design decision was seen as an advantage of the protocol, but after time it turned out to be a problem for mobility, security, and multi-homing.

To overcome this architectural limitation, the IETF and the IRTF investigated solutions in the HIP WG, the HIPRG (HIP Research Group) and the RRG (Routing Research Group). Results so far are an experimental standard for HIP, some accompanying documents, and a draft for the Locator/ID Separation Protocol (LISP).

The presentation summarizes the locator/identifier split problem and the history of related IETF/IRTF activities, discusses advantages and disadvantages of investigated solutions and gives an outlook on potential future developments and ongoing research in the area