[   ]   Identifier/Locator

                              IP
                         IP   ,
                                                      .

    1.
        (Endpoint identifier)
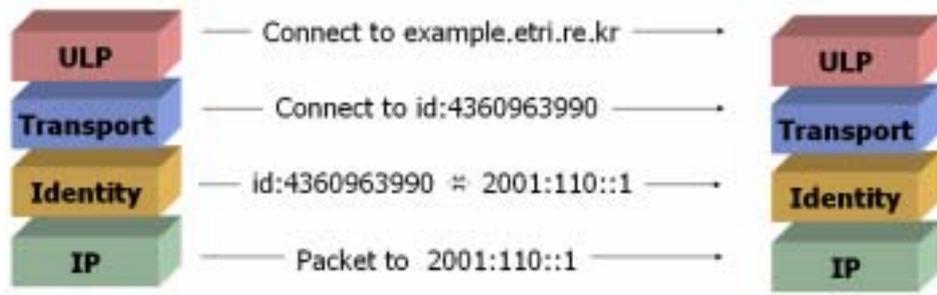   2.   (Location identifier)
        IP   Identifier   Locator   .

                                                              ,
                        .

            ,   .   IP
            Identifier   Locator
        IP   Identifier
                        (Seamless service)
                    .

Identity   locator   ?
                              (2
                ISP   2   )
                        Identifier   Locator
                    .   ,
            Locator   Identifier   .
        (1)   3   (IP)   4   (Transport)   Identity
                            Identifier (ID: 4360963990)   IP
locator   IP   (2001:110::1)   .
IP   Identity   IP   ID
                                                    .

(1) Identifier locator

Identifier Locator

• VIP (Virtual Internet Protocol)

1994 IP IPv6 IPv4
VIP . VIP Transport VIP address
Identifier Locator IP . VIP IP
Transport IP VIP . VIP
VIP
.

• LINA (Location Independent Network Architecture)

1999 , IPv6
LIN6 . VIP IP
Identification delivery Identifier Locator
. LIN6 locator IPv6 , Identifier
embedded address 64bit LIN6 ID IPv6 64 bits prefix
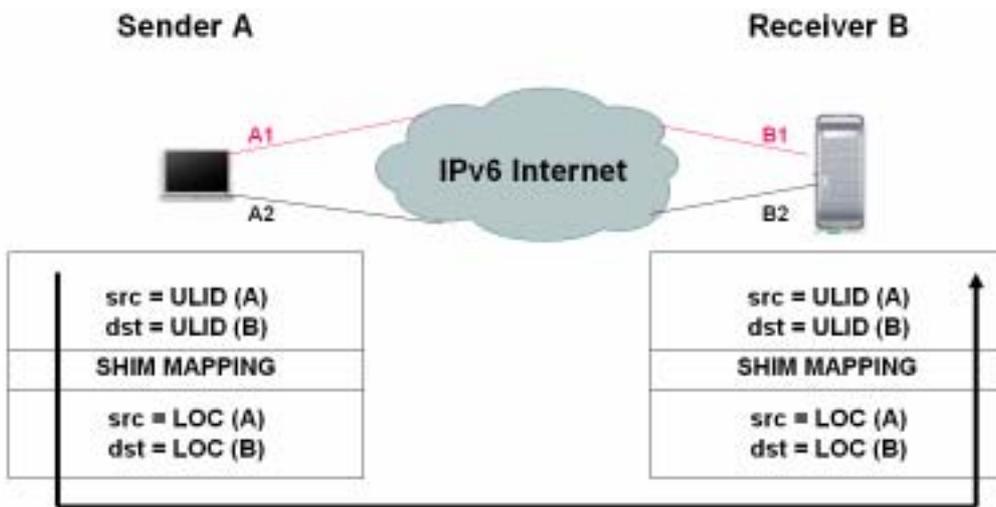(LIN6 address) . LIN6 WIDE
, FreeBSD .

• HIP (Host Identity Protocol)

HIP , Transport IP
Identifier Locator Identity .
Identifier public key hash . HIP
, DNS
RVS(Rendezvous Server) .

• L3Shim (Network layer Shim)

HIP IPv6
. L3Shim 3
. Identifier HIP name space
IP . (2) L3Shim .

1.   Identifier   ULID (A)   Locator LOC (A)
                     IP   (   )
2.   Shim   context
3.   A1- B1   A2- B2   .
        Identifier   , locator   A1   A2   B1   B

L3Shim   ULID   LOC   ,   null
    .   L3Shim   ULID   LOC   .

Sender A   **Receiver B**

A1   B1

IPv6 Internet

A2   B2

| src = ULID (A) |
| dst = ULID (B) |
| SHIM MAPPING |
| src = LOC (A) |
| dst = LOC (B) |

| src = ULID (A) |
| dst = ULID (B) |
| SHIM MAPPING |
| src = LOC (A) |
| dst = LOC (B) |

1. 연결초기: ULID (A) = LOC (A) = A1, ULID (B) = LOC (B) = B1
2. Shim Context 교환 후: 각각 상대방의 Locator set 정보 획득
3. A1-B1링크의 문제발생 후: Shim 매핑
    ULID (A) = A1 → LOC (A) = A2, ULID (B) = B1 → LOC (B) = B2

(2) L3Shim

1994   VIP   ID/Locator   IP   IPv6
    .
1999   IETF (Internet Engineering Task Force)   IP   ID   Locator
        HIP   .   HIP   ,
                                    .
2000   IETF   Multi6   LIN6
                                    .
2001   HIP   IETF   BoF (Birds of a Feather)
                        ,   BoF   .
HIP   2002   2003   2004   59

BoF   60   IETF   IRTF   HIP

. IETF   HIP   HIP

, IRTF   IP

.   IETF   HIP

HIP   .

2004   61   IETF   Multi6   IPv6

Identifier   Locator

L3shim   .

L3Shim   Multi6   Shim6(Site Multihoming
by IPv6 Intermediation)   , Shim6   2005   62
IETF   BoF   .

ID/Locator

, ID/Locator   VIP, LIN6, HIP

.

HIP

.   Shim6

L3Shim   ID   Locator   ,

,   shim   IPv6

.

,   IETF   standard track   .

ID   Locator   .

L3Shim   ,

.   ,

HIP   ,

.

(, twyou@etri.re.kr)