HIP Rendezvous Extensions

draft-ietf-hip-rvs-03.txt

Julien Laganier, Lars Eggert

HIP WG, 63rd IETF Paris, France

Monday, August 1st, 2005

HIP Rendezvous Basics

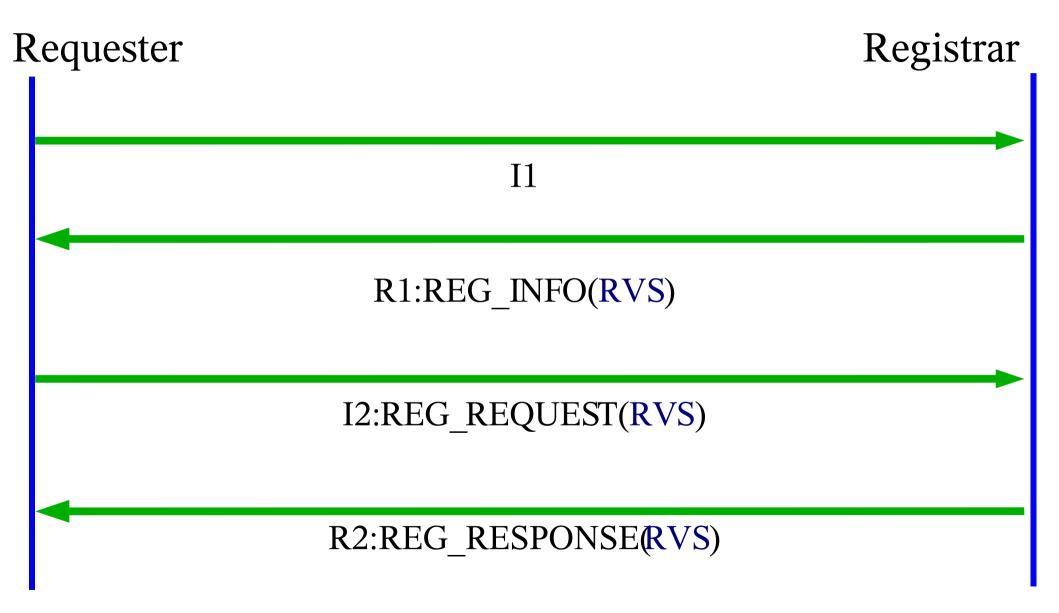
- A HIP node might frequently change its IP address
- How to maintain reachability with new correspondents at its Rendezvous Server IP address

Rendezvous Extensions

- Establish a Rendezvous Registration with a RVS
 - Relies on HIP Registration extensions
 - [I-D.koponen-hip-registration]
 - New HIP Registration Type: *RENDEZVOUS*
- Establish a HIP Association via a RVS
 - HIP Base Exchange extensions
 - New HIP Parameters:
 - FROM preserves original source IP address
 - *RVS_HMAC* protects I1 from RVS to responder
 - VIA RVS signals the IP addresses of traversed RVSs

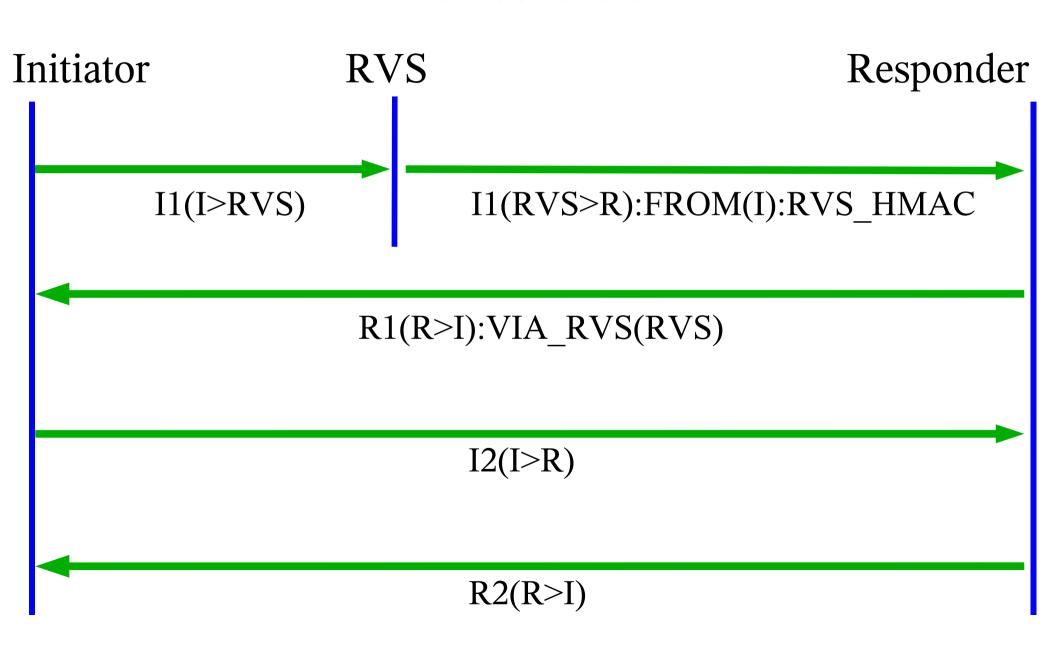
Rendezvous Registration

Protocol sketch



RVS relaying I1

Protocol sketch



Changelog since -01 Editorial

- Rewritten introduction
 - Removed architectural considerations
 - Refer to [I-D.ietf-hip-arch]
 - Parameters type code updated
 - Conformant with [I-D.ietf-hip-base]

Changelog since -01 Relaying of techniques

- Removed variations:
 - 11 TUNNEL, 11 REWRITE, BIDIRECTIONAL
- RVS rewrites I1 headers only
 - SHOULD rewrite I1 source IP address (egress filtering)
 - Then, MUST add to I1 FROM and RVS_HMAC

Changelog since -01 Constructing/Validating R1 when RVS is involved

- Removed dependency on [I-D.ietf-hip-mm]:
 - Removed text on *LOCATOR* usage in R1.
 - Responder MUST add VIA_RVS to R1
 - Initiator checks if it sent an I1 to the originator of R1
 - If addresses are compared, then I1 destination address
 MUST be compared with address in VIA_RVS

Appendix: Parameters Format

FROM

0 1 2 3 0123456789012345678901 type length

Address

VIA RVS

Address

Address