

HIP Registration Extensions

draft-koponen-hip-registration-00.txt

Julien Laganier, Teemu Koponen, Lars Eggert,

HIP WG, 62th IETF
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HIP Registration Basics

- Primitively part of the Rendezvous extensions
 - Used by a client to register with its RVS
- Generic HIP registration procedure also useful for:
 - NAT/FW/Midbox Traversal
 - Hi3
 - Etc.
- Hence *split* registration protocol from RVS exts.

Registration Extensions

Create a registration

- New parameters
 - *REG_INFO*
 - *REG_REQUEST*
 - *REG_RESPONSE*
 - *REG_FAILED*
- New message exchanges
 - Modified base exchange
 - or
 - Updates to an existing association

Establishing a Registration

An association between requester and registrar

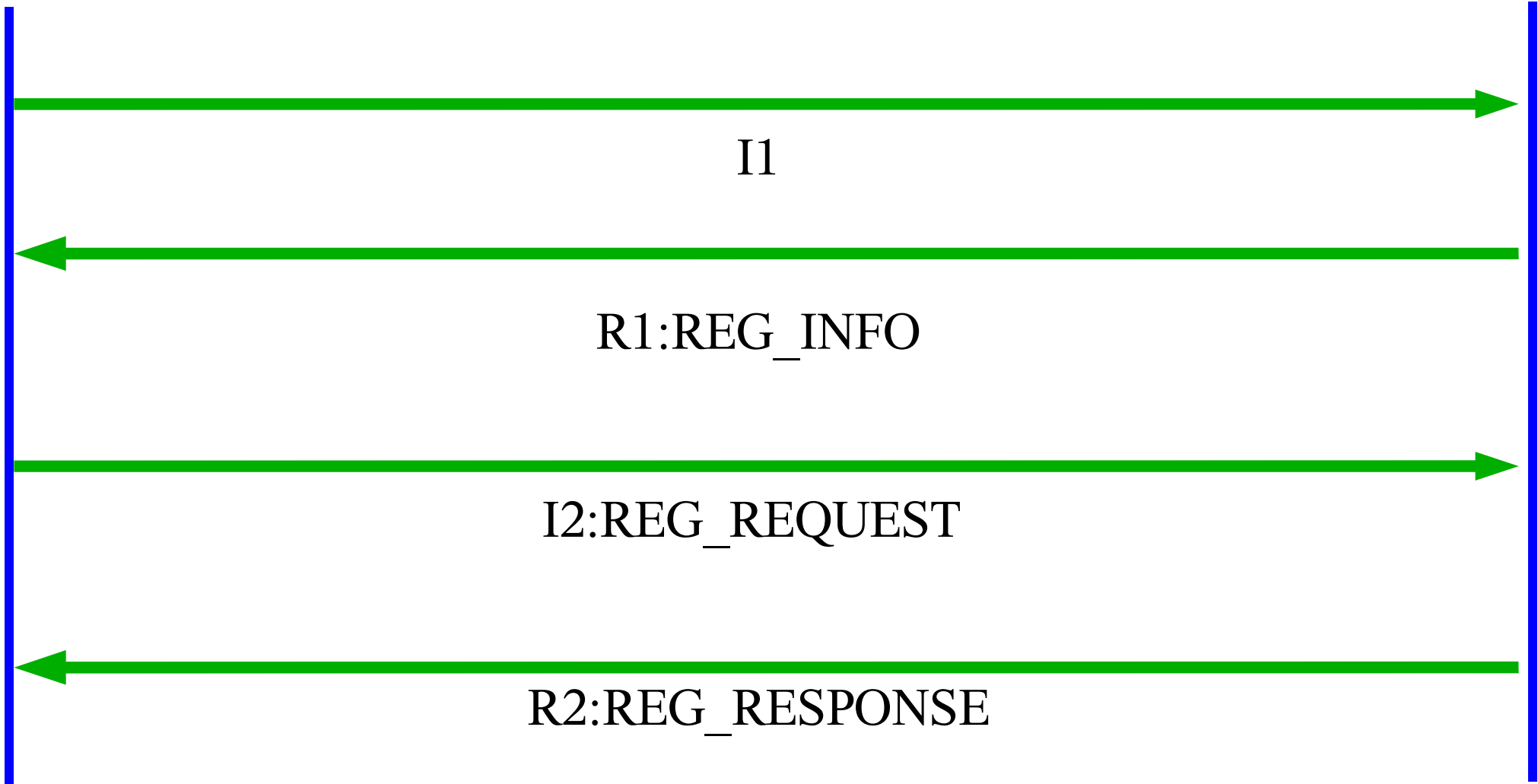
- Initiating a modified HIP base exchange:
 - *REG_INFO* added on R1
 - *REG_REQUEST* added on I2
 - *REG_RESPONSE* added on R2
- Or later using an existing HIP association:
 - *REG_INFO* included in UPDATE
 - *REG_REQUEST* included in UPDATE
 - *REG_RESPONSE* included in UPDATE

Registration within the base exchange

Protocol sketch

Requester

Registrar



Late registration updating an association

Protocol sketch

Requester

Registrar

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sequenceDiagram
    participant Requester
    participant Registrar
    Requester->>Registrar: REG_INFO (either in R1 or UPDATE)
    Note over Requester, Registrar: Later...
    Requester->>Registrar: UPDATE:REG_REQUEST
    Registrar-->>Requester: UPDATE:REG_RESPONSE
```

REG_INFO (either in R1 or UPDATE)

Later...

UPDATE:REG_REQUEST

UPDATE:REG_RESPONSE

Next Steps

- Review the document
- Adopt as a WG item?
 - Needed for RVS operation

Questions or comments...

ju@sun.com

teemu.koponen@hiit.fi

lars.eggert@netlab.nec.de