

Directory Assisted Edge

Donald Eastlake, Linda Dunbar

Huawei Technologies

d3e3e3@gmail.com, linda.dunbar@huawei.com

Directory Assisted Edge: Purposes

- Support ARP/ND/RARP optimization by providing IP ↔ MAC ↔ nickname mapping information to ingress TRILL switches.
- Support pre-encapsulation

Status of Four Drafts

1. draft-ietf-trill-directory-assist-mechanisms-00
2. draft-ietf-trill-ia-appsubtlv-01
3. draft-ietf-trill-channel-tunnel-01
4. draft-dunbar-trill-directory-assisted-encap-07

Status of the Four Drafts

1. draft-ietf-trill-directory-assist-mechanisms-00
 - Provides both push and pull directory services. Push uses ESADI, pull uses RBridge Channel messages.
 - Push Directory needs known correction to state machine as discussed on the mailing list. For example see <http://www.ietf.org/mail-archive/web/trill/current/msg06197.html>
 - Pull needs some work – in particular there are some error cases not handled.
 - This draft almost entirely about the directory mechanisms themselves. Section 5 and most of section 4 are not about the directory. They should be split off into a separated working group draft.

Status of the Four Drafts

2. draft-ietf-trill-ia-appsubtlv-01

- Specifies a TLV data structure for address mapping information.
- Probably ready for WG Last Call after nit polishing for referenced drafts that have been published as RFCs and the like.

Status of the Four Drafts

3. draft-ietf-trill-channel-tunnel-01

- Extends RBridge Channel protocol (RFC7178) in a few ways, including the addition of security.
- Referenced to by draft-ietf-trill-directory-assist-mechanisms for the security of Pull Directory messages.
- Needs some work, particularly on the security parts.

Status of the Four Drafts

4. draft-dunbar-trill-directory-assisted-encap-04
 - Specifies a method for non-RBridge devices to perform TRILL encapsulation before sending data packet to edge RBridge.
 - Benefits include MAC learning table reduction and nickname conservations.
 - Being deferred for other work.

END