

TRILL for 802.11s

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802.11s

- 802.11 = Wi-Fi
- 802.11s = Wi-Fi Mesh
(IEEE Std 802.11s-2011)
- TRILL and another Link State protocol were considered in the 802.11s effort. But, to simplify 802.11s, the final standard provides only one routing method, HWMP (Hybrid Wireless Mesh Protocol), a combination re-active and pro-active distance vector routing.

802.11s

- 802.11s is designed so that nodes (stations) can indicate and use support for alternative routing protocols.
- 802.11s is the basis for routing between laptops in the One Laptop Per Child project and is currently being used by the Serval project and elsewhere.
- There is an open source implementation of 802.11s for Linux.

Liaison from TRILL to 802.11

- The best initial step is to inquire as to whether the IEEE 802.11 WG has any objection to this.
- Proposed Liaison would be from TRILL WG Co-Chairs to IEEE 802.11 WG Chair, cc'ing appropriate liaisons and other officers.

Liaison from TRILL to 802.11

In connection with IEEE 802.11 the IETF TRILL Working Group may wish to standardize a variation of TRILL as an alternative 802.11 mesh (802.11s) path selection protocol. This might eventually require the allocation of one or more 802.11 code points. There is, of course, no guarantee that the TRILL WG would succeed in such an effort.

TRILL is a protocol based on link-state routing that gives nodes within the network a global view of the topology, a view that can enable more intelligent forwarding than some other techniques. The base TRILL protocol is specified in IETF RFCs 6325, 6326, and 6327.

We have been in contact with individuals at the Serval project and at CozyBit, 802.11s implementers and users, and they are interested in this possibility. Would the IEEE 802.11 Working Group have any objection to the specification of an alternative 802.11s path selection protocol by the TRILL WG as described above?