

# IETF / IEEE 802.1 Liaison

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# Topics

- TRILL charter and 802.1 dependencies
- Bridge MIB transfer
- Radius Extensions 802 Attributes
- Bandwidth Attributes

# TRILL

- First meeting of TRILL took place at IETF-63 in Paris
- Working with 802 was discussed by 802.11s chair. Liaison relationship with 802.1 unclear but appears necessary. See: <http://www3.ietf.org/proceedings/05aug/slides/trill-1.pdf>
- **Priorities:**
  1. Define Problem statement
  2. Create architecture document
  3. Routing Protocol Requirements
  4. Base protocol document (draft exists)

# Bridge MIB Transfer

- Work proceeding on ruzin MIB submission.
- Initial draft of IETF document on transfer process.
  - David Harrington editor
  - Dan R assisting. Need additional support and review from 802.1

# Radius Extensions – 802 Attributes

- Draft in WG last call that creates new Radius attributes for VLANs, Priority and traffic redirection
- <http://www.ietf.org/internet-drafts/draft-ietf-radext-ieee802-00.txt>
- Issues being resolved through Radext mailing list.

# Attribute Summary

(as will be documented in -01)

## VLAN attributes

Egress-VLAN-ID

Ingress-Filter

Egress-VLAN-Name

## Quality of Service Attributes

User-Priority-Table

QoS-Filter-Rule

## Access Control Attributes

NAS-Filter-Rule

# Bandwidth Attributes

- Individual submission desiring to become a working group item
- Work is desired by 802.11 and 802.1 vendors and related SDOs for very simple bandwidth control.
- Historically part of 802 attributes draft, but also in wi-fi drafts with slightly different behavior.
- <http://www.ietf.org/internet-drafts/draft-lior-radius-bandwidth-capability-01.txt>
- IETF decision to become a WG item held pending review by other IETF areas and original requesting SDOs.

# Bandwidth Attribute Summary

## Ingress Bandwidth

Specifies ingress rate limits in terms of Kbps

## Egress Bandwidth

Specifies egress rate limits in terms of Kbps

## Bandwidth Profile Id

Specifies to apply a pre-configured bandwidth profile by name



# Consideration for Traffic Classes

0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1								
Type										Length										ingress																			
Value										TC-0 Weight					TC-1 Weight					TC-2 Weight					TC-3 Weight					TC-4 Weight					TC-5 Weight				
TC-6 Weight					TC-7 Weight																																		

$$\text{Traffic class X rate} = \text{Ingress Rate} * (\text{sum TC weights}) / \text{TC-X weight}$$

# Bandwidth Attributes Next Steps

- Update individual submission to represent comments from review
- IEEE 802.1 to respond with review comments against submission
  - current comments recommend defining the attributes to be 802 traffic class aware.
- Become a working group item, simply disappear or re-emerge after 802.1 and 802.3 bandwidth controls evolve.