

DLEP Extensions:

LID's, TID's, CID's, QID's, FID's

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Current Extensions

- LID Extension
 - Adds a ‘Link Identifier’ Data Item to identify destinations reachable beyond the layer-2 domain
- DiffServ-aware Credit Windowing
 - Adds a ‘Traffic class Id’ Data Item to describe a group of DiffServ codepoints or Ethernet TOS markings
 - Adds a ‘Credit Window Id’ Data Item to describe a credit window per ‘Traffic class Id’ (possibly per Destination)

Complex Modems

Modern radio equipment is increasingly sophisticated

- Schedule traffic transmission differently based on Traffic class. “*Expediated Forwarding*”
- Forward traffic via different paths to a destination based on Traffic class. “*Hub Assistance*”

Can we re-use the Traffic class structures from DiffServ-aware Credit Windowing?

A family of extensions

- LID's
 - Identifiers for links beyond the layer-2
- TCID's
 - Identifiers of traffic classification sets
- CID's (CWID's?)
 - Identifiers of credit windows, used for transmission control.
- QID's
 - Identifiers of egress queues at modem, used for pausing
- FID's
 - Identifiers of flows, associating a TCID with a destination

A family of extensions

By defining each ID in a separate draft, then a 'mix and match' approach can be used to do any of the following:

- A credit window per destination.
- Pause/resume traffic of a certain class.
- Metrics per traffic class to each destination.
- Multi-hop control per traffic-class.
- etc...

Proposed Next Steps

- New draft-ietf-manet-dlep-tcid:
 - Lift traffic-class identifiers from draft-ietf-manet-dlep-da-credit-extension.
- Reformulate existing documents:
 - draft-ietf-manet-dlep-da-credit-extension
 - draft-ietf-manet-dlep-pause-extension
- New document:
 - draft-ietf-manet-dlep-fid?
 - Needs volunteer authors and WG input.

Questions and Arguments?