

Uplink access technology indication

draft-krishnan-6man-uat-00

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Why?

- In some scenarios it is advantageous for routers to provide their uplink access technology information to the hosts attached on the downlinks
 - Consider a tethering scenario where a mobile phone that uses a cellular uplink such as LTE, shares its internet connection to hosts that connect over a local WiFi link
 - It would be beneficial for hosts on the WiFi link to know that the uplink connection is a cellular link and potentially modify their behavior
 - e.g. Application and software updates (and similar bulk transfers) could be rescheduled based on administrative configuration.

How?

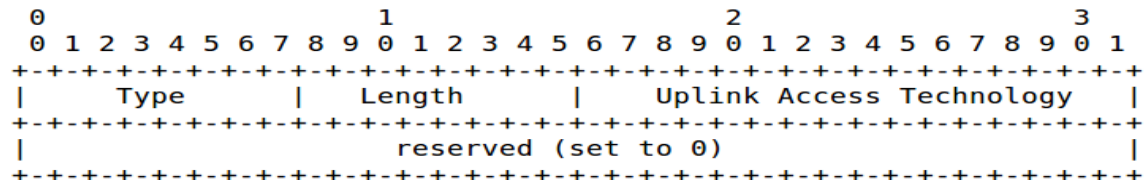
- Define an option is to be carried in RA messages sent out by a router on a given link
- It specifies the uplink type(s) that the router uses.
- Uplink types are specified in an extensible registries and have some initial values

Next Steps

- Questions?
- Adoption as working group draft?

Backup

Option Format



Type

8-bit identifier of the type of option. The option identifier for the UAT option will be allocated by the IANA.

Length

8-bit unsigned integer. The length of the option (including the type and length fields) in units of 8 octets. It MUST be set to 1.

Uplink Access Technology

A 16-bit field that specifies the uplink access technology used by the router sending the Router Advertisement carrying this option.

Figure 1: Uplink Access Technology (UAT) Option Layout

Multiple UAT options MAY be present in a single Router Advertisement message to allow for routers that use multiple uplinks. This document defines the following initial values for the UAT field that can be extended by adding new values to the IANA registry.

UAT	Access Technology
0x01	3GPP
0x02	DSL
0x03	Cable
0x04	802.3