MRT Status
draft-ietf-grow-mrt-01.txt

IETF 64 – GROW WG

MRT Review

- Binary format to record routing information with timestamps

- Originally developed for Multithreaded Routing Toolkit (MRT)

- Used by a number of other routing daemons and tools (Zebra/Quagga, OpenBGPD, C-BGP, etc.)
- Primarily used for BGP messages and RIB table dumps
    - Routeviews and RIPE RIS archives
- Also supports OSPF, ISIS, RIP

MRT Review - basic header format

```
0                   1                   2                   3
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
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                           Timestamp                           |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|            Type             |            Subtype              |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                            Length                             |
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
|                      Message... (variable)
+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+
```

MRT -01 Draft changes

* Added support for microsecond timestamps for OSPF with new OSPF_ET type
    * OSPF_ET type also adds supports OSPFv3 (Ipv6)
* Added a security considerations section

Proposed updates for -02 draft

* IANA Considerations section for Type/Subtype codes
  * Specify registry 16-bit type and subtype fields
  * Allows possible future extensions such as a compressed format for RIB table dumps
* Support for 4-byte AS numbers
  * 4-byte AS draft is moving forward
  * Relatively trivial to add as MRT leaves attribute data as abstract information to be interpreted at the application level
  * AS number only explicitly encoded for source and destination AS for BGP4MP Message and State Changes subtypes
* Does anyone care about microsecond timestamps for RIP?