Active and Passive Metrics and Methods (and everything in-between)

draft-morton-ippm-active-passive-00 Al Morton Nov 2014

We* didn't start the fire...

- IPPM chartered since 1997, working as part of BMWG before that... RTFM and IPFIX long-timers
- First PAM conference in 2000
- Many terms are in common use in IETF, but
 some lack formal definitions
- The notions of active and passive are wellestablished, so let's document them.
- Further, let's help classify new methods according to useful criteria
- * "we" is likely everyone sitting in the session, unless Matt Mathis is present. Al here since '98. Not sure when Bill joined.

Definitions

- First, define Performance Metric and Method of Measurement.
- Next, define Active and Passive Methods
- Then, recognize that IPPM's Active metrics deliberately incorporate some methods in the Metric Definition – therefore, Active Metrics.
- Passive Metric definition follows
- Finally Hybrid Methods are a combination of Active and Passive

On to classification: 2 Dimensions

- The degree to which the measurement stream affects network conditions.
- The methodological advantages of knowing the source stream characteristics, and having complete control of stream characteristics

On to classification: 2 Dimensions

```
Affect of the measurement stream on network conditions
^ Max
|* Active using max capacity stream
| * Active using stream with load of typical user
|* Active using extremely sparse, randomized stream
                               * PDM
                                                             Passive
 Min
Stream
                                                                   None
Characteristics
completely
known
```

Next steps

- There's a typo on the reference to Observation Point – should be RFC 7011, not 7101.
- Observation Points and Measurement Points are synonyms, following from the different methods – we just do mapping
- Hybrid examples worked through in Section 4,
 Discussion (of classification)