

High-Precision Service Metrics

draft-csfx-ippm-hipmetrics (A. Clemm, J. Strassner, J. Francois)

- Define a new set of metrics to capture whether a delivered service complies with its SLO
 - Does the precision with which the service is delivered meet its SLOs? (e.g. e2e latency, loss)
 - Example SLOs: end-to-end latency, loss
 - Compliance depends on the SLO– telehaptic service different from telegaming
 - Current state of the art insufficient: interface stats, flows stats, even measurements (no SLO consideration)
- Applications
 - Accounting – maintain records of what precision has been delivered
 - Monitoring – obtain sense of the health of precision service
 - May define corresponding IPFIX Information Elements, YANG data models – but need metrics first
- Example metrics:
 - First order: #violated packets, #violated time units (e.g. msec)
 - Second order: Precision availability: # nonviolated time units / duration of service and other statistics, e.g. mean #time units between violations (compare MTBF)
- Next steps
 - Refine metrics
 - Define IPFIX Information Elements, YANG data models at some point as an option– but need metrics first
 - Who would like to join us? Pls contact us e.g. Alex: ludwig@clemm.org

THANK YOU!