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!