

InfiniBand Interconnects for High-Speed Data Acquisition in a TANGO Environment

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The given environment

The new 'Image' beamline at the ANKA synchrotron uses TANGO for process control / automation



The Problem

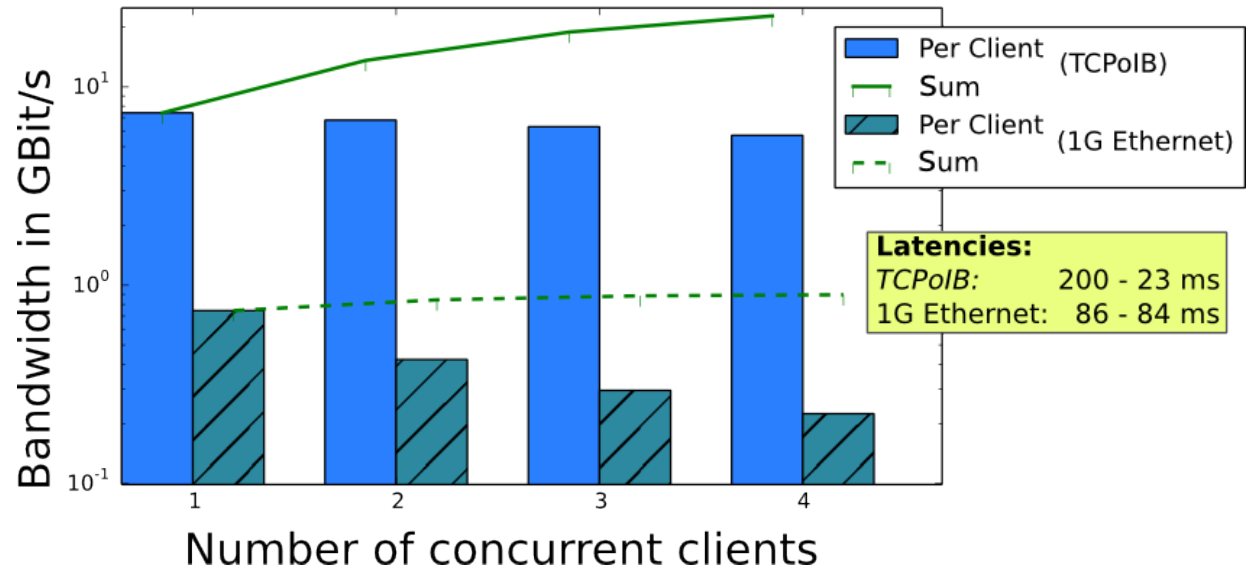


-TANGO uses CORBA which relies on TCP/IP

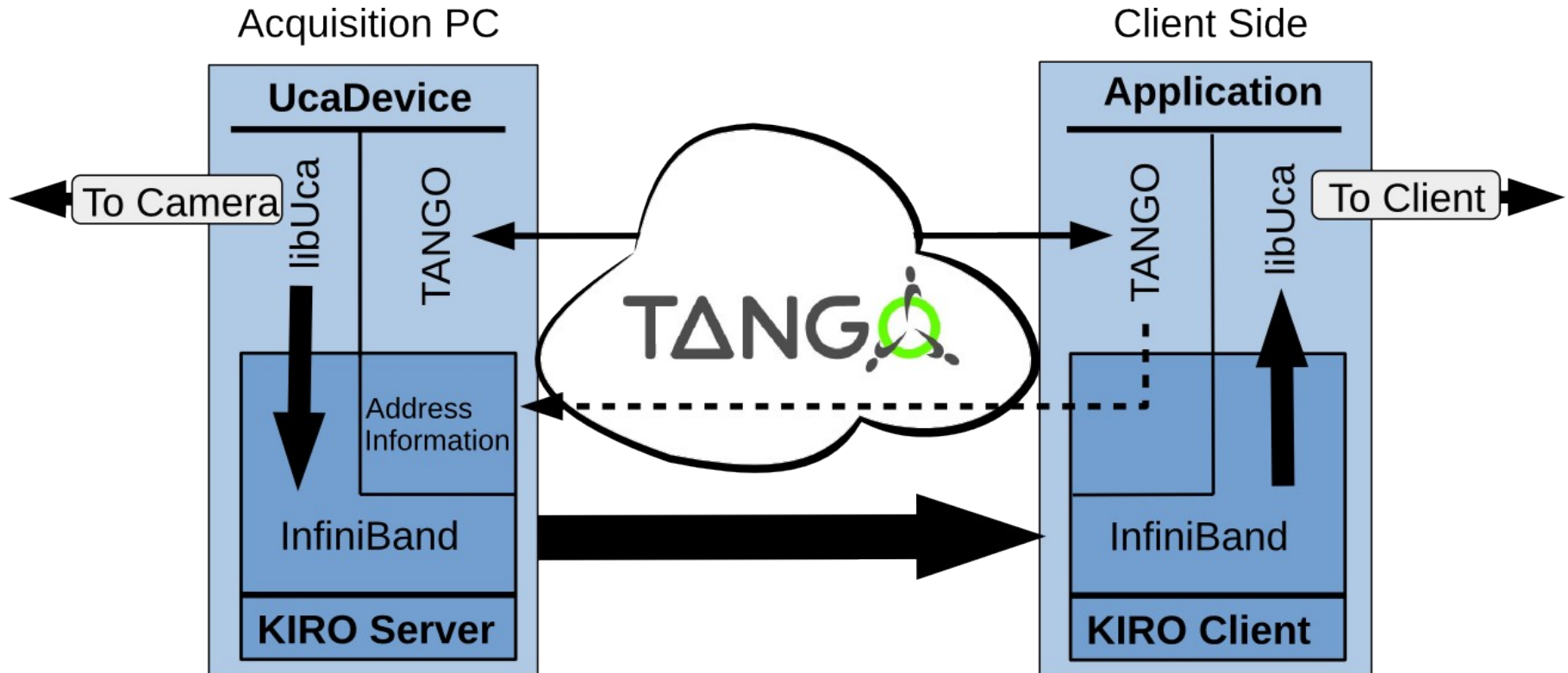
-TCP/IP performs badly on InfiniBand inter-connects

7.4 Gbits/s (out of 32 Gbit/s)
(~23% efficiency)

Bandwidth per client, using CORBA over TCPoIB
and 1 GBit/s Ethernet

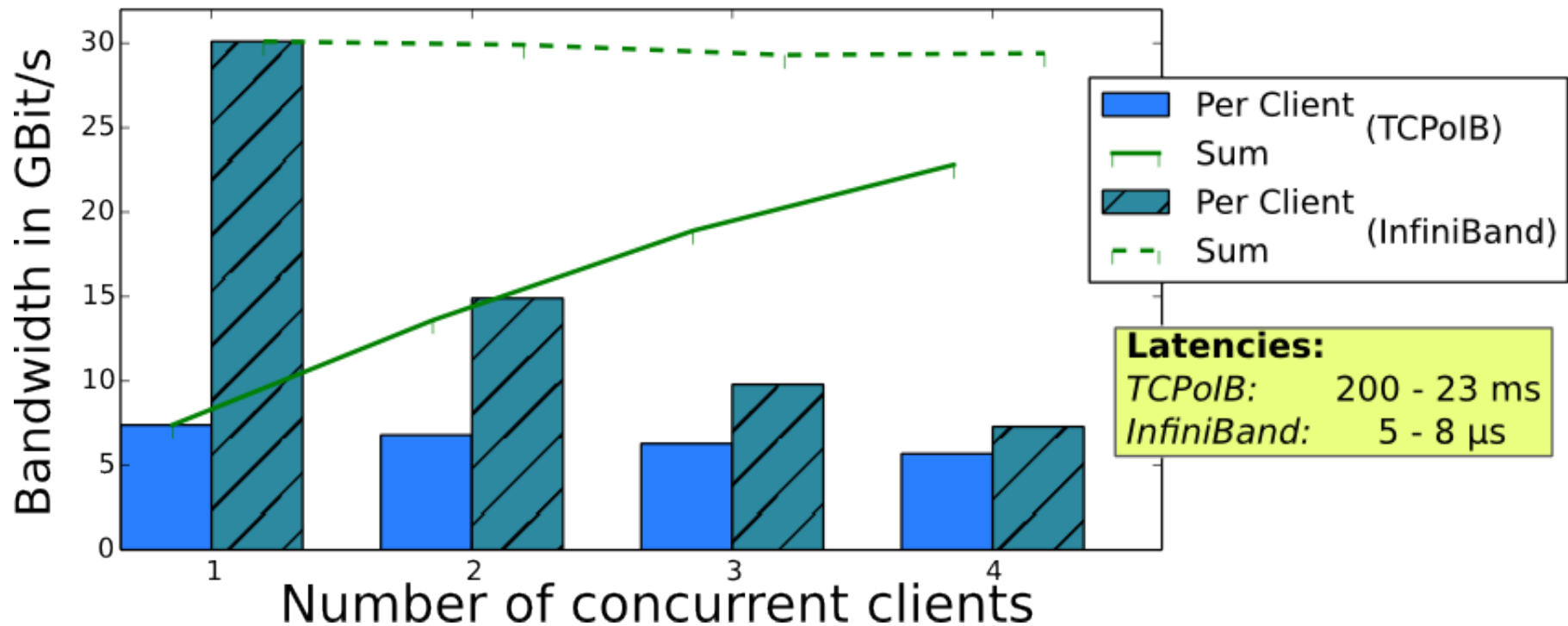


The Solution



Results

Bandwidth comparison between CORBA over TCPoIB, and InfiniBand



Thank you for your attention!

Questions?

You can also contact me at: timo.dritschler@kit.edu