Contribution ID: **157**   Type: **Poster presentation**

Implementing a ReboT server on a Microblaze.

Tuesday 7 June 2016 15:00 (1h 30m)

Data acquisition over an IP network is convenient for diagnostics, monitoring and control applications. The ReboT protocol (Register Based Access Over TCP) extends the MTCA4U deviceaccess framework, letting it access supported hardware over TCP/IP. Using ReboT, the Python and Matlab bindings provided by the framework give application developers a convenient way to access hardware over the network.

The poster discusses the server side implementation of ReboT on a Microblaze soft core. We present our experience implementing the code on the Microblaze using FreeRTOS and the Netconn API of the LWIP stack. We also compare network performance against an implementation realized using the Xilinx kernel and the socket API of the LWIP stack.

Author: VARGHESE, Geogin (DESY, Hamburg)

Co-author: Mr BUTKOWSKI, Lukasz (DESY, Hamburg)

Presenter: VARGHESE, Geogin (DESY, Hamburg)

Session Classification: Poster session 1

Track Classification: Emerging Technologies / Feedback on Experience