



Technical HQT - September 30, 2020
- Virtual, by live video streams and video conference -

Session 1: Technical HQT live video stream - 9:00am – 10:30am CEST

Topics of session 1: History and functionality of Linux and real-time Linux

- Real-time extensions compared to real-time kernel (PREEMPT_RT)
- Functionalities of PREEMPT_RT
- Linux Foundation RTL Collaborative Project
- + Additional current topic: OPC UA PubSub over TSN – Reality check

Session 2: Technical HQT live video stream - 11:30am – 1:00pm CEST

Topics of session 2: Debug and trace interface of the Linux kernel and why it is important for real-time

- Function tracing
- Event tracing
- Latency tracing
- Principle of backtracking
- + Additional topic: OSADL QA Farm 1 – Live general demonstration

Session 3: Technical HQT live video stream - 2:00pm – 3:45pm CEST

Topics of session 3: Creating and managing a Linux real-time system

- Determination of the real-time properties of a Linux system
- Presentation of the OSADL QA Farm
- Generation of artificial latency
- Hardware latency detector
- Examples of "latency fighting"
- + Additional topic: OSADL QA Farm 2 – Live latency fighting demonstration

Questions and discussion (by video conference) - 3:45pm CEST

V4

Approx. 4:00/4:15pm CEST: End of Technical HQT
Speakers: Dr. Carsten Emde, OSADL