

Technical HOT

September 30, 2020

- Virtual, by live video streams and video conference -

Session 1: Technical HOT 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

Session 2: Technical HOT 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
- Short digression: Glibc tracer proof of concept and what it could be used for

Session 3: Technical HOT 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"

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

Approx. 4:00/4:15pm CEST: End of Technical HOT Speakers: Dr. Carsten Emde, Nicholas Mc Guire, OSADL