



## Realtime Ethernet [TSN]

# Training Realtime Ethernet (TSN)

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## Day 1

### Time Sensitive Network

Collection of standards under IEEE 802.1 on deterministics

### Time synchronization - the basis of everything

Linux and PTP  
Timestamping  
Profiles

### Deterministics and Ethernet - but how?

Traffic Scheduling – Qdiscs, Credit based/Time Aware shaper, Frame preemption, Earliest TxTime  
Linux implementations – XDP, DPDK and other improvements for deterministic

### Network Configuration

CUC and CNC  
Support in mainline linux

### Switched endpoints / Bridges

What is it and why?  
Implementation in mainline Linux



# Agenda Real-time Ethernet

## Experience in implementation

IIC testbed, ProfiNET and TSN

## Latency, Jitter, Synchronicity - measurements under Linux

### **Software:**

- nothing

### **Hands-On training:**

- not planned due to time constraints

### **Number of participants:**

Due to our experience we know that a single instructor could coach a maximum of 8 persons. Our courses are therefore limited to this number of individuals.