

Technical Workshop: Real-time Linux Latency Fighting

March 26, 2019

TP ConferenceCenter im Technologiepark Heidelberg
Im Neuenheimer Feld 582, 69120 Heidelberg

08:30 – 09:00	<i>Get-together</i>
09:00 – 10:30	Linux kernel debug and trace interface <ul style="list-style-type: none"> 1. Raw access to the variables of the debug file system 2. Using command line tools 3. Using the graphical user interface
10:30 – 11:00	<i>Coffee break</i>
11:00 – 12:30	Latency monitoring I: <ul style="list-style-type: none"> 1. Standard methods to define a system's worst-case latency 2. Special methods to monitor real-time capabilities of a system 3. The real-time framework of the OSADL QA Farm
12:30 – 13:30	<i>Lunch break</i>
13:30 – 15:00	Latency monitoring II: <ul style="list-style-type: none"> 1. Calibrating latency detection 2. Analysis of a deliberately created latency 3. The breaktrace functionality of cyclictst
15:00 – 15:30	<i>Coffee break</i>
15:30 – 17:00	Everyday's practice of a latency fighter <ul style="list-style-type: none"> 1. Typical mistakes that may lead to prolonged latency values 2. Recently discovered sources of latency and fixes or workarounds 3. Live latency fighting*
17:00 – 17:30	Discussion, questions, answers
17:30	<i>End of workshop</i>

* Participants are encouraged to take along with them, if possible, particular equipment that suffers from unexpected prolonged latency values.