

In-application energy measurement on Megware SlideSX systems

Tuesday, 5 November 2019 16:50 (20 minutes)

The design of energy efficient applications requires a proper energy measurement inside the compute servers. The Megware SlideSX chassis for HPC servers provide an energy measurement directly between the power supply and the mainboard of the system with a sampling rate up to 100Hz. This enables the users to detect the energy consuming parts of their applications. In order to obtain the energy measurements from the operating system a plugin for the SLURM workload manager is developed. This plugin uses a server-client model to communicate with the users' applications. Beside the design of the measurement plugin with SPANK (SLURM Plug-in Architecture for Node and job Kontrol) the presentation will cover the usage in some example applications.

Primary author: KÖHLER, Martin (Max Planck Institute for Dynamics of Complex Technical Systems)

Co-authors: SAAK, Jens (Max Planck Institute for Dynamics of Complex Technical Systems); COOPERATION WITH MEGWARE, in (MEGWARE Computer Vertrieb und Service GmbH)

Presenter: KÖHLER, Martin (Max Planck Institute for Dynamics of Complex Technical Systems)

Session Classification: Day I