Tertimuss

A Simulation Environment for Thermal-aware Real Time Multiprocessor Scheduling

- This project is the result of a joint effort involving the GaZ group at the University of Zaragoza, Spain and the CINVESTAV - IPN Unidad Guadalajara, Mexico.
- The peer website of this page at the CINVESTAV can be reached at this link
- As of today, we have released two simulation environments. **TCPN-ThermalSim** was our starting point, developed in MatLab®

with

Tertimuss

being a complete rebuild in Python, which constitutes our current simulation tool.

Tertimuss

- **Tertimuss** is a simulation environment for designing and testing Real Time multiprocessor schedulers subject to thermal constraints. It consists of four modules. The fist module allows defining the system (processors, tasks) and their parameters. The second module automatically build a TCPN model, generating the state and thermal equations. The third module is for selecting, modifying or adding and parameterizing the scheduling algorithm. The fourth module allows the user to perform simulations and collect, process and plot results. The parameters of the tasks can be defined either manually or automatically (by means of the integrated UUnifast algorithm). You can subscribe to the public version of Tertimuss at [https://github.com/uz-gaz/Tertimuss](https://github.com/uz-gaz/Tertimuss)

TCPN-ThermalSim
Tertimuss: Simulation Environment for Thermal-aware Real Time Scheduling

Related papers

  (see on-line)

Development team

CINVESTAV: Laura Rubio-Anguiano, Gaddiel Desirena López, Antonio Ramírez-Treviño\n
UZ: Abel Chils Trabanco, José Luis Briz

Acknowledgments

Partially supported by the Ministerio de Ciencia, Innovación y Universidades and the European ERDF under Grant TIN2016-76635-C2-1-R (AEI/ERDF, EU), and by the Aragon Government (T58 17R research group) and ERDF 2014-2020 Construyendo Europa desde Aragón.