



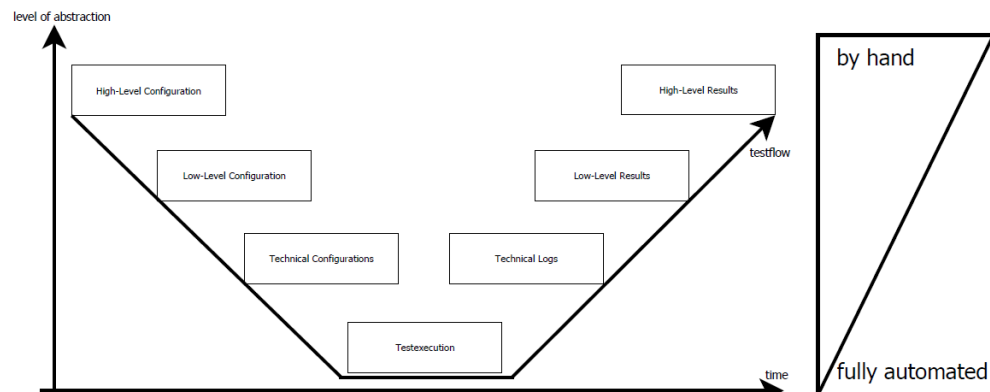
A Framework for Scientific Workflows in Networking Experiments

Motivation

Distributed data collection is one task that almost every Networking experiment has in common. Usually data (like throughput, CPU-load or disk storage) is continuously collected at multiple points in the network and finally aggregated in a central place for further analysis. Automated data analysis uses plots and/or generates higher-level results to give the researcher insight into the collected data.

Aufgabenstellung

Goal of this thesis is the identification of common tasks within the scientific workflow of different projects. Therefore, you will be involved in various projects at the chair for “Network Architectures and Services”, like the MEMPHIS project. Equipped with the requirements gained in these projects, common and generic tasks have to be identified. After identifying the scientific workflows of the analyzed projects, a framework to support the automation of the scientific workflows has to be designed and implemented. Features provided by the resulting system may cover (dependent in the interest and previous knowledge of the student) data aggregation and analysis, data management, visualization and/or other tasks.



The student catches interesting insights into various scientific projects. The work requires your presence in the analysis phase, but afterwards most of the work can be done from home.

Voraussetzungen

General interest in data analysis, SQL, ...

Stichworte

Scientific Workflow, Data Mining, Network Data Analysis

