Thermodata: a Thermophysical Database Running on Linux

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ThermoData is web-based database system for the storage and analysis of thermophysical properties. It has been developed using Java. It runs on a Java virtual machine and its user interfaces are web-based provided by the servlet container Tomcat 6.0. The framework utilizes the new Model-View-Controller framework Struts2 and the system is completely run on open source software, including the Linux operating system, MySQL database management system and Apache web server. The database structure fully corresponds to ThermoML schema. Their transfer is completed by Java programs. The core part of the process is composed by ThermoML, ThermoFactory and SqlOperator. The SqlOprator part exchanges information with the database. The ThermoML part performs data storage and analysis. The ThermoFactory part is designed for the final users. ThermoData is low-cost and has an open architecture that is easily expanded.