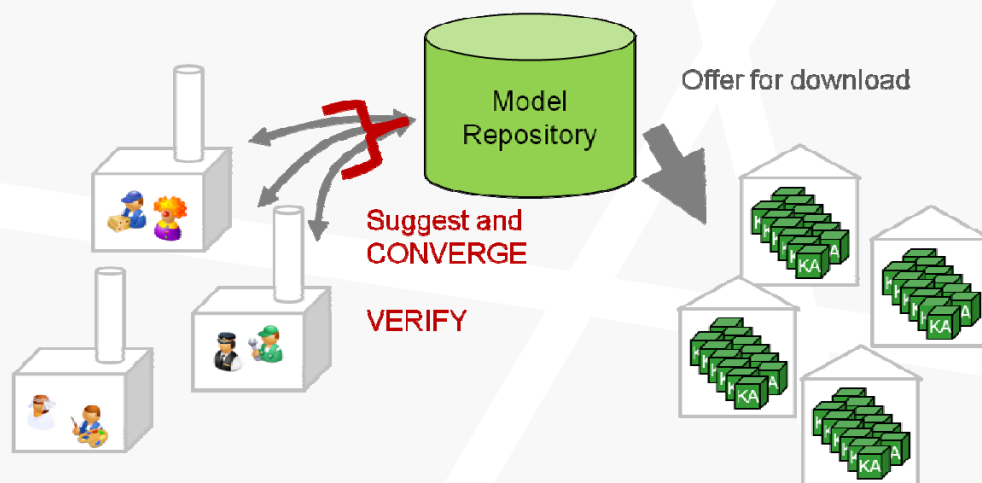


Support Mechanisms for Model Creation



motivation

My team is currently working on a universal control and management platform for heterogeneous systems.

To be able to manage devices we have to represent them digitally. We call the digital representations models and prototypes in our project. These are only useful if their semantics are understandable to those interacting with them: the control and management service providers.

To use abstract representations of real world entities the representations have to be understandable and distributable. In this work we focus on both aspects.

your task

A framework to manage and develop digital representations should be specified and implemented. This includes methods to verify the validity of models.

In the first stage relevant related works like SNMP MIBs or CIM MOF etc. should be examined. Common principles and techniques should be identified.

The research phase should be completed by looking at existing approaches to define consistent and highly unified models in a team. Techniques to merge different models and to rate them could be a possible solution. (In the concrete case everyone should be able to deliver models but we do not want to have a total diversification.)

Having the research as base an appropriate framework should be specified and implemented. The framework should use existing tools like eclipse and web server based applications.

The chosen approach will be integrated and evaluated with our platform.

required

Eclipse-Plugin, Web, Distributed Management, Joy to work in a team on a bigger software project

