Name: PLASMA: a Plan-based Layered Architecture for Software Model-driven Adaptation

Presenter(s): Hossein Tajalli

Objective: An approach to building self-adaptive systems using architectural modeling, meta-layered architectures, and planning

Rationale: To ease the burden of design on the architect and to extend self-adaptive techniques to deal with a wider variety of requirements changes and failure situations

Target Users: System Designers and Architects

Scope: Software planning, management and adaptation.

Project Type: Research Project

Runs On: Unix

IPR Status:

Technical Approach: Planning techniques are used in a layered architecture to drive the architecture of the software, run it and adapt it.

Developers: Hossein Tajalli

Future Directions: Planning for distributed applications and non-functional properties

Demo Description: The component models for an application as well as the goal of the application are provided to the system. The application and adaptation plans are derived and the system is deployed. Later we can update the component models and/or change the goal of the system and system will adapts to manage the situations.