



Model Execution Adaptation?

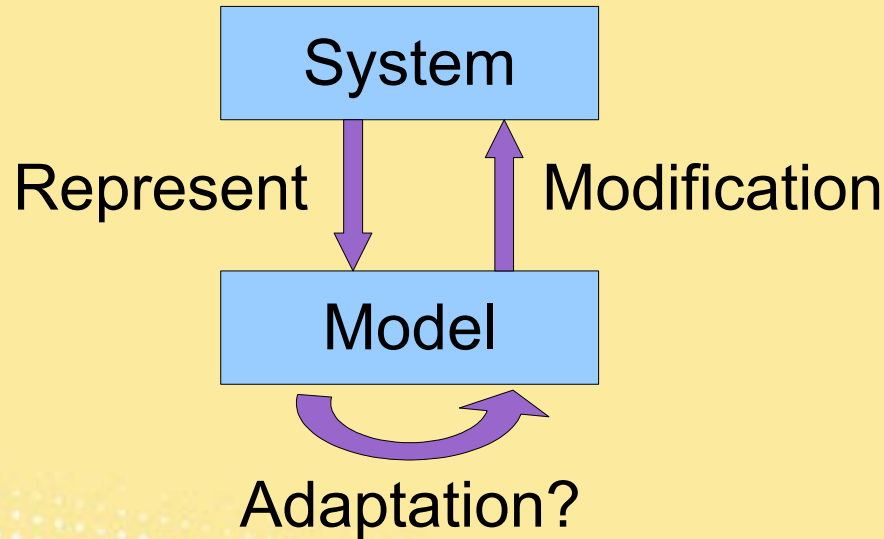
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MRT Workshop, October 2012

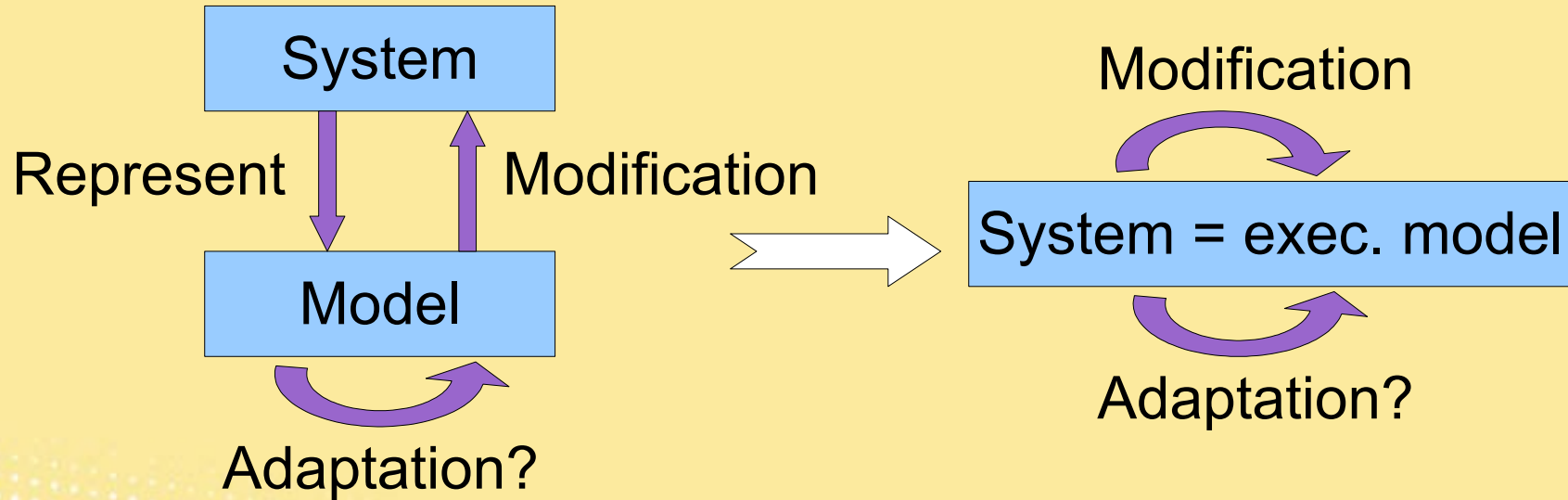


System adaptation through models@RT



- Common adaptation through models@run.time
 - Causal link between the system and the model

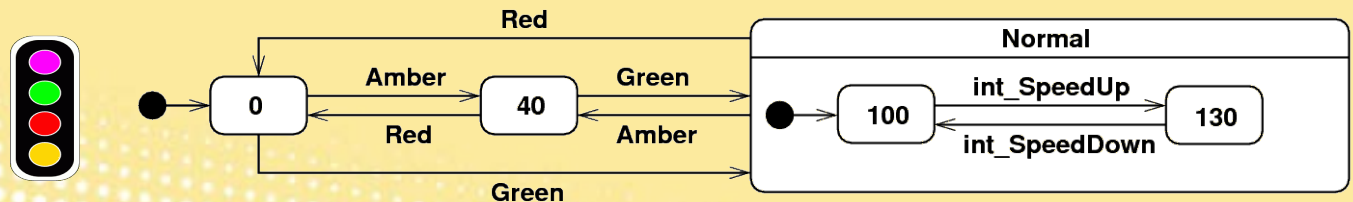
System adaptation through models@RT



- Common adaptation through models@run.time
 - Causal link between the system and the model
- For a model execution
 - The system becomes the executed model
 - Reasoning and action of adaptation on the model directly

Discussion (1)

- A first basic investigation
 - How to detect that a model is consistent against a changing execution environment
 - Including fail-soft verification modes
 - A basic train state machine example



- Discussion on model execution adaptation
 - What is adapting an executed model?
 - Modifying its structural and dynamical contents
 - Modifying the operational semantics and adaptation policies during the execution

Discussion (2)

- Comparison
 - Common M@RT adaptation
 - + model dedicated to exactly and only what is required
 - causal link between the system and the model
 - Model execution adaptation
 - + no causal link
 - several concerns within the model (business contents, execution and adaptation management elements)
 - In complex cases, why not applying common M@RT adaptation techniques on the executed model?
 - Complementary approaches
- Perspectives
 - Developing techniques for model execution adaptation