QUALITY ENGINEERING

Schwerpunkt
Agile Prozesse

Dr. Barbara Weber

Our Vision for Agile PAIS

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- Fast Delivery of Process-Aware Information Systems (PAIS)
- Emergence of Process-Aware Information Systems
- Responsiveness to Change
- Feedback and Learning from Real Process Executions
- Integrated Process Life Cycle Support

ProCycle: Integrated Process Lifecycle Support

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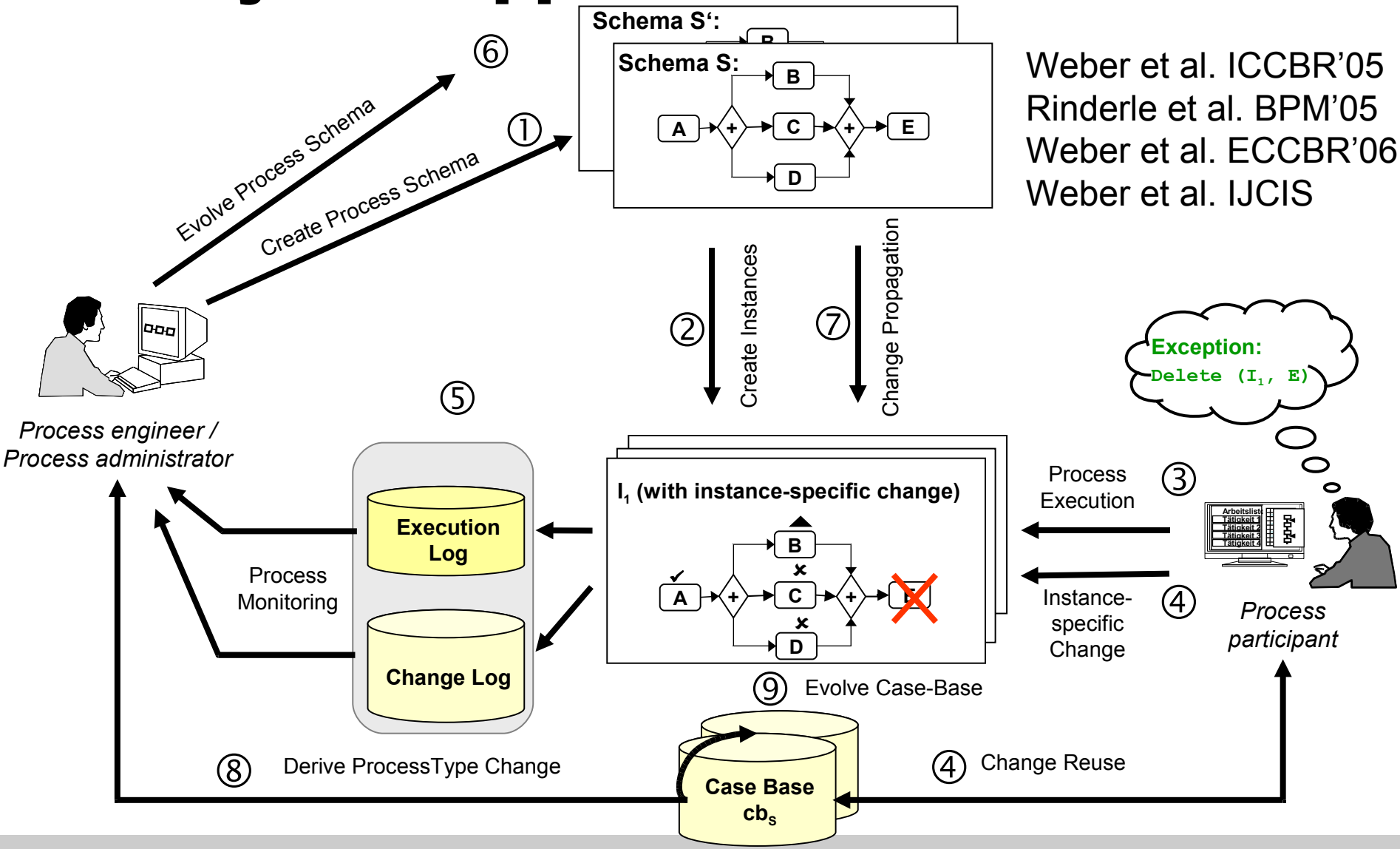

Weber et al. ICCBR’05
Rinderle et al. BPM’05
Weber et al. ECCBR’06
Weber et al. IJCIS

Change Patterns + Features

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- Goal: Reduce Cost of Process Change
- **Change Patterns**
  - describe typical changes at a high level of abstraction
- **Change Support Features**
  - describe crucial features making changes applicable in practice

Weber et al. CAiSE'07
Weber et al. DKE

Change Patterns + Features

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- 2 Major Categories
  - Adaptation Patterns
    - Support for quick adaptations
  - Patterns for Changes in Predefined Regions
    - Support for deferring decisions

Refactoring of Process Models

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- Goal: Improve understandability and maintainability of process models
- Catalogue of 11 refactorings
- Proof-of-Concept Implementation

Weber and Reichert, CAiSE‘08

Refactoring of Process Models

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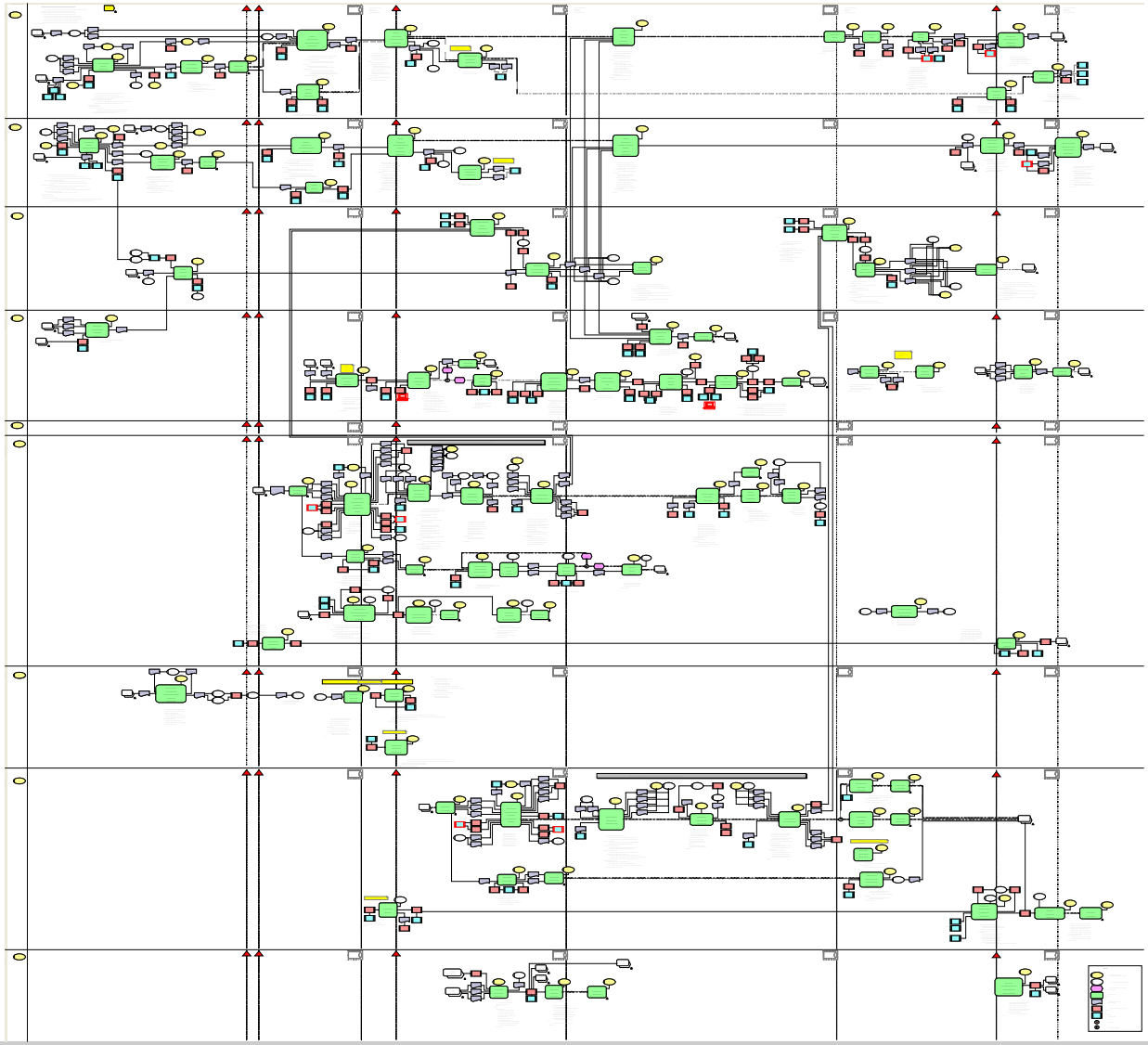

Constraint-based Workflows

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- SecServ
  - Modeling and Execution Environment for Constraint-Based and Imperative Workflows
    - Applications:
      - Access control for adaptive PAIS
      - Visualization of system-spanning processes
- User Guidance through Recommendations

SecServ

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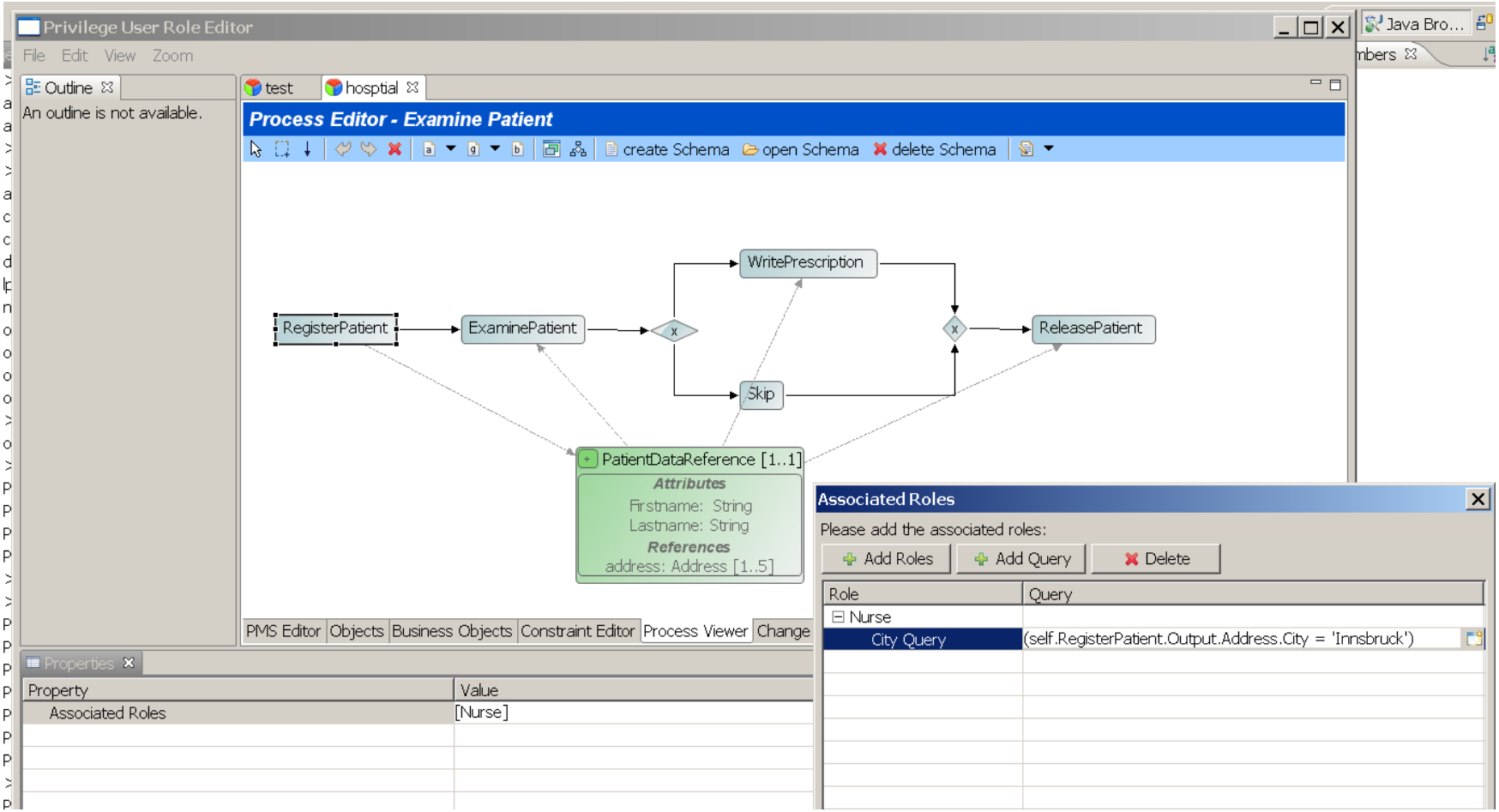

User Guidance through Recommendations

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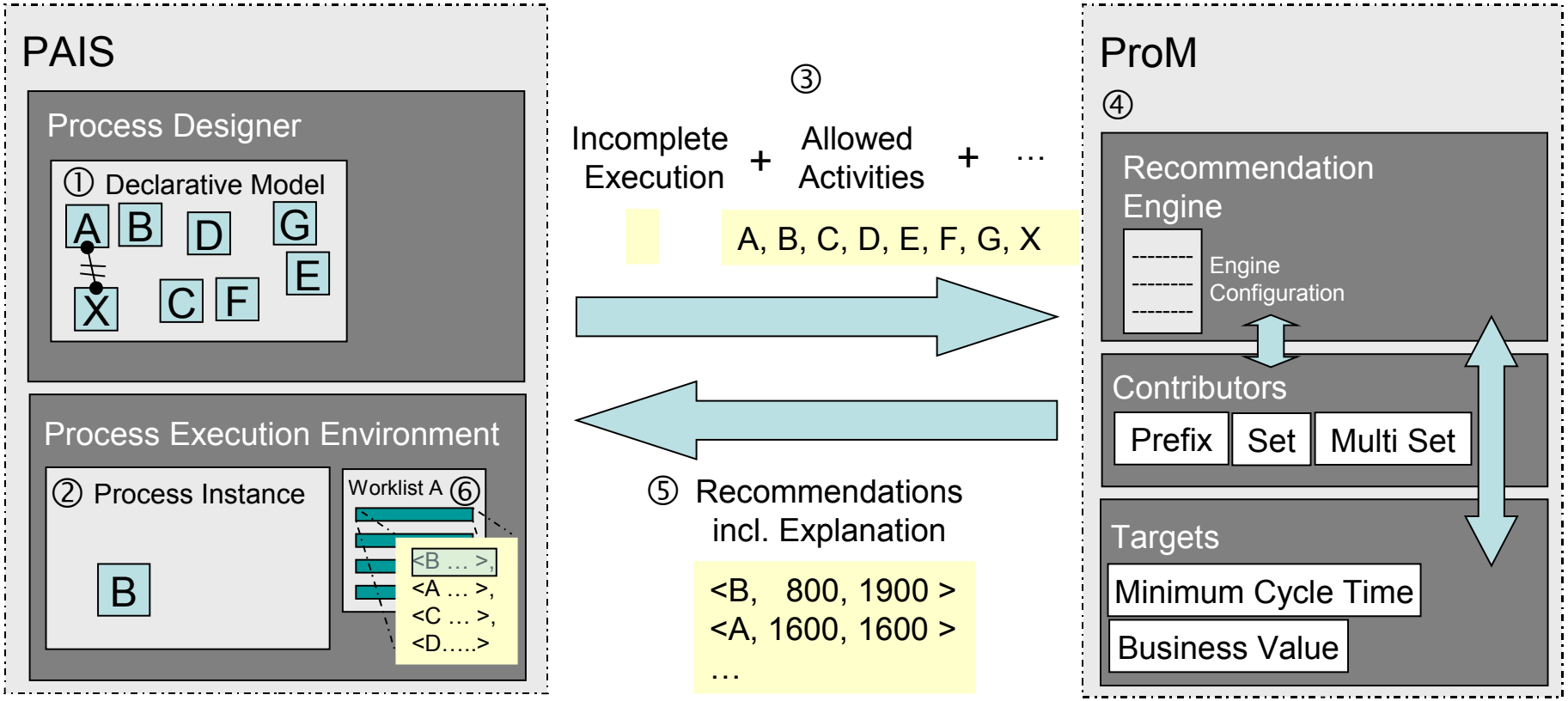


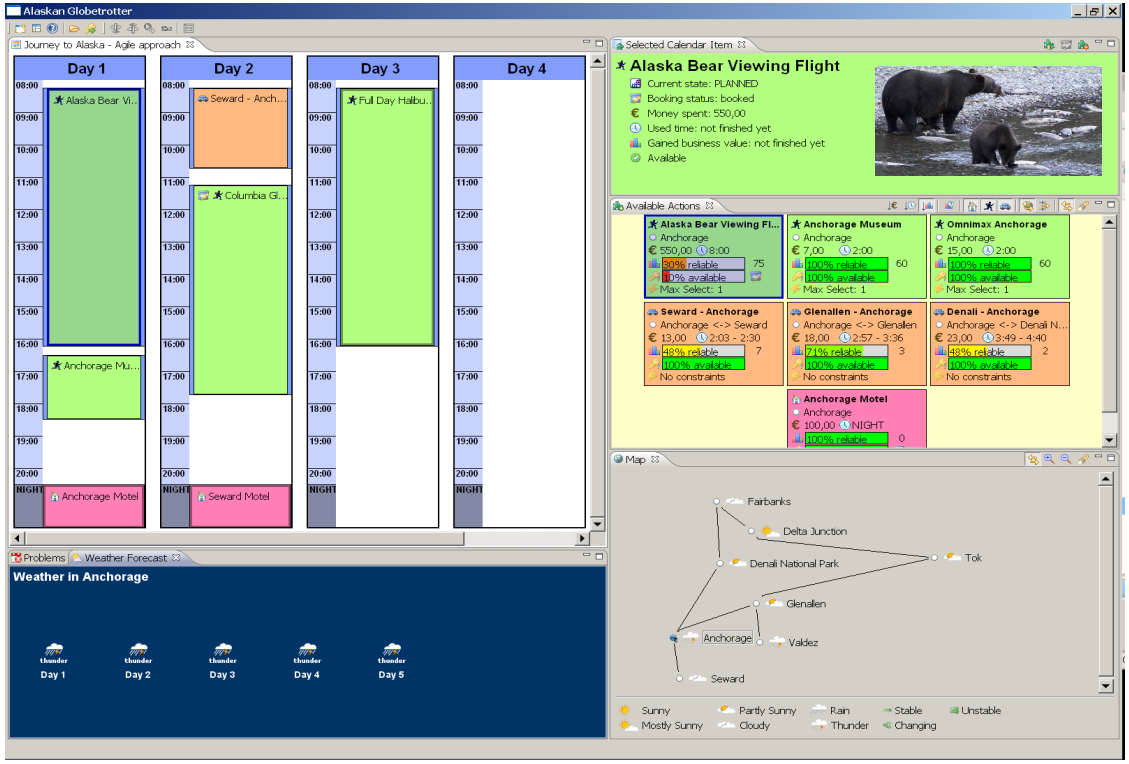
Trace	Cycle Time
A, B, C, D, E	1600
A, B, C, D, E	2400
A, B, C, D, E	800
B, D, E, F, G	800
X, B, C, D, E	2400

Execution Log

Schonenberg et al. BPM'08

Alaska

- Simulator for analyzing planning behavior



Visit alaskasimulator.org

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Vielen Dank für die Aufmerksamkeit!