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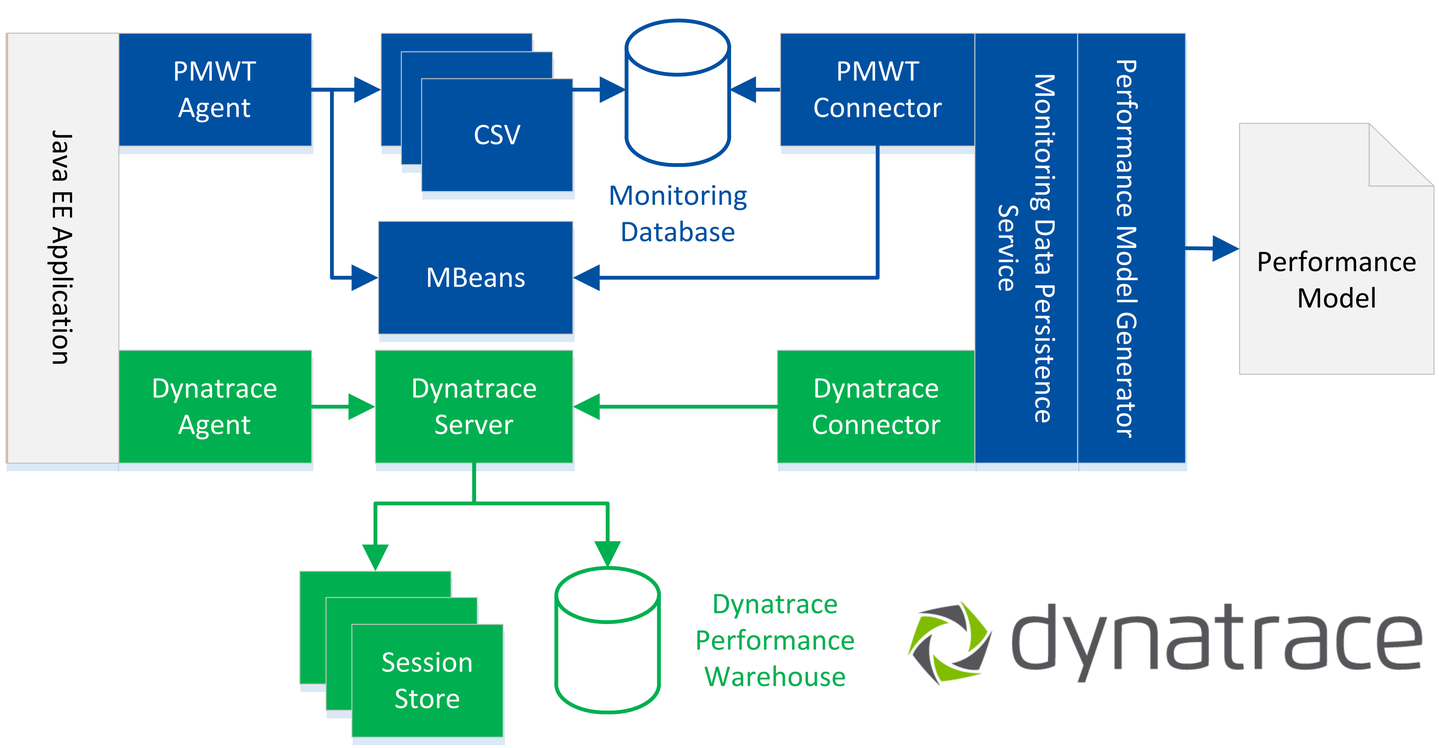
Performance Model Generator Framework

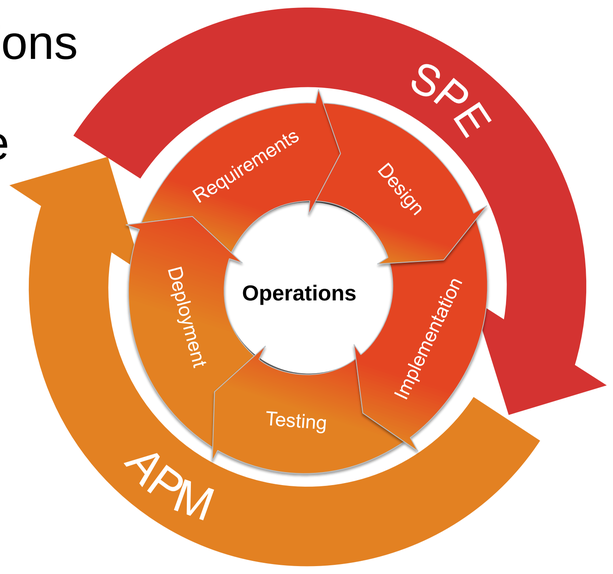
- Creating performance models requires a lot of expert knowledge
- Model-based performance evaluation techniques proposed by the scientific community are often only applicable once a model of a system exists
- Several approaches were proposed to automatically construct performance models but they use self-written monitoring solutions



Integrating Measurement- and Model-based Performance Evaluation Techniques

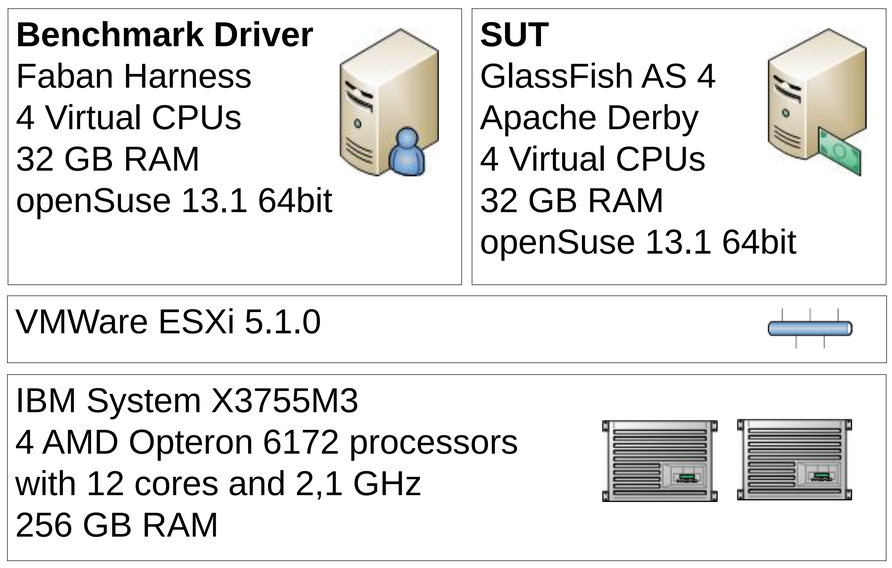
Application Areas

- Use existing **Application Performance Management (APM)** knowledge for model-based **Software Performance Engineering (SPE)** activities such as:
  - Early Performance Predictions (e.g., when reusing existing components)
  - Architecture Optimizations
  - Detecting Performance Changes
  - Capacity Planning
  - …



Evaluation Using SPECjEnterprise2010

- **Experiment Setup**



- **Results**
  - CPU utilization prediction error between 2 and 10 %
  - Response time prediction error between 8 and 27 %

Interested? Learn more: http://pmw.fortiss.org
Or contact us directly: performancegroup@fortiss.org

Performance Management Group

spec RG DevOps Performance

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