Service Oriented Architectures and Product Lines - What is the Connection?

Software Engineering Institute
Carnegie Mellon University
Pittsburgh, PA  15213

Bob Krut
10 September 2007
SPLC 2007, Kyoto, Japan
# Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:30</td>
<td>Introductions and Goals</td>
</tr>
<tr>
<td>09:30-10:30</td>
<td>Topic Presentations and Discussion</td>
</tr>
<tr>
<td>10:30-11:00</td>
<td>Break</td>
</tr>
<tr>
<td>11:00-11:30</td>
<td>Topic Presentation and Discussion</td>
</tr>
<tr>
<td>11:30-12:30</td>
<td>General Discussion: working groups or new topics</td>
</tr>
<tr>
<td>12:30-13:30</td>
<td>Lunch</td>
</tr>
<tr>
<td>13:30-15:00</td>
<td>General Discussion Continued</td>
</tr>
<tr>
<td>15:00-15:30</td>
<td>Break</td>
</tr>
<tr>
<td>15:30-16:00</td>
<td>General Discussion Continued</td>
</tr>
<tr>
<td>16:00-16:30</td>
<td>Working Group Report(s)</td>
</tr>
<tr>
<td>16:30-17:00</td>
<td>Conclusion: Goals Addressed, Topics for Limerick, Future Work</td>
</tr>
</tbody>
</table>
Accepted Papers

Product Lines that supply other Product Lines: A Service-oriented Approach

Salvador Trujillo, IKERLAN Research Centre, Mondragon, Spain
Christian Kästner, University of Magdeburg, Magdeburg, Germany
Sven Apel, University of Passau, Passau, Germany

A Taxonomy of Variability in Web Service Flows

Sergio Segura, David Benavides and Antonio Ruiz-Cortés, University of Seville, Seville, Spain

Identifying and Specifying Reusable Services of Service Centric Systems through Product Line Technology

Jaejoon Lee, Dirk Muthig, and Matthias Naab, Fraunhofer Institute for Experimental Software Engineering (IESE), Kaiserslautern, Germany
Minseong Kim and Sooyong Park, Sogang University, Seoul, R.O.Korea
Accepted Papers Continued

Comparison of Service and Software Product Family Modeling

Mikko Raatikainen, Varvana Myllärniemi, and Tomi Männistö, Helsinki University of Technology, Finland

Software Product Lines and Service-oriented Architecture: A Systematic Comparison of Two Concepts

Andreas Helferich, Georg Herzwurm, and Stefan Jesse, Universität Stuttgart, Stuttgart, Germany

A Framework for Software Product Line Practice, Version 5.0, FAQ

http://www.sei.cmu.edu/productlines/frame_report/FAQ.htm#other_approaches
Paper Topics

Topic 1. Methods for SOA and Product Line Development
Topic 2. Managing Service Features and Variability
Topic 3. Example Applications
Topic 1. Methods for SOA and Product Line Development

**Presentation:** Comparison of Service and Software Product Family Modeling

**Authors:** Mikko Raatikainen, Varvana Myllärniemi, Tomi Männistö
Helsinki University of Technology, Software Business and Engineering Institute (SoberIT)

**Questions:** Could criteria from the Service Migration and Reuse Technique (SMART) serve as an approach for the migration of legacy components for product lines? What specific criteria would apply here? Are there detailed examples or a comparison of models, e.g. feature models vs. SDL/BPEL/BPMN?
Topic 2. Managing Service Features and Variability

Presentation: A Taxonomy of Variability in Web Service Flows

Authors: Sergio Segura, David Benavides and Antonio Ruiz-Cortés, Department of Computer Languages and Systems University of Seville

Questions: Where an application in a SOA-based product line is built using services from external core asset sources, how would product development manage variability and selection of variation of features within those assets? Could entire services be substituted? Variations within a service? Any implementation of the taxonomy?
Topic 3. Example Applications

Presentation: Identifying and Specifying Reusable Services of Service Centric Systems through Product Line Technology

Authors: Jaejoon Lee, Dirk Muthig, and Matthias Naab, Fraunhofer Institute for Experimental Software Engineering (IESE). Minseong Kim, Sooyong Park Sogang University, Seoul, R.O.Korea

Questions: How would identified services be used in applications? Might we see hybrid service/component oriented applications? What evidence is there of an actual "right" scale of granularity? Do case study artifacts beyond the limited figures in the paper actually exist?
Conclusion

Goals Addressed

• Where the goals of the workshop addresses?

Future Work

• What future SOAPL work will the participants being working on?

SPLC 2008

• Should we continue this topic at SPLC 2008? If so, what should we focus on?