Workflow and Service Components

Introduction

This forum is about both workflow (middleware) software and services, also called components, (small chunks of code for performing specific tasks). Please use a very broad definition since any sort of software that can be used to connect or compose services into larger processes fits in this forum. Equally, any software that has been found to be useful by the community and can be made into a re-usable component is appropriate to this forum. Both fully automated processes and those which include people should be part of these discussions. Also, it's not just about software! The layout of the processes, often called business processes and business integration patterns, are equally part of the discussion. None of these discussion need to be Fedora-specific since this is all about connecting any component from any source including your existing systems.

Contents

- Registry
- How to Participate
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- Best Practices
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Registry

This registry includes known software aimed at workflow that works with recent releases of the Fedora Commons Repository Software (2.2.x and 3.x).

Know of anything that's not listed? Please add it below! And don't hesitate to add a project that is just getting started; it is good for the community to know what each other is working on.

<table>
<thead>
<tr>
<th>Title and Link</th>
<th>Summary</th>
<th>Status</th>
<th>Compatibility</th>
<th>Contact</th>
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<tbody>
<tr>
<td>Fedora Kepler Integration</td>
<td>A demonstration of how to use Fedora to provide data to the Kepler Scientific Workflow Engine</td>
<td>Experimental 2009-12-09</td>
<td>Fedora 3.2+</td>
<td>Rick Moore - Fedora Commons</td>
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<tr>
<td>Fedora/Route Workflow</td>
<td>A prototype, ruby-based workflow manager listening to the JMS</td>
<td>Prototype 2010-05-19</td>
<td>Fedora 3.2+</td>
<td>Chris Beer - WGBH</td>
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<tr>
<td>FedoraUpdateHandler</td>
<td>A Java program to listen to JMS messages from Fedora and launch an external script to handle those messages. Essentially it acts as a kind of “gateway” connecting JMS and a script (XProc, bash, JavaScript, Windows batch file, etc), analogously to how CGI connects HTTP and a script.</td>
<td>Released 2011-12-01</td>
<td>Fedora 3.4+ (possibly earlier versions)</td>
<td>Conal Tuohy</td>
</tr>
<tr>
<td>Fedora/Taverna Integration</td>
<td>A PHP-based microservices framework that listens to Fedora’s JMS messages and launches triggered workflows to a Taverna Server.</td>
<td>Released 2014-01-20</td>
<td>Fedora 3.6+ (possibly earlier versions)</td>
<td>Mark Leggott</td>
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How to Participate

Feel free to add any Mailing lists, blogs, regular calls, IRC channels, etc. used by people working on this type of project.

If you don't know where else to look, check the Create Forum and use the fedora-commons-create google group.

Related software

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<tbody>
<tr>
<td>Taverna</td>
<td>Taverna is an open source tool for designing and executing workflows created by the myGrid project and funded through the OMI I-UK.</td>
<td>Released</td>
<td>N/A</td>
<td>Open source project</td>
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Workflow Approaches

- Enterprise Service Buses
- Simple message-queues

Useful Documentation

- Workflow Patterns - This site has a lot of good information about how to think about workflow processes abstractly.

Best Practices

*Does it irk you when people keep doing things the “wrong” way? Document the best practices here and they’ll (hopefully) learn!*

Challenge Areas & Hot Topics

*What challenges and roadblocks so people hit when working on these types of projects? What topics and ideas do they get really excited about?*

- Locking mechanisms in Fedora 3 make it difficult to do distributed, complex processes.