

# 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](#)
- [Workflow Approaches](#)
- [Useful Documentation](#)
- [Best Practices](#)
- [Challenge Areas and Hot Topics](#)

## 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.

Title and Link	Summary	Status	Compatibility	Contact
<i>The unique name of the software or project, linked to a URL providing more information.</i>	<i>One-line description</i>	<i>Released or Unreleased; date of last update</i>	<i>Fedora 2.2.x or Fedora 3.x</i>	<i>Individual and/or Organization</i>
<a href="#">Fedora Kepler Integration</a>	A demonstration of how to use Fedora to provide data to the Kepler Scientific Workflow Engine	Experimental 2009-12-09	Fedora 3.2+	Rick Moore - Fedora Commons
<a href="#">Fedora/Route Workflow</a>	A prototype, ruby-based workflow manager listening to the JMS	Prototype 2010-05-19	Fedora 3.2+	Chris Beer - WGBH
<a href="#">FedoraUpdateHandler</a>	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.	Released 2011-12-01	Fedora 3.4+ (possibly earlier versions)	<a href="#">Conal Tuohy</a>
<a href="#">Fedora/Taverna Integration</a>	A PHP-based microservices framework that listens to Fedora's JMS messages and launches triggered workflows to a Taverna Server.	Released 2014-01-20	Fedora 3.6+ (possibly earlier versions)	<a href="#">Mark Leggott</a>

## 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

Title and Link	Summary	Status	Compatibility	Contact
<i>The unique name of the software or project, linked to a URL providing more information.</i>	<i>One-line description</i>	<i>Released or Unreleased; date of last update</i>	<i>Fedora 2.2.x or Fedora 3.x</i>	<i>Individual and/or Organization</i>
<a href="#">Taverna</a>	<b>Taverna</b> is an open source tool for designing and executing workflows created by the <a href="#">myGrid</a> project and funded through the <a href="#">OMI I-UK</a> .	Released	N/A	Open source project

<a href="#">Camel</a>	Apache Camel is a powerful open source integration framework based on known <a href="#">Enterprise Integration Patterns</a> with powerful <a href="#">Bean Integration</a> .	Released	N/A	Open source project
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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.