

# Contents

# Control-M Integration Plan

Leo Przybylski  
przybyls@arizona.edu

June 5, 2009

## 1 Overview

Control-M can handle scheduling for remote services that reside on KFS. Control-M manages job registration, metadata, and scheduling internally via the agent. It will invoke jobs on KFS remotely via web services call to the Kuali Rice ESB. A web service on the Rice ESB can integrate with KFS Quartz jobs defined in Spring. This way scheduling is deferred to Control-M while the jobs themselves are developed and implemented for Quartz using the Quartz API and Spring IOC.

## 2 Control-M Web Services

Control-M BPI module has presets for communicating with various J2EE application servers. It also has a generic Web Services interface where input/output parameters can be specified for a web service call.

### 2.1 Control-M Callbacks

If necessary, the Rice ESB registered web service can make callbacks to the Control-M BPI Control Module via `EMXmlInvoker` of the Control-M EM API.

## 3 Kuali Enterprise Service Bus

The Kuali Rice ESB can be used to expose services to external applications via web services. A service published on the Rice ESB can be given access to KFS Quartz jobs registered internally within Spring.

## 4 Integration Tasks

### 4.1 At Control-M BPI Control Module

Define web services parameters for job processing:

- Specify the account (an account is a logical name that encapsulates a repository of WSDLs)
- Specify the business, service, and operation to invoke the full hierarchy (all information is populated automatically without manual typing or configuration)
- Specify input/output parameters (dynamically displays a list of all input and output parameters available for the selected operation)

Since Quartz no longer handles scheduling for batch jobs, each job will have to be added to the agent with BPI Control Module. Web services will be required to be configured for each.

### 4.2 On Rice ESB

- Create WSDL for a web service Control-M will communicate with on the Rice ESB. Input/Output parameters can be configured in the Control BPI Control Module, so it isn't necessary to create a layer to handle input/output parameters.
- Develop an exposed web service registered on the Rice ESB
  - Registers Quartz jobs defined in KFS through Spring IOC
  - Exposed for remote call from the Control-M BPI Control Module
  - Accepts parameters and responds with output information
  - Reports success or failure

- Generates log data