JSR 352 Expert Group

Working Session
22 February 2012
Discussion: Job Parameters

Discussion: Job Operations, including Launch

Discussion: Runtime Configuration

List for Next Meeting
Discussion: Job Parameters

- Must be possible to pass parameters to the job and its steps
- Must be a way to set defaults
- Must be a way to override defaults
- Must be a way to pass parameters when job is launched
- Must be a way to resolve properties from environment
Discussion: Job Parameters

- Proposal (annotation view)
- Job Properties – defaults
- Step Properties – defaults
- Overrides when composing Steps into Jobs
- Overrides when submitting (launching) jobs
- Resolution from environment
Discussion: Job Parameters

- **Job Properties**

  ```java
  @Job(name="Job1")
  @Properties({'key1=value1","key2=value2",...})
  public class MyJob { ... }
  ```

- **Step Properties**

  ```java
  @Step(name="Step1")
  @Properties({'key1=value1","key2=value2",...})
  public class MyStep { ... }
  ```
Overrides When Composing Steps Into Jobs

```java
@Job(name="Job1")
@Properties({"key1=value1","key2=value2",...})
public class MyJob {

    @Step(name="Step1")
    @Properties({"key1=value1","key2=value2",...})
    MyStep _step;

}
```
Overrides When Submitting (Launching) Jobs

BatchContainer container = new BatchContainerImpl("config.xml");
String[] properties = {"key1=value1","key2=value2",...}
container.submit("Job1", properties);
Discussion: Launching Jobs

- BatchContainer is runtime object for interacting with jobs
  - submit (launching) – asynchronous execution
  - canceling
  - restarting
  - obtaining job results

- BatchContainer has configuration (xml)

- More than one instance of BatchContainer may exist, but in practice it is a singleton.
public interface BatchContainer {

    JobId submit(String jobName, String[] properties);
    void cancel(JobId jobInstance);
    void restart(JobId jobInstance);
    JobResults getResults(JobId jobInstance);
    void getLog(JobId jobInstance, Writer jobLogWriter);

}
Discussion: Runtime Configuration

- BatchContainer config file (xml)
  - List of plugin implementations:
    - TransactionManager
    - JobRepositoryManager
    - JobLogManager
    - ExecutionManager (i.e. task executor)
    - CommandLineHandler
  - Properties bags to configure each plugin
List for Next Meeting

- Readers/Writers
- Concurrency
- Future
  - Repeat
  - Metrics
  - Java EE