

JSR 352 Expert Group

Working Session
24 February 2012

Agenda

- ▣ Discussion: Job Parameters Redux
- ▣ Discussion: Job Launch, Operations, Explorer – Continued
- ▣ Discussion: Runtime Configuration Wrapup?
- ▣ Discussion: Readers/Writers
- ▣ List for Next Meeting

Discussion: Job Parameters

▣ Substitutions Values

Optional substitution symbol

```
@Job(name="Job1")
@SubstitutionDefaults({"substitution1=defaultValue1"})
@Properties({"key3=value3", "key4=${substitution1}", ...})
public class MyJob {

    @Step(name="Step1")
    @Properties({"key1=${substitution2}", "key2=override2", ...})
    MyStep _step;

}
```

Required substitution symbol

Substitution syntax:

`$(“symbol”)` – regular symbol

`$(“system:symbol”)` – resolved from System properties

`$(“env:symbol”)` – resolved from environment variables

Discussion: Job Parameters

■ Substitution Symbols When Submitting (Launching) Jobs

```
BatchContainer container= new BatchContainerImpl("config.xml");  
String[] properties= {"substitution1=value1","substitution2=value2",...}  
container.submit("Job1", properties);
```

or

```
Properties props= new Properties();  
props.setProperty("substitution1","value1");  
props.setProperty("substitution2","value2");  
constainer.submit("Job1",props);
```

Discussion: Launch, Operator, Explorer

Idea:

- one stop shopping for Repository CRUD methods
- everything you need to interact with batch container (e.g. build operations console

```
public interface BatchManager {  
  
    JobId submit(String jobName,String[] substitutions);  
    void stop(JobId jobInstance);  
    void restart(JobId jobInstance, String[] substitutions);  
    void remove(JobId jobInstance);  
    JobResults getResults(JobId jobInstance); // exitstatus/job RC  
    void getJobLog(JobId jobInstance,Writer jobLogWriter);  
    List<JobInfo> getJob(JobFilter filter);  
}
```

Discussion: Runtime Configuration

- BatchContainer config file (xml)
 - List of plugin implementations:
 - TransactionManager <<< **More discussion?**
 - JobRepositoryManager
 - JobLogManager
 - ExecutionManager (i.e. task executor)
 - CommandLineHandler
 - Properties bags to configure each plugin

Discussion: Readers/Writers

Idea: combine ItemReader(Writer) and ItemStream semantics

Annotations

@Reader (or @Writer)

```
public class MyReader {
```

```
    @Open void open(CheckpointInfo chkpt) {...}
```

```
    @Close void close() {...}
```

```
    @ItemReader {Type} read() {...}
```

```
    @GetCheckpointInfo CheckpointInfo getCheckpt() {...}
```

```
}
```

```
@ItemWriter void write({Type} record) {...}
```

Discussion: Readers/Writers

- Usage

```
@Step(...)
```

```
@Reader(ref="MyFileReader")
```

```
@Writer(ref="MyFileWriter")
```

```
public class MyStep {
```

```
    @ItemProcessor {Type1} process({Type2} rec) {...}
```

```
}
```

List for Next Meeting

- ▣ Listeners
- ▣ Concurrency
- ▣ Future
 - ▣ Repeat
 - ▣ Exit codes
 - ▣ Step conditions
 - ▣ Execution Context
 - ▣ Metrics
 - ▣ Java EE