

# JSR 352 Expert Group

Working Session  
29 February 2012

# Agenda

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- ▣ Review: Launcher, Manager Interfaces
- ▣ First Look: Launch & Packaging
- ▣ Examples: Batch Container Use
- ▣ Discussion: Readers/Writers
- ▣ List for Next Meeting

# Review: Launcher, Manager

```
public interface BatchLauncher {  
    JobId execute(String jobName, Object[] parameters);  
}
```

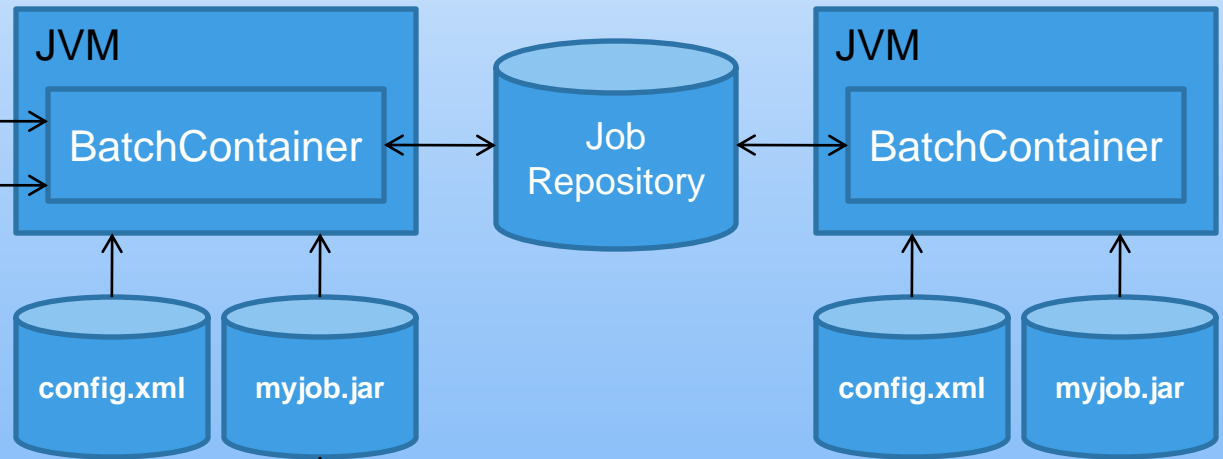
```
public interface BatchManager {  
    void stop(JobId jobInstance);  
    void restart(JobId jobInstance, Object[] parameters);  
    void remove(JobId jobInstance);  
    JobResults getResults(JobId jobInstance); // exitstatus/job RC  
    void getJobLog(JobId jobInstance, Writer jobLogWriter);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

**Note: actual names and signatures TBD**

# First Look: Launch & Packaging

## container operations:

launcher.execute("Job1")  
manager.getJobs()



"Job" annotation  
processor writes  
jobs.xml

## class files:

```
@Job(name="Job1")  
public class MyJob {
```

```
@Job(name="Job2")  
public class YourJob {
```

## META-INF/jobs.xml:

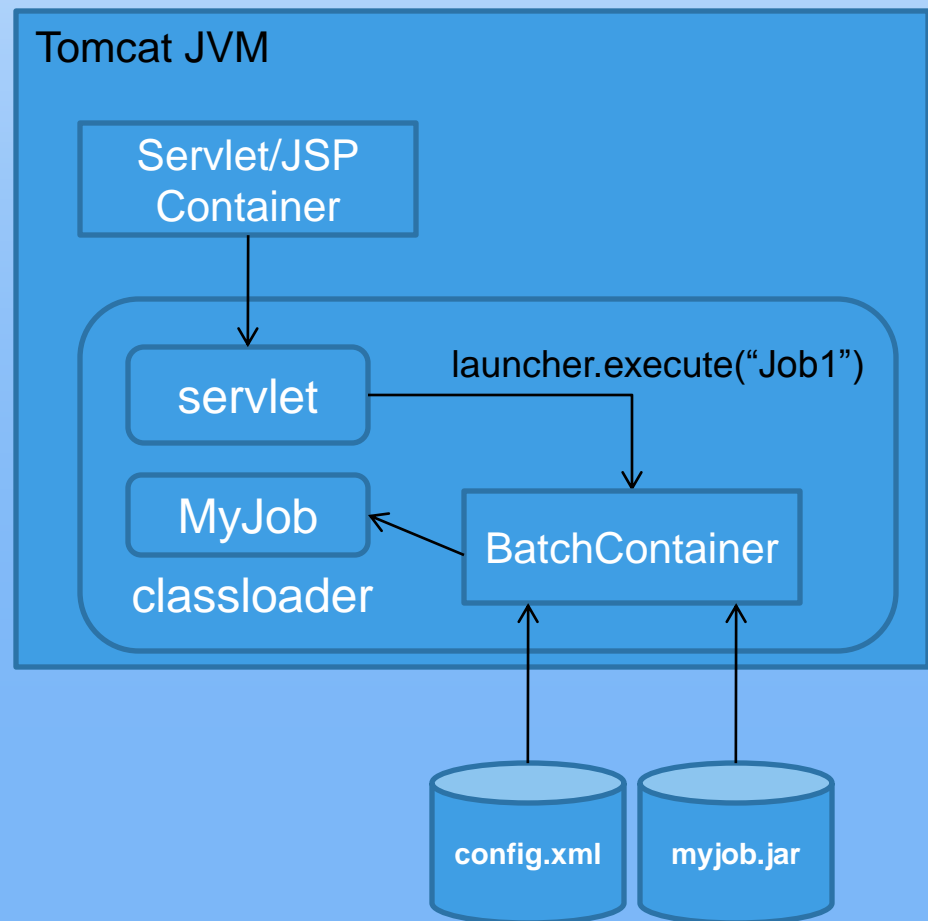
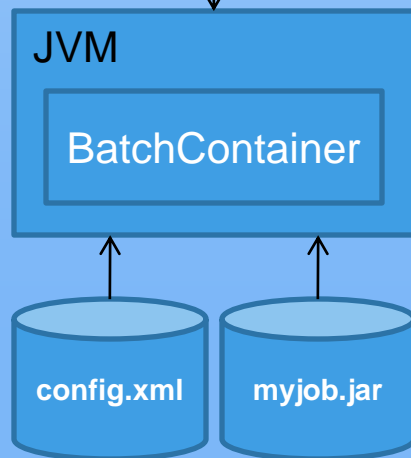
```
<job name="Job1"  
      classname="com..MyJob" />
```

```
<job name="Job2"  
      classname="com..YourJob" />
```

# Examples: BatchContainer Use

Command line and web servers:

```
java -jar myjob.jar "Job1"
```

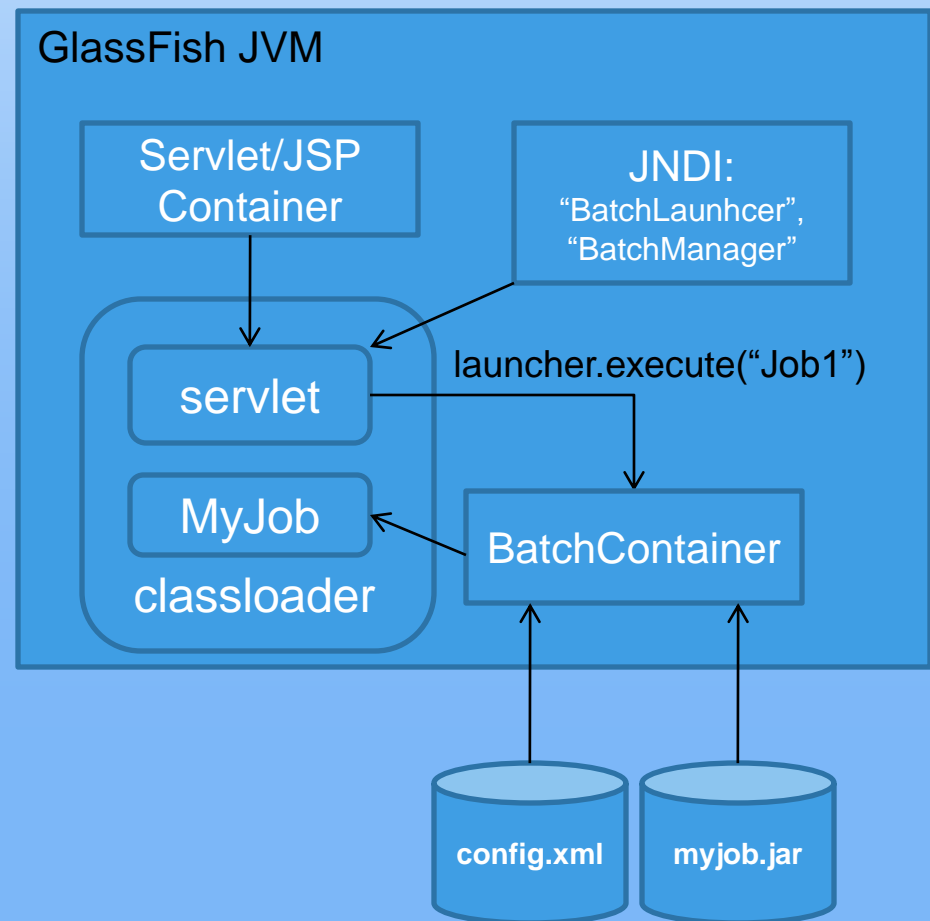


# Examples: BatchContainer Use

## Java EE Servers:

More likely that batch container is a singleton runtime service.

BatchLauncher and BatchManager references available through JNDI lookup.



# Discussion: Runtime Configuration

- BatchContainer config.xml
  - List of plugin implementations:
    - TransactionManager <<< **More discussion?**
    - JobRepositoryManager
    - JobLogManager
    - ExecutionManager (i.e. task executor)
    - CommandLineHandler
    - ParameterResolver?
  - 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