

# Configuring Job Reader

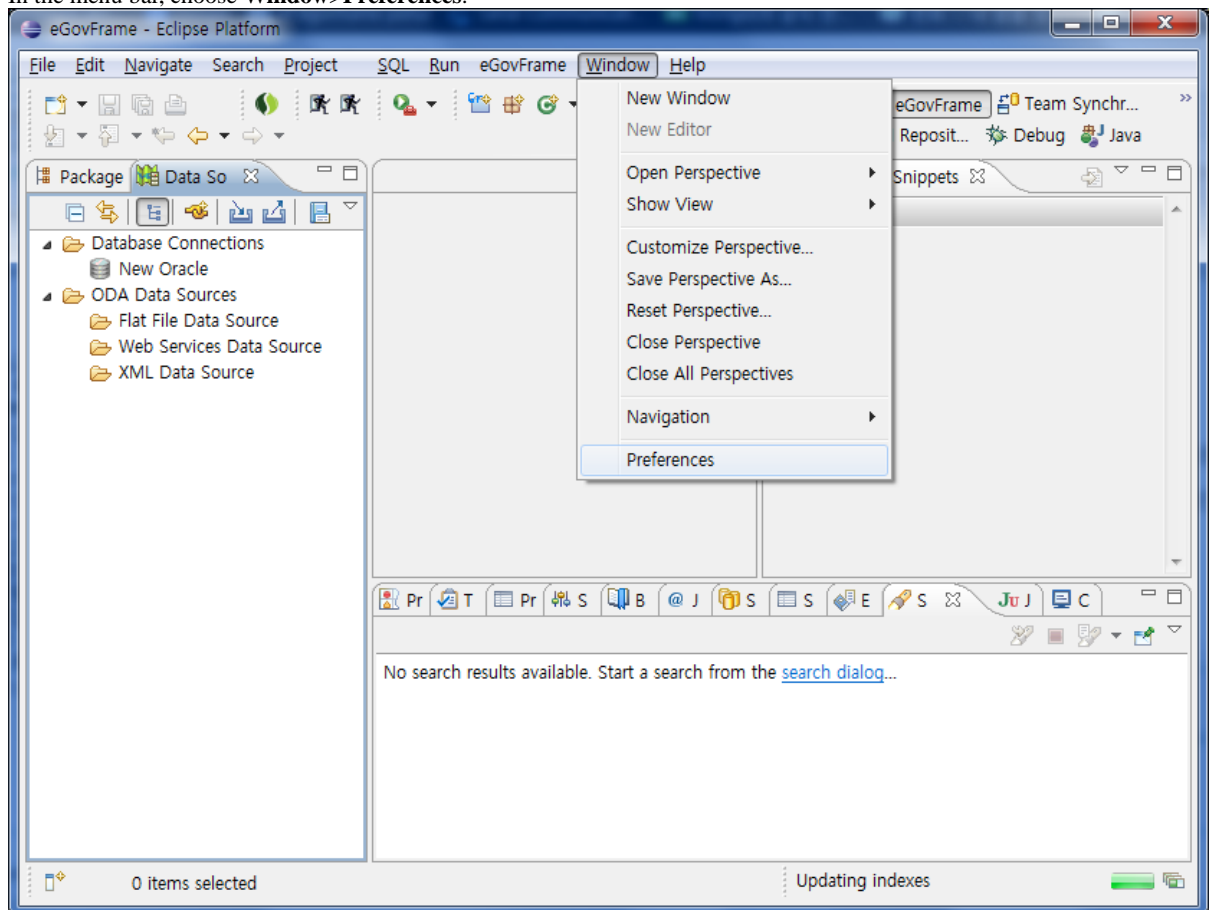
## Description

Job Reader provides a management environment where input data used during batch jobs can be registered and used.

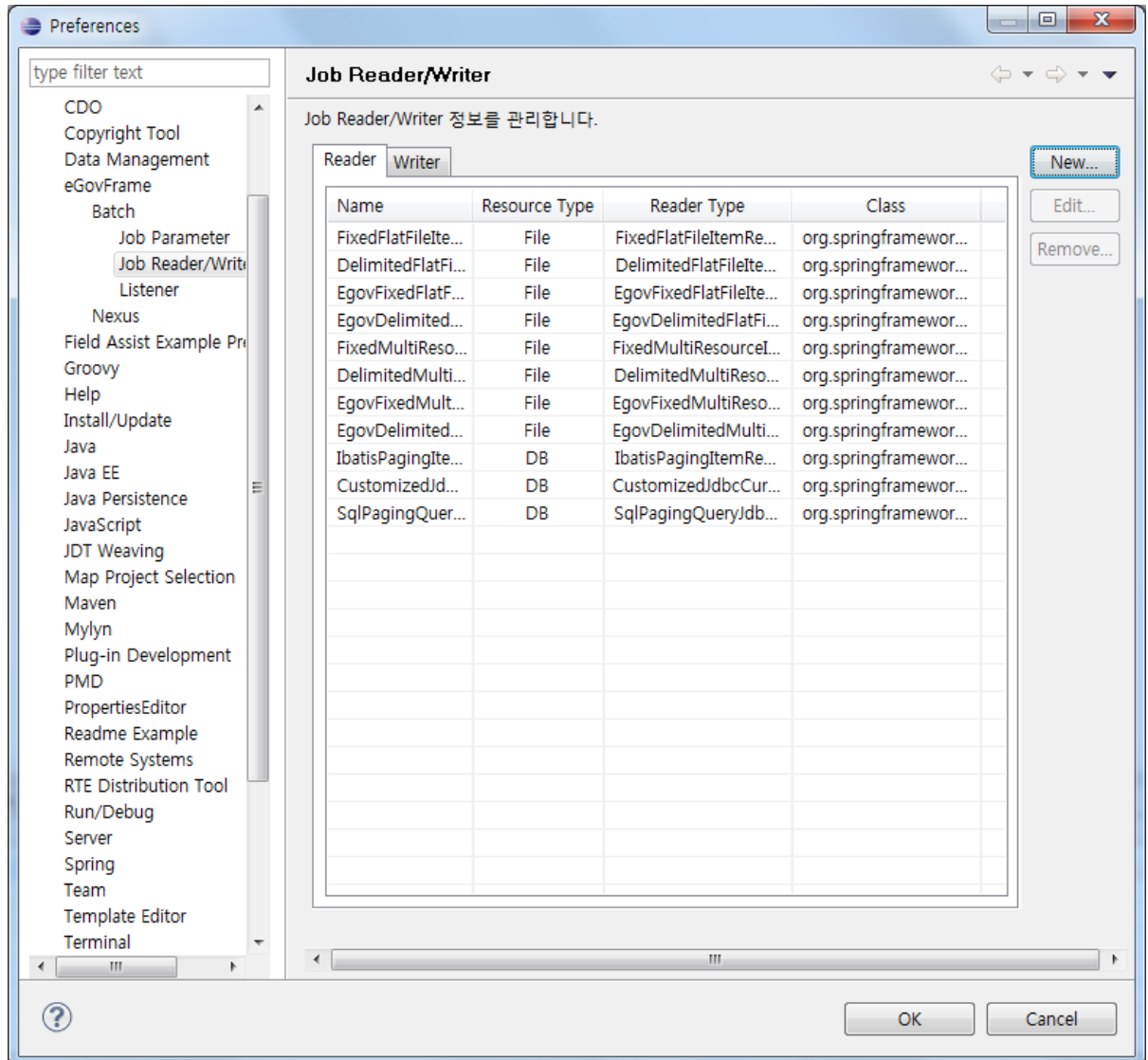
## How to Use

### Components of Job Reader

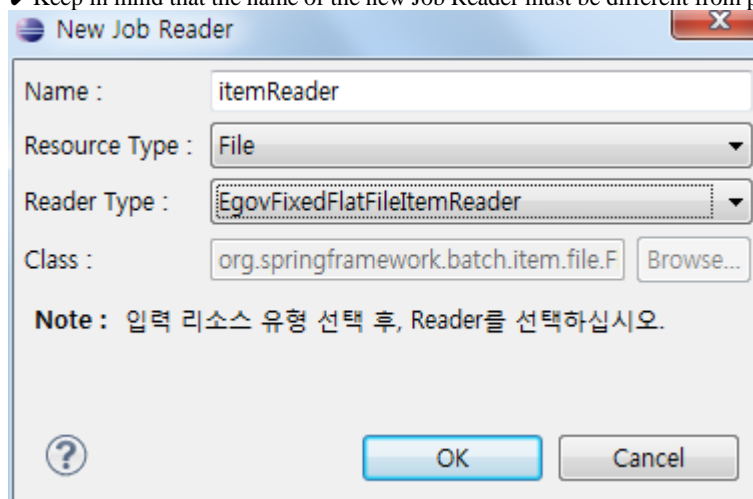
1. In the menu bar, choose **Window>Preferences**.



- From the list on the right side of the Preferences Page, select **eGovFrame>Batch>Job Reader/Writer**, then select the **Job Reader Tab** then click the "New" button to add a new Job Reader.



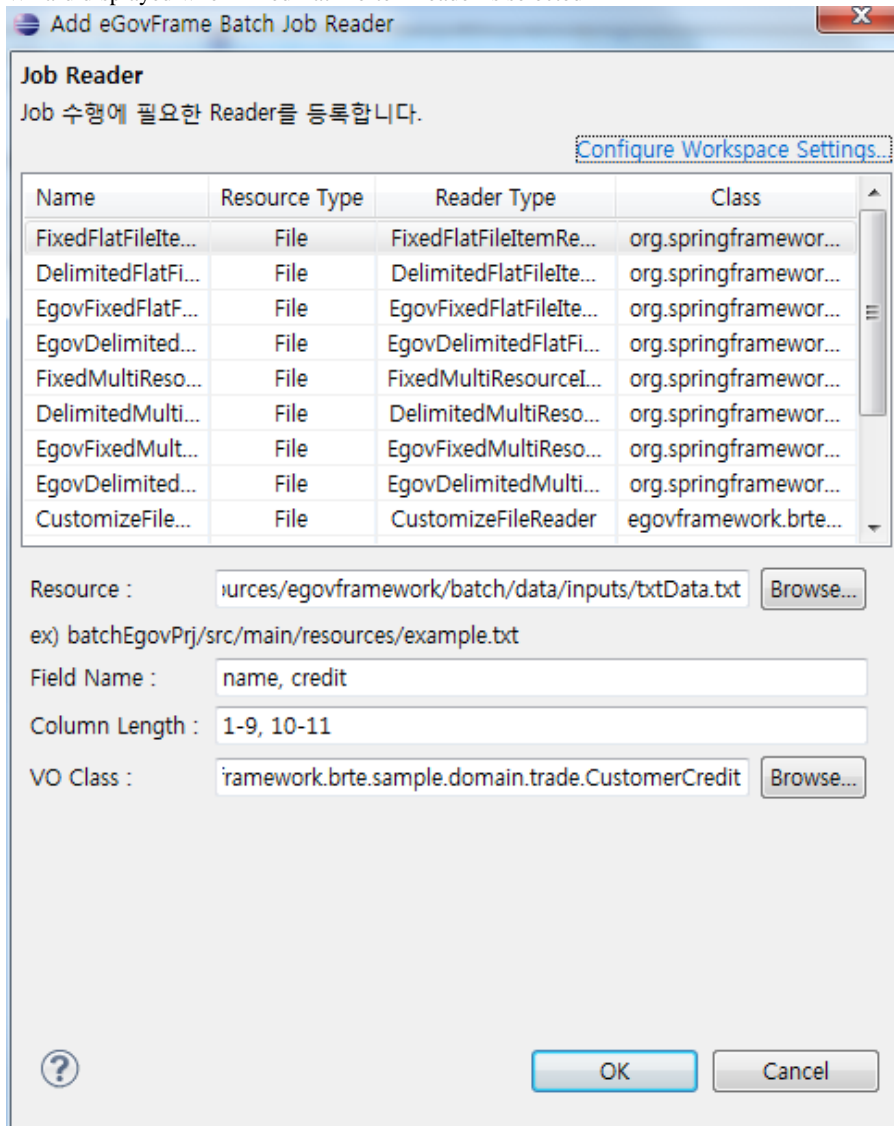
- Input desired name of the Job Reader to be registered and select Resource and Reader Type. Then, select "confirm" to add a new Job Reader.  
 ✓ Keep in mind that the name of the new Job Reader must be different from previously added Job Readers.



## Description of Job Parameters

### FixedFlatFileItemReader

- Wizard displayed when FixedFlatFileItemReader is selected



- Configuration of respective XML when FixedFlatFileItemReader is used

```
<beanid="TestJob.TestStep1.FixedFlatFileItemReader" class="org.springframework.batch.item.file.FlatFileItemReader" scope="step">
<propertyname="resource" value="file:./src/main/resources/egovframework/batch/data/inputs/txtData.txt"/>
<propertyname="lineMapper">
<beanclass="org.springframework.batch.item.file.mapping.DefaultLineMapper">
```

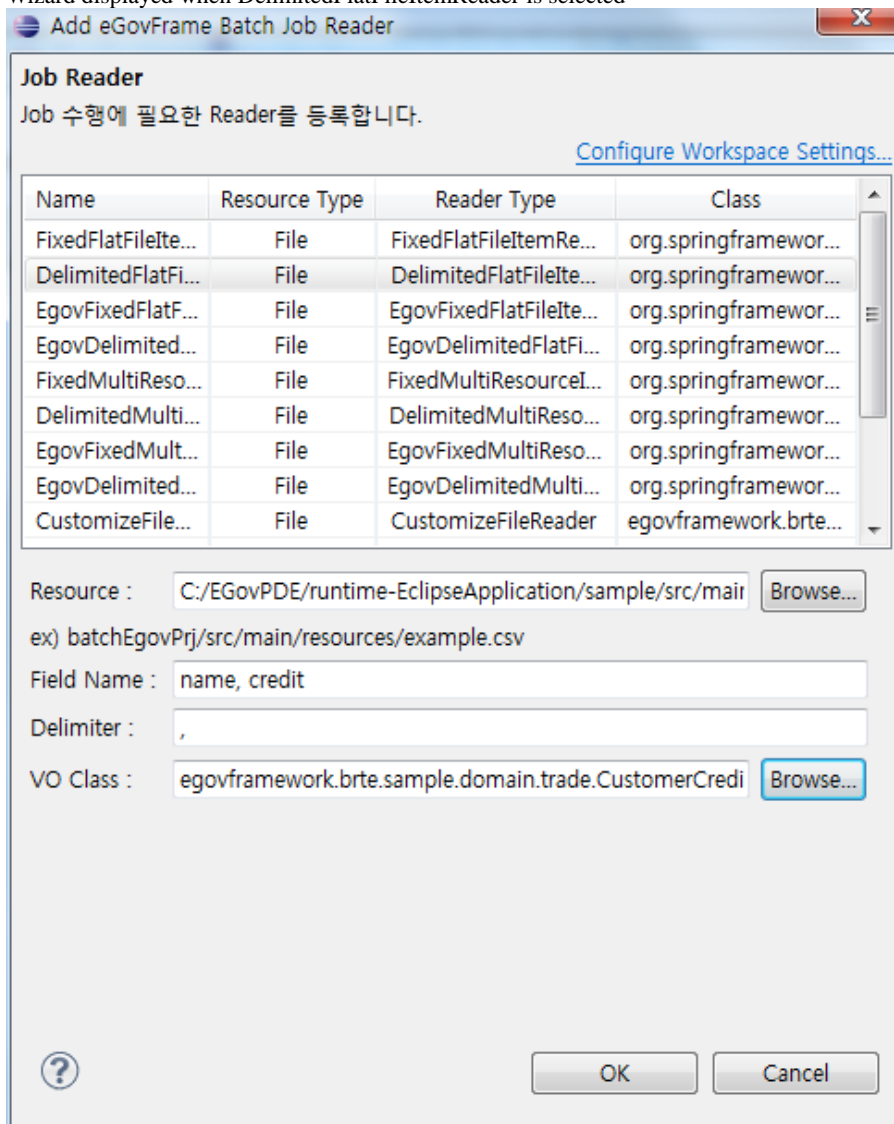
```

<propertyname="lineTokenizer">
<beanclass="org.springframework.batch.item.file.transform.FixedLengthTokenizer">
<propertyname="names" value="name, credit"/>
<propertyname="columns" value="1-9, 10-11"/>
</bean>
</property>
<propertyname="fieldSetMapper">
<beanclass="org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper">
<propertyname="targetType" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
</bean>
</property>
</bean>
</property>
</bean>

```

### DelimitedFlatFileItemReader

- Wizard displayed when DelimitedFlatFileItemReader is selected

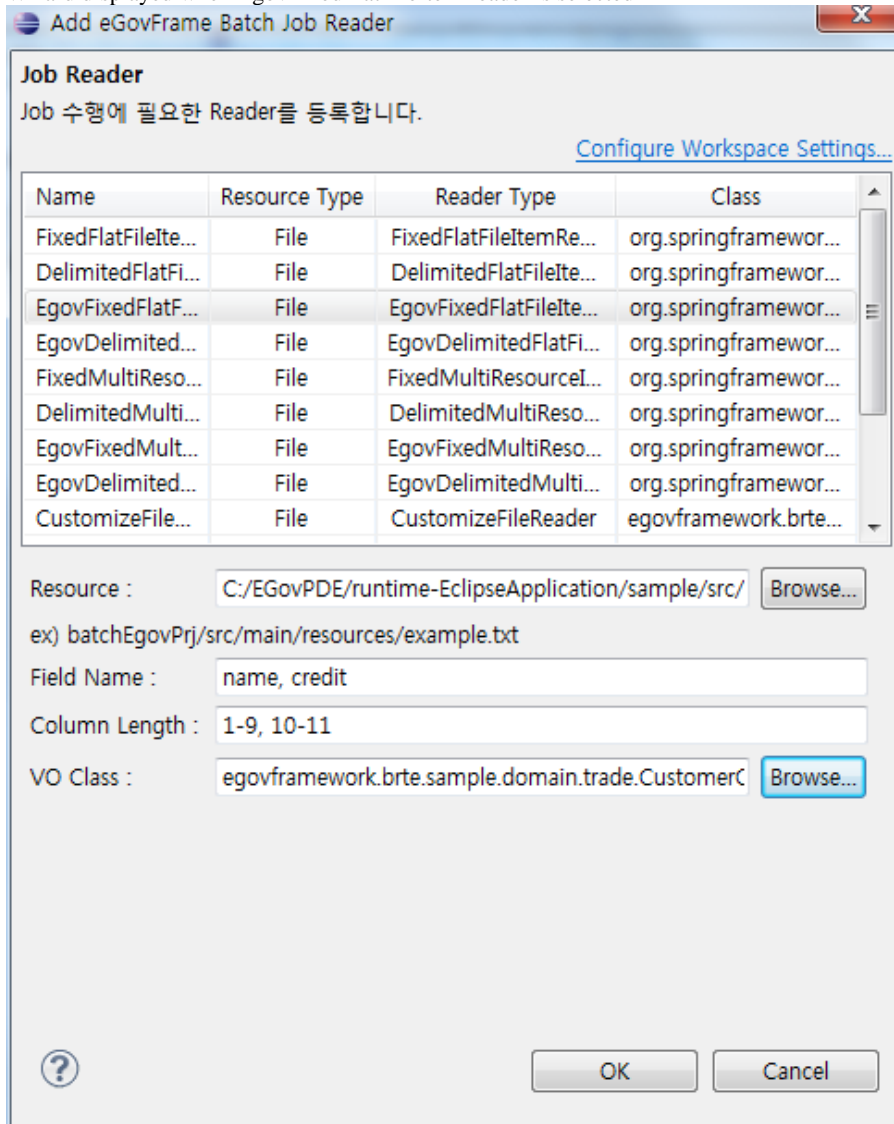


- Configuration of respective XML when DelimitedFlatFileItemReader is used

```
<beanid="TestJob.TestStep2.DelimitedFlatFileItemReader" class="org.springframework.batch.item.file.FlatFileItemReader" scope="step">
<propertyname="resource" value="file:./src/main/resources/egovframework/batch/data/inputs/csvData.csv"/>
<propertyname="lineMapper">
<beanclass="org.springframework.batch.item.file.mapping.DefaultLineMapper">
<propertyname="lineTokenizer">
<beanclass="org.springframework.batch.item.file.transform.DelimitedLineTokenizer">
<propertyname="delimiter" value=","/>
<propertyname="names" value="name,credit"/>
</bean>
</property>
<propertyname="fieldSetMapper">
<beanclass="org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper">
<propertyname="targetType" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
</bean>
</property>
</bean>
</property>
</bean>
```

## EgovFixedFlatFileItemReader

- Wizard displayed when EgovFixedFlatFileItemReader is selected



- Configuration of respective XML when EgovFixedFlatFileItemReader is used

```
<beanid="TestJob.TestStep3.EgovFixedFlatFileItemReader" class="org.springframework.batch.item.file.FlatFileItemReader" scope="step">
  <propertyname="resource" value="file:./src/main/resources/egovframework/batch/data/inputs/txtData.txt"/>
  <propertyname="lineMapper">
    <beanclass="egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper">
      <propertyname="lineTokenizer">
        <beanclass="egovframework.brte.core.item.file.transform.EgovFixedLengthTokenizer">
          <propertyname="columns" value="1-9,10-11"/>
        </bean>
      </property>
    <propertyname="objectMapper">
      <beanclass="egovframework.brte.core.item.file.mapping.EgovObjectMapper">
        <propertyname="type" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
      </bean>
    </property>
  </bean>
</property>
```

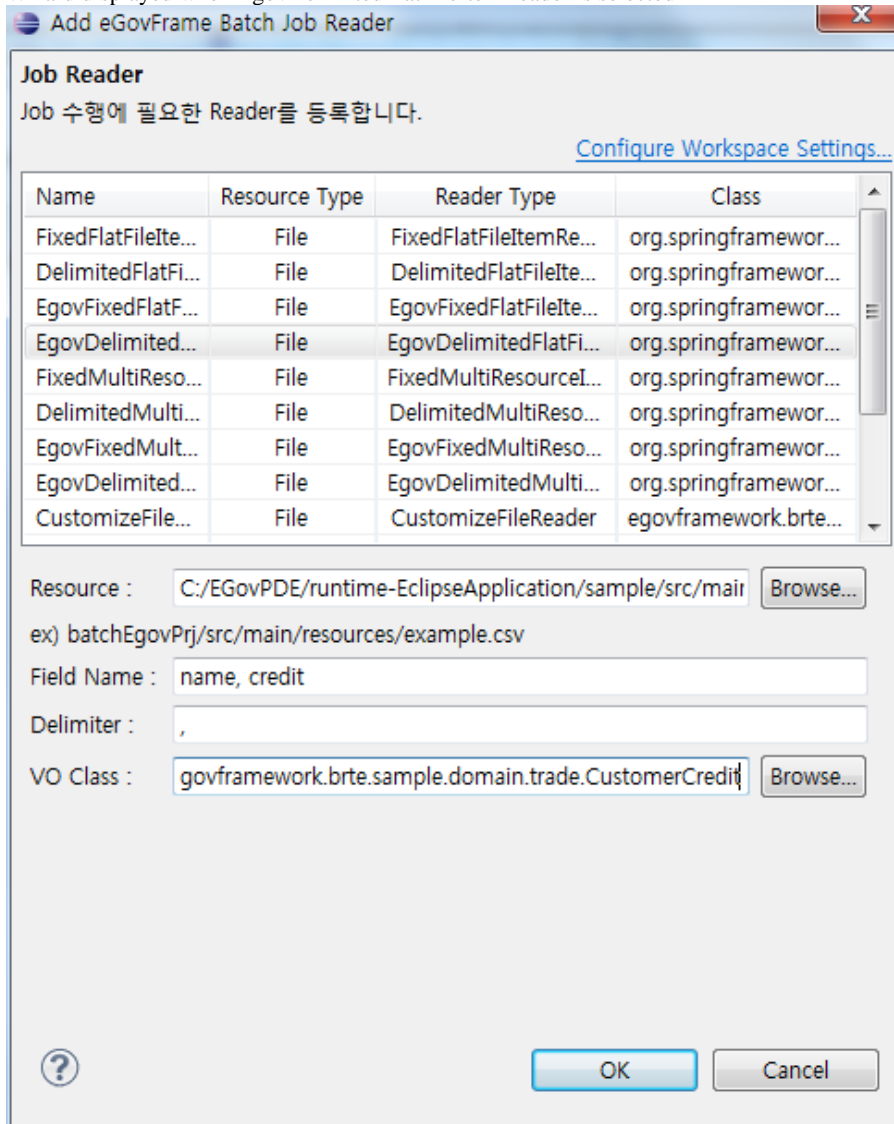
```

<propertyname="names" value="name,credit"/>
</bean>
</property>
</bean>
</property>
</bean>

```

### EgovDelimitedFlatFileItemReader

- Wizard displayed when EgovDelimitedFlatFileItemReader is selected



- Configuration of respective XML when EgovDelimitedFlatFileItemReader is used

```

<beanid="TestJob.TestStep4.EgovDelimitedFlatFileItemReader" class="org.springframework.batch.it
em.file.FlatFileItemReader" scope="step">
<propertyname="resource" value="file:./src/main/resources/egovframework/batch/data/inputs/csvData
.csv"/>
<propertyname="lineMapper">
<beanclass="egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper">
<propertyname="lineTokenizer">
<beanclass="egovframework.brte.core.item.file.transform.EgovDelimitedLineTokenizer">

```

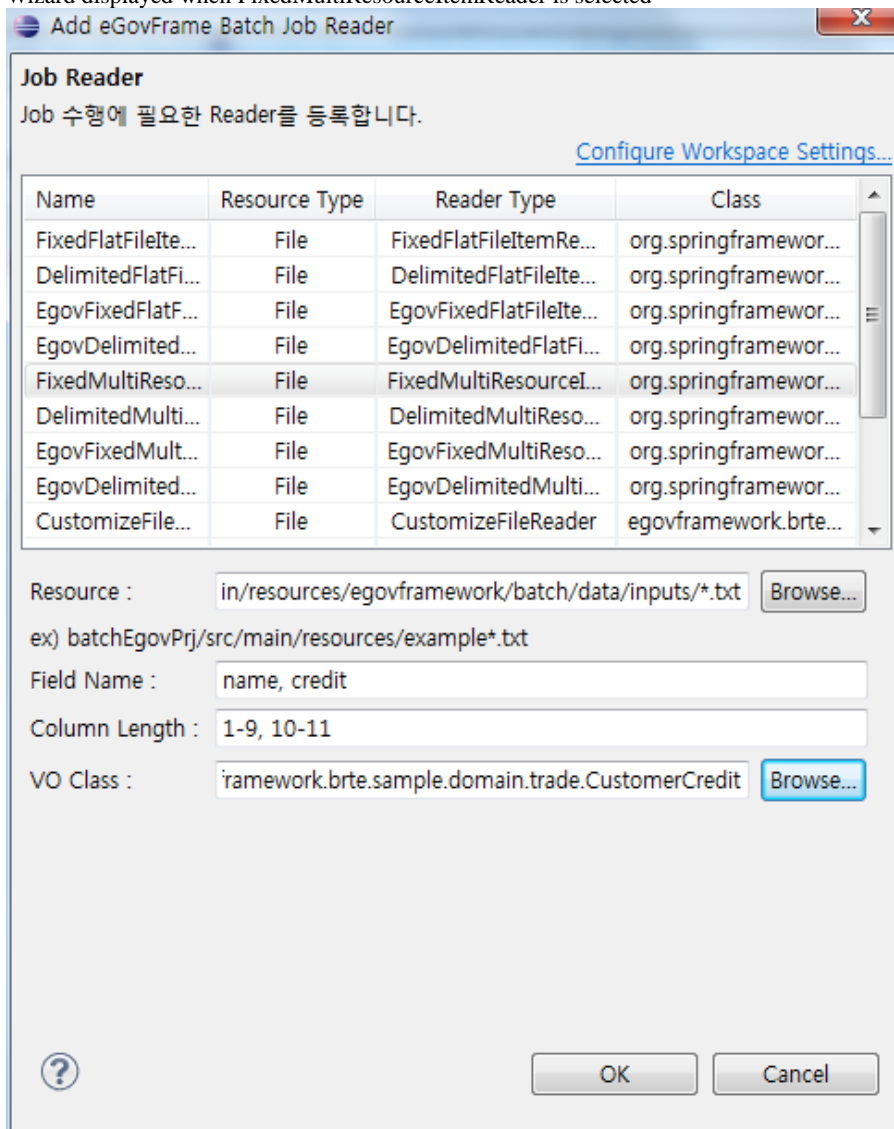
```

<propertyname="delimiter" value=","/>
</bean>
</property>
<propertyname="objectMapper">
<beanclass="egovframework.brte.core.item.file.mapping.EgovObjectMapper">
<propertyname="type" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
<propertyname="names" value="name,credit"/>
</bean>
</property>
</bean>
</property>
</bean>

```

### FixedMultiResourceItemReader

- Wizard displayed when FixedMultiResourceItemReader is selected



- Configuration of respective XML when FixedMultiResourceItemReader is used

```

<beanid="TestJob.TestStep5.FixedMultiResourceItemReader" class="org.springframework.batch.item.file.
MultiResourceItemReader" scope="step">

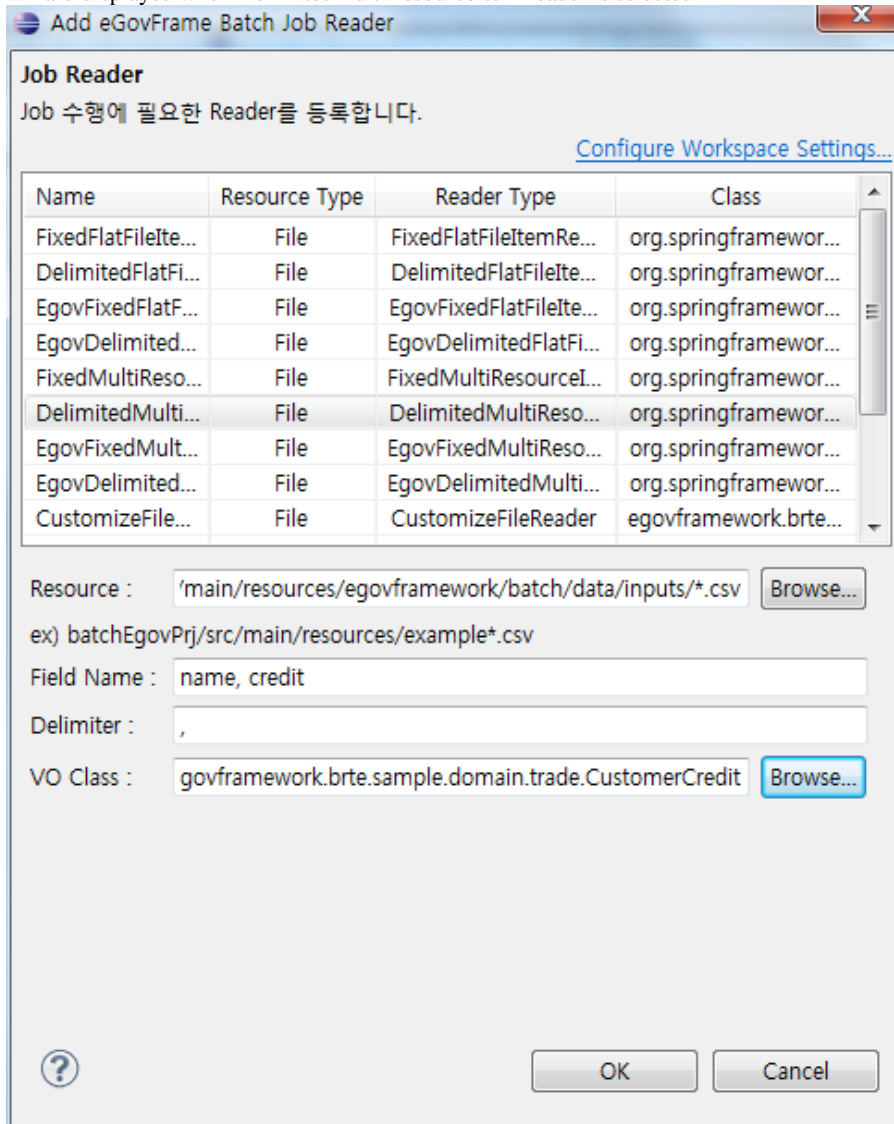
```



```
<propertyname="resources" value="file:./src/main/resources/egovframework/batch/data/inputs/*.txt"/>
<propertyname="delegate" ref="TestJob.TestStep5.delegatingReader"/>
</bean>
<beanid="TestJob.TestStep5.delegatingReader" class="org.springframework.batch.item.file.FlatFileItemRe
ader">
<propertyname="lineMapper">
<beanclass="org.springframework.batch.item.file.mapping.DefaultLineMapper">
<propertyname="lineTokenizer">
<beanclass="org.springframework.batch.item.file.transform.FixedLengthTokenizer">
<propertyname="names" value="name,credit"/>
<propertyname="columns" value="1-9,10-11"/>
</bean>
</property>
<propertyname="fieldSetMapper">
<beanclass="org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper">
<propertyname="targetType" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
</bean>
</property>
</bean>
</property>
</bean>
```

## DelimitedMultiResourceItemReader

- Wizard displayed when DelimitedMultiResourceItemReader is selected



- Configuration of respective XML when DelimitedMultiResourceItemReader is used

```
<beanid="TestJob.TestStep6.DelimitedMultiResourceItemReader" class="org.springframework.batch.item.file.MultiResourceItemReader" scope="step">
<propertyname="resources" value="file:./src/main/resources/egovframework/batch/data/inputs/*.csv"/>
<propertyname="delegate" ref="TestJob.TestStep6.delegatingReader"/>
</bean>
<beanid="TestJob.TestStep6.delegatingReader" class="org.springframework.batch.item.file.FlatFileItemReader">
<propertyname="lineMapper">
<beanclass="org.springframework.batch.item.file.mapping.DefaultLineMapper">
<propertyname="lineTokenizer">
<beanclass="org.springframework.batch.item.file.transform.DelimitedLineTokenizer">
<propertyname="delimiter" value=","/>
<propertyname="names" value="name,credit"/>
</bean>
</property>
</bean>
```

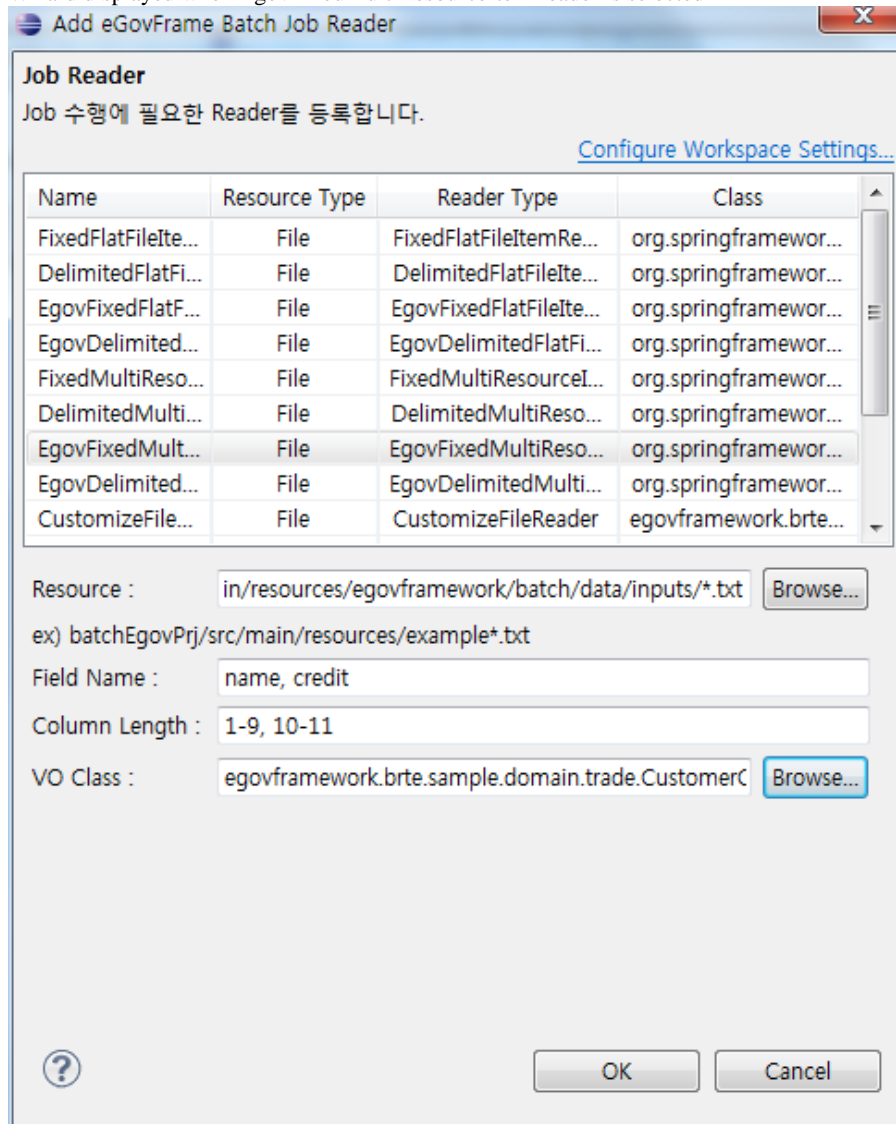
```

<propertyname="fieldSetMapper">
<beanclass="org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper">
<propertyname="targetType" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
</bean>
</property>
</bean>
</property>
</bean>

```

#### EgovFixedMultiResourceItemReader

- Wizard displayed when EgovFixedMultiResourceItemReader is selected



- Configuration of respective XML when EgovFixedMultiResourceItemReader is used

```

<beanid="TestJob.TestStep7.EgovFixedMultiResourceItemReader" class="org.springframework.batch.item.file.MultiResourceItemReader" scope="step">
<propertyname="resources" value="file:./src/main/resources/egovframework/batch/data/inputs/*.txt"/>
<propertyname="delegate" ref="TestJob.TestStep7.delegatingReader"/>
</bean>
<beanid="TestJob.TestStep7.delegatingReader" class="org.springframework.batch.item.file.FlatFileItemReader">

```

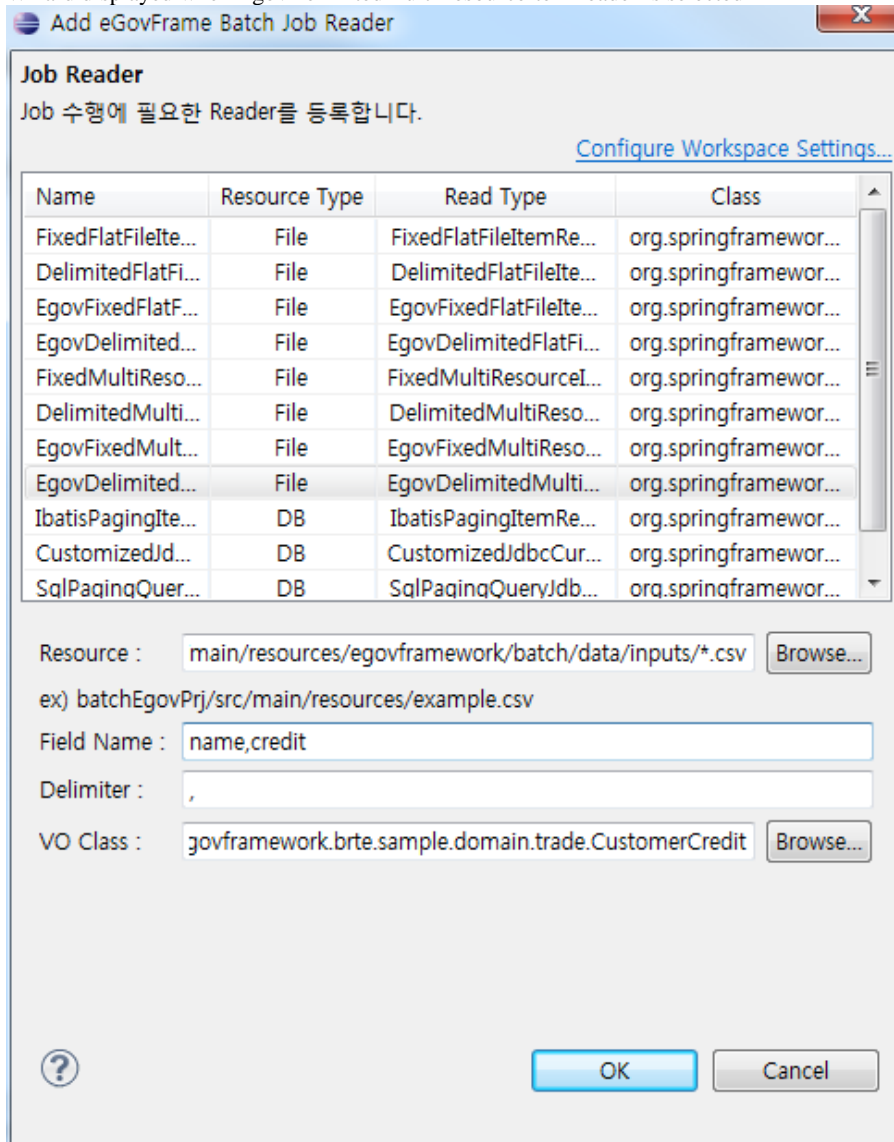
```

<propertyname="lineMapper">
<beanclass="egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper">
<propertyname="lineTokenizer">
<beanclass="egovframework.brte.core.item.file.transform.EgovFixedLengthTokenizer">
<propertyname="columns" value="1-9,10-11"/>
</bean>
</property>
<propertyname="objectMapper">
<beanclass="egovframework.brte.core.item.file.mapping.EgovObjectMapper">
<propertyname="type" value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
<propertyname="names" value="name,credit"/>
</bean>
</property>
</bean>
</property>
</bean>

```

#### EgovDelimitedMultiResourceItemReader

- Wizard displayed when EgovDelimitedMultiResourceItemReader is selected

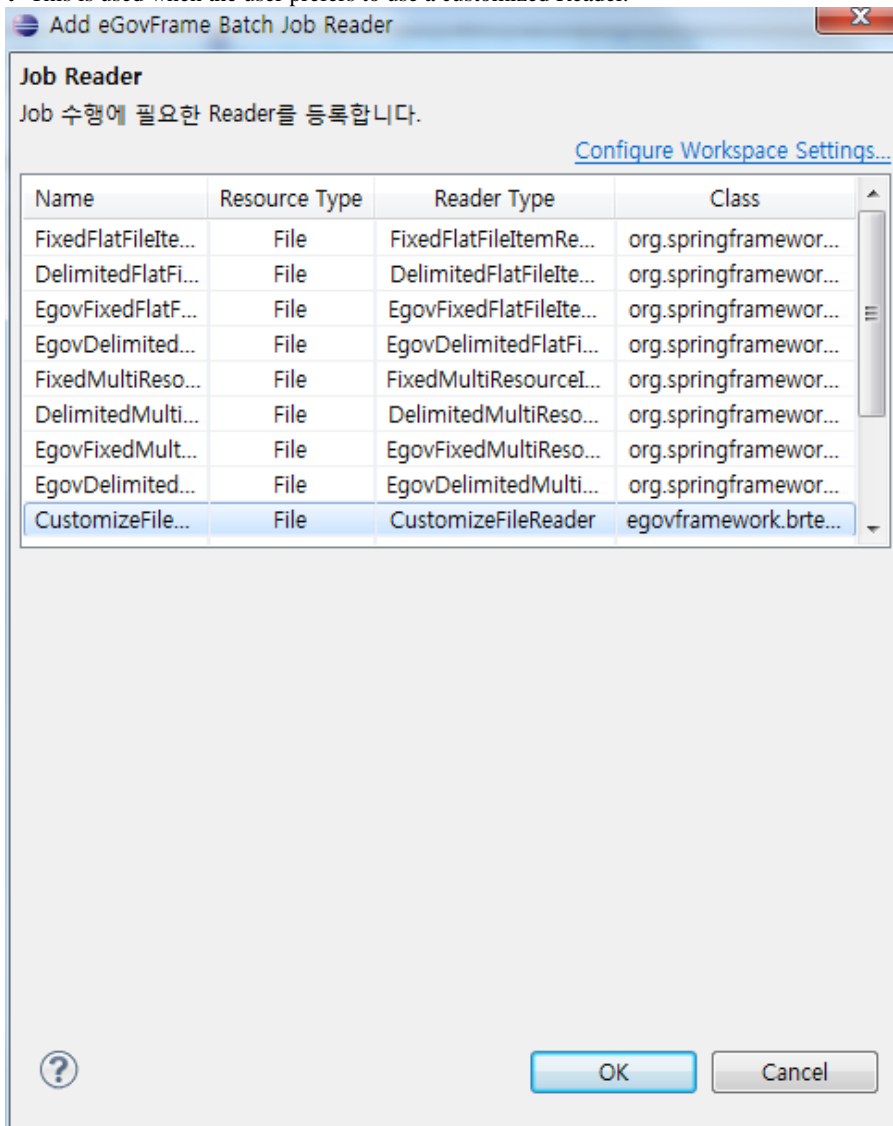


- Configuration of respective XML when EgovDelimitedMultiResourceItemReader is used

```
<beanid="TestJob.TestStep.EgovDelimitedMultiResourceItemReader"class="org.springframework.batch.item.file.MultiResourceItemReader"scope="step">
<propertyname="resources"value="file:./src/main/resources/egovframework/batch/data/inputs/*.csv"/>
<propertyname="delegate"ref="TestJob1.TestStep.delegatingReader"/>
</bean>
<beanid="TestJob.TestStep.delegatingReader"class="org.springframework.batch.item.file.FlatFileItemReader">
<propertyname="lineMapper">
<beanclass="egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper">
<propertyname="lineTokenizer">
<beanclass="egovframework.brte.core.item.file.transform.EgovDelimitedLineTokenizer">
<propertyname="delimiter"value=","/>
</bean>
</property>
<propertyname="objectMapper">
<beanclass="egovframework.brte.core.item.file.mapping.EgovObjectMapper">
<propertyname="type"value="egovframework.brte.sample.domain.trade.CustomerCredit"/>
<propertyname="names"value="name,credit"/>
</bean>
</property>
</bean>
</property>
</bean>
```

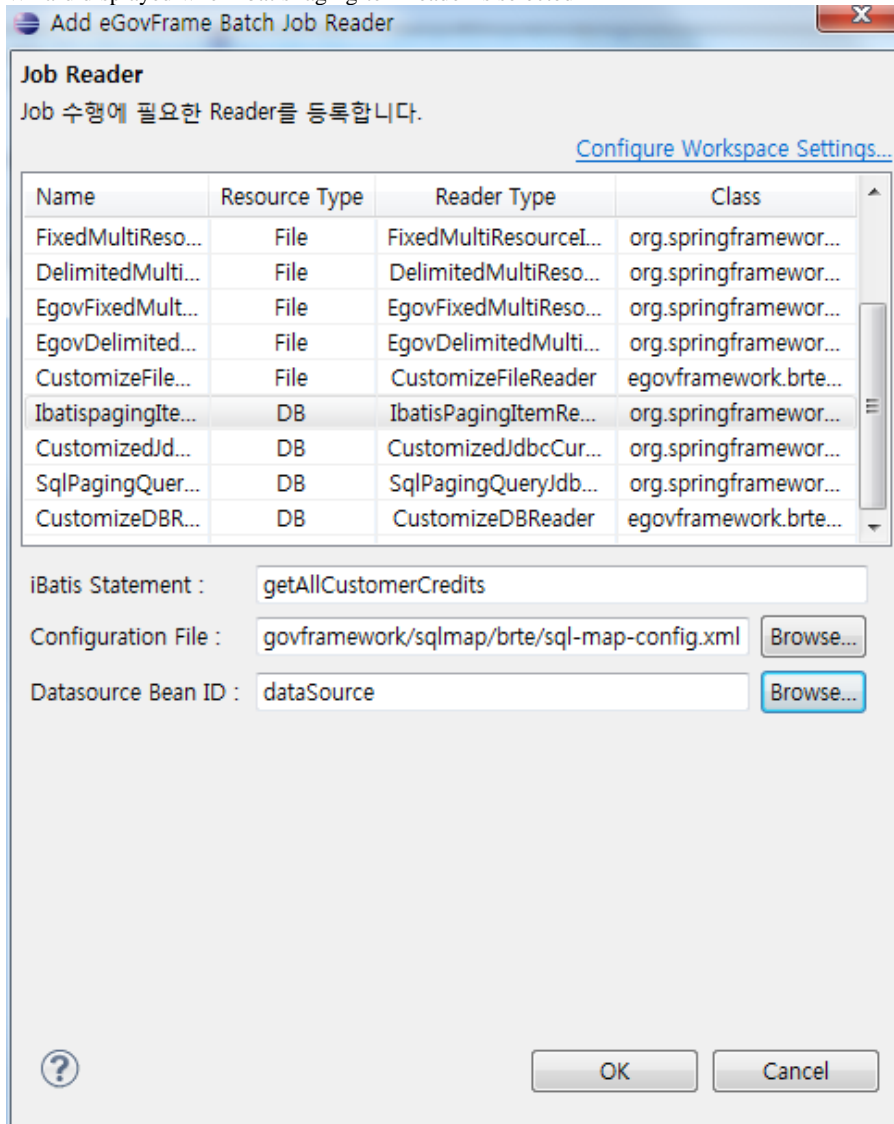
## CustomizeFileReader

- Wizard for CustomizeFileReader  
✓ This is used when the user prefers to use a customized Reader.



## IbatisPagingItemReader

- Wizard displayed when IbatisPagingItemReader is selected

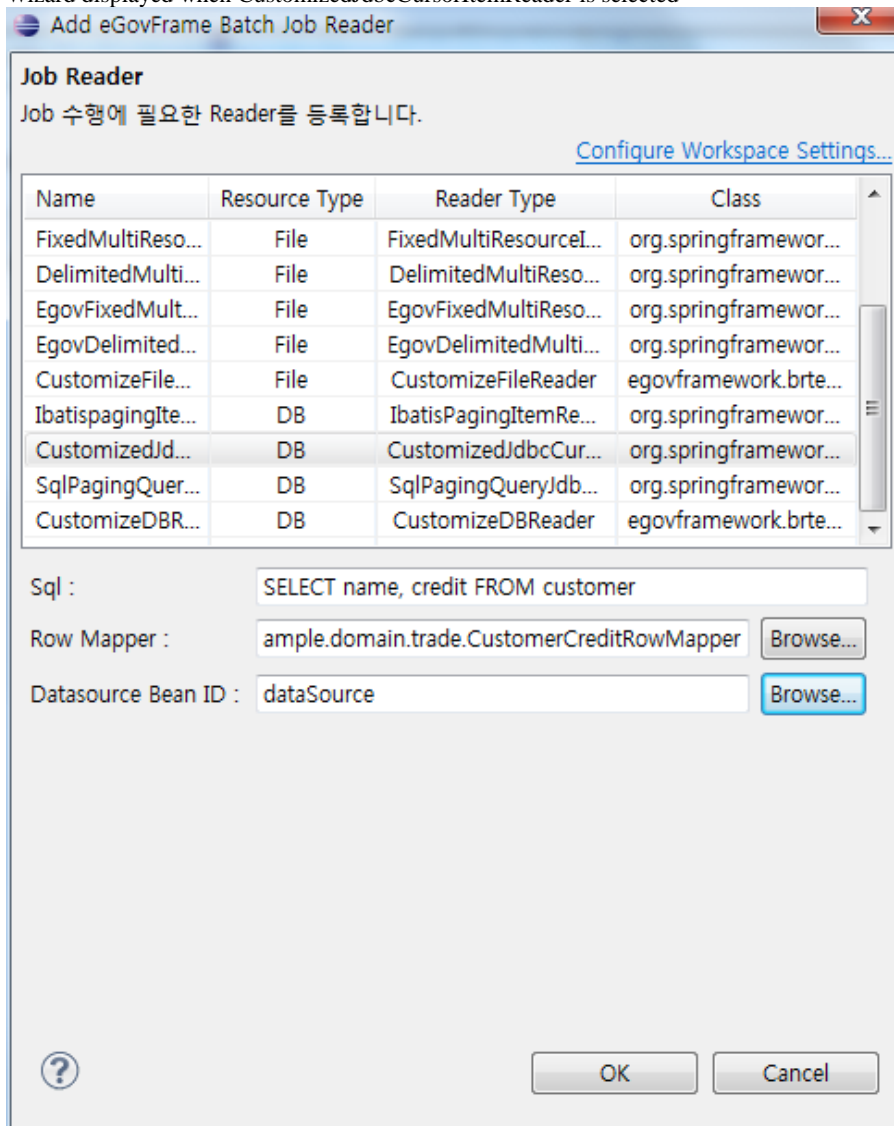


- Configuration of respective XML when IbatisPagingItemReader is used

```
<beanid="TestJob.TestStep1.IbatisPagingItemReader" class="org.springframework.batch.item.database.IbatisPagingItemReader">  
<propertyname="queryId" value="getAllCustomerCredits"/>  
<propertyname="sqlMapClient">  
<beanclass="org.springframework.orm.ibatis.SqlMapClientFactoryBean">  
<propertyname="dataSource" ref="dataSource"/>  
<propertyname="configLocation" value="file:./src/main/resources/egovframework/sqlmap/brte/sql-map-config.xml"/>  
</bean>  
</property>  
</bean>
```

## CustomizedJdbcCursorItemReader

- Wizard displayed when CustomizedJdbcCursorItemReader is selected



- Configuration of respective XML when CustomizedJdbcCursorItemReader is used

```
<beanid="TestJob.TestStep2.CustomizedJdbcCursorItemReader" class="org.springframework.batch.item.database.JdbcCursorItemReader">
  <propertyname="dataSource" ref="dataSource"/>
  <propertyname="sql" value="SELECT name,credit FROM customer"/>
  <propertyname="rowMapper">
    <beanclass="egovframework.brte.sample.domain.trade.CustomerCreditRowMapper"/>
  </property>
</bean>
```



## SqlPagingQueryJdbcItemReader

Wizard displayed when SqlPagingQueryJdbcItemReader is selected

**Add eGovFrame Batch Job Reader**

**Job Reader**  
Job 수행에 필요한 Reader를 등록합니다.

[Configure Workspace Settings...](#)

Name	Resource Type	Reader Type	Class
FixedMultiReso...	File	FixedMultiResourceI...	org.springframework...
DelimitedMulti...	File	DelimitedMultiReso...	org.springframework...
EgovFixedMult...	File	EgovFixedMultiReso...	org.springframework...
EgovDelimited...	File	EgovDelimitedMulti...	org.springframework...
CustomizeFile...	File	CustomizeFileReader	egovframework.brte...
IbatispagingIte...	DB	IbatisPagingItemRe...	org.springframework...
CustomizedJd...	DB	CustomizedJdbcCur...	org.springframework...
SqlPagingQuer...	DB	SqlPagingQueryJdb...	org.springframework...
CustomizeDBR...	DB	CustomizeDBReader	egovframework.brte...

Row Mapper :

PageSize :

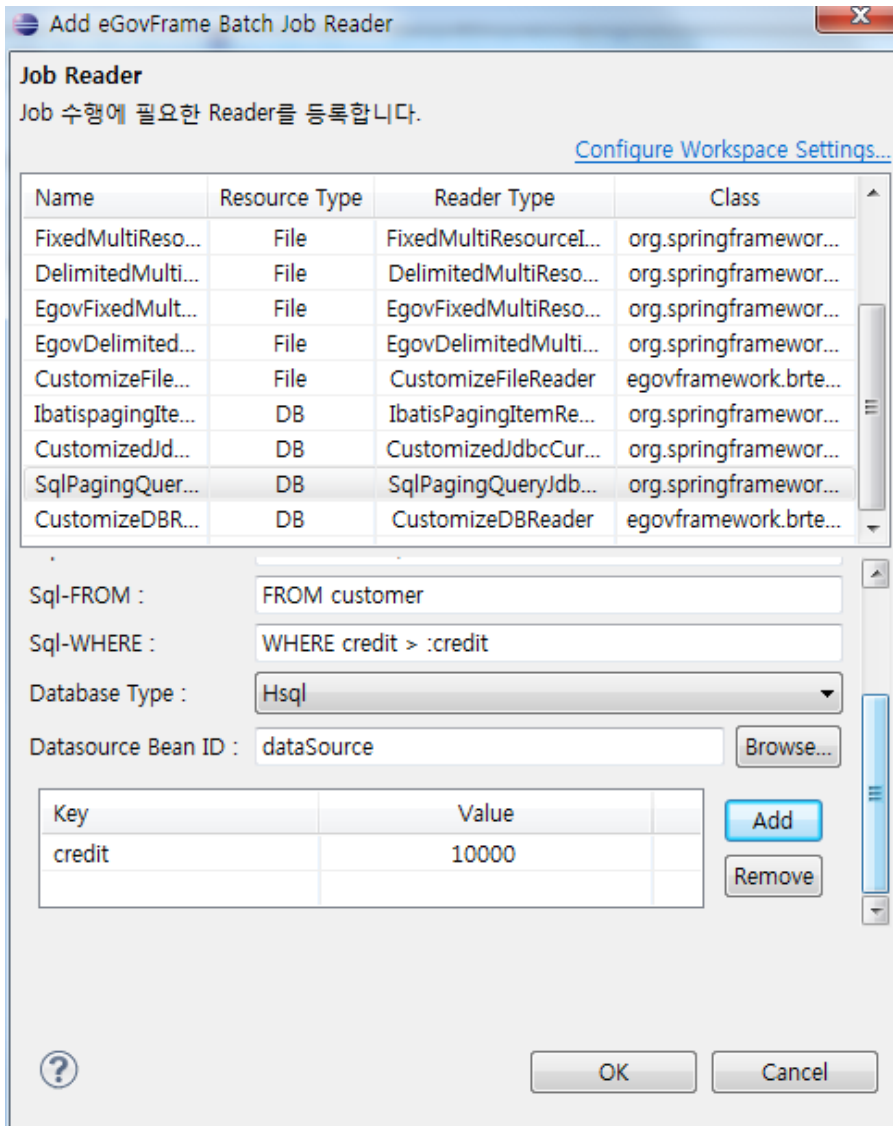
Sql-SortColumn :

Sql-SELECT :

Sql-FROM :

Sql-WHERE :

Database Type :



- Configuration of respective XML when SqlPagingQueryJdbcItemReader is used

```

<beanid="TestJob.TestStep3.SqlPagingQueryJdbcItemReader" class="org.springframework.batch.item.database.JdbcPagingItemReader" scope="step">
<propertyname="dataSource" ref="dataSource"/>
<propertyname="rowMapper">
<beanclass="egovframework.brte.sample.domain.trade.CustomerCreditRowMapper"/>
</property>
<propertyname="queryProvider">
<beanclass="org.springframework.batch.item.database.support.SqlPagingQueryProviderFactoryBean">
</property>
<propertyname="dataSource" ref="dataSource"/>

```

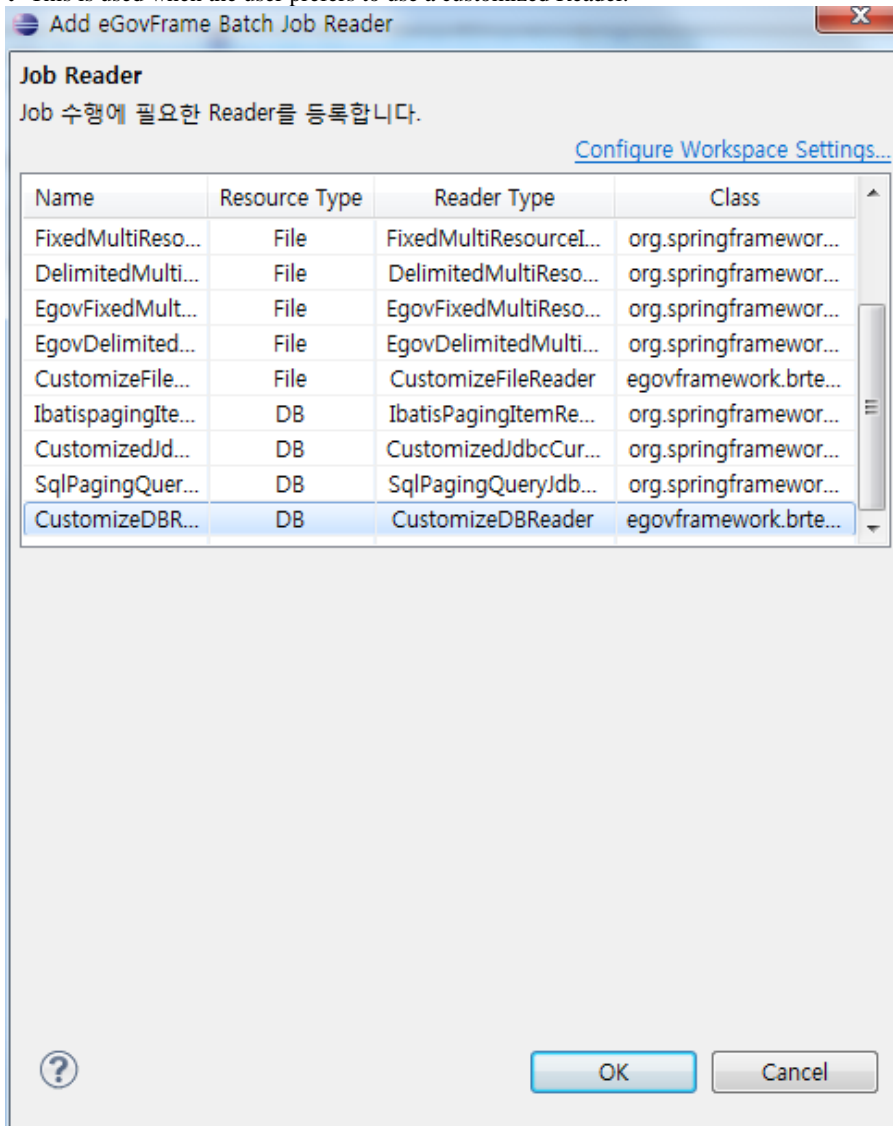
```

<propertyname="sortKey" value="name"/>
<propertyname="selectClause" value="SELECT name,credit"/>
<propertyname="fromClause" value="FROM customer"/>
<propertyname="whereClause" value="WHERE credit > :credit" />
<propertyname="pageSize" value="2"/>
</bean>
</property>
<propertyname="parameterValues">
<map>
<entrykey="credit" value="10000"/>
</map>
</property>
</bean>

```

**CustomizeDBReader**

- Wizard for CustomizeDBReader  
 This is used when the user prefers to use a customized Reader.



### Description of each Wizard items.

Category	Item	Description
File	Resource	Configuration of file path and directory
File	Field Name	Configuration of VO Field to be mapped through classification by Delimiter or Column Length
File	Column Length	Configuration of Column Length for Column Length Reading Mode.
File	Delimiter	Configuration of Delimiter Value for Delimiter Reading Mode.
File	VO Class	Configuration of data objectification class
DB	iBatis Statement	Query ID to be used by the user for iBatis configuration file.
DB	Configuration File	Configuration of file name and directory for SqlMapConfig file.
DB	Sql	Configuration of Database Access Query
DB	Row Mapper	Class where user has implemented RowMapper Interface to execute ResultSet data mapping by VO.
DB	PageSize	Configuration of the number of entities to be read from database every time a query is executed.
DB	Sql-SortColumn	Configuration of standard column where the results of query will be organized and extracted.
DB	Sql-SELECT	SELECT clause of the query
DB	Sql-FROM	From clause of the query

DB	Sql-WHERE	Where clause of the query
DB	Datasource Bean ID	Bean ID of the datasource to be used for connection to database
DB	Database Type	Configuration of Database Type

### **Application of Job Readers during creation of Batch Job File**

1. In order to create a new Batch Job File through [Batch Job Wizard](#), click on the **Add** button located on the right side of "Reader" from "Step Add"

The screenshot shows the 'New eGovFrame Batch Job File' dialog box. The title bar reads 'New eGovFrame Batch Job File'. The main window has a header 'eGovFrame Batch Job' and a sub-header 'Job Reader를 설정해 주십시오.' (Please set the Job Reader). The interface is divided into three main sections: 'Job List', 'Step/Decision List', and 'Info'. The 'Job List' contains one entry 'TestJob'. The 'Step/Decision List' is empty. The 'Info' section contains the following fields: 'Job ID' (TestJob), 'Step Type' (Normal selected, Partition(File) unselected), 'Step ID' (TestStep), 'next' checkbox (unchecked), 'Item Configuration' section with 'Reader' (필수 입력 사항입니다), 'Writer' (필수 입력 사항입니다), and 'Commit-Interval'. The 'Reader' field has an 'Add' button next to it. At the bottom of the dialog, there are buttons for '< Back', 'Next >', 'Finish', and 'Cancel'. The 'Add' button for the Reader is highlighted.

2. From the list of Job Readers, select the Reader to be registered and click OK.

The screenshot shows the 'New eGovFrame Batch Job File' dialog box. The title bar reads 'New eGovFrame Batch Job File'. The main window has a header 'eGovFrame Batch Job' and a sub-header 'Job Writer를 설정해 주십시오.' (Please set the Job Writer). The interface is divided into three main sections: 'Job List', 'Step/Decision List', and 'Info'. The 'Job List' contains one entry 'TestJob'. The 'Step/Decision List' is empty. The 'Info' section contains the following fields: 'Job ID' (TestJob), 'Step Type' (Normal selected, Partition(File) unselected), 'Step ID' (TestStep), 'next' checkbox (unchecked), 'Item Configuration' section with 'Reader' (TestJob.TestStep.FixedFlatFileItemReader), 'Writer' (필수 입력 사항입니다), and 'Commit-Interval'. The 'Reader' field has an 'Add' button next to it. At the bottom of the dialog, there are buttons for '< Back', 'Next >', 'Finish', and 'Cancel'. The 'Add' button for the Reader is highlighted.

## Remark

- Basic Job Reader item provided from the eGov Standard Framework Batch Development Environment.

Category	Item	Description	Components of Items
File	<a href="#">FixedFlatFileItemReader</a>	ItemReaders that read file data through Column Length Reading mode, by using LineMapper, Tokenizer, and FieldSetMapper that are provided by Spring.	org.springframework.batch.item.file.FlatFileItemReader, org.springframework.batch.item.file.mapping.DefaultLineMapper, org.springframework.batch.item.file.transform.FixedLengthTokenizer, org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper
File	<a href="#">DelimitedFlatFileItemReader</a>	ItemReaders that read file data through Delimiter Reading mode, by using LineMapper, Tokenizer, and FieldSetMapper that are provided in Spring.	org.springframework.batch.item.file.FlatFileItemReader, org.springframework.batch.item.file.mapping.DefaultLineMapper, org.springframework.batch.item.file.transform.DelimitedLineTokenizer, org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper
File	<a href="#">EgovFixedFlatFileItemReader</a>	Enhanced ItemReaders that read file data through Column Length Reading mode, by using LineMapper, Tokenizer, and ObjectMapper that are provided by eGov.	org.springframework.batch.item.file.FlatFileItemReader, egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper, egovframework.brte.core.item.file.transform.EgovFixedLengthTokenizer, egovframework.brte.core.item.file.mapping.EgovObjectMapper
File	<a href="#">EgovDelimitedFlatFileItemReader</a>	Enhanced ItemReaders that read file data through Delimiter Reading mode, by using LineMapper, Tokenizer, and ObjectMapper that are provided by eGov.	org.springframework.batch.item.file.FlatFileItemReader, egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper, egovframework.brte.core.item.file.transform.EgovDelimitedLineTokenizer, egovframework.brte.core.item.file.mapping.EgovObjectMapper
File	<a href="#">FixedMultiResourceItemReader</a>	ItemReaders that can read multiple file data through Column Length Reading mode, by using LineMapper, Tokenizer, and FieldSetMapper that are provided by Spring.	org.springframework.batch.item.file.MultiResourceItemReader, org.springframework.batch.item.file.mapping.DefaultLineMapper, org.springframework.batch.item.file.transform.FixedLengthTokenizer, org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper
File	<a href="#">DelimitedMultiResourceItemReader</a>	ItemReaders that can read multiple file data through Delimiter Reading mode, by using LineMapper, Tokenizer, and FieldSetMapper that are provided by Spring.	org.springframework.batch.item.file.MultiResourceItemReader, org.springframework.batch.item.file.mapping.DefaultLineMapper, org.springframework.batch.item.file.transform.DelimitedLineTokenizer, org.springframework.batch.item.file.mapping.BeanWrapperFieldSetMapper
File	<a href="#">EgovFixedMultiResourceItemReader</a>	Enhanced ItemReaders that can read multiple file data through Column Length Reading mode, by using LineMapper, Tokenizer, and ObjectMapper that are provided by eGov.	org.springframework.batch.item.file.MultiResourceItemReader, egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper, egovframework.brte.core.item.file.transform.EgovFixedLengthTokenizer, egovframework.brte.core.item.file.mapping.EgovObjectMapper
File	<a href="#">EgovDelimitedMultiResourceItemReader</a>	Enhanced ItemReaders that can read multiple file data through Delimiter Reading mode, by using LineMapper, Tokenizer, and ObjectMapper that are provided by eGov.	org.springframework.batch.item.file.MultiResourceItemReader, egovframework.brte.core.item.file.mapping.EgovDefaultLineMapper, egovframework.brte.core.item.file.transform.EgovDelimitedLineTokenizer, egovframework.brte.core.item.file.mapping.EgovObjectMapper
File	<a href="#">CustomizeFileReader</a>	File Item Reader registered by the user.	User Customization
DB	<a href="#">IbatisPagingItemReader</a>	ItemReaders that read by units of page through Ibatis mode, by using SqlMapClient that are provided by	org.springframework.batch.item.database.IbatisPagingItemReader, org.springframework.orm.ibatis.SqlMapClientFactoryBean

Spring.

- |    |  |   |  |
|----|--|---|--|
| DB | <a href="#">CustomizedJdbcCursorItemReader</a> | ItemReaders that read DB data by units of cursor through Jdbc mode, by using SqlMapClient customized by the user.                               | org.springframework.batch.item.database.JdbcCursorItemReader, Customized Mapper Class implemented by inheriting RowMapper  |
| DB | <a href="#">SqlPagingQueryJdbcItemReader</a>   | ItemReaders that read DB data by units of page through Jdbc mode, by using SqlProvider provided by Spring and RowMapper customized by the user. | org.springframework.batch.item.database.JdbcPagingItemReader, Customized Mapper Class implemented by inheriting RowMapper, org.springframework.batch.item.database.support.SqlPagingQueryProviderFactoryBean |
| DB | <a href="#">CustomizeDBReader</a>              | DB ItemReader registered by the user.   | User Customization   |