



SPRING FRAMEWORK

EXPRESSION LANGUAGE

APRIL, 2015

EXPRESSION LANGUAGE



LITERALS

```
<property name="num" value="#{5}">
```

```
<property name="num" value="#{-5.5}">
```

```
<property name="num" value="#{0x7AF7}">
```

```
<property name="num" value="#{6.2E+7}">
```

```
<property name="b" value="#{false}">
```

```
<property name="s" value="#{null}">
```

```
<property name="s" value="#{'Hello'}">
```

BEAN REFERENCE

```
<property name="client" value="#{client}">
```

```
<property name="client" ref="client">
```

BEAN REFERENCE

```
<property name="client" value="#{client}">
```

```
<property name="client" ref="client">
```

```
<property name="..."  
    value="#{app.defaultLogger}">
```

BEAN REFERENCE

```
<property name="client" value="#{client}">
```

```
<property name="client" ref="client">
```

```
<property name="..."  
    value="#{app.defaultLogger}">
```

```
<property name="..."  
    value="#{app.createEvent()}">
```

```
<property name="..."  
    value="#{client.say('Hello')}">
```

METHOD CALL

```
<property name="..."  
    value="#{app.createEvent().date}">
```

METHOD CALL

```
<property name="..."  
    value="#{app.createEvent().date}">
```

NULL-CHECK

```
<property name="..."  
    value="#{app.createEvent()?.date}">
```


METHOD CALL

```
<property name="..."  
    value="#{app.createEvent().date}">
```

NULL-CHECK

```
<property name="..."  
    value="#{app.createEvent()?.date}">
```

STATIC METHODS

```
<property name="..."  
    value="#{T(java.lang.Math).PI}">
```

```
<property name="..."  
    value="#{T(java.lang.Math).random()}">
```

OPERATIONS

MATHEMATICAL

<property value="#{5 * 2}"

<property value="#{5 % 2}"

<property value="#{5 ^ 2}"

OPERATIONS

MATHEMATICAL

`<property value="#{5 * 2}"`

`<property value="#{5 % 2}"`

`<property value="#{5 ^ 2}"`

RELATIONAL

`<property value="#{5 >= 2}"`

`<property value="#{5 ge 2}"`

`<property value="#{'X' instanceof T(int)}"`

`<property value="#{'5' matches '^-\?\\d+?$'}"`

OPERATIONS

MATHEMATICAL

`<property value="#{5 * 2}"`

`<property value="#{5 % 2}"`

`<property value="#{5 ^ 2}"`

RELATIONAL

`<property value="#{5 >= 2}"`

`<property value="#{5 ge 2}"`

`<property value="#{'X' instanceof T(int)}"`

`<property value="#{'5' matches '^-\?\\d+?$'}"`

LOGIC

`<property value="#{a and b}"`

`<property value="#{not (a | b)}"`

CONDITIONAL OPERATORS

TERNARY

```
<property name="..."  
    value="#{ condition ?  
        trueValue : otherValue }">
```

TERNARY

```
<property name="..."  
  value="#{ condition ?  
    trueValue : otherValue }">
```

```
Event.isDay() {
```



8 am - 5 pm → true



5 pm - 8 am → false

```
}
```

TERNARY

```
<property name="..."  
  value="#{ condition ?  
    trueValue : otherValue }">
```

```
Event.isDay() {
```



8 am - 5 pm → true



5 pm - 8 am → false

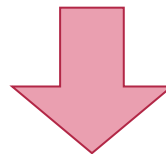
```
}
```

```
#{ T(Event).isDay() ? fileEventLogger  
  : consoleEventLogger }
```

CONDITIONAL OPERATORS

ELVIS ?:

```
<property name="msg"  
  value="#{ client.greeting ?: 'Hello' }">
```



```
if ( client.greeting != null )  
  msg = client.greeting  
else  
  msg = 'Hello'
```


COLLECTIONS SUPPORT

```
<property value="#{ loggers[2] }"  
<property value="#{ props['key_name'] }"
```

```
<property value="#{ 1,2,3,4 }"  
<property value="#{ 'A':5, 'B':10 }"
```

SYSTEM ENV

```
<property value="#{ systemEnvironment['USER'] }"
```

VM ARGUMENTS

```
<property value="#{ systemProperties['dir'] }"
```

OPERATIONS ON COLLECTIONS

SELECTION

- All elements with condition

```
<property value="#{ clients.?[id < 10] }"
```

- First suitable element:

```
<property value="#{ clients.^[id > 10] }"
```

- Last suitable element:

```
<property value="#{ clients.$[id > 10] }"
```

OPERATIONS ON COLLECTIONS

SELECTION

- All elements with condition

```
<property value="#{ clients.?[id < 10] }"
```

- First suitable element:

```
<property value="#{ clients.^[id > 10] }"
```

- Last suitable element:

```
<property value="#{ clients.$[id > 10] }"
```

PROJECTION

```
<property value="#{ loggers.![name] }"
```



THANK YOU

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