# FileName constraints

## Summary

FileName constraints check the name of the target resource. Checks are comparisons with literal strings (greater than, equal to, etc.) or attempts to match the name against string patterns or regular expressions.

## Element

<fileName>

## Examples

<fileName like="airport\*.json" likeMsg="JSON files must match pattern 'airport\*.json"  
 notLike="\*test\*" notLikeMsg="JSON files must not match pattern '\*test\*'"/>

<fileName notMatches="\s"

likeMsg="Billions of dollars are wasted by using whitespace in file names"/>

## Example schemas

See:

$greenfox/example-schemas/constraint-components/FileName

## Constraint nodes

The constraints are specified by attributes on <fileName>, summarized in the following table.

**Table 1**: Constraint nodes supported by FileName constraints. All nodes are attributes on the <fileName> element.

|  |  |  |  |
| --- | --- | --- | --- |
| **Check node** | **Expectation** | **Example** | **Notes** |
| @eq, @ne | The name is eq/ne the attribute value | eq="airports.xml"  ne="UPDATE\_FLAG" | Wildcards not allowed – use @like or @notLike in order to use wildcards |
| @like | The name matches the text pattern | like="\*.xsd" | Wildcards are \* and ? |
| @notLike | The name does not match the text pattern | notLike="\*.deprecated.\*" | Wildcards are \* and ? |
| @matches | The name matches the regex | matches="\s\d+" | The regex is not anchored – it may describe a substring |
| @notMatches | The name does not match the regex | notMatches="\(.\*\)" | The regex is not anchored – it may describe a substring |

## Option nodes

There are two option nodes, represented in the following table.

**Table 2**: Option nodes supported by FileName constraints. The nodes are attributes on the <fileName> element.

|  |  |  |  |
| --- | --- | --- | --- |
| **Check node** | **Semantics** | **Example** | **Notes** |
| @case | If true, the comparison is case-sensitive. | case="true" | Comparison is case-sensitive. By default, it is case-insensitive, regardless if the comparisons uses literal strings (@eq, @ne) or string patterns or regular expressions. |
| @flags | The attribute value supplies flags used when evaluating regular expressions or string patterns. | flags="i"  flags="x" | Flag semantics as described in the XPath functions spec ([XP flags](https://www.w3.org/TR/xpath-functions-31/#flags)); “x” can be useful when ignorable whitespace makes the regex more readible |

## Message nodes

For each constraint node (see table 1), two message nodes are supported – an error message and a message commenting a pass, as summarized in the following table.

**Table 3**: Message nodes of FileName constraints. The nodes are attributes on the <fileName> element.

|  |  |  |
| --- | --- | --- |
| **Message node** | **Semantics** | **Example** |
| constraint-node-name + „Msg“ | Error message, displayed in a red result describing constraint violation | gtMsg="File stale" |
| constraint-node-name + „MsgOK“ | Success message, displayed in a green result describing conformance | gtMsgOK="File fresh" |