# LastModified constraint

## Summary

Checks the last-modified property of the target resource. Checks can be comparisons with literal strings, or glob patterns or regular expressions.

## Element

<lastModified>

## Example

<lastModified   
 le="2020-07-08" leMsg="Files must be older than 2020-07-08"  
 gt="2020-04-01" gtMsg="Files must be from 2020-04-01 or later"/>

## Example schemas

See:

$greenfox/example-schemas/constraint-components/resourceProperties/lastModified

## Constraint nodes

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

Table 1: Constraint nodes supported by LastModified constraints. All nodes are attribues on the <lastModified> element.

|  |  |  |  |
| --- | --- | --- | --- |
| **Check node** | **Semantics** | **Example** | **Notes** |
| @eq, @ne,  @lt, @le,  @gt, @ge | Last-modified is eq/ne/lt/le/gt/ge the attribute value. | eq="2020-08-11T09:39:47.552Z"  lt="2020-08-11T10:00"  gt="2020-08-11"  lt="2020-09" | Compares as strings, thus initial substrings like “2020-09” can be used |
| @like | Last-modified matches the text pattern | like="2020-08-11T10\*" | Wildcards are \* and ? |
| @notLike | Last-modified does not match the text pattern | notLike="2020-08-11\*" | Wildcards are \* and ? |
| @matches | Last-modified matches the regex | matches="T(23|00)" | The regex is not anchored – it may describe a substring |
| @notMatches | Last-modified does not match the regex | notMatches="T(05|06)" | The regex is not anchored – it may describe a substring |

## Options

There is a single options node, represented in the following table.

Table 2: The only options node supported by LastModified constraints. The node is an attribute on the <lastModified> element.

|  |  |  |  |
| --- | --- | --- | --- |
| **Check node** | **Semantics** | **Example** | **Notes** |
| @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 [x.x]; “x” may be useful as ignorable whitespace may make the regex more readible |

## Message nodes

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

Table 2: Message nodes of LastModified constraints. The nodes are attributes on the <lastModified> 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 | gtMsg="File not stale" |