

```
+++ title = "Template functions" keywords = ["grafana", "alerting", "guide",
"contact point", "templating"] +++
```

## Template Functions

Template functions allow you to process labels and annotations to generate dynamic notifications.

Name	Argument type	Return type	Description
humanize	number or string	string	Converts a number to a more readable format, using metric prefixes.
humanize1024	number or string	string	Like humanize, but uses 1024 as the base rather than 1000.
humanizeDuration	number or string	string	Converts a duration in seconds to a more readable format.
humanizePercentage	number or string	string	Converts a ratio value to a fraction of 100.
humanizeTimestamp	number or string	string	Converts a Unix timestamp in seconds to a more readable format.
title	string	string	strings.Title, capitalises first character of each word.
toUpper	string	string	strings.ToUpper, converts all characters to upper case.
toLower	string	string	strings.ToLower, converts all characters to lower case.
match	pattern, text	boolean	regexp.MatchString Tests for a unanchored regexp match.
replaceAll	pattern, replacement, text	string	Regexp.ReplaceAllString Regexp substitution, unanchored.
graphLink	string - JSON Object with "expr" and "datasource" fields	string	Returns the path to graphical view in Explore for the given expression and data source.
tableLink	string- JSON Object with "expr" and "datasource" fields	string	Returns the path to tabular view in Explore for the given expression and data source.
args	[]interface{}	map[string]interface{}	Converts a list of objects to a map with keys, for example, arg0, arg1. Use this function to pass multiple arguments to templates.

Name	Argument type	Return type	Description
externalURL	nothing	string	Returns a string representing the external URL.
pathPrefix	nothing	string	Returns the path of the external URL.

## Examples

### humanize

**Template string** { humanize \$value }

**Input** 1234567.0

**Expected** 1.235M

### humanize1024

**TemplateString** { humanize1024 \$value }

**Input** 1048576.0

**Expected** 1Mi

### humanizeDuration

**TemplateString** { humanizeDuration \$value }

**Input** 899.99

**Expected** 14m 59s

### humanizePercentage

**TemplateString** { humanizePercentage \$value }

**Input** 0.1234567

**Expected** 12.35%

### humanizeTimestamp

**TemplateString** { \$value | humanizeTimestamp }

**Input** 1435065584.128

**Expected** 2015-06-23 13:19:44.128 +0000 UTC

**title**

**TemplateString** { \$value | title }

**Input** aa bb CC

**Expected** Aa Bb Cc

**toUpper**

**TemplateString** { \$value | toUpper }

**Input** aa bb CC

**Expected** AA BB CC

**toLowerCase**

**TemplateString** { \$value | toLower }

**Input** aA bB CC

**Expected** aa bb cc

**match**

**TemplateString** { match "a+" \$labels.instance }

**Input** aa

**Expected** true

**replaceAll**

**TemplateString** {{ reReplaceAll "localhost:(.\*)" "my.domain:\$1"  
\$labels.instance }}

**Input** localhost:3000

**Expected** my.domain:3000

**graphLink**

**TemplateString** {{ graphLink "{\"expr\": \"up\", \"datasource\":  
\"gdev-prometheus\"}" }}

**Expected** /explore?left=["now-1h","now","gdev-prometheus",{ "datasource": "gdev-prometheus", "e

**tableLink**

**TemplateString** {{ tableLink "{\"expr\": \"up\", \"datasource\":  
\"gdev-prometheus\"}" }}

**Expected** /explore?left=["now-1h","now","gdev-prometheus",{ "datasource": "gdev-prometheus", "e

**args**

```
TemplateString {{define "x"}}{{.arg0}} {{.arg1}}{{end}}{{template  
"x" (args 1 "2")}}
```

**Expected** 1 2

**externalURL**

```
TemplateString { externalURL }
```

**Expected** http://localhost/path/prefix

**pathPrefix**

```
TemplateString { pathPrefix }
```

**Expected** /path/prefix