

Better Slack alerts from Prometheus



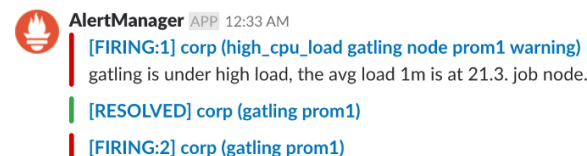
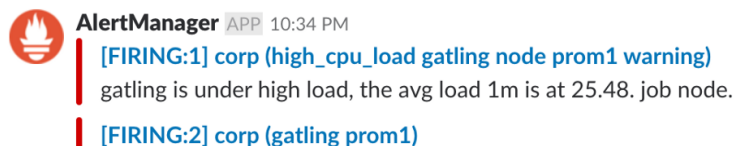
Roman Vynar

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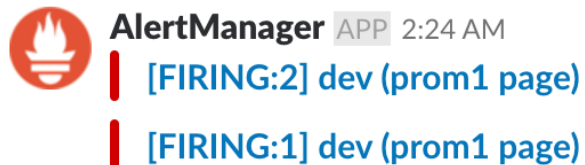
Feb 19, 2018 · 3 min read

If you are using Prometheus and Alertmanager for monitoring and have the latter to send notifications to Slack, you probably do not like the default notification template which in most of the cases hides the alert details.

For example, let's take a look:



As you can see, the default template groups by common labels and the description is only shown if it is common for all notifications which is rarely a case. Usually, when you have multiple notifications of different nature you just see this:



More alerts, less details unfortunately. How can we improve this?

There is an official documentation on customizing Alertmanager's notification template and references to Golang templating. However, if you are not very familiar with this, you may find it hard and boring.

Here is one quick way of improving your alerts.

1. Set **title** and **text** fields of `slack_config` of your Alertmanager's config to use *custom_title* and *custom_slack_message* definitions as follow:

```
receivers:
- name: slack-channel
  slack_configs:
  - channel: #monitoring
    icon_url: https://avatars3.githubusercontent.com/u/3380462
    send_resolved: true
```

```
title: '{{ template "custom_title" . }}'  
text: '{{ template "custom_slack_message" . }}'
```

Also add the following snippet in the end assuming Alertmanger can access this file:

```
templates:  
- /alertmanager/notifications.tmpl
```

2. Create notifications.tmpl:

```
{{ define "__single_message_title" }}{{ range .Alerts.Firing }}{{  
.Labels.alertname }} @ {{ .Annotations.identifier }}{{ end }}{{  
range .Alerts.Resolved }}{{ .Labels.alertname }} @ {{  
.Annotations.identifier }}{{ end }}{{ end }}  
  
{{ define "custom_title" }}[{{ .Status | toUpper }}{{ if eq .Status  
"firing" }}:{{ .Alerts.Firing | len }}{{ end }}] {{ if or (and (eq  
(len .Alerts.Firing) 1) (eq (len .Alerts.Resolved) 0)) (and (eq (len  
.Alerts.Firing) 0) (eq (len .Alerts.Resolved) 1)) }}{{ template  
"__single_message_title" . }}{{ end }}{{ end }}
```

```

{{ define "custom_slack_message" }}
{{ if or (and (eq (len .Alerts.Firing) 1) (eq (len .Alerts.Resolved) 0)) (and (eq (len .Alerts.Firing) 0) (eq (len .Alerts.Resolved) 1)) }}
{{ range .Alerts.Firing }}{{ .Annotations.description }}{{ end }}{{ range .Alerts.Resolved }}{{ .Annotations.description }}{{ end }}
{{ else }}
{{ if gt (len .Alerts.Firing) 0 }}
*Alerts Firing:*
{{ range .Alerts.Firing }}- {{ .Annotations.identifier }}: {{ .Annotations.description }}
{{ end }}{{ end }}
{{ if gt (len .Alerts.Resolved) 0 }}
*Alerts Resolved:*
{{ range .Alerts.Resolved }}- {{ .Annotations.identifier }}: {{ .Annotations.description }}
{{ end }}{{ end }}
{{ end }}
{{ end }}

```

3. Ensure each of your Prometheus alerts contains **identifier** and **description** tags in the annotations block, e.g.

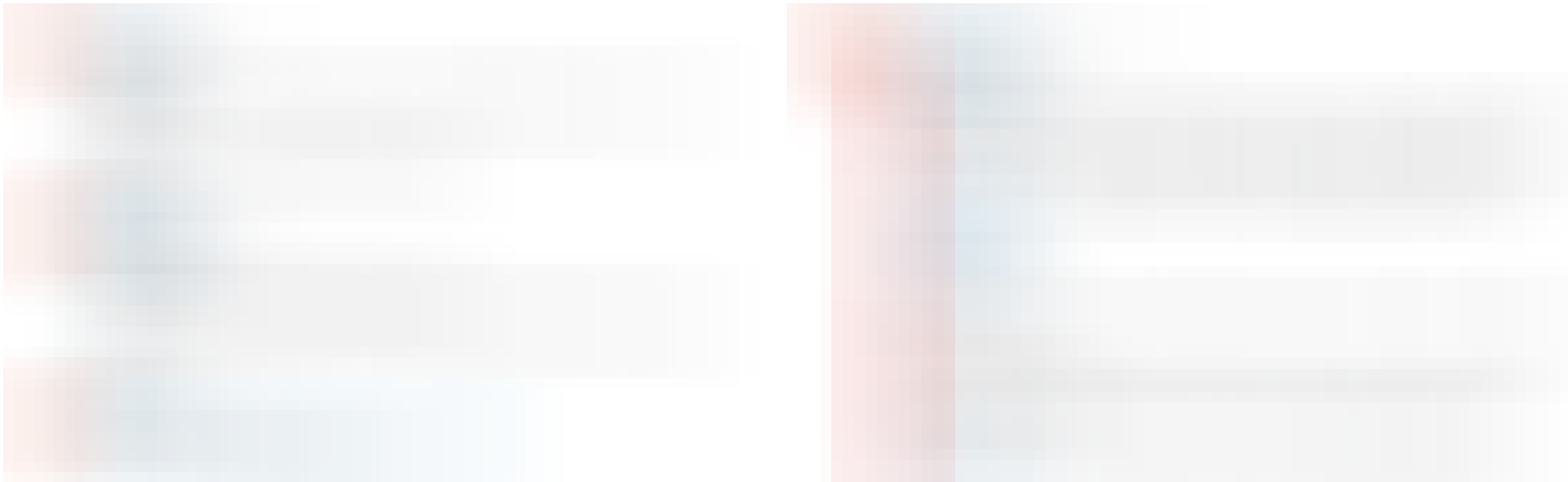
```

- alert: instance_down
  expr: up == 0
  for: 5m

```

```
annotations:  
  identifier: '{{ $labels.instance }}'  
  description: '{{ $labels.job }} exporter job has been down for  
more than 5 minutes.'
```

Done. Restart Alertmanager and your Slack notifications will get better:



As you can see a single alert contains “alert name @ instance” in the notification title. In case of multiple alerts, the message body expands with

details in a form of the list “- identifier: description” grouped by Resolved/Firing.

Also feel free to modify notifications.tpl with your own format, use different annotations, e.g. **instance** label instead of **identifier**, etc.

Enjoy!

Prometheus

Slack

Alerts

111 claps



3



Roman Vynar

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```
ipam: {  
  "type": <IPAM Plugin name, matches the name of the executable>  
  "subnet": <ip addr range to allocate the IPs from>  
  "routes": {  
    "dst": <dst to reach>  
    "gw": <next hop IP to reach the dst>  
  }  
}  
"dns": {
```

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[James Sparenberg](#)

May 25, 2018

1.) You hit a big issue with slack notifications right between the eyes. Thank you.

2.) the function toUpper caused an error by being “undefined”. Not being a go maven, I’m not sure where/how it should be defined. Suggestions?

1 response





Roman Vynar

May 26, 2018

Hi, Thanks.

toUpper() should be available according to

https://prometheus.io/docs/prometheus/latest/configuration/template_reference/ Not sure why it's not defined, if you try w/o it?



Conversation with [Roman Vynar](#).



Maciej Przygodzki

Jul 18, 2018 · 1 min read

Hi Roman, that's a nice article, i'm already using configured AlertManager, but today i've discovered the icon_url parameter. I've added it to my slack_config like below, but unfortunately it's not working, and I'm out of ideas why. Alert manager in newest release, install by Helm chart on Kubernetes. Config below:

[Read more...](#)

1 response





Roman Vynar

Jul 19, 2018

Looks like the issue is with URL you are using. May be an image is not accessible from within the Slack app. Does this one work
<https://avatars3.githubusercontent.com/u/3380462> ?



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