

Consolidando o seu conhecimento

Chegou a hora de você pôr em prática o que foi visto na aula. Para isso, execute os passos listados abaixo.

1) Montar o painel de monitoramento de infraestrutura

- Create > Dashboard > Dashboard Settings
 - Name: Aula 3 - Monitorando o Sistema

2) Criar os painéis:

- Utilização de CPU

The screenshot shows the Grafana Query Editor interface. At the top, the 'Query' tab is selected, and the database is set to 'InfluxDB'. Below this, a query is being built using a table-like interface. The query is as follows:

FROM	default	cpu	WHERE	host	=	/^\$server\$	AND	cpu	=	cpu-total	+
SELECT	field (usage_idle)	mean ()	math (* -1 + 100)	+							
GROUP BY	time (\$interval)	fill (null)	+								
FORMAT AS	Time series										
ALIAS BY	Naming pattern										

The screenshot shows the 'Visualization' settings for a 'Singlestat' panel. The settings are organized into several sections:

- Value:** Stat is set to 'Average', Font size is 80%, Prefix and Postfix are empty, Unit is 'percent (0-100)', and Decimals is 'auto'.
- Coloring:** Background, Prefix, and Postfix are all disabled. Thresholds are set to '50,80,90' with colors green, orange, and red. The 'Invert' option is checked.
- Spark lines:** The 'Show' option is disabled.
- Gauge:** The 'Show' option is enabled. Min is 0, Max is 100, Threshold labels are disabled, and Threshold markers are enabled.

```
# Instalando a ferramenta para estressar o servidor
$ sudo apt-get update
$ sudo apt-get install stress-ng
# Estressando a CPU do servidor
$ stress-ng -c 0 -l 95
```

- Utilização de FS

Query InfluxDB

A

FROM	default	disk	WHERE	host	=	/^\$server\$/	AND	path	=	/	+
SELECT	field (used_percent)	mean ()	+								
GROUP BY	time (\$interval)	fill (null)	+								
FORMAT AS	Time series										
ALIAS BY	Naming pattern										

Visualization Bar Gauge beta

Display	Field	Thresholds
Show Calculation	Title Auto	
Calc Mean	Unit percent (0-100)	+ 90 x
Orientation Vertical	Min 0	+ 75 x
Mode Retro LCD	Max 100	+ Base
	Decimals 1	

+ Add value mapping


```
# Criando um arquivo grande no servidor
$ dd if=/dev/zero of=arquivo.img bs=1M count=3000
```

- Utilização da memória RAM

Query InfluxDB

B

FROM	default	mem	WHERE	host	=	instance-1	+
SELECT	field (used_percent)	mean ()	+				
GROUP BY	time (\$interval)	fill (null)	+				
FORMAT AS	Time series						
ALIAS BY	Naming pattern						

Visualization  Graph ▾

Draw Modes	Mode Options	Hover tooltip	Stacking & Null value
Bars <input type="checkbox"/>	Fill 1 ▾	Mode All series ▾	Stack <input type="checkbox"/>
Lines <input checked="" type="checkbox"/>	Line Width 2 ▾	Sort order None ▾	Null value connected ▾
Points <input type="checkbox"/>	Staircase <input checked="" type="checkbox"/>		

[+ Add series override ?](#)

Axes

Left Y	Right Y	X-Axis
Show <input checked="" type="checkbox"/>	Show <input checked="" type="checkbox"/>	Show <input checked="" type="checkbox"/>
Unit short ▾	Unit short ▾	Mode Time ▾
Scale linear ▾	Scale linear ▾	Y-Axes Align ⓘ <input type="checkbox"/>
Y-Min auto Y-Max 100	Y-Min auto Y-Max auto	
Decimals 1	Decimals auto	
Label	Label	

```
# Estressando a Memória do servidor
```

```
$ stress-ng --vm-bytes $(awk '/MemAvailable/{printf "%d\n", $2 * 0.9;}' < /proc/meminfo)k --vm-keep
```