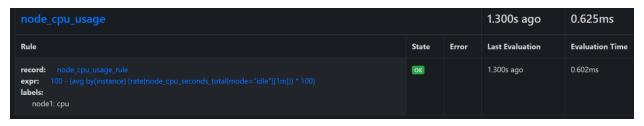# Node CPU usage

```yaml
- name: node_cpu_usage
  rules:
    - record: node_cpu_usage_rule
      expr: 100 - (avg by(instance) (rate(node_cpu_seconds_total{mode="idle"}[1m])) * 100)
      labels:
        node1: cpu
```

```yaml
- name: node_cpu_usage
  rules:
    - alert: node_cpu_usage_alert
      expr: node_cpu_usage_rule > 20
      #for: 1m
      annotations:
        summary: "cpu usage in {{ $labels.instance }}"
        description: "cpu usage is {{ $value }}"
```

```yaml
global:
route:
  receiver: 'slack'
  group_by: ['alertname']
  group_wait: 10s
  group_interval: 15s

receivers:
- name: 'slack'
  slack_configs:
    - channel: "#devops_team"
      send_resolved: true
      api_url: 'https://hooks.slack.com/services/T████████QLTHQF/P2ko8X4S46ZiUc8SyJghwrre'
```

Node exporter - node1 (1/1 up) show less

Endpoint	State	Labels	Last Scrape	Scrape Duration	Error
http://192.168.███:9100/metrics	UP	instance="192.168███:9100" job="Node exporter - node1"	101.000ms ago	23.783ms	

node_cpu_usage				1.203s ago	1.006ms
Rule		State	Error	**Last Evaluation**	**Evaluation Time**
alert: node_cpu_usage_alert **expr:** node_cpu_usage_rule > 20 **annotations:** description: cpu usage is {{ $value }} summary: cpu usage in {{ $labels.instance }}		OK		1.204s ago	0.983ms

node_cpu_usage				1.300s ago	0.625ms
Rule		State	Error	Last Evaluation	Evaluation Time
record: node_cpu_usage_rule expr: 100 - (avg by(instance) (rate(node_cpu_seconds_total{mode="idle"}[1m])) * 100) labels: node1: cpu		OK		1.300s ago	0.602ms

```
adham@node1:~$ stress --vm 2 --vm-bytes 2G --timeout 50
stress: info: [14832] dispatching hogs: 0 cpu, 0 io, 2 vm, 0 hdd
stress: info: [14832] successful run completed in 51s
adham@node1:~$
```


☑ Inactive (0) ☑ Pending (0) ☑ Firing (2)   Filter by name or labels   ☐ Show annotations

/etc/prometheus/alert_rules.yml > node_cpu_usage   firing (1)

∨ **node_cpu_usage_alert** (1 active)

```
name: node_cpu_usage_alert
expr: node_cpu_usage_rule > 20
annotations:
    description: cpu usage is {{ $value }}
    summary: cpu usage in {{ $labels.instance }}
```

Labels	State	Active Since	Value
alertname=node_cpu_usage_alert instance=192.▮▮▮:9100 node1=cpu	FIRING	2025-01-01T19:46:07.297590169Z	50.43755000000003

devops_team

Messages   🗅 Add canvas   +

[RESOLVED] node_cpu_usage_alert (192.168.▮▮▮:9100 cpu)   Today ∨

Demo App APP 8:37 PM
[FIRING:1] node_cpu_usage_alert (192.168.▮▮▮:9100 cpu)

[RESOLVED] node_cpu_usage_alert (192.168.▮▮▮:9100 cpu)

[FIRING:1] node_cpu_usage_alert (192.168.▮▮▮:9100 cpu)

[FIRING:1] node_usage_memory_alert (192.168.▮▮▮:9100 Node exporter - node1 node1)

[RESOLVED] node_cpu_usage_alert (192.168.▮▮▮:9100 cpu)

[FIRING:1] node_cpu_usage_alert (192.168.▮▮▮:9100 cpu)

[RESOLVED] node_usage_memory_alert (192.168.▮▮▮:9100 Node exporter - node1 node1)

[FIRING:1] node_usage_memory_alert (192.168.▮▮▮:9100 Node exporter - node1 node1)