

Node file descriptor usage

```
- name: node_file_descriptor_usage
  rules:
    - record: node_file_descriptor_usage_rule
      expr: node_filefd_allocated / node_filefd_maximum * 100
      labels:
        node1: node_file_descriptor_usage
      #when you open a file, the operating system creates an entry to represent that file and store the information about that opened file. So if there are 100 files opened in your OS then there will be 100 entries in OS (somewhere in kernel). These entries are represented by integers like (...100, 101, 102...). This entry number is the file descriptor.
```

```
- name: node_file_descriptor_usage
  rules:
    - alert: node_file_descriptor_usage_alert
      expr: node_file_descriptor_usage_rule > 80
      for: 1m
      annotations:
        summary: "file descriptor in {{ $labels.instance }}"
        description: "file descriptor is {{ $value }}"
```

```
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/T086Y[REDACTED]THQF/P2ko8X4S46ZiUc8SyJghwrre'
        title: '{{ .CommonAnnotations.summary }}'
        text: '{{ .CommonAnnotations.description }}
```

Node exporter - node1				1 / 1 up
Endpoint	Labels	Last scrape	State	
http://192.168.1.100:9100/metrics	instance="192.168.1.100" job="Node exporter - node1"	3.636s ago 44ms	UP	

node_file_descriptor_usage /etc/prometheus/rules.yml		last run 58.824s ago	took 1ms	every 15s
node_file_descriptor_usage_rule	node_filefd_allocated / node_filefd_maximum * 100	58.89s ago	1ms	OK
node1="node_file_descriptor_usage"				

node_file_descriptor_usage

/etc/prometheus/alert_rules.yml

last run 13.89s ago

took 1ms

every 15s

node_file_descriptor_usage_alert

14.134s ago

1ms

OK

^

node_file_descriptor_usage_rule > 80

for: 1m

description

file descriptor is {{ \$value }}

summary

file descriptor in {{ \$labels.instance }}

node_file_descriptor_usage

/etc/prometheus/alert_rules.yml

INACTIVE (1)

node_file_descriptor_usage_alert

^

node_file_descriptor_usage_rule > 80

for: 1m

description

file descriptor is {{ \$value }}

summary

file descriptor in {{ \$labels.instance }}