# prometheus

## 安装部署

wget <https://github.com/prometheus/prometheus/releases/download/v2.8.1/prometheus-2.8.1.linux-amd64.tar.gz>

tar -zxvf prometheus-2.8.1.linux-amd64.tar.gz -C /usr/local/

cd /usr/local

mv prometheus-2.8.1.linux-amd64/ prometheus

cd prometheus/

 ./prometheus --version

修改prometheus.yml文件，确定启动ip

完成修改后，可以直接启动

./prometheus

# 添加用户，后期用此账号启动服务

[root@localhost prometheus]# groupadd prometheus

[root@localhost prometheus]# useradd -g prometheus -s /sbin/nologin prometheus

# 赋权和创建prometheus运行数据目录

[root@localhost prometheus]# cd ~

[root@localhost ~]# chown -R prometheus:prometheus /usr/local/prometheus/

[root@localhost ~]# mkdir -p /home/software/prometheus-data

[root@localhost ~]# chown -R prometheus:prometheus /home/software/prometheus-data

设置开机启动

[root@localhost ~]# touch /usr/lib/systemd/system/prometheus.service

[root@localhost ~]# chown prometheus:prometheus /usr/lib/systemd/system/prometheus.service

[root@localhost ~]# vim /usr/lib/systemd/system/prometheus.service

[Unit]

Description=Prometheus

Documentation=https://prometheus.io/

After=network.target

[Service]

# Type设置为notify时，服务会不断重启

Type=simple

User=prometheus

# --storage.tsdb.path是可选项，默认数据目录在运行目录的./dada目录中

ExecStart=/usr/local/prometheus/prometheus --config.file=/usr/local/prometheus/prometheus.yml --storage.tsdb.path=/home/software/prometheus-data

Restart=on-failure

[Install]

WantedBy=multi-user.target

再次修改配置文件

vim prometheus.yml

# my global config

global:

  scrape\_interval:     15s # Set the scrape interval to every 15 seconds. Default is every 1 minute.

  evaluation\_interval: 15s # Evaluate rules every 15 seconds. The default is every 1 minute.

  # scrape\_timeout is set to the global default (10s).

# Alertmanager configuration

alerting:

  alertmanagers:

  - static\_configs:

    - targets:

      # - alertmanager:9093

# Load rules once and periodically evaluate them according to the global 'evaluation\_interval'.

rule\_files:

  # - "first\_rules.yml"

  # - "second\_rules.yml"

# A scrape configuration containing exactly one endpoint to scrape:

# Here it's Prometheus itself.

scrape\_configs:

  # The job name is added as a label `job=<job\_name>` to any timeseries scraped from this config.

  - job\_name: 'prometheus'

    # metrics\_path defaults to '/metrics'

    # scheme defaults to 'http'.

    scrape\_interval: 5s

    static\_configs:

      - targets: ['192.168.33.134:9090']

        labels:

          instance: prometheus

  - job\_name: 'centos7-machine1'

    scrape\_interval: 10s

    static\_configs:

      - targets: ['192.168.33.131:9100']

        labels:

          instance: node1

  - job\_name: 'centos7-machine2'

    scrape\_interval: 10s

    static\_configs:

      - targets: ['192.168.33.132:9100']

        labels:

          instance: node2

启动服务

[root@prometheus ~]# systemctl enable prometheus 开机启动

[root@prometheus ~]# systemctl start prometheus

设置iptables或者firewalld（测试环境可以直接关闭）

开端口：

firewall-cmd --permanent --add-port 9090/tcp

firewall-cmd --reload

注释：centos7查看开放端口

#### ****查看已开放的端口****

firewall-cmd --list-ports

**开放端口**（开放后需要要重启防火墙才生效）

firewall-cmd --zone=public --add-port=3338/tcp --permanent

**重启防火墙**

firewall-cmd --reload

**关闭端口**（关闭后需要要重启防火墙才生效）

firewall-cmd --zone=public --remove-port=3338/tcp --permanent

#### **开机启动防火墙**

systemctl enable firewalld

开启防火墙

systemctl start firewalld

#### **禁止**防火墙**开机启动**

systemctl disable firewalld

#### **停止**防火墙****

systemctl stop firewalld

完成后可以在浏览器中查看

192.168.154.129:9090/metrics

192.168.154.129:9090/graph 图形界面

yml基本语法

大小写敏感

使用缩进表示层级关系

缩进不允许使用tab，只允许空格

缩进的空格数不重要，只要相同层级的元素左对齐即可

'#'表示注释

部署node\_exporter

Node\_exporter收集机器的系统数据，这里采用prometheus官方提供的exporter，除node\_exporter外，官方还提供consul，memcached，haproxy，mysqld等exporter，具体可查看官网。

这里在prometheus服务和 node节点部署相关服务。

tar -zxvf node\_exporter-0.17.0-rc.0.linux-amd64.tar.gz -C /usr/local/

cd /usr/local/

mv node\_exporter-0.17.0-rc.0.linux-amd64 node\_exporter

设置用户（节点）

groupadd prometheus

useradd -g prometheus -s /sbin/nologin prometheus

chown -R prometheus:prometheus /usr/local/node\_exporter

[root@node1 ~]# vim /usr/lib/systemd/system/node\_exporter.service

[Unit]

Description=node\_exporter

Documentation=https://prometheus.io/

After=network.target

[Service]

Type=simple

User=prometheus

ExecStart=/usr/local/node\_exporter/node\_exporter

Restart=on-failure

[Install]

WantedBy=multi-user.target

[root@node1 ~]# systemctl enable node\_exporter

[root@node1 ~]# systemctl start node\_exporter

开启9100端口

grafana安装

wget <https://dl.grafana.com/oss/release/grafana-6.1.3-1.x86_64.rpm>

yum -y localinstall grafana-6.1.3-1.x86\_64.rpm

配置文件

配置文件位于/etc/grafana/grafana.ini，这里暂时保持默认配置即可

设置开机启动

systemctl enable grafana-server

systemctl start grafana-server

开启3000端口

浏览器登陆