Prometheus

- 系统监控与警告系统，将指标数据（cpu使用率、活动连接）存储为时间序列。
- `systemctl start prometheus` 启动
- `systemctl status prometheus` 显示状态信息
- `journalctl -u prometheus | grep error` 具体问题日志

1. 直接传输(http)

```
//源端Prometheus配置
remote_write:
  - url: http://<远程存储后端地址>/api/v1/write

//接收端Prometheus.yml配置
scrape_configs:
  - job_name: 'remote_prometheus' //数据名
    scrape_interval: 5m           //抓取数据间隔
    basic_auth:                   //验证
      username: shgddfxxzxxm
      password: Y05SAtgnzUyq
    static_configs:               //目标机器
    - targets: ['172.20.88.244:9090']
```

2. 依赖源端nginx代理(https)

```
//prometheus.yml配置
scrape_configs:
  - job_name: 'remote_prometheus' //数据名
    scrape_interval: 5m           //抓取数据间隔
    #metrics_path: /prometheus     //指定抓取端点路径
    scheme: https                 //协议
    tls_config:
      insecure_skip_verify: true
    basic_auth:                   //验证
      username: shgddfxxzxxm
      password: Y05SAtgnzUyq
    static_configs:               //目标机器
    - targets: '172.20.88.244'

//nginx配置
location  / {
    proxy_pass http://172.20.88.244:9090/;
    proxy_http_version 1.1;
    proxy_set_header Upgrade $http_upgrade;
    proxy_set_header Connection keep-alive;
    proxy_set_header Host $host;
    proxy_cache_bypass $http_upgrade;
    proxy_set_header Connection "Upgrade";
    proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
```

```
    proxy_read_timeout 3000s;
}
```

3. 通过https与接收端nginx反向代理实现安全数据传输 (**存疑**)

```
//源端Prometheus.yml配置
remote_write:
  - url: https://<nginx-proxy-address>/api/v1/write

    basic_auth: //如果 Nginx 配置了认证
        username: <username>
        password: <password>

    tls_config:
        ca_file: /path/to/ca.pem # 可选，如果需要验证服务器证书
        cert_file: /path/to/client.pem # 可选，如果需要客户端证书验证
        key_file: /path/to/client-key.pem

//接收端Prometheus.yml配置
remote_read:
  - url: https://<nginx-proxy-address>/api/v1/read

    tls_config:
        ca_file: /path/to/ca.pem # 可选，如果需要验证服务器证书
        cert_file: /path/to/client.pem # 可选，如果需要客户端证书验证
        key_file: /path/to/client-key.pem

//nginx配置
server {
    listen 443 ssl;
    server_name <nginx-proxy-address>; //17.188.60.104

    ssl_certificate /path/to/server.crt;
    ssl_certificate_key /path/to/server.key;

    location /api/v1/write {
        proxy_pass http: //<receiving-prometheus-address>:9090/api/v1/write;
        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    }

    location /api/v1/read {
        proxy_pass http: //<receiving-prometheus-address>:9090/api/v1/read;
        proxy_set_header Host $host;
        proxy_set_header X-Real-IP $remote_addr;
        proxy_set_header X-Forwarded-For $proxy_add_x_forwarded_for;
    }
}
```

4. 检验

- 在浏览器输入 http:// 接收端ip:端口/ -> Status -> Targets .