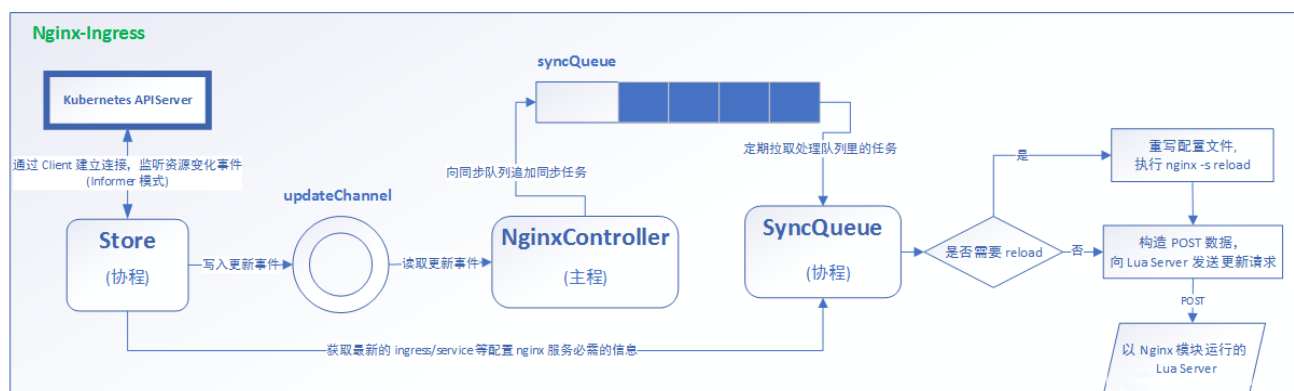
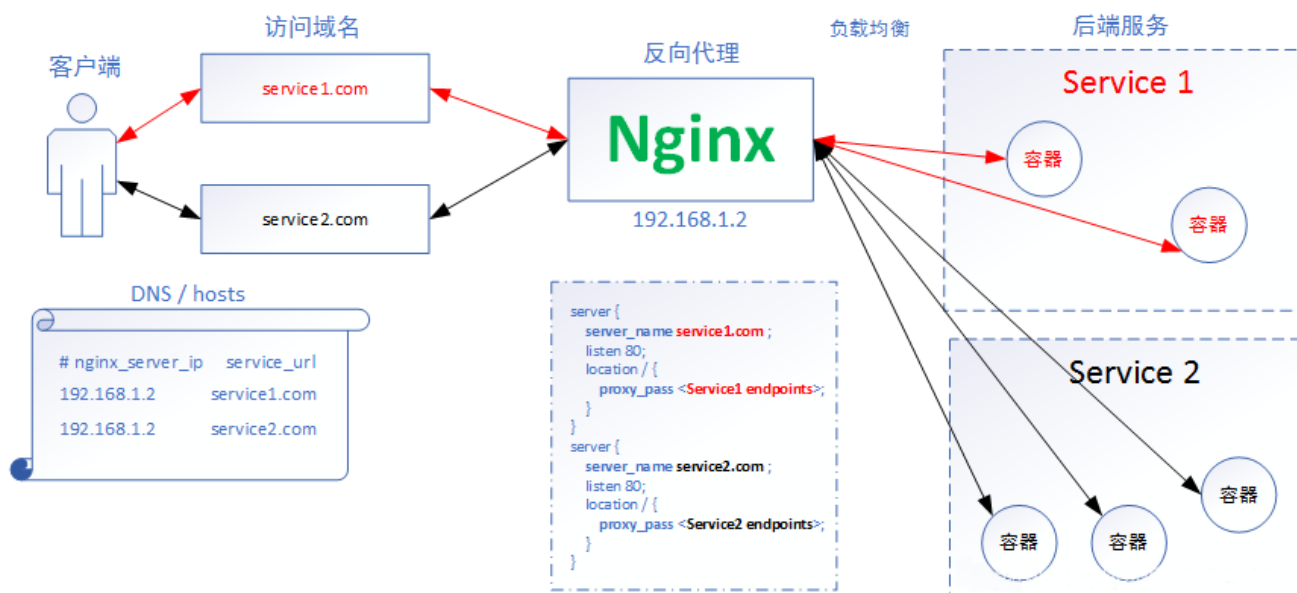


## 资料信息

Ingress-Nginx github 地址: <https://github.com/kubernetes/ingress-nginx>

Ingress-Nginx 官方网站: <https://kubernetes.github.io/ingress-nginx/>



## 部署 Ingress-Nginx

```
kubectl apply -f mandatory.yaml
kubectl apply -f service-nodeport.yaml
```

## Ingress HTTP 代理访问

deployment、Service、Ingress Yaml 文件

```
apiVersion: extensions/v1beta1
```

```

kind: Deployment
metadata:
  name: nginx-dm
spec:
  replicas: 2
  template:
    metadata:
      labels:
        name: nginx
    spec:
      containers:
        - name: nginx
          image: wangyanglinux/myapp:v1
          imagePullPolicy: IfNotPresent
          ports:
            - containerPort: 80
---
apiVersion: v1
kind: Service
metadata:
  name: nginx-svc
spec:
  ports:
    - port: 80
      targetPort: 80
      protocol: TCP
  selector:
    name: nginx
---
apiVersion: extensions/v1beta1
kind: Ingress
metadata:
  name: nginx-test
spec:
  rules:
    - host: www1.atguigu.com
      http:
        paths:
          - path: /
            backend:
              serviceName: nginx-svc
              servicePort: 80

```

## Ingress HTTPS 代理访问

创建证书，以及 cert 存储方式

```
openssl req -x509 -sha256 -nodes -days 365 -newkey rsa:2048 -keyout tls.key -out tls.crt -subj
"/CN=nginxsvc/O=nginxsvc"
kubectl create secret tls tls-secret --key tls.key --cert tls.crt
```

## deployment、Service、Ingress Yaml 文件

```
apiVersion: extensions/v1beta1
kind: Ingress
metadata:
  name: nginx-test
spec:
  tls:
    - hosts:
        - foo.bar.com
      secretName: tls-secret
  rules:
    - host: foo.bar.com
      http:
        paths:
          - path: /
            backend:
              serviceName: nginx-svc
              servicePort: 80
```

## Nginx 进行 BasicAuth

```
yum -y install httpd
htpasswd -c auth foo
kubectl create secret generic basic-auth --from-file=auth
```

```
apiVersion: extensions/v1beta1
kind: Ingress
metadata:
  name: ingress-with-auth
  annotations:
    nginx.ingress.kubernetes.io/auth-type: basic
    nginx.ingress.kubernetes.io/auth-secret: basic-auth
    nginx.ingress.kubernetes.io/auth-realm: 'Authentication Required - foo'
spec:
  rules:
    - host: foo2.bar.com
      http:
        paths:
          - path: /
            backend:
              serviceName: nginx-svc
              servicePort: 80
```

# Nginx 进行重写

名称	描述	值
nginx.ingress.kubernetes.io/rewrite-target	必须重定向流量的目标URI	串
nginx.ingress.kubernetes.io/ssl-redirect	指示位置部分是否仅可访问SSL（当Ingress包含证书时默认为True）	布尔
nginx.ingress.kubernetes.io/force-ssl-redirect	即使Ingress未启用TLS，也强制重定向到HTTPS	布尔
nginx.ingress.kubernetes.io/app-root	定义Controller必须重定向的应用程序根，如果它在'/'上下文中	串
nginx.ingress.kubernetes.io/use-regex	指示Ingress上定义的路径是否使用正则表达式	布尔

```
apiVersion: extensions/v1beta1
kind: Ingress
metadata:
  name: nginx-test
  annotations:
    nginx.ingress.kubernetes.io/rewrite-target: http://foo.bar.com:31795/hostname.html
spec:
  rules:
    - host: foo10.bar.com
      http:
        paths:
          - path: /
            backend:
              serviceName: nginx-svc
              servicePort: 80
```