Prerequisites

- 1 Mysql DB cluster
- 1 Kafka cluster
- 1 or more proxmox clusters
- FTC source code

Deployment

Configuration

Edit the configuration file based on your real environment

(locates under deploy/k8s/$env/cm.yml)

```
env: ftc-prod
http:
  host: 0.0.0.0
  port: 8000
template:
  ftp_base_forticsp: test@10.65.10.243:images/forticsp
  ftp_base_forticsp_manager: test@10.65.10.243:images/forticspmanager
  ftp_base_fortigate: test@10.65.10.243:images/fortigate
  ftp_passwd: test
  template_dir: /var/lib/vz/template/fortinet
  auto_template_id:
    start: 8000
    end: 8999
  manual_template_id:
    start: 9000
    end: 9999
proxmox:
  ftc-qa-1:
    api_endpoint: https://10.65.184.121:8006/api2/json
    token_id: api@pve!dev
    token_secret: 2168736a-e8e2-419e-9551-6c8907f4e762
    active: true
    base_cluster: true
    system_user: root
    system_secret: Forti1@#
    template_nodes: blade1-1,blade1-2,blade1-3
    mgmt_bridge: vmbr1
    data_bridge: vmbr1
  ftc-qa-2:
    api_endpoint: https://10.65.184.125:8006/api2/json
    token_id: api@pve!dev
    token_secret: 1636ade1-14ee-4eca-a605-a32235ddd872
    active: true
    base_cluster: false
    system_user: root
    system_secret: Forti1@#
    template_nodes: blade1-5,blade1-6,blade1-7
    mgmt_bridge: vmbr1
    data_bridge: vmbr1
proxmox_id:
  start: 3000
  end: 5999
scheduler:
  filters: CPUFilter,RamFilter,ImgFilter,LocalStoreFilter
  weighters: CPUWeighter,RAMWeighter
  ocr_cpu: 4
  ocr_mem: 1
  weight_cpu: 0.1
  weight_mem: 0.9
storage:
  pool: VM-Storage-Pool-QA
dhcp:
  url: http://10.65.184.52:5000
  username: admin
  password: Forti1@#
engine:
  retry: 7
  task_limit: 60
  window_size: 24
  task_trigger_min: 1
  collect_trigger_min: 1
  media_offset: 100000
data:
  db:
    user:
      driver: mysql
      dsn: root:123456@tcp(mysql.mysql.svc.cluster.local:3306)/ftc-qa?charset=utf8mb4&parseTime=True&loc=Local
  kafka:
    bootstrap: 10.65.173.23:32001,10.65.173.25:32001,10.65.173.10:32001
    topic: Cloud-Platform-FTC-QA
log:
  log_level: debug
  encoding: console
```

Compile & Package & Make images

```
cd deploy/build && \
docker  build --file "./deploy/build/Dockerfile"  --tag harbor.fortihawkeye.com/ftnt/ftc:v1.0.83 --build-arg
APP_RELATIVE_PATH="./cmd/server/main.go" . && \
docker push harbor.fortihawkeye.com/ftnt/ftc:v1.0.83
```

DB Deployment

DB schema deployment

```
# Run the below script file
deploy/$env/ftc_schema.sql
```

DB basic data initialization

```
# Run the below script file
deploy/$env/ftc_image.sql
deploy/$env/ftc_network.sql
deploy/$env/ftc_host.sql
```

Application Deployment

```
cd deploy/k8s/$env

kubectl apply -f cm.yml;
kubectl apply -f namespace.yml;
kubectl apply -f ingress.yml;
kubectl apply -f service.yml;
kubectl apply -f sts.yml;
```

Upgrade

like what we do in the Deployment part,

1. Make some updates over the code w/o configuration as per your business changes
2. Compile and package and make images
3. Alter the schema of DB or add initialize data
4. Apply the change in the K8S cluster