Duplicating Encoding Profiles

Oct 2021

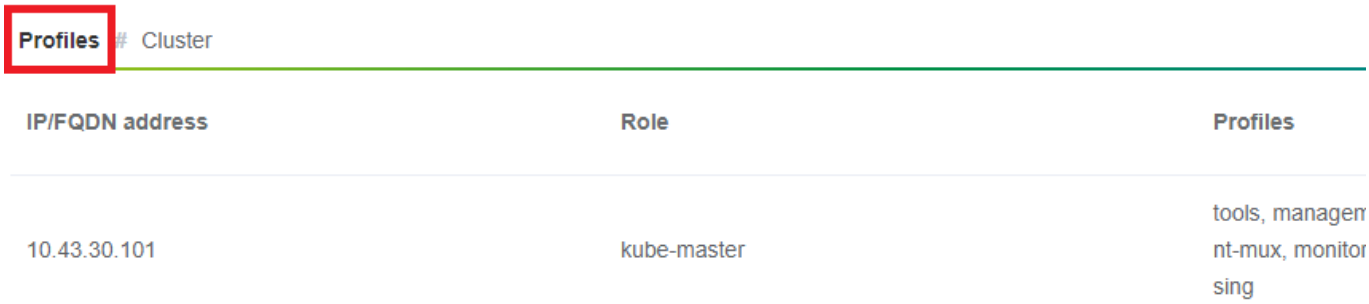
Introduction

IPHE comes with a set of pre-defined encoding profiles, but no way to manually add a new one from the MDT UI (at the time of writing).

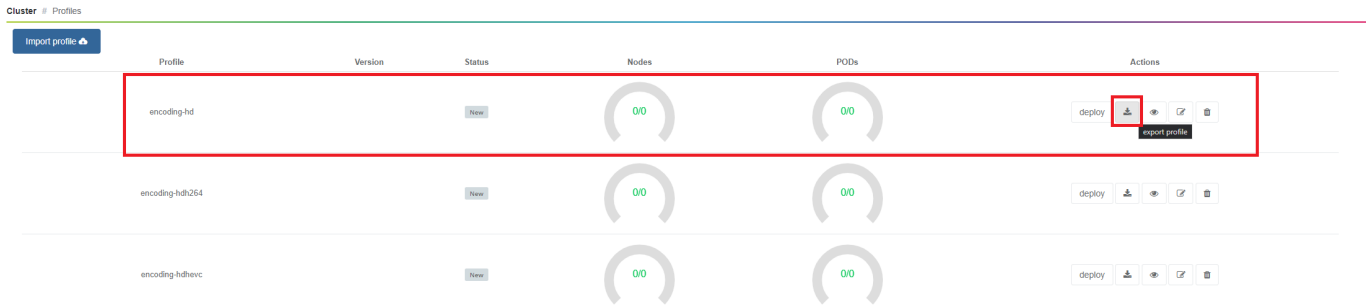
To create a new encoding profile, the best way to do this is to duplicate and existing MDT profile. We just then need to edit a few lines in the profile and re-upload it.

Download an existing encoding profile

Open the MDT application (https://ipaddress:30443) and login using mdt-admin / changeme.



Now look for an appropriate encoding profile to download (I normally take encoding-hd) and select the 'export profile' button.



The encoding profile (a .yaml file) will now download.

— Alan Walker 2021/09/21 14:49 — Alan Walker 2021/09/21 14:49

Editing the encoding profile

Open the .yaml file (preferably in an editor that properly supports .yaml file formats (not notepad)) and save it to a new filename. If this is for a PoD per server then you can just save it as a new encoding filename like 'encoding-hd-custom.yaml' for example. If this is for a PoD per service, then save it including the service name, encoding-hd-bbc1.yaml for example.

Below is the format of the default encoding-hd yaml file:

```
mdt-kinds:
  - kind: profile
    name: encoding-hd
    version: ''
    packages:
      - deploy-package: encoding-live-worker-hd
        version: 25.14.76+4.0.19
  - kind: deploy-package
    deploy-package:
      name: encoding-live-worker-hd
      version: 25.14.76+4.0.19
    chart:
      name: encoding-live-worker
      version: 25.14.76
    namespace: '{{ products_var.namespace }}'
    deploy_list:
      - mkel-hd1
    options:
      mdt:
        deployment_stage: 5
        upgrade:
          policy: immediate
      helm:
        wait: false
        timeout: 300
    values:
      image:
        serverdaemon:
          repository: '{{ products_var.docker_registry }}/mediakind/server-daemon'
          tag: '{{ products_var.server_daemon.tag }}'
        worker:
          repository: '{{ products_var.docker_registry }}/mediakind/encoding-live-worker'
        redis:
          repository: '{{ products_var.docker_registry }}/redis'
          tag: '{{ products_var.redis.tag }}'
        alarmProxy:
          repository: '{{ products_var.docker_registry }}/mediakind/alarm-proxy'
          tag: '{{ products_var.alarm_proxy.tag }}'
        initcontainer:
          repository: '{{ products_var.docker_registry }}/busybox'
          tag: 1.30.1
      alarmsViaRedisInWorkerPod: '{{ products_var.features.alarmsViaRedisInWorkerPod }}'
      el_worker:
        server_mngt_nic: '{{ products_var.server_mngt_nic }}'
        mpeg4cfg: |
          perChannelLicensing=true
      qsv:
        enable: false
      mongo:
        name: '{{ products_var.mongo.name }}'
        database: '{{ products_var.mongo.replicasetname }}'
        replica: '{{ products_var.mongo.replica }}'
      muhook:
        enable: '{{ products_var.features.muconv }}'
        interface: '{{ products_var.server_mngt_nic }}'
        process_name: '*liveTranscoder'
        log_level: 4
        log_output: stderr
      unified_ui:
        name: api-gateway
      rabbitmq:
        name: '{{ products_var.rabbitmq.name }}'
      etcd_mu:
        name: '{{ products_var.etcd.name }}'
        port: '{{ products_var.etcd.port }}'
      redis:
        name: '{{ products_var.redis.name }}'
      volumes:
        log:
```

```
        enable: '{{ products_var.log_volume }}'
    license_server_addr: '{{ products_var.license_server }}'
    server_processing_name: LiveEncoder
    nodeSelector: '{{ mdt.current_profile.profile_name_label }}'
    resources:
      requests:
        cpu: 9
    privilegedInitContainer:
      enabled: true
      command:
        - sysctl
        - '-w'
    affinity:
      podAntiAffinity:
        requiredDuringSchedulingIgnoredDuringExecution:
          - topologyKey: kubernetes.io/hostname
            labelSelector:
              matchLabels:
                app: encoding-live-worker
```

We need to change a few lines, see below for a side-by-side comparison, where the original text is on the left and the edited text on the right.

```
1  mdt-kinds:
2    - kind: profile
3      name: encoding-hd
4      version: ''
5      packages:
6        - deploy-package: encoding-live-worker-hd
7          version: 25.14.76+4.0.19
8    - kind: deploy-package
9      deploy-package:
10       name: encoding-live-worker-hd
11       version: 25.14.76+4.0.19
12     chart:
13       name: encoding-live-worker
14       version: 25.14.76
15     namespace: '{{ products_var.namespace }}'
16     deploy_list:
17       - mkel-hd1
18     options:
19       mdt:
20         deployment_stage: 5
21         upgrade:
22           policy: immediate
23       helm:
24         wait: false
25         timeout: 300
26     values:
27       image:
28         serverdaemon:
```

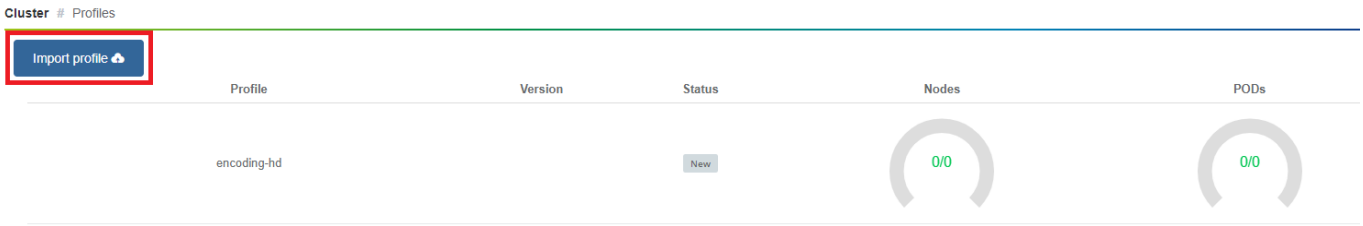
```
1  mdt-kinds:
2    - kind: profile
3      name: encoding-sky-hd-01
4      version: ''
5      packages:
6        - deploy-package: encoding-live-worker-sky-hd-01
7          version: 25.14.76+4.0.19
8    - kind: deploy-package
9      deploy-package:
10       name: encoding-live-worker-sky-hd-01
11       version: 25.14.76+4.0.19
12     chart:
13       name: encoding-live-worker
14       version: 25.14.76
15     namespace: '{{ products_var.namespace }}'
16     deploy_list:
17       - sky-01
18     options:
19       mdt:
20         deployment_stage: 5
21         upgrade:
22           policy: immediate
23       helm:
24         wait: false
25         timeout: 300
26     values:
27       image:
28         serverdaemon:
```

The first three lines we edit are just for the profile names, and the associated deploy package. Line 17 is where we change the deploy list names, if you are working with a PoD per node, then you add an entry here for each node that you want this encoding profile for, so if you want 5 encoding profiles of this type, you enter the names of those five encoding profiles (mkel1, mkel2, mkel3, mkel4 and mkel5 for instance).

If you are working with PoD per service, you would enter the service name here, and will only have a single item in your deploy list, bbc1 for instance. You will have to create this file for each service PoD you will require.

Adding the new encoding profile to MDT

Once you have created your new encoding profiles, you can upload them to MDT. To do this use the 'Import Profile' button at the top right of the MDT web UI (ensure you are in profile view).



Now select your profile