

NKIA API eXpression

Below are nokubectl specific flags

nokubectl specific flags cannot be used in combination with each other or other options,

aka mutually exclusive

ex) nokubectl {flag}

```
- init:
    description:  initiate  (or re-init) a nokubectl config and
runtime directory
- help:
    description:  given command line argument, prints out
relevant information
- interactive:
    description:  (recommended) run command in interactive mode

- apix-md:
    description:  exports all apix information to a markdown
file
- apix-js:
    description:  exports all apix information to an importable
js file
- apix-py:
    description:  exports all apix information to an importable
py file
```

Below are orch.io request specific options**

ex) nokubectl {arg1} {arg2} {arg3} [--req_option_name] {req_option_val}

```
- to:
    description:  target cluster registered on orch.io server
- as:
    description:  request option to apply when making request
to orch.io, currently available [ 'admin' ]
```

Below are all available queries and corresponding required options

queries are made of arguments and then joined by the options

ex) nokubectl {arg1} {arg2} {arg3} [--option_name] {option_val}

```
- conncheck:
    description:  checking orch.io connection
    options:
        # this is admin query, which is used
        # with [ --as admin ]
- keygen:
    description:  generate and receive private key
    options:
```

```

        # this is admin query, which is used
        # with [ --as admin ]
- addcluster:
    description: generate and receive token for connecting a
working cluster
    options:
        # this is admin query, which is used
        # with [ --as admin ]
- admin install env:
    description: set up installation environment
    options:
        --localip: local ip adress
        # this is nkia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- admin install mainctrl:
    description: set up main control plane
    options:
        --localip: local ip adress
        --osnm: OS distro version
        --cv: Kubernetes version at the same time
container runtime version
        # this is nkia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- admin install subctrl prep:
    description: prepare sub control plane
    options:
        --targetip: ssh server ip
        --targetid: ssh user id
        --targetpw: ssh user password
        # this is nkia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- admin install subctrl add:
    description: set up sub sontrrol plane
    options:
        --targetip: ssh server ip
        --targetid: ssh user id
        --targetpw: ssh user password
        --localip: local ip adress
        --osnm: OS distro version
        --cv: Kubernetes version at the same time
container runtime version
        --token: join token (the whole 'print token'
output)
        --nrole: node role
        --nid: node id (given node name)
        # this is nkia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- admin install worker:
    description: set up worker
    options:
        --targetip: ssh server ip
        --targetid: ssh user id
        --targetpw: ssh user password
        --localip: local ip adress

```

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--osnm: OS distro version
--cv: Kubernetes version at the same time
container runtime version
--token: join token (the whole 'print token'
output)
--nrole: node role
--nid: node id (given node name)
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- admin install volume prep:
  description: prepare volume
  options:
    --targetip: ssh server ip
    --targetid: ssh user id
    --targetpw: ssh user password
    --localip: local ip adress
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- admin install volume add:
  description: set up volume
  options:
    --targetip: ssh server ip
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- admin install toolkit:
  description: set up toolkit
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- admin install log:
  description: check set up logs
  options:
    --islocal: indicates wheter or not we need remote
ssh connection [ true | false ]
    --targetip: ssh server ip
    --targetid: ssh user id
    --targetpw: ssh user password
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- admin install lock get:
  description: get lock info on installation process
  options:
    --islocal: indicates wheter or not we need remote
ssh connection [ true | false ]
    --targetip: ssh server ip
    --targetid: ssh user id
    --targetpw: ssh user password
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- admin install lock set:
  description: set lock info on installation process
  options:
    --islocal: indicates wheter or not we need remote
ssh connection [ true | false ]

```

```

--targetip:  ssh server ip
--targetid:  ssh user id
--targetpw:  ssh user password
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- admin init:
  description:  initiate admin function
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- admin init log:
  description:  get admin initiation log
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- setting create namespace:
  description:  create namespace
  options:
    --ns:  namespace
    --repoaddr:  repository address
    --regaddr:  registry address
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- setting set repo:
  description:  set repository per project
  options:
    --ns:  namespace
    --repoaddr:  repository address
    --repoid:  repository id
    --repopw:  repository password
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- setting set reg:
  description:  set registry per project
  options:
    --ns:  namespace
    --regaddr:  registry address
    --regid:  registry id
    --regpw:  registry password
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- setting create monitoring:
  description:  create monitoring
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- toolkit build:
  description:  build from docker-compose.yaml
  options:
    --ns:  namespace
    --repoaddr:  repository address
    --regaddr:  registry address
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually

```

- toolkit build log:
 - description: get build log
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource nodes:
 - description: get nodes
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource pods:
 - description: get pods
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource pods log:
 - description: get logs from a specific pod
 - options:
 - ns: namespace
 - podnm: pod name
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource service:
 - description: get serivces
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource deployment:
 - description: get deployments
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource event:
 - description: get events
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource resource:
 - description: get resorces
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource namespace:
 - description: get namespace
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually

- resource ingress:
 - description: get ingress
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource nodeport:
 - description: get nodeport
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource pod scheduled:
 - description: get json info on scheduled pods
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource pod unscheduled:
 - description: get json info on unscheduled pods
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource container cpu:
 - description: get json info on cpu usage by containers
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource container mem:
 - description: get json info on memory usage by containers
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource container fs read:
 - description: get json info on filesystem read by containers
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource container fs write:
 - description: get json info on filesystem write by containers
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource container net receive:
 - description: get json info on network receive by

```

containers
  options:
    --ns: namespace
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource container net transmit:
  description: get json info on network transmission by
containers
  options:
    --ns: namespace
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource volume available:
  description: get json info on volume availability
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource volume capacity:
  description: get json info on volume capacity
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource volume used:
  description: get json info on volume usage
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource node temperature:
  description: get json info on node temperature
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource node temperature change:
  description: get json info on node temperature change

  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource node temperature average:
  description: get json info on node temperature average

  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource node process:
  description: get json info on node processes
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- resource node cores:
  description: get json info on node cores
  options:
    # this is nkia query, which is used
    # with [ --to $CLUSTER_ID ] usually

```

- resource node mem:
 - description: get json info on node memory
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource node mem total:
 - description: get json info on total node memory
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource node disk read:
 - description: get json info on node disk read
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource node disk write:
 - description: get json info on node disk write
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource node net receive:
 - description: get json info on network receive
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource node net transmit:
 - description: get json info on network transmission
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- resource node disk written:
 - description: get json info on bytes written per node
 - options:
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- apply reg secret:
 - description: add registry secret to a cluster
 - options:
 - ns: namespace
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- apply distro:
 - description: deploy a project onto a cluster
 - options:
 - ns: namespace
 - repoaddr: repository address
 - regaddr: registry address
 - # this is nkia query, which is used
 - # with [--to \$CLUSTER_ID] usually
- apply create operation source:
 - description: create operation source file for various actions


```

options:
    --ns: namespace
    --repoaddr: repository address
    --regaddr: registry address
    # this is nokia query, which is used
    # with [ --to $CLUSTER_ID ] usually
- apply restart:
    description: restart (update) deployment
    options:
        --ns: namespace
        --resource: resource type name such as [
deployment | service ]
        --resourcenm: resource name that has a specific
resource type
        # this is nokia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- apply rollback:
    description: rollback deployment
    options:
        --ns: namespace
        --resource: resource type name such as [
deployment | service ]
        --resourcenm: resource name that has a specific
resource type
        # this is nokia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- apply kill:
    description: delete deployment
    options:
        --ns: namespace
        --resource: resource type name such as [
deployment | service ]
        --resourcenm: resource name that has a specific
resource type
        # this is nokia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- apply net refresh:
    description: restart cluster network
    options:
        # this is nokia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- apply hpa:
    description: apply hpa to a deployment
    options:
        --ns: namespace
        --resource: resource type name such as [
deployment | service ]
        --resourcenm: resource name that has a specific
resource type
        # this is nokia query, which is used
        # with [ --to $CLUSTER_ID ] usually
- apply hpa undo:
    description: remove hpa from a deployment
    options:

```

```

--ns: namespace
--resource: resource type name such as [
deployment | service ]
--resourcenm: resource name that has a specific
resource type
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- apply qos:
description: apply qos to a deployment
options:
--ns: namespace
--resource: resource type name such as [
deployment | service ]
--resourcenm: resource name that has a specific
resource type
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- apply qos undo:
description: remove qos (to default) from a deployment
options:
--ns: namespace
--resource: resource type name such as [
deployment | service ]
--resourcenm: resource name that has a specific
resource type
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- apply ingress:
description: apply ingress to a service
options:
--ns: namespace
--hostnm: host name
--svcnm: service name
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- apply ingress undo:
description: remove ingress from a service
options:
--ns: namespace
--hostnm: host name
--svcnm: service name
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- apply nodeport:
description: apply nodeport to a deployment
options:
--ns: namespace
--svcnm: service name
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
- apply nodeport undo:
description: remove nodeport from a deployment
options:

```

```
--ns: namespace
--svcnm: service name
# this is nkia query, which is used
# with [ --to $CLUSTER_ID ] usually
```