CLI administration

rabbitmqctl

rabbitmqctl

- a command line tool for managing a RabbitMQ broker.
- It performs all actions by connecting to one of the broker's nodes.
- {rabbitmq installation folder}/sbin/

rabbitmqctl

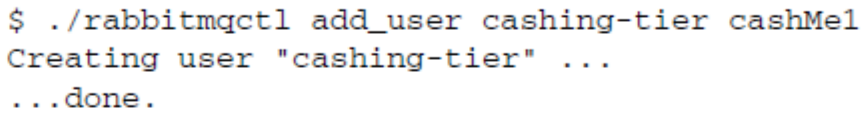
```
#rabbitmqctl add_vhost [vhost_name]
#rabbitmqctl status
#rabbitmqctl delete_vhost [vhost_name]
#rabbitmqctl list_vhosts
#rabbitmqctl stop
```

(Stops the Erlang node on which RabbitMQ is running)

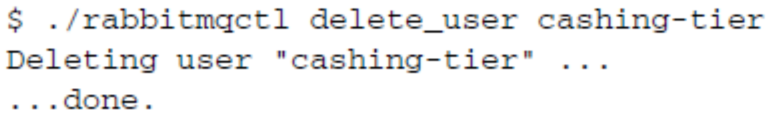
```
#rabbitmqctl stop_app
```

(Stops the RabbitMQ application, leaving the runtime (Erlang VM) running)

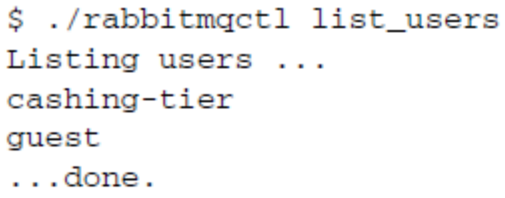
User Management - CLI



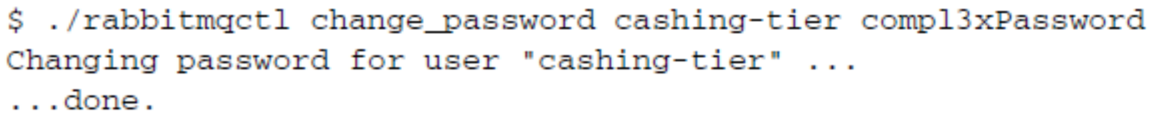
```
$ ./rabbitmqctl add_user cashing-tier cashMe1
Creating user "cashing-tier" ...
...done.
```



```
$ ./rabbitmqctl delete_user cashing-tier
Deleting user "cashing-tier" ...
...done.
```

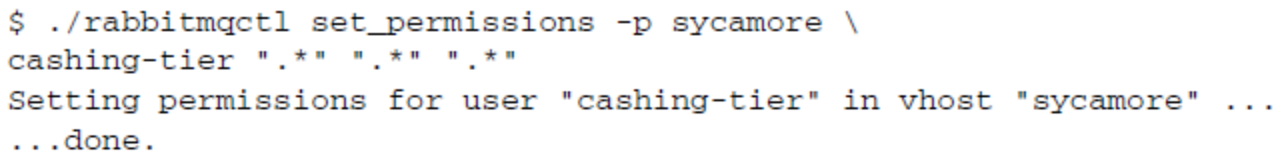


```
$ ./rabbitmqctl list_users
Listing users ...
cashing-tier
guest
...done.
```



```
$ ./rabbitmqctl change_password cashing-tier compl3xPassword
Changing password for user "cashing-tier" ...
...done.
```

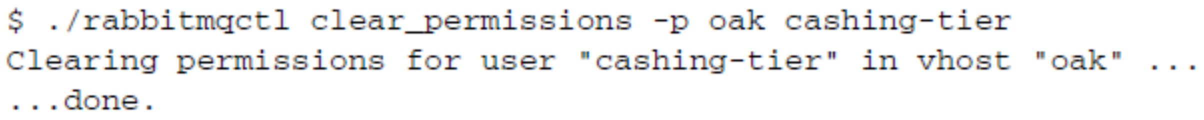
User Management - CLI



```
$ ./rabbitmqctl set_permissions -p sycamore \
cashing-tier ".*" ".*" ".*"
Setting permissions for user "cashing-tier" in vhost "sycamore" ...
...done.
```

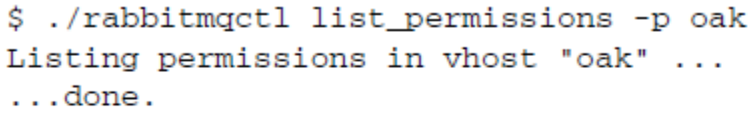
User Management - CLI

- remove a user’s permissions on any vhost



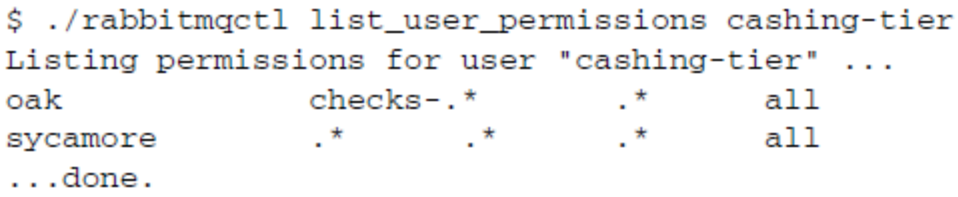
```
$ ./rabbitmqctl clear_permissions -p oak cashing-tier
Clearing permissions for user "cashing-tier" in vhost "oak" ...
...done.
```

Verify permissions



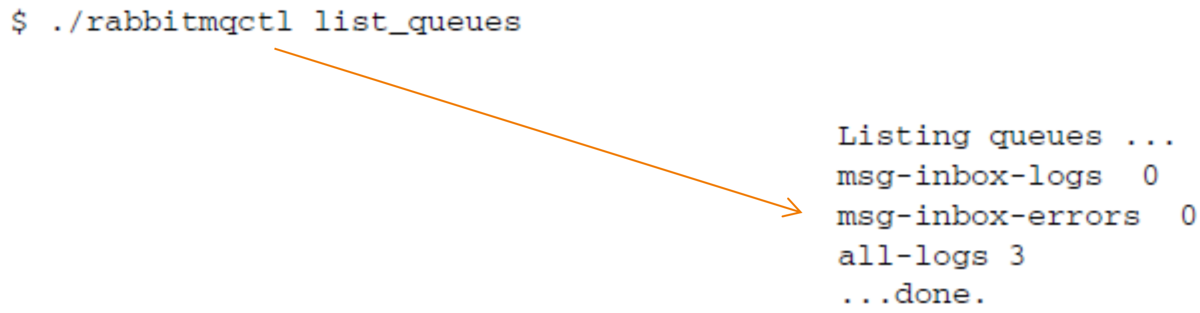
```
$ ./rabbitmqctl list_permissions -p oak
Listing permissions in vhost "oak" ...
...done.
```

across *all vhosts*



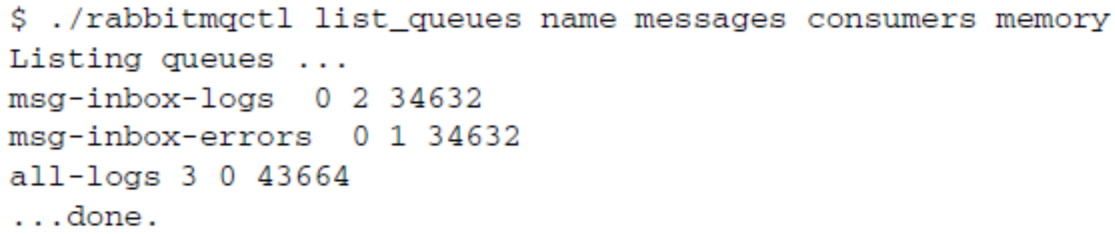
```
$ ./rabbitmqctl list_user_permissions cashing-tier
Listing permissions for user "cashing-tier" ...
oak             checks-.*       .*      all
sycamore        .*      .*      .*      all
...done.
```

LISTING QUEUES AND MESSAGE COUNTS



```
$ ./rabbitmqctl list_queues
```

```
Listing queues ...
msg-inbox-logs   0
msg-inbox-errors   0
all-logs 3
...done.
```

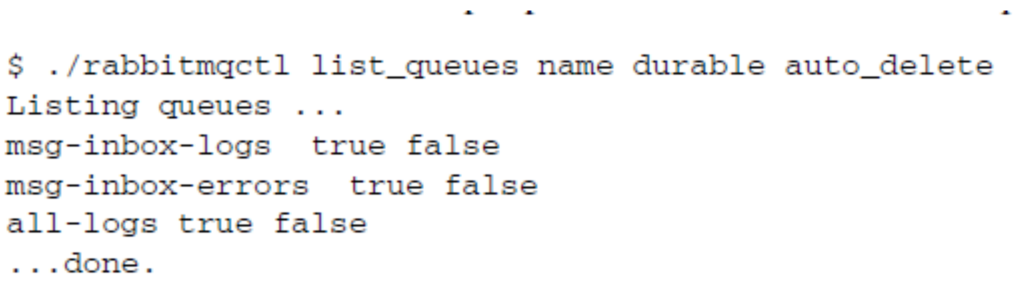


```
$ ./rabbitmqctl list_queues name messages consumers memory
Listing queues ...
msg-inbox-logs   0 2 34632
msg-inbox-errors   0 1 34632
all-logs 3 0 43664
...done.
```

HP

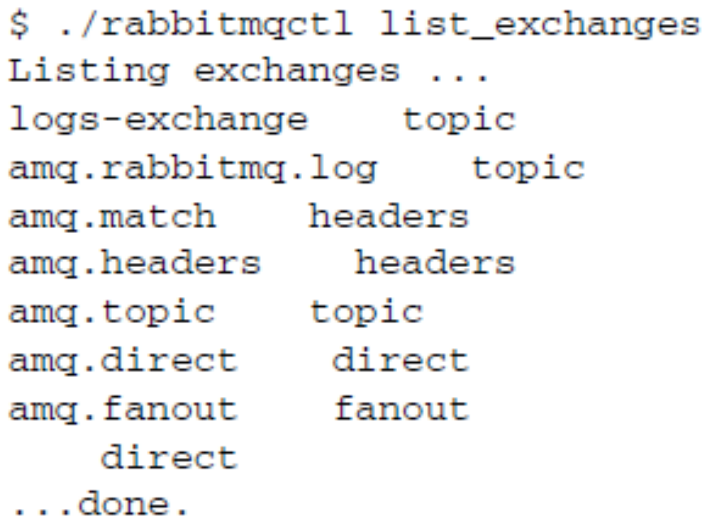
rabbitmqctl

- check the properties used to declare the queue



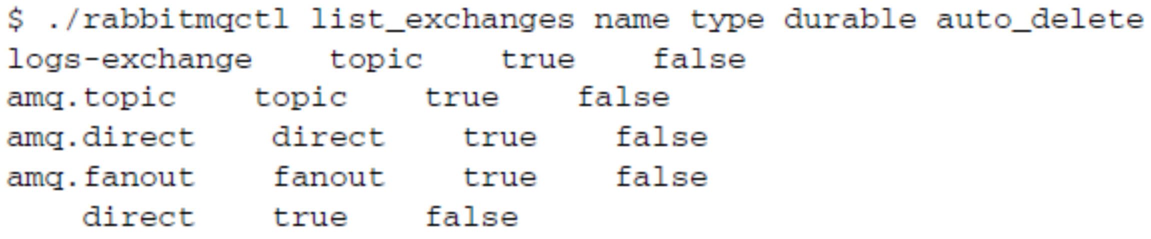
```
$ ./rabbitmqctl list_queues name durable auto_delete
Listing queues ...
msg-inbox-logs  true false
msg-inbox-errors  true false
all-logs true false
...done.
```

VIEWING EXCHANGES AND BINDINGS

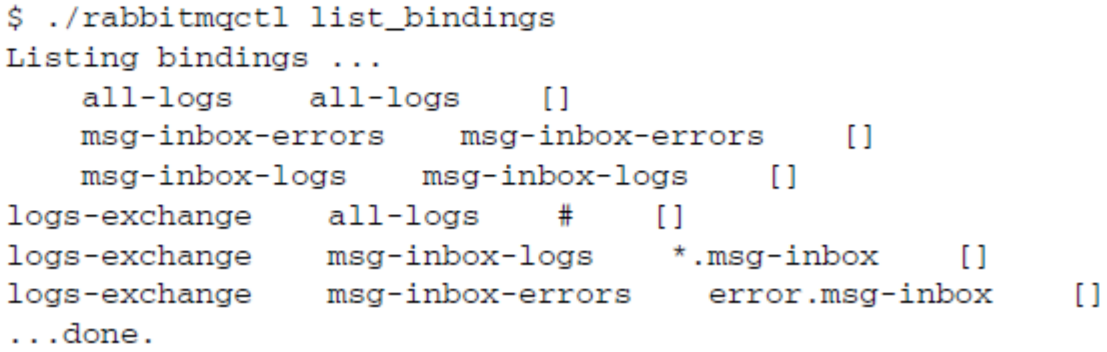


```
$ ./rabbitmqctl list_exchanges
Listing exchanges ...
logs-exchange    topic
amq.rabbitmq.log    topic
amq.match    headers
amq.headers    headers
amq.topic    topic
amq.direct    direct
amq.fanout    fanout
    direct
...done.
```

rabbitmqctl



```
$ ./rabbitmqctl list_exchanges name type durable auto_delete
logs-exchange    topic    true    false
amq.topic    topic    true    false
amq.direct    direct    true    false
amq.fanout    fanout    true    false
    direct    true    false
```



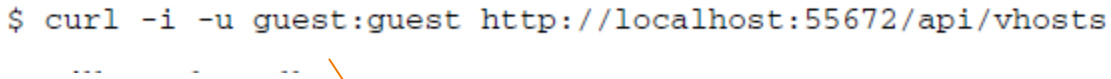
```
$ ./rabbitmqctl list_bindings
Listing bindings ...
    all-logs    all-logs    []
    msg-inbox-errors    msg-inbox-errors    []
    msg-inbox-logs    msg-inbox-logs    []
logs-exchange    all-logs    #    []
logs-exchange    msg-inbox-logs    *.msg-inbox    []
logs-exchange    msg-inbox-errors    error.msg-inbox    []
...done.
```

HTTP API

HP Overview

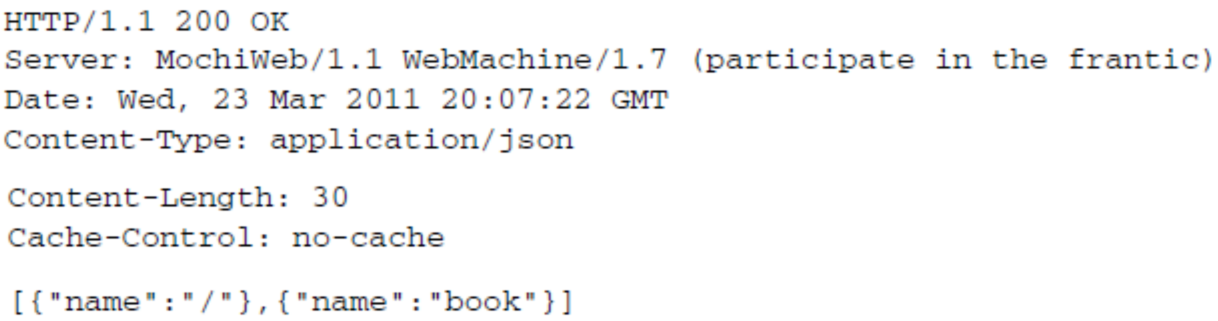
- Anything you can do with the Management plugin (Management Web UI), can also be done by using curl

list the vhosts



```
$ curl -i -u guest:guest http://localhost:55672/api/vhosts
```

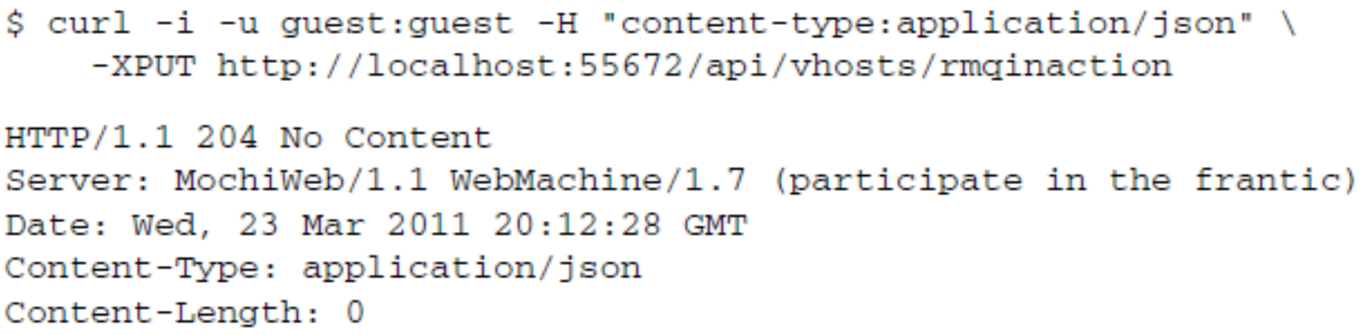
output



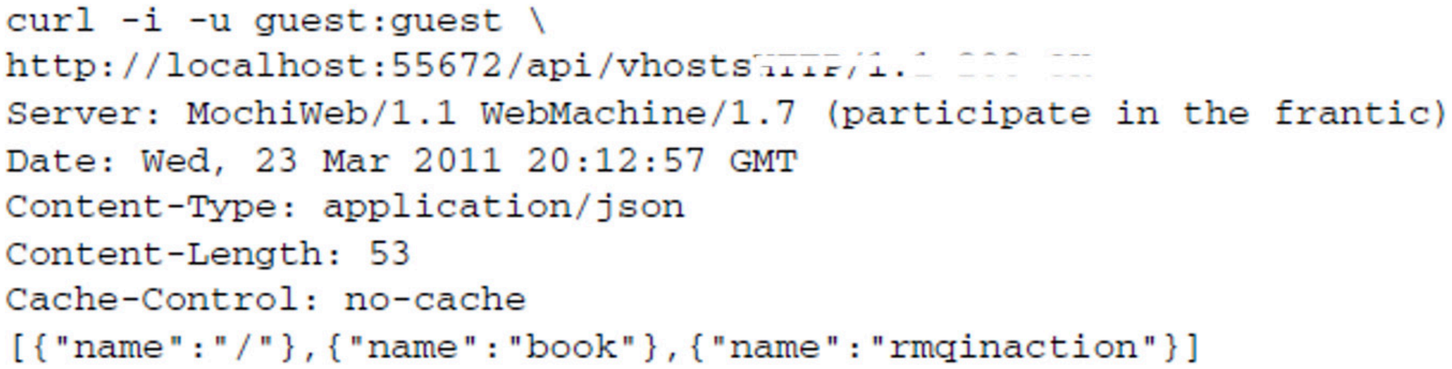
```
HTTP/1.1 200 OK
Server: MochiWeb/1.1 WebMachine/1.7 (participate in the frantic)
Date: Wed, 23 Mar 2011 20:07:22 GMT
Content-Type: application/json

Content-Length: 30
Cache-Control: no-cache

[{"name":"/"},{"name":"book"}]
```

HP HTTP API

- Add new vhosts



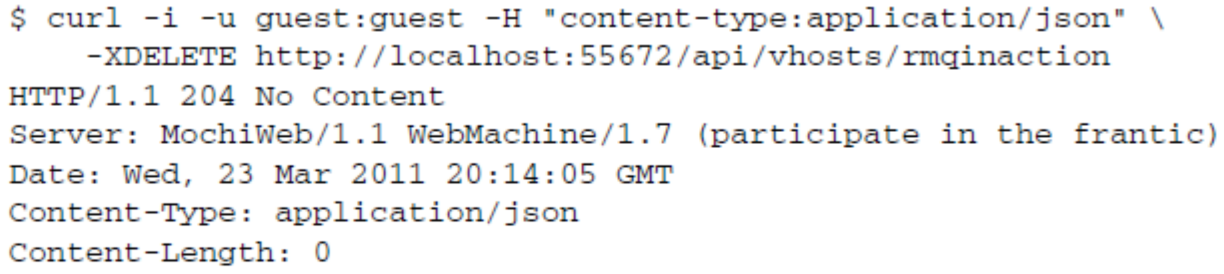
```
$ curl -i -u guest:guest -H "content-type:application/json" \
    -XPUT http://localhost:55672/api/vhosts/rmqinaction

HTTP/1.1 204 No Content
Server: MochiWeb/1.1 WebMachine/1.7 (participate in the frantic)
Date: Wed, 23 Mar 2011 20:12:28 GMT
Content-Type: application/json
Content-Length: 0
```



```
curl -i -u guest:guest \
http://localhost:55672/api/vhostsHTTP/1.1 200 OK
Server: MochiWeb/1.1 WebMachine/1.7 (participate in the frantic)
Date: Wed, 23 Mar 2011 20:12:57 GMT
Content-Type: application/json
Content-Length: 53
Cache-Control: no-cache
[{"name":"/"},{"name":"book"},{"name":"rmqinaction"}]
```

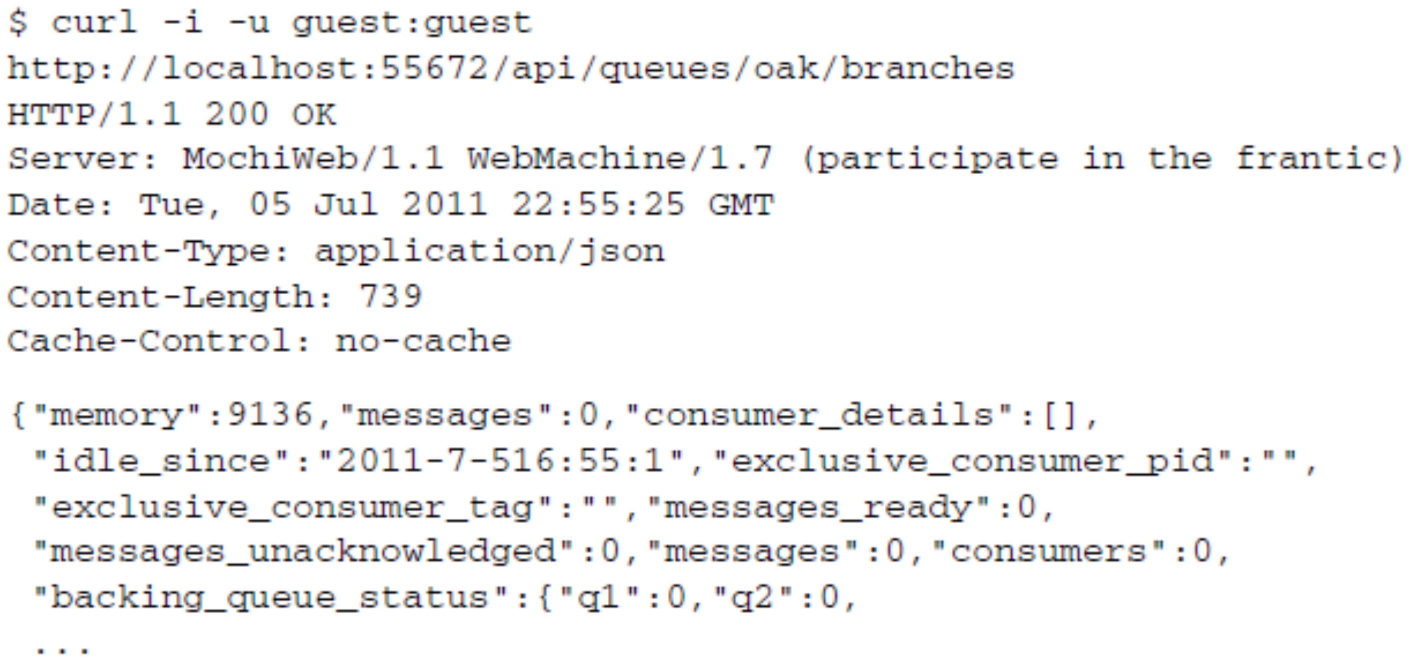
HTTP API

- Delete



```
$ curl -i -u guest:guest -H "content-type:application/json" \
    -XDELETE http://localhost:55672/api/vhosts/rmqinaction
HTTP/1.1 204 No Content
Server: MochiWeb/1.1 WebMachine/1.7 (participate in the frantic)
Date: Wed, 23 Mar 2011 20:14:05 GMT
Content-Type: application/json
Content-Length: 0
```

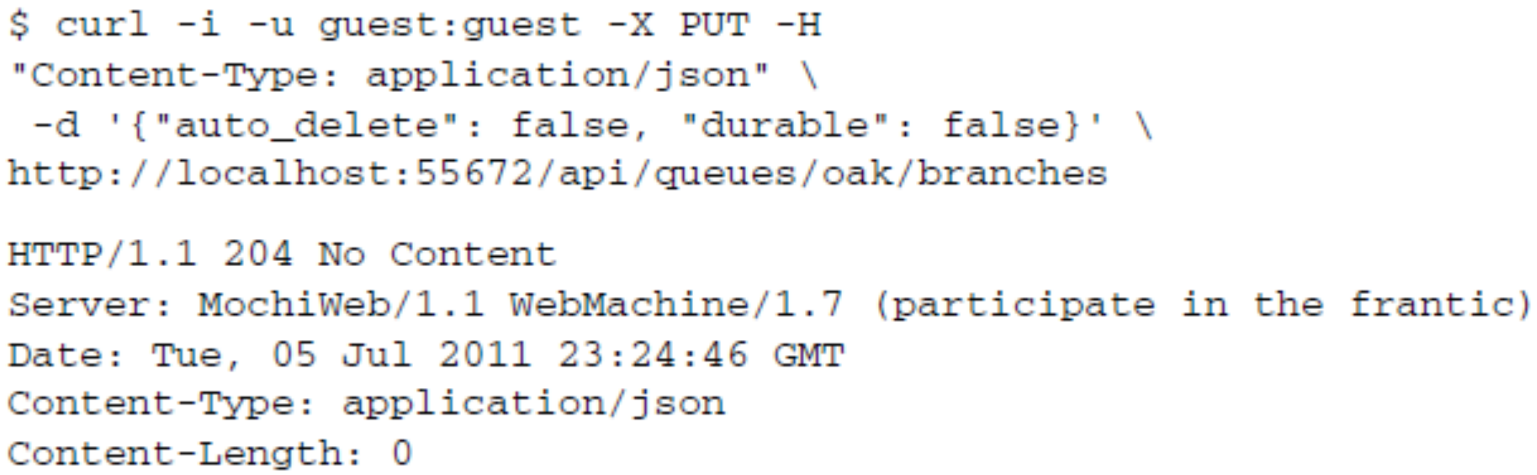
Statistics for the queue



```
$ curl -i -u guest:guest
http://localhost:55672/api/queues/oak/branches
HTTP/1.1 200 OK
Server: MochiWeb/1.1 WebMachine/1.7 (participate in the frantic)
Date: Tue, 05 Jul 2011 22:55:25 GMT
Content-Type: application/json
Content-Length: 739
Cache-Control: no-cache

{"memory":9136,"messages":0,"consumer_details":[],
 "idle_since":"2011-7-516:55:1","exclusive_consumer_pid":"",
 "exclusive_consumer_tag":"","messages_ready":0,
 "messages_unacknowledged":0,"messages":0,"consumers":0,
 "backing_queue_status":{"q1":0,"q2":0,
 ...
```

HP

Create queue

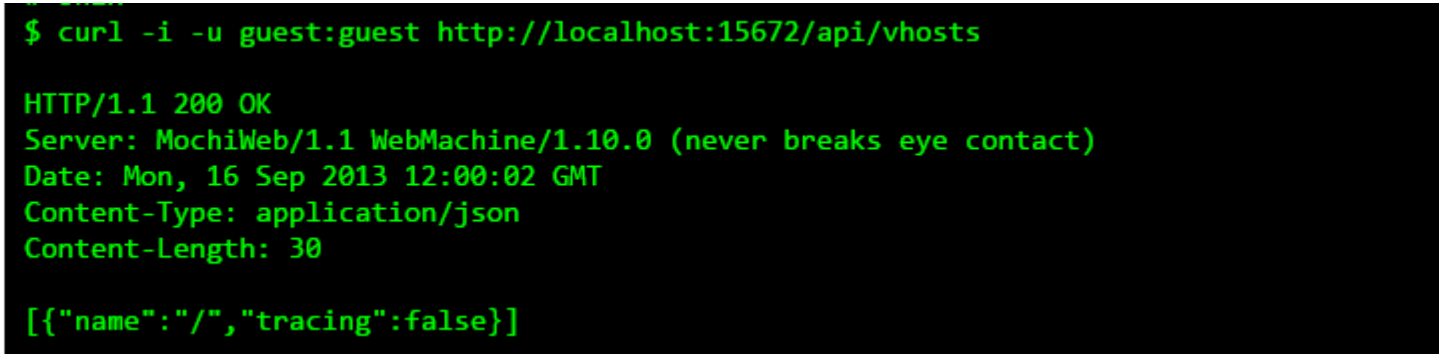


```
$ curl -i -u guest:guest -X PUT -H
"Content-Type: application/json" \
 -d '{"auto_delete": false, "durable": false}' \
http://localhost:55672/api/queues/oak/branches

HTTP/1.1 204 No Content
Server: MochiWeb/1.1 WebMachine/1.7 (participate in the frantic)
Date: Tue, 05 Jul 2011 23:24:46 GMT
Content-Type: application/json
Content-Length: 0
```

API ......

- View a list of the current connections and their details—`/api/connections`
- Download or upload the complete configuration of your RabbitMQ broker, including queues, exchanges, and bindings— `/api/all-configuration`
- List all of the nodes in a cluster (and their statistics)—`/api/nodes`
- Create or view a RabbitMQ user— `/api/users/<user>`
- View or create a virtual host— `/api/vhosts/<vhost>`
- Set the permissions for a user— `/api/permissions/<vhost>/<user>`

#curl http://localhost:15672/api/nodes



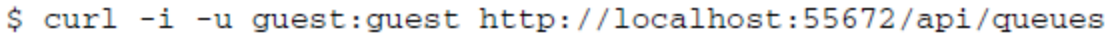
```
$ curl -i -u guest:guest http://localhost:15672/api/vhosts

HTTP/1.1 200 OK
Server: MochiWeb/1.1 WebMachine/1.10.0 (never breaks eye contact)
Date: Mon, 16 Sep 2013 12:00:02 GMT
Content-Type: application/json
Content-Length: 30

[{"name":"/","tracing":false}]
```

rabbitmqadmin

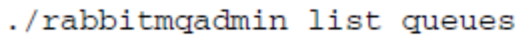
HP

rabbitmqadmin

- an easier way to administer the server: the *command-line tool.*
- *The command-line tool is a Python script*
- can download directly from your RabbitMQ Management plugin installation and execute on your machine.
- advantages don’t need to hand-craft your requests.
- wrap the REST API



```
$ curl -i -u guest:guest http://localhost:55672/api/queues
```



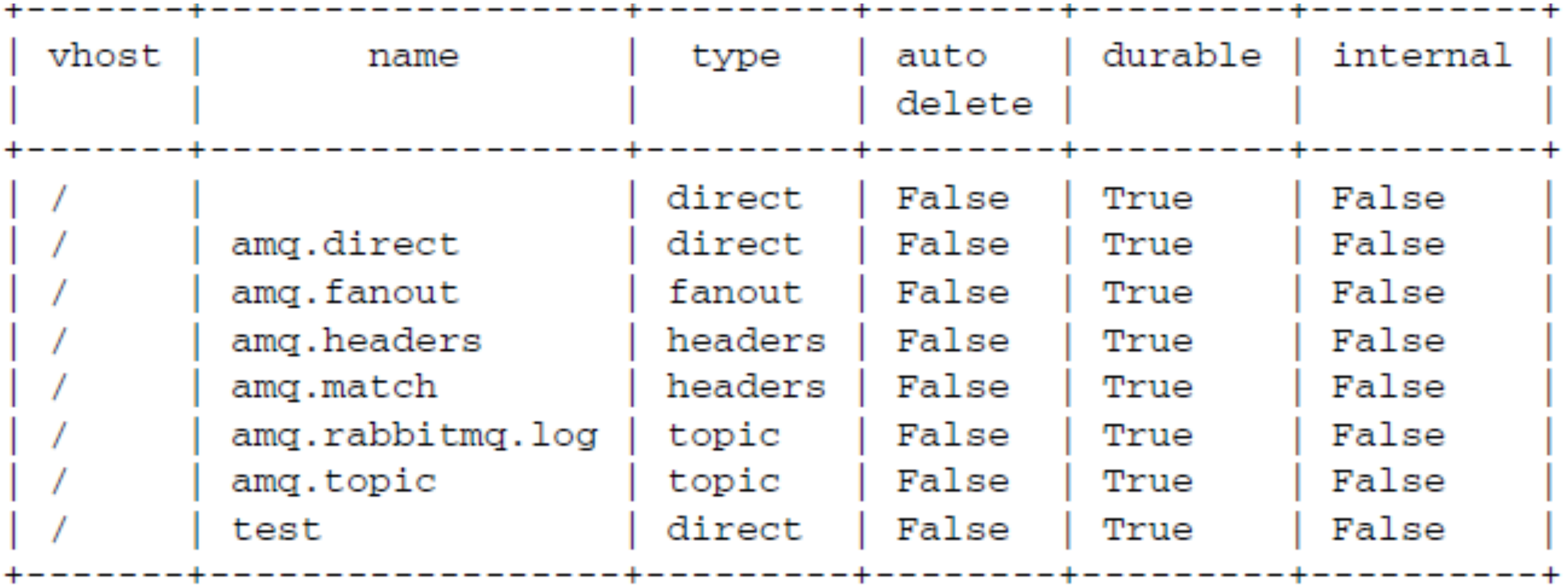
```
./rabbitmqadmin list queues
```

rabbitmqadmin

- Installation:
  - Python
  - $ *wget http://localhost:55672/cli/rabbitmqadmin*
  - $ *chmod +x rabbitmqadmin*

rabbitmqadmin

- ./rabbitmqadmin -V "/" list exchanges

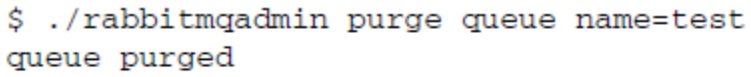


```
+-------+--------------------+---------+--------+---------+----------+
| vhost |        name        |  type   | auto   | durable | internal |
|       |                    |         | delete |         |          |
+-------+--------------------+---------+--------+---------+----------+
| /     |                    | direct  | False  | True    | False    |
| /     | amq.direct         | direct  | False  | True    | False    |
| /     | amq.fanout         | fanout  | False  | True    | False    |
| /     | amq.headers        | headers | False  | True    | False    |
| /     | amq.match          | headers | False  | True    | False    |
| /     | amq.rabbitmq.log   | topic   | False  | True    | False    |
| /     | amq.topic          | topic   | False  | True    | False    |
| /     | test               | direct  | False  | True    | False    |
+-------+--------------------+---------+--------+---------+----------+
```

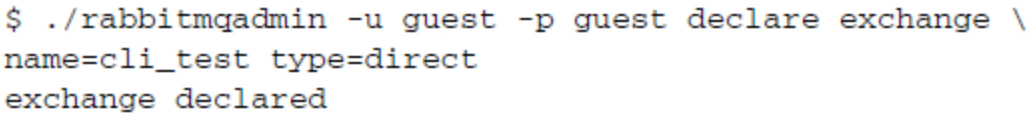
HP

rabbitmqadmin

- Purging queues, creating exchanges, and more



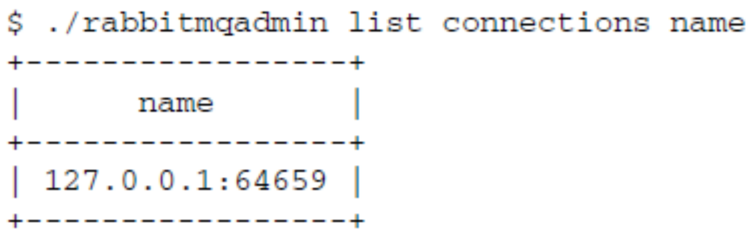
```
$ ./rabbitmqadmin purge queue name=test
queue purged
```



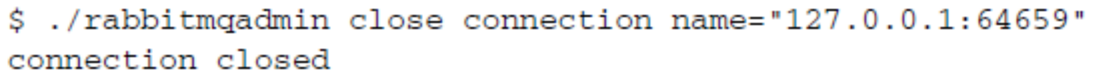
```
$ ./rabbitmqadmin -u guest -p guest declare exchange \
name=cli_test type=direct
exchange declared
```

rabbitmqadmin

- Purging queues, creating exchanges, and more….



```
$ ./rabbitmqadmin list connections name
+-----------------+
|      name       |
+-----------------+
| 127.0.0.1:64659 |
+-----------------+
```



```
$ ./rabbitmqadmin close connection name="127.0.0.1:64659"
connection closed
```

Lab : Administration CLI