



## Morpheus Component Password Change

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## Overview

### General

The purpose of this document is to provide information on changing the passwords defined in the morpheus-secrets.json file located at /etc/morpheus/morpheus-secrets.json.

## Components

### Example “morpheus-secrets.json”

```
{
  "mysql": {
    "root_password": "12345",
    "morpheus_password": "12345",
    "ops_password": "12345"
  },
  "rabbitmq": {
    "morpheus_password": "12345",
    "queue_user_password": "12345",
    "cookie": "12345"
  },
  "ui": {
    "ajp_secret": "12345"
  },
  "elasticsearch": {
    "keystore_password": "12345",
    "truststore_password": "12345",
    "elastic_password": "12345",
    "morpheus_password": "12345"
  }
}
```

## MySQL

There are three passwords defined that have different uses based on if you are running in a multi-node HA with an external database or an All in One (AIO).

HA (or another setup running an external MySQL):

This setup only uses one of the passwords from the json file. That is the morpheus\_password. This is the password that Morpheus will use to connect to your MySQL database for the application to run. To change this password, you will do the following.

- Login to MySQL (you can use the embedded client on the Morpheus app nodes at /opt/morpheus/embedded/mysql/bin/mysql -h x.x.x.x -u root -p
- Confirm your user setup in MySQL

```
SELECT user,host FROM mysql.user;
```

This will return something like the below

```
mysql> select user,host from mysql.user;
+-----+-----+
| user                | host                |
+-----+-----+
| clusterAdmin        | %                   |
| morpheus             | %                   |
+-----+-----+
```

From this return I can see the host is returned as any or %

- Update the Morpheus password based on the above return.

```
Alter USER 'morpheus'@'%' IDENTIFIED BY 'your_password'
```

AIO (All In One) - Does not apply to HA Environments

This is a single node Morpheus using the embedded MySQL database. This setup will use all three passwords in the json file.

- Login to MySQL from the Morpheus App node  
/opt/morpheus/embedded/mysql/bin/mysql -h 127.0.0.1 -u root -p
- Confirm your user setup in MySQL

```
SELECT user,host FROM mysql.user;
```

This will return something like the below

```
mysql> SELECT user,host FROM mysql.user;
```

user	host
morpheus	localhost
mysql.infoschema	localhost
mysql.session	localhost
mysql.sys	localhost
ops	localhost
root	localhost

- Update the morpheus,ops,root password based on the above return.

```
Alter USER 'morpheus'@'localhost' IDENTIFIED BY 'your_password'
```

```
Alter USER 'ops'@'localhost' IDENTIFIED BY 'your_password'
```

```
Alter USER 'root'@'localhost' IDENTIFIED BY 'your_password'
```

For HA

- Update the /etc/morpheus/morpheus.rb with the new MySQL password.
- Reconfigure Morpheus
  - o morpheus-ctl reconfigure
- Tail Morpheus-ui log
  - o morpheus-ctl tail morpheus-ui
- Confirm functionality

For AIO

- Update the morpheus-secrets.json with the new passwords.
- Reconfigure Morpheus
  - o morpheus-ctl reconfigure
- Tail Morpheus-ui log
  - o morpheus-ctl tail morpheus-ui
- Confirm functionality

## RabbitMQ

This applies only to the embedded RabbitMQ. Using this is the recommended setup for both AIO and HA installations. If you are running external RabbitMQ follow your company's practices on updating the passwords as this is not maintained by Morpheus.

For HA deployments you will want to do this across all nodes otherwise the cluster will have issues with erlang differences.

- Source the rabbitmqctl
 

```
source /opt/morpheus/embedded/rabbitmq/.profile
```
- Confirm the current user/password
 

```
rabbitmqctl authenticate_user morpheus your_password
```

```
rabbitmqctl authenticate_user queue_user your_password
```
- Stop the morpheus-ui service (Do this on all application nodes)
 

```
morpheus-ctl stop morpheus-ui
```

- Confirm the service is stopped  
morpheus-ctl status  
  
If the service does not stop, you can force it.  
morpheus-ctl kill morpheus-ui
- Stop the check-server service (Do this on all application nodes)  
morpheus-ctl stop check-server
- Confirm the service is stopped  
morpheus-ctl status  
  
If the service does not stop, you can force it.  
morpheus-ctl kill check-server
- Change the user passwords (this only needs to be done from one of the cluster nodes)  
rabbitmqctl change\_password morpheus "yourpassword"  
rabbitmqctl change\_password queue\_user "yourpassword"
- Confirm the new passwords are working on each application node  
rabbitmqctl authenticate\_user morpheus your\_new\_password  
rabbitmqctl authenticate\_user queue\_user your\_new\_password
- Stop the Rabbit App on each node  
rabbitmqctl stop\_app
- Stop RabbitMQ (Do this on all nodes)  
morpheus-ctl stop rabbitmq
- Confirm the service is stopped  
morpheus-ctl status  
  
If the service does not stop, you can force it.  
morpheus-ctl kill rabbitmq
- Change the erlang cookie (This equates to what is stored as cookie in the morpheus-secrets.json  
vi /opt/morpheus/embedded/rabbitmq/.erlang.cookie  
  
replace the file contents with a new cookie value. You can use an equal sized string similar to what is currently in the file.
- Update the /etc/morpheus/morpheus-secrets.json values with the new values  
Update all entries in this block  
"rabbitmq": {  
    "morpheus\_password": "your\_password",  
    "queue\_user\_password": "your\_password",  
    "cookie": "your\_cookie"  
},
- Start the RabbitMQ service on each node  
morpheus-ctl start rabbitmq

- Start the app on each node  
rabbitmqctl start\_app
- Confirm the RabbitMQ cluster is healthy  
rabbitmqctl cluster\_status
- Reconfigure Morpheus  
morpheus-ctl reconfigure
- Start the check-server service  
morpheus-ctl start check-server
- Start the morpheus-ui service  
morpheus-ctl start morpheus-ui
- Tail Morpheus-ui log  
morpheus-ctl tail morpheus-ui
- Confirm functionality

\*\*\* If running an external RabbitMQ setup, you should follow your companies practices on updating passwords as Morpheus does not maintain this environment. Once complete you will need to update the morpheus-secrets.json with the new passwords and then run a morpheus-ctl reconfigure. \*\*\*

## AJP Secret

Tomcat requires a non-zero entry for AJP. This is not really used by Morpheus, however it exists to support customer use of Apache HTTP server using mod\_jk for load balancing.

- Stop the morpheus-ui  
morpheus-ctl stop morpheus-ui

There are two ways this password can be set/updated

### 1. Direct File edits

Update the secret in morpheus-secrets.json  
vi /etc/Morpheus/morpheus-secrets.json

Update the server.xml file.  
vi /opt/morpheus/lib/tomcat/conf/server.xml

Update the section like below

```
<Connector address="127.0.0.1" port="8009" protocol="AJP/1.3"
  redirectPort="8443"
  secret="12345" />
```

Reconfigure Morpheus  
morpheus-ctl reconfigure

2. Edit the morpheus.rb file  
vi /etc/morpheus.rb  
  
Add the following entry  
ui['ajp\_secret'] = '12345'  
  
Reconfigure Morpheus  
morpheus-ctl reconfigure

## ElasticSearch

**The passwords stored in the morpheus-secrets.json file only apply to advanced tls settings. These passwords are not used in a typical Morpheus HA or AIO deployment. They can be ignored.**

Advanced config password changes: Only change these if advanced tls and secure mode is being used in your morpheus.rb file. Otherwise, it will cause Morpheus to fail to connect.

TrustStore coming Soon

ElasticSearch Password:

- Change elastic password  
/opt/morpheus/embedded/elasticsearch/bin/elasticsearch-reset-password –  
username elastic
- Change morpheus password  
/opt/morpheus/embedded/elasticsearch/bin/elasticsearch-reset-password –  
username morpheus

KeyStore:

- KeyStore file locations:  
Config Location:  
/opt/morpheus/embedded/elasticsearch/config/elasticsearch.keystore  
App Location:  
/opt/morpheus/embedded/elasticsearch/bin/elasticsearch-keystore
- Change the owner on the elasticsearch.keystore file to your user so changes can be saved.  
sudo chown \$(whoami) /opt/morpheus/embedded/elasticsearch/config/elasticsearch.keystore
- Change the password  
/opt/morpheus/embedded/elasticsearch/bin/elasticsearch-keystore passwd
- Change the owner back to es-morpheus  
sudo chown es-morpheus:es-morpheus  
/opt/morpheus/embedded/elasticsearch/config/elasticsearch.keystore

Update json file:  
vi /etc/morpheus/morpheus-secrets.json

Reconfigure Morpheus:  
morpheus-ctl reconfigure

Tail the log to confirm no issues:  
morpheus-ctl tail morpheus-ui