**MemSQL version 4.0 installation**

**1) Check your system requirements as per http://docs.memsql.com/latest/setup/requirements/**

MemSQL recommends the following hardware for on-premises deployments.

| **Component** | **Requirement** |
| --- | --- |
| CPU | Two socket x86-64 based server with 8 cores.  At a minimum, Intel Core i3 or better processor. |
| Memory | Recommended: 64-96GB. Minimum: 8GB |
| Hard Drive | SSD or SATA 7200RPM hard drive with 3X memory capacity |

**Network Requirements**

MemSQL requires routing and firewall settings to be configured to:

* allow database clients (eg, your application) to connect to the MemSQL aggregators
* allow all nodes in the cluster to talk to each other over the MySQL protocol (3306) and MemSQL Agent protocol (9000)

| **Port** | **Source** | **Destination** |
| --- | --- | --- |
| 3306 | Clients | Aggregator nodes |
| 3306 | All MemSQL nodes | All MemSQL nodes |
| 9000 | All MemSQL nodes | All MemSQL nodes |

## [MemSQL Database Configuration](http://docs.memsql.com/latest/setup/best_practices/#id2)

**2) Configure Linux ulimit settings**

**Increase File Descriptor Limit**

**[ root @ dbversitydotcom : /memsql ] cat /etc/security/limits.conf | grep 'NOFILE'**

**\* soft NOFILE 1000000**

**\* hard NOFILE 1000000**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ulimit -n**

**1000000**

**[ root @ dbversitydotcom : /memsql ]**

**OR**

**[ root @ dbversitydotcom : /memsql ] ulimit -n**

**4096**

**[ root @ dbversitydotcom : /memsql ] ulimit -n 1000000**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ulimit -n**

**1000000**

**[ root @ dbversitydotcom : /memsql ]**

**Increase Maximum Process Limit**

**[ root @ dbversitydotcom : /memsql ] ulimit -u**

**62832**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ulimit -u 128000**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ulimit -u**

**128000**

**[ root @ dbversitydotcom : /memsql ]**

**Configure Linux vm settings**

**[ root @ dbversitydotcom : /memsql ] tail -8 /etc/sysctl.conf**

**#For MemSQL configuration Linux settings**

**vm.max\_map\_count=1000000000**

**vm.min\_free\_kbytes=500000**

**[ root @ dbversitydotcom : /memsql ]**

**Create swap files**

**[ root @ dbversitydotcom : /memsql]snapshot\_dir="/var/lib/memsql/data/snapshots"**

**[ root @ dbversitydotcom : /memsql ] snapshot\_file="$snapshot\_dir/memsql.swp"**

**[ root @ dbversitydotcom : /memsql ] mkdir -p $snapshot\_dir**

**[ root @ dbversitydotcom : /memsql ] dd if=/dev/zero of=$snapshot\_file bs=1M count=10240**

**10240+0 records in**

**10240+0 records out**

**10737418240 bytes (11 GB) copied, 58.9393 s, 182 MB/s**

**[ root @ dbversitydotcom : /memsql ] chmod 600 $snapshot\_file**

**[ root @ dbversitydotcom : /memsql ] mkswap $snapshot\_file**

**mkswap: /var/lib/memsql/data/snapshots/memsql.swp: warning: don't erase bootbits sectors**

**on whole disk. Use -f to force.**

**Setting up swapspace version 1, size = 10485756 KiB**

**no label, UUID=741daa0c-0ea1-4fd6-8103-bdeab7d17b12**

**[ root @ dbversitydotcom : /memsql ] swapon $snapshot\_file**

**[ root @ dbversitydotcom : /memsql ] echo "$snapshot\_file swap swap defaults 0 0" | tee -a /etc/fstab**

**/var/lib/memsql/data/snapshots/memsql.swp swap swap defaults 0 0**

**[ root @ dbversitydotcom : /memsql ]**

**Installation:**

**You can download the required package from http://www.memsql.com/download/**

**[ root @ dbversitydotcom : /memsql ] tar -xvf memsql-ops-4.0.31.tar**

**memsql-ops-4.0.31/**

**memsql-ops-4.0.31/install.sh**

**memsql-ops-4.0.31/memsql-ops/**

**memsql-ops-4.0.31/README**

**memsql-ops-4.0.31/memsql-ops/lib/**

**------- blah blah blah ----------**

**memsql-ops-4.0.31/memsql-ops/lib/unicodedata.cpython-34m.so**

**memsql-ops-4.0.31/memsql-ops/lib/zlib.cpython-34m.so**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ll -lhtr**

**total 15M**

**drwxr-xr-x 3 attivioid 20 4.0K Jun 29 22:30 memsql-ops-4.0.31**

**-rw-r--r-- 1 root root 15M Jul 17 05:22 memsql-ops-4.0.31.tar**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] cd memsql-ops-4.0.31**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ] ll -lthr**

**total 12K**

**-rw-r--r-- 1 attivioid 20 517 Jun 29 22:30 README**

**-rwxr-xr-x 1 attivioid 20 1.6K Jun 29 22:30 install.sh**

**drwxr-xr-x 4 attivioid 20 4.0K Jul 17 05:34 memsql-ops**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ] pwd**

**/memsql/memsql-ops-4.0.31**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ] ./install.sh**

**Installing MemSQL Ops in /var/lib/memsql-ops**

**Creating a memsql user**

**Setting up permissions**

**Creating an init script so that MemSQL Ops runs on startup**

**Creating a symlink to MemSQL Ops at /usr/bin/memsql-ops**

**Successfully installed MemSQL Ops!**

**--------------------------------------------------------------------------------**

**You can install MemSQL across multiple machines**

**using the MemSQL Ops Web UI.**

**You can setup, manage and monitor MemSQL with the MemSQL Ops**

**web UI on port 9000. Make sure that port 9000 is open in your**

**firewall or security group.**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ] ps -ef | grep memsql**

**memsql 2039 1 9 05:37 ? 00:00:13 /var/lib/memsql-ops/lib/memsql-ops start -u memsql --port 9000**

**root 2607 27339 0 05:40 pts/1 00:00:00 grep memsql**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31 ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31/memsql-ops ] ll -lhtr**

**total 12K**

**drwxr-xr-x 6 attivioid 20 4.0K Jun 29 22:30 static**

**-rwxr-xr-x 1 attivioid 20 245 Jun 29 22:30 memsql-ops**

**drwxr-xr-x 2 attivioid 20 4.0K Jul 17 05:34 lib**

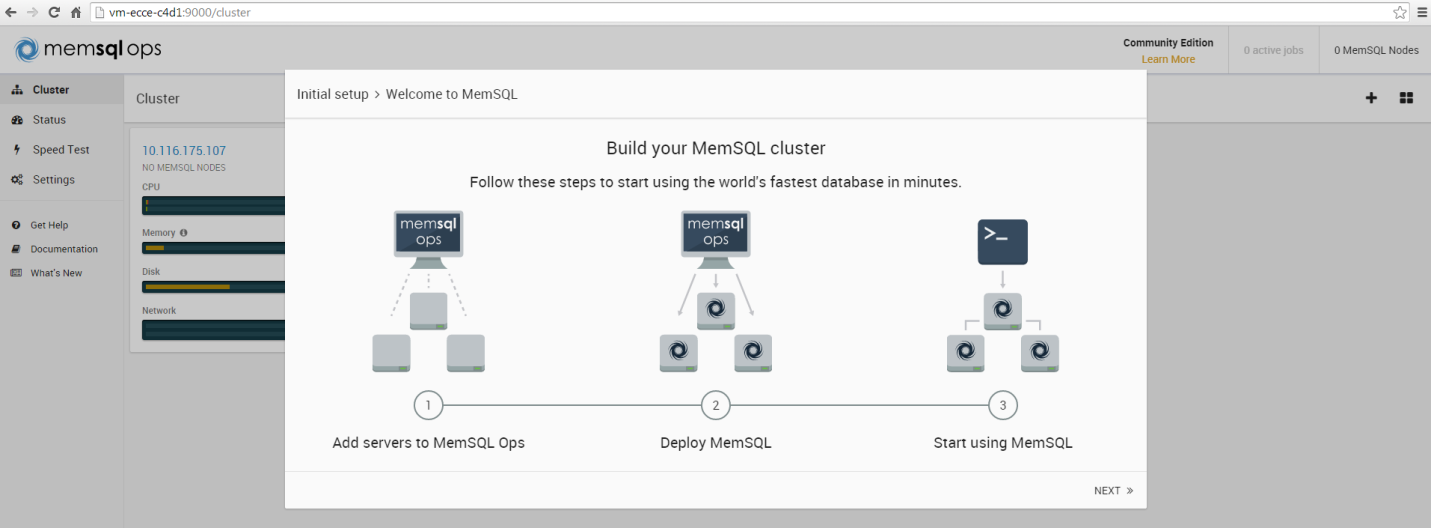
**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31/memsql-ops ]**

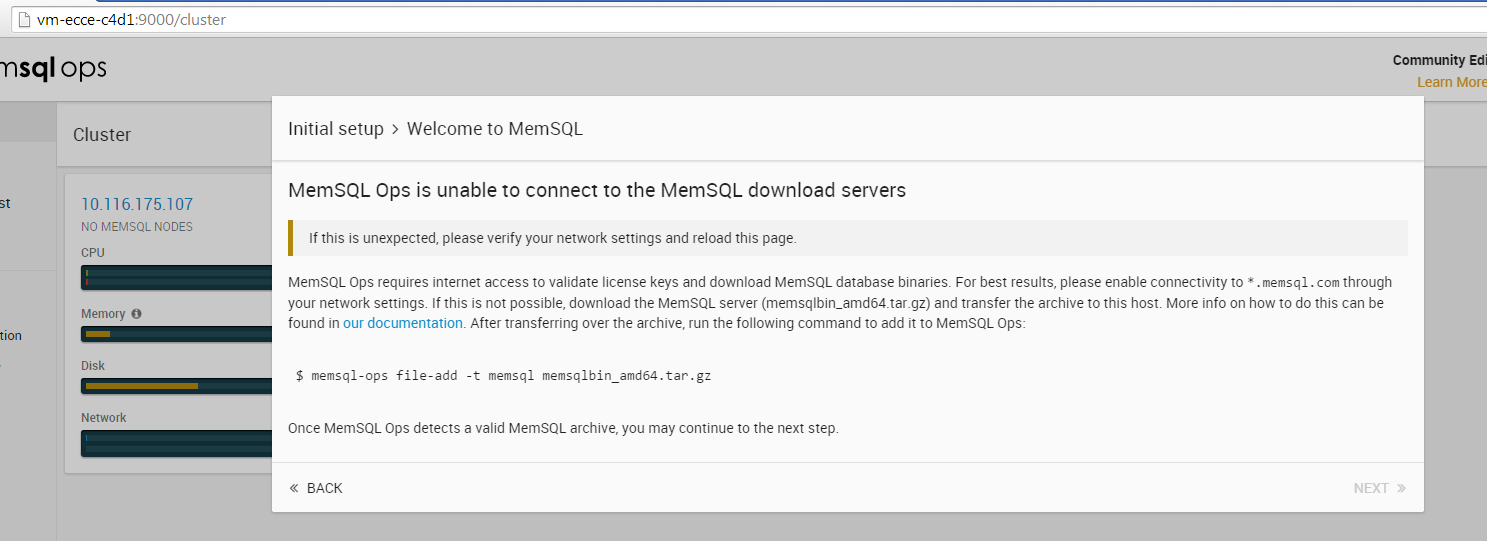
**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31/memsql-ops ]**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31/memsql-ops ] memsql-ops status**

**MemSQL Ops is running with pid 2039 on port 9000.**

**[ root @ dbversitydotcom : /memsql/memsql-ops-4.0.31/memsql-ops ]**





**[ root @ dbversitydotcom : /memsql ] memsql-ops file-add -t memsql memsqlbin\_amd64.tar**

**Adding a MemSQL file**

**Unpacking archive to determine its version**

**Copying file into MemSQL Ops data directory**

**Registering file with MemSQL Ops**

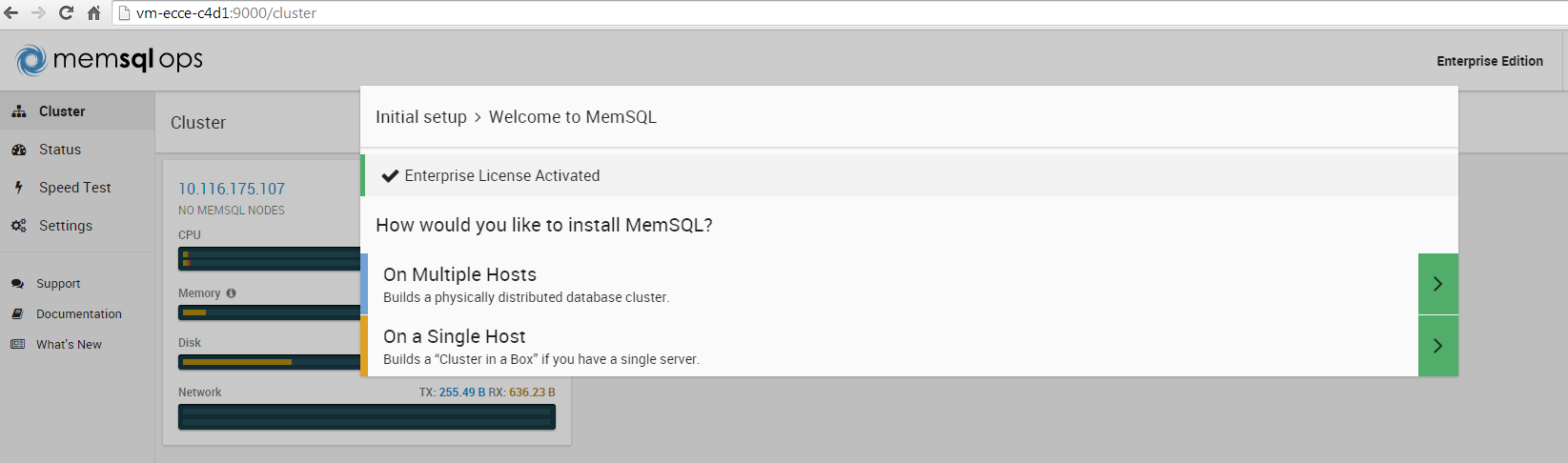
**Adding license file from MemSQL archive to MemSQL Ops**

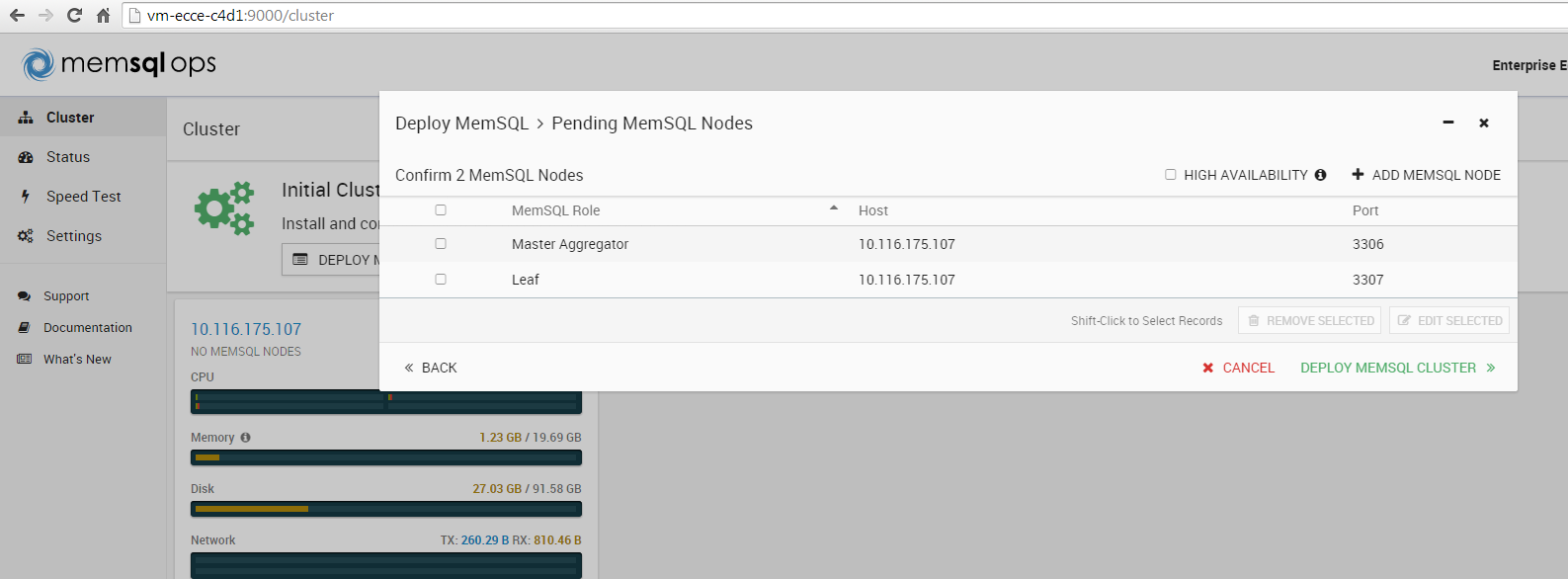
**2015-07-17 05:58:42: J92b468 [INFO] Adding a license file for agent Afef126c86f4d408ba284ed004fa055d6**

**2015-07-17 05:58:42: J92b468 [INFO] Successfully added a license file for agent Afef126c86f4d408ba284ed004fa055d6**

**Successfully added a MemSQL file with version 4.0.0**

**[ root @ dbversitydotcom : /memsql ]**





**[ root @ dbversitydotcom : /memsql ] ps -ef | grep mysql**

**root 5696 1 0 Jul05 ? 00:00:00 /bin/sh /usr/bin/mysqld\_safe --datadir=/var/lib/mysql --pid-file=/var/lib/mysql/dbversitydotcom.pid**

**root 5757 27339 0 06:01 pts/1 00:00:00 grep mysql**

**mysql 5953 5696 0 Jul05 ? 00:13:34 /usr/sbin/mysqld --basedir=/usr --datadir=/var/lib/mysql --plugin-dir=/usr/lib64/mysql/plugin --user=mysql --log-error=/var/lib/mysql/mysqld.log --pid-file=/var/lib/mysql/dbversitydotcom.pid**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] service mysql stop**

**Shutting down MySQL.. SUCCESS!**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] netstat -nlp | grep 3306**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops status**

**MemSQL Ops is running with pid 2039 on port 9000.**

**[ root @ dbversitydotcom : /memsql ]**

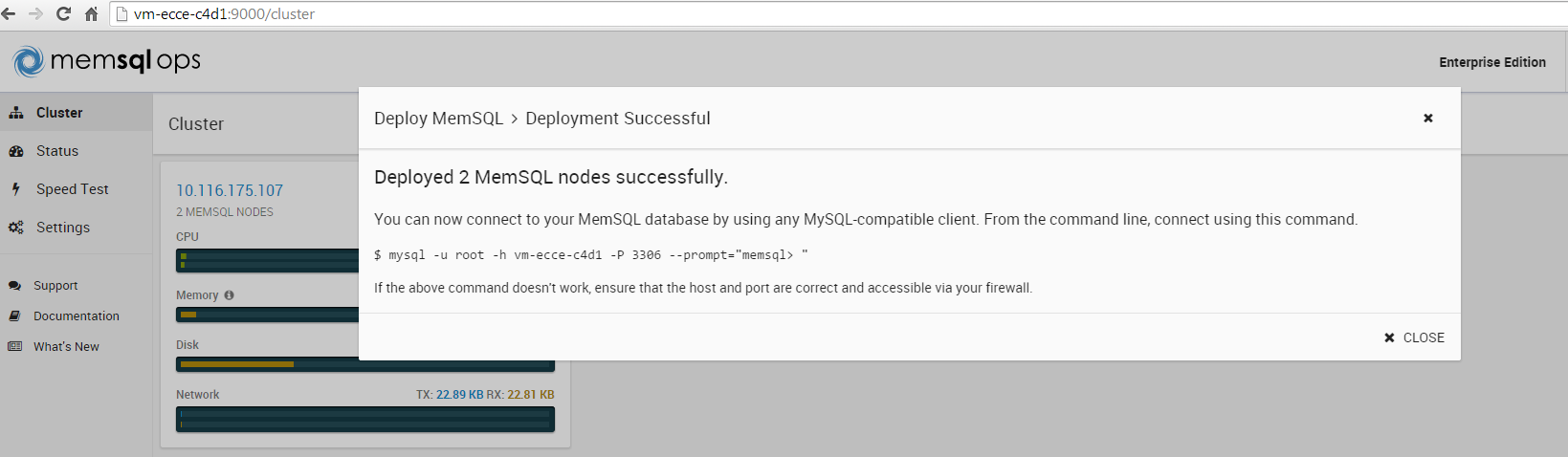
**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] netstat -nlp | grep memsql**

**tcp 0 0 0.0.0.0:9000 0.0.0.0:\* LISTEN 2039/memsql-ops**

**[ root @ dbversitydotcom : /memsql ]**





**[ root @ dbversitydotcom : /memsql ] netstat -nlp | grep memsql**

**tcp 0 0 0.0.0.0:3307 0.0.0.0:\* LISTEN 7053/memsqld**

**tcp 0 0 0.0.0.0:9000 0.0.0.0:\* LISTEN 2039/memsql-ops**

**tcp 0 0 0.0.0.0:3306 0.0.0.0:\* LISTEN 6655/memsqld**

**unix 2 [ ACC ] STREAM LISTENING 8862853 7053/memsqld memsql.sock**

**unix 2 [ ACC ] STREAM LISTENING 8861833 6655/memsqld memsql.sock**

**unix 2 [ ACC ] STREAM LISTENING 8862707 7055/memsqld @memsql\_commandproc\_7055**

**unix 2 [ ACC ] STREAM LISTENING 8838838 6658/memsqld @memsql\_commandproc\_6658**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ps -ef | grep memsql**

**memsql 2039 1 4 05:37 ? 00:01:20 /var/lib/memsql-ops/lib/memsql-ops start -u memsql --port 9000**

**memsql 6655 1 1 06:04 ? 00:00:00 /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld.pid --user=memsql**

**memsql 6658 6655 0 06:04 ? 00:00:00 /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld.pid --user=memsql**

**memsql 7053 1 2 06:05 ? 00:00:01 /var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld.pid --user=memsql**

**memsql 7055 7053 0 06:05 ? 00:00:00 /var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld.pid --user=memsql**

**root 7428 27339 0 06:06 pts/1 00:00:00 grep memsql**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] mysql -u root -h dbversitydotcom -P 3306 --prompt="memsql> "**

**Welcome to the MySQL monitor. Commands end with ; or \g.**

**Your MySQL connection id is 5**

**Server version: 5.5.8 MemSQL source distribution (compatible; MySQL Enterprise & MySQL Commercial)**

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**affiliates. Other names may be trademarks of their respective**

**owners.**

**Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.**

**memsql>**

**memsql>**

**memsql> show databases;**

**+--------------------+**

**| Database |**

**+--------------------+**

**| information\_schema |**

**| memsql |**

**| sharding |**

**+--------------------+**

**3 rows in set (0.00 sec)**

**memsql> select \* from information\_schema.processlist where info is not null;**

**+----+-------------+-----------------------------------+--------------------+---------+------+-----------------------------------+---------------------------------------------------------------------+---------+-------------------+----------------+----------------------+-------+**

**| ID | USER | HOST | DB | COMMAND | TIME | STATE | INFO | PLAN\_ID | TRANSACTION\_STATE | ROW\_LOCKS\_HELD | PARTITION\_LOCKS\_HELD | EPOCH |**

**+----+-------------+-----------------------------------+--------------------+---------+------+-----------------------------------+---------------------------------------------------------------------+---------+-------------------+----------------+----------------------+-------+**

**| 23 | root | dbversitydotcom.nam.nsroot.net:12945 | information\_schema | Query | 0 | Dropping leaf partition databases | DROP DATABASE IF EXISTS `dbspeedtest` | NULL | NULL | 0 | 0 | NULL |**

**| 8 | distributed | dbversitydotcom.nam.nsroot.net:5009 | dbspeedtest | Query | 52 | | MEMSQL REPLICATION START | NULL | NULL | 0 | 0 | NULL |**

**| 5 | root | dbversitydotcom.nam.nsroot.net:2449 | NULL | Query | 24 | executing | select \* from information\_schema.processlist where info is not null | 2 | NULL | 0 | 0 | 49437 |**

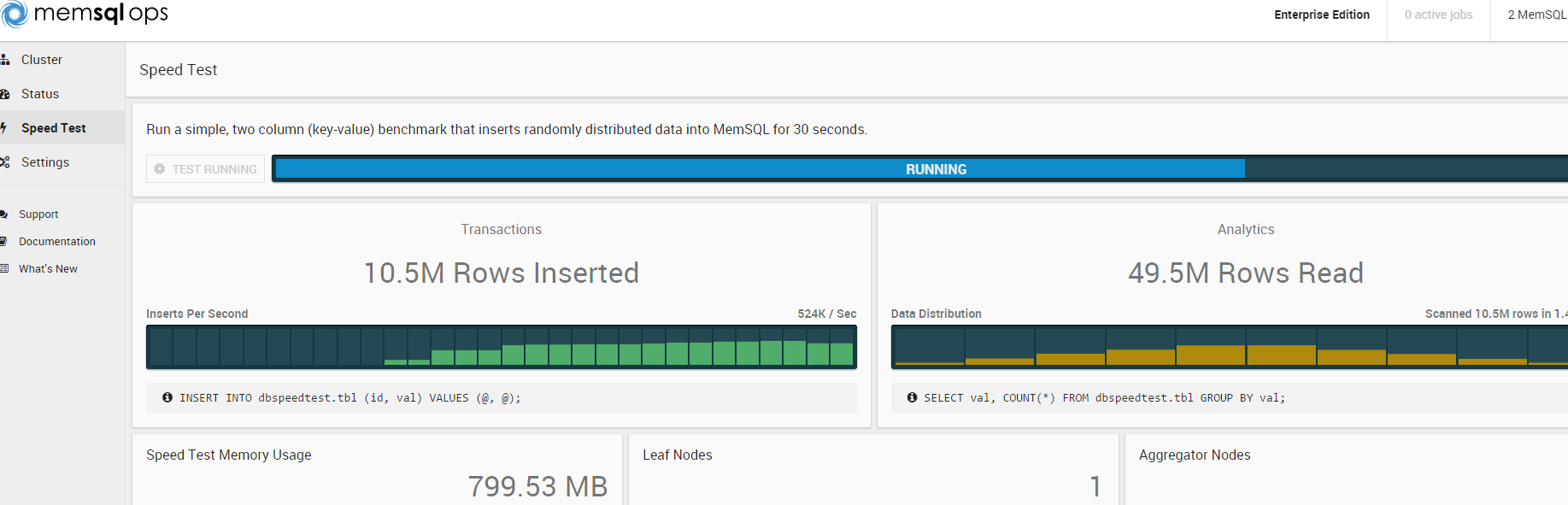
**| 3 | distributed | dbversitydotcom.nam.nsroot.net:145 | sharding | Query | 160 | | MEMSQL REPLICATION START | NULL | NULL | 0 | 0 | NULL |**

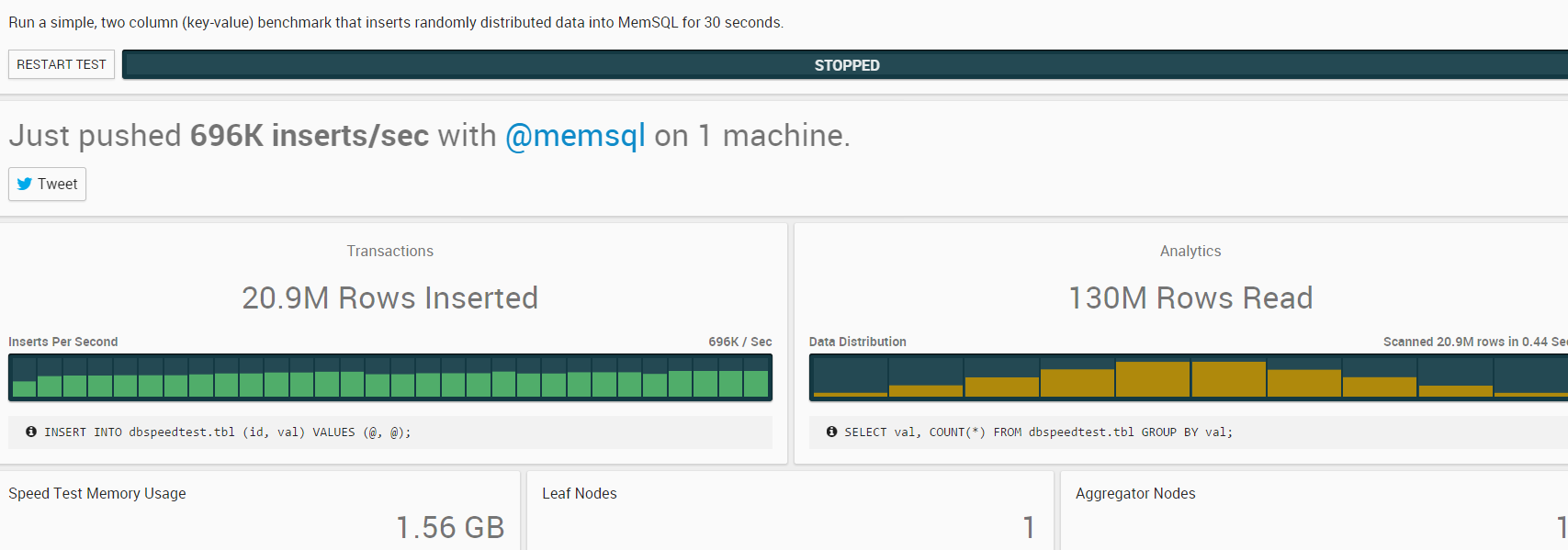
**+----+-------------+-----------------------------------+--------------------+---------+------+-----------------------------------+---------------------------------------------------------------------+---------+-------------------+----------------+----------------------+-------+**

**4 rows in set (24.88 sec)**

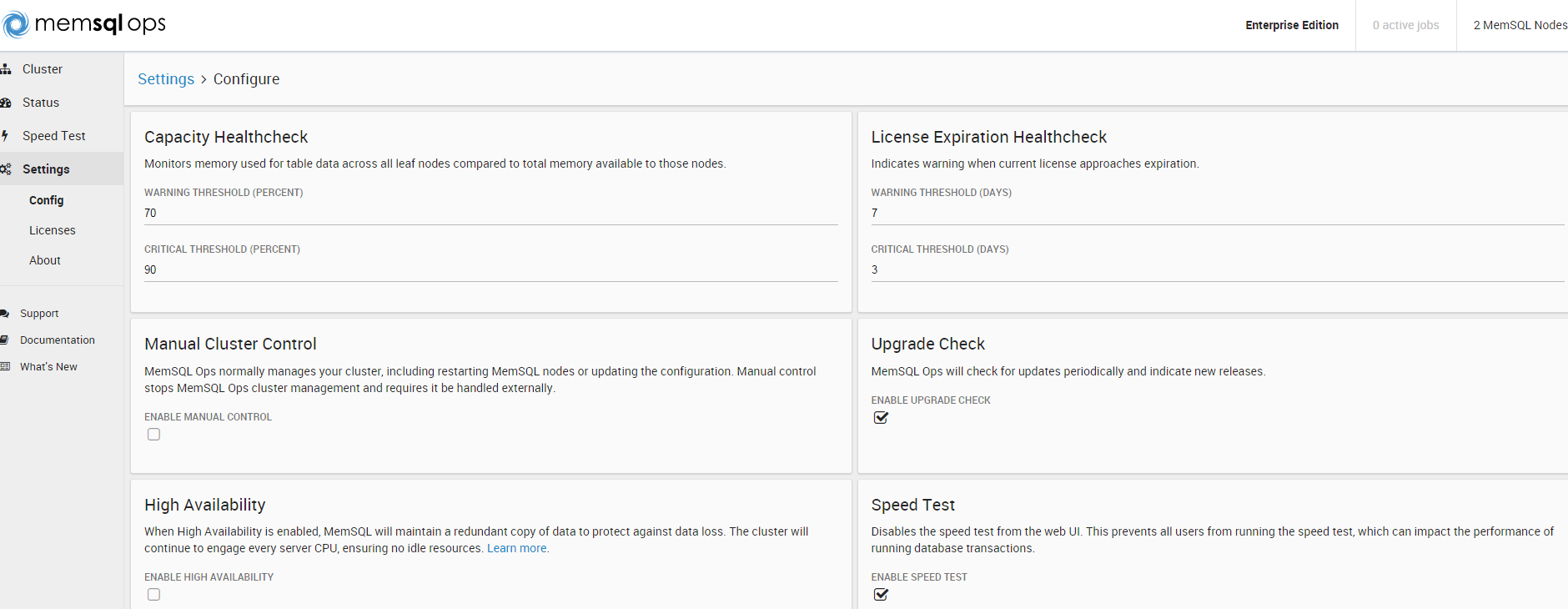
**memsql>**

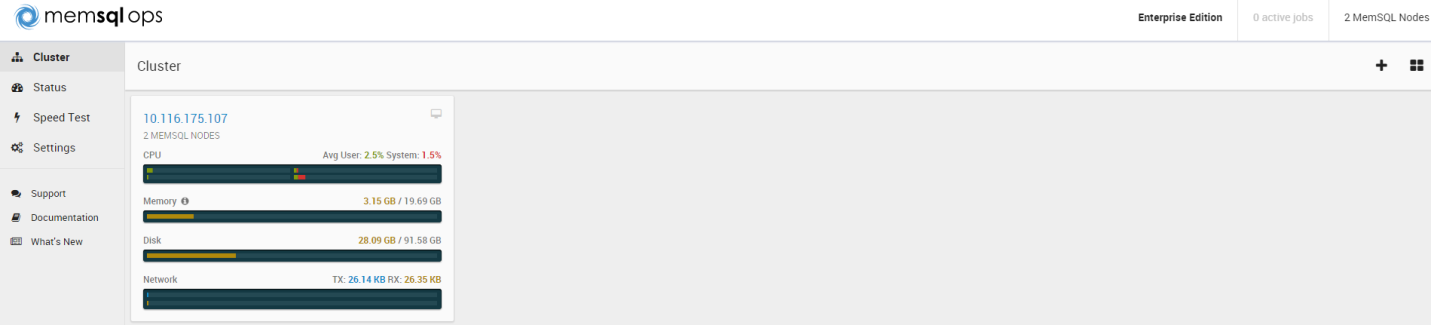
**Speed Test :**

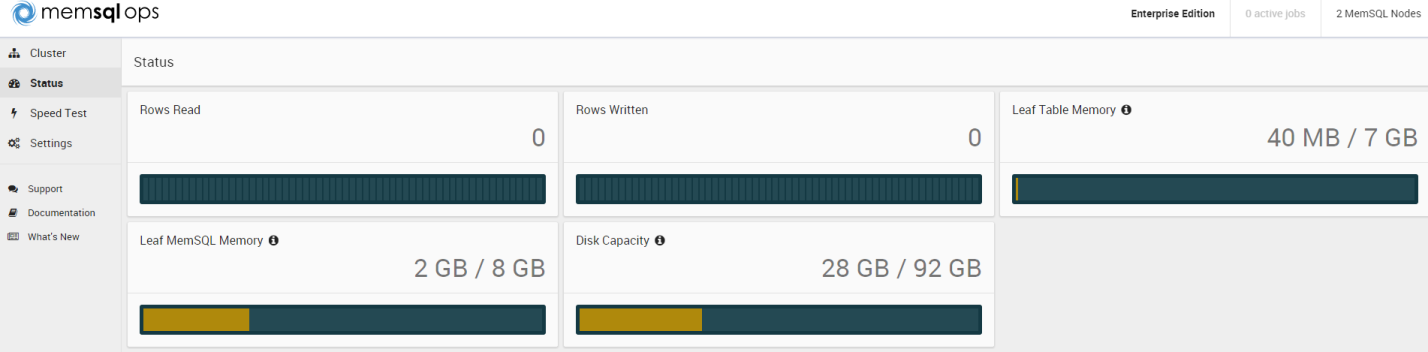




**Settings :**







**[ root @ dbversitydotcom : /memsql ] ps -ef | grep memsql**

**memsql 2039 1 6 05:37 ? 00:02:45 /var/lib/memsql-ops/lib/memsql-ops start -u memsql --port 9000**

**memsql 6655 1 5 06:04 ? 00:01:00 /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld.pid --user=memsql**

**memsql 6658 6655 0 06:04 ? 00:00:00 /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsqld.pid --user=memsql**

**memsql 7053 1 7 06:05 ? 00:01:29 /var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld.pid --user=memsql**

**memsql 7055 7053 0 06:05 ? 00:00:00 /var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld --defaults-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsql.cnf --pid-file=/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsqld.pid --user=memsql**

**root 10293 27339 0 06:23 pts/1 00:00:00 grep memsql**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] cat /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/memsql.cnf**

**; ------------------------------------------------------------------**

**; THIS CONFIGURATION FILE IS MANAGED BY MEMSQL OPS**

**; MemSQL Ops controls the data in this file. Please be careful**

**; when editing it.**

**; For more information contact support@memsql.com**

**; ------------------------------------------------------------------**

**[server]**

**basedir = .**

**bind\_address = 0.0.0.0**

**core\_file**

**default\_partitions\_per\_leaf = 4**

**durability = on**

**lc\_messages\_dir = ./share**

**lock\_wait\_timeout = 60**

**max\_connections = 100000**

**snapshot\_trigger\_size = 256m**

**socket = memsql.sock**

**tmpdir = .**

**transaction\_buffer = 64m**

**; ------------------------------------------------------------------**

**; MEMSQL OPS VARIABLES**

**;**

**; Variables below this header are controlled by MemSQL Ops.**

**; Please do not edit any of these values directly.**

**; ------------------------------------------------------------------**

**master\_aggregator**

**port = 3306**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] cat /var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954/memsql.cnf**

**; ------------------------------------------------------------------**

**; THIS CONFIGURATION FILE IS MANAGED BY MEMSQL OPS**

**; MemSQL Ops controls the data in this file. Please be careful**

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**; For more information contact support@memsql.com**

**; ------------------------------------------------------------------**

**[server]**

**basedir = .**

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**tmpdir = .**

**transaction\_buffer = 64m**

**; ------------------------------------------------------------------**

**; MEMSQL OPS VARIABLES**

**;**

**; Variables below this header are controlled by MemSQL Ops.**

**; Please do not edit any of these values directly.**

**; ------------------------------------------------------------------**

**port = 3307**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ll -lthr /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa/**

**total 7.1M**

**drwxr-xr-x 2 memsql memsql 4.0K May 20 02:52 share**

**-rwxr-xr-x 1 memsql memsql 905 May 20 02:52 service**

**drwxr-xr-x 3 memsql memsql 4.0K May 20 02:52 objdir**

**-rwxr-xr-x 1 memsql memsql 12K May 20 02:52 check\_system**

**-rw-r--r-- 1 memsql memsql 33K May 20 02:52 redist\_licenses.txt**

**drwxr-xr-x 2 memsql memsql 4.0K May 20 02:52 redist\_licenses**

**-rw-r--r-- 1 memsql memsql 338 May 20 02:52 LICENSE**

**-rwxr-xr-x 1 memsql memsql 7.0M May 20 02:53 memsqld**

**drwxr-xr-x 3 memsql memsql 4.0K Jul 17 06:04 utils**

**drwxr-xr-x 9 memsql memsql 4.0K Jul 17 06:04 lib**

**-rw-r--r-- 1 memsql memsql 888 Jul 17 06:04 memsql.cnf**

**-rw-r--r-- 1 memsql memsql 4 Jul 17 06:04 memsqld.pid**

**drwxr-xr-x 2 memsql memsql 4.0K Jul 17 06:04 tracelogs**

**drwxr-xr-x 5 memsql memsql 4.0K Jul 17 06:04 data**

**drwxr-xr-x 49 memsql memsql 4.0K Jul 17 06:07 plancache**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] ll -lhtr /var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954**

**total 7.1M**

**drwxr-xr-x 2 memsql memsql 4.0K May 20 02:52 share**

**-rwxr-xr-x 1 memsql memsql 905 May 20 02:52 service**

**drwxr-xr-x 3 memsql memsql 4.0K May 20 02:52 objdir**

**-rwxr-xr-x 1 memsql memsql 12K May 20 02:52 check\_system**

**-rw-r--r-- 1 memsql memsql 33K May 20 02:52 redist\_licenses.txt**

**drwxr-xr-x 2 memsql memsql 4.0K May 20 02:52 redist\_licenses**

**-rw-r--r-- 1 memsql memsql 338 May 20 02:52 LICENSE**

**-rwxr-xr-x 1 memsql memsql 7.0M May 20 02:53 memsqld**

**drwxr-xr-x 3 memsql memsql 4.0K Jul 17 06:04 utils**

**drwxr-xr-x 9 memsql memsql 4.0K Jul 17 06:04 lib**

**lrwxrwxrwx 1 memsql memsql 68 Jul 17 06:04 MIa5e97c3be61648409382d557752251aa -> /var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa**

**-rw-r--r-- 1 memsql memsql 838 Jul 17 06:05 memsql.cnf**

**-rw-r--r-- 1 memsql memsql 4 Jul 17 06:05 memsqld.pid**

**drwxr-xr-x 2 memsql memsql 4.0K Jul 17 06:05 tracelogs**

**drwxr-xr-x 5 memsql memsql 4.0K Jul 17 06:05 data**

**drwxr-xr-x 53 memsql memsql 4.0K Jul 17 06:07 plancache**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] mysql -u root -h dbversitydotcom -P 3306 --prompt="memsql> "**

**Welcome to the MySQL monitor. Commands end with ; or \g.**

**Your MySQL connection id is 26**

**Server version: 5.5.8 MemSQL source distribution (compatible; MySQL Enterprise & MySQL Commercial)**

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**affiliates. Other names may be trademarks of their respective**

**owners.**

**Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.**

**memsql>**

**memsql> show aggregators;**

**+-----------+------+--------+--------------------+------------------------------+-------------------+**

**| Host | Port | State | Opened\_Connections | Average\_Roundtrip\_Latency\_ms | Master\_Aggregator |**

**+-----------+------+--------+--------------------+------------------------------+-------------------+**

**| 127.0.0.1 | 3306 | online | 0 | NULL | 1 |**

**+-----------+------+--------+--------------------+------------------------------+-------------------+**

**1 row in set (0.00 sec)**

**memsql> SHOW REPLICATION STATUS;**

**+--------+----------+-----------+----------------+------------------------------+-----------+-----------------+-------------+----------------+---------------+--------------+**

**| Role | Database | MasterURI | MasterPosition | SlaveURI | Connected | NetworkPosition | SlaveState | ReplayPosition | MasterCommits | SlaveCommits |**

**+--------+----------+-----------+----------------+------------------------------+-----------+-----------------+-------------+----------------+---------------+--------------+**

**| master | sharding | NULL | 0:564 | 10.xx.xx.11:3307/sharding | yes | 0:564 | replicating | 0:564 | 13 | 13 |**

**+--------+----------+-----------+----------------+------------------------------+-----------+-----------------+-------------+----------------+---------------+--------------+**

**1 row in set (0.00 sec)**

**memsql>**

**memsql> select \* from information\_schema.processlist where info is not null order by time desc;**

**+----+-------------+-----------------------------------+----------+---------+------+-----------+----------------------------------------------------------------------------------------+---------+-------------------+----------------+----------------------+-------+**

**| ID | USER | HOST | DB | COMMAND | TIME | STATE | INFO | PLAN\_ID | TRANSACTION\_STATE | ROW\_LOCKS\_HELD | PARTITION\_LOCKS\_HELD | EPOCH |**

**+----+-------------+-----------------------------------+----------+---------+------+-----------+----------------------------------------------------------------------------------------+---------+-------------------+----------------+----------------------+-------+**

**| 3 | distributed | dbversitydotcom.nam.nsroot.net:145 | sharding | Query | 1555 | | MEMSQL REPLICATION START | NULL | NULL | 0 | 0 | NULL |**

**| 26 | root | dbversitydotcom.nam.nsroot.net:56721 | NULL | Query | 3 | executing | select \* from information\_schema.processlist where info is not null order by time desc | 3 | NULL | 0 | 0 | 99487 |**

**+----+-------------+-----------------------------------+----------+---------+------+-----------+----------------------------------------------------------------------------------------+---------+-------------------+----------------+----------------------+-------+**

**2 rows in set (3.45 sec)**

**memsql>**

**[ root @ dbversitydotcom : /memsql ] mysql -u root -h dbversitydotcom -P 3306 --prompt="memsql> "**

**Welcome to the MySQL monitor. Commands end with ; or \g.**

**Your MySQL connection id is 35**

**Server version: 5.5.8 MemSQL source distribution (compatible; MySQL Enterprise & MySQL Commercial)**

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**affiliates. Other names may be trademarks of their respective**

**owners.**

**Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.**

**memsql>**

**memsql>**

**memsql> SHOW STATUS;**

**+-------------------------------------+----------------------------------+**

**| Variable\_name | Value |**

**+-------------------------------------+----------------------------------+**

**| Aborted\_clients | 1 |**

**| Aborted\_connects | 9 |**

**| Bytes\_received | 265185393 |**

**| Bytes\_sent | 990391286 |**

**| Connections | 35 |**

**| Max\_used\_connections | 22 |**

**| Queries | 58834 |**

**| Questions | 58834 |**

**| Threads\_cached | 1 |**

**| Threads\_connected | 21 |**

**| Threads\_created | 22 |**

**| Threads\_running | 2 |**

**| Uptime | 4228 |**

**| Aggregator\_id | 1 |**

**| Seconds\_until\_expiration | 1675313 |**

**| License\_key | 65525960351a46189c7c54e8c9e00fe6 |**

**| License\_type | enterprise |**

**| Maximum\_cluster\_capacity | 18446744073709551615 MB |**

**| Used\_cluster\_capacity | 15744 MB |**

**| Query\_compilations | 6 |**

**| Query\_compilation\_failures | 0 |**

**| GCed\_versions\_last\_sweep | 0 |**

**| Average\_garbage\_collection\_duration | 0 ms |**

**| Total\_server\_memory | 382.5 MB |**

**| Loaded\_plans\_virtual\_memory | 2.0 MB |**

**| Malloc\_active\_memory | 365.1 MB |**

**| Malloc\_cumulative\_memory | 410.0 (+0.0) MB |**

**| Alloc\_variable\_cached\_buffers | 4.9 MB |**

**| Ssl\_accept\_renegotiates | 0 |**

**| Ssl\_accepts | 0 |**

**| Ssl\_callback\_cache\_hits | 0 |**

**| Ssl\_client\_connects | 0 |**

**| Ssl\_connect\_renegotiates | 0 |**

**| Ssl\_ctx\_verify\_depth | 18446744073709551615 |**

**| Ssl\_ctx\_verify\_mode | 0 |**

**| Ssl\_default\_timeout | 0 |**

**| Ssl\_finished\_accepts | 0 |**

**| Ssl\_finished\_connects | 0 |**

**| Ssl\_session\_cache\_hits | 0 |**

**| Ssl\_session\_cache\_misses | 0 |**

**| Ssl\_session\_cache\_overflows | 0 |**

**| Ssl\_session\_cache\_size | 20480 |**

**| Ssl\_session\_cache\_timeouts | 0 |**

**| Ssl\_sessions\_reused | 0 |**

**| Ssl\_used\_session\_cache\_entries | 0 |**

**| Ssl\_verify\_depth | 0 |**

**| Ssl\_verify\_mode | 0 |**

**| Ssl\_cipher | |**

**| Ssl\_cipher\_list | |**

**| Ssl\_version | |**

**| Ssl\_session\_cache\_mode | SERVER |**

**+-------------------------------------+----------------------------------+**

**51 rows in set (0.00 sec)**

**memsql> SELECT @@GLOBAL.redundancy\_level;**

**+---------------------------+**

**| @@GLOBAL.redundancy\_level |**

**+---------------------------+**

**| 1 |**

**+---------------------------+**

**1 row in set (0.00 sec)**

**memsql> SHOW REBALANCE STATUS ON db ;**

**+------------------+---------+----------------+-------------+-------+---------+--------------+**

**| Action | Ordinal | Target\_Host | Target\_Port | Phase | Status | Running\_Time |**

**+------------------+---------+----------------+-------------+-------+---------+--------------+**

**| CREATE PARTITION | 0 | 10.xx.xx.11 | 3307 | 1 | success | 995 |**

**| CREATE PARTITION | 1 | 10.xx.xx.11 | 3307 | 1 | success | 995 |**

**| CREATE PARTITION | 2 | 10.xx.xx.11 | 3307 | 1 | success | 995 |**

**| CREATE PARTITION | 3 | 10.xx.xx.11 | 3307 | 1 | success | 995 |**

**+------------------+---------+----------------+-------------+-------+---------+--------------+**

**4 rows in set (0.01 sec)**

**memsql>**

**memsql> \! hostname -i**

**10.xx.xx.11**

**memsql>**

**memsql> SHOW LEAVES;**

**+----------------+------+--------------------+-----------+-----------+--------+--------------------+------------------------------+**

**| Host | Port | Availability\_Group | Pair\_Host | Pair\_Port | State | Opened\_Connections | Average\_Roundtrip\_Latency\_ms |**

**+----------------+------+--------------------+-----------+-----------+--------+--------------------+------------------------------+**

**| 10.xx.xx.11 | 3307 | 1 | NULL | NULL | online | 60 | 0.396 |**

**+----------------+------+--------------------+-----------+-----------+--------+--------------------+------------------------------+**

**1 row in set (0.00 sec)**

**memsql>**

**memsql> SHOW AGGREGATORS;**

**+-----------+------+--------+--------------------+------------------------------+-------------------+**

**| Host | Port | State | Opened\_Connections | Average\_Roundtrip\_Latency\_ms | Master\_Aggregator |**

**+-----------+------+--------+--------------------+------------------------------+-------------------+**

**| 127.0.0.1 | 3306 | online | 0 | NULL | 1 |**

**+-----------+------+--------+--------------------+------------------------------+-------------------+**

**1 row in set (0.00 sec)**

**memsql>**

**memsql> exit**

**Bye**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops --help**

**usage: memsql-ops ...**

**LOCAL MEMSQL OPS AGENT MANAGEMENT:**

**start Start the MemSQL Ops agent.**

**stop Stop the MemSQL Ops agent.**

**restart Restart the MemSQL Ops agent.**

**follow Connect the local MemSQL Ops agent to the primary**

**agent.**

**unfollow Disconnect the local MemSQL Ops agent from the primary**

**agent.**

**uninstall Uninstall MemSQL Ops from this host and delete all of**

**its data.**

**status Check the status of the MemSQL Ops agent.**

**version Print version information for MemSQL Ops.**

**agent-id Print the current MemSQL Ops agent ID.**

**ssl-set-cert Set an SSL certificate that will be used to serve the**

**web UI through HTTPS.**

**ssl-disable Disables SSL for MemSQL Ops.**

**REMOTE MEMSQL OPS AGENT MANAGEMENT:**

**agent-start Start one or all MemSQL Ops agents in the cluster.**

**agent-stop Stop one or all MemSQL Ops agents in the cluster.**

**agent-upgrade Upgrade MemSQL Ops to the newest version.**

**agent-deploy Deploy a MemSQL Ops agent to a host.**

**agent-list List MemSQL Ops agents in the cluster.**

**agent-set-credential**

**Set the SSH credentials to use for the specified**

**agent.**

**agent-uninstall Uninstall a remote MemSQL Ops agent and all of its**

**data.**

**agent-ssh Open SSH connections to agents.**

**agent-get SCP files from agents.**

**agent-put SCP files to agents.**

**MEMSQL NODE MANAGEMENT:**

**memsql-deploy Deploy a MemSQL node.**

**memsql-list List MemSQL nodes in the cluster.**

**memsql-start Start a MemSQL node.**

**memsql-stop Stop a MemSQL node.**

**memsql-restart Restart a MemSQL node.**

**memsql-monitor Start monitoring a MemSQL node in MemSQL Ops.**

**memsql-unmonitor Stop monitoring a MemSQL node.**

**memsql-update-config**

**Change a config value for a MemSQL node.**

**memsql-update-root-password**

**Update the root password for a MemSQL node.**

**memsql-path Get the directory where a given MemSQL node is**

**installed.**

**memsql-delete Delete a MemSQL node and all of its data.**

**MEMSQL CLUSTER MANAGEMENT:**

**cluster-start Start all MemSQL nodes in the cluster.**

**cluster-stop Stop all MemSQL nodes in the cluster.**

**cluster-restart Restart all MemSQL nodes in the cluster.**

**cluster-upgrade Stop, upgrade, and restart all MemSQL nodes in the**

**cluster.**

**cluster-enable-high-availability**

**Enable high availability for the MemSQL cluster.**

**cluster-manual-control**

**Enable or disable MemSQL Ops manual control of the**

**cluster.**

**MEMSQL LICENSE MANAGEMENT:**

**license-list List all registered licenses for MemSQL Enterprise**

**Edition.**

**license-add Add a license for MemSQL Enterprise Edition. This**

**license will be deployed to all MemSQL nodes.**

**MEMSQL BACKUP MANAGEMENT:**

**database-backup Create a backup of a database in the MemSQL cluster.**

**database-restore Restore a MemSQL database from a backup.**

**database-backup-list**

**List MemSQL backups in the cluster.**

**database-backup-delete**

**Delete a MemSQL backup on all nodes.**

**MEMSQL OPS JOB MANAGEMENT:**

**job-list List jobs.**

**job-info Show information about a job.**

**job-logs View job logs.**

**job-cancel Cancel a job.**

**job-wait Wait for a job to finish.**

**MEMSQL OPS FILE MANAGEMENT:**

**file-add Add a file that can be used to install MemSQL or**

**MemSQL Ops.**

**file-list List files stored in MemSQL Ops.**

**file-delete Delete a file stored in MemSQL Ops.**

**MEMSQL OPS SUPERUSER MANAGEMENT:**

**superuser-list List superusers that can manage MemSQL Ops.**

**superuser-add Add a superuser that can manage MemSQL Ops.**

**superuser-delete Delete an existing superuser.**

**MEMSQL OPS TOOLS:**

**help Print user manual for MemSQL Ops.**

**report Generate a report that contains diagnostic information**

**for MemSQL Ops.**

**EXAMPLES:**

**Start MemSQL Ops on this host:**

**$ memsql-ops start**

**Check to see if MemSQL Ops is running:**

**$ memsql-ops status**

**Stop MemSQL Ops on this host:**

**$ memsql-ops stop**

**For more information please visit our online documentation:**

**http://docs.memsql.com/latest/ops**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-list**

**ID Agent Id Process State Cluster State Role Host Port**

**6DCC03C Afef126 RUNNING CONNECTED MASTER 10.xx.xx.11 3306**

**F1371BF Afef126 RUNNING CONNECTED LEAF 10.xx.xx.11 3307**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-path F1371BF**

**/var/lib/memsql-ops/data/installs/MI9a8271286b5a413d9f54b932cd80a954**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-path 6DCC03C**

**/var/lib/memsql-ops/data/installs/MIa5e97c3be61648409382d557752251aa**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops version**

**Version: 4.0.31**

**Git SHA: 02d78dc77925eb294bf92e5a6769b8df3da3f5c1**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-unmonitor**

**Index ID Agent Id Process State Cluster State Role Host Port**

**1 6DCC03C Afef126 RUNNING CONNECTED MASTER 10.xx.xx.11 3306**

**2 F1371BF Afef126 RUNNING CONNECTED LEAF 10.xx.xx.11 3307**

**Must be in the range 1-2**

**Select a MemSQL node: 1**

**2015-07-17 07:29:39: J79e589 [INFO] Stopping monitoring for MemSQL node 6DCC03C6ECF8A8F97026EA4814D91BBC004BBBCB**

**2015-07-17 07:29:39: J79e589 [INFO] No longer monitoring MemSQL node 6DCC03C6ECF8A8F97026EA4814D91BBC004BBBCB**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-unmonitor**

**Index ID Agent Id Process State Cluster State Role Host Port**

**1 F1371BF Afef126 RUNNING CONNECTED LEAF 10.xx.xx.11 3307**

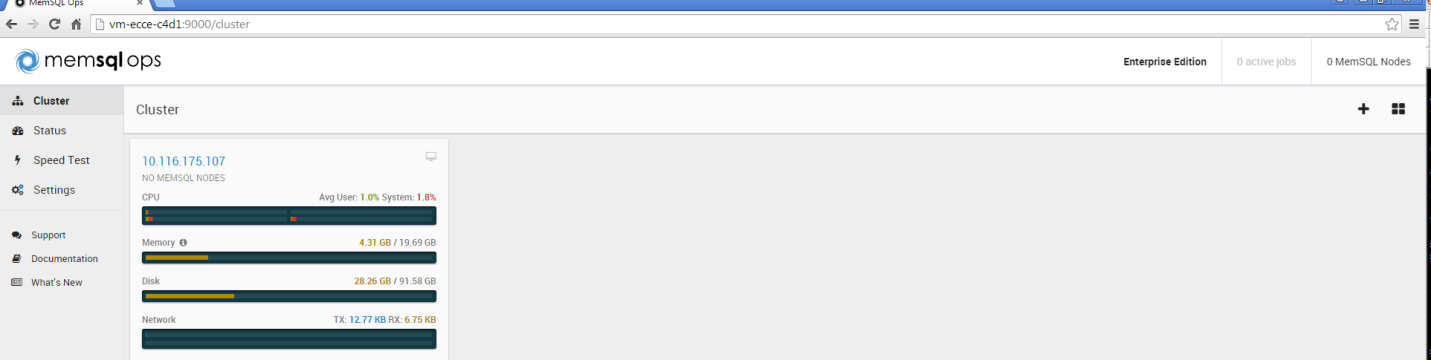
**Must be in the range 1-1**

**Select a MemSQL node: 1**

**2015-07-17 07:29:51: J7b618a [INFO] Stopping monitoring for MemSQL node F1371BF8DDCF1D603286611CAF7CCA95FDC390F6**

**2015-07-17 07:29:51: J7b618a [INFO] No longer monitoring MemSQL node F1371BF8DDCF1D603286611CAF7CCA95FDC390F6**

**[ root @ dbversitydotcom : /memsql ]**

**-**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-monitor --help**

**usage: memsql-ops memsql-monitor [--settings-file SETTINGS\_FILE] [--async]**

**[-h HOST] [-P PORT] [-u USER] [-p [PASSWORD]]**

**[--single-box]**

**Start monitoring a MemSQL node in MemSQL Ops.**

**optional arguments:**

**--settings-file SETTINGS\_FILE**

**A path to a MemSQL Ops settings.conf file. If not set,**

**we will use the file in the same directory as the**

**MemSQL Ops binary.**

**--async If this option is true, we will exit without waiting**

**for MemSQL Ops to monitor the node.**

**-h HOST, --host HOST The host for the MemSQL node. If this is not**

**specified, we will use the local host.**

**-P PORT, --port PORT The port for the MemSQL node.**

**-u USER, --user USER The user to use for the MemSQL node.**

**-p [PASSWORD], --password [PASSWORD]**

**The password to use for the MemSQL node.**

**--single-box If this is true, we will not attempt to attach this**

**MemSQL node to the rest of the cluster.**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-monitor -h 10.xx.xx.11 -P 3306 --single-box**

**2015-07-17 07:47:51: J02a977 [INFO] Monitoring MemSQL node at 10.xx.xx.11:3306**

**2015-07-17 07:47:51: J02a977 [INFO] Now monitoring MemSQL node at 10.xx.xx.11:3306**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-monitor -h 10.xx.xx.11 -P 3306 --single-box**

**2015-07-17 07:48:07: J308e3c [INFO] Monitoring MemSQL node at 10.xx.xx.11:3306**

**2015-07-17 07:48:07: J308e3c [ERROR] Already monitoring MemSQL node with id 6DCC03C6ECF8A8F97026EA4814D91BBC004BBBCB**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-monitor -h 10.xx.xx.11 -P 3307 --single-box**

**2015-07-17 07:48:15: J3633d7 [INFO] Monitoring MemSQL node at 10.xx.xx.11:3307**

**2015-07-17 07:48:15: J3633d7 [INFO] Now monitoring MemSQL node at 10.xx.xx.11:3307**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ]**

**[ root @ dbversitydotcom : /memsql ] memsql-ops memsql-unmonitor**

**Index ID Agent Id Process State Cluster State Role Host Port**

**1 6DCC03C Afef126 RUNNING CONNECTED MASTER 10.xx.xx.11 3306**

**2 F1371BF Afef126 RUNNING CONNECTED SINGLE\_BOX 10.xx.xx.11 3307**

**Select a MemSQL node:**

**[ root @ dbversitydotcom : /memsql ]**