



INSTITUTO TECNOLÓGICO SUPERIOR DE JEREZ



INGENIERÍA EN SISTEMAS COMPUTACIONALES

ADMINISTRACIÓN DE BASES DE DATOS

6° SEMESTRE

TEMA 4: OPERACIÓN Y MANTENIMIENTO

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“REPORTE DE PRÁCTICA: USO HERRAMIENTA MYSQLSLAP”

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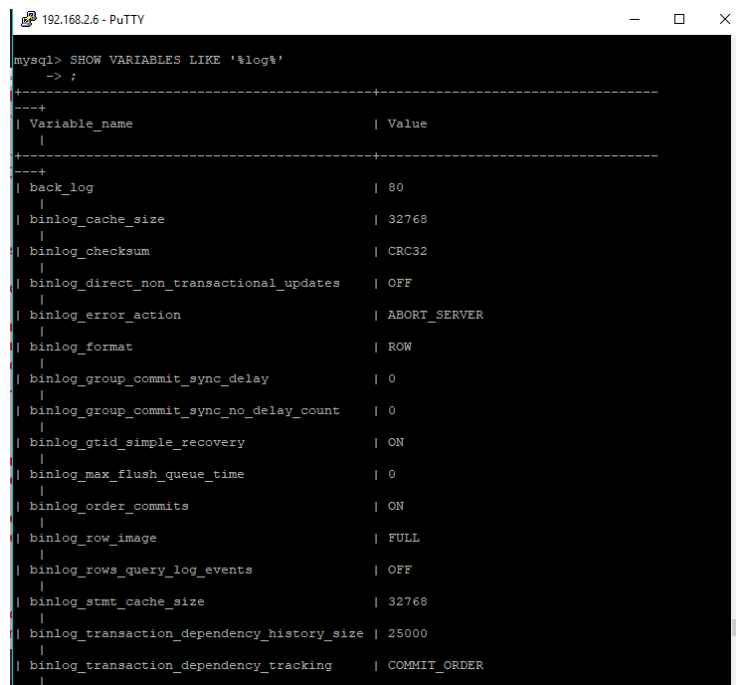
**JEREZ, ZACATECAS
MARTES 26 DE MARZO DE 2019**

OBJETIVO

Establecer conexión a través de MySQL en Debian, utilizando la herramienta MYSQLSALP.

PROCEDIMIENTO

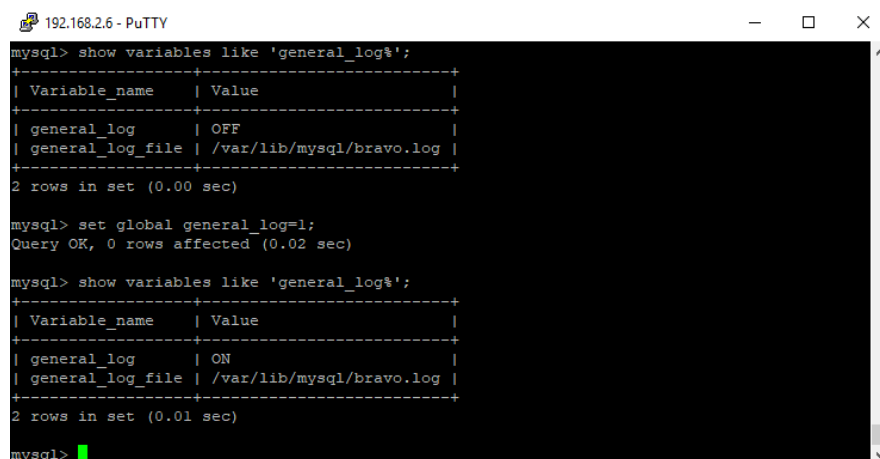
Inicialmente, verificamos que si se encuentren los logs.



```
mysql> SHOW VARIABLES LIKE '%log%'
```

Variable_name	Value
back_log	80
binlog_cache_size	32768
binlog_checksum	CRC32
binlog_direct_non_transactional_updates	OFF
binlog_error_action	ABORT_SERVER
binlog_format	ROW
binlog_group_commit_sync_delay	0
binlog_group_commit_sync_no_delay_count	0
binlog_gtid_simple_recovery	ON
binlog_max_flush_queue_time	0
binlog_order_commits	ON
binlog_row_image	FULL
binlog_rows_query_log_events	OFF
binlog_stmt_cache_size	32768
binlog_transaction_dependency_history_size	25000
binlog_transaction_dependency_tracking	COMMIT_ORDER

Enseguida se debe de ver, en qué estado se encuentra general_log, si se encuentra desactivado, se debe de activar.



```
mysql> show variables like 'general_log%';
```

Variable_name	Value
general_log	OFF
general_log_file	/var/lib/mysql/bravo.log

```
mysql> set global general_log=1;
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> show variables like 'general_log%';
```

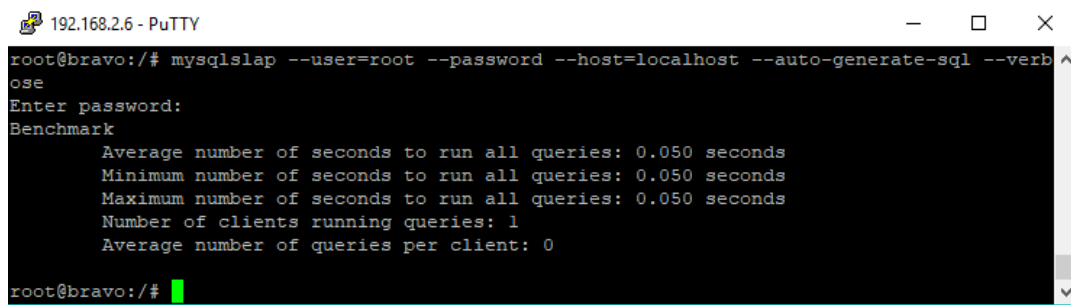
Variable_name	Value
general_log	ON
general_log_file	/var/lib/mysql/bravo.log

RESULTADOS

Después de haber activado el log, se prosigue a ejecutar las siguientes instrucciones, para la verificación de varios registros.

1.-

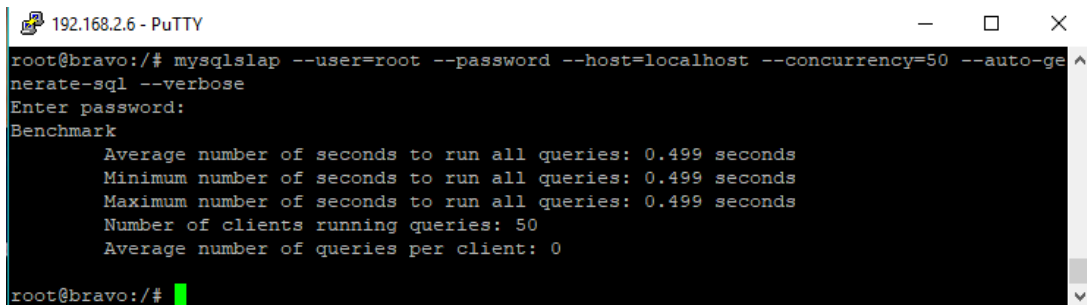
`mysqlslap --user=root --password --host=localhost --auto-generate-sql --verbose`



```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.050 seconds
  Minimum number of seconds to run all queries: 0.050 seconds
  Maximum number of seconds to run all queries: 0.050 seconds
  Number of clients running queries: 1
  Average number of queries per client: 0
root@bravo:/#
```

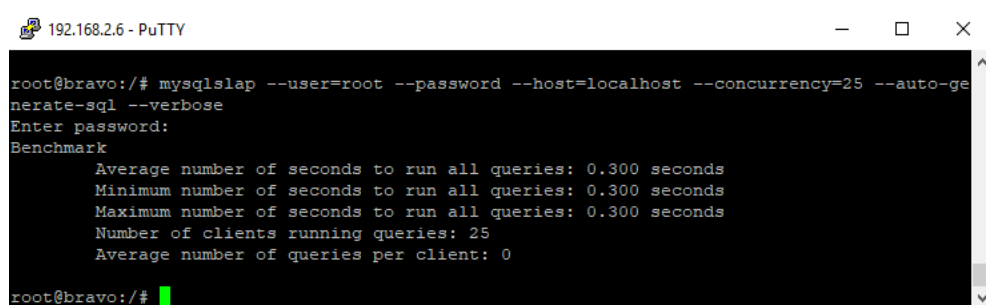
2.-

`mysqlslap --user=root --password --host=localhost --concurrency=50 --auto-generate-sql --verbose`



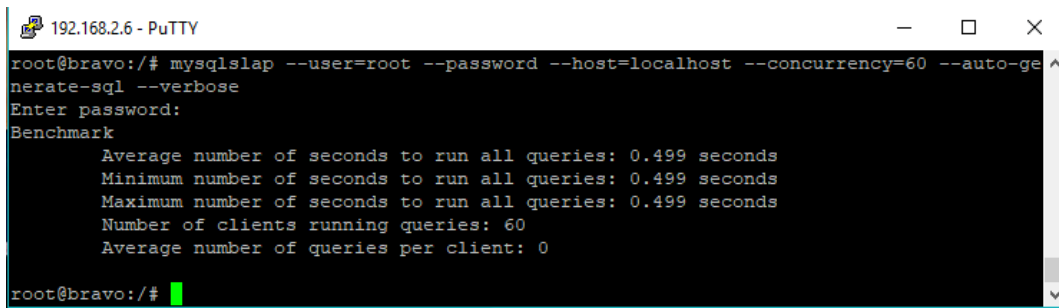
```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=50 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.499 seconds
  Minimum number of seconds to run all queries: 0.499 seconds
  Maximum number of seconds to run all queries: 0.499 seconds
  Number of clients running queries: 50
  Average number of queries per client: 0
root@bravo:/#
```

En el cual, se realizó una prueba de concurrencia de 25.



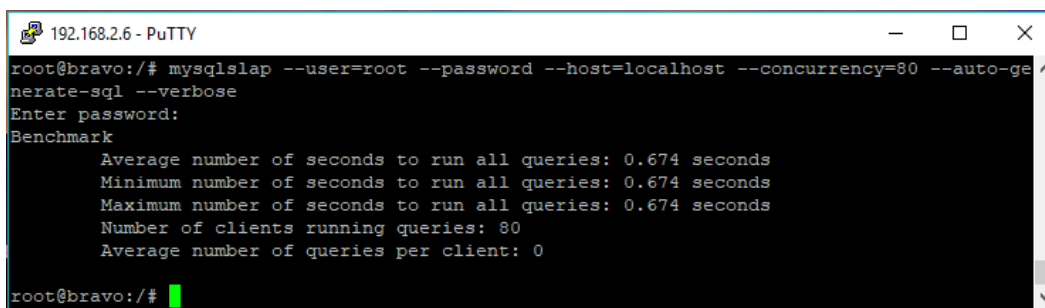
```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=25 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.300 seconds
  Minimum number of seconds to run all queries: 0.300 seconds
  Maximum number of seconds to run all queries: 0.300 seconds
  Number of clients running queries: 25
  Average number of queries per client: 0
root@bravo:/#
```

Después, una prueba, con la concurrencia en 60.



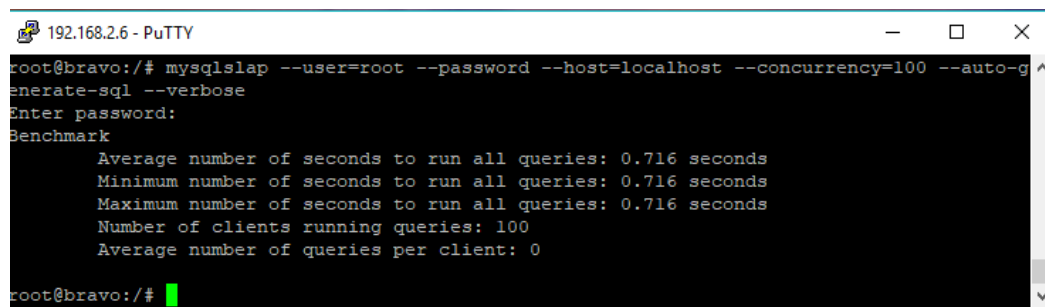
```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=60 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.499 seconds
  Minimum number of seconds to run all queries: 0.499 seconds
  Maximum number of seconds to run all queries: 0.499 seconds
  Number of clients running queries: 60
  Average number of queries per client: 0
root@bravo:/#
```

Enseguida con la concurrencia en 80.



```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=80 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.674 seconds
  Minimum number of seconds to run all queries: 0.674 seconds
  Maximum number of seconds to run all queries: 0.674 seconds
  Number of clients running queries: 80
  Average number of queries per client: 0
root@bravo:/#
```

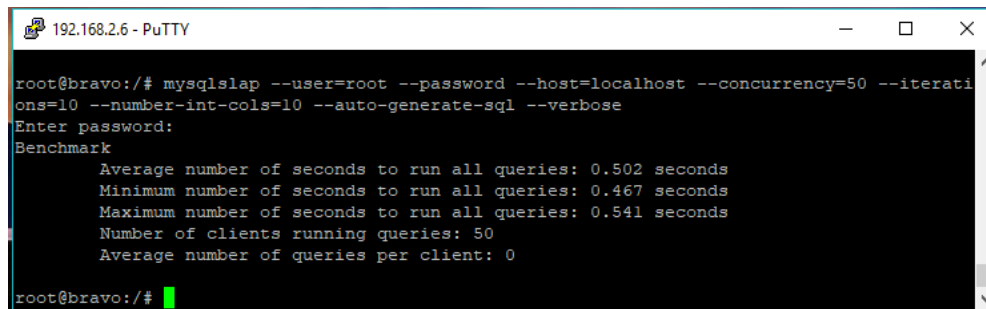
Y finalmente, con la concurrencia en 100.



```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=100 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.716 seconds
  Minimum number of seconds to run all queries: 0.716 seconds
  Maximum number of seconds to run all queries: 0.716 seconds
  Number of clients running queries: 100
  Average number of queries per client: 0
root@bravo:/#
```

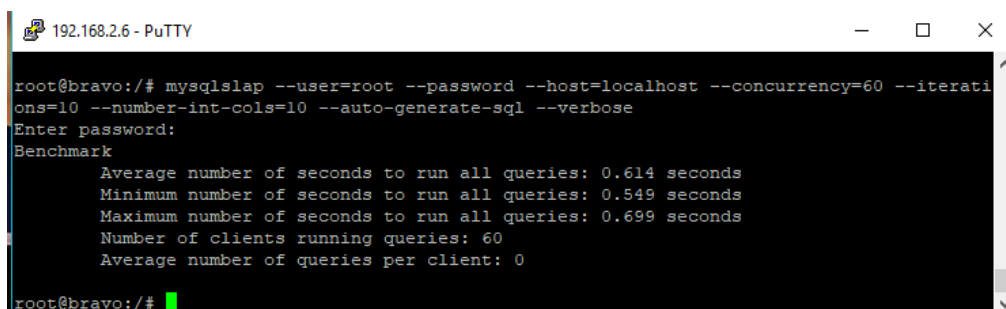
3.-

mysqlslap --user=root --password --host=localhost --concurrency=50 --iterations=10 --number-int-cols=10 --auto-generate-sql --verbose



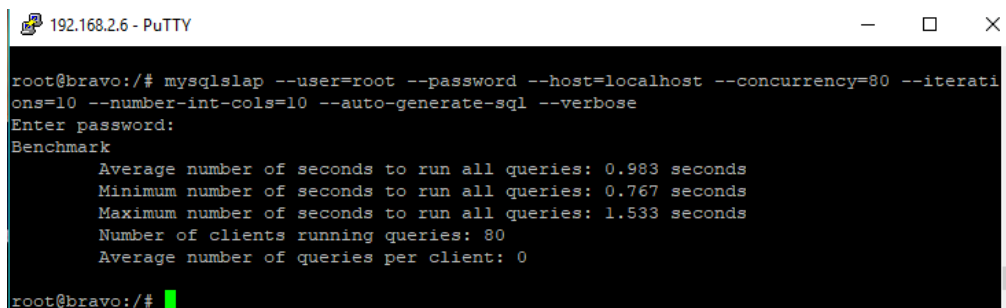
```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=50 --iterations=10 --number-int-cols=10 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.502 seconds
  Minimum number of seconds to run all queries: 0.467 seconds
  Maximum number of seconds to run all queries: 0.541 seconds
  Number of clients running queries: 50
  Average number of queries per client: 0
root@bravo:/#
```

En el cual, se fueron realizando varias pruebas, como, por ejemplo, se cambió el número de la concurrencia a 60, dejándolo con mismo número de iteraciones.



```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=60 --iterations=10 --number-int-cols=10 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.614 seconds
  Minimum number of seconds to run all queries: 0.549 seconds
  Maximum number of seconds to run all queries: 0.699 seconds
  Number of clients running queries: 60
  Average number of queries per client: 0
root@bravo:/#
```

Después, se cambió el número de la concurrencia por 80, y con el mismo número de iteraciones.



```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=80 --iterations=10 --number-int-cols=10 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 0.983 seconds
  Minimum number of seconds to run all queries: 0.767 seconds
  Maximum number of seconds to run all queries: 1.533 seconds
  Number of clients running queries: 80
  Average number of queries per client: 0
root@bravo:/#
```

Enseguida, se realizó otra prueba con la concurrencia de 100, y con el mismo número de iteraciones.

```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=100 --iterations=10 --number-int-cols=10 --auto-generate-sql --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 1.529 seconds
  Minimum number of seconds to run all queries: 1.041 seconds
  Maximum number of seconds to run all queries: 3.374 seconds
  Number of clients running queries: 100
  Average number of queries per client: 0
root@bravo:/#
```

4.-

*mysqlslap --user=root --password --host=localhost --concurrency=10 --iterations=10 --create-schema=employees --query="SELECT * FROM dept_emp; SELECT * FROM dept_manager;" --delimiter=";" --verbose*

```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=10 --iterations=10 --create-schema=employees --query="SELECT * FROM dept_emp; SELECT * FROM dept_manager;" --delimiter=";" --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 3.320 seconds
  Minimum number of seconds to run all queries: 3.107 seconds
  Maximum number of seconds to run all queries: 5.179 seconds
  Number of clients running queries: 10
  Average number of queries per client: 2
root@bravo:/#
```

Después, se cambió el número de la concurrencia a 20, y no quiso.

```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=20 --iterations=10 --create-schema=employees --query="SELECT * FROM dept_emp; SELECT * FROM dept_manager;" --delimiter=";" --verbose
Enter password:
Killed
```

Enseguida se redujo el número de la concurrencia a 10, con iteraciones de 5

```
192.168.2.6 - PuTTY
root@bravo:/# mysqlslap --user=root --password --host=localhost --concurrency=10 --iterations=5 --create-schema=employees --query="SELECT * FROM dept_emp; SELECT * FROM dept_manager;" --delimiter=";" --verbose
Enter password:
Benchmark
  Average number of seconds to run all queries: 3.116 seconds
  Minimum number of seconds to run all queries: 3.110 seconds
  Maximum number of seconds to run all queries: 3.125 seconds
  Number of clients running queries: 10
  Average number of queries per client: 2
root@bravo:/#
```