

NAME

`mysql_secure_installation` – improve MySQL installation security

SYNOPSIS

`mysql_secure_installation`

DESCRIPTION

This program enables you to improve the security of your MySQL installation in the following ways:

- You can set a password for root accounts.
- You can remove root accounts that are accessible from outside the local host.
- You can remove anonymous–user accounts.
- You can remove the test database (which by default can be accessed by all users, even anonymous users), and privileges that permit anyone to access databases with names that start with `test_`.

`mysql_secure_installation` helps you implement security recommendations similar to those described at Section 2.10.4, “Securing the Initial MySQL Account”.

Normal usage is to connect to the local MySQL server; invoke **`mysql_secure_installation`** without arguments:

```
shell> mysql_secure_installation
```

When executed, **`mysql_secure_installation`** prompts you to determine which actions to perform.

The `validate_password` component can be used for password strength checking. If the plugin is not installed, **`mysql_secure_installation`** prompts the user whether to install it. Any passwords entered later are checked using the plugin if it is enabled.

Most of the usual MySQL client options such as `--host` and `--port` can be used on the command line and in option files. For example, to connect to the local server over IPv6 using port 3307, use this command:

```
shell> mysql_secure_installation --host=:1 --port=3307
```

`mysql_secure_installation` supports the following options, which can be specified on the command line or in the `[mysql_secure_installation]` and `[client]` groups of an option file. For information about option files used by MySQL programs, see Section 4.2.2.2, “Using Option Files”.

- `--help, -?`

Display a help message and exit.

- `--defaults-extra-file=file_name`

Read this option file after the global option file but (on Unix) before the user option file. If the file does not exist or is otherwise inaccessible, an error occurs. *file_name* is interpreted relative to the current directory if given as a relative path name rather than a full path name.

For additional information about this and other option–file options, see Section 4.2.2.3, “Command-Line Options that Affect Option-File Handling”.

- `--defaults-file=file_name`

Use only the given option file. If the file does not exist or is otherwise inaccessible, an error occurs. *file_name* is interpreted relative to the current directory if given as a relative path name rather than a full path name.

For additional information about this and other option–file options, see Section 4.2.2.3, “Command-Line Options that Affect Option-File Handling”.

- **--defaults-group-suffix=***str*

Read not only the usual option groups, but also groups with the usual names and a suffix of *str*. For example, **mysql_secure_installation** normally reads the [client] and [mysql_secure_installation] groups. If the **--defaults-group-suffix=***other* option is given, **mysql_secure_installation** also reads the [client_ *other*] and [mysql_secure_installation_ *other*] groups.

For additional information about this and other option-file options, see Section 4.2.2.3, “Command-Line Options that Affect Option-File Handling”.

- **--host=***host_name*, **-h** *host_name*

Connect to the MySQL server on the given host.

- **--no-defaults**

Do not read any option files. If program startup fails due to reading unknown options from an option file, **--no-defaults** can be used to prevent them from being read.

The exception is that the .mylogin.cnf file, if it exists, is read in all cases. This permits passwords to be specified in a safer way than on the command line even when **--no-defaults** is used. (.mylogin.cnf is created by the **mysql_config_editor** utility. See **mysql_config_editor**(1).)

For additional information about this and other option-file options, see Section 4.2.2.3, “Command-Line Options that Affect Option-File Handling”.

- **--password=***password*, **-p** *password*

This option is accepted but ignored. Whether or not this option is used, **mysql_secure_installation** always prompts the user for a password.

- **--port=***port_num*, **-P** *port_num*

For TCP/IP connections, the port number to use.

- **--print-defaults**

Print the program name and all options that it gets from option files.

For additional information about this and other option-file options, see Section 4.2.2.3, “Command-Line Options that Affect Option-File Handling”.

- **--protocol={TCP|SOCKET|PIPE|MEMORY}**

The connection protocol to use for connecting to the server. It is useful when the other connection parameters normally result in use of a protocol other than the one you want. For details on the permissible values, see Section 4.2.4, “Connecting to the MySQL Server Using Command Options”.

- **--socket=***path*, **-S** *path*

For connections to localhost, the Unix socket file to use, or, on Windows, the name of the named pipe to use.

On Windows, this option applies only if the server was started with the named_pipe system variable enabled to support named-pipe connections. In addition, the the connection must be a member of the Windows group specified by the named_pipe_full_access_group system variable.

- **--ssl***

Options that begin with **--ssl** specify whether to connect to the server using SSL and indicate where to find SSL keys and certificates. See the section called “Command Options for Encrypted Connections”.

- **--ssl-fips-mode={OFF|ON|STRICT}** Controls whether to enable FIPS mode on the client side. The **--ssl-fips-mode** option differs from other **--ssl-xxx** options in that it is not used to establish encrypted connections, but rather to affect which cryptographic operations are permitted. See Section 6.5, “FIPS Support”.

These **--ssl-fips-mode** values are permitted:

- OFF: Disable FIPS mode.
- ON: Enable FIPS mode.
- STRICT: Enable “strict” FIPS mode.

Note

If the OpenSSL FIPS Object Module is not available, the only permitted value for **--ssl-fips-mode** is OFF. In this case, setting **--ssl-fips-mode** to ON or STRICT causes the client to produce a warning at startup and to operate in non-FIPS mode.

- **--tls-ciphersuites=ciphersuite_list**

The permissible ciphersuites for encrypted connections that use TLSv1.3. The value is a list of one or more colon-separated ciphersuite names. The ciphersuites that can be named for this option depend on the SSL library used to compile MySQL. For details, see Section 6.3.2, “Encrypted Connection TLS Protocols and Ciphers”.

This option was added in MySQL 8.0.16.

- **--tls-version=protocol_list**

The permissible TLS protocols for encrypted connections. The value is a list of one or more comma-separated protocol names. The protocols that can be named for this option depend on the SSL library used to compile MySQL. For details, see Section 6.3.2, “Encrypted Connection TLS Protocols and Ciphers”.

- **--use-default**

Execute noninteractively. This option can be used for unattended installation operations.

- **--user=user_name, -u user_name**

The user name of the MySQL account to use for connecting to the server.

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SEE ALSO

For more information, please refer to the MySQL Reference Manual, which may already be installed locally and which is also available online at <http://dev.mysql.com/doc/>.

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