



Connection String URI Format

Standard Connection String Format

This section describes the standard format of the MongoDB connection URI used to connect to a MongoDB database server. The format is the same for all official MongoDB drivers. For a list of drivers and links to driver documentation, see [MongoDB Drivers and Client Libraries](#). The following is the standard URI connection scheme:

```
mongodb://[username:password@]host1[:port1][,host2[:port2],...[,hostN[:portN]]]/[database][?options]
```

```
use MongoDB::Uri;
my MongoDB::Uri $uri-obj .= new(:uri<mongodb://localhost>);
ok $uri-obj.defined, 'T0';
is $uri-obj.server-data<servers>[0]<host>, "localhost", 'T1';
5. is $uri-obj.server-data<servers>[0]<port>, 27017, 'T2';
```

- ✓ **T0:**
- ✓ **T1:** default server name
- ✓ **T2:** default port number

In the specification shown above it is necessary to specify at least one host and when there are more, all of these must be defined. In this driver implementation however, it is not necessary when host is `localhost`. So for this driver it is;

```
mongodb://[username:password@][host1][:port1],...[,hostN][:portN]]/[database][?options]
```

```
$uri-obj .= new(:uri<mongodb://>);
is $uri-obj.server-data<servers>[0]<host>, "localhost", 'T3';
is $uri-obj.server-data<servers>[0]<port>, 27017, 'T4';
$uri-obj .= new(:uri<mongodb://,,>);
10. ok $uri-obj.server-data<servers>[1]<host>:!exists, 'T5';
```

- ✓ **T3:** All is brought back to bare protocol specification and we get `localhost`.
- ✓ **T4:** and its default port number `27017`.
- ✓ **T5:** No matter how many comma's are used to separate host specifications. So here there is no second host `localhost:27017`.

Username and password

```
$uri-obj .= new(:uri<mongodb://user:pencil@>);
is $uri-obj.server-data<username>, "user", 'T6';
is $uri-obj.server-data<password>, "pencil", 'T7';
dies-ok { $uri-obj .= new(:uri<mongodb://user:@>); }
15. , 'T8';
```

- ✓ **T6:** Username found in uri is `user`.

- ✓ T7: Password found in uri is pencil.
- ✓ T8: It is not correct to specify the username without its password.

Database

```
$uri-obj . = new(:uri<mongodb://>);
is $uri-obj.server-data<database>, "admin", 'T9';
$uri-obj . = new(:uri<mongodb://contacts>);
is $uri-obj.server-data<database>, "contacts", 'T10';
```

- ✓ T9: Default database is admin.
- ✓ T10: User defined database is contacts.

Options

```
20. $uri-obj . = new(:uri<mongodb://:65000/?replicaSet=test&authMechanism=SCRAM-SHA-1>);
is $uri-obj.server-data<options><replicaSet>, "test", 'T11';
is $uri-obj.server-data<options><authMechanism>, "SCRAM-SHA-1", 'T12';
```

- ✓ T11: Option replicaSet is test.
- ✓ T12: Option authMechanism is SCRAM-SHA-1.

