

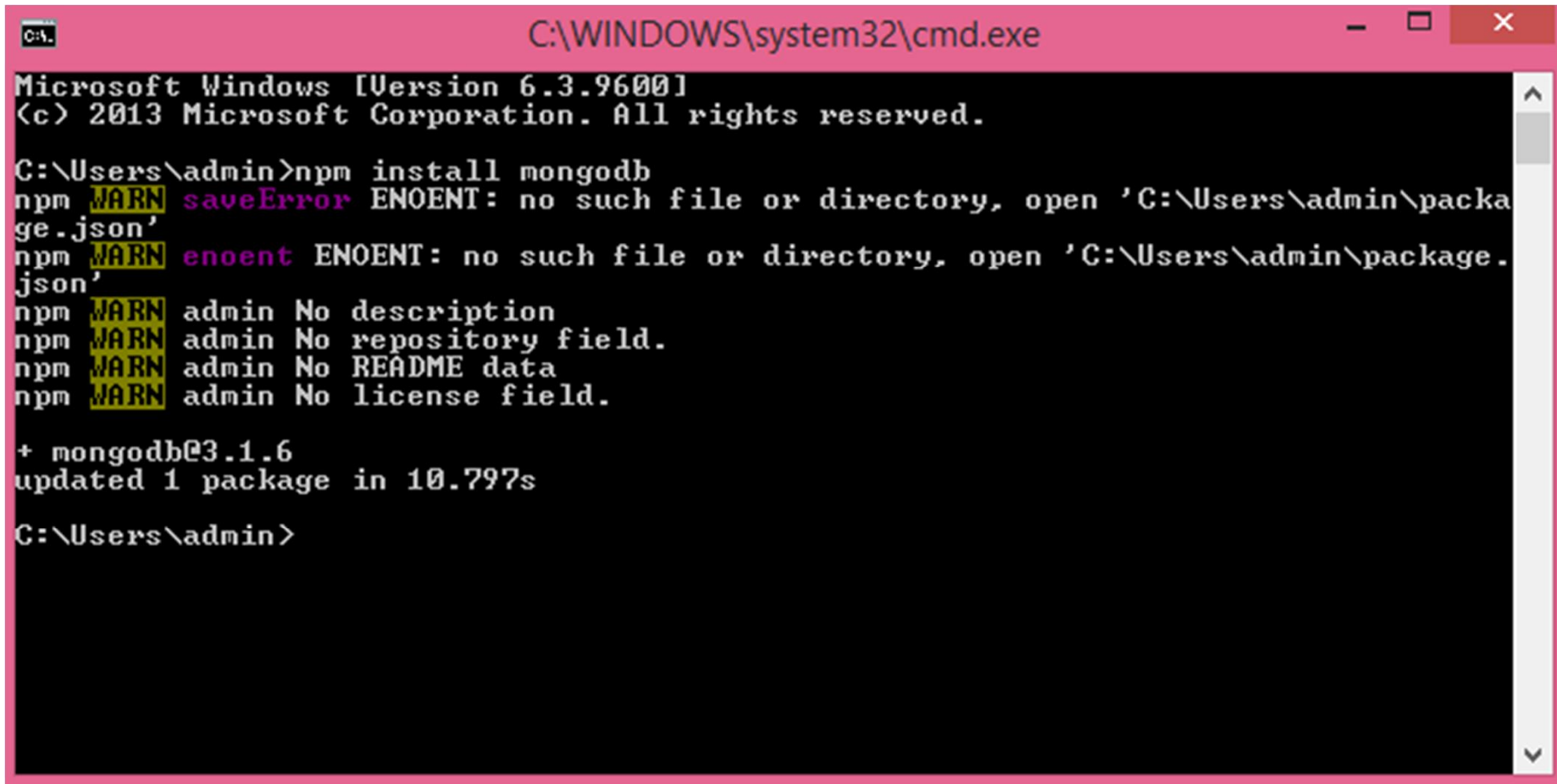
Client-Server-Database

MONGODB

Manipulation Using

NODE JS

- **Install MongoDB Driver** to connect node js and mongodb
- Type command → C:\Users\admin>npm install mongodb



```
C:\WINDOWS\system32\cmd.exe
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\admin>npm install mongodb
npm WARN saveError ENOENT: no such file or directory, open 'C:\Users\admin\package.json'
npm WARN enoent ENOENT: no such file or directory, open 'C:\Users\admin\package.json'
npm WARN admin No description
npm WARN admin No repository field.
npm WARN admin No README data
npm WARN admin No license field.

+ mongodb@3.1.6
updated 1 package in 10.797s

C:\Users\admin>
```

Create MongoDB database through Node JS

C:\Users\admin\ node_mongodb.js

```
var MongoClient=require('mongodb').MongoClient;
console.log(MongoClient);
var url="mongodb://localhost:27017/";
MongoClient.connect(url,function(err,db) {
  if (err)      throw err;
var db1 =db.db("mydb");
  console.log("Database connected!");
  db.close();});
```

- 27017 is the default port number for MongoDB.
- MongoDB waits until you have created a collection (table), with at least one document (record) before it actually creates the database (and collection).

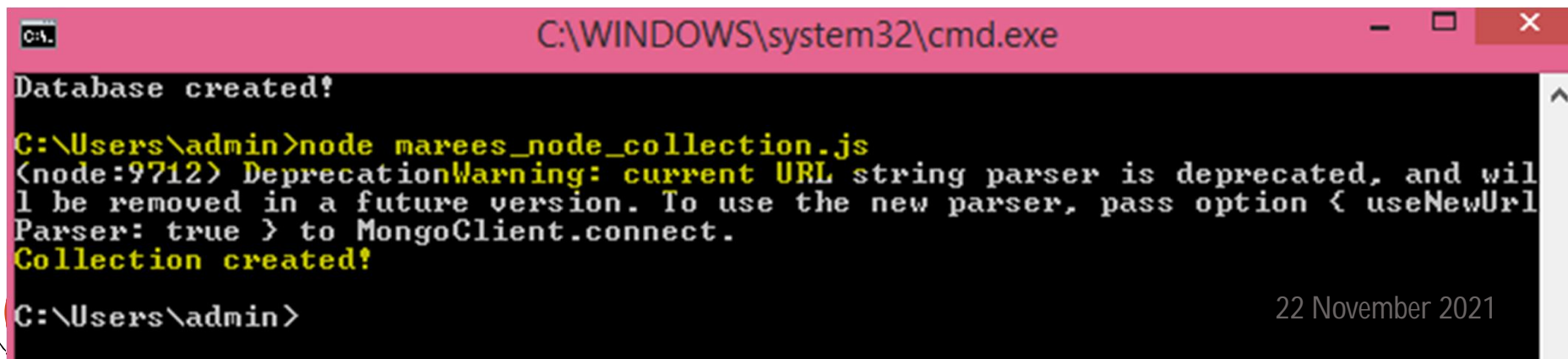
Run the connectivity program by C:\Users\admin>node node_mongodb.js

```
C:\WINDOWS\system32\cmd.exe

C:\Users\admin>node marees_node_mongodb.js
< [Function: MongoClient]
  super_:
    < [Function: EventEmitter]
      EventEmitter: [Circular],
      usingDomains: false,
      defaultMaxListeners: [Getter/Setter],
      init: [Function],
      listenerCount: [Function] },
  connect:
    < [Function]
      MongoError: [Function: MongoError],
      MongoNetworkError: [Function: MongoNetworkError],
      Admin: [Function: Admin],
      MongoClient: [Circular],
      Db:
        < [Function: Db]
          super_: [Object],
          SYSTEM_NAMESPACE_COLLECTION: 'system.namespaces',
          SYSTEM_INDEX_COLLECTION: 'system.indexes',
          SYSTEM_PROFILE_COLLECTION: 'system.profile',
          TWO_PWR_24_DBL: 16777216,
          TWO_PWR_32_DBL: 4294967296,
          TWO_PWR_31_DBL: 2147483648,
          TWO_PWR_48_DBL: 281474976710656,
          TWO_PWR_64_DBL: 18446744073709552000,
          TWO_PWR_63_DBL: 9223372036854776000,
          ZERO: [Object],
          ONE: [Object],
          NEG_ONE: [Object],
          MAX_VALUE: [Object],
          MIN_VALUE: [Object],
          TWO_PWR_24: [Object],
          Timestamp: [Circular],
          BSONRegExp: < [Function: BSONRegExp] BSONRegExp: [Circular] >,
          Decimal128: < [Function: Decimal128] fromString: [Function], Decimal128: [Circular] >,
          connect: [Circular],
          instrument: [Function] > }
(node:7052) DeprecationWarning: current URL string parser is deprecated, and will be removed in a future version. To use the new parser, pass option { useNewUrlParser: true } to MongoClient.connect.
Database created!
C:\Users\admin>
```

C:\Users\admin\node_collection.js

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  dbo.createCollection("customers", function(err, res) {
    if (err) throw err;
    console.log("Collection created!");
    db.close();  }); });
```



The screenshot shows a Windows command prompt window titled "C:\WINDOWS\system32\cmd.exe". The prompt is at "C:\Users\admin>". The user has entered the command "node marees_node_collection.js". The output shows a deprecation warning from Node.js about the URL string parser, followed by the message "Collection created!". The prompt is now "C:\Users\admin>".

```
C:\WINDOWS\system32\cmd.exe
Database created?
C:\Users\admin>node marees_node_collection.js
(node:9712) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser:
true } to MongoClient.connect.
Collection created!
C:\Users\admin>
```

22 November 2021

C:\Users\admin\node_insert.js

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/mydb";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myobj = { CompanyID:"1",name: "Vijayan Infotech", address:
  "VIT Road,Vellore" };
  dbo.collection("customers").insertOne(myobj, function(err, res) {
    if (err) throw err;
    console.log("1 document inserted");
    db.close(); });});
```

```

C:\Users\admin>node marees_node_mongodb_insert.js
(node:8056) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser:
Parser: true } to MongoClient.connect.
1 document inserted

C:\Users\admin>node marees_node_mongodb_insert.js
(node:6616) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser:
Parser: true } to MongoClient.connect.
1 document inserted

```

- Run the node program like above
- Run the below commands in mongo client

```

> use mydb
switched to db mydb
> show collections;
customers
> db.customers.find().pretty();
{
  "_id" : ObjectId("5bd03b0cceec371f78bede66"),
  "name" : "Company Inc",
  "address" : "Highway 37"
}
> db.customers.find().pretty();
{
  "_id" : ObjectId("5bd03b0cceec371f78bede66"),
  "name" : "Company Inc",
  "address" : "Highway 37"
}
{
  "_id" : ObjectId("5bd03c00f68d6d19d854898a"),
  "CompanyID" : "1",
  "name" : "Marees Infotech",
  "address" : "UIT Road, Vellore"
}

```


C:\Users\admin\node_find.js

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var query = { name: "Marees Infotech" };
  dbo.collection("customers").find(query).toArray(function(err,
result) {
  if (err) throw err;
  console.log(result);
  db.close(); });});
```

```

> db.customers.find().pretty();
{
  "_id" : ObjectId("5bd03b0cceec371f78bede66"),
  "name" : "Company Inc",
  "address" : "Highway 37"
}
{
  "_id" : ObjectId("5bd03c00f68d6d19d854898a"),
  "CompanyID" : "1",
  "name" : "Marees Infotech",
  "address" : "UIT Road, Vellore"
}
{
  "_id" : ObjectId("5bd045a02359901b806cbfba"),
  "CompanyID" : "1",
  "name" : "Marees Infotech",
  "address" : "UIT Road, Vellore"
}

```

```

C:\Users\admin>node marees_node_mongodb_find.js
(node:11260) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUr
lParser: true } to MongoClient.connect.
[ { _id: 5bd03c00f68d6d19d854898a,
  CompanyID: '1',
  name: 'Marees Infotech',
  address: 'UIT Road, Vellore' },
  { _id: 5bd045a02359901b806cbfba,
    CompanyID: '1',
    name: 'Marees Infotech',
    address: 'UIT Road, Vellore' } ]
C:\Users\admin>

```

C:\Users\admin\node_update.js

```
var MongoClient = require('mongodb').MongoClient;
var url = "mongodb://localhost:27017/";
MongoClient.connect(url, function(err, db) {
  if (err) throw err;
  var dbo = db.db("mydb");
  var myquery = { name: " Infotech" };
  var newvalues = { $set: {name: "Industries", address:
                                "Near Vellore Port " } };
  dbo.collection("customers").updateOne(myquery, newvalues,
function(err, res) {
  if (err) throw err;
  console.log("1 document updated");
  db.close(); });});
```

```
C:\Users\admin>node marees_node_mongodb_update.js
(node:2616) DeprecationWarning: current URL string parser is deprecated, and will
be removed in a future version. To use the new parser, pass option { useNewUrlParser:
true } to MongoClient.connect.
1 document updated

C:\Users\admin>
```

```
> db.customers.find().pretty();
{
  "_id" : ObjectId("5bd03b0ccec371f78bede66"),
  "name" : "Company Inc",
  "address" : "Highway 37"
}
{
  "_id" : ObjectId("5bd03c00f68d6d19d854898a"),
  "CompanyID" : "1",
  "name" : "Mareeswari Industries",
  "address" : "Near Vellore Port "
}
{
  "_id" : ObjectId("5bd045a02359901b806cbfba"),
  "CompanyID" : "1",
  "name" : "Marees Infotech",
  "address" : "UIT Road, Vellore"
}
```