

connect-mongo

MongoDB session store for Connect and Express written in Typescript.



Breaking change in V4 and rewritten the whole project using Typescript. Please checkout the migration guide and changelog for details.

- Install
- Compatibility
- Usage
 - Express or Connect integration
 - Connection to MongoDB
- Known issues
 - Native autoRemove causing error on close
 - MongoError exports circular dependency

- Existing encrypted v3.2.0 sessions are not decrypted correctly by v4
- Events
- Session expiration
- Remove expired sessions
 - Set MongoDB to clean expired sessions (default mode)
 - Set the compatibility mode
 - Disable expired sessions cleaning
- Lazy session update
- Transparent encryption/decryption of session data
- Options
 - Connection-related options (required)
 - More options
 - Crypto-related options
- Development
 - Example application
 - Release
- License

Install

```
npm install connect-mongo
yarn add connect-mongo
```

- You may also need to run install mongodb if you do not have it installed already because mongodb is not a peerDependencies instead.
- If you are upgrading from v3.x to v4, please checkout the migration guide for details.
- If you are upgrading v4.x to latest version, you may check the example and options for details.

Compatibility

- Support Express up to 5.0
- Support native MongoDB driver >= 4.0

- Support Node.js 12, 14 and 16
- Support MongoDB 3.2+

For extended compatibility, see previous versions **v3.x**. But please note that we are not maintaining v3.x anymore.

Usage

Express or Connect integration

```
Express 4.x, 5.0 and Connect 3.x:

const session = require('express-session');
const MongoStore = require('connect-mongo');

app.use(session({
    secret: 'foo',
    store: MongoStore.create(options)
}));

import session from 'express-session'
import MongoStore from 'connect-mongo'

app.use(session({
    secret: 'foo',
    store: MongoStore.create(options)
}));
```

Connection to MongoDB

In many circumstances, connect-mongo will not be the only part of your application which need a connection to a MongoDB database. It could be interesting to re-use an existing connection.

Alternatively, you can configure connect-mongo to establish a new connection.

Create a new connection from a MongoDB connection string

MongoDB connection strings are the best way to configure a new connection. For advanced usage, more options can be configured with mongoOptions property.

```
// Basic usage
app.use(session({
    store: MongoStore.create({ mongoUrl: 'mongodb://localhost/test-app'
}));

// Advanced usage
app.use(session({
    store: MongoStore.create({
        mongoUrl: 'mongodb://user12345:foobar@localhost/test-app?authSour
        mongoOptions: advancedOptions // See below for details
    })
}));
```

Re-use an existing native MongoDB driver client promise

In this case, you just have to give your MongoClient instance to connect-mongo.

```
/*
    ** There are many ways to create MongoClient.
    ** You should refer to the driver documentation.
    */

// Database name present in the connection string will be used
app.use(session({
    store: MongoStore.create({ clientPromise })
}));

// Explicitly specifying database name
app.use(session({
```

```
store: MongoStore.create({
    clientPromise,
    dbName: 'test-app'
    })
}));
```

Known issues

Known issues in GitHub Issues page.

Native autoRemove causing error on close

• Calling close() immediately after creating the session store may cause error when the async index creation is in process when autoRemove: 'native'. You may want to manually manage the autoRemove index. #413

MongoError exports circular dependency

The following error can be safely ignore from official reply.

```
(node:16580) Warning: Accessing non-existent property 'MongoError' of module exports inside ci (Use `node --trace-warnings ...` to show where the warning was created)
```

Existing encrypted v3.2.0 sessions are not decrypted correctly by v4

v4 cannot decrypt the session encrypted from v3.2 due to a bug. Please take a look on this issue for possible workaround. #420

Events

A MongoStore instance will emit the following events:

Event name	Description	Payload
create	A session has been created	sessionId
touch	A session has been touched (but not modified)	sessionId

Event name	Description	Payload
update	A session has been updated	sessionId
set	A session has been created OR updated (for compatibility purpose)	sessionId
destroy	A session has been destroyed manually	sessionId

Session expiration

When the session cookie has an expiration date, connect-mongo will use it.

Otherwise, it will create a new one, using ttl option.

```
app.use(session({
   store: MongoStore.create({
      mongoUrl: 'mongodb://localhost/test-app',
      ttl: 14 * 24 * 60 * 60 // = 14 days. Default
   })
}));
```

Note: Each time an user interacts with the server, its session expiration date is refreshed.

Remove expired sessions

By default, connect-mongo uses MongoDB's TTL collection feature (2.2+) to have mongod automatically remove expired sessions. But you can change this behavior.

Set MongoDB to clean expired sessions (default mode)

connect-mongo will create a TTL index for you at startup. You MUST have MongoDB 2.2+ and administration permissions.

```
app.use(session({
```

```
store: MongoStore.create({
    mongoUrl: 'mongodb://localhost/test-app',
    autoRemove: 'native' // Default
    })
}));
```

Note: If you use connect-mongo in a very concurrent environment, you should avoid this mode and prefer setting the index yourself, once!

Set the compatibility mode

In some cases you can't or don't want to create a TTL index, e.g. Azure Cosmos DB.

connect-mongo will take care of removing expired sessions, using defined interval.

```
app.use(session({
    store: MongoStore.create({
        mongoUrl: 'mongodb://localhost/test-app',
        autoRemove: 'interval',
        autoRemoveInterval: 10 // In minutes. Default
    })
}));
```

Disable expired sessions cleaning

You are in production environnement and/or you manage the TTL index elsewhere.

```
app.use(session({
    store: MongoStore.create({
        mongoUrl: 'mongodb://localhost/test-app',
        autoRemove: 'disabled'
    })
}));
```

Lazy session update

If you are using express-session >= 1.10.0 and don't want to resave all the session on database every single time that the user refresh the page, you can lazy update the session, by limiting a period of time.

```
app.use(express.session({
    secret: 'keyboard cat',
    saveUninitialized: false, // don't create session until something s
    resave: false, //don't save session if unmodified
    store: MongoStore.create({
        mongoUrl: 'mongodb://localhost/test-app',
        touchAfter: 24 * 3600 // time period in seconds
    })
}));
```

by doing this, setting touchAfter: 24 * 3600 you are saying to the session be updated only one time in a period of 24 hours, does not matter how many request's are made (with the exception of those that change something on the session data)

Transparent encryption/decryption of session data

When working with sensitive session data it is recommended to use encryption

```
const store = MongoStore.create({
  mongoUrl: 'mongodb://localhost/test-app',
  crypto: {
    secret: 'squirrel'
  }
})
```

Options

Connection-related options (required)

One of the following options should be provided. If more than one option are provided,

each option will take precedence over others according to priority.

Priority	Option	Description
1	mongoUrl	A connection string for creating a new MongoClient connection. If database name is not present in the connection string, database name should be provided using dbName option.
2	clientPromise	A Promise that is resolved with MongoClient connection. If the connection was established without database name being present in the connection string, database name should be provided using dbName option.
3	client	An existing MongoClient connection. If the connection was established without database name being present in the connection string, database name should be provided using dbName option.

More options

Option	Default	Descri
mongoOptions	{ useUnifiedTopology: true }	Options object for MongoClient method. Can be mongoUrl opt
dbName		A name of databastoring sessions. with mongoUrl clientPromi

9 of 14

Option	Default	Descri
		database name p
collectionName	'sessions'	A name of collect storing sessions.
ttl	1209600	The maximum lif seconds) of the s will be used to se session.coo if it is not yet set. days.
autoRemove	'native'	Behavior for rem sessions. Possibl 'native', 'i and 'disable
autoRemoveInterval	10	Interval (in minual autoRemove cinterval.
touchAfter	0	Interval (in secor session updates.
stringify	true	If true, connect serialize sessions JSON.string setting them, and them with JSON when getting the useful if you are a MongoDB doesn'

Option	Default	Descri
serialize		Custom hook for sessions to Mong helpful if you nee the session befor
unserialize		Custom hook for sessions from Mc can be used in sc you need to supp types of serialization objects and JSOI need to modify the before using it in
writeOperationOptions		Options object to MongoDB write c that supports it (remove). Usefuthe write concernexception: If autset to 'interv concern from the writeOperat object will get ov
transformId		Transform origin sessionId in want to use as st
crypto		Crypto related or below.

Crypto-related options

Option	Default	Description
secret	false	Enables transparent crypto in accordance with OWASP session management recommendations.
algorithm	'aes-256- gcm'	Allows for changes to the default symmetric encryption cipher. See <pre>crypto.getCiphers()</pre> for supported algorithms.
hashing	'sha512'	May be used to change the default hashing algorithm. See crypto.getHashes () for supported hashing algorithms.
encodeas	'hex'	Specify to change the session data cipher text encoding.
key_size	32	When using varying algorithms the key size may be used. Default value 32 is based on the AES blocksize.
iv_size	16	This can be used to adjust the default IV size if a different algorithm requires a different size.
at_size	16	When using newer AES modes such as the default GCM or CCM an authentication tag size can be defined.

Development

```
yarn install
docker-compose up -d
# Run these 2 lines in 2 shell
yarn watch:build
```

yarn watch:test

Example application

```
yarn link
cd example
yarn link "connect-mongo"
yarn install
yarn start
```

Release

Since I cannot access the setting page. I can only do it manually.

- 1. Bump version, update CHANGELOG.md and README. Commit and push.
- 2. Run yarn build && yarn test && npm publish

Reposit gjt tag vX.Y.Z && git push --tags

github.com/jdesboeufs/connect-mongo

License

Homepage



Keywords 105,451

Versignect	mongo	mongodb	session	express	License
4.6.0					MIT

Total Files Unpacked Size 109 kB 14

Issues **Pull Requests**

Last publish

11

9 months ago

Collaborators





13 of 14 6/7/2022, 10:46 AM

1

>_Try on RunKit
™Report malware





Support

Help

Advisories

Status

Contact npm

Company

About

Blog

Press

Terms & Policies

Policies

Terms of Use

Code of Conduct

Privacy