EventStoreDB Node.js Instructions for Running Locally

Overview

Welcome to the Node.js example of Event Store's **From Scratch** series. This series allows you to quickly overcome the common challenges of setting up and configuring a new development environment, and focus on advancing your EventStoreDB skills.

The **From Scratch** series provides working code examples for basic reads and writes to EventStoreDB, a tested environment to run the code, and instructions that clearly describe the steps required to run the code successfully.

Each **From Scratch** repository provides the following:

- A working Github Codespaces environment
- Instructions on running EventStoreDB locally
- Instructions to set up a similar project on your own

We recommend you progress through the **From Scratch** projects in the following order:

1. Run the code in Codespaces
2. Clone the For Scratch GitHub repo, and follow the instructions to run it locally
3. Build your own project

This document assumes you have successfully run the code in Codespaces. Your next step is downloading or cloning the GitHub repository and running the code on your computer. ***This is the recommended second stage in Event Store's From Scratch Node.js series.***

Other clients in the **From Scratch** series include:

- .NET
- Java
- Python

Topics covered

1. Download or clone the GitHub repository
2. Install an IDE
3. Install Node.js locally
4. Start a Docker container running EventStoreDB
5. Execute an append by running `node sample_append.js`
6. Execute a read by running `node sample_read.js`

Before you start

To run the code locally, you will need the following:

- A working Node.js installation
- An IDE (*optional)
- Docker

1. Download or clone the GitHub repository

On the GitHub repository's home page, select the green “Code” button. Ensure you are in the “Local” tab. Choose one of the following options to download the repo code to a local directory.

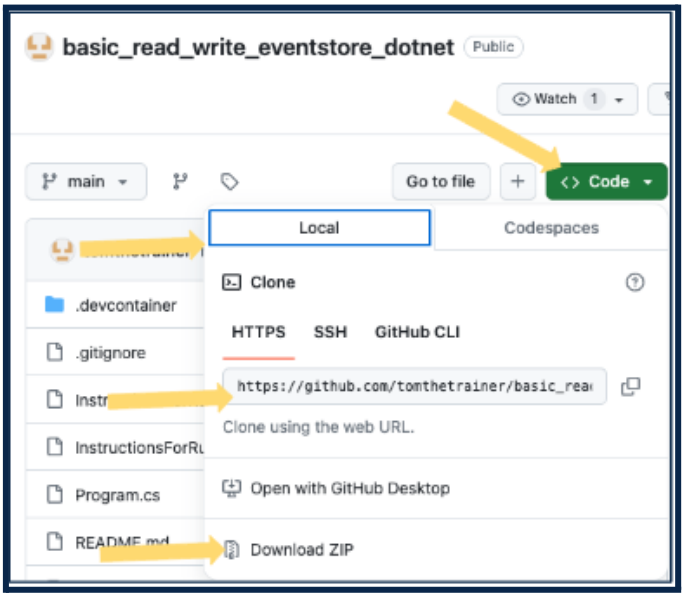
Option 1: Using Git Clone

1. Copy the URL provided
2. Open a terminal window, and run the following command. (Replace “<repository_url.git>” with the copied URL)

```
git clone
https://github.com/EventStore/EventStoreDB-From-Scratch-Node.js.git
```

Option 2: Download repo to a zip file

1. Select “Download ZIP” located at the bottom of the Local tab



2. Install an IDE

This is an optional step. If you prefer using an IDE, please follow these instructions to download VS Code.

https://code.visualstudio.com/download.

If you prefer an alternate IDE, please feel free to use the IDE of your choice.

If you opt not to use an IDE, the code can be run from the command line.

3. Install Node.js locally

On a Mac, you can install homebrew by running the following command.

```
brew install node
```

For other platforms, please follow the instructions at
https://nodejs.org/en/learn/getting-started/how-to-install-nodejs

4. Start a Docker container running EventStoreDB

Install Docker

Find instructions at https://docs.docker.com/engine/install/

Once Docker is installed, download and run the EventStoreDB Docker container using the command line. The following command will start an unsecured single instance EventStoreDB cluster locally.

```
docker run -d --name esdb-node -it -p 2113:2113 -p 1113:1113 \
     eventstore/eventstore:lts --insecure --run-projections=All \
     --enable-external-tcp --enable-atom-pub-over-http
```

Like the Codespaces environment, you can view the EventStoreDB WebUI by pointing a browser to http://localhost:2113/.

Install the dependencies for the project

Dependencies added to a yarn-managed Node.js project are stored in the yarn.lock file. Because dependencies are not typically stored with the project when pushed to GitHub, you will need to install the dependencies locally after downloading the project.

Executing the following command will download the dependencies into the node_modules directory.

```
yarn install
```

5. Execute an append of an event to EventStoreDB

The sample_append.js file will append an event to EventStoreDB.

```
node sample_append.js
```

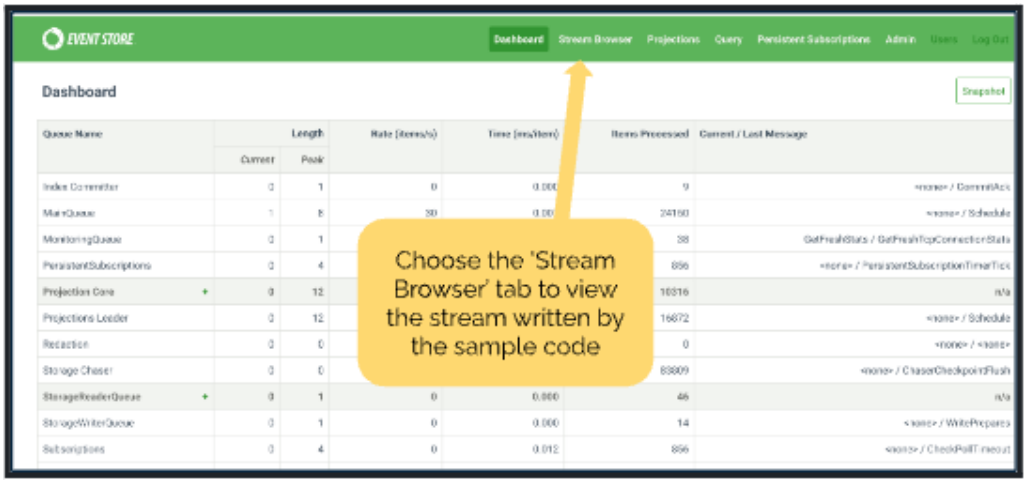
6. Execute a read of events in a stream from EventStoreDB

The sample_read.js file will read the event you just wrote.

```
node sample_read.js
```

Verify by checking the WebUI

After executing the code, view the "Stream Browser" tab within the WebUI to verify the events were written to a stream.



Congratulations! After running the sample program.cs you have succeeded in writing and reading events to and from EventstoreDB.

Next Steps

Now that you have successfully written and read events in EventstoreDB locally, we recommend you continue your learning with the **From Scratch** .Node.js instructions for setting up a local environment.

As you progress with your EventStoreDB skills, you can also find additional examples in the following repo:

> https://github.com/EventStore/samples

In particular, we recommend the Quickstart examples here:

> https://github.com/EventStore/samples/tree/main/Quickstart