**Host Node.js applications on Render**

Hosting a **Node.js application** on **Render** is simple and provides free tier hosting with auto-deployments. Follow these steps:

**Step 1: Prepare Your Node.js App**

Ensure your project has:

* A **package.json** file with necessary dependencies.
* A **server.js** or **index.js** file as the entry point.
* A **start script** in package.json:

json

{

"scripts": {

"start": "node server.js"

}

}

* If using **Express**, ensure the app listens on process.env.PORT:

js

const express = require("express");

const app = express();

const PORT = process.env.PORT || 3000;

app.get("/", (req, res) => {

res.send("Hello from Render!");

});

app.listen(PORT, () => {

console.log(`Server running on port ${PORT}`);

});

**Step 2: Push Your Code to GitHub**

1. Initialize Git (if not done already):

sh

git init

git add .

git commit -m "Initial commit"

git branch -M main

git remote add origin <your-github-repo-url>

git push -u origin main

**Step 3: Deploy on Render**

1. **Go to** [**Render**](https://render.com/)
2. **Sign up/log in** using GitHub.
3. Click **"New Web Service"**.
4. Select **your GitHub repository**.
5. Set deployment settings:
   * **Build Command:** npm install
   * **Start Command:** npm start
   * **Environment Variables:**
     + Add PORT = 10000 or leave it auto-assigned.
6. Click **Create Web Service**.

**Step 4: Verify Deployment**

* After deployment, Render provides a **live URL** (e.g., https://your-app.onrender.com).
* Open the URL in your browser to test the app.

**Step 5: Enable Automatic Deployment (Optional)**

* Enable **Auto Deploy** in **Render Dashboard > Settings**.
* Any **Git push** triggers automatic deployment.

**Additional Features**

* Use a **custom domain** via **Settings > Custom Domains**.
* Enable **logging** under the **Logs** section.
* Deploy a **database** (e.g., PostgreSQL) under **Databases** in Render.