May 31, 2025

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Nuxt.js 3 Web

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-

2

'config.yaml' 'config.yaml.example'

'config.yaml'

```yaml
1  #
2  #   config.yaml
3
4  #
5  server:
6    #
7    port: 3008
8    # 127.0.0.10.0.0.0
9    host: "127.0.0.1"
10
11 #
12 site:
13   #
14   name: ""
15   #
16   version: "1.0.0"
17   #
18   copyright_owner: ""
19
20   #
21   filing:
22     # ICPICP12345678-1
23     icp_number: ""
24     # 11010802012345
25     police_number: ""
26     #
27     show_filing: false
28
29 # API
30 api:
31   # ISBNAPI -   https://data.isbn.work
32   isbn_key: "your-isbn-api-key-here"
33
34 #
35 database:
36   # SQLite
37   url: "file:./library.db"
38
39 #
40 admin:
41   #   -
42   username: "admin"
43   #   -
44   password: "your-secure-password"
45
46 #
47 auth:
48   #
49   session_max_age_days: 14
50
51 #
52 debug:
53   # true
54   enabled: false
```

- **server.port:** 3008

- **server.host:** 127.0.0.1 0.0.0.0

- **site.name:**

- **site.version:**

- **site.copyright_owner**:

- **site.filing**: `icp_number` (ICP), `police_number` (), `show_filing` ()

- **api.isbn_key**: ISBN API ISBN Market API

- **database.url**: URL SQLite `library.db` MySQL, PostgreSQL

- **admin.username**:

- **admin.password**:

- **auth.session_max_age_days**:

- **debug.enabled**: false

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Nuxt 3 API Node.js

- **Nuxt 3** (SSR) (SSG) Nuxt 3 Web

- **Nitro Server Engine** API ('server/api') ('server/middleware') Nitro

- **Prisma ORM** Prisma

- API

- 'config.yaml'

4   ()

- Cookie

- ISBN ISBN API

- ISBN

-

-

- Web

- Node.js

5

- **Node.js:** 18.0

- **NPM:** 8.0

- **Git:**

6

Windows

```
1 start.bat
```

Mac/Linux

```
1 chmod +x start.sh  #
2 ./start.sh
```

1. Node.js npm

2. ISBN API 'config.yaml'

3. ('npm install')

4.

5. ('npm run dev')

1.

```
1 npm install
```

2. 'config.yaml'

```
1 cp config.yaml.example config.yaml   # Mac/Linux
2 copy config.yaml.example config.yaml  # Windows
```

'config.yaml' ISBN API

3. Prisma

```
1 npx prisma generate
2 npx prisma migrate dev --name init
```

'library.db'

4.

```
1 npm run dev
```

'config.yaml' 3008 'http://localhost:3008'

7

1.

```
1 npm run build
```

Nuxt 3 '.output' 'config.yaml' '.output'

2.

```
1 npm run preview
```

PM2 Systemd

3. PM2

PM2 Node.js

1. **PM2** PM2

```
1 npm install -g pm2
```

2. 'ecosystem.config.js' PM2

```
1 pm2 start ecosystem.config.js
```

'ecosystem.config.js'

```
1 pm2 start .output/server/index.mjs --name family-library
```

'--name family-library'

3. PM2

```
1 pm2 status
```

4.

```
1 pm2 logs family-library
```

'family-library'

5. //

```
1 pm2 stop family-library
2 pm2 restart family-library
3 pm2 delete family-library
```

6. Systemd () PM2

```
1 pm2 startup
2 pm2 save
```

4. Systemd (Linux)

Systemd Linux Systemd Nuxt

- 'npm run build' '.output'
- Systemd
- 'sudo'

1. **Systemd**

   'family-library.service' '/etc/systemd/system/'

```
1 sudo nano /etc/systemd/system/family-library.service
```

2.

   'family-library.service' 'User', 'Group', 'WorkingDirectory' 'ExecStart'

```
1 [Unit]
2 Description=Family Library Nuxt Application
3 After=network.target
4
5 [Service]
6 Type=simple
7 User=your_app_user  #  your_app_user : familylib
8 Group=your_app_user #  your_app_user
9 WorkingDirectory=/path/to/your/app
```

```
10 ExecStart=/usr/bin/npm start #  npm start
11 Restart=on-failure
12 StandardOutput=syslog
13 StandardError=syslog
14 SyslogIdentifier=family-library
15
16 [Install]
17 WantedBy=multi-user.target
```

* 'Description': * 'After=network.target': * 'User' / 'Group': 'root' * 'WorkingDirectory':
* 'ExecStart': 'npm start' 'package.json' '/usr/bin/npm' npm * 'Restart=on-failure': *
'StandardOutput'/'StandardError': Systemd ('syslog')

3. **Systemd**

   Systemd

```
1 sudo systemctl daemon-reload
```

4.

```
1 sudo systemctl enable family-library.service
```

5.

```
1 sudo systemctl start family-library.service
```

6.

```
1 sudo systemctl status family-library.service
```

7.

   'journalctl' '-u family-library' '-f'

```
1 sudo journalctl -u family-library -f
```

   Systemd

5. Nginx

   80 (HTTP) 443 (HTTPS) Nginx Nginx

```
1 server {
2     listen 80;
3     server_name your-domain.com;
4
5     location / {
6         proxy_pass http://localhost:3008; #
7         proxy_http_version 1.1;
8         proxy_set_header Upgrade \$http_upgrade;
9         proxy_set_header Connection \'upgrade\';
10        proxy_set_header Host \$host;
11        proxy_set_header X-Real-IP \$remote_addr;
12        proxy_set_header X-Forwarded-For \$proxy_add_x_forwarded_for;
13        proxy_set_header X-Forwarded-Proto \$scheme;
14        proxy_cache_bypass \$http_upgrade;
15    }
16 }
```

   Nginx '/etc/nginx/sites-available/' 'sites-enabled' Nginx

   'your-domain.com' SSL/TLS HTTPS

8

Git

Windows

```
1  update.bat
```

Mac/Linux

```
1  chmod +x update.sh   #
2  ./update.sh
```

- (a) Git, Node.js, npm Git
- (b) 'backups/' ('library.db') ('config.yaml') 'backups/'
- (c) ('git fetch') ('git fetch –all git reset –hard origin/main')
- (d) ('npm install') Prisma ('npx prisma generate') ('npx prisma migrate deploy' 'npx prisma db push')
- (e) '.output' ('npm run build')
- (f)

Windows

```
1  rollback.bat
```

Mac/Linux

```
1  chmod +x rollback.sh   #
2  ./rollback.sh
```

- •
- •
- • ( )
- • ++

'backups/'

- 'library$_backup_YYYMMDD_HHMMSS.db$"library$_backup_20241215_143022.db$"config$_backup_YYYMMDD.yam$

```
1  # 30 (Linux/Mac)
2  find backups/ -name "library_backup_*.db" -mtime +30 -delete
3  find backups/ -name "config_backup_*.yaml" -mtime +30 -delete
4
5  # Windows PowerShell (PowerShell)
6  Get-ChildItem backups/ -Name "library_backup_*.db" | Where-Object {$_.LastWriteTime
       -lt (Get-Date).AddDays(-30)} | Remove-Item
```

-
- 'config.yaml'
-
- Git

- "" Git 'git fetch origin'
- Git
- 'npm install' npm ('npm cache clean –force') 'node$_modules$"package$-lock.json$"Prisma URL$"npx prisma mig$
- 'npm run build'

9 API

RESTful API API URL 'http://:/api'

API Cookie '/api/auth/login' Cookie Cookie Cookie

JSON UTF-8

API

API

- **(/api/auth)** ('/api/auth/login' POST) ('/api/auth/logout' POST) ('/api/auth/verify' GET)
- **(/api/books)** ('/api/books' GET) ('/api/books' POST) ('/api/books/:id' PUT) ('/api/books/:id' DELETE)

- **ISBN (/api/isbn)** ISBN API ('/api/isbn' GET)
- **(/api/categories)** ('/api/categories' GET)
- **(/api/system)** ('/api/system/info' GET) ('/api/system/database-status' GET) ('/api/system/backup-database' POST) ('/api/system/init-database' POST)

API 'API.md' TEX API API

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(a) 'http://localhost:3008'

(b) 'config.yaml'

(c) ""

'config.yaml' 'admin.password'

-
-
- ISBN
-
-
-

""ISBN

""""

""

ISBN

"" ISBN ISBN "" API ""

"""ISBN"""

- ISBN
- ISBN
- URL

""""""

""""""

""

""

-
- ""
- "" `backups/`

Node.js

`config.yaml` API

- ISBN
-

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SQLite (`library.db`) Prisma Web

Web -

(a) **Prisma**

```
1 npx prisma generate
```

(b)

```
1 npx prisma migrate dev --name init
```

'prisma/schema.prisma'

- Prisma Studio

Prisma Studio

```
1 npx prisma studio
```

'http://localhost:5555'

```
1 #
2 npx prisma migrate reset --force
3
4 #  schema
5 npx prisma db pull
6
7 # Prisma  schema
8 npx prisma generate
```

12

-
  ```
  1    netstat -ano | findstr :  # Windows Command Prompt
  2    Get-NetTCPConnection -LocalPort   # Windows PowerShell
  3    lsof -i :                 # Linux/Mac
  4
  ```

  'config.yaml' 'server.port'

- 'config.yaml' 'database.url' SQLite 'library.db' 'npx prisma db push' schema

- 'npm install' npm ('npm cache clean –force') 'node$_{m}odules$''$package-lock.json$''$npm install$'**Git** *Git*

- **502** 'npm run build' 'config.yaml' '.output' 'utils/config.ts'

- PM2 'pm2 logs <app-name>' Systemd 'journalctl -u <service-name>'
- Prisma 'prisma/schema.prisma' Prisma

13

- 'config.yaml'
- HTTPS 80, 443, IP
- ('library.db')
- Node.js root

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- SQLite MySQL, PostgreSQL
- ('npm run build') Nuxt 3 Nitro Gzip
- CPU SSD

15

-
-
-
-

16   ()