

# Database Section

Configuration options for how ESS can communicate with your PostgreSQL database.

Config:



This section of the ESS installer GUI will only be present if you are using the Kubernetes deployment option or you have opted to use your own PostgreSQL for a Standalone deployment.

If you have not yet set up your PostgreSQL, you should ensure you have done so before proceeding, see the relevant PostgreSQL section from the [Requirements and Recommendations](#) page:

- [Standalone Deployment PostgreSQL Prerequisites](#)
- [Kubernetes Deployment PostgreSQL Prerequisites](#)

All settings configured via the UI in this section will be saved to your `deployment.yml`, with the contents of secrets being saved to `secrets.yml`. You will find specific configuration examples in each section.

## Config Example

- `deployment.yml`

```
spec:
```

```
  components:
```

```
    synapse:
```

```
      config:
```

```
        postgresql:
```

- `secrets.yml`

```
apiVersion: v1
```

```
kind: Secret
```

```
metadata:
```

name: synapse

namespace: element-onprem

data:

postgresPassword: <https://ems-docs.element.io/books/element-server-suite-classic-documentation-lts-2504>

By default, if you do not change any settings on this page, defaults will be added to your configuration file/s (see example below).

### Config Example

<https://ems-docs.element.io/books/element-server-suite-classic-documentation-lts-2504>

spec:

components:

synapse:

config:

postgresql:

database: synapse

host: db.example.com

passwordSecretKey: postgresPassword

user: test-username

<https://ems-docs.element.io/books/element-server-suite-classic-documentation-lts-2504>

# PostgreSQL

## Database

Database \*

synapse

PostgreSQL database name

### Config Example

```
spec:
```

```
  components:
```

```
    synapse:
```

```
      config:
```

```
        postgresql:
```

```
          database: synapse
```

Enter the name of the PostgreSQL Database you configured per the previously mentioned [Requirements and Recommendations](#) to use for Synapse.

## Host

Host \*

db.example.com

PostgreSQL database host

<https://ems-docs.element.io/books/element-server-suite-classic-documentation-lts-2504>

### Config Example

spec:

components:

synapse:

config:

postgresql:

host: db.example.com

<https://ems-docs.element.io/books/element-server-suite-classic-documentation-lts-2504>

Enter the fully qualified domain name of the PostgreSQL Database you configured per the previously mentioned [Requirements and Recommendations](#) to use for Synapse.

## Port

Port

5432

Default

### Config Example

spec:

components:

synapse:

config:

postgresql:

```
# port not present when left as default 5432
```

```
port: 5432
```

Defaults to `5432`, either keep if correct or provide the required port of the PostgreSQL Database you configured per the previously mentioned [Requirements and Recommendations](#) to use for Synapse.

## SSL Mode

SSL Mode

Require

Default



TLS settings to use for the PostgreSQL connection

### Config Example

```
spec:
```

```
  components:
```

```
    synapse:
```

```
      config:
```

```
        postgresql:
```

```
          # sslMode not present when left as default `require`
```

```
          sslMode: require
```

```
          # sslMode: disable
```

```
          # sslMode: allow
```

```
# sslMode: prefer
```

```
# sslMode: verify-ca
```

```
# sslMode: verify-full
```

Defaults to **Require** - it is not recommended to disable SSL, so for most setups, this setting should be left as default.

You should adjust to accommodate your environment as required, the options available are:

- Disable
- Allow
- Prefer
- Require
- Verify CA
- Verify Full

## User

User \*

test-username

PostgreSQL username

### Config Example

```
spec:
```

```
  components:
```

```
    synapse:
```

```
      config:
```

```
        postgresql:
```

```
          user: test-username
```



Enter the username of a user who can access the PostgreSQL Database you configured per the previously mentioned [Requirements and Recommendations](#) to use for Synapse.

## PostgreSQL Password

Secrets / Synapse / PostgreSQL Password ▾

PostgreSQL Password

●●●●●●●●●●

The PostgreSQL password

### Config Example

- secrets.yml

```
apiVersion: v1

kind: Secret

metadata:

  name: synapse

  namespace: element-onprem

data:

  postgresPassword: dGVzdC1wYXNzd29yZA==
```

Enter the password for the specified user who can access the PostgreSQL Database you configured per the previously mentioned [Requirements and Recommendations](#) to use for Synapse.

# Advanced

## Connection Pool

### Max / Min Connections

Max Connections

10

Default

The maximum number of connections in the pool.

Min Connections

5

Default

The minimum number of connections in the pool.

### Config Example

```
spec:

  components:

    synapse:

      config:

        postgresql:

          # connectionPool not present when left as default

          connectionPool:
```

maxConnections: 10

minConnections: 5

In most deployments you should not need to configure these settings, however if required, you can adjust both the minimum and maximum connections in the Synapse connection pool.

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