

# 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:
```

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

```
spec:
  components:
    synapse:
      config:
        postgresql:
          database: synapse
          host: db.example.com
          passwordSecretKey: postgresPassword
          user: test-username
```

# 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

## Config Example

```
spec:
  components:
    synapse:
      config:
        postgresql:
          host: db.example.com
```

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.