

# 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

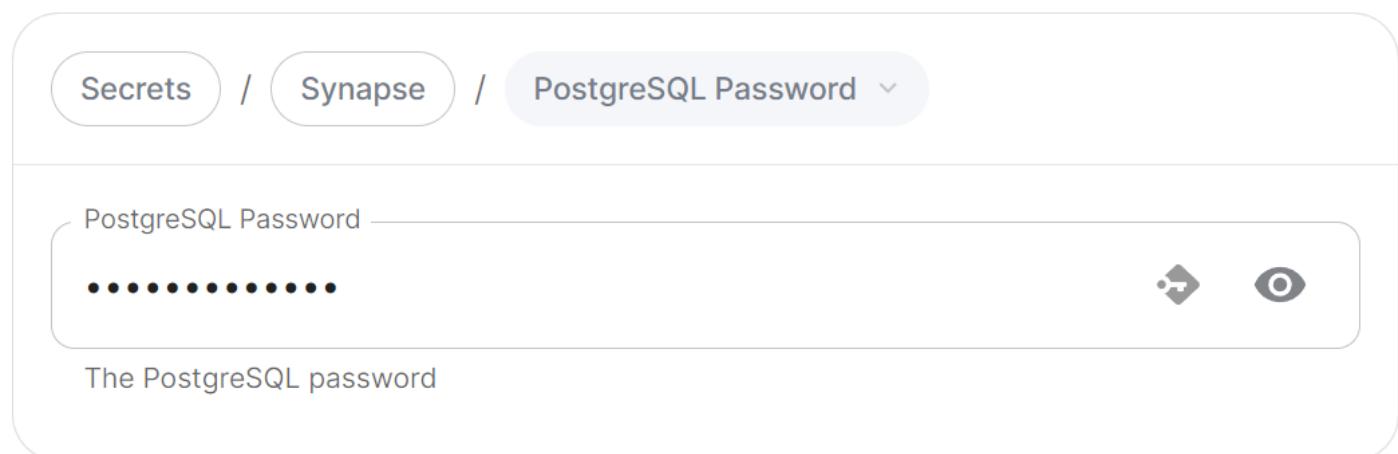
PostgreSQL username

## 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



## 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.

Revision #5

Created 6 November 2024 10:22:12 by Kieran Mitchell Lane

Updated 15 November 2024 13:07:05 by Kieran Mitchell Lane