

Database Section

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

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 content 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 (see the 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

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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.

Revision #7

Created 2024-11-06 10:22:12 UTC by Kieran Mitchell Lane

Updated 2025-05-28 11:25:48 UTC by Kieran Mitchell Lane