

# Installing Element Server Suite

First-time installation, Upgrading or Reconfiguring ESS? See here for advice on getting started.

## First-Time Installation

Make sure you've read the [Requirements and Recommendations](#) page so your environment is ready for installation.

## Running the Installer

Once the binary is on the device you wish to run the installer from, make it executable using `chmod +x` then run it to begin:

```
chmod +x ./element-installer-enterprise-edition-YY.MM.00-gui.bin
```

### Kubernetes Deployment Note

If you are performing a Kubernetes deployment and have multiple kubernetes clusters configured in your kubeconfig, you will have to export the `K8S_AUTH_CONTEXT` variable before running the installer, as per the [Operating System](#) notes from the [Requirements and Recommendations](#) page:

```
export K8S_AUTH_CONTEXT=kube_context_name
```

```
./element-installer-enterprise-edition-YY.MM.00-gui.bin
```

```
ubuntu@:~$ ./element-installer-enterprise-edition- -gui.bin
Testing network...

Using self-signed certificate with SHA-256 fingerprint:
1B:BB:99:22:54:4E:94:79:DA:39:EA:64:CE:6F:96:68:1F:BF:78:74:F7:CF:F9:66:E7:32:9C:FD:17:9A:E3:9B

To start configuration open:
https://:8443/a/XXBHVZjVnK or https://:8443/a/XXBHVZjVnK or https://127.0.0.1:8443/a/XXBHVZjVnK
```

With the installer running you will need to open a web browser and browse to one of the presented IPs. You may need to open port 8443 in your firewall to be able to access this address from a different machine. If you are unable to open port 8443 or you are having difficulty connecting from a different machine, you may want to try ssh port forwarding in which you would run:

```
ssh <host> -L 8443:127.0.0.1:8443
```

Replacing host with the IP address or hostname of the machine that is running the installer. At this point, with ssh connected in this manner, you should be able to use the <https://127.0.0.1:8443> link which will then forward that request to the installer box via ssh.

Upon loading this address for the first time, you may be greeted with a message informing you that your connection isn't private, this is due to the installer initially using a self-signed certificate. Once you have completed deployment, the installer will use a certificate you specify or the certificate supplied for the admin domain on the [Domains Section](#).

To proceed, click 'Advanced' then 'Continue', exact wording may vary across browsers.



## Your connection isn't private

Attackers might be trying to steal your information from **192.168.122.47** (for example, passwords, messages, or credit cards).

NET::ERR\_CERT\_AUTHORITY\_INVALID

Advanced

Go back

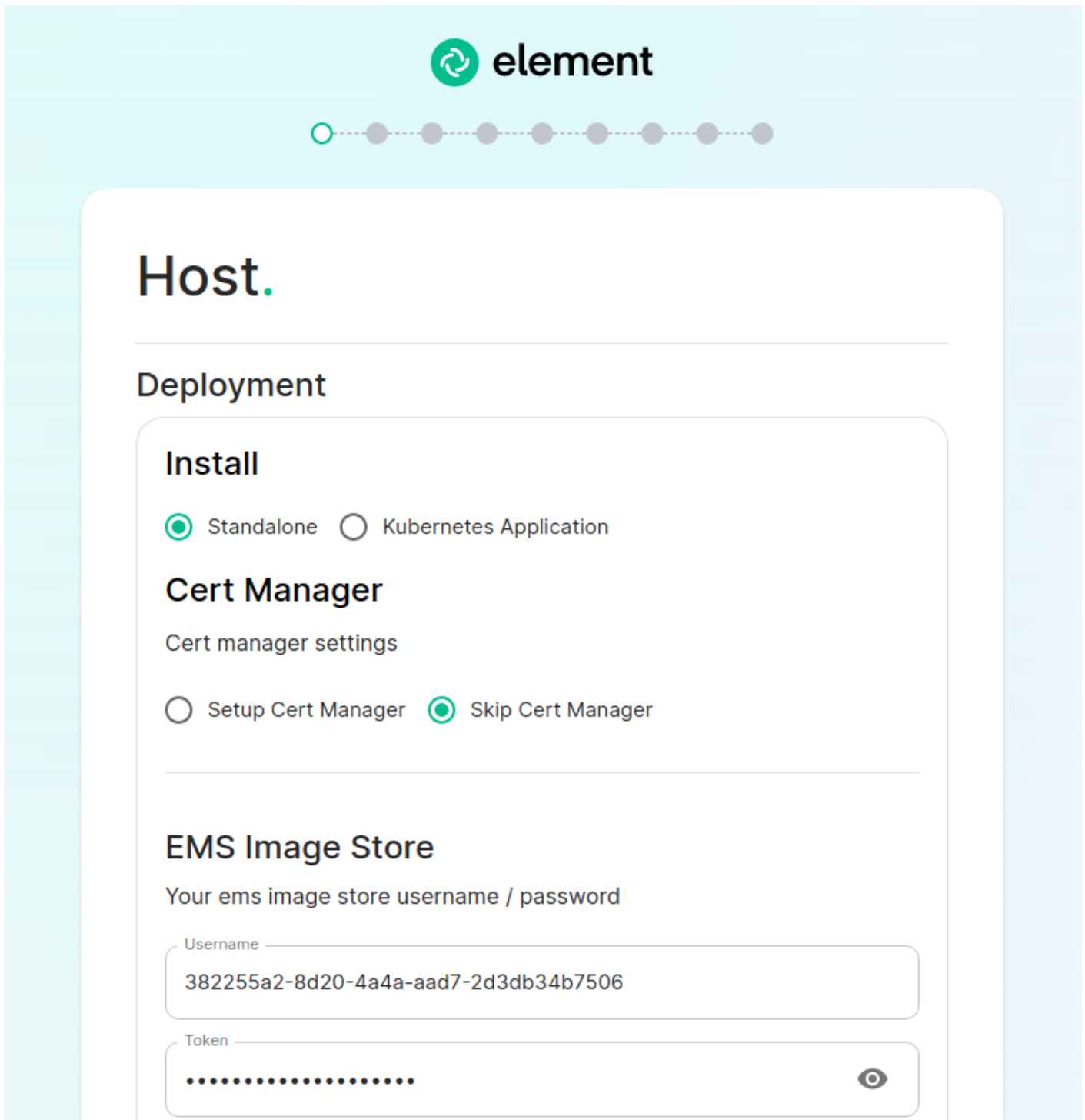
## The Installer

With the installer running, you will initially be presented with a 'Welcome to Element!' screen, from here you can click the 'Let's Go!' button to start configuring your ESS deployment. The installer has a number of sections to work through to configure your config before starting deployment, below will detail each section and what you can configure.

You can click on any sections' header, or the provided link below it, to visit that sections' detailed breakdown page which runs through what each specific option in that section does - however do please note that not all setups will require changing from the default settings.

## Host Section.

The first section of the ESS installer GUI is the Host section, here you will configure essential details of how ESS will be installed including; deployment type; subscription credentials; PostgreSQL to use; and whether or not your setup is airgapped.



**element**

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# Host.

---

## Deployment

### Install

Standalone  Kubernetes Application

### Cert Manager

Cert manager settings


Setup Cert Manager  Skip Cert Manager

---

### EMS Image Store

Your ems image store username / password

Username

Token  

For detailed guidance / details on each config option, check the [Detailed Section Overview](#). Specifically for airgapped deployments, see the [Airgapped](#) notes.

## Standalone Deployment

Ensure `Standalone` is selected, then if you are using LetsEncrypt for your certificates, you will want to make sure that you select `Setup Cert Manager` and enter an email address for LetsEncrypt to associate with your certificates. If you are using custom certificates or electing to manage SSL certificates yourself, then you will want to select `Skip Cert Manager`.

Provide your EMS Image Store Username and Token associated with your subscription, which you can find at <https://ems.element.io/on-premise/subscriptions>.

By default, microk8s will set up persistent volumes in `/data/element-deployment` and will allow 20GB of space to do this; ESS will configure the default DNS resolvers to Google (8.8.8.8 and 8.8.4.4); and a PostgreSQL database will be created for you. These defaults are suitable for most setups however change as needed i.e. if you need to use your company's DNS servers. If you elect to setup your own PostgreSQL database, make sure it is configured per the [Requirements and Recommendations](#).

## Kubernetes Deployment

Ensure `Kubernetes Application` is selected, then specify the Kubernetes context name for which you are deploying into. You can use `kubectrl config view` to see which contexts you have access to. You can opt to skip the update setup or the operator setup, but unless you know why you are doing that, you should leave those options as default.

Provide your EMS Image Store Username and Token associated with your subscription, which you can find at <https://ems.element.io/on-premise/subscriptions>.

## Airgapped

If you are installing in an airgapped environment, you'll either need to authenticate against your own container repository or download the airgapped package alongside the gui installer. If you choose our airgapped package, extract this somewhere on your system and enter the path to the extracted directory.

```
user@airgapped:~$ cd /home/user/Downloads/
user@airgapped:~/Downloads$ ls -l
total 7801028
-rwxr-xr-x 1 user user 129101654 Nov  7 15:51 element-installer-enterprise-edition-<version>-gui.bin
-rw-r--r-- 1 user user 7859142151 Nov 11 16:33 element-installer-enterprise-edition-airgapped-<version>-gui.tar.gz
user@airgapped:~/Downloads$ tar xf element-installer-enterprise-edition-airgapped-<version>-gui.tar.gz
user@airgapped:~/Downloads$ cd airgapped/
user@airgapped:~/Downloads/airgapped$ pwd
/home/user/Downloads/airgapped
```

## Connectivity

Connected  Airgapped

### Airgapped

Airgapped settings to automatically configure images

Upload Images with the Installer

Target an Existing Local Image Registry

The installer will automatically upload images to the provided registry.

Local Registry \*

localhost:32000

Default

The local registry url to find airgapped images

Source Directory \*

/home/user/Downloads/airgapped

Edited

The path to the airgapped directory to upload the images

## Upload Credentials

Upload credentials, if the registry is protected behind auth.

Authenticate against the Registry to Upload

Upload without Authentication

Password \*

q8nuWWWp4Jt7lqPsKlkcNiA1sJPskB2uRTZgsbp2y6BNaE

Edited

Upload password

Username \*

admin

Edited

Upload username

If you are installing in standalone mode, ensure your system has a default gateway configured, even if it's not used. This is required by microk8s. See <https://microk8s.io/docs/install-offline> for additional details.

## Domains Section.

The second section of the ESS installer GUI is the Domains section, here you will configure the fully-qualified domain names for each of the main components that will be deployed by ESS.



# Domains.

Domain Name \*

example.com

The domain name of this deployment. It will be used for the <localpart> of the users MXIDs, and cannot be changed afterwards. For example: @user:example.com

Synapse Domain \*

matrix

.example.com ✕

Fully qualified domain name of the ingress

Element Web Domain \*

element

.example.com ✕

Fully qualified domain name of the ingress

Synapse Admin Domain \*

admin

.example.com ✕

Fully qualified domain name of the ingress

Integrator Domain \*

integrator

.example.com ✕

Fully qualified domain name of the ingress

Previous

Continue

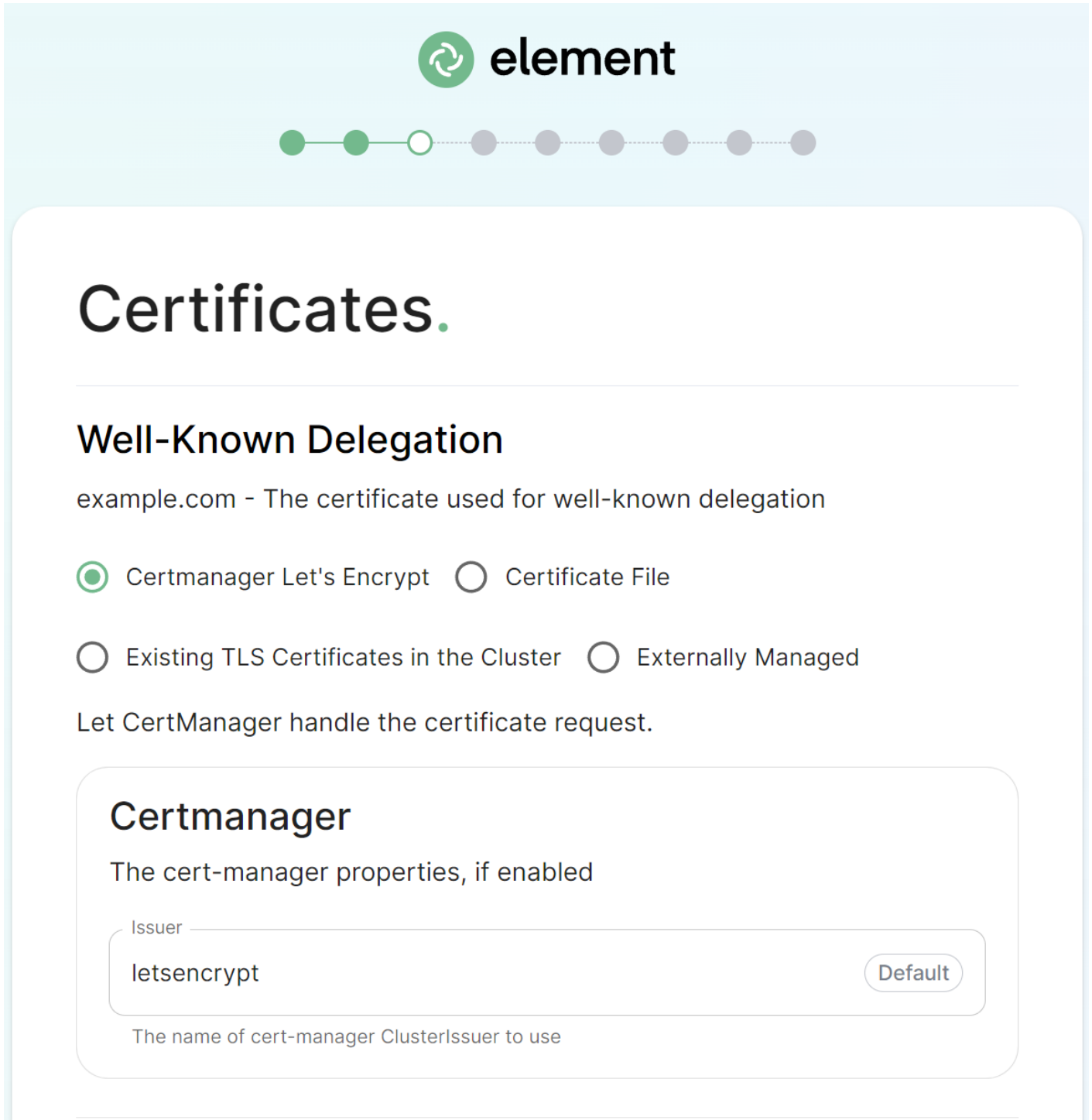
On this page, we get to specify the domains for our installation. In this example, we have a domain name of `example.com` and this would mean our MXIDs would look like `@username:example.com`.


The domain page performs a check to ensure that the host names provided resolve. Once you get green checks across the board, you can click continue.


For detailed guidance / details on each config option, check the [Detailed Section Overview](#)

## Certificates Section.

The third section of the ESS installer GUI is the Domains section, here you will configure the certificates to use for each previously specified domain name.







# Certificates.

---

## Well-Known Delegation

example.com - The certificate used for well-known delegation

Certmanager Let's Encrypt  Certificate File

Existing TLS Certificates in the Cluster  Externally Managed

Let CertManager handle the certificate request.

### Certmanager

The cert-manager properties, if enabled

Issuer

The name of cert-manager ClusterIssuer to use

If you are already serving content on your base domain, please read the [Well-Known Delegation](#) notes specifically to understand how you should configure this components' certificates.

If you wish to use your own certificates they must be in PEM encoded format, for detailed guidance / details on each config option, check the [Detailed Section Overview](#)

## Database Section.

The fourth section of the ESS installer GUI is the Database section, here you will provide the configuration of the PostgreSQL database you will be using for Synapse.

If you're running in Standalone mode, and opted for the installer deployed postgres, you will not see this section.

## Database.

### PostgreSQL

Configuration of Postgres database

Database \*

PostgreSQL database name

Please fill out this field.

Host \*

PostgreSQL database host

Port

5432

Default

PostgreSQL port

SSL Mode

Require

Default ▾


TLS settings to use for the Postgres connection


User \*

PostgreSQL username

Secrets

/ Synapse

/ Postgres Password 

Postgresql Password 

The postgres password

Make sure you've read the [Requirements and Recommendations](#) page so your environment is ready for installation. Specifically for PostgreSQL, ensure you have followed the guidance specific to your deployment:

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

On this page you simply need to specify the database name, the database host name, the port to connect to, the SSL mode to use, and finally, the username and password to connect with. Once you have completed this section, simply click continue.

For Standalone Deployments, if your database is installed on the same server you are installing ESS to, ensure that the servers' public IP address is used. As the container is not sharing the host network namespace, entering `127.0.0.1` will resolve to the container itself and cause the installation failure.

For detailed guidance / details on each config option, check the [Detailed Database Section Overview](#)

## Media Section.

The fifth section of the ESS installer GUI is the Media section, here you will configure where media will be saved as well as the maximum media upload size.

# Media

---

## Config

### Media

- Persistent Volume Claim for Storage
- S3 for Long Term Storage and Ephemeral Storage for the Short Term
- S3 for Long Term Storage and Persistent Volume Claim for the Short Term

Max Upload Size  Default

The cap on the size of uploaded media. Size in bytes ending in M or K

You can opt to use either a Persistent Volume Claim (default) or if you wish to use an S3 bucket. Selecting S3 will then require you to provide your S3 connection details and authentication credentials. You will also be able to adjust the maximum media upload size for your homeserver.

For detailed guidance / details on each config option, check the [Detailed Media Section Overview](#)

## Cluster Section.

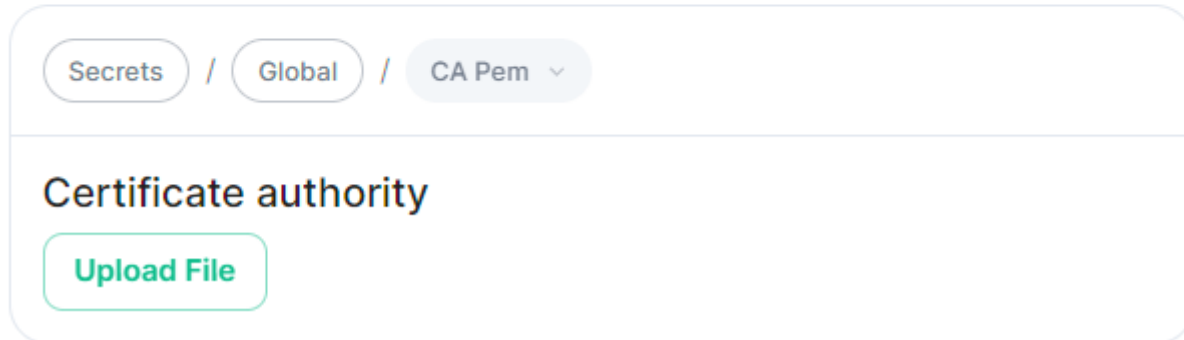
The sixth section of the ESS installer GUI is the Cluster section, here you will configure settings specific to the cluster in which Element Deployment will run on top of.

# Cluster

Your Element Deployment runs on top of Kubernetes, a clustering software that isolates and manages your services.

---

## Config



Secrets / Global / CA Pem ▾

### Certificate authority

Upload File

On standard setups, no options need configuring here so you can click continue.

For setups where on the certificates section, you uploaded certificates signed by you own private Certificate Authority, you will need to upload it's certificate in PEM encoded format. This should be a full chain certificate, like those upload in the Certificates section, including the Root Certificate Authority as well as any Intermediate Certificate Authorities.

If you are in an environment where you have self-signed certificates, you will want to disable TLS verification, by clicking `Advanced` and then scrolling down and unchecking `Verify TLS`. Please bear in mind that disabling TLS verification and using self-signed certificates is not recommended for production deployments.

If your host names are not DNS resolvable, you need to use host aliases and this can be set up here. You will also click "Advanced" and scroll down to the "Host Aliases" section in "k8s". In here, you will click "Add Host Aliases" and then you will specify an IP and host names that resolve to that IP:

## Host Aliases

The list of hosts aliases to configure on the pod spec. It should be avoid as much as possible to use this feature. Please prefer using a DNS entry to resolve your hostnames. This can be used as a workaround when entries cannot be resolved using DNS, for example for our automated testings.

IP \*  
192.168.122.121

An IP resolution to add to /etc/hosts

### Hostnames

- An hostname of the associated ip to add to /etc/hosts

element.demo
- An hostname of the associated ip to add to /etc/hosts

hs.element.demo
- An hostname of the associated ip to add to /etc/hosts

web.element.demo
- An hostname of the associated ip to add to /etc/hosts

admin.element.demo
- An hostname of the associated ip to add to /etc/hosts

integrator.element.demo
- An hostname of the associated ip to add to /etc/hosts

metrics.element.demo

[Add more Hostnames](#)

For detailed guidance / details on each config option, check the [Detailed Cluster Section Overview](#)

## Kubernetes Deployment

If you are not using OpenShift, you will need to set `Force UID GID` and `Set Sec Comp` to `Enable` under the section `Security Context` so that it looks like:

## Security Context

Force UID GID

Enable

Edited

Enable pod runAsUser and fsGroup in security context. Disable if it should not be used, in the case of openshift for example. Auto attempts to detect openshift automatically.

Set Sec Comp

Enable

Edited

Enable RuntimeDefault pod seccomp. disable if it should not be used, in the case of openshift for example. Auto attempts to detect openshift automatically.

If you are using OpenShift, you should leave the values of `Force UID GID` and `Set Sec Comp` set to `Auto`.

## [Synapse Section.](#)

## Authentication Section.

For first-time installation, it is recommended to leave the defaults on this page and reconfigure as required following a successful deployment.

## Matrix Authentication Service.

For first-time installation, it is recommended to leave the defaults on this page and reconfigure as required following a successful deployment.

Please note, however, that you will need to provide the Fully-Qualified Domain Name (FQDN) for the Matrix Authentication Service (MAS) and confirm the TLS configuration.

# Ingress

Matrix Authentication Service Domain

mas.example.com

Edited

Fully qualified domain name of the ingress

## TLS

### Certmanager Let's Encrypt

Let CertManager handle the certificate request.

### Certificate File

Upload a certificate and its private key.

### Existing TLS Certificates in the Cluster

Configure TLS on the ingress, however certificates are already present and managed in the cluster

### Externally Managed

Don't configure TLS on the ingress, when it is handled in front of the cluster.

## Certmanager

Issuer

letsencrypt

The name of cert-manager ClusterIssuer to use

## [Synapse Section.](#)

The seventh section of the ESS installer GUI is the Synapse section, here you will configure settings specific to your homeserver.



# Synapse.

This is a matrix homeserver.

## Profile

Monthly Active Users

How many users actively use your server?

Federation Type

Closed: No Federation Limited: Federation within trusted network Open: Federation with all

## Config

Accept Invites

Manual

Whether to enable auto accept invites. Defaults to manual if not set

Max MAU Users

250

Maximum number of Matrix Active Users

Registration

Closed

Synapse registration

While there are lots of options that can be configured in the section, it is generally recommended to complete the first-time setup before toggling on additional features i.e. Delegated Authentication, Data Retention etc.

Re-running the installer and configuring these individually after first-time setup is recommended to make troubleshooting easier should something in this section be mis-configured.

Generally speaking, for first-time setup the default options here can be left as-is, as they can be altered as needed post-deployment. Simply click continue to advance, however see below for details on some options you may wish to alter.

The first setting that you will come to is our built in performance profiles. Select the appropriate answers for `Monthly Active Users` and `Federation Type` to apply our best practices based on years of running Matrix homeservers.

Setting of `Monthly Active Users` aka MAU and `Federation Type` within the Profile section does not directly set the maximum monthly active users or open/close Federation. These options will simply auto-configure the number of underlying pods deployed to handle the advised values.

You will be able to directly configure your desired maximum MAU and Federation in dedicated sections.

The next setting that you will see is whether you want to auto accept invites. The default of `Manual` will fit most use cases, but you are welcome to change this value.

The next setting is the maximum number of monthly active users (MAU) that you have purchased for your server. Your server will not allow you to go past this value. If you set this higher than your purchased MAU and you go over your purchased MAU, you will need to true up with Element to cover the cost of the unpaid users.

The next setting concerns registration. A server with open registration on the open internet can become a target, so we default to closed registration. You will notice that there is a setting called `Custom` and this requires explicit custom settings in the additional configuration section. Unless instructed by Element, you will not need the `Custom` option and should instead pick `Closed` or `Open` depending on your needs.

After this, you will see that the installer has generated a random admin password for you. You will want to use the eye icon to view the password and copy this down as you will use this with the user `onprem-admin-donotdelete` to log into the admin panel after installation.

## Telemetry

Enabled

True to enable telemetry

Instance ID

The telemetry instance id

Room

#element-telemetry

The telemetry room where to send telemetry

Username

The telemetry username

Secrets

/ Synapse

/ Telemetry Password

Telemetry Password



Continuing, we see telemetry. You should leave this enabled as you are required to report MAU to Element. In the event that you are installing into an environment without internet access, you may disable this so that it does not continue to try talking to Element. That said, you are still required to generate an MAU report at regular intervals and share that with Element.

For more information on the data that Element collects, please see: [What Telemetry Data is Collected by Element?](#)

As mentioned above, there are a lot of options that can be configured here, it is recommended to run through the detailed guidance / details on each config option available on the [Detailed Synapse Section Overview](#)

## Delegated Auth.

A sub-section of the Synapse section is Delegated Authentication, which allows deferring to OIDC, SAML and LDAP Identity Providers for authentication.

It is not recommended to set this up on first-time install, however should you wish please refer to the dedicated [Detailed Delegated Auth Section Overview](#) page.

## Delegated Auth



Allow Local Users Login

Enabled

## User Profiles

User profiles permissions

Allow Avatar Change

Allow users to change their avatars themselves

Allow Display Name Change

Allow users to change their display names themselves

At least one of the following is required.

## OIDC



IdP Name \*

Keycloak

The display name of the Identity Provider (IDP).

## Federation.

A sub-section of the Synapse section is Federation, found under **Advanced**, which allows configuration of how your homeserver should federate with other homeservers.

It is not recommended to set this up on first-time install, however should you wish please refer to the dedicated [Detailed Federation Section Overview](#) page.

## Federation

Client Minimum TLS Version

1.2

## Certificate Authorities Secret Keys

List of keys in the secret, corresponding to CA certificates for Synapse to trust. This will replace Synapse's default CA trust store

[Add Certificate Authorities Secret Keys](#)

## Trusted Key Servers

Servers providing trusted keys

## [Element Web Section.](#)

The eighth section of the ESS installer GUI is the Element Web section, here you can configure settings specific to the deployed Element Web client.

First almost all setups, nothing needs to be configured, simply click continue.

For airgapped environments you should click [Advanced](#) then enable [Use Own URL for Sharing Links](#):

### Config

Use Own URL for Sharing Links

For detailed guidance / details on each config option, check the [Detailed Section Overview](#)

## [Homeserver Admin Section.](#)

The ninth section of the ESS installer GUI is the Homeserver Admin section, here you can configure settings specific to the deployed Admin Console.

# Homeserver Admin

This is web based user interface used to administrate your Element Deployment.

---

Advanced

Unless advised by Element, you will not need to configure anything in this section, you will be able to access the homeserver admin via the admin domain specified in the Domains section, logging in with the built-in default Synapse Admin user `onprem-admin-donotdelete` whose password is defined in the Synapse section.

If you have enabled Delegated Authentication, the built-in Synapse Admin user `onprem-admin-donotdelete` will be unable to login unless `Allow Local Users Login` has been set to `Enabled`.

See the [Delegated Authentication](#) notes for how to promote a user from your Identity Provider to Synapse Admin

For detailed guidance / details on each config option, check the [Detailed Section Overview](#)

## [Integrator Section.](#)

The final section of the ESS installer GUI when running for the first-time is the Integrator section, here you can configure settings specific to the integrator which is used to send messages to external services.

# Integrator

Send messages to external services

---

## Config

Enable Custom Widgets

Enable custom widgets in Appstore

Verify TLS

Use Global Setting

TLS Verification

## Log

Level

Info

The maximum level of log output

Structured

Output logs in logstash format. Otherwise, logs are output in a console friendly format.

## PostgreSQL

On first-time setup only PostgreSQL will need to be configured for Standalone Deployments where you are using an external PostgreSQL or Kubernetes Deployments where an external PostgreSQL is required.

For Standalone Deployments where the installer is deploying PostgreSQL for you, you will not need to configure anything.

For detailed guidance / details on each config option, check the [Detailed Section Overview](#)

## The Installation Screen

After all sections you will finally be ready to begin the installation, simply click Install to begin.

## Install.



Install

Depending on your OS setup, you may notice the installer hang, or directly ask for a password. Simply go back to the terminal where you are running the installer, you will see that you are being asked for the sudo password:

```

canonicaljson, ansible-core, wheel, signedjson, pyopenssl, psutil, pkgutil-resolve-name, openapi-
schema-validator, netaddr, kubernetes, jmespath, importlib-resources, ansible
Attempting uninstall: setuptools
  Found existing installation: setuptools 53.0.0
  Uninstalling setuptools-53.0.0:
    Successfully uninstalled setuptools-53.0.0
Attempting uninstall: wheel
  Found existing installation: wheel 0.41.1
  Uninstalling wheel-0.41.1:
    Successfully uninstalled wheel-0.41.1
Successfully installed ansible-6.7.0 ansible-core-2.13.9 attrs-23.1.0 cachetools-5.3.1
canonicaljson-2.0.0 certifi-2023.7.22 cffi-1.15.1 charset-normalizer-3.2.0 cryptography-38.0.1
google-auth-2.22.0 idna-3.4 importlib-resources-6.0.0 jinja2-3.1.2 jmespath-1.0.1 jsonschema-4.17.3
kubernetes-25.3.0 markupsafe-2.1.3 netaddr-0.8.0 oauthlib-3.2.0 openapi-schema-validator-0.5.0
packaging-23.1 pkgutil-resolve-name-1.3.10 psutil-5.9.4 pyasn1-0.5.0 pyasn1-modules-0.3.0
pyparser-2.21 pynacl-1.5.0 pyopenssl-23.2.0 pyrsistent-0.19.3 python-dateutil-2.8.2 pyyaml-6.0.1
requests-2.31.0 requests-oauthlib-1.3.1 resolvelib-0.8.1 rfc3339-validator-0.1.4 rsa-4.9
setuptools-68.0.0 signedjson-1.1.4 six-1.16.0 unpaddedbase64-2.1.0 urllib3-1.26.16 websocket-
client-1.6.1 wheel-0.40.0 zipp-3.16.2
WARNING: You are using pip version 21.2.3; however, version 23.2.1 is available.
You should consider upgrading via the '/home/karl1/.element-enterprise-server/installer/.install-
env/bin/python3 -m pip install --upgrade pip' command.
Starting galaxy collection install process
Nothing to do. All requested collections are already installed. If you want to reinstall them,
consider using '--force'.
sudo: a password is required
ansible-playbook [core 2.13.9]
  config file = None
  configured module search path = ['/home/karl1/.ansible/plugins/modules',
'/usr/share/ansible/plugins/modules']
  ansible python module location = /home/karl1/.element-enterprise-server/installer/.install-
env/lib64/python3.9/site-packages/ansible
  ansible collection location = /home/karl1/.ansible/collections:/usr/share/ansible/collections
  executable location = /home/karl1/.element-enterprise-server/installer/.install-env/bin/ansible-
playbook
  python version = 3.9.14 (main, Jan  9 2023, 00:00:00) [GCC 11.3.1 20220421 (Red Hat 11.3.1-2)]
  jinja version = 3.1.2
  libyaml = True
No config file found; using defaults
Processing...

```

Install

```

[karl1@airgap ~]$ ./element-enterprise-graphical-installer-2023-02.02-gui-rc1.bin
Testing network...

Using self-signed certificate with SHA-256 fingerprint:
    CB:8E:4A:75:80:32:D5:E0:A0:2C:90:A7:DF:F9:2F:9F:6D:14:F7:18:53:D0:C5:6C:20:D5:95:A8:1A:57:67:21

To start configuration open:
    https://192.168.122.47:8443 or https://10.1.185.64:8443 or https://127.0.0.1:8443
API resolved without sending a response for /api/logs, this may result in stalled requests.
[sudo] password for karl1: █

```

Provide your sudo password and the installation will continue. You will know the installer has finished when you see the Play Recap, as long as nothing failed the install was a success.

For Standalone Deployments, when running the installer for the first-time, you will be prompted to log out and back in again to allow Linux group membership changes to be refreshed. It is advised to simply cancel the running installer `CTRL + C` then reboot i.e. `sudo reboot now`. Then re-run the installer, return

to the Installation Screen and click Install again. You will only have to perform this step once per server.

## Verifying Your Installation

Once the installation has finished, it can take as much as 15 minutes on a first run for everything to be configured and set up. You can use:

```
watch kubectl get pods -n element-onprem
```

This will show the status of all pods, simply wait until all pods have come up and stabilised showing as `Ready`. You can also keep track of the `Current Deployment Status` on the Installation Screen, once fully ready you should see:

## Current Deployment Status

**Success** Last reconciliation succeeded











## What's Next?

Once your installation has been verified you should stop the running installer with `CTRL + C` then re-run it. You should notice instead of an IP you are given a URL matching the Synapse Admin domain you configured on the Domains section but on port `8443`.

When the installer detects a successful installation, it will change from the first-time run interface to the Admin Console UI. Here you can:

- Run through any section previously configured and adjust your settings
- Access a new section called `Integrations` to setup additional components like Bridges, VOIP, Monitoring etc.
- Use the Admin tab to administer your homeserver (also deployed without requiring running the installer at the Synapse Admin Domain)

## SECTIONS

-  Host
-  Domains
-  Certificates
-  Media
-  Cluster
-  Synapse
-  Element Web
-  Homeserver Admin
-  Integrator
-  Integrations

## Welcome home!

Admin Console:  
`https://admin.example.com`

Your users will have Matrix IDs in this format:  
`@username:example.com`

Web Client:  
`https://element.example.com`

Base Domain with well-knowns:  
`https://example.com`

Element Matrix Server:  
`https://matrix.example.com`

### Configure your integrations

#### Monitoring

Our monitoring stack allows you to monitor the health of our Server Suite running in your environment.

Check out the [Post-Installation Essentials](#) for additional information and resources.

## Core Component Sections

You already run through all these sections, however you may wish to dive deeper into each to fine-tune your configuration as required. You can find detailed breakdowns of each config option for these sections in the [Installation of Core Components](#) chapter, as well more advanced options detailed within the [Advanced Configuration](#) chapter.

## The Integrations Section

This new section allows you to install new integrations to your deployment, you can find detailed installation instructions for each integration in the [Integrations](#) chapter.

# Integrations

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## Adminbot

Installed

Configure

Deploys an Adminbot which automatically joins rooms. Admins can manage rooms by impersonating the Adminbot.

## Auditbot

Installed

Configure

Deploys an Auditbot which automatically joins rooms and logs every messages to configured outputs.

## Coturn

Install

Coturn provides a STUN and a TURN server. The STUN server can be used by Element Call and Jitsi so that device are able to detect their access IP. The TURN server can be used by Jitsi to provide WebRTC relaying.

## Element Call

Experimental

Installed

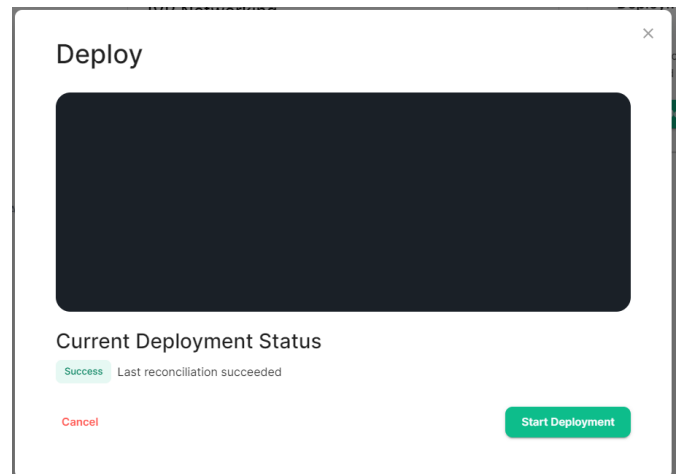
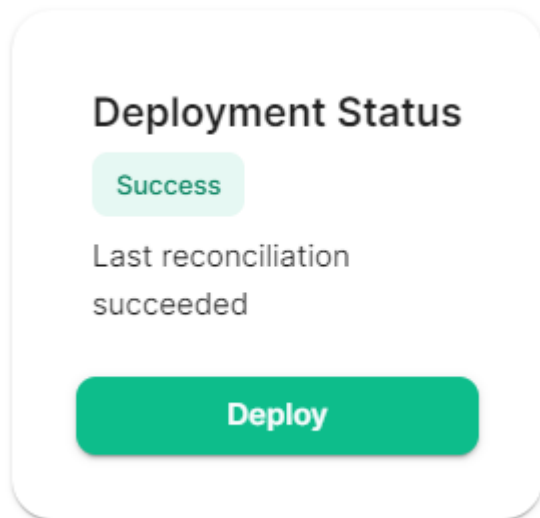
Configure

VoIP group calls powered by Matrix, implementing MatrixRTC with SFU backend.

You can find a full list of integrations available from the [Introduction to Element Server Suite](#) page.

## Reconfiguring an existing Installation

Simply re-run the installer and run through any sections you wish to adjust your config on. Make sure to hit `Save` at the bottom of any changed sections, then hit `Deploy` and `Start Deployment`



## Upgrading an existing Installation

First, before downloading a new version of the installer, it is important to check all upgrade notes that may affect you (any since the version you are currently on). You can check all upgrade notes specific to an LTS from its associated book's `ESS LTS YY.MM Change Logs and Upgrade Notes` page, i.e. from this book (LTS 24.10) see [ESS LTS 24.10 Change Logs and Upgrade Notes](#)

If upgrading from an older LTS to a newer one, it is highly recommended to first upgrade to the latest version of the LTS you are currently running. Then perform another upgrade to the latest version of the next LTS.

Next, download the latest version of the installer, transfer it to the device where your `.element-enterprise-server` configuration exists and make it executable using `chmod +x`.

When you first run a new version of the installer, your config may be upgraded. It is highly recommended to make a backup of your config directory. See [Where are the Installer Configuration Files](#) for more information.

On first run of a new version of the installer, your config may be upgraded, once this is complete you will be able to access the installer UI.

Simply go through all sections within the installer, **re-confirm all options**<sup>1</sup> (making sure to save any changes / click save on any pages that do not have it greyed out), then hit Deploy.

<sup>1</sup> Changes to how specific settings are configured may not automatically be upgraded as part of this step. To avoid issues, it is highly recommended to run through each section of the installer and hit the `Save` button on

each.

## Performing upgrades with GroupSync installed

If you have the GroupSync integration installed, please ensure you enable `Dry Run` mode.

# Group Sync

Remove

Configure users and roles from an external source

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## Config

Dry Run

Enable Dry Run mode to avoid any unexpected change

Once deployment is complete, you can confirm via the GroupSync pod logs that everything is running as expected:

```
# Confirm the GroupSync Pod Name
kubectl get pods -n element-onprem | grep group

# Replace POD_NAME in the command below
kubectl logs POD_NAME -n element-onprem
```

If everything looks as expected, please re-deploy with `Dry Run` disabled to resume GroupSync functionality.

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