Setting Up Jitsi and TURN With the Installer

Configure the Installer to install Jitsi and TURN

Prerequisites

Firewall

You will have to open the following ports to your microk8s host (or k8s cluster) to enable coturn and jitsi :

For jitsi :

- `30301/tcp`
- `30300/udp`

For coturn, allow the following ports :

- `3478/tcp`
- `3478/udp`
- `5349/tcp`
- `5349/udp`

You will also have to allow the following port range, depending on the settings you define in the installer (see below) :

- `<coturn min port>-<coturn max port>/udp`

DNS

The jitsi and coturn domain names must resolve to the VM access IP. You must not use `host_aliases` for these hosts to resolve to the private IP locally on your setup.

Coturn

From the Installer's Integrations page, click "Install" under "Coturn".

element

Coturn.

Cancel and return to Integrations

Coturn.yml

`Edited` `Default`

```
1   shared_secret: # a shared secret, to generate randomly
2   coturn_fqdn: coturn.dev.local
3   min_port: 40000 # a port between 32769-65535
4   max_port: 40500 # max port, between 32769-65535
5   # external_ip: x.x.x.x  # if coturn is behind NAT, you ne
6
```

PREVIOUS   CONTINUE

For the coturn.yml presented by the installer, edit the file and ensure the following values are set:

- `coturn_fqdn` : The access address to coturn. It should match something like `coturn.<fqdn.tld>`. **It must resolve to the public-facing IP of the VM**.
- `shared_secret` : A random value, you can generate it with `pwgen 32`
- `min_port` : The minimal UDP Port used by coturn for relaying UDP Packets, in range 32769-65535
- `max_port` : The maximum UDP Port used by coturn for relaying UDP Packets, in range 32769-65535

Further, if you are using your own certificates instead of letsencrypt, for the `coturn_fqdn`, you will need to provide certificates for the installer outside of the GUI. Please find your `~/.element-enterprise-server/config` directory and create a directory called `~/.element-enterprise-server/config/legacy/certs` under which to put a .crt/.key PEM encoded certificate for this fqdn. If your fqdn was coturn.airgap.local, your filenames would need to be `coturn.airgap.local.crt` and `coturn.airgap.local.key`. You will need to have these certificate files in place before running the installer.

Jitsi

From the Installer's Integrations page, click "Install" under "Jitsi".

element

Jitsi.

Cancel and return to Integrations

Jitsi.yml

`Edited` `Default`

```
1   jitsi_fqdn: jitsi.dev.local
2   jicofo_auth_password: # a secret internal password for ji
3   jicofo_component_secret:  # a secret internal password fo
4   jvb_auth_password:  # a secret internal password for jvb
5
6   app_name: "element-jitsi"  # the hosted app name
7   helm_override_values: {}  # if needed, to override helm s
8
9   timezone: Europe/Paris  # The timezone in [TZ format](htt
10
11  # stun_servers: needed if you don't setup coturn using th
12
```

PREVIOUS   CONTINUE

For the jitsi.yml presented by the installer, edit the file and ensure the following values are set:

- `jitsi_fqdn` : The access address to jitsi. It should match something like `jitsi.<fqdn.tld>`. **It must resolve to the public-facing IP of the VM**.
- `jicofo_auth_password` : # a secret internal password for jicofo auth
- `jicofo_component_secret` : # a secret internal password for jicofo component
- `jvb_auth_password` : # a secret internal password for jvb

- `helm_override_values` : {} # if needed, to override helm settings automatically set by the installer; For Helm values that can be overriden, see https://vector-im.github.io/jitsi-helm/ For environment variables that can be passed in via Helm overrides, see https://jitsi.github.io/handbook/docs/devops-guide/devops-guide-docker/
- `timezone` : Europe/Paris # The timezone in TZ format
- `stun_servers` : Needed if you don't setup coturn using the installer. Should be a yaml list of server:port entries. Example:
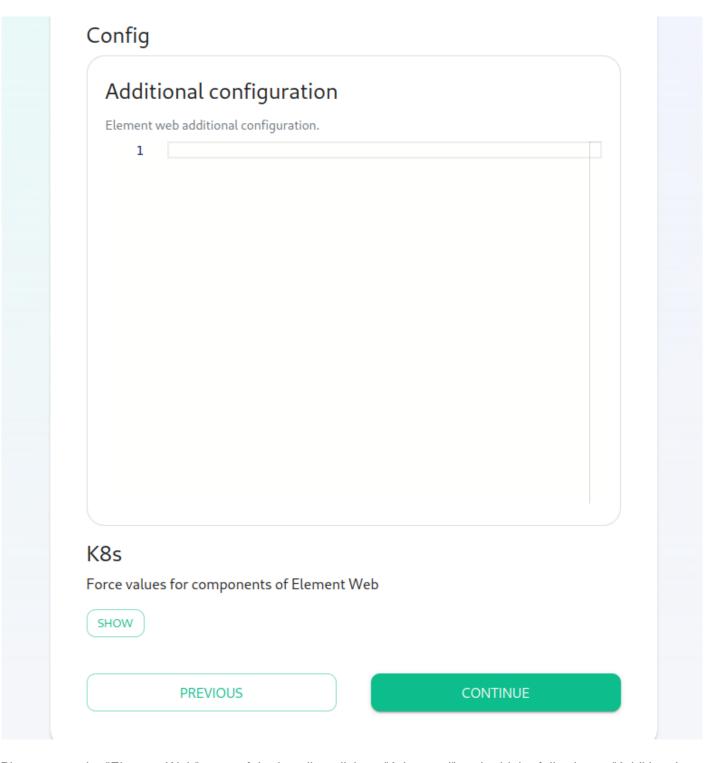
```
stun_servers:
- ip:port
- ip:port
```

Further, for the `jitsi_fqdn` , you will need to provide .crt/.key PEM encoded certificates. These can be entered in the installer UI. If your fqdn was jitsi.airgap.local, your filenames would need to be `jitsi.airgap.local.crt` and `jitsi.airgap.local.key` . You will need to edit the file name field in the UI before pressing "Choose File" button when selecting the certificates.

If your network does not have any NAT, Jitsi cannot use the local coturn server to determine the IP it should advertise to the users. In this case, you might have issues with your calls and video. To workaround it, you can use the following configuration :

```
provide_node_address_as_public_ip: true

helm_override_values:
  jvb:
    extraEnvs:
    - name: JVB_ADVERTISE_IPS
      value: "public ip of jitsi"
    - name: JVB_ADVERTISE_PRIVATE_CANDIDATES
      value: "true"
```

Element

Config

Additional configuration

Element web additional configuration.

```
1 |
```

K8s

Force values for components of Element Web
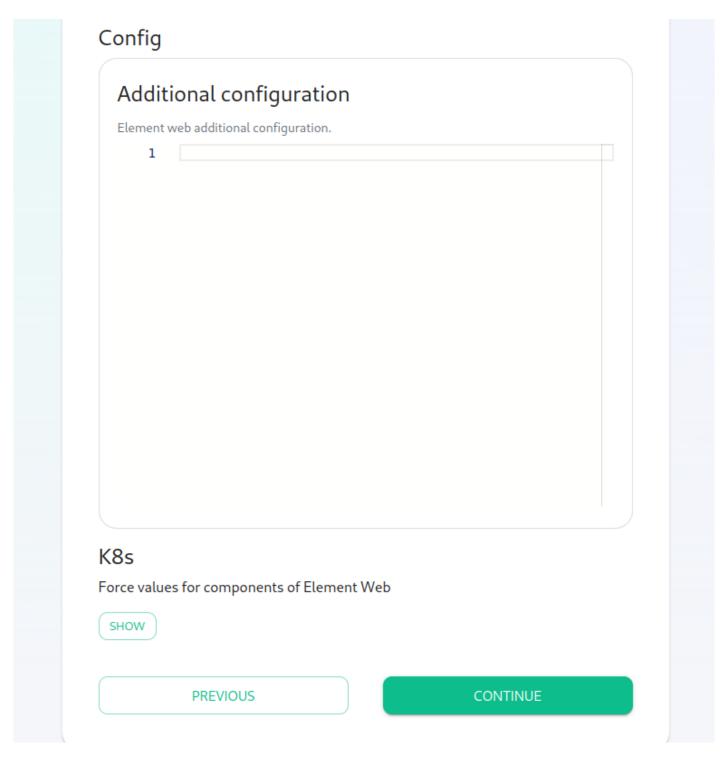
[SHOW]

[PREVIOUS]   [CONTINUE]

Please go to the "Element Web" page of the installer, click on "Advanced" and add the following to "Additional Configuration":

```
{
  "jitsi": {
    "preferred_domain": "<jitsi_fqdn>"
  }
}
```

In the above text, you will want to replace `<jitsi_fqdn>` with the actual fqdn.

Configure the installer to use an existing Jitsi instance

Config

Additional configuration

Element web additional configuration.

```
1
```

K8s

Force values for components of Element Web

[SHOW]

[PREVIOUS]   [CONTINUE]

Please go to the "Element Web" page of the installer, click on "Advanced" and add the following to "Additional Configuration":

```
{
    "jitsi": {
```

```
          "preferred_domain": "your.jitsi.example.org"
      }
  }
```

replacing `your.jitsi.example.org` with the hostname of your Jitsi server.

You will need to re-run the installer for this change to take effect.

Configure the installer to use an existing Coturn instance

Follow the instructions here: https://ems-docs.element.io/books/element-on-premise-documentation/page/single-node-installations#bkmrk-turn-server