How to Install Jitsi Meet on Debian or Ubuntu

Installing Jitsi Meet on your own server allows you to Voice-/Videochat with multiple people and use features like screen sharing. Unlike other services it works without accounts or desktop clients — you just need to share a link with others.

You have any feedback or ideas to improve this? Contact me on Social Media or per E-Mail. You can find my other projects at lw1.at.

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Prerequisites

- an up-to-date version of Ubuntu or Debian (tested using Ubuntu 18.04 and Debian Buster)
- a running instance of Apache or Nginx
- OpenJDK

Sources / More Information

github.com/jitsi/jitsi-meet/blob/master/doc/quick-install.md

github.com/jitsi/jitsi-meet/blob/master/doc/manual-install.md

github.com/jitsi/jicofo/blob/master/README.md#secure-domain

jitsi.org/tutorial

Adding the apt repository

If you are using Ubuntu, make sure the universe repositories are enabled

The repository is added like ever other apt repository: Create

/etc/apt/sources.list.d/jitsi-stable.list and enter the following line in it:

deb https://download.jitsi.org stable/

Afterwards add the GPG key with

wget -q0 - https://download.jitsi.org/jitsi-key.gpg.key | sudo apt-key add -

and update the repository with

sudo apt-get update

Add a firewall exception

If you are using ufw or another firewall software, you need to add an exception to the TCP ports 443 and 4443 and the UDP port 10000:

sudo ufw allow 443/tcp # this is probably already allowed if you are runnning a webserversudo ufw allow 4443/tcpsudo ufw allow 10000/udp

Prepare the Let's Encrypt certificate

The easiest way to set up HTTPS is by creating the SSL certificates beforehand. If you are using certbot you can do this by running e.g.

sudo certbot certonly -d jitsi.yourdomain.example

Run the installer

At this point you can start the jitsi setup. At this point either Nginx or Apache have to be set up for the installer to configure everything correctly.

apt-get -y install jitsi-meet

In the first step, the installer will ask for the domain where you want to install Jitsi:

jitsi.yourdomain.example .

In the next step select that you want to use your existing certificate which you created in the previous step. Assuming you are using certbot, you can find the private key at /etc/letsencrypt/live/jitsi.yourdomain.example/privkey.pem and the certificate at /etc/letsencrypt/live/jitsi.yourdomain.example/fullchain.pem.

If all goes well you should already be able to access Jitsi at https://jitsi.yourdomain.example.

Nevertheless, there are a few more steps to make sure everything is configured ideally.

Everyone who can access the website is able to create a meeting room. If you want to restrict this, follow the last chapter.

Some more things...

Nginx

If you are using Nginx, you can take a look at the generated

/etc/nginx/sites-available/jitsi.yourdomain.example.conf and edit it to align with the configs of your other sites. You might want to adapt the ssl config or enable http2.

NAT

If your server is not directly connected to the internet, you have to specify its local IP in

/etc/jitsi/videobridge/sip-communicator.properties :

```
org.ice4j.ice.harvest.NAT_HARVESTER_LOCAL_ADDRESS=<Local.IP.Address>
org.ice4j.ice.harvest.NAT_HARVESTER_PUBLIC_ADDRESS=<Public.IP.Address>
```

STUN Server

(thanks to kuketz-blog.de for the idea)

By default Jitsi uses the STUN server by Google to set up a connection. If you don't want this, you can replace the list of STUN servers in the /etc/jitsi/meet/jitsi.yourdomain.example-config.js:

```
stunServers: [
    { urls: 'stun:stun.t-online.de:3478' },
    { urls: 'stun:stun.lundl.de:3478' },
    { urls: 'stun:stun.easybell.de:3478' },],
```

Screensharing and Firefox 74+

Update: This change is included in the latest version of the Debian package and is therefore not needed anymore.

Screensharing in Firefox 74+ doesn't work. Thankfully there is a patch available and it is simple enough that one can apply it to the installed Jitsi instance.

Edit the wsr/share/jitsi-meet/libs/external_api.min.js. It is minified and quite unreadable, but one only has to search for <a href="mailto:camera; microphone" in it and then replace the string this._frame.allow="camera; microphone" with this._frame.allow="camera; microphone; display-capture".

A save and reload of the page later everything should be working fine.

Adding authentification to room creation

You probably want to restrict the creation of new rooms to some users, but still allow everyone with the link to join a room. For this we can configure jicofo:

```
First edit the <a href="//etc/prosody/conf.avail/jitsi.yourdomain.example.cfg.lua">
/etc/prosody/conf.avail/jitsi.yourdomain.example.cfg.lua</a>. In the main <a href="VirtualHost">VirtualHost</a>, replace <a href="anonymous">anonymous</a> authentication with <a href="internal_plain">internal_plain</a>. Next up create a new <a href="VirtualHost">VirtualHost</a> below for e.g. <a href="guest.jitsi.yourdomain.example">guest.jitsi.yourdomain.example</a> with <a href="anonymous">anonymous</a> authentication.
```

Afterwards the file should look similar to this:

```
VirtualHost "jitsi.yourdomain.example"
                                            -- enabled = false -- Remove this line to
enable this host
       authentication = "internal_plain" -- Properties below are modified by jitsi-
meet-tokens package config
        -- and authentication above is switched to "token"
app_id="example_app_id"
       --app secret="example app secret" -- Assign this host a certificate for TLS,
otherwise it would use the one
       -- set in the global section (if any).
                                                  -- Note that old-style SSL on port 5223
only supports one certificate, and will always
       -- use the global one.
       ssl = {
                              key =
"/etc/prosody/certs/jitsi.yourdomain.example.key";
                                                              certificate =
"/etc/prosody/certs/jitsi.yourdomain.example.crt";
       -- we need bosh
       modules enabled = {
           "bosh";
           "pubsub";
           "ping"; -- Enable mod_ping
```

```
c2s_require_encryption = false

VirtualHost "guest.jitsi.yourdomain.example"

authentication = "anonymous"

c2s_require_encryption = false
```

Next up, you have to edit the config.js at /etc/jitsi/meet/jitsi.yourdomain.example-config.js.

It should already have a line for anonymousdomain which you only need to uncomment and specify the domain of the new VirtualHost.

```
var config = {
   hosts: {
        // XMPP domain.
        domain: 'jitsi.yourdomain.example',
        // When using authentication, domain for guest users. anonymousdomain:
'guest.jitsi.yourdomain.example',
        [...]
   }
}
```

Now we need to enable the authentification in jicofo. For this we create

/etc/jitsi/jicofo/sip-communicator.properties and set it to

```
org.jitsi.jicofo.auth.URL=XMPP:jitsi.yourdomain.example
```

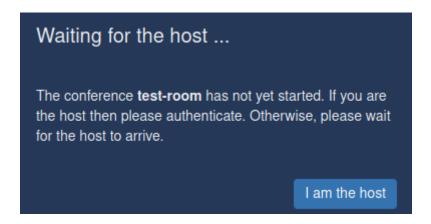
After every config is set, we can restart jicofo and prosody

```
sudo systemctl restart prosody.service
sudo systemctl restart jicofo.service
```

And lastly we can create users using prosodyctl:

```
prosodyctl register <username> jitsi-meet.example.com <password>
```

Now when you create a new room, you can click on I am the host and enter the username/passwort. Every following user will be able to join directly.



Using existing user databases

As jitsi is using Prosody for this, you can use e.g. IMAP, LDAP, Wordpress and many more for authentication.

But if you just want to limit the instance to the people you know, a single shared user account as set up above might be enough.