

# Jitsi WebRTC server installation guide for Ubuntu14.04 + Apache2

This guide provides instructions how to install Jitsi WebRTC server on Ubuntu14.04 with existing Apache2 web server.

It is assumed that we already have working domain on **https://qqq.com** and we need make working Jitsi video conference and existing web content.

Must use Chrome or Firefox browser.

The commands in this guide require root privileges.

## 1. Uninstall old dependencies.

### Jitsi

```
apt-get purge jigasi jitsi-meet jitsi-meet-web-config jitsi-meet-prosody jitsi-meet-web jicofo jitsi-videobridge
```

```
rm -rf /etc/jitsi
```

### Prosody

```
apt-get purge prosody
```

```
rm -rf /etc/prosody
```

## 2. Upgrade existing dependencies

Typically installing the latest version of Jitsi on Ubutnu14.04 leads to the error below:

```
The following packages have unmet dependencies.  
cloudprint-service : Depends: init-system-helpers (>= 1.18~) but 1.14 is to be installed  
E: Unable to correct problems, you have held broken packages.
```

Download init-system-helpers\_1.18\_all.deb from [http://launchpadlibrarian.net/173841617/init-system-helpers\\_1.18\\_all.deb](http://launchpadlibrarian.net/173841617/init-system-helpers_1.18_all.deb)

Install the package:

```
dpkg -i init-system-helpers_1.18_all.deb
```

### 3. Install jitsi-meet

Follow jitsi-meet installation guide for Ubuntu on <https://jitsi.org/downloads/>.

All installation steps should pass without errors.

Pay attention for SSL certificates settings.

### 4. Post install steps

#### Check installation

Open <https://qqq.com> in your browser the page should look the same as <https://meet.jit.si/>.

Later we return the old web content and setup non-default port to access jitsi video conference.

Try to make connection. Typically, 2-users conference works OK but when a third user joins the room video and audio stop working.

#### Fix video conferencing for more than 2 users.

Skip this chapter if video conferencing works fine for 3 or more users.

#### prosody log

Open separate console and run below command to monitor prosody log:

```
tail -f /var/log/prosody/prosody.log
```

After jitsi default installation you will see messages like below in prosody.log:

```
Feb 06 12:51:24 mod_bosh info New BOSH session, assigned it sid '95608d52-2798-4c00-97fa-001763675527'  
Feb 06 12:51:24 bosh95608d52-2798-4c00-97fa-001763675527 info Authenticated as dd9a7992-ebd8-4c46-896f-4aeb6096d28b@qqq.com  
Lots of:  
Feb 06 12:51:26 c2s159cf90 info Client connected  
Feb 06 12:51:26 c2s159cf90 info Client disconnected: ssl handshake failed  
...
```

#### Services

Stop relevant services to simplify diagnostics:

```
service prosody stop  
service jicofo stop  
service jitsi-videobridge stop
```

Now check each server individually.

## Prosody

```
service prosody start
```

prosody.log:

```
12:42:16 certmanager error SSL/TLS: Failed to load '/etc/prosody/certs/localhost.crt': Check that the path is correct, and the file exists
```

Provide valid link for localhost certificate:

```
In -s /etc/ssl/certs/ssl-cert-snakeoil.pem /etc/prosody/certs/localhost.crt
```

Specify path to your SSL certificate instead of ssl-cert-snakeoil.pem if it is required.

Restart service

```
service prosody restart
```

Now error messages should not appear in the log on start prosody service.

## jitsi-videobridge

```
service jitsi-videobridge start
```

prosody.log should look like below:

```
Feb 06 12:57:08 jcp1635650 info Incoming Jabber component connection  
Feb 06 12:57:08 jitsi-videobridge.qqq.com:component info External component successfully authenticated
```

In case of any errors check ssl certificates, configuration files /etc/jitsi/videobridge, etc.

## jicofo

```
service jicofo start
```

prosody.log:

```
Feb 06 13:01:22 c2s16fd840 info Client connected  
Feb 06 13:01:22 jcp1703190 info Incoming Jabber component connection  
Feb 06 13:01:22 focus.qqq.com:component info External component successfully authenticated  
Feb 06 13:01:23 c2s16fd840 info Client disconnected: ssl handshake failed  
Feb 06 13:01:28 c2s160f660 info Client connected  
Feb 06 13:01:28 c2s160f660 info Client disconnected: ssl handshake failed  
Feb 06 13:01:28 c2s160b260 info Client connected  
Feb 06 13:01:28 c2s160b260 info Client disconnected: ssl handshake failed
```

Apply the workaround below (or find another solution to the problem):

Add line `org.jitsi.jicofo.ALWAYS_TRUST_MODE_ENABLED=true` in `/etc/jitsi/jicofo/sip-communicator.properties` configuration file.

Restart jicofo:

```
service jicofo restart
```

prosody.log should look like below:

```
Feb 06 13:08:58 c2s17ec910 info Client connected
Feb 06 13:08:58 jcp17c66a0 info Incoming Jabber component connection
Feb 06 13:08:58 focus.qqq.com:component info External component successfully authenticated
Feb 06 13:08:58 c2s17ec910 info Authenticated as focus@auth.qqq.com
```

Try multi-user conference on <https://qqq.com>

Now a video conference for more then 2 users should work

On each new connection the messages like below should appear in prosody.log:

```
Feb 06 13:10:22 mod_bosh info New BOSH session, assigned it sid '55ffc51d-ab44-4328-9153-1a8bb2b1f34c'
Feb 06 13:10:22 bosh55ffc51d-ab44-4328-9153-1a8bb2b1f34c info Authenticated as c39d916b-81e4-4b17-820c-4b3485738403@qqq.com
```

## Apache2: make old content accessible

Check open ports in your system

```
netstat -l
```

Let's assume that port 5555 is free, and we will use it to access jitsi web content.

Add "Listen 5555" lines to /etc/apache2/ports.conf:

```
<IfModule ssl_module>
  Listen 443
  Listen 5555
</IfModule>

<IfModule mod_gnutls.c>
  Listen 443
  Listen 5555
</IfModule>
```

Apache2 configuration file **qqq.com.conf** has been added during jitsi setup and contains settings for jitsi web content. Change 443 port to 5555 in /etc/apache2/sites-available/qqq.com.conf:

```
...
<VirtualHost *:5555>
  ServerName qqq.com
...
```

Now the old content should be accessible via <https://qqq.com/>  
<https://qqq.com:5555/> - jitsi video conference main page

Trying joining a room: <https://qqq.com:5555/q> failed, no video.

prosody.log contains errors:

```
Feb 06 13:25:34 boshbc949f0f-ea09-4146-b96a-4029395ce53b info BOSH client disconnected
```

To fix this error modify /etc/jitsi/meet/qqq.com-config.js like below:

```
// BOSH URL. FIXME: use XEP-0156 to discover it.
bosh: 'https://qqq.com:5555/http-bind',
```

## Restart services

```
service jitsi-videobridge restart  
service jicofo restart
```

Try video room again **<https://qqq.com:5555/q>**

Now more then 2 connections should work as expected