



BigBlueButton :: Open Source Web Conferencing

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Agenda

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Minimum server requirements

For production

```
Ubuntu 20.04 64-bit OS running Linux kernel 5.x
Latest version of docker installed
16 GB of memory with swap enabled
8 CPU cores, with high single-thread performance
500 GB of free disk space (or more) for recordings, or 50GB if session recording is disabled on the server.
TCP ports 80 and 443 are accessible
UDP ports 16384 - 32768 are accessible
250 Mbits/sec bandwidth (symmetrical) or more
TCP port 80 and 443 are not in use by another web server or reverse proxy
A hostname (such as bbb.ehsan.co) for setup of a SSL certificate
IPV4 and IPV6 address
```

For development

```
4 CPU cores/8 GB of memory
Installation on a local VM container
50G of disk space
IPV4 address only
```

Initial Server Setup with Ubuntu 20.04

```
ssh root@your_server_ip
vim /root/.ssh/authorized_keys
```

```
adduser ehsan
usermod -aG sudo ehsan
```

```
ufw app list
```

Output

```
Available applications:
OpenSSH
```

```
ufw allow OpenSSH
ufw enable
ufw status
```

Output

```
Status: active

To Action From
--
OpenSSH ALLOW Anywhere
OpenSSH (v6) ALLOW Anywhere (v6)
```

Step 5 — Enabling External Access for Your Regular User

```
ssh ehsan@your_server_ip
sudo [command]
```

Copy of your local public key to the new user's ~/.ssh/authorized_keys file to log in successfully.

```
rsync --archive --chown=ehsan:ehsan ~/.ssh /home/ehsan
```

Pre-installation checks

```
cat /etc/default/locale
```

Output:

```
LANG="en_US.UTF-8"
```

If you don't see LANG="en_US.UTF-8"

```
sudo apt install -y language-pack-en
sudo update-locale LANG=en_US.UTF-8
cat /etc/default/locale
```

Output:

```
LANG="en_US.UTF-8"
```

```
sudo systemctl show-environment
```

Output:

```
LANG=en_US.UTF-8  
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
```

If you don't see LANG="en_US.UTF-8"

```
sudo systemctl set-environment LANG=en_US.UTF-8  
sudo systemctl show-environment
```

Output:

```
LANG=en_US.UTF-8  
PATH=/usr/local/sbin:/usr/local/bin:/usr/sbin:/usr/bin:/sbin:/bin
```

```
free -h
```

If you see a value for Mem: in the total column less than 15G, then your server has insufficient memory to run BigBlueButton in production. You need to increase the server's memory to (at least) 16G. (As stated above, if your running this in a development environment, 8G is fine.)

```
cat /etc/lsb-release
```

Output:

```
DISTRIB_ID=Ubuntu  
DISTRIB_RELEASE=20.04  
DISTRIB_CODENAME=focal  
DISTRIB_DESCRIPTION="Ubuntu 20.04.4 LTS"
```

```
uname -m
```

Output:

```
x86_64
```

```
ip addr | grep inet6
```

Output:

```
inet6 ::1/128 scope host
```

Next, check that your server is running Linux kernel 5.x.

```
uname -r
```

Output:

```
5.4.x-xx-generic
```

Next, check that your server has (at least) 8 CPU cores

```
grep -c ^processor /proc/cpuinfo
```

Output:

```
8
```

Install

Set DNS for Docker & MongoDB

```
vim /etc/resolv.conf
```

Set Firewall ports

```
ufw allow 80/tcp
ufw allow 443/tcp
ufw allow 16384:32768/udp
ufw --force enable
ufw status verbose
```

```
hostnamectl set-hostname bbb.ehsan.co
```

```
screen -S bigblue
```

press “Ctrl-A” and “d”

```
screen -ls
screen -r 47247
screen -x bigblue
```

To install BigBlueButton, use [bbb-install-2.5.sh](#) script.

The above link gives detailed information on using the script. As an example, the following command installs BigBlueButton 2.5 using hostname [bbb.example.com](#) and email address (for Let’s Encrypt) [notice@example.com](#). It installs (or upgrades if the command is rerun later) the latest version of BigBlueButton 2.5 using `-v focal-250`. It also installs the API demos (`-a`) and a firewall (`-w`).

```
wget -qO- https://ubuntu.bigbluebutton.org/bbb-install-2.5.sh | bash -s -- -v focal-250 -s bbb.ehsan.co -e hi@ehsan.co -a -w -g
```

Note: You can install Greenlight on the same server by also passing the `-g` option to [bbb-install-2.5.sh](#).

check the status of your server

```
bbb-conf --check
```

Check that all the BigBlueButton processes have started and are running

```
bbb-conf --status
```

```
dpkg -l | grep bbb
```

Output:

```
ii  bbb-apps-akka                2.5-29                all                    BigBlueButton Apps (Akka)
ii  bbb-config                    1:2.5-53              amd64                 BigBlueButton configuration utilities
ii  bbb-demo                      1:2.5-11              amd64                 BigBlueButton API demos
ii  bbb-etherpad                  1:2.5-11              amd64                 The EtherPad Lite components for Big
BlueButton
ii  bbb-freeswitch-core           2:2.5-11              amd64                 BigBlueButton build of FreeSWITCH
ii  bbb-freeswitch-sounds         1:2.5-8               amd64                 FreeSWITCH Sounds
ii  bbb-fsesl-akka                2.5-24                all                    BigBlueButton FS-ESL (Akka)
ii  bbb-htm15                     1:2.5-2829            amd64                 The HTML5 components for BigBlueButt
on
ii  bbb-learning-dashboard        1:2.5-18              amd64                 BigBlueButton bbb-learning-dashboard
ii  bbb-libreoffice-docker        1:2.5-6               amd64                 BigBlueButton setup for LibreOffice
running in docker
ii  bbb-mkclean                   1:2.5-5               amd64                 Clean and optimize Matroska and WebM
files
ii  bbb-pads                      1:2.5-13              amd64                 BigBlueButton Pads
ii  bbb-playback                  1:2.5-9               amd64                 BigBlueButton playback
ii  bbb-playback-presentation     1:2.5-10              amd64                 BigBluebutton playback of presentati
on
ii  bbb-record-core               1:2.5-24              amd64                 BigBlueButton record and playback
ii  bbb-web                       1:2.5-37              amd64                 BigBlueButton API
ii  bbb-webrtc-sfu                1:2.5-26              amd64                 BigBlueButton WebRTC SFU
ii  bigbluebutton                 1:2.5-2               amd64                 Open source web conferencing platfor
m (bbb)
ii  libopusenc0                   0.2.1-1bbb1           amd64                 High-level API for encoding Ogg Opus
audio streams
ii  yq                            3.4.1bbb1             amd64                 lightweight and portable command-lin
e YAML processor
```

For 3rd party

```
bbb-conf --secret
```

Post installation steps

Secure

[Configure your firewall](#)

- TCP/IP port 22 (for SSH)
- TCP/IP ports 80/443 (for HTTP/HTTPS)
- UDP ports in the range 16384 - 32768 (for FreeSWITCH/HTML5 RTP streams)

[Remove the API demos](#)

```
sudo apt purge bbb-demo
```

Modify the default landing page

```
vim /var/www/bigbluebutton-default/index.html
```

After editing

```
bbb-conf
```

You can restart and check your BigBlueButton server at any time using the commands

```
bbb-conf --restart  
bbb-conf --check
```

Creating Accounts

```
cd ~/greenlight
```

Creating a User Account

```
docker exec greenlight-v2 bundle exec rake user:create["name","email","password","user"]
```

Creating an Administrator Account

```
docker exec greenlight-v2 bundle exec rake user:create["Ehsan Diary","hi@ehsan.co","/xnD|bG17SF/","admin"]
```

Common Customizations

Delete raw data from published recordings

```
vim /etc/cron.daily/bigbluebutton
```

comment

```
remove_raw_of_published_recordings
```

The default duration (days)

```
published_days=14
```

Enable playback of recordings on iOS

```
vim /usr/local/bigbluebutton/core/scripts/presentation.yml
```

```
video_formats:  
- webm  
- mp4
```

Big Blue Button Video Download by Tilman Moser

لینک وینار در آکادمی ابرها با عنوان آسون‌تر از همیشه رویداد آنلاین برگزار کن

