

## AWS Linux Ubuntu 19.10 VM

1	sudo apt-get update
2	sudo apt-get upgrade
3	sudo apt-get dist-upgrade
4	sudo reboot
5	sudo apt-get install binutils
6	sudo apt-get install apt-transport-https ca-certificates
7	sudo add-apt-repository ppa:ubuntu-toolchain-r/test ----- Not required / Check
8	sudo apt-get install build-essential software-properties-common -y
9	sudo apt-get update
10	sudo apt-get install gcc-snapshot -y ----- Not required / Check sudo apt-get install gcc
11	
12	sudo apt-get install gcc-9 g++-9 -y ----- Not required / Check
13	sudo update-alternatives --install /usr/bin/gcc gcc /usr/bin/gcc-9 60 --slave /usr/bin/g++ g++ /usr/bin/g++-9 ----- Not required / Check
14	gcc --version
15	g++ --version
20	sudo apt-get install libssl-dev
21	sudo apt-get install build-essential binutils binutils-doc autoconf flex bison libjpeg-dev libfreetype6-dev zlib1g-dev libgdbm-dev libncurses5-dev automake libtool libffi-dev curl git tmux gettext cmake
22	sudo apt-get install libxml2-dev libxslt-dev xutils-dev
23	sudo apt-get install libboost-all-dev
24	sudo apt-get install python-dev
25	sudo apt-get install python3-dev
26	sudo apt-get install cython
27	sudo apt-get install cython3

28	sudo apt-get install libdbus-1-dev libdbus-glib-1-dev
29	sudo apt-get install clang
30	sudo apt-get install gfortran - Not required
31	sudo apt-get install python-pip
32	sudo apt-get install python3-pip
33	sudo apt-get install libblas-dev liblapack-dev libatlas-base-dev
34	sudo apt-get install vim
35	sudo apt-get install tree
36	-----
37	sudo apt-get install libreadline-dev
38	sudo apt-get install libgc-dev
39	-
40	-
41	sudo apt-get install liburcu-dev
42	sudo apt-get install check
43	-
44	
45	sudo apt-get install libcurl4-openssl-dev OR
47	sudo apt-get install libcurl4-gnutls-dev
48	sudo apt-get install software-properties-common
49	<a href="https://certbot.eff.org/lets-encrypt/ubuntu-focal-apache">sudo add-apt-repository ppa:certbot/certbot</a> ---- Not required <a href="https://certbot.eff.org/lets-encrypt/ubuntu-focal-apache">https://certbot.eff.org/lets-encrypt/ubuntu-focal-apache</a>
50	sudo apt-get update
51	sudo apt-get upgrade
52	sudo apt-get dist-upgrade
53	sudo reboot

54	sudo apt-get install apache2
55	sudo ufw app list
56	sudo ufw allow 'Apache Full'
57	sudo ufw status
58	sudo service apache2 start (If required)
59	sudo apt-get install -y php7.2 libapache2-mod-php7.2 php7.2-cli php7.2-common php7.2-mbstring php7.2-gd php7.2-intl php7.2-xml php7.2-mysql php7.2-zip php7.2-json php7.2-curl php-smbclient php7.2-imap php7.2-gmp php-memcached php-redis
	sudo apt-get install -y php libapache2-mod-php php-cli php-common php-mbstring php-gd php-intl php-xml php-mysql php-zip php-json php-curl php-imap php-gmp php-memcached php-redis
	sudo apt-get install -y php-imap
	sudo apt-get install -y php-gmp
	sudo apt-get install -y php-memcached sudo apt-get install -y php-redis
	sudo apt-get install libmagickcore-dev sudo apt-get install libmagickcore-6.q16hdri-6-extra sudo apt-get install libmagickwand-dev  sudo apt-get install php-imagick
60	sudo add-apt-repository ppa:certbot/certbot
	sudo apt-get update
	sudo apt-get install python-certbot-nginx
	<b>sudo certbot --apache</b> sudo certbot --apache certonly sudo certbot renew --dry-run
	sudo apt-get install doxygen* sudo apt-get install graphviz*

	<pre> sudo apt-get install libsuperlu-dev sudo apt-get install libarpack* (Large scale eigenvalue solver)  sudo apt-get install txt2man (Needed by MLPack to generate man pages)  sudo apt-get install libpcr++-dev zlib1g-dev  sudo apt-get install help2man (to generate Wabbit man pages)  sudo apt-get install libbsd-arc4random-perl sudo apt-get install libbsd-dev sudo apt-get install libbsd-resource-perl </pre>
61	df -h
	lsblk
	<pre> // For 2GB Swap space.... sudo /bin/dd if=/dev/zero of=/var/swap.1 bs=2M count=1024 sudo /sbin/mkswap /var/swap.1 sudo chmod 600 /var/swap.1 sudo /sbin/swapon /var/swap.1  sudo vi /etc/fstab /var/swap.1 swap swap defaults 0 0  sudo mount -a </pre>
	sudo reboot
	<pre> proxy proxy_ajp proxy_http rewrite deflate headers proxy_balancer proxy_connect proxy_html  sudo apt install -y lsb-release wget 58 sudo apt-get install libhiredis-dev 59 sudo apt-get install libjansson4 60 sudo apt-get install libcjose0 61 mkdir software 62 cd software/ 63 wget wget https://github.com/zmartzone/mod_auth_openidc/releases/download/v2.3.11/libapache 2-mod-auth-openidc_2.3.11-1.bionic+1_amd64.deb 64 ll </pre>

	<pre> 65 sudo a2enmod ssl rewrite proxy proxy_http proxy_wstunnel proxy proxy_ajp proxy_http rewrite deflate headers proxy_balancer proxy_connect proxy_html 66 sudo systemctl restart apache2 67 sudo apt install -y libxml2-dev 68 sudo apt install -y libxml2-dev 69 sudo a2enmod 70 sudo systemctl restart apache2 71 sudo dpkg -i libapache2-mod-auth-openidc_2.3.11-1.bionic+1_amd64.deb 72 sudo a2enmod auth_openidc 73 sudo systemctl restart apache2 </pre>
	sudo apt-get upgrade
	sudo apt-get dist-upgrade
	sudo reboot
	<a href="https://stackoverflow.com/questions/37142357/error-instance-does-not-have-a-volume-attached-at-root-dev-sda1">https://stackoverflow.com/questions/37142357/error-instance-does-not-have-a-volume-attached-at-root-dev-sda1</a>
	<a href="https://docs.aws.amazon.com/efs/latest/ug/mount-fs-auto-mount-onreboot.html">https://docs.aws.amazon.com/efs/latest/ug/mount-fs-auto-mount-onreboot.html</a>
	<a href="http://site.clairvoyantsoft.com/fixing-an-aws-ec2-instance-boot-up-issue/">http://site.clairvoyantsoft.com/fixing-an-aws-ec2-instance-boot-up-issue/</a>
	sudo apt-get install redis-server
	sudo apt-get install gpsbabel
	<p><b>How to recover SAML settings?</b></p> <p><a href="https://github.com/nextcloud/user_saml/issues/148">https://github.com/nextcloud/user_saml/issues/148</a></p> <pre> sudo -u www-data php /var/www/nextcloud/occ config:app:set --value saml user_saml type </pre>
	FOR DISPLAY ISSUES ON LINUX TERMINAL:

	<a href="https://aws.amazon.com/premiumsupport/knowledge-center/connect-to-ubuntu-1604-windows/">https://aws.amazon.com/premiumsupport/knowledge-center/connect-to-ubuntu-1604-windows/</a>  <a href="https://askubuntu.com/questions/135573/gconf-error-no-d-bus-daemon-running-how-to-reinstall-or-fix">https://askubuntu.com/questions/135573/gconf-error-no-d-bus-daemon-running-how-to-reinstall-or-fix</a>
	<p>Remote Desktop is a not a viable solution. Let's not attempt it now.</p> <p><a href="https://askubuntu.com/questions/213678/how-to-install-x11-xorg">https://askubuntu.com/questions/213678/how-to-install-x11-xorg</a></p> <pre> sudo apt-get install fxlrg sudo apt-get install xserver-xorg-core sudo apt-get install xserver-xorg sudo apt-get install xorg sudo apt-get install xorg openbox sudo apt-get install ubuntu-desktop </pre>
	<p>If needed. Usually we need not do it.</p> <p><a href="https://superuser.com/questions/806637/xauth-not-creating-xauthority-file">https://superuser.com/questions/806637/xauth-not-creating-xauthority-file</a></p>
	<p>Install Cockpit</p> <p>On Controller</p> <pre> /etc/cockpit/ cockpit.conf -&gt; [WebService] Origins = https://cockpit.edufi.net ProtocolHeader = X-Forwarded-Proto AllowUnencrypted = true </pre> <p>On remote machines</p> <pre> [WebService] Origins = https://cockpit.edufi.net ProtocolHeader = X-Forwarded-Proto AllowUnencrypted = true </pre>
	<pre> 400 sudo python3 -m pip install jupyterhub 401 sudo python3 -m pip install --upgrade notebook 406 sudo pip3 install numpy 407 sudo pip3 install scipy 408 sudo pip3 install pandas </pre>

409	sudo pip3 install matplotlib
410	sudo pip3 install seaborn
411	sudo pip3 install bokeh
412	sudo pip3 install scikit-learn
413	sudo pip3 install nltk
414	sudo pip3 install gensim
415	sudo pip3 install scrapy
416	sudo pip3 install beautifulsoup
417	sudo pip3 install scrapy
418	sudo pip3 install pyasn1
419	sudo pip3 install pyasn1==0.5.0
420	sudo pip3 install pyasn1==0.5.0
421	sudo pip3 install pyasn1==0.4.3
422	sudo pip3 install scrapy
423	sudo pip3 install statsmodels
424	sudo pip3 install pydot
425	sudo pip3 install spacy
426	sudo pip3 install eli5
427	history

How to create user without direct login...

We are going to create a new user called git and install/setup everything under that user:

```
$ sudo adduser --disabled-login --gecos 'Gogs' git
```

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How to install Etherpad for MEET.EDUFI.NET

```
$ sudo adduser --disabled-login --gecos 'Etherpad' etherpad
```

Starting Etherpad with PM2.

```
pm2 start `pwd`/node_modules/ep_etherpad-lite/node/server.js -s `pwd`/settings.json --name "Etherpad Lite"
```

Install SQLite3

```
install php-sqlite3
```

For Phabricator

Remove PHP 7.0.

Phabricator needs PHP 7.1 or later.

<https://askubuntu.com/questions/856793/upgrade-to-the-specific-php-7-1-7-2-from-php-7-0-in-ubuntu-16-04>

```
sudo add-apt-repository ppa:ondrej/php  
sudo add-apt-repository ppa:ondrej/apache2
```

Install Phabricator using install script.

Remove MYSQL Server.

We will be using central MYSQL server ..

<https://guides.wp-bullet.com/install-apcu-object-cache-for-php7-for-wordpress-ubuntu-16-04/#apcupear>

```
sudo apt-get install libapache2-mod-php7.2  
sudo a2enmod php7.2
```

## Setting up Mail in a Box

Ubuntu 14.04

1	sudo apt-get update
2	sudo apt-get upgrade
3	sudo apt-get dist-upgrade
4	sudo reboot
5	sudo apt-get install binutils
6	sudo apt-get install apt-transport-https ca-certificates
7	sudo add-apt-repository ppa:ubuntu-toolchain-r/test
8	sudo apt-get install build-essential software-properties-common -y
9	sudo apt-get update
10	sudo apt-get install gcc-snapshot -y
11	sudo apt-get update



12	<code>sudo apt-get install gcc-6 g++-6 -y</code>
13	<code>sudo update-alternatives --install /usr/bin/gcc gcc /usr/bin/gcc-6 60 --slave /usr/bin/g++ g++ /usr/bin/g++-6</code>
14	<code>gcc --version</code>
15	<code>g++ --version</code>
16	<code>sudo update-alternatives --config gcc</code>
17	<code>sudo apt-get install gcc-5 g++-5 -y</code>
18	<code>sudo update-alternatives --install /usr/bin/gcc gcc /usr/bin/gcc-5 60 --slave /usr/bin/g++ g++ /usr/bin/g++-5</code>
19	<code>sudo update-alternatives --config gcc</code>
20	<code>sudo apt-get install libssl-dev</code>
21	<code>sudo apt-get install build-essential binutils binutils-doc autoconf flex bison libjpeg-dev libfreetype6-dev zlib1g-dev libgdbm-dev libncurses5-dev automake libtool libffi-dev curl git tmux gettext cmake</code>
22	<code>sudo apt-get install libxml2-dev libxslt-dev xutils-dev</code>
23	<code>sudo apt-get install libboost-all-dev</code>
24	<code>sudo apt-get install python-dev</code>
25	<code>sudo apt-get install python3-dev</code>
26	<code>sudo apt-get install cython</code>
27	<code>sudo apt-get install cython3</code>
28	<code>sudo apt-get install libdbus-1-dev libdbus-glib-1-dev</code>
29	<code>sudo apt-get install clang</code>
30	<code>sudo apt-get install gfortran</code>
31	<code>sudo apt-get install python-pip</code>
32	<code>sudo apt-get install python3-pip</code>
34	<code>sudo apt-get install vim</code>
35	<code>sudo apt-get install tree</code>
37	<code>sudo apt-get install libreadline-dev</code>

38	sudo apt-get install libgc-dev
39	sudo apt-get install libncurses-dev
40	sudo apt-get install libexpat1-dev
41	sudo apt-get install liburcu-dev
42	sudo apt-get install check
43	sudo apt-get install libyaml-dev
44	sudo apt-get install curl
46	sudo apt-get install libcurl4-openssl-dev
47	sudo apt-get install libcurl4-gnutls-dev
48	sudo apt-get install software-properties-common
49	sudo add-apt-repository ppa:certbot/certbot
50	sudo apt-get update
51	sudo apt-get upgrade
52	sudo apt-get dist-upgrade
53	sudo reboot
54	<pre>// For 2GB Swap space.... sudo /bin/dd if=/dev/zero of=/var/swap.1 bs=2M count=1024 sudo /sbin/mkswap /var/swap.1 sudo chmod 600 /var/swap.1 sudo /sbin/swapon /var/swap.1  sudo vi /etc/fstab /var/swap.1 swap swap defaults 0 0  sudo mount -a</pre>
	sudo reboot
55	<a href="https://mailinabox.email/guide.html">https://mailinabox.email/guide.html</a>  Request for RDNS

	<a href="https://aws.amazon.com/premiumsupport/knowledge-center/route-53-reverse-dns/">https://aws.amazon.com/premiumsupport/knowledge-center/route-53-reverse-dns/</a> <a href="https://aws.amazon.com/forms/ec2-email-limit-rdns-request">https://aws.amazon.com/forms/ec2-email-limit-rdns-request</a>
57	

# Indico - OAuth Config

```
# OAUTH Configuration
_edufi_oauth_config = {
    'consumer_key': 'Edu-Fi_NG-EVENTS_OIDC', # put your key here
    'consumer_secret': '98c68946-92bc-4485-b01d-7d084491139a', # put your secret here
    'request_token_params': {'scope': 'email, openid, roles'},
    'base_url': 'https://edufi.vosis.net/auth/realms/myedufi/protocol/openid-connect',
    'request_token_url': None,
    'access_token_method': 'POST',
    'access_token_url':
'https://edufi.vosis.net/auth/realms/myedufi/protocol/openid-connect/token',
    'authorize_url': 'https://edufi.vosis.net/auth/realms/myedufi/protocol/openid-connect/auth'
}

AUTH_PROVIDERS = {
    'edufi': {
        'type': 'oauth',
        'title': 'Edu-Fi SSO Account',
        'oauth': _edufi_oauth_config,
    }
}

IDENTITY_PROVIDERS = {
    'edufi': {
        'type': 'oauth',
        'oauth': _edufi_oauth_config,
        'endpoint': 'https://edufi.vosis.net/auth/realms/myedufi/protocol/openid-connect/userinfo',
        'identifier_field': 'sub',
        'mapping': {
            'user_name': 'email',
            'email': 'email',
            'first_name': 'given_name',
            'last_name': 'family_name',
        },
        'trusted_email': True,
    }
}

PROVIDER_MAP = {
```

```
      'edufi': 'edufi'  
    }
```

```
=====
```