Let sever send email using PHP and Postfix

server: alibaba ubuntu 16.04

1. prerequisite blah blah...

When your server sends email, it will send the email using SMTP protocol and using a public email server(e.g. Gmail, outlook ...) as MUA (eg. using the gmail sender account to send). SMTP is the email delivery protocol. MTA is the server program that uses SMTP to deliver emails. So, we have to install a MTA on our server in order to use SMTP protocol to send server email (edit in your php file) via public email server MUA (we will take gmail as an example in this lecture).

So, thinking that just use mail() function in php file to send email is naïve. You must install MTA to make your ubuntu server can implement SMTP protocol first.

1. Choosing a proper MTA.

There are many MTAs available, like sSMTP, msmtp, sendmail, postfix and so on. In this lecture, I will use postfix.

If you intall these softwares: [exim](http://www.exim.org/), [postfix](http://www.postfix.org/), and [sendmail](http://en.wikipedia.org/wiki/Sendmail), your Ubuntu server will become a Fully-fledged mail server.

1. Intall postfix: this is a shot of the installation process



InternetSite Configuration

System mail name is the name of your sever.

How to in stall please see other documents.

Don’t forget to test the postfix using command line first.

When you edit the configuration files, please check the documentation to see what each parameters means in /etc/postfix/main.cf: <http://www.postfix.org/BASIC_CONFIGURATION_README.html>

**/etc/postfix/sasl\_passwd: is to type your MUA account and MUA’s smtp info**

**(every MUA(like gmail) has its own SMTP server, if you want a outlook MUA, check outlook’s smtp settings)**

the smtp settings should look like:

[

*Outgoing Mail (SMTP) Server*: **smtp.gmail.com**

*Use Authentication*: **Yes**

*Use Secure Connection*: **Yes** (this can be TLS or SSL depending on your mail client)

*Username*: **your GMail account**, i.e. *user@gmail.com*

*Password*: **your GMail password**

*Port*: **465** or **587**

]

1. Trouble shooting after your first sending email test via command line:

### 1. No TLS

status=bounced (host smtp.gmail.com[74.125.65.109] said: 530 5.7.0 Must issue a STARTTLS command first. s9sm727762ybm.8 (in reply to MAIL FROM command))

You’re missing smtp\_use\_tls=yes in main.cf

### 2. Unknown CA

certificate verification failed for smtp.gmail.com[74.125.47.109]:587: untrusted issuer /C=US/O=Equifax/OU=Equifax Secure Certificate Authority

You’re missing smtp\_tls\_CAfile = /etc/ssl/certs/ca-certificates.crt in main.cf

3. cannot connect:

cause: wrong mydomain in main.cf: seach domainname by ‘nslookup’

type ip to get domain name

type domain name to get ip

can use for all websites or servers

type ‘ifconfig’ to find out ip address of server.

4. Connection could not be established with host smtp.gmail.com

cause: MUA thinks that sb else is using your email account, just follow the email and trust the server:

[

If you receive the following message when attempting to send a test email then the issue is that Gmail has blocked access from your server IP address believing the  sign-in attempt to be a hijacker trying to access your account.

"Message failed to sendError Code: 0Error Message: Failed to authenticate on SMTP server with username "ross.peetoom@gmail.com" using 2 possible authenticators"

Check your Gmail inbox, you have likely received an email from no-reply@accounts.google.com saying that "Someone recently tried to use an application to sign in to your Google Account".  You should scroll to the bottom of the email and follow the link to complete the troubleshooting steps.  On the page that loads follow the link "[https://accounts.goo...ayUnlockCaptcha](https://accounts.google.com/DisplayUnlockCaptcha)" and click the "Continue" button, you will now see the following text.

"Sign in using the application you want to authorize access to your account within the next ten minutes. Google will remember the application after it signs in, and will allow it to access your account in the future as long as it uses the correct password."

Restart your browser and log back into Zurmo, now test your SMTP settings again.  This time Gmail should accept the connection and your test mail should be delivered.

]

# SSL vs TLS vs STARTTLS

**Way of encypt email:** [STARTTLS](https://en.wikipedia.org/wiki/Starttls) is a way to take an existing insecure connection and upgrade it to a secure connection using SSL/TLS. <https://www.fastmail.com/help/technical/ssltlsstarttls.html>

1. Edit php using mail() or PHPMailer()

PHPMailer can help send image and link embedded html email

1. Trouble shooting after your first sending email test via php: