**Configuring ftp server using SSL/TLS Encryption**

Type the following command to create self-signed certificate (you can also use certificate issued by 3rd party CA):

# cd /etc/vsftpd/

# opensslreq -x509 -nodes -days 365 -newkey rsa:1024 –keyoutvsftpd.pem -out vsftpd.pem  
  
Sample outputs:

Generating a 1024 bit RSA private key

.......++++++

........................................++++++

writing new private key to '/etc/vsftpd/vsftpd.pem'

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You are about to be asked to enter information that will be incorporated

into your certificate request.

What you are about to enter is what is called a Distinguished Name or a DN.

There are quite a few fields but you can leave some blank

For some fields there will be a default value,

If you enter '.', the field will be left blank.

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Country Name (2 letter code) [GB]:IN

State or Province Name (full name) [Berkshire]:Maharashtra

Locality Name (eg, city) [Newbury]:Pune

Organization Name (eg, company) [My Company Ltd]:nixCraft Ltd

Organizational Unit Name (eg, section) []:IT

Common Name (eg, your name or your server's hostname) []:ftp.nixcraft.net.in

Email Address []:vivek@nixcraft.net.in

Edit the vsftpd configuration file, enter:  
# vim vsftpd.conf

Add or correct the following configuration option:

# Turn on SSL

ssl\_enable=YES

# Allow anonymous users to use secured SSL connections

allow\_anon\_ssl=YES

# All non-anonymous logins are forced to use a secure SSL connection in order to

# send and receive data on data connections.

force\_local\_data\_ssl=YES

# All non-anonymous logins are forced to use a secure SSL connection in order to send the password.

force\_local\_logins\_ssl=YES

# Permit TLS v1 protocol connections. TLS v1 connections are preferred

ssl\_tlsv1=YES

# Permit SSL v2 protocol connections. TLS v1 connections are preferred

ssl\_sslv2=NO

# permit SSL v3 protocol connections. TLS v1 connections are preferred

ssl\_sslv3=NO

# Specifies the location of the RSA certificate to use for SSL encrypted connections

rsa\_cert\_file=/etc/vsftpd/vsftpd.pem

or(if not run)

ssl\_enable=YES

allow\_anon\_ssl=YES

force\_local\_data\_ssl=NO

force\_local\_logins\_ssl=NO

ssl\_tlsv1=YES

ssl\_sslv2=NO

ssl\_sslv3=NO

rsa\_cert\_file=/etc/vsftpd/vsftpd.pem

Restart the vsftpd ftp server:  
# service vsftpd restart  
# [netstat -tulpn | grep :21](http://www.cyberciti.biz/tips/linux-display-open-ports-owner.html)

Test SSL Aware FTP Server With ftp-ssl command

On Client side Machine

# yum install lftp

Connect ftp user using Following command :-

# lftp 192.168.1.162 .............(For User)

# lftp [user@192.168.1.162](mailto:user@192.168.1.162) ........(for Other Group)