How to install and configure Jabber Server (Ejabberd) on Debian Lenny GNU / Linux

Author : admin

I've recently **installed a jabber server** on one Debian Lenny server and hence decided to describe my installations steps hoping **this would help ppl who would like to run their own jabber server on Debian** . After some research of the jabber server softwares available, I decided to install Ejabberd

The reasons I choose **Ejabberd** is has rich documentation, good community around the project and the project in general looks like one of the best free software jabber servers available presently. Besides that *ejabberd* doesn't need Apache or MySQL and only depends on erlang programming language.

Here is the exact steps I followed to have installed and configured a running XMPP jabber server.

1. Install Ejabberd with apt

The installation of Ejabberd is standard, e.g.:

```
debian:~# apt-get --yes install ejabberd
```

Now as **ejabberd** is installed, some minor configuration is necessery before the server can be launched:

2. Edit /etc/ejabberd/ejabberd.cfg

Inside I changed the default settings for:

a) Uncomment*%%override_acls.*. Changed:

```
%%%% Remove the Access Control Lists before new ones are added.%%%%override_acls.
```

to

```
%%
%% Remove the Access Control Lists before new ones are added.
%%
override_acls.
```

b) **Admin User** from:

```
%% Admin user
{acl, admin, {user, "", "example.com"}}.
```

to

```
%% Admin user
{acl, admin, {user, "admin", "jabber.myserver-host.com"}}.
```

c) default **%% Hostname** of *example.com* to my real hostname:

```
%% Hostname
{hosts, ["jabber.myserver-host.com"]}.
```

The rest of the configurations in */etc/ejabberd/ejabberd.cfg* can stay like it is, though it is interesting to read it carefully before continuing as, there are some config timings which might prevent the XMPP server from user brute force attacks as well as few other goodies like for example (ICQ, MSN , Yahoo etc.) protocol transports.

3. Add iptables ACCEPT traffic (allow) rules for ports which are used by Ejabberd

The minimum ACCEPT rules to add are:

```
/sbin/iptables -A INPUT -p tcp -m tcp --dport 22 -j ACCEPT
/sbin/iptables -A INPUT -p tcp -m tcp --dport 5222 -j ACCEPT
/sbin/iptables -A INPUT -p udp -m udp --dport 5222 -j ACCEPT
/sbin/iptables -A INPUT -p tcp -m tcp --dport 5223 -j ACCEPT
/sbin/iptables -A INPUT -p udp -m udp --dport 5223 -j ACCEPT
/sbin/iptables -A INPUT -p tcp -m tcp --dport 5269 -j ACCEPT
/sbin/iptables -A INPUT -p udp -m udp --dport 5269 -j ACCEPT
/sbin/iptables -A INPUT -p tcp -m tcp --dport 5280 -j ACCEPT
/sbin/iptables -A INPUT -p udp -m udp --dport 5280 -j ACCEPT
/sbin/iptables -A INPUT -p tcp -m tcp --dport 4369 -j ACCEPT
/sbin/iptables -A INPUT -p udp -m udp --dport 4369 -j ACCEPT
/sbin/iptables -A INPUT -p tcp -m tcp --dport 53873 -j ACCEPT
```

Of course if there is some specific file which stores iptables rules or some custom firewall these rules has to be added / modified to fit appropriate place or chain.

4. Restart ejabberd via init.d script

```
debian:~# /etc/init.d/ejabberd restart
Restarting jabber server: ejabberd is not running. Starting ejabberd.
```

5. Create ejabberd necessery new user accounts

```
debian:~# /usr/sbin/ejabberdctl register admin jabber.myserver-host.com mypasswd1
debian:~# /usr/sbin/ejabberdctl register hipo jabber.myserver-host.com mypasswd2
debian:~# /usr/sbin/ejabberdctl register newuser jabber.myserver-host.com mypasswd3
debian:~# /usr/sbin/ejabberdctl register newuser1 jabber.myserver-host.com mypasswd4
...
etc.
```

ejabberdctl ejabberd server client (frontend) has multiple other options and the manual is a good reading.

One helpful use of *ejabberdctl* is:

```
debian:~# /usr/sbin/ejabberdctl status
Node ejabberd@debian is started. Status: started
ejabberd is running
```

ejabberctl can be used also to delete some existent users, for example to delete the newuser1 just added above:

```
debian:~# /usr/sbin/ejabberdctl unregister newuser jabber.myserver-host.com
```

6. Post install web configurations

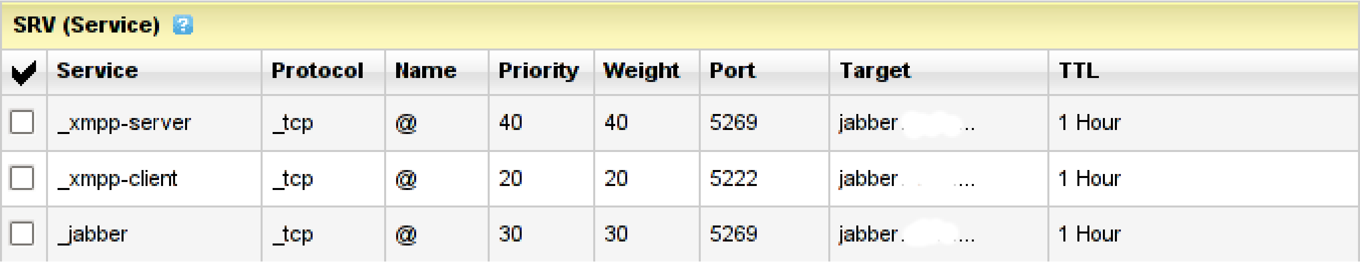
ejabberd server offers a *web interface* **listening on port 5280**, to access the web interface right after it is installed I used URL: **http://jabber.myserver-host.com:5280/admin/**

To login to *http://jabber.myserver-host.com:5280/admin/* you will need to use the admin username previously added in this case:
admin@jabber.myserver-host.com mypasswd1

Anyways in the web interface there is not much of configuration options available for change.

7. Set dns SRV records

I'm using *Godaddy* 's DNS for my domain so here is a screenshot on the SRV records that needs to be configured on Godaddy:



SRV (Service)

✓	Service	Protocol	Name	Priority	Weight	Port	Target	TTL
☐	_xmpp-server	_tcp	@	40	40	5269	jabber.[redacted]..	1 Hour
☐	_xmpp-client	_tcp	@	20	20	5222	jabber.[redacted]....	1 Hour
☐	_jabber	_tcp	@	30	30	5269	jabber.[redacted]....	1 Hour

In the screenshto **Target** is the Fually qualified domain hostname for the jabber server.

Setting the SRV records for the domain using Godaddy's DNS could take from 24 to 48 hours to propagate the changes among all the global DNS records so be patient.

If instead you use own custom **BIND** DNS server the records that needs to be added to the respective domain zone file are:

```
_xmpp-client._tcp 900 IN SRV 5 0 5222 jabber.myserver-host.com.
_xmpp-server._tcp 900 IN SRV 5 0 5269 jabber.myserver-host.com.
_jabber._tcp 900 IN SRV 5 0 5269 jabber.myserver-host.com.
```

8. Testing if the SRV dns records for domain are correct

```
debian:~$ nslookup
> set type=SRV
> jabber.myserver-host.com
 ...
> myserver-host.com
```

If all is fine above nslookup request should return the requested domain SRV records.
You might be wondering what is the purpose of setting DNS SRV records at all, well if your jabber server has to communicate with the other jabber servers on the internet using the DNS SRV record is the way your server will found the other ones and vice versa.

DNS records can also be checked with **dig** for example

```
$ dig SRV _xmpp-server._tcp.mydomain.net

[...]

;; QUESTION SECTION:
;_xmpp-server._tcp.mydomain.net. IN SRV

;; ANSWER SECTION:
_xmpp-server._tcp.mydomain.net. 259200 IN SRV 5 0 5269 jabber.mydomain.net.
```

```
;; ADDITIONAL SECTION:
jabber.mydomain.net. 259200 IN A 11.22.33.44

;; Query time: 109 msec
;; SERVER: 212.27.40.241#53(212.27.40.241)
;; WHEN: Sat Aug 14 14:14:22 2010
;; MSG SIZE rcvd: 111
```

9. Debugging issues with ejabberd

Ejabberd log files are located in **/var/log/ejabberd** , you will have to check the logs in case of any issues with the *jabber XMPP server*. Here is the three files which log messages from ejabberd:

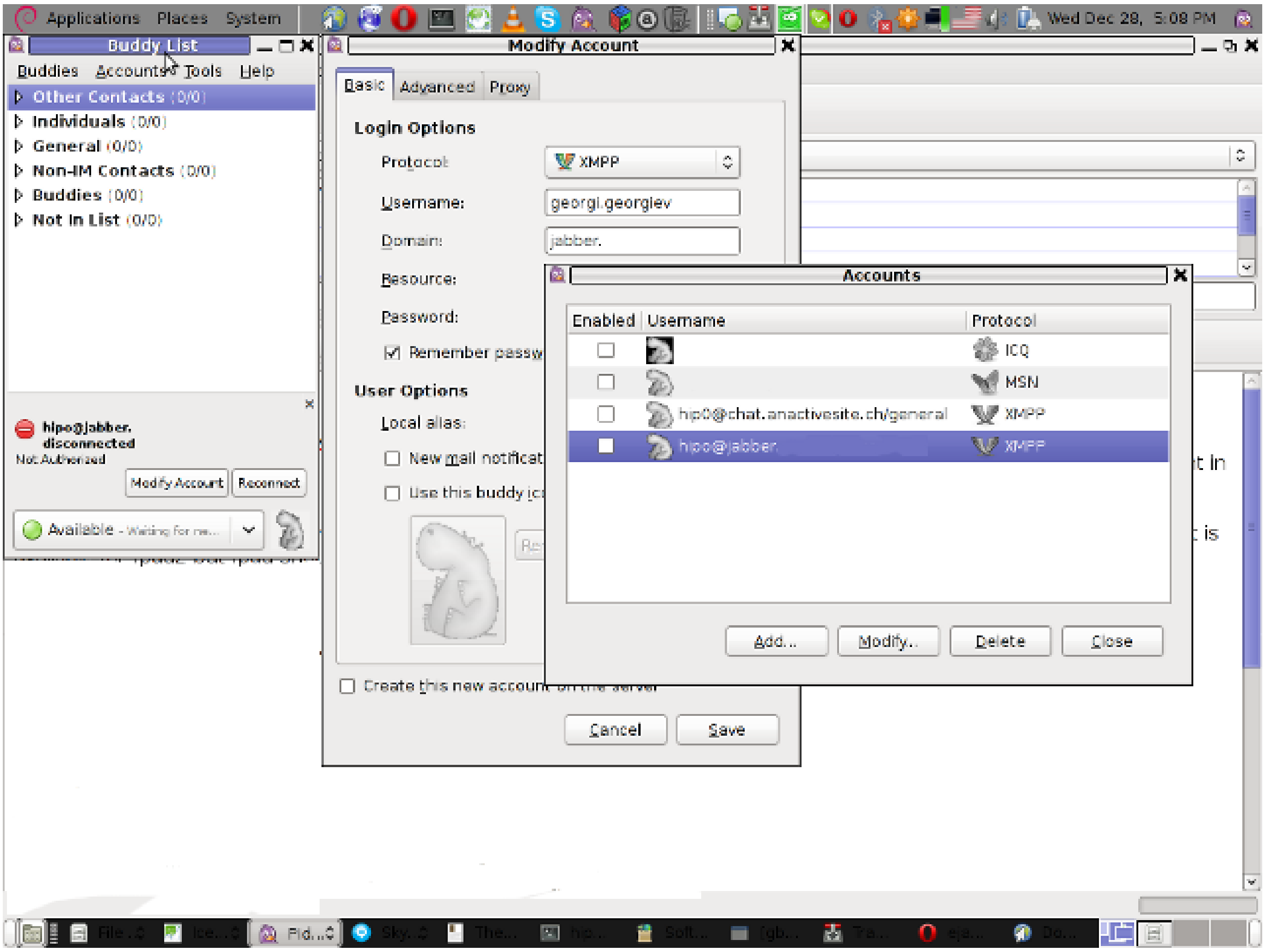
```
debian:~$ ls -1 /var/log/ejabberd/
ejabberd.log
erl_crash.dump
sasl.log
```

I will not get into details on the logs as the best way to find out about them is to read them ;)

10. Testing ejabberd server with Pidgin

To test if my Jabber server works properly I used Pidgin universal chat client . However there are plenty of other multiplatform jabber clients out there e.g.: **Psi** , **Spark** , **Gajim** etc.

Here is a screenshot of my **(Accounts -> Manage Accounts -> Add)** *XMPP protocol* configuration



Protocol: XMPP

Username: georgi.georgiev

Domain: jabber.

Resource:

Password:

☑ Remember passw

Local alias:

☐ New mail notificat

☐ Use this buddy ic

☐ Create this new account on the server

hipo@jabber. disconnected
Not Authorized

Accounts

Enabled	Username	Protocol
☐		ICQ
☐		MSN
☐	hip0@chat.anactivesite.ch/general	XMPP
☐	hipo@jabber.	XMPP