Never leave an IRC channel again with ZNC

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RITlug, 2015
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What is IRC?

- [Online chat protocol](#) in existence since 1988
- Large network of chat rooms (#channels)
  - Often used with web chat clients
  - Most commonly used with IRC client (e.g. HexChat)
- Popular networks are often hubs for different kinds of communities
  - freenode: ~99,000 users connected at peak hours
  - Projects on freenode: Ubuntu, Fedora, Perl, SELinux… FOSS loves freenode
    - #ritlug, #rit-foss
- Your digital life is incomplete without IRC

Do people live in IRC?

- *Context*: The same group of people idling in the same IRC channels every time you connect
  - Answer: No (usually)
- Popular solution is an IRC "bouncer" (a.k.a. proxy)
- ZNC is open-source IRC bouncer in C++
  - https://github.com/znc/znc
- **Without ZNC**: *chat.freenode.net*
- **With ZNC**: *znc.mysite.com => chat.freenode.net*

How do I get it?

- Unless you use an obscure distro, check your distro's repos (probably is packaged)
    - Fedora: `sudo dnf install znc`
    - RHEL, CentOS: `sudo yum install znc`
    - Ubuntu, Debian, other Debian-based distros: `sudo apt-get install znc`
    - Arch: Ask Nate
- Package manager will take care of the details for you
- Also possible to compile and build from source

Doing the prep work

- The extensive, laborious, difficult prep work for getting your system to handle the firewall is…
- **Adjusting your firewall**
  - CentOS/RHEL 7 or later, Fedora, Arch(?):
    - `sudo firewall-cmd --add-port=6697/tcp`
    - `sudo firewall-cmd --runtime-to-permanent`
  - CentOS/RHEL 6 or earlier, Debian, Ubuntu, etc.:
    - `sudo iptables -A INPUT -p tcp --dport 6697 -j ACCEPT`
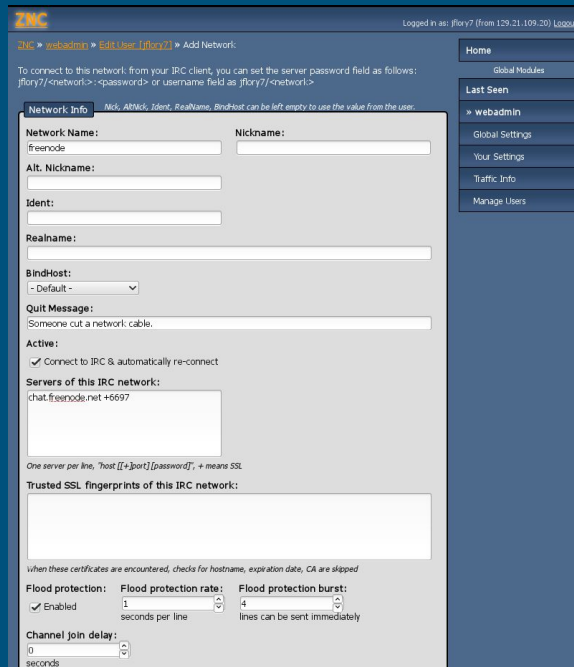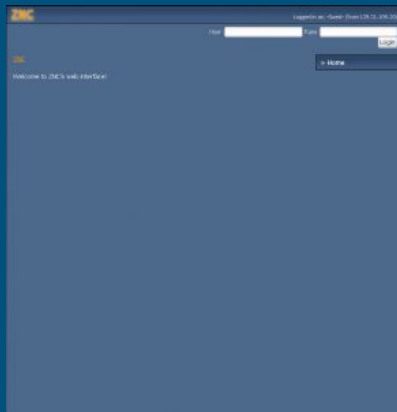   - `sudo service iptables save`

Configuring ZNC

- Initial configuration in CLI
  - sudo -u znc znc --makeconf
- Will begin prompting you for basic configuration information
  - Usually the defaults are fine
- Example: Fedora Magazine

Using the web panel

- After configuration, ZNC will launch immediately
  - http(s)://<server_ip>:<your_port>
  - If you opted to use SSL, *must* include https

Final steps

- If server ever reboots, you will want ZNC to restart itself
- Can be done with `systemd` or `chkconfig`
  - CentOS/RHEL 7 or later, Fedora, Arch(?): `sudo systemctl enable znc`
  - CentOS/RHEL 6 or earlier, Ubuntu, Debian, etc.: `sudo chkconfig znc on`

Setting up HexChat

- Numerous IRC clients, it's all personal preference - find one that you look
  - Example uses HexChat because it is one of the most well-known and popular ones
- Instead of connecting to IRC network, connect to your bouncer
  - irc.freenode.net => mysupercoolbouncer.example.com
- Detail of note: **Server Password**
  - To connect to ZNC, server password required
  - Generally formatted as: `username/network:password`
    - *Example*: `jflory7/freenode:SomeW1ttyPassw0rd`
- Reference ZNC wiki for help

A HexChat window

- Yours should look similar
- Note accepting invalid SSL certificates
  - If you use SSL, you are using a self-signed certificate - this is safe but a necessary step because it is self-signed
  - Also note the + before the port: denotes SSL

HexChat: Edit ZNC Test

my.bouncer.com/+6697

[Add]
[Remove]
[Edit]

Servers | Autojoin channels | Connect commands

☐ Connect to selected server only
☑ Connect to this network automatically
☐ Bypass proxy server
☑ Use SSL for all the servers on this network
☑ Accept invalid SSL certificates
☑ Use global user information

Nick name: [   ]
Second choice: [   ]
Real name: [   ]
User name: [   ]

Login method: [Server Password (/PASS password) ▾]

Password: [●●●●●●●●●●●●●●●●●●●●●●●●●]

Character set: [UTF-8 (Unicode)] [▾]

[Close]

Congratulations, you are now ZNC Certified!

- Credit: Fedora Magazine
  - Read my other work: fedoramagazine/author/jflory7