

Quassel IRC - Feature #1079

Consider supporting unix socket as a transport between core and client

05/25/2011 11:03 AM - lindi

Status:	New	Start date:	05/25/2011
Priority:	Low	Due date:	
Assignee:		% Done:	0%
Category:	Quassel Client	Estimated time:	0.00 hour
Target version:			
OS:	Linux		

Description

This is a wishlist bug. I'd like to be able to use an unix socket between core and client. I might take a look at how to implement this but I thought it'd be a good idea to report it here before doing any work.

Advantages:

1) I don't need to worry about passwords. I can use filesystem permissions to make sure that only my own user account can access the socket (it could be named \$HOME/.quassel/socket for example). No other user can connect and try a dictionary based attack against the password.

2) I don't need to worry about port number collisions. Currently if multiple users are using quassel on a shared server they need to use different ports (this assumes that the administrator does not have time to configured a shared quassel core instance). Allocating port numbers is really annoying especially if you use multiple ssh tunnels between multiple servers and desktops and quassel instances.

Disadvantages:

1) This would obviously be a more advanced feature that probably only makes sense for advanced users. You might want to hide it behind some Advanced tab "Edit Core Account" dialog.

2) At least I don't know how to support this on anything else than Linux.

History

#1 - 05/26/2011 12:26 AM - johu

Vote against because of simple solution: configure firewall that drops/rejects packages from not-local nets for quassel port.

#2 - 05/26/2011 12:21 PM - lindi

I'm running quassel core on a multiuser machine for which I have no root access. Even if I had root access, should I use "iptables -m owner --uid-owner" to make sure that no other user of the same multiuser machine can connect?

And even if that works, there's still the trouble of assigning unique ports for each user.

#3 - 05/26/2011 11:51 PM - lindi

I have a half-working patch that adds unix socket support to the client (both code and UI). I'm currently testing it as follows:

- 1) build with -DWITH_OPENSSL=OFF
- 2) run "socat -x UNIX-LISTEN:/tmp/quassel TCP-CONNECT:localhost:4242"
- 3) run "./quasselcore --logfile=core.log --loglevel=Info --configdir=config --port=4242"
- 4) run "./quasselclient"
- 5) check "Use Local Socket" on the core settings dialog and enter "/tmp/quassel" as the path.

I'll implement support to core next. Should the syntax be "--address unix:/tmp/quassel" or "--local-socket /tmp/quassel"?

Current problems:

- 1) I'm not sure what to do with SSL. It might be just extra since unix socket is not visible to other users. However, I like the idea of having everything encrypted just in case somebody does crazy socat forwarding and the data actually hits TCP somewhere.
- 2) QSslSocket seems to be somewhat tied to QTcpSocket, I don't know if it can be sensibly made to work with QLocalSocket.