

WARNING

Brain Murmurs is in NO WAY responsible for ANY damage that may occur to your system or network as a result of using this service. Running a network server is inherently RISKY and should only be done by people that know what they are doing and what they are getting into.

If someone manages to authenticate with your Pulse Gateway they will have BYPASSED YOUR NETWORK FIREWALL. At that point your machines will only have their own built-in security mechanisms to protect them from malicious attacks.

Pulse currently does not provide data encryption. This can be worked around by using secure services like ssh and https until we add built-in encryption.

Requirements

You need to know how to do the following things if you are seriously thinking about hosting your own Pulse Gateway.

1. Ability to open a port on your network firewall
2. Administrative access to a G4, G5, or Intel Mac
3. Knowledge of your network's external IP address
4. A Pulse-compatible Blackberry (yes, you guessed it) running Pulse 1.02.

Installation

Download the installer from

<http://brainmurmurs.com/products/pulse/download.php>

Once the DMG file has been downloaded, double click on the DMG file to mount it on your Mac, then double click on the PKG file inside the disk image to launch the installer. You will need an administrator account to successfully run the installer.

Account setup

The installer will automatically launch the Pulse Gateway Configuration tool, which will allow you to create user accounts. Once the accounts have been created and saved the Pulse proxy will start itself automatically.

Firewall configuration

You will need to open port 3923 on your firewall and point it to the machine on which you have installed the Pulse Gateway.

Once you have completed the installation process the Pulse gateway will start automatically.

Pulse Gateway Network Configuration

If your gateway computer connects to the internet via anything other than the default ethernet port (for instance, by Airport) you will need to edit `/Library/StartupItems/Pulse/Pulse` and change the following line

```
DEVICE=en0
```

to match your chosen configuration. For instance, for connecting via Airport the line should read

```
DEVICE=en1
```

Connecting to your server:

On your laptop, open the Internet Connect panel and enter the following information:

1. Name (user name of one of the accounts set up during the setup process)
2. Password (also specified during the proxy setup process)
3. Telephone number. This is of the form

```
username@your-networks-external-ip-address
```

Administration Notes

Starting and stopping the proxy server

The server will start at boot and run until shutdown. You can manually stop or start the server by opening a command prompt and typing

```
sudo /Library/StartupItems/Pulse/Pulse stop
```

or

```
sudo /Library/StartupItems/Pulse/Pulse start
```

Adding or modifying user accounts

Open the Finder and go to /Applications/PULSE. Run the Pulse Proxy Configuration Editor

Uninstalling the Pulse Gateway

Open the Finder and go to /Applications/PULSE. Run uninstall-pulse

Troubleshooting

How can I tell if the gateway is running?

Check for running gateway process

Open a command prompt and type "ps -ax | grep pulse". You should see "pulsed[s]: waiting for connections on port 3923"

```
kenobi:~ dan$ ps -ax | grep pulse
6115 ?? S    0:00.02 pulsed[s]: waiting for connections on port 3923
6839 p2 R+   0:00.01 grep pulse
kenobi:~ dan$
```

Watch the system logs for evidence of activity

Open a command prompt and type "tail -f /var/log/system.log". You should see activity as people log on and log off via Pulse.

Try connecting on your local machine using telnet:

```
kenobi:~ dan$ telnet localhost 3923
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^]'.
Pulse server ver 1.0 12/13/2006
```