

# How to install pfsense on a Checkpoint Firewall

First you will need to download the INTEL version of PFSense from their website (located at <https://www.pfsense.org/download/mirror.php?section=downloads> ) and select

- i386 (32-bit)
- Live CD with installer (on USB Memstick)
- Serial console



Enter your email address to subscribe to our low-volume announcements mailing list:

(opens new browser window or tab)

## Download Full Install

Need to [update an existing installation](#) instead?

### Which Image Do I Need?

Computer Architecture:

**NOTE:** If your system has a 64 bit capable Intel or AMD CPU, use the 64 bit version. *32 bit should only be used with 32 bit CPUs.*


Platform:

Console:

Or [just show me the mirrors](#) so I can choose which file to download on my own.

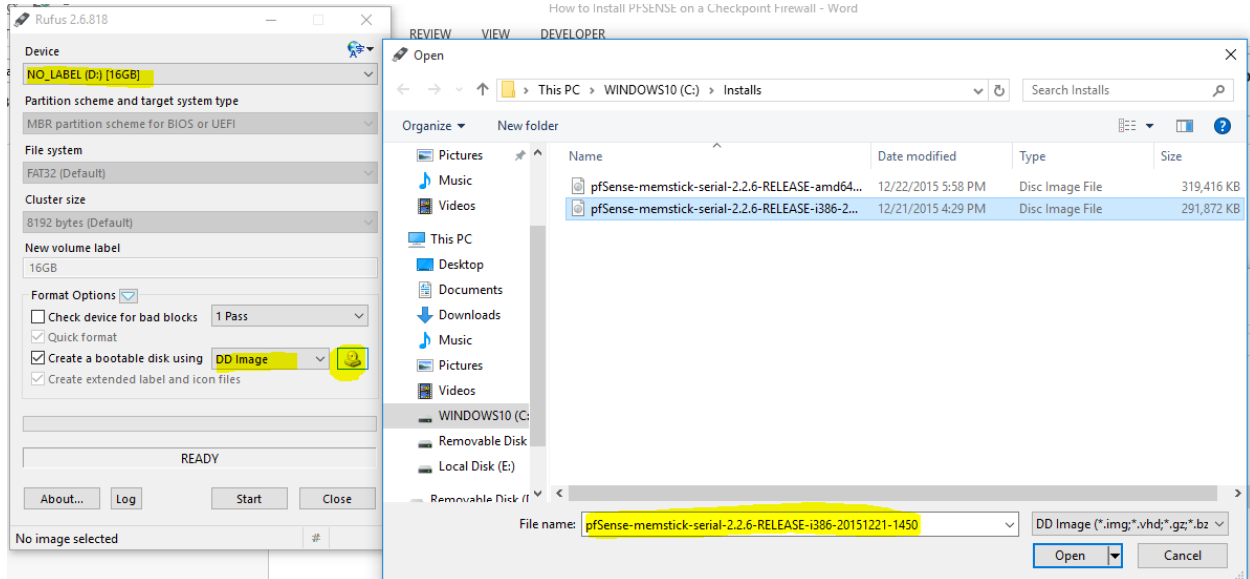
Click on a mirror name (second column) **to download the appropriate image** for the installation information you've selected above.

[MD5 checksum](#); [SHA256 checksum](#)

Country	Hosting by	Location
	<a href="#">ESF</a>	Austin, TX USA

Next create a bootable USB memory device with pfsense

Suggest using rufus (located at <https://rufus.akeo.ie/> ) to create the USB with the pfsense image



Once the USB has been created, install it into a powered off CHECKPOINT then power on the unit. The CHECKPOINT device should boot from the USB device by default.

To connect to the CHECKPOINT device, use an RJ45-SERIAL console cable and run putty (located at <http://www.putty.org/>) and select serial port (in my case was COM1: ) at 115200 baud rate. If you see garbage characters appearing on your putty screen, ensure the baud rate is set correctly.

```
COM1 - PuTTY

pfSense

-----Welcome to pfSense-----
1. Boot Multi User [Enter]
2. Boot [S]ingle User
3. [Esc]ape to loader prompt
4. Reboot

Options:
5. [K]ernel: kernel (1 of 2)
6. Configure Boot [O]ptions...

p f Sense

/boot/kernel/kernel text=0x1230515 data=0x835970+0x28f360
```

Select “1. Boot Multi User [Enter]”

```
COM1 - PuTTY

Starting syslog...done.
Starting CRON... done.
pfSense (cdrom) 2.2.6-RELEASE i386 Mon Dec 21 14:50:36 CST 2015
Bootup complete

FreeBSD/i386 (pfSense.localdomain) (ttyu0)

*** Welcome to pfSense 2.2.6-RELEASE-cdrom (i386) on pfSense ***

WAN (wan)      -> em0      ->
LAN (lan)      -> em1      -> v4: 192.168.1.1/24
0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) pfSense Developer Shell
4) Reset to factory defaults    13) Upgrade from console
5) Reboot system              14) Enable Secure Shell (sshd)
6) Halt system                15) Restore recent configuration
7) Ping host                  16) Restart PHP-FPM
8) Shell

99) Install pfSense to a hard drive, etc.

Enter an option:
```

Select “99) Install pfsense to a hard drive, etc.”

**NOTE:** You **MAY** have the opportunity to install by selecting “I to Launch the Installer” before pfsense boots if you see the screen in time (see image below)

```

Welcome to pfSense 2.2.6-RELEASE ...

Mounting unionfs directories...done.
Creating symlinks...ELF ldconfig path: /lib /usr/lib /usr/lib/compat /usr/local/lib
a.out ldconfig path: /usr/lib/aout /usr/lib/compat/aout
done.
Launching the init system... done.
Initializing..... done.
Starting device manager (devd)...done.

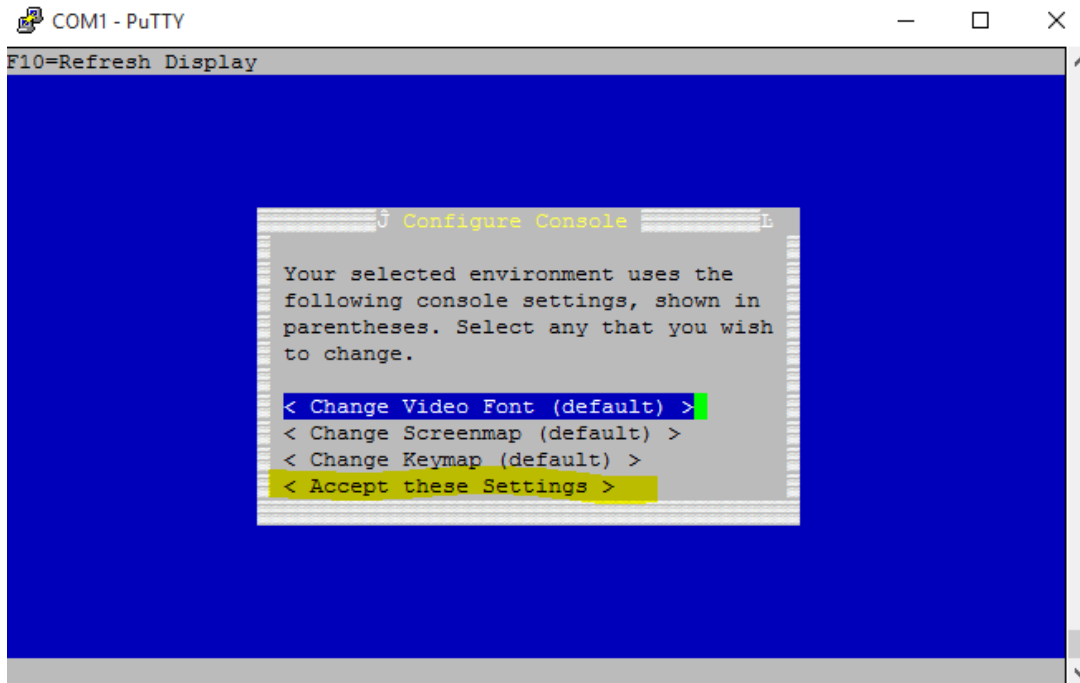
[ Press R to enter recovery mode or ]
[ press I to launch the installer ]

(R)ecovery mode can assist by rescuing config.xml
from a broken hard disk installation, etc.

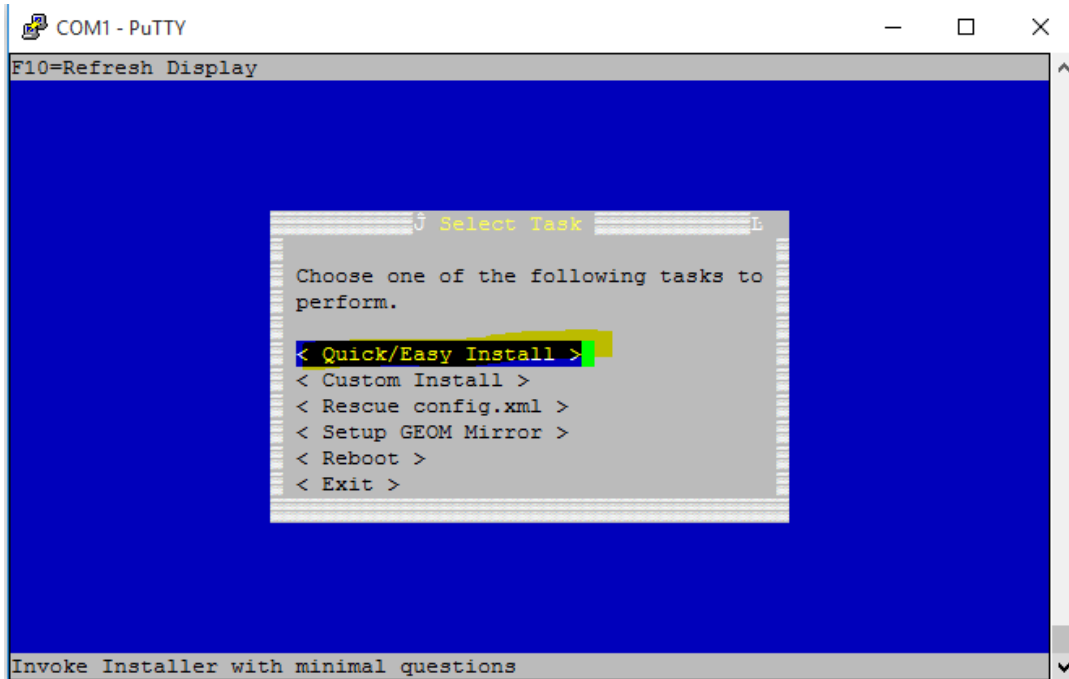
(I)nstaller may be invoked now if you do
not wish to boot into the liveCD environment at this time.

(C)ontinues the LiveCD bootup without further pause.

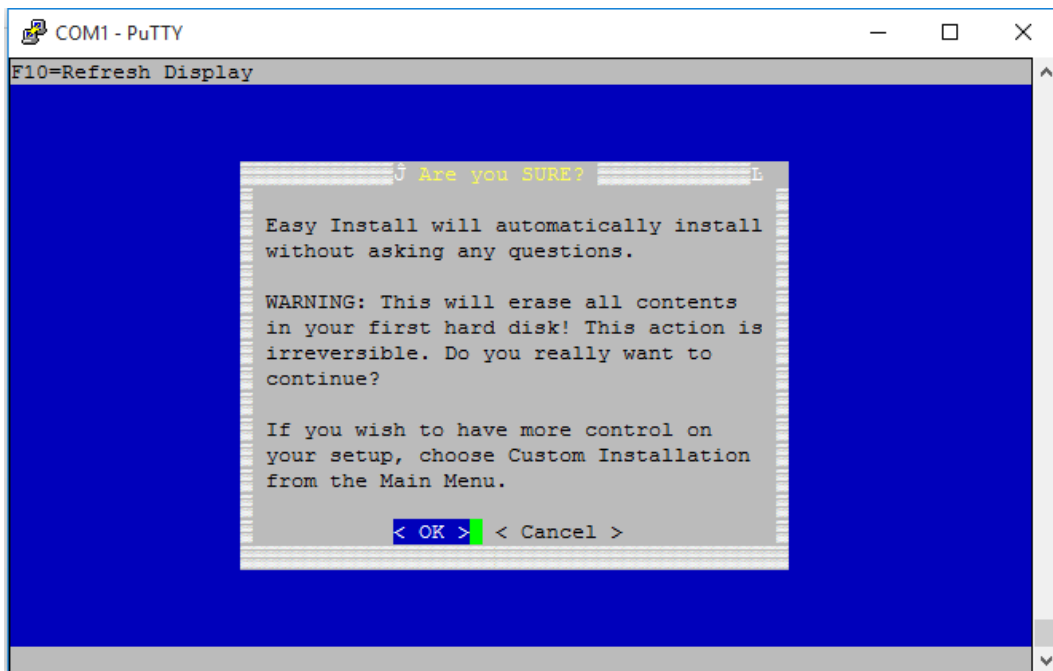
Timeout before auto boot continues (seconds): 6
```



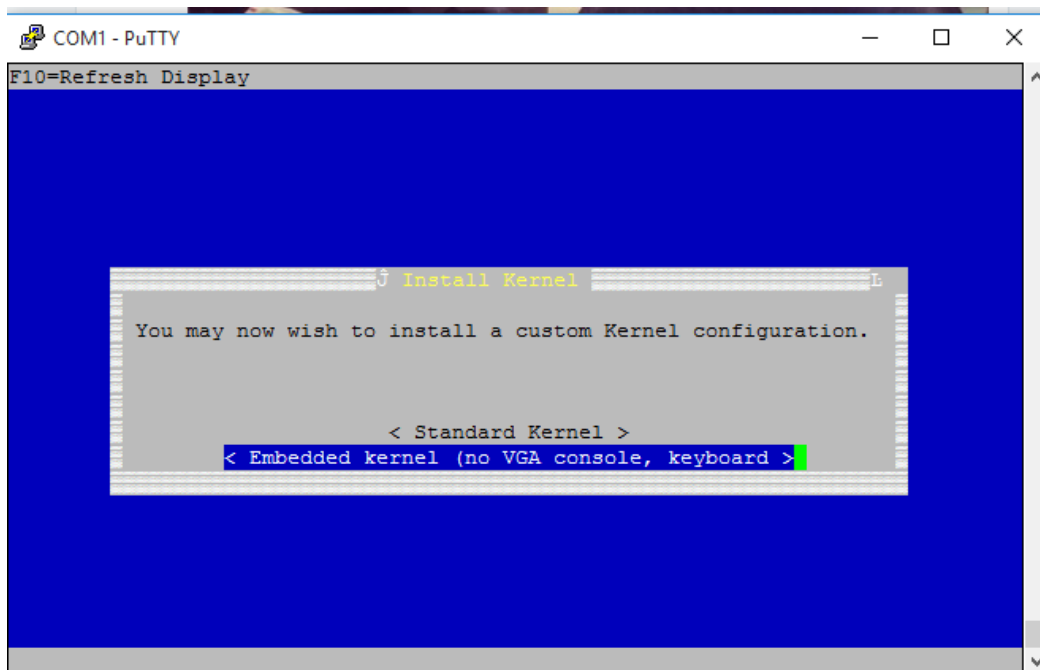
Select “< Accept these Settings >”



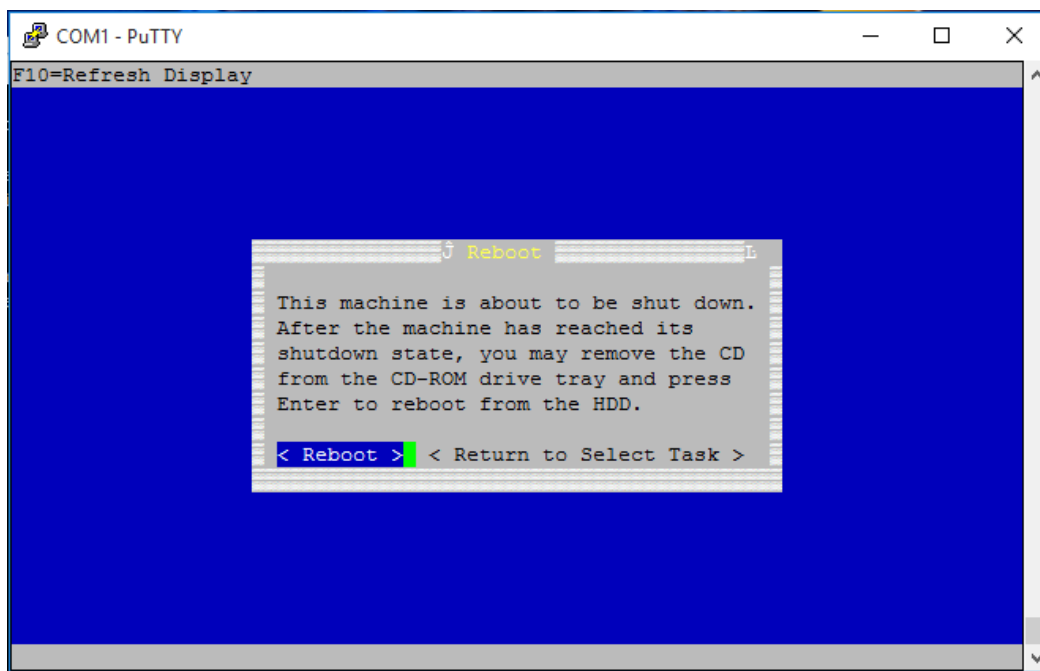
Select "< Quick/Easy Install >"



Select "OK"



Select "< Embedded kernel (no VGA console, keyboard) >"



**REBOOT**

```
COM1 - PuTTY
pfSense is now rebooting

After the reboot is complete, open a web browser and
enter https://192.168.1.1 (or the LAN IP Address) in the
location bar.

You might need to acknowledge the HTTPS certificate if
your browser reports it as untrusted. This is normal
as a self-signed certificate is used by default.

*DEFAULT Username*: admin
*DEFAULT Password*: pfsense

Rebooting in 5 seconds. CTRL-C to abort.
Rebooting in 4 seconds. CTRL-C to abort.
Rebooting in 3 seconds. CTRL-C to abort.
Rebooting in 2 seconds. CTRL-C to abort.
Rebooting in 1 second.. CTRL-C to abort.

pfSense is now rebooting.

Feb  9 16:31:06 lighttpd[23247]: (server.c.1572) server stopped by UID = 0 PID =
13130
```

Screenshot of system rebooting . . .

```
COM1 - PuTTY
Generating RRD graphs...done.
Starting syslog...done.
Starting CRON... done.
pfSense (pfSense) 2.2.6-RELEASE i386 Mon Dec 21 14:50:36 CST 2015
Bootup complete

FreeBSD/i386 (pfSense.localdomain) (ttyu0)

*** Welcome to pfSense 2.2.6-RELEASE-pfSense (i386) on pfSense ***

WAN (wan)      -> em0      ->
LAN (lan)      -> em1      -> v4: 192.168.1.1/24

0) Logout (SSH only)          9) pfTop
1) Assign Interfaces          10) Filter Logs
2) Set interface(s) IP address 11) Restart webConfigurator
3) Reset webConfigurator password 12) pfSense Developer Shell
4) Reset to factory defaults    13) Upgrade from console
5) Reboot system              14) Enable Secure Shell (sshd)
6) Halt system                15) Restore recent configuration
7) Ping host                  16) Restart PHP-FPM
8) Shell

Enter an option: █
```

Checkpoint is now running pfsense.

```
COM1 - PuTTY
4) Reset to factory defaults      13) Upgrade from console
5) Reboot system                  14) Enable Secure Shell (sshd)
6) Halt system                    15) Restore recent configuration
7) Ping host                      16) Restart PHP-FPM
8) Shell

Enter an option: 1

Valid interfaces are:

em0  00:90:0b:10:e1:5f  (up) Intel(R) PRO/1000 Network Connection 7.4.2
em1  00:90:0b:10:e1:5e  (up) Intel(R) PRO/1000 Network Connection 7.4.2
em2  00:90:0b:10:e1:5d  (down) Intel(R) PRO/1000 Network Connection 7.4.2
em3  00:90:0b:10:e1:5c  (down) Intel(R) PRO/1000 Network Connection 7.4.2
fxp0 00:90:0b:10:e1:60  (down) Intel 82562ET/EZ/GT/GZ PRO/100 VE Ethernet

Do you want to set up VLANs first?

If you are not going to use VLANs, or only for optional interfaces, you should
say no here and use the webConfigurator to configure VLANs later, if required.

Do you want to set up VLANs now [y|n]? █
```

Select “**1) Assign Interfaces**” and you can setup VLANS now if required.

If you select NO and proceed then the system will AUTO query active link status for network connections to the appliance itself and will let you configure form there.

Pfsense automatically sets up LAN interface as 192.168.1.1/24. You need to configure WAN



```
COM1 - PuTTY
8) Shell
Enter an option: 0

FreeBSD/i386 (pfSense.localdomain) (ttyu0)

*** Welcome to pfSense 2.2.6-RELEASE-pfSense (i386) on pfSense ***

WAN (wan)      -> em0      ->
LAN (lan)      -> em1      -> v4: 192.168.1.1/24

0) Logout (SSH only)          9) pfTop
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7) Ping host                   16) Restart PHP-FPM
8) Shell

Enter an option: █
```

Once pfsense has been installed, you will want to connect to <https://192.168.1.1> via web interface (remote computer) to configure the system

You will be prompted that site is not secure. Accept the risk and continue on.

192.168.1.1





## There is a problem with this website's security certificate

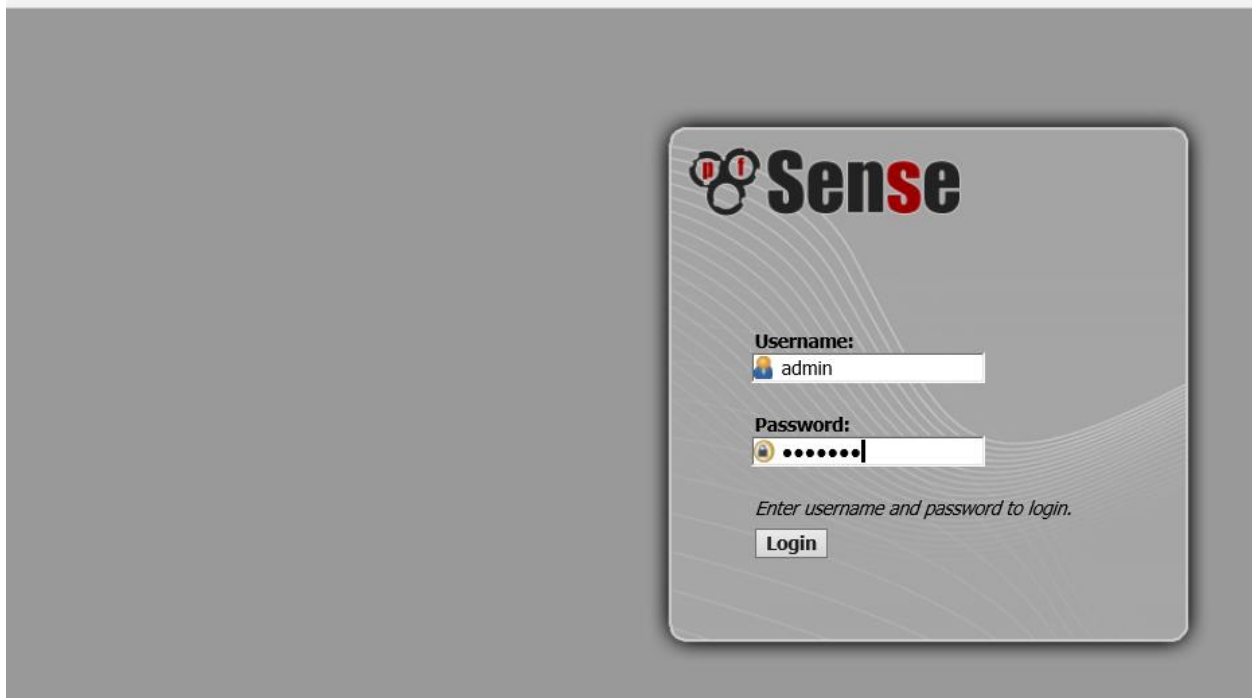
We recommend that you close this webpage and do not continue to this website.

The security certificate for this site doesn't match the site's web address and may indicate an attempt to fool you or intercept any data you send to the server.

 [Go to my homepage instead](#)

 [Continue to this webpage \(not recommended\)](#)

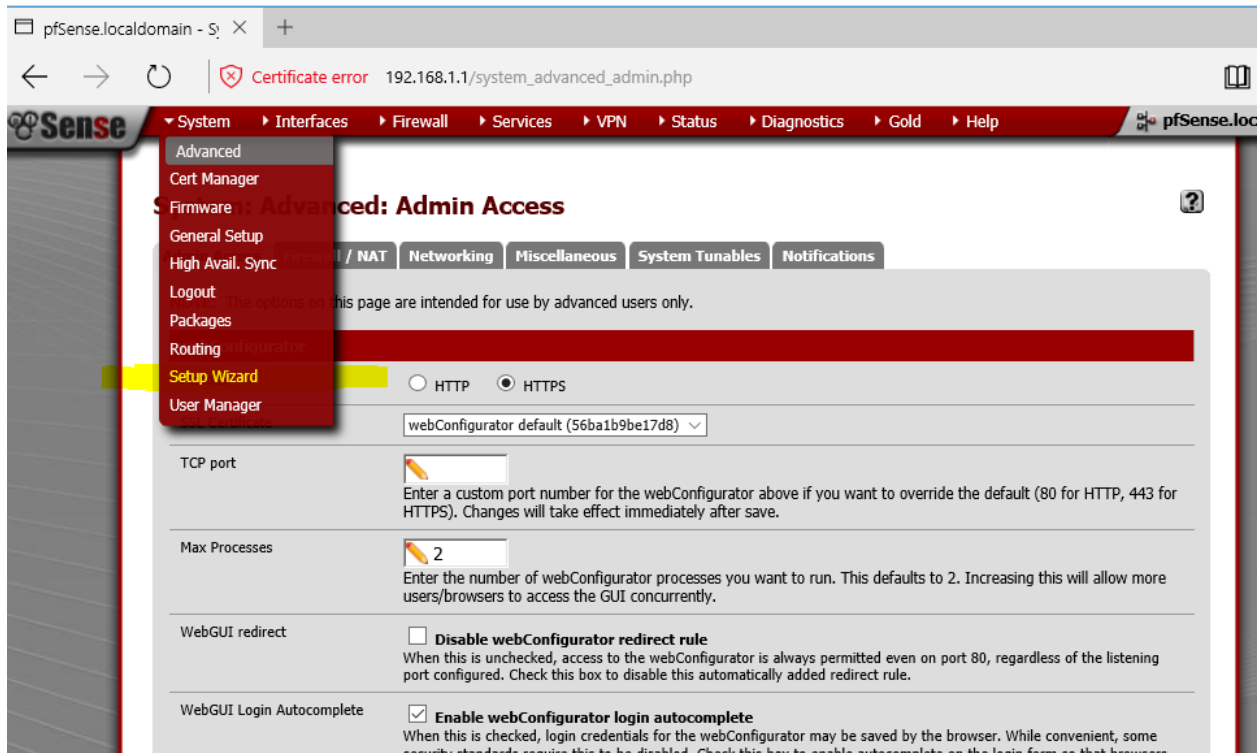
 Certificate error 192.168.1.1



The screenshot shows a browser window with a certificate error warning at the top. Below the warning is the pfSense login page. The login page has a grey background with a white rounded rectangle containing the pfSense logo and the word "Sense" in a large, bold, black font. Below the logo are two input fields: "Username:" with the text "admin" and "Password:" with a masked password "••••••". Below the password field is the text "Enter username and password to login." and a "Login" button.

Username : admin  
Password: pfsense

To configure the pfsense, run "SETUP WIZARD" from the "SYSTEM" menu selection



Screenshot of DASHBOARD on device I had used.

### Status: Dashboard

The screenshot displays the 'Status: Dashboard' page. It features two main panels: 'System Information' and 'Interfaces'. The 'System Information' panel shows details such as Name (pfsense.localdomain), Version (2.2.6-RELEASE), Platform (pfSense), CPU Type (Intel(R) Celeron(R) M processor 600MHz), and various usage metrics. The 'Interfaces' panel shows the configuration for WAN (DHCP) and LAN (192.168.1.1).

System Information	
Name	pfsense.localdomain
Version	2.2.6-RELEASE (1386) built on Mon Dec 21 14:50:36 CST 2015 FreeBSD 10.1-RELEASE-p25
Platform	pfSense
CPU Type	Intel(R) Celeron(R) M processor 600MHz
Uptime	00 Hour 10 Minutes 31 Seconds
Current date/time	Tue Mar 1 18:46:51 UTC 2016
DNS server (s)	127.0.0.1
Last config change	Tue Mar 1 18:43:50 UTC 2016
State table size	0% (31/98000) Show states
MBUF Usage	9% (2280/26584)
Temperature	27.0°C
Load average	0.08, 0.14, 0.15
CPU usage	0%
Memory usage	9% of 982 MB
SWAP usage	0% of 2047 MB
Disk usage	/ (ufs): 0% of 147G /var/run (ufs in RAM): 3% of 3.4M

Interfaces	
WAN (DHCP)	autoselect
LAN	1000baseT <full-duplex> 192.168.1.1