

RECOVERING DAHUA IP CAMERA AFTER A FAILED FIRMWARE UPDATE

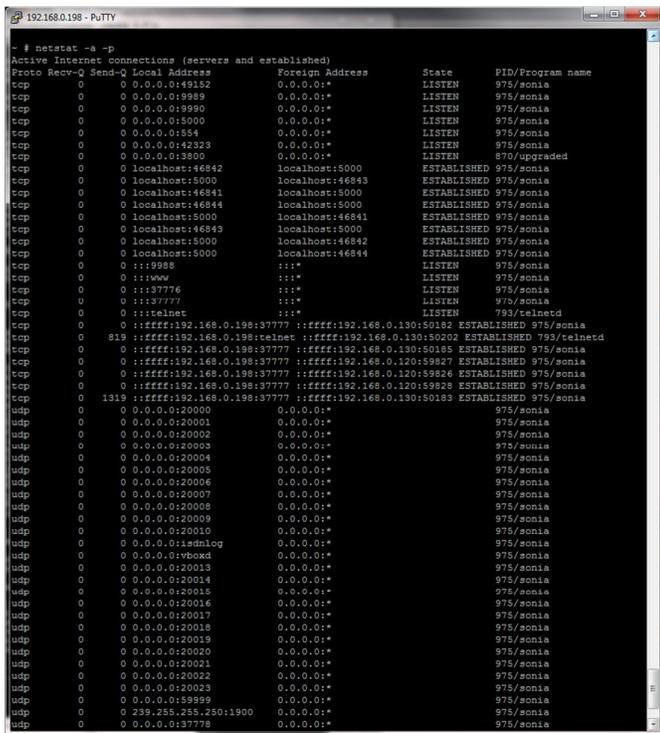
You will need a few items to recover your camera. The upgrade tool, a working firmware and optionally a port scanner and putty. Links are provided below.

General_ConfigTool_Eng_V1.07.3.R.130701.zip <http://tinyurl.com/o6p628f>
Port Scanner <http://tinyurl.com/q53pojg>
Putty <http://tinyurl.com/lvbbmsq>
Firmware files <http://www.cctvforum.com/viewtopic.php?f=19&p=266659#p266659> or <http://www.cam-it.org/index.php?topic=9396.0>

The default IP address of the camera is typically 192.168.1.108 when you receive it.

In this example my camera IP address was changed from the default to 192.168.0.198. You will need to use the IP address that you assigned to your camera. If you didn't change it, it will still be the default address.

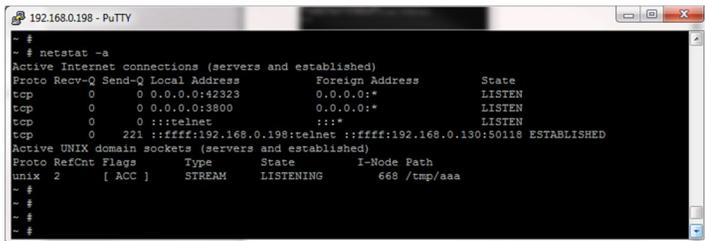
Figure 1 shows the open ports on a camera with a good firmware. You can see a long list of ports that provide the services that you would expect. The web port is functional along with all the streaming services, telnet and port 3800 which runs the upgrade daemon. Port 3800 is used to receive and install firmware files.



```
- # netstat -a -p
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address          Foreign Address        State       PID/Program name
tcp        0      0 0.0.0.0:49152         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:9989         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:9990         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:5000         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:554         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:42323        0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:3800         0.0.0.0:*              LISTEN      970/upgrade
tcp        0      0 0.0.0.0:46842        localhost:5000         ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:5000         localhost:46843       ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:46841        localhost:5000         ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:46844        localhost:5000         ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:5000         localhost:46841       ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:46843        localhost:5000         ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:5000         localhost:46842       ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:5000         localhost:46844       ESTABLISHED 975/sonia
tcp        0      0 0.0.0.0:9989         :::*                   LISTEN      975/sonia
tcp        0      0 0.0.0.0:www          :::*                   LISTEN      975/sonia
tcp        0      0 0.0.0.0:37776        :::*                   LISTEN      975/sonia
tcp        0      0 0.0.0.0:37777        :::*                   LISTEN      975/sonia
tcp        0      0 0.0.0.0:telnet        :::*                   LISTEN      793/telnetd
tcp        0      0 0.0.0.0:3800         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20000         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20001         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20002         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20003         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20004         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20005         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20006         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20007         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20008         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20009         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20010         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:isadmlog      0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:vbosx         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20013         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20014         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20015         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20016         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20017         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20018         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20019         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20020         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20021         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20022         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:20023         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:59999         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20000         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20001         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20002         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20003         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20004         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20005         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20006         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20007         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20008         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20009         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20010         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:isadmlog      0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:vbosx         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20013         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20014         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20015         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20016         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20017         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20018         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20019         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20020         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20021         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20022         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:20023         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:59999         0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:235235-2501900 0.0.0.0:*              LISTEN      975/sonia
udp        0      0 0.0.0.0:37778        0.0.0.0:*              LISTEN      975/sonia
```

Figure 1

In the following screen print (Figure 2) taken after a bad firmware upgrade, you can see that only telnet and the upgrade service on port 3800 are still open.



```
- #
- # netstat -a
Active Internet connections (servers and established)
Proto Recv-Q Send-Q Local Address          Foreign Address        State       PID/Program name
tcp        0      0 0.0.0.0:42323        0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:3800         0.0.0.0:*              LISTEN      975/sonia
tcp        0      0 0.0.0.0:telnet        :::*                   LISTEN      793/telnetd
tcp        0      0 0.0.0.0:3800         0.0.0.0:*              LISTEN      975/sonia
Active UNIX domain sockets (servers and established)
Proto RefCnt Flags       Type       State       I-Node Path
unix    2      [ ACC ]     STREAM    LISTENING   668 /tmp/aaa
```

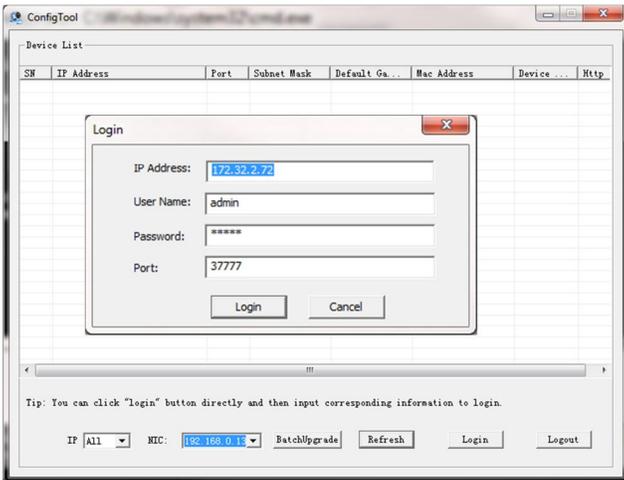
Figure 2

You can confirm your camera is on the network by sending a ping command to the last known IP address. In the following examples, you can see that it doesn't respond to the default address, but does to my configured address.

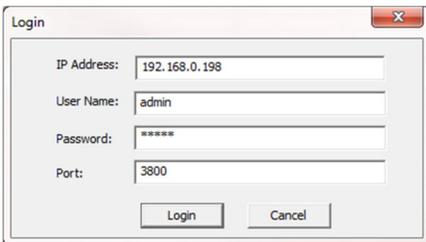
```
Administrator: C:\Windows\system32\cmd.exe
C:\>ping 192.168.1.108
Pinging 192.168.1.108 with 32 bytes of data:
Reply from 192.168.1.1: Destination host unreachable.
Ping statistics for 192.168.1.108:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
```

```
Administrator: C:\Windows\system32\cmd.exe
C:\>ping 192.168.0.198
Pinging 192.168.0.198 with 32 bytes of data:
Reply from 192.168.0.198: bytes=32 time<1ms TTL=64
Ping statistics for 192.168.0.198:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

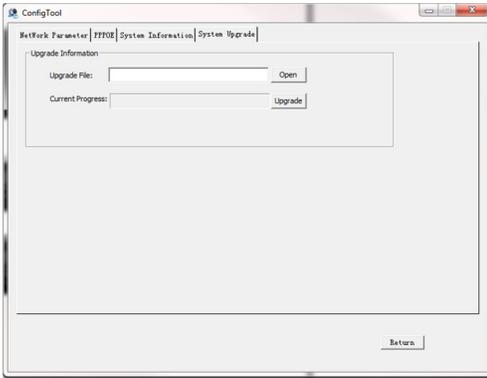
Launch the ConfigTool and click on the login button.



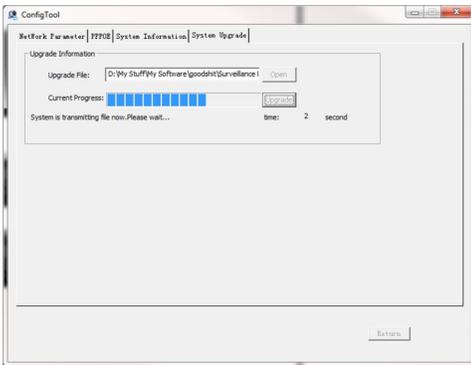
Change the login information to your IP address, admin, your WEB UI password and port 3800.



All the tabs in the config tool will be locked out since the other service ports are not running on the camera. Browse the location of your firmware file by clicking the open button. Then click the upgrade button.



You will see the progress bar as the file is uploaded and applied. Your camera will reboot after the process has completed.



That's it!!

If you chose a compatible firmware file, your camera will be back in working order. If you have a version 2 camera, the files that are compatible are a little limited so you may have to revert to an older firmware and not use the most current.

Visit my threads at <http://www.cctvforum.com/viewtopic.php?f=19&p=266659#p266659> or <http://www.cam-it.org/index.php?topic=9396.0> for more updated information, firmware files and more advanced recovery using the serial interface.

There are also instructions on using telnet to reset your camera to factory defaults using telnet. Visit the forum thread for all the information.