

Device: ATEM PROXY



Introduction

The SKAARHOJ ATEM Proxy offers a way to expand the number of connected SKAARHOJ controller clients to an ATEM switcher.

See this presented here: <https://www.youtube.com/watch?v=ApYouYfX5G4> (investigation are old - number of clients might depend on Firmware Version)

- ATEM Production Studio 4K (5 clients)
- ATEM Television Studio (5 clients)
- ATEM 2 M/E (7 clients)

Update 19.09.14

ATEM 4K 1 M/E (6 clients)

ATEM 1 M/E (5 clients)

Update 23.11.14

ATEM 4K 2 M/E (8 clients)

Confirming ATEM Proxy Firmware Version

First ensure you are running the latest firmware version for the ATEM Proxy. Acquire information with us directly for latest Firmware version. As of writing this document the latest version is v1.2.

Check this by connecting a monitor to the HDMI output of the ATEM Proxy. It is suggested to power off the ATEM Proxy prior to connecting a HDMI monitor for the ATEM Proxy to discover the monitor. Below is a screenshot of the boot up process for the ATEM Proxy. Notice the message "SKAARHOJ ATEMProxy v1.2". This states the version number of the ATEM Proxy.

```
( ' > )
/) TC (\ Core is distributed with ABSOLUTELY NO WARRANTY.
( \_ _ _ \) www.tinycorelinux.net

IP: 192.168.10.241
Netmask: 255.255.255.0
Gateway: 192.168.10.1
ATEM IP: 192.168.10.240
Config OK, starting ATEMProxy..
SKAARHOJ ATEMProxy v1.2
ATEM IP: 192.168.10.240

Trying ATEM switcher on 192.168.10.240:9910
Trying ATEM switcher on 192.168.10.240:9910
CMD: MPFM, Stored length: 1400 Received length: 280
CMD: MPFM, Stored length: 1400 Received length: 280
Switcher connection established
New connection: 192.168.10.95:62794 (Total clients: 1)
New connection: 192.168.10.96:65236 (Total clients: 2)
New connection: 192.168.10.97:54498 (Total clients: 3)
New connection: 192.168.10.98:63109 (Total clients: 4)
```

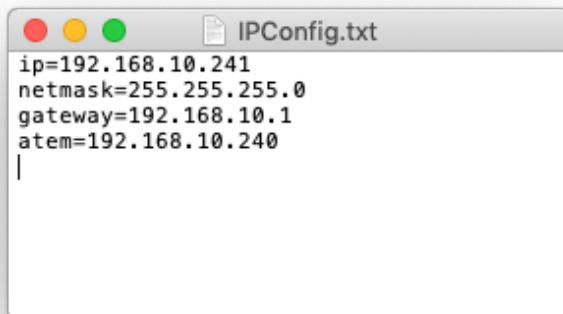
Updating Firmware

Please acquire with us for the latest firmware image. Follow the instructions here: https://github.com/kasperskaarhoj/SKAARHOJ-Open-Engineering/raw/master/Manuals/Files/ATEM_Proxy_Upgrade_Instructions.pdf

Setting IP of ATEM Proxy and ATEM IP

Load the image onto a computer and find the file "IPConfig.txt" on the root of the SD card.

The ip is the IP address of the ATEM Proxy it self and this is the IP the SKAARHOJ controllers should connect to when using the ATEM Proxy instead of connecting to the ATEM directly. The "atem" is the IP address of the ATEM Switcher.



Confirming ATEM Proxy Connection

Connection between the ATEM Proxy and the ATEM Switcher can be confirmed with the message "Switcher connection established"

Clients connecting to the ATEM Proxy have confirmation with "New connection: xxx.xxx.xx.xx:yyyyy" where you can see the IP address of the clients connecting.

The screenshot shows a terminal window displaying logs from the ATEMProxy application. The logs include configuration details and connection information. Several lines of text are highlighted with a red box, specifically:

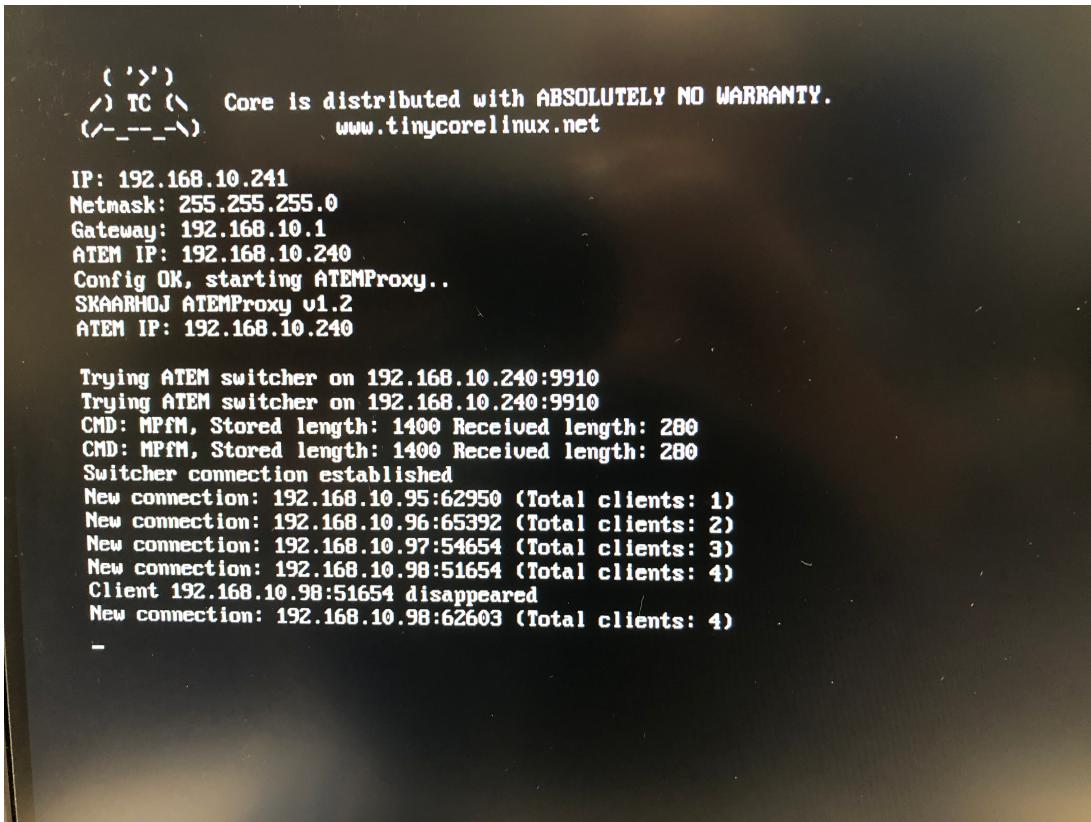
- "Switcher connection established"
- "New connection: 192.168.10.95:62794 (Total clients: 1)"
- "New connection: 192.168.10.96:65236 (Total clients: 2)"
- "New connection: 192.168.10.97:54498 (Total clients: 3)"
- "New connection: 192.168.10.98:63109 (Total clients: 4)"

Client Connection Status

Clients connecting to the ATEM Proxy are confirmed with the message "New connection" as stated above.
If a client are removed from the network the ATEM Proxy will state this with

"Client xxx.xxx.xxx.xx disappeared"

If the client is re-connecting to the ATEM Proxy this is stated with the usual "New connection" message.



The screenshot shows a terminal window with a dark background and white text. It displays the startup configuration of the ATEM Proxy, including IP, Netmask, Gateway, and ATEM IP. It also shows the proxy attempting to connect to an ATEM switcher and receiving data. Subsequent lines show new connections being established, followed by a message indicating a client has disappeared and then re-connected.

```
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Netmask: 255.255.255.0
Gateway: 192.168.10.1
ATEM IP: 192.168.10.240
Config OK, starting ATEMProxy..
SKAARHOJ ATEMProxy v1.2
ATEM IP: 192.168.10.240

Trying ATEM switcher on 192.168.10.240:9910
Trying ATEM switcher on 192.168.10.240:9910
CMD: MPfM, Stored length: 1400 Received length: 280
CMD: MPfM, Stored length: 1400 Received length: 280
Switcher connection established
New connection: 192.168.10.95:62950 (Total clients: 1)
New connection: 192.168.10.96:65392 (Total clients: 2)
New connection: 192.168.10.97:54654 (Total clients: 3)
New connection: 192.168.10.98:51654 (Total clients: 4)
Client 192.168.10.98:51654 disappeared
New connection: 192.168.10.98:62603 (Total clients: 4)
-
```