ANPR Setup Checklist - Tattile

Initial Setup

Wired	Wireless	Port
192.168.0.21 255.255.0.0	SSID: Anpr-###### 192.168.150.1	1080 or 8081

Initial Access to the Camera

https://www.youtube.com/embed/rZHMVAMb7yk?wmode=opaque

Yet another setup trick is to login to the device initially using WIFI.

The device will need to be plugged into a network hub that is connected to a DHCP server

- change the wired IP to Obtain Automatically
  - later in the process we do this anyways
- device will reboot
- reconnect using WIFI and record the wired IP that was assigned to the device
  - generally a device will be assigned the same IP each time it boots
  - you should now be able to connect to the listed wired IP
  - disconnect your wifi connection

This is useful since often your computer will become confused about where to send packets. Using the wifi connection is good for configuration, but accessing other online resources may be problematic with the second connection. Once the wifi is disconnected all configuration can be performed through the wired IP.

Connecting to PL8RDR from tablet or camera

System - Network Settings

Changes on this panel will reboot the device.

This work is usually done by OPS-COM support.
Details are here to help those clients that are doing initial configuration themselves.

* Suggested that WIFI settings be changed last unless you have a local DHCP server setup.

During setup the device reboots several times, any changes to WIFI settings may make it more difficult to connect to complete configuration.

- * connect wireless and setup wired connection first, then connection may be easier
  - device reboots numerous times during setup
  - DHCP server software: http://www.dhcpserver.de - dhcpsrv2.5.2.zip (*extract to C:*)
    - setup computer with LAN 192.168.8.1 and use that for IP assignment
    - camera will connect to computer to obtain IP address

- Hostname: Mobile-R | Mobile-L   (that way we know which is the Right / Left camera)

System - Time Sync

Changes on this panel will reboot the device.

- not terribly important as the PL8RDR records the time of the event not the values sent by the camera
- Time Server (use your own or one of these)
  - 0.us.pool.ntp.org
  - 1.us.pool.ntp.org
  - 2.us.pool.ntp.org
  - 3.us.pool.ntp.org

Time zone America/Vancouver

Country Canada

Advanced info

```
210 Number of Sources = 1
MS Name/IP address      Stratum Poll Reach LastRx Last sample
=====================================================================
                          0    7    0   10y    +0ns[  +0ns] +/-   0ns
```

1. set proper time zone and apply changes
2. set time / date

Reset | Apply

Set Local Date Time

DD/MM/YYYY: 20 / 05 / 1970

HH:MM:SS: 23 : 04 : 50

Plate Reader - General Settings

- should always be the **CLIENT_ID** (no spaces)
  - eg. OC_TOMA

NOTE: This graphic shows and old implementation. The text in this sample should be only:
OC_LIONS

General Settings

Plate Reader

System

Basic settings

Enable Engine	YES ▾
Acquisition mode	FREE_RUN ▾
Site Address	lions

Site address should match client sub-domain plus client ID (colon delimited)

`lions:OC_LIONS`

On mobile client ID is not required, but for standardization it should be included.

Advanced settings

Warning: system functionality may be affected if parameters below are changed

Multi-thread action execution	NO ▾
TCP timeout (ms)	10000
Gateway Interface	Auto ▾
Skip check if oldest then	5

Reset | Apply

Plate Reader - Plate Reader

Changes on this panel will reboot the device.

- create a buffer around the capture area
- the listed settings are factory defaults (except Locator) and should work with minimal issues
- for mobile bounding region should be set to a lower area since plates will rarely be at the top of the image
  - leave a gutter around the bounding area of at least 30 pixels

Plate Reader - Events Actions

- (Mobile) there are 4 options; 2 for wired and 2 for wireless
  - 1 each are READ results; 1 each are NO_READ results (vanity plates)

- %SITE_ADDRESS is not important for Mobile but listed here for standardization

During configuration set **wired** *TCP Message* connection as **Enable=No**

Cameras leaving Tomahawk's office will be setup to use wireless only. Configuring wired settings can help with troubleshooting in the future.

Events - Specific

- 2 x **READ** - wired (192.168.8.1) & wireless (10.42.0.1)
  - %PLATE_STRING%IMAGE_BW%IMAGE_COL%PLATE_MIN_X%PLATE_MIN_Y%PLATE_MAX_X%PLATE_MAX_Y
  - Server IP: 192.168.8.1   Server Port: 32000

%IMAGE_BW sends the thumbnail image (*required*)
%IMAGE_COL sends the context image (*not required*)

- 2 x **NO_READ** - wired (192.168.8.1) & wireless (10.42.0.1)
  - %PLATE_NOT_READ%IMAGE_BW%IMAGE_COL%PLATE_MIN_X%PLATE_MIN_Y%PLATE_MAX_X%PLATE_MAX_Y
  - Server IP: 10.42.0.1   Server Port: 32000

Wireless Only with Wired Disabled

The final screen should look as shown below. "TCP Message" is setup (disabled) for 192.168.8.1 and "TCP Message 2" is setup (enabled) for 10.42.0.1

We are shipping cameras with wireless configured and wired ready to be enabled if needed; *as of spring 2020*

Events/Actions Settings

Plate Reader

System

Actions / Events	Send Image FTP	Save DB FTP	TCP Message	Send Image FTP 2	Save DB FTP 2	TCP Message 2	SD Saving	Save DB SD
Ocr Read	⊘	⊘	⊘	⊘	⊘	✓	⊘	⊘
Ocr Not Read	⊘	⊘	⊘	⊘	⊘	✓	⊘	⊘
Ocr No Plate	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
Match On List A	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
No Match On List A	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
Match On List B	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
No Match On List B	⊘	⊘	⊘	⊘	⊘	⊘	⊘	⊘
System Alarm		⊘	⊘		⊘	⊘		

Shared configuration

JPEG header configuration	Config
Event/Action monitor	Config

Camera Context

- likely not necessary to make changes in this area
  - adjust; iris, gain, shutter

Sample Device Info

Organization name

VERSION

```
Firmware version       = ANPR Mobile Ver.3.12.19 CAN-ON Dec 20 2019 13:41:34
OCR lib version        = Tattile Plate Reader Ver.3.156.000
Traffic Interface lib  = 1.112
TOS version            = 4.34.73
TatExt OCR lib         = TatExt 2.8 TatExt OCR 2.13.16 - Pr 2.1 - Lib 6.0.29805 - May  7 2020
BOOTLOADER version     = 3.0
KERNEL version         = 3.0.35-tattile #1 SMP PREEMPT Wed Oct 23 17:25:48 CEST 2019
DRIVER version         = 2.2.2
FILESYSTEM version     = 3.13
UPDATE version         = 3.13
FPGA Version           = 2045
```

DEVICE STATUS

```
Image Sensor OCR       = CMOS_1280x1024_BW (151) (50)
Image Sensor CTX       = CMOS_1280x1024_COL (154)
Board Serial Number    = 4294967295
Board code             = 696
Board revision         = 2
MAC Address            = 0x00C008934BB5
Hostname               = Mobile-L
GMT Time & Date        = 17.44.14, 02/07/2020, GMT offset: -300min, DST status: OFF
LOCAL Time & Date      = 13.44.14, 02/07/2020
Application time       = 00:00:47
Device uptime          = 00:01:32
CPU Temperature        = 27.0 °C
Temperature            = 35.2 °C
Humidity               = 6.6 %
Pointing Angles        = Tilt: -0.1° Roll: 0.1°
Current                = 904mA
Voltage                = 10.0V
Flash file system size = 3442040 KByte
```

DIAGNOSTIC STATUS

```
Status                 = WARNING
Internal parameters    = M:0x09bf8f C:0x09bf8f A:0x000000 W:0x001000 R:0x000000
Last check time        = 02/07/2020 13:43:40,978
Boot time              = 02/07/2020 13:43:40,978
Status Temperature     = OK
Status Humidity        = OK
Status Secure Digital  = OK
Status Current Consumption= OK
Status Time Synchro    = DISABLED
Status OCR Camera      = OK
Status Context Camera  = OK
Status Plate Reader    = OK
Status WiFi            = OK
Status Crypto          = OK
Status GPS             = WARNING
Status TatExt          = OK
```

DEVICE DESCRIPTION

```
Device serial number   = 1910033218
Device type            = F01710
Number of heads        = 2
Channel 0 lens         = T18523 - 6.0mm
Channel 0 best focus   = 3.00m
Channel 0 F number     = 4.0
Channel 1 lens         = T18523 - 6.0mm
Channel 1 best focus   = 3.00m
Channel 1 F number     = 2.8
```

Plate Reading Quick Test

You should now be able to go to **Plate Reader - Text Result** and hold a plate in front of the camera to confirm operation.

Further testing is suggested with a PL8RDR system.