ONVIF Audit Tool

By Roger Hardiman

ONVIF Open Source Challenge

ONVIF Audit Tool

- The Problem
  - Need a list of the Make, Model, Firmware Version of all the ONVIF cameras on the network
  - Need a JPEG snapshot to show the image view or image quality in different light levels
  - Has to support
    - Multiple makes of ONVIF Camera
    - Mixture of different firmware versions
    - Mixture of different usernames and passwords

ONVIF Audit Tool

- The Solution

- Utility that carries out an ONVIF Audit
- Produces a folder containing a log file for each camera and a JPEG for each camera

Folder /onvif_audit_report_2018_05_31_09_05_00

```
camera_report_123.157.208.28.txt
snapshot_123.157.208.28.jpg

camera_report_193.159.244.132.txt
snapshot_193.159.244.132.jpg

camera_report_193.159.244.134.txt
snapshot_193.159.244.134.jpg

camera_report_60.191.94.122.txt
snapshot_60.191.94.122.jpg

camera_report_61.164.52.166.txt
snapshot_61.164.52.166.jpg
```

ONVIF Audit Tool

Using a Config File

Use a config file with a list of IP addresses, usernames and passwords using a file in the industry standard JSON format

>onvif-audit --filename camera_list.json

- Contents of camera_list.json :-

```
"cameralist": [
   {
   "ipaddress": "193.159.244.132-193.159.244.134",
   "port": "80",
   "username": "service",
   "password": ”the password",
   "comment": "Bosch"
   }
] }
```

ONVIF Audit Tool

Using the Command Line

Use the command line with an IP address (or a range of IP addresses) and the username and password

>onvif-audit –ipaddress 192.168.1.1 –username user –password passwd

>onvif-audit –ipaddress 192.168.1.1-192.168.1.20 –username user –password passwd

ONVIF Audit Tool

Outputs

JPEG Snapshot for each camera

Log file for each camera. An example is

Host:= 60.191.94.122 Port:= 8086
Date:= Thu May 31 2018 06:39:49 GMT+0100 (BST)
Manufacturer:= Dahua
Model:= IPC-HDW4830EM-AS
Firmware Version:= 2.622.0000000.21.R, Build Date 2018-02-03
Serial Number:= 2E05F8AYAW00038
Hardware ID:= 1

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Future

RoadMap

Use the PTZ Absolute Position to capture JPEGs from different directions on Pan/Tilt/Zoom cameras

Graphical User Interface to allow novice users to enter IP address range, username and password