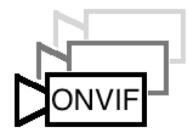
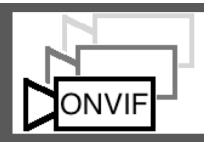
By Roger Hardiman

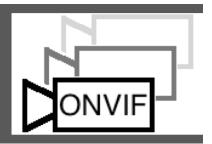
ONVIF Open Source Challenge





- 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



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

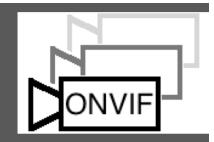
```
camera report 123.157.208.28.txt
snapshot_123.T57.208.28.jpg

camera report 193.159.244.132.txt
snapshot_193.T59.244.132.jpg

camera_report 193.159.244.134.txt
snapshot_193.T59.244.134.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
```



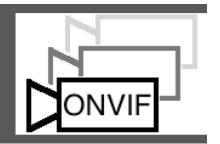
Using a Config File

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"
      }
] }
```

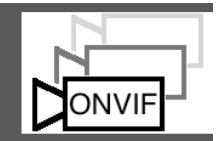


Using the Command Line

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



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

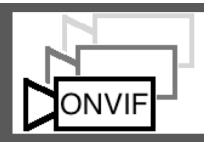
Serial Number:= 2E05F8AYAW00038

Hardware ID:= 1

By Roger Hardiman

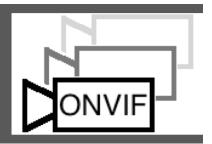
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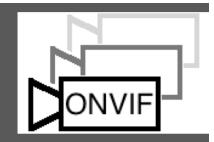
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snapshot_193.T59.244.134.jpg

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snapshot_60.191.94.122.jpg

camera_report 61.164.52.166.txt
snapshot_61.164.52.166.jpg
```



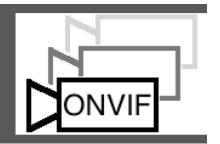
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          "ipaddress": "193.159.244.132-193.159.244.134",
          "port": "80",
          "username": "service",
          "password": "the password",
          "comment": "Bosch"
      }
] }
```

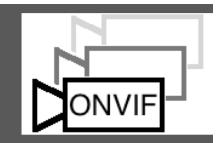


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Use the command line with an IP address (or a range of IP addresses) and the username and password

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



Outputs

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Date:= Thu May 31 2018 06:39:49 GMT+0100 (BST)

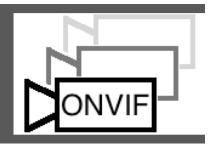
Manufacturer:= Dahua

Model:= IPC-HDW4830EM-AS

Firmware Version:= 2.622.0000000.21.R, Build Date 2018-02-03

Serial Number:= 2E05F8AYAW00038

Hardware ID:= 1



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