IPCAM Control

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Abstract

This document gives an easy guideline on how to send request to IPCAM with ONVIF protocol and how to capture image by openCV.

1 Software List

- ONVIF Test tool (in IPCAM package)

2 Easy GuideLine

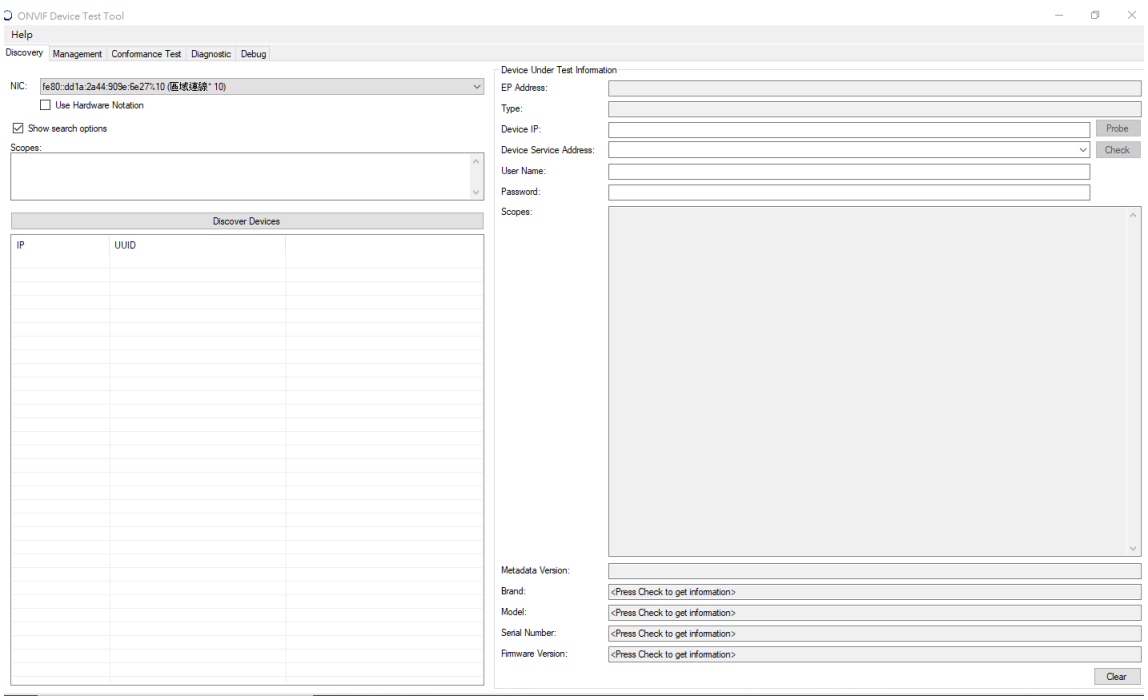

Figure 1: Main Page

- Step 1. Open ONVIF Test tool, you will see the Main Page like the image

- Step 2. Click on NIC

- Step 3. All the ip links will be shown on the scroll bar

- Step 4. Click on IP to see more information

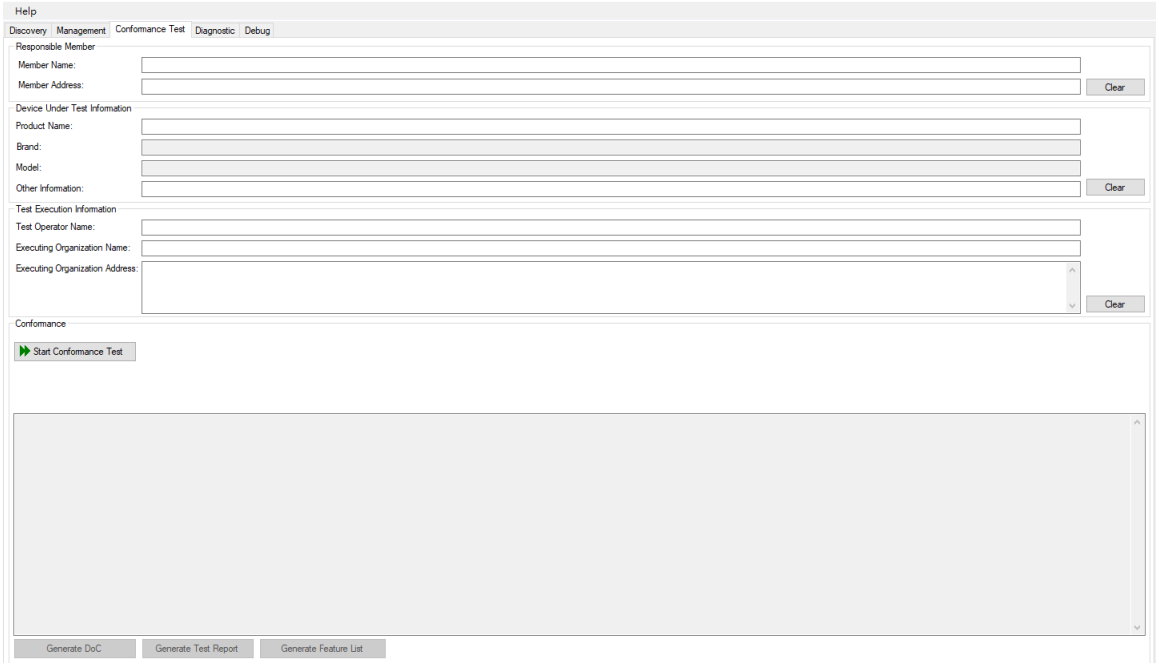

Figure 2: Comformance Test

Usage: Test whether your IPCAM support ONVIF protocol to control the IPCAM

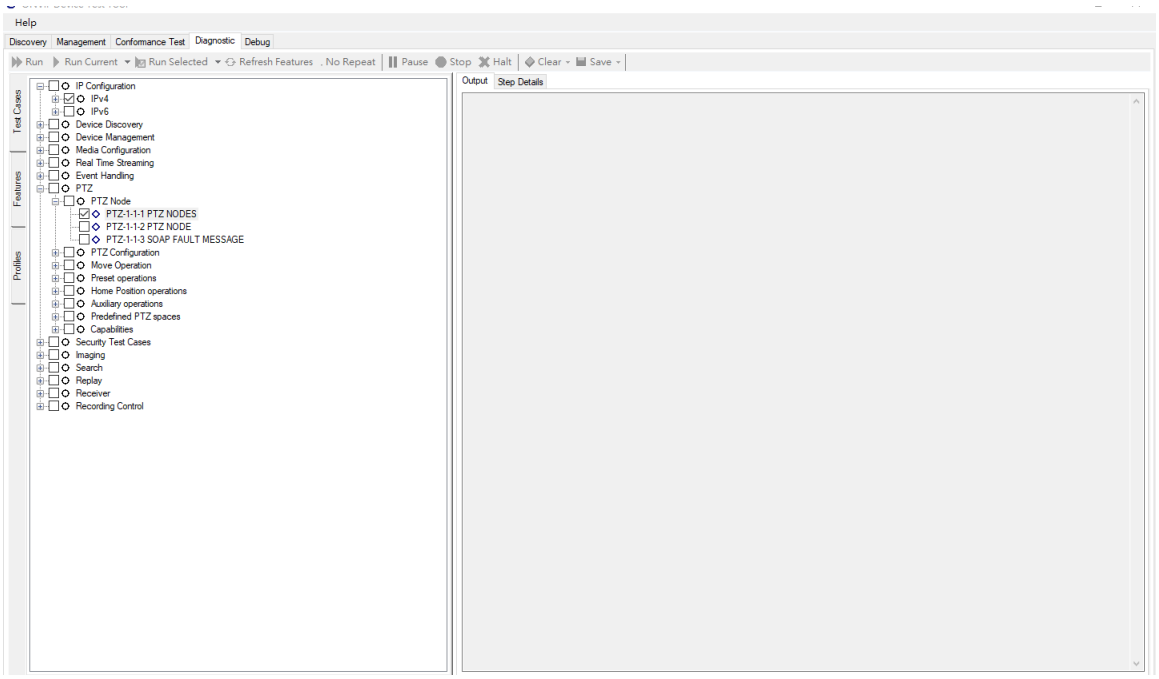

Figure 3: Diagnostic Test

- Step 1. Click on the item you would like to know

- Step 2. CLick on run to enable the test

- Step 3. The result will be shown on the right side of the screen

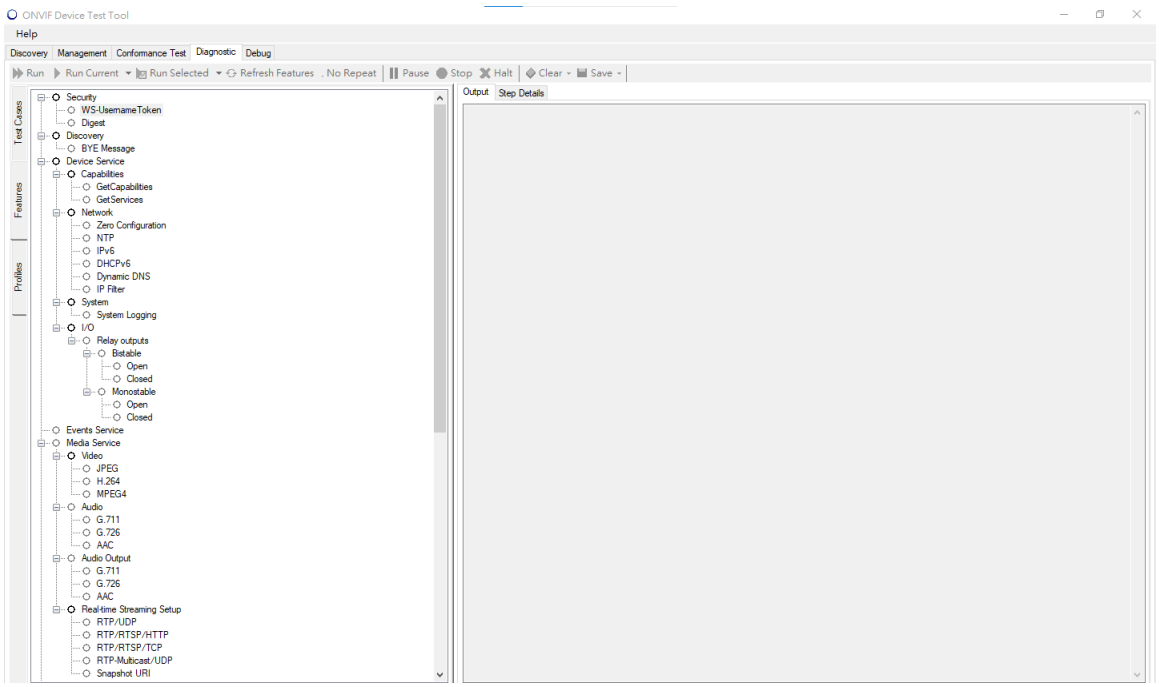

Figure 4: Diagnostic TestMore testing options

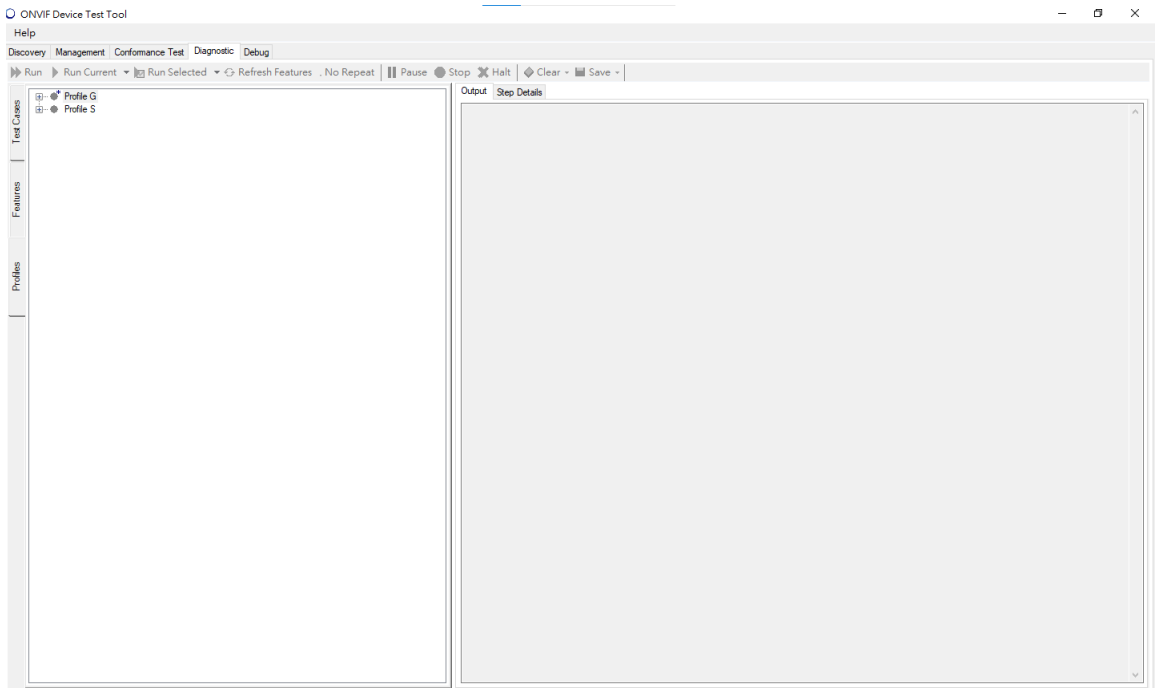

Figure 5: Diagnostic TestMore testing options

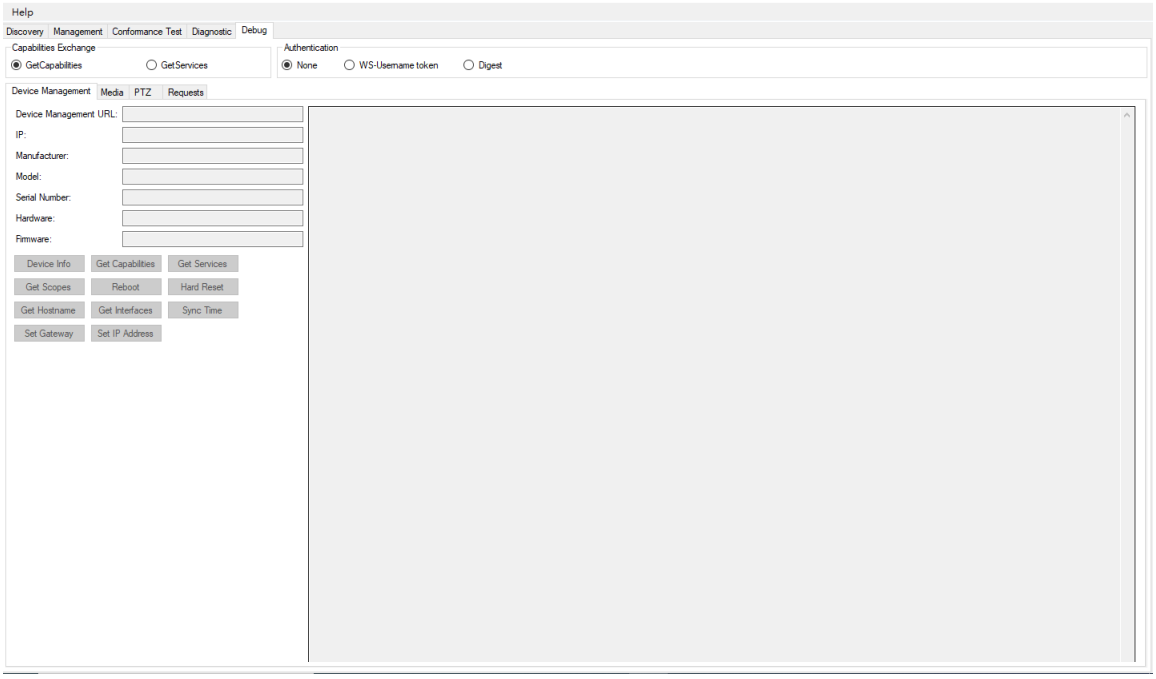

Figure 6: Device Management

- Debug Mode
- The Left bottom corner contains lots of setting such as Device Info
- You could even reboot the IPCAM from the Tool

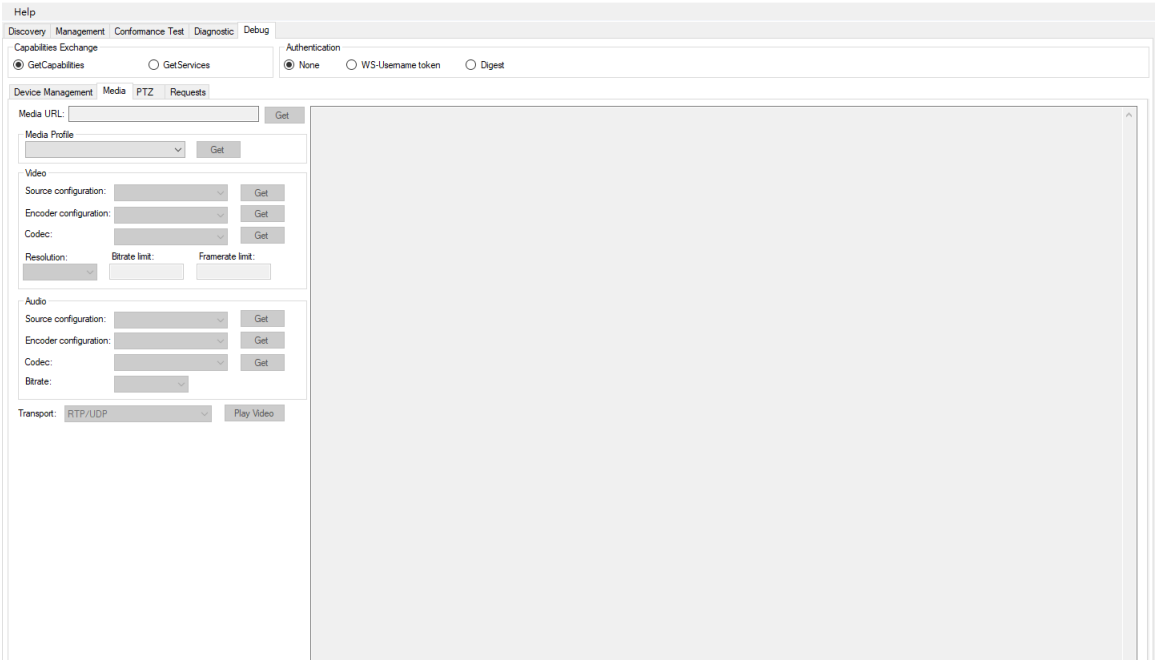

Figure 7: Media Management

Media Management controls the config information on how to capture or control the picture quality and video quality.

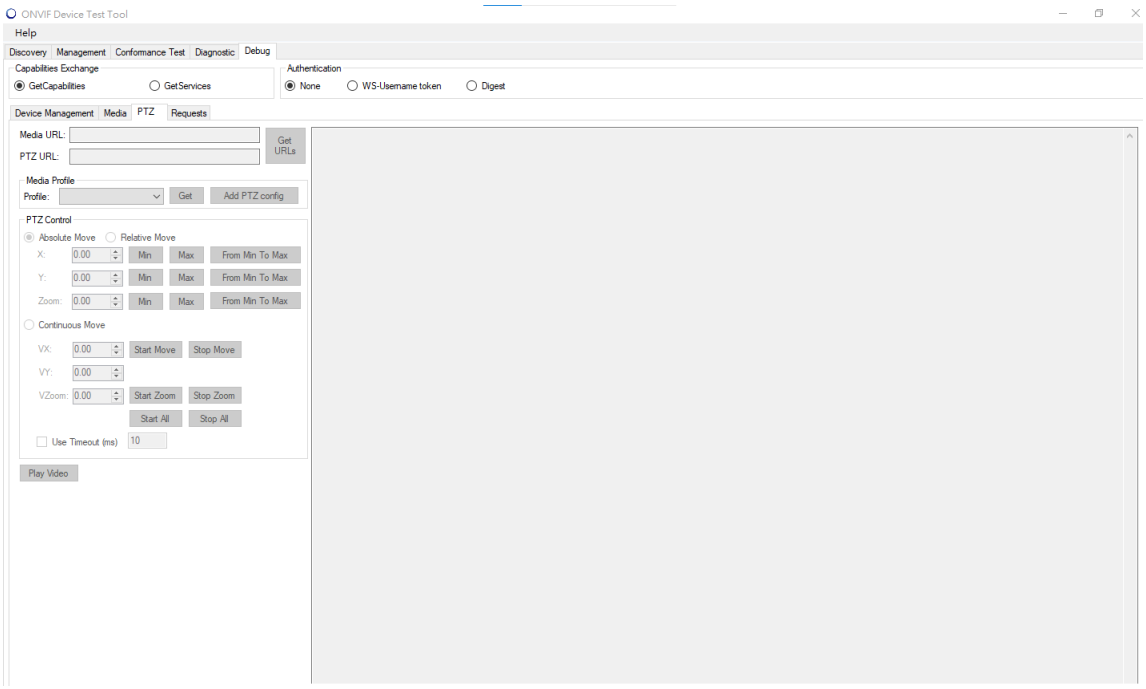

Figure 8: PTZ control

PTZ control controls how the IPCAM absolute move. You could move the IPCAM by ONVIF protocol.

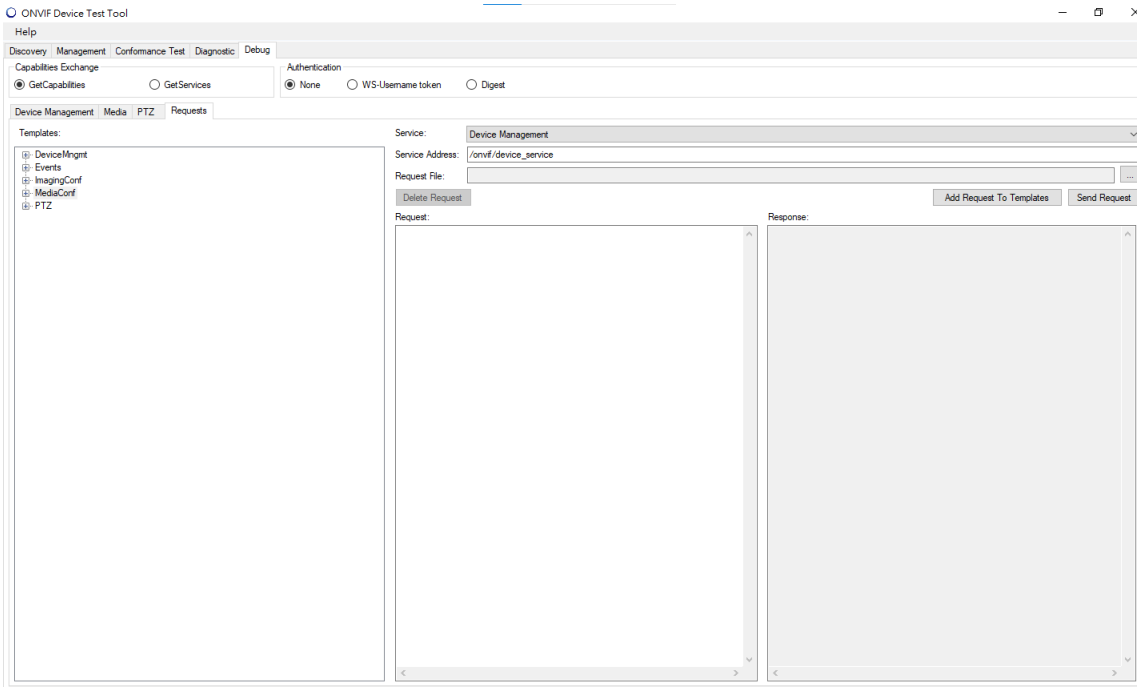

Figure 9: Request Menu for IPCAM

If you want to send the request via programming, ONVIF test tool provide lots of example XML which could control IPCAM by sending XML message

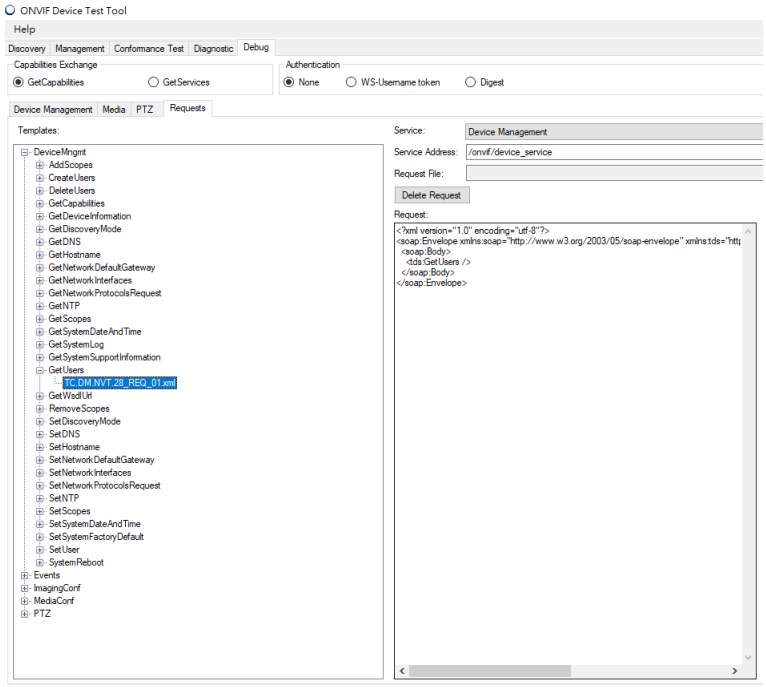

Figure 10: Request get Users

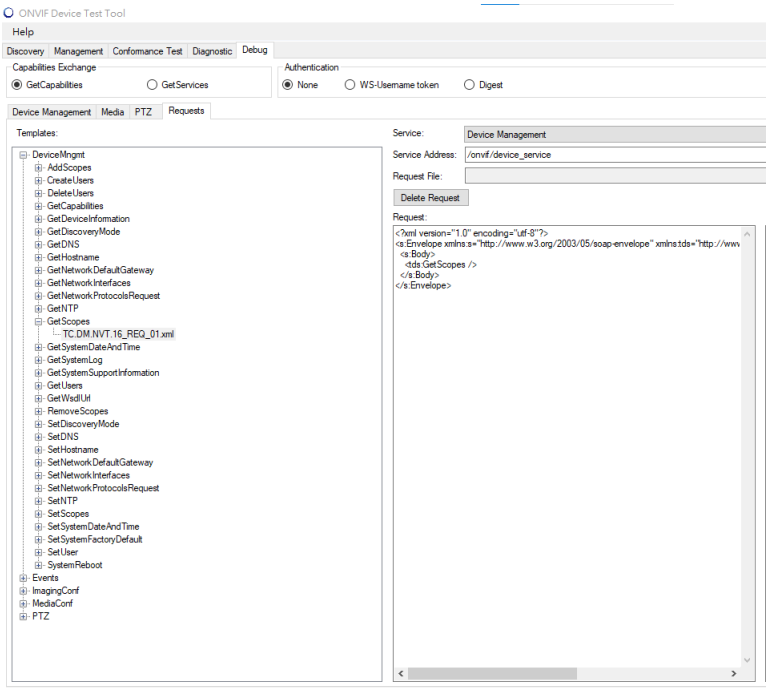

Figure 11: Request get Scope

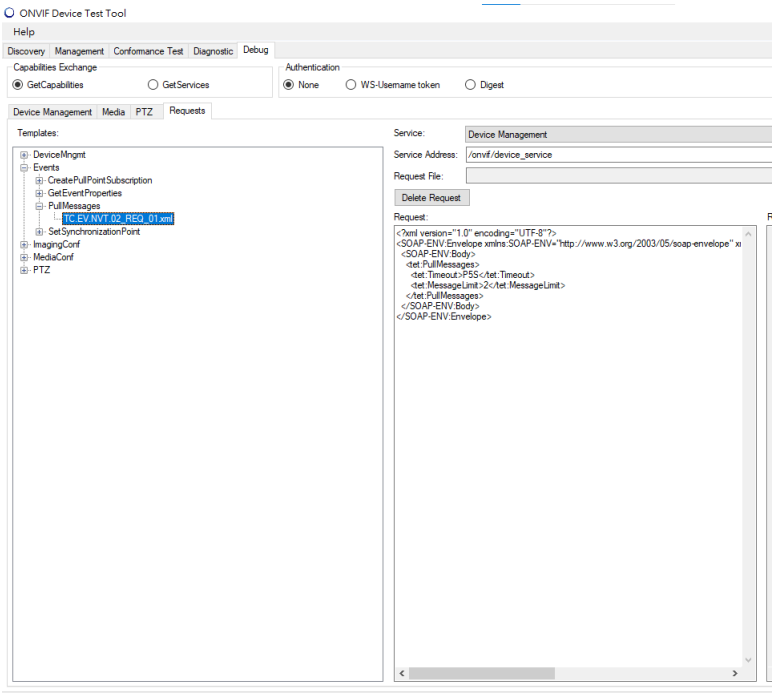

Figure 12: Request Pull message

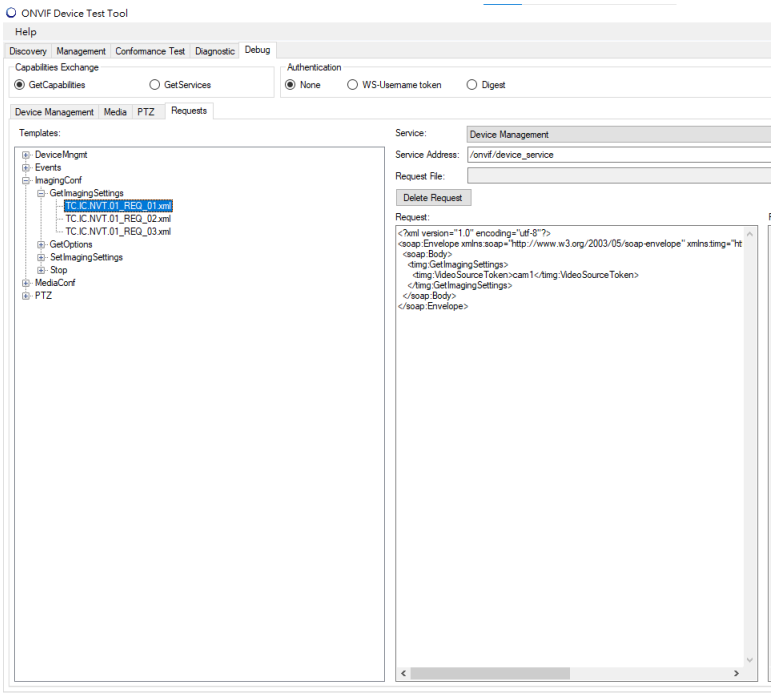

Figure 13: Request get image setting

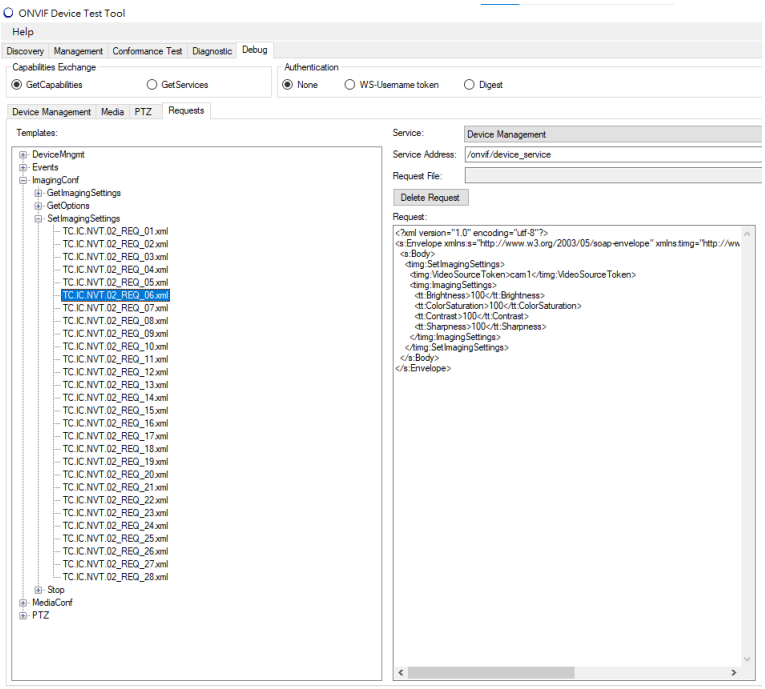

Figure 14: Request set image setting

If you want to change the information, you could fix XML number by customization.

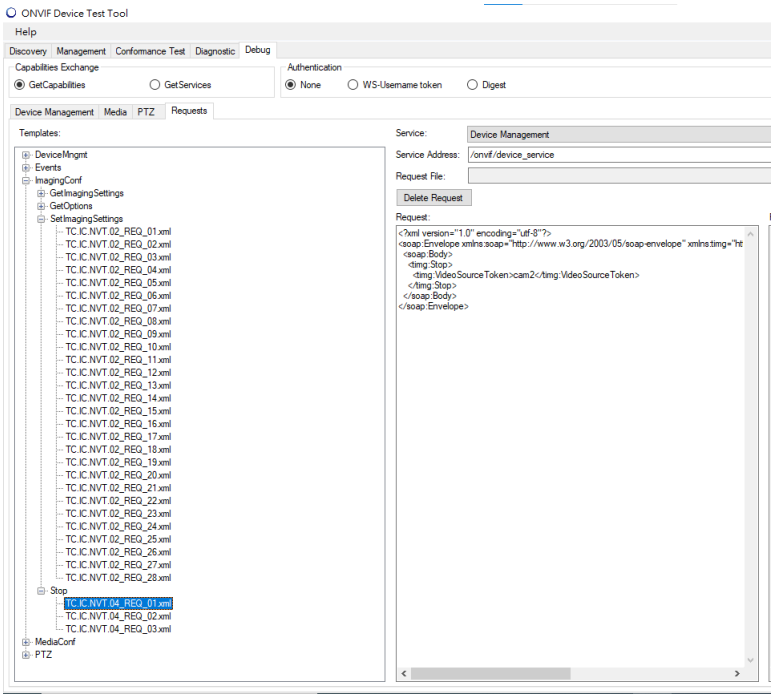

Figure 15: Request Stop video recording

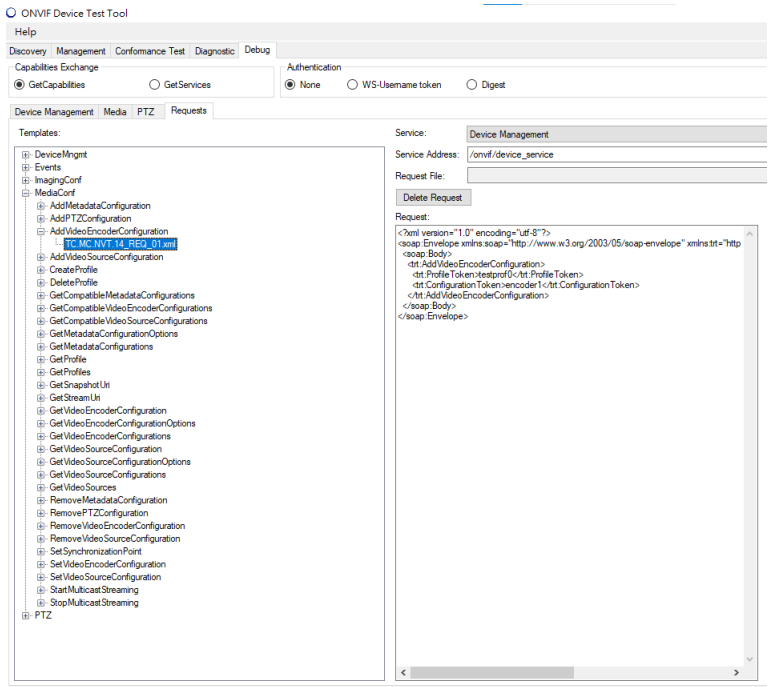

Figure 16: Add video recorder

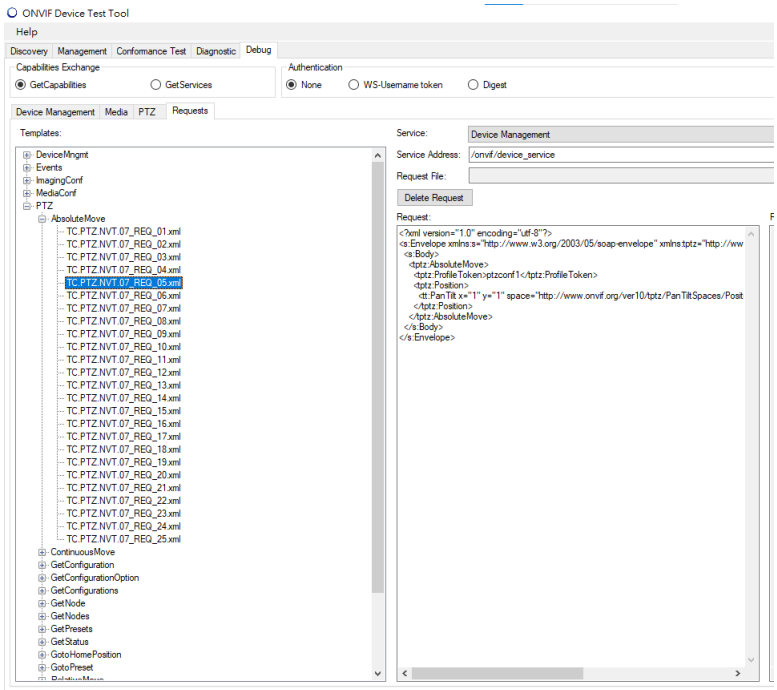

Figure 17: Request get Profile Token

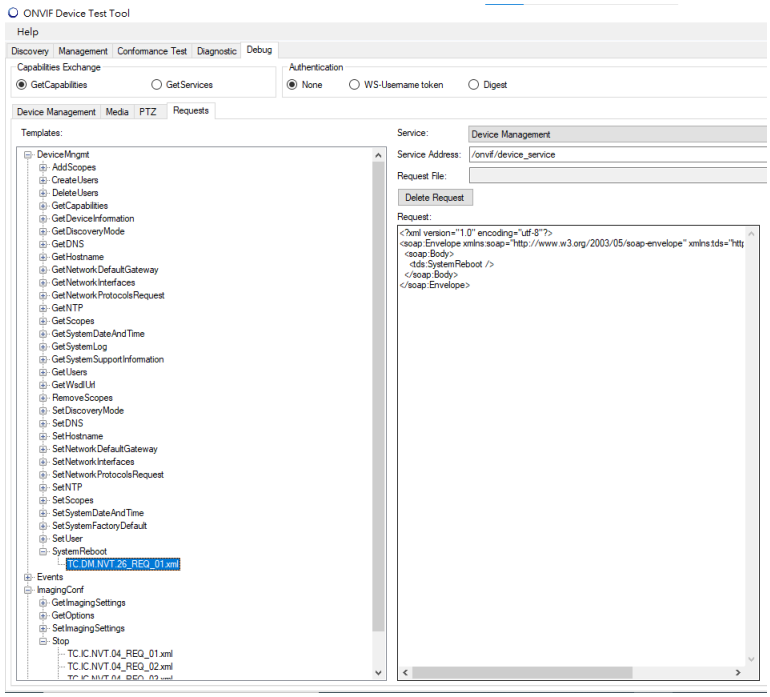

Figure 18: Request send reboot Information

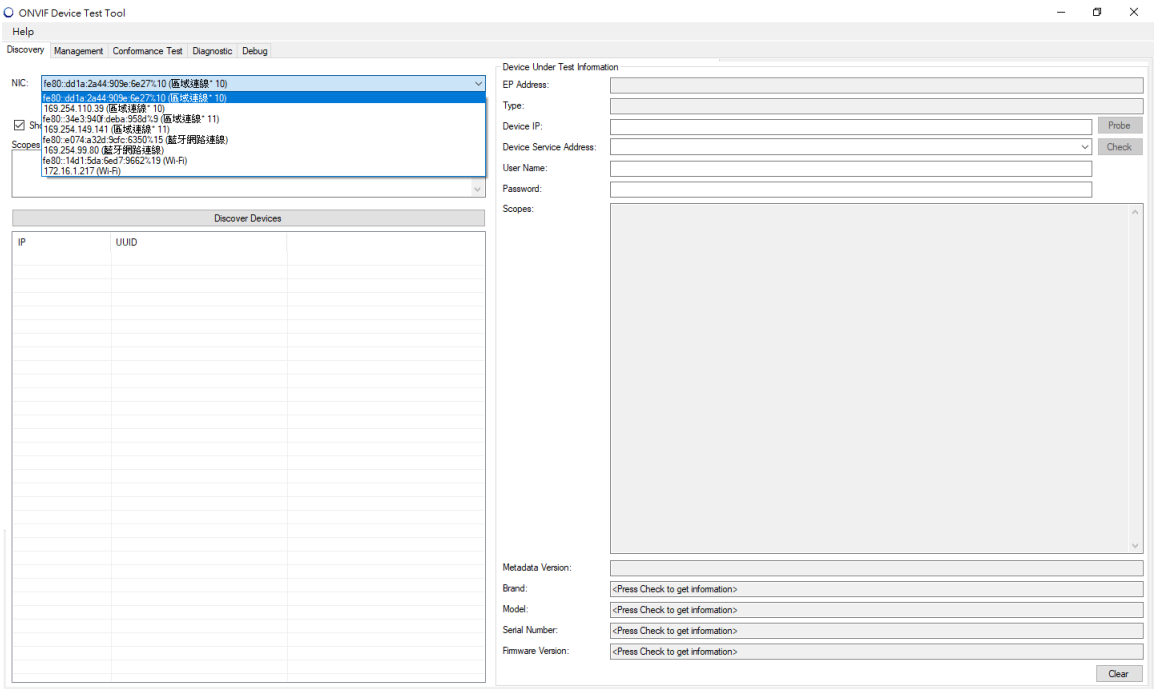

Figure 19: Example for real usage

```
#include "pparking.h"
#include "main.h"

int main()
{
    init_camera();

    Mat frame;
    snapshot(frame);
    imshow("frame", frame);
    waitKey(0);

    return 0;
}
```

Figure 20: This function activates the crop function