ONVIF camera compatibility Guide

This guide aims to make it easier for integrators to determine the compatibility an IP camera to the Freedom VMS software. Freedom VMS has native compatibility with IP cameras from Dahua, Hikvision, Maxima, Omega and Sony. Cameras that are certified ONVIF '**Profile S**' compliant are also supported by Freedom VMS.

ONVIF is an open platform IP video based security standard.

To find out if your camera model is ONVIF 'Profile S' compliant please consult the model datasheet or manufacturer. There is also a search tool available from the ONVIF organisation located at http://www.onvif.org/ConformantProducts/ProfileProducts.aspx

To list ALL products from a specific manufacturer

Searching for a specific camera model

IMPORTANT: If you are unsure of the 'EXACT' model name, use the method above to search for '**all'** the supported devices from that manufacturer, you can then browse the list and see if your camera model is listed.

Any results are listed, in the example below 2 products are found, clicking on the model number will display its supported profiles.

Related material

- [Adding an ONVIF IP camera to Freedom VMS (PDF)](#)
- [Video tutorial of adding an ONVIF device](#)

ONVIF profile selection

Manufacturers of ONVIF cameras make available a number of 'video profiles'. These video profiles equate to different types of video codecs, and are usually represented by a sequence number starting at 1. Some manufacturers might have *video profile 1* as MJPEG and *video profile 2* as H.264 (baseline) and *video profile 3* as H.264 (High) etc, while others may equate *video profile 1* to the same as what we would call 'main stream' (h.264) and *video profile 2* to what we would call 'sub stream' (h.264). Some manufacturers also allow you to create your own *video profiles,* while others can have up to 8 fixed video profiles. By default when you add an 'ONVIF' IP camera in the Freedom VMS software it will set *video profile 1* as the 'main stream' and *video profile 2* as the sub stream. In the Freedom VMS software you can change to a different 'video profile' for main and sub stream by using a 'customized' profile option.

Prior to adding the camera to Freedom VMS software

1. Update the cameras firmware to the latest version.
2. Ensure an NTP server is on-site and operating.

(if just testing ensure the *time*, *GMT off-site* and *DST* settings on the IP camera are the same as that which your PC is configured for)

ONVIF PTZ camera support

At this stage Freedom VMS supports basic control for ONVIF PTZ cameras including directional panning, tilting, zooming, setting and calling a preset.

Common issues in adding the camera or bringing up a video stream.

- The time in the camera does not match the time on the PC, time synchronization is critical with ONVIF.
- The profile may need to be changed in Freedom VMS to a 'customized' profile.
- The password may be incorrect; some camera manufacturers require a different account/password to be used for the ONVIF stream.
- Some manufacturers require the ONVIF stream to be enabled before it can be used.

Testing sample camera

If the IP camera is certified 'Profile S' compliant and you are still un-able to add it to the Freedom VMS software, we will require a sample unit to test.