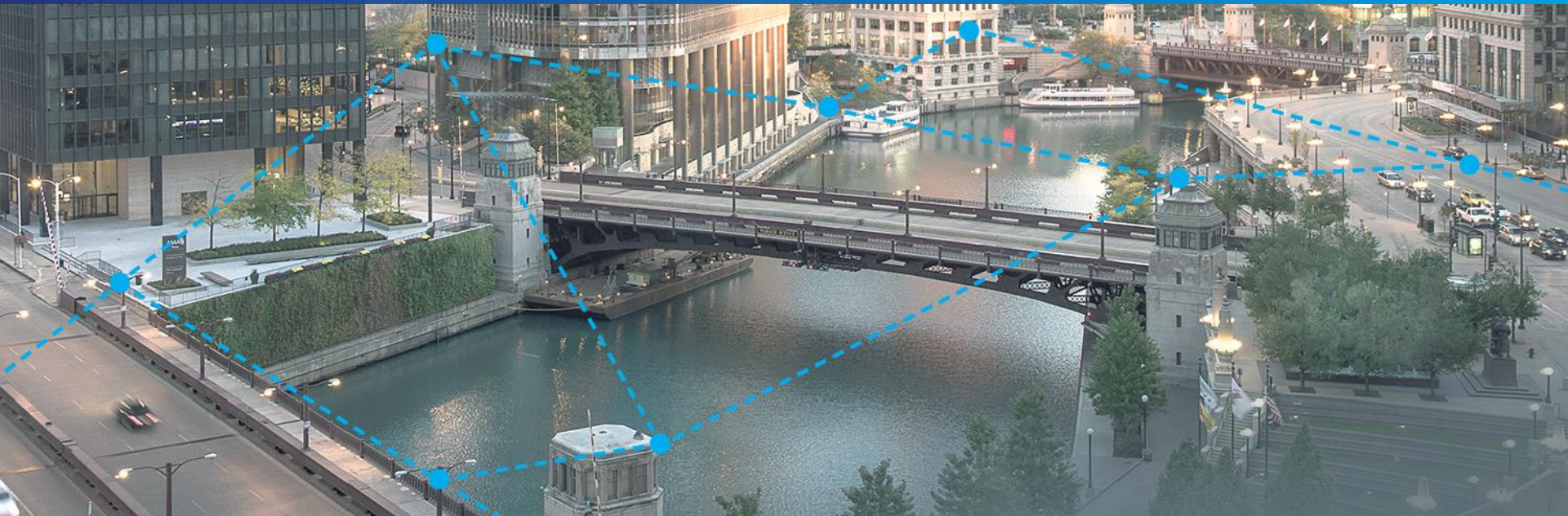


Understand ONVIF in 10 Minutes



ONVIF in a Nutshell

- What is ONVIF?
- Why use ONVIF?
- ONVIF Structure – Specifications and Profiles
- ONVIF Conformant Products
- Where can I get more information?

What is ONVIF?

- ONVIF is an organization, comprised of member companies from within the IP security industry
- The mission of ONVIF is to provide and promote standardized interfaces for effective interoperability of IP-based physical security products and services
- The three cornerstones of ONVIF are:
 - Standardization of communication between IP-based physical security products and services
 - Interoperability regardless of brand and deployment (on-premise, cloud, hybrid solutions)
 - Openness to all companies and organizations

Why Use ONVIF?

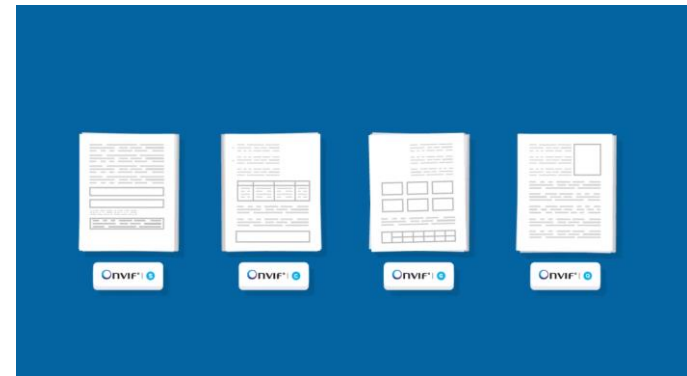


- In a multi-vendor environment, ONVIF ensures that products will work seamlessly together
- Chose between more than 30,000+ products to match your exact needs and preferences, regardless of vendor
- As an installer, ONVIF saves you installation time, trouble, cost, and future-proofs your installation

ONVIF Profiles

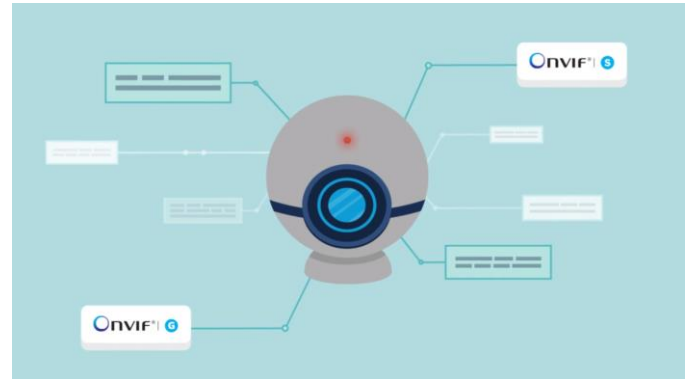
ONVIF Structure

- ONVIF consists of a wealth of specifications
- These specifications are grouped into Profiles
- A Profile has a fixed set of features
- Profiles makes it easier to identify compatible products



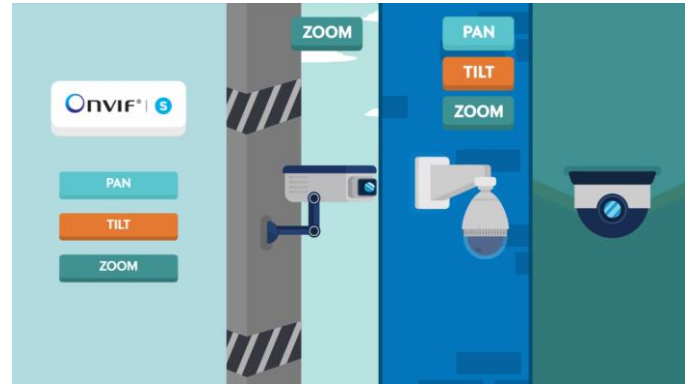
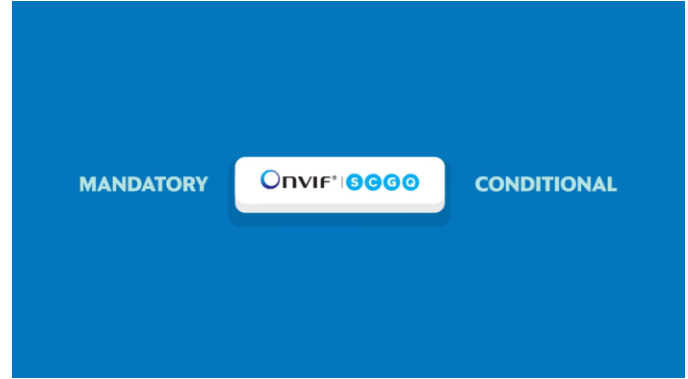
ONVIF Profiles

- The Profile specifies a set of features that must be supported by both client and device
- Conformant products must support at least one Profile...
- ...but can support more than one...



ONVIF Profiles

- Features in Profiles are either Mandatory or Conditional
- Mandatory features must be supported
- Conditional features only supported if relevant
- i.e., PTZ functions can only be supported in PTZ cameras



ONVIF Profiles

- A** Profile A for broader access control configuration
 - C** Profile C for door control and event management
 - D** Profile D for access control peripherals
 - G** Profile G for edge storage and retrieval
 - M** Profile M for metadata and events for analytics applications
 - S** Profile S for basic video streaming
 - T** Profile T for advanced video streaming
-

ONVIF Profiles

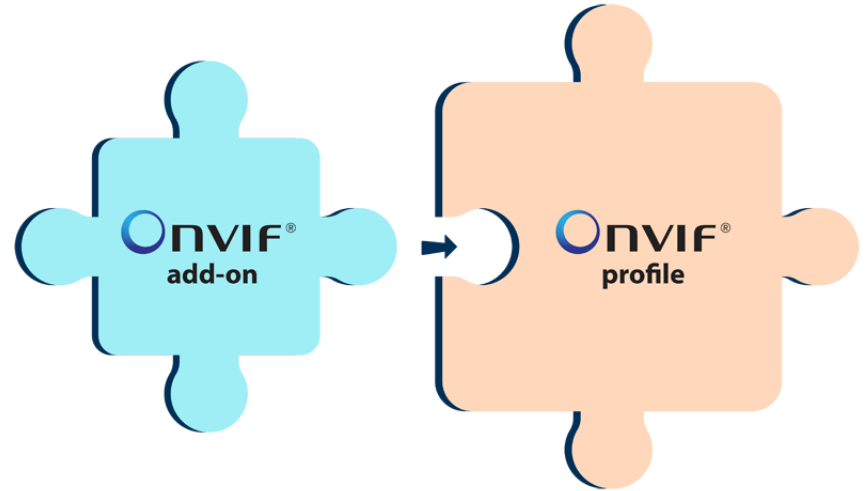
- Online overview of features in each profile
- Check list to see exactly which features a profile covers
- Or check to see in which profile(s) your required feature is included

Features		Profiles															
		G		Q		S		T		C		A		D		M	
		Service	Client	Service	Client	Service	Client	Service	Client	Service	Client	Service	Client	Service	Client	Service	Client
		General															
System Settings		M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C
User Authentication	WS Username Token					M	M										
	Digest Authentication	M	M	M	M	O	M	M	M	M	M	M	M	M	M	M	M
User Handling		M	C	M	M	M	C	M	C	M	C	M	M	M	M		
Query Services and Capabilities		M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M
Device Discovery		M	C	M	M	M	C	M	M	M	C	M	M	M	M	O	M
Default Access Policy				M													
Network Configuration		M	C	M	C	M	C	M	M	M	M	M	C	M	M		
Zero configuration				C	C	C	C										
Firmware Upgrade				C	C												
Backup and Restore				C	C												
TLS Configuration				C	C												
IP Address Filtering						C	C					C	C				
NTP						C	C	C	C			M	C				
Automatic IP Assignment				C	C												
Media Profile Configuration						M	C	M	C							M	C
Media Transport	RTP/UDP	M	M			M	M ¹	M	M ¹							M	M ¹
	RTP/RTSP/HTTP/TCP	M	M			M		M								M	
	RTP/RTSP/HTTPS/TCP	C	C					C	C							C	C
	RTP/RTSP/TCP/WebSocket							C	O								
	RTP/UDP Multicast					C	C	M	C								

ONVIF Add-on

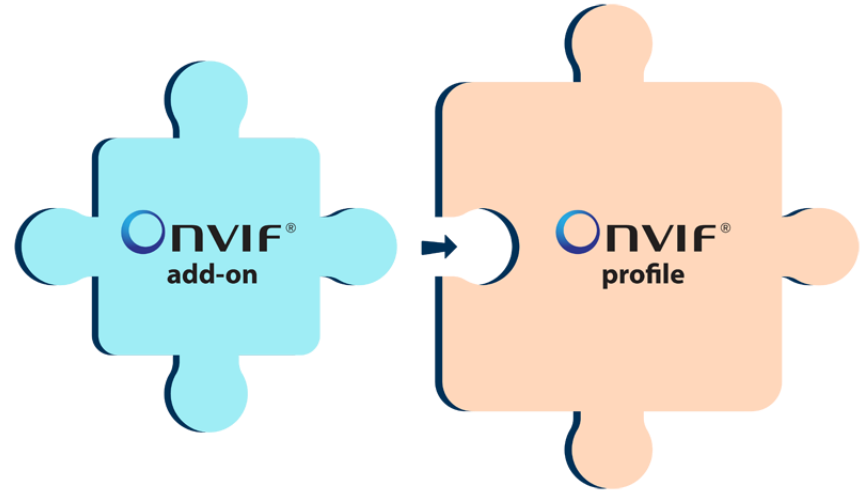
ONVIF Add-on

- One or more features that solve one use case
 - Not enough to qualify as a profile by itself
- Allows for version handling
 - Features can be added/removed if there is market justification
- Devices/clients claiming add-on conformance must:
 - Pass add-on conformance tests
 - Conform to an ONVIF profile



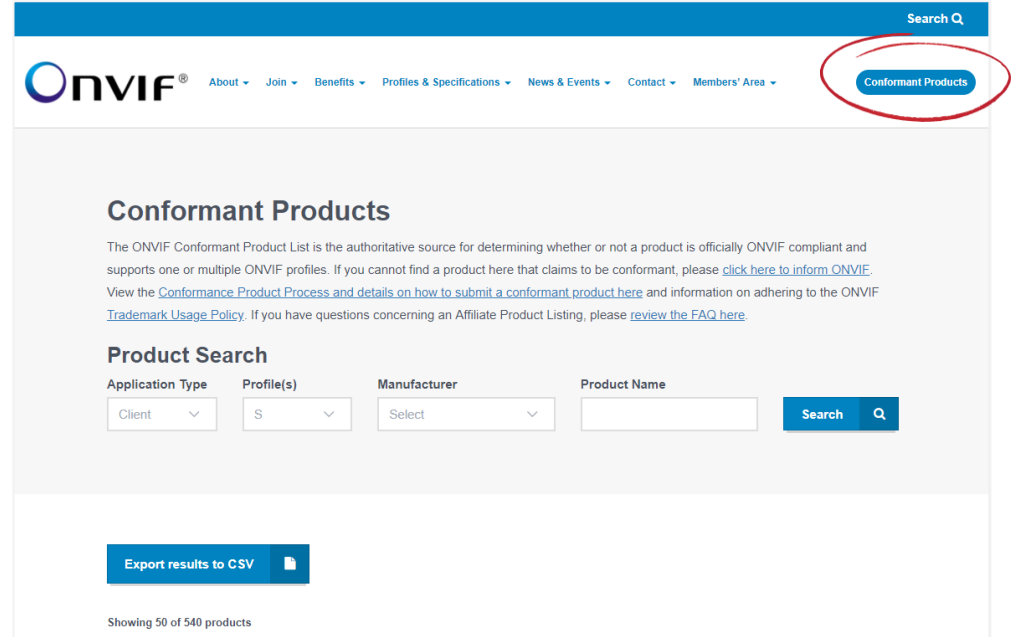
Benefits of an Add-on

- Allows ONVIF profile conformant device/client to claim conformance to additional capabilities outside of profiles
- Easier and quicker to develop and release due to its limited features as compared with a profile



ONVIF Conformant Products

- All conformant products are listed on the ONVIF website
- Only products listed here are guaranteed conformant



The screenshot shows the ONVIF website's 'Conformant Products' page. At the top, there is a blue navigation bar with the ONVIF logo and several menu items: 'About', 'Join', 'Benefits', 'Profiles & Specifications', 'News & Events', 'Contact', and 'Members' Area'. A search bar is located in the top right corner. The 'Conformant Products' link in the navigation bar is circled in red. Below the navigation bar, the page title 'Conformant Products' is displayed. The main content area contains a paragraph explaining the ONVIF Conformant Product List and providing links for more information. Below this is a 'Product Search' section with four input fields: 'Application Type' (set to 'Client'), 'Profile(s)' (set to 'S'), 'Manufacturer' (set to 'Select'), and 'Product Name'. A 'Search' button with a magnifying glass icon is to the right of the 'Product Name' field. At the bottom of the search section, there is an 'Export results to CSV' button with a download icon. Below the search section, it says 'Showing 50 of 540 products'.

<https://www.onvif.org/conformant-products/>

Where to Get More Information

General information on ONVIF	www.onvif.org
Profiles	www.onvif.org/profiles/
List of conformant products	www.onvif.org/conformant-products/



Thank you

For more information visit www.onvif.org

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