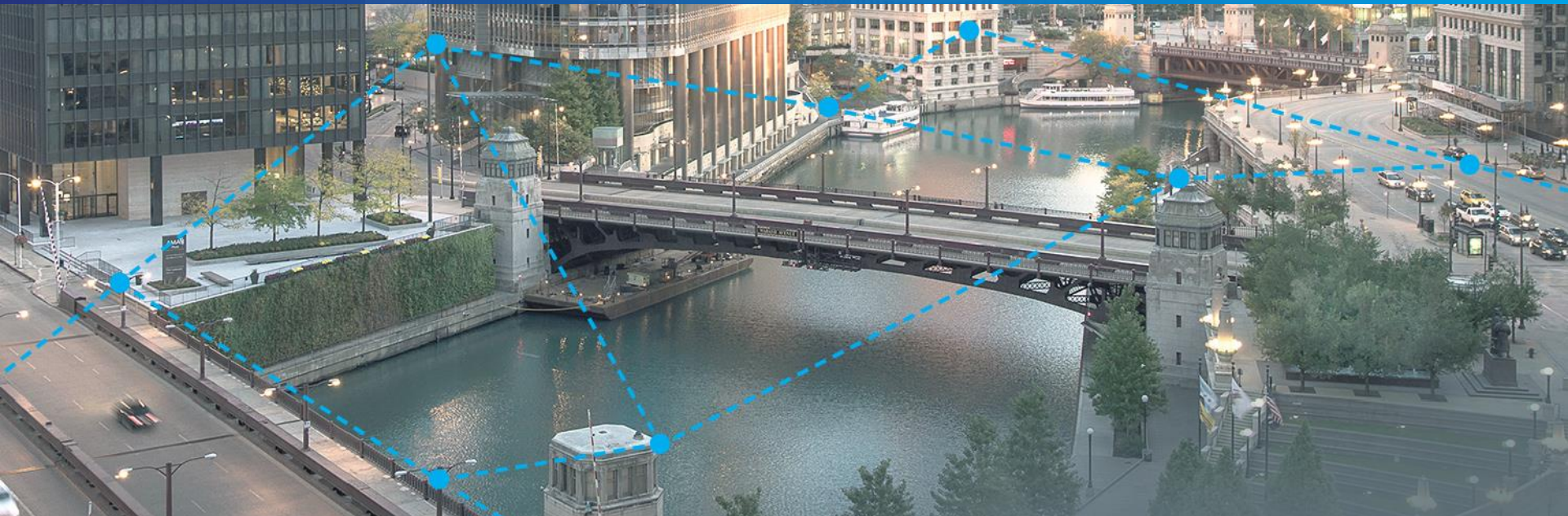


Understand ONVIF in 10 Minutes



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
- Choose between more than 33,000+ 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

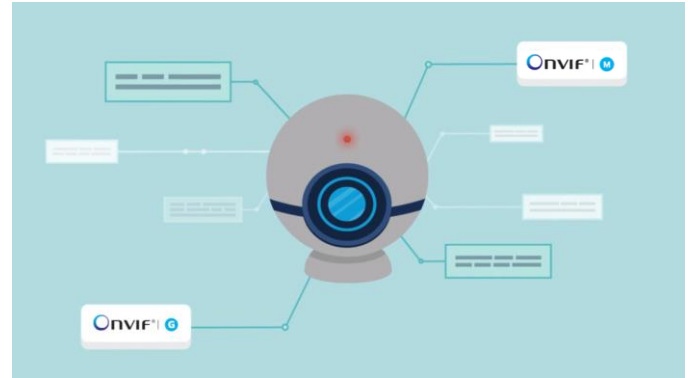
ONVIF Structure

- 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



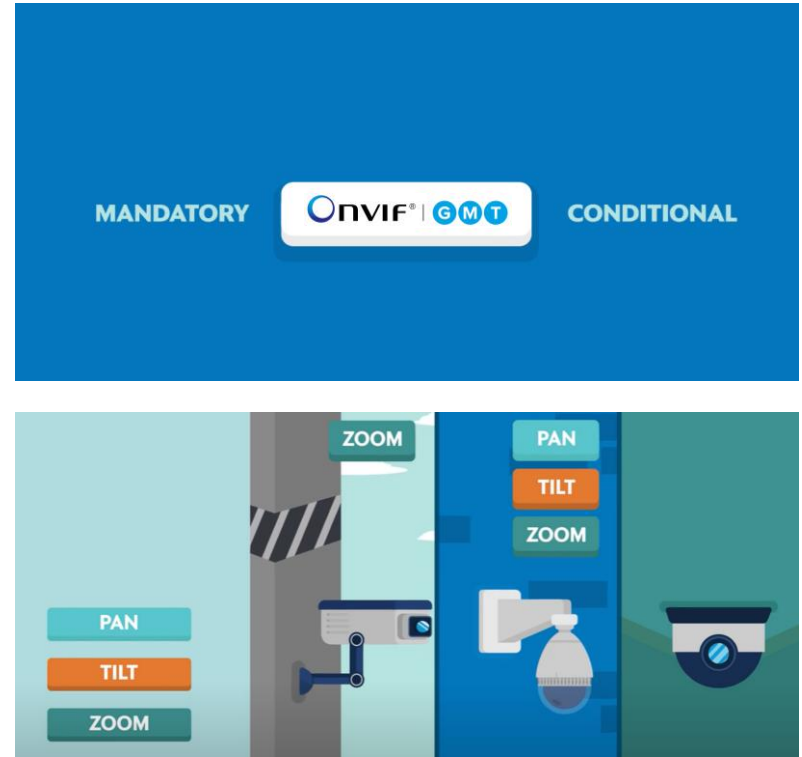
ONVIF Profiles

- 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
 - T** Profile T for advanced video streaming
-

ONVIF Profiles

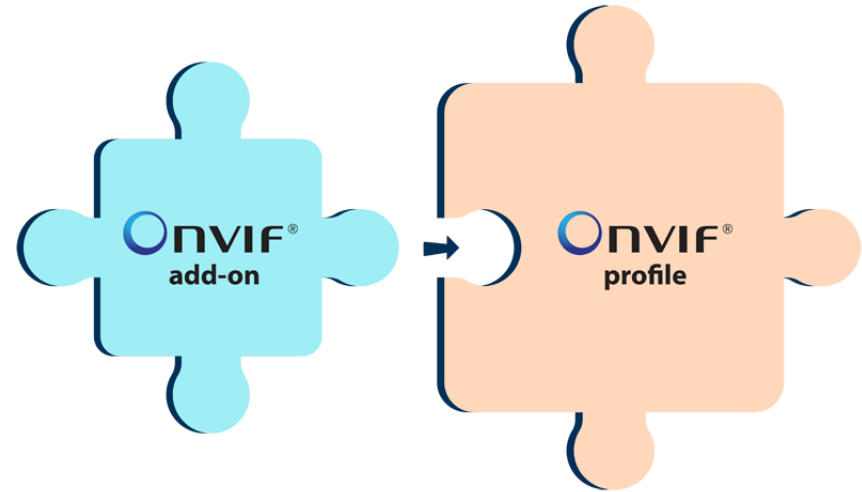
- Online overview of features in each profile
- Check list to see exactly which features a profile covers
- Or check to see in which profile(s) your required feature is included

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	C	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/HTTP/TCP	C	C					C	C							C	C
	RTP/RTSP/TCP/WebSocket							C	O								
	RTP/UDP Multicast					C	C	M	C								

ONVIF Add-on

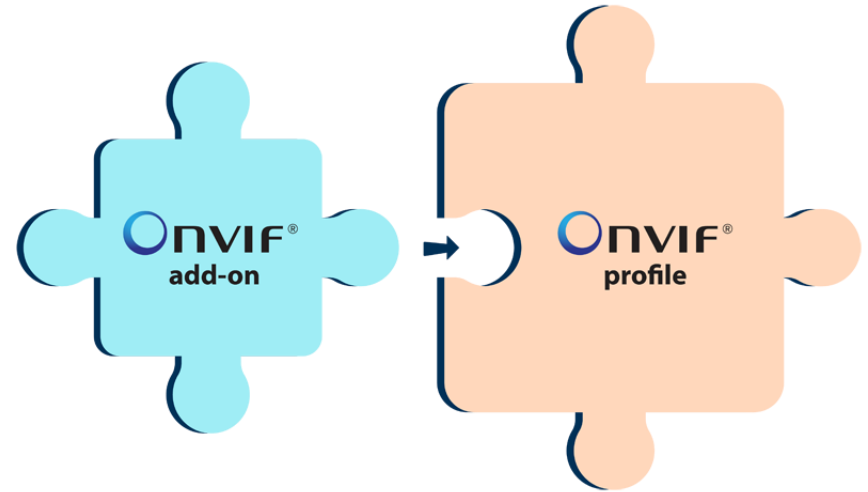
ONVIF Add-on

- 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

Search Q

ONVIF® About ▾ Join ▾ Benefits ▾ Profiles & Specifications ▾ News & Events ▾ Contact ▾ Members' Area ▾

Conformant Products

Conformant Products

The ONVIF Conformant Product List is the authoritative source for determining whether or not a product is officially ONVIF compliant and supports one or multiple ONVIF profiles. If you cannot find a product here that claims to be conformant, please [click here to inform ONVIF](#). View the [Conformance Product Process and details on how to submit a conformant product here](#) and information on adhering to the ONVIF [Trademark Usage Policy](#). If you have questions concerning an Affiliate Product Listing, please [review the FAQ here](#).

Product Search

Application Type	Profile(s)	Manufacturer	Product Name	
Client ▾	S ▾	Select ▾		Search Q

Export results to CSV

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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