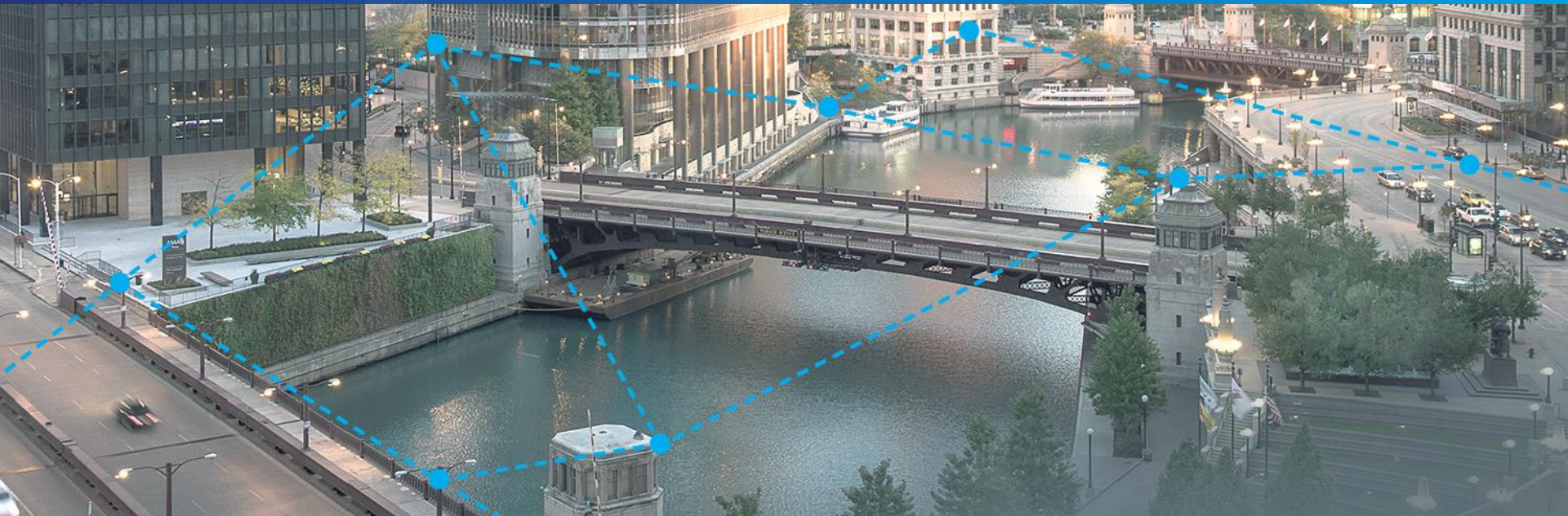


# Understand ONVIF in 10 Minutes



# 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
- The three cornerstones of ONVIF are:
  - Standardization of communication between IP-based physical security products
  - Interoperability regardless of brand
  - Openness to all companies and organizations

# Why Use ONVIF?



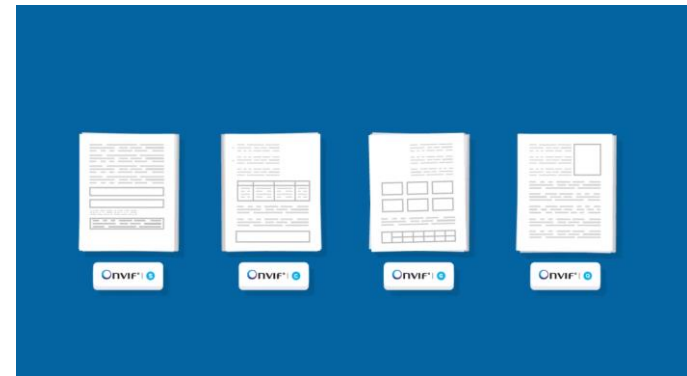
In a multi-vendor environment, ONVIF ensures that products will work seamlessly together.

Chose between nearly 10,000 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.

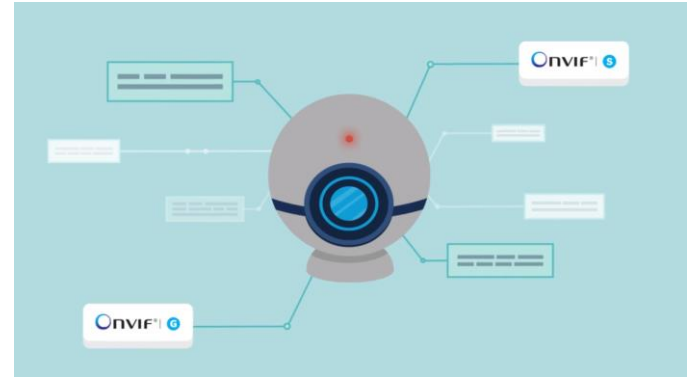
# ONVIF Structure

- 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



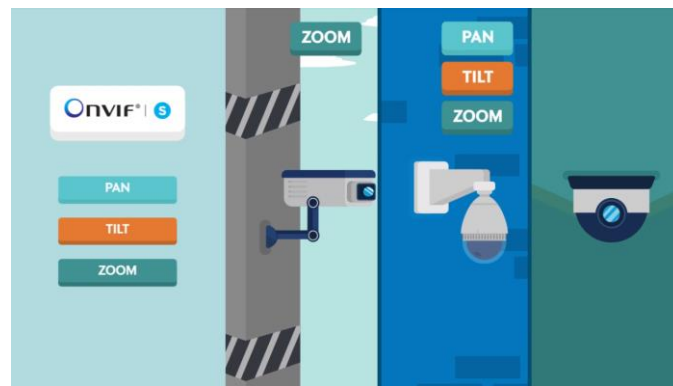
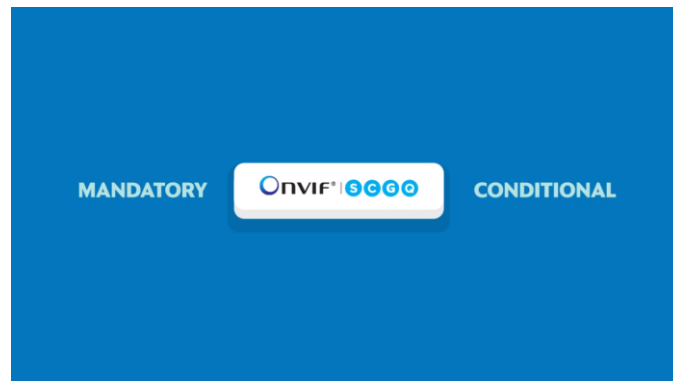
# ONVIF Profiles

- 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

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- S** Profile S for streaming video
  - C** Profile C for IP-based access control
  - G** Profile G for edge storage and retrieval
  - Q** Profile Q for quick installation
  - A** Profile A for broader access control configuration
  - 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	
		Release Candidate											
		Device	Client	Device	Client	Device	Client	Device	Client	Device	Client	Device	Client
General													
<b>System Settings</b>		M	C	M	C	M	C	M	C	M	C	M	C
<b>User Authentication</b>	WS-Username Token					M	M						
	Digest Authentication	M	M	M	M	O	M	M	M	M	M	M	M
<b>User Handling</b>		M	C	M	M	M	C	M	C	M	C	M	M
<b>Query Services and Capabilities</b>		M	M	M	M	M	M	M	M	M	M	M	M
<b>Device Discovery</b>		M	C	M	M	M	C	M	M	M	C	M	M
<b>Default Access Policy</b>				M									
<b>Network Configuration</b>		M	C	M	C	M	C	M	M	M	M	M	C
<b>Zero configuration</b>				C	C	C	C						
<b>Firmware Upgrade</b>				C	C								
<b>Backup and Restore</b>				C	C								
<b>TLS Configuration</b>				C	C								
<b>IP Address Filtering</b>						C	C					C	C
<b>NTP</b>						C	C	C	C			M	C
<b>Automatic IP Assignment</b>				C	C								
<b>Media Profile Configuration</b>						M	C	M	C				
<b>Media Transport</b>	RTP/UDP					M	M	M	M	M <sup>1</sup>			
	RTP/RTSP/HTTP/TCP					M		M					
	RTP/RTSP/HTTPS/TCP									C	C		
	RTP/RTSP/TCP/WebSocket							C	O				
	RTP/UDP Multicast					C	C	M	C				

# 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. The header is blue with the ONVIF logo and navigation links: About, Join, Benefits, Profiles & Specifications, News & Events, Contact, and Members' Area. A red circle highlights the 'Conformant Products' link in the top right corner. The main content area has a white background with the title 'Conformant Products'. Below the title is a paragraph explaining that 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. It includes links for 'click here to inform ONVIF', 'submit a conformant product here', and 'review the FAQ here'. Below this is a 'Product Search' section with a form containing four fields: 'Application Type' (dropdown menu with 'Client' selected), 'Profile(s)' (dropdown menu with 'S' selected), 'Manufacturer' (dropdown menu with 'Select' selected), and 'Product Name' (text input field). A blue 'Search' button with a magnifying glass icon is to the right of the form. Below the search form is a blue button labeled 'Export results to CSV' with a document icon. At the bottom of the page, it says 'Showing 50 of 540 products'.

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

# Where to Get More Information

General information on ONVIF	<a href="http://www.onvif.org">www.onvif.org</a>
Profiles	<a href="http://www.onvif.org/profiles/">www.onvif.org/profiles/</a>
List of conformant products	<a href="http://www.onvif.org/conformant-products/">www.onvif.org/conformant-products/</a>
Intro-videos	<a href="http://www.youtube.com/channel/UCiZI79oCHegilFka4DAuMyQ">www.youtube.com/channel/UCiZI79oCHegilFka4DAuMyQ</a>



# Thank you

For more information visit [www.onvif.org](http://www.onvif.org)

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