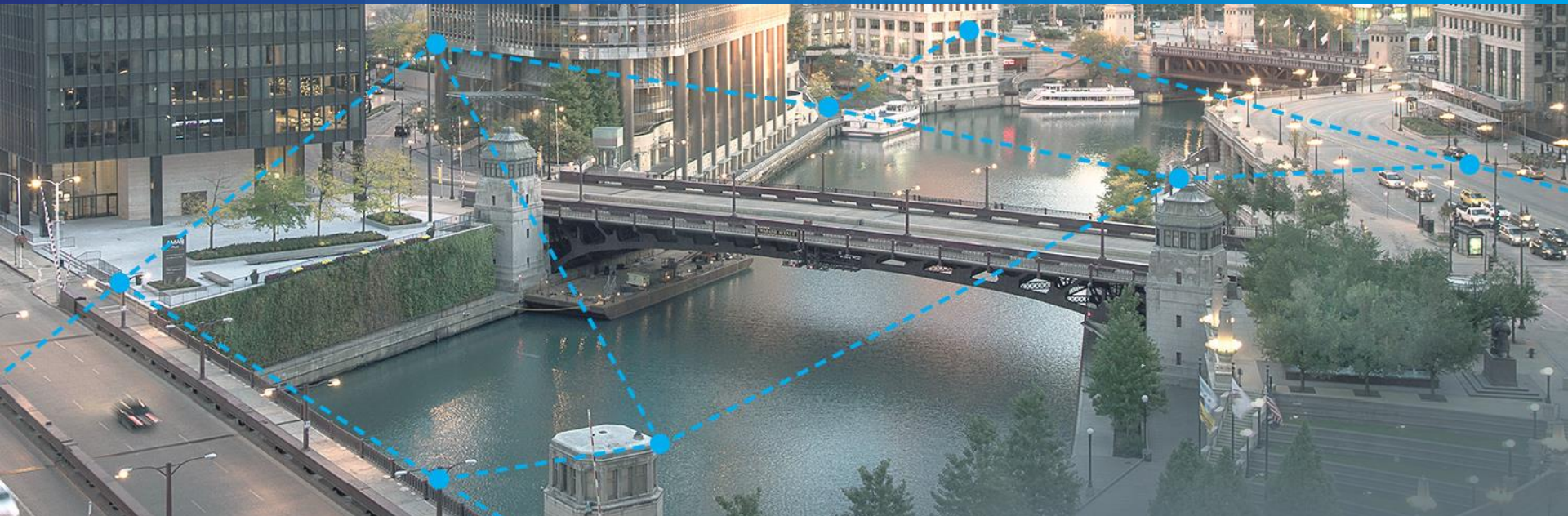


# Understand ONVIF in 10 Minutes



# 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

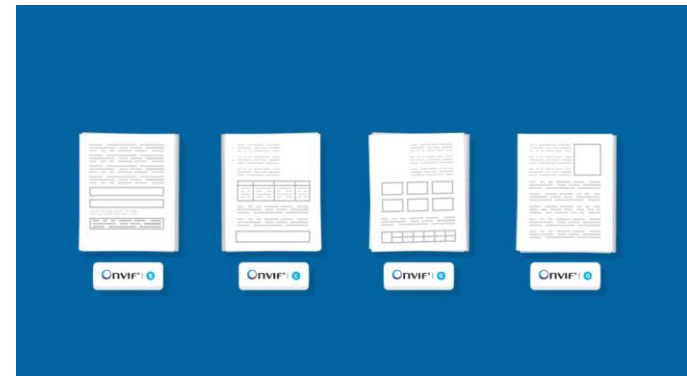
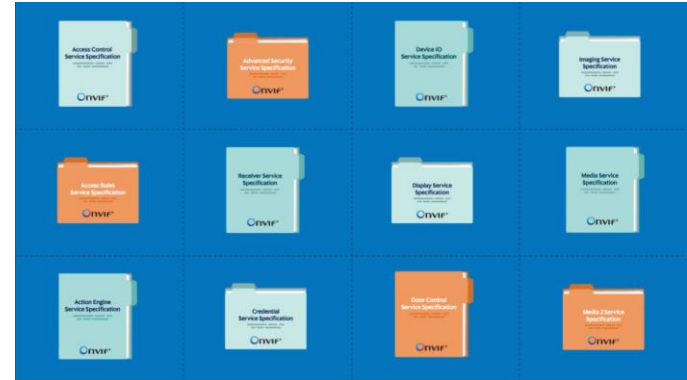
# Why Use ONVIF?



- In a multi-vendor environment, ONVIF ensures that products will work seamlessly together
- Chose between more than 25,000+ 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

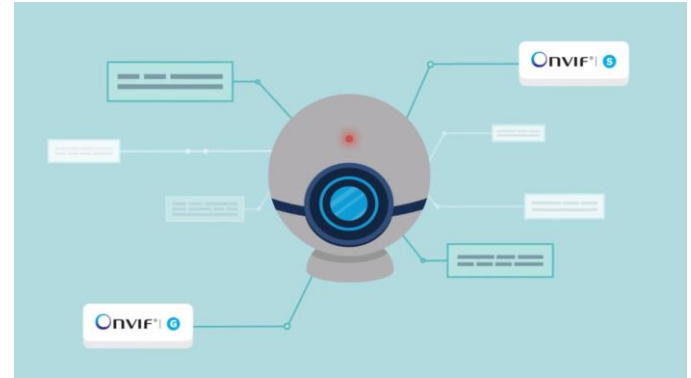
# ONVIF Structure

- 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



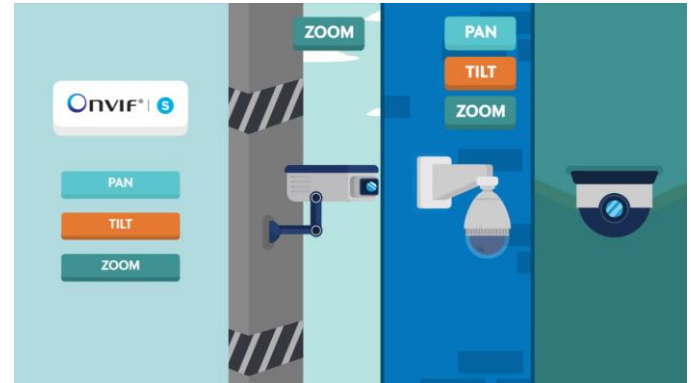
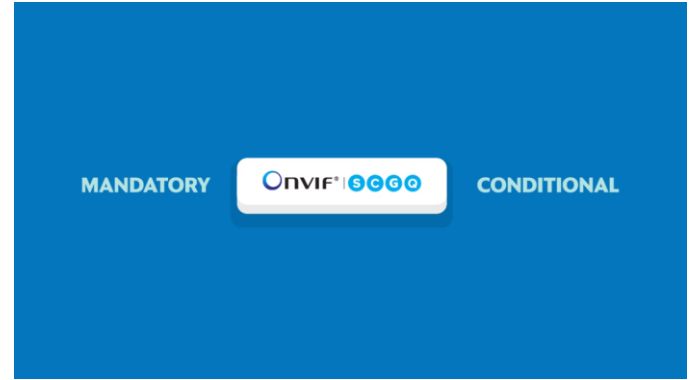
# ONVIF Profiles

- 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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- 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 <sup>1</sup>	M	M <sup>1</sup>							M	
	RTP/RTSP/HTTP/TCP	M	M			M		M								M	M <sup>1</sup>
	RTP/RTSP/HTTPS/TCP	C	C					C	C							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 includes the ONVIF logo and a navigation menu with items like 'About', 'Join', 'Benefits', 'Profiles & Specifications', 'News & Events', 'Contact', and 'Members' Area'. A red circle highlights the 'Conformant Products' link in the navigation menu. The main content area is titled 'Conformant Products' and contains the following text: '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](#).' Below this text 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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