Topics

- ONVIF Add-on Concept
- TLS Configuration Add-on
- Use Cases & Scenarios
- Obtaining Conformance for an Add-On
- Conclusion
- Q&A
ONVIF Add-on Concept
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 Add-on

• For manufacturers
  • 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

• For end-users and system integrators
  • Flexibility for market-specific scenarios
  • Interoperability
<table>
<thead>
<tr>
<th>Key Differences and Similarities</th>
<th>Applicable for ONVIF profile</th>
<th>Applicable for ONVIF add-on</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive enough to allow functional product development on its own</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Adaptable through version handling</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Covers specifications for both client and device</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Both client and device must pass conformance tests to claim conformance</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Can be proposed by any ONVIF member, but can only be developed by ONVIF full and contributing members</td>
<td>Yes</td>
<td>Yes</td>
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</table>
ONVIF TLS Configuration Add-on
TLS Configuration Add-on

For encrypted communication using Transport Layer Security (TLS)

TLS encrypts communications to make it more difficult for cyber threats such as eavesdropping and intrusions to occur.

First ONVIF add-on, enabling secure communications in physical security systems when using products conformant with the add-on.
Why is it needed?

• Cybersecurity is increasingly a priority for businesses
• Key market demand
  • Standardized way to secure communications between IP-based physical security products from different manufacturers
What is it?

For encrypted communication using TLS

• Provides a baseline for encrypted communications between a client and device that conform with the ONVIF add-on

• Regardless of brand, a client with this add-on will be able to configure and update the TLS settings on a device with the same add-on
Use Cases | Scenarios
## Use Cases

### Preventing
- TLS secures communications between VMS and devices, ensuring authentication credentials are not stolen during transmission
- Allows VMS to confirm the identity of the camera using certificates

### Securing
- Prevent unknown parties from observing video data from cameras by encrypting video streams
### Scenarios

The TLS Configuration Add-on can be bundled easily with other profiles and add-ons:

| Combined with Profile T to encrypt video traffic | Combined with Profile M for the security of analytics data |
Obtaining Conformance for an Add-on
Add-on conformance allows ONVIF profile conformant devices/clients to claim conformance to additional capabilities, allowing for even greater functionality.

Streamlined process with limited features

Easier and quicker to develop and release due to its limited features as compared with a profile

Customization options for specific requirements

Adaptability to changing technology and market needs
ONVIF Conformance Process

Self-declaration by ONVIF member for its products

Implement an ONVIF add-on with an ONVIF profile

Pass device/client test tool
New tool versions released every June & December

Submission to ONVIF
DoC Interface Guide Feature list

Developers’ Plugfest
Verification with other member conformant products

For details, see the ONVIF Conformance Process at onvif.org/profiles/conformance
How to find Add-on Conformant Products

• Check that the product and firmware/software version is listed here on the ONVIF website at: onvif.org/conformant-products/

• Site is the only authoritative source for all ONVIF conformant products
Product Search

1. Select the add-on
2. Enter values in other fields (optional)
3. Run the search

Please enter values in at least one of the five fields to run the search.
Conclusion
Add-on Concept and TLS Configuration

Add-on Concept

- An adaptable feature set that complements existing profiles
- Mandatory add-on conformance tests

TLS Configuration

- Encrypted communication in physical security systems
  - First ONVIF add-on
- A standardized way for a client to be able to configure and update TLS settings on a device
## Benefits

<table>
<thead>
<tr>
<th>For manufacturers</th>
<th>Add-on Concept</th>
<th>TLS Configuration Add-on</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>● Quick responsiveness</td>
<td>● A differentiating feature for the ONVIF conformant product portfolio</td>
</tr>
<tr>
<td></td>
<td>● Flexibility of features</td>
<td></td>
</tr>
<tr>
<td>For end-users and system integrators</td>
<td>● Flexibility for market-specific scenarios</td>
<td>● Unified configurations and updates of TLS setting</td>
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<td></td>
<td>● No need to look outside the ONVIF ecosystem for specific demands</td>
<td>● More peace of mind from cyber threats</td>
</tr>
</tbody>
</table>
Thank you

For more information, visit www.onvif.org

Contact us at https://help.onvif.org