

This document provides instructions on how to connect to an ONVIF-compliant camera using the ONVIF protocol. It begins by explaining that ONVIF is an open industry forum that promotes standardized interfaces for IP-based physical security products.

The document lists the requirements for connecting to a camera, which include having an ONVIF-compliant IP camera, a network connection, and either ONVIF client software or a custom application that supports ONVIF API calls.

The steps to connect to the camera are as follows:

1. **Network Setup:** This step involves ensuring that the camera is properly connected to the network and assigning an IP address to the camera, either statically or via DHCP.
2. **Discovering the Camera:** The document explains how to use the GetServices API to discover the ONVIF services provided by the camera. This involves sending a request to the camera's IP address to retrieve the list of services.
3. **Retrieving Device Information:** The GetDeviceInformation API is used to retrieve basic information about the device, such as the manufacturer, model, firmware version, and serial number.
4. **Fetching Profiles:** The GetProfiles API from the Media service is used to fetch available profiles, which define configurations for video streams, including resolution, encoding, and frame rate.
5. **Obtaining Stream URI:** The GetStreamUri API is used to obtain the RTSP stream URI for a given profile. This URI can be used to access the live video stream.

The document also briefly mentions how to control PTZ (Pan-Tilt-Zoom) features using the ContinuousMove API, and how to handle events using the PullMessages API.

In conclusion, communicating with an ONVIF-compliant camera involves using specific SOAP-based APIs to discover the device, retrieve its information, access profiles and stream URIs, control PTZ functions, and handle events. Following the standardized ONVIF protocol ensures interoperability and ease of integration across different devices and platforms.