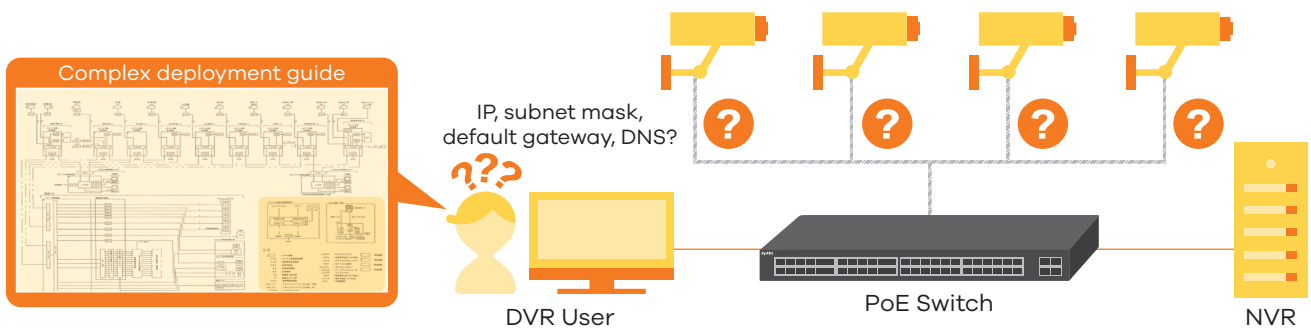# Migrating to IP surveillance
Utilize the Ethernet Network for Surveillance Safety

Today, Ethernet IP (Internet Protocol) is the de facto standard of most business networks. The first benefit of IP networks is that one Ethernet infrastructure can provide multiple services such as data, voice, video and surveillance to save extra efforts laying coaxial cables; building on top of the IP network is the high-definition IP CAM also calls for high-speed Ethernet services. However, the migration can be a challenge for operators or administrators lacking Ethernet and IP knowledge.

Learning about IP camera setup or Ethernet switches can be time-consuming and even intimidating to typical CCTV operators.

Zyxel's Ethernet Switch solution can be easily deployed and integrated along with the unique Zyxel One Network technology. With the comprehensive Zyxel PoE solutions, businesses can easily embrace the advantages of IP surveillance technology.

Complex deployment guide

IP, subnet mask, default gateway, DNS?

DVR User

PoE Switch

NVR

Challenges of migration from CCTV to IP surveillance

High PoE Power Budget

The high power budget support enables Zyxel PoE switches to comfortably accommodate the power-hungry PDs (Power Devices), like Dome Camera, PTZ (pan–tilt–zoom) camera, video IP phones, and 802.11ac access points which required on a modern IP surveillance network.

Flexible Deployment

With one single cable, Zyxel's PoE switches ease PD deployments especially for locations with hard-to-reach power outlets. In addition, some of the Zyxel PoE switches feature combo (SFP/RJ-45), SFP or SFP+ ports to make long-distance deployment with better resiliency. In addition, Zyxel PoE switches support the 802.3at standard, which makes them suitable for high-density surveillance deployments

Complete PoE Solution

PoE Injector

PoE injection is an economical solution for installations with 2 to 4 PoE elements. The PoE injector is a single-port PoE device in which both power and data can be delivered to other PoE devices (PD) via a single CAT-5 Ethernet cable without extra power supply. The PoE injection is easy to use without any configuration.
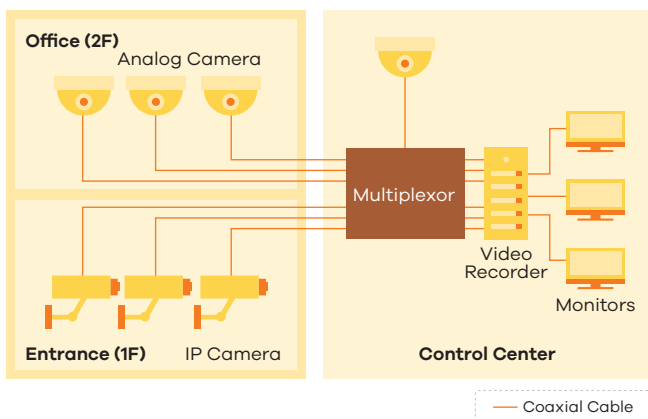
PoE Switches

Applying PoE switches to IP surveillance infrastructures is not only economical for cost control since system power and data are transmitted via a CAT-5 Ethernet cable, but it is also convenient for network administrators to maintain and monitor system functionality.

Zyxel One Network Add-on Features

The Zyxel One Network combines multiple unique, innovative technologies to deliver the easiest, most efficient network setup and initial provision for businesses. The Smart Connect feature of Zyxel One Network can actively present important information of the attached IP CAM, including its IP & MAC addresses and PoE power consumed, which is essential for

troubleshooting. In addition, remote power recycling of the attached IP CAM can also be performed when needed – without the need to go on-site or to figure out how it's connected. Moreover, Zyxel One Network also provides the flexibility to be integrated into third-party equipment, like NVR, to significantly improve efficiency of IP surveillance management.

Traditional CCTV Surveillance

IP-based Video Surveillance