ID Systems

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Application Integration & Connectivity
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IDS Surveillance Camera Primer and Recommendations

1. Monitored services

In the early 2000's police departments across the nation discontinued direct to police burglar alarm, panic alarm, and distressed home owner response services. By 2005 most municipalities had also implemented false alarm penalties. These services are now provided by private alarm monitoring companies. The cheapest of these services starts at $9 a month, and does not include utility and infrastructure expenses. It is interesting to note that although these companies do contact local law enforcement as part of their service, there is a requirement to validate these calls, which requires contacting the owner of the service before law enforcement is dispatched. Non-validated and false alarms can incur a penalty as described by local law enforcement policies.

2. Camera infrastructure

The costs of both DVR's and Webcam's have dropped significantly in the last five years. Residential Webcam's can now be procured for as little as $100 per unit. The average residential consumer is often surprised by the cost of camera installation, even for WiFi implementations. The initial signal cabling expense for CCTV (coaxial cable) or Webcam's (Ethernet cable) is often 3 times the initial purchase cost of the DVR or Webcam. Electrical power cabling for cameras can further increase the installation expense by a factor of 10! Finally, as few as 5 Hi definition cameras in the a residential network may increase monthly Internet expenses by a factor or 2 or 3 times the base cost if using a metered Internet connection.

3. CCTV and DVR's

DVR's (Digital Video Recorders) are essentially CCTV Systems connected to a local Internet capable "DVR" server. These systems have the advantage of operating un-monitored and continuously. They can record streaming video content, which can be reviewed at a later date. If the DVR is connected to the Internet remote reviewing is possible. DVR systems can support camera TPZ (Tilt, Pan, Zoom) and motion alarm functionality; however these features are expensive to implement as they require special controllers and cabling. A major advantage of CCTV and DVR's systems is that they do not impact local network or Internet resources.

4. Web cameras

IP Web Cameras or "Webcams" are simply cameras embedded with small web servers. The cost of these devices has dropped from over $800 in the early 2000's to less than $200 today. Webcam's in this price range include TPZ, motion sense, relay control, and may be night vision capable. Webcam's can be certified for indoor and outdoor operation. More expensive Webcam's above $1000 support high definition resolutions (using H.264 compression). Advanced WebCams may have features such as virtual TPZ, image enhancement, and secure excripted operation. Webcam's with these advanced video features can exceed $20,000 per unit. Know that the use of such advanced video features will consume network bandwidth at incredible rates and require high capacity network and storage devices to store the images.

5. Remote Access

Remote access is a technology that allows an administrator to remote control and configuration of both camera and DVR Systems. WebCams and DVR systems are capable of remote access which **is not** a feature or requirement of the implementation deployed for the Sunrise Terrace Camera Project. To project your privacy the SunRise Terrace implementation model is strictly outbound FTP under the complete control of the home owner.

6. Deployment Options

As mentioned above the expense to deploy a wired camera can easily exceed the cost of the camera itself. Our project recommends use wired cameras to isolate and preserve network bandwidth within your home. However, the WiFi option is available to lower the expense of camera placement. Properly configured, the motion detection trigger should not result in excessive snapshot frequency or size. We currently limit snapshots to 0.5 MegaBytes which should not burden the typical residential network. In this case, if outside power is already available the deployment of a weather proof IP camera using WiFi connectivity should be quite affordable.