Introducing TOP WATCH 1.0
Internet Video Service

Service Highlights

- ✍ Low-cost, **extremely** powerful Internet-based video surveillance
- ✍ Innovative technology provides maximum function and ease-of-use
- ✍ Live-action, recent activity, and infinite historical archives available
- ✍ Relevant for surveillance, entertainment, and remote troubleshooting applications
- ✍ Access and configure any number of cameras from Internet-accessible locations
- ✍ You receive the highest level of customer service and responsiveness

TOP WATCH is a revolutionary Internet-based video service that brings new value to video surveillance, security, remote troubleshooting and entertainment applications for businesses of all sizes.

Introduction

What-Happened.com is an innovator in networked video. TOP WATCH, an Internet-based video service, was designed by What-Happened.com to specifically provide a superior level of value for security and entertainment applications, and at the same time substantially reduce costs compared to competitive alternatives.

TOP WATCH eliminates the security, administration, and maintenance problems that result from hosting your own video monitoring systems. Further, it *adds* new functionality to security and entertainment applications through valuable software innovation (patents pending).

Overview

Current technology places the command, control and intelligence of image processing on the system capturing video images. What-Happened.com architecture completely changes this model by centralizing the intelligence and enables new levels of utility and cost reduction. TOP WATCH has been designed for maximum ease-of-use. Once you've setup your cameras, simply spend 5 minutes installing the snapshot software. What-Happened.com manages all the rest, and provides features and functions never available before. In fact, images from your cameras can be available with TOP WATCH in 60 seconds of completing your installation! Moreover, all your cameras, whether in a single building or scattered across the globe, can be controlled and monitored from a single location.

Administration

Multiple Cameras, One Web Site

The TOP WATCH architecture is completely different from traditional approaches in that it uses your local computers as "frame capturing" devices and "frame forwarding" devices. This way, your images are uploaded to a centralized What-Happened.com datacenter where powerful software can be applied to the images and all your cameras are accessible from a single mouse click.

Competitive alternatives have significant disadvantages in the areas of scalability, utility, and security. Video image files are stored where they are captured (either with webcam software or digital video recorders (DVRs). In contrast, What-Happened.com has designed the next generation of Internet-based video services, leveraging the power of the Internet for maximum benefit in most applications.

There are many advantages to the TOP WATCH approach. For example, you can control the options and settings of all your cameras (worldwide) from a single, secure location. If you want to change the frequency of image capture, contrast/brightness, or motion detection settings, you can do it all (and more) from any web browser. This means you save

valuable time and money by avoiding the training costs of remote support staff. As well, this increases the value of your video equipment tremendously.

Another benefit of centralization is that the management of stored images is outsourced to What-Happened.com servers. You no longer need to worry about where to put large (or many files), running out of disk space, backing-up the images, and being limited in how much history data you can keep. All the maintenance and archiving of images is managed by the TOP WATCH service. You simply specify how many days you want to keep online, and how long you want What-Happened.com to keep optical backup copies of your images.

With your centralized control panel you can view thumbnails of all your cameras and quickly switch between views to see the live image, recent activity, animations of archived data, and email or print single-frame images.

Data Security and Confidentiality

What-Happened.com is very concerned about privacy and confidentiality of data. In fact, our founder has a career history of physical and data security, including 4 network security-related patents and two awards for secure remote access technology.

Whatever your security needs may be, TOP WATCH provides you with a wide array of security options, giving you complete control and flexibility. For sensitive applications, you may choose all of our confidentiality elements: usernames, passwords, SSL (HTTPS) encryption, validated IP addresses for uploaded frames, and encrypting all images on disk. Optionally, the TOP WATCH service can be licensed as software to run at your datacenter.

An advanced security feature that leverages the Internet and traditional phone networks, detects when images have stopped being uploaded from your camera(s). If desired, the administrator can configure an idle time parameter which, if exceeded, causes TOP WATCH to *automatically* call a phone number (or series of phone numbers), to indicate your cameras have stopped uploading. This could be a result of an intruder, power outage, computer system failure, or network interruption. Nevertheless, for highly sensitive applications and high-profile entertainment sites, the Knowtify™ feature is extremely critical to successful and secure operations.

TOP WATCH supports an "administrative" account with all capabilities, and a "view-only" account that does not have permission to change camera settings.

Internet Image Technology

Optimized Upload Processing

What-Happened.com has optimized the TOP WATCH architecture to accommodate the frequent uploading of single image frames. This approach has both the benefits of near real-time capability, but without the substantial network and storage load of real-time video transmission. Furthermore, because bandwidth is optimized, uploaded images may be larger and have greater quality compared to streaming real-time video.

You have complete control over the interval at which image frames are uploaded to TOP WATCH servers. Depending on your network capabilities, the resolution of the cameras, budget, and the number of cameras, your uploads could be as frequently as twice per second or as infrequent as once every 10 minutes.

There are many benefits to this approach. You can easily control which images are saved, based on sophisticated motion detection algorithms. As well, you can apply many effects to the images upon their receipt at What-Happened.com

What-Happened?com

(dithering, color/grayscale conversion, resizing).

Animations

Most importantly, you can **animate** the series of still images into a live-action video stream. You have flexibility over how fast you see the stream, and what quality you want the animation (depending on your network bandwidth).

You can save animations to your local computer for later use, as well as "single-step" through each frame of the animation to accurately see "what happened."

Motion Memory™ Technology

One of the major benefits of the TOP WATCH service is the ability to leverage sophisticated motion detection technology. Motion Memory "remembers" what happens **before** and **after** a motion event has occurred. This gives you the entire context of the event, not just an isolated sample. The administrator controls how many minutes are recorded before and after an event occurs. Even better, you see an indication on a per-frame basis of what frames were part of the motion and what frames were part of the context.

All saved frames are date/time-stamped with one of 20 configurable fonts.

Motion Memory allows you the most sophisticated options available. You can specify regions of exclude and include zones for each camera. You can specify what hours in the day correspond to "night" mode. This will automatically adjust the motion detection algorithms during darkness to avoid unnecessary motion detection from cameras overcompensating when the field is dark.

You have 255 levels of sensitivity to choose from and these can be adjusted at any time.

Your site's physical security can be ultimately enhanced by enabling the Knowtify option in the event of motion (or lack of motion) during a specific time period. This means that you will receive an automated phone call if motion is detected (or if motion is not detected). This is invaluable for environments where there is a stark contrast between cases where there should or should not be motion.

Online and Archival Storage

You can configure how many days of online history you want to keep available.

Further, if you have legal, statutory, or other requirements that necessitate long-term storage, What-Happened.com offers an archival service. Each evening the day's images, which are older than what is to be retained online, are copied to optical storage. These optical backups are kept for as long as you keep the service, and What-Happened.com will provide the contents to you within 24 hours upon request.

Protection of Your Existing Webcam Investment

You may have an existing webcam investment and infrastructure in-place, but want to utilize the TOP WATCH features without modifying your configuration.

TOP WATCH has been designed to easily extract images from existing webcam sites and upload these images into TOP WATCH as if they were coming from the camera directly. This means that your existing site can benefit from all the motion detection, animation, and other features that are part of TOP WATCH without compromising your existing infrastructure.

Usage and Feature-based Pricing

The TOP WATCH service is conveniently priced as a function of desired features, frequency/size of uploaded images, and

storage used. This way, you pay only for the features you need.

There is no fee for the number of users accessing the cameras, and simultaneous viewing of images and animations by any number of users is supported.

Applications Scenarios

More than relevant for security and surveillance, TOP WATCH is perfect for a variety of applications. Remote troubleshooting can be implemented on-demand, augmented with head-mounted wireless cameras.

Hotels, bars, and other entertainment venues can benefit from a variety of innovative demand-creation capabilities.

Service, Support, and Consulting

What-Happened.com offers the highest level of customer service to ensure your application's maximum uptime and utility.

You will find What-Happened.com to be one of your most responsive and reliable service providers. All customer communication receives the highest priority. We welcome your feedback and look forward to establishing your trust in us as a valued business partner.

Consulting arrangements are available on an as-needed basis to aid in the optimal design of Internet-based video services for your business.

Requirements

For Video Capture

- ✍ Microsoft Windows 2000 or XP system,

- ✍ WebcamXP™ for Microsoft Windows-based image capture

- ✍ At least one camera (wired or wireless) with appropriate physical connection to one of the above computer systems. Typically, the connection would be USB/Video interface, PCI/Video, or 802.11 Network Video cameras.

- ✍ Broadband Internet connection (dial-up is insufficient for image uploads)

For Animation Viewing

Internet Explorer or Mozilla with DIVX plug-in. Internet Explorer requires Windows Media Player 9 or greater and Direct X 9.0 or greater.