ViewVault is a powerful audio/video recording platform based on Intel's state-of-the-art i7 processors, TEKVOX's robust and proven plenum-grade ceiling box and innovative, patent-pending TEKVOX software that provides a powerful, cost-effective and flexible solution to a multitude of A/V recording applications. Wherever possible, ViewVault solutions employ commercial off-the-shelf technologies to reduce cost and improve reliability.

As a member of the TEKVOX family of Drop-In A/V™ solutions, VIewVault is a factory-built, factory-programmed system that is ready to install without on-site programming or costly integtration. In its primary mode of operation, ViewVault requires only a single connection to a 110V power source and automatically goes into operation.

Mechanical System

ViewVault is housed in the proven rugged TEKVOX 78038 ETL-certified ceiling box. Secured to building infrastructure with included safety cables and protected with a combination lock, the enclosure houses the ViewVaule recording system and is accessible only to authorized personnel.

Included with the ViewVault is a customer-specific camera/microphone kit and all cables and accessories needed to quickly install the system. The mechanical system defends the ViewVault contents against all but the most determined physical attacks.

Camera/Mic System

ViewVault leverages the great variety and sophistication of commercially available camera systems. The default system includes an advanced LogiTech camera with 120 degree viewing angle and 25 ft plenum-rated cable. This single camera, located in a suitable corner, can provide 100% visibility for the vast majority of room configurations. Where needed, an additional Logitech camera and audio-only microphones can be added for room-specific applications. TEKVOX supports a wide-variety of make & model cameras and can support virtually any room configuration with only a modest increment in base cost.

Electronics System

ViewVault is based on the latest generation of the Intel i7, the most modern media-friendly microprocessors in the industry. Coupled with 16+ GB of dynamic RAM, 2+ TB of permanent storage and 32+ GB of removable storage, the ViewVault core is a powerful platform for innovative recording applications.

The base configuration can be enhanced with networking extensions, back-up drives, larger removable media and a variety of other options. The system is resilient and will automatically start operation when powered on and will resume operation automatically after any interruption in power.

A simple visual indicator is provided to verify system integrity without needing to access or open the systems.

Recording System

ViewVault records all available inputs based on scheduled process that is programmed into the system by TEKVOX at manufacturing time. This schedule can be easily modified by the user as needed with free tools provided by TEKVOX. In addition, ViewVault can be configured to detect motion events via its camera and record ad-hoc for 30 minutes after the motion trigger.

ViewVault utilizes a standard Windows file structure to store media tagged by date and time in 30 minute windows. It is very simple to navigate a ViewVault repository when needed to retreive content.

Generally, a classroom schedule would be pre-programmed into the ViewVault for 'always record' time slots and ViewVault would capture motion-activated events outside this schedule. The system can be easily customized for any mix of scheduled/ad-hoc recording.

ViewVault uses H.264 technology for real-time recording to is main storage. During 'off-time', ViewVault automatically transcodes recorded media to H.265 for long-term storage.

These recordings are saved to the long-term storage and are also written to a removable solid-state storage unit ("Thumb" drive) inserted in a USB slot.

In general, recordings made during a normal 'day', are transcoded and stored in both locations prior to the start of the next day.

In typical operation, ViewVault records with no human intervention or outside resource until a request for 'production of media' is made. In most cases, if the request is within 30 days of the recording date, an administrator with access to the ViewVault combination, can simply unlock the enclosure, remove the Thumb drive, download the requested day/time media and replace the Thumb drive.   This operation requires but a few minutes with very little training or overhead.

Recorded media is automatically deleted at the end of the pre-programmed retention period (e.g. 6 months for SB507).

Extensions

Although primarily designed to operate as a robust 'black box' recorder with no outside connection, ViewVault can be configured for a variety of 'extended operation', including:

- WiFi connectivity for remote non-real-time retrieval of recorded media selection
- Ethernet connectivity for remote non-real-time retrieval of recorded media selection
- Ethernet connectivity for real-time streaming of H.264 recordings or non-real-time archival of H.265 recordings
- Customer-specific requirements

Operating modes

1. Black box: records and stores automatically. No network connection needed (or wanted!). Safe, secure, reliable and lowest possible cost. No reliance on network, network bandwidth or any other external factor except power. Extremely reliable, attention only needed for media production requests which are simple to service. Cannot be attacked or compromised expect by local physical action.
2. 'Lightly' connected: Blackbox + WiFi/LAN access for non-real-time media download only. This instance is *not* network manageable.
3. "Connected": full streaming, network manageability, …

Conclusion

ViewVault provides a very cost-effective, reliable means to implement demanding recording applications including full compliance to Texas SB507 as well as many other applications. Deployment can start with a simple black-box instance which can be incrementally upgraded, if needed, over time.

TEKVOX provides the most flexible A/V recording platform in the industry.