System Assessment and Validation for Emergency Responders (SAVER)

Video Management Software Market Survey Report

December 2014

FOREWORD

The U.S. Department of Homeland Security (DHS) established the System Assessment and Validation for Emergency Responders (SAVER) Program to assist emergency responders making procurement decisions. Located within the Science and Technology Directorate (S&T) of DHS, the SAVER Program conducts objective assessments and validations on commercially available equipment and systems, and develops knowledge products that provide relevant equipment information to the emergency responder community. The SAVER Program mission includes:

- Conducting impartial, practitioner-relevant, operationally oriented assessments and validations of emergency response equipment

- Providing information, in the form of knowledge products, that enables decision-makers and responders to better select, procure, use, and maintain emergency response equipment.

SAVER Program knowledge products provide information on equipment that falls under the categories listed in the DHS Authorized Equipment List (AEL), focusing primarily on two main questions for the responder community: "What equipment is available?" and "How does it perform?" These knowledge products are shared nationally with the responder community, providing a life- and cost-saving asset to DHS, as well as to Federal, state, and local responders.

The SAVER Program is supported by a network of Technical Agents who perform assessment and validation activities. As a SAVER Program Technical Agent, the Space and Naval Warfare Systems Center (SPAWARSYSCEN) Atlantic has been tasked to provide expertise and analysis on key subject areas, including communications, sensors, security, weapon detection, and surveillance, among others. In support of this tasking SPAWARSYSCEN Atlantic developed this report to provide emergency responders with information gathered during a market survey of commercially available video management software, which falls under AEL reference number 14SW-01-VIDA titled Systems, Video Assessment, Security.

Visit the SAVER website on First Responder.gov (http://www.firstresponder.gov/SAVER) for more information on the SAVER Program or to view additional reports on video management software or other technologies.

POINTS OF CONTACT

SAVER Program
U.S. Department of Homeland Security
Science and Technology Directorate
FRG Stop 0203
245 Murray Lane
Washington, DC 20528-0215

E-mail: saver@hq.dhs.gov
Website: http://www.firstresponder.gov/SAVER

Space and Naval Warfare Systems Center Atlantic
Advanced Technology and Assessments Branch
P.O. Box 190022
North Charleston, SC 29419-9022

E-mail: ssc_lant_saver_program.fcm@navy.mil

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1. INTRODUCTION

Video management software is widely used by law enforcement, corrections, and security personnel in both covert and overt surveillance operations. It enables users to view the live video from multiple camera feeds, as well as record, playback, and export video files for evidentiary purposes. To provide emergency responders with information on video management software, the System Assessment and Validation for Emergency Responders (SAVER) Program conducted a market survey.

This market survey report is based on information gathered from April to August 2014 from vendors, Internet searches, industry publications, an emergency responder survey, and a government issued Request for Information (RFI) that was posted on the Federal Business Opportunities website. For inclusion in this report, the video management software had to meet the following criteria:

- The product is strictly a software solution.

- The product does not require proprietary hardware from the vendor.

Due diligence was performed to develop a report that is representative of products in the marketplace.

2. VIDEO MANAGEMENT SOFTWARE OVERVIEW

Video management software allows for highly scalable video network monitoring. It may be utilized in the monitoring of a single camera feed at a single location or to monitor numerous video feeds at various locations. In addition to monitoring, video management software may permit end users to perform other key functions such as manipulate the camera(s); view, record, playback, and export video; configure alarms such as motion detection; authenticate video; manage user rights; and configure settings for recorded audio and video.

Some of the features to consider in video management software include: licensing and costs (e.g., number of cameras and clients supported, as well as associated costs); video export and playback capabilities; resolution, compression, and frame rate options; multi-streaming capabilities; bookmarking capabilities; and hardware requirements.

2.1 Licensing and Costs

Video management software licensing and costs vary by vendor. Cost is often determined by several key factors including the initial software licensing fee, number of clients and cameras supported, and the terms of the software maintenance agreement.

Many vendors charge one-time fees for each software license and/or a connection fee for each camera supported. Typically, the more cameras supported by the video management software, the higher the costs. A small agency may need a lesser number of cameras while a large agency may need more scalability or an unlimited number of cameras. Additionally, some vendors may only sell solutions based on camera bundles; requiring the agency to purchase in specific increments, such as bundles of 4 or 16. Software licenses are typically distributed and downloaded online through the vendor's portal.

2.2 Video Export and Playback

Saved video may need to be exported for evidentiary purposes. Many video management software products allow for video to be exported in common formats, such as audio video interleaved (.avi), which can be easily played on most computers without a proprietary player. While this is convenient, there are times when law enforcement must present authenticated video. Authenticated video can be provided, typically in proprietary formats, as official evidence and allows for proof that evidence has not been tampered with or altered. Playback of authenticated video typically requires a vendor's proprietary player.

2.3 Resolution, Compression, and Frame Rates

The image resolution—the amount of detail captured in an image—is normally measured in pixel dimensions (e.g., 720x480 pixels). Typically, more pixels result in a higher quality image and larger file size. Pixel dimensions are oftentimes reported in the following formats:

- Common Intermediate Format (e.g., CIF [352x240], 2CIF [704x240])
- Video Graphics Array (VGA, 640x480) and Super VGA (SVGA, 800x600)
- Progressive HDTV (e.g., 720p [1280x720], 1080p [1920x1080])
- Megapixels (e.g., 12 MP [4000x3000], 20 MP [5400x3600]).

Video management software supports a variety of resolution options and resolution may be limited by the resolution capabilities of the camera(s) as well as the agency's network bandwidth and storage space. Compressing video for streaming reduces latency and break-up of the video stream when bandwidth is limited or variable. It may also be used as a means of conserving drive space. Video compression formats for streaming video include H.263, H.264, and H.263+. Video compression formats for saving include Joint Photographic Experts Group (JPEG) 2000, Motion Joint Photographic Experts Group (M-JPEG), Moving Picture Expert Group (MPEG)-4, MPEG-4 Advanced Simple Profile (MPEG-4 ASP), MxPEG, and Wavelet. Additionally, proprietary formats unique to the vendors exist and may require a proprietary player to playback video.

The frame rate refers to the video recording speed, generally measured in frames per second (fps). Full-motion recording is 30 fps. Most video management software permits recording in standard definition at 30 fps, while systems capable of recording in high definition (HD) typically provide an option to record at lower frame rates, such as 15 fps, to conserve storage space.

2.4   Multi-Streaming

Multi-streaming refers to the ability of the video management software to support multiple video streams on a single camera. The number of streams the video management software may support varies by vendor and is also dependent on the specifications of the cameras being used. Some vendors also allow for users to configure frame rate, compression format, and/or resolution on each individual stream. This is sometimes referred to as "purpose-based multi-streaming." As illustrated in Figure 2-1, purpose-based multi-streaming provides the ability to configure each stream based on its intended use. For example, an agency may want a lower bandwidth and resolution on streaming being archived and a higher frame rate and resolution on live streaming in a surveillance scenario.
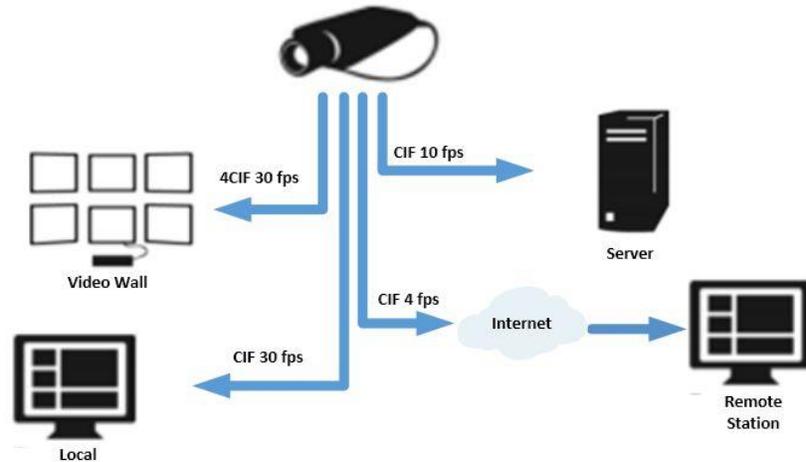
Figure 2-1. Purpose-Based Multi-Streaming

Image courtesy of Genetec Inc.

2.5   Bookmarking

Bookmarking allows users to mark specific sections of video. Once bookmarked, the sections are easily located in archived video for export, viewing, or other action.

2.6   Hardware Requirements

It is the agency's responsibility to ensure their hardware (e.g., computers, servers, cameras) meets the minimum requirements for operation. Since these requirements may change frequently with new software releases, agencies should contact vendors for information on the latest requirements.

2.7   Additional Resources

Additional information on equipment and software used for surveillance can be found in the SAVER *Closed Circuit Television (CCTV) Technology Handbook*, the *Wireless Surveillance Camera Systems Market Survey Report*, and the *Portable Surveillance Kits Market Survey Report* available at http://www.firstresponder.gov/SAVER.

3.   PRODUCT INFORMATION–VENDOR PROVIDED

This section provides information on 19 video management software solutions that range in price from $0 to $8,000 per initial software license and from $99 to $450 per camera connection. All of the products feature search capabilities, motion detection, multi-streaming support, and enable recorded video to be exported. In addition, all feature synchronous playback, which permits users to playback video from multiple camera feeds simultaneously.

Product information presented in this section was obtained directly from an RFI, vendors, and/or vendor websites. The information has not been independently verified by the SAVER Program.

3.1   Aventura Technologies Inc. SWR-VMSB-4

The SWR-VMSB-4 video management software is available in four-camera bundles for $685, which includes the software, a user manual, and a 1-year warranty. Additional bundles can be purchased to support up to an unlimited number of cameras and clients. Software maintenance agreements are available for an annual price of $343 plus $34 per camera. On-site training is also available for an additional cost of $116 per hour.

Figure 3-1. SWR-VMSB-4

Video files can be bookmarked and watermarked. Authenticated video requires the use of the Aventura proprietary player. The player can be downloaded with the video. Unauthenticated video can be exported in non-proprietary formats (.avi and .wmv) and does not require a proprietary player for playback.

The SWR-VMSB-4 video management software supports H.264, H.265, JPEG2000, MPEG, MPEG-2 MPEG-4, and M-JPEG compression formats. Frame rate options range from 1 to 30 fps, and resolution options range from CIF (352x240) to 20 MP (3600x5400).

3.2   Avigilon ACC (Enterprise Level)

The Avigilon Control Center (ACC) (Enterprise Level) video management software costs approximately $280 per camera connection and is sold in camera bundles of 1, 4, 8, 16, or 24. Additional bundles can be purchased to support up to an unlimited number of cameras and clients. No initial software license fee or annual charges apply. While Avigilon does not offer a formal software maintenance agreement, full-version software releases (e.g., v5.0 to v6.0) are made available for a server upgrade charge of approximately $300 per server. Minor software updates (e.g., v5.1 to v5.2) are included with
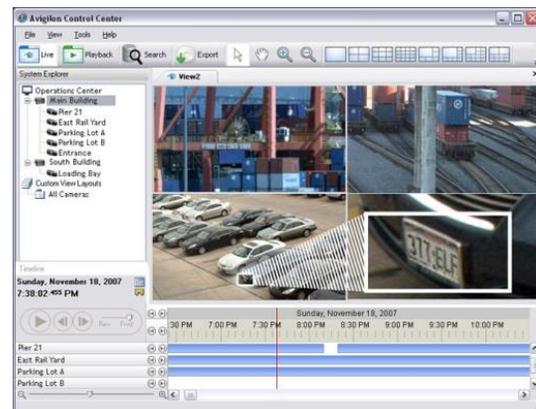

Figure 3-2. ACC (Enterprise Level)

purchase. Access to the Avigilon portal is included with purchase, which provides access to the user manual and online training.

Video files can be bookmarked, watermarked, and encrypted. Authenticated (watermarked and/or encrypted video) must be saved in a proprietary format, which is only viewable with the ACC (Enterprise Level) player. The player can be exported and saved with the video file. Unauthenticated video can be exported in a non-proprietary format (.avi) and does not require a proprietary player for playback.

The ACC (Enterprise Level) video management software supports H.264, M-JPEG, JPEG2000, MPEG, and MPEG-4 compression formats. Frame rate options range up to 30 fps, and resolution options range from CIF to 29 MP (6576 x 4384).

3.3 Genetec Inc. Omnicast

The Omnicast video management software is available in three versions: Standard, Pro, and Enterprise. Costs range between $590 to $3,650 per initial software license plus a one-time camera connection fee ranging between $150 and $250 per camera connection. Access to the Genetec Inc. portal, which provides software downloads, licensing details, and a technical support knowledge base, is included with purchase. Training is also included with purchase through a third-party integrator. Paid certification courses are available at multiple Genetec Inc. locations or can be held at a location of the agency's choice for an additional fee. Software maintenance agreements are available for an annual price of $400 plus $18 to $48 per camera, depending on the version of video management software. The software maintenance agreement includes software upgrades. Multi-year software maintenance agreements are available at discounted rates.

Figure 3-3. Omnicast

All versions of the Omnicast video management software allow for video files to be bookmarked, watermarked, and encrypted. Authenticated video is saved in Genetec Inc.'s .g64 proprietary format, which is only viewable with the Genetec Inc.'s proprietary player. The player can be exported and saved with the video file. Unauthenticated video can be exported in a non-proprietary format (.asf) and a proprietary player is not required for playback.

The Omnicast video management software supports H.264, M-JPEG, MPEG-2, MPEG-4, and JPEG2000, and Wavelet compression formats. Frame rate options range from 1 to 60 fps, and resolution options range up to 40 MP (7264x5440).

3.3.1 Omnicast Standard

The Genetec Inc. Omnicast Standard video management software costs $590 per initial software license plus a one-time connection fee of $150 per camera connection. A software maintenance agreement is available for a base price of $400 plus $18 per camera connection paid annually. The software allows for a maximum of 50 camera connections, 1 server, and 5 clients.

3.3.2 Omnicast Pro

The Genetec Inc. Omnicast Pro video management software costs $1,130 plus a one-time connection fee of $230 per camera connection. A software maintenance agreement is available for a base price of $400 plus $35 per camera connection paid annually. The software allows for a maximum of 100 camera connections, 20 servers, and 10 clients.

3.3.3 Omnicast Enterprise

The Genetec Inc. Omnicast Enterprise video management software costs $3,650 plus a one-time connection fee of $250 per camera. A software maintenance agreement is available for a base price of $400 plus $48 per camera connection paid annually. The software allows for an unlimited number of cameras, servers, and clients.

3.4   Internet Video & Imaging Inc. ViewCommander Pro Advanced

The ViewCommander Pro Advanced video management software costs $600 per initial software license and includes support for one camera. There is a one-time connection fee of $125 per additional camera connection. A USB dongle, included with purchase, must be connected to the main server to access and operate the software. The software and user manual are available for download online. Software maintenance agreements are optional and are available for an annual cost of approximately 15 percent of the total purchase price. The software maintenance agreement includes technical support by e-mail and phone, as well as all software upgrades. Training is not included but may be available with large orders.

Figure 3-4. ViewCommander Pro Advanced

The software allows for 100+ camera connections and unlimited clients. Video files cannot be bookmarked. While videos are not watermarked or encrypted, the video can be authenticated when saving in the ViewCommander proprietary format (.vca) and played utilizing the ViewCommander player. The player can be downloaded with the video. Unauthenticated video can be exported in a non-proprietary format (avi or .asf) and a proprietary player is not required for playback.

The ViewCommander Pro Advanced video management software supports H.264 and M-JPEG compression formats. Frame rate options range from less than 1 to 30 fps and resolution options range up to 12 MP. Higher resolutions can be supported per client request.

3.5   ipConfigure Inc. Enterprise Surveillance Manager

The Enterprise Surveillance Manager video management software is available for purchase through Red River Computer Company, an ipConfigure Inc. distributor. It costs $2,048 per initial software license and includes support for 8 cameras. There is a one-time connection fee of $256 per additional camera connection. User guides, technical support, and 1 year of software upgrades are included with purchase. A software maintenance agreement is available for an annual cost of $64 per camera. The software maintenance agreement includes software upgrades and technical support for an additional 1-year period. Training is available at the vendor's facility for $250 per student plus the cost of travel.
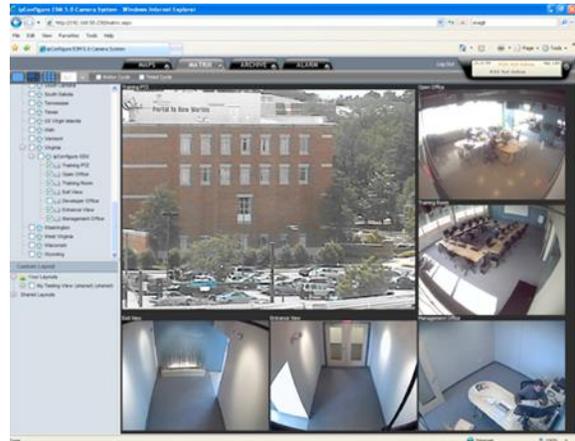

Figure 3-5. Enterprise Surveillance Manager

The software allows for an unlimited number of camera connections and clients. Video files can be bookmarked and watermarked. Video files can be exported in a non-proprietary format (.wmv) and a proprietary player is not required for playback.

The Enterprise Surveillance Manager video management software supports MJPEG, MPEG-4, and H.264 compression formats. Frame rate options range from 1 to 30 fps and resolution options range from 1 CIF to 6.636 GP (Gigapixels).

3.6   Milestone Systems Inc. Xprotect

The Xprotect video management software includes four law enforcement grade versions: Professional, Enterprise, Expert, and Corporate. These versions are available for purchase through a third-party integrator. Costs range between $499 to $3,183 per initial software license plus a one-time camera connection fee ranging between $149 and $329 per camera and/or encoder. Camera driver updates and a built-in technical support/help desk knowledge base that includes online videos and tutorials are

Figure 3-6. Xprotect

included with purchase. Training is available and may be included with purchase through a third-party integrator. A software maintenance agreement, which allows for approximately two software upgrades per year, is available and ranges from a base price of $90 to $575 plus $27 to $60 per camera—depending on the version of the video management software—paid annually. A multi-year software maintenance agreement is available at a discounted rate.

All versions of the Xprotect video management software allow for video files to be encrypted and digitally signed. This authenticated video can be exported in a non-proprietary format

(.avi or .mkv). A proprietary player is not required for playback of exported video, including digitally signed or encrypted video.

The Xprotect video management software supports H.264, M-JPEG, MPEG-4, MPEG-4 ASP, and MxPEG compression formats. Frame rate options range over 30 fps, and resolution options range over 20 MP.

3.6.1 Xprotect Professional

The Milestone Systems Xprotect Professional video management software costs $499 per initial software license plus a one-time connection fee of $149 per camera. A software maintenance agreement is available for a $90 fee plus an additional $27 per camera paid annually. A multi-year software maintenance agreement is available at a discounted rate. The software allows for a maximum of 64 cameras per server and unlimited clients. The Xprotect Professional video management software does not have a bookmarking capability.

3.6.2 Xprotect Enterprise

The Milestone Systems Inc. Xprotect Enterprise video management software costs $1,479 per initial software license plus a one-time connection fee of $199 per camera. A software maintenance agreement is available for a $270 fee plus an additional $36 per camera paid annually. A multi-year software maintenance agreement is available at a discounted rate. The software allows for an unlimited number of cameras and clients. The Xprotect Enterprise video management software does not have a bookmarking capability.

3.6.3 Xprotect Expert

The Milestone Systems Inc. Xprotect Expert video management software costs $1,999 per initial software license plus a one-time connection fee of $269 per camera. A software maintenance agreement is available for a $360 fee plus an additional $49 per camera paid annually. A multi-year software maintenance agreement is available at a discounted rate. The software allows for an unlimited number of cameras and clients and provides a bookmarking capability. Added functionality not included in the Professional and Enterprise versions includes support for edge storage, among other features. Edge storage permits video to be stored and retrieved directly from the camera(s).

3.6.4 Xprotect Corporate

The Milestone Systems Inc. Xprotect Corporate video management software costs $3,183 per initial software license plus a one-time connection fee of $329 per camera. A software maintenance agreement is required for the first year for a $575 fee plus an additional $60 per camera paid annually. A multi-year software maintenance agreement is available at a discounted rate. The software allows for an unlimited number of cameras and clients and provides a bookmarking capability. Added functionality not included in the Professional, Enterprise, and Expert versions includes failover support (i.e., network redundancy), among other features.

3.7   NICE Systems Ltd. NiceVision Net

The NiceVision Net video management software is available in two law enforcement grade versions: Professional and Enterprise. The manufacturer's suggested retail price ranges between $3,000 to $8,000 per initial software license plus a one-time camera connection fee ranging between $300 and $450 per camera. Access to the Nice System Ltd. portal is included with purchase and provides access to the software download, the user manual, hotfixes, and technical tutorials. A software maintenance agreement is available for approximately seven percent of the initial cost (initial software license plus camera fee) paid annually. On-site instructor-led administrator and end-user training is available for $2,900 per day.

Figure 3-7. NiceVision Net

All versions of the NiceVision Net video management software allow for video files to be bookmarked. Watermarking is not supported; however, video data is recorded in the NICE Systems Ltd. proprietary data format (.nvf) and can be authenticated using their proprietary player. The proprietary player can be saved with the exported file. Unauthenticated video can be exported in a non-proprietary format (.avi) and a proprietary player is not required for playback.

NiceVision Net video management software supports H.263, H.263+, H.264, M-JPEG, MPEG-4, and MxPEG compression formats. Frame rate options range from 1 to 30 fps, and resolution options range up to 10 MP. Higher resolutions may be supported based on customer requirements.

3.7.1 NiceVision Professional

The NICE Systems Ltd. NiceVision Professional video management software costs $3,000 per initial software license plus a one-time connection fee of $300 per camera. The software allows for a maximum of 200 cameras and up to 20 client connections (2 clients are included with purchase and additional clients cost $450 per client).

3.7.2 NiceVision Enterprise

The NICE Systems Ltd. NiceVision Enterprise video management software costs $8,000 per initial software license plus a one-time connection fee of $450 per camera. The software allows for an unlimited number of cameras and unlimited client connections (2 clients are included with purchase and additional clients cost $450 per client). Added functionality not included in the Professional version includes the video parameter optimizer, which balances video tint, contrast, and hue based on environmental concerns such as fog or sun glare.

3.8   On-Net Surveillance Systems Inc. (OnSSI) Ocularis

The Ocularis video management software is available in five versions: PS, IS, CS, LS, and ES. Costs range between $199 to $3,499 per initial software license plus a one-time camera connection fee ranging between $99 and $359 per camera. A user manual, web and mobile access, online operator training, camera driver downloads, and technical support are included with purchase. Two-day, instructor-led administrator training is available for $1,099 per person at a third-party training facility. Software maintenance agreements are available for

Figure 3-8. Ocularis

approximately 20 percent of the initial cost (initial software license plus camera connection fees) paid annually. A multi-year software maintenance agreement is available at a discounted rate.

The Ocularis video management software suite consists of four components:

- *Ocularis base:* provides for central management and authentication

- *Ocularis recorder:* provides for the recording and management of video data. Only one recorder is allowed per Windows instance

- *Ocularis client:* provides live monitoring and investigative capabilities

- *Ocularis media server:* provides the web client and mobile applications.

All versions of the Ocularis video management software allow for video files to be bookmarked. Video is stored in a secured and authenticated database. Video can be watermarked and encrypted. Playback of authenticated video requires a proprietary player which can be downloaded and saved with the exported file. Unauthenticated video can be exported in a non-proprietary format (.avi) and a proprietary player is not required for playback.

The Ocularis video management software supports H.263, H.264, M-JPEG, MPEG-4, and MxPEG compression formats. Frame rate options range up to 60 fps, and resolution options range from CIF to 20 MP.

3.8.1 Ocularis PS

The OnSSI Ocularis PS video management software costs $199 per initial software license plus a one-time connection fee of $99 per camera. The software allows for a maximum of 26 cameras and 4 client connections per Ocularis recorder (part of software suite). Multiple Ocularis recorder instances may be added at no additional cost; however, additional hardware may be required.

3.8.2 Ocularis IS

The OnSSI Ocularis IS video management software costs $999 per initial software license plus a one-time connection fee of $199 per camera. The software allows for a maximum of 64 cameras and unlimited clients per Ocularis recorder (part of software suite). Multiple Ocularis recorder instances may be added at no additional cost; however, additional hardware may be required.

3.8.3 Ocularis CS

The OnSSI Ocularis CS video management software costs $1,999 per initial software license plus a one-time connection fee of $249 per camera. The software allows for an unlimited number of cameras and clients per Ocularis recorder.

3.8.4 Ocularis LS

The OnSSI Ocularis LS video management software costs $2,499 per initial software license plus a one-time connection fee of $299 per camera. The software allows for an unlimited number of cameras and clients per Ocularis recorder. Ocularis LS features centralized recorder management and support for edge recording.

3.8.5 Ocularis ES

The OnSSI Ocularis ES video management software costs $3,499 per initial software license plus a one-time connection fee of $359 per camera. The software allows for an unlimited number of cameras and clients per Ocularis recorder. Ocularis ES features centralized recorder management, support for edge recording, and recorder failover protection.

3.9   Pelco by Schneider Electric Digital Sentry

The Digital Sentry video management software is available for purchase through Red River Computer Company, a Pelco by Schneider Electric distributor. The Digital Sentry video management software is available for no charge for the first four cameras and a cost of $118 per additional camera (one-time fee). User guides, technical support, and software upgrades for the life of the product are included with purchase; nullifying the need for a formal software maintenance agreement. Various training courses are offered at no cost throughout the year at multiple locations.
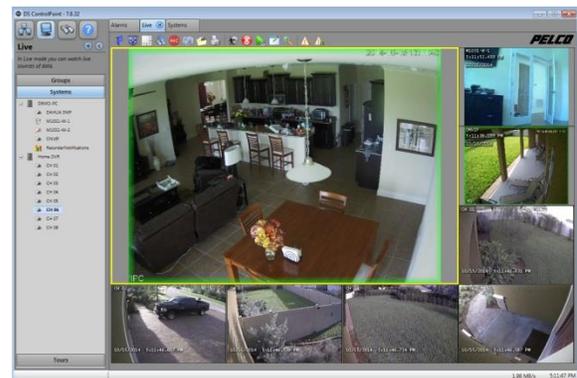

Figure 3-9. Digital Sentry

The software allows for an unlimited number of camera connections and clients. Video files can be bookmarked and watermarked. Video files can be exported in a non-proprietary format (.avi) and a proprietary player is not required for playback.

The Digital Sentry video management software supports MJPEG, MPEG-4, H.263, and H.264 compression formats. Frame rate options range from 1 to 30 fps and resolution options range from 1CIF to 5MP.

4.   VENDOR CONTACT INFORMATION

Additional information on video management software included in this market survey report can be obtained from the vendors listed in Table 4-1. Additional vendors of video management software are also included, as designated by an asterisk (*).

Table 4-1. Vendor Contact Information

Vendor	Phone Number	Website
Aventura Technologies Inc.	(631) 300-4000	http://www.aventuracctv.com
Avigilon	(888) 281-5182	http://avigilon.com
Genetec Inc.	(866) 684-8006	http://www.genetec.com
Internet Video & Imaging Inc.	(800) 635-1127	http://ivimg.com
ipConfigure Inc.	(877) 207 1112	http://ipconfigure.com
Milestone Systems Inc.	(877) 350-1101	http://www.milestonesys.com
NICE Systems Ltd.	(866) 999-6423	http://www.nice.com
On-Net Surveillance Systems Inc. (OnSSI)	(845) 732-7900	http://onssi.com
Pelco by Schneider Electric	(800) 289-9100	http://pelco.com
Red River Computer Company[1]	(800) 769-3060	http://redriver.com
Robert Bosch LLC*	(800) 289-0096	http://boschsecurity.com
Samsung Techwin America*	(877) 213-1222	http://samsung-security.com

[1]Distributor for ipConfigure Inc. and Pelco by Schneider Electric

5.   SUMMARY

This market survey report provides information on 19 video management software products. All of the products feature search capabilities, motion detection, multi-streaming support, and enable recorded video to be exported. In addition, all feature synchronous playback, which permits users to playback video from multiple camera feeds simultaneously.

In purchasing video management software, the purchasing agency should consider the size of their agency, the number of cameras that require monitoring and/or recording, and the number of clients needed.

Emergency responder agencies that consider purchasing video management software should carefully research each product's overall capabilities and limitations in relation to their agency's operational needs.