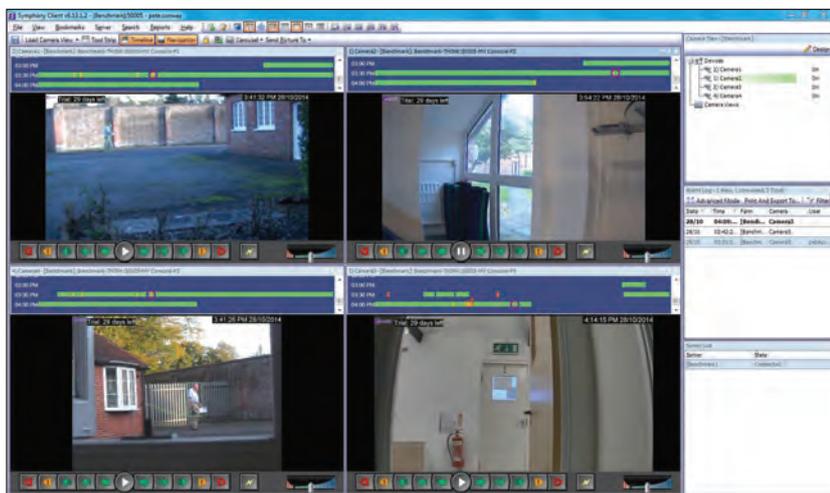


Group Test: VMS and Video Handling



Aimetis - Symphony

Symphony is the VMS from Aimetis, and is available with three levels: Standard, Professional and Enterprise. All three can support an unlimited number of cameras (obviously dependent upon the supporting infrastructure and IT peripherals). The manufacturer states that this has been tested for up to 500 connections.

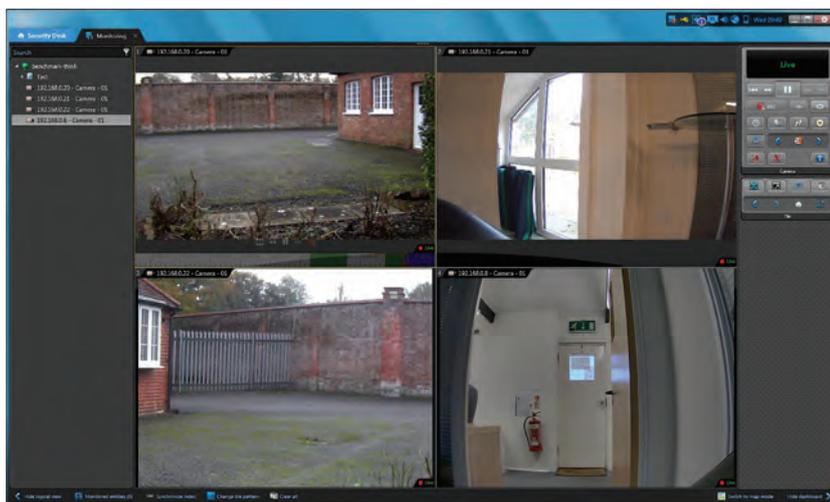
The Professional and Enterprise level packages also support multiple servers, automatic failover and the use of video walls. The package includes a server and client structure. Mobile connectivity is also supported.

Aimetis licensing has been devised to be simple. Each camera requires a license, and



that's pretty much it. The licenses are not tied to the MAC address of the camera, so devices can be changed without a need to contact the company and go through a license switching exercise, which is a benefit for installers and integrators.

The Enterprise version of Symphony is supplied with a number of analytics options, and these can be used across the devices to flag events, to initiate recordings or to instigate other actions. The solution is compatible with devices from a number of leading manufacturers. It is fair to say that some other VMS providers support many more manufacturers, but a number of these are not active in the UK. Aimetis certainly does cover the vast majority of manufacturers of professional surveillance equipment in the UK.



Genetec – Security Center

Genetec's Security Center is, in reality, a framework software package which unifies the various elements available from the manufacturer. These include video management, access control and other software elements. Omnicast is the video surveillance package, although when purchased it is supplied as an integral element of the overall Security Center solution.

The Omnicast video element is available as a software package, but is also available pre-loaded onto security appliances.

Omnicast is available in three configurations: the software's Enterprise level package supports unlimited numbers of video devices, an unlimited number of clients and an unlimited number of archivers.



Connected devices can deliver multiple streams (up to six per device), and there is also support for on-board audio and inputs and outputs. Mobile connectivity via smartphones, tablets and PCs is available, but this requires an additional license.

For video handling, Security Center supports H.264, M-JPEG, MPEG-4, MPEG-2, JPEG2000 and Wavelets (remember Wavelets, the compression of the future?). Other features include motion detection, alarm handling, 360 degree camera dewarping and edge storage support.

Failover servers are supported, but again this requires additional licensing.

The Client element of Security Center is Security Desk, and this works across all integral software elements including Omnicast. A base licence includes use of up to 5 clients.

Milestone XProtect Corporate

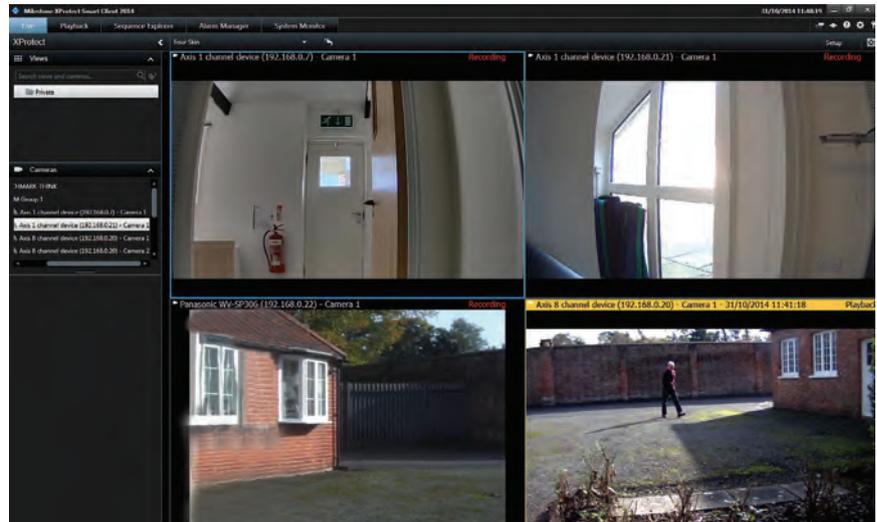
Milestone Systems' XProtect Corporate is the company's top-end video management system. It is best to consider it as an unlimited solution. It supports an unlimited number of cameras per server (obviously this is theoretical, as server capabilities will ultimately dictate how many devices can be supported without an impact on overall performance), an unlimited number of servers, and an unlimited number of users.

The video client for system control – Smart Client – is free from licensing, and so offers freedom with regard to system management as multiple workstations can be created for any given system. Mobile connectivity over smartphones and tablets is also supported.

XProtect Corporate supports a wide range of video formats including H.264, MPEG-4, M-JPEG and MxPEG. The solution is compatible with devices from over 100 manufacturers, including the vast majority of the manufacturers of professional surveillance equipment.

The XProtect Corporate software has also been used for integrations with other security and non-security systems to offer bespoke solutions, and so offers enhanced interoperability. Milestone has a diverse partner programme which ensures continual development across a number of video and access disciplines.

Features include support for failover servers, scheduled archiving to back-up servers, interactive mapping, support and management of edge storage devices, as well as integration with peripheral system elements including analytics, ANPR, telemetry, tracking, business intelligence and video wall management.



Nuuo – IP Surveillance System

Nuuo's IP Surveillance System is the company's video management software, and can be used as a standalone package on suitable IT equipment, or on a dedicated NVR or hybrid surveillance recorder. This approach ensures the same GUI across a selection of software or hardware options. The solution is scalable, and each server can support up to 64 IP cameras.

The software supports analogue and HD-SDI cameras via suitable Nuuo capture cards. As with the other solutions, a supported codec could also be used.

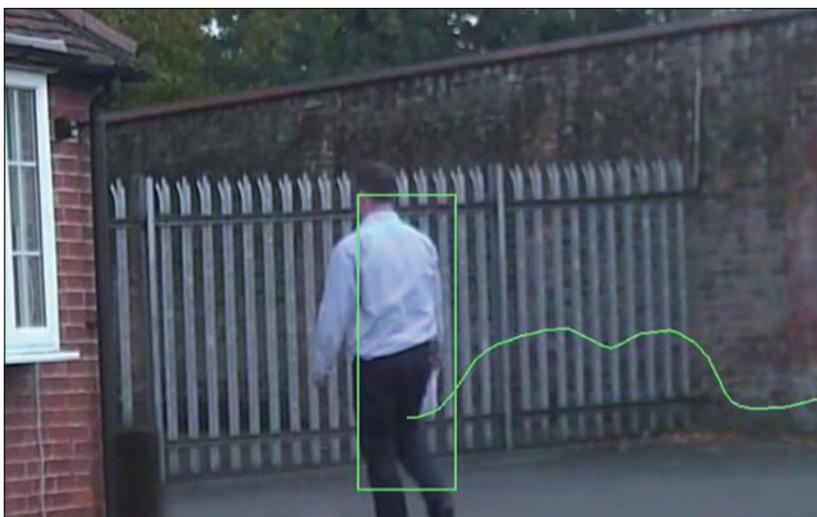
For video handling, IP Surveillance System uses H.264, but can support streams in various video formats including H.264, MPEG-4, M-JPEG and MxPEG. The solution is compatible with devices from nearly 100 manufacturers, including the vast majority of the manufacturers of professional surveillance equipment.

The Nuuo IP Surveillance System boasts integrations with intelligent video, with differing software applications and counting mechanisms. It features intelligent video analytics including general motion, object disappear, object appear, as well as detection of camera tampering and sabotage attempts. A licensable advanced intelligent video upgrade introduces additional elements. Other features include video transcoding, audio management, failover server support and video enhancement during playback.



79%

Group Test: VMS and Video Handling



It is interesting that when you view the promotional materials for advanced VMS solutions, often the highlighted features have more to do with how IT than with security performance. Whilst many VMS solutions feature highly flexible video-handling capabilities, these aren't always at the top of the list of benefits despite being an important element. Benchmark looked at VMS packages to see what they offer.

Whilst it is true that the mainstream video surveillance market is hardware-based when it comes to video management, the reality is that the case for software-based open platform VMS is becoming ever more compelling. For those that move to a VMS solution, often the driver for the initial change is the ease with which a range of third party devices can be deployed. Many VMS packages support hundreds of devices from professional manufacturers, with the market-leaders boasting thousands of supported products.

Hardware-based NVRs and management systems have limitations with regards to compatibility. You often find that they will support the manufacturer's own cameras and codecs (sometimes limited to newer models), along with a few devices from partners. If you want to add anything else, then you are left with the minefield that is ONVIF compatibility!

Not only will a VMS offer a vast array of supported third party models, but because the

drivers have been created specifically for the individual devices, typically all functionality will be supported. This rarely happens with a common protocol approach such as ONVIF.

The ability to bring together seemingly disparate elements with ease allows installers and integrators to select devices which best fit the needs of the site, and often legacy system elements can also be retained, ensuring that the resulting system is cost-effective.

While this level of interoperability can be the initial reason for considering a VMS, those that make the step to software platforms often find that the functionality and flexibility on offer is far in excess of what was anticipated when the solution was first considered!

One area where VMS solutions excel is with regard to managing archived video. The reason for this is simple. Software-based solutions have an inherent level of flexibility.

When considering the functionality on offer from the VMS solutions in this test, ratings apply solely to the handling, search, display and overall management of archived video. Other functionality – which is often diverse – was not considered unless it impacted on the handling of recorded footage.

Basic information is given about the capabilities of the various VMS packages, as well as general installation information. This is included to give an overall impression of where the tested variant of the VMS is targeted, and the required level of knowledge from the installer or integrator.

Most of the tested packages are available with different degrees of add-on functionality. These variants are beyond the scope of this report.

Aimetis – Symphony

Once Symphony is installed – the process is simple as it uses a single installation wizard, and then carries out a basic configuration (see Installation Issues on page 34 for further information) – devices can be added.

Symphony handles this process well, even where the cameras aren't fully supported. Symphony might not boast the depth of third party manufacturer integrations that other VMS packages offer, but all the prominent brands are there. Where ONVIF compatibility is required, this actually works well.

Whilst the package doesn't deliver a full configuration menu for each supported camera, it does allow the general video stream

to be managed. Any fine tuning of camera settings beyond this level can be achieved as the VMS gives an option to open the device's web-page from within the Symphony GUI.

Symphony's initial device set-up allows the designation of inputs and outputs to various tasks, as well as the implementation of analytic elements for each video stream. These are handled via a number of what Aimetis refers to as Video Engines. Dependent upon the selected choices, some of these can be used in combination to layer notifications and events.

The main choices are simple motion detection, basic video tracking without object classification, advanced video tracking (including an option optimised for counting applications), object tracking, automatic PTZ tracking, video stabilisation, video error and tamper detection.

Whether recording is carried out on a continual basis, or is triggered by an event or action, these Video Engines can be configured and deployed to add information and flag events. These can not only be used to trigger recordings or other actions via Rules, but can also create flagged incidents that may be used to enhance searches, or as an aid during investigations.

Where a combination of Video Engines are employed, searches can use data from all, none or selected Engines to refine incidents and events. This delivers flexibility which allows different search patterns to be created, dependent upon the user's needs in any given incident. Selecting which data to utilise is carried out via a simple tick-box.

In use, the various Video Engines can be allocated on a 'per camera' basis, which also allows a high degree of flexibility with regard to overall system configuration.

Once the Video Engines are selected, the configurations can be further tweaked to optimise performance. Some of the tools for configuring the functionality do take a different approach, but they actually make adjusting the configuration a simpler task. Not only that, but the ease of configuration allows a greater degree of reliability to be established.

One example of this is setting the camera angle and, in turn, the perspective. This is achieved by dragging a camera icon on a basic alignment diagram to set mounting height, viewing angle, etc.. Dependent upon the entered parameters, the VMS generates an overlay grid with 3D modeled people. This greatly simplifies the configurations and can deliver a high degree of accuracy with regard to perspective. It might look a little gimmicky,

but anything that allows a swift and reliable configuration reduces installation time and delivers enhanced performance.

There is an ability to create bookmarks, and this can be carried out with live or replayed footage. It is a manual task, via the menus.

Searches can be instigated via the associated stream Timeline, or through the Search menu. The Timeline shows the current day's activity; events, alarms and other flagged events are colour coded. Each video stream has a dedicated Timeline, and this can be toggled on or off.

The Search menu brings up a search screen, and this has a Basic and an Advanced option. Searches can be given start and end dates and times.

The actual parameters in the search menus may change, dependent upon the Video Engine selected. There is also an option to select a Class (people, vehicles or unknown) and whether a target will be moving or static (loitering); a minimum time duration can also be specified.

Searches can be filtered using defined zones (Masks) or lines (Fence). Directional discriminations can be applied to the latter.

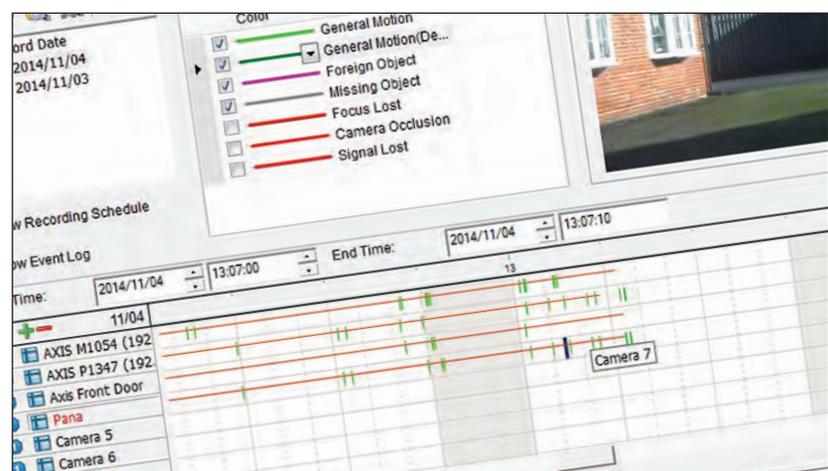
Once the search is complete, Symphony can either produce a video of all events, allowing a simple view of every incident of the prescribed type during the selected time period, or individual events can be viewed.

Searches can be one-off, during a specified period over a number of days, or recurring. If recurring searches are used, these allow regular reports to be generated.

With regard to reports, Symphony can generate reports based upon a range of activities including line crossing, heat

FEATURES AND FUNCTIONS

AIMETIS - SYMPHONY	84%
GENETEC - SECURITY CENTER	84%
MILESTONE - XPROTECT CORPORATE	85%
NUUO - IP SURVEILLANCE SYSTEM	78%



EASE OF INSTALLATION	
AIMETIS - SYMPHONY	86%
GENETEC - SECURITY CENTER	78%
MILESTONE - XPROTECT CORPORATE	83%
NUUO - IP SURVEILLANCE SYSTEM	84%

mapping, object counts and statistics, alarm statistics and alarm reports. Setting up reports is simple, and adds an extra benefit to the VMS. The only thing we did note was that when the Reports screen was selected, it took around 15 seconds to load!

accessing the flexibility does take a bit of digging around. There is a lot of documentation provided by Genetec, but it falls into the realm of being not very useful.

Probably the two most often-used tools for defining video of interest will be motion detection and Bookmarks. There is also a Visual Tracking function which adds a significant operator benefit. Another feature which does make sense is the ability to synchronise viewed scenes when playing back events. This allows a wider view to be taken of an incident without having to manage several channels of video to try and piece together an overall view of events.

Exporting video is quick and simple, and allows for a range of delivery methods.

Genetec – Security Center

The Security Center installation process was the slowest on the test, and whilst it pretty much runs by itself, it gave the impression of being completed during installation, as it showed no progress report. On seeing just the installer splash-screen, we rebooted the machine, only to discover it still had some time to go. We also had a licensing problem, attributable to human error at Genetec, but this did reveal an issue with the tech support team (see Installation Issues on page 34 for further information).

The first task is to licence the server, which is done via a Genetec web page. This does require the system to be internet connected. If your system doesn't have WAN connectivity and you change IP addresses, remember to restart Services when you change the IP address back! There is an off-line licensing method but it's more time-consuming.

Control and management of the system is via the Security Desk client, but set-up is carried out via the Config Tool program. This has a range of task-based pages, and the overall process is generally intuitive.

Much of the interaction with archived footage is obviously dependent upon the configuration of flagging mechanisms such as alarms, events, bookmarks, etc.. Security Center offers a number of options for this, but

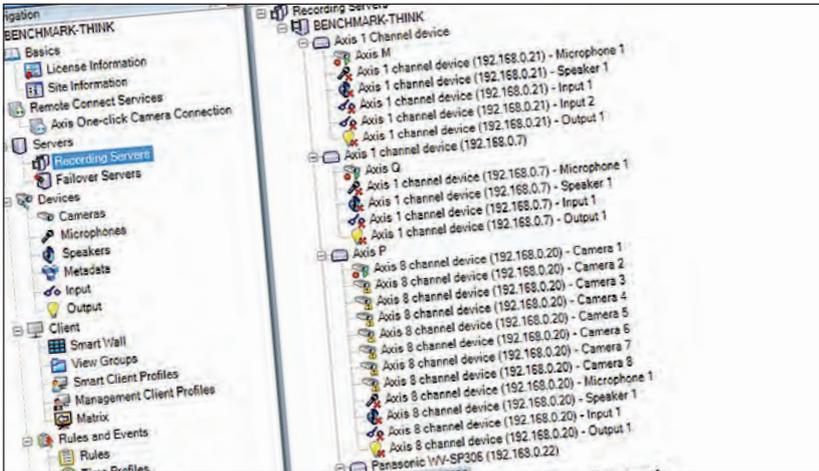
Motion detection can be carried out at the device, or via Security Center's Archiver. Genetec points out that the latter is the better option as the Archiver is always running. There is a good degree of flexibility with regard to motion detection, including the ability to set a percentage of motion required for an alarm. Use this with caution as we found reducing it from 100 per cent led to numerous false alarms. There are other tools which allow the setting of block sizes and time windows which can enhance stability.

Motion is shown on the timeline of the video stream, and can also be used to trigger an alarm. Alarm actions can be specified, and can include creating a Bookmark. This is useful to enhance footage management during periods of low risk. Rather than create an alert for an operator, video of interest can be flagged, making investigation simpler if an event does later require analysis.

With Visual Tracking, it is possible to create a 'clickable' area within an image, which can allow an operator following action to simply click to step to the next camera. This is ideal if, for example, a suspect moves from one room to another. The operator can jump to the video stream from the next room, without having to be aware of its name or camera number. As the function works in both live and playback video, it does greatly enhance the effectiveness of post-event searching.

Security Center also offers flexibility with regard to searches, and includes a motion search facility. This follows the typical approach of motion searches, and generates a report brings up all matching events within the prescribed time window. Multiple events can be viewed at once, delivering a flexible approach to investigations.

The management of Bookmarks in Security Center is probably the simplest of all the tested systems. In truth it's not the Bookmark process that is impressive, but the various ways in which they can be used to manage



footage or to generate reports. Because of this, Security Center very much had the edge over the other software packages if used in an environment with an operator.

Indeed, it could be argued that the Security Center approach puts interaction with an operator first, and the potential for exploiting an automated surveillance solution second.

This is reflected in the management of threat levels. Criteria for the system configurations, including video recording quality, recorded frame rates, protection of data, and alarm and event responses can all be changed, globally or on a site or building basis, by altering the core threat level.

Milestone – XProtect Corporate

The XProtect Corporate installation process is slightly slow, and it does prompt you to manually download two different versions of the .NET Framework, which adds to the time (see Installation Issues on page 34 for further information). Aside from this, everything else is automatic.

Control of the system is via the Smart Client, but set-up is carried out via the Management module. Both of these elements have been upgraded for the 2014 version. Despite XProtect Corporate being considered as an IT-centric software package by some, it always had an interface that was intuitive for those from a security background. The new versions have enhanced functionality, but this is slightly at the expense of that intuition.

As with other systems, the interaction with archived footage will always be dependent upon the configuration of flagging mechanisms such as alarms, events, bookmarks, etc.. Milestone tends to offer a framework for supporting third party analytics, and as such XProtect does not have native IVA. It does have motion detection, plus events and alarms can be captured from any devices equipped with video content analytics functions.

On-camera events, inputs and outputs, and motion detection are set up via the video stream configurations in the camera menus. It is also possible to use the Rules engine of XProtect Corporate to flag specific video segments with preconfigured Bookmarks.

Rules can be applied to generate a specific Bookmark in response to an event. Once the type of Event is decided, the next stage is to identify the device from which the event will be generated. Multiple devices can be selected if required.

The next step of the configuration allows conditions to be set for the event. These include whether the event occurs inside or

outside of time windows, between start and end times, on certain days, or is triggered by a specific motion window.

Once the event has been defined, the Rules Engine is used to create Actions. One potential action is to apply a specified type of Bookmark to the video. This can be video from any device, not just the device which generated the event alert!

Because multiple actions can be created, Bookmarking need not be the only outcome of an event. Other devices can be triggered, alerts transmitted, recordings manipulated, I/Os activated, etc.. A short time spent configuring Events and Rules ensures that searches and investigations using recorded footage are greatly enhanced.

There is also an ability to manually create Bookmarks, and this can be carried out from live or replayed footage, via the Smart Client. It is a question of clicking a Bookmark button in the viewing controls for a displayed stream.

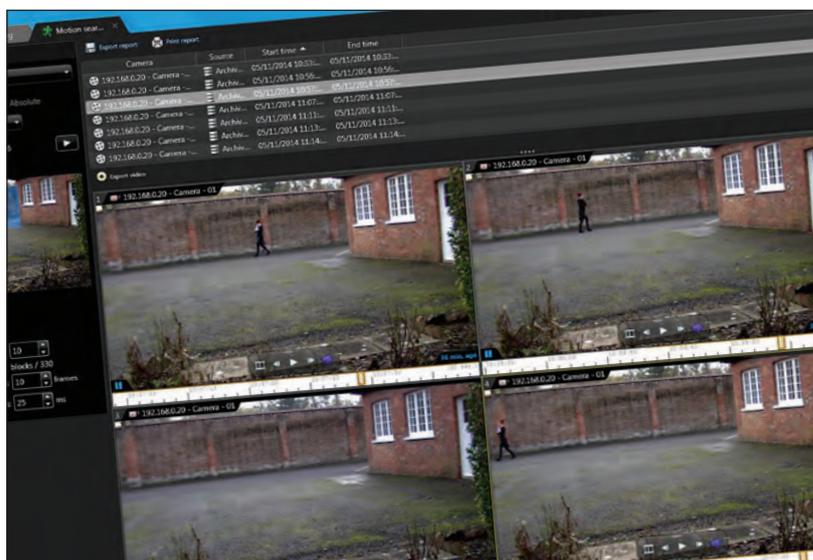
Searches can be carried out via the associated stream Timeline, or through the Smart Search function. In the Playback screen, the Timeline is relatively standard, with recording status being colour coded. Each video stream has a dedicated Timeline, and there is also one for all cameras in the view, allowing for synchronised searching.

The Smart Search function allows the creation of detection windows, and the threshold of these can also be set. Once a time window is selected the Search identifies all motion-based video, and presents the results as a sequence.

An alternative to this is the Sequence

VIDEO HANDLING

AIMETIS - SYMPHONY	86%
GENETEC - SECURITY CENTER	84%
MILESTONE - XPROTECT CORPORATE	85%
NUUO - IP SURVEILLANCE SYSTEM	78%



PERFORMANCE	
AIMETIS - SYMPHONY	85%
GENETEC - SECURITY CENTER	83%
MILESTONE - XPROTECT CORPORATE	84%
NUUO - IP SURVEILLANCE SYSTEM	77%

Explorer window. This gives the option of Sequence Searches or Smart Searches. The former allows an interval to be established, and will then show a 'sliced' sequence view. This allows an operator to select a

portion of video prior to a change in the viewed scene.

Where there is a need for multiple views, it is simple to select any relevant cameras, and all will be included in the sliced Sequence Search. Camera views are shown in order (e.g. Camera 1, Camera 2, etc.) for each selected time interval. The tool is really more effective with fewer cameras, but two or three don't make it cumbersome! Selected video clips can be played or looped.

XProtect Corporate also features a Recording Search window, which allows a quick search to be carried out. Options include a specified time interval for searches, search for Bookmarks or Sequences, an option to select video sources or to search all video streams in the view, and the ability to limit the search to Bookmarks created by the operator carrying out the search. An automatic preview can be generated if required.

Once the search is complete, XProtect Corporate allows the bookmarked clip to be exported or transmitted, with player software if necessary.

Exporting video is simple to carry out, and allows for a range of delivery methods.

Nuuo – IP Surveillance System

Once the IP Surveillance Solution is installed using an installation wizard, a database is

created, and then it's over to the installer or integrator (see Installation Issues on page 34 for further information). The first task is to add any devices. IP Surveillance Solution does have an auto-find process, but it only worked for just over half of the connected cameras. Adding the rest manually was actually very simple, and the software found the rest using minimal information.

In truth, all of the VMS systems on test missed a few cameras, but whilst the Nuuo solution missed most, it had the simplest approach to adding devices manually!

The software offers a decent degree of configuration for each connected device, and any fine tuning of camera settings beyond this level can be easily achieved; the VMS gives an option to open the device's web-page from within the GUI. The menus are straightforward and intuitive. The IP Surveillance System really does replicate the experience of using an NVR, albeit with more flexibility.

The video analytics are applied via the SmartGuard function. This allows each channel to have Regions set for general motion detection, motion detection from the device, object appear/disappear and various tamper detection options.

Configurations are for Region size and shape, sensitivity and time interval. In truth, the definition 'General Motion' is accurate. There is an advanced IVA module which requires a separate licence, but that was not included in the test.

A series of actions can also be linked with these. Multiple actions are supported. These are for a visual or audible warning of a detected event, communication options (email, SMS, dial a telephone number, upload file via FTP or push notification to a mobile device), or to trigger a telemetry preset or an input/output.

If you directly compare the options for events and actions in the Nuuo IP Surveillance System with those in the other VMS packages in this test, the Nuuo VMS does fall short. However, it is a case of getting what you pay for, and if you're looking at more mainstream security applications, then what's on offer does far exceed the functionality you'd expect from a general NVR.

There is also an option to set system events – HDD filled, CPU overloaded, bandwidth congestion or system health issues – as events.

Whether recording is carried out on a continual basis, or is triggered by an event or action, the various Smart Guard alarms can be used to flag events. These can be colour-coded by type, and are visible in timelines in



the replay pages. They can also be filtered in the system log screen.

Searches can be carried out via the timelines on a time and date basis. It is possible to select colours for alerts; these are categorised as general motion, motion detection from the device, object found, object missing, defocus, camera blocking and signal lost. These appear marked in the relevant colours against the timeline if the 'Show Event Log' box is ticked.

The next step is to select a channel, then drag over the period you wish to view. It pays to be precise when doing this to ensure you view the correct segment of video.

There is an additional Smart Search feature, and this allows selected segments to be further examined. However, but we found this to be very slow. Also, when an activation has been caused by innocuous motion, environmental conditions or light changes, the lack of bounding boxes means that this isn't always immediately obvious.

Exporting video is relatively straightforward, and files can be replayed on Windows Media Player.

Verdict

Whilst the aim of the test was to focus on how well the VMS packages handled archived footage, it is hard to consider that without also looking at how events are flagged.

At first glance, Symphony from Aimetis doesn't have the sleek business-like look of many VMS solutions. However, it is intuitive, it packs some serious power, and the more we used it, the more we liked it. Aimetis might not be the first name on the list when considering a VMS for many, and that's something that should change. It does lack a few of the options of the big name packages, but these are features you might not use very often.

Security Center from Genetec has a depth of functionality and is a powerful VMS. Our feeling was that an application with security operators would benefit more from its approach than a site where surveillance is relatively automated. Genetec could certainly improve documentation for the system, and at times it uses terms that simply are not common in security. However, it does deliver high levels of performance, and must be considered as a credible option.

XProtect Corporate from Milestone Systems still has one of the best Event/Action engines for a VMS. This gives the ability to create flexible and robust flagging mechanisms which will deliver enhanced management of recorded footage. The software has a high

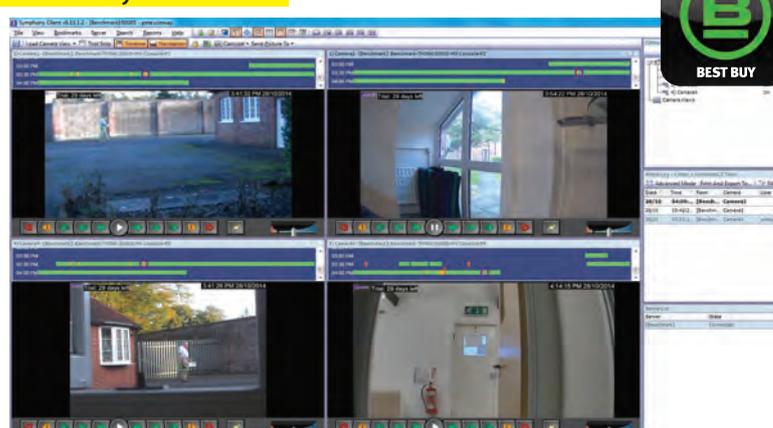
degree of flexibility, and supports a huge number of third party devices. To really get the best from it you need to spend some time configuring the various options; it's time well spent as the enhanced performance ensures high security!

Nuuo's IP Surveillance System did create something of a debate. It is aimed more at mainstream applications where the process of migration from analogue to IP might be ongoing. It's a basic entry-level solution and as such it doesn't have the inherent flexibility of the other packages. If you want typical NVR-type functionality with licensable third party device support, it delivers that. However, even bearing that in mind, with regard to handling footage and allowing management of video, it doesn't have the most seamless approach. Search options are limited, as is event handling.

There isn't a 'bad' video management solution here, but the Nuuo VMS does lag slightly behind the pack when specifically considering the handling of recorded footage. Otherwise, it pretty much comes down to a case of considering which VMS offers the right mix for any given site.

One thing, however, is without doubt; the flexibility on offer simply cannot be matched by most hardware NVRs.

Best Buy



It is very difficult to pick one VMS from the four tested, as all will appeal to a certain type of application. It is also important to consider the full cost of ownership – including which elements require additional licensing.

Of the three that achieved Recommended status, each had their supporters! However, with regard to ease of installation, an intuitive GUI, flexibility with regard to flagging video and management of footage, Symphony from Aimetis was the one that test team members said they would consider for forthcoming installations.

It may not be advanced as the Milestone and Genetec offerings, but with regards to offering the right fit for the majority of applications, it is currently just ahead of the others by a nose!



Installation Issues

Aimetis' Symphony is supplied with a single installation for client and server, and an installation guide. The guide covers the full product installation, but unless you have system installation anomalies or require a customised set-up you are unlikely to need it.

Once the installation wizard is running it will detect if any Microsoft elements are required and install them, and will then install both the Symphony server and client. The whole process is relatively smooth.

When the installation is complete the installer runs through basic set-up, creates a database, and then tests the system. There are a few settings that need to be made, but these are things like server name, passwords, etc.. The package can be licensed on-line or off-line. The off-line process is slightly inconvenient, but at least the option is available!

Once up and running the interface is relatively intuitive, and adding devices is simple. There is a device discovery mode: we tried it with a range of supported cameras as well as ONVIF compliant models, and the devices were found with one exception. This camera was found immediately when the IP address was added.

Genetec's Security Center is a unified platform which manages the other software elements. However, there is a single installer for Security Center and the other elements (in this case, Omnicast). The process is relatively straightforward, and it identifies any required Microsoft elements and installs them.

One word of warning: it is a lengthy process and at one point we thought it had completed and rebooted the server. It was actually halfway through, but between tasks so it showed no progress information!

The initial task is to open the Server Admin element to initialise the licence. This can be done via a web page, or off-line. The latter is more time-consuming.

Set-up is carried out via the Config Tool program, and control via Security Desk. We had a licence issue with the latter (it was caused by a Genetec error), but this did reveal that if you call the central number for technical support, you are transferred to a mobile number which was – when we tried it – more often than not on voicemail.

Milestone Systems' XProtect Corporate uses a simple global installation wizard

which makes the process relatively painless. If the server you're installing the VMS to isn't running .NET 4.0, the wizard will prompt you to download and install it before the XProtect process will run. Then, once you've done this, it will commence the installation, before stopping and instructing you to download .NET 4.5.1. It's a slight frustration that adds time to the install, and an initial request for the correct version would save a bit of time. Overall the install is painless, but is a fairly slow process. Make sure you're ready to put the kettle on!

Most of the processes in the configuration have in-program help screens. Having used XProtect Corporate before, we were fairly familiar with the program. However, this was the first time we'd used the 2014 version, and there are some changes which affect the configuration processes. In our opinion, during initial configuration, these changes actually reduce the intuitive feel that previous versions of the VMS had, and taking manual control of some installation elements, rather than using wizards, isn't as straightforward as it used to be!

XProtect Corporate was always very much a CCTV tool once you got past the initial installation, but some of the 'surveillance-centric thinking' seems to have been removed in the new version.

Nuuo's IP Surveillance System is supplied with an auto-executed installation assistant which also includes all of the relevant documentation. The guides do cover the full range of possibilities for installation, including dedicated NVRs. The installer process is simple, and it completed without any issues, and was relatively swift.

While the installation wizard is running it will detect if any Microsoft elements are required and automatically install them.

When the installation is complete, the installation tool creates a database, and then you are ready to go. The first log-in will prompt you to set an administrator password.

Once up and running, you can immediately see that the GUI has been developed for use on an NVR as well as in a software VMS environment. Although it looks a little less 'high tech' than the other packages, it is intuitive. Adding devices is simple, and whilst the 'auto-detect' mechanism only found half of our cameras, manually adding the others was swift and accurate.