The Benefits Of Map Based Monitoring

IndigoVision

Why Map Based Monitoring?

Video Management Software (VMS) is specifically designed to help manage security devices and the footage they record. It is an aspect of modern security solutions that has been somewhat overlooked in recent years.

Yes, IP video solutions continue to evolve, with solution providers developing numerous new and imaginative ways to capture and store footage. However, little has been done to improve the way operators manage all of this new technology, with most solutions still employing the same 'tree view' system that they have always used.

Tree views are often convoluted, with each individual device requiring its own name and location on the network. This, in turn, requires operators to memorise a huge amount of information and, as devices are often installed by different personnel and, in many cases a different company entirely, it is easy to become confused. This confusion can be compounded further if the network has to be reconfigured to accommodate new devices or move existing ones.

This can cause problems for organisations which have to manage a particularly large or complex security system; it also makes it difficult to manage a system remotely, something which more and more organisations are keen to do. It also means that operators have to go through a protracted training program, and often struggle to respond to situations quickly due to the complexity of the interface they are using.

Therefore, as security solutions becoming steadily more intricate and larger in scale, it is more important than ever that operators are able to access individual devices quickly and efficiently.

That's why video management software design needs to focus on improving how the operator interacts with the software. One of those improvements comes from map-based interfaces.
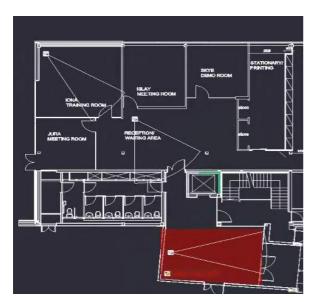
Using a map based interface allows operators to simply click on a particular area and access any and all devices installed there. This simple, user friendly approach has the potential to drastically improve several different aspects of the security industry. Let's look at these in more detail.

Improve Remote Monitoring

With IP video becoming increasingly prominent in the security industry remote site monitoring is becoming more common. This presents a new set of challenges for security professionals.

For one thing, many system operators will often be monitoring areas which they have never actually visited, and relying on equipment that has been set up and configured by someone else, who they may never have met.

This can cause serious problems; say for example, an alarm is triggered at a fence, the operator does not know the surrounding area, or even how many cameras there are. In this scenario, it would be almost impossible to track an intruder; the traditional tree-view of cameras and alarms is just too slow and cannot supply enough intelligence.

Map based VMS allows operators to quickly access all relevant cameras simply by clicking on the appropriate area. This allows them to see exactly what is happening and easily track any intruder without needing to rely on knowledge of the area itself.

Streamline Staff Training

It can take weeks, even months to train a new operator to efficiently use a security system, as they have to get to grips with an often lengthy list of device names and locations. Many organisations even have to produce a handbook, which they must ensure is kept secure and up to date.

This issue is particularly challenging in areas such as city centres, which often have complex layouts meaning that operators need more time to orienting themselves, before they can determine which camera to bring up.

Once again, the easy to use nature of map based VMS shines here. Because cameras can be accessed with a simple mouse click, there is no need for operators to memorize the names and locations of individual devices, and having a map of the area in front of them also removes the need for operators to orient themselves before bringing up cameras.

Managing Large Scale Systems

It has been a long time since the security industry received its first scalable VMS in 2002 – we know because we created it.

At that time, IndigoVision's Control Center software was capable of supporting hundreds of cameras. Today it can support tens of thousands.

While this is excellent news for organisations which require enterprise level security systems, it does further expose the shortcomings of the traditional tree view approach.

The sheer volume of devices which appear on these systems makes trying to find specific clips of video footage like searching for a needle in a haystack – it's woefully inefficient.

Map based VMS allows operators to access footage within seconds, simply click once on the area in question, the again on the individual camera to access it. From there, finding the footage you need should be easy.

Reducing Response Time

As you've probably already noticed, the theme that runs through all of the above points is improved response time. Traditional video management software makes it difficult for the operator to find the right camera.

For example, the camera may have been named incorrectly, or placed in the wrong location in the tree view during configuration. These problems are worsened as the number of cameras increase, with our research showing that these issues occur in systems with as few as fifty cameras.

Even if you don't feel that any of the above examples apply to you, the fact is that less time spent sifting through tree views means that operators can respond faster to developing situations - it really is that simple!

Summary

Although we have discussed map interfaces in general, the majority of VMS developers have taken a very basic approach to map interface design. That basic approach has meant the security operator or manager when using a VMS with a poor map interface does not experience these benefits.

However, the feedback we've from operators who have used a VMS with more advanced map based interfaces has left us in no doubt that this is the way forward. And now that IndigoVision's VMS, Control Center, is integrated into online mapping software - it's even easier to design your own maps.

We have no doubt that as more end users are exposed to a genuine map based VMS, and come to realise the benefits it offers, that this will eventually replace tree view systems as the industry standard.