

## Add intelligence at ZERO incremental cost

iOmniscient’s new **SmartVMS Enabler** can work with ANY existing VMS to reduce the storage and network bandwidth requirements by over 90%. In view of the high interest in this capability, we now provide further insight on its features and benefits.

### The Issues

With the increasing use of high resolution cameras, the cost of storage and bandwidth is also increasing. Users have two options when it comes to recording their video. Either they can record their video in the resolution of the camera or they can record at a lower resolution.

Let us consider a user who installs a 2 mega-pixel camera. If he records at 2MP, it takes an enormous amount of storage and requires significant bandwidth for transmission. However, much of this resource is wasted as a lot of useless information is continuously recorded. If he records at 1xCIF, he loses the detail which he might need for investigation in the future and hence has got little benefit from using 2MP cameras.

- The statistics show that almost 99% of the information stored has little value. Once the information is archived, it is very expensive and time consuming to search for and retrieve the relevant information.
- The other challenge for most users is that they do not know what is important or what may be important in the future.

### The Solution

iOmniscient’s **SmartVMS Enabler** is an internationally patented technology that enables the user to save enormous amount of storage and network bandwidth by recording only the important details at high resolution and the rest at a lower resolution (even down to 1xCIF).

For instance, the system can capture the faces of all those in the scene in high resolution (leaving the rest of the image in low resolution). If one is trying to recognize people in the video, the VMS only needs to store the face of the person in high resolution. If the rest of the image is stored in a lower resolution it will not negatively impact the recognition of the person.

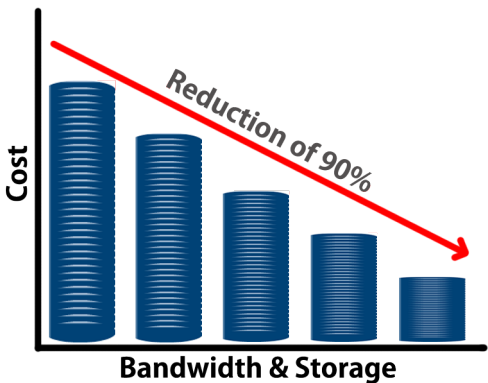
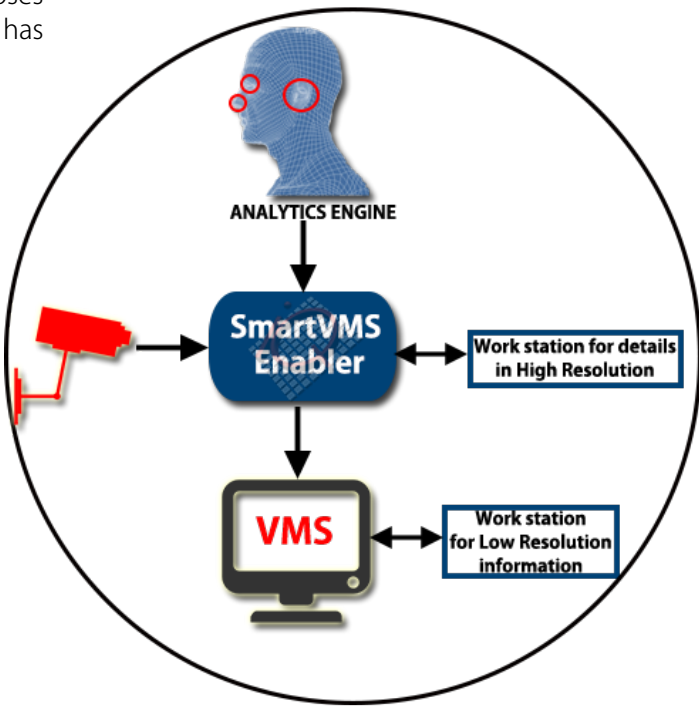
The selection criteria can be broadened or narrowed. Hence the user could capture the faces of only those individuals who are involved in some particular type of behavior. Or the system could capture a particular abnormal activity (such as a car accident) in high resolution. But no information is ever lost.

## Cisco integrated with iOmniscient's advanced video analytics

Cisco has integrated iOmniscient's advanced video analytics with its security portfolio to fulfill increasing expectations for highly accurate and reliable analytics capable of working in crowded and complex scenes.

Visit us at **ASIS** in Atlanta at the **Cisco Booth (No. 225)** to see a live demonstration of this integrated solution.

Please **click here** to book a meeting with us or send us an email on **meeting@iomniscient.com**



### The Benefit

The **SmartVMS Enabler** uses iOmniscient’s advanced analytics to understand the activity in the video and to accurately extract the important information based on a flexible set of rules. These rules can be automatic or user defined. The system can therefore achieve enormous saving in Storage and Network Bandwidth. For a 2 mega-pixel camera the storage required can be reduced by over 90%. To make this tangible, if the normal cost of storage required to record the video is \$20,000 it could be reduced to \$2,000.

Environments with very low bandwidth may never be able to transmit large quantities of high resolution video. This problem is solved using the SmartVMS Enabler because most of the video can be transmitted at lower resolution whilst the important details are still retained and transmitted at full resolution.

Everything is done automatically with no human involvement. All information is recorded so nothing is ever missed. However information that is considered important is captured and stored in high resolution.

And with iOmniscient's Jump to Event capability, the high resolution information can be extracted at the click of a single button. This saves the significant manpower that would otherwise be required to search the video for a particular event.

Example:

An airport has 3,000 cameras, each with a resolution of 2 megapixels. It will require 8,500 Terabytes of storage for recording 30 days of video using H.264. If the video is not stored at a resolution of 2 megapixels they will lose all the detail.

The iOmniscient **SmartVMS Enabler** will allow the airport customer to store the video at whatever resolution they like (e.g. at 1xCIF) without losing the detail because the detail will be separately recorded at a high resolution.

The average cost of storage today is US\$500 per Terabyte. With SmartVMS the airport will save around 90% of the storage – a saving of US\$3.8m – which can be used to purchase intelligence that makes the system more proactive and the user more productive.

iOmniscient's **SmartVMS Enabler** sits alongside any VMS and can make it more efficient by telling it which segments of the video needs to be recorded in high or low resolution.

And the SmartVMS Enabler from iOmniscient is **FREE** (though you do have to pay for any analytics you decide to use in the system).

In summary, SmartVMS Enabler from iOmniscient can offer the following benefits:

- Substantial savings on costs and resources.
- No compromise on video recording and No information is missed. ONLY important and relevant information is saved in high resolution.
- Enhanced overall productivity and a proactive system.
- Accelerate the search to get to the relevant part of video in a timely manner.

## iOmniscient proudly sponsors Asia's premier smart cities event 'Future Cities Asia'

iOmniscient has always been at the forefront of implementing Smart City Solutions by integrating all its intelligent analytics capabilities. The company has several citywide deployments in Asia and several other countries around the world.

iOmniscient is committed to make cities Smarter and Safer and to take this commitment forward, we are delighted to sponsor Asia's premier smart cities event - **FUTURE CITIES ASIA**. This event will bring together city authorities, government agencies and the private sector to discuss integrated citywide solutions that will drive and foster convergence in the smart city space.

iOmniscient's Managing Director Ms. Ivy Li and CEO Dr. Rustom Kanga will be speakers as well as panel members at the event. Based on practical experience in implementing smart city projects, the topics covered will be:

- Ms Li: **"Multi Media Analytics for Safe Cities: How to implement this at Zero Cost"**
- Dr. Kanga: **"Emergency Management with Automated Responses"**

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