

## **Everything is simple with the Red**



Redvision's VMS 1000 is an easy to use industry leading Open Platform Video Management Software for small to medium businesses through to high-end Enterprises.

Making use of the most advanced concepts in digital intelligence in the area of surveillance and physical security, the VMS 1000 embarks upon a new age in the active and passive surveillance of security cameras, integrating solutions and offering the most modern technologies that are available today.

With large numbers of connected devices coming together, there is so much data being generated which will continue to grow.

Bringing together technology and intelligence, the Redvision VMS 1000 provides a solution that is a value-add to our customers.

#### Single Command Control.

Redvision's partnership with other physical security systems, as well as many analytical software developers, is designed to integrate multiple unconnected security applications and devices and control them through one comprehensive user interface. This offers benefits including increased control, improved situational awareness and a proactive resolution of site incidents.

Ultimately, our solutions allow organizations to reduce costs through improved efficiency and to improve security through increased intelligence.

#### Our ethos



#### Independent

The best IP video management systems are independent of hardware and give you the freedom to select the "best of breed" hardware with the best fit for your application.

Our Independence is a unique key to be working with the best hardware and technology partners around the globe. This makes it easily accessible to every enterprise, no matter how small or big, and whatever the budget. We believe security should be affordable for everyone.



#### **Enterprising**

Adopting new technologies is our vision and a key strength of Redvision. These technological advances will have a positive impact on ROI for your security systems.

Investment in any new system comes out of a company's capital expenditure, and "returns" can be difficult to calculate. Not anymore!



#### **Open Platform**

Redvision's VMS 1000 is Open Platform, which translates into "Freedom of Choice" for our customers, avoiding being locked in to proprietary systems.

VMS 1000 is the most compatible software in the market, supporting more than 6000 devices and 250 different manufacturers. This list is growing every day.

# Redvision transforms video surveillance into real value for your business



## Center of your business intelligence

With deep intelligent integration, we bring the latest technology to your fingertips. Configuration, analysis, playback, report generation and more, are all embedded into the VMS 1000, making it extremely simple and easy to use.

#### **Tiered Offering**

Redvision offers 4 package options for the VMS 1000:

- Explorer
- Standard
- Professional
- Enterprise

Each package includes features compatible with any type of installation and support for a large number of IP cameras. This enables economical custom solutions for your immediate needs, while providing the scalability for future expansion.

## Save bandwidth and spend less

Redvision leverages multi-streaming capabilities, allowing live recording views in both small screen and full screen mode. It uses different streams for motion detection in order to avoid overloading your hardware. This means you can achieve better performance, even with your existing hardware.

#### Language Support

A truly global solution, Redvision's VMS 1000 software is written in 14 different languages: English, Spanish, Portuguese, Dutch, Japanese, Korean, French, Czech, Italian, Russian, Traditional Chinese, Simplified Chinese, Turkish, Lithuanian.





#### Мар

Supports creation of multi-level maps but also Google maps with camera auto population advanced engine.



#### **Virtual Matrix**

Manages large video walls, sending objects, images from cameras, maps and screen styles from monitor to monitor. Highly essential feature in any modern control room.



#### Intel quick sync

Support for video decoding (H.264 and H.265) using Quick Sync via the Intel processor video card.



#### **Multi-Processor Scalability**

The VMS 1000's powerful memory manager allows greater scalability when using multiple processors. It reduces CPU usage by up to 50% in servers with high processing volume and multiple cores.



#### **Redvision Insight**

A free utility provided by Redvision. Insight is screen capture software that works as an IP camera. It generates streaming video to the Redvision server containing the desktop screenshot of where it is installed. It also has the ability for remote PC access.



#### Failove

Achieve uninterrupted system connectivity and ensure maximum up time and peace of mind. When you have critical data to protect, you can rely on Redvision's failover to provide continuous access. It can tolerate hardware failures without any system interruption.

Redvision also offer for failover LPR, VCA & I/O devices



#### Multiple-thread media playback

The VMS 1000 delivers high performance when reading images and sending them to the client PC's.



Attach Multiple images to e-mail and enable full e-mail customisation.



#### **Redvision Mobile**

Redvision Mobile is a software developed on the Java platform for mobile devices such as Smartphones and PDAs. It makes it possible to view images of IP cameras and video encoders as well as activate events from your mobile devices.



#### Edge recording and self-healing

Edge recording is possible on integrated cameras where video is recorded to the camera's SD card. When there is a network disconnection, missing video will be transferred back to the central server as soon as the network connection is restored



#### MP4 compatible with WhatsApp

The .MP4 export format is now WhatsApp compatible and can be sent directly through the WhatsApp web.

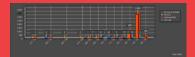


## Redvision. See More. Do more.



#### Research and Reporting

Redvision lets you easily generate reports from any analytics event in a variety of styles including line, bar and pie charts. Set advanced filters and create comprehensive reports within minutes. Valuable business intelligence is at your fingertips.





#### **Redvision Keyboard**

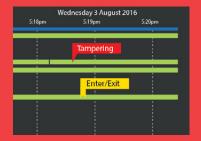
The keyboard controller VMS-KB1000 has been developed exclusively for the VMS 1000 system to provide faster and easier control over your entire operation.





#### Bookmarking

Innovative video bookmarking is an advanced forensic tool which allows fast marking of events for later search.





#### Screen Style

Redvision VMS solutions provide unlimited screen style creation.
This flexibility gives the customer more control over display options.





#### **Redvision Mobile Camera**

Mobility is more important than ever. The VMS 1000 system allows recording and live viewing of images from smart mobile phone device (Android or iOS) cameras, where there are no security cameras.

- Police
- Cargo Inspection
- Patrol/Security Guards
- Maintenance Team





#### **Meta Data Recording**

Redvision's system allows metadata recording and playback tied to camera images.





#### Thumbnails search in playback

Redvision Media Player allows you to search by thumbnails. This great feature will display a thumbnail at different recording times, allowing you to quickly locate footage.



Only key features are covered in these pages. Contact Redvision for a comprehensive list.

#### **Exporting in MP4**

The media player allows native exporting to .mp4 format as a great alternative to .avi exporting.

#### **Exporting in JPEG**

The media player allows video export in JPEG.

#### **Codec for AVI Exporting**

Redvision will install by default two great codecs for using in video export:

- XviD MPEG-4
- X264

#### **Turbo Exporting**

This is the default export mode for the highest possible export speed.

#### **Protect Video Exporting**

This is an option for password protected exporting.

#### **Media Player Printing**

Printing of multiple cameras.

#### **Privacy Mask**

The Privacy Mask feature allows for blurring the areas of an image as well as a total blackout.

#### **Image Cropping**

Use this feature to crop the camera image from media playback. The system administrator can select an area of the image that they wish to keep visible for the users.

#### Selection of Multicast Network for Relay

Redvision allows the selection of a source network for sending images using multicast.

#### **Motion Detection**

Recording profile (Resolution & Frame Rate) changes by motion detection offers huge savings or bandwidth (storage).

#### **Archiving**

Archived recordings are considered "Cold Storage" and form part of the archiving system. These can be configured to copy all recordings of the previous day to another storage folder. This can be located in a different storage device that usually has lower performance and lower cost.

#### **Audio Archiving**

The archiving system archives audio as well.

### Send Multiple Object to Virtual Machine

Virtual Matrix allows the sending of all objects on the screen, along with their configurations (Current media profile, zoom position, 360 lens position, image filter and motion detection).

#### **Support ONVIF**

Deep Integration with the latest ONVIF version

#### Support H.265

Full support for decoding and management of H.265 streams (HEVC).

#### **Audio Level Detection**

Redvision can analyse the audio level of an environment. Events can be triggered when the noise level is above or below a specified level for a designated time period.

#### **Edge Analytics**

Both LPR & VCA systems support Edge analytic cameras which run embedded analysis algorithms.

#### **Report Authentication**

Redvision has a great feature for verifying the authenticity of an issued report for legal purposes.

#### Video Buffer

Redvision's VMS 1000 surveillance client allows the option for video buffering with different settings for fixed and PTZ cameras

#### **Ping Test on Device**

The camera and I/O device status now provides a quick link for a ping test as a way to diagnose communication problems.

#### Easy Registration of Multi-channel Device

This is an option to automatically register multiple channels of a multi-channel device such as DVR, NVR or multi-sensor camera

#### **Multi-thread Performance**

The system multi-threading scheduler allows better performance and control



#### Support HTTPS/SSL

Redvision Web Server has support for HTTPS and SSL.

#### Support IP V6

The Redvision VMS 1000 server can connect to camera: using IPv6 and clients accessing the server using IPv6 networks.

#### **Support SNMP**

The Redvision VMS 1000 allows sending TRAPs to notify the occurrence of any system events through the SNMP protocol.

#### RTSP server

The VMS 1000 has an internal media buffer in the RTSP Server to improve the transmission of media in connections slower than the original camera bitrate. With Redvision's VMS 1000, transmission of MJPEG over RTSP uses little bandwidth



## Video Synopsis

[13:40]



Too much video. Not enough eyes.



Get to the point



Multiple configuration option



See patterns at a glance



Find your target

## Fast video review, search and analysis

Redvision has integrated third party Video Synopsis® technology. This helps everyone, from law enforcement, government and public security organizations, to private security and corporate entities. It achieves rapid video review, search and analysis via the simultaneous presentation of events that occurred over time.

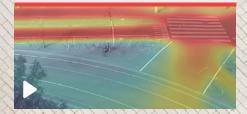
## Know what you didn't know before

Synopsis technology can recognize and extract objects, along with information about those objects, such as color, direction, path, dwell time, size, speed, and more. It has been developed over the years to handle thousands of scenes, lighting and weather conditions.

## Reduce your time to target

Synopsis offers a powerful set of video review tools for locating events of interest so that users can reach targets more quickly than ever before.

#### **Pathways**



#### **Activity Map**



[08:34]



#### Video Synopsis



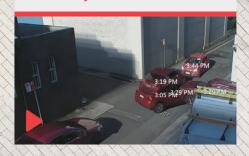
**Original Video** 



Other key filters:

Speed
Area of interest/
Area of exclusion
"Similar to This"
Customized path

#### **Refined by Colour**



**Refined by Direction** 



**Refined by Size** 







At Redvision we work with the best forwardthinking technology partners to create a safer and more secure planet through face recognition software technology. This is ideal for airports, shopping malls, cities, law enforcements and more.

Redvision's face biometric system is very powerful. It differentiates between persons that look alike, even on galleries of thousands of enrolled people.

Thanks to the State of the art algorithms, we can achieve robust and efficient detection of multiple faces under challenging conditions.

Our technology has taken facial recognition accuracy to the next level using the latest advancement in computer vision technologies, Deep learning techniques and Al.

Deep learning is a branch of machine learning with multiple levels of representation and abstraction to make sense of the data. It is a set of algorithms in machine learning which uses artificial neural networks to learn multiple levels of abstraction.

Faces are represented into multidimensional numerical vectors called faceprints.



#### Key features

- Log all faces, known and unknown
- Enroll from unknown events given a specific unknown face
- Blacklist and whitelist
- Hardware agnostic
- Automated alert escalations
- High recognition rate with very low false positives
- Activity log, logs any feed activity
- Trigger VMS 1000's global events

#### Redvision's Global Events

Send e-mail to a group of contacts

Show objects to operator. The objects will be displayed in the same popup

Play alarm sound in surveillance client

Send an instant message to the operator

Request operator acknowledge

Call presets from cameras Activate output action scripts

Activate or deactivate system objects

Send a HTTP request

Create a bookmark

Download recordings from devices with edge recording support

Create timer event

#### Forensic Analytics

#### Empower your security team with the best surveillance tools.

Quickly locate a specific person of interest across an entire face monitored site by uploading a photo of the person of interest. It can dramatically improve incident response time and enhance forensic investigations.

Disclaimer: Images and drawing are for illustration purpose only.





## **Video Content Analytics** [VCA]

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#### **Main Applications**



































Video retail analytics is the best way

to understand your business, and to

make educated retail decisions

**People Counting** 

to grow your business.

#### Analytics driving the future of next-generation video surveillance.

With camera counts in large-scale applications becoming larger than ever, they generate huge amounts of data that strains human resources.

Redvision video analytics can complement the human operator in the supervision task in two ways: Real-time video alarm triggers and assisted video

Independently tested against the UK Home Office i-LIDS, Redvision VCA technology is able to work exceptionally well by automatically adapting to varying light conditions and reducing false alarms.

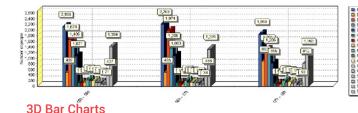


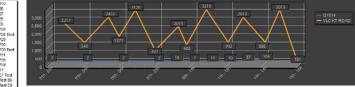


#### Powerful report generation.

Create customized reports based on system events, specific parameters and filters.

**Pie Charts** 





**Line Graphs** 



# License Plate Recognition [LPR]





Redvision offers the world's best library of number plates for recognition.
It can be read at acute

It can be read at acute angles, in many different lighting conditions and most importantly, at high speeds.

#### **Benefits of LPR**

- Allows integration with external databases including cloud database integration with external control devices.
- There is no limit to the number of recorded plates on the database.
- Allows search by date, time, plate, set characters, used cameras and customized filters.
- Allows you to generate and print powerful reports.
- Largest license plate library in the world. It is fast, highly accurate and cost-effective.
- Able to detect fast moving vehicle speeds of up to 250km/h.

 Due to our core LPR engine's outstanding technology, it delivers high accuracy, fast image processing and adaptability. It is amongst the best of its class.





#### **Benefits of POS Integration**

- The Redvision VMS 1000 uses the Unified Security monitoring and analysis platform for POS integration.
- Protect company assets by detecting fraud early through analytics.
- Zero in on vulnerabilities where potential theft can occur, such as line item voids, employee discounts no sales, coupon overrides & more.
- User friendly audit investigation tools allow easy setup of transaction categories.
- All POS transactions are time synchronized with all Redvision VMS 1000 surveillance video.

- Easily bring up multiple camera views of an event during forensic investigations.
- Monitor POS activity locally as well as from a remote site at any time.
- Powerful Hypermedia Search tools link all POS text received with all stored Redvision video.
- Select events from the audit spreadsheet to view the transaction and its associated video.
- · Export video evidence.





Redvision is the UK's leading manufacturer of high-performance, CCTV cameras and housings for tough, hazardous or corrosive, outdoor surveillance applications.

Redvision brands include the pioneering, X-SERIES™ rugged PTZ dome camera; the VOLANT™, the fast, quiet and accurate, rugged PTZ camera; the VEGA™, rugged camera enclosure; and the VMS 1000, open platform, video management and analytics software.

IP and analogue models of each Redvision camera are available, all with low power consumption. Options include a wiper, to remove water or dirt from the optically-correct camera window; white-light or IR, LED illuminators for night-time operation; and a range of mounts, brackets, RAL colours and marine finishes.

Redvision cameras are weather-proof rated; impact, shock and vibration resistant; and salt spray resiliant. IP models are ONVIF S compliant.

Redvision products are popular in applications from town centres, utilities and universities to ports, prisons, industrial buildings and MoD sites.



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