iVENCS
everything's under control.

overview

The iVENCS Control System is an open and intuitive integrated management platform. Offering comprehensive control, monitoring, and incident analysis across all building safety, security and communications subsystems, iVENCS sits at the heart of building and site management.

- Intuitive 3D or traditional 2D graphical interface
- Comprehensive library of equipment types
- No ongoing license cost
- Distributed processing with multi-site redundancy

- Modular system architecture; easily expandable
- Customisable administrator permissions
- Cross platform support
- Caters for many industry applications

a custom solution

According to what subsystems you wish to monitor and control, you can add any number of iVENCS modules to the iVENCS Core package. iVENCS can simultaneously control multiple subsystems including Public Address, Fire, CCTV, Digital Signage, Network Monitoring, Building Management Solutions, SCADA, and more. From small site management to large sites, iVENCS can be as comprehensive as you require.

Public Address	CCTV	Fire	Help Points

Display Systems	Telecoms	Network Monitoring	SCADA	and more...

3D and 2D viewing options

iVENCS offers both a traditional 2D view and ASL's award-winning 3D view to allow the user to digitally navigate around the site.

The 2D view allows users to view site maps at a top-level. This view is helpful for gaining a quick overview of large site applications, such as multiple stations over a railway line or large international airports with many gates.

The intuitive 3D view enables the user much more in-depth control of the site, with the ability to zoom in on certain devices to see their statuses, select zones and easily see which zones you are making announcements to, analyse evacuation routes, and also be alerted of system faults in real time and be directed to the equipment at fault. Intuitive controls allows the user to pan, tilt, rotate and zoom at ease, with the ability view and select multiple storeys at once or drill down into a particular floor or room.
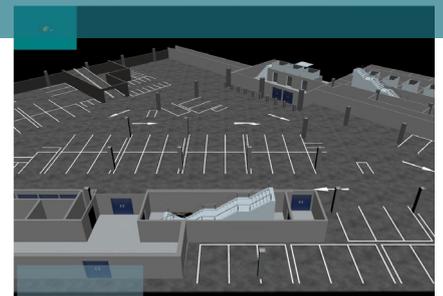
2D

A 2D view of Glasgow's railway system allows multiple stations to be monitored simultaneously

3D
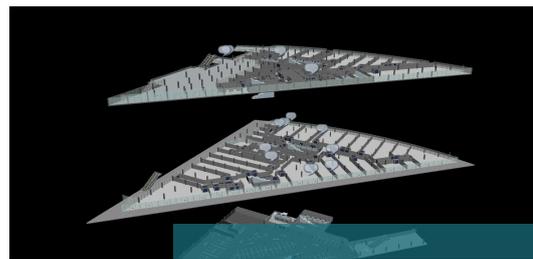
A 3D view of Westfield shopping centre allows easy navigation of multiple floors all on one screen

fault and status reporting

iVENCS continuously monitors both its own health, the status of its subsystems, and all associated devices. Each alarm is configured using a prioritised alarm structure, each with their own alerts and pop-up warning banners. And it's not just alarms that iVENCS can monitor; status icons can be used to show operating statuses, such as doors being open or closed, the direction of escalator movement, and the position of lifts and barriers.

All triggered alarms and system faults are logged as incidents and stored in an event history archive. A user can look back over past incidents and create a report and can export this data to spreadsheet applications such as Microsoft Excel. With search, sort and filter functions, any device can be quickly identified and its event history accessed.

flexible user permissions

Different admin rights can be configured in iVENCS for various users according to their role. For instance, a site maintainer's account can be configured to view the entire system and all device statuses for full comprehensive control, whilst the account for a site manager who only wishes to see the overall site status can be configured to see a smaller number of indicators and statuses.

simple system maintenance

With a built-in editing tool, iVENCS users are free to maintain and amend the system themselves, with no need to come back to ASL for further system development. Users can freely re-position and edit subsystem equipment icons and add new devices and mirror system changes, with preview, auto-save and roll-back functionality, all whilst a record is made of all the amendments.

A training mode also gives operators the ability to play out life-like scenarios within a safe, simulated environment without the need to purchase and maintain additional training workstations.

low operating costs

Intelligent alarm handling allows equipment downtime and maintenance costs to be reduced. In the event of an equipment failure, the fault is prioritised and escalated to in-house or external maintainers, according to the failure's impact on the system.

With a single click, the operator is transported through the 3D model to the affected device, without the need to hunt through files or check site maps. Contingency plans are automatically enacted where necessary, whilst detailed diagnostic information in the form of a fault tree accompanies alerts with suggested corrective actions.

ST PANCRAS INTERNATIONAL

St Pancras International is Europe's largest rail hub, where several iVENCS workstations offer control and monitoring of over 8,000 devices across 16 communications, security and life safety subsystems including CCTV, BMS, network switches, passenger help points, long line public address, voice alarm, access control, passenger information displays, vehicle barriers and telephones.

iVENCS' advanced features allows for tiered user role operation across multiple sites, failover and redundancy between operational and backup locations, monitoring and control of all safety subsystems from workstations situated in the Eurostar control rooms and from others located about the station.

Following successful delivery of the system, ASL won a number of awards including 'Best AV/IT Project', and have been providing ongoing support and maintenance strategy aimed at reducing overall lifecycle costs.
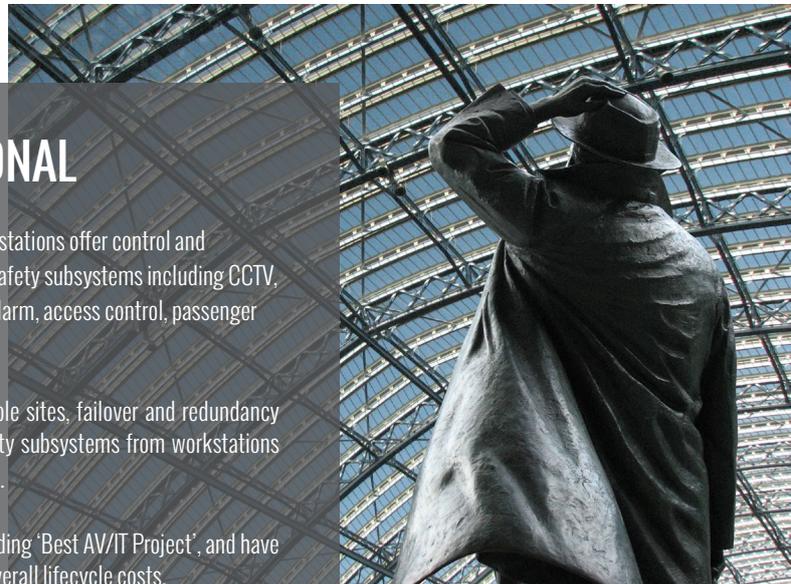
implementation options

There are a number of implementation options to suit various different needs, budgets and requirements.

iVENCS can be installed onto any number of workstations. For smaller applications, just one PC with a built-in server will suffice, whilst at the other end of the scale, multiple-server systems can be set up with IP connectivity, enabling the management of large complex sites with an almost unlimited number of monitoring and control points.

Both the servers and workstations run on either Windows or Linux operating systems. An iVENCS system can be supplied with more than one server to offer dual or multiple redundancy, ensuring peace of mind that the system will keep running smoothly even in the event of a system disruption.

Please see the table below for examples of various hardware options:

Integrated-Server Workstation

Separate-Server Workstation

Standalone

1 workstation + built-in server

- Back-end server + Front-end user interface all in one PC
- Less storage space required
- Best for smaller sites

multiple workstations

+ separate server

- Back-end server PC separate from Front-end user interface PCs
- Easy to upgrade
- Best for large sites with more than one system operator

Dual Redundant

2 workstations + built-in servers

- Most reliable option for a smaller site
- Two workstations/ servers ensure dual redundancy - if one workstation fails, the other keeps the system running

multiple workstations

+ multiple servers

- Most reliable option for large sites
- Multiple servers ensure dual redundancy - if one server fails, the other(s) keep the system running

We understand that different sites have many different requirements, and that working out the variation of control system you require can be complex - so please contact us if you would like any help with clarifying your requirement, and we will be happy to assist.