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 transport and site safety, security and communications subsystems, iVENCS sits at the heart of transport, 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
- Built-in Training System

- Modular system architecture; easily expandable
- Customisable administrator permissions
- Cross platform support
- Caters for many industry applications
- Context sensitive help on every page

A CUSTOM SOLUTION

According to which 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, Passenger Information, Fire, CCTV, Digital Signage, Network Monitoring, Building Management Solutions, SCADA, and more. iVENCS can integrate with Train and Signalling control systems, and Remote Condition Monitoring or Performance Reporting can be included. From small site management to large sites, iVENCS can be as comprehensive as you require.

| Public Address	CCTV	Fire	Help Points	and more...
Passenger Information	Condition Monitoring	SCADA	Training	

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, building, or railway line, and even onto mobile locations such as on trains.

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, a depot or a large international airport site.

The intuitive 3D view enables the user much more in-depth control, with the ability to zoom into the buildings, stations, or trains, and to see the status of the equipment at each location. Operators can easily select zones and can easily see which zones they are making announcements to. Alarms can lead the operators directly to the affected locations, and the 3D model gives easy understanding of large sites, which may have complex public routes. Intuitive controls allow the user to pan, tilt, rotate and zoom the site view at ease, with the ability to select and view multiple stories at once or to drill down into a particular floor or room.
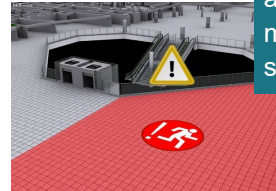
2D

3D
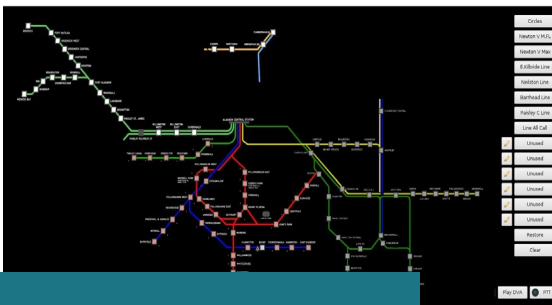
A 2D view of a railway system allows multiple stations to be monitored simultaneously
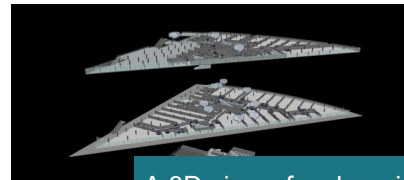
A 3D view of a shopping centre allows easy navigation of multiple floors all on one screen

FAULT AND STATUS REPORTING

iVENCS continuously monitors both its own health, the status of its subsystems, and the status of all associated devices. Each alarm is configured using a prioritised alarm structure, each with their own alerts and configurable pop-up warning banners. 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. Operator instructions can be provided direct from the Alarm List, for immediate advice when it is needed.

All triggered alarms and system faults are logged as incidents and are 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 groups of users according to their roles. For instance, a site maintainer's account can be configured to receive full detailed device statuses for comprehensive monitoring of the systems, whilst the account for a site operator can receive simplified and filtered service affecting alarms, without all of the detailed clutter. Each operator can be provided with different subsystems monitoring and control permissions, based on their role, or on their training.

SIMPLE SYSTEM MAINTENANCE

With a built-in 3D Model configuration editing tool, iVENCS users are free to maintain and amend the system themselves, with no need to come back to ASL for tweaks to the configuration. 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. The site graphics are created in AutoCAD, and can be updated by the user's CAD team, or by a local bureau.

A built-in training mode gives operators the ability to play out life-like scenarios within a safe simulated environment, with repeatable scenarios and recorded responses to the test situations.

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. Whilst detailed diagnostic information in the form of a fault tree accompanies alerts. Operators can receive situation management instructions with each alarm, while the maintainers can be provided with suggested corrective actions.

BUILT-IN CONDITION MONITORING AND PERFORMANCE MANAGEMENT

iVENCS built-in RCM Condition Monitoring and Performance Management reporting modules provide unrivalled control system functionality, benefitting both the maintenance and management teams, as well as the operators who traditionally use site management systems.
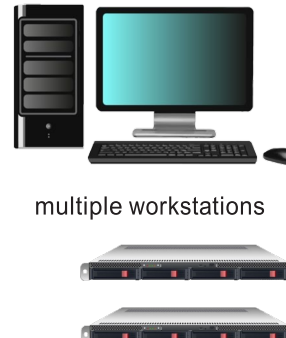
FLEXIBLE HARDWARE IMPLEMENTATIONS AND REDUNDANCY

iVENCS' advanced features allow for tiered operation across multiple sites with failover and redundancy between operational and remote or local backup locations. There are many implementation options to suit 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 and distributed systems with an almost unlimited number of monitoring and control points. The iVENCS SDK also enables integration with other control systems.

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 and servers can be run on dedicated hardware or in data centres, 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

Standalone

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

1 workstation + built-in server

Separate-Server Workstation

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

multiple workstations

separate server

Dual Redundant

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

2 workstations + built-in servers

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

multiple workstations

multiple servers/servers running in datacentre

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