# Network Monitoring

**iVENCS CORE +**

## overview

The iVENCS Network Monitoring module offers operators a complete view of the statuses of a site's IP equipment, networks, servers, workstations and more.

iVENCS Network Monitoring can simultaneously monitor a large number of devices at once, so maintaining the performance and health of even the largest systems simple, and bypasses the need for excessive server or network bandwidth.

Operators can view and export detailed status reports which greatly simplifies installation and maintenance activities associated with IP networked equipment.

## visual equipment monitoring

The module works in conjunction with the fault reporting functionality included in the iVENCS Core package which provides aggregated views of status data from all the controlled and monitored equipment, for a simple and clear overview of device statuses.

iVENCS' 3D model enables the viewing of monitored devices in their exact site location, while the Network Monitoring module adds the ability to view the equipment status directly on top of the 3D objects of the equipment racks themselves. iVENCS Network Monitoring shows consolidated status reports on plan drawings of the equipment rooms for each equipment rack, where the health and operational status of each is shown visually via coloured icons. Operators then have the option to drill down to view detailed reports and historical timelines for each rack if desired. The facility provides a quick overview the system's health and status for operators, whilst enabling site engineers to gage exactly what each equipment rack looks like and which piece of equipment may be at fault - all from the same workstation.

The ability of iVENCS Network Monitoring to detect which particular device is at fault avoids the need to take a whole network down by directing the user to the server at fault in a dual redundant system, so a maintainer can switch off just the failed unit rather than the entire system. The ability to visualise faulty equipment also helps for visiting maintenance engineers who may be less familiar with the system and equipment on site.

The system's servers, workstations and other IP-connected devices such as Help Points and CCTV cameras can also be monitored using various methods including SNMP polling and traps, IP pinging and log files.

## 24/7 status reports

iVENCS Network Monitoring operates 24/7. System equipment is continually monitored and all results are logged up to a rate of every 60 seconds and then auto-archived. This is useful for operators when determining if it is necessary to call an engineer to investigate an equipment fault according to its intermittence. The visiting engineer can also view the equipment's timeline, that shows when and for how long a piece of equipment has been at fault in the past, to evaluate its performance and advise on a repair or replace accordingly.

## example applications

• System FAT Testing
- IP subsystem equipment monitoring
- Control System Failover testing
- NTP Time Synchronisation checks, with filtered views of the time sync of all servers and workstations
• System Commissioning
- Easy high level consolidated view of the system status
- Drill down to Comms Room, Rack, Server and Process status
- Network connectivity monitoring of all equipment
- Historical logging of equipment availability and identification of intermittent connectivity problems
• Installed System Maintenance
- Subsystem equipment monitoring, including IP CCTV Cameras and Help Points
- Control System server and process status monitoring

This equipment is designed and manufactured to conform to the following EC standards:
EMC: EN55103-1/E1, EN55103-2/E5, EN50121-4, ENV50204
Safety: EN60065

Assessed to ISO 9001
LPCB Cert No: C1043

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