

GMS

GRAPHICAL MANAGEMENT SYSTEM



GMS

The integrated security management system for multi-site organizations.

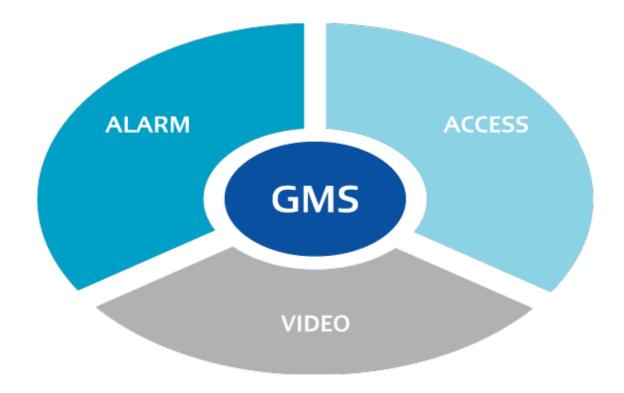
Pacom's Graphical Management System (GMS) is the modular client-server application that integrates all of Pacom's powerful security management operations. This includes:

- Access control and elevator management
- Hardware configuration
- Alarm monitoring & management
- Identification and card printing
- Digital video surveillance & recording
- interfacing to third party systems

Choice is important which is why the GMS solution caters to organizations that wish to monitor/manage their system in-house or outsource it to a third party or a combination of both. Decisions change so it is important that your investment is preserved to cater to different market conditions.

GMS integrates alarms, access control, video, security and building automation into a single, remotely-accessible system. The levels of redundancy are unrivalled in today's market with technologies that deliver uninterrupted system operation, intelligent self-testing, multiple back-ups and remote disaster recovery. Open architecture and intelligent modular design provide flexibility to integrate with all existing systems.

As your business expands, so does your Pacom GMS solution.



GMS enables full integration between access control, alarm and video on one platform.

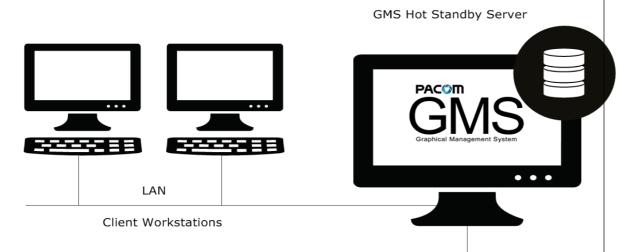
GMS is trusted by many of the top tier banking and finance institutions around the world for providing a reliable and highly integrated security system combining access control, alarm and video on one unified platform.

Typical Applications:

- Banking & Finance
- Commercial Environments
- Retail

- Managed Services
- Utilities & Telecommunications
- Government

GMS System Architecture







Enterprise Applications

In a mission-critical environment that demands continuous behaviour, GMS Server redundancy protects your security activity on the network. It enables multiple fully functioning GMS servers to act as backups for one other in the case of server failure.

All Pacom systems have a Main GMS Server and may have an optional Hot-Standby and/or Remote (Disaster Backup) Server. Each server is an integral part of the Pacom system. Only one server is active at any one time, while the other servers are on standby until required. The active server continuously updates the other servers, ensuring the other servers are always up-to-date and the database is synchronized.

If the Main Server shuts down or fails, the Hot-Standby Server automatically becomes the active server. All workstations automatically connect to the server that is currently active and a message is displayed to the operator to indicate that the active server has changed. If both the Main and Hot-Standby Servers shut down or fail, the Remote Server becomes active.

Multi-Region Applications

GMS's intelligent sub-server methodology provides organizations with multiple regions to have some control over a portion of the enterprise system. Regional security staff can independently manage their security with the confidence that all cardholder and access control information is synchronized between the GMS Sub-Server and GMS Main Server. Alarm escalation schemes can be configured so that alarms originating from a regional facility can be automatically escalated to the central GMS Main Server if not actioned within a certain time period.

Standalone Applications

GMS can be used for standalone applications where a single GMS server can be configured and controllers can operate in a peer-to-peer arrangement. In these smaller applications, customers can often take advantage of the freely available SQL Express database engine.

Web Applications

GMS's web interface offers flexibility to organizations wanting to decentralize their access control administration and enable remote cardholder management to be performed from the convenience of a web browser. A wide variety of tasks can be performed such as the creation of new cards, photo capture, ID card printing, assigning access permissions and generating reports. A full audit trail of web operator actions can be generated from the GMS Main Server to satisfy reporting requirements.



GMS Remote Server

Access Control.

The Pacom GMS solution provides extensive access control capabilities and can support a virtually unlimited number of cardholders.

GMS uses proven and reliable access control technologies and has demonstrated competence in large global applications, gaining widespread acceptance by corporate IT managers.

GMS allows areas as well as cards to be defined with specific security levels. In the case of an emergency, areas can be set to change security level, and only allow cards with a particular security level to be granted access.

The integrated video badging module enables authorized operators to quickly capture cardholder photographs and signatures, and print personalized access cards. Operators can perform a search based on any user criteria, and are able to bulk update any or all cardholders within the database.

Advanced Capabilities:

- Database partitioning to restrict operators to viewing cardholder data and generating reports on only locations, cardholders and other items to which they have access
- Dual card authentication to access high security areas
- Custom report generation
- Live photo capture using a USB camera or import cardholder photos



- Integration with Elevator Management Systems and Destination Dispatch Systems
- Intelligent door interlocking to control the entry of personnel to secure areas
- People and vehicle counting applications
- Validation module to enforce compliance of specific card data entered by GMS operators to meet specific customerdefined rules

Alarm.

Alarm Monitoring

All (alarm) events display in real-time on the GMS workstation. These events are sorted on a hierarchical basis – with more importance placed on higher priority events. Sophisticated dispatch schemes can be programmed to ensure that events are actioned appropriately.

Operator instructions are displayed automatically and can be complemented with video and graphics from add-ons like Google Maps, Microsoft MapPoint and Bing Maps which greatly enhances the operator's awareness and ability to action an alarm.

GMS's unique Summary Manager provides a real-time status summary of all remote facilities on a single user interface. Each location is depicted as a color-coded square that indicates the real-time status of the hardware devices. Operators can point-n-click on any icon representing a remote facility, and "drill down" into a graphical site map that depicts the dynamic status of each device.





Video Integration.

GMS's video management application has significantly reduced the incidence of false alarms for many customers. It enables immediate access to video in response to an event and can be configured to activate on any alarm or access control event. GMS offers a high degree of integration with many of today's leading DVR, NVR and IP Camera manufacturers. Some of the most common GMS video integration functions include:

- Receiving video-related alarms at the GMS workstation such as video loss, low HDD space, and motion detection
- Streaming live video (on demand) to the GMS workstation by clicking an interactive camera icon
- Automatic live or recorded video display when actioning events
- Tagging the events in the transaction log that have associated video
- Retrieving video by clicking an event in the transaction log
- Manual PTZ (Pan/Tilt/Zoom) camera control from within the GMS workstation

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Third Party Integration.

Wireless Integration

The Pacom GMS solution enables customers to take advantage of wireless alarm and wireless access control systems. By partnering with industry leaders in the field of wireless security, Pacom's powerful integration can be extended to wireless environments.

Human Resource (HR) Integration

The GMS solution includes the ability to interface with third party applications such as payroll systems. This integration can eliminate the duplication of effort relating to data entry and can improve operational efficiencies. For example, if an employee is terminated, the information can be transferred from the HR system to GMS, which, in turn, automatically blocks all access from that cardholder.

Building Management Integration

The Pacom GMS system can interface with Building Management Systems (BMS) that use BACNet and Modbus protocols. This enables the activation a BMS event when an alarm occurs. For example, when the alarm system is disarmed, the lighting and airconditioning system could be activated for the appropriate area or floor. Similarly, an alarm can be triggered when a BMS alarm occurs such as a cooling system failure. Integration can also be achieved with devices that can output analog data. This means that information from utilities as well as temperature and lighting sensors can be read and different events can be triggered depending on the condition.

Elevator and Destination Dispatch System Integration

High level integration can be achieved between Pacom and a range of Elevator Management Systems. Access control can be applied to specific floors based on time of day, and cardholder destination reports can also be generated.

Visitor Management System Integration

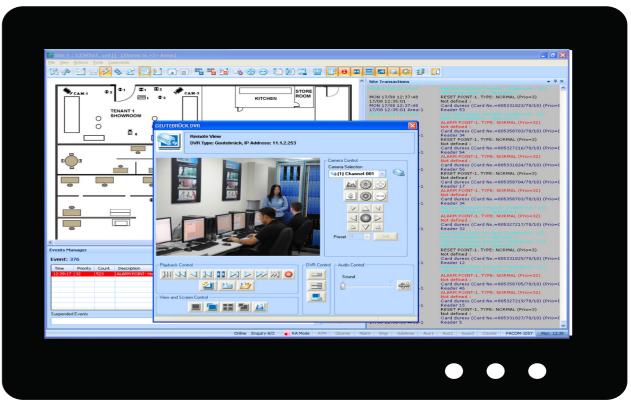
To offer a range of advanced visitor management functions to customers, the Pacom GMS has been integrated with the EasyLobby® suite of visitor management software. This enables GMS customers to take advantage of features such as ID scanning, web-based visitor pre-registration, watch list screening and visitor self-registration using touch-screen devices.

Intercom Integration

A range of different intercom systems can be integrated into the Pacom GMS system. GMS provides the convenience for system operators to respond to calls, perform actions and monitor the status of the intercom entire system.

Biometric System Integration

GMS enhances access control by integrating with biometric systems such as the EyeLock iris recognition technology. GMS's intelligent integration provides enrolment, template management, access assignment, identification and reporting all within a single integrated system.



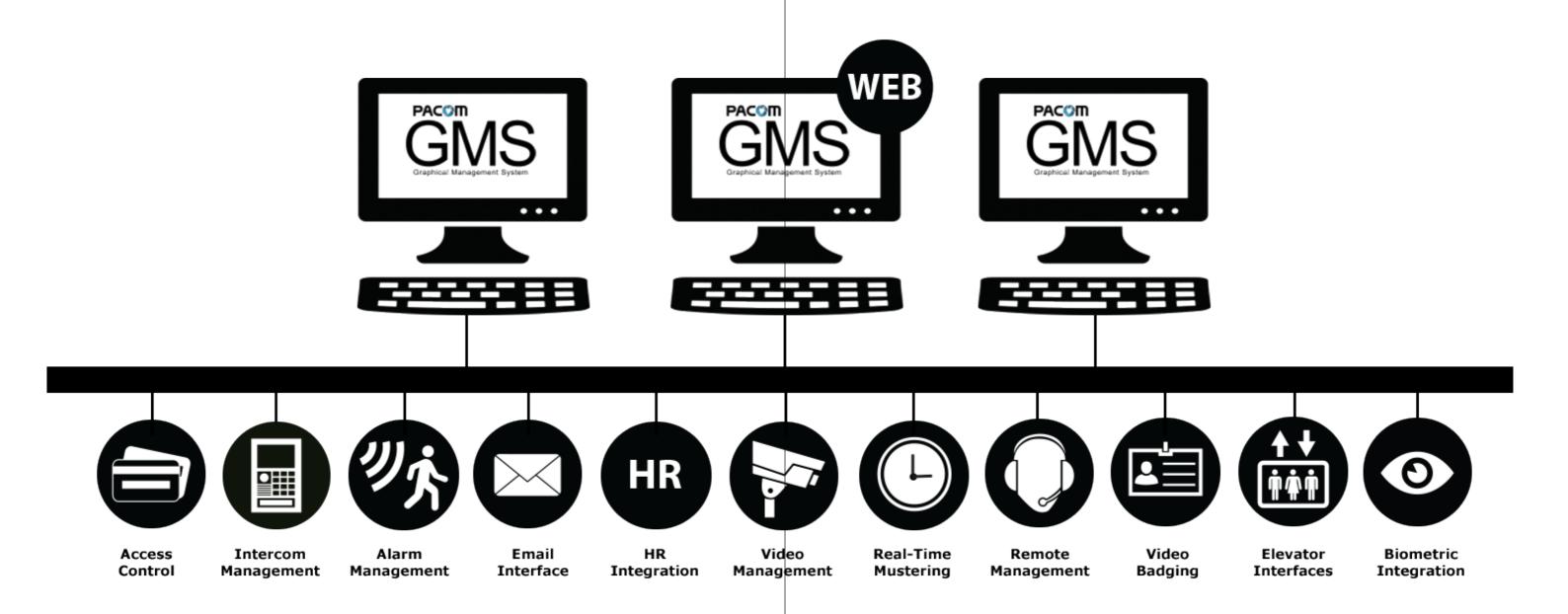


Other Integration:

- Digital Alarm Receivers
- Central Station Automation Software
- IP Locks and Vaults
- Notification Systems (pager, SMS and email)
- Video Wall Systems
- Smart Card Management Systems
- Interactive Voice Response (IVR) Systems

- Mobile Mustering Systems
- Key Lock Management Systems
- Mobile Duress Alarm Systems
- Life Safety Management Systems
- Fire Extinguisher Monitoring Systems
- Support Helpdesk Applications

Graphical Management System.



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