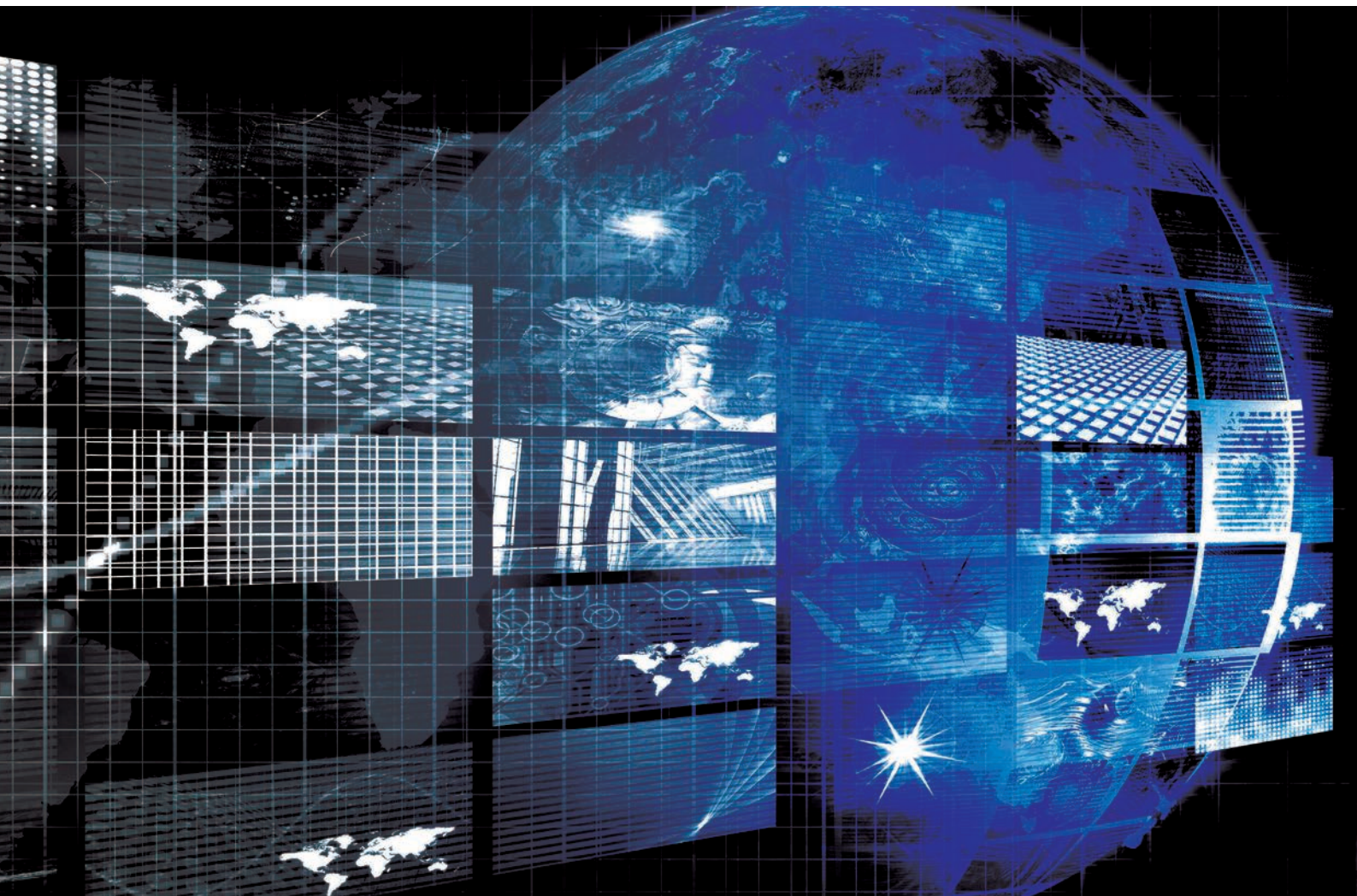




TISM – Tyco Integrated Systems Manager



Organise your Security – with PSIM+ Software

Johnson Controls and TISM

Johnson Controls International Plc is a globally diversified technological and multi industrial leader serving a wide range of customers in more than 150 countries. Since the merge between Johnson Controls and Tyco Integrated Fire and Security, the new leader promises to create safe and intelligent buildings, efficient energy solutions, integrated infrastructure and next generation transportation systems that work seamlessly together to deliver on the promise of smart buildings and industries. With over 120,000 employees, our mission is to help our customers win everywhere, every day.

With the Tyco Integrated System Manager (TISM), we provide a unique solution that offers independence, vendor neutrality and central integration of security systems that's easy to use.

One of the biggest challenges and requirements for customers in the security industry is ensuring complete and reliable integration of security, building and communication technology in one software platform. Johnson Controls has carefully designed and engineered an efficient, user friendly solution in TISM that offers security systems to all your security needs.



What is TISM?



With TISM, we define Physical Security Information Management System software as a solution reaching far beyond the common scope, offering the possibility for cross-domain integration of the complete security, building and communication technology. Another enhancement compared to conventional PSIM solutions is the connection to higher-tier mission control systems.

In practice, TISM collects all incidents from different security and information systems. The intelligent event visualisation enables the user to easily identify situations. With the help of workflows as well as automatic actions, the user is led to the most appropriate response method in accordance with established guidelines.

Features of the Software

Control Centre

The daily workflow of a control centre is becoming more and more complex. Today, all technological and organisational measures of a company are coordinated within it. With its modular and simultaneously very compact system structure, TISM is the perfect solution: providing comprehensive control and reducing the number of input devices.

User Interface

In addition to its sleek, modern look, the TISM user interface offers multiple design possibilities. The user works with an intuitive man-machine-interface providing all relevant information depending on the respective situation. This is how the highest security level is ensured, even in case of various incidents all happening at the same time.

Event Workflow

Depending on the surrounding conditions and his/her own system entries, the TISM Event Workflows guide the user through the required actions for a quick and secure resolution of the situation. Daily operation is significantly simplified. Furthermore they offer innovative possibilities for customised process control and organisation of the event message processing.



Reports & Evaluations

All events such as state changes, incoming event messages or user entries are logged in TISM. Based on this data, reports and evaluations can be created. That also includes the possibility to draw up a PDF report directly out of the event message processing. The graphic display of the collected data provides a quick overview of relevant figures. For external use, this information can be exported into standard formats or provided in real-time via an open web interface.

Security & Stability

The TISM location and redundancy concept enables the realization of complex system architectures and fallback scenarios. The system availability is continuously ensured via Hot Standby. The distributed data management allows smooth working even at locations that are connected via a low bandwidth. The network connections are, as a matter of principle, encrypted by TISM according to current standards (AES 256).

Modular & Scalable

TISM is scalable from a standalone system up to a comprehensive network solution and can be flexibly extended anytime by further modules and interfaces. The modular extensibility of the management system offers high investment protection. With individually adapted modules for particular functions, systems, processes or verticals, TISM even solves specific requirements: a complex global solution, but easy to operate.

TISM Express

The optimal solution for small installations

TISM Express is a standalone system with up to 3,000 datapoint units and three interfaces to subsystems: the ideal and cost-efficient solution for a single location not requiring any further clients apart from the main system. TISM Express is suitable e.g. for the linkage of access control with video surveillance or for visualisation and control of fire alarm systems with up to 3,000 detectors, including the automated printout of fire detector positioning plans in case of an event. Of course TISM Express can be extended anytime to a more comprehensive solution by adding further functional and interface modules.

- Cost-efficient solution for smaller projects
- Linkage of different devices and systems that are installed in the building
- Automatic creation of fire detector positioning plans
- Flexible access and notification via optional mobile app

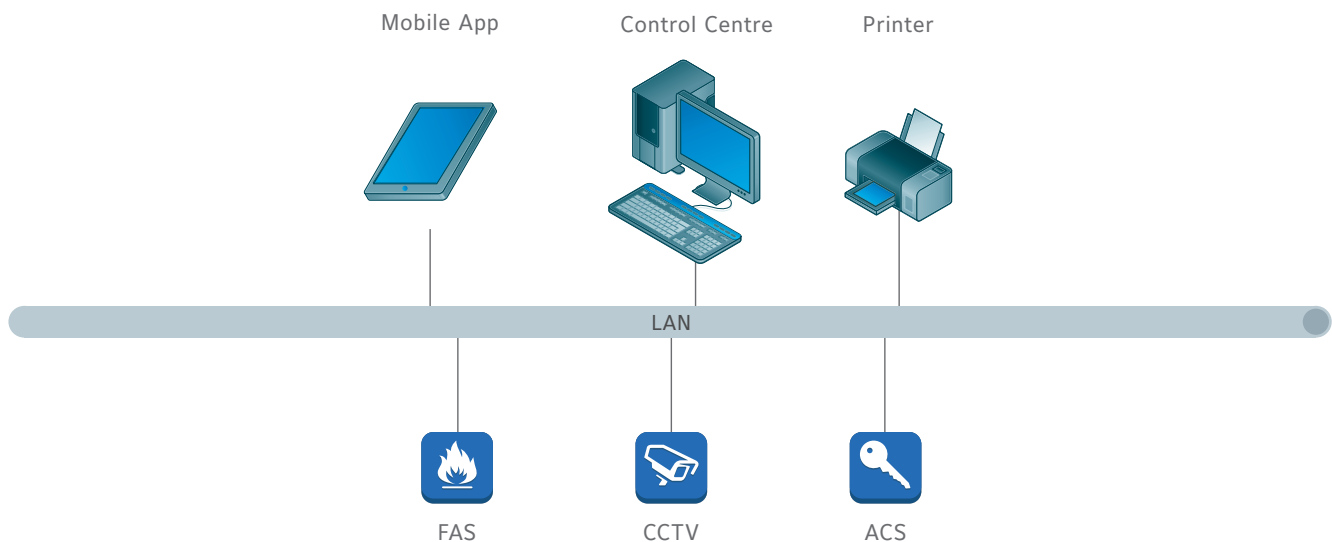


Application

The iOS or Android App can already be used with TISM Express, enabling mobile access to TISM and all connected systems. The notification of users by forwarding event messages to their smartphone is included.

The TISM standalone system already offers the possibility to realise comprehensive security concepts for smaller locations. In an office building, access control is an essential part; ensuring that the building and certain areas within

can only be accessed by authorised persons. Extended by a video surveillance system, the interaction of these connected devices can be automated by TISM. In case of a non-authorized access attempt, the responsible person not only receives the event message, but also additional information such as personal data (name and photo of card holder) as well as the booking history. The cameras installed in the access area can be automatically displayed and enable a quick evaluation of the situation on site.



TISM Basic

Multiple clients and network extensions

TISM Basic is a distributed system with up to five clients, 5,000 datapoint units and five interfaces – the optimal solution for medium-sized installations, including multi-client mode. The system is the ideal platform for linkage of diverse security, building or information management systems. Fire alarm systems, intrusion detection, access control, video surveillance or communication systems are controlled by one uniform user interface, enabling access to all control options and displaying event messages in a clear and easily visible way.

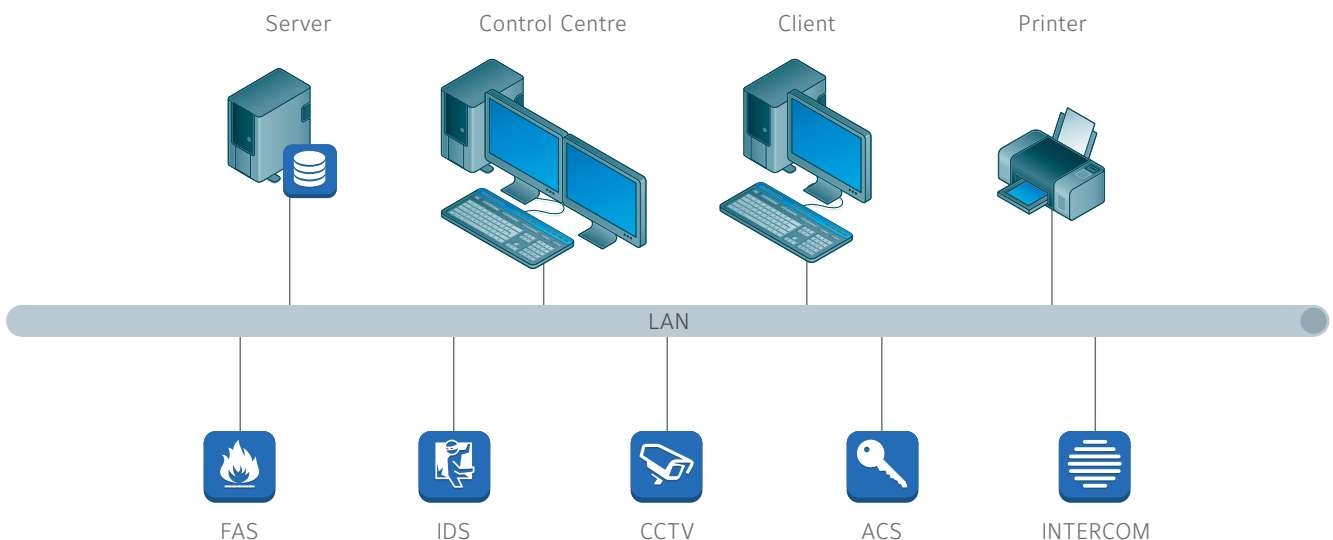
- Distributed systems in medium-sized installations
- Linkage of different security, building and information management systems
- Optimised work processes and technical reliability
- Central documentation and comprehensive reporting possibilities



Application

The module "Facility Manager" offers the possibility to manage e.g. maintenance dates or inspection intervals for fire extinguishers, sprinkler systems, air conditioning systems, etc. All set events are comfortably displayed in a well-arranged overview. For optimisation of maintenance work processes, all entries can be filtered and sorted according to time, type or location.

Due to the uniform TISM user interface, event processing and control of building management devices is user-friendly and efficient. It is also possible to receive event messages including action instructions on mobile devices so that personnel on site can react immediately. A centralised documentation combined with comprehensive reporting possibilities is a decisive advantage of the system.



TISM Professional

The comfortable and flexible solution for larger installations

TISM Professional is a distributed system with up to 15 clients, 25,000 datapoint units and 15 interfaces. The development of new interfaces is possible.

TISM Professional is designed to offer multiple redundancy levels to always ensure the high availability of the security and building management platform. Thanks to Hot Standby, the system functionality is kept even if a central component fails. This is particularly important for critical environments e.g. in the finance sector, in data centres, correctional facilities or any other highly-sensitive areas.

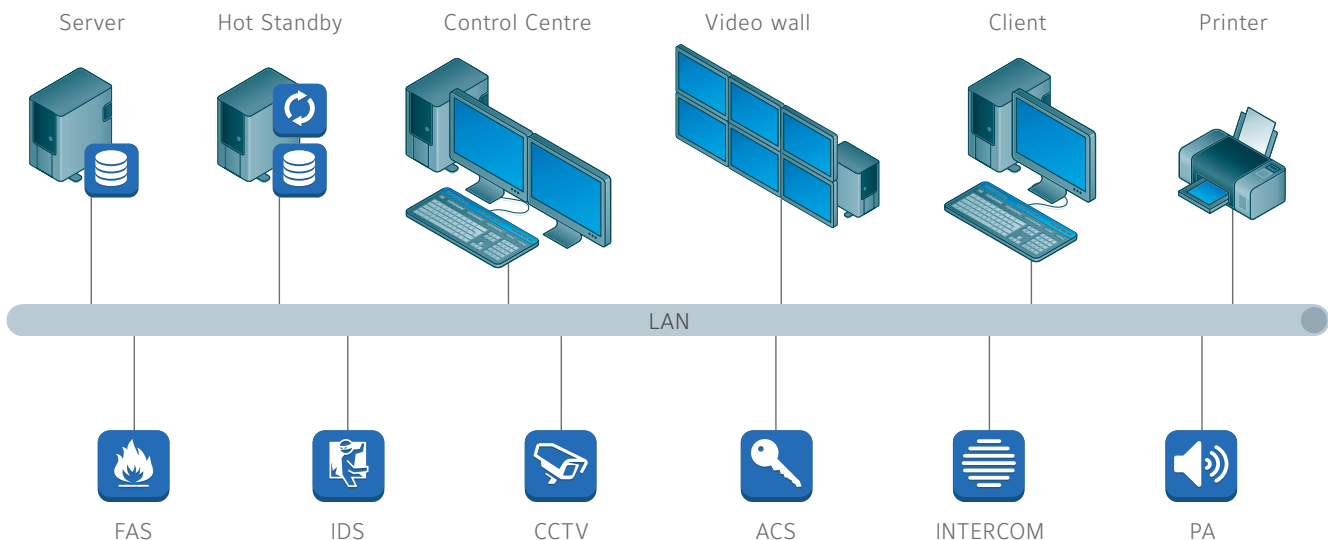
- Distributed systems in large-sized installations
- Multiple redundancy and high availability
- Automatic insertion of detector positions into floor plans
- Connection of overarching incident management systems



Application

Attachments such as video images and sequences, comments, e-mails, photos and other documents can be appended to incoming event messages.

In addition to numerous subsystems of building, security and communication management, the connection of overarching incident management systems for resource planning is enabled via a documented interface.





TISM Enterprise

Nearly unlimited application possibilities

TISM Enterprise is a distributed system with unlimited locations, clients, datapoint units and interfaces. The development of new interfaces is possible.

TISM Enterprise is the ideal solution for multi-location systems e.g. for distributed stores of a retail chain. With the System Manager module, the control of several independent TISM systems spread over multiple locations is possible. The status of each system is shown in a task bar as part of the TISM user interface so that the user has a clear overview. Automatic actions can be executed by the system in each connected location, enabling centralised control.

- Global installations with an unlimited number of locations
- Autonomous operation of locations via location servers
- Integration of map material, geo-referenced datapoints
- Integration of further process-supporting software is possible

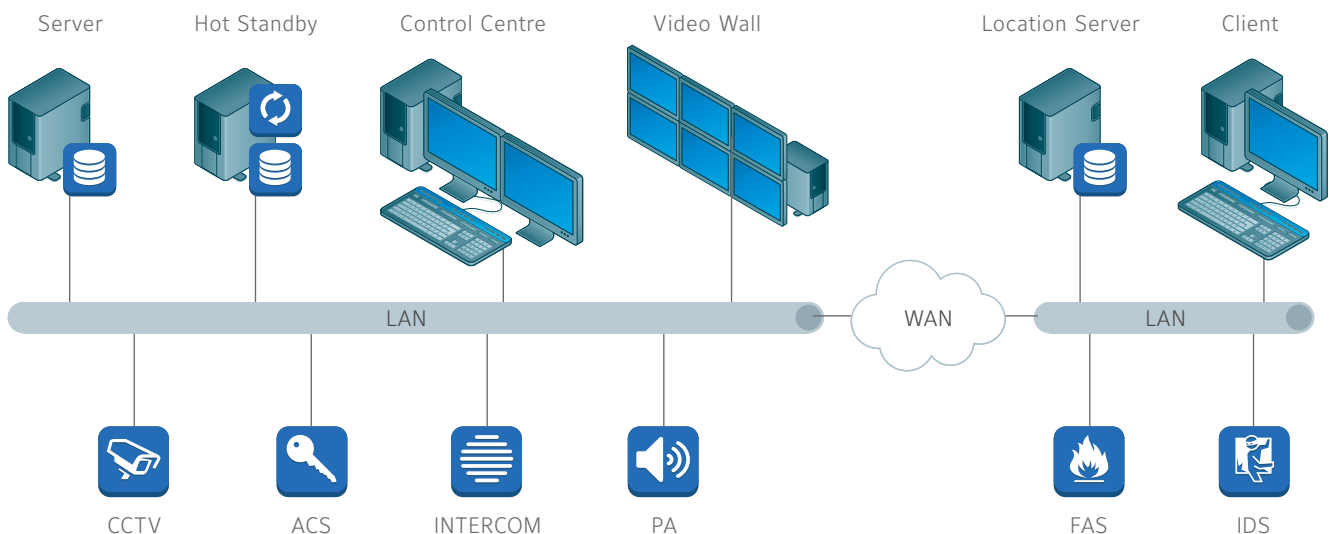
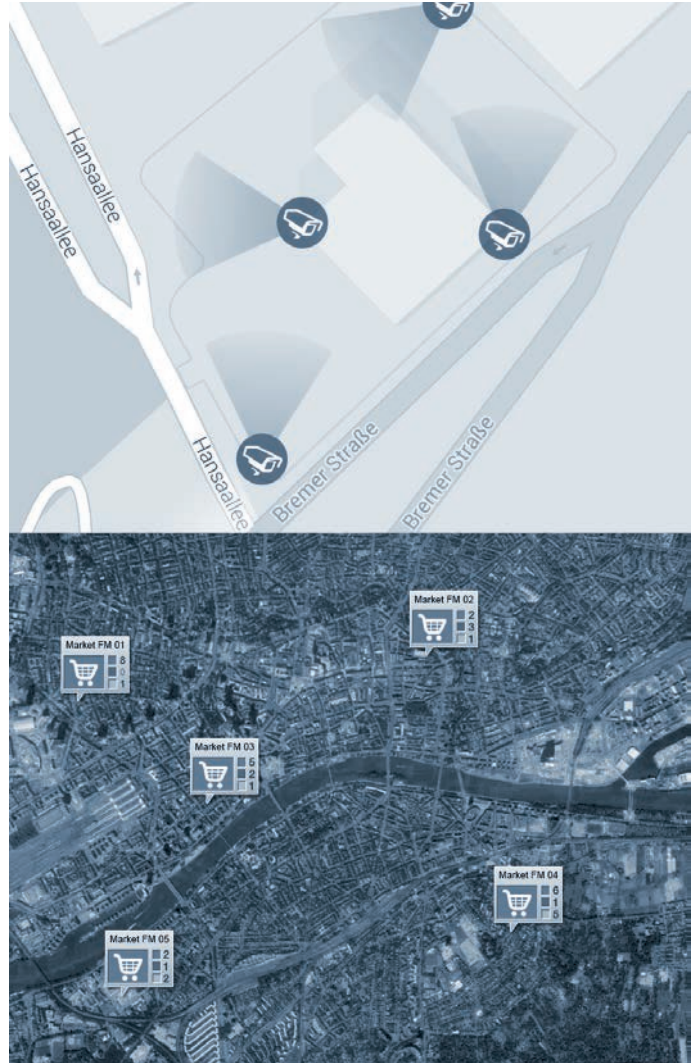
Application/project example

Map material can be integrated via the geo data interface (Google Static Maps API). Each datapoint can be geo-referenced by its placement on the map which is supporting the visualisation of different locations and mobile devices.

A centralised control room offers the optimal solution for the operator of a retail chain with numerous chain stores, to increase efficiency and reduce costs.

With location servers installed in the distributed locations, TISM collects information from all connected systems such as fire and intrusion alarm systems, access control, RFID and cashier systems and video surveillance. Event messages are displayed in one well-arranged user interface at the centralised workstations so that security personnel can focus on the important situations. The TISM Event Workflows assist the user in taking the appropriate actions. In addition, TISM offers continuous surveillance of building technology systems, e.g. temperature of cooling chambers.

If an event message is received, the control centre and a service technician on site will be automatically informed by SMS, e-mail or phone. Connecting to further process-supporting software is also possible.



TISM Module Overview

Organising your security



Interfaces

All subsystems are linked to TISM via interfaces. Depending on the device type and manufacturer, these interfaces might significantly differ.

To allow TISM to communicate with different systems, program modules (interface modules) provide the offered functions in a uniform format in TISM. The amount and type of the installed interface modules also define the functional scope of the system.



Video Manager

The TISM Video Manager can control both analog and digital video systems. The interface for display is freely adaptable and different layouts can be pre-defined. Live image displays, PTZ control and archive access are uniformly possible, provided that the connected systems have the corresponding functionality.

For easy operation, video control units or USB joysticks can be used. Video display can be transferred e.g. to a video wall via the corresponding TISM module.



Video Archive

The TISM module Video Archive offers the possibility to create bookmarks and save video sequences independent of the installed video system.

The bookmarks and centrally saved sequences can be easily managed, filtered and searched for in TISM. It is possible to link them to events as well as to add notes. The storage time of these clips can be set in TISM, independent of the connected video system.



CAD Support

The dynamic TISM CAD Support offers a user-friendly import as well as the possibility to control the layers of AutoCAD graphics.

The CAD Support plus enables integration of DWG and DXF graphics including automatic linkage of detectors (import of datapoint blocks). Datapoint positions will be automatically transferred and activated.



Notifications

All TISM versions include Event Routing, i.e. forwarding of events to workstations. This enables parallel event processing according to diverse criteria.

Using the notification module to forward events by e-mail, fax or voice mail to predefined persons is possible. In addition, dynamic playback via Text-to-Speech, i.e. via loudspeaker or telephone, can be realised.



Mobile Devices

The SMS module as well as the Mobile Apps (iOS and Android) offer the interactive integration of modern communication devices into the notification chain. This allows a well-arranged, compact mobile access to all states and events of the TISM system at any time.



Scheduler

The Scheduler module provides calendars, time schedules, "dead man's" handle function, automatic actions as well as control operations (scheduled and monitored system controls).

Control operations define time periods during which particular datapoints will be placed into a specific target status. The states of the datapoints will then be monitored. If, after a defined tolerance time, there are deviating states remaining, this will be signaled to the user.



Facility Manager

TISM offers a facility management interface for collection, administration and event projection of offline data, e.g. maintenance dates/inspection intervals for fire extinguishers, sprinkler systems, air conditioning systems, etc. Serial sequences (once, daily, weekly, monthly, yearly) can be defined here.

The management of building control technology installations is user-optimised. All set events are comfortably displayed by the Facility Manager in a well-arranged overview.



Configuration

The Graphic and Workflow Editor (projection) links graphic files in different formats with actions. A datapoint symbol library (drag & drop) as well as a text editor for display of event messages is included.

Text modules, personal data and list fields can be easily inserted by interactive dialog and conditional elements. The user layouts enable a free configuration of the program interface. Separate user profiles are available. The user interface can also be adapted for touch screen usage with buttons.



Geo Information

Geo data interface for integration of geo information systems. Map material can be integrated via Google Static Maps API. Datapoints being placed or shifted on the integrated maps automatically receive the corresponding geo coordinates.

Due to the flexible interface designed by the layout manager, map material can be displayed in separate window areas of the TISM user interface and integrated into event workflows.



Redundancy

Hot Standby is a structure to ensure system availability in case a central component fails.

The replacement system on a second computer continuously keeps the complete database of the main system, based on the generally distributed data management in TISM (server and client). This is how a setup of even complex fallback levels is possible in order to ensure the stability of the TISM system at all times.



Multi-Sites

Distributed locations can be linked with location servers in order to ensure their independent operation in case of a breakdown of the central server or of the network.

The complete database is stored on the server; administration is possible from every client.

TISM Versions Overview

	TISM Express	TISM Basic	TISM Professional	TISM Enterprise
Data Points				
Data Point Units	max. 3,000	max. 5,000	max. 25,000	unlimited
Features				
Operator Alarm	✓	✓	✓	✓
Voice and Fax Notification	✓	✓	✓	✓
E-Mail Notification	✓	✓	✓	✓
SMS Notification	✓	✓	✓	✓
CAD Support	✓	✓	✓	✓
Virtual Module	✓	✓	✓	✓
Scheduler	✗	✓	✓	✓
Facility Manager	✗	✓	✓	✓
User Management Plus	✗	✓	✓	✓
CAD Support Plus	✗	✗	✓	✓
SQL Export	✗	✗	✓	✓
TISM OPC Server	✗	✗	✗	✓
Geo Information System (GIS)	✗	✗	✗	✓
System Extensions				
Mobile App	✓	✓	✓	✓
Webclient	✗	✓	✓	✓
Client	✗	max. 5	max. 15	✓
Video Display Control	✗	✗	✓	✓
Interface Server	✗	✗	max. 5	✓
Hot Standby	✗	✗	✓	✓
Location Server	✗	✗	✗	✓
System Manager	✗	✗	✗	✓
Workstation Extensions				
Video Manager	✓	✓	✓	✓
Video Control	✓	✓	✓	✓
Editor	✗	✓	✓	✓
Multi Monitor Support	✗	✓	✓	✓
Interfaces				
Interface (existing OEM Tyco)	max. 3	max. 5	max. 15	✓
Interface (new)	✗	✗		✓

TISM Life Cycle Services

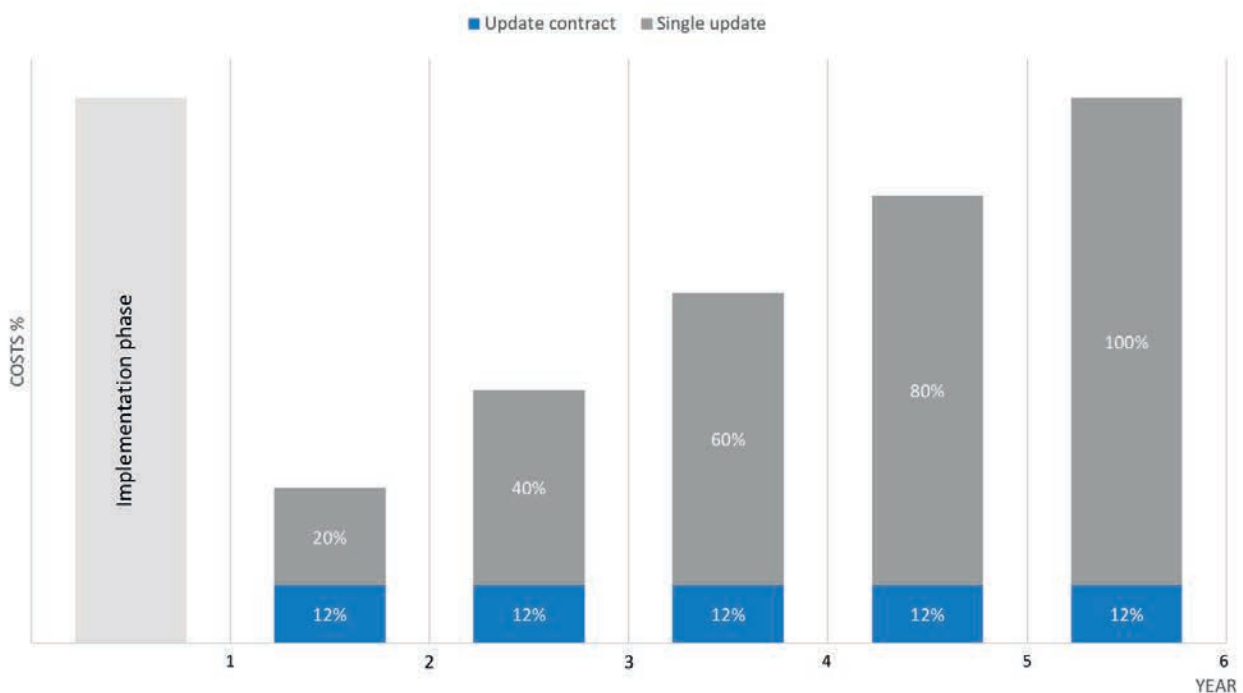
Benefit from always being up-to-date - with the TISM Update contract

Only a constantly maintained system fulfills the strict requirements of a perfect security organisation. New functions in TISM as well as interfaces to systems and installations are always in development and already existing ones are optimised in order to adapt the software architecture to the current standards.

In the course of time, lots of customers extend their TISM installation with additional functional modules and interfaces or they intend to renew computers or the operating system. There are often also changing requirements with regard to the performance of a security and building management system, or new application possibilities come up due to innovations of the connected installations. This is why an update is worthwhile and often necessary. Within 12 months after purchase of a TISM system, updates are provided free of charge.

An Update contract ensures that TISM always remains up-to-date and extends the warranty for the total contract duration. Furthermore, an Update contract is cost-effective and saves time compared to the purchase of single updates.

- ✓ Yearly updates during the agreed contract duration
- ✓ Regular provision of new TISM functions
- ✓ Continuous interface updates
- ✓ Extension of warranty for the total contract duration
- ✓ Free of charge use of support hotline
- ✓ Remote support
- ✓ Special conditions for individual trainings



Used Everywhere

The highest level of security for any application

Industry

In an automotive plant with almost 10,000 employees, corporate security as well as production processes have to be monitored. Among other installed systems, fire alarm technology is an important aspect, as the production site has its own fire department. The module CAD Support plus offers the possibility to automatically insert all detector positions and attributes into the floor plans. In case of a fire alarm, the corresponding floor plan is immediately displayed in the user interface so that the alarm-giving detector can be precisely localised. At the same time, the camera on site is displayed and the image can be shown via the Video Display e.g. on a video wall. Dynamic workflows guide the user through event processing, whilst automatic system actions are initiated at the same time. Alarms, e.g. via phone, SMS, radio communication or e-mail, can be selected manually or run automatically in the background. A Hot Standby Server ensures the high availability of the system



Critical Infrastructure

Organisations that are very important for the community require special security. Energy suppliers, waterworks and municipal facilities need early risk detection as well as clear processes in case of an event, in order to avoid supply bottlenecks.

The ideal reaction to any breakdown or impairment minimises the consequences for public safety.



Finance & Administration

In financial and administration buildings, the full scope of security, building, communication and network technologies is applied. TISM's advantage is that it covers the total range of deployed systems. In addition to area and perimeter protection, access control and video monitoring, the technical utilities are also included, e.g. emergency power supply.

Furthermore there are personal security and communication systems. Defined maintenance intervals can be easily monitored via the Facility Management module.



Data Centres

Data centres are highly-secured buildings. In addition to the conventional security systems, environmental conditions such as temperature, humidity or power consumption are all critical elements that require surveillance.

Monitoring these critical conditions allows for events to be anticipated prior to costly repairs or services.. Any breakdown of emergency systems, such as uninterrupted power supply and generators are detected, for an immediate initiation of the appropriate actions.



Hospitals

In a hospital the focus is on the patient, therefore security and building management needs to work smoothly in the background. Optimised work processes and technical reliability are of utmost importance. With fire detection systems, video surveillance, access control, nurse call, elevator emergency call and building management technology, a hospital has a wide range of technical installations. In addition, there are comprehensive reporting requirements. Distributed clients enable flexible task and information management, from facility management over the ward, to the reception desk and the emergency department. Due to the uniform TISM user interface, event processing and control of building management devices is user-friendly and efficient.



Penal & Forensic

Penal and forensic institutions place high requirements on their security management system. In case of an event, TISM is able to cross-reference with an occupant database which provides important occupant information. TISM offers multiple layers of redundancy and disaster recovery solutions as required by these facilities.



Transport & Traffic

Airports, rail networks, ports and road systems all have numerous video and emergency call systems deployed remotely. The same applies for parking management systems. TISM enables centralised monitoring in an integrated, well-arranged user interface.



Marine & Offshore

Ships and Offshore installations have numerous fire detection, fire suppression, emergency call and video systems deployed. TISM enables centralised monitoring in an integrated, well-arranged user interface. Due to continuous work going on at such installations, TISM can be used as a valuable tool to bring these systems in line with work permits issued, leaving no parts of these installations longer unprotected than strictly necessary. For unmanned installations, TISM also offers great possibilities to monitor and control sub-systems also from one or more Onshore control rooms.



About Johnson Controls' Building Technologies & Solutions

Johnson Controls' Building Technologies & Solutions is making the world safer, smarter and more sustainable; one building at a time. Our technology portfolio integrates every aspect of a building, whether security systems, energy management, fire suppression or HVAC, to ensure that we exceed customer expectations at all times. We operate in more than 150 countries through our unmatched network of branches and distribution channels, helping building owners, operators, engineers and contractors enhance the full lifecycle of any facility. Our arsenal of brands includes some of the most trusted names in the industry, such as Tyco®, YORK®, Metasys®, Sabroe®, ZETTLER® and Sensormatic®.

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