**C4 Benefits Part 2**

**In this lesson dedicated to the benefits of the C4 System, we will focus on the advantages brought by the new generation.**

**In the previous lesson, we have demonstrated how the C4 System enables the users to manage the individuals and access rights in a simple and organized way.**

**How efficient is your management of the cards, codes and other identifiers in access control and alarm systems?**

The previous versions of the C4 System offered two strategies of uploading: Full Upload and Incremental Upload.

In the Full Upload strategy, all access rights settings defined in the C4 System are transferred to the device in a single package. Since this method is the most time-consuming one, it is usually performed once every 24 hours, typically during the night.

Incremental Upload is a strategy when only those changes in access rights which happened since the last upload are transferred to the device.

Both of these strategies are always performed on one specific device only.

The new C4 System generation also offers a third uploading strategy called Selective Upload. With this strategy, the permissions of a person or a small group are uploaded to all access systems at once. This option ensures maximum speed in applying access rights. It is mainly used by the customers with a visitor module or those who require quick card replacement for employees.

**One of the customers' requirements, especially in large installations, is to be able to use the security system besides the monitoring and control also for configuring their devices.**

The new version of the C4 System allows implementation of the full-scale configuration of the devices in the same extent as in the original application of the device manufacturer. Instead of switching to the original device software, it is possible to set the parameters directly in the C4 System.

For each device type, a developer can create custom panels, in which it is possible to configure the specific parameters required by the client.

For example, in the case of this lighting system, we have a panel for configuring different colors for various presets. Once they are defined, they can be subsequently launched in automation.

Similarly, it is possible to set various parameters for other types of devices as well.

We can have for example a panel for setting time parameters on detectors for triggering alarms, or a panel for adjusting longer door opening times for disabled people.

In the new version of the C4 System, it is possible to develop the panels with parameters tailored exactly to the client's needs.

**How much do you use automation in your current systems? How user friendly is it and what extension possibilities does it offer?**

The current generation of the C4 System contains a new automation and workflow module.

Automations are implemented by use of the Plugins of Smart Routines.

Gamanet provides a basic set of Smart Routines which can be further extended by the custom routines developed according to the customer's specific requirements.

Smart Routines can be activated by three different sources of signal. The first one is occurrence of a certain event, the second one is change in the state of the particular device, and the third option is scheduling the Smart Routine to be activated at a specific time.

The previous C4 System generations contained so called automatic actions. In the new generation, these are contained within a Log Routine.

A Smart Routine has two parts. The first one is a set of conditions, which are evaluated, and based on the result the system decides whether it should perform a defined action.

To create a condition, we have a set of parameters available.

The range of parameters which the user can set is defined by the developer. For example, for this Log Routine, we can configure the parameters concerning a device, an event, a person or a region.

By specifying conditions in the given Smart Routine we determine the items to which it will apply. For example, in the case of an event, we can exactly define whether it applies only to the specific event or to the subordinate events as well. We can also specify an exact list of events to which the Smart Routine will apply.

Within one condition set, it is possible to combine conditions for various types of items that are included in the event. For example, we can combine alarm with the specific detector 3, too.

In addition to combination of simple conditions, the new generation of the C4 System allows to create also compound conditions with parentheses.

Meeting all the defined conditions triggers the second part of the Smart Routine, which is an action or a set of actions.

The C4 System distinguishes two types of actions, depending on where they are executed. The first type are actions executed on the server side, such as sending a command to the device or sending an e-mail.

In this case, we define that the e-mail is sent to an operator, but it can be sent to any unit within the organizational structure. It is also possible to attach a file with information about the event to the e-mail.

The second type are actions executed on the client side, for example, displaying an instruction set to the operator, or showing a live video.

For a single set of conditions, it is possible to set a combination of both server and client actions.

The list of both client and server actions is open, and it can be expanded according to the client's requirements.

Client actions of the instruction set type enable interaction with the operators and they can come in various forms.

For example, we can enter a confirmation instruction, when an operator is asked to confirm that they have performed the required task.

Another possibility is to enter a command for an operator, specifying the device on which it should be executed and what kind of command it is. In this case, we define an alarm reset on the specified alarm group.

The next option is for example to ask an operator to write a note or a report about the event.

It is also possible to enter an instruction with informational character only.

To ensure that the instructions are displayed only to the persons they concern, for each instruction set we can specify the recipients.

The recipient can be for example a specific person or a group of persons, regardless of the computer they are currently logged-in. On the other hand, it is also possible to configure that the instruction set is displayed on a specific computer or a group of computers, regardless of who is currently logged in to them.

For instance, we can define that the instructions will appear on the operator room computer, irrespective of the logged-in user. It brings benefits especially during the rotation of work teams, for example in shift changes.

Such defined instruction set will be displayed to the recipients who proceed according to it. They confirm that they have performed the specified action, they carry out the command, write a report and read the provided information.

**When an incident occurs, it is often handled by more people, sometimes even across several shifts.**

**How is the information from various persons handling the same incident uploaded to the system and how is it shared?**

The module of the C4 System called Incident Management gathers all the information and events related to the particular security situation.

The new version of the C4 System introduces so called tickets, which ensure grouping and common registry of the related information concerning one process.

Currently, the C4 System offers two main types of tickets: visit and incident. Each type is processed in a different way. The list of tickets is open and can be expanded in the future.

An incident ticket gathers all events related to the situation that requires attention of the operator and should be processed. Several people can be involved in processing it, for example operators, security guards or security managers.

Incident Management facilitates collaboration of multiple persons on a single incident.

All events are saved in the central database as independent events, and at the same time they are connected through the incident ticket.

An incident can be created in a standard way, using a Smart Routine called Incident Creator, which is provided by Gamanet.

It generates incidents from all alarm-type events, regardless of the device type.

If a customer needs to include in the event processing also other types than a typical alarm, they can create their own custom Smart Routine that will generate incidents based on the conditions defined by them. It is possible to create an incident from any event, change in the status of the device, or scheduled time.

For example, as a condition we define any event which occurs on the detector 3.

Then we configure that if this condition is met, an incident will be created.

For each incident we can display an overview of all the events related to it.

It contains the interventions of all persons involved in resolving the incident, including all the notes, photos from the incident site, phone calls or reports from the security guard who is reporting the situation through the C4 mobile application.

Each incident must be taken over by a responsible person, and once it is successfully solved, it can be declared by them as resolved.

In the Incidents module, there is a list of all unresolved incidents in the system. They can be in the "*accepted*" state, indicating which person is handling them, or in the "*unhandled*" state.

Incident Management can also be helpful in providing an overview of how and how quickly the critical situations were resolved. It offers information about the response time of the operators and the steps they took in processing the incidents.

**How important is it for an operator to know the historical context regarding the security incident when evaluating it?**

In the C4 System, we can view information from various perspectives. We can display events according to the individual persons or devices, while the information is always linked to a specific moment and item.

Context Monitor is a new module that helps the operators to evaluate the security situation quickly and accurately, by providing them with information from the past related to the specific item.

For example, if a particular person triggered an alarm by passing through a door, the operator can immediately see which other doors that person has passed through.

Also, the operator can view everything that has happened in the past on the particular device, including which event has been recurring and how frequently.

When selecting a person, an event, or a device anywhere within the C4 System, all available information related to them are displayed in a separate Context Monitor window, logically summarized in reports.

The operator doesn't have to search for this information in a complicated way.

Context Monitor simplifies the process of accessing and reviewing relevant data, allowing the operator to efficiently evaluate the situation and make informed decisions.

A set of information displayed within the Context Monitor can also be expanded and customized according to the requirements of the individual customers.

Automations, Incident Management and Context Monitor are new modules of the C4 System, that provide the customers with greater comfort and overview when dealing with security incidents.

**How much is the mobile application used in managing your industrial security installations?**

Another contribution to more effective resolution of security situations is the possibility of remote intervention via mobile application.

When we need to allow a quick entry to the premises for a person without an access card, for example due to a service intervention, we can remotely open the doors for them using a mobile phone.

Through the mobile application, it is possible to remotely issue any command to any device.

We can also use it for remote definition of accesses. It is helpful in situations such as when an employee forgets their card at home or the card isn't working, and the person responsible for card management is not present at the workplace. In such cases, the responsible person can use the mobile phone to assign the access to the area remotely.

Mobile application covers approximately 80% of the functionalities of the desktop application and is compatible with both Android and iOS operating systems. It provides options for reporting escalations and handling security situations.

It expands the possibilities of collaboration in cases when the responsible person is not present at the workplace. For example, a security service worker who has been dispatched to the incident site can use the mobile phone to take photos, and upload them to the Incident Management.

The greatest benefits are achieved when used in connection with the Safe Connect system, which is a supplementary product by Gamanet that enables secure remote user access to the C4 System.