VISIT US AT THE INTERSEC AND ARAB HEALTH EXHIBITIONS IN DUBAI

INTERSEC	ARAB HEALTH
19th to 21st of January 2020	27th to 30th of January 2020
Stand 4G12	Austrian Pavilion stand H6.E01

In January 2020, Schrack Seconet will present innovations from its latest range of products at two leading trade fairs in the Gulf. At Intersec, the focus is on digital solutions for fire alarm and nurse call systems. At the Arab Health exhibition stand, the big theme is the new features of the hospital communication system VISOCALL IP.
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SCHRACK
SECONET

CUSTOMER MAGAZINE OF SCHRACK SECONET

02
DECEMBER 2019

fire&care

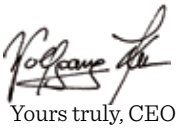
Editorial

Dear customers and business associates, Security is the central theme in our 2019 magazine. Digital transformation is closely linked to this, which when intelligently implemented enables real progress in modern, networked security solutions. Digital remote access, for example, brings a considerable gain in quality and efficiency for fire safety systems. In our cover story on page 8, you can read how digital innovations from mounting to maintenance to predictive analytics are shaping the future of preventive fire safety. We'll show you how this works in practice using solutions we have developed for the Lower Austrian paper producer Hamburger Rieger and the Swedish marshalling yard Hagalund.

Digital security solutions
As always, you can also read about how we specifically implement networked fire safety and state-of-the-art nurse call and communication solutions in our "Best Practice" section on page 4. This time around, we present our high-tech solutions for the Almazov National Medical Research Centre in St. Petersburg, Russia's most important healthcare facility, and for the listed building PHILIPS House on Wienerberg.

In line with this, I recommend reading the commentary by Prof. (FH) Dr. Christian Heschl from the Centre for Building Technology at the FH Burgenland in Pinkafeld, found on page 18. Christian Heschl heads up the research project techFM4.0, in which Schrack Seconet participates. His comments also focus on new, digital technologies that optimise the maintenance of technical building systems and, in doing so, ensure energy-efficient and cost-efficient operation.

Enjoy your read!



Yours truly, CEO Wolfgang Kern

IMPRINT
Owner and publisher: Schrack Seconet AG Security and Communication Systems, Eibesbrunnergasse 18, 1120 Wien **Responsible for content:** Rosa Maria Seilerbeck / Schrack Seconet AG **Project Manager:** Brigitte Sator / Schrack Seconet AG **Editor:** Alexandra Kropf / kropf kommunikation **Creative Design / Art Direction:** Jo Santos / NEA Design Services **Coverphoto:** Thomas Topf **Translation** Interlingua Language Services-ILS GmbH **Production:** Schwechater Druckerei-Seyss GmbH
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Publication frequency: 3 times per year

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New SecurWATCH: even more convenience with the app

In the healthcare and nursing sectors, digital solutions have become an indispensable asset: particularly when dealing with vulnerable people, SecurWATCH by Schrack Seconet ensures freedom of movement with the greatest possible level of security, and simultaneously takes the burden off the care staff. The good news for many satisfied users in healthcare institutions: the next generation of the system is set to be launched very soon. The highlight is the new app, which makes administrative procedures considerably easier.

Greater security, lower costs

SecurWATCH will continue to equip people entrusted to care with wristbands that use small transmitters to inform staff the moment they leave a defined area. This makes it clear where somebody is located at all times. Time and cost-intensive searches are a thing of the past. Families are left with the positive feeling of knowing that their relatives are safe in a reliable and comfortable environment, which also boosts the image of the facility itself.

Android-based app

The new generation of SecurWATCH additionally stands out with a sophisticated, very extensive, Android-based app. This allows the care staff to administer attendances quickly and easily from their phones, to place an emergency call if necessary, and to have a mobile overview of what is happening on the ward at all times. In addition to the noticeable relief, the app therefore also provides greater overview and convenience.

The new app for SecurWATCH allows to administer attendances or emergencies via mobile phone and takes the burden off the care staff.

Integration via ESPA-X

SecurWATCH can be integrated using an interface in VISOCALL IP, the communication system of Schrack Seconet that is installed in many hospitals and healthcare facilities. Here again, the solution impresses customers with its future-orientated technology: from now on, the embedding will take place via the contemporary ESPA-X standard interface, which offers flexible communication platforms a large number of possibilities for expansion and thus long-term investment security.

Available from 2020

The new generation of SecurWATCH will be introduced to the market in the first quarter of 2020. Existing customers who wish to switch to the new system can expect attractive special rates. ✱

With SecurWATCH vulnerable people can move about freely, yet still under a reliable safety shield.

PHOTO: ISTOCK / RELAXFOTO.DE

Fire safety for PhilsPlace on the Wienerberg

In for preservation-listed buildings such as Vienna's famous PHILIPS house, reliable fire safety is of particular importance. It comes as no surprise, therefore, that the remodelling of the interior of this striking building, which is now home to exclusive freehold apartments and several retail spaces, focused on the very latest in security technology. For two years, installation, modernisation and networking activities were carried out – now three Integral IP MX fire alarm control panels by Schrack Seconet along with 1,650 fire detectors guarantee complete protection throughout the entire complex.

The Integral IP MX fire alarm control panels are ideally suited for protecting large buildings. They are highly effective and, thanks to their modular structure, can be adapted to new circumstances at any time. IP interfaces transmit the system status to operators regardless of location and ensure shorter reaction times.

A building with history

The PHILIPS house at the southern edge of the Wienerberg is regarded as a milestone in Viennese postwar modernism. It was designed by the internationally renowned Austrian architect Karl Schwanzer in the 1960s. For decades, the building housed the offices of the Austrian headquarters of the PHILIPS company. After the company moved out, the new name of PhilsPlace now takes pride of place on the façade of the listed building. The uppermost storey is home to a luxurious penthouse. Below this are 135 exclusive freehold apartments with spectacular views into the distance, which are rented out to business professionals and travellers as fully furnished, full-service apartments. The ground floor also boasts a bank, two supermarkets, a restaurant and a fitness centre.

Secure thanks to modern technology

In order to ensure that apartment owners, visitors and guests from all over the world are able to enjoy the ambience and views with peace of mind, a modern fire alarm system by Schrack Seconet is hard at work in the background. The fire alarm control panels of Integral IP were integrated into the basement, into the fifth and the ninth floor with a decentralised structure, and use a total of 1,650 fire detectors to monitor the entire building. These combined MTD 533X smoke and heat detectors are connected to the control panels via loop technology. These are rounded out by 200 fire controls, which in case of emergency control the sirens, emergency lighting, fire dampers, escape route releases and vents, as well as the lifts and an indoor radio system. In the event of a fire, this ensures the fastest possible automatic alarm notification. What is more, the building is also completely furnished with a sprinkler system, which sends acknowledgements to the fire alarm control panels for evaluation. ✱

PHOTO: MARGHERITA SPILUTTINI / ARCHITEKTURZENTRUM WIEN, SAMMLUNG

Even in for preservation-listet buildings such as the famous PHILIPS house modern fire safety can be installed.

PHOTO: JOSEF WEICHENBERGER ARCHITECTS + PARTNER / PHOTOGRAPHER LEO FELLINGER

PHOTO: PHILSPLACE MANAGEMENT GMBH / PHOTOGRAPHER: MOODLEY BRAND IDENTITY, TINA HERZL & JULIAN MULLAN

PHOTOS: ALMAZOV NATIONAL MEDICAL RESEARCH CENTRE

St. Petersburg: High-Tech Makeover for Medical Centre

With more than 1,500 beds across 18 departments, the Almazov National Medical Research Centre in St. Petersburg is one of Russia's most important health care facilities and, at the same time, is a respected research centre, where numerous scientists are working hard to unveil new medical findings. The centre combines high-tech surgery with the best patient care in its own training and research unit. From the conversion of the old building and also development of a new building, Schrack Seconet is gradually equipping the entire complex with state-of-the-art nurse call and communication solutions as well as fire alarm systems.

The Almazov Centre, named after its founder, Professor of Internal Medicine Vladimir Almazov, has enjoyed a strong increase in popularity among patients, doctors and researchers since it first opened in the 1970s. This is one of the reasons why an expansion of the existing facility was already underway at the end of the 1980s. After construction was halted for ten years, the expansion restarted again at the end of 2001 with the support of the government. Since 2006, when the new high-tech clinic opened, Schrack Seconet has been on board with the project as an outfitter.

Networked fire alarm technology

It started with the installation of Integral fire alarm control panels. Today, the new clinic, the Perinatal Centre and finally the second main clinic building are already equipped with modern fire alarm control panels and monitored by a total of 20,000 combined smoke and heat detectors. The fire alarm systems in the various buildings are connected via SecoNET. As new homes and facilities are constantly being added to the system, the plan is to switch to Integral WAN in the future. This means that all fire alarm control panels in the branched Almazov Centre will ultimately be integrated into a single network.

Schrack Seconet's modern communication systems and fire alarm control panels are growing with the Almazov Medical Centre in Russia.

Communication on the pulse of the times

Schrack Seconet began implementing the new communication and call system back in 2013. A wide variety of nurse call systems were already in use in the individual buildings. Step by step they are being replaced by the modern solution VISOCALL IP, without any interruption to day-to-day work. The completely renovated neurology department and the new rehabilitation building were the first to receive the upgrade, with doctors and nursing staff particularly pleased with the fact their iPods could be connected. Emergency calls can now be made on-the-go and without delay, which is particularly important in time-critical situations. A total of 300 beds are already equipped with VISOCALL IP patient terminals with voice function.

Full protection planned

Other buildings which are currently under construction or for which development is planned, such as the new research centre, will also be equipped with fire alarm systems and communication solutions from Schrack Seconet. Thanks to the good connection to the local IT team and the excellent way in which we have cooperated, the installations are progressing well. In May of this year, 20 international Schrack Seconet customers were impressed by the quality and professional implementation of the solutions during a reference visit to the Almazov Centre. ✱

PHOTO: ISTOCK / BORCHEE

Keep in Touch

Digitalisation of fire alarm systems offers significant advantages, whether you are a sophisticated user or a specialist who is interested in comprehensive control options. Schrack Seconet has developed a comprehensive range of solutions which offer even more convenience and efficiency when operating and implementing fire alarm systems.

DIGITAL SOLUTIONS: ADVANTAGES FOR THE WHOLE LIFE CYCLE

▸ FOR SYSTEM OPERATORS ◂

Rapid intervention. You can see any events immediately and at a glance. Authorised individuals can intervene quickly and effectively wherever they are. This minimises business interruptions caused by hoax and false alarms and avoids unnecessary evacuations and fire-service operations.

Optimised processes. Authorised personnel can operate systems from anywhere (subject to compliance with national regulations), which saves travel time and optimises processes. Fire safety officers can, for example, switch off detector zones during work which produces heat. You can also manage several locations centrally.

More oversight. Integral Remote documents all events and accesses. You can run reports which show important information and provide full transparency and traceability.

▸ FOR SYSTEM INSTALLERS ◂

Optimised commissioning. You can put fire alarm systems into operation more rapidly and easily. You can monitor test runs remotely, and thereby test them under real conditions before you activate alarm forwarding.

Efficient maintenance. You can check system components continuously without disturbing the operating procedure. Technicians read all the information about the system before making a service visit, so that they arrive at the appointment well prepared and can perform the service efficiently.

Planning extensions. You can read system data remotely during operation and can plan extensions optimally based on this data.

„Graphic display of all of our plant's fire protection plans with many stored active functions is a very useful tool."
Andreas Eichberger, MSc Fire Safety Engineer & Technical Assistant to the Operations Director at Hamburger

Hamburger, the paper mill in Pitten, was modernised future-oriented and the alarm management system SecoLOG IP was installed. Information in real time throughout the entire factory premises are possible.

Tomorrow's digital world is making new demands on planning and implementing technological fire protection. It is estimated that 50 billion devices and sensors will be interconnected worldwide by next year, and buildings will in future incorporate digital and networked technology. Preventive fire protection will also benefit from this, especially in view of the large number of participants. "Our aim is to develop a common eco-system for the entire life cycle of a fire alarm system that brings users, planners, installers and us as the manufacturer together," explains René Türk, product manager for information systems at Schrack Seconet.

Efficiency, convenience and quality

Remote digital access to systems increases quality and efficiency considerably for both installers and users. Technicians can provide remote support to users on site, for example in the event of operating difficulties or faults. In the same way, fire safety officers and other employees can continually monitor the state of the fire alarm systems, even if they are not on site. This is especially useful in the evening and at the weekend. Digital solutions also allow service appointments to be planned more efficiently. Service staff download information from the system in advance, so that they are fully prepared and have all the material they need when they travel to an appointment.

Digital solutions already facilitate the installation of fire alarm systems. The latest development is Integral Scan, a new app which records data about the devices, such as their hardware types and logical numbers, as they are installed. Many steps which were previously manual are now digitalised, so there are no errors in classification. The app will in future also interact with Schrack Seconet's service platform. This practical example also shows that implementations will interconnect even more in the future.

"Ultimately, the central task is to transmit knowledge to where it is needed as quickly as possible."

René Türk
Product Manager for information systems at Schrack Seconet

From Big Data to BIM

However, digitalisation's potential for innovation extends well beyond apps and remote access. "Ultimately, the central task is to transmit knowledge to where it is needed as quickly as possible," René Türk explains. Big data, the combination and analysis of large amounts of data, is therefore rightly seen as the gold of the future. It will, for example, enable patterns to be recognised and measures to be derived in respect of recurring alarms.

Predictive analytics will in future also offer exciting approaches. It will enable specific forecasts to be made in maintenance as to when detectors will need to be replaced or certain components will need to be maintained. It will increase the availability of the system and enable maintenance schedules to be planned optimally in line with operational requirements, and thereby avoid interruptions in production. Using building information modelling (BIM) in project planning may in future also open up new possibilities for preventive fire protection, as the interaction between architects and specialist planners intensifies. For example, if fire compartments change during planning, the person planning the building equipment will be informed of the new requirements automatically.

Digitalisation and security

Digitalisation is closely linked in fire protection with the topic of security. Where is the data stored, and how is it protected against unauthorised access? These questions need to be answered reliably, because devices with IP addresses or web applications can be a potential loophole which enables unwanted access. Schrack Seconet has therefore adopted extensive measures to

PHOTOS: THOMAS TOPF

HAMBURGER, LOWER AUSTRIA

More operating convenience and oversight with an intelligent control centre

Hamburger, a paper mill in Pitten, has continuously invested in expanding its fire alarm system. This gradually resulted in a mill-wide solution for a large number of production processes, which also integrated peripheral areas. It had a large number of detection elements, many special solutions and complex fire control systems. This solution was no longer very user-friendly, and its technical possibilities had been exhausted. The solution was therefore modernised to a network with two main and six sub-centres.

Location-independent information in real time

A SecoLOG IP hazard management system was installed at the same time. This now displays all system statuses clearly and also allows direct operating procedures. A detector can be controlled simply with a click, and a tiresome search in paper plans and entries directly at the fire alarm control panels is no longer necessary. Additional information which is helpful to the emergency services, fire protection officers and employees, such as information about keys and special protective equipment, has also been stored. Authorised users can enter and update this information. “Graphic display of all of our plant’s fire protection plans with many stored active functions is a very useful tool,” notes Andreas Eichberger, a fire safety engineer at Hamburger who initiated and drove the system’s development.

The system has continued to grow since then. It is no longer only aimed at fire detection, but now also controls a total of 38 extinguishing zones. “Strong cooperation produced an individually tailored system that is easy to operate despite its size. With SecoLOG IP, we can now operate entire extinguishing zones with a wide variety of detector zones and controls quickly and easily at the touch of a button. Predefining areas in SecoLOG IP also minimises operating errors,” explains Kurt Maierhofer, group technical customer service leader and workshop manager at Schrack Seconet.

Expansion with Integral Mobile

The implementation of Integral Mobile is the most recent innovation at Hamburger. Users receive information in real time throughout the extensive factory premises and can operate the system directly where an event occurred. “The fire alarm system gives current information about the status of the situation and this gives us a decisive time advantage in an emergency,” Andreas Eichberger of Hamburger emphasises.

PHOTO: WIKIPEDIA / JAN AINALI

Railway junction Hagalund in Sweden: App notifications or SMS provide immediate information in the event of an alarm.

ensure that data is stored securely and is transmitted reliably. Its multilevel security model includes VPN tunnels, access protection with a physical dongle, and userlevel authorisation controls. Content is encrypted using the TLS protocol before it is transmitted. We store all data in Switzerland in our own highly secure computer centre which meets the Tier IV standard.

From information to better response

On the other hand, security clearly benefits from the new digital options. For example, notifications via an app or SMS provide immediate information in the event of an alarm. Sophisticated information chains ensure that all relevant persons, from the fire protection officer to the managing director, are notified.

This makes it possible to react even more rapidly and on the basis of exact information, and this prevents unnecessary fire-service operations or evacuations of buildings in the event of false alarms. In the event of an actual fire, the Integral Mobile smartphone app provides exact information about the specific alarm and allows an initial assessment to be made of the scale of the emergency, so that appropriate measures are taken without losing time. In addition, stored fire brigade plans enable the emergency services to prepare as well as possible for the site of the fire. Their response to an event will be faster and better prepared. "Digitally stored information also contributes to the analysis after a fire. It can provide important information about a fire, even if the physical fire alarm control panel has been damaged," says René Türk. ✱

Burgenland University of Applied Sciences is currently working on a project, in cooperation with Schrack Seconet and other companies, to develop specific approaches for the digitalisation of buildings. Commentary by Prof. (FH) Dr. techn. Heschl on the current status on p. 18.

HAGALUND / SWEDEN

Rapid digital information on a very large station site

Six kilometres north of Stockholm city centre is Hagalund, Sweden's largest passenger marshalling station. "Shunting now requires far fewer tracks than it used to. So, when the site was extensively redesigned, space was created for a completely new district, which also accommodates a stadium and the Mall of Scandinavia, Northern Europe's largest shopping centre," explains Mats Höxter, manager of Schrack Seconet's branch in Sweden. Schrack Seconet's fire alarm systems are now used in both the new shopping centre and the revitalised railway junction. The Integral IP system and ASD 535 smoke extraction systems now provide reliable protection in the huge maintenance halls. The requirements were particularly stringent because of the size of the site and the high ceilings. The total area is 90,000 m², and the two large maintenance halls are equipped with six and eight tracks. The longer hall can even fit complete sets of the Swedish high-speed train.

Building technicians carry out routine tasks

EuroMaint carries out all of the maintenance activities. The company has its own team of building technicians who carry out many day-to-day activities, such as changing detectors. If there is a false alarm or a malfunction in the fire alarm system, the employees who are currently working automatically receive a message on their smartphones. This informs them immediately, without them having to go directly to the fire alarm control panel. "This is very helpful, especially because of the long distances at the site. A problem can be located quickly and precisely, even if EuroMaint's employees are not on site at the time. EuroMaint also looks after other railway systems in the Stockholm area, so its employees are working in a larger area," Mats Höxter explains. Bravida Sverige AB, an installer, is brought in if specialised support is needed. Schrack Seconet's Swedish partner has remote access to the fire alarm system so that it can provide support if required.

"A problem can be located quickly and precisely, even if EuroMaint's employees are not on site at the time."

Mats Höxter Manager of Schrack Seconet's branch in Sweden.

PHOTO: RCLASSENLAYOUTS

Individual escape concepts

SINCE THE VERY START OF HIS PROFESSIONAL CAREER, PETER BOCK HAS BEEN CONCERNED WITH THE ISSUES OF PUBLIC ADDRESS AND ELECTRO-ACOUSTIC EMERGENCY SYSTEMS. HE IS REGARDED AS ONE OF THE MOST RENOWNED EXPERTS AND IS NOW BRINGING HIS SPECIALIST KNOWLEDGE TO THE PRODUCT MANAGEMENT OF SCHRACK SECONET. IN THIS INTERVIEW, HE TOUCHES ON THE CENTRAL CHALLENGES FACING THESE ISSUES, AS WELL AS THE TOPIC OF DYNAMIC ESCAPE ROUTING.

fire&care — *What will change in future in terms of security concepts and evacuation?*
Peter Bock — At present, static systems are commonly used to assist the evacuation of people, for example the green escape signs with a white arrow. An acoustic alarm notification goes far beyond this – especially when loudspeaker announcements are adapted to the current situation. The next step involves adaptive concepts that acoustically and visually guide escape routes and ensure the opening and closing of doors and gates. With this type of concept, sensors are permanently registering any hazards or changes. This ensures that there is always up-to-date information on the accessibility of escape routes.

fire&care — *What generally needs to be taken into account when it comes to escape routing?*
Peter Bock — The escape route guidance needs to be customised to suit the type and use of the building. In many buildings, such as offices or schools, the same people are usually in the building each day. They are familiar with the security precautions and train for the most efficient manner of evacuation by doing fire drills. It's a different story in buildings where the majority of people are unfamiliar with the location, such as shopping centres, museums, hotels or airports. For both types of use, the previously mentioned security concepts apply; however, for the latter, it is important to consider the fact that people are unfamiliar with the escape routes and that announcements in the local language may not be understood by everyone. It is precisely in cases such as these that adaptive escape routing, implemented with acoustic and visual aids, ensures greater safety.

"The next step involves adaptive concepts that acoustically and visually guide escape routes."

Peter Bock
Product Manager for voice alarms, fire detectors and optical/acoustic alarm devices

fire&care — *In which buildings do special security concepts make sense?*
Peter Bock — In hospitals or in buildings with assisted living, a personal and individualised alarm notification system is necessary: in the event of an evacuation, some patients are able to exit the building themselves, while others need to be transported. Even now, for example, the care staff are already informed of an alarm directly and individually via our VISOCALL IP communication system. The possibilities will only increase in this field. Our goal for the future is to be able to offer our customers comprehensive fire protection systems including escape route guidance systems, all from one single source. ✱

SYSTEMS ALWAYS UP TO DATE

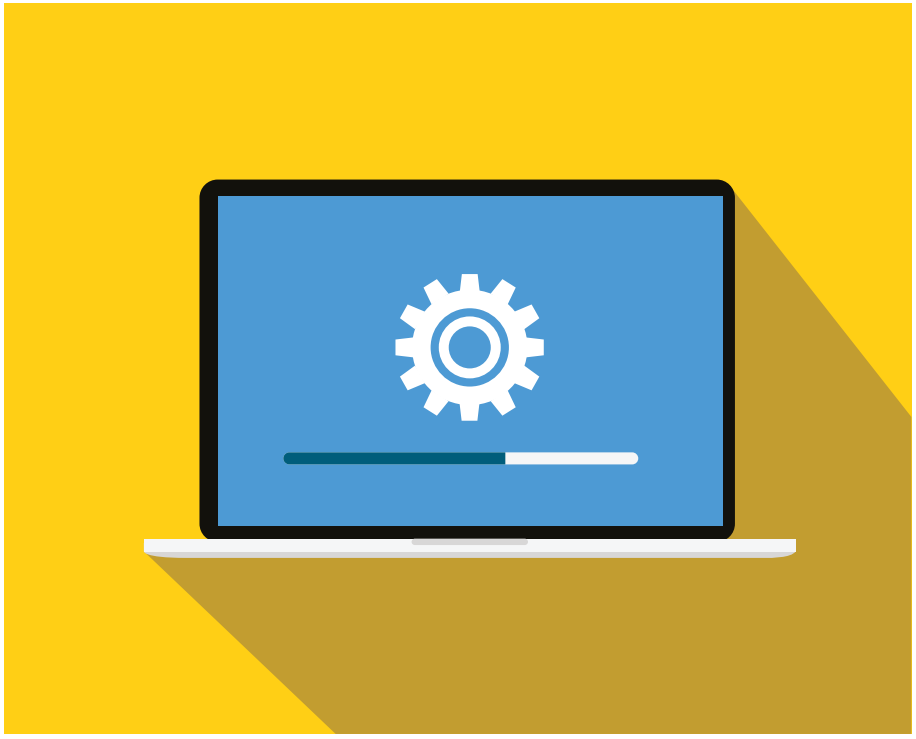


ILLUSTRATION: ISTOCK / RIBKHAN

Who would be comfortable getting on an aircraft if its operating programmes have not been updated for years? That would be absurd. However, what's even more absurd is that this is often not an issue when it comes to other relevant systems. Fire alarm systems, for example, are sometimes used for many years and the software status is the same as it was at the time they were first commissioned. The situation is not much better with communication systems for hospitals.

The triple benefit of software updates

Regular software updates are also more than advisable for these kinds of devices, as they provide a threefold benefit. First of all, system functionality is continuously developed: new features are implemented or existing ones are changed. Digital progress extends the functionalities, simplifies processing and is advantageous in terms of time and cost! What's even more important are the aspects related to operational reliability: software updates help to eliminate any recurring problems. They raise the level of quality and ensure safe use in the long term.

The third issue is data security: outdated systems leave the door open for hackers to paralyse systems or gain unauthorised access to data. Therefore, regular updates are an important precaution in order to close security loopholes. The relevance of the issue should not be underestimated: even a programme that is optimally programmed can be affected by vulnerabilities of third-party components, such as an operating system. This is one of the reasons why continuous optimisation is essential for all kinds of software.

This also applies to fire alarm systems, communication systems and security solutions. Schrack Seconet makes continuously improving its software a major priority. Updates may sometimes be perceived as disruptive, but they are particularly important when it comes to security technology, especially for networked systems. Digitisation is a major step forward, but everyone has to face it in a responsible way. ✱

"Products are improved, vulnerabilities are repaired and security loopholes are closed."

Alexander Schober
Product Management for fire alarm systems

THREE QUESTIONS FOR ALEXANDER SCHOBER

Fire alarm systems

fire&care — ***Why are regular software updates essential and how are they implemented?***
Alexander Schober — Updates involve a lot of effort, but the advantages are plain to see: products are improved, vulnerabilities are repaired and security loopholes are closed. Software updates are always carried out by a specialist. If there are any issues, you can intervene manually or return to the old version. And, of course, we adjust the timing according to the time requirements of the customer.

fire&care — ***What are the typical reasons for updates?***
Schober — Many updates do not have a direct impact on ongoing use, such as improvements to the user interface or programming tools. But then there are also topics that are important for operation – we make sure that the update cycles are shorter here for this reason. For customers with a maintenance contract, we automatically keep the systems up to date at all times.

fire&care — ***On what basis are software updates developed at Schrack Seconet?***
Schober — We use ongoing tests to check as many aspects as possible and this serves as our starting point. In addition to carrying out our own active reviews, we also monitor feedback from customers. If irregularities occur, we identify the vulnerability and fix it with a software update.

PHOTO: FH TECHNIKUM WIEN / GRABNER

Nurturing talent: count us in

As part of the project "One of 1000", Schrack Seconet provides support for additional study places at the University of Applied Sciences Technikum Wien. With this crowdfunding initiative, the University of Applied Sciences is finding new ways to enable a greater number of qualified applicants to pursue a course of study. This comes after over 1,000 potential students had to be rejected from the University of Applied Sciences Technikum Wien in autumn 2018 alone due to a lack of publicly financed study places, at a time when the industry is in need of 16,500 technical specialists. Schrack Seconet finances, amongst other things, a full study place on the Bachelor's degree course in Information and Communications Systems.

The crowdfunding project "One of 1000", which is unique in Europe, represents a further great opportunity for Schrack Seconet to actively contribute to the training of talent. This will help to fill the pool of qualified technicians who can be welcomed as new employees in the future.

Skilled professionals for tomorrow

At the same time, Schrack Seconet provides ongoing guidance for pupils and students who write their final theses in and with the company. This spring, four students in the Digital Business branch of the HAK Mistelbach business school were especially successful. They developed an alarm notification and information system for public facilities, taking first place in the digBiz project competition between all Digital Business commercial academies across Austria.

Active recruiting

Thanks to many such initiatives, the interest of budding technicians in Schrack Seconet remains unwavering. A good indicator for this is the high attendance at HTL Mödling's recruiting day, which Schrack Seconet participates in every year and piques young people's interest in security technology. ✱

Intelligent Swiss residence

The very first fully functional house in the world to be planned digitally and also largely constructed digitally with the help of robots and 3D printers, was built near Zurich in Switzerland. The innovative building was made possible by ETH Zurich university and several Swiss companies, including Securiton AG, an affiliate of Schrack Seconet.

In May 2019, the first residents moved into the building, where their life in the so-called DFAB House will be digitally controlled in an entirely new dimension: the individual elements of the building are networked with each another, the components are capable of exchanging information and performing actions independently, and devices can be controlled via voice command. Integrated into this digital ecosystem are security systems by Securiton – tried and tested sensors and controls are intelligently connected to other devices. The project thus makes it possible to test the very latest technologies and products in a real environment. ✱

NEWS

Medica 2019

The communication platform VISOCALL IP was the highlight at the newly developed exhibition stand of Schrack Seconet at this year's MEDICA in November in Düsseldorf. Numerous interested visitors tested the latest generation of the platform directly on site, including its many innovative, digital features that make day-to-day life in hospitals and care facilities even more secure and comfortable.

Leading Companies of Austria

Once again, **Schrack Seconet** is amongst the Leading Companies of Austria. As in previous years, the independent, cross-sector commercial network honoured our company as an exemplary Austrian business that works on its corporate success in a sustainable and innovative manner and with social responsibility. In the picture, Leading Companies of Austria CEO Monica Rintersbacher congratulates Schrack Seconet general manager Wolfgang Kern on the 2019 certification.

PHOTO: SABINE KLIMPT

KAZTRANSOIL LARGEST PIPELINE COMPANY IN KAZAKHSTAN

The state operator KazTransOil transports 80 per cent of the oil in Kazakhstan. The company, headquartered in the capital, Nur-Sultan (previously Astana), operates around 5,400 kilometres of oil pipelines. It operates a further 2,000 kilometres of water pipes. KazTransOil employs some 8,800 people and in recent years has invested heavily in renovating facilities and in international expansion: over 1,000 kilometres of oil pipeline and 60 per cent of the oil tanks were renovated, and several international pipeline projects were initiated. The volume of transported oil was 46 million tonne-kilometres in 2018. Also in 2018, KazTransOil's turnover rose to around 400 billion tenge.

Perfectly monitored pipelines

KazTransOil's Integral IP is a country-wide networked fire alarm system for its pipeline network in Kazakhstan. Larissa Kirsch, Area Sales Manager at Schrack Seconet, already championed this project ten years ago. The project required intensive collaboration between the export department, development and support. Together, a solution-oriented approach was found that today connects decentralised fire alarm systems across the country together through Integral LAN networks. The next planned step is to develop the system further into Integral WAN. Sergey Anatolyevich Valenwein from MunayGas Engineering Company, the implementing partner, talks about the project in an interview.

fire&care — ***What did you recommend Integral IP as a solution?***
Sergey Anatolyevich Valenwein — One of the key factors was the possibility of building a distributed network with a large number of elements – Integral IP allows connecting many fire alarm control panels in one network. Add to this the innovative remote access, which makes the operation of the system very comfortable and significantly reduces its maintenance costs. Finally, the control options for fire extinguishing systems that are already integrated in Integral IP deserve a mention.

fire&care — ***What factors were decisive for KazTransOil due to their specific requirements?***
Valenwein — The customer had several clear criteria: reliability, functionality, networked operation and the possibility of monitoring objects centrally and remotely.

fire&care — ***How was the comprehensive solution for KazTransOil implemented concretely?***
Valenwein — As part of the project, Integral IP was installed in the oil pumping stations and in the communication nodes of KazTransOil across the country. The so-called communication nodes are located along the extensive pipeline network in the Republic of Kazakhstan. These are free-standing structures along remote sections of the pipeline that are installed next to the towers and on which transmission antennae are fixed. The communication centre for these is an autonomous room in which the necessary equipment is installed. The communication nodes are mostly unsupervised buildings. The individual locations were connected into networks with Integral LAN technology; one Integral LAN consists of up to 16 centres. Overall, 80 fire alarm control panels were connected in this way. The client's existing company network is used for the data transfer. However, the foundation for a successful implementation was the close and intensive collaboration of various departments at Schrack Seconet together and with KazTransOil, which was very successful.

fire&care — ***KazTransOil also uses extensive notification options – what communication routes are specifically used?***
Valenwein — With the SecoLOG IP alarm management system, all the information is displayed on several monitoring systems and notification is organised via SMS and e-mail. Depending on the area of responsibility and geographic region, notifications are sent to the responsible persons – a quick and comfortable solution for the client. The information from the local fire extinguishing systems is also transmitted via SecoNET.

This project was one of the first in which Schrack Seconet implemented the Integral LAN. For Area Sales Manager Larissa Kirsch it was very important to respond to the client's needs and to develop an optimal, customised solution for KazTransOil. The entire team at Schrack Seconet worked intensively on presenting a concept that corresponded to the detailed requirements and desires of the client. For the technical implementation, Anatoliy Perepechkin deserves a special mention; the Schrack Seconet technician played a significant role in the successful execution of the project. The results are now in operation in Nur-Sultan and across the whole of Kazakhstan.

fire&care — ***Why does KazTransOil now want to introduce Integral WAN? What advantages does it have for the client?***
Valenwein — The integration of the fire alarm control panels in an Integral WAN network opens up new possibilities to further expand this complex solution and increase system efficiency. The innovative technology enables extending the existing network and the connection of new facilities to the existing monitoring network. This has three major advantages: compared to the current technical solution, network expansion is more flexible, additional extensions are easier to implement, and the central monitoring of facilities is simplified. ✱

ABOUT THE PERSON Sergey Anatolyevich Valenwein has been working at MunayGas Engineering Company since 2004. He started off as a design engineer and is now Director of Planning. The company designs and implements projects in the oil and gas industry. MunayGas develops and realises process control systems, safety systems, measurement stations, fire alarm systems, video monitoring etc. It also offers maintenance services. The quality management is ISO 9001:2008 certified. The company has four regional sites in addition to the headquarters in Nur-Sultan .

Added value thanks to digital twin with real live data

In the context of the techFM4.0 project, we examine new potential solutions for more efficient operation of buildings. The digitalisation of building technology offers enormous potential. However, the right approaches are decisive when it comes to the concrete implementation of current trends from the semiconductor and software industries. With our innovation study course, we impart customised qualification measures and provide support in the development of transfer projects for more energy- and cost-efficient operation of buildings. We take up current digitalisation trends and apply them as innovation incubators. Particular attention is paid to Building Information Modelling (BIM) – the use of digital planning data, especially in technical building management, makes it possible to implement new work methods. The digital twin supplies crucial information for the sustainable realisation of efficient, comfortable buildings. Beyond this, the analysis of real live data also offers starting points for the optimised planning of future buildings.

Following its launch in the first half of 2018, techFM4.0 initially concentrated on conveying specialist knowledge, such as knowledge of evaluation procedures and sensory methods. Starting in the upcoming semester, the focus will increasingly be on specific – including cross-company – transfer projects along the entire building value-added chain.

Key parameters of temperature and CO_2

A building produces thousands of dynamically changing data. Two indicative parameters are the temperature and the CO_2 content, which provide information about the quality of the indoor air. Both factors contribute to the sense of well-being of the people inside a building, but also to its performance. If the air in the room is stale or the temperature too high, this restricts the ability of employees in an office building to perform. If the temperature is cooled to excess, thermal comfort is affected and too much energy is required for the air conditioning – the building is no longer operated in an energy-efficient manner. This makes quantification essential in order to optimally control the facilities of the building technology. Similarly, physical information provides conclusions as to the satisfaction of a building's users. This means that the sensor technology provides relevant data for making valid decisions, automatically identifying errors and optimising the building technology as a whole.

"The digital twin supplies crucial information for the sustainable realisation of efficient, comfortable buildings."

Prof. (FH) Dr. techn. Christian Heschl

Fire detectors are almost everywhere

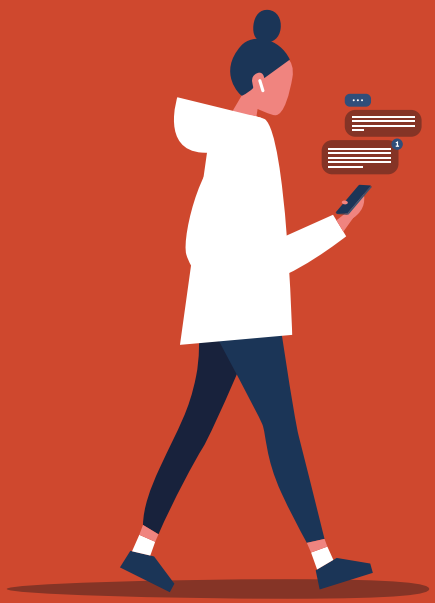
Fire alarm systems are present in many places in buildings in which there is otherwise no sensor technology – and with a network connected to the power supply. In the context of techFM4.0, it has become evident that new approaches will be conceivable here in the future: in addition to the core tasks, the free potential for additional issues – such as CO_2 sensor technology – could also be made use of here.

Knowledge transfer between science and application

On the part of the University of Applied Sciences Burgenland, researchers from the specialist areas of building technology and cloud computing engineering are involved in the techFM4.0 project; the second scientific partner is the Austrian Institute of Technology. Schrack Seconet and five further companies from the building technology industry are also involved. ✱

Prof. (FH) Dr. techn. Christian Heschl is head of the Center for Building Technology at the University of Applied Sciences Burgenland in Pinkafeld, and supports the research project techFM4.0, in which Schrack Seconet participates.

HANDY COMPANION



Nowadays, mobile phones accompany us everywhere we go. We share our most important and most private information with this digital companion, holding our phone in our hand for over three hours each and every day. This gives us constant access to contacts, the calendar, numerous apps and all the knowledge accumulated on the internet. No matter where we are – the mobile navigation feature takes us to our destination. Sometimes we even use our phone to make calls, and in real emergencies, help is just a call away even without the PIN code. The security provided by a mobile phone is far more than just a feeling. Therefore, it is no wonder that we feel so uneasy when our digital companion stops working or gets lost. That is why it is important to take precautions in good time with password protection and backups, in order to avoid being left defenceless in such adverse situations.

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