



Editorial

Dear reader

Why do we sometimes find our bodies sluggish and our minds inflexible? Could it be because the reason for this lies in the natural laziness of the human being and quite often its unwillingness to move? Because to move both body and mind with one's own strength or just to bring it to a change simply hurts and is often connected with great effort. Therefore we try to avoid it although we know -, or at least strongly suspect- that movement of any kind, in any form and in all areas of our lives is basically for our own good.

Adrian Hutzli. I hope that in my new role within Intersys and in consideration of this change/movement process, I will be able to reach out for new interesting achievements with many of you. Because I believe in the positive force of change.

Jiří Petr
CEO

In the spirit of this reciprocal relationship „Movement = Change / Change = Movement“, I will quit my role as Managing Director of Intersys at the End of the year and leave the writing of this editorial to my successor,



Intersys Events

Our autumn event, organized together with our partner Ranorex, attracted almost 90 persons who came to get new insights into the topics of test management and test automation. The event had many highlights from customer presentations. The networking aperitif following the event was widely used for vivid discussions about the newly acquired know-how. For impressions please follow this Link.: <https://www.intersys.ch/en/events/20170928>



New Intersys employees

We welcome new members within our Team. With them, Intersys will have a staff of 31 persons as per 1. November 2017.

Bernhard Brunner
Software Developer
Simon Strebel
Software Developer Frontend

Cem Grossenbacher
Software Developer
Laurent Weber
Database Developer



Bernhard Brunner



Simon Strebel



Cem Grossenbacher



Laurent Weber

Case Study «Intersys Device Management Platform»

Intersys IoT solution for device monitoring and management

The Internet of Things (IoT - Internet of Things) is nowadays not only on everyone's lips but has long since found its way into all kinds of industries. Intersys is at the forefront with a solution for monitoring and management of devices.

Specifically, a specially recruited team is working closely with a major Swiss customer to build a device that measures the power consumption of their technical devices and transmits the data via the Internet to a back-end system in the cloud. The project is strategic for Intersys and will open a new business area that is called Intersys DMP (Device Management Platform). As with many similar companies, the customer uses a large number of, usually very expensive, technical equipment with which the company's employees carry out their production work on a daily basis. In order for the technical devices to function flawlessly, they must be serviced regularly - not an easy thing to think of. Those responsible are struggling with the challenge that the effective utilization and use of equipment is often unknown. The result is frequent unnecessary maintenance or, in extreme cases, unnecessary procurement of new equipment. Particularly interesting are movable devices which are used in different locations within the company, so that often not even the exact location of the technical device is known. This is a problem that makes it impossible to manage the equipment fleet optimally and limits the possible optimization of utilizing the full capacity of the device. This is not only a problem from an economic point of view, but can also have an impact on the resulting quality of the products produced by the customers organisation.

the necessary information, which can be used to make qualified statements not only about the load, but also about the use of the individual devices. The WLAN connection and network monitoring tools also ensure that the location of the individual device is known at all times within the organisation.

Such a platform can be used to gather and communicate various information such as the number of operating hours in standby mode, the absolute number of operating hours and many others. The user receives access using a password-protected web GUI and can thus read the usage or, depending on the application, the type of usage. Based on the data stream, which is read out via IoT standard interfaces, the system architecture is designed and the evaluations are programmed according to the customer's requirements. For example, for a particular production machine, it could be shown which production process it has carried out in which time period. Last but not least, the resulting production figure could be compared with the number of end products actually produced. Based solely on the power consumption characteristics of a device, there are likely to be many more possible use cases for business solutions in the operations and maintenance area. The potential savings for in the area of procurement and operating cost is considered to be quite substantial for many companies on the market.

Intersys specialists are therefore in the process of working with the customer's technical infrastructure managers to develop a simple solution that will solve the problem and achieve considerable cost savings in the mid to long term. The sensor is a current meter that is connected to the power cable between the technical device and the power outlet. Wifi functionality enables transfer of information on power consumption to be sent to a back-end system in the cloud via the company's Wireless LAN (WLAN). Intersys' core task is to develop the back-end system according to the customer's requirements, so that in the future the maintenance of the many different technical devices can be carried out via a web GUI and thus the expected savings can be made. A built-in sensor reads out

Interview with Reto Gantenbein, Head of Sales and Marketing at Intersys



What does it take to develop such a new product? Where did the initiative come from?

The initiative came through our company network. Interdisciplinary networking is becoming increasingly important for the company today, precisely because we are a small company and cannot cover every field by ourselves. At Intersys, the development of a product usually follows the Minimum Viable Product approach. The product does not have to be fully specified and implemented until it is first used by a customer. The interaction with the customer helps to develop the product in a more targeted way with regard to the functionality required by the market. An agile approach ensures that the relevant and higher priority functions are implemented first.

Does Intersys already have experience in the development of IoT systems? What kind of?

Although the term IoT is more recent, at Intersys we built similar systems for telecom operators already 15 years ago, which, by their very nature, have done

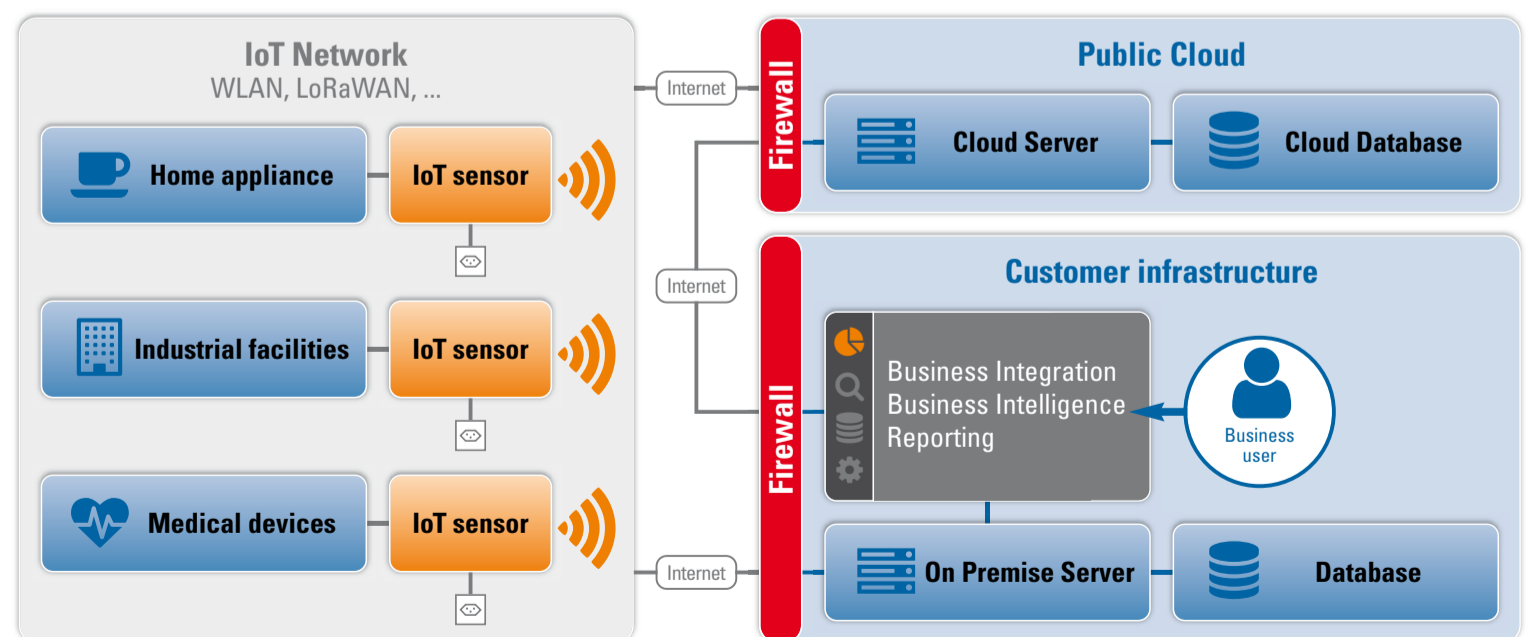
exactly the same thing: collect information by means of sensors, centralize it and draw conclusions about processing on the basis of business logic, which can then be used for further control of the system.

The underlying technologies have improved over time, e. g. that today's sensors are able to work independently anywhere in the world and are still part of an IoT network. But the tasks have not changed. That's why we can say, with a slight wink, that we have known IoT for years.

What is the significance of IoT at Intersys with regard to corporate development?

The Intersys Device Management platform has a good potential to be used in many different markets, as we are able to locate demand everywhere. For example, in industry, retail, hospitals or consumer goods. Our core competence is not actually the device itself, but the use of technologies such as IoT, Big Data or block chain, so that our customers can achieve added value from it.

By anticipating technological trends, we are moving away from reactive market cultivation to proactive processing. We are convinced that this will help us to be better perceived in the market and to be able to increase our footprint significantly. This helps our company develop into an accentuated position.



Intersys DPF Architecture

In a hurry? – Why not using DevOps?

New software and IT services have to be launched on the market very quickly. Development departments and operations are therefore under great time pressure.

The speed with which companies can deliver new products has become one of the most important key factors for business success. Those who are unable to implement profitable ideas very quickly will be overtaken by the competition on the left. To prevent this from happening, internal development departments or external IT service providers must be able to implement the production and operation of software solutions much faster than before. In practice, it is now the case that services, for which there used to be about half a year's time, have to be available in one or two months' time. This means that there must not be any tensions between development and operation at any point - from the recording of requirements to development, testing and delivery.

However, larger SMEs and large companies usually have a heterogeneous development environment. In addition to Java and .NET platforms, web technologies and proprietary development systems are often used in parallel. A suitable means to meet the fast time-to-market required by departments and sales is the transition to DevOps mode. In order to make effective use of the close cooperation between development and IT operations, a higher degree of maturity in terms of automation is imperative. How is „DevOps“ implemented in the company and what are the crucial points? One thing is certain: the use of „tools and toys“ is not enough to enable new services to be mapped and brought to market faster with software. On the contrary, an uncontrolled growth of DevOps systems can hinder the coordination of tasks and the improvement of processes.

For larger companies, however, different developer groups often use different DevOps tools. In addition, the tools, whether open source or commercial, are becoming increasingly powerful, but a comprehensive tool is not yet available, at least at this point in time. Tool manufacturers are already trying to add more and more functionalities to their products. However, it is not yet possible to map the DevOps process with one single solution.

Concept with a target definition

This makes it all the more important for development managers to develop a concept at company level and to standardize the different approaches used. This concept clearly defines how continuous servers (e. g. Jenkins) allow continuous integration and delivery (continuous delivery) of new software components and which tool set is used throughout the company by all contributors of the different development teams within the company.

It is important to allow exceptions to the rules. In particular, legacy systems need to be assessed on how they can be integrated into the process flow, since the provision of test data and the automation of test cases is usually more difficult than with newer systems. Despite all the standardisation, we must therefore proceed with a sense of proportion and as many units as possible should be integrated. The necessary management efforts will be considerably higher as the number of systems to be managed raises.

If individual teams or developers are critical of the upcoming change, it helps to clearly show the benefits for them. Above all,

it is important to involve the team as early as possible in the conception phase and to take their own ideas seriously. Concepts, in which employees recognize themselves in some form, are more likely to be supported and will last longer. Overall, depending on the situation, it is advisable to define a roadmap that shows how and, above all, to what extent a DevOps concept should be implemented and what goals the team wants to achieve with it.

Collaborative Culture

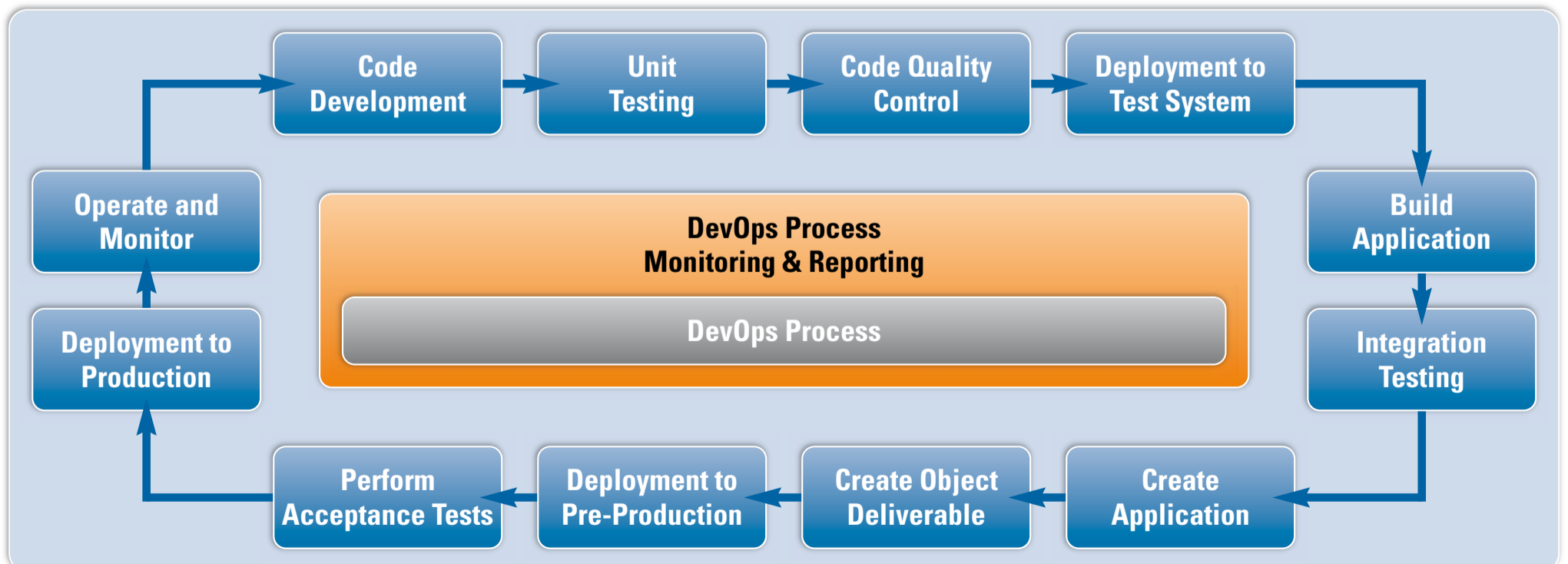
In addition to selecting the right tools, it is also important to quickly specify and implement new functional units that are to be put into operation and to keep them as small and efficient as possible. In order to achieve the expected speed of delivery, the related tests have to be carried out much earlier than before and, above all, they have to be clearly defined and need to be run fully automated. The goal of DevOps is to improve the quality of the software, optimize the throughput time and provide individual software blocks automatically with fully automated processes and background tests. Unfortunately, as of today, there is still a lot of manual testing happening in larger companies. This entails the risk that the quality will deteriorate rather than improve over time. DevOps is not limited to defining automation tools and empowering employees to use them. It is equally important that the idea must be anchored in the minds of the developers as well as the operational staff within the company. The goal is: to deliver products with higher-quality much faster through improved processes and cross-de-

partmental collaboration. First and foremost, this requires a collaborative corporate culture and common goals to be agreed upon.

Tools, Automation and Budget

Only then does the selection of the right tools, test automation and the integration of legacy systems come into play. A DevOps plan with milestones, owners and clearly defined delivery targets is just as essential as the management, standardisation and automation of complex environments as well as the development of the necessary skillset. And last but not least: the importance of IT infrastructure security become more and more an important issue in what is summarized by the new term „DevSecOps“.

However, the willingness to establish such a new culture within the company between departments, developers and operations alone is by far not enough. Compare it to using open source software tools: applying them does also not mean there's no cost involved either. In order to successfully implement the DevOps concept in a company, a budget and, in particular, support at executive level for the provision of financial and human resources is an absolute requirement.



DevOps Cycle

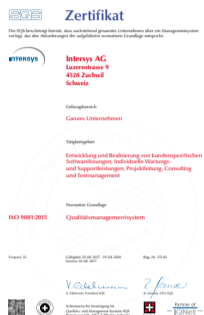
New customers in 2017

In 2017, we started some very exciting new projects with new customers:

- Aare Jura Attorneys
- Amberg Technologies
- Bad Ammannsegg (nursing home)
- Diocese Basel
- Swiss Federal Government
- Unia (labour union)

We are looking forward to a lasting and beneficial cooperation.

ISO 9001-2015 re-certification



Since July 2017, Intersys has received the certification according to the latest ISO 9001-2015 standard. This is very important for the company in its quest to deliver highest quality software and services.

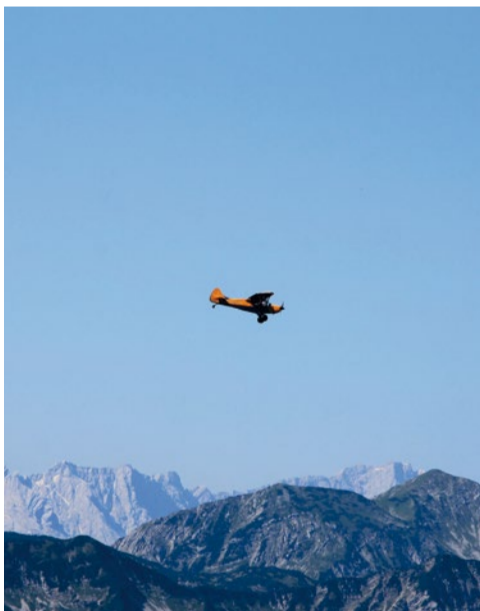
Winner of our previous contest



Latest happy winner of a voucher for a historic guided tour through the baroque city of Solothurn for up to 10 persons is Walter Grob. He works as part of an application operations team within Swisscom in Luzern.

We wish Mr. Grob a beautiful stay within the Intersys Hometown.

Contest



Picture: Wolfgang Discherl / pixelio

Take part in our newest contest! With the help of a little luck, you can win a gift certificate for a trial flight either in a motor plane or in a sailplane. Experience the world of flying! The trip will start from the Grenchen airport close to Solothurn.

Participate by scanning below QR-Code and filling out the resulting form or visit our website on www.intersys.ch/en/contest (german only). The winner will be drawn from all entries. Contest deadline is December 20th 2017.

What's the name of the technology, that allows to gather data using sensors and transfers it for further treatment?

- a) Database
- b) Java
- c) IoT



All people aged 18 and older are eligible to take part in the contest. Only one entry per person. There is no legal recourse after the prize draw. The prize draw is excluded from the jurisdiction of any court. The winner will be notified in writing by eMail and/or letter. There is no cash alternative to the prize. The prize is not transferable to another person. Information entered by the participants can be used by Intersys for advertising purposes, however, they will not be passed on to third parties. Employees of Intersys AG and Business4you AG are excluded from the contest. The contest will close on December 20th 2017.

Intersys User Experience competences

Intersys now offers various consulting services in the area of software frontends and eCommerce systems. Our experienced UX specialist is here to consult you in the area of ergonomic and modern user interfaces as well as webshop system design and implementation. Ask our sales specialist for more details on these topics: sales@intersys.ch

IoT – The Internet of Things

Have you already come into contact with the Internet of Things (IoT) in your business or private environment? Are you wondering how specific IoT use cases can add value to your business?

Read our case study on page 2 of this issue and ask us for more of our ideas that we can implement to leverage your business and make you more successful using IoT.

Intersys and Blockchain Technology

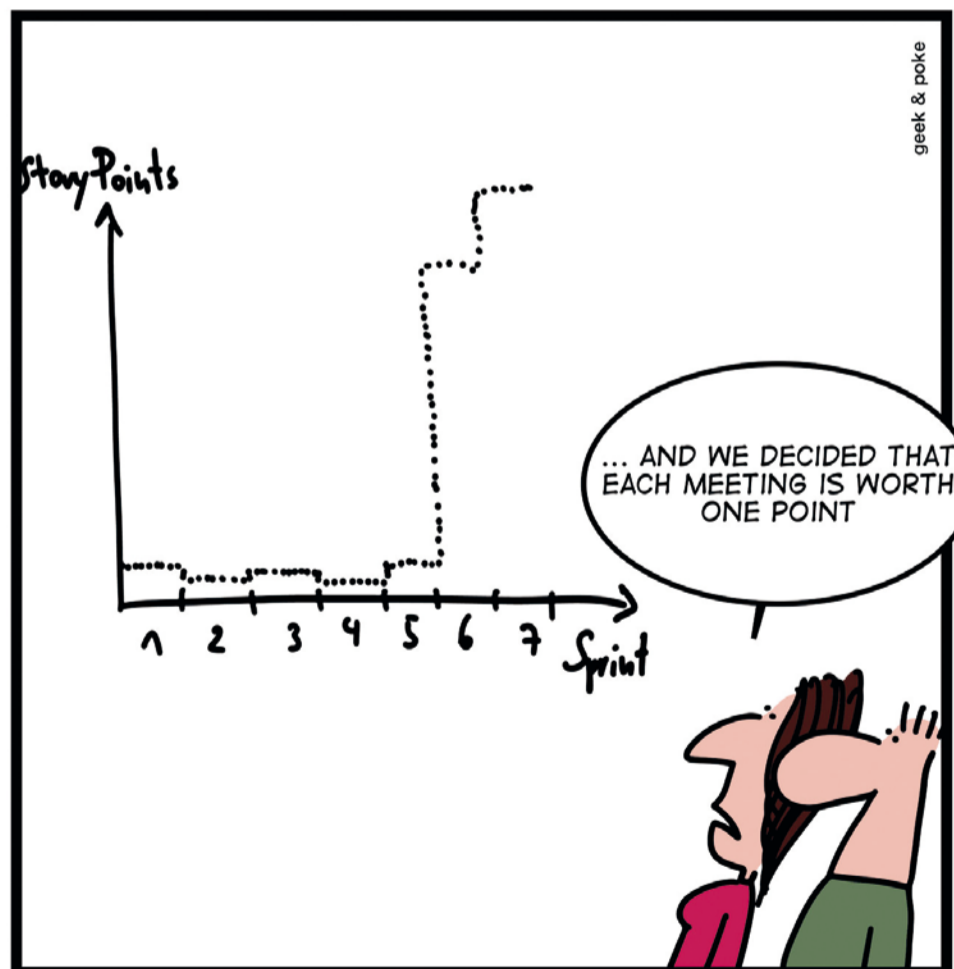
Intersys considers itself to be a technologically advanced company. This means that we are already considering today what technologies we can use to support our customers tomorrow.

offices or insurance, no industry that will profit from it. Intersys is making first experiences with the blockchain technology and on how to use it in modern application.

The blockchain technology has everything to make our world more transparent and to change it sustainably. Whether in medicine, finance, public

We would be happy to pass on our findings and show you what Blockchain can do for your company. Do not hesitate to contact us.

Comic



HOW TO INCREASE VELOCITY

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