# AIRLOCK®
## SECURE ACCESS HUB

# BÜHLER

# Industry 4.0: "Innovations for a better world"

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## Protected data and reduced risks



*We are a clear leader in terms of quality, which is why we also rely on superior solutions in terms of IT security.*

Florian Christberger,
Team Manager Network Services

Tradition is no guarantee of the future. Swiss tech group Bühler, which has been operating in a highly competitive market for over 160 years, is well aware of this. This is why the global plant manufacturer consistently relies on digitalisation – with innovative services, state-of-the-art cloud solutions and secure end-to-end digitalisation of production processes – and of course, with the Airlock Secure Access Hub.

Previously, industrial companies were defined by powerful engines and long production lines more than anything, but today online is increasingly replacing the assembly line and data, rather than iron ore, is set to be the most important resource in future. This is no different for our customer with its 12,700 employees and revenue of several billions.

The Bühler Group realised early on that if it wanted to expand its leading position in grain processing, pressure die-casting and surface coating methods, then digital services would be a critical key to ensure new successes. Digital services which offer the customer significant added value but have to be absolutely secure when it comes to protecting against external attacks as well as encrypting interfaces and sensitive data. The following specific examples show just how complex the challenge of digitalisation is:

▶ **Tackling food waste with data**

   30% of all food is wasted on the way from the field to our plates, meaning there is enormous potential for optimisation here – both in terms of economic efficiency and with regard to sustainability. The technology company makes use of the digital measurement of various production parameters. The use of networked sensors and the Internet of Things (IoT) have enabled vast reductions in food production waste and significant increases in yield.

▶ **Improved service thanks to an online portal**

   Machines running almost anywhere in the world are hard to maintain, except if, like the Swiss company, you use "predictive maintenance" and a digital customer portal in the private cloud. The benefits of this are that you have digital access to maintenance services and the customer service enables optimum maintenance. The option of maintaining and controlling the plants via an IoT platform guarantees a higher level of reliability and greater operational efficiency.

**The future of IT security: Coherent systems instead of singular solutions.**

IT architectures are growing increasingly complex, which is why the trend is clearly moving towards having upstream security layers. The benefit of these integrated solutions is the convergence of application security, API protection and access management, as a world in which various sites communicate with a variety of internal and external partners requires integrated security ecosystems. In addition, holistic solutions also boost cost efficiency and enable a faster time-to-market.

## Reliably protecting the company crown jewels.

The opportunities that digitalisation offers for industry are therefore clear to see – but unfortunately so are the risks. These risks need to be reliably managed, primarily in the area of long-term capital goods and particularly in Industry 4.0 where valuable patents and business secrets are integrated directly into the databases.

This is because if unauthorised persons have access to computer systems, an industrial company's crown jewels are often there for the taking, such as all internal expert knowledge that has been gained over the years, confidential project and customer information and – as is the case with our customer – a globally networked system of plants and machines. That's why intelligent IT security solutions which ensure outstanding reliability are in demand. The following was clear to Florian Christberger Team Manager Network Services: "We are a clear leader in terms of quality, which is why we also rely on superior solutions in

terms of IT security, as errors in this area would be fatal for our company!" The following statistic shows how great this error risk is in everyday corporate life: companies in Europe still take 177 days on average to notice attacks by hackers. A shocking figure!

## Preventing attacks and boosting reliability.

With Airlock, attacks are identified as follows in a specific case – web applications are protected against authorised access by means of upstream authentication and a dynamic whitelist filtering method. As part

« *In just 20 minutes and without any machine learning knowledge, we were able to achieve significantly higher protection for our applications thanks to the Airlock Anomaly Shield. This changeover was not noticeable to the user due to the same data throughput.* »

Florian Christberger,
Team Manager Network Services

of this process, Airlock Gateway analyses all traffic between users and services and blocks attempted attacks even before hackers can access internal systems. The Airlock Anomaly Shield provides additional protection here, as it can also detect unknown types of attacks and unwanted bots using machine learning.

A high level of availability is just as important as protecting against attacks and Airlock also offers impressive service in this case, as reliability of at least 99.99% is a key security feature in order to prevent long downtimes, even in the event of serious attacks.

In discussions, our contact mentioned two additional aspects that impressed him about Airlock – the out-

### Internet of Things: Making secure use of future opportunities

Whether heating, cars or industrial plants, new IT ecosystems are emerging in the Internet of Things whose added value is the result of the interaction of all components. To this end, Airlock guarantees cross-system security which reliably closes security gaps between "things", cloud services and on-premise environments, meaning that the Airlock Gateway protects central services against attacks. Airlock IAM also enables a wide range of users to securely access data and applications – with single sign-on, strong authentication and automated user administration.

standing service and reliable support, along with the future viability of the security software. The support from an Airlock expert is not the only key argument for the customer, but the modular structure and expandability are also clear benefits of the Secure Access Hubs from Ergon.

## If data is the future, then what is data security?

The following statement is as true for many customers as it is for the Swiss industrial company – the security solutions used have to be as high quality as the in-house products are professional, as if data is the future, then that means that data security also ensures the company's future viability.

**Bühler Group**
The Bühler Group is based in Uzwil and is an internationally operating Swiss tech group.
The family-run company owned by the Bühler family is the global market leader in technologies and methods for grain processing for flour and feed as well as for pasta and chocolate production, pressure die-casting, wet milling and surface coating. The company's core technologies are in the field of mechanical and thermal process technology.

The Bühler Group is active in over 140 countries and has around 12,700 employees. Bühler AG also trains around 600 apprentices in Switzerland and in the respective companies in Germany, Austria, China, India, Brazil, the US and South Africa. There are a total of 30 production sites globally. The company generates revenue of several billions and invests 5 percent of this in research and development.

**About Airlock – security innovation by Ergon Informatik AG**
The Airlock Secure Access Hub combines the key IT security issues of filtering and authentication into a well coordinated overall package that sets standards in terms of usability and services.IT The Secure Access Hub provides all key functions required for modern IT security in this field – from a web application firewall (WAF) recognised by specialist journalists and a customer identity and access management system (CIAM) which Swiss banks trust to API security which meets the latest requirements. The Airlock IT security solution protects more than 20 million active digital identities and 30,000 backends from over 550 customers all over the world.
You can find further information at www.airlock.com. Airlock is a security innovation from Swiss software company Ergon Informatik AG.

Ergon Informatik AG was founded in 1984 and is a leader in the production of customised software solutions and software products. 300 highly qualified IT specialists who quickly anticipate new technology trends and ensure key competitive advantages with innovative solutions thanks to their outstanding specialist knowledge form the basis for this success. Ergon Informatik mainly implements large-scale projects in the B2B sector.

Ergon Informatik AG
Merkurstrasse 43
8032 Zurich
+41 44 268 89 00
info@airlock.com

www.airlock.com

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