

IKB Data

Protected SAP access with Active Directory

Together, IKB Data and Ergon Informatik have come up with secure web access to an SAP portal of the IKB Deutsche Industriebank AG. Requirements for user log-on were a two-factor authentication against the Active Directory as well as access to SAP via single sign-on. The Ergon web application firewall Airlock WAF and its authentication module meet these requirements.

When it comes to lifecycle management, IKB Data was facing the replacement of the previous web application firewall (WAF). In this time IKB Deutsche Industriebank decided in favour of the SAP solution SRM-SUS (Supplier Relationship Management / Supplier User Service) to be implemented as external web access. It thus lent itself to adjusting special wishes regarding the WAF to the requirements on SRM-SUS.

SRM-SUS helps simplify supplier management in that external employees and suppliers can enter their own invoicing information and timesheets. To limit access to SRM-SUS, VPN was not the desired option for data exchange. Instead data exchange was enabled directly via Internet. A WAF made as restrictive as possible and two-factor authentication were used to meet the high security requirements of the bank. Single sign-on (SSO) was added as a convenience feature to the specifications so that users do not have to also sign on to SAP. In addition to securing the SRM-SUS portal, the idea was to replace the existing WAF connections for the web applications of other customers.

"When it came to updating our web application firewall we placed great importance on an appropriate security level for our customers in addition to looking at it from an economic standpoint", explains Markus Repges, IT Security & Business Continuity Manager at IKB Data. "For this reason we were looking for a product with a good reputation in terms of filtering data traffic and flexible options for strong authentication. On top of that, the capability for locationredundant high availability mode was a crucial prerequisite." That is why renewing the previously used hardware-based solution was rejected. First of all, according to Repges, the WAF products of the "big players" were examined closely. During the course of a workshop it became evident that Ergon's Airlock WAF was best suited to meet the needs of IKB Data.

Airlock WAF is flexible

A secure reverse proxy server and WAF all in one, Airlock offers a unique combination of protective mechanisms. "An important argument in favour of the Swiss solution is that we can flexibly and gradually configure the authentication rules ourselves", says Repges. In this process, the existing rules were transferred manually to Airlock and the authentication was adapted to IKB Data's special SSO requirements.

The costly use of an additional SAP portal to log in was avoided during implementation because the Airlock authentication module enables SAP direct access via SSO using the active directory login. Airlock WAF forces upstream authentication, in other words user data are checked prior to enabling access to the SAP application. A one-time password (OTP) is used to enhance security. All access attempts are systematically controlled and filtered, the relevant information is available via monitoring and reporting functions.

Striking simplifications and cost reductions

Thanks to SRM-SUS it was possible to markedly simplify delivery management. Airlock WAF plays a significant role in this. Today, around 50 IKB Deutsche Industriebank suppliers benefit from the advantages of direct data entry. Thanks to the positive experiences, the aim is to expand the supplier circle integrated into SRM-SUS.

Airlock Suite has been productive at IKB Data since the fourth quarter of 2012. The solution is integrated into a high availability cluster in the individual computer centres and in an approval instance. It protects a systems interconnection of up to 15 SAP servers. The SAP system is maintained by internal specialists at the IKB Deutsche Industriebank.

Conclusion

Airlock Suite is the ideal solution when combining high security requirements and great flexibility in the authentication mechanism. Upstream authentication is separate from the business logic. No changes to the target application are necessary for implementation. New means of authentication can be made available quickly and easily. Web applications are best protected from attacks such as SQL injection through restrictive access rules. That makes Airlock Suite an important part of providing secure and reliable web services.



"Implementing the Airlock web application firewall by Ergon has put IKB Data GmbH in a position to offer its customers secure web applications as well as strong authentication. The implementation was characterised by extremely good cooperation with the manufacturer."

Markus Repges, IT Security & Business Continuity Manager at IKB Data GmbH

About IKB Data

The company IKB Data was founded from the IKB Deutsche Industriebank in 2004 as an IT infrastructure service provider. The company uses state-of-the-art IT solutions, currently operates two computer centres in Düsseldorf and Krefeld and specialises in cloud computing. The services provided cover all relevant outsourcing areas from hosting to the outsourcing service.

About Ergon Informatik AG and Airlock Suite

Founded in 1984, Ergon Informatik AG is a leading developer of bespoke software solutions and products. The cornerstone of our success: 235 highly qualified IT specialists who are committed to creating value for the client, anticipating technological trends and designing solutions that generate competitive advantage. Ergon focuses on implementing major B2B projects.

Airlock Suite deals with the issues of filtering and authentication in one complete and coordinated solution – setting standards for usability and services. Airlock, our security product, was launched on the market in 2002 and is now used by 300 customers around the globe.

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