

"Secure File Exchange" Confidential Computing Platform

Swisscom facilitates the exchange of confidential commercial documents in collaboration with Intel and Secretarium

Swisscom and its technology partners Intel and Secretarium are working jointly to develop the "Secure File Exchange" (SFX) confidential computing platform. The SFX application enables companies to exchange business-critical commercial documents in the cloud, significantly accelerating crucial business processes while complying with the highest standards of data security and confidentiality. Industry projects are going well, with transactions already being carried out across South America, Europe and Asia.

International trade today depends on large amounts of information being exchanged between business partners and the highest standards of data confidentiality and integrity. It also brings a number of other specific requirements: for some business processes, for example, the trading partners require simultaneous access to documents or information to prevent either party having a knowledge advantage that they can unilaterally exploit. The rise in cases of financial fraud is another challenge: cyber criminals increasingly use insecure channels – such as e-mail – to obtain payment information and cause significant damage by manipulating invoices. The automated and encrypted retrieval of Standard Settlement Instructions (SSI) through a secure platform resolves this issue and ensures secure payment transactions between trading partners.

To combat issues such as these, Swisscom, together with technology partners Intel and Secretarium, has developed the Secure File Exchange (SFX) platform. SFX enables fast and reliable data exchange of encrypted content between companies. Users can make their confidential business documents available to each other within seconds, avoiding costly and time-consuming exchange via courier services.

How SFX works

SFX is very simple to use. After registering for SFX and undergoing verification by Swisscom, companies receive self-administration rights that allow them to make the application accessible to other employees in their organisation. As soon as a user uploads documents, the recipient business partner is informed by e-mail that an order is ready for processing and can log in directly to SFX via a





link. SFX provides several support functions to facilitate easy and efficient exchange of documents between the parties. A Smart Contract can also be integrated as an option to ensure that the business partner is only able to view uploaded documents after providing their own data.

Security and confidentiality

SFX meets the highest requirements for security and confidentiality of company data. The servers on which the platform is operated are located in Swisscom data centres. No one, except for the owner and the selected recipients, can access the data, and that includes Swisscom, the platform developer and the provider. Company data is encrypted end to end to ensure that it cannot be accessed at any time. This is made possible by the new confidential computing technology (Intel Software Guard Extensions, SGX for short), which ensures that data remains encrypted even during processing.

Swisscom and Intel anticipate broad demand for the business process simplification and digitisation platform within the trading and finance sector and have successfully driven strong adoption through early live piloting. The product was developed with the ethos of driving a high usability experience. Swisscom's core mission is to deliver impactful, yet unintrusive industrial platforms for the market that facilitate digitalisation by supporting the integrity of business and industry practices.

"It is a privilege for us to innovate together with leading international technology companies such as Intel to develop this platform for secure data exchange between companies," says Christoph Aeschlimann, CTO & CIO Swisscom.

"The need for higher levels of security and confidentiality will only increase as multi-party business processes, collaboration and transactions move online," said Jason Grebe, Corporate Vice President of the Cloud & Enterprise Solutions Group at Intel. "Innovators like Swisscom that apply Intel SGX technology to their cloud services provide new levels of protection to data in-use, harnessing the industry's most tested, widely-deployed hardware-based data center trusted execution environment."

Confidential Computing Consortium

The SFX platform was developed under the auspices of the international Confidential Computing Consortium, founded in autumn 2019. Swisscom is one of 16 founding members alongside Google, Microsoft and Intel.





Bern, 9 december 2020

More information on SFX: https://sfx.swisscom.ch/

More information on the Confidential Computing Consortium:

 $\frac{https://linuxfoundation.org/press-release/confidential-computing-foundation-founding-member-comments/}{}$