R&D Outsourcing

25 2023

Pilot Integration of Post-Quantum Encryption by QOOApp

On February 16, 2023, the Russian IT holding T1 announced to TAdviser about testing the joint operation of the Dion videoconferencing system, developed by Innotech (part of the T1 group), with a solution for post-quantum data protection from QApp, a domestic developer of complex cybersecurity products based on post-quantum algorithms . Pilot product integration resulted in the first video communication session protected from cyber threats using post-quantum encryption algorithms. In Russia, for the first time, post-quantum protection for video conferencing is being tested During the pilot project, the companies integrated the QApp product, a post-quantum VPN, into the Dion video conferencing service. Successful integration made it possible in test mode to protect the video data transmission channel from attacks using both classical and quantum computers. Along with the possibility of video calls from computers and mobile devices based on the Android OS without loss of video and sound quality, the significant geographical extent of the channel became a distinctive feature of the software product: according to T1, the conference participants managed to provide secure data exchange without the use of additional equipment at a distance of 1800 km . "With the help of our products, Dion has become the first video conferencing service in Russia with post-quantum encryption. In an experimental mode, we are already using it in the company," said Anton Guglya, head of QApp. - I see significant potential in cooperation with the T1 Group - both with the developer and with the integrator of digital products with a high level of information security. »

According to the top manager of QApp, the company plans to further increase the number of joint pilot projects, including trilateral integrations in the interests of companies in the financial and other sectors of the Russian Federation.

Together, we will accelerate the transition of business and the public sector to quantum-resistant solutions and will be able to ensure large-scale implementations as soon as the process of standardization of domestic post-quantum algorithms is completed in Russia," concluded Anton Guglya. As explained in T1, post-quantum encryption is a promising direction in the cybersecurity sector, the products of which are actively piloted around the world to protect state and commercial secrets, personal and financial data. In the medium term, attackers with access to a powerful quantum computer will be able to crack classical encryption algorithms in near real time. Post-quantum algorithms are resistant to the computational advantages of quantum computers in cyberattacks, which is confirmed by mathematical proofs of the resistance of each such algorithm.

п

"In the new reality, to ensure the proper level of security, it is not enough to focus only on classical technologies and information security solutions. A significant increase in the number of cyber threats, the development of new technologies, especially quantum computing, seriously affect the level of the existing cybersecurity landscape around the world," Igor Kalganov, CEO of T1 Group, is convinced.

As he stressed, this is especially important for critical infrastructure facilities - government organizations, financial institutions and banks, industrial enterprises, that is, the main clients of T1 Group. According to Igor Kalganov, it is necessary to ensure the accelerated introduction of innovative digital technologies, the creation of new tools on their basis and legislative support for such technological projects and initiatives. T1 expects that a joint pilot project with QApp will guarantee customers a new level of cyber protection.

2022: Innotech requested 530 million rubles for completion of the Dion video conferencing service to the level of Zoom, MS Team and WebEx

As it became known to TAdviser, the Innotech company, which is part of the T1 group, estimated the completion of the Dion video conferencing service to the level of Zoom, MS Team, WebEx, GoogleMeet at 530 million rubles. An informed source reported this to TAdviser.

According to the interlocutor of TAdviser, on July 27, 2022 at a meeting of the competence center for development of the Russian general system and applied software necessary for replacement of the foreign analogs used now (TsKR "Communication Services") discussed a possibility of support of VKS service for receiving state subsidies. Initially, Innotech asked for 1.2 billion rubles to improve the video conferencing service, but then reduced the amount to 530 million rubles. According to the interlocutor, the participants in the meeting of the Central Committee for Communication Services recommended Innotech to apply to venture financing institutions to obtain support. Innotech said they do not comment on the results of closed meetings.

The service was announced by Innotech on June 16, 2022 as part of the St. Petersburg Economic Forum. At the same time, it was announced that the hybrid cloud platform supports up to 1000 one-time connections within one "room", while the number of "rooms" is not limited. According to the company, more than 50,000 people already use the service every week.

Innotech requested 530 million rubles for revision

Video conferencing service Dion. Photo - newsae.ru

As an informed source told TAdviser, the service has been used for several months in VTB Bank, as well as in the T1 integrator.

According to the data of the Innotech presentation presented at the meeting of the Central Committee of Communications Services (available from TAdviser), the company divided the project into several stages. The first stage started in 2021 and was completed in March 2022, when the MVP of the videoconferencing service was presented. The second stage involved the preparation of the commercialization of the product and the launch of pilot projects. The third stage, which should be completed in 2024, involves the refinement of functionality to meet the requirements of the market.

From the presentation it follows that:

in 2021, the project budget was 38.1 million rubles;

in 2022 it is planned to invest 241 million rubles;

in 2023 - 414.2 million rubles;

in 2024 - 536.1 million rubles.

How the distribution of funds has changed after adjusting the project budget, the company did not specify.

According to the source, Deputy Minister of Digital Development, Telecommunications and Mass Communications Maxim Parshin, representatives of ANO TsKIT, ANO IIC, ANO IRI, integrator Greenatom (subsidiary of Rosatom), developer Naumen, creator of domestic videoconferencing TrueConf, etc.

At this stage, which will last until mid-August 2022, companies submit applications, and the participants of the Central Committee for Communication Services evaluate them, deciding whether to support projects or not. The selected projects must be reviewed by the Ministry of Digital Development and the Ministry of Finance by September 7. Those who pass all the stages will receive financial support, the mechanism of which, according to the source of TAdviser, is still being worked out.

CCR "Communication Services" was created as one of 35 industrial competence centers that will determine what software is needed by domestic consumers to replace foreign software.

Link to article:: <u>Pilot Integration of Post-Quantum Encryption by QOOApp</u>