

Report on the "FragmentiXOne" Appliance by FragmentiX

Introduction:

The purpose of this report is to provide an evaluation of the "fragmentiXOne" Appliance developed by fragmentiX (frX), which has been tested in an environment consisting of three S3 buckets with Windows 11/10 clients.

This Appliance stands out for its ease of configuration, autonomy, and security. This report will highlight these features as well as the technologies utilized, such as secret sharing, multi-part computing, and quantum key distribution, to offer highly secure encrypted data backup in fragmented pieces. Additionally, we will also address the protection provided by the Appliance against the U.S. Cloud Act, as well as the growing risk of data sovereignty loss by governmental entities in various countries.

Easy Configuration:

The "fragmentiX One" Appliance distinguishes itself with its straightforward configuration. Its installation process is user-friendly and well-documented, facilitating setup in any environment. The clear instructions provided by FragmentiX allow users to quickly configure the Appliance without requiring advanced technical expertise.

Autonomy:

Once configured, the "fragmentiX One" Appliance operates autonomously, providing an efficient data backup solution without the need for constant user intervention. This allows users to focus on other critical tasks without compromising data security.

Security:

Security stands as a strong point for the "fragmentiX One" Appliance. It employs multiple advanced technologies to ensure the confidentiality of backed-up data.

Secret Sharing: The Appliance divides data into pieces and securely distributes them across multiple servers, ensuring that no individual server possesses the entirety of sensitive information.

Quantum Key Distribution (requires an additional vendor to have this option): The use of quantum key distribution enhances the security of encryption keys used by the Appliance. This advanced technology detects any attempts to intercept keys, providing additional protection against attacks.

Security Tests:

As part of our testing, we evaluated the resilience of the "fragmentiX One" Appliance against various potential attacks. We conducted penetration tests to assess the Appliance's strength against unauthorized access attempts, brute force attacks, and data extraction attempts. The results demonstrated the robustness of the Appliance and its strong defense against these types of attacks.

Protection against the U.S. Cloud Act:

The U.S. Cloud Act is an American law that grants U.S. authorities the power to request access to data stored by U.S. companies, whether hosted in the United States or abroad. This

risk also exists with a growing number of governmental entities in other countries, not just in the USA. The "FragmentiXOne" Appliance by FragmentiX ensures protection against the U.S. Cloud Act through its data fragmentation technology and secure distribution across multiple servers. Since data is divided into pieces and stored in a distributed manner, it is impossible for a third party, including U.S. authorities, to access the entirety of backed-up data, based on obtaining only a single fragment.

Usage and User Experience:

Once installed and configured, the Appliance requires a client to connect, providing a network drive similar to Dropbox/OneDrive, etc. After over three months of use, transfers occur at internet connection speed (minimum overhead, almost invisible). Remarkably robust, despite several complete power outages (network/internet disconnected, the Appliance is on a UPS), no intervention was necessary for everything to resume functioning.

Conclusion:

The "FragmentiXOne" Appliance by fragmentiX offers an easy-to-configure, autonomous, and secure data backup solution. Through its use of advanced technologies like secret sharing, multi-part computing, and quantum key distribution, it ensures data confidentiality and protection against attacks. Additionally, by fragmenting and distributing data, the Appliance provides effective protection against the U.S. Cloud Act and similar risks in other countries. Overall, the "fragmentiX One" Appliance is an exceptional choice for businesses and organizations seeking to secure sensitive data while adhering to privacy and data protection standards. The solution is not limited to this Appliance; larger options designed for more significant needs are also available, allowing more clients to access this secure drive. It is also possible to share securely data between users or companies using each a fragmentiX box.