XCrypt Full Disk™

High Performance, Full Disk Encryption with Key Management Integration

Zettasets XCrypt Full Disk is a high-performance, software-only full-disk encryption solution that provides proven protection for sensitive information. XCrypt Full Disk requires no proprietary appliances for simplified deployment and a significantly lower cost. The versatility of XCrypt Full Disk makes it suitable for encryption of both data in-motion and data at-rest, in the cloud and on-premises.

Big Data Security Challenges

The increased frequency and sophistication of high-profile data breaches and malicious hacking is putting organizations at continued risk of data theft and significant business disruption. Complicating this scenario is the unbounded growth of petabyte-scale data storage, cloud services, distributed systems, and myriad data stores. The massive attack surface of large-scale data stores on-premises and in the cloud makes them highly vulnerable to unauthorized intrusion. However, much of the encryption technology that exists today was not designed for deployment in distributed computing architectures and massive cloud stores which consist of multiple servers that are networked together into server arrays.

Distributed data systems require a distributed policy server, with secure policy replication to prevent unauthorized modifications to policies. Distributed systems also require automated mechanisms for secure node removal when a server is removed from a cluster, encryption for both data-at-rest and in-motion, as well as rapid and secure encryption key rotation. All of these functions must perform efficiently without requiring the re-encryption of any files or downtime during normal operation. Further, security best practices require that encryption keys are stored separately from the encrypted data, unlike most of the full disk encryption solutions available.

Encryption Optimized for Performance, Scalability, Ease of Use

XCrypt Full Disk is a high-performance, software-only, full disk encryption solution which is ideal for bulk encryption of stored data and can be applied to both data-at-rest and data-in-motion. Zettasets's all-software approach to encryption simplifies deployment and eliminates the need for proprietary appliances – it can be installed on your commodity hardware already in use. It also makes XCrypt Full Disk ideal for elastic cloud environments. XCrypt Full Disk utilizes Advanced Encryption Standard (AES) 256-bit encryption, the largest key size available, and provides AES-NI accelerated performance in equipped servers. The product also includes Zettasets's Virtual Enterprise Key Manager and Virtual Hardware Security Module for organizations that don't already have key management in place. XCrypt Full Disk delivers data-centric security utilizing advanced encryption and access control technologies to ensure the highest levels of protection for sensitive business and regulated information.

XCrypt Full Disk provides proven defense in regulated industries such as healthcare, financial services, and retail from the accelerating frequency and scope of data breaches. XCrypt Full Disk can help bring structured and unstructured data stores into compliance with corporate and regulatory data protection initiatives including PCI DSS, HIPAA, FISMA and more.

Benefits and Features

Lower Total Cost of Ownership (TCO)

- Requires no proprietary hardware (appliances); software-only encryption solution that can be deployed on commodity and existing hardware – just point and encrypt
- Does not require specialized encryption experts on staff - can be deployed and maintained by existing IT staff
High performance
- Negligible performance impact on existing processes

Versatile
- Protects sensitive data in a wide range of structured and unstructured data environments

Interoperable
- Command line interface simplifies automation and integration (e.g. Puppet, Ansible, Chef)
- KMIP compatible & PKCS #11 certified and interoperable with all major key managers and HSMs, including Thales and Gemalto

Supports IT Compliance Initiatives
- Provides a proven defense for sensitive data in regulated industries such healthcare, financial services, and retail from the accelerating frequency and scope of data breaches
- Helps bring cloud and on-premises data stores into compliance with corporate and regulatory data protection initiatives such as PCI DSS, SOX, HIPAA, FISMA, and more

About Zettaset
Zettaset is a software-defined encryption solution that protects against data theft and can be transparently deployed across all physical and virtual environments. Its products are designed for medium to large enterprises that deal with sensitive information that would expose them, financially and reputationally, in the event of a breach. Unlike traditional solutions that are appliance-based, Zettaset is a cost-effective, software-only solution that is easy to deploy, does not impact performance, and scales with your business from on premise to the cloud.