Zettaset

XCrypt™ Cloud Encryption Platform for Amazon S3
Complete Client-Side Control of All Encryption Processes and Services Between the Enterprise and the S3 Cloud

Zettaset XCrypt is an advanced data protection platform for Big Data in the cloud that addresses the growing anxiety over cloud service providers' dual role of storing encrypted data and having access to encryption keys, and the exposure that situation creates for unauthorized decryption of sensitive data.

Amazon Simple Storage Service (S3) provides object-based storage through web services interfaces, and is one of the most widely used cloud storage services in the world. The Zettaset XCrypt Cloud Encryption Platform extends advanced big data encryption capabilities into the Amazon S3 cloud, providing organizations with full client-side encryption control of all data hosted in the S3 cloud as well as data transferring between the enterprise and the S3 cloud.

Organizations using Amazon S3 services no longer need to share encryption keys with Amazon administrators, and can securely transition their most sensitive data into the S3 with the knowledge that all data transitioning to and from the S3 cloud as well as data in the S3 cloud is fully encrypted. XCrypt requires no modification to existing S3 APIs, and will support multiple APIs. All data is encrypted by XCrypt on the client-side before being sent to the S3 cloud, and decrypted on the client-side customer network.

Ideal for organizations with strict data privacy mandates and regulated compliance requirements, the XCrypt Cloud Encryption Platform from Zettaset ensures that Amazon S3 administrators know nothing about the content of encrypted customer data or customer keys. The Zettaset XCrypt solution is extensible, with support for other cloud services and data stores available in 2017.

Cloud adoption is transforming business, providing organizations with greater agility and unprecedented economies of scale. According to a recent IDG Enterprise cloud computing survey, 70% of respondents have already moved at least one application or a portion of their infrastructure to the cloud. However, the security of cloud computing solutions remains a top concern.

XCrypt Cloud Encryption Platform Highlights

The Zettaset XCrypt Cloud Encryption Platform is a highly scalable, feature rich solution that provides Amazon S3 users with several enhancements to existing S3 services that are not available from Amazon.

- Provides enterprise customers with complete client-side control of all encryption processes and services between the enterprise and the Amazon S3 cloud, including key management and data protection*

- Eliminates the need to surrender ownership and control of data and keys to Amazon S3 admins*

- Provides a single point of control for integrated Zettaset Big Data Encryption Suite, including encryption software, virtual key manager and virtual hardware security module

- Protects data in-motion and data at-rest

- Integrates with existing standards-based security infrastructure, including KMIP-compliant key managers and PKCS#11-compliant hardware security modules*

- User-defined policy determines what data is encrypted and level of key granularity*

- User-defined control of what encryption code is used (i.e. FIPS libraries)*

- Automated key management*

- Support for files larger than 64GB*

* Not provided by Amazon S3 encryption service

From the Enterprise to the Cloud: Assured Interoperability and Systems Fit

Zettaset provides customers with an all-software solution that reduces hardware costs associated with traditional key managers and HSMs, simplifies encryption deployment and security operations, and is ideal for elastic cloud environments such as Amazon S3 where resources are provisioned and de-provisioned on-demand.

The Key Management Interoperability Protocol (KMIP) and Public Key Cryptography Standard #11 (PKCS) are specifications developed by OASIS that standardize communication between enterprise key management systems, hardware security modules, and encryption systems. OASIS (Organization for the

Advancement of Structured Information Standards) is a nonprofit consortium that drives the development, convergence and adoption of open standards for the global information society.

Every component of the Zettaset XCrypt Cloud Encryption Platform for Amazon S3 and the Zettaset Big Data Encryption Suite adheres to these standards, to ensure interoperability with other standards-based key management systems, hardware security modules, and encryption systems that may exist within the enterprise and the cloud.