

CYPHERIX
STRONG ENCRYPTION



CRYPTAINER SE[®]

CYPHERIX[®]'s HIPAA Security Solution

Meeting the HIPAA Privacy and Security Standard with Cryptainer SE™

Health Insurance Portability and Accountability Act (HIPAA), 1996 was passed by the Congress with the principal intent of providing portability of health insurance coverage to workers when they switched or lost their jobs. The 90's saw an increasing use of electronic network by HCO's for storing and transferring information among themselves for various financial, administrative, education and research purposes. However, the idea of passing individual health records across the public Internet in turn prompted concerns about the privacy and security of patient identifiable information also called "protected health information" (PHI). Thus, HIPAA was further refined to include a security standard for sharing PHI over the Internet.

HIPAA impacts any health care entity, large or small, that exchanges individually-identifiable health information. This includes entities such as payers, providers and clearinghouses as well as other entities such as laboratories, billing agencies, IT vendors, employers, and pharmaceutical and biotechnology companies. Covered entities are now facing a deadline of April 14, 2003 for complying with the privacy rule. (Small health plans have been given an additional year to comply). The deadline for complying with the security rule is April 21, 2005. (Small health plans have been given an additional year to comply).

Privacy and Security are inextricably interlinked and it makes good business sense to consider these standards together as you consider measures for HIPAA compliance. Also, privacy standard makes it imperative for you to implement certain security mechanisms. This is where Cryptainer SE™ can help you in quickly complying with the standards within the given deadline.

Cryptainer SE meets the following HIPAA Privacy and Security Standard.

□ Privacy Rule (Set out in Federal Register):

164.530(c)(1) Standard: Safeguards. A covered entity must have in place appropriate administrative, technical, and physical safeguards to protect the privacy of protected health information.

164.530(c)(2) Implementation specification: Safeguards. A covered entity must reasonably safeguard protected health information from any intentional or unintentional use or disclosure that is in violation of the standards, implementation specifications or other requirements of this subpart.

□ Security Rule (Set out in Federal Register):

Standards	Sections Implementation	Specifications	Compliance	CryptainerSE
Access Control	164.312(a)(1)	Unique User Identification	Required	Meets
		Emergency Access Procedure	Required	Meets
		Encryption and Decryption	Addressable	Meets
Audit Controls	164.312(b)		Required	Meets
Person or Entity Authentication	164.312(d)	Unique User Identification	Required	Meets
Transmission Security	164.312(e)(1)	Encryption	Addressable	Meets

Cryptainer SE meets the Required Criteria of HIPAA Privacy and Security Regulations. Additionally, it confirms to the addressable requirements.

How Cryptainer SE™ Addresses HIPAA Requirements:

Cypherix's HIPAA security solution, CryptainerSE provides for a network wide encryption based security implementation, using the existing hardware and software infrastructure of the enterprise. It addresses vital security issues such as information security, access control, and hierarchical dissemination of information, without any issues of data migration into the new structure. The solution does not require any input from the enterprise in terms of user migration for a secure solution, since it is presumed that all users are already familiar with basic Windows functionality like drag-and-drop. Components within the implementation use the cryptographically secure AES algorithm at 256 bits.

Cryptainer SE addresses HIPAA technical security requirements on several fronts. Below are key security attributes of Cryptainer SE product.

Encryption: Cryptainer SE encrypts using the trusted AES algorithm at 256 bits, approved by NIST. Our products are so strongly encrypted that the mean time to break Cypherix®'s encryption is estimated at 10^{32} years - in comparison, the estimated age of the Universe is 10^{18} years.

Access/Authorization Controls: Cryptainer SE administration module ensures that only authorized individuals can view information and that information is properly controlled. It does this by providing for user based access with passwords. Our solution allows you to create dedicated areas on the hard disk that can only be accessed by authorized users. Our strong encryption based user access control makes it impossible for anyone to access data without the correct authentication password.

Audit Controls: The administrator module of Cryptainer SE keeps track of the activities of the end user. Every access to and use of Cryptainer volume(s) is recorded, including by whom.

Entity Authentication: Cryptainer SE enables entity authentication using unique user identification.

Disaster Recovery: Our solution allows for simple one click encrypted backups of any data on any media (eg. Another hard disk, CD-R/CD-RW, Zip disks, etc). Our solution is also fully interoperable with all backup tools, allowing you to integrate encrypted backups as part of your standard back up procedures.

Cryptainer Administrative Module enables corporate users to maintain control, despite individual end users' freedom to set independent passwords, without administrative intervention. In case an employee leaves or inadvertently encrypts vital data, it is possible for the corporation to recover such data, if they so deem necessary. It provides corporate users with a single point control and monitoring of the distributed security system without introducing any of the weaknesses inherent in the underlying operating systems. This ensures the integrity of your data, and at the same time gives you flexibility and overall control. You have the freedom to implement your company security policies without changing any underlying software.

CRYPTAINER SE™ TECHNICAL SPECIFICATIONS

PLATFORM	Intel/AMD/Cyrix/Other compatible architecture
OPERATING SYSTEM	Windows 95(OSR2), 16MB RAM Windows 98(First and Second Editions)16MB RAM Windows NT Workstation(SP6a or greater),32MB RAM Windows 2000 Professional, Service Pack 1
DISK REQUIREMENT	2MB approx on all platforms
REQUIRED COMPONENTS	Cryptainer™ Server Edition Cryptainer Administrative Module
ENCRYPTION ALGORITHMS	Cryptainer Server Edition-AES algorithm at 256 bits Cryptainer Administrative Module-RSA 2048 bit
CONFORMITY TO STANDARDS	Confirms to the following standards SHA NIST FIPS Key setting Pkcs5v2 HMAC RFC2104 HMAC test vectors RFC2202 HIPAA Security Standards

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