



IRON MOUNTAIN TECHNICAL BRIEF: SERVER ELECTRONIC VAULTING SERVICE SECURITY

Today more companies are recognizing the value and convenience of using online backup to protect their server data. If you are a network or information administrator, CIO or business owner considering the Iron Mountain Electronic Vaulting Service, then you may be wondering:

- How secure is my data? Could an unauthorized individual gain access to my data? Could my data stored with Iron Mountain be altered?
- Will my data be available when I need it? Is it safe from floods, fire or human error?

Iron Mountain Electronic Vaulting Service addresses both of these concerns with the most secure solution on the market. All data is encrypted before it leaves your server and remains encrypted on the Iron Mountain Electronic Vaulting Service vaults and optional TurboRestore appliances. Only you have access to the data encryption password. To insure the security and availability of data stored in vaults, Iron Mountain Electronic Vaulting Service uses a fully redundant vaulting infrastructure at its National Underground Site (NUS) facility. This facility provides stringent physical data protection safeguards.

Security for Data in Transit

Iron Mountain assures that the connection between your server and the NUS site is secure. Iron Mountain uses the best electronic security methods:

- *Automatic, outbound connections* - This means there is no added security risk to your environment. No changes are needed to your firewall configuration. The Iron Mountain Agent on your server only communicates with Iron Mountain vaults at the NUS data center. The Agent initiates all communication. The Agent will find ports that allow outbound connections.
- *Public key encryption for mutual authentication* - There is no possibility of spoofing. The vault and the Agent independently validate certificates each time a connection is made. This authenticates the Agent to the vault and the vault to the Agent.
- *256-bit AES encryption of all data before transmission and storage* - This means there is no possibility of eavesdropping. Banks rely on this level of encryption. Data is also compressed for transmission and storage.
- *Digital signatures* – This means there is no possibility of corruption or modification. Iron Mountain digitally signs every packet. Iron Mountain detects any accidental or malicious modification, even if the underlying network protocols do not.
- *Web interface uses SSL* – The Iron Mountain web user interface is always protected through the Secure Sockets Layer (SSL).



Security for Data Stored in Vaults

Iron Mountain's underground facility in western Pennsylvania provides high-security environmentally controlled storage for film, sound, magnetic media and vital records. We provide custom-designed storage and processing facilities for government and private industry.

The Pennsylvania Facility

- 1000+ acre limestone mine (active from 1902 to 1950)
- 130 acres currently developed and still growing
- 180-220 feet below the surface
- The normal temperature, if not for the waste heat generated by the HVAC systems, would be 54 degrees
- Located away from any urban areas

It is a Self-Sufficient Operation – A City Underground

- Full backup power for up to 7 days
- EPA certified water treatment plant
- OSHA certified fire company
- 24 hour armed security
- 24 hour maintenance
- 24 x 7 service operation

Security and Environmental Features For Specific Business Lines

- Premium Hardcopy
 - *Class A, 3 hour fire rated storage*
 - *Climate controlled – temperature < 72 degrees; humidity 40-50 %*
 - *Current volume > 1.6 million cubic feet*
- Micro-graphics
 - *Media stored in Class A, 4 hour fire rated vaults*
 - *Halon or FM200 fire suppression available*
 - *Standard storage temperatures of 68, 50 and 35 degrees*
- Vital records
 - *Class A, 4 hour fire rated vaults*
 - *Climate controlled, less than 70 degrees, 20 to 30% RH*
 - *Meets various standards for the storage of nuclear quality control records*
- Film and Sound
 - *Private space built to customers' specifications*
 - *Common space available by the CF at...68 degrees and 30% RH, 50 degrees and 30% RH, and 35 degrees and 30% RH*
 - *Over 450,000 cubic feet of film and sound media*
- Data Protection
 - *Class A, 4 hour fire rated vaults*
 - *Climate controlled, less than 70 degrees, 20 to 30% RH*
 - *Halon or FM200 fire suppression systems*
- Private vaults and Record Centers
 - *Class A, 3 hour fire rated vaults with 4 hour rated storage as an option*
 - *Environments range from 25 to 68 degrees and 20% to 50% RH*



Iron Mountain's Service Operations Center (SOC) monitors and supports the Service. Please note:

- *The SOC has no access to your data* – There is no possibility of decrypting your data. Only you have access to the data encryption password.
- *There is no access to data via the web user interface* – Furthermore, the Iron Mountain user interface only allows a restore to be done to the machine where the data originated, or to a server where you have installed the necessary data encryption key.
- *You can easily recover from a compromised data encryption key password with no data loss* - Any time you feel that a data password may be compromised, such as when a privileged employee leaves, you can change the password. This makes the old password inoperative with respect to any past or future data kept by the Iron Mountain Electronic Vaulting Service, but does allow you to access past and future backups with the *new* password. Changing a password does not cause any extra transmission of data from your server.
- *Redundant infrastructure* – Iron Mountain Electronic Vaulting Service components such as firewalls, disks, vaults and web servers are implemented redundantly. There are always multiple copies of your data and Iron Mountain can quickly resume monitoring and support from another location if Iron Mountain's own SOC facility is lost or unavailable.

Today, thousands of customers rely on the security of the Iron Mountain Electronic Vaulting Service to protect their data. Data protected with the Iron Mountain Electronic Vaulting Service is safer than it is in your own facility. Iron Mountain is the only company that ensures recoverability of your data, while protecting the privacy and integrity of the data.