# What does Intronis use for encryption?

https://campus.barracuda.com/doc/93197146/

Intronis takes every measure to keep your data safe at all times. We encrypt each file using 256-bit AES encryption technology. When you first install and configure the software for a client account, you have the option to choose a 48-character string that will be converted into a 256-bit private encryption key. Only you will have this encryption key; it will never be transmitted over the Internet and it is never stored on our servers. This means only you can access your files. Each file you backup is encrypted using this key and remains encrypted until you restore it to your computer. Using a managed encryption key means the encryption key is generated for you and you don't have to remember it. Even when using a managed encryption key, your data is still encrypted during transfer and storage and cannot be accessed without being decrypted by the software.

In addition, the software communicates with the Intronis servers using SSL/TLS technology. This is the same encryption technology used by Internet browsers when a user enters a secured site, such as an online bank. As a result, your data is encrypted twice. It is encrypted at all times using the 256-bit AES encryption and it is encrypted again while it is being sent over the Internet.

Your data is stored (in its encrypted form) on secure data centers, located thousands of miles apart from each other (Boston and Los Angeles; the Montreal data center is not hooked into the redundancy circuit). Each data center has 24/7 monitoring and advanced security measures such as biometric controlled access as well as backup generators and redundant connections to the Internet. To retrieve any data you would need the encryption key, the client account username, and password. A managed encryption key automatically populates the encryption key to be more convenient but you will still need the client account username, password, and an active computer account to restore data.

For more information on encryption:

- http://en.wikipedia.org/wiki/Wikiped...t_Cryptography
- http://en.wikipedia.org/wiki/NSA_encryption_systems
- http://en.wikipedia.org/wiki/Type_1_encryption