

SteadyBackup - Security

**SteadyBackup backs up your data quick, easy and with multi-level protection.
Read more about the details in this White Paper**

1 Introduction

This White Paper describes the security and encryption processes of SteadyBackup. This includes the software features for the encryption of the data, as well as the transfer and storage in the data center.

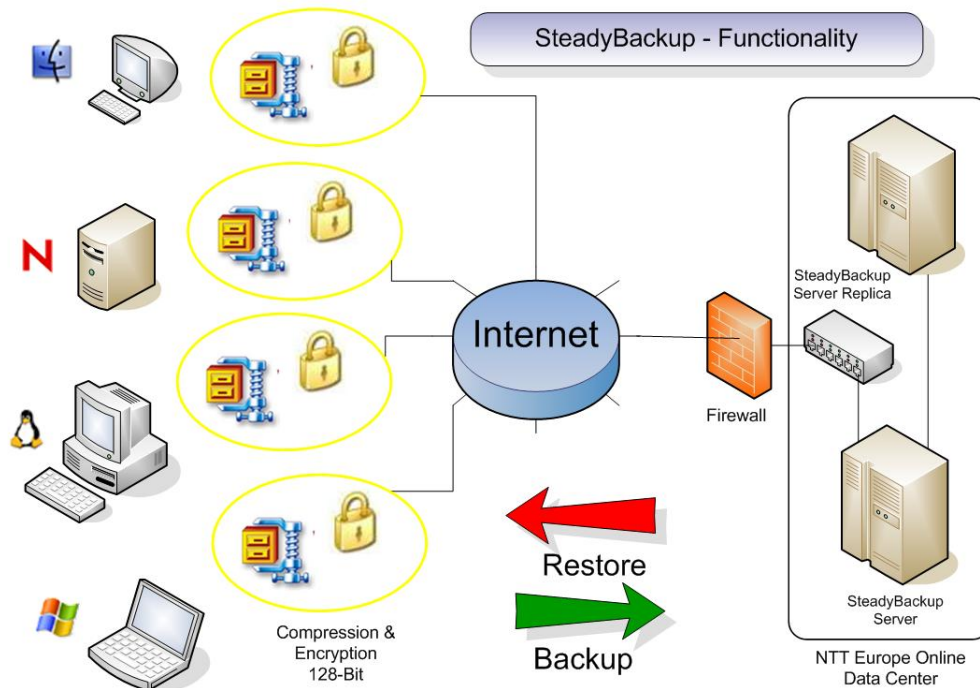
2 SteadyBackup – Secure, robust and reliable

2.1 Secure 128-Bit SSL connection

All communication between the backup client (system, of which the data should be backed up) and the backup server (server system in the data center of NTT Europe Online) will be transmitted through a 128-bit SSL ([Secure Socket Layer](#)) channel. By using this technique, nobody is able to read the data during the transmission.

2.2 Data is securely encrypted before the transmission is started

All data of the client system, which is supposed to be backed up, will be encrypted with a personal password. On the backup server system, the data stays in this encrypted format. Only by typing in the personal password, which has been used in the moment of encryption, the data can be made readable again.



2.3 The personal password is only known to you

The password, which is used to encrypt the data on your system, is only known to you. It is stored on your local system and will never be transmitted via the internet nor used on the backup server system. In case you lose this password, the data can not be made readable anymore. For this reason please store the password in a secure place.

2.4 Best possible encryption algorithm is used

For the encryption of your data, the 128-bit [Twofish](#) algorithm is used. This is a block-based cipher of the company Counterpane Labs. It is one of the five [Advanced Encryption Standards](#) (AES), which are used by the [National Institute of Standard and Technology \(NIST\)](#). So far, nobody has ever tried to break this encryption.

2.5 It would take $8,77 \times 10^{17}$ years to break the encryption

Even with the fastest currently available super-systems of IBM, it would take $8,77 \times 10^{17}$ years to break the code. For a comparison: The estimated [age of the universe](#) is ca. $13,7 \times 10^9$ years. A decryption effort by testing all different combinations would therefore take nearly twice the time our universe exists. Even despite the fact, that the processor power is [doubled every second year](#), in 50 years from now, it would still take 1.619.193.200.911 years to break the code.

2.6 Restricting access to your data to pre-defined IP address range

You can restrict the access to your data to pre-defined IP address ranges (e.g. those of your company). By doing this, it will only be possible to restore data at systems which belong to these address ranges, even if the username and password would be known.

2.7 High secure data center

Our top modern data center is equipped with the best security features available. These include redundant UPS, redundant power generators, fire detection and fire fighting system, HVAC (heating, ventilation and air conditioning), separate cooling circles, humidity control and secure access control.

Detailed information on the data center can be obtained from our datasheet or at our website.

NTT Europe Online – stable and secure

NTT Europe Online is a wholly owned subsidiary of NTT Communications (NTT Com), which provides complementary global network access reaching over 200 countries worldwide. NTT Europe Online is one of the world's largest operators of Web sites for businesses and a leading provider of global IP solutions. The company offers businesses a broad range of Internet services, including Web hosting, high-end dedicated access and managed service offerings. NTT Europe Online supports its operations with highly reliable and scalable global infrastructure and systems including the NTT Communications Global IP Network, and provides business technology solutions to customers in more than 170 countries. The combination of NTT Europe Online and NTT Com offers services to meet the growing and diverse needs of all businesses, including small to medium businesses, large global enterprises and multi-national corporations.

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