

IP-guard V+

Protect your information;

Prevent data leakage.

IP-guard V+ automatically encrypts the files transparently when users are using specified applications. Encrypted files are always secure. No matter where the encrypted files go, only authorized users can access the files. Therefore, IP-guard V+ effectively protects business confidential information and prevents data leakage.



Encrypts and secures your corporate data

Introduction

IP-guard V+, the latest and powerful module of IP-guard, automatically encrypts files for authorized end users transparently. It allows you to maintain data security without affecting end users' productivity. If the encrypted files are opened outside the authorized environment, they cannot be accessed and recognized. IP-guard V+ allows you to protect confidential information and fulfills company compliance regulations. It helps you to prevent data leakage and control data access, All data will be secured no matter they are stored on hard drives, removable storages, or even transferred via Internet. Using the IP-guard V+, you can share the important business information with your partners, consultants, vendors, offsite contractors or anyone you work with without any worry.



Files are sent in encrypted format and cannot be accessed by unauthorized users.



Why IP-guard V+?

IP-guard V+ effectively protects data at rest, in use and in motion. Adopting the virtual computing technology, together with the intelligent caching and the plaintext backup technique, IP-guard V+ ensures that the encryption system works fast and your encrypted files are secure all the time. Comparing to other encryption products, IP-guard V+ is much more stable, faster and securer with its thoughtful design using leading techniques.

Custom encryption algorithm is much safer.

IT managers can choose different encryption algorithms to process data encryption according to corporate management needs. The managers can fully protect the business secrets by using different security level.

Standby server always stands by.

IP-guard standby server is designed to be used if the primary server is crashed or the primary server has communication error with agent computers. Standby server ensures that the encryption function always works and the server is running in any times.

Easy to use humanised interface design.

Users can easily master how to use it without any professional training. The interface of IP-guard V+ is really simple and user friendly.

The usage of intelligent caching technique will not affect system performance.

Adopting the intelligent caching technique, IP-guard V+ can quickly transform the plaintext into cipher text and only takes up little CPU utilizations. The encryption is transparent, users can still work fast using their computer because they cannot sense the existence of IP-guard encryption function.

Customers can tailor-made the list of authorized applications for data encryption freely.

IP-guard V+ is compatible with all Windows applications. It supports the popular business applications such as MS Office, Notepad, Wordpad, AutoCAD, Photoshop, CorelDraw...etc.

Features of IP-guard V+

With IP-guard V+, data security is completely in your control.



>> Transparent File Encryption

IP-guard V+ uses the secure and transparent encryption technique to encrypt files in all different formats. It efficiently protects the files stored in local hard drives, insecure mobile devices. Even the files are transferred via Internet, infrared and Bluetooth, they are still under protection.

>> Effective Outgoing File Protection

IP-guard V+ can help the companies to limit the users' file operations, as well as the file access times and duration. It effectively prevents data leakage when the files are sent to business partners, manufacturers, suppliers and other receivers.

>> Flexible File Use Authorization

Encrypted files are restricted to be accessed by the users in a specified security zone with a specified security level. If the users belong to another security zone, or they are in the same security zone but do not have the same or higher security level, they still cannot access the encrypted files. Therefore, IP-guard V+ helps the companies setting up a secure file system with different roles. Confidential files stored in different departments can only be accessed by authorized people appropriately.

>> Strong File Operation Restriction



IP-guard V+ allows you to limit the file operations of the encrypted files. File operations like read, copy, paste, print, screen capturing, delete and drag can be disabled in order to safeguard your business information.

>> Comprehensive File Operation Logging

IP-guard V+ completely records encrypted file operations like encrypt, decrypt, file sending request, file decrypt request, etc.

| Туре | Time | Computer | User | Application | File | Path |
|--------------------|---------------------|-------------|--------|-------------|------|--|
| Modify the Docu | 2010-09-10 14:31:05 | XP-HJM-2 | VM-XP | | qu | E:\Users\qiuwf\Desktop\yy.txt |
| 👧 Generate an outg | 2010-09-10 14:30:50 | XP-INTEGNPS | VM-XP | InteGNPS | In | F:\install\InteGNPS\bulletin\InteGNPS_ |
| Encrypt file | 2010-09-10 14:30:35 | XP-INTEGNPS | VM-XP | InteGNPS | qu | F:\install\InteGNPS\quote.ldb |
| Encrypt file | 2010-09-10 14:30:21 | XP-INTEGNPS | VM-XP | InteGNPS | In | F:\install\InteGNPS\bulletin\InteGNPS_ |
| Decrypt file | 2010-09-10 14:30:09 | XP-INTEGNPS | VM-XP | | In | F:\install\InteGNPS\InteGNPS.cfg |
| Encrypt file | 2010-09-10 14:29:54 | XP-HJM-2 | DEVELO | EXCEL.EXE | уу | D:\techsupport\ |
| Encrypt file | 2010-09-10 14:26:46 | XP-INTEGNPS | VM-XP | InteGNP5 | qu | F:\install\InteGNPS\quote.ldb |
| Modify the Docu | 2010-09-10 14:26:45 | XP-INTEGNPS | VM-XP | InteNest | In | F:\install\InteGNPS\InteNest.\$undo |
| Modify the Docu | 2010-09-10 14:24:51 | XP-INTEGNPS | VM-XP | InteGNPS | In | F:\install\InteGNPS\bulletin\InteGNPS_ |
| 🗟 Decrypt file | 2010-09-10 14:24:00 | TEC-QIUWF | DEVELO | | Q | D:\Personal\hefang\Desktop\QAA -IP |
| Encrypt file | 2010-09-10 14:23:54 | XP-HJM-2 | DEVELO | EXCEL.EXE | Q | D:\Personal\hefang\Desktop\QAA -IP |
| Encrypt file | 2010-09-10 14:20:50 | XP-INTEGNPS | VM-XP | InteGNPS | qu | F:\install\InteGNPS\quote.ldb |
| Decrypt file | 2010-09-10 14:20:08 | TEC-QIUWF | DEVELO | | Q | D:\Personal\hefang\Desktop\QAA -IP |
| 🚯 Generate an outg | 2010-09-10 14:20:02 | TEC-QIUWF | DEVELO | | Q | D:\Personal\hefang\Desktop\QAA -IP |
| 📧 Generate an outg | 2010-09-10 14:19:35 | XP-INTEGNPS | VM-XP | | In | F:\install\InteGNPS\InteGNPS.\$undo |
| 🕵 Request to gener | 2010-09-10 14:18:06 | XP-INTEGNPS | VM-XP | | In | F:\install\InteGNPS\InteGNPS.PPF |

>> Unmatched Protection for Working Online and Offline

IP-guard V+ not only protects your files when the computers are online, but also secures your corporate information when the users are offline or on a business trip. It ensures that the encryption function always works no matter the users are online or offline. Even the users are working outside your company with the laptop PCs, the data are still secure.

>> Incredible Stable Encryption System

IP-guard V+ is compatible with all Windows operating systems and it supports various applications. Besides, it has two servers running at the same time, the primary server and the standby server. The use of the standby server is to make sure that there is at least one server keeps running in your company. In case of the encryption system getting crash or having unexpected incident, the company still keeps its valuable data. Moreover, IP-guard V+ has a plaintext system to backup all your original files before they are encrypted.

>> Clear and Well-organized Corporate File System



Considering medium and large companies might contain many departments, with numerous managers and supervisors, IP-guard V+ adopts the concept of security zone and security level to classify different users into relevant customized classification in order to set up a well-organized file system. Therefore, it not only preserves the secrecy and confidentiality of the encrypted files, but also ensures that only authorized users get the permission to access the specified files.

V+ File Encryption vs. Full Disk Encryption

At present, there are many companies offering full disk encryption software but few companies are offering file encryption software. The reason is that file encryption needs longer developing time in order to study every software application. It is necessary to be compatible with every application when the encryption system is running on every computer. Having conquered this challenge, IP-guard takes the lead in launching the file encryption function in order to completely secure the valuable information for different organizations, including companies, governments, charities, financial institutions and educational sectors. V+ has been tested on a large number of computers for over one year. TEC Solutions Limited guarantees to provide customers with a stable, easy-to-use, secure and fast file encryption system.

Shortcomings of Full Disk Encryption

- It only protects the files stored in local encrypted hard drives but cannot protect the files transferred via email, IM applications, FTP and other applications. Once the files are sent to insecure environment, the protection is completely gone and your data in the files are at risk.
- Cannot effectively protect the files stored on local drives. If a hacker gains access to the computer at run-time, he can access all files.
- Cannot limit the file operations like copy, paste, delete, print, print screen and move. Data can be easily leaked if the internal users intentionally copy and paste the contents to emails, IM applications, or forums. Confidential information may easily leave your company without anyone's notice.
- If the disk encryption system crashes, all the files stored in the computer will be lost. This will cause a huge loss for the company.

Advantages of IP-guard V+



IP-guard V+ protects data at rest, in use and in motion. No matter the files are stored in local computer, removable storage, mobile devices, or transferred via Internet/Intranet, IP-guard V+ keeps the files secure. It effectively prevents data leaks.

- 100% automate and transparent file encryption. Users do not need to manually encrypt the files and input any encryption key.
- Automate file decryption within the authorized corporate environment. Only authorized users have the permissions to automatically decrypt files. If other users want to decrypt the files, they need to send decrypt requests to IT manager and wait for the approval.
- Effective file sending control. Users cannot send encrypted files out. They need to send request to IT manager and wait for the approval before they can send out the encrypted files.
- Strong authentication. When encrypted files are sent to external target recipients, the external recipients need to be authenticated before they can access the encrypted files. IP-guard V+ ensures that the outgoing files are in the appropriate people's hands.
- Powerful file use control. IP-guard V+ not only empowers you to control the internal users' file operations like read, write, delete, print screen, print and move, but also empowers you to control the file use when the files are sent to external recipients (business partners, producers, agents, etc.). Besides the file operation restrictions, you can also limit how many times external recipients can open the encrypted files, or setting the date which the access right of the files expire.
- IP-guard V+ enables you to build a clear and well-organized corporate file system.
 Different Users in different job positions can have different security rights to access different files with respective security levels in respective security zones.
- Modular architecture enables you to tailor the DLP solution to suit your needs. You can buy your favorite modules based on your data protection requirements. Moreover, additional module is easy to be added to your existing IP-guard system. If you already installed IP-guard on your computers and want to add the file encryption module, what you need to do is to upgrade the product serial number of the IP-guard server.
- Centralized and integrated policy settings for file encryption. Administrator can centrally manage the whole corporate document system via the IP-guard console. Through one workstation, administrator can efficiently control the data security of the whole company.
- Only the files created or modified by the specified authorized applications will be encrypted. Unnecessary files created by unauthorized applications are not encrypted.
- Uses commercial grade encryption algorithm AES 256 and another strong encryption algorithm triple-DES to encrypt plaintext into cipher text. You can choose which algorithm you want to use for encrypting your data.

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Supports silent installation. IP-guard V+ will not affect end users' computer usage.

Benefits



Stay compliant with data security regulations

IP-guard encrypts all the files created, modified or accessed within your company. Even if the hard disk is physically stolen, or the files are **transferred** to other insecure media, your data always stays secure.

Set up clear and secure data usage structure

IP-guard V+ helps you classify all the departments in your company into different data usage zones. Policies can be set in order to block the access to the confidential files from the employees belong to other departments.

Maintain end-user productivity

IP-guard V+ for Windows works quickly in the background for transparent encryption. The encryption process is completely invisible. Users do not need to perform any actions to start the encryption. And there is no need to input any decryption key to decrypt the encrypted files.

Improve IT efficiency

There is no need for the existing IP-guard customers to install any installation file for V+..What customers merely need to do is using the new Serial Number to register. And then the file encryption module will be automatically added to your system. Just with a few seconds, the whole registration setup will be completed easily.



Protect Intellectual Property to Avoid Tremendous Loss

Intellectual property is the valuable competitive factor for a modern company in today's digital era. IP-guard V+ helps companies of all sizes secure the valuable intellectual property, as well as avoiding huge loss caused by data leakage.



Enhance Corporate Reputation

IP-guard V+ encrypts your confidential data, effectively protecting your business plans, customer data, financial data and other important information. It helps you to gain the trust from your business partners and customers day by day. As a result, your company's reputation is greatly enhanced.



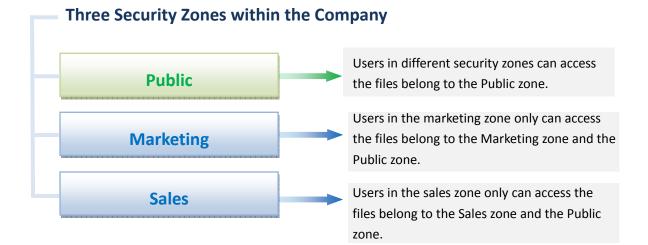
Appendix

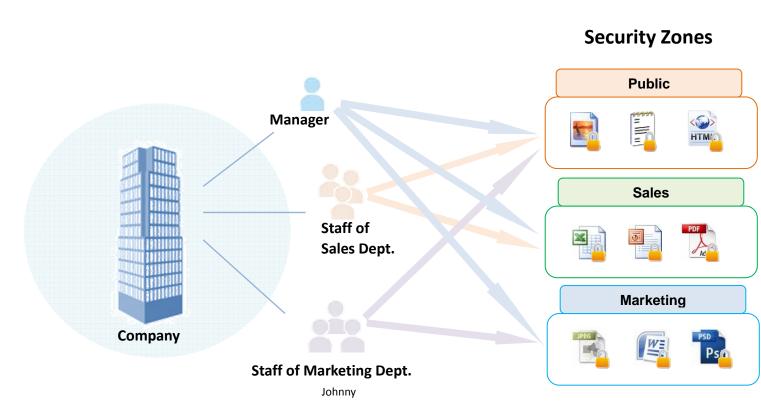
What is Security Zone in the IP-guard V+?

Security zones are used to classify the files in different departments within a company in order to regulate the file use. The encrypted files can be classified into different security zones. End users belong to a specified security zone cannot access the files in another security zone. By default, there is a predefined security zone named "Public". The end users or the files will be automatically classified into the public security zone by default if there is no special assignment.

For example, an IT manager creates two security zones: Marketing and Sales. Including the predefined zone "Public", there are three security zones present in total..By default, every user has the permission to access the files belong to the Public zone. Supposing the user Johnny is classified into the Marketing zone, he cannot access the files belong to the Sales zone.

NOTE: The security zones within a company can be customized by the IT manager based on various management needs. The manager can create as many security zones as they want. By default, a predefined security zone "Public" is already exists.





Illustration

Manager: The highest position in the company and he is authorized to access the documents belong to all security zones.

Staff of Sales Department: They are general employees of the sales department. Their routine work only focuses on selling products. There is no need for them to access the files belong to marketing department. So they are authorized to access the files in the sales and public zones only.

Staff of Marketing Department: They are general employees of the marketing department. Every day, they focus on product promotion. They do not have the needs to learn about the detailed information of sales department. Therefore, they are authorized to access the files in the marketing and public zones only.



Five Levels of Security Classification for Encrypted Files in IP-guard V+

The purpose of file classification is to protect information, preventing the corporate security being endangered or damaged from data leakage.

All encrypted files in every security zone are classified into five categories, we define them as five security levels. The security levels (from the highest level to lowest) are:

1 Top Secret

The Top Secret level is the highest level of classification of file. If the encrypted files of this level are being accessed by inappropriate staff, or even leaked out to the public, it would cause "extremely serious damage" to the corporate security, result in a huge loss to the company. Belong to the same security zone, users who are granted the top secret level permissions can access and modify the top secret files. If the users have the permissions to access the top secret files, they also have the permissions to access all the files which are classified into lower security levels (secret, confidential, restricted, and unclassified) within the same security zone.

2 Secret

If the encrypted files of Secret level are being accessed by inappropriate staff, or even leaked out to the public, it would cause "serious damage" to the corporate security. Users who are granted the secret level permissions can access and modify the files with the same or lower security levels, including Secret, Confidential, Restricted and Unclassified level.

3 **Confidential**

If the encrypted files of Confidential level are being accessed by inappropriate staff, or even leaked out to the public, it would cause "damage" or "harm" to the corporate security. Users who are granted the confidential level permissions can access and modify the files with the same or lower security levels, including Confidential, Restricted and Unclassified level.

24 Restricted

If the encrypted files of Restricted level are being accessed by inappropriate staff, or even leaked out to the public, it would cause "undesirable effects" to the corporate security. \bigcirc

Users who are granted the restricted permissions can access and modify the files with the same or lower security levels, including Restricted and Unclassified level.

5 Unclassified

Technically, Unclassified level is not a classification level, it is the default level for those corporate files which are not classified. Such files can be viewed by people without any security permission.

Security Zone and Security Level

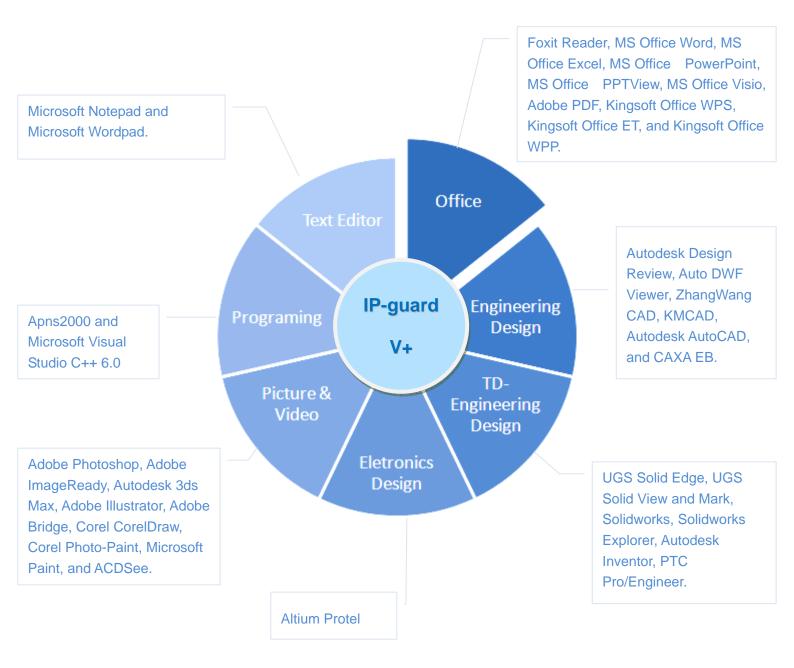
IT managers can specify the security zone and the security level for every user. For special users like general managers, they have the needs to access files belonged to different departments. So, they can be granted the permissions to access files from more than one department. Security zone coexists with security level. Whenever a security zone is set to a user, the related security level should also be specified. Otherwise, the security level of that user will become Unclassified level by default.

| Encryption Permission Settings | - (Marketing/Johnny) | | | | | |
|---|--|--|--|--|--|--|
| General Authorized Software Security Zones The default security properties of encrypted document O All security zones and levels Specify the security level for all security zones Top Secret | | | | | | |
| Specify the security zone and the Security Zones ✓ Public ✓ Marketing Sales | Corresponding level Security Levels Top Secret Confidential Unclassified Restricted Confidential Secret Top Secret | User Johnny can access all the files in the Public Zone and can access the confidential, restricted and unclassified files in the marketing zone. | | | | |
| | | OK Cancel | | | | |

All the users can access the files in the public zone with unclassified security level. If the files in the public zone are with higher security levels, the users need to have relevant security levels to access those files.

Supported Applications by IP-guard V+

IP-guard File Encryption Module supports many categories of software application to perform data encryption. Each category is specially used by a certain type of user.



Cannot find the application you want to use to encrypt the data?

Don't worry! IP-guard V+ development team promises to help you supporting the applications you want for the purpose of encrypting the data. The service is 100% free.



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