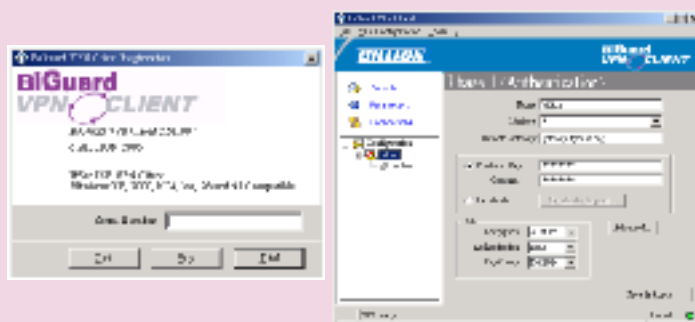


## BiGuard C01

# BiGuard IPsec VPN Client Software

Designed for mobile work force, BiGuard IPsec VPN Client Software is a window-based software that is implemented with IPsec VPN solution to allow a remote site to establish a secure connection over the Internet to corporate network. The uniqueness of USB Stick that allows a user to encrypt and store VPN tunnel configuration and VPN security elements on a portable USB drive make it easy to use ubiquitous. The communication between the head office is just 'plug-in an USB Stick' away.



BiGuard C01 BiGuard IPsec VPN Client Software 1-user License

- Use USB Stick to store VPN Security Elements (network, key, certificates,...)
- IPsec VPN Tunneling with DES/3DES/AES Encryption
- Internet Key Exchange (IKE) for User Authentication
- Support Windows 95, 98, NT, Me, 2000, XP
- Support Billion's VPN-enabled router products, such as BiGuard series, BiPAC 85xx series, BiPAC 75xx series, BiPAC 7402, and BiPAC 7402G
- Ideal for Telecommuters and Office Users

## Key Benefits

### Portability and Scalability

An USB Stick is an USB flash drive with the size of your car key, in which a user is allowed to encrypt and store VPN tunnel security elements such as certificates, Preshared key.... Just plug an USB stick in your PC and open configured tunnels. No tunnel can be opened without an USB stick! An client-user can bring an USB Stick to plug in a PC anywhere to set up a VPN tunnel. The USB Stick adds another layer of security and convenience. It facilitates efficient and affordable solution for users at all sizes of projects.

### User Friendly

The window-based interface of BiGuard IPsec VPN Client makes itself user-friendly. It's easy to install, easy to configure and read by using a configuration Wizard and gateways-configuration-guides that helps users to create VPN connections just in three steps.

### Robust Security

BiGuard IPsec VPN Client supports a wide range of tunneling protocols and authentication such as full IPsec support, Data Encryption Standard (DES), 3DES and Advanced Encryption Standard (AES). It also supports full Internet Key Exchange (IKE - Main mode and Aggressive mode); Message-Digest Algorithm (MD5), and Secure Hash Algorithms (SHA). Peer-to-Peer mode can be used to securely connect branch office servers to the corporate information system.

### Management Options

Configuration and parameters are stored in a unique file. Thus, deploying BiGuard VPN Client is as easy as copying a file. Moreover, varies management tools allow administrators to control when and how BiGuard VPN Client should run.

### Comprehensive Compatibility

It provides secure access to corporate network via wireless, broadband, and dial-up connections. It is utilized to support Billion's BiGuard series, BiPAC 85xx series, BiPAC 75xx, BiPAC 7402, BiPAC 7402G and other VPN enabled devices. Client supports windows version from Win 95, Win 98, Me, NT, Win 2000, to Win XP (including SP2).

## Feature & Specification

### Hash Algorithms

- MD5-HMAC 128 bit authentication
- SHA1-HMAC 160 bit authentication

### Encryption

- DES-CBC 56 bit encryption
- 3DES-CBC 168 bit encryption
- AES 128, 192, 256 bit encryption

### Diffie Hellman Group Support

- Group 1: MODP 768
- Group 2: MODP 1024
- Group 5: MODP 1536

### Authentication Mechanism

- Preshared Key
- X.509 Certificate support (PEM)
- X-Auth

### Certificate

- Flexible Certificate Support (PEM, PKCS12...)

### Key Management

- ISAKMP (RFC2408)
- IKE (RFC2409)

### IPSec Mode

- ESP
- Tunnel

### IKE Mode

- Main
- Aggressive
- Quick

### Peer to Peer

- Peer-to-Peer connections
- Accept incoming IPSec Tunnels

### Networking

- NAT traversal (Draft 1,2 &3) allow IPSec connection through a NAT device
- NAT keep alive, Payload NAT\_OA, IP address emulation
- Multi tunneling to several Gateways
- DNS and WINS resolutions supported

### Blocking capabilities

- "IPSec only" traffic filtering
- Can block all other connection than the VPN connections

### Management Options

- Client configuration in hidden mode
- Set of command lines to make easier deployment and management
- Capability to start before logon

### Performance

- Runs as a service on Win2K or XP
- High performance, no system overhead

### USB Stick mode

- All formats supported (SD, MMC...)
- Auto close, Auto open IPSec tunnels when plug in or remove USB Stick
- Security Elements (e.g. network configuration, shared key, certificates...) cannot be used on other computers

### Supported Platforms

- Windows 95, 98, Me, NT4, 2000, XP

### Supported Billion's devices

- Billion's VPN-enabled devices:  
BiGuard series, BiPAC 85xx series, BiPAC 75xx series, BiPAC 7402 and BiPAC 7402G

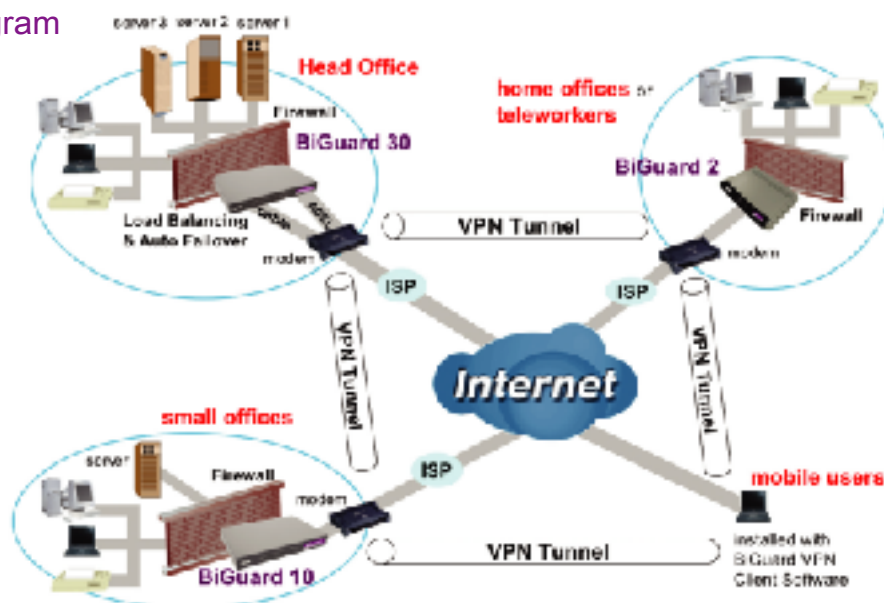
## How the "Auto-open VPN tunnel" feature works?

- Plug in your USB Stick
- The "Auto-open VPN Tunnels when plug in" feature of the VPN Client will decrypt security elements from the USB Stick and open configured tunnels.

An USB Stick is an USB flash drive at the size of your car key. All formats work (e.g. SD, MS, SM, MMC, CF). You can buy USB Sticks in any electronic retail stores.



## Application Diagram



All the specifications are subject to changes without prior notice.