

Bkav[®] Corporation

BKAV TOTAL SOLUTION



About Bkav



Bkav is the leading technology corporation in Vietnamese market, headquartered in Hanoi and has started a business office in Mountain View, California, USA.

Established in 1995, our business specializes in the fields of antivirus software, software solution for enterprise, security service.

Concerning the field of antivirus software, Bkav's antivirus software products now enjoy more than 10 million users, occupying 73.95% market share in Vietnamese market and overwhelming the rest of other famous brands such as Kaspersky (13.36%), Norton (8.95%), etc.

In the comparative test of Virus Bulletin – the most prestigious antivirus testing organization in the world – in June 2011, Bkav has achieved VB100 certification with RAP index in the top 3.

Bkav's antivirus products are Bkav Internet Security (for home users) and Bkav Endpoint (for enterprises).

Regarding the field of security service, Bkav now provides the services of checking website vulnerabilities, online scan (webscan.bkav.com). The services are carried out directly by Bkav experts.

Bkav has the leading network security expert team, which is recognized in many security events around the world. In 2009, websites of USA and South Korea Governments were attacked by DDoS attacks. This was the first time in the world that such large scale attack happened. Bkav was the first company to find the Server of the attacks.

About Bkav

Bkav experts also have detected and warned many software vulnerabilities in software products by Google, Microsoft, etc. (More details can be found at: Bkav.com/SecurityReference)

In the field of software solution for enterprise, Bkav is the leading vendor in Vietnam with our products named as Bkav eOffice and Bkav Bmail.

Bkav eOffice is the comprehensive solution for Administration Modernization, Enterprise Operation, with full features such as workflow processing, email sending and receiving, conversations, etc. The product includes all features of MS Exchange, Lotus Notes, SharePoint, etc.

Bkav eOffice is now deployed in thousands of enterprises, governmental offices in Vietnam. It occupies 72% market share, while the rest (28%) is occupied by Microsoft SharePoint and IBM Lotus Notes. The solution is voted as the best solution in many years by PCWorld magazine.

Bkav Bmail is the mail server solution which can take over the places of other mail servers such as MS Exchange or Lotus Domino, Mdaemon, etc. Bmail server can be upgraded and expanded regardless of the limitation of hardware devices. Bkav Bmail can satisfy the requirements of scales from small and medium businesses to large corporations.

Bkav believes that our products, with high quality, especially reasonable price and good competition, can be used well in any market around the world and will bring safety, success and increased profit to our partners/customers.



Total Antivirus Solution

Bkav's total security solution for agencies, enterprises including 2 main parts:

- **Bkav Endpoint Enterprise 8:** Antivirus system for LAN
- **Bkav Gateway Scan:** Antivirus system for Gateway

This is the combination of multi-layer antivirus technology, server-based centralized management system, cloud computing technology and accompanied technical supports. **Bkav achieves VB100, international certificate issued by Virus Bulletin, world leading organization in testing antivirus software.**

Bkav now enjoys more than 10 million users counted in Vietnamese market only. Our product occupies 73.95% market share in Vietnam, the rest is of other antivirus software vendors such as: Kaspersky (13.36%), Norton (8.95%), etc.

Multi-layer Protection Technology



Virus can penetrate into your system via two routes: Directly from the Internet and from inside the LAN. Bkav multi-layer protection technology blocks and removes viruses from either route. Bkav Multi-layer Protection Model:

Internet Gateway Protection with Bkav Gateway Scan:

Blocks and clears viruses right at Internet Gateway of the network. Removes viruses at Internet transaction nodes, protects the entire system when accessing the Internet.

Inter-LAN Protection with Bkav Endpoint Enterprise 8:

- Protects every server, client ;prevents virus spreading via LAN or through software holes.
- Prevents virus spreading via USB drives, mobile memory devices, etc.

Cloud Computing Technology

With Cloud computing technology, the cloud agents integrated in Bkav (Bkav Cloud Agents) make online interaction with Bkav Cloud, helping to update virus samples quickly in some minutes.

Bkav Cloud's wide coverage and computing competence closely protect users' computers. In addition, the signature database in the cloud will be updated timelier compared with the traditional solutionsT

Safe Removing

When a computer is infected with virus, its system files and keys are usually deleted or changed. Some antivirus softwares are unable to restore the system to its original status after performing virus removal, which makes the system unable to work properly or even crash.

Safe Removing Technology of **Bkav Endpoint Enterprise 8** permits the restoring of system files, hence ensures the proper operation for user's system after removing the virus.

USB protection

In big networks, the use of removable storage devices bears a great deal of potential information security risks like virus spreading, data loss, information leaking.

USB Protection feature helps administrators remotely enable or disable the use of USB or removable hard disk drives on every client.

Centralized Management

Bkav Centralized Management Solution gives network administrators constantly updated virus infection status for the whole network. Based on the information, administrators can make suitable decisions and policies as well as timely solutions to arising issues.

All client computers are centrally managed from Server. Whenever there is any new virus signature, Bkav Server will automatically update it to all clients simultaneously. Bkav statistics and reports will give administrators an overview as well as detailed information about the operation of Bkav clients, the number of viruses and infected computers in the network. Bkav supports web-based remote network control interface which helps administrators configure, remotely view statistics and reports without direct manipulation on server.

Technical Support - Bkav Contact Center

Technical Support is an indispensable part of a total antivirus solution. With **Bkav Contact Center**, it becomes so easy for customers to get assisted whenever there is any virus-related issue. Bkav specialists will sort out the problem in a quick, timely and thorough manner. Technical Support is provided to every customer of Bkav Total Solution.

All-In-One

Any newly emerged malware (virus, trojan, spyware, adware or rootkit) is timely updated by Bkav every hour (24 times per day). With current trends, different types of viruses, trojans, spywares, adwares, rootkits often combine for faster spreading. Thus, it is not effective to use software which only provides protection against one specific type of malware (for example, virus, Trojan, spyware, adware or rootkit). Considering the fact, Bkav is an all-in-one solution integrated with the technologies for removing virus, trojan, spyware, adware and rootkit



Technical Features – Bkav Engine

Feature	Bkav Engine
Memory scanning	✓
Auto Protection	✓
Removes Key Logger, Trojan, BackDoor	✓
Removes Spyware, Adware	✓
Performs scheduled scan	✓
Cloud Computing	✓
Safe Removing	✓
Site Advisor	✓
Operates in background mode	✓
Real-time Protection	✓
Auto Updates	✓
USB Protection	✓
Parental Control	✓
Web Protection	✓
Personal Firewall	✓
Behavior-based Virus Detection	✓
Removes metamorphic virus	✓
Smart Scan	✓
Proactive Protection	✓
Self-defense	✓
Reputation-based Detection	✓
Deep Scan	✓

Cloud Computing Technology



**Proud to achieve VB100
International certificate for antivirus software**

KEEPING YOU SAFE, PROFESSIONALLY !

Antivirus Solution for LAN

Bkav Endpoint Enterprise 8 is an antivirus solution for agencies, enterprises using a LAN. This version works on a server-based centralized management model, uses cloud computing technology, which ensures the protection for every computer as well as the whole system against such threats as virus, trojan, spyware, adware, rootkit, etc.

Bkav Endpoint Enterprise 8 statistics and reports on virus situation within the network enable the system administrators to be fully informed of the overall as well as detailed picture of the system, specifically, what types of virus are propagating in the network, which machines are infected or which machines have not been updated with the latest virus definitions. With such information, the administrators will be able to provide timely and precise solutions to minimize potential threats to the system.

Management tool of **Bkav Endpoint Enterprise 8** permits the deployment of big sized and geographically separated networks, administrators of which can easily perform the remote installation without direct interactions on every client.

Technical Features



- Real-time protection
- Cloud Computing Technology
- Safe Run
- Safe Removing
- Site Advisor
- Removes virus, worms, trojan, spyware, adware, keylogger, backdoor, rootkit...

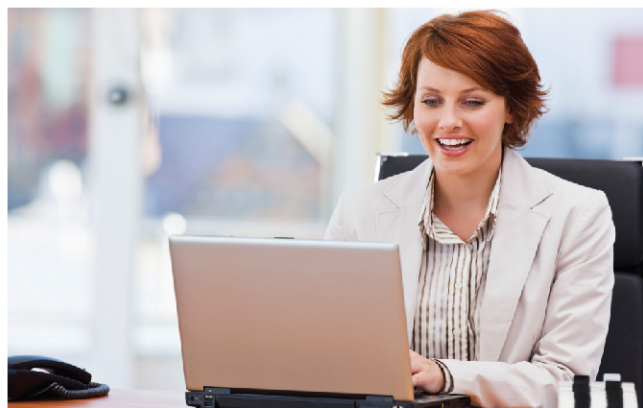
Technical Features



- Removes rootkit in the memory
- Removes metamorphic virus
- Firewall
- USB Protection
- Proactive Protection
- Heuristic Scan
- Web Protection
- Reputation Based Detection
- Supervises virus infection status of clients from Server
- Manages and monitors Bkav Clients' status and version on client computers
- Manages virus situation in a hierarchical model of multiple servers
- Produces statistics and reports on the whole network's virus situation
- Schedules periodical scans for clients in the network
- Remotely orders a group of or all clients in the system to scan for viruses at a specific time
- Divides and manages clients in groups

Operation Model

Bkav Endpoint Enterprise 8 operates in a client/server model, including 2 main components, i.e. Bkav Endpoint Enterprise Server and Bkav Endpoint Enterprise Client:



Bkav Endpoint Enterprise Server: The server in charge of processing, controlling, and regulating the entire antivirus system. Bkav Endpoint Enterprise Client installed on each client are set to connect to this server to update the latest virus definitions, receive orders as well as report the clients' virus situation. The server provides system administrators with a toolkit to grasp the entire network's virus situation, schedule scans or order instantaneous virus scans on all clients. Besides, this center takes the responsibility for automatically and simultaneously updating new virus definitions to every client in the network.

There are 02 options for **Bkav Endpoint Enterprise Server** installation, which are: separate software package installed on 01 ordinary server or Bkav Endpoint Enterprise 8 Appliance with built-in Bkav server.

Bkav Endpoint Enterprise client: Like a shield in every client, it automatically detects and removes (Real-time Auto-Protect) virus, trojan, rootkit, spyware, adware, etc. right at the very invasion into the system. Each client automatically updates the latest virus definitions and receives commands from Bkav Endpoint Enterprise Server.

General Information

Bkav Gateway Scan is the antivirus solution for gateway, blocks and removes viruses right at the gateway of the network.

Currently, viruses spread on the Internet mainly via malicious websites, emails or Internet downloads. **Bkav Gateway Scan** scans and removes viruses in all those 3 routes.

Bkav Gateway Scan consists of 3 scanning engines that correspond 3 data flows through gateway:

HTTPScan: scanning engine for web-transactions

- FTPScan: scanning engine for files transfer via FTP
- EmailScan: scanning engine for emails

Statistics and reports of Bkav Gateway Scan help administrators grasp the information of every virus passing the gateway, then introduce flexible policies to prevent virus outbreak in the network.

Technical Features

- Protects Internet gateway from viruses
- Automatically updates new virus definitions via the Internet (LiveUpdate)
- Compatible with different mail servers, popular HTTP and FTP proxy servers
- Runs as a background service of operating system (Kernel Mode)
- Automatically divides network by flows and processes, ensures the optimal network efficiency
- Supports flexible/customizable implementation models
- Provides tools to set up processing rules for emails, scripts, popups, etc.
- Provides statistics and reports on the virus-infection status via gateway
- Automatically sends statistics and reports via emails to administrators
- Supports management/administration via GUI and remotely from websites.

Operation Model

In a network, **Bkav Gateway Scan** stands right at the doorway to receive all data in web, email or FTP transactions with the Internet; scans these data before they are distributed to client computers. Bkav **Gateway Scan** can be implemented in the following models:

EmailScan:

- **Model 1:** Bkav Gateway Scan is installed on a separate server, not on mail server. In this model, both Bkav Gateway Scan and SMTP service of mail server operate through the standard service port 25.
- **Model 2:** Bkav Gateway Scan and mail server are installed on the same server. In this model, Bkav Gateway Scan will operate at port 25 while SMTP service of mail server is assigned to operate at another port. After scanning emails for viruses, Bkav Gateway Scan will forward these emails to mail server via this port.

HTTPScan and FTPScan:

- **Model 1:** For network without HTTP/FTP proxy, Bkav Gateway Scan operates as the two-layer HTTP/FTP proxy of the system. Clients will be configured so that all web and FTP transactions go through Bkav Gateway Scan.
- **Model 2:** For network with HTTP/FTP proxy, Bkav Gateway Scan will be assigned as new HTTP/FTP proxy of the system. Data returning from HTTP/FTP proxy will be scanned by Bkav Gateway Scan before going to clients.



Why Technical Support necessary

In fact, when there is a newly emerging virus whose definition has not been updated into any AV engines, only virus experts can resolve the issue by collecting the virus signature and update it to AV software. Thus, live technical support is an indispensable part of a total antivirus solution.

Every customers of licensed Bkav antivirus software will enjoy technical support from Bkav Contact Center. In case of any problems involving computer virus, Bkav's experts will provide customer with a timely and thorough treatment.

Customer support system - Bkav Contact Center



Bkav has developed a customer support system with hundreds of specialists and technicians. In this system, each Center in **Bkav Contact Center** system can simultaneously assist hundreds thousands of customers. All Centers are equipped with Centralized Call Management Solution of Bkav. This solution consists of 3 main components namely: IP telephoning infrastructure, Customer Database Management System and a tool set specifically designed for Bkav customer support (Bkav CCS).

All calls from customers to **Bkav Contact Center** are centrally managed at Call Management Server System (IPCC Server). From this server, the assigning module will analyze and forward the call to the staff in-charge who gave the customer previous support, which minimizes the time for holding line and call forwarding time. The final aim is to give customers the most convenient service and the best support.

Bkav Contact Center is operated in a flexible time mode in order to make the best use of customer support number. All missed calls from customers are recorded in system database, which helps Bkav supporters promptly detect it and make a call-back to the customers.

Bkav Contact Center (cont.)

Bkav Contact Center provides a number of methods for communicating with customers such as via telephone, emails, voice conference, etc. in order to enhance the friendliness and liveliness of the communication process, ensuring a prompt, convenient and effective support for customers.

Bkav Contact Center is equipped with Bkav online computer examining and diagnosing system. With this system, Bkav technical supporters can easily assist customers and get virus samples remotely via the Internet..

The entire supporting process for each customer is recorded in system database in details. Each customer has his own Customer ID. When a customer make a phone call to Bkav Contact Center, the system will automatically display the entire technical support history for this customer. This will help Bkav supporter quickly get the overall condition of customer's computer, from which thorough solution will be provided..



The centralized and unified call management system gives customers constant and direct supports from Bkav experts with the highest quality and shortest time. The entire communication between Bkav supporters and customers is recorded in the archive system. The system administrators can perform regular check, draw lessons, assess staffs' performance, etc. so as to improve customer service quality.

Bkav experts

With more than 17 years of experience in providing antivirus solutions, Bkav experts can handle any type of malwares (virus, trojan, spyware, adware, rootkit, etc.) within a few hours. It is by all means certain that every single virus-related issue encountered by customers will be sorted out timely, promptly and thoroughly

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