SANGFOR TECHNOLOGIES

Internet Access Management

SANGFOR® IAM Product Features

Function	Description

Log & Reports & Network Visibility

Real-time monitor	Real-time monitoring of CPU/hard disk/traffic/connection/session status, as well as online user information, traffic ranking and connection ranking; real-time utilization visibility of bandwidth channels;
Access audit (Optional)	Records a wide variety of audit information including: URL, Webpage title and content accessed (can record only Webpage content containing specific keywords), outbound file transmissions via HTTP and FTP and file content, names and behavior of files downloaded, plain text thread posting and emails, chat sessions on MSN, MSN Shell, Skype, Yahoo! Messenger, Google Talk, etc.; also records application behavior such as network gaming, stock trading, entertainment, P2P downloads and Telnet; tallies user traffic and access duration and audits Webpage/file/email access of extranet users on intranet servers;
Reporting	Supports various kinds of reports, including scheduled reporting of statistics, behaviors, trend, comparison, plus customized reporting of traffic statistics, queries, ranking, times and behavior of users and user groups;
Data center	Massed log storage with built-in and independent data center support; administrators can easily manage users based on a hierarchical permissions structure;
Audit-free Key	Prevents access audits for users assigned audit-free keys; audit-free status cannot be arbitrarily changed by system administrator (Optional);
Data center authentication Key	Data center administrators can view recorded audit logs only via audit check key (Optional);
Content search	Google-like log search tool to enable the manager to locate logs quickly by entering multiple keywords, including the search and location of the content of the log attachments; supports the title subscription, and supports automatically sending the search results to designated mailbox;

Internet Access Optimization

Bandwidth management	Bandwidth management based on wide range of criteria, including application type/Website type/file type, user, time, target IP, etc.; extranet-to-intranet access flow control and bandwidth management;
Multiplexing and intelligent routing	In case that organizations may have multi-lines that connecting to the Internet, the IAM's multi-lines and intelligent routing feature will allocate the best output for users automatically when Intranet users are visiting the resources of different ISP operators. To guarantee stability, IAM can also lead the traffic to the other healthy lines automatically when one line is interrupted;
Virtual line	The "virtual line" visualizes one link into multiple virtual links and each virtual links can be applied with independent traffic shaping policies;
virtual pipe	The "virtual pipe" allows the traffic shaping pipes to be divided into 8 layers to offer better flexibility;
Dynamic bandwidth control	The "dynamic bandwidth control" allows "bandwidth borrowing" to optimize the bandwidth usage. All policies can be applied to uplink as well as downlink;
Caching	The frequently accessed webpage, files and videos are cached in IAM appliance. When internal users visit these websites or watch these videos, they will get the data from IAM's cache rather than directly from the servers in Internet;

Additional Features

Proxy	HTTP proxy; Socks 5 proxy; Transparent proxy;
Firewall	Built-in SPI firewall thwarts a range of security threats to gateway reliability, including DoS attacks, ARP spoofing, etc.;
End-point detection	Detects end-point profile (including OS version/patch, system processes, disk files, registry, etc.) and can prompt or reject access for end-points not meeting IT requirements or passing security tests;
Gateway anti-virus	Built-in professional anti-virus engine supports gateway virus elimination (Optional);

Function	Description

Internet Access Control

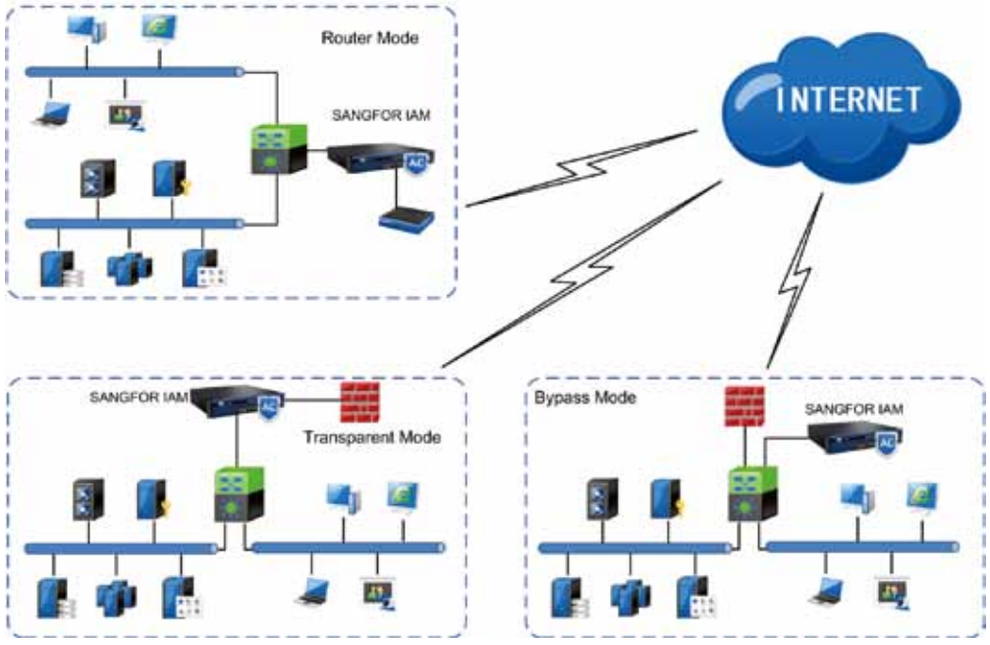
User identification	IP, MAC, IP/MAC binding, username/password, third-party authentication such as LDAP/AD/RADIUS/POP3/PROXY, USB-KEY and hardware authentication; Single Sign-on (SSO) options include LDAP/POP3/Proxy and forced SSO of designated network segment/account; account control via public/private accounts and account validity period; account import options include text list, IP/MAC scanning, and even account and organization structures from Active Directory servers;
Authentication exception	Accounts can be renamed (in the IP/MAC/computer name formats) based on new users' IP segments; authentication exception-handling includes conflict detection, privileged control after authentication failure and page forward control after successful authentication;
Online access authorization	Multi-level user account management to align with organizational structure, allowing access control based on account, IP, application, behavior, content, period, etc.; Implements re-use, integration and forced inheritance of access privileges by combining object-based access policy templates; Monitoring of accumulated duration and maximum traffic for specified user applications;
Web filtering	Support Webpage filtering based on URL/search word/keyword contained in Webpage; Support keyword-based filtering of outbound Webmail and Web post; fine-grained control such as allowing only reading post but not post thread, and only allowing receiving but not sending mail; Optional URL database for on-disk URL database, in-cloud URL database, Blue Printdata URL database;
Application control	Over 1000 application identification rules conveniently built-in to identify and control popular network protocols, including IM chat, network games, Web-based stock trading, P2P, streaming media, remote control, and proxy software;
IM software control	Perfectly control over the usage of IM tools, including IM tool that been encrypted or not encrypted, such as MSN, Skype, Gtalk, MSNShell, Yahoo!, QQ, etc. Support blocking the designated IM tools or allow IM chatting while block file sharing and other applications via IM tools. Apart from that, the IAM's IM logging feature also allows you to audit all the IM chatting content to ensure the full visualization of the network;
File control	Capable to control outbound file transmission via HTTP/FTP/email attachments, supports identification and blocking of outbound files based on file extensions and file types (to identify encrypted, compressed, extension name modified files);
Email control	Supports complete blocking of email reception and sending, and filtering of outbound and inbound junk mail; filtering can be based on multiple conditions such as keyword, sender and receiver addresses;
Intelligent P2P identification and control	Identifies over 30 popular P2P application protocols such as BitTorrent, eMule, etc. with deep packet inspection (DPI); SANGFOR's patented intelligent P2P identification technology can further comprehensively identify and manage other variant P2P protocols, encrypted P2P behaviors and unknown P2P behaviors;
Advanced control	Encrypted SSL URL filtering; identifies and filters attempts to avoid management via public network proxies or encrypted proxy software; Capable to control behavior of sharing web access privileges with others via installed proxy software;

Equipment Management

Deployment mode	Deployable via router, bridge, bypass and multi-bridge topologies, with active-standby, active-active for HA;
Device management	Web based management access; functionality of different modules can be assigned to different administrators as needed, via a hierarchical management paradigm;
Bypass	Supports hardware bypass

SANGFOR® IAM Product Family

Typical Deployment



Model Specifications

Model	Profile	RAM	HD Capacity	Throughput (without proxy)	Concurrent Connections (without proxy)	Throughput (with proxy)	Concurrent Connections (with proxy)	Concurrent Users
M5000	1U	512M	250GB	5~8 Mbps	30,000	N/A	N/A	50~100
M5100	1U	1G	250GB	10~20 Mbps	40,000	5~15 Mbps	7,000	100~200
M5400	1U	2G	250GB	25~50 Mbps	120,000	18~35 Mbps	15,000	200~500
M5500	2U	2G	500GB	60~130 Mbps	400,000	40~75 Mbps	20,000	500~1,200
M5600	2U	4G	500GB	140~300 Mbps	550,000	100~150 Mbps	60,000	1,200~3,000
M5800	2U	4G	500GB	300~400 Mbps	700,000	150~250 Mbps	85,000	3,000~5,000
M5900	2U	4G	500GB	400 Mbps ~1 Gbps	1,000,000	250~500 Mbps	100,000	5,000~10,000
M6000	2U	4G	500GB	800 Mbps ~2 Gbps	1,700,000	400 Mbps~1 Gbps	120,000	10,000~14,000

Power and Physical Specifications

Model	Dual Power Supplies	Power [Watt] (Typical)	Temperature	Relative Humidity	System Dimensions (W×L×H)	System Weight
M5000	N/A	60W	0℃~40℃	5%~95% non-condensing	440x300x50 mm³	4.0 Kg
M5100	N/A	80W	0℃~40℃	5%~95% non-condensing	430x274.8x44.5 mm³	4.25 Kg
M5400	N/A	250W	0℃~40℃	5%~95% non-condensing	440x420x44.5 mm³	7.0 Kg
M5500	N/A	250W	0℃~40℃	5%~95% non-condensing	440x500x89 mm³	10.9 Kg
M5600	√	350W	0℃~40℃	5%~95% non-condensing	440x435.4x88 mm³	18.0 Kg
M5800	√	460W	0℃~40℃	5%~95% non-condensing	440x600x90 mm³	19.0 Kg
M5900	√	460W	0℃~40℃	5%~95% non-condensing	440x600x90 mm³	19.0 Kg
M6000	√	460W	0℃~40℃	5%~95% non-condensing	440x600x90 mm³	20.0 Kg

Network Interfaces

Model	Bypass (copper)	10/100 Base-T			10/100/1000 Base-T			Other Interfaces		
		WAN	LAN	DMZ	WAN	LAN	DMZ	SFP	Serial Port	USB
M5000	1 pair	N/A	N/A	N/A	2	1	1	N/A	RJ45×1	1
M5100	1 pair	N/A	N/A	N/A	2	1	1	N/A	RJ45×1	2
M5400	1 pair	N/A	N/A	N/A	4	1	1	N/A	RJ45×1	N/A
M5500	1 pair	N/A	N/A	N/A	4	1	1	4	RJ45×2	N/A
M5600	3 pair	N/A	N/A	N/A	4	1	1	4	RJ45×1	1
M5800	3 pair	N/A	N/A	N/A	4	1	1	4	RJ45×1	1
M5900	2 pair	N/A	N/A	N/A	2	1	1	4	RJ45×1	2
M6000	2 pair	N/A	N/A	N/A	2	1	1	4	RJ45×1	2