K7 SECURITY

K7 SD-WAN

High-performance

SOFTWARE-DEFINED WIDE-AREA NETWORK

Cost-effective Virtual WAN Architecture for
Improved Business Productivity and Agility

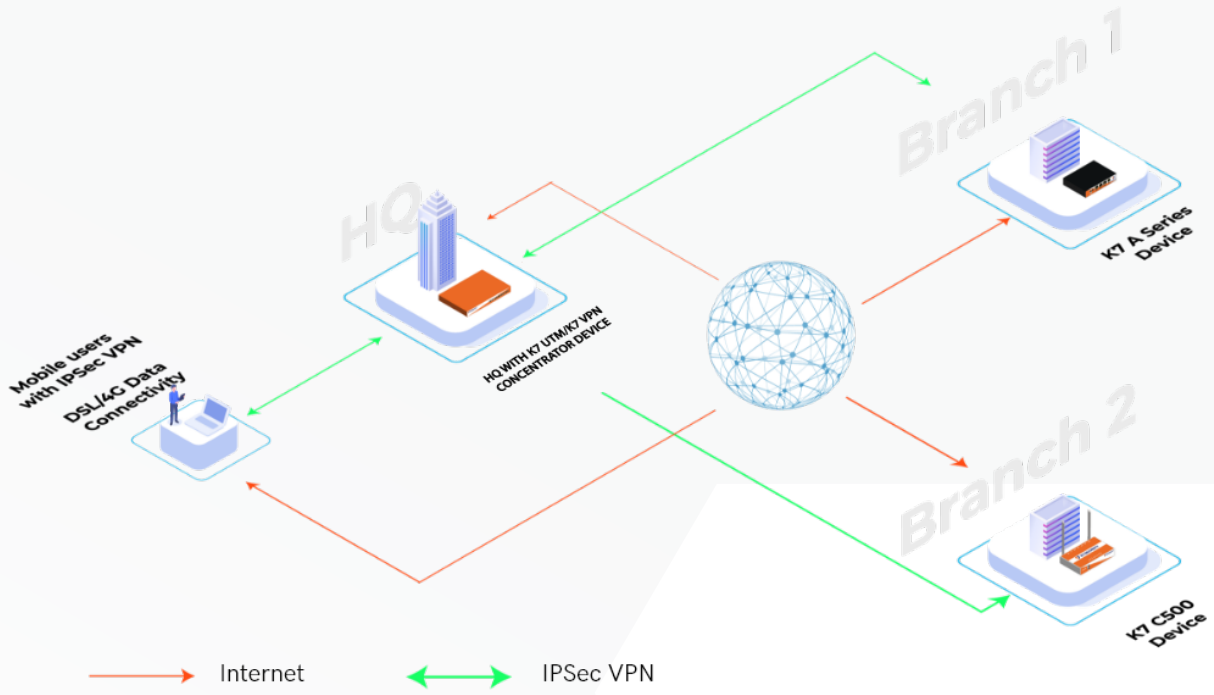
www.k7computing.com

Router-centric WAN Impairs Application Performance

The modern enterprise requires IT infrastructure that can combine distributed operations, utilising multiple data transport services, with access to SaaS services and applications hosted in on-premises data centres and public or private clouds. Wide Area Networks that rely on conventional routers typically transmit data to a central hub or data centre for security inspection, impairing application performance, uptime, and user productivity while driving up bandwidth expenditure.

K7 SD-WAN – Secure, Reliable, Cost-effective Application Access

The K7 SD-WAN solution is designed to support the complex connectivity requirements of 24/7 enterprise operations by creating centralised control over business networks to intelligently direct traffic across the WAN, optimising routing decisions to improve visibility across the WAN edge and reduce operational costs while improving application performance and business productivity.



Benefits

- Easy Deployment
- Easy Management
- Centralised Monitoring and Control
- Simplified WAN Connectivity and Optimisation
- Multi-branch Connections
- Dynamic Path Selection
- Remote Manageability
- 100% Uptime between HQ and Branch
- Scalable Appliances (Future Proof)
- Cost Effective Solution
- SLA Management
- Logs & Reporting

Features

- Multiple Virtual VPN Servers
- 2X Scalable Appliances
- High Availability
- Load Balancing and ILLB
- Works with All ISP Links
- No Static IP Required
- Seamless Failover of VPN Tunnels
- Alerts on VPN Client Failure, ISP Failure
- Daily Scheduled Report Generation
- IDS/IPS, GeoIP Filter, PFS
- Encryption: DES, 3DES-192, AES (128 & 256), Blowfish-128
- Message integrity: MD-5 and SHA-1, SHA256, SHA384, SHA512
- Password Protected Private Key, Easy Monitoring of Connected/Disconnected VPN Clients on a Real-time Basis

Firewall

The K7 SD-WAN product line includes a secure, multi-zone, Stateful Packet Inspection (SPI) firewall for access control, authentication, and network-level attack prevention with integrated IDS/IPS.

IDS/IPS

Built-in Intrusion Detection (IDS) and Intrusion Prevention (IPS) block over 2,500 internet attacks. Attack signatures are updated automatically and custom signatures can be added. K7 SD-WAN constantly scans for anomalous traffic and protocol behaviour to protect against unknown threats, and prevents DOS and DDOS attacks. To improve security against a growing attack surface, devices deployed in SD-WAN mode add role- and identity-based IDS/IPS capabilities on top of existing security features.

Networking Features

The K7 SD-WAN solution integrates seamlessly into existing network architecture with support for Next Generation features including IPv6, multi-LAN/WAN connections, SSL/IPSec VPN with 3DES, AES, and Blowfish cipher support. Enterprise-class features such as quality-based link failover, inbound and outbound load balancing, and QoS bandwidth management are standard. For mission-critical deployments, K7 SD-WAN's High Availability supports Active-Passive mode when the K7 VPN Concentrator device is deployed, or interface failure with autoconfiguration synchronisation with a secondary backup K7 VPN Concentrator device.

VPN SSL/IPSec

Secure connections between IPSec gateways and VPN clients can be created using SSL. Static IP and Dynamic IP configurations are supported, and services can be configured by group policy. Multi-WAN support includes VPN failover to maximise uptime.

Devices and Firewalls

For cloud security threat protection, K7's devices can assume the role of an on-premises agent of centrally-hosted firewalls such as those provided by Palo Alto Networks and Check Point, etc., or web security devices from Zscaler and Symantec.

WAN Management

K7 SD-WAN allows network overlay for WAN connections to improve visibility and control across private and public connections.

Hub-and-Spoke Topology

Secure connections can be established from a branch site to a headend site using public or private connections. This allows users to efficiently access corporate resources hosted in data centres.

Site-to-Site VPN

Secure connections can also be established from one branch site to another over a public Internet connection. This allows users from different locations to access network resources hosted within the corporate network without going through the data centre.

Dynamic Routing

WAN traffic can be automatically routed over the best available uplink based on characteristics such as WAN throughput, latency, and packet loss.

Gateway Anti-Malware Scanning

The scanning engine blocks both known and unknown malware objects before they can execute by using a combination of automated and custom signatures, in addition to heuristic analysis. Designed to detect all variants of a specific malware family by identifying common traits, the scan engine can quickly identify malware infections before a network-wide outbreak occurs.

The integrated scanning engine can also block inbound spyware, adware, and related malware in addition to blocking already existing spyware and preventing adware infected systems from 'phoning-home' or transferring sensitive private data.

Web Security

The K7 SD-WAN solution can proactively identify malicious websites using heuristic URL analysis and cloud-based website reputation services, protecting against malicious website code long before a payload can be deployed to a vulnerable endpoint.

Content Filtering

Web Categorisation helps businesses define the types of websites and content their users can access while using company-owned devices, limits access to websites that impact productivity during business hours, such as social media websites, and blocks access to unwanted downloads, or other potentially inappropriate content, found on hacking and gaming websites and chat services.

Email Security

Incoming and outgoing email is checked against whitelists and blacklists before being sent to the scan engine to identify new or existing threats. URLs and attachments contained within the email are scanned and delivered to the user's inbox if found clean.

Application Filter

Application layer proxies can look deep within packets' (traffic) content, and look for inconsistencies, invalid or malicious commands, and executable programs.

Geo Filter

Next-generation Geo-IP filtering can be fine-tuned to vastly reduce unwanted and malicious traffic.

3G/4G Support

All network providers' 3G/4G USB modems can connect directly into the K7 UTM to provide shared internet connectivity.

Administrative Alerts, Logging, and Reporting

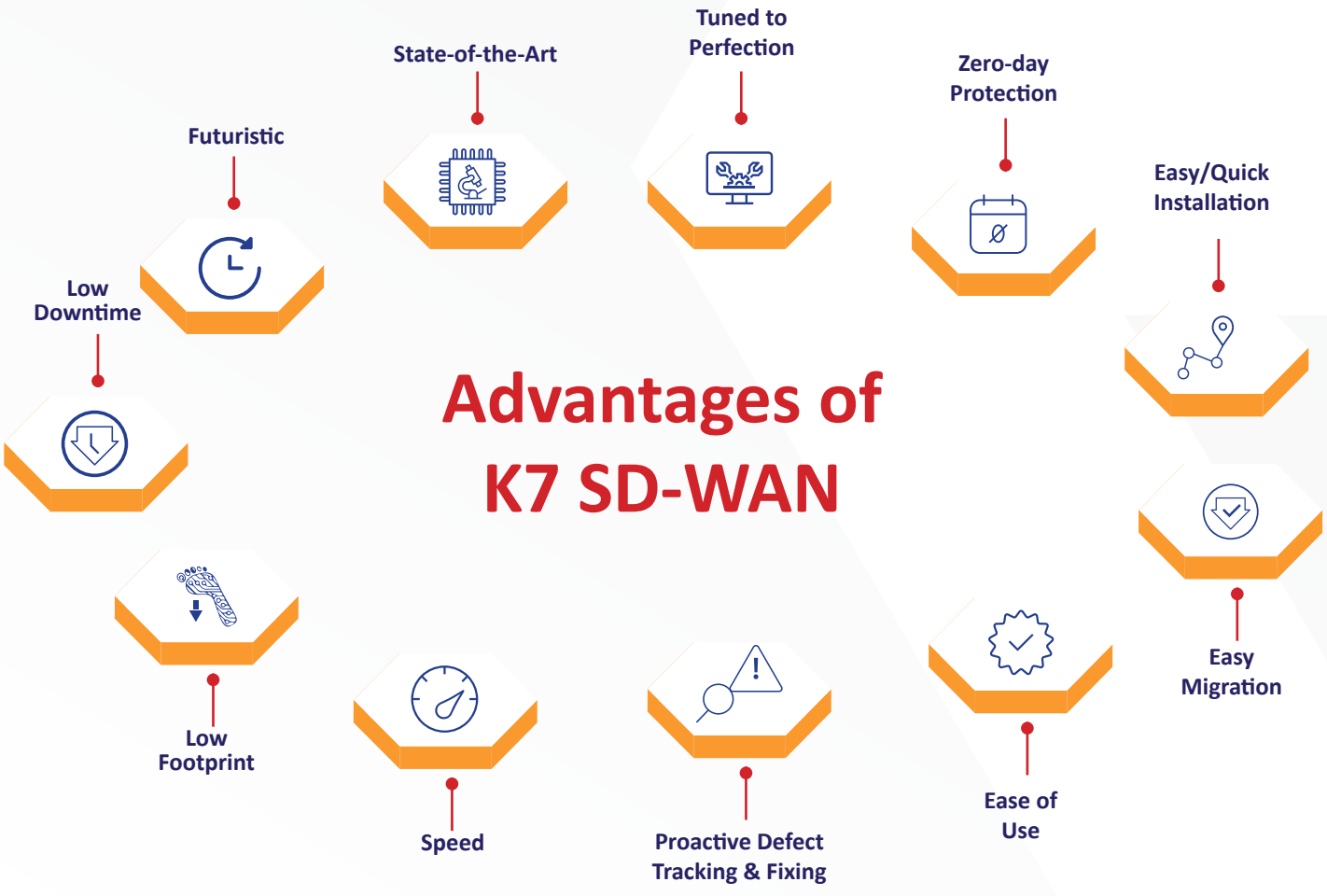
To assist administrators in diagnosing potential network issues, the K7 UTM appliances integrate with a real-time network sniffer and net flow analyser to provide more than 35+ live logs and over 40 different report formats to help pinpoint faults and supplement compliance reporting efforts.

AAA User Management

K7 SD-WAN includes the triple-A framework, a critical process that is important for effective network management and security. Authentication, Authorisation, and Accounting (AAA) is a framework that intelligently controls access to computing resources, enforcing policies and auditing usage.

Logging/Monitoring

20 different kinds of logs are provided including System Boot log, Firewall log, IDS/IPS, VPN, Web Proxy logs, Antivirus/Antispam, System and Admin Events, IM activities Log; Graphical Bandwidth Report (based on Time, Date, Week, Month); Email Alert - Multiple Mail ID Security Reports for suspicious activities; Graphical real-time and historical monitoring.



K7 SD-WAN Appliance Models and Features

K7 Unified Threat Management (K7 UTM)

Gateway security with AAA user management

K7 A-Series	15-75 Users
K7 S-Series	100-250 Users
K7 M-Series	300-600 Users
K7 E-Series	700+ Users

K7 VPN Concentrator

Secure remote access with multiple VPN tunnels

K7 A Series	K7 E Series
K7 S Series	K7 V Series
K7 M Series	K7 P Series

K7 Connect 500

Secure branch connectivity with Wired and LTE/4G support

Connect 500	Connect 500G
Connect 500 S1	Connect 500G S1
Connect 500 S2	Connect 500G S2

www.k7computing.com

India | Singapore | UAE | USA

K7 SECURITY