

DarPeng VE application and security virtual tester

DarPeng VE is application and security tester launched by Xinertel for voice, video, data applications, and network security test. It accurately simulates the network access behavior of millions of real end users, and performs pressure and performance tests on application and security devices (such as Firewall/IPS/IDS/WAF/DPI, etc.) or the entire system;By simulating a large amount of real attack traffic and malicious software and virus traffic, the detection and defense capabilities of network security devices and systems against attacks and viruses can be verified and tested. At the same time, the control and recognition capabilities of the tested device over traffic can be confirmed by replaying real environment traffic.

DarPeng VE is a virtualization security tester based on VMware and KVM. Collaborating with the B/S architecture based testing software ALPS (Application Layer Protocol Simulator) developed by Xinertel, it supports real application traffic simulation (such as HTTP/FTP/TCP/DNS for application layer protocols, VoIP SIP&RTP for voice, RTSP/RTP/IPTV for video, etc.);At the same time, it can simulate real attack traffic (DDoS attacks/botnets/custom attacks, etc.), malicious traffic, and virus traffic, and support voice and video quality testing.

Key features

- **Interfaces**

A single DarPeng VE virtual tester support up to 8 testing interfaces and network cards with different speed.

- **Unified License Deployment**

DarPeng VE adopts an All In One deployment approach, where the console, traffic generator, and LicenseServer are deployed in the same virtual machine.

- **Support network security device performance and capacity testing**

Including firewalls, load balancers, WAFs, URL filters, antivirus, anti spyware, HTTP/HTTPS accelerators, WAN accelerators, IDS/IPS, and IPsec VPN gateways, etc

- **Support application server performance testing**

Including web servers, mail servers, DHCP services, FTP servers, DNS servers, RTSP/RTP QuickTime streaming servers, multicast servers, etc

- **Support network security testing**

Support simulation of attack traffic, virus traffic, and Cyber Range.



Protocols

Application	TCP, UDP, SCTP, WebSocket, DNS, HTTP, HTTPS, HTTP2, FTP, SSH, Telnet TFTP, RTMP, H.225, H.245, SMB, RPC, ONVIF, Chat applications (SKYPE, QQ, WeChat, etc.), E-mail applications (SMTP, POP3, IMAP, etc.), Gaming applications, video applications (Tencent Video, iQiyi, HLS, etc.), Download applications (BitTorrent, eDonkey, Xunlei, etc.), Social news applications (Tiktok, Toutiao, etc.), Payment applications, Database applications (Oracle, MySQL, MSSQL, etc.)
Industrial control protocol	ECHONET Lite, BACnet, Modbus, OPCUA, MQTT, ProfiNet (PNIO CM), OPC DA, IEC104, EtherNet/IP, ProfiNet (DCP), ENIP, IEEE C37.118 Synchronizer Omron Fins, S7comm, DNP3, Ether-S-I/O, CoAP
Voice	SIP/RTP, Voice Codec (PCMU, PCMA, G.723, G.728, G.729, G.726-32, G.729AB, G.729A, G.723.1), MOS score
Video	RTSP/RTP, Multicast, Video Codec (H.261, H.262/MPEG-2, H.263, H.264, H.265, MPEG-TS, MPEG-1, MPEG-4)
DDoS	Support up to 73 types of DDoS attacks, including L2/L4 DDoS attacks (ARP/ICMP/UDP/TCP/IP/IGMP, etc.) and L7 Application Attacks (DNS Reflection, Slowloris slow attacks, etc.)
Virus and attack libraries	Covering over 7000 types of vulnerability attacks, over 40000 types of virus, and 73 types of DDoS attacks.
Access Protocol	IPv4, IPv6, 802.1Q (QinQ), DHCPv4/DHCPv6 client, DHCPv4/DHCPv6 server, PPPoEv4/PPPoEv6 client, PPPoEv4/PPPoEv6 server, IPsecv4/IPsecv6, GTP, 802.1x, IP/TCP+UDP/TCP/UDP, custom IPv6 extension headers and stream labels
Routing Protocol	SRv6 BE/SRv6 TE
Data encryption and decryption	SSLv3, TLSv1.0, TLSv1.1, TLSv1.2, TLSv1.3

Specifications

Minimum resource allocation	<ul style="list-style-type: none"> • 4 vCPUs • 8GB • 128GB Disk
Supporting platform	<ul style="list-style-type: none"> • VMware ESXI • KVM

Ordering information

Product Name	Product Description	Product Classification
DarPeng VE-1G	DarPeng VE application and security virtual tester with 1G throughput, including 1-year software package upgrade service.	DarPeng VE License
DarPeng VE-10G	DarPeng VE application and security virtual tester with 10G throughput, including 1-year software package upgrade service.	DarPeng VE License
DarPeng VE-100G	DarPeng VE application and security virtual tester with 100G throughput, including 1-year software package upgrade service.	DarPeng VE License

