ສຳນັກງານໃຫຍ່

ເລກທີ: 3728/ທຄຕລ.....2026.....
ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ:.....21 OCT 2026.....

ໜັງສືແຈ້ງເຊີນ

ເຖິງ: ບັນດາບໍລິສັດ ແລະ ຫ້າງຮ້ານຕົວແທນຈຳໜ່າຍ ໃນນະຄອນຫຼວງວຽງຈັນ.

ເລື່ອງ: ແຈ້ງເຊີນເຂົ້າຮ່ວມຍື່ນຊອງປະມູນອຸປະກອນປ້ອງກັນຄວາມປອດໄພ Firewall ຈຳນວນ 04 ຊຸດ .

ທະນາຄານການຄ້າຕ່າງປະເທດລາວ ມະຫາຊົນ ຂໍແຈ້ງມາຍັງທ່ານຊາບບັນດາບໍລິສັດ ແລະ ຫ້າງຮ້ານຕົວແທນເພື່ອຊາບ, ທຄຕລ ມີຄວາມຕ້ອງການອຸປະກອນປ້ອງກັນຄວາມປອດໄພ Firewall ຈຳນວນ 04 ຊຸດ, ເພື່ອນຳໃຊ້ເຂົ້າໃນວຽກງານ ຂອງ ທະນາຄານ ຈຶ່ງໄດ້ແຈ້ງເຊີນມາຍັງທ່ານເພື່ອຍື່ນຊອງເຂົ້າຮ່ວມປະມູນ ດັ່ງມີລາຍລະອຽດຂ້າງລຸ່ມນີ້:

No.	List	Quantity	Site
1	DC Firewall	4	DC
2	DR Firewall	4	DR
3	Switch	2	DC
4	ການສະໜອງທັງໝົດ ແມ່ນລວມຄ່າຕິດຕັ້ງ, Migration ແລະ ບຳລຸງຮັກສາ (MA & License) ສຳຫລັບ 3 ປີ		
5	ລວມຄ່າການເຂົ້າຝຶກອົບຮົມໃຫ້ສາມາດຄຸ້ມຄອງແລະບໍລິການຈັດການອຸປະກອນ Official Training Course ພາຍໃນ ຫຼື ຕ່າງປະເທດ ສຳລັບ 03-05 ຄົນ.		

Equipment specification details

Table 1-1 Firewall Requirement for Internal Firewall

Specification	Requirement
Brand	Huawei
Performance of the entire system	Firewall throughput ≥ 450 Gbit/s; maximum number of concurrent connections ≥ 10 million; number of new connections per second ≥ 4,500,000
	SD-WAN throughput ≥ 100 Gbit/s
	Small-packet throughput decreases by no more than 20% compared with large-packet throughput.
	Threat Protection Throughput ≥ 97 Gbit/s
	IPsec VPN throughput ≥ 126 Gbit/s
	SSL VPN throughput ≥ 21 Gbit/s
	The number of IPSec VPN tunnels is greater than or equal to 192,000, and the number of concurrent SSL VPN users is greater than or equal to 22,500.
	Firewall forwarding delay ≤ 15 μs

	Supports the virtual firewall system. Multiple independent logical devices can be divided on a physical device. Each virtual system is equivalent to a real device. It has its own interface, address set, user/group, routing entry, and policy. It can be configured and managed by the system administrator. It is not a Virtual Routing Forwarding (VRF). Number of virtual firewalls ≥ 2048
Chassis and Port Requirements	400G optical ports ≥ 4; 100G optical ports ≥ 4; 25G optical ports ≥32; **Note:** Services can be flexibly expanded without extra interface cards.
	USB 3.0 support (photo of the device is provided)
	Standard rack-mounted 2U appliance (Provide the link to the official website, product documentation description on the official website, and stamp the official seal of the manufacturer or the special bidding seal.)
	Two power supplies are configured. Four fans in 3+1 redundancy mode
	Support local storage at least 1.92TB
	Supports the configuration of security policy rules based on the source IP address, destination IP address, MAC address, service type, application type, security zone, and time range.
	IPv4 and IPv6 addresses can be configured in a security policy. (Provide function screenshots and affix the manufacturer's official seal or special bidding seal.)
Integrated protection	Integrates firewall, VPN, intrusion prevention, antivirus, bandwidth management, Anti-DDoS, and URL filtering functions, and provides a global configuration view and integrated policy management
Security policy management	Supports traffic management and control based on the VLAN ID, 5-tuple, security zone, region, application, and time range, and implements integrated content security inspection; supports policy self-learning, aggregates traffic matching a security policy, and generates more refined sub-security policies to achieve precise security management.
Policy management	When the security policy is blocked, the device can send feedback packets to quickly disconnect the connection. For example, the device can send reset packets for TCP packets and ICMP unreachable packets for U and ICMP packets. (Provide function screenshots and affix the manufacturer's official seal or special bidding seal.)
	Supports routing protocols such as static routing, policy-based routing, RIP, OSPF, BGP, and IS-IS.
	Supports SRv6, SRv6 TE policy, and EVPN L3VPN over SRv6 TE policy. (Provide function screenshots and affix the manufacturer's official seal or special bidding seal.)
Routing function	Matching conditions supported by PBR: source/destination IP address service type, application type, user (group), inbound interface, and DSCP priority
	Supports the IPv6 protocol stack, IPv6 traversal technology, and IPv6 routing protocol.
	Supports multiple types of IPv 4 /IPv 6 routing protocols, such as RIP, OSPF, BGP, IS-IS, RIPng OSPFv 3 BGP 4 and IPv 6 IS-IS
IPV6	Traffic control policies can be configured based on application layer protocol including the maximum bandwidth, assured bandwidth, and

	protocol traffic priority. (Provide functional screenshots and affix the manufacturer's official seal or special bidding seal.)
	Supports HQoS based on bandwidth parent and child policie implementing hierarchical traffic scheduling and refined traffic control.
Flow control	Supports NAT66 and NAT64.
	Supports comprehensive NAT functions and the ALG function for multiple application layer protocol including DNS FTP, H323, MSN, Netbio, PPTP, RSH, RTSP, SIP, and SQLnet.
NAT	Triplet NAT smart-full cone
	Supports the NAT address reuse technology to implement unlimited port translation for a single public IP address which effectively solves the problem of address shortage. (Provide relevant technical patent certificates)
	Supports the URL identification capability and URL identification database. The cloud URL identification database is greater than or equal to 560 million (screenshots are provided for proof).
	Number of identifiable application layer protocols ≥ 6000 (function screenshots are provided for proof)
URL filtering	Supports data leakage prevention, identifies and filters transmitted files and content, and matches the content with ID card credit card bank card and social security card numbers. A database of over 560 million URLs in the cloud
Protocol Identification	HTTP, FTP, SMTP, POP3, NFS SMB, IMAP, doc, ppt, xl docx, pptx, xlsx, html, c, cpp, cxx, h, hpp, java, Data filtering detection for the TXT file type
Content security	Controls domain names accessed by users based on the DNS trust list, and DNS category, and allows or forbids users to access certain websites.
	Supports web application protection and HTTP-based management and control. (HTTP request method control, HTTP version detection, HTTP request header control, HTTP request body control, and URL parameter content control), intelligent semantic analysis anti-leeching detection, and web page anti-tamper functions: fine-grained management and control and threat detection for traffic accessing web application servers
	Supports IP reputation filtering to identify malicious IP addresses and defend against attacks such as Botnet, mining, and APT. (Provide functional screenshots and stamp the manufacturer's official seal or special bidding seal.)
Web security	The URL category database on the cloud contains 560 million URLs in over 130 categories, such as news, games, gambling, drugs, and malicious web pages. URLs cover over 100 languages, and key categories of URLs cover over 20 languages. The URL category query servers are deployed in multiple countries/regions to provide high-speed and low-latency category query services. User-defined URL/host whitelist and blacklist are supported. HTTPS traffic can be filtered without decryption. TLS/SSL traffic can be decrypted before filtering. HTTP/2 and QUIC traffic can be

	filtered, and URL categories can be imported in batches.
	Supports Safe Search enforcement across five major search engines: YouTube, Bing, Google, Yahoo, and Yandex, with mandatory filtering of illegal or inappropriate content in search results.
	URL access can be controlled based on users/user groups, time ranges, and security zones to precisely manage users' online behaviors.
IP reputation	The firewall can interwork with the sandbox to block unknown APT attacks based on the sandbox detection result. The same file does not need to be repeatedly detected. The firewall can update the malicious file and URL list in the cache based on the sandbox detection result. (Provide function screenshots and stamp the manufacturer's official seal or special bidding seal.)
SSL-encrypted traffic detection	Supports the packet tracing function. It displays the service process and the cause of packet discarding in a graphical manner. (Provide function screenshots and stamp the official seal of the manufacturer or the special seal for bidding.) Detects and defends against threats hidden in TLS/SSL (IPv 4, IPv 6 encrypted traffic, performs application layer protection, such as intrusion prevention, antivirus, data filtering, and URL filtering, on decrypted TLS/SSL (IPv 4, IPv 6 traffic, and supports URL category whitelist)
Centralized management and usability	Traffic source tracing is supported. Source and destination IP addresses can be traced for the traffic that causes abnormal CPU usage increase. (Provide function screenshots and stamp the manufacturer's official seal or special bidding seal.)
	The device can proactively send interface traffic statistic CPU usage, or memory data to the collector using the telemetry function. (Provide function screenshots and stamp the manufacturer's official seal or special bidding seal.)
	Open northbound interface such as RESTCONF and NETCONF, To integrate with existing Seco manager platform for security management and log collection (Provide function screenshots and stamp the official seal of the manufacturer or special seal for bidding.)
	Supports BFD link detection, association between BFD and VRRP to implement fast active/standby switchover, and association between BFD and OSPF to implement fast active/standby switchover. (Provide function screenshots and affix the official seal of the manufacturer or the special seal for bidding.)
	Dual-system hot backup survival is supported. When all heartbeat ports are unavailable, the device sends Hello packets to the peer device through the available service ports to establish the dual-system state through the service ports. The dual-system state is maintained without switchover.

Implementation, Migration	Shall support migration from the existing firewall system to the new firewall platform, including configuration, security policy, routing, NAT, and VPN migration with minimal service impact. The solution shall support centralized management of firewall systems deployed at both DC and DR.
Technical Support Service	3 years

Table 1-2 Switch Requirement for Service Leaf

Specification	Requirement
Brand	Huawei
Fixed Ports	48*10GE SFP+, 8*100GE QSFP28, 2*AC Power Modules, 3*Fans, Port-side Intake
NOR Flash	64 MB
Power supply mode	AC pluggable, DC pluggable,HVDC pluggable
Maximum number of MAC address entries	640K
Maximum number of routes (FIB IPv4/IPv6)	1.5M/750K
ARP size	128K
Maximum number of VRFs	4096
Maximum number of VRRP groups	1024
Number of member paths in each ECMP group for load balancing	128
Maximum number of VXLAN bridge domains	16K
Maximum number of BDIF interfaces	16K
Maximum number of virtual tunnel endpoints (VTEPs)	5K
Maximum number of LAGs	1024
Maximum number of links in a LAG	256

Maximum latency of 3µs (three microseconds) for 64-byte packet switching	~1µs
MAC address table	Automatic MAC address learning and aging
	Static, dynamic, and blackhole MAC address entries
	Source MAC address filtering
	MAC address learning limiting based on ports and VLANs
IP routing	IPv4 dynamic routing protocols such as RIP, OSPF, IS-IS, and BGP
	IPv6 dynamic routing protocols such as RIPng, OSPFv3, IS-ISv6, and BGP4+
Feature	Basic functions (including IPv6 and VXLAN), M-LAG virtual peer link, Basic network analysis functions
Network Connectivity Requirement	Shall support the connection of service leaf switches to the existing spine network and provide connectivity to the firewall system within the DC site. The solution shall ensure proper network integration and seamless communication between the existing network infrastructure and the new firewall environment.
Technical Support Service	3 years

- **ເງື່ອນໄຂຂອງບໍລິສັດ ຫ້າງຮ້ານຕົວແທນຈຳໜ່າຍອຸປະກອນດັ່ງກ່າວມີຄວາມຕ້ອງການຍື່ນຊອງປະມູນລາຄາຕ້ອງປະກອບເອກະສານໃຫ້ຄົບຖ້ວນດັ່ງລຸ່ມນີ້:**
  - **<u>ເອກະສານ ຊອງທີ1:</u>**

1. ປະກອບເອກະສານໃນນາມນິຕິບຸກຄົນ ທີ່ດຳເນີນທຸລະກິດຈຳໜ່າຍເຄື່ອງອຸປະກອນໄອທີ, ດຳເນີນທຸລະກິດຢ່າງໜ້ອຍ 02 ປີຂຶ້ນໄປ, ສຳເນົາໃບທະບຽນວິສາຫະກິດ, ໃບຢັ້ງຢືນການເສຍອາກອນປີ 2024-2026 ແລະ ໃບຢັ້ງຢືນການເປັນຕົວແທນຈຳໜ່າຍ. ສາມາດເປີດ Case & Ticket ໄດ້.
2. ຕ້ອງເປັນບໍລິສັດຜູ້ສະໜອງພາຍໃນ ສປປລາວ ທີ່ມີໃບຮອງຮັບ ຫລື ໂຕແທນຢ່າງເປັນທາງການຂອງຜະລິດຕະພັນດັ່ງກ່າວ ມີທີມງານຊັບພອດທີ່ສາມາດໃຫ້ຄຳປຶກສາ ແລະ ແກ້ໄຂບັນຫາໄດ້.
3. ເອກະສານລາຍລະອຽດສະເປັກໜ້າວຽກ, ການຮັບປະກັນ, ໄລຍະເວລາການຈັດສົ່ງເຄື່ອງ ແລະ ຂໍ້ມູນຕ່າງໆ ຕາມ format ທີ່ຕິດຄັດມາພ້ອມນີ້.
4. ເອກະສານຂ້າງເທິງແມ່ນໃຫ້ຍື່ນກ່ອນ **ວັນສຸກ ວັນທີ 06/11/2026 ເວລາ 11:00 ໂມງ ໂດຍການສົ່ງຟາຍເຂົ້າ E-mail: <u>procurement@bcel.com.la</u> ແລະ <u>inspect-it@bcel.com.la</u> ເພື່ອໃຫ້ສູນໄອທີໄດ້ກວດລາຍລະອຽດ, ຂໍ້ມູນທີ່ຈຳເປັນ ແລະ ສະເປັກ.**

❖ **<u>ເອກະສານ ຊອງທີ2:</u> (ປິດຊອງ)**

1. ໃບສະເໜີລາຄາຕ້ອງເປັນສະກຸນເງິນກີບ ແລະ ລວມອາກອນມູນຄ່າເພີ່ມ 10%, ໂດຍສະເໜີເປັນ: Technical Support Service & MA 03 ປີ.
2. ຜູ້ສະໜອງຕ້ອງວາງເງິນຄ້ຳປະກັນການປະມູນຕ່ຳສຸດ 10% ຂອງມູນຄ່າທັງໝົດ ໂດຍໜັງສືຄ້ຳປະກັນທີ່ອອກໂດຍທະນາຄານພາຍໃນ **(ອັນໝົດອາຍຸໜັງສືຄ້ຳປະກັນຕ້ອງເຖິງ ວັນທີ 18/02/2027)** ຫຼື ແຊັກທີ່ວີຊ້າແລ້ວ (ທຄຕລ ບໍ່ຮັບເງິນສົດ), ພາຍຫຼັງປະກາດຜົນ ທຄຕລ ຈະສົ່ງໜັງສືຄ້ຳປະກັນດັ່ງກ່າວຄືນ.
3. ໃນວັນພຸດ **ວັນທີ 18/11/2026 ເວລາ 13:30 ໂມງ** ແມ່ນມື້ເປີດຊອງປະມູນ ສະນັ້ນໃຫ້ຜູ້ສະໜອງທີ່ຜ່ານການຄັດເລືອກຈາກເອກະສານຊອງທີ 1 ມາຍື່ນຊອງລາຄາດ້ວຍຕົນເອງ ຫຼື ສົ່ງຜູ້ຕາງໜ້າເຂົ້າຮ່ວມທີ່ຫ້ອງປະຊຸມຊັ້ນ 5 ອາຄານ C.

<u>ໝາຍເຫດ:</u>

- ທຄຕລ ຂໍສະຫງວນສິດ ປະຕິເສດຜູ້ສະໜອງທີ່ປະກອບເອກະສານ ບໍ່ຄົບຖ້ວນ ຫຼື ບໍ່ຖືກຕ້ອງຕາມການກຳນົດຂ້າງເທິງ.

ເງື່ອນໄຂຂອງສັນຍາລະຫວ່າງ ທຄຕລ ແລະ ຜູ້ສະໜອງທີ່ຊະນະການປະມູນ:

- ຜູ້ທີ່ຊະນະການປະມູນຈະໄດ້ເຊັນສັນຍາກັບ ທຄຕລ ແລະ ຮັບຜິດຊອບຄ່າທຳນຽມໃນການຈົດທະບຽນສັນຍາ.
- ຖ້າຜູ້ຊະນະການປະມູນປະຕິເສດການເຊັນສັນຍາ ແມ່ນຕ້ອງໄດ້ຈ່າຍຄ່າເສຍຫາຍໃຫ້ແກ່ ທຄຕລ ໃນອັດຕາ 10% ຂອງມູນຄ່າລວມທີ່ສະເໜີປະມູນ.

ການຊຳລະຈະແບ່ງອອກເປັນ 02 ງວດ ລຸ່ມນີ້:

- ງວດທີ 01: ຊຳລະ 90% ຂອງມູນຄ່າພາຍໃນ 25 ວັນ ລັດຖະການ, ພາຍຫລັງໄດ້ຮັບເຄື່ອງຄົບຖ້ວນ ແລະ ກວດກາຄວາມຖືກຕ້ອງຈາກຄະນະກຳມະການຕິດຕາມກວດກາ.
- ງວດທີ 02: ຊຳລະ 10% ພາຍຫລັງຄົບກຳນົດຄ້ຳປະກັນຄຸນນະພາບສິນຄ້າ 06 ເດືອນ.

ດັ່ງນັ້ນ, ຈຶ່ງອອກແຈ້ງເຊີນມາຍັງທ່ານທີ່ມີຄວາມສົນໃຈເຂົ້າຮ່ວມຍື່ນຊອງປະມູນໃນຄັ້ງນີ້.

ຜູ້ອຳນວຍການ

ທະນາຄານ ການຄ້າຕ່າງປະເທດລາວ ມະຫາຊົນ BANQUE POUR LE COMMERCE EXTERIEUR LAO PUBLIC

ສາຍຈິດ ສົມມະວົງ

(ຕົວຢ່າງ) ລາຍລະອຽດເອກະສານການປະມູນ (ກະລຸນາຕື່ມຂໍ້ມູນ ແລະ ເຊັນຢັ້ງຢືນ)

- ອີງຕາມໃບແຈ້ງປະມູນ ສະບັບເລກທີ ...../ກຄຕລ, ລົງວັນທີ .....

ລ/ດ	ຜູ້ສະໜອງ	ເງື່ອນໄຂ									ໝາຍເຫດ
		ໃບທະບຽນວິສາຫະກິດ	ໃບຢັ້ງຢືນການເສຍອາກອນ	ໃບອະນຸຍາດດຳເນີນທຸລະກິດ	ໄລຍະເວລາໃນການດຳເນີນທຸລະກິດ	ຜົນງານຜ່ານມາ (Server ທີ່ເຄີຍສະໜອງໃຫ້ພາກສ່ວນໃດແນ່)	ປະເພດ / ວັດສະດຸ / ຍີ່ຫໍ້ສິນຄ້າ	ປະເທດຜະລິດ	ການຮັບປະກັນສິນຄ້າ	ກຳນົດສົ່ງ (ວັນ)	
1	ບ/ສ.....	(ເລກທີ/ລົງວັນທີ)	(ເລກທີ/ລົງວັນທີ)	(ເລກທີ/ລົງວັນທີ)	.... ປີ	(ໃຫ້ລະບຸ)			.... ປີ	.....	

ໝາຍເຫດ: ຂໍ້ມູນທີ່ແຈ້ງຂ້າງເທິງນີ້ ເປັນຄວາມຈິງທຸກປະການ, ຖ້າມີຂໍ້ມູນຜິດພາດ ຂ້າພະເຈົ້າຂໍຮັບຜິດຊອບເອງທຸກປະການ.

ນະຄອນຫຼວງວຽງຈັນ, ວັນທີ .....
ຜູ້ອຳນວຍການບໍລິສັດ

ຜູ້ປະສານງານບໍລິສັດ:
ຊື່:
ໂທ: