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बबरमहल, काठमाडौं ।

प.सं. :- ०८०/८१

मिति :- २०८१/०८/१९

च.नं. :- HMIS/ICT/८४

विषय: लागत अनुमान तयार गर्ने प्रयोजनका लागि बजारभाउ उपलब्ध गराउने बारे ।

यस विभागको लागि आवश्यक Enterprise Network Firewall खरिदको लागि लागत अनुमान तयार गर्नुपर्ने भएकोले सोको लागि बजारभाउ आवश्यक रहेको हुँदा यसै सूचना साथ संलग्न प्राविधिक स्पेसिफिकेशन भएको Firewall को बजारभाउ ७ दिन भित्र उपलब्ध गराई सहयोग गरिदिनुहुन सम्बन्धित सबैलाई अनुरोध गरिन्छ ।

(सुप्रितम राज श्रेष्ठ)

कम्प्युटर इन्जिनियर

Government of Nepal
Ministry of Physical Infrastructure and Transport
Department of Roads
Babarmahal, Kathmandu

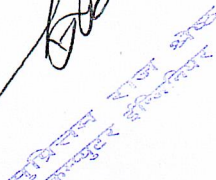
Technical Description, Specifications, and Standards for Enterprise Firewall

S.No.	Particulars	Requirements
1.	Brand	(To be mentioned by the bidder) (To be mentioned by the bidder)
2.	Model	(To be mentioned by the bidder) (To be mentioned by the bidder) The proposed model should not be declared as End of Sales/End of Support
3.	Industry Compliance	OEM must be part of leader or challenger quadrant in the latest Gartner Magic Quadrant for Network Firewall
4.	Connectivity	Min. 10 x 1 GbE Ports (RJ45) Min. 4 x 1GbE Ports (SFP) Min. 2 x 10 GbE Ports (SFP+) 1 Management Port 1 Console Port USB Port
5.	Concurrent Sessions	Min. 2.5 million
6.	New Connections/Second	120K
7.	Firewall Throughput	Minimum 30 Gbps
8.	IPS Throughput	Minimum 4.5 Gbps
9.	NGFW Throughput	Minimum 2.5 Gbps
10.	Threat Protection Throughput (FW + AVC + IPS+ Antivirus +Anti Malware)	Min. 2 Gbps
11.	IPSec VPN Throughput	Minimum 25 Gbps
12.	Features	- Virtual Firewall Instances The firewall solution must support virtual firewall instances from the initial deployment. All necessary licenses required to enable this feature must be included. - Operational Modes The system must support both Transparent (bridge) mode, ensuring minimal disruption to the existing network infrastructure, and NAT/Route mode. These modes must be operable concurrently. - VPN Capabilities The solution must support IPSEC and SSL VPN functionality. Licensing for at least 100 SSL VPN clients must be included from day one. - Traffic Shaping Advanced traffic shaping and quality of service (QoS) functionalities must be integral to the proposed system.


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| | | <p>5. Next-Generation Firewall Features
The firewall must support configurable actions for TCP session management.</p> <p>6. Multi-Factor Authentication (MFA)
The system must either have inbuilt support or integrate with third-party multi-factor authentication platforms.</p> <p>7. Real-Time Monitoring and Dashboard
The solution must feature real-time event monitoring through pre-defined dashboards for SD-WAN, VPN, Wi-Fi, inbound/outbound traffic, applications, and websites.</p> <p>8. Low Latency
The firewall must ensure latency does not exceed 4 microseconds under normal operating conditions.</p> <p>9. Intrusion Prevention System (IPS)
The IPS be capable of mitigating Denial of Service (DoS) and Distributed Denial of Service (DDoS) attacks.</p> <p>10. Web Filtering
The firewall must include URL filtering based on a real-time categorization database.</p> <p>11. SSL Inspection
The system must support SSL inspection with a throughput of at least 3 Gbps, incorporating features like safe search enforcement and automatic or manual signature updates.</p> <p>12. Antivirus and File Control
The firewall must provide granular control to block, allow, or monitor traffic using antivirus signatures and file-blocking rules. Policies must be configurable by firewall rules or authenticated user groups.</p> <p>13. Anti-APT Integration
The system must integrate bi-directionally with an Anti-Advanced Persistent Threat (APT) solution to enable zero-day malware detection and threat intelligence sharing for attack mitigation.</p> <p>14. Email Filtering and Anti-Spam
The proposed solution must support email filtering with the ability to allow or block mail based on predefined criteria. It must also include anti-spam capabilities to detect and block spam emails across IMAP, SMTP, POP3, and MAPI protocols.</p> <p>15. High Availability</p> |
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		The firewall must support high availability configurations, including both Active/Active and Active/Passive modes. 16. Redundant Power Supplies The device must include redundant power supplies to ensure uninterrupted operation in the event of power supply failure.
13.	Routing and Networking	1. Routing Capabilities The proposed solution must support static routing, policy-based routing, identity-based routing, multicast routing, and dynamic routing protocols 2. ISP Failover and Load Sharing The system must support seamless ISP failover and load sharing to ensure uninterrupted connectivity and optimized bandwidth utilization. 3. NAT and Address Translation The solution must support: Dynamic NAT and PAT, NAT46, NAT64, DNS64 and DHCPv6 4. SD-WAN Capabilities The system must include comprehensive SD-WAN functionality from the initial deployment. Any necessary licensing must be provided. The SD-WAN throughput must not be less than 20 Gbps. 5. Simultaneous WAN Link Utilization The firewall must be capable of utilizing all configured WAN links simultaneously to maximize network efficiency and throughput.
14.	Management, Monitoring and Usability	1. Centralized management with GUI, CLI, and API support. 2. Real-time monitoring 3. Automated Threat Response 4. Role-based access control (RBAC) for multi-user environments. 5. Logging and reporting with storage for at least 30 days of logs. 6. Automated firmware updates and vulnerability patching.
15.	License	3 years
16.	Warranty and Support	Minimum 3 years with hardware replacement and 24*7 support
17.	Accessories	Related Accessories
18.	Installation site	IDMC, Singhadarbar, DOR, Babarmahal and DRC Hetauda


 Digitally signed by Babarmahal, Kathmandu
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