

भारतीय प्रौद्योगिकी संस्थान मद्रास चेन्नै 600 036

INDIAN INSTITUTE OF TECHNOLOGY MADRAS Chennai 600 036 भंडार एवं क्रय अनुभाग

STORES & PURCHASE SECTION

दूरभाषः (044) 2257 8285 / 8286 / 8287 / 8288 फैक्सः (044) 2257 8292 / 2257 8082 Telephone : (044) 2257 8293,8287,8285,8286

E-mail id- adstores@iitm.ac.in



A.V. Sudarsanam Dated: 17.08.2015

Deputy Registrar (Stores & Purchase)

Tender No. SPS/CC/Network Firewall/003/2015-16

Dear Sirs,

Due Date - 07.09.2015 before 2.00 p.m.

1. On behalf of the Indian Institute of Technology Madras, I invite you to tender for supply.

Item	
"Network Firewall "	

Confirming to the specifications enclosed.

A.	LAST DATE for receipt of Tender	:	07.09.2015 before 2.00 p.m
	Submission of Tender	:	Both Technical Bid & Price Bid should be in separate cover with specification on the cover as "Technical Bid" & "Price Bid" as the case may be.
			Both the independent covers should be placed in one big cover and sealed with the superscription on the left hand side OPEN TENDER FOR SUPPLY OF "Network Firewall" due on 07.09.2015 at 2.00 p.m. The tender cover should be sent to: Ms. V.G. BHOOMA, IRPS REGISTRAR INDIAN INSTITUTE OF TECHNOLOGY MADRAS CHENNAI-600 036
			Right is reserved to ignore any tender which fails to comply with the above instructions. Tender should be sent either by REGISTERED POST ACKNOWLEDGEMENT DUE OR THROUGH MESSENGER. If the Tender is sent through Messenger, the same has to be dropped in the TENDER BOX marked Stores & Purchase kept for this purpose in the REGISTRAR'S OFFICE (1st Floor of Administrative Building) before 2.00 PM on due date 07.09.2015. If it is by post (Registered Post or Speed post only) the same should reach before 2.00 p.m. i.e. on the last date 07.09.2015 otherwise it will be summarily rejected.
			THE INSTITUTE SHALL NOT BE RESPONSIBLE FOR THE LATE RECEIPT OF TENDER ON ACCOUNT OF POSTAL OR ANY

			OTHER DELAY. THE TENDER BOX WILL BE CLOSED EXACTLY AT 2 P.M. ON 07.09.2015 SHARP.
В.	Earnest Money Deposit (EMD)	:	 EMD @ 2% of the equipment value quoted has to be paid along with the tender in the form of DD only. To be calculated based on the highest value quoted, among all configurations, by the bidder. Performance guarantee @3% of the equipment value quoted has to be submitted in addition to above 2% EMD by way of DD or by bank guarantee by the successful bidder only from any nationalized banks. Demand Draft may be drawn in favour of "The Registrar, IIT Madras" payable at Chennai. The EMD should be put in a separate cover and should be enclosed in the technical bid cover only, else the bid is likely to be rejected due to non-enclosure of EMD. The EMD cover will be opened along with the commercial bid only after technical evaluation of the bids.
C.	Pre bid meeting	:	There will be a Pre-bid meeting on 25.08.2015 at 03.00 P.M. in the conference room of computer centre. (Ground Floor)
D.	Marking on Technical Bid	:	 For each item/configuration separate Technical Bid envelope should be used. The technical bid cover of the various items should clearly be marked with the item name. The technical bid covers of the various items should be put into one big cover super scribed "Technical Bid". All technical bid should have the page-wise heading as "Technical Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents. The technical bid should be enclosed in the format as specified in page # 12 to 32
E.	Marking on Price Bid	:	 For each item/configuration separate Price Bid envelops should be used. The price bid cover of the various items should clearly be marked with the item name. The price bid covers of the various items should be put into one big cover super scribed "Price Bid". All financial bid should have the page-wise heading as "Financial Bid" and page no. in all pages with seal and signature of authorized signatory. The total no. of pages should be mentioned at the last page of the documents.
F.	Agency Commission		 The financial bid should clearly state (below the total price quoted) if the quoted amount includes agency commission. If yes, state the percentage of commission. This will be paid in INR only after satisfactory installation. The quote value + agency commission, if any, will be

			taken for comparison purpose.
G.	Tender document fee	A	The tender document fee of Rs.525/-(inclusive of VAT @ 5%) (Non-refundable) should be drawn in the form of DD (obtained on or after the date of advertisement) in favour of "The Registrar, IIT Madras" payable at Chennai, and the same should be enclosed only in the technical bid cover. No separate tender documents will be issued by us. The same can be downloaded from our institute website: http://tenders.iitm.ac.in
Н.	For all the imported components	>	Quote should be in US dollars.

2. Preparation of Tender:

- a) The Schedule to the Tender form should be returned intact whether you are quoting for any item or not. Pages should not be detached and when items are not being tendered for, the corresponding space should be defaced by some such words as 'not quoting'.
- b) In the event of space on the schedule form being insufficient for the required purpose, you have to submit the rates in the letter head of your company clearly mentioning S.No. and other relevant particulars. Each such additional page must be numbered consecutively, bear the Tender Number and be fully signed by you. In such cases reference to the additional pages must be made in the tender form.
- c) If any modification of the schedule is considered necessary, you should communicate the same by means of a separate letter sent with the Tender within due date.
- d) You should quote your product as per our specification requirements by mentioning our requirements and your offer side by side and the rate should be in total as per our requirements. We will not make any calculation if you have mentioned the rates of items separately.
- e) In case, your product specification does not exactly match our requirements, you may quote for your product, but you must highlight the deviation in specification point by point.
- f) If you need to add any item to your system in order to meet our specification requirements, you are required to quote for your basic system separately and also to quote the total value of the system including the option required to suit our requirements. Otherwise, your tender will not be considered at all.
- g) Wherever applicable you are required to clearly indicate the Part No./Model No./Brand Name etc. If such details are not included, it will be presumed that your offer is not for branded item, but for generic only, and compared accordingly.
- h) The offer/bids should be submitted in two bid system i.e. Technical Bid and Price Bid in a separate cover. The technical bid should consist of all technical details along with catalogue, commercial terms and conditions. Financial bid should indicate item-wise price for all the items mentioned in the technical bid.
- i) The Technical bid cover will be first opened and evaluated. In the primary screening, technical bid of only those who satisfy the eligibility criteria will be evaluated. The Price bid of only those bidders whose technical bid is found to be technically adequate by the Committee will be opened.

3. Signing of Tender:

The Tender is liable to be rejected if complete information is not given therein or if the particulars and date (if any) asked for in the schedule to the Tender are not fully filled in or not duly signed/authenticated. Specific attention is drawn to the delivery dates and important conditions referred to in Annexure enclosed herewith. Each page of the tender documents required to be signed and bears the official seal of the tenderers.

4. Period for which the offer will remain open:

- (i) Firms tendering should note the period for which it is desired that their offers should remain open for acceptance. If the firms are unable to keep their offers open for the specified period they should specifically state the period for which their offers are being considered provided, however, the day up to which the offer is to remain open being declared closed holiday for the Indian Institute of Technology Madras, the offer shall remain open for acceptance till the next working day.
- (ii) Quotations qualified by such vague and indefinite expressions such as 'subject to immediate acceptance', 'subject to prior sale' will not be considered.

5. Opening of Tenders:

You are at liberty to be present or authorize a representative to be present at the opening of the tender at the time and date specified in the Schedule.

6. Prices:

The prices quoted must be net per unit shown in the schedule and must include all packing and delivery charges and other statutory levies. Refund on account of returnable packages (if any) are to be separately specified. Price and refunds must be clearly shown in figures and worked in Indian currency. The prices quoted by the Tenderer should be inclusive of Sales Tax/VAT and other statutory levies (and should be clearly stated to be so) which will be paid by the Purchaser/if legally leviable at the rate ruling on the date of supply as specified in the Acceptance of Tender. The percentage of tax etc. included in the price should be indicated in clear terms. If the inclusive price is not given, we will treat your offered rate as inclusive rate and comparison be made with others. If at the time of comparison of your offer without taxes etc. is happen to be lowest, you are bound to supply as per the offered rate, i.e. without taxes etc.

Hence you are requested to be careful while quoting for tender. The price should be without customs duty and excise duty since IIT Madras is fully exempted from payment of excise duties and also eligible for payment of concessional customs duty against submission of Essentiality Certificate. The customs duty will be payable / reimbursable by us at the time of clearance on production of necessary proof. Hence these duties need not be included in the price while quoting. Necessary document will be provided at appropriate time. No price revision, changes in the specification already given or changes in the terms and conditions etc. during the period is acceptable.

We are eligible for concessional VAT/CST on submission of concessional certificate. The Institute is not authorized to issue C or D forms of Sales tax certificate. Hence VAT/CST should be charged at concessional rates as applicable to educational and research institutions run without profit motives, for which necessary certificate will be issued on demand at the time of retirement of documents/payment, wherever applicable.

7. Terms of Delivery:

Supply, Installation and Commissioning are required by date(s) specified in the Schedule of Tender. If, however, it is not possible for you to effect supply, installation and commissioning by the date(s), you should specify the date(s) by which you can guarantee supply, installation and commissioning in the

	prescribed schedule to the Tender.
8.	Right of Acceptance: The Indian Institute of Technology Madras, Chennai-600 036 does not pledge itself to accepting the whole or any part of the Tender or portion of the quantity offered.
9.	Communication of Acceptance: Acceptance by the Purchaser will be communicated by Post, if required, and the Company's acceptance communicated to us formally in writing. In case where acceptance is communicated by Telegram or letter by Speed Post, the formal Acceptance of Tender will be forwarded to you as soon as possible but the instructions contained in the Telegram or Speed Post letter should be accepted upon immediately.
10.	The Institute shall not be responsible for the late receipt of tender documents due to postal and or any other delay.

Yours faithfully,

Deputy Registrar (Stores & Purchase Section)

Indian Institute of Technology Madras, Chennai 600 036 Stores & Purchase Section			
SCHEDULE TO INVITATION OF TENDER NO	:	SPS/CC/Network Firewall/003/2015-16	
LAST DATE & TIME FOR RECEIPT OF TENDER		07.09.2015 at 2.00 p.m.	
TIME & DATE OF OPENING OF TENDER	:	07.09.2015 at 3.00 p.m.	

In the event of the date of opening of tender being declared a closed holiday for the Indian Institute of Technology Madras the due date for opening will be following working day.

The Tender shall remain open for acceptance/validity till: 31.12.15

S.No.	Description	Quantity	Price		
		(One unit)	US Dollars	In Indian Rupee	

As per the eligibility criteria and terms & conditions (page 9 to 11); Special instructions regarding payment terms (page 33) and Technical specifications refer [page 12 to 32].

IMPORTANT TO NOTE:

- 1. All tender documents should be filled in signed and returned.
- 2. Tenderer must state categorically whether or not his offer is exact to tender specifications and indicate deviations, if any failing which his offer will be ignored.
- 3. Your offer should be accompanied by catalogue of the equipments.
- 4. Delivery should be effected within the time frame as given in Important Condition No.7
- 5. FAX/Email/Telegram quotations will not be accepted.

NOTE: ONE AGENT **CAN NOT REPRESENT FOR TWO SUPPLIERS OR QUOTE ON THEIR BEHALF AT ONE TIME IN THE SAME TENDER**. In case of import all the particulars required for opening Letter of Credit should be furnished in clear terms. After opening of L/c, based on our tender no more requests for amendment of L/C will be entertained. Total inclusive price to be quoted should be in nearest Rupee (Supply, installation and commissioning at IIT Madras).

IMPORTANT CONDITIONS:

The following instructions are to be followed meticulously FAILING WHICH YOUR OFFER WILL NOT BE CONSIDERED:

- 1. Please mention the Part No., Model No. & Make wherever required and also CST/VAT No and Area Code failing which your quotation will be rejected. All of your future correspondences including Invoices should bear the CST/VAT No. and Area Code.
- 2. Withdrawal of a Model quoted is acceptable ONLY IF accompanied by a certificate from the manufacturer to that effect. Correspondence in this connection must be addressed to DR (Stores & Purchase). The offer of higher configuration in lieu of withdrawal model will be accepted only if there is no change in the price offered.
- 3. **Quotations should be submitted in Arrack Sealed Cover (Sealing Wax).** The quotation should be typed in the space provided in the downloaded format only. No manual entries are accepted and this will be rejected at the opening stage itself. Quotes given by the tenderers in their own format/letter heads will not be considered at all.

4.	Warranty should be in clear terms. Indicate price change (if any) for extra year warranty.		
5.	In case of import, the insurance & Freight charges should not exceed 6% of FOB value. You are requested to quote FOB price as well as CIF, CHENNAI mentioning Freight & Insurance charges separately. No Ex-works pricing is considered.		
6.	 Quotations will be accepted only from manufacturers for branded items. If they are not in a position to quote, they may authorize only one exclusive Accredited Resellers/Channel Partners/Deluxe Premium Service Partners, who may quote along with proof for authorization. 1. Two bid processes (separate sealed envelopes of technical and financial bids in the cover) is open to original equipment manufacturers (OEMs) only. Each OEM can, however, nominate one third party agent (TPA) to represent them during the bidding process. Either the Indian Agent on behalf of principal / OEM or the principal itself can bid but both cannot bid simultaneously for the same item / product in the same tender. 2. Documentary evidence for the following shall be included along with the covering letter. a) TPA shall produce authorization from the OEM they represent. b) OEM / TPA shall be an ISO certified company. 		
7.	The Vendor / Supplier / Manufacturer shall provide detailed service and user's manual for the standardized components like PC, Power Supply, etc. The list is indicative and not exhaustive.		
8.	Delivery Period for Import & Indigenous Items: For Indigenous Items: Items should be delivered within a week. The actual time to be specified clearly. No further extension of time will be allowed. For Import Items: Items should be delivered within a reasonable time. The order acknowledgement should be issued by fax within 3 days, and the item should be airlifted within 15 days from the date of receipt of the Letter of Credit copy/copy of DD, as the case may be. Non delivery of items will lead to cancellation of Purchase Order without any notice. In addition, action may be taken for removing them from our mailing list in respect of future enquiry.		
9.	IIT Madras is exempted from the Payment of Excise Duty and also eligible for payment of concessional customs duty against submission of Essentiality Certificate. I.I.T. will make necessary arrangements for the clearance of imported goods at Airport. Hence, the price should not include the above charges.		
10.	No Advance Payment will be made for Indigenous purchase. 100% Payment against Delivery on satisfactory installation for local purchase can be agreed to. For imports normally payment will be made by Letter of Credit only. In this case, the 75% of the cost will be made by LC out of this 90% will be made initially and the balance 10% will be paid after satisfactory installation and commissioning of the same LC. The balance 25% will be made as given in page# 33. Demurrage charges (if any) will be borne by the supplier & it will be deducted from the balance 10%. Initial opening of Letter of Credit charges will be borne by us. If any amendment is requested for, the charges for the amendment will be borne by the supplier only. Hence, care should be taken in all respects before opening of Letter of Credit.		
11.	Item should be commissioned immediately after receipt of item failing which legal action will be taken against the successful bidder.		
12.	You must give an undertaking to the effect that "in case of downward price movements during		

	the period, the firm promises to pass on the advantage to IIT Madras". Your quotation will be summarily rejected, if the undertaking does not accompany the quotation.	
13.	In terms of Rule 160 (ii) of General Financial Rules, 2005 the bidder shall be at liberty to question the bidding conditions, bidding process and / or rejection of its bid.	

Deputy Registrar (Stores & Purchase)

INSTRUCTIONS & SPECIAL CONDITIONS

(To be returned by Tenderer along with the Tender duly signed)

1. **GENERAL:** Tenderer should furnish a clear declaration as follows: We declare that I am/we are i) Accredited Agents of the suppliers aboard; ii) Authorized Agents of the Projects & Equipment Corporation of India Ltd., iii) Eligible for import of Scientific Equipment from East European Countries; iv) Holders in stock of the stores tendered for (Strike out whichever is not applicable) 2. CONDITIONS OF CONTRACT: Printed or cyclostyled or such terms and conditions of the tenderer, not appearing in the body of the tender will not be considered as forming part of the tender. Tenderer should quote on the basis of the conditions referred to in Para of the invitation to tender and tender papers. In case these terms and conditions are not acceptable to the tenderer, he should specifically state the deviation(s) there from in the body of the tender. 3. **DEVIATION FROM SPECIFICATIONS:** It is in the interest of the tenderer to study the specifications in the tender schedule thoroughly before quoting so that, if any deviations are made by the tenderer, the same are prominently brought out in the body of the tender. If you need to add any optional items to your system in order to meet our specifications, you are requested to quote for the total including the option required to suit our requirements; otherwise, your tender will not be considered at all. 4. PRICE: Prices must be in Rupees and Paisa if the import is from the East European countries. For import from General currency Area, the price may be indicated in foreign currency (both F.O.B. & C.I.F. Chennai by Air/Sea). The price should be without customs duty and excise duty since IIT Madras is exempted from the payment of Excise duties and also eligible for concessional customs duty against submission of Essentiality Certificate. AGENCY COMMISSION [Refer page no. 2[F]] iil) The unit prices should be for the same unit as indicated in the Schedule to tender enquiry and not for any other unit. iV) Prices quoted should be for supply, installation and commissioning in I.I.T. Madras. V) Discount, if any, should be indicated prominently. VI) Offers should normally be on firm price basis. If the tenderer cannot quote firm prices, variable prices with a ceiling have to be indicated. If the variation price be lower than the price stated in the quotation, the purchaser should have the benefit of lower price. 5. **TRANSIT INSURANCE:** The Purchaser will not pay separately for Transit Insurance. 6. PAYMENT: (Refer page no.33 for stages of payment) Payment will be made only after completion of supply, installation and commissioning of the systems to the entire satisfaction of the Purchaser. ii. If the payment is desired to be made to their principals directly, the same will be made against irrevocable letter of credit only. For more details, see the accompanying note on "Important conditions". iii. No advance payment will be made either for Indigeneous purchase or Import. iv. Advance dispatch details like invoice copy, Airway Bill No., Packing List and Flight No. should be sent immediately after shipment for early clearance and also make suitable arrangements for sending Cargo Arrival Notice [CAN] in time. Demurrage charges, if any on account of delay in receipt of

above will be debited to suppliers account.

7.	TENDERER SHALL SUBMIT ALONG WITH HIS TENDER:			
	 Submission of Income Tax clearance certificate is not required. However, they have to quote their PAN No. Name and full address of the Banker and their swift code. Proof of having ISO 9002 or other equivalent certification given by appropriate authorities. Proof of registration with sales tax /VAT authorities like registration number, range etc. in clear terms. 			
8.	EARNEST MONEY DEPOSIT (EMD): Refer page no.2 (B)			
	> This Earnest Money will be returned to the unsuccessful tenderers after the final disposal of the tenders. EMD will not carry any interest.			
	➤ The EMD along with Performance Guarantee will be retained in the case of successful tenderers till the warranty period.			
EMD will not be waived under any circumstances.				
	> EMD will be forfeited in the case of non-execution of the order within the due date.			
	Non submission of EMD will lead to rejection of tender at the opening stage itself.			
9.	DISTRIBUTORSHIP CERTIFICATE:			
	Sole selling Agents/Distributors of a particular make should submit a Certificate from their Principals to the effect that they are the authorized Agents of the Manufacturers and that they are authorized to import and supply the equipment to IIT Madras.			
10.	GUARANTEE:			
	The tenderer has to declare that the goods sold to the buyer under this contract shall be of the best quality and workmanship and shall be strictly in accordance with the specifications. Tenderer should indicate the period for which the said goods/articles would continue to confirm to the specifications.			
11.	JURISDICTION:			
	All questions, disputes, or differences arising under, out of or in connection with the contract, if concluded, shall be subject to the exclusive jurisdiction at the place from which the acceptance of Tender is issued.			

ACKNOWLEDMENT

It is hereby acknowledged that we have gone through all the points listed under "Instructions & Special Conditions" outlined above, and those in the accompanying note on "Important Conditions", and we agree to abide by them under the penalty of permanent disqualification for Tender participation and for related penal actions for non-abidance of the conditions.

SIGNATURE OF TENDERER ALONG WITH SEAL OF THE COMPANY WITH DATE

TERMS & CONDITIONS for Rupee quote

1.	Sales tax	IIT will issue concessional sales Tax certificate for purchase of scientific and research items.
		IIT is not eligible to issue "C" or "D" form.
		Percentage of tax if applicable- may be mentioned.
2.	Validity	Should be mentioned clearly
3.	Service charges	May be stated clearly
4.	Freight charges	-do-
5.	Customs duty	IIT is eligible for concessional customs duty. The necessary certificate will be issued for clearance.
6.	Excise duty	IIT is fully exempted from excise duty. The necessary certificate will be issued for clearance.
7.	Discount	Should be stated in clear terms / percentage of discount should be stated.
8.	Warranty	5 Years
9.	Payment terms	Please refer specific instructions [Refer Page No. 33]
10.	Delivery period	May be stated clearly
11.	AMC	Charges may be stated clearly.
12.	Any other details	Separate sheet may be attached.

TERMS & CONDITIONS for Foreign quote

1.	Price	Please state whether the price quoted by you is Ex-works / FOB / CIF / CIP / FCA etc. The additional charges for FOB/CIF/CIP etc. to be indicated clearly.
		For quote received in Ex-works / FOB / FCA etc. value, without clear details for freight, insurance etc. additional 10% of quote value will be added and comparison will be made accordingly for CIF / CIP at the prevailing exchange rate on the date of opening of tender (i.e.) on 07.09.2015 so as to arrive lowest quote.
2.	Validity	Should be mentioned clearly
3.	Customs duty	IIT is eligible for concessional customs duty. The necessary certificate will be issued for clearance.
4.	Discount	Should be stated in clear terms / percentage of discount should be stated.
5.	Warranty	5 Years
6.	Payment terms	Please refer specific instructions [Refer Page No. 33]
7.	Delivery period	May be stated clearly
8.	AMC	May be stated clearly
9.	Any other details	Separate sheet may be attached.

TECHNICAL SPECIFICATION OF NETWORK FIREWALL

The Technical bid should be submitted in the following format only			
S.No.	Firewall Appliances specifications	Compliance Yes/No	Remark
1	Architecture		
1.1	Proposed Firewall vendor must be Leader / Challenger / Niche players in Gartner Magic Quadrant for Enterprise Network Firewalls in last 2 years.		
1.2	OEM / Bidder Should have sales and Support office in Chennai		
1.3	Proposed appliance should have inbuilt Flash / HDD Storage		
1.4	Proposed solution should comply with FCC and CE norms		
1.5	The proposed solution should match the following criteria		
1.6	a. Must have a 64-bit hardware platform		
1.7	b. Proposed appliance should contain 8 or more ports of 1 G Copper and 4 or more ports of 10 G SFP+ Fiber pluggable modules.		
1.8	c. 250,000 connections per sec		
1.9	d. 20,000,000 concurrent sessions		

1.10	e. 75 Gbps or above Firewall throughput	
1.11	f. 9 Gbps or above IPS throughput	
1.12	g. 5 Gbps or above Fully Protected throughput (UTM Throughput)	
1.13	h. 10 Gbps or above AV throughput	
1.14	i. 1 Gbps or above SSL VPN throughput	
1.15	All features should have equivalent support for IPV4 & IPV6, unless explicitly specify.	
1.16	The proposed solution should support unrestricted user/node license or minimum of 30,000 user / node.	
1.17	The proposed solution must work as a standalone HTTP proxy server with integrated Firewall, Anti- Virus, Anti-Spam, Content filtering, IPS and Web Application Firewall. Option to enable / disable any service.	
1.18	The proposed solution must support User based policy configuration for security and Internet management.	
1.19	The proposed solution should provide on-appliance reports / dedicated reporting server not only based on IP addresses and also on user based.	
1.20	The proposed Solution should have warranty and License support for 5 years including Web Filter, Application Filter, IPS, Gateway Antivirus, VPN, Logging& Reporting.	

1.21	FirewallAppliance should have a feature of holding at least two OS images simultaneously to support resilience & easy rollbacks during the version upgrades	
2	Administration, Authentication & General Configuration	
2.1	The proposed solution should support administration via secured communication over HTTPS, SSH and from Console.	
2.2	Solution must support multiple administrators to work on policies on session based, All the policies and objects on which Administrator 1 is working should be locked for all other administrator, however other administrator can work on other policy rules and objects in their respective sessions. Changes done by Administrator-1 should not be visible to other administrators till the time Administrator-1 publish changes.	
2.3	Solution must allow administrator to choose to login in read only or read write mode	
2.4	The proposed solution should be able to export and import configuration backup including user objects	
2.5	The proposed solution must be able to be deployed in Route (Layer 3) and Transparent mode (Layer 2), individually and simultaneously.	

	The proposed solution should support integration	
2.6	with Windows NTLM, Active Directory, LDAP, Radius,	
	or Local Database for user authentication.	
	The Durance of colution provet compart CCL/TLC on	
2.7	The Proposed solution must support SSL/TLS on	
	LDAP/Active Directory integration.	
	The proposed solution must support Automatic	
2.8	Transparent Single Sign On for user authentication.	
2.0	SSO must be proxy independent and should support	
	all applications for authentication.	
	The proposed solution should provide bandwidth	
2.9	utilization graph on daily, weekly, monthly or yearly	
	for at least 5 individual ISP links.	
2.10	The proposed solution should provide real time data	
2.10	transfer/bandwidth utilization details regarding	
	individual user / ip / application.	
2.11	The proposed solution should support NTP.	
	The proposed solution should support user/ip/mac	
2.12	binding that can map username with corresponding	
	IP and MAC addresses for security reason.	
2.42	The proposed solution should support Version roll	
2.13	back functionality.	
	The proposed solution should be able to force-logout	
2.14	users upon session time-out, quota exceeded (over	
	download) and idle time-out.	
	The proposed solution should support Group based	
2.15	user creation for administration purposes.	

2.16	The proposed solution should support SNMP v1, v2c and v3.	
2.17	The proposed solution must be firmware-based rather than software-mounted. It should be able to hold two firmware images on the appliance simultaneously, to facilitate instant roll back.	
2.18	The proposed solution must provide flexible, granular role-based GUI administration for configuring hosts, networks, services, access rules, VPN, NATing, etc	
2.19	The proposed solution must provide support of multiple authentication servers for each module (e.g. Firewall, Different type of VPN)	
2.20	The proposed solution must support multiple Thin Client (Microsoft TSE, Citrix) authentication mechanisms and must be able to differentiate between requests originating from the same IP address.	
2.21	The proposed solution must support:	
2.22	a. DHCP/DHCPv6 Server	
2.23	b. DHCP/DHCPv6 Relay Agent	
2.24	The proposed solution should work as DNS/DNSv6 Proxy	
2.25	The proposed solution must provide customizable login security settings	

2.26	The proposed solution must provide customizable administrator password complexity setting	
3	Multiple ISP load balancing and Failover	
3.1	The proposed solution should support Load Balancing and Failover at least 4 ISP Links.	
3.2	The proposed solution should support explicit routing based on Source, Destination, FQDN,Username, Application.	
3.3	The proposed solution should support weighted round robin algorithm for Load Balancing.	
3.4	The proposed solution should provide options for failover condition which includes detecting a failed ISP link on ICMP, TCP or UDP protocol.	
3.5	The proposed solution should send alert by email to the administrator(s) notifying any change in gateway status.	
3.6	The proposed solution should have Active/Active (Round Robin) and Active/Passive Gateway Load Balancing and Failover support.	
3.7	The proposed solution must failover without dropping any connection in active active mode.	
3.8	The proposed solution should provide Multi-link Management for IPv4 as well as IPv6 traffic.	

4	High Availability (In case of requirement)	
4.1	The proposed solution should support High Availability Active/Passive and Active/Active	
4.2	The High Availability feature in the proposed solution should be ICSA certified.	
4.3	The proposed solution should notify administrator(s) on change of appliance status in High Availability.	
4.4	The traffic between the two HA peers must be encrypted.	
4.5	The proposed solution should send Link, Device and Session failure.	
4.6	The proposed solution should support automatic and manual synchronization between appliances in cluster.	
4.7	The proposed solution should support HA in Bridge Mode deployment	
4.8	The proposed solution should support HA in Mixed Mode (gateway+bridge) deployment	
4.9	HA should be optional and possible to deploy at any point even if not initially enabled.	
5	Firewall	
5.1	The proposed solution should be standalone appliance with hardened OS.	
5.2	The proposed solution should have an ICSA / NSS-Lab / Common Criteria - EAL4+ / Gartner's recent Magic Quadrant certified firewall.	

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5.3	The proposed solution should support stateful inspection with user based one-to-one and dynamic NAT and PAT.		
5.4	The proposed solution should use User Identity as a matching criteria along with Source/Destination IP/Subnet/group, destination Port in firewall rule.		
5.5	The proposed solution should facilitate the application of UTM policies like AV/AS, IPS, Content filtering, Bandwidth policy and policy-based routing decision on the firewall rule itself.		
5.6	The proposed solution should support user-defined multi-zone security architecture.		
5.7	The proposed solution should have predefined applications based on port/signature and also should support creation of custom application based on port/protocol number.		
5.8	The proposed solution should support inbound NAT load balancing with different load balancing methods like First Alive, Round Robin,Random,Sticky IP and failover with server health check by TCP or ICMP probe.		
5.9	The proposed solution should support 802.1q VLAN tagging.		
5.10	The proposed solution should support dynamic routing like RIP1, RIP2, OSPF, BGP4.		
5.11	The proposed system should provide alert messages on Dash Board in events like default password has not been changed, non-secure access is allowed or module subscription is to expire soon.		

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5.12	The proposed solution must support IPv6 as per www.ipv6ready.org guidelines		
5.13	The proposed solution must support IPv6 Dual Stack Implementation		
5.14	The proposed solution must support tunneling like 6in4, 6to4, 4in6, 6rd		
5.15	The proposed solution must support all IPv6 configuration on GUI		
5.16	The proposed solution must support DNSv6		
5.17	The proposed solution must support DoS protection against IPv6 attacks		
5.18	The proposed solution must support Spoof prevention on IPv6		
5.19	The proposed solution must support 802.3ad standard for Link Aggregation		
5.20	The proposed solution must support Application-based Bandwidth Management which allows administrator to create application-based bandwidth policies.		
5.21	The solution should be able to address all aspects of the Advanced Persistent Threat (APT) lifecycle, including: Blocking known malware sources, blocking known malware, identifying and blocking unknown or zero-day malware within an hour, protecting against client-side vulnerabilities, blocking command and control backdoor traffic, blocking server-side vulnerabilities, and advanced application and user control		

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	The proposed solution must support sandbox	
5.22	behavior based inspection and protection of	
	unknown viruses and malware	
6	IPS	
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6.1	The proposed solution should have an ICSA / NSS /	
	West Coast Labs Checkmark certified IPS	
	The proposed solution should have signature-based	
6.2	and protocol-anomaly-based Intrusion Prevention	
0.2		
	System.	
	The proposed solution must support creation of	
6.3	custom IPS signatures.	
	custom ir 5 signatures.	
	The proposed solution must support creation of	
6.4	multiple IPS policies.	
	multiple if 3 policies.	
	The proposed solution must allow disabling/enabling	
6.5	of IPS categories/signatures to reduce packet latency.	
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<i>c c</i>	The proposed solution should display username along	
6.6	with the IPs in IPS alerts and reports.	
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6.7	The proposed solution should update automatically	
0.7	by synchronizing with an update server.	
6.8	The proposed solution should generate alerts in case	
0.0	of attacks.	

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6.9	The proposed solution should generate historical reports based on top alerts, top attackers, severity wise, top victims, protocol wise.	
6.10	The proposed solution must be capable to provide session based IPS signature control with actions like: a. Drop Session: To drop the entire session if the traffic in that session matches with any IPS signature. b. Bypass Mode: To bypass the entire session if any traffic matches with IPS signature which is allowed to pass.	
7	Gateway Anti-Virus / Anti-spam	
7.1	The proposed solution should have an integrated Anti-Virus solution.	
7.2	The proposed solution should have an ICSA / West Coast Labs Checkmark certified.	
7.3	The proposed solution must work as an SMTP proxy rather than an MTA or relay server.	
7.4	The proposed solution should support scanning for SMTP, SMTPS, POP3, IMAP, FTP, HTTP, HTTPS, FTP over HTTP protocols.	
7.5	The basic virus signature database of proposed solution should comprise all wild list signatures and variants, as well as those for malware like Phishing, spyware.	
7.6	The proposed solution must support on-appliance quarantine facility / dedicated quarantine facility and also a personalized user-based quarantine area.	

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7.7	The proposed solution should be able to block dynamic/executable files based on file extensions.		
	a,		
	The proposed solution should support multiple anti-		
	virus policies based on sender/recipient email		
7.8	address or address group, notification setting,		
	quarantine setting and file extension setting. There		
	should not be just a single blanket policy.		
	The proposed solution should update the signature		
7.10	database at a frequency of less than one hour and it		
	should also support manual update.		
	For POP3 and IMAP traffic, the proposed solution		
7.11	should strip the virus infected attachment and then		
	notify the recipient and administrator.		
	The proposed solution should scan http traffic based		
7.12	on username, source/destination IP address or URL		
	based regular expression.		
7.12	The proposed solution should provide the option to		
7.13	bypass scanning for specific HTTP traffic.		
	The proposed solution should support real mode and		
7.14	batch mode for HTTP virus scanning.		
	The proposed solution should provide historical		
7.15	reports based on username, IP address, Sender,		
	Recipient& Virus Names.		
8	Web Filtering Solution		
	The proposed solution should have an ICSA / West		
8.1	Coast Labs Checkmark certified.		

8.2	The solution should protect users from downloading virus / malwares embedded files by stopping viruses / malwares at the gateway itself. Should at least provide Real-Time security scanning.	
8.3	Should stop incoming malicious files with updated signatures & prevent access to malware infected websites & unblocks the sites when the threats have been removed.	
8.4	Solution must have a URL categorization that exceeds 100+ million URLs filtering database. Should have predefined URL categories. The solution should have the capabilities to block, permit, allow & log, protocols other than HTTP, HTTPs, FTP. Also list the protocols that supports.	
8.5	The proposed solution should provide cloud-based web categorization for real time filtering and zero day attack	
8.6	The proposed solution must be able to work as a Standalone HTTP proxy.	
8.7	The proposed solution must have a database containing at least 75+ web categories.	
8.8	The proposed solution must have the following features inbuilt	
8.9	a. Should be able to block HTTPS based URLs	
8.10	b. Should be able to block URL based on regular expression	
8.11	c. Should support exclusion list based on regular expression	

8.12	d. Should be able to block any HTTP / HTTPS upload traffic.	
8.13	e. Should be able to block google cached websites based on category.	
8.14	f. Should be able to block websites hosted on Akamai.	
8.15	g. Should be able to identify and block requests coming from behind a proxy server on the basis of username and IP address.	
8.16	h. Should be able to identify and block URL translation request.	
8.17	The proposed solution should support application control blocking features as follows	
8.18	a. Should be able to block known Chat applications like Yahoo, MSN, AOL, Google, Rediff, Jabber etc.	
8.19	b. Should support YouTube Education Filter	
8.20	c. Should support blocking of File transfer on known Chat applications and FTP protocol.	
8.21	The proposed solution must block HTTP or HTTPS based anonymous proxy requests.	
8.22	The proposed solution should allow customization of Access Denied message for each category.	
8.23	The proposed solution should be CIPA compliant and should have predefined CIPA based Internet access policy.	
8.24	The proposed solution should be able to classify traffic as Productive, Neutral, Unhealthy or Nonworking as specified by administrator.	

	The proposed solution should have specific categories	
8.25	that broadly classify websites. For instance, websites	
3.23	that reduce employee productivity, bandwidth	
	choking sites or malicious websites.	
	The proposed solution should be able to generate	
8.26	reports based on username, IP address, URL, groups,	
	categories and category type.	
8.27	The proposed solution should allow searching in	
0.27	reports to filter relevant data.	
	The proposed solution should support creation of	
8.28	cyclic policies on Daily/Weekly/Monthly/Yearly basis	
	for Internet access on individual users/group of users.	
	The proposed solution should support creation of	
8.29	Internet access time policies for individual users or	
	user group.	
	The proposed solution should support creation of	
8.30	cyclic data transfer policies on	
8.30	Daily/weekly/Monthly/yearly basis for individual user	
	or group.	
0.21	The proposed solution should have integrated	
8.31	bandwidth management capability.	
	The proposed solution should be able to set	
8.32	guaranteed and burstable bandwidth per	
	User/IP/Application on individual or shared basis.	
	The proposed solution should provide entire to set	
8.33	The proposed solution should provide option to set	
	higher priority for critical applications.	

8.34	The proposed solution should provide option to define different bandwidth for different schedule in a single policy and bandwidth should change as per schedule on the fly.	
8.35	The proposed solution must provide web category based bandwidth management and prioritization.	
8.36	The proposed solution must provide logging and extensive controls on Instant Messaging (IM) traffic for Yahoo and MSN messengers such as: 1. Log of chat sessions for all or specific set of users. 2. Rules to control allow or deny chat, voice, web cam and file transfer for specific ID or Group of IDs. 3. Archiving of transferred files. 4. Antivirus scanning on file transferred.	
9	VPN	
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9.1	The proposed solution should have an ICSA / West Coast Labs Checkmark certified.	
9.1		
	Coast Labs Checkmark certified. The proposed solution should be VPNC Basic interop	
9.2	Coast Labs Checkmark certified. The proposed solution should be VPNC Basic interop and AES interop certified. The proposed solution should support IPsec (Net-to-Net, Host-to-Host, Client-to-site), L2TP, PPTP and SSL	

9.6	The proposed solution should support Main mode and Aggressive mode for phase 1 negotiation.	
9.7	The proposed solution should support external certificate authorities.	
9.8	The proposed solution should support export facility for Client-to-site configuration which ensures hassle free VPN configuration in remote Laptop/Desktop.	
9.9	The proposed solution should support commonly available IPsec VPN clients.	
9.10	The proposed solution should support local certificate authority & should support create/renew/Delete self-signed certificate.	
9.11	The proposed solution should support VPN failover for redundancy purpose wherein more than one connections are grouped together. If one connection goes down it automatically switches over to another working connection ensuring zero downtime.	
9.12	The proposed solution should support Threat free IPsec/L2TP/PPTP VPN tunneling.	
9.13	The proposed solution must support Apple iOS and Android, Windows Mobile, VPN clients	
9.14	The proposed solution must provide on-appliance SSL VPN solution with Web Access (Clientless), Web Application Access (Most common used protocols), Full Tunnel and Split Tunnel control. Solution should provide per user / group SSL VPN access (Which involves free license for unlimited users)	

9.15	SSL VPN solution should be certified by VPNC for SSL Portal / Firefox Compatibility / Java Script / Basic and Advanced Network Extensions.	
10	Logging and Reporting	
10.1	The proposed solution must support authentication to comply with Internet Privacy laws	
10.2	The proposed solution must have On-Appliance / dedicated server reporting solution.	
10.3	The proposed solution should be able to be integrated with any reporting solution.	
10.4	The proposed solution should allow exporting of reports in PDF, Excel and CSV format.	
10.5	The proposed solution should support logging of Antivirus, Antispam, Content Filtering, Traffic discovery, IPS, Firewall activity on syslog server.	
10.6	The proposed solution should provide detailed reports for all files uploaded via HTTP or HTTPS protocol. The report should include username/IP address/URL/File name/Date and Time.	
10.7	The proposed solution should provide data transfer reports on the basis of application, username, IP address.	
10.8	The proposed solution should provide connection- wise reports for user, source IP, destination IP, source port, destination port or protocol.	
10.9	The proposed solution should facilitate sending of reports on email address.	

10.10	The proposed solution should provide compliance reports for SOX, HIPAA, PCI, FISMA and GLBA compliance.	
10.11	The proposed solution should support Auditing facility to track all activity carried out on the appliance.	
10.12	The proposed solution should support multiple syslog servers for remote logging.	
10.13	The proposed solution should forward logging information of all modules to syslog servers.	
10.14	The proposed solution should have customizable email alerts/automated Report scheduling.	
10.15	The proposed solution should provide reports for all blocked attempts by users/IP address.	
10.16	The proposed solution must be capable of deriving logs and reports of proprietary devices including UTMs, Proxy Firewalls, Custom Applications and Syslog-compatible devices.	
10.17	The proposed solution must be capable to provide Multiple Dashboard Report along with the facility to customize the dashboards.	
10.18	The proposed solution should be capable of forensic analysis to help organizations reconstruct the sequence of events that occurred at the time of security breach.	
10.19	The proposed solution should provide zone-based reporting.	

10.20	The proposed solution should provide complete BYOD visibility	
10.21	The proposed solution should allow rebranding or customization of reports	
11	Application Filtering Solution	
11.1	The proposed solution must provide inbuilt Application Filtering solution	
11.2	The proposed solution must identify (Allow/Block/Log) the applications regardless of port, protocols, encryption including SSL/TLS.	
11.3	The proposed solution's application database must get updated automatically without any manual intervention	
11.4	The proposed solution must give Identity based reports (username along with IP)	
11.5	The proposed solution must be capable of blocking the following type of applications:	
11.6	a. Applications that allow file transfer	
11.7	b. Online Games	
11.8	c. Instant Messengers (Including Non-English Versions)	
11.9	d. Peer-to-Peer (P2P) applications (Including Non- English Versions)	
11.10	e. Browser Based Proxy (Regardless of IP address or Port Number)	

11.11	f. Web 2.0 based applications (Facebook, CRM etc.)	
11.12	g. Applications that provide Remote Control	
11.13	h. All type of streaming media (Both Web and Software Based)	
11.14	i. VOIP Applications	
11.15	The proposed solution must be capable of identifying hidden applications running over standard ports (80, 443, 22 etc.)	
11.16	Instant Messenger should have options to Block File Transfer, Block Audio, Block Video, Application Sharing and Remote Assistance	
11.17	Application Intelligence should have controls for Instant Messenger, Peer-to-Peer, Malware Traffic etc.	
11.18	The solution should allow for third party signature import	
12	MAF - ManufacturerAuthorization Form to be attached for the quoted specification	
13	Evaluation of the firewall by any one of the agencies: Gartner / NSS-Lab. / ICSA / EAL4 + any one Certificate	
14	The vendor should give at least two references in India where they have implemented the similar solution with 2 Gbps Internet Link & 10,000 + users in a single appliance	

SPECIFIC INSTRUCTIONS

1.	The quote must be given for one unit. The bidder should agree to	
	supply more quantity of items if required. They should quote the	
	discount if any to be allowed for increase in number of	
	requirements.	
2.	Payment Terms :	
	I. 75 % of the payment will be released after installation of the	
	firewall in production for 30 days with satisfactory	
	performance.	
	II. SLA for 99.9 % System Availability should be followed. In case of	
	failure, for 0.1 % downtime, 1% of cost will be deducted. (i.e.	
	out of 5,25,600 minutes, 5,25,074 minutes system should be up	
	and the allowed down time is 526 minutes or 8 hours 46	
	minutes in a year. Beyond it, for every 8 hours 46 minutes, 1 %	
	of the cost will be deducted).	
	III. End of every year from the date of Installation, 5% of the	
	balance payment will be released.	
3.	The manufacturer/Dealer should have an office / branch in and	
	around Chennai with sufficient technically skilled persons for	
	sorting out any issues in time.	
4.	For any Clarifications/ Queries:	
	Mr. V.Selvaraju, B.E.,M.E.,	
	Assistant Systems Engineer,	
	Computer Centre,	
	IIT Madras, Chennai - 600 036.	
	Phone: 91-044-2257 4988	
	Mobile: +91 94444 04983 / +91 9710 312 213	
	e-mail: selva@iitm.ac.in	