



ZIQUITZA HEALTH CARE LIMITED

Tender for Supply and Installation of Computers, Servers and Networking Items for the Control and Dispatch Centre at Bhubaneswar, Odisha

**Ziqitza Health Care Limited
23rd Floor, Sunshine Tower
Senapati Bapat Marg,
Dadar West
Mumbai-400013
www.zhl.org.in**

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Disclaimer

The information contained in this Request for Proposal (RFP) document or subsequently provided to Applicant(s), whether verbally or in documentary form by or on behalf of Ziqitza Health Care Limited (ZHL), or any of their employees or advisors, is provided to Applicant(s) on the terms and conditions set out in this RFP document and any other terms and conditions subject to which such information is provided.

This RFP document is not an agreement and is not an offer or invitation by the ZHL or its representatives to any other party. The purpose of this RFP document is to provide interested parties with information to assist the formulation of their Application and detailed Proposal. This RFP document does not purport to contain all the information each Applicant may require. This RFP document may not be appropriate for all persons, and it is not possible for ZHL, their employees or advisors to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP document. Certain applicants may have a better knowledge of the proposed Project than others. Each applicant should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and obtain independent advice from appropriate sources. ZHL, its employees and advisors make no representation or warranty and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of the RFP document.

ZHL may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information in this RFP document.

SECTION 1 - NOTICE INVITING TENDER

Sealed Tenders are invited by Ziqitza Health Care Limited (ZHL) on behalf of Department of Health and Family Welfare , Government of Odisha from the registered bodies for procurement of the following items as per details given below:-

Desktops, Laptops, Netbooks, Servers, SAN Storage, Contact Center solution, Network Equipment, Server Racks, Unified Threat Management, Tape Library, Printers, UPS, Modems, IP-PBX, DVR, CCTV Cameras, Biometrics, Televisions, Projector, Analog Telephones, Head Sets, IP Phones, Mobile Phones, Microsoft Windows server licenses and Microsoft SQL Licenses.

| | |
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| Tender No and Date | ZHL RFP 002 - dated 14 th August 2019 |
| Items to be procured | Items for Setting up of Emergency Response Centre as detailed in the RFP document |
| Date and time of Pre-bid meeting | 21 st August 2019, 11:00 AM |
| Last date of sale of tender paper | 24 th August 2019, 5:00 PM |
| Date and Time for Submission of Tender Documents | 7 th September 2019, 5:00 PM |
| Date and Time of Opening of Technical Bid | 10 th September 2019, 11:00 AM |
| Date and Time of Technical Presentation | 10 th September 2019, 11:00 AM |
| Date of opening of Financial Bid | 11 th September 2019, 11:00 AM |
| Venue for Submission of Tender Documents | Ziqitza Health Care Limited, Plot No 288, Satya Nagar, Bhubaneswar, Khurdha, Odisha-751007 |

The RFP document can be downloaded from www.zhl.org.in up to 24th August 17:00 Hrs of 2019.

SECTION 2 - ELIGIBILITY CRITERIA

1. The Bidder should be registered body under the Companies Act or any other Act of State Government or Government of India for at least three years as on the date of submission of the Proposal/Bid.
2. The bidder should have an average annual turnover of Rs. 10 crore for last three financial years.. The bidder must attach audited accounts or certificate duly certified by Chartered Accountant for last three years as supporting documents.
3. The bidder must have experience of setting up or implementing Control Room of minimum 50 seats in India in any one of the last 3 financial years. The work-orders and/or any other supporting documents/experience certificates issued by the client pertaining to such works done satisfactorily in the past should be provided. Bidders cannot participate for part of the items required and need to participate for all the items mentioned in the schedule of requirements.
4. An affidavit (on non-judicial stamp of Rs 100/-) to the effect that the bidder/proposer has not been blacklisted in the past by any of the State Governments across the country or Government of India and that it will not form any coalition or cartel with the other bidder/proposer. The Bidder should not have been black listed by any State or Central Govt. Institutions or disqualified by any of its clients on account of non-fulfillment of contract for supply/maintenance, Malpractices, cheating or any related issues.

SPECIAL CONDITION:

- 1. The bidder is required to quote the buy-back price of each item separately wherever applicable. The total price including CMC price for 2 (two) years and buy-back price will be considered for evaluation of L1 bidder (Please refer price bid format in Annexure-6).The Prospective bidder may visit the existing setup at 7th Floor, Idco towers, Unit-9, Sahid Nagar, Bhubaneswar-751007, for inspection of the items proposed for replacement.***
- 2. The quantity of Desktops and Laptops mentioned in the tender document may be revised at the time of placement of Purchase Order.***

SECTION 3 - INSTRUCTIONS TO BIDDERS

1. Definitions

“Service Provider” means Ziqitza Health Care Limited having its registered office at 23 Rd Floor, Sunshine Towers, Senapati Bapat Marg, Dadar (West) Mumbai 400013

“Purchaser” means Department of Health and Family Welfare, Government of

Odisha “Supplier” means Successful Bidder(s), to whom the contract is awarded

“Bidder” means those who submit the bid.

2. General Instructions to Bidders

a. An affidavit to the effect is to be submitted by the bidder that it has not been blacklisted in the past by any of the State Governments across the country and Government of India and that he will not form any coalition or cartel with other bidder.

b. The bidder to inform himself fully. The bidder shall be deemed to have been satisfied himself as to the scope of the task as well as all the conditions and circumstances affecting implementing of the Project. Should he find any discrepancy in the RFP document including terms of reference, he should submit his issue/question in writing within 3 days after the pre-bid meeting is held.

c. Cost of the RFP Document

The Cost of the RFP Document – Rs 25,000+ GST (Rs 29,500) should be remitted by way of a Demand Draft/Bankers’ cheque payable in favour of Ziqitza Health Care Limited, Mumbai along with the bid documents. If remitted earlier at the time of pre-bid meeting, they need not submit again.

d. Clarification of Bidding Documents

Issues relating to the project received in writing post 3 days after pre-bid meeting date will be scrutinized and clarified by e-mail or at the pre-bid meeting if received before the date of the pre-bid meeting. Queries to be sent to **contactus@zhl.in**. Queries received after this due date will not be entertained. However, at any time prior to the date for submission of Proposal ZHL may, for any reason, whether at its own initiative or in response to the discussions/ clarifications, modify the RFP document by issuance of addenda and convey to the persons who have purchased the RFP document. The addenda would also be placed on the website- ‘www.zhl.org.in’. Such addenda will become an integral part of the RFP become an integral part of the RFP document. Queries received after this deadline will not be entertained.

- e. Incomplete Proposals in any respect or those that are not consistent with the requirements as specified in this Request for Proposal Document or those that do not contain the Covering Letter or any other documents as per the specified formats may be considered non-responsive and liable for rejection.
- f. Strict adherence to formats, wherever specified, is required
- g. All communication and information should be provided in writing and in English language
- h. All communication and information provided should be legible. The financial proposals given in figures should be mentioned in words also
- i. No change in/or supplementary information shall be accepted once the Proposal is submitted. However, ZHL reserves the right to seek additional information and/or clarification from the Bidders, if found necessary, during the course of evaluation of the Proposal. Non submission, incomplete submission or delayed submission of such additional information or clarifications sought by ZHL may be a ground for rejecting the Proposal.
- j. The Proposal shall be evaluated as per the selection criteria specified in this RFP Document.
- k. Technical evaluation of the items tendered will be done by a Technical Committee constituted by the Service Provider and the Purchaser. The Technical evaluation criteria is as given below:

| Sl.No | Criterion | Maximum Marks | Marks obtained |
|-------|---|---------------|----------------|
| 1. | Experience of the Firm – a) One year experience – 10 marks b) Two years and more – 20 marks | 20 | |
| 2. | No of similar projects handled by the bidder in the last two years a.project: 10 marks b. 2 projects and more: 20 marks | 20 | |
| 3. | Experience of key Personnel | 20 | |
| 4. | Technical presentation including Solution Offered | 40 | |

Financial bid opening shall be done for only those applicants who score at least 60

marks in technical evaluation. The selection of Supplier shall be on L1 basis..

The Shortlisted bidders will have to make a presentation covering the following topics:

Brief Company profile, local presence, associates, major clients & projects etc.

The bidder shall furnish a certificate from the OEM as per Annexure, in respect of all the equipment.

- l. The bidder should designate one person ("Contact Person" who shall also be the "Authorized Representative and Signatory") authorized to represent the Bidder in its dealings with ZHL. This designated person should hold the Power of Attorney and be authorized to perform all tasks including but not limited to providing information, responding to enquiries, etc. The Covering Letter submitted by the Bidder shall be signed by the authorized Signatory and shall bear the stamp of the firm/ consortium
- m. ZHL reserves the right to reject any or all of the Proposals without assigning any reason whatsoever
- n. Mere submission of information does not entitle the Bidder to meet an eligibility criterion. ZHL reserves the right to vet and verify any or all information submitted by the Bidder.
- o. If any claim made or information provided by the Bidder in the Proposal or any information provided by the Bidder in response to any subsequent query by ZHL, is found to be incorrect or is a material misrepresentation of facts, then the Proposal will be liable for rejection. Mere clerical errors or bonafide mistakes may be treated as an exception at the sole discretion and satisfaction of ZHL.
- p. The Bidder shall be responsible for all the costs associated with the preparation of the Request for Proposal and any subsequent costs incurred as a part of the Bidding Process. ZHL shall not be responsible in any way for such costs, regardless of the conduct or outcome of this process.
- q. The Bidder shall seal the Technical Proposal and the Financial Offer separately in two envelopes, duly marking the envelopes as "TECHNICAL PROPOSAL" and "FINANCIAL PROPOSAL". These envelopes shall then be sealed in single outer envelope.
- r. The Bidder shall prepare (1) one original and (1) one copy of the Proposal, clearly marked "ORIGINAL" and "COPY" respectively. In the event of any discrepancy between the original and the copy, the original shall prevail.
- s. The Proposal, both the original and the copy shall be typed or written in indelible ink and an authorized signatory of the Bidder or Individual, as applicable. Shall initial each page. Each page should be duly page numbered and an index of the contents should also be made on the first page. The person(s) signing the Proposal shall also initial all the alterations, omissions, additions, or any other amendments made to the proposal.

t. Sealing and Marketing of Envelopes

- i. The Bidder shall seal the original and the copy of the Bid in separate envelopes, duly marking the envelopes as “ORIGINAL” and “COPY”. The envelopes shall then be sealed in a single outer envelope.
- ii. Each envelopes, both outer and inner, must be super-scribed with the following information:

Name and Address of Bidder

Contact person's name and phone numbers

Proposal for the Project “*Integrated Patient Transport and Health Help line Service*”:

If the envelope is not sealed and marked as instructed above, ZHL assumes no responsibility for the misplacement or premature opening of the contents of the Proposal submitted and such Proposal, may, at the sole discretion of ZHL, be rejected

u. Earnest Money Deposit & Security Deposit:

The Bidder shall deposit Earnest Money Deposit (EMD) amounting to Rupees Five Lacs Only (Rs.5.0 lacs) in the form of a Demand Draft/Bankers Cheque in favour of “Ziqitza Health Care Limited” payable at Mumbai, along with the bid. In the absence of the EMD, technical proposal of the bidder shall be rejected. The earnest money shall be forfeited in case the bidder withdraws or modifies the offer after opening of the bid but before acceptance of the bid or he does not execute the agreement and deposit security deposit within specified time. Earnest money of unsuccessful bidders shall be refunded within 30 days after final acceptance of the bid.

If any bidder is a Local Micro & Small Enterprise (SSI Unit) registered with respective DICs or having Local Udyog Aadhar, will be eligible for exemption from payment of Earnest Money Deposit. Also any bidder qualifying as Micro & Small Enterprise (SSI Unit) at national level will be eligible for the advantages under the respective policy

The successful bidder ,within 7 days of receipt of Purchase order shall be required to submit Performance Security Deposit of 10% of the order value in the form of Bank Guarantee in favour of the Service Provider. Earnest Money Deposit of the successful bidder shall be returned after furnishing the Performance Security. The Performance Security shall be returned to the suppliers on successful completion of contract after the expiry of the period covered under comprehensive onsite warranty and submission of performance security in the name of the Service Provider for an amount equal to 5 % of the Bid Amount for Comprehensive Maintenance Contract.

- v. Earnest Money /Security deposit is for due performance of the contract. It can be forfeited by the ZHL in the following circumstances:

- i. When any terms or conditions of the agreement are infringed.
 - ii. When the supplier fails in providing the services satisfactorily.
 - iii. Notice will be given to the bidder with reasonable time before the earnest money / security deposit is forfeited.

- w. A copy of the RFP Document sealed and signed in all pages by the applicant.

SECTION 4 – SCHEDULE OF REQUIREMENTS

| Sr. No. | Required Items | Quantity to be supplied |
|---------|--|--|
| 1 | Desktop (Core i3) | 187 |
| 2 | Contact center Communication Box Along with HOT Failover in DC, Cold failover in DR site | 8 servers communication box with required licenses |
| 3 | Head Phones | 150 |
| 4 | IP Phones | 150 |
| 5 | Media Gateway | 3 |
| 6 | PRI Modem | 8 pair |
| 7 | EDS Database Server | 2 server with required licenses |
| 8 | EDS Application server | 2 server with required licenses |
| 9 | EDS Closing Database server | 2 server with required licenses |
| 10 | Biometric App+ DB server | 2 server with required licenses |
| 11 | Active Directory Server | 2 server with required licenses |
| 12 | FTP Server | 1 server with required licenses |
| 13 | Antivirus Server | 1 server with 200 client license |
| 14 | Window Server CALS | 200 |
| 15 | Tape Library & tape cartridges | 1 Tape library & 32 Tape cartridges |
| 16 | Backup Software | As per required licenses |
| 17 | SAN Storage 50TB Usable & upgradable up to 2 PB | 1 |
| 18 | Fibre Channel SAN Switch for SAN connectivity | 2 |
| 19 | Layer 2 Network Switch Non-PoE | 2 |
| 20 | Layer 2 Network Switch PoE | 8 |
| 21 | Layer 3 Network Core switch | 2 |

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| 22 | Laptop | 32 |
| 23 | Netbook | 65 |
| 24 | Wireless Access Point | 6 |
| 25 | KVM Switch ,LCD panel, keyboard | 2 set |
| 26 | Unified Threat Management (UTM) | 2 UTM with required licenses |
| 27 | Biometric with Time Attendance | 3 Biometric with required licenses |
| 28 | Television | 2 |
| 29 | Color laser Printer | 2 |
| 30 | Multi-function Printer | 2 |
| 31 | Laser Printer | 2 |
| 32 | DG Set – 250 KVA | 1 |
| 33 | Rack for Server & Network | 2 |
| 34 | 12v, 150 AH UPS battery (The supplier shall quote buyback price which shall be adjusted against the price quoted for the new battery) | 60 |
| 35 | Analog telephone | 70 |
| 36 | Digital Phone | 20 |
| 37 | EPABX expansion card (Upgrade) | 1 |
| 38 | Biometric device with GPRS dongle | 512 |
| 39 | Biometric application Software + license(5000 users) | 1 |

SECTION 5 – TECHNICAL SPECIFICATIONS

| Required Items | Specifications | Qty |
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| Contact center Communication Box to Handle min 360 Channels with integration and Customization as per the requirement Along with HOT Failover in DC, Cold failover in DR site (Upgrade to existing 108 Dialer) | <p>8 servers</p> <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 6134, 3.20 GHz, 8 cores, 24.75 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory: 64GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5 – Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIe NVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer, internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability (Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface: Quad port 1Gb Base-T with cables Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO (Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP (750W each) minimum.</p> <p>LCD panel: To display system ID, status information & system error code followed by descriptive text. LCD should light up in different colors during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows</p> | 8 |

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| | <p>server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>5. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system in Clustering mode and SQL 2016 Enterprise in clustering with all required drivers, software & configurations.</p> <p>24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security:</p> <p>Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user | |
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| | <p>defined configuration template & remediation of misconfigurations</p> <ul style="list-style-type: none"> • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert: Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> <p>Call center solution requirements The vendor should be recognized by reputed Industry bodies or research firms (likes of Gartner, Deolitte, Frost & Sullivan, TMCNet, Nasscom) for offering such Technology for at least 8 years, and should have at least 10 such recognitions (share list of awards and accolades)</p> <ul style="list-style-type: none"> - Number of Inbound agents - 140 agents (Upgrade from current 60 agents) - Number of Outbound agents – 10 agent - No of channels - 360 - Number of Supervisors - 10 supervisors (Upgrade from current 6 supervisors) - Number of admin – 2 admin (Same as current 2 admin) - Number of ACD – 330 - Number of Wallboard - 3 (Same as current 3 wallboard) - Number of IVR channels – 50 - Auto Failover license corresponding to the 150 Agent licenses and 10Supervisors - Voice Log Archival for 150 agents for 5 years - Reporting Server for 150 agents for 5 years | |
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| | <p><u>Call Centre Solution Requirement</u></p> <ul style="list-style-type: none"> - The proposed system should be based on Service Oriented Architecture and should support granular web-services API for flexible service delivery - The system should support to run on MS Windows, UNIX, Linux systems - Call Centre solution should be capable of integrating with various third party CRMs with use of web-services API and standard connectors (based on web-services API). Please name at least 2 known CRM vendors with which the solution has been deployed with such integration - The vendor should have an experience of more than 7 years supporting such technology (please share case-study and reference of 2 customers (with contact details) which are using such technology since more than 7 years) - The vendor should have supported emergency service setup for more than 5 years. - The offered Technology should be scalable please share minimum 3 references of sites (with contact details) with more than 500 trunk ports and 500 agents in a single instance of setup -There should be no shelf-life of the system. All updates and upgrades should be part of solution. I.e. There should be no compulsion to upgrade to a different product in future but the system should provide updates/upgrades at no additional cost. -Should consist of open-standard and open-platforms and should not require use of proprietary technology i.e. the system should be based on a non-standard telephony protocol for calls between telephone/PC with systems. The system should not be mandating use of a particular 3rd party system like a CRM or a DB but should be able to integrate with use of open-standard protocols and APIs -No proprietary hardware should be required. The system should be able to work on COTS (Commercially off the shelf) server machines as processing power and should not require any one particular proprietary hardware as compulsion. <p><u>Interactive Voice Response (IVR) Functions</u></p> <ul style="list-style-type: none"> -The proposed system should provide Interactive Voice Response function to support automatic service to reduce the cost of manual service. -The proposed system should provide the unified IVR portal for different set of callers -IVR should support the transfer of call to agent and agent to IVR as many times as required -IVR should be capable of handling integrations with third party system for assisting self service - The agent can transfer the call to the specified IVR menu. -The proposed system should provide the data for analysis of traversed IVR - IVR solution must allow the creation and modification of IVR messages at administration/supervisor level -The proposed system should be capable of announcing numbers, digits, currency without the need of a TTS (Text To Speech) Engine - The proposed system should be compatible for multiple | |
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| | <p>language support like English and others</p> <ul style="list-style-type: none"> - The proposed system must be able to understand DTMF signals - IVR should have the ability to incorporate office hours functionality i.e. System should be able to provide office hours integration wherein if the call is received after the office hours, the system should play the after office hours IVR Flow - IVR should be based out of XML - System should provide an easy GUI Tool to change the IVR prompts on the implemented IVR flow - System should be capable to support voicemail feature wherein the callers can leave a voice message and can be called back later on the provided number at the desired time -System should be able to provide office hours integration wherein if the call is received after the office hours, the system should play the after office hours IVR Flow - System should be able to identify notorious activities and repeated calls from same number which may hamper the security or productivity of the business. System should also be able to blacklist such numbers and reject calls from these numbers - The system should be capable of announcing the customer's position in the queue before getting connected to the agent. - The system should be capable of announcing the customer's estimated waiting time before getting connected to the agent. <p><u>Routing Functions</u></p> <ul style="list-style-type: none"> -The proposed system should support the routing schemes of first in first service for customer - The proposed system should support the routing schemes of first idle first service for agent -The proposed system should support the routing schemes of skill based routing - The proposed system should support the routing schemes of CLI based routing - The proposed system should support the routing schemes of channel based routing -The proposed system should support the routing schemes of preferred agent routing. Based on business logic, the customer can be mapped with a preferred agent. In case the agent is not available or busy (configurable definition of busy or not available), the call gets routed as per general routing logic - The proposed system should support the routing schemes of customer value based routing - Each agent should have multiple skills. And each skill has priority definition, so that the agent can serve more than one customer groups. And the supervisor shall to be able to change the agent skill on the fly in live environment - Agent can be set on different ranks, so high rank agent can have the priority to answer the calls when more agents are waiting for calls. - The proposed system should support segmented access rate for different customer group. The high level customer group should be able to access to the system with high access rate and high priority to agent service. -The proposed system should support queue waiting overtime control and overflow control. After the call in the queue is | |
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| | <p>overtime yield or overflow yield, the call should be able to be routed to other resources, such as IVR, other queue, or specific agent. Provide call back option or release the call with an announcement.</p> <ul style="list-style-type: none"> -The proposed system should support multiple queues for different customer group or for different service requirements. -The proposed system should support queuing priority. For the same service requirements, the calls of these one have higher class can be come into the special prior queue. -The calls should be freely transferred between agent and agent, between agent and IVR, agent and skill queue etc. and the service data should be transferred at the same time with the call. -The proposed system should support to allow change for music on hold on the fly - The proposed system should support to allow a recording or promotion offer to play during customer on hold - Multiple queues can be managed and routing can be based on service data from IVR to those queues <p><u>Dialer Functions</u></p> <ul style="list-style-type: none"> - Dialer should support preview dialing mode - Dialer should support progressive dialing mode -Dialer should support predictive dialing mode - The proposed system should support to manage special list and provides the management like add, import, delete, batch modify or batch export about special list - The proposed system should support setting different calling periods for work days and holidays - The OB (outbound system) need to be integrated with the CRM/customer information to be provided to the agents - The ability to tag the customer as blacklisted should be supported in the solution - Dialer should have the capability of fetching the contacts for dialing based on the defined priority and weightage of the leads - Dialer should dial limited number of time the call backs on pre-defined date and time based on the availability of earlier handled agent. Otherwise, route it to the next available agent after specified number of tries achieved. - The proposed system should have functionality to control action on dialing by defining conditions on different lead list. (E.g. if the number of connects from a lead list reaches 100 then the dialer should stop dialing from that particular lead list.) - Lead list and callbacks should be managed automatically as per configurable Time Zones <p><u>Agent Desktop Application Functions</u></p> <ul style="list-style-type: none"> -Agent desktop has to be web based and should be supported in IE, Firefox, Chrome browsers -Application should provide support for integration with CRM to have customer basic profile, customer package and related information including the customer contact history - Agent must be authenticated when logging in the system. If require single login methodology should be supported by the application along with other third party databases. - Application should perform based on the assigned rights to an agent | |
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| | <ul style="list-style-type: none"> - Application should provide the call function for Answer/release - Application should provide the function to set agent as Busy - Application should provide the function to set agent on Break/Available - Application should provide the function for Mute -Application should provide the function for Hold -Agent should be able to transfer the call to any other agent - Agent should be able to transfer the call to a specified IVR section - Agent should be able to seek help from other agent or supervisor - Agent should be able to hang-up each conference participant individually -Application must provide the interface of customer data to agent based on the service data captured in IVR or based on any other customer related information -Application should support the function of call back where agent can set the call back for any specified date and time for a customer - Application should provide the reminder for call back to the agent - Application should have the feature to mark status to each call as disposition. - Application should allow agent to do manual dialing - Should support the functionality to auto answer the calls instead of the agent to press receiver button. - Application should allow chatting between agents - Application should allow chatting between agent and supervisor even when agent is on live call - The proposed application should support customer information popup when the call is connected to the agent. - The proposed system should have a soft phone/webRTC integrated with the agent interface - The agent should be able to transfer the customer call back on a different IVR or queue from the unified agent desktop - The system should provide configuration of few hot-line numbers wherein the agents can initiate a conference / transfer using single click (or minimum clicks) - The system should provide agents with capability to take multiple parties in conference. <p><u>Supervisor Functions</u></p> <ul style="list-style-type: none"> - Application should provide the ability to monitor log in and log out for agents - Supervisor should be able to see agents' presence i.e. available agents and those who are either busy or on break - Supervisor should be able to snoop into a call – i.e. listen into a call - Supervisor should be able to barge into a call - i.e. take over a call - Supervisor should be able to whisper with an agent – ability to speak with the agent without alerting the customer -Supervisor should be able to do conference with agents and customer in real time -Supervisor should be able to terminate a login session of agents - Force logout/login of agents | |
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| | <ul style="list-style-type: none"> -Application should provide the support to monitor agent customer interaction in real time -Supervisor should be able to download recorded calls and assign scoring to the respective agents at operations level, unique for each campaign -Supervisor should be able to rate calls using a combination of gradient rating (Bad, Fair, Good, Excellent and such) and a YES/NO type. Capability should be there to generate reports for scoring. - Application should support the capability to monitor calls queues and assignment of agents if need arises – i.e. Outbound to Inbound - Supervisor should be able to manage callbacks redefining schedules - Application should provide support to supervisor to act as agents - Application should provide a dashboard to monitor productivity real time with major KPIs - Solution should support the supervisor to view whether call has been disconnected at customer end or agent end - Solution should support to allow supervisor to change the auto-dialing algorithm at run-time without a restart or reset - Supervisor should be able to assign agents with leads for preview dialing - Supervisor GUI allow him/her to manage the contact lists for dialing - System should be able to integrate and pass the vital statistics to be displayed for business productivity - Supervisor should be able to assign skills to agents and queues from the provided GUI - Supervisor can map agents with queues. - Supervisor GUI should allow the queue wise SLA in live dashboard - Supervisor should be able to see the past calls related history - Supervisor's live dashboard must provide agent's current status including: <ul style="list-style-type: none"> • Telephony status - if on-call • User presence - if on break, on-call, idle • Since what time user is on call or on break • Number of breaks user has taken • Number of calls user has attended • Number of calls user has dialed • Breakup of all user dispositions • Average wrap-up time of user in past hour • Average call-duration in past hour • Longest call-duration in past hour • Number of callbacks done by user <p><u>Recording and Quality Functions</u></p> <ul style="list-style-type: none"> - The proposed system should provide voice recording system that must record all the conversation of the agents for both inbound and outbound call - System should provide 100% call recording - Voicelogs are automatically archived and stored through an intelligent algorithm that effectively minimizes strain processing and storage of servers. |
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| | <ul style="list-style-type: none"> - The voice recording should be easily retrievable in desired format by the authorized personnel. - Supervisor should have the option to listen, play, forward, rewind and rate the agent's recording through a single unified interface - The recording should be easily searchable based on following parameters <ul style="list-style-type: none"> a. Date b. Time c. Call type d. Agent List e. Caller Number f. Number dialed for outbound calls h. Customer status <p><u>Reports</u></p> <ul style="list-style-type: none"> - The report template should be customizable - Report to be able to give the number of breaks an agent has taken - Report to be set on different KPI parameters like call answered time, agent utilization report, wrap up time, average call handling time etc. - Report should be able to provide the SLA based reporting - The proposed solution should support Release party report, i.e report stating hung-up details for each call - Queue drop calls report with MSISDN and time stamp - The report should have details about missed calls - Some reports should comprise of graphical charts exhibiting the statistics - Automatic archiving of Reports on separate server for backup of the historical data <p><u>Security and Encryption</u></p> <ul style="list-style-type: none"> - Contact Centre solution should be robust and modular in nature which allows high flexibility in the system design leading to easiness in achieving add-on modules. Proposed system should provide encrypted data exchange between client machines and Server to ensure higher level of security. All modules including the Application server, management server, reporting server must be configured to be accessed via only Secure Socket Layer (SSL) which uses RSA encryption and Public Key Infrastructure (PKI). - System should provide high availability, load balancing and redundancy in the application to ensure the business continuity. -Proposed should be recoverable in case of disaster recovery , where DR site should be separate independent location <p><u>Voice Logger Archiving</u> – Voice logger Archival Duration – 5 years</p> <p><u>Reporting Server Module</u> – Reporting server duration – 5 years</p> <p><u>CRM integration</u> - URL based CRM integration module to API providing flexibility with inherent systems and applicable as per set-up basis</p> <p><u>Customer Priority</u> -Feature allowing for routing of preferred customers for priority engagement.</p> | |
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| | <p><u>Stats Wallboard</u></p> <ul style="list-style-type: none"> - Stats wallboard for two users - Stats manager for in-depth management of business processes <p><u>Platinum support</u>– 24*7*365 for 5 years</p> <p><u>Implementation</u> – Implementation of the all the above software features</p> | |
| Media Gateway | <p>Gateway should be support Minimum 4 PRI</p> <ul style="list-style-type: none"> - Line Gateway should be field- license upgradable for 60, 90, 120 simultaneous calls. - Installation wizard should be GUI based - Auto Firmware upgradation support - Auto configuration upgrade - Gateway should support pcap trace - Local Survivability :Survivability for IP phones Enterprise Applications - Hardware Failover - 4 T1/E1 failover ports provide seamless connectivity through to another gateway allowing calls to continue. - VoIP Interface <ul style="list-style-type: none"> a) SIP b) T.38 FAX c) VoIP Channel Capacity up to 120 - Telephony Interface T1 <ul style="list-style-type: none"> a) NI1/NI2 b) AT&T 5ESS c) CAS (RBS) d) DMS100 e) ISO QSIG f) CAS Private Wire Telephony Interface E1 <ul style="list-style-type: none"> a) Euro-ISDN b) ISO QSIG c) VN d) CAS R2MFC e) CAS Private Wire - Audio Codecs <ul style="list-style-type: none"> a) G.711 (a-law/u-law) 64 kbps b) G.723.1 (5.3/6.4 kbps) c) G.729a (8kbps) d) G.726 e) T.38 - Caller ID presentation & screening - SIP Registration & digest authentication - LAN Interface 2x RJ-45, 1000BaseT /100BaseTx / 10BaseT ,full / Half duplex - Operations, Maintenance & Billing <ul style="list-style-type: none"> a) HTTP(S) web server b) SNMP V1, V2 & V3 c) TFTP/FTP support d) Radius accounting & login e) VT100 - RS232/Telnet/SSH f) Auto configuration upgrade - Routing & Numbering <ul style="list-style-type: none"> a) Direct Dialing in DDI | 3 |

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| | <ul style="list-style-type: none"> b) SIP Registration to multiple proxies c) Dial planner sophisticated call routing capabilities d) NAT - Security & Encryption <ul style="list-style-type: none"> a) Management -HTTPS, SSH Telnet b) Configurable user login password c) SIP/TLS and SRTP - Call Quality <ul style="list-style-type: none"> a) Adaptive jitter removal b) Silence suppression c) Type of Service (ToS) d) Differentiated Services (DiffServ) e) Comfort noise generation f) 802.1p/Q VLAN tagging g) Echo cancellation (G.168 up to 128ms tail) - Redundancy/Survivability <ul style="list-style-type: none"> a) Hardware failover using bypass E1 ports - Hardware Certification - EMC (CLASS B) EN55022, EN55024, FCC Part 15, AS/NZS3548, Safety - EN60950, IEC60950, UL60950, AS/NZS60950 - Hardware Certification - TELECOMS (ISDN) E1:TBR4, T1:FCC Part 68, T1: CS-03, VCCI - Environmental <ul style="list-style-type: none"> a) 0° .. 40°C b) 0% .. 90% humidity (non-condensing) - LED Indicators <ul style="list-style-type: none"> a) Power b) ISDN:NT/TE & Link UP c) LAN : Speed/ activity - Power Supply <ul style="list-style-type: none"> a) Internal PSU 100...240 VAC, 47...63 Hz, 1..0.5 A | |
| Head Phones | Binaural Noise Cancelling Headset: Flexible hose microphone boom, Anti-static shock microphone, Microphone: Uni-directional (noise cancellation), Weight: Super lightweight for long hours use, Cable Jack, Adjustable headband soft ear cushion. | 150 |
| IP Phones | Compatible with SIP/ POE/Loop back/Dual SIP account/VOIP/2x RJ45 ports 10/100/1000/external Headsets facility and 132/64 Graphic LCD, 3 VOIP Accounts, HD Voice, HD Codec, HD Hand set and HD Speaker, Dual Ethernet | 150 |
| PRI Modem | <ul style="list-style-type: none"> . User port options: E1, T1, V.35, X.21, RS-530, and 10/100 Base T User port with bridge or router . Multiplexer version available with two user ports, integrating V.35/X.21/RS-530 data, 10/100 Base T LAN or E1 traffic over an SHDSL link . Complies with ITU-T G.991.2 and ETSI 101524 standards for SHDSL . Operates at multiple data rates between 64 kbps and 4608 kbps enabling single platform system upgrades . Working on 230V AC & 48V DC . Support: T1/E1/PRI | 8 Pair |
| EDS Application server (production setup) | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores,16.5 MB</p> | 2 |

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| | <p>L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory:64GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive:</p> <p>4 x 1.2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5– Parity + fault tolerance)</p> <p>Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIeNVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer , internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability(Five x8 and three x16 slots)</p> <p>Raid Controller:</p> <p>12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface:</p> <p>Quad port 1Gb Base-T with cables</p> <p>Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO(Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP(750W each) minimum.</p> <p>LCD panel:</p> <p>To display system ID, status information & system error code followed by descriptive text. LCD should light up in different colors during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance:</p> <p>User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system Installed: Microsoft Windows Server 2016 Standard Edition for 8 cores. License should be valid for 5 years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along</p> | |
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| | <p>with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>6. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system in Clustering mode. 24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security: Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user defined configuration template & remediation of misconfigurations • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be | |
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| | <p>able to dynamically enable them as needed for technicians</p> <ul style="list-style-type: none"> • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert: Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| EDS Call Taker Database Server (Production Setup) | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores,16.5 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory:128GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 1.2TB 15k rpm SAS 12 GBPS or higher disks (in RAID5 – Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIeNVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer , internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability(Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface: Quad port 1Gb Base-T with cables Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port</p> | 2 |

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| | <p>other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO(Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP(750W each) minimum.</p> <p>LCD panel: To display system ID, status information & system error code followed by descriptive text. LCD should light up in different colors during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system & Database Installed: Microsoft Windows Server 2016 Standard Edition, Microsoft SQL Server 2016 Enterprise edition for 8 cores. License should be valid for 5 years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication. 2. Server should have dedicated 1 GBPS remote management port. 3. Server should support agentless management using the out-of-band remote management port. 4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs. 5. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software</p> | |
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| | <p>should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system in Clustering mode and SQL 2016 Enterprise in clustering with all required drivers, software & configurations.</p> <p>24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security:</p> <p>Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user defined configuration template & remediation of misconfigurations • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert:</p> <p>Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty:</p> <p>5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
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| <p>EDS Closing & Reporting Database server(Production setup)</p> | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores,16.5 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory:128GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 1.2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5– Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIeNVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer , internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability(Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface: Quad port 1Gb Base-T with cables Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC(should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO(Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP(750W each) minimum.</p> <p>LCD panel: To display system ID, status information & system error code followed by descriptive text. LCD should light up in different colors during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system & Database Installed: Microsoft Windows Server 2016 Standard Edition, Microsoft SQL Server 2016 Enterprise edition for 8 cores. License should be valid for 5</p> | <p>2</p> |
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| | <p>years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>5. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system in Clustering mode and SQL enterprise 2016 in clustering with all required drivers, software & configurations.</p> <p>24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security:</p> <p>Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user defined configuration template & remediation of misconfigurations | |
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| | <ul style="list-style-type: none"> • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert: Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| Active Directory Server Primary & Secondary (Production Setup) | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores,16.5 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory:32 GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 1.2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5– Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIeNVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer , internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability(Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface: Quad port 1Gb Base-T with cables Dual Port 25Gbps SR ports with cables Ethernet from day one</p> | 2 |

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| | <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO(Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP(750W each) minimum.</p> <p>LCD panel: To display system ID, status information & system error error code followed by descriptive text. LCD should light up in different colours during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system Installed: Microsoft Windows Server 2016 Standard Edition. License should be valid for 5 years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>5. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide</p> | |
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| | <p>support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system. 24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security:</p> <p>Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user defined configuration template & remediation of misconfigurations • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert:</p> <p>Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty:</p> <p>5 years comprehensive warranty with 24x7x365 remote</p> | |
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| | hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM. | |
| FTP Server (Production Setup) | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores, 16.5 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory: 32GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 1.2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5 – Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIe NVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer, internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability (Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface: Quad port 1Gb Base-T with cables Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO (Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP (750W each) minimum.</p> <p>LCD panel: To display system ID, status information & system error error code followed by descriptive text. LCD should light up in different colours during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> | 1 |

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| | <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system Installed: Microsoft Windows Server 2016 Standard Edition. License should be valid for 5 years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>5. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system in Clustering mode and SQL 2016 in clustering with all required drivers, software & configurations. 24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security:</p> <p>Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user | |
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| | <p>defined configuration template & remediation of misconfigurations</p> <ul style="list-style-type: none"> • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert: Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| Antivirus Server (Production Setup) | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores, 16.5 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory: 32GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 1.2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5 – Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIe NVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer, internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2 PCI-e or PCI-X) slots for future expandability (Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface:</p> | 1 |

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| | <p>Quad port 1Gb Base-T with cables</p> <p>Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO(Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP(750W each) minimum.</p> <p>LCD panel: To display system ID, status information & system error error code followed by descriptive text. LCD should light up in different colours during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User- selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system Installed: Microsoft Windows Server 2016 Standard Edition. License should be valid for 5 years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>5. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2</p> | |
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| | <p>support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system with all required drivers, software & configurations.</p> <p>24X7 Onsite service & support till the warranty and AMC get expired.</p> <p>Server security:</p> <p>Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user defined configuration template & remediation of misconfigurations • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert:</p> <p>Intrusion alert in case chassis being opened. It should be</p> | |
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| | monitored using integrated system management tools. Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM. | |
| Anti-virus Software license (Upgrade) | Symantec End point Protection 14.1 5 years subscription | 200 |
| Window Server CALS | Microsoft Windows server CALs for 250 Domain Controller users | 200 |
| SAN Storage 50TB Usable & upgradable up to 2 PB | <p>Architecture: Storage must feature Fibre Channel architecture. It should not be a SAN emulated on File System. The architecture should allow modular upgrades of hardware and software for investment protection.</p> <p>Spindle Flexibility: The array should support the following spindles: 10K / 15K RPM SAS, 7.2K RPM NL-SAS and SSD drives. Mix and match of different type of spindles should be supported behind the same pair of controllers.</p> <p>Array Architecture: The array should be equipped with paired array controllers for redundancy. The storage system should be provided with 128GB system memory across SAN controllers The storage system should be supplied with 8 x 32Gbps FC & 8x10Gbps iSCSI Ports across controller The storage system should be supplied with minimum 4 x 12Gbps back-end ports The SAN must include support for synchronous & asynchronous replication. Further, the replication must be bi-directional to support multiple replication options.</p> <p>Replication: The two SAN storages have to be configured as Primary & DR storage with synchronous replication for "zero data loss" in case of failure of primary one storage.</p> <p>3-site replication: Proposed storage should support 3-site data replication (i.e. zero data loss between DC & near DR & async replication near DR & far DR) natively & without using any appliance</p> <p>Array Features to be included: Array Features to be included (with required license, if any) Intelligently restripe data as disks are added to optimize performance. The Storage to include licenses for Snapshots/ Virtual disk copy & Thin Provisioning, QoS, De-duplication & Compression should be supported. Must have capability to Write in RAID 10 & Read in RAID 5 for same LUN. In case of unavailability of such feature vendor should give 30% additional up & above the useable capacity mentioned. The SAN must allow RAID levels to be changed on the fly without taking down the server to which the volume is attached. The SAN must allow any LUN provided to a system configured with both types of server connectivity (fiber channel or iSCSI) and must be capable of mapping volumes from one</p> | 1 |

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| | <p>connectivity type to the other without changing or copying the data.</p> <p>Storage capacity: The bidder should configure adequate number of HDD/ SSD Drives</p> <p>Storage scalability: The array should be scalable to a minimum of 220 disks of the offered configuration of the disk count behind the same controller pair by adding the appropriate number of spindles and disk shelves. Storage should be scalable to 2PB Raw.</p> <p>Cache Protection: System memory should be mirrored between the Active-Active controllers (load balancing). The paths should be redundant (at least 2 paths) to prevent disruption if one path fails. Must support either Cache battery backup or fully automatic de-stage of cache to disks or it should be non-volatile DIMM (NVDIMM) during power failure to prevent possible data loss.</p> <p>No single point of failure Architecture: Storage Array should be configured in a No-Single-Point-of-Failure Architecture.</p> <p>OS Support: Industry leading Operating System platforms including: Windows Server 2008, Sun Solaris, HP-UX, IBM-AIX, Linux 2.6 and above, RHEL-5, VMware, Hyper-V.</p> <p>Global Hot Sparing: System should have capability to designate multiple global hot spares that can automatically be used to replace a failed drive anywhere in the system.</p> <p>RAID level support: Storage system to support HARDWARE based RAID only. Must support various Hardware RAID levels such as 10, 5 and 6 (Dual Parity Protection). Must support inter-mixing different RAID groups within one storage system. Different type of RAID levels should co-exist within the same array simultaneously to match different protection requirements of data.</p> <p>Online RAID Group expansion: Must support online expansion of RAID Group. Must be able to add additional disks on the fly to expand the RAID group capacity.</p> <p>Online LUN migration for flexibility of redeployment: The array should support online LUN migration (transparent movement of volumes within the array). The functionality should allow cross RAID migration and cross spindle migration</p> <p>Array Management: Entire system must be manageable from a web-based single, secure interface without requirements for a separate management device or server. Entry-level system must have same management platform as the manufacturer's largest system in order to allow system expansion without learning curves in the future. Management system must include comprehensive online and remote monitoring abilities without third party hardware or software. At-a-glance, comparable views of current aggregate capacity statistics and overall storage resource objects for all SANs of same series from the vendor</p> <p>Controller software and Non-Disruptive Upgrade:</p> | |
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| | <p>Firmware should be upgradeable for functionality improvement and enhancements. Must support non-disruptive upgrade of core software, BIOS, snapshot, clone, remote mirroring and management software without shutting down the storage system. All host-attached servers must remain fully operational during system level or maintenance upgrade procedures.</p> <p>Information Life Cycle Management: Data must be automatically moved in a Bi-Directional manner in all the tiers available and also should support Tiering among SLC and MLC SSD drives Software must be able to be managed within a single pane of glass</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| Fibre Channel/ Ethernet Converged Switch for SAN connectivity | <p>Market Presence: The OEM should have presence on Gartner or any other reputed leading information technology research and advisory company</p> <p>Device Type: Switch supporting Full Enterprise Layer 3 image supporting IPv6 and BGP with the latest Firmware as available with Line rate non-blocking performance.</p> <p>Ports Scalability: The switch should support 48 x SFP+ interfaces and 6 x QSFP28 40G/100G interfaces</p> <p>Port Requirement:</p> <ul style="list-style-type: none"> • Each switch to be supplied with following Optic, DAC cables for 10G/40G as mentioned with appropriate Port licenses as required • 100GbE AOC 10 meter cable - 01 nos used for Interswitch connectivity to form HA per switch • 10G-LR optic - 24 nos per switch • 25G-SR optic - 24 nos per switch <p>1G/10G/40Gig support: All Licenses required to enable 40G to be supplied from day one for all the ports as required. The 1G/10G/25G/40Gig would be required to connect Storage, Server, Access Switches over 1G/10G MMF/SMF etc using IEEE standard mode of connectivity.</p> <p>High Availability: The switch should support HA options in Active - Active or Active Backup configuration as required, all supporting features and licenses to be provided to support the same.</p> <p>Inter-core connectivity: The switches should be interconnected to offer linerate speed as desirable.</p> <p>Interfaces to connect Servers: The switch should support relevant 10G/25G interfaces to connect Servers.</p> <p>Performance:</p> <ul style="list-style-type: none"> • Switching Capacity: Minimum 3 Tbps backplane or more • Switching Throughput: Minimum 2 million pps with nanosecond latency | 2 |

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| | <ul style="list-style-type: none"> • MAC Address Table Size: Minimum 132K MAC addresses • 802.1Q Vlan: 4K 802.1Q vlans with 4K vlan ID support <p>Networking Features:</p> <ul style="list-style-type: none"> • Data Link Protocol: Ethernet, Fast Ethernet, Gigabit Ethernet, 10 Gigabit, 25 Gigabit, 40 Gigabit, 100 Gigabit • Routing Protocol: Should support L3 routing in hardware for both IPv4 and IPv6 packets • Should support 60K route table capacity for IPv4 and IPv6 in hardware. • Should support Static Route, RIP, OSPF, ISIS, BGP from Day one for both IPv4 and IPv6 considering all License, software, hardware upgrades required if any. • Link Aggregation: Should support 8 ports upto max 128 LAG groups, should be able to LAG across switches • Switching Protocol: Ethernet • Status Indicators: Link activity, port transmission speed, port duplex mode, power, link OK, system <p>Compliant Standards:</p> <p>IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, 802.3ae 10 Gigabit Ethernet, 802.3ba 40Gigabit Ethernet, 802.1p L2 Prioritization, 802.1Q VLAN Tagging, Double VLAN Tagging (Q in Q), GVRP, 802.1D Bridging, GARP, GMRP, 802.3x Flow Control, 802.1ac Frame Extension for VLAN tagging, 802.1x Port based Network Access Control</p> <ul style="list-style-type: none"> • Vlan: Should support 802.1Q VLAN Tagging, QinQ VLAN Tagging, GVRP etc • DHCP: Should support DHCP (Client, Snooping and Relay), with UDP helper • Multicast: MLD Snooping v1/v2, MLD snooping, IGMP Snooping v1/v2/v3, PIM technologies • Redundancy Protocols: • Should support STP, RSTP, MSTP/PVST, Root Guard, BPDU Guard, multiple Instances of minimum 32 of STP, and technology to offer sub milliseconds failover • Should support BFD/sub-millisecond fast failover ring technologies etc • Should support technologies similar to MLAG, ECMP, Stacking etc • QoS: Should support and create Policy Maps using DSCP values, QoS Rate Adjustment, Strict-priority Queueing, Weighted Random Early Detection, minimum 8 queues using 802.1p or similar • should support remarking of 802.1p and DSCP priorities, along with Prioritization and Congestion Management. <p>Management Function:</p> <ul style="list-style-type: none"> • Should support encrypted communication between the user accessing the device namely using all access methods CLI, GUI or NMS via features like SSHv2, SSL, and SNMPv3 and Secure FTP/TFTP • Support be able to define various user Privilege level mapped to various configurations modes • Should support features like LLDP, LLDP-MED or equivalent • The Operating image should be modular in architecture with the industry standard CLI would be preferred along | |
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| | <p>with SNMP and XML support.</p> <ul style="list-style-type: none"> • XML/PERL/Python/API integration support should provide the ability to control IP addresses, configure both physical and logical interfaces, configure Access controls. • The proposed switch should have the ability to disaggregate software and hardware using SDN feature and ONIE initiatives or equivalent. • The Operating image should be user friendly with online interactive help, and advance features like Grepetc • Should support automated rollback and restored of multiple configuration files without the reboot of the chassis. • Should support mass provisioning methods using standard based DHCP and File transfer utilities. • Should support inbuilt cable tester or a TDR function to to resolve link issues that helps detect obvious open or short conditions • Should support Openflow to integrate with open source controllers • Should support sFlow or equivalent • Should support management vlans and Port namings to each interfaces • Should support Link Layer Discovery protocols • Should support multiple configuration and system files • Should support management function like Ping, Telnet, Tracert for both IPv4 and IPv6 <p>Miscellaneous</p> <p>Physical parameter of switch</p> <p>Power Device: Internal Hotswappable Power supply AC with lowest power consumption would be preferred</p> <p>Voltage Required: AC 120/240 V (50/60 Hz)</p> <p>Redundancy: The proposed switch should be offered with FAN and Power supply Redundancy.</p> <p>operating specifications: Operating temperature: 32° to 104°F (0° to 40°C)</p> <p>Voltage Required: AC 120/240 V (50/60 Hz)</p> <p>Datacenter Cooling: proposed switch hardware design FAN should offer front to back air flow mechanism to manage the hot/cold aisle environments in the DC.</p> <p>Compliant Standards:</p> <p>Should be ROHS Compliant</p> <p>Safety: UL/CSA 60950-1, Second Edition</p> <p>EN 60950-1, Second Edition</p> <p>IEC 60950-1, Second Edition Including all National Deviations and Group Differences</p> <p>EN 60825-1 Safety of Laser Products Part 1: Equipment Classification Requirements and User's Guide</p> <p>EN 60825-2 Safety of Laser Products Part 2: Safety of Optical Fibre Communication Systems</p> <p>FDA Regulation 21 CFR 1040.10 and 1040.11</p> <p>Emissions: Australia/New Zealand: AS/NZS CISPR 22: 2006, Class A</p> <p>Canada: ICES-003, Issue-4, Class A</p> <p>Europe: EN 55022: 2006 (CISPR 22: 2006), Class A</p> <p>Japan: VCCI V3/2007.04 Class A</p> <p>USA: FCC CFR 47 Part 15, Subpart B, Class A</p> <p>Immunity: EN 300 386, EN 55024, EN 61000-3-2, EN 61000-3-3,</p> | |
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| | <p>EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6 or equivalent standards</p> <p>Warranty and Support SLA: OEM warranty for 5 year 24x7 Next Business Day, Post installation, 5- year product warranty should reflect in the support web site of the OEM.</p> | |
| Tape Library, tape cartridges & Backup Software | <p>Capacity: 1. Shall support native data capacity of minimum 2.5 TB(Uncompressed). 2. Shall be offered with minimum of three LTO-8 FC tape drives configured. Tape drive shall support encryption.</p> <p>Form factor: Rack mount, maximum 3U</p> <p>Cartridges slots: Minimum 32 cartridge slots & 32 LTO-8 cartridges & 2 no's cleaning cartridges.</p> <p>IO slots: Minimum 5 import / export slots</p> <p>Drive scalability: Scalable to 21 LTO drives using expansion modules</p> <p>Cartridges slots scalability: Scalable to 272 cartridge slots using expansion modules</p> <p>Partitioning: Libraries that contain at least two drives should be configurable into two logical libraries. It is possible to configure up to 21 logical libraries in the library (up to the number of drives installed)</p> <p>Encryption feature: Should include activation license for standard support for host Application Managed Encryption (AME) and Library Managed Encryption (LME)</p> <p>Cartridges: Should include 48 nos. LTO8 cartridges & 2 nos. cleaning cartridges with labels</p> <p>Remote management: Should support remote management with the management GUI</p> <p>Remote monitoring: Remote monitoring with Simple Network Management Protocol (SNMP)</p> <p>Management interface: Should provide web based remote graphical management interface</p> <p>Tape drive Architecture: Offered LTO-8 drive in the library shall confirm to the continuous and data rate matching technique for higher reliability. Should support Multipath architecture & Host-based path failover</p> <p>Speed: offered LTO-8 drive shall support minimum 160 Mb/ sec in native burst mode.</p> <p>Connectivity: Offered tape library shall provide minimum 8 GBPS native FC connectivity to each SAN switches.</p> <p>Other Features: 1. Tape library shall have GUI panel 2. Shall have configuration for redundant power supply</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post</p> | 1 |

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| | <p>installation, 5- year product warranty should reflect in the support web site of the OEM.</p> <p><u>Backup Software Specifications</u></p> <ul style="list-style-type: none"> • Proposed backup software required for 11 servers (The backup server should be compatible to run on both Windows and Linux OS platforms) • Proposed backup software should be available on various OS platforms like Windows, Linux, HP-UX, IBM AIX, Solaris etc. The backup server should be compatible to run on both Windows and Linux OS platforms • The backup software should be able to encrypt the backed up data using 256-bit AES encryption on the backup client and should not demand for additional license, any such license if needed should be quoted for the total number of backup clients asked for. • The backup solution should also support online LAN Free SAN based backups of databases through appropriate agents; Important Applications being Oracle, Microsoft SQL Server, Exchange, SharePoint, IBM DB2 UDB, Informix, Lotus Notes/Domino, MySQL, SAP, SAP HANA & Sybase etc. • Should able to dynamincally break up large savesets into smaller savesets to be backed up in parallel to allow backups to complete faster for Windows, Unix and Linux clients. • Should have in-built calendar based scheduling system and also support check-point restart able backups for file systems. It should support variuos level of backups including full, incremental, differential, synthetic and virtual synthetic backups • The proposed backup software should have the capability to enable WORM on the backup sets from the backup software console on proposed disk backup appliance • The solution must support client-direct backup feature for file system, applications and databases to reduce extra hop for backup data at backup/media server to cater stringent backup window. • Should integrate with third party VTL which has data deduplication capabilities. Backup software must support Robotic/automated Tape library, the licensing of such library should be on the number of slots and not on the drive counts as additional drives are added to improve performance. Must support OST, VTL, Disk, NFS. CIFS for proposed backup disk appliance • Must support source capacity based licensing and host based licensing as well. • Must have Agent/Modules for online backup of applications and databases such as MS SQL, Oracle, Exchange, Lotus, DB2, Informix, Sybase, Sharepoint, Meditech and SAP. Must support NAS and storage array based snapshot backup for off host zero downtime and zero load on the primary backup client with wizard based configuration. • Backup Solution must support multi tenancy feature for creation of distinct data zones where the end users have access without being able to view data, backups, recoveries, or modify in other data zones. | |
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| | <ul style="list-style-type: none"> • Backup Solution should also have configurable ReST API support for management, administration and reporting on backup infrastructure via custom applications and out of box integration with VMWarevRealize Automation for complete orchestration • The proposed backup software should support restore a single VM, single file from a VM, a VMDK restore from the same management console for ease of use. • Proposed backup software should not need a physical proxy server for VMWare backups and should have a minimum of 16 concurrent sessions capability for the VMWARE VM machines image based backups with single virtual proxy. It should support instant access of a VM machine. • The proposed solution should have inbuilt feature for extensive alerting and reporting with pre-configured and customizable formats. The proposed solution must have capability to do trend analysis for capacity planning of backup environment not limiting to Backup Application/Clients, Virtual Environment, Replication etc. • The proposed backup software should support deployment in public, private and hosted clouds. The backed up data written to cloud volumes should flow directly from Clients to cloud storage without intervention of media server in data path. The Clients writing to cloud storage using the proposed backup software should have source based deduplication, compression and encryption with them. • The proposed backup software should be able to recreate backed up data from existing volumes from metadata backups. The solution should offer recovery of specific volumes for recovery from metadata in case of a disaster recovery. • The proposed Backup software should have the capability for Block based backups with granular recovery capability for Windows, Linux, Hyper-V, VMWARE and Exchange for faster backups on supported Disk platforms. • The proposed backup solution should provide search capability from a web portal to allow search for a single file from complete backup store • The solution should be capable of integration with active directory infrastructure for ease of user rights management along with role based access control to regulate the level of management • The solution should have the capability to manage and monitor backups at remote locations from a single backup server, where clients can backup data to a local disk backup device without the need of local media server or sending primary backup copy over the WAN • The solution should have the capabilities to backup as well as archive data to cloud with cloud service providers like Azure / Amazon etc. In addition to this if data has to be moved from Cloud A to Cloud B the solution should be capable of cloud portability. • Proposed backup software should be in leader's quadrant of 2017 Gartner report for Enterprise Backup software and recovery solutions. <p>Support & subscription for 5 years with 24x7 remote support</p> | |
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| <p>Unified Threat Management (UTM) in High availability/Failover with Installation and Configuration with required licenses & subscription</p> | <p>Architecture: Minimum of 6 X1 GbE interface, 2 Nos 10Gb SFP + and 2 Nos 1 Gb SFP ports , Future option for 2X40Gb QSFP ports, 1 console Interface, 40 Gbps firewall throughput , IPS throughput should be minimum 8 Gbps& minimum 6 Gbps gateway antivirus throughput, Minimum concurrent connection >= 20M/Sec, minimum new connections >= 200K/Sec, Support for Active-Active or Active- Passive HA. Should have 16 GB of RAM & 240 GB of SSD storage. Optional external dual power supply</p> <p>Enclosure Type: 1RU, 19-in Rack Mountable(Bracket Included)</p> <p>Quality: ISO 9001/9002 Manufacturer with ICSA Firewall- certification, FCC Class A/B for quality assurance.</p> <p>Firewall Feature: Firewall should support static NAT, policy based NAT and PAT. Firewall should support antimalware capability, Including Anti-virus, botnet traffic filter and Antispyware. Should support IPSec data encryption, support client based IPSec& SSL VPN tunnel, Should support IPSec NAT traversal.</p> <p>UTM Feature: Antivirus/antimalware, intrusion prevention, application control, web control filtering & advance threat prevention.</p> <p>Management Feature: Support for built-in software for simple, secure remote management of security appliance through integrated, web based GUI. Support of accessible through variety of methods, including console port, Telnet, and SSH v2 Support for both SNMPv2 & SNMPv2c, providing in-depth visibility into the status of the appliances. extensive Logging, reporting for all the UTM functionalities offered should be available. Quarantining of blocked or infected files should be supported. Solution should be included to achieve the same.</p> <p>Stateful Inspection Firewall: -layer 8 (User-Identity) firewall -Multiple security zones - Location aware and Device aware Identity based access -Access Control Criteria(ACC): User-Identity, Source & destination zone, MAC an IP Address service -Security policies: IPS, Web filtering, Application filtering, Anti-Virus, QoS -Country based traffic control -Access Scheduling -Policy based Source and Destination NAT, Gateway Specific NAT policy -H.323, SIP NAT traversal -Dos and DDoS attack prevention -MAC address and IP-MAC filtering -Spoof prevention</p> <p>Intrusion Prevention: -Signature: Default(4500+), Custom -IPS policies: Pre-configured Zone based multiple policies, Custom -Filter Based Selection:</p> | <p>2</p> |
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| | <p>category, severity, platform & target (client/ server)</p> <ul style="list-style-type: none"> -IPS actions: recommended, allowed packet, drop packet, Disable, drop session, reset, bypass session -User based policy creation - Automatic signature update via threat research Lab - Protocol anomaly detection - Security heart beat detection and protection mechanism should be available <p>Anti-Virus & Anti-Spyware:</p> <ul style="list-style-type: none"> - virus, worm, Trojan Detection and Removal -Spyware, Malware, Phishing Protection -automatic Virus signature database update -Scans HTTP, HTTPS, FTP,VPN Tunnels - Customize individual user scanning -Self Service Quarantine area - Scan and deliver by file size - Block by file types <ul style="list-style-type: none"> - Dual av engine support <p>Web Filtering</p> <ul style="list-style-type: none"> - On-Cloud Web Categorization - Controls based on URL, Keyword and File type - Web Categories: Default(89+), External URL Database, Custom - Protocols supported: HTTP, HTTPS -Block Malware, Phishing, Pharming URLs - Block Java Applets, Cookies, Active X, Google Cache pages <p>Dual AV engine supported</p> <ul style="list-style-type: none"> - CIPA Compliant - Data leakage control by blocking HTTP and HTTPS upload - Schedule-based access control - Custom Denied Message per Web Category - Safe Search enforcement, YouTube for schools <p>Application Filtering</p> <ul style="list-style-type: none"> - Layer 7 (Applications) & Layer 8 (User - Identify) Control and Visibility -Inbuilt Application Category Database - Control over 2,000+ Applications classified in 21 categories Filter based selection: Category, Risk Level, Characteristics and Technology - Schedule-based access control- Visibility and Controls for HTTPs based Micro-Apps like Facebook chat, YouTube video Upload- - Command & control protection - Control various Commands and functions <p>Bandwidth Management</p> <ul style="list-style-type: none"> - Application, Web Category and identity based Bandwidth Management - Guaranteed & Burstable bandwidth policy - Application & User identity based Traffic Discovery - Data Transfer Report for multiple Gateways <p>Networking</p> <ul style="list-style-type: none"> - Multilink Load Balancing WRR based - Automated Failover/Failback - Interface types: Alias, Multiport Bridge, LAG(port trunking),RED, VLAN, WWAN, TAP - DNS- based inbound load balancing - IP Address Assignment - Static, PPPoE (with Schedule Management), L2TP, PPTP & DDNS, Client, Proxy ARP, Multiple | |
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| | <p>DHCP Servers support, DHCP relay</p> <ul style="list-style-type: none"> - Supports HTTP Proxy, Parent Proxy with FQDN - Dynamic Routing: RIP v1 & v2, OSPF, BGP, PIM-SIM, Multicast Forwarding <p>Web Filtering and AV applications</p> <ul style="list-style-type: none"> - Discover mode for PoC Deployments - IPv6 Support: - Dual Stack Architecture: Support for IPv4 and IPv6 protocols - Management over IPv6 - IPv6 Route: Static and Source - IPv6 tunneling (6in4, 6to4, 6rd, 4in6) - Alias and VLAN - Firewall security over IPv6 traffic - High Availability for IPv6 networks <p>Content Filtering</p> <ul style="list-style-type: none"> - Instant Messaging Archiving & Controls <p>High Availability</p> <ul style="list-style-type: none"> - Active-Active - Active-Passive with state synchronization - Stateful Failover with LAG Support <p>Administration & System Management</p> <ul style="list-style-type: none"> - Web-based configuration wizard - Role-based Access control - Support of API - Firmware Upgrades via Web UI - Web 2.0 compliant UI (HTTPS) - UI Color Style - Command Line Interface (Serial, SSH, Telnet) - SNMP (v1, v2) - Multi-lingual - Central Console (Optional) - User Authentication - Internal database - AD Integration OU-based Security Policies and - Automatic Window Single Sign On/RADIUS - External LDAP/LDAPS/RADIUS database Integration - Thin Client Support - 2-factor authentication: 3rd party support** - SMS (Text-based) Authentication - Layer 8 Identity over IPv6 - Secure Authentication - AD, LDAP, Radius - Clientless Users - Authentication using Captive Portal <p>Logging/Monitoring</p> <ul style="list-style-type: none"> - Real-time and historical Monitoring - Log Viewer- IPS, Web filter, WAF, Anti-Virus, Authentication, System and Admin Events - Forensic Analysis with quick identification of network attacks and other traffic anomalies - Syslog support - Authentication Anonymization <p>On Appliance iView Reporting</p> <ul style="list-style-type: none"> - Integrated Web-based Reporting tool- 1,200+ drilldown reports - Compliance reports - HIPAA, GLBA, SOX, PCI, FISMA - Zone based application reports - Historical and Real-time reports | |
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| | <ul style="list-style-type: none"> -Default Dashboards: Traffic and Security - Username, Host,specific Monitoring Dashboard -Reports- Application, Internet & Web Usage, Virus, Search Engine, User Threat Quotient (UTQ) for high risk users and more - Client Types Report including BYOD Client Types - Multi-format reports- tabular, graphical - Export reports in- PDF, Excel, HTML-Email notification of reports -Report customization - (Custom view and custom logo) <p>Installation, configuration, implementation, support and training</p> <p>Certification</p> <ul style="list-style-type: none"> - Checkmark Certification - IPv6 Ready - ISO <p>Compliance</p> <ul style="list-style-type: none"> - CE - FCC <p>Minimum Support of 4 ISP</p> <p>Warranty:</p> <p>5 years comprehensive warranty with 24x7x365 remote hardware support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| <p>Layer 2 Network Switch</p> <p>Along with 10G SFP module & 10 Meter FC cable for up-link</p> | <p>Architecture:</p> <p>Shall be 1RU, Rack Mountable</p> <p>48 RJ-45 autosensing 10/100/1000 ports</p> <p>The switch shall have two 1G/10-Gigabit ports (SFP+) in addition to the above ports. Shall be populated with minimum 2x10G SR Single-mode Fiber Transceiver and upgradeable to 2 x 10G base-T in same hardware.</p> <p>1 serial console port, 1 out of band RJ45 port</p> <p>1 GB RAM, 1 GB Flash</p> <p>Shall have switching capacity of minimum 250 Gbps or more</p> <p>Shall have minimum 170 Mpps switching throughput or more</p> <p>Resiliency:</p> <p>Shall support stacking creation across up to eight switches with minimum 80 Gbps of bandwidth on additional stacking ports apart from asked in clause 1.3. Required modules/cables shall be provided.</p> <p>IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol</p> <p>IEEE 802.3ad Link Aggregation Control Protocol (LACP)</p> <p>Should have internal redundant power supply</p> <p>Layer 2 Features:</p> <p>Shall support up to 32K MAC Address Table</p> <p>Shall support 4K IEEE 802.1Q-based VLANs (4,094 VLAN IDs)</p> <p>Shall support Jumbo frames on GbE and 10GbE ports</p> <p>Internet Group Management Protocol (IGMP)</p> <p>IEEE 802.1AB Link Layer Discovery Protocol (LLDP)</p> <p>Shall support Voice VLAN feature to automatically assigns VLAN and priority to devices like IP phones</p> <p>Shall have the capability to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops</p> | 2 |

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| | <p>Layer 3 features (any additional licenses required shall be included):Optional</p> <p>Static Routing for IPv4 & IPv6 RIPv1 and RIPv2 routing OSPF for IPv4 & IPv6 , BGP4, PBR, PIM from day one Shall support DHCP Relay to enable DHCP operation across subnets</p> <p>QoS and Security Features:</p> <p>Access Control Lists for Layer 2 to Layer 3 traffic filtering Powerful QoS feature supporting strict priority (SP) queuing, weighted round robin (WRR) or equivalent IEEE 802.1x to provide port-based user authentication with multiple 802.1x authentication sessions per port Media access control (MAC) authentication to provide simple authentication based on a user's MAC address Dynamic Host Configuration Protocol (DHCP) protection to prevent unauthorized DHCP servers Port security and port isolation STP BPDU port protection to prevent forged BPDU attacks STP Root Guard to protect the root bridge from malicious attacks or configuration mistakes IP Source guard to prevent IP spoofing attacks Dynamic ARP protection blocking ARP broadcasts from unauthorized hosts</p> <p>Management features:</p> <p>Configuration through the CLI, console, Telnet and SSH SNMPv1, v2, and v3 and Remote monitoring (RMON) support sFlow (RFC 3176) or equivalent for traffic analysis Management security through multiple privilege levels FTP / SFTP and TFTP support Port mirroring to mirror ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port Shall support RADIUS or TACACS+ for switch security access administration Network Time Protocol (NTP) or equivalent support Software Defined Networking Ready with Openflow protocol support</p> <p>Environmental features:</p> <p>Shall provide support for RoHS and WEEE regulations Shall have features to improve energy efficiency like variable-speed fans, shutoff unused ports etc Shall support Energy Efficient Ethernet (EEE) in accordance with IEEE 802.3az Operating temperature of 0°C to 45°C Safety and Emission standards including UL 60950-1; IEC 60950-1; VCCI Class A; EN 55022 Class A</p> <p>Warranty:</p> <p>5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| Layer 2 Network Switch(Power over Ethernet) PoE budget of 750 watt. Along with 10G SFP module & 10 Meter | <p>Architecture:</p> <p>Shall be 1RU, Rack Mountable 48 RJ-45 autosensing 10/100/1000 ports The switch shall have two 1G/10-Gigabit ports (SFP+) in addition to the above ports. Shall be populated with minimum</p> | 8 |

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| FC cable for up-link | <p>2x10G SR Single-mode Fiber Transceiver and upgradeable to 2 x 10G base-T in same hardware.</p> <p>1 serial console port, 1 out of band RJ45 port</p> <p>1 GB RAM, 1 GB Flash</p> <p>Shall have switching capacity of minimum 250 Gbps or more</p> <p>Shall have minimum 170 Mpps switching throughput or more</p> <p>Resiliency:</p> <p>Shall support stacking creation across up to eight switches with minimum 80 Gbps of bandwidth on additional stacking ports apart from asked in clause 1.3. Required modules/cables shall be provided.</p> <p>IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol</p> <p>IEEE 802.3ad Link Aggregation Control Protocol (LACP)\</p> <p>Should have internal redundant power supply</p> <p>Layer 2 Features:</p> <p>Shall support up to 32K MAC Address Table</p> <p>Shall support 4K IEEE 802.1Q-based VLANs (4,094 VLAN IDs)</p> <p>Shall support Jumbo frames on GbE and 10GbE ports</p> <p>Internet Group Management Protocol (IGMP)</p> <p>IEEE 802.1AB Link Layer Discovery Protocol (LLDP)</p> <p>Shall support Voice VLAN feature to automatically assigns VLAN and priority to devices like IP phones</p> <p>Shall have the capability to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops</p> <p>Layer 3 features (any additional licenses required shall be included):Optional</p> <p>Static Routing for IPv4 & IPv6</p> <p>RIPv1 and RIPv2 routing</p> <p>OSPF for IPv4 & IPv6 , BGP4, PBR, PIM from day one</p> <p>Shall support DHCP Relay to enable DHCP operation across subnets</p> <p>QoS and Security Features:</p> <p>Access Control Lists for Layer 2 to Layer 3 traffic filtering</p> <p>Powerful QoS feature supporting strict priority (SP) queuing, weighted round robin (WRR) or equivalent</p> <p>IEEE 802.1x to provide port-based user authentication with multiple 802.1x authentication sessions per port</p> <p>Media access control (MAC) authentication to provide simple authentication based on a user's MAC address</p> <p>Dynamic Host Configuration Protocol (DHCP) protection to prevent unauthorized DHCP servers</p> <p>Port security and port isolation</p> <p>STP BPDU port protection to prevent forged BPDU attacks</p> <p>STP Root Guard to protect the root bridge from malicious attacks or configuration mistakes</p> <p>IP Source guard to prevent IP spoofing attacks</p> <p>Dynamic ARP protection blocking ARP broadcasts from unauthorized hosts</p> <p>Management features:</p> <p>Configuration through the CLI, console, Telnet and SSH</p> <p>SNMPv1, v2, and v3 and Remote monitoring (RMON) support</p> <p>sFlow (RFC 3176) or equivalent for traffic analysis</p> <p>Management security through multiple privilege levels</p> <p>FTP / SFTP and TFTP support</p> | |
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| | <p>Port mirroring to mirror ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port</p> <p>Shall support RADIUS or TACACS+ for switch security access administration</p> <p>Network Time Protocol (NTP) or equivalent support</p> <p>Software Defined Networking Ready with Openflow protocol support</p> <p>Environmental features:</p> <p>Shall provide support for RoHS and WEEE regulations</p> <p>Shall have features to improve energy efficiency like variable-speed fans, shutoff unused ports etc</p> <p>Shall support Energy Efficient Ethernet (EEE) in accordance with IEEE 802.3az</p> <p>Operating temperature of 0°C to 45°C</p> <p>Safety and Emission standards including UL 60950-1; IEC 60950-1; VCCI Class A; EN 55022 Class A</p> <p>Warranty:</p> <p>5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| Layer 3 Network switch | <p>Architecture:</p> <p>Shall be 1RU, Rack Mountable</p> <p>24 RJ-45 autosensing 10/100/1000 ports</p> <p>The switch shall have two 1G/10-Gigabit ports (SFP+) in addition to the above ports. Shall be populated with minimum 2x10G SR Single-mode Fiber Transceiver and upgradeable to 2 x 10G base-T in same hardware.</p> <p>1 serial console port, 1 out of band RJ45 port</p> <p>1 GB RAM, 1 GB Flash</p> <p>Shall have switching capacity of minimum 250 Gbps or more</p> <p>Shall have minimum 170 Mpps switching throughput or more</p> <p>Resiliency:</p> <p>Shall support stacking creation across up to eight switches with minimum 80 Gbps of bandwidth on additional stacking ports apart from asked in clause 1.3. Required modules/cables shall be provided.</p> <p>IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol and IEEE 802.1s Multiple Spanning Tree Protocol</p> <p>IEEE 802.3ad Link Aggregation Control Protocol (LACP)\</p> <p>Should have internal redundant power supply</p> <p>Layer 2 Features:</p> <p>Shall support up to 32K MAC Address Table</p> <p>Shall support 4K IEEE 802.1Q-based VLANs (4,094 VLAN IDs)</p> <p>Shall support Jumbo frames on GbE and 10GbE ports</p> <p>Internet Group Management Protocol (IGMP)</p> <p>IEEE 802.1AB Link Layer Discovery Protocol (LLDP)</p> <p>Shall support Voice VLAN feature to automatically assigns VLAN and priority to devices like IP phones</p> <p>Shall have the capability to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops</p> <p>Layer 3 features Static Routing for IPv4 & IPv6</p> <p>RIPv1 and RIPv2 routing</p> <p>OSPF for IPv4 & IPv6 , BGP4, PBR, PIM from day one</p> | 2 |

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| | <p>Shall support DHCP Relay to enable DHCP operation across subnets</p> <p>QoS and Security Features: Access Control Lists for Layer 2 to Layer 3 traffic filtering Powerful QoS feature supporting strict priority (SP) queuing, weighted round robin (WRR) or equivalent IEEE 802.1x to provide port-based user authentication with multiple 802.1x authentication sessions per port Media access control (MAC) authentication to provide simple authentication based on a user's MAC address Dynamic Host Configuration Protocol (DHCP) protection to prevent unauthorized DHCP servers Port security and port isolation STP BPDU port protection to prevent forged BPDU attacks STP Root Guard to protect the root bridge from malicious attacks or configuration mistakes IP Source guard to prevent IP spoofing attacks Dynamic ARP protection blocking ARP broadcasts from unauthorized hosts</p> <p>Management features: Configuration through the CLI, console, Telnet and SSH SNMPv1, v2, and v3 and Remote monitoring (RMON) support sFlow (RFC 3176) or equivalent for traffic analysis Management security through multiple privilege levels FTP / SFTP and TFTP support Port mirroring to mirror ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port Shall support RADIUS or TACACS+ for switch security access administration Network Time Protocol (NTP) or equivalent support Software Defined Networking Ready with Openflow protocol support</p> <p>Environmental features: Shall provide support for RoHS and WEEE regulations Shall have features to improve energy efficiency like variable-speed fans, shutoff unused ports etc Shall support Energy Efficient Ethernet (EEE) in accordance with IEEE 802.3az Operating temperature of 0°C to 45°C Safety and Emission standards including UL 60950-1; IEC 60950-1; VCCI Class A; EN 55022 Class A</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| KVM Switch with Installation and Configuration, LCD panel, keyboard, touchpad with Installation and Configuration | <p>16 port combo KVM switch with 16*2mcables and adaptor (USB)(All necessary powercords, adapters, data cables, Connectors,CDs, manuals, brackets accessories, wire managers, etc. should be provided)</p> <p>CD drawer industrial grade 17" LCD panel or above, keyboard, touchpad - 1U , Support USB , Compatible with all KVM switching systems for multiple server access, Adjustable to various rack depth, Operating System :Dos, Windows , Linux, etc.</p> | 2 |

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| Rack for Server & Network Installation and Configuration | <p>42U Height (2 Rack for Server & 1 Rack for Network) STANDS ALONE compatible with all Server, Storage & Network equipment Vertical Power Distribution Unit all socket with 5amp to 15amp with 12 Socket and Over Loading Capacity - Qty 2 with each rack</p> <p>Fix Vented Shelf – 4</p> <p>Sliding Shelf for Keyboard – 1</p> <p>Modem Shelf</p> <p>Front Panel Mounting Hardware</p> <p>Cable manager x 6 with each rack</p> <p>Front Panel Mounting Hardware (pack of 100 Sets for each rack)</p> <p>All the racks should be mounted on the floor with castor wheels with brakes</p> <p>The racks must have steel (solid / grill / mesh) front / rear doors and side panels. Racks should NOT have glass doors / panels.</p> <p>Both front and rear doors must have the ability to open from the left and right without the need for any field modifications or tools</p> <p>All required Accessories required</p> | 2 |
| Desktop (Core i3) | <p>Windows-Desktop having Intel i3 7th Gen Processor; Intel Chipset or equivalent chipset; 4GB DDR-4 or higher expandable up to 32 GB; Integrated sound and graphics controller, Gigabit Ethernet controller; 1 TB or higher SATA HDD 7200 rpm; Dual layer DVD writer; 104 Keys OEM Keyboard and OEM Optical Scroll Mouse with Mouse pad; SFF chassis with suitable power supply; 19.5" or higher LED Monitor with TCO06 Certified; PCI Graphics Card with Dual monitor support HDMI or VGA; Preloaded with Windows 10 Professional (64 bit), all necessary Plug-ins/utilities and driver software, bundled in CD/DVD Media. (Five years Warranty), MS office 2016 home & business (Preloaded). All preloaded Software should have 5 year subscription if running on subscription model.</p> | 187 |
| Laptop with Installation and Configuration | <p>Core i5 processor 7th Generation or Above</p> <p>8GB of Memory</p> <p>1 TB or Higher Hard disk, have TPM 1.2 or higher</p> <p>Gigabit LAN/WL/BL/Web Camera/USB ports/HDMI/SD-MMC slot</p> <p>(13" to 14" display) have TPM 1.3 or higher 4 cell battery</p> <p>Gigabit LAN/WL/BL/Web Camera/USB ports/HDMI/SD-MMC slot</p> <p>Backpack</p> <p>TCP Network Support IPv4, IPv6</p> <p>No CD/DVD drive</p> <p>Complete cover with Accidental Warranty</p> <p>Genuine Windows® 10 Professional 64bit with Media Kit (English) or above</p> <p>Office Home & Business 2016 with Media</p> <p>Warranty: Comprehensive 5 years onsite warranty. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | 32 |
| Netbook - with Installation and Configuration | <p>Intel Core i3 7th Generation processor or above</p> <p>. 4 GB Of Memory</p> <p>. 1TB or higher Hard disk, have TPM 1.2 OR higher</p> | 65 |

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| | <ul style="list-style-type: none"> . Gigabit LAN/WL/BL/Web Camera/ USB ports/HDMI/SD-MMC slot . 11.6" to 14" Inch display . 5 hour battery backup . Backpack <p>Complete cover with Accidental Warranty</p> <ul style="list-style-type: none"> . Genuine Windows® 10 Professional 64bit with Media Kit (English) or above . Office Home & Business 2016 with Media <p>Warranty: Comprehensive 5 years onsite warranty. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> | |
| Wireless Access Point | <ul style="list-style-type: none"> • Should support 4x4 MIMO. • Should have 802.11ac support. • Should provide support for 1.3gbps. • The access point should be managed & monitored through a centralized controller. • Should support three spatial streams. • Should be able to intelligently collaborate in real-time to allow more users to connect with optimized signal quality and performance. • Should ensure client association with the best AP offering the best data rate available. • Should have the capabilities to improve downlink performance to all mobile devices, including one-, two-, and three-spatial-stream devices on 802.11ac while improving battery life on mobile devices such as smartphones and tablets. • Should have 80Mhz channel support. • Should provide proactive, high-speed spectrum intelligence across 20-, 40-, and 80-MHz-wide channels to combat performance problems due to wireless interference. • Should have the capabilities for MIMO equalization to optimize uplink performance and reliability by reducing the impact of signal fade. • Should support external antennas. <p>802.11n version 2.0 (and related) capabilities</p> <ul style="list-style-type: none"> • 802.11n and 802.11a/g beamforming • 20- and 40-MHz channels • PHY data rates up to 450 Mbps (40 MHz with 5 GHz) • Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx) • 802.11 dynamic frequency selection (DFS) • Cyclic shift diversity (CSD) support <p>802.11ac Wave 1 capabilities</p> <ul style="list-style-type: none"> • 4x4 MIMO with three spatial streams • MRC • 802.11ac beamforming • 20-, 40-, and 80-MHz channels • PHY data rates up to 1.3 Gbps (80 MHz with 5 GHz) • Packet aggregation: A-MPDU (Tx/Rx), A-MSDU (Tx/Rx) • 802.11 DFS • CSD support <p>Data rates supported</p> <p>802.11a: 6, 9, 12, 18, 24, 36, 48, and 54 Mbps</p> <p>802.11g: 1, 2, 5.5, 6, 9, 11, 12, 18, 24, 36, 48, and 54 Mbps</p> <ul style="list-style-type: none"> • Should support Certified for use with antenna gains up to 6 dBi (2.4 GHz and 5 GHz) external antennas. • Should have 10/100/1000BASE-T autosensing (RJ-45) & | 6 |

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| | <p>Management console port (RJ-45)</p> <ul style="list-style-type: none"> • Should have 512 MB DRAM & 64 MB flash. • Should support PoE& Local Power supply. • Should support 802.3at &af <p>Should comply to the following standards:-</p> <ul style="list-style-type: none"> ◦ UL 60950-1 ◦ CAN/CSA-C22.2 No. 60950-1 ◦ UL 2043 ◦ IEC 60950-1 ◦ EN 60950-1 ◦ EN 50155 <p>Radio approvals:</p> <ul style="list-style-type: none"> ◦ FCC Part 15.247, 15.407 ◦ RSS-210 (Canada) ◦ EN 300.328, EN 301.893 (Europe) ◦ ARIB-STD 66 (Japan) ◦ ARIB-STD T71 (Japan) ◦ EMI and susceptibility (Class B) ◦ FCC Part 15.107 and 15.109 ◦ ICES-003 (Canada) • ◦ VCCI (Japan) ◦ EN 301.489-1 and -17 (Europe) ◦ EN 60601-1-2 EMC requirements for the Medical Directive 93/42/EEC <p>Should support following IEEE standards:</p> <ul style="list-style-type: none"> ◦ IEEE 802.11a/b/g, 802.11n, 802.11h, 802.11d ◦ IEEE 802.11ac Draft 5 <p>Should have following Security standard:</p> <ul style="list-style-type: none"> ◦ 802.11i, Wi-Fi Protected Access 2 (WPA2), WPA ◦ 802.1X ◦ Advanced Encryption Standards (AES), Temporal Key Integrity Protocol (TKIP) <p>Should support Extensible Authentication Protocol (EAP) types:</p> <ul style="list-style-type: none"> ◦ EAP-Transport Layer Security (TLS) ◦ EAP-Tunneled TLS (TTLS) or Microsoft Challenge Handshake Authentication Protocol Version 2 (MSCHAPv2) ◦ Protected EAP (PEAP) v0 or EAP-MSCHAPv2 ◦ EAP-Flexible Authentication via Secure Tunneling (FAST) ◦ PEAP v1 or EAP-Generic Token Card (GTC) ◦ EAP-Subscriber Identity Module (SIM) | |
| Biometric with Time Attendance with software installation and configuration & Training with all required accessories. | <p>User Capacity:300</p> <p>Transaction Storage : 1,00,000</p> <p>Communications: RS232, RS485, TCP/IP ,USB</p> <p>Processor: 32 Bit</p> <p>Identification time : < =2S</p> <p>Sensor: OEM Optical Sensor 500 DPI</p> <p>Access Control Interface (door): 3rd party electric</p> | 3 |
| Television- with installation and configuration with all required accessories. | <p>42" Full HD, LED TV</p> <p>Resolution:1920 x 1080 resolution</p> <p>Internet Connectivity: LAN, Wireless Ready</p> <p>In the Box: Ultra Slim Wall Mount Support, Remote Control, Batteries, Power Cable, E-manual, User Manual</p> <p>Connectivity</p> | 2 |

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| | Composite Video Input Component Video Input USB HDMI and VGA input Ethernet (RJ 45): PC Audio In (Mini Jack): PC In (D-sub): Digital Audio Output (Optical): RF Connection Input(s): DVI Audio Input | |
| Color Printer Laser with Installation and Configuration | Print speed up to 30 ppm, min RAM 128MB or more, 600x600 dpi, with duplexer, print, Scan to email, Scan to folder and Copy, Connectivity: Network and US(Print/Network Color Scan/Copier/DADF/USB/) | 2 |
| Multi-function Printer with Installation and Configuration | (Print/Network Color Scan/Copier/DADF/Duplexer/USB Network TCP Network Support IPv4, IPv6)/Scan to folder and email, A3, A4, Legal, Envelopes, minimum 35 ppm, with 3 cassette tray and trolley (optional). | 2 |
| Laser Printer: with Installation and Configuration | Print speed up to 30 ppm, 1200x1200 dpi, min 256 MB RAM or more, with Print, Scan, Copy, Duplex and ADF Connectivity: Network & USB | 2 |
| DG Set – 250 KVA (Production setup) | Fuel Type: Diesel Cylinders:6 Power Rating Range:250 KVA Fuel Tank Capacity Range:500 Liters Weight Range:1400 Speed:1500 rpm Phase: Three Phase Battery Capacity:180 Ah Style:Standby Generators Rating (kVA):250 Rated kW:250 Cooling System (Air Cooled/Water Cooled) : Water Door Type : DD | 1 |
| UPS battery 12v, 150 AH | 12 volt, 150 Ah battery (The supplier shall quote buyback price which shall be adjusted against the price quoted for the new battery). | 60 |
| Analog telephone | GENERAL - TYPE : Corded Phone GENERAL - TYPE : Corded Phone CALL FEATURES - Speed Dialing : 10 Speed Dialing Buttons - Other Call Features : Auto Redial KEYPAD FEATURES - Keypad : Alphanumeric MEMORY FEATURES - Redial Memory : 20 Redial - Phone book Entries : 50 Entries ADDITIONAL FEATURES - Other features : 20 one Touch, 2 step Tilt Angle | 30 |
| Digital Phone | 4 Programmable Dual Colored Buttons . Configurable Display . Four Local Soft key Controls | 20 |

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| | <ul style="list-style-type: none"> . Large Message Waiting LED . 24 Characters, 3 Line LCD Display . Context Sensitive programmable display . Built-in Wall Mount Unit . 6 Programmable Ring Tones . Speed Dial/DSS Buttons . Programmable Line Keys with 2 Color LED . Feature, Recall, Multi Conference, Redial, Hold, Transfer, Answer, Speaker, Mic. . Built-in-Half Duplex Hands free Unit . Over 400 Features | |
| EPABX expansion card (Upgrade) | 8 port DKP8 card for EPABX present at 108 Idco towers, Matrix Eternity ME | 1 |

Biometric:

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| Biometric App & DB server with software, Biometric device, GPRS dongle, Installation | <p>One of the top three server vendors (by revenue market share in IDC or Gartner report) in any of the previous 2 quarters or should have been placed in Leaders Quadrant in the last Gartner's report of "Magic Quadrant for Modular Servers"</p> <p>Processor : 2 x Intel Xeon Gold 5122, 3.60 GHz, 4 cores,16.5 MB L3 Cache</p> <p>Chipset: Latest OEM Chipset supporting an optimized for the above processor</p> <p>Memory:128 GB DDR4 2666MT/s, total 24 DIMM slots, it should not be populated more than 50% of the memory slots with the offered RAM.</p> <p>Hard Disk Drive: 4 x 1.2TB 15k rpm SAS 6 GBPS or higher disks (in RAID5 – Parity + fault tolerance) Hot Swappable, available 16 HDD slots for up gradation. Must be fitted with 256GB PCIeNVMe SSD along with HDD.</p> <p>Optical Drive: 8X or higher DVD writer , internal/ external</p> <p>I/O Slots: at least 6 PCIe Gen2 slots (2 free, 2PCI-e or PCI-X) slots for future expandability(Five x8 and three x16 slots)</p> <p>Raid Controller: 12Gbps PCIe 3.0, 8GB cache, with support for RAID 1, 10, 5, 50, 6, 60</p> <p>Network Interface: Quad port 1Gb Base-T with cables Dual Port 25Gbps SR ports with cables Ethernet from day one</p> <p>SAN connectivity: 2 no's of minimum 16 GBPS dual port FC (should be compatible with SAN switch & SAN storage) with cables</p> <p>Graphics: Integrated Graphics with at least 16 MB video memory</p> <p>Server Management: OEM embedded controller with IPMI 2.0 compliance and server management tool from same OEM.</p> <p>Ports: I/O interface, 1 serial port, 1 remote management port other than the serial port, 1 graphic port, 4 USB ports. Should also support external backup devices like DTL or LTO(Tape library)</p> <p>Power Supply: 80Plus Platinum certified redundant Power Supply (at least 750W each) to sustain above configuration. Hot plug, redundant power supply, 2 SMSP(750W each) minimum.</p> <p>LCD panel: To display system ID, status information &system error code followed by descriptive text. LCD should light up in different colors</p> | 2 server + 512 Devices |
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| | <p>during normal system operation & error conditions.</p> <p>Additional management with Industry standard compliance: User-selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 compliant, PCI 2.3 compliant, PXE and WOL support, IPv4 & IPv6 support.</p> <p>Industry standard Certification: the quoted server models should have the following certifications: Microsoft windows server 2008 R2 and above, Microsoft windows HPC server, Red Hat Enterprise Linux, Novel SUSE Linux, Microsoft Windows server 2008 hyper-V, VMware ESXi Version 4.1</p> <p>Form Factor: Max. 2U rackable Form factor with sliding rails</p> <p>OEM certifications: UL/FCC/ RoHS</p> <p>Operating system Installed: Microsoft Windows Server 2016 Standard Edition, Microsoft SQL Server 2016 Standard edition for 8 cores. License should be valid for 5 years.</p> <p>Mouse/KB: USB optical Scroll mouse/ 107 Key KB should be same make as base machine.</p> <p>Manuals/ Media: Manuals & Media CD for S/W & device drivers</p> <p>Remote Management Feature: 1. System remote management should support browser based graphical remote console along with virtual power button, remote boot using USB/ CD / DVD drive. It should be capable of offering upgrade of software & patches from remote client using Media/ Image/ Folder; it should support server power capping & historical reporting and should have support for multifactor authentication.</p> <p>2. Server should have dedicated 1 GBPS remote management port.</p> <p>3. Server should support agentless management using the out-of-band remote management port.</p> <p>4. The server should support monitoring & recording changes in server hardware & system configuration. It assists in diagnosing problems and delivering rapid resolution when system failure occurs.</p> <p>6. Remote console sharing. Console replay- console replay captures & stores for replay the console video during the server last major fault or boot sequence. Microsoft Terminal Services Integration, 128 bit SSL encryption & secure shell version 2 support. Should provide for AES & 3DES on browser. Should provide remote firmware update functionality. Should provide support for java graphical remote console.</p> <p>Server Management Features: The system management software provide role based security. Should help provide proactive notification of actual or impending component failure alerts on critical components like CPU, Memory & HDD. Should support automatic event handling that allows configuring policies to notify failures The server management software should be of the same brand as server supplier. Infra platform/ Infra software to support a variety of different hypervisor, such as VMware, Microsoft Hyper-v, Red Hat KVM & HP integrity VM. Solution available to deploy a fast & easy installation via software appliance delivery mode. With its own OS & database to provide Infra and Life cycle management. Management software should support integration with popular virtualization plat form management software like vCenter, SCVMM and Red Hat RHEV.</p> <p>Installation & configuration of a server with SAN storage.</p> <p>Installation & configuration Microsoft Windows 2016 operating system in Clustering mode and SQL 2016 in clustering with all required drivers, software & configurations. 24X7 Onsite service &</p> | |
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| | <p>support till the warranty and AMC get expired.</p> <p>Server security: Should provide effective protection, reliable detection & rapid recovery using:</p> <ul style="list-style-type: none"> • Silicon-based Hardware Root of Trust • Secure default passwords • Detection of configuration and firmware drift from user defined configuration template & remediation of misconfigurations • Persistent event logging including user activity • Secure alerting • Automatic BIOS recovery • Rapid OS recovery to allow booting a trusted backup OS image from a hidden boot device • Drive Security, including secure system erase for instant secure erasure for every drive (HDD, SSD, NVMe) • Dynamically enabled USB ports to protect the servers from USB-based attacks by shutting off USB ports – yet should be able to dynamically enable them as needed for technicians • Protection against firmware which executes before the OS boots • Configuration upgrades should be only with cryptographically signed firmware and software • UEFI secure boot <u>with custom certificates</u> to allow using custom certificates to validate the OS boot loader (primarily for Linux applications) • Secure access via management port to enable administrators to shut off all ports from access except for authenticated access through management port • System lockdown feature to lock down configuration and firmware, protecting the server from inadvertent or malicious changes <p>Intrusion alert: Intrusion alert in case chassis being opened. It should be monitored using integrated system management tools.</p> <p>Warranty: 5 years comprehensive warranty with 24x7x365 remote hardware support & next business day on-site support. Post installation, 5-year product warranty should reflect in the support web site of the OEM.</p> <p>COSEC DOOR FOT - Optical Fingerprint scanner based biometric device – 512 numbers</p> <p>Features</p> <ul style="list-style-type: none"> • Fingerprint based Time-Attendance Terminal • Device to support Finger print, RFID card and PIN • Dot-Matrix LCD and Touch sense Keypad • Ethernet and USB Connectivity • Time-Attendance Application • Solution to support 5,00,000 Events and 9,600 Fingerprint Templates • 2 USB port (Data transfer and 2G-3G dongle) • 4 LEDs and Buzzer • Power - 12V DC @2A • 256 MB Flash + 128 MB DDR3 RAM • Display - 128 x 64 Dot Matrix | |
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| | <ul style="list-style-type: none">• Display Size - 38.1mm x 60.96mm (1.5" x 2.4")• Keypad - 16 Touch Sense Keys• Operating Temperature - 0°C to +45°C (32°F to 113°F)• Tamper detection – Yes• System Integration – API for software integration• Device should be water proof• Encryption - 256-bit AES <p>GPRS Dongle (GSM SIM based) Used to connect the device with Central Server based Software, 2G/3G/4G Dongle Micromax/Huawei/ZTE (based on the availability)</p> <p>Software license for 5000 users:</p> <ul style="list-style-type: none">• Application Software for 5000 users• Supports Up to 65,000 Door Controllers• Basic Access Control, Basic Time-Attendance and Enrollment Management• Time-Attendance and Leave Management Software Module <ul style="list-style-type: none">• Attendance and Leave Policy Creation• Integration with Payroll, Tally, Active Directory• Shift Schedule, Holiday Schedule and Past Adjustment• Manually Attendance Correction• Leave/Tour Application and Approval• SMS and Email Notification• Reports and Charts Generation• Web-access for monitoring | |
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SECTION 6 – GENERAL (COMMERCIAL) CONDITIONS OF CONTRACT

1. Standards

The Goods supplied under this contract shall conform to the standards/specifications prescribed in Section – 5 of this document.

2. Patents rights

The Supplier shall indemnify the purchaser against all third party claims of infringement of patent, trademark or industrial design rights arising from use of the goods or any part thereof.

3. Inspection and Test

On delivery, the Service Provider and the Purchaser shall jointly inspect the material supplied for conformance of specification, quality and issue an inspection certificate.

4. Delivery

- a. Delivery of the goods and services shall be made in accordance with the terms of this RFP and the actual delivery schedule given in the Purchase Order.
- b. All technical assistance for installation, commissioning and monitoring of the equipment shall be provided by the suppliers at no extra cost.

5. Training (Where required)

The supplier should provide hardware documentation, protocol documentation (Wherever applicable) and provide 3 tier training for the user, administration and trouble shooting.

6. The supplier may be required to provide all or any of the following services:

- a. Performance or supervision of on-site assembly and/or start-up of the supplied goods;
- b. Furnishing of tools required for assembly and/or maintenance of supplied goods;
- c. Design Document:-
The supplier should provide site planning, site design, document along with the tender which should include high availability architecture, no single point of failure (Redundancy).

7. Warranty

The supplier warrants that:

- a. The supplier should provide onsite comprehensive warranty of 3 years, by OEM with 24 x 7 support, NBD onsite support. There after CMC for 2 years from OEM with 24 x 7 support, NBD onsite support. However, the rate for extended CMC for 2 years period shall be quoted separately". For CMC the rates will be frozen and the bidder will enter into a separate contract with Service Provider on award of contract. Payment to the bidder/supplier shall be reimbursed by the Service Provider in every

six months on submission bill..

- b. The goods supplied shall be new and free of all defects and faults in materials used, workmanship and manufacture and shall be of the highest grade and consistent with the established and generally accepted standards for materials ordered
- c. The Supplier shall be responsible for any defects that may develop under proper use, arising from faulty material, design or workmanship such as corrosion of the equipment, inadequate quantity of materials to meet equipment requirements, inadequate contact protection, deficiencies in circuit design and/or otherwise and shall remedy such defects at his own cost when called upon to do so by the Service Provider who shall state the defect in writing. This warranty shall survive inspection or payment for/and acceptance of the goods, but shall expire (except in respect of complaints notified prior to such date) 36 months after the delivery of the material.
- d. If any defect is not remedied by the Supplier within a reasonable time, the Service Provider may proceed to get the defects remedied from other Supplier etc at the Suppliers risk and expense, but without prejudice to any other defects which the Service Provider may have against the Supplier in respect of such defects.
- e. The supplier should provide 24 x 7 services for the critical components of the Data Centre as at Annexure-7 and shall resolve any complaints pertaining to them within 4 hours of receipt of the complaint..
- f. Uptime of material supplied should be maintained at 99.95%. The supplier to provide one L1/L2/L3 (whichever is applicable) supports personnel on 24x7 basis for the entire warranty period for servers/storage/firewall's only. Remote support by way of e-mail, telephone etc to be made available at all times.
- g. OEM should provide at least two years of additional warranty/ CMC, if required, after completion of 60 months from the date of delivery, which includes 2 years of extended warranty/CMC, for the stores, as mentioned in Annexure A.
- h. During warranty period, the supplier is required to visit at each consignee's site at least once in three months commencing from the date of the delivery for preventive maintenance of the goods irrespective of the breakdown calls.
- i. The supplier shall ensure continued supply of the spare parts for the equipment supplied by them to the purchaser for seven years from the date of installation and handing over.

8. Documentation (Scope of bidder)

- a. The supplier should document the scope of work and delivery
 - i. Prepare the project documents based on shared requirements and submit the projects documents along with necessary layouts & diagrams for server room/ Data Centre/ Network Architecture etc.
 - ii. ZHL team will review and validate the scope of work and confirm the final document to bidder.

- iii. The bidder start the work based on finalized document.
- b. The supplier should be ready with all equipment's for UAT testing & commissioning of equipment's configured based on the project planning in the specified time intervals with equipment's wise checklist for UAT signoff.
- c. The supplier shall be responsible for safety check and installation of all equipment along with safety checklist & test documents to be signed and share with ZHL.

Part II: Required Delivery & Implementation Parameters

- a. Delivery schedule: The delivery should be completed within 35 days from the date of issue of Purchase Order.
- b. Supervision, Installation: The installation should be completed within 45 days from the date of issue of Purchase Order.
- c. UAT: The UAT should be completed/done within 45 days from the date of issue of Purchase Order.
- d. Training and Commissioning: The Training and Commissioning should be completed within 45 days from the date of issue of Purchase Order.
- e. Project Sign-off to include the following Documents and to be done within 65 days of the PO issue date: Comprehensive User Manual/s written in simple English with detailed parts description, operating instructions, service contact numbers, Architecture layouts & diagrams along with Equipment's Inventory etc. Shall be provided. These should be printed on high quality papered housed in water-resistant pouches. All system super admin passwords to be shared in password protected excel.

| Description | *Delivery Schedule |
|--------------------------------------|--------------------|
| Delivery Period | PO + 35 days |
| Installation Period | PO + 45 days |
| UAT (User Acceptance Testing) Period | PO + 55 days |
| Training and Commissioning Period | PO + 60 days |
| Project Signoff Period | PO + 65 days |

*The exact dates would be put on the PO when it is issued based on the above timelines:

Part III: Penalty Parameter:

- f. Centre Up Timing: There will be 99.95% uptime warranty during warranty period as Specified in document. Time for scheduled maintenance shall be excluded for computation of uptime warranty. Failure to meet uptime shall render supplier liable for penalty @ 25,000 per day.

9. Payment Terms

- a. 100% Payment shall be made by the Service Provider to the vendor on delivery, inspection, installation and commissioning wherever applicable of the stores. The following documents have to be submitted to the Service Provider for claiming the payment.
 - i. Invoice clearly indicating the break up details of composite price i.e. Basic price, GST or any other duties and taxes, Freight/Packing Charges, Insurance etc
 - ii. Delivery Challan
 - iii. Proof of E-way bill, if any
 - iv. Inspection Certificate. Proportionate deductions will be made in case of part deficiencies / shortages

10. Prices

- a. The Supplier shall not charge higher than the prices quoted in the bid for the goods delivered and services performed.
- b. In case of variation in taxes and duties during the scheduled delivery period, the Service Provider shall revise the prices as per new duties and taxes for the supplies to be made during the remaining delivery period as per terms and conditions of purchase order.
- c. The price offered in the proposal should be inclusive of all costs and taxes, including transit insurance, freight for delivery at Bhubaneswar, Odisha.
- d. The name of the Purchaser and the name of the consignee along with the exact quantity to be delivered and the schedule of delivery will be given on the Purchase Order for the purpose of invoicing of the consignment. There may be slight variations in the actual quantity ordered and the quantities mentioned in the RFP Document for which the bid prices will hold good.
- e. No dealer/ wholesaler/ purchaser can sell any items for a price more than the MRP.

11. Liquidated Damages/Late Delivery Charges

If the Supplier fails to deliver the store or any consignment thereof within the period prescribed and agreed for delivery, the Service Provider, without prejudice to other remedies available to the Service Provider shall be entitled to recover Rs 50,000 (Fifty Thousand) for every day of default in either delivery or installation or UAT or completion of commissioning / Project Sign off.

12. Force Majeure

Notwithstanding the provisions of Termination for Default and Penalty clauses, the Supplier shall not be liable for forfeiture of its Security Deposit, penalty or termination for default, if and to the extent that, it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of force majeure.

Force majeure shall mean and be limited to the following:

- a. War/Hostilities
- b. Restrictions imposed by the Government or other statutory bodies which prevents or delays the execution of the order by the supplier.

13. Termination

The Service Provider may at any time terminate the contract by giving written notice of 7 days to the Supplier, if the Supplier becomes bankrupt or otherwise insolvent.

The Service Provider may, without prejudice to any other remedy for breach of contract, by written notice of default, sent to the Supplier, terminate this contract in whole or in part,

If the Supplier fails to deliver any or all of the goods within the time period specified in the contract, or any extension thereof granted by the Service Provider;

If the Supplier fails to perform any other obligation(s) under the Contract; and

If the Supplier does not remedy his failure within a period of 15 days after receipt of the default notice from the Service Provider.

In the event the supplier fails to supply the store in whole or in part, the contract is to be terminated and the Performance Security of the supplier to be forfeited. However, the Supplier shall continue the performance of the contract for the stores supplied to the extent as if the contract is not terminated.

14. Pre- bid Meeting

- a. A Pre-bid meeting with all the interested parties/firms, for the work will be held on the date and time fixed in this document. Only two representatives per firm / interested parties will be allowed to attend the meeting. The person(s) attending the meeting shall be capable of discussing the technical aspects of the work to be carried out and will carry the authorization letter from their company for this purpose
- b. All queries on the scope of work, terms and conditions and any other points pertaining to the work order will be clarified by the Purchase Committee of ZHL
- c. The queries shall be restricted to the scope of tender document, its terms and conditions. Discussions/arguments with co-vendors are strictly prohibited

- d. All the queries shall be brought forth only during this pre-bid meeting since no queries will be entertained thereafter
- e. The minutes of the meeting will be recorded and become part of the Tender Evaluation process. Decisions taken at the meeting will supersede the relevant terms and conditions of the tender document subject to concurrence/approval by State Procurement Committee of Govt. of Odisha¹.

15. Resolution of Disputes

If any dispute arises between parties, then there would be two ways for resolution of the dispute under the Contract.

a. Amicable Settlement

Performance of the contract is governed by the terms and conditions of the contract, however at times dispute may arise about any interpretation of any term or condition of contract including the scope of work, the clauses of payments etc.

In such a situation, either party of the contract may send a written notice of dispute to the other party. The party receiving the notice of dispute will consider the notice and respond to it in writing within 30 days after receipt.

b. Resolution of Disputes

In the case dispute arising between the parties in the contract, which has not been settled amicably, any party can refer the dispute for Arbitration under (Indian) Arbitration and Conciliation Act, 1996. Such disputes shall be referred to Arbitral Tribunal as prescribed by Ministry of Law, Government of India. The Indian Arbitration and Conciliation Act, 1996 and any statutory modification or re-enactment thereof, shall apply to these arbitration proceedings. Arbitration proceedings will be held in Mumbai, Maharashtra and the language of the arbitration proceeding shall be in English and that of all documents and communications between the parties shall be as per directions of Arbitration Tribunal.

The decision of the majority of arbitrators shall be final and binding upon both the parties. The expenses of the arbitration as determined by the arbitrators shall be borne by party/parties as per directions of Arbitrator. However, the expenses incurred by each party in connection with the preparation, presentation shall be borne by the party itself.

16. Court Jurisdiction

All legal disputes between the parties shall be subject to the jurisdiction of the courts situated in Mumbai only.

SECTION 7- ANNEXURES TO BE ATTACHED ALONG WITH THE TECHNICAL PROPOSAL.

Annexure 1- Bid Form

To,

Chief Executive

Officer Ziqitza Health

Care Limited Mumbai

Re: Tender No

dated Dear

Madam,

1. Having examined the conditions of contract as in the Bid Document and specifications including Addenda Nos (if any), we the undersigned, offer to supply and deliver the tendered items of store in conformity with specifications and other terms and conditions for the sum quoted in the Financial Bid/financial offer.
2. We undertake, if our Bid is accepted, to commence supplies within 7 days from the date of issue of the Purchase Order and to complete delivery of all the ordered items specified in the contract within 60 days of the date of issue of the Purchase Order.
3. If our bid is accepted, we shall furnish the Security Deposit for a sum equal to 10% of the contract value for due performance of the contract.

Signature and Seal of the

Bidder Date

Place

Annexure 2- Bidder's Information

| S.No | Particulars | Details |
|------|---|--|
| 1 | Name of the Project | <i>"Integrated Patient Transport and Health Help line Service"</i> |
| 2 | Name and address of the Organization responding to RFP <ul style="list-style-type: none">• Telephone No with STD• Fax Number• E-mail address, if any• Name and Designation of Contact person | |
| 3 | Date of incorporation of the business | |
| 4 | Registration no and date | |
| 5 | Proposal Addressed to | |
| 6 | Reference of Notice inviting for RFP | |
| 7 | Authority for signing and submitting the document <i>(Power of Attorney, Resolution of the organization etc.)</i> | |
| 8 | Documents enclosed in support of the Request- As per index attached Total no of pages | |

Signature and Seal of the Bidder

ZHL - Tender Document – 002 dated August 14, 2019

Annexure 3- Annual Turnover Statement

The Annual Turnover of M/s _____ for the past two financial years is as given below:

| Sl.No | Year | Amount |
|------------------|------------|--------|
| 1 | 2016-2017 | |
| 2 | 2017-2018 | |
| 3 | 2018-2019* | |
| Total | | |
| Average turnover | | |

- CA Certified Statement will be accepted for FY 2018-2019

Signature and Seal of Bidder.

Certified by Chartered

Accountant.

Annexure 4- Performa for Performance Statement

Name of the Firm:

| SR.No | Name and address of the Client | Items Supplied | Period of Supply | Quantity Supplied | Value of Supplied | Certificate from client enclosed (Y/N) |
|-------|--------------------------------|----------------|------------------|-------------------|-------------------|--|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

*- Please enclose performance certificates which will help prove qualification under the eligibility criterion.

Signature and Seal of the Bidder

Annexure – 5 Technical Details of Proposed Items

| Sl.No | Name of Item | Qty. | Brand | Make | Model Number | Country of Origin |
|-------|--------------|------|-------|------|--------------|-------------------|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

Annexure 6- Financials

| Sl.No | Name of Item | UoM | Qty. | Cost per Unit | Total Amount (A) | Buy-back Value (B) | Net amount (C=A+B) | CMC 1 st Year (D) | CMC 2 nd Year (E) | Total Cost (C+D+E) |
|-------|--------------|-----|------|---------------|------------------|--------------------|--------------------|------------------------------|------------------------------|--------------------|
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |

Total C + D + E = (In figures and words)

Signature and seal of the Bidder

Notes:

The rate quoted against each item should be inclusive of all taxes, entry taxes, duties, freight, insurance etc at the point of delivery i.e. Bhubaneshwar, Odisha. However, at the time of billing, the basic price, GST be mentioned separately

The Bidders are advised to study the Scope of Work carefully and quote the price accordingly.

The Supplier shall be required to maintain the items for a period of five years from the date of completion of the delivery. The Service Provider shall enter into a separate contract for the Annual Maintenance of the items at the rate quoted in the bid. The landed price per unit (excluding GST) and including standard warranty and CMC charges for comprehensive maintenance contract shall be the criteria for determining the L1 rate. However the order will be placed only for the cost of the equipment. For CMC the rates will be frozen and the bidders will enter into CMC separately with Service Provider after the expiry of warranty if desired by the service provider

Annexure 7- After Sales Service Network in Odisha

| Name of the Item | Name and Agency of the After Sales Service Provider in Odisha | Phone/Fax/Email |
|------------------|---|-----------------|
| | | |
| | | |
| | | |
| | | |
| | | |

Signature and Seal of the Bidder

Annexure 8- Critical Data Center Components:

1. Servers
2. Storage
3. SAN Switch
4. Network Switch
5. Firewalls
6. Tape Library
7. Voice Gateways
8. KVM Switch
9. PRI Modems
10. Power Backup System (UPS)
11. Access control systems
12. Precision AC/ Cooling system
13. Digital Generator (250 KVA)