NATIONAL BOARD OF EXAMINATIONS

Ministry of Health & Family Welfare, Govt. of India

NAMS Building, Ansari Nagar,

New Delhi – 110029

No.: NBE/Admin/IT/Tender/Server/2019

dated 03rd January 2019

Invitation for Limited Bids

for

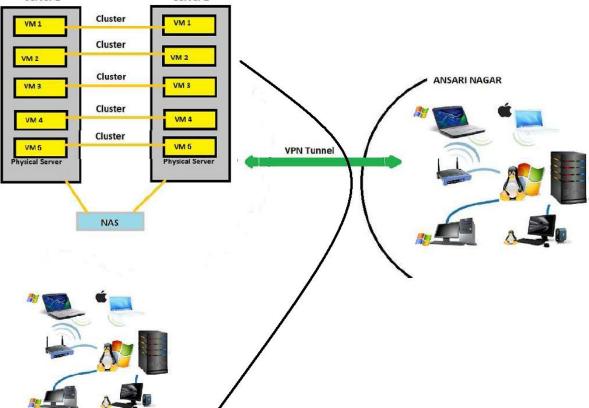
Deployment of Linux based Servers and Data Migration

The National Board of Examinations (NBE) is an autonomous body of Ministry of Health and Family Welfare (MOHFW), Govt. of India, entrusted with the task of conducting uniform and high standard examinations at Postgraduate level in the field of Modern Medicine. All entrance tests for admission to Medical courses, with the exception of NEET (UG) are being conducted by the NBE. Additionally, the NBE conducts three-year Post Graduation level course namely the Diplomate of National Board (DNB) and a two years Fellowship Courses.

2. The NBE has its offices at Dwarka and Ansari Nagar, New Delhi. The computer and IT infrastructure at both the offices are presently working at separate network with existing network/server system which are running on windows platform. NBE intends to deploy the existing network control system and serversin Linux based platformand disaster Recovery servers, as part of Free & Open Source Software(FOOS) initiative envisaged by the Government of India, Ministry of Electronics and Information Technology. In line with this, NBE has decided to procure latest hardware and its installation to createLinux based Servers for automation and monitoring the systems installed at NBE offices and other IT related resources (which are running on multiple platforms viz Windows, Linux, Mac). This setup has to be Virtualized and integrated with Disaster Recovery Server and also migrate data from existing Windows based servers.

Server 1 Server 2 Cluster Cluster VM 2 Cluster **ANSARI NAGAR** VM 3

An architecture diagram of proposed system is as under:



The NBE invites Limited Bids for Deployment of Linux Servers and Data 3. Migrationfrom reputed firms (also called the "bidder") capable of providing the Hardware and setting up the required infrastructure/environment in accordance with the requirements of NBE, as per its terms and conditions.

Eligibility Criteria for bidder

- 1) The agency/firm (bidder) should be a registered body.
- 2) The agency/firm (bidder) should have a turnover of more than 50 Lacson incremental basis in each year over the last three years. Copies of Company balance sheet, certified by the chartered accountant to be submitted.
- 3) The agency/firm should have minimum of 3 years of experience in Setting up and maintenance of Servers for reputed organizations (for Domain Controller, SQUID, Database, LAMP, File Share, Email server etc) on Linux based environment on virtualization.

Competencies

- 1) Past experience in Supply, Installation, Maintenance and Trouble shooting of Servers on Linux Platform professionally and exceptionally.
- 2) Excellent I.T. skills and project management skills.
- 3) Ability to provide additional servers requirements, maintenance support, meets deadlines and performs well under pressure.
- 4) Ability to respond quickly to the maintenance requirement in the post commissioning phase.
- 5) Awareness on the latest smart technologies for Server hosting on virtualization and deployment.
- 6) Ability to regularly monitor and update servers if required.

Essential knowledge and experience

- 1) Good information technology skills, with previous experience inServerdeployment, maintenance and management on Linux Platform through creation of VMs and VPN.
- 2) Knowledge of the mandate and work of a government department computer and IT network/Servers would be desirable.

Indicative Deliverables

1) The bidder has to provide the following items and services with specifications as given:

Two Server: One for Running Virtual Machines and second server will be treated as clusterserver (Fail Over).

Five Virtual Machines to be deployed on physical Servers with the following services:

- A. Linux Based Domain Controller (SAMBA 4.X or similar)
- B. Content Filtering, Reporting, Monitoring (SQUID)
- C. Database Server (MySQL/PostGre/MariaDB) with File Sharing
- D. LAMP Server (Web Server / Intranet Server)
- E. Email Server (ZIMBRA OS)

NAS(Network Area Storage) for Backup Space

VPN Connectivity with ANSARI NAGAR Office

- 2) Bidder should be capable of create and providing more VMs on the deployed servers within a short notice of time (within a week) as and when required.
- 3) The bidder has to provide knowledge transfer to NBE Officer/Officials regarding creation, installation, implementation, maintenance and troubleshooting of proposed architecture.

- 4) The bidder has to provide the Technical Manual including Data Backup/ Archival Process, data recovery, creation and modification of network architecture, domain policy, Security policy etc.
- 5) The bidder has to provide a Prompt and Proper Maintenance of servers for a period of one year.
- 6) The bidder has to provide support for installation of applications and database on the servers as per requirements of NBE.

Scope of the Work & Technical Specifications

Scope of Work and the Technical Specifications is as under:

Component	Quantity
DELL 2U Rack	
Intel® Xeon® Silver 4110 (2.10GHz/11M Cache)	
8X16 GB DDR4 / 3X 2 TB NLSAS (2.5 inch with 3.5	
inch carrier) 10K RPM upto 8x3.5LFFRAID 0,1,5 (H730p)+ 2GB	2
CACHE / IDRAC 9DVD Writer /Dual 2X inbuilt (750W)	
3 Yrs. Pro-Support & Mission Critical	
24x7 Hr Onsite	
NAS Device NETGEAR RN-214	
4 Bays with 8 TB EFFECTIVE STORAGE	1
(4TB * 3 NOS) RAID 5 RAD WD DRIVES	
CentOS 7.x (Open Source)	6
PROXMOX virtualization Software(Open Source)	2
Servers Deployment& Maintenance Service	
Server Implementation/deployment ,SQUID/LINUX Domain	
Controller/Database,Server/Application Server/Email erver/LAMP	
Server/VPN Connectivity With possible data, migration from OLD	
windows based servers for 250, user based network setup.	
One Year Maintenance	
24*7 Support	

Functional Requirements

DEPLOYMENT OF LINUX SERVER AND DATA MIGRATION

It is the responsibility of the bidder to ensure that the installation of new server setup and data migration from old servers is taken care of and that any problem arises are quickly resolved. Also, the hardware equipment is to be maintained by the service provider (bidder) for a period of one year. The Service provider should support NBE for Installation of application and migration of data from the existing servers.

I. Linux Based Domain Controller

A Linux based ActiveDirectory-compatible domain controller that supportscentralized Net logon authentication for Windows systems, network printing services etc., without requiring Windows Server and provide a secure and stable free software re-implementation of standard Windows services and protocols (SMB/CIFS).

Desired Features:

- GPL Licensing –Free
- Inbuilt LDAP Server
- Unlimited users
- Virus free
- Stable and secure
- Centralized authentication throughdomain controller
- Group policies for windows clients
- Unlimited file shares
- Integration with windows AD server

Contd..

II. LAMP (Linux, Apache, MySQL, PHP) Server

The service provider should take care of all the activities of installation of LAMP server as per the requirement of NBE. Following installation and configuration characteristics should be integrated during installation:

- ✓ Apache Web Server (Mod Security + Automatic updated rules optional)
- ✓ PHP (suPHP, SuExec + PHP version switcher)
- ✓ MySQL/MariaDB + phpMyAdmin/PostGreSQL
- ✓ Postfix + Dovecot + roundcube webmail
- ✓ CSF Firewall
- ✓ File System Lock
- ✓ Backups
- ✓ AutoFixer for server configuration

3rd Party Aplications

- ✓ CloudLinux + CageFS + PHP Selector
- ✓ Softaculous Script Installer (Free and Premium)

CentOS Web Panel (CWP)

- ✓ Setups Server for Web Hosting
- ✓ API for easier account management, and whmcs billing api
- ✓ NAT-ed version, support for NAT-ed IPs
- ✓ Free Hosting Module, account activation provisioning for sites that have a free hosting

Web Server

- ✓ Varnish Cache server
- ✓ Nginx Reverse Proxy
- ✓ Compiles Apache from source
- ✓ Apache reCompiler + Additional modules installation with one click
- ✓ Apache server status, configuration
- ✓ Apache Redirects Manager
- ✓ Edit apache vhosts, vhosts templates, include configuration
- ✓ Rebuild all apache Virtual hosts with one click
- ✓ suPHP&suExec (improved security)

- ✓ Mod Security: Comodo WAF, OWASP rules
- ✓ Tomcat 8 server management & install in one click
- ✓ DoS protection from the Slow-Loris attacks
- ✓ Apache with spamhaus RBL protection (Protecting http PUT,POST,CONNECT)
- ✓ Perl cgi script support

PHP

- ✓ Compiles PHP from source (improves up to 20% on performances)
- ✓ PHP Switcher (switch between PHP versions like: 5.2, 5.3, 5.4, 5.5, 5.6, 7.x)
- ✓ PHP Selector select PHP version per user or per folder (PHP 4.4, 5.2, 5.3, 5.4, 5.5, 5.6, 7.x)
- ✓ Simple php editor
- ✓ Simple php.ini generator in the users panel
- ✓ PHP addons with one click
- ✓ PHP.ini editor & PHP info & List modules
- ✓ php.ini per user account (you can add changes in /home/USER/php.ini)
- ✓ FFMPEG, For Video streaming websites)
- ✓ CloudLinux + PHP Selector
- ✓ ioncube, php-imap ...

User Management

- ✓ Add, List, Edit and Remove Users
- ✓ User Monitoring
- ✓ Shell access management
- ✓ User Limit Managment (Quota and Inodes)
- ✓ Limit Processes: The maximum available number of processes per account.
- ✓ Limit Open Files: The maximum available number of open files per account.
- ✓ User FTP &File Manager
- ✓ CloudLinux + CageFS
- ✓ Dedicated IP per account

DNS

- ✓ FreeDNS
- ✓ Add, Edit, List and Remove DNS zones
- ✓ Edit nameserver IPs
- ✓ DNS zone template editor
- ✓ New Easy DNS Zone Manager (with ajax)
- ✓ New DNS Zone list with Additional resolving information using google

System

- ✓ Hardware Information (CPU core and clock info)
- ✓ Memory Information (Memory usage info)
- ✓ Disk Info (Detailed Disk status)
- ✓ Software Info (kernel version, uptime...)
- ✓ Services Status (Quick services restart eg. Apache, FTP, Mail...)
- ✓ ChkConfig Manager (Quick list and manage your services)
- ✓ Services Monitor (automatic restart of services and email notifications)
- ✓ Network port usage
- ✓ Network configuration
- ✓ SSHD configuration
- ✓ Auto-Fixer (checks important configuration and tries to auto-fix issues)

Monitoring

- ✓ Live Monitoring (Monitor services eg. top, apache stats, mysql...)
- ✓ Use Java SSH Terminal/Console within panel
- ✓ Services Configuration (eg. Apache, PHP, MySQL...)
- ✓ Run shell commands in screen/background
- ✓ Security
- ✓ CSF Firewall (Best Linux Firewall)
- ✓ SSL generator
- ✓ SSL Certificate Manager (quick and easy installation of SSL Certs)
- ✓ Letsencrypt, Free SSL certificates for all your domains
- ✓ CloudLinux + CageFS

- ✓ CSF/LFD BruteForce protection
- ✓ IP access control
- ✓ Mod Security + OWASP rules (one click install, easy management)
- ✓ DoS protection from the Slow-Loris attacks (for Apache)
- ✓ File System Lock (no more website hacking, all your files are locked from changes)
- ✓ PHP now shows the script name and path in top or process lists
- ✓ Apache is limiting number of php processes per user
- ✓ Automated Backups
- ✓ Hide system and other user processes
- ✓ SFTP Security

Database

- ✓ MySQL Database Management
- ✓ Add local or remote access user
- ✓ Live Monitor MySQL process list
- ✓ Create, Remove database
- ✓ Add additional users per database
- ✓ MySQL server configuration
- ✓ PhpMyAdmin (database managment)
- ✓ PostgreSQL, phpPgAdmin Support
- ✓ Remote MySQL support (remove mysql load from web server)
- ✓ MongoDB Manager/Installer

Additional options

- ✓ TeamSpeak 3 Manager (Voice servers)
- ✓ Shoutcast Manager (Shoutcast streaming servers)
- ✓ Auto-update
- ✓ Backup manager
- ✓ File Manager
- ✓ Scripts folder "/scripts" over 15+ scripts
- ✓ Virtual FTP users per domain
- ✓ cPanel Account Migration (restores files, databases and database users)
- ✓ SSH key generator

III. SQUID Server

The service provider should take care of all the activities of installation of SQUID server as per the requirement of NBE. Following installation and configuration characteristics should be integrated during installation:

- Safe & Secure Internet Surfing
- Virus/Worm/Spyware Protection
- Download Blocking File Extension Wise
- Time Based Internet Surfing Control
- Mime Type Filter
- Reporting in a database (Surfing Logs)
- Antivirus Integration
- Control Panel
- User/IP/MAC Level Security
- Unlimited Surfing Rule sets
- Extended Cache Management
- Download Throttling
- Control user level Security
- URL Blocking / Content Filtering
- Transparent Proxying
- Own DHCP/DNS Server
- Network Monitoring on Gateway
- Report Can be export in PDF Format

IV.EMAIL Server

The service provider should take care of all the activities of installation of EMAIL server as per the requirement of NBE.

V. VPN Network

The service provider should take care of all the activities of installation of VPN Network as per the requirement of NBE. Internet privacy, remote access for employees, securing Cloud data centre through VPN setup at its Offices at different locations.

VI. Uptime Guarantee

The Service Provider has to ensure that the Uptime for the application availability of servers in NBE networks at least 99.5%.

Criteria for evaluation

The evaluation process consists of 2 stages. Only those firm/bidder/companies that have passed the technical evaluation stage will be allowed to submit the financial bid.

Criteria for evaluation of Technical and Financial Bids:

- 1) Background and Registration of organization (date of start, various types of IT related tasks performed in past other than web development)
- 2) Proven practical experience with all stages of Installation of Servers (Work -order, Agreements, SLA)
- 3) Past experience of Installation and maintaining Servers (AMC document agreement, bill of payments etc.)
- 4) Registered in Central/State Govt. Organizations/bodies. (Documents of empanelment with them)
- 5) Average income tax paid in last 3 years (on basis of attached ITR document of three years)
- 6) Average Turnover for the last 3 years (on basis of CA's certified document of three years)

The above items shall be verified on the basis of the documents submitted by the bidder. The successful bidder, has to score above 70% in the technical evaluation, shall be allowed to submit the financial bid. The decision of committee to provide score shall be final and binding to accept for bidders.

Cost of Tender Document

As the Tender Document is for Limited Bids, the same can be downloaded from our website www.natboard.edu.in 'free of cost'.

Single Stage Two Envelops System (Two Bid System)

Two envelops system shall be followed by NBE to determine the successful bidder. The agency/firm (bidder) should bifurcate their quotations in two separate envelops, (with appropriate superscriptions), and submit the same in one sealed envelope.

- 1) The first envelop, called the Techno-Commercial bid, should contain the eligibility, technical quality and performance aspects, commercial terms and conditions and documents sought in the tender, except the price and relevant financial details.
- 2) In the second envelop, called the Financial bid, the agency/firm (bidder) should submit its price quotation along with other financial details.
- 3) All interested bidders may submit their Limited Bids addressed to the Honorary Executive Director, by 12 noon of 18th January, 2019 at:

National Board of Examinations,
NAMS Building, Medical Enclave,
Ansari Nagar, Mahatma Gandhi Marg,
New Delhi – 110029

The envelopes containing the Techno-Commercial bids shall be opened on the same day at 4 pm.

- 4) The Bids shall be scrutinized and evaluated by NBE's Technical and Evaluation Committee with reference to the parameters prescribed in the tender documents, and responsive, eligible and technically compliant bidders shall be decided.
- 5) Thereafter, in the second instance, the Financial bids of only the technocommercially compliant offers (as decided in the first instance above) shall be opened at 4 pm of the 21st January, 2018 for further scrutiny, evaluation, ranking and placement of contract.

- 6) The Financial bids of technically non-compliant bidders shall be returned unopened to the respective bidders by SPEED POST/reliable courier or any other mode with proof of delivery.
- 7) Any Bid received by NBE after the last date for submission of the said Limited Bids will be summarily rejected and returned unopened to the Bidder. NBE shall not be responsible for any postal delay or non-receipt / non-delivery / incomplete Bid documents. No further correspondence on this will be entertained.

General Instructions

- 1) The firm must be registered with Offices / institutions of the Govt. of India/ State Governments.
- 2) The bidder should behaving PAN, TAN/TIN, GST (whichever applicable) and Registered for Service Tax.
- 3) Rate quoted should be inclusive of the cost of Services, Manpower cost, Printing, Transportation, maintenance for a minimum onward period of 1 year, inclusive of charges of GST and other taxes as applicable.
- 4) Any reimburse of amount shall be considered only after successful completion of assignment.
- 5) The firm has to complete the job assigned within the joint agreement duration and if the job is not completed within the stipulated time, a penalty @ 10% of the cost of the uncompleted job for each day will be imposed on the firm.
- 6) NBE will have no liability regarding transportation, boarding and loading of firm/bidder and their staff.
- 7) Under no circumstances the firm shall appoint any subcontractor or sub lease the contract. If violated the conditions, the contact with the firm will be terminated.

- 8) The rate quoted once will be remaining firm for that particular dealing. Any Conditions of the firm sent along with proposal if any, shall not binding on NBE.
- 9) It is not binding on NBE to accept the lowest of the biding.
- 10) TDS as applicable on date will be deducted from firm actual bill submitted for payment.
- 11) The price accepted by the committee is final and no deviation from it will be accepted in this regard.
- 12) Conditional offer submitted by firm/bidder or submitted by fax/email will not be accepted.
- 13) The NBE reserves the right to accept or reject any or all Bids without assigning any reason thereof.
- 14) Jurisdiction for disputes if any, shall be at New Delhi only.

Earnest Money Deposit& Performance Security

- 1) Each Bidders shall furnish, Earnest Money Deposit (EMD) of Rs. 5,000/-as Bid Security in the form of Demand Draft / Banker's Cheque, from a scheduled commercial bank, drawn in favour of National Board of Examinations, New Delhi.
- 2) The EMD of unsuccessful bidders shall be returned without any interest only after finalization of selection and the signature on Service Level contract (SLA)/Agreement with NBE.
- 3) The EMD of the successful bidder shall be returned to the agency without interest after the agency signs the Service Level Contract (SLA) / Agreement and submits a Performance Bank Guarantee (PBG) equal to 10% of the contract value.
- 4) The EMD will be forfeited if the agency withdraws the bid during the period of bid validity or does not accept the correction of errors. If the successful Bidder fails to sign the Contract/Agreement within the time stipulated, the NBE will adopt measures relating to unfair practices.

Disqualification

NBE reserves the right to reject Bids in the following cases:

- 1) Bids received after due date and time.
- 2) Bids not accompanied by all requisite documents along with the Earnest Money Deposit (EMD) by Demand Draft / Bankers Cheque.
- 3) If the hard copy of Bids is not signed by the authorized signatory of the agency.
- 4) If the bidder submits the Bids specifying his own terms and conditions.
- 5) If information submitted in Bids is found to be misrepresented, incorrect or false.
- 6) Bidder fails to deposit the Performance Bank Guarantee (PBG) or fails to enter into a contract even after the date of notice of award of contract or within such extended period, as may be, the selection may be rejected.
- 7) Bidders may specifically note that while evaluating the Bids, if it comes to NBE knowledge, expressly or implied, that some bidders may have colluded in any manner whatsoever or otherwise joined to form an alliance resulting in delaying the processing of Bids, then the bidders so involved are liable to be disqualified.
