

REQUEST FOR PROPOSAL (RFP)

Rate Contract for Supply, Installation & Maintenance of Data Centre/Cloud Infrastructure

e-Tender Ref. No.: JAP-IT/RC (Data Centre/Cloud
Infrastructure)/02/2016



JHARKHAND AGENCY FOR
PROMOTION OF INFORMATION
TECHNOLOGY, GOVT. OF
JHARKHAND

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GOLCHAKKAR, DHURWA,
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DISCLAIMER

All information contained in this Request for Proposal (RFP) provided / clarified are in good interest and faith. This is not an agreement and is not an offer or invitation to enter into an agreement of any kind with any party.

Though adequate care has been taken in the preparation of this RFP document, the interested firms shall satisfy it-self that the document is complete in all respects. The information is not intended to be exhaustive. Interested Bidders are required to make their own enquiries and assumptions wherever required. Intimation of discrepancy, if any, should be given to the specified office immediately. If no intimation is received by this office by the date mentioned in the document, it shall be deemed that the RFP document is complete in all respects and firms submitting their bids are satisfied with the RFP Document in all respects.

Jharkhand Agency for Promotion of IT (JAP-IT), Ranchi under Dept. of IT & e-Gov., Govt. of Jharkhand reserves the right to reject any or all of the applications submitted in response to this RFP document at any stage without assigning any reasons whatsoever. JAP-IT also reserve the right to withhold or withdraw the process at any stage with intimation to all vendors submitted the BID document.

JAP-IT reserves the right to change/ modify/amend any or all of the provisions of this RFP document. Such changes would be posted on the website (**www.jharkhandtenders.gov.in** and **<http://japit.jharkhand.gov.in>**)

Neither JAP-IT, Jharkhand or their employees and associates will have any liability to any prospective respondent interested to apply or any other person under the law of contract, to, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this RFP document, any matter deemed to form part of this RFP. Information provided in this document or imparted to any respondent as part of the RFP process is confidential JAP-IT, Jharkhand and shall not be used by the respondent for any other purpose, distributed to, or shared with any other person or organization.

NOTICE INVITING TENDER

FOR

e-Tender Ref. No. : JAP-IT/RC (Data Centre/Cloud Infrastructure)/02/2016

Jharkhand Agency for Promotion of Information Technology (JAP-IT), invites online bid through e-Procurement system from IT firms (here in after referred to as "Bidder" till the award of Contract and there after onward of contract, referred to as "Vendor/Successful Bidder") for Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure. List of immediate procurement has been mentioned in the tender document for Supply, Installation, deployment and Maintenance of JDC Cloud at JAP IT Data Centre (JDC).

The document can be downloaded from the website www.jharkhandtenders.gov.in in response to this tender shall be deemed to have been done after careful study and examination of this document with full understanding of its implications. This section provides general information about the Issuer, important dates and addresses and the overall eligibility criteria for the parties. **The tender document cost of Rs.10,000/- is to be submitted vide crossed demand draft on any Nationalized bank/ Scheduled Bank in favour of The CEO, Jharkhand Agency for Promotion of Information Technology (JAP-IT), Ranchi.**

- **Issuer**

The CEO
Jharkhand Agency for Promotion of Information Technology, Ranchi
Ground Floor, Engineers hostel 1,
Near Golchakkar, Dhurwa, Ranchi-834 004.
Tel: 0651-2401044
Fax: 0651-2401040
Email: support.jdc@jharkhandmail.gov.in
Website: <http://japit.jharkhand.gov.in>

- **Address for Bid Submission and Correspondence**

The CEO
Jharkhand Agency for Promotion of Information Technology, Ranchi
Ground Floor, Engineers hostel 1,
Near Golchakkar, Dhurwa, Ranchi-834 004.
Tel: 0651-2401044
Fax: 0651-2401040
Email: support.jdc@jharkhandmail.gov.in
Website: <http://japit.jharkhand.gov.in>

The bid shall be downloaded and submitted online in the Website <http://jharkhandtenders.gov.in> The bidder(s) should have necessary portal enrolment with their own Digital Signature Certificate.

ABBREVIATION & DEFINITION

ABBREVIATIONS	DEFINITIONS
Authorized Signatory	The bidder's representative with the powers to commit the authorizing organization to a binding agreement. Also called signing officer/authority having the Power of Attorney (PoA) from the competent authority of the respective bidding firm.
BG/PBG	Bank Guarantee/Performance Bank Guarantee
Bid/e-Bid/Proposal	A formal offer made in pursuance of an invitation by a procuring entity and includes any tender, proposal or quotation in electronic format
Bid Security	A security provided to the procuring entity by a bidder for securing the fulfillment of any obligation in terms of the provisions of the bidding documents
Bidder	Any person/ firm/ agency/ company/ contractor/ supplier/ vendor participating in the procurement/ bidding process with the procurement entity/prime bidder
Bidding Document/RFP	Documents issued by the procuring entity, including any amendments thereto, that set out the terms and conditions of the given procurement and includes the invitation to bid
CBS	Cost Based Selection (L1)
CEO	Chief Executive Officer
Competent Authority	Chief Executive Officer, JAP-IT or his representative
Contract/ Procurement Contract/ Agreement	A contract entered into between the procuring entity and a Selected Bidder (RC holder) concerning the subject matter of procurement
Contract/ Project Period	Contract is of 01 year from the date of signing of the agreement.
Day	A calendar day as per GoJ
DeitY, GoI	Department of Electronics and Information Technology, Government of India
DoIT& e-Gov, GoJ	Department of Information Technology & e-Governance, GoJ
GoI/ GoJ	Government of India/ Government of Jharkhand
ICT	Information and Communication Technology
IFB	Invitation for Bids (A document published by the procuring entity inviting Bids relating to the subject matter of procurement and any amendment thereto and includes notice inviting Bid and request for proposal)
INR	Indian Rupee
ISI	Indian Standards Institution
ISO	International Organization for Standardization
IT	Information Technology
ITB	Instruction to Bidders
JDC	JAP-IT Data Centre
LD	Liquidated Damages
LoI	Letter of Intent
NeGP	National e-Governance Plan of Government of India, Department of Information Technology (DIT), Ministry of Communications and Information Technology(MCIT), New Delhi

NIB	Notice Inviting Bid
Notification	A notification published in the Official Gazette
OEM	Original Equipment Manufacturer
PAN	Permanent Account Number
PC	Procurement/ Purchase Committee
Procurement Process	The process of procurement extending from the issue of invitation to Bid till the award of the procurement contract or cancellation of the procurement process, as the case may be
Procurement/ Public Procurement	The acquisition by purchase, lease, license or otherwise of works, goods or services, including award of Public Private Partnership projects, by a procuring entity whether directly or through an agency with which a contract for procurement services is entered into, but does not include any acquisition without consideration, and "procure" accordingly
Project Site	"Project Site", wherever application where the project implementation is to be carried out
PSD/ SD	Performance Security Deposit/ Security Deposit
Purchaser/ Tendering Authority/ Procuring Entity	JAP-IT
JAP-IT	Jharkhand Promotion of Information Technology
SDC	State Data Centre, Jharkhand
JharNet	Jharkhand State Wide Area Network
JVAT	Jharkhand Value Added Tax
Selected Bidder/ Supplier/ Implementing Agency/ Successful Bidder	The bidder who will be finally selected (RC holder) and who gets into an agreement with the JAP-IT for completing the work mentioned in this bidding document
Services	Any subject matter of procurement other than goods or works and includes physical, maintenance, professional, intellectual, consultancy and advisory services or any service classified or declared as such by a procuring entity and does not include appointment of any person made by any procuring entity
SLA	Service Level Agreement is a negotiated agreement between two parties wherein one is JAP-IT and the other is the selected bidder. It is a service contract where the level of service is formally defined. In practice, the term SLA is sometimes used to refer to the contracted delivery time (of the service) or performance.
SoW	Scope of Work
State Government	Government of Jharkhand
e-Procurement Portal	http://jharkhandtenders.gov.in
TC	Technical Committee
TIN	Tax Identification Number
VAT/ CenVAT	Value Added Tax/ Central VAT
WO/PO	Work Order/ Purchase Order

1. TENDER SCHEDULE

1.	Name of Work	Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure
2.	Tender Ref No.	JAP-IT/RC (Data Centre / Cloud Infrastructure)/02/2016
3.	Cost of tender Document	INR 10,000/-(Rs. Ten Thousand only) in the form of Demand Draft in favour of CEO, JAP-IT payable at Ranchi
4.	Earnest Money Deposit (EMD)	INR 15,00,000 /- (Rs. Fifteen Lakhs only) in the form of BG/Demand Draft (Validity 90 days) in favour of CEO, JAP-IT payable at Ranchi
5.	Availability of Tender Online for bidding	
A.	Bid Downloading Date	22.09.2016 onwards
B.	Start date and time of Online	14.10.2016 from 11:00 am onwards
C.	Last date and time of Online Bid Submission	18.10.2016 till 05:00 pm
D.	Technical Bid Opening	20.10.2016 at 03:30 pm onwards
E.	Financial Bid Opening	To be announced latter
F.	e-Mail Address for	support.jdc@jharkhandmail.gov.in
G.	Place of Bid opening	Chief Executive Officer, JAP-IT, Ground Floor, Engineer's Hostel 1, Near Goal Chakkar, Dhurwa, Ranchi – 834 004.

- Cost of bidding document i.e. INR 10,000 (non refundable fee) as indicated shall be in the form of demand draft drawn upon any Nationalized/Scheduled Bank in favor of CEO, JAP-IT, Ranchi payable at Ranchi.
- The Bidder shall furnish a refundable bid security (EMD) amounting to INR 15,00,000.00 (Rs. Fifteen Lakhs only). The bid security shall be in favor of CEO, JAP-IT, Ranchi.
- Cost of Tender Document and Bid Security (EMD) shall be deposited in the office of the CEO, JAP-IT, Ground Floor, Engineer's Hostel No.1, Near Golchakkar, Dhurwa, Ranchi on all working days.
- Tender Document cost & Bid Security (EMD) has to be submitted by registered post/Speed post or by hand latest by 20.10.2016 by 02:30 pm. Only those applications will be entertained who's cost of Tender Document and Bid Security (EMD) submitted to JAP-IT within the respective time frame. CEO, JAP-IT will not be held responsible for the postal delay, if any, in the delivery of the document or non-receipt of the same.

- Those bidders, who have paid the tender cost at the time of pre bid meeting, shall not be paid the amount again. The copy of the same can be attached/ submitted at the time of pre bid or submission of bid.
- Bids shall be submitted online on the website <http://jharkhandtenders.gov.in>
- Documents mentioned in Addendum (Instruction to bidders for Jharkhand SBD Contract) must be uploaded/ submitted according to Addendum).
- Authority (JAP-IT) reserves the right to reject any or all the tender(s) received without assigning any reason thereof.
- Tender Document can be downloaded from www.jharkhandtenders.gov.in & <http://japit.jharkhand.gov.in>
- In Case, bidder requires any assistance regarding online bidding process they may contact through helpline no. (0651-2400178)

Note: Bidders are advised to familiarize themselves adequately with the Jharkhand Government e-procurement website (www.jharkhandtenders.gov.in) well in advance, to avoid last minute technical glitches/errors preventing successful uploading of bid within specified time frame.

**Officer on Special Duty,
JAP-IT, GoJ**

2. INTRODUCTION

JAP-IT is the nodal agency for execution of e-Governance projects in the State of Jharkhand. In continuation of that JAP-IT also responsible for smooth functioning of State Data Centre (SDC) and Near Data Centre (JAP-IT Data Centre – JDC).

JAP IT Data Centre (JDC) established in year 2005 and it is been delivering all important services (Financial, G2G, G2C) of Govt. of Jharkhand. JAP-IT Data Center is state of the art established at JAP-IT premises currently JDC is delivering services as State Data Centre (SDC) of Govt. of Jharkhand till SDC gets functional, after that JDC becomes Near Data Centre (NDC) for State of Jharkhand.

JDC is one of the major pillars involved in execution of several computerization projects in the State of Jharkhand. JAP-IT is delivering more than 100 e-Gov services with existing resources. JAP-IT Data Center has the required infrastructure which makes it unique in-comparison with others, as JDC comprises with collocation, cloud, redundancy at each level, 24*7 operation & support and other Non-IT infrastructure etc. Computing infrastructure & Non-IT infrastructure installed at JDC are under AMC and been properly maintained. Operation of JDC including exiting JDC cloud is being maintained by JAP-IT's JDC team with 24*7 support.

JDC performs to ensure minimal downtime or minimal disruption in operations. The facility like fire detection and suppression systems is state-of-the-art technology to guard against potential losses due to fire. Sophisticated onsite security through surveillance cameras and advanced biometric systems to prevent unauthorized entry. Backups are scheduled as per standards.

3. SCOPE OF WORK

JAP-IT wishes for a Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure so that smooth functioning of State Data Centre (SDC) and Near Data Centre (JAP-IT Data Centre – JDC) may be continue & enhance.

JAP-IT Data Centre (JDC) having its own cloud named JDC Cloud performing with intermediate level server in which ProxmoxVm& CitrixXen Cloud is running. Currently 53 services are being delivered through JDC cloud platform. To cater the huge no. of services through JDC Cloud, strengthening of JDC cloud is much more needed so that maximum e-Gov. services will be delivered through JDC cloud with high availability & fault tolerance. Technical details are as under:

1. Existing JDC Cloud Architecture
 - See on Annexure 9.1
2. Details of Existing Equipment/item (utilized for JDC Cloud).
 - See on Annexure 9.2
3. List of Immediate Hardware Requirement (for strengthen of JDC Cloud).
 - See on Annexure 9.3
4. Proposed Architecture for JDC Cloud
 - To be submitted by vendor/ selected bidder.
5. Details of Technical Specifications (for strengthen of JDC Cloud).
 - See on Annexure 8

4. TERMS & CONDITION

Due Diligence

The Bidder is expected to and shall be deemed to have examined all instructions, forms, terms and specifications and other information in this Tender Document. The bid should be precise, complete and in the prescribed format as per the requirement of the Tender Document. Failure to furnish all information required by the Tender Document or submission of a bid not responsive to the Tender Document in every respect will be at the Bidder's risk and may result in rejection of the bid. Jharkhand Agency for Promotion of Information Technology (JAP-IT) shall at its sole discretion be entitled to determine the adequacy/ sufficiency of the information provided by the Bidder.

Cost of Bidding

The Bidder will bear all costs associated with the preparation and submission of its bid and Jharkhand Agency for Promotion of Information Technology (JAP-IT) will in no event or circumstance be held responsible or liable for these costs, regardless of the conduct or outcome of the bidding process.

Bid Submission

Sealed offers prepared in accordance with the procedure enumerated in the RFP document should be submitted to CEO, JAP-IT, not later than the date and time laid down, at the address given in the schedule for invitation for BID.

All bids must be accompanied by a non-refundable Bid fee/Tender Cost **INR 10,000/-** in form of Bank Draft and Bid security/ **Earnest Money Deposit (EMD) of INR. 15,00,000 /-** (Rs. Fifteen lakhs only) in the form Bank Demand Draft / Bank Guarantee valid for period of 3 months drawn from a Nationalized/scheduled bank in favor of CEO, JAP-IT, payable at Ranchi.

Bid not accompanied by Earnest Money/Bid Security and Tender Cost or incomplete in any respect will be rejected outright.

The tenders will be opened on the date and time indicated in the presence of Bidders if any present on the occasion. If the date of opening is declared to be a holiday the tenders will be opened on the next working day or as decided by Tendering Authority.

This Tender Document is not transferable at any circumstances.

Site Visit

The bidder may wish to visit and examine the site (s) of the project and obtain for itself, at its own responsibility and risk, **all required information** that may be necessary for preparing the bid and entering into the contract.

Proposal Evaluation

The constituted Evaluation Committee shall evaluate the Technical and Financial proposals. The decisions of the Evaluation Committee in the evaluation of, Technical and Financial bids shall be final. No correspondence will be entertained outside the process of negotiation / discussion with the Committee.

Technical Evaluation

The evaluation of the Technical bids will be carried out in the following manner:

The bidders technical bid will be evaluated as per the technical qualification criteria specified in the RFP. JAP-IT reserves the right to ask for any other supporting document or testimonial at any Point of time, during the evaluation of the Bid.

Commercial Bid

After opening of the technical bids, those bidders, who are technically found eligible (i.e. who satisfy the all the eligibility criteria) and have submitted all the required documents mentioned in technical qualification criteria, the financial bids of the only those technically qualified bidders will be opened.

Selection Process:

1. L1 bidder will be finalized on the basis of Maximum number of Item-wise L1 prices quoted.
2. L1 bidder will be given an opportunity to match the minimum quoted rates quoted by other bidders item wise.
3. In case the L1 bidder meets the minimum quoted price item wise, L1 bidder will be awarded the contract for all the items mentioned in the RFP as per the requirement of the purchaser (mentioned in the Annexure -9.3).
4. If the above criteria are not fulfilled by the L1 bidder, opportunity will be provided to the L2 bidder and so on.
5. For Rate contract, all qualified bidders will be given the opportunity to match the item wise L1 rates for Rate contract finalization. This will be done with mutual discussion & negotiation between the bidder(s) and purchaser

Compliance sheet in context of specification of cloud hardware infrastructure provided by respective bidders against each of the items should be supported with OEM's Data Sheet and OEM Authorization for items quoted. Deviation to specification only is accepted in case of higher specification, other deviation will leads to non-compliance of the product and bidders also.

One OEM should be authorized with one bidder only except proprietary items as mentioned in RFP document. In case of conflict, the bid will be rejected for the concern bidders.

One OEM should not be allowed in the bids with multiple bidders.

Payment Schedule

No advance payment will be made.

Sl. No.	Mode of Payment	Remarks
1.	70 %of Total Quoted Price	Will be released on execution of respective work order i.e. on supply of HW infrastructure.
2.	20 % of Total Quoted Price	Will be released after successful installation, deployment & commissioning of the respective supplied HW infrastructure.
3.	10 % of Quarterly Payment	Will be released on quarterly basis for operation & maintenance of the HW infrastructure. Payments for post warranty AMC, if any will also be paid on quarterly basis for operation & maintenance of the HW infrastructure commissioning.

5. INSTRUCTIONS TO BIDDERS

Detailed instruction & documents to be furnished for online bidding

- ✓ Guidelines for online submission of bids can be downloaded from the website <http://jharkhandtenders.gov.in>
- ✓ Interested bidders can download the bid from the website <http://jharkhandtenders.gov.in> or <http://japit.jharkhand.gov.in>
- ✓ Bidders in order to participate in the bidding process have to get 'Digital Signature Certificate (DSC)' as per Information Technology Act-2000 to participate in online bidding. This certificate will be required for digitally signing the bid. Bidders can get the above mentioned digital signature certificate from any approved vendors (CA). Bidders, who already possess valid Digital Certificate, need not procure new Digital Certificate.
- ✓ **Bidders have to submit their bids online in electronic format with digital Signature. Bids without digital signature will not be accepted. The bidders' are also required to submit the hardcopy (seal and signed) of the technical bid documents latest by 20.10.2016 by 02:30 pm along with Tender Document cost & EMD. In case of any discrepancies in the submitted documents (hard copy), JAP-IT will accept the online bid documents as authentic and final. This shall be binding to all parties.**
- ✓ Bids will be opened online as per time schedule mentioned in the Invitation for Bids (IFB).
- ✓ Bidders should be ready with the scanned copies of cost of documents & EMD/Bid security as specified in the tender document. Before submission of bids online, bidders must ensure that scanned copies of all the necessary documents have been attached with bid.
- ✓ Bidders have to submit original Demand Draft towards tender fee & EMD/bid security as mentioned in the RFP during the period & time as mentioned in the RFP failing which bid will not be accepted. The details of cost of documents, EMD/bid security specified in the tender documents should be the same as submitted online (scanned copies), otherwise bid will summarily be rejected.
- ✓ Uploaded documents of successful bidder will be verified with the original before signing the agreement. The successful bidder has to provide the originals to the concerned authority.
- ✓ **The JAP-IT will not be responsible for delay in online submission of bids due to any reason, what so ever.**
- ✓ All required information for bid must be filled and submitted online.

Details of the documents to be furnished for online bidding

- (a) Scanned copies of the following documents to be up-loaded in .pdf format only on the website <http://jharkhandtenders.gov.in> in Technical envelop/folder.
- i. Bank Demand draft towards tender cost
 - ii. Bank Demand Draft or Bank Guarantee towards EMD/Bid Security.
 - iii. Technical Qualification information and supporting documents as specified in Technical Evaluation Criteria

- iv. Certificates, undertakings, affidavits, Annexure as required in Technical Qualification Criteria and
- v. Annexure-1, 2, 5, 6,8
- (b) Scanned copies of the following documents to be up-loaded in .pdf format only on the website <http://jharkhandtenders.gov.in> in Technical envelop/folder.
 - i. Duly filled in & Digitally signed BOQ (Will be available online in the portal)
 - ii. Financial Bid proposal (As per annexure 10)
- (c) Uploaded documents of successful bidder will be verified with the original before signing the agreement. The successful bidder has to provide the originals to the concerned authority on receipt of such a letter, which will be sent through registered post or speed post or delivered by hand.
- (d) Uploaded documents should be digitally signed by the bidders.

Format and Signing

The RFP shall be submitted in two parts

- ✓ Part A – Technical Bid
- ✓ Part B – Financial Bid

The RFP shall be typed or written in indelible ink and shall be signed by the applicant or a person or persons duly authorized. Any interlineations, erasures or overwriting shall be valid only if the person or persons signing the RFP prior to opening of the same initial them.

Submission of Bid

Sealing and Marking of Bids (For hardcopy)

The Bidders shall also furnish a hard copy of the seal Technical bid and shall be addressed to:

The CEO, JAP-IT, Engineers Hostel No. 1, Near Golchakkar, Dhurwa, Ranchi-4

The envelope shall bear the words:

“Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure”

Envelope shall indicate the name and address of the Bidder.

Deadline for Submission of Bids

- ✓ Bids must be received by The Tendering Authority at the address, not later than the time and date specified in the RFP In the event of the specified date for the submission of Bids being declared as a holiday for the Tendering Authority, the bids will be received up to the appointed time on the next working day.

- ✓ The Tendering Authority may, at its discretion, extend this deadline for submission of bids by amending the bid documents, in which case all rights and obligations of The Tendering Authority and Bidders subject to the deadline will thereafter be subject to the deadline as extended.
- ✓ Any bid received by the Tendering Authority after the deadline for submission of bids prescribed by the Tendering Authority, will be rejected and/or returned unopened to the Bidder.

Number of Proposals

A bidder can submit one proposal at a time. Bidder submitting more than one proposal shall be rejected.

Language of Bid

All proposals and various documents related to these proposals should be in English language. All correspondence between JAP-IT and the Bidders would also be in English Language. Supporting Documents and Printed Literature furnished by the Bidders may be in another Language provided they are accompanied by an accurate translation in English Language.

Conflict of Interest

JAP-IT requires that bidder must provide professional, objective and impartial advice and at all times hold, strictly avoid conflicts with other assignments/jobs or their own corporate interests and act without any consideration for future work. In case the Bidders have any subsisting interest, either by themselves or through their partners, that is likely to conflict the work specified in the Scope of Work, they shall declare such interests as part of their proposal.

Validity of Proposal

- ✓ For the purpose of placing the order, the Bids shall remain valid for at least 180 days after the date of bid opening.
- ✓ A bid valid for a shorter period may be rejected by JAP-IT as being non-responsive.
- ✓ During the period of validity of Bids, the rates quoted shall not change.
- ✓ In exceptional circumstances, JAP-IT may ask for extension of the period of validity and such a request shall be binding on the bidder.
- ✓ A bidder agreeing to such an extension will not be permitted to increase its rates.

Right to accept Proposal

JAP-IT reserves the right to accept or reject any Proposal, and to annul the Proposal process and reject all Proposals at any time prior to award of contract, without thereby incurring any liability to the affected bidder or any obligation to inform the affected bidder of the grounds for such decision.

Bid Opening

JAP-IT will open all proposals, in the presence of bidders or their authorized representatives who choose to attend, at the date and time mentioned in the RFP.

The bidders' representatives who are present shall sign a register evidencing their attendance. In the event of the specified date being declared a holiday, the RFPs shall be opened at the appointed time and location on the next working day.

Fraud & Corruption

JAP-IT requires that bidder is bidding for this RFP must observe the highest standards of ethics during the performance and execution of such contract, in pursuit (pursuance) of this policy.

- ✓ "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of JAP-IT official by any personnel of bidder in procurement process or in contract execution.
- ✓ "Fraudulent practice" means a misrepresentation of facts, in order to influence a procurement process or the execution of a contract, to the detriment of JAP-IT, and includes collusive practices among the bidders (prior to or after Proposal submission) designed to establish bids at artificially high or non-competitive levels and to deprive the JAP-IT of the benefits of free and open competition.
- ✓ "Unfair trade practices" means supply of services different from what is ordered on, or change in the Scope of Work which was given by the JAP-IT.
- ✓ "Coercive practices" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the execution of contract.
- ✓ JAP-IT will reject a proposal for award, if it determines that the bidder recommended for award has engaged in corrupt, fraudulent, unfair trade practices or coercive practices.
- ✓ JAP-IT, will declare a firm ineligible, either indefinitely or for a stated period of time, for awarding the contract, if it at any time determines that the firm has engaged in corrupt, fraudulent, unfair trade and coercive practices in competing for, or in executing, the contract.

Amendments

At any time prior to deadline for submission of proposal, JAP-IT may for any reason, modify the RFP. The prospective bidders having received the RFP shall be notified of the amendments through e-mail/website and such amendments shall be binding on them.

Clarifications

During evaluation of the Proposals, JAP-IT may, at its discretion, ask the bidder for clarifications on their proposal.

Rejection of Bid

JAP-IT reserves the right to reject any and all proposals, in whole or in part, to waive any and all infirmities, and to disregard all non-conforming, non-responsive or conditional proposals. In the event any or all proposals are rejected, in whole or in part, thereafter JAP-IT in its sole discretion may initiate a new RFP process including all or part of the components of this Request for Proposals.

Authentication of Bid

The hard copies of the bid document (Technical Bid) shall be type written in indelible ink and shall be signed by a person or persons duly authorized to bind the bidder to the contract. A duly stamped Power-of-Attorney accompanying the bid document shall support the letter of authorization. The person or persons signing the bid document shall initial all pages of the Bid document, including pages where entries or amendments have been made. All the pages of the proposal should be serially numbered. All parts of the bid shall be properly spiral bind together. There shall be no loose sheets. Documents submitted in clip file shall be rejected.

Acknowledge by the Bidder

It shall be deemed that by submitting the Proposal, the bidder has:

- ✓ Made a complete and careful examination of the RFP
- ✓ Received all relevant information requested from JAP-IT
- ✓ Acknowledged and accepted the risk of inadequacy, error or mistake in the information provided in the RFP or furnished by or on behalf of JAP-IT or relating to any of the matters Stated in the RFP Document
- ✓ Acknowledged that it does not have a conflict of Interest and
- ✓ Agreed to be bound by the undertaking provided by it under and in terms hereof.

JAP-IT shall not be liable for any omission, mistake or error on the part of the Applicant in respect of any of the above or on account of any matter or thing arising out of or concerning or relating to RFP or the Selection Process, including any error or mistake therein or in any information or data given.

Earnest Money Deposit (EMD)/Bid Security

The EMD/Bid Security is required to protect JAP-IT against the risk of Bidder's conduct, which would warrant the security's forfeiture. Unsuccessful Bidder's EMD/Bid Security will be discharged / returned as promptly as possible as but not later than 30 days after the expiration of the period of bid validity. The successful Bidder's EMD/Bid Security will be returned after furnishing the performance guarantee or adjusted against the performance guarantee upon the bidder signing the contract.

Forfeiture of EMD/Bid Security

EMD/Bid Security submitted by the vendor may be forfeited under the following conditions. If the bid or its submission is not in conformity with the instruction mentioned herein;

- ✓ If the vendor withdraws the tender before the expiry of the validity period
- ✓ If the vendor violates any of the provisions of the terms and conditions of the tender
- ✓ In the case of a successful vendor fails to (a) accept award of work, (b) sign the contract agreement with JAP-IT of communication on placement of award, (c) furnish performance security, or the vendor violates any of such important conditions of this tender document or indulges in any such activities as would jeopardize the interest of JAP-IT in timely finalization of this tender. The decision of JAP-IT, Jharkhand regarding forfeiture of bid security shall be final and shall not be called upon question under any circumstances. A default in such a case may involve black-listing of the vendor by JAP-IT.

Extension of Period of Validity

In exceptional circumstances, JAP-IT may solicit the bidder's consent to an extension of the period of validity. The request and the response thereto shall be made in writing. Extension of validity period by the Bidder shall be unconditional. The EMD/Bid Security provided shall also be suitably extended. A Bidder may refuse the request without forfeiting the EMD/ Bid Security. A Bidder granting the request will not be permitted to modify its bid.

Validation of Interlineations in Bid

Any interlineations, erasures, alterations, additions or overwriting shall be valid only if the person or persons signing the bid have authenticated the same with signature.

Announcement of Bids

The name of Bidder, bid prices, total amount of each Bid, EMD/Bid Security, discount, etc. shall be announced at the Commercial Bid opening.

Clarification of Bids

To assist in the evaluation, comparison and an examination of bids, JAP-IT may, at its sole discretion, ask the Bidder for a clarification of its bid including breakdown of unit rates. The request for clarification and the response shall be in writing. If the response to the clarification is not received before the expiration of deadline prescribed in the request, JAP-IT reserves the right to make its own reasonable assumptions at the total risk and cost of the Bidder.

Completeness of Bids

JAP-IT will examine the bids to determine whether they are complete, whether they meet all the conditions of the Tender Document and Technical Specifications, whether any computational errors have been made, whether required sureties have been

furnished, whether the documents have been properly signed, and whether the Bid Documents are substantially responsive to the requirements of the RFP.

Rectification of Errors

Arithmetical errors will be rectified on the following basis: -

- ✓ If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail and the total price shall be corrected.
- ✓ If there is a discrepancy between the rates in words and figures, the rate in words will govern.
- ✓ If the supplier does not accept the correction of errors, his bid will be rejected & EMD/Bid Security may be forfeited.

Notification to Bidder

The Bidder whose Bid has been accepted shall be notified of the award prior to the expiration of the period of validity of the proposal, by registered letter or by fax. This letter (hereinafter the "Letter of Acceptance") shall state the sum that JAP-IT shall pay the Bidder in consideration of the execution, completion and maintenance of the work as prescribed by the Contract (hereinafter the "Contract Cost") in accordance with Payment Terms. The Bidder shall acknowledge in writing, the receipt of the Letter of Acceptance and shall send his acceptance to enter into the Contract within Ten (10) days from the receipt of the Letter of Acceptance.

Signing of agreement

Pursuant to the Bidder acknowledging the Letter of Acceptance, the Bidder and JAP-IT Jharkhand shall promptly and in no event later than 7 working days from the date of acknowledgement of the Letter of Acceptance, sign the Contract. This shall be subject to the furnishing of the Performance Guarantee. JAP-IT Jharkhand shall have the right and authority to negotiate certain terms with the successful Bidder before signing of the Contract. The signing of the Contract shall amount to award of the Contract and the Bidder shall initiate the execution of the work as specified in the Contract.

Expenses for the Contract

All incidental expenses of the execution of the Contract shall be borne solely by the successful Bidder and such amount shall not be refunded to the successful Bidder by the JAP-IT.

Failure to abide by the Contract

The conditions stipulated in the Contract shall be strictly adhered to and violation of any of these conditions shall entail immediate termination of the Contract without

prejudice to the rights of JAP-IT with such penalties as specified in the Bid Document and the Contract.

Period for Furnishing Performance Bank Guarantee (PBG)

Within fifteen (15) working days of the receipt of the acknowledgment of the Letter of Acceptance from JAP-IT, the successful bidder shall furnish a Performance Guarantee for an amount equivalent to **10% of the Contract Cost** in accordance with the conditions of the Contract, in the form of a Bank Guarantee from a National/scheduled Bank in favour of CEO, JAP-IT payable at Ranchi, Jharkhand. The EMD/Bid Security submitted earlier by the successful Bidder may be refunded against the Performance Guarantee and such Performance Guarantee shall be retained by the JAP-IT till the end of the Term as defined in the RFP. The PBG should be valid for 66 months (5 years & 6 months) from the date of the contract signed.

Annulment of Award

Failure of the successful Bidder to comply with qualification criteria, evaluation criteria and other terms and conditions set out in the Tender Document shall constitute sufficient ground for the annulment of the award of Contract and forfeiture of the EMD/ Bid Security, in which event JAP-IT may make the award to the next lowest evaluated Bidder or call for new bids.

Disqualification

JAP-IT may at its sole discretion and at any time during the evaluation of Proposal, disqualify any bidder, if the bidder has

- ✓ Submitted the Proposal documents after the response deadline
- ✓ Made misleading or false representations in the forms, statements and attachments submitted in proof of the eligibility requirements
- ✓ Submitted a proposal that is not accompanied by required documentation or is non-responsive
- ✓ Failed to provide clarifications related thereto, when sought
- ✓ Submitted more than one Proposal Declared ineligible by the Government of India for corrupt and fraudulent practices or blacklisted
- ✓ Submitted a proposal with price adjustment/variation provision.

Delays in the Performance

Performance or the Contract shall be made by the Bidder in accordance with the time schedule specified by the JAP-IT as indicated in tender document. An unexcused delay by the Bidder in the performance of its contract obligations shall render the Bidder liable to any or all of the following sanctions:

- (i) Enforce the penalty as mentioned in the RFP
- (ii) Forfeiture of its performance security

(iii) Termination of the Contract for default

As soon as practicable, after receipt of the Bidder's notice, the JAP-IT shall evaluate the situation and may at its discretion extend the Bidder's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

Termination for Insolvency

The Tendering Authority may at any time terminate the Contract by giving written notice to the Provider. If the Provider becomes bankrupt or otherwise insolvent, in this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Tendering Authority.

Force Majeure

- ✓ For purposes of this clause, "Force Majeure" means an event beyond the control of the Provider and not involving the Provider's fault or negligence and not foreseeable. Such events may include, but are not limited to, acts of the Purchase either in its sovereign or contractual capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.
- ✓ If a force Majeure situation arises, the Provider shall promptly notify the Tendering Authority in writing of such conditions and the cause thereof. Unless otherwise directed by the Tendering Authority in writing, the Provider shall continue to perform its obligations under the Contract as far as it reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure.

Resolution of Disputes

The matter regarding any dispute shall first be sorted out at the level of CEO, JAP-IT. If the dispute persists to remain unresolved then it will be entertained, heard & finalized as per the provisions of the Arbitration and Conciliation Act, 1996. The arbitrator will be the Principal Secretary/Secretary of Department of Information Technology, Government of Jharkhand.

Legal Jurisdiction

All legal disputes are subject to the jurisdiction of Ranchi courts only.

Taxes and Duties

The rates quoted shall be in Indian Rupees and all rates, taxes, duties etc (as applicable) should be separately quoted for the completion of job. Any changes in the taxes, duties etc (as applicable) will be allowed but changes in rates are not allowed in any circumstances for entire period of the contract.

Binding Clause

All decisions taken by The Tendering Authority regarding the processing of this tender and award of contract shall be final and binding on all concerned parties.

- ✓ The Decision regarding acceptance of Tender by the Tendering Authority will be full and final.
- ✓ Conditional tenders shall be summarily rejected.
- ✓ The Tendering Authority is free to phase out the work if it feels it is necessary.

Acquaintance with Local Conditions

- ✓ Each Bidder is expected to fully get acquainted with the local conditions and factors, which would have any effect on the performance of the contract and /or the cost.
- ✓ The Bidder is expected to know all conditions and factors, which may have any effect on the execution of the contract after issue of Letter of Intent/Award as described in the bidding documents. The bidder shall not entertain any request for clarification from the Bidder regarding such local conditions.
- ✓ It is the Bidder's responsibility that such factors have properly been investigated and considered while submitting the bid proposals and no claim whatsoever including those for financial adjustment to the contract awarded under the bidding documents will be entertained by JAP-IT. Neither any change in the time schedule of the contract nor any financial adjustments arising thereof shall be permitted by JAP-IT on account of failure of the bidder to know the local laws / conditions.

6. TECHNICAL QUALIFICATION CRITERIA

The Bidding is open to all qualified Bidder who fully meet the following qualifying requirements:-

- i. Non-refundable Tender cost Rs. 10,000/-, in shape of Bank Draft from any Nationalized/scheduled bank drawn in favor of **CEO, JAP-IT** payable at **Ranchi**.
- ii. Earnest Money Deposit (EMD)/Bid Security of Rs. **15,00,000/-** in shape of Bank Demand Draft / Bank Guarantee from any Nationalized/Scheduled bank drawn in favour of **CEO, JAP-IT payable at Ranchi**. The EMD/Bid Security of successful bidder is liable to be forfeited if the bidder revokes any terms of the tender within the validity period. EMD/Bid Security given by unsuccessful bidders will be refunded after placing of work order to the successful bidder.
- iii. Bidder should either be a company registered under Indian Companies Act or a partnership firm registered under Indian Partnership Act or a sole proprietary concern registered with local authority under applicable laws and should submit copy of certificate of registration issued by relevant authority as the cause may be (submit documentary proof).
 - a. The consortium shall not consist of more than **two entities**, each of which should be a legal entity registered under Indian Companies Act, 1956/1932. [Submit registration certificate and consortium agreement]
 - b. In case of consortium Prime bidder shall be designated as a '**Lead Partner**'. The Lead Partner will perform the "**Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure**" and shall be responsible for the successful completion of the entire project including software solution [submit declaration].
 - c. Other partner must be registered firm as per above clause no – iii [Submit the proof]
 - d. The Bidder (in case of consortium other partner) should have the experience of having implementation of minimum of two cloud project in any organization (Government or Corporate) of India of value not less than 2 Crore. [Submit work order and Client certificate]
- iv. The Bidder must be in the business of providing IT infrastructure solutions (**On Supply & Maintenance of Data Centre Infrastructure including Cloud implementation**) for at least 3 consecutive years as on 31.03.2016 [Submit the work orders and client certificates which establish bidder is in business of providing IT infrastructure solutions since last 3 consecutive yrs.]
- v. At the time of signing of agreement the bidder must have local presence and Tax

registration in Jharkhand. [Submit Self Declaration Form]

- vi. The Bidder should have a minimum average annual turnover of **10 Crore (Rs. Ten Crore only)** during last three consecutive financial years ending March 31, 2016 from similar services/business. [Submit relevant audited balance sheet]
- a. The Bidder (in case of consortium other partner) should have the experience of having implementation of minimum of two Data Centre Infrastructure project in any organization (Government or Corporate) of value not less than 2 Crore. Bidder should completed Cloud implementation project worth not less than 50 Lakh. [Submit work order and Client certificate]
 - b. The Bidders should submit **latest** VAT clearance certificate and service tax registration along with service tax return. [Submit latest VAT and service tax return]
 - c. The Bidder must have a valid quality certification of ISO 9001:2008 or above or ISO 27001:2013 or above. [Submit certificate]
 - d. Bidder shall enclose MAF (Manufacturer Authorization Form) from the OEMs (in case of Non OEM) for all the relevant (bought out) components that would be quoted in the tender viz. all Server, SAN Storage, San Switch, Switch, Router, ALTO, VTL and UTM and Licenses. [Submit MAF as per Annexure (6) for above mentioned items]
 - e. Bidders have to provide a concerned OEM certificate for Cloud Software solution product along-with license, if bidder is not quoting the open source solution. [submit certificate from respective OEM]
 - f. The bidder should not have been blacklisted by any State/Central Government in India during **last three years**. [Submit Self declaration]
 - g. The Bidders have to submit certificate issued by their registered auditor that the company is profit making for the last 3 years and does not have any legal & financial investigation pending against it. [attach auditor's certificate]
 - h. Bidder must submit the Technical Compliance Sheet along with data sheet of all items as per the annexure 8.

JAP-IT reserves the right to accept or reject any or all responses without assigning any reason. Only successful technically qualifier bidder's bid will be open for commercial evaluation.

7. GENERAL TERMS & CONDITIONS

Relationship between the parties

Nothing mentioned herein shall be constructed as relationship of master and servant or of principal and agent as between the JAP-IT and 'Bidder'. The bidder subject to this contract has complete charge of personnel, performing the services under this project from time to time. The bidder shall be fully (jointly and severally) responsible for the services performed by them or on their behalf hereunder.

Standards of performance

The bidder shall perform the services and carry out their obligations under the contract with due diligence, efficiency and economy in accordance with generally accepted professional standards and practices. The bidder shall always act in respect of any matter relating to this contract as faithful advisor to JAP-IT

The bidder shall always support and safeguard the legitimate interests of JAP-IT, in any dealings with the third party. The bidder shall abide by all the provisions/ acts/ rules etc. of Information Technology prevalent in the country. The bidder shall conform to the standards laid down in RFP in totality.

Delivery and Documents

The bidder shall not without the JAP-IT prior written consent disclose the contract, drawings, specifications, plan, pattern, samples to any person for "**Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure**" other than an entity employed by JAP-IT for the performance of the contract. In case of termination of the contract, the entire document used by bidder in the execution of project shall become property of JAP-IT.

Intellectual Property Rights

No services covered under the contract shall be sold or disposed by the bidder in violation of any right whatsoever of third party, and in particular, but without prejudice to the generality of the foregoing, of any patent right, trademark or similar right, or any charge mortgage or lien. The bidder shall indemnify the JAP-IT from all actions, costs, claims, demands, expenses and liabilities, whatsoever, resulting from any actual or alleged infringement as aforesaid and at the expenses of the bidder, JAP-IT shall be defended in the defense of any proceedings which may be brought in that connection.

Assignment

The bidder shall not assign the project to any other agency, in whole or in part, to perform its obligation under the Contract.

Suspension

JAP-IT may, by written notice to bidder, suspend all payments to the bidder hereunder if the bidder fails to perform any of its obligations under this contract including the carrying out of the services, provided that such notice of suspension

- ✓ Shall specify the nature of failure.
- ✓ Shall request the bidder to remedy such failure within a period not exceeding thirty (30) days after receipt by the bidder of such notice of failure.

Termination

Under this contract, JAP-IT may, by written notice terminate the bidder in the following ways

- ✓ Termination for default for failing to perform obligations under the contract or if the quality is not up to the specification or in the event of non adherence to time schedule.
- ✓ Termination for Convenience in whole or in part thereof, at any time. JAP-IT reserves the right to elect:
 - To have any portion completed at the work order and /or the Work Order terms and prices; and /or
- ✓ To cancel the remainder and pay to the agency an agreed amount for partially completed Services.
- ✓ Termination for Insolvency if the bidder becomes bankrupt or otherwise insolvent.

Taxes and Duties

The commercial proposal shall be exclusive of all taxes, duties and operational expenditures, taxes and will be applicable as per actual and payable by vendor only.

Notice

Any notice, request or consent required or permitted to be given or made pursuant to this contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in person to an authorized representative of the party to whom the communication is addressed, or when sent to such party at the address mentioned in the Contract Agreement.

Limitations of Liabilities

- ✓ Either party will accept liability without limit. For death or personal injury caused to the order party by its negligence or the negligence of its employees acting in the course of their employment;
- ✓ Any other liability which by law either party cannot exclude.
- ✓ This does not in any way confer greater rights than what either party would otherwise have at law

- ✓ The contract does not contemplate any consequential, indirect, loss profit, claim for tort or similar damages of any form to be paid by the bidder to JAP-IT or any other organizations
- ✓ Notwithstanding anything to the contrary contained in this contract, in no event will the bidder be liable to JAP-IT, whether a claim be in tort, contract or otherwise; for any amount in excess of 100% of the total professional fees payable for the respective project provided that this limitation shall not apply to any obligation of bidder to indemnify to JAP-IT with respect to intellectual property right infringement.

Progress of the Project

The bidder would be required to intimate the progress of the project to JAP-IT in a frequency and manner prescribed by JAP-IT in consultation with the bidder after the award of contract.

Miscellaneous

The end product of the work assignment carried out by the bidder, in any form, will be the sole property of JAP-IT.

In the event the bidder's company or the concerned Division of the company is taken over / bought over by another company, all the obligations under the agreement with JAP-IT should be passed on the compliance by the new company new division in the negotiation for their transfer.

Roles and Responsibility of JAP-IT

- ✓ Facilitate/co-ordinate to selected bidder so that existing JDC Cloud will be integrated with proposed JDC Cloud along with required provisions during Installation and commissioning of Cloud Infrastructure.
- ✓ Nominate the Contact Person during the Supply, Installation & Maintenance of JDC cloud Infrastructure.
- ✓ Monitoring the performance and review of Successful Bidder during maintenance and support period.

Measurement of SLA

Penalty Clause for Supply of equipments/items:

If the agency is not executing the contract to the satisfaction of the tendering authority then the tendering authority may invoke any or all of the following clauses.

- i. **Selected bidder must have to deliver the above mentioned equipments/items within 4-6weeks time from the date of issue of "Supply/Work Order".**

- ii. If the selected bidder fails to deliver the said Equipment/item within 6weeks a penalty of 0.5% of the contract cost will be imposing for every week of delay maximum of BG/PBG value.
- iii. Exceeding the value of penalty.
- iv. Termination/blacklisting of the selected bidder.

Service Level Penalties:

The Response Time of the Vendor will have to be in consonance with the sensitivity of the problems/Defects as mentioned below:-

- SEVERITY level I — A Monitoring Fault/Problem in the equipments which affects the customer's business objective/critical infrastructure, problems in Equipment/item should be resolved in next 12 Hours after intimation by JAP-IT.
- SEVERITY level II — If any Equipment/item replacement is required for rectifying a problem/fault it has to be done within 2 working days after intimation of such problemby JAP-IT.

The Services/Replacement of Parts/Deleverables will be provided by selected bidder other wise penalties will be deducted as per the termes & conditions mentioned under tender document. Apart from that for failing to resolve the Severity level I & II a penalty of Rs. 100.00 per hour per equipment will be chargebale.

The above response time will be maintained for all equipment/items and in case the Equipment/item is not repairable within agreed resolution time, the Vendor will provide standby equipment of workable configuration in all cases without fail. In case of non-execution of work within the committed time and no standby equipment is provided the penalty clause shall apply.

Whenever the system cannot be repaired on site within the specified limits, the Vendors will have the option to provide an alternate equipment of matching specification otherwise penalty clause shall be applied as mentioned in the tender.

Attending to breakdown of the Data Centre/Cloud Infrastructure (in regard of tender ref. no.: JAP-IT/RC (Data Centre / Cloud Infrastructure)/02/2016) as & when reported shall be within 24 hours of the complaint and rectifying the complaint within 48 hours. If the breakdown call is not attended and the problem is not resolved within 48 hours then a penalty shall be levied at the rate of INR 100.00 per day.

The office will keep record of machine failure included the nature of failure, date and time of booking the complaint. This record will be signed by Vendor's service engineer and respective department represntatives. Format for keeping these records will be as fallows. This can be done either through the complaint MIS or through complaint resgister. The Vendor's escalation matrix will be provided by Vendor to JAP-IT with execution of the SLA.

ADDRESS :

MONTH & DATE :

SN	Failure Date/Time	Complaint Date/Time	Booking Complaint Registration No. by vendor	Attended Date/Time	Repaired Date/Time	Down Time in Days	Engr. Name & Sig	Remark

The penalties will be capped at 10% of total bid value. The bidders who reach this level will have either their agreement terminated or agrees to additional performance guarantee as mutually agreed.

The bid proposal shall be inclusive of **05 years** of Comprehensive on-site warranty, applicable from the date of Commissioning. **The selected bidders shall obtain the certificate of successful commissioning of required equipments/items at JDC, JAP-IT, Ranchi.** The selected bidders shall maintain **required equipments/items** (in regard of tender ref. no.: JAP-IT/RC (Data Centre/Cloud Infrastructure)/02/2016) as described under Scope of Work of this RFP.

Breach of performance requirements consistently on part of the Successful Bidder may lead to invocation of clause for "Termination for Default" and invocation of the PBG by the JAP-IT.

Warranty:

- 1) Total warranty for HW infrastructure should be of 05 years [submit certificate from respective OEM]
- 2) Bidders have to be submit a BG/PBG equivalent to 10% of the respective work order value for a period of 05 years and 06 months.
- 3) Bidder has to enter into a back to back agreement with the original OEM for post warranty AMC, if any.

ANNEXURES
(Enclosed with Technical Bid)

ANNEXURE -1 (TECHNICAL BID LETTER)

To

The CEO, JAP-IT
Engineers Hostel - 1
Dhurwa, Ranchi, Jharkhand

Dated: __/__/____

Sub: Request for Proposal (RFP) for Selection of bidder for Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure

Dear Madam/Sir,

1. With reference to your request of proposal document no. _____, Dated: __/__/____, I/we, have examined the bid documents and understood the contents, hereby submit my/our proposal for the aforesaid project. The proposal is unconditional and unqualified.
2. All information provided in the proposal and appendices is true and correct.
3. This statement is made for the express purpose of qualifying as a bidder for undertaking the Project.
4. I/We shall make available to the tendering authority for any additional information it may find necessary or require to supplement or authenticate the bid.
5. I/We acknowledge the right of tendering authority to reject our proposal without assigning any reason or otherwise and hereby waive our right to challenge the same on any account whatsoever.
6. I/We certify that in the last three years, we have neither failed to perform on any contract, as evidenced by imposition of a penalty or a judicial pronouncement or arbitration award, nor been expelled from any project or contract nor have had any contract terminated for breach on our part.
7. I/We declare that:
 - (i) I/We have examined and have no reservations to the RFP Documents, including any addendum issued by the tendering authority.
 - (ii) I/We hereby certify that we have taken steps to ensure that, no person acting for us or on our behalf have engaged or will engage in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice.
8. I/We declare that we are not a member of any other firm submitting a proposal for this project.
9. I/We certify that in regard to matters other than security and integrity of the country, we have not been convicted by a Court of Law or indicted or adverse orders passed by a regulatory authority which could cast a doubt on our ability to undertake the Project or which relates to a grave offence that outrages the moral sense of the community.

10. I/We further certify that in regard to matters relating to security and integrity of the country, we have not been charge-sheeted by any agency of the Government or convicted by a Court of Law for any offence committed by us or by any of our Associates.
11. I/We further certify that no investigation by a regulatory authority is pending either against us or against our associates or against our CEO or any of our Directors.
12. In the event of my/ our being declared as the successful, I/We agree to enter into an agreement in accordance with the draft that has been provided to in the RFP document. We agree not to seek any changes in the aforesaid draft and agree to abide by the same.
13. The fee has been quoted by me/us after taking into consideration all the terms and conditions Stated in the RFP.
14. I/We undertake to provide Performance Security of 10% of the order value in case the contract is being awarded to us.
15. I/We agree and understand that the Proposal is subject to the provisions of the RFP documents. In no case, I/We shall have any claim or right of whatsoever nature if the project is not awarded to me/us or our proposal is not opened.
16. I/We agree to keep this offer valid for 180 days from the proposal due date specified in the RFP.
17. I/We agree and undertake to abide by all the terms and conditions of the RFP document. In witness thereof, I/we submit this Proposal under and in accordance with the terms of the RFP document.

Yours faithfully,

(Authorized signatory)

Date:

Name:

Designation:

ANNEXURE -2 (BIDDER COMPANY PROFILE)

Name of the Firm/Company		
Full Address of the Company		
Year Established		
Telephone Number		
Fax Number		
E-mail Address		
Website		
Sectors' in which the company / firm has provided services in India		
No. of full time personnel currently under employment	Technical	
	Non-Technical	
No. of years of presence in India		
Annual Turnover (Last Three Consecutive years)	FY	Turn Over (Rs.)
	2014-15	
	2013-14	
	2012-13	
Details of Authorized Representative	Name	
	Designation	
	Mobile	
	Office	
	E-mail	

Signature & Seal

(Authorized Signatory)

ANNERURE-3 (FORMAT FOR BIDDERS EXPERIENCE)

[Bidders are required to provide details of relevant experiences in the format give below. Use separate sheet for each citation]

(Testimonial would include Copy of Work order /Agreement copy clearing mentioning the value of work and Client Experience/ Successful Post Implementation Support Certificate.)

S. No.	Particular	Details	
1.	Citation Serial Number		
2.	Name of Project		
3.	Name of Client		
4.	Address of Client		
5.	Contact Person Name & Mobile/ Telephone		
6.	Total assignment value(Rs)		
7.	Value of Work		
8.	Start & End Date	From:	To:
9.	Project Timelines/ Duration (in months)		
10.	Brief narrative description of Project		

Signature of Bidder (with official seal)

Date

Name

Designation

ANNEXURE-4 (CERTIFICATE OF CONFORMITY)

To,

**THE CEO,
JAP-IT,
GROUND FLOOR ENGINEERS HOSTEL - I
Dhurwa, Ranchi – 834 004**

C E R T I F I C A T E

This is to certify that, the service for supply installation, operation, maintenance and service which I shall provide, if I am awarded with the work, are in conformity with the Scope of Work in the Tender document.

I also certify that the price I have quoted per unit cost basis is inclusive of all the cost factors involved in the execution of the project, to meet the desired standards set out in the Conditions of the contract.

Company Name:

Authorized Signatory

Seal:

**ANNEXURE-5 (UNDERTAKING FOR SERVICE AND STANDBY
EQUIPMENTS)**

To,
**THE CEO,
JAP-IT,
GROUND FLOOR ENGINEERS HOSTEL - I
Dhurwa, Ranchi – 834 004**

UNDERTAKING FOR SERVICE AND STANDBY EQUIPMENTS

We hereby undertake that items to be supplied by us hereunder shall be brand new, free from all encumbrances, defects and fault in material, workmanship and manufacturer and shall be of the highest grade and quality and consistent with the established and generally accepted standard for materials of the type ordered and shall be in full conformity with the specifications and scope of work and shall operate properly. We shall keep enough standby equipment and be fully responsible for its efficient and effective operation during currency of Contract,

In case of faults in equipments we ensure to provide standby equipment as per the specification before taking the faulty equipment for repair. Faulty equipment should be put in place after repaired. The obligation under the Undertaking expressed above shall include all costs relating to labour, repair, maintenance (preventive and unscheduled), and transport charges.

Company Name:

Authorized Signatory

Seal:

ANNEXURE-6 (MANUFACTURER'S AUTHORIZATION FORM)

MANUFACTURER'S AUTHORIZATION FORM (MAF)

(Enclosed for Each Product)

To,

**THE CEO,
JAP-IT,
GROUND FLOOR ENGINEERS HOSTEL - I
Dhurwa, Ranchi – 834 004**

Whereas _____ (Name and Address of the Manufacturer) who are established and manufacturers of _____ (Name/description of the products), having production facilities at _____ (Address of factory) do hereby authorize M/s _____. (Name and Address of the Bidder) to submit a bid, for providing Guarantee and support for 3 years and sign the Contract with you against RFP No. _____ dated _____ for the above products manufactured by us, for the supply requirements of the above invitation of bids.

We hereby extend full guarantee for the products offered are not end of life and it shall support spares, patches for the quoted Products shall be available for next 3 years. The above firm against the said RFP shall act on our behalf in fulfilling all installation, technical support/service and maintenance obligations as required by JAP-IT.

Name: _____ (In the capacity of)
(Duly authorized to sign the authorization on and behalf of)

Signature:

Dated this _____ day of _____ 20__

Note: This letter of authority must be on the letterhead of the concerned manufacturer and must be signed by a competent person and having the power of attorney to bind the Manufacturer and, must be included by the Bidder in its bid for each proposed equipment/item(s).

**ANNEXURE-7 (PERFORMA OF PERFORMANCE BANK
GUARANTEE)**

Ref: _____

Date _____

Bank Guarantee No. _____

To,

**THE CEO,
JAP-IT,
GROUND FLOOR ENGINEERS HOSTEL - I
Dhurwa, Ranchi – 834 004**

Against Contract vide Advance Acceptance of the Tender No. _____ Dated _____

of the JAP-IT covering the "**Rate Contract for Supply, Installation and Maintenance of Data Centre/Cloud Infrastructure**". (Hereinafter called " The Said Contract") entered into between the JAP-IT and the _____ (Hereinafter called the "The Bidder"), this is to certify that at the request of the Bidder we Bank _____ are holding in trust in favour of the client, the amount _____ (write the sum here in words) to indemnify and keep indemnified the department against any loss or damage that may be caused to or suffered by the JAP-IT by reason of the said Contract and / or in the performance thereof. We agree that the decision of the JAP-IT, whether any breach of any of the terms and conditions of the said contract and / or in the performance thereof has been committed by the Bidder and the amount of loss or damage that has been caused or suffered by the JAP-IT shall be final and binding on us and the amount of the said penalty, loss or damage shall be paid by us forthwith on demand and without demur to the JAP-IT.

We Bank further agree that the guarantee herein contained shall remain in full force and effect during the period that could be taken for satisfactory performance and fulfillment in all respects of the said Contract by the Bidder i.e. till (viz. The date up to 42 months after the date of successful implementation) hereinafter called the said date and that if any claim arises against us _____ Bank by virtue of this guarantee before the said date, the same shall be enforceable against us _____ Bank notwithstanding the fact that the same is enforced within six months after the said date, provided that the notice of any such claim has been given to us _____ Bank by the purchaser before the said date. Payment under this letter of guarantee shall be made promptly upon our receipt of notice to that effect from the JAP-IT.

It is fully understood that this guarantee is effective from the date of the said Contract and that we _____ Bank undertake not to revoke this guarantee during its currency without the consent in writing of the JAP-IT.

We undertake to pay the JAP-IT any money so demanded notwithstanding any dispute or disputes raised by the Bidder in any suit or proceedings pending before any Court or Tribunal relation thereto our liability under this present bond being absolute and unequivocal.

The payment so made by us under this bond shall be a valid discharge of our liability for payment there under and the Bidder shall have no claim against us for making such payment.

We, _____ Bank further agree that the JAP-IT shall have the fullest liberty, without affecting in any manner our obligation hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the Bidder from time to time or to postpone for any time or from time to time any of the powers exercisable by the JAP-IT against the said Bidder and to forebear or enforce any of the terms and conditions relating to the said Contract and we, _____ Bank shall not be released from our liability under these guarantee by reason of any such variations or extension being granted to the said forbearance and / or omission on the part of the JAP-IT or any other matter or thing whatsoever, which under the law relating to sureties, would but for this provisions have the effect of so releasing us from our liability under this guarantee.

The guarantee is for an amount of Rs. _____ (In figures Rs. _____).

This guarantee shall not be discharged due to the change in the constitution of the Bank or the Bidder.

DATE: -

PLACE:

SIGNATURE: -

WITNESS: -

PRINTED NAME:

_____ **(BANK'S COMMON SEAL)**

ANNEXURE-8 (MINIMUM REQUIRED TECHNICAL SPECIFICATIONS)

(Bidders must submit the Data Sheet of each component with technical bid)

A. Immediate Requirements:

1. Server Specification

Sl. No	Items	Specification	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 18 core	
2	Socket	4 (Half Populated)	
3	Memory	At least memory of 1 TBDDR-4 ECC RDIMM/LDIMM (with half of the slot should be populated) scalable up 2 TB	
4	Internal Hard Disk Drive	Minimum 24 Hot Plug SFF SAS/SSD disk bays should be supported. At least 2 TB usable with Raid 5 or above	
4	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCI Gen 3 slots & 3 USB 3.0 ports or higher, 1 Serial, 1 VGA & 1 SD port and Internal DVD/ROM drive.	
5	RAID support	Support for RAID 5 and above.	
6	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
7	Connectivity with Storage	At least Dual port 2 x 16 Gbps FC HBA (scalable upto 4)	
8	Graphics	Integrated Graphics with atleast 16MB Video Memory	
9	Operating System Supports	Latest in windows, Opens Source & Virtual and Cloud	
10	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	
11	Power	Redundant Platinum rated efficient Power Supply to sustain above configuration. Power Supply with 80+ Gold certified for better utilization.	
12	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
13	Additional Management with industry standard compliance	User-selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 Compliant, PCI 3.0 compliant, PXE and WOL Support, IPv4 and IPv6 support	

14	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server2012 R2, Microsoft® Windows® HPC Server 2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux(Latest), Sun Solaris, Microsoft® Windows Server® 2012 Hyper-V, VMware® ESXi Version 6.0, Citrix® Xen Server, FCC, UL, ROHS	
15	Form Factor	Max. 4U Rackable form factor with sliding rails	
16	OEM certification	The server OEM must be ISO-14001 or Greenpeace or equivalent certified	
17	Warranty support (part/labor/onsite) in year	5x5x5	

2. San Storage Specification

SI. No	Feature	Specification	Compliance in Yes/No
1	Capacity	Offered Storage array shall be supplied with minimum of 25 TB using 600GB 15k rpm SAS-2 disks in RAID5 or higher including auto tearing feature. Hot spares in the ratio of 1HS per 30disks should be configured.	
2	Scalability	Offered Array shall be scalable to at-least 50% of present capacity using additional disks and enclosures only. Controller should be configured as per this rating.	
3	Host Connectivity	FC, iSCSI	
4	High Availability	Storage Array shall be configured in a no single point of failure configuration including array controller cards, cache memory, fan, Power supply etc.	
5	Fiber Channel Ports	Offered Storage shall have minimum of 4 Fiber channel 16 Gbps host ports and four numbers of 10Gbps iSCSI ports across controllers	
6	Controller	System should be configured with minimum Dual Controllers in true active- active mode such that a single logical unit can be shared across all offered controllers in symmetrical fashion, while supporting all the major functionalities like Thin Provisioning and Data Tiering. Storage backend should be based on 6Gbps SAS with minimum 2 x 4 SAS lanes. Storage array shall support configuring volumes/LUNs across all the disks on all backend lanes.	
7	Cache	The storage array should have a minimum of 128GB Cache. Cache shall be used only for data and control operations and should not handle any overhead of operating system. Cache shall be used for both read and write operations. The storage array should support use of SSD as cache and 200GB of SSD as cache should be	

		provided along with necessary software. This cache should be able to accelerate read Operation. The storage must be provided with suitable monitoring license to see the promotions/utilization of extended cache	
8	Array Integration	Storage shall have API integration for	
		a. VAAI, VASA, vCenter Operations Manager	
		· IO Ports Physical	
		· Drives	
		· Disk Group,	
		· Volumes Capacities	
		· Performance	
		· Response times	
		· IO Sizes	
		· Health	
		b. SRM, Peer Persistent, Fail over clustering etc. from the same OEM offering storage.	
		c. ODX, Thin Provisioning, SCOM and SCVMM etc.	
d. OpenStack based cloud for block access.			
9	RAID	Array should support equipment/item based RAID 0,1, 5, 6 and 10.	
10	Operating System & Software Support	Windows Server 2008 & Windows Server 2012 and above	
		Enterprise Linux (Redhat and Suse), VMWare,	
		Clouds OS/ Virtualization,	
11	Application performance	Application from a storage perspective should be configurable from a latency and IOPS bandwidth perspective to deliver better cloud services. Configuration flexibility for both is essential.	
12	Processing Power	Offered Storage architecture shall be based on purpose built ASIC or dedicated Equipment/item engine in addition to the controllers as mentioned above such that there shall be no load on the storage CPU during raid parity calculations.	
13	Snapshot / Point in time copy / Clone	a. Offered Storage shall support to make the snapshot and full copy (Clone) of thin/thick volumes as thin volume.	
		b.The storage array should have support for controller based snapshots functionality (At-least 512 copies for a given volume).	
		c. Storage array shall have functionality to re-claim the space from thin provisioned deleted snapshot automatically. Vendors shall provision at-least 10% additional cache over and above the actual requirements, if space re-claim from thin provisioned deleted snapshot is not possible automatically.	

		d. Storage shall have support for application consistent integration with VMWare, Hyper-V, MS SQL, Oracle, Exchange etc.	
14	Storage Tiering	a. Offered storage shall provide dynamic migration of volume from one Raid set to another set while keeping the application online. b. For effective data tiering, Storage subsystem shall provide automatic policy based Sub-Lun Data Migration from one Set of drive Tier to another set of drive tier.	
15	Features	a. The storage array must be configured with required licenses to enable thin provisioning to allow physical allocation of just the storage that is needed or over provisioning of capacity. This license should be configured for entire supported capacity of the array. b. The Storage array should support SED (Self Encryption Disk) encryption for all data on any type of disk present in the storage c. The Storage array should support Block Compression or Block De-duplication to enhance the overall efficiency of the array for relatively inactive data sets.	
16	Management	Storage shall have GUI based management for provisioning, performance management, tiering, PiT/snapshot, Clone, Replication, storage shall have API based integration to view end to end integration from vCenter GUI.	
17	3 Way DR support	The Storage array should support three way replication in native fashion without using any third party replication appliance.	
18	Software License	The system must be configured with perpetual licenses for operation of storage device, iSCSI application along with client agent to be installed on server, backup agent, partitioning and for unlimited number of hosts in high availability. All licenses should be for the full capacity of the array. Multipath and load balancing software for all SAN connected servers shall be provided. The storage box should be licensing ready from day one.	
19	Data Protection	The Storage array must provide end-to-end data protection using industry standard mechanism such as parity checking, checksum and background disk scrubbing or equivalent etc.	
20	Warranty	5 years comprehensive warranty inclusive of parts and labor.	

3. SAN Switch Specification

SI. No	Specifications	Compliance in Yes/No
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1	Switch solution should be highly available with no single point of failure.	
2	Switch shall support minimum 48 ports x 16Gbps FC ports or higher with all port licenses. Additional 4 ISL ports of 16 Gbps FC ports should be provided.	
3	The switch should have capability to interface with HBA of different makes and model from multiple OEM, supporting multiple Operating Systems, including,	
4	Management S/W to provide topology view of switches, HBA Cards, Storage and SAN Fabric should be offered. Support for web based management and configuration for remote administration	
5	Switch should have dual hot swappable power supply.	
6	Switch should support non-disruptive Micro code/Firmware upgrade All required accessories and cables, etc. as applicable to meet the above specification and hence the proposed solution.	
7	Should support proactive fault detection and alerting capability to avoid any hotspots in the fabric. Switch shall support diagnostics features such as port mirroring, Syslog, Online system health, Port-level statistics etc	
8	Should support features such as Quality of Service (QoS) to help optimize be possible to define high, medium and low priority QOS settings to expedite high priority traffic. Should support Port security and Port Zoning. It should support be possible to define high, medium and low priority QOS settings to expedite high priority traffic.	
9	Should support Port security and Port Zoning. It should support	
10	5 years comprehensive warranty inclusive of parts and labor.	
11	Rack Mountable in standard rack	

4. LTO Specification

SL. No	Item	Description	Compliance in Yes/No
1	Name	At Least LTO-6 or higher	
2	Ideal for	Customers needing reliable backup and restore, or archive/long-term retention of less than 3TB along with security needs and legal regulation compliance.	
3	Capacity	Up to 2.5 TB	
4	Transfer rate	Up to 160MB/sec	
5	Optimized Media	LTO-6, LTO-6 WORM	
6	Media	Reads/Writes LTO-6, LTO-6 WORM, LTO-5 and LTO-5 WORM, Reads LTO-4	

	Compatibility	and LTO-4 WORM tapes	
7	Open Format	Yes	
8	MTBF	250,000 hours	
9	Duty cycle	100%	
10	Buffer size	512MB	
11	Host Bus Interface	6Gb Serial Attached SCSI (SAS)	
12	Maintenance	Head-cleaning cartridge used when indicated by drive, integrated sweep cleaning brush	
13	Drives	No. of drive will be minimum of 04 out of which 02 should be populated and no. of cartridges will be minimum of 20.	

5. UTM Specification

S.NO.	Items	Description	Compliance in (Yes/No)
1	Application Throughput	Must have a 64-bit equipment/item platform	
		Must be based on Multicore Parallel Processing Architecture	
		Firewall throughput of 10,000 Mbps.	
		Minimum 2400 Mbps of Antivirus Throughput	
		Minimum 3,000,000 Concurrent sessions	
		Minimum 2800 Mbps of IPS throughput	
		Minimum 1200Mbps UTM throughput	
		Minimum 80,000 New Sessions/second	
		Minimum 800 Mbps of IPSec VPN throughput and 400 Mbps of SSL VPN throughput	
		10nos. of 10/100/1000 Ethernet ports & 4GB of Compact Flash	
2	General Features	Identity based Firewall	
		Intrusion Prevention System	
		Gateway Anti-virus	
		Gateway Anti-spam	
		Web Content & Application Filtering	
		Bandwidth Management	
		Inbuilt-on Appliance Reporting	
		Network: OSPF, Round Robin load balance, RIPv2, BGP, equal & unequal cost load balance, High Availability, QoS, etc. Round Robin Balance, Server Load Balancing.	
		Support for user authentication over SMS.	
		Country Based Blocking, FQDN support and should support MIX mode deployment	

		Support for ICAP and Link Aggregation	
		4 Eye Authentication feature for data integrity.	
		User/IP/MAC binding functionality to map username & IP address & MAC address	
3	Gateway Antivirus, Anti-Spyware and Anti-Spam	Checkmark Certified. Virus, Worm, Trojan Detection and Removal, Automatic Virus signature database update, Real-Time blacklist, MIME header check, and Redirect spam mails to dedicated email address, image-spam filter, Spam Notification, Zero hour Virus outbreak protection. Recurrent pattern Detection Technology for AS. Self Service Quarantine area.	
4	Web and Application Filtering:	Checkmark Certified.URL, Keyword, File type block, Block Java applets, cookies, ActiveX, Block malware, phishing, pharming URL, block P2P application, anonymous proxies, Customized block on group basis. Minimum of 82 categories with more than 42 million URLs supported with more than 5000 application support.	
5	Intrusion Prevention System (IPS)	Checkmark Certified. For different attacks like Mail Attack, FTP Attack, HTTP Attack, DNS Attack, ICPM Attack, TCP/IP Attack, DOS and DDOS Attack, TelNet Attack. Signatures: Default (3000+), Custom , IPS Policies: Multiple, Custom, User-based policy creation, Automatic real-time updates from CR Protect networks, Protocol Anomaly Detection	
6	Web Application Firewall (WAF)	Should have On appliance WAF with Positive Protection Module, Protection against SQL Injections, Cross Site Scripting (XSS), Session Hijacking, URL tampering, Cookie Poisoning, Extensive Logging and reporting with subscription. If WAF is external Appliance should be quoted separately with 900 Mbps throughput & 3 year subscription licenses.	
7	VPN	IPsec, L2TP, PPTP and SSL as a part of Basic Appliance, VPN redundancy, Hub and Spoke support, 3DES, DES, AES, MD5,SHA1 Hash algorithms, IPsec NAT Transversal, VPNC Certified.	
8	Load Balance	For Automated Failover/Failback, Multi-WAN failover, WRR based Load Balancing. High availability: Active-Active. QoS, OSPF, RIPv2, BGP, Policy routing based on Application and User support Round Robin Load Balancing.	
9	Bandwidth Management	Application and user identity based bandwidth management, Multi WAN bandwidth reporting, Guaranteed and Burstable bandwidth policy. Bandwidth for User, Group, Firewall Rule, URL and Applications.	

10	Monitoring and Reporting System	Includes reports for Centralized management, Monitoring & Logging, Command line interface. Monitoring Gateways, Monitoring suspicious activity and alerts, Graphical real-time and historical monitoring, email notification of reports, viruses and attacks reports. IPS, Web filter, Antivirus, Anti-spam system reports. IP and User basis report, 45+ Compliance reports and 1000+ drilled down reports on the appliance. If external then at least 250+ GB storage.	
11	License for UTM (Unified Threat Management)	Three Years for Gate Way Antivirus, spyware, Anti-Spam, content and application filtering, IPS, WAF and 24*7 supports License. License period will be counted after activation.	
12	Standard Certification	Product or OEM should attain ISO 9001 certification as well as should attain ISO for its Support Services	
		Proposed appliance should support On appliance reporting for logs and reports with min 240 GB internal Storage.	
		The Firewall should be ICSA Labs certified and EAL4+ certified for appliance	

Note: Currently Cyberoam has been used at JAP-IT Data Centre, proposal is required for HA purpose thus Cyberoam with same model (Model: 2500 iNG) is preferred.

6. Router

S.N.	Items	Description	Compliance in (Yes/No)
1	Four Gigabit port Router	4 integrated 10/100/1000 Ethernet ports with 1 port capable of RJ-45 or SFP connectivity	
2		4 Enhanced High-Speed WAN Interface Card slots	
3		2 onboard/integrated DSP/VPM slots digital signal processor (DSP) slots	
4		1 internal service module slot for application services	
5		DRAM at least 515 MB	
6		External USB 2.0 or higher Flash Memory Slots	
7		Fully integrated power distribution to modules & Redundant Power Slot	
8		Onboard hardware acceleration for VPN encryption	
9		Secure collaborative communications with Group Encrypted Transport VPN, Dynamic Multipoint VPN, or Enhanced Easy VPN	

7. Switch

S.N.	Items	Description	Compliance in (Yes/No)
1	24 Port	24 auto sensing 10/100/1000Base-T ports	

2	Manageable Gbps Switch	4 SFP ports, 2 10Gbps stacking ports, 1 RJ-45 console port	
3		Forwarding bandwidth 16 Gbps	
4		Flash Memory at least 64 Mb	
5		Memory DRAM at least 128 Mb	
6		Port security and Port Zoning	
7		Port & MAC based access control	
8		Multi-layer ACL based on: VLAN	
9		Multi Link Trunking (MLT)	
10		Single IP address management	
11		Switch should have dual hot swappable power supply	
12		5 years comprehensive warranty inclusive of parts and labor.	

8. Cloud and Hypervisor Requirements

S. N.	Specifications	Compliance in (Yes/No)
	Cloud software requirements	
1	Solution should be capable of allowing applications to self-service compute, network and storage infrastructures automatically based on workload demand.	
2	Solution should be able to abstract compute, network, and storage resources for the application and user self-service regardless of hypervisor, server, network and storage hardware.	
3	Solution should have orchestration layer for provisioning, work flow management and change management.	
4	Solution should be capable of orchestrating compute and storage resource placements based on flexible policies to maximize hardware utilization.	
5	Solution should be capable of decoupling applications and application infrastructure configurations in portable containers, referred in some cases as images/templates.	
6	Solution should be capable of supporting multi-tenancy to run cloud services (compute, network and storage) for multiple users/ departments and their applications on a single platform while dynamically and automatically managing the isolation of virtual machines into secure pools.	
7	Solution should be able to isolate and allow secure authenticated access to infrastructure services.	
8	Solution must support hypervisor platforms like KVM/ Xen server, Hyper-V and Vmware	
9	Solution should be deployable on a wide variety of open source and proprietary host Operating Systems	
10	The Cloud Solution should support Automatic Patch Notification & Security Alerts	
11	All the components of the Cloud Solution (Host Hypervisor and Cloud Management Framework) should include both Updates and Upgrades	
	Hypervisor	
1	Virtualization software should be based on hypervisor technology which sits directly on top of Hardware (Bare Metal)	

2	Solution should be able to run various operating systems like MS Windows desktop version and MS Windows Server edition, various flavors of Linux(Redhat, Suse, etc) and any other open source OS working on x86 architecture.	
3	Solution should have the capability for creating Virtual Machines templates to provision new servers	
4	Virtualized Machines should be able to boot from SAN	
5	Solution should allow for taking snapshots of the Virtual Machines to be able to revert to an older state, if required	
6	Solution should be able to dynamically allocate and balance computing capacity across collections of hardware resources of one physical box aggregated into one unified resource pool	
7	Solution should support Live Migration of Virtual Machine from one host to another.	
8	Solution should cater for the fact that if one server fails all the resources running on that server shall migrate to another set of virtual servers without manual intervention .	
9	Should have software load balancing feature to ensure while dynamically scaling up/down virtual machines.	
10	Software should have the capability to create Virtual Machines with required number of virtual CPUs.	
11	Solution should allow Virtual Machines consume RAM dynamically in such a way that if some of the VMs in Physical machine are not utilizing the RAM, this RAM can be utilized by some other VM in the same physical machine which has a requirement	
12	Solution should have power saving features	
13	The Hypervisor Environment should have Common Criteria Certifications (EAL, OSPP and FIPS)	
14	The Cloud Solution should support Automatic Updates (Minor Releases) and Automatic Upgrades (Major Releases) for the Host Hypervisor	
15	The Hypervisor Environment should be certified with all Server H/W's from all major Server Vendors.	
16	All the components of the Cloud Solution (Host Hypervisor and Cloud Management Framework) should include both Updates and Upgrades	
17	Solution should support p2v migration	
	Storage Virtualization	
1	Solution should integrate with SAN and infrastructure from leading Vendors so as to leverage high performance shared storage to centralize Virtual Machine file storage for greater manageability, flexibility and availability	
2	Solution should have the ability to thin provision disks to avoid allocating all storage space upfront	
3	Solution should provide the capability to migrate the Virtual Machine files from one storage array to another storage server.	
	Network Virtualization	
1	Solution should allow configuring each Virtual Machine with one or more virtual NICs. Each of those network interfaces can have its own IP address and even its own MAC address	
2	Solution should allow for creating virtual switches that connect virtual machines	

3	Solution should support configurations of 802.1 q VLANs that are compatible with standard VLAN implementations from other vendors.	
4	Solution should take advantage of NIC teaming capabilities.	
5	Solution should ensure inter VM configuration happens through virtual switch	
6	The Solution shall deliver above listed all network capabilities with network equipment of Cisco, HP, etc.	
	Security	
1	Solution should offer automated and approval based upgrades for Virtual Machines delivering cloud infrastructure.	
2	Solution must offer Identity, Authentication and Role based access to User Departments Infrastructure - Machines (Virtual or Physical), Application or Common Services.	
3	Solution must offer Policy based administration by putting Virtual Machines in logical groups and apply relevant policies	
4	Solution should support VLAN isolation by supporting multiple networks per resource pool.	
5	Solution should provide security on the hypervisor, as well as guest VMs. It should provide the ability to apply security to virtual machines and security policies that can follow the machines as they move in the cloud. It should provide policy control and security to support cloud service delivery.	
6	Solution should support multiple roles and permissions based on the rights on Cloud Management Console.	
	Cloud Management	
1	Solution should provide a simple to use intuitive Web and experience for Cloud Administrator and User Departments.	
2	Private Cloud Administrators should be able to easily configure, deploy, and manage services through a highly intuitive service-centric interface, while using a library of standard templates.	
3	Solution should be able to offer choice to select multi operating systems such as Windows 2008, Windows 2012 RHEL / SUSE Linux, etc.	
4	Solution should offer Service catalog listing availability of Cloud infrastructure like Virtual Machines, Applications , Common Services offered by Bank Private cloud.	
5	Solution should provide comprehensive service catalog with capabilities for service design and lifecycle management, a web-based self-service portal for users to order and manage services.	
6	Solution should offer Registration, Signup, Forgot Password and other standard pages (Profile, Billing or Contact information) or integration with existing Active directory setup.	
7	Solution should enforce password policies (complex password, change password in some days etc) Solution should be able to offer choice of various hardware profiles, custom hardware profile, Selection of operating systems, VLAN, Storage.	
8	Solution should automate provisioning of new and changes to existing infrastructure (Virtual, Application or Common Services) with approvals. The approval workflow should be configurable and should be specific to a department	
9	Solution should allow creation of library hosting various Operating System, applications that can be selected while creating new virtual servers.	

10	Solution should track ownership and utilization of virtual machines, applications and common services.	
11	Solution should allow for implementing workflows for provisioning, deployment, decommissioning all virtual assets in the cloud datacenter.	
12	Solution should have the ability to manage Virtual Assets across the major multiple virtualization platforms (Microsoft Hyper-V, VMware, Xen/KVM,etc).	
13	Solution should have Show-Back (to check the usage patterns and reporting for the application) and the same solution should have the capability to be updated into Charge-Back whenever this functionality is required. Solution should have the feature to raise invoices on internal user departments / external users whenever required.	
14	Solution should offer Reporting Engine which can be used to extract Usage, Consumption data, Statistics in reports or dash boards. Examples for such reports can be usage reports by tenant, by region, or by virtual machine reporting usage of memory consumption, CPU consumption'	
15	User Department should be able to report Department's allocated Quota, Used Quota and balance Quota of infrastructure capacity	
16	Solution should allow selecting various Operating System as well as option of installation of additional software's on the provisioned Virtual Machines to User Department while Requesting for provisioning of new virtual servers from Self service GUI.	
17	User Department should be able to generate consumption reports for Department's cloud infrastructure	
18	Administrators should be able to automatically scale and/or manage resources unilaterally (as also termed in the NIST definition) for tenant services without manual intervention as and when required by the SLA requirements of the service.	
19	Cloud Automation framework should provide capability for Roll based Access for performing specific tasks.	
20	Private Cloud Administrators should be easily be able to take resources offline and online	
21	Private Cloud Administrators/Application Managers should be able to create, manage, services using a web-based interface that presents a customized view of resources based on their role in the organization	
22	Solution should identify idle, underutilized capacity percentage to provide inputs to the capacity management function such that informed decisions can be taken.	
23	Solution should provide a mechanism to automatically assess high volumes of workloads and determines optimal placement on virtual machines across the enterprise's shared resource pools	
24	Solution should have the ability to develop highly customized workflows and easy user interface.	
25	Solution should have web based interface Integration Capabilities.	
26	Orchestration Solution should be open and interoperable and has rich integration capabilities that support interfaces from command line interface and web services.	
27	It should support provisioning for multiple platforms including MS Windows, Linux, etc on x86 (32 and 64 bit) architecture.	
	Monitoring Capabilities	

1	Solution should be able to monitor User Department Virtual Resources independent of the platform and solution/service they are running.	
2	Solution should monitor all the critical operating system level services and should check for their status like running, not running, paused. In addition, deviations from a desired Configuration should be detectable and reported.	
3	Solution should be able to send the reports through e-mail to predefined user with pre-defined interval. Solution should also have the SMS alerting agent for configuring alerts as may be required	

9. Virtual Tape Library (VTL)

S. N.	Specifications	Compliance in (Yes/No)
1	Proposed disk based backup appliance should be able to interface with various industry leading server platforms and operating systems.	
2	Must support LAN/SAN based D2D backup and VTL backup simultaneously via NFS v3, CIFS, FC and NDMP protocols	
3	Must support global and inline data duplication using variable block length de-duplication technology.	
4	Must support industry leading backup software like EMC Networker, Symantec NetBackup, CommVault and HP Data Protector etc.	
5	Should Support deduplication at backup server/ host level so that only changed blocks travel through network to backup device.	
6	Must have the ability to perform different backup or restore jobs simultaneously.	
7	Must support single management pane for backup software and multiple backup devices for ease of management.	
8	Must supports communications and data transfers through 8GB SAN, 10 Gb & 1 Gb ethernet LAN over copper and SFP+	
9	Should support capacity on demand feature that allows the storage allocation associated with a virtual tape cartridge to be consumed upon write and not creation.	
10	Should support backup throughput of 5TB/hr or more for data de-duplication at backup storage and 10TB/hr or more for client side de-duplication with configured capacity.	
11	Should have min 50TB usable capacity and scalable to 125TB usable with only capacity expansion shelves	
12	Must support up to 64 virtual tape libraries, 270 virtual drives, 64,000 slots & 1,00,000 virtual tapes	
13	Should support different retentions for primary and DR backup storage	
14	Replication Should support bi-directional, many-to-one, one-to-many, and one-to-one replication	
15	Should support Link Aggregation Control Protocol (LACP) and VLAN tagging	
16	Should support IP Aliasing, ethernet failover and aggregation	
17	Should support 256 bit AES encryption for data at rest and data-in-flight during replication.	
18	Should support retention lock feature which ensures that no data is deleted accidentally.	
19	Must support RAID 6 technologies with 2TB/3TB disk drives on SATA/SAS	

	technology.	
20	Must have continuous file system check to ensure data integrity.	
21	Must protect against lost data in power fail and software crashes.	
22	Should support auto support remote health check for OEM to monitor the system health.	

B. Other Requirements:

Server - 1

Sl. No	Items	Specification	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 18 core	
2	Socket	4 (Half Populated)	
3	Memory	At least memory of 512 GB DDR-4 ECC RDIMM/LDIMM (with half of the slot should be populated) scable up 1 TB	
4	Internal Hard Disk Drive	Minimum 24 Hot Plug SFF SAS/SSD disk bays should be supported. At least 2 TB usable with Raid 5 or above	
4	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCIe Gen 3 slots & 3 USB 3.0 ports or higher, 1 Serial, 1 VGA & 1 SD port and Internal DVD/ROM drive.	
5	RAID support	Support for RAID 5 and above.	
6	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
7	Connectivity with Storage	At least Dual port 2 x 16 Gbps FC HBA (scalable upto 4)	
8	Graphics	Integrated Graphics with at least 16MB Video Memory	
9	Operating System Supports	Latest in windows, Opens Source & Virtual and Cloud	
10	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	
11	Power	Redundant Platinum rated efficient Power Supply to sustain above configuration. Power Supply with 80+ Gold certified for better utilization.	
12	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
13	Additional Management with industry standard compliance	User-selectable power cap (subsystems throttle to maintain the specified power cap), ACPI 3.0 Compliant, PCI 3.0 compliant, PXE and WOL Support, IPv4 and IPv6 support	

14	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server 2012 R2, Microsoft® Windows® HPC Server 2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux(Latest), Sun Solaris, Microsoft® Windows Server® 2012 Hyper-V, VMware® ESXi Version 6.0, Citrix® XenServer, FCC, UL, ROHS	
15	Form Factor	Max. 4U Rackable form factor with sliding rails	
16	OEM certification	The server OEM must be ISO-14001 or Green peace or equivalent certified	
17	Warranty support (part/labor/onsite) in year	5x5x5	

Server – 2

Sl. No	Items	Specification	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 16 core, 50MB Cache and 2.1 Ghz	
2	Socket	4 (Half Populated)	
3	Memory	At least memory of 128 GB DDR-4 ECC RDIMM /LDIMM (with a scalability of up-to 12TB).	
4	Internal Hard Disk Drive	At least 1TB usable with Raid 5 using SAS 10K RPM Drives. System should support a minimum of 48 Drives in the same system.	
5	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCIe Gen 3 slots & 4 USB ports or higher, 1 Serial, 1 VGA.	
6	RAID support	Support for RAID 5 or above.	
7	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
8	Connectivity with Storage	At least Dual port 16 Gbps FC HBA (scalable upto 2 Cards)	
9	Graphics	Integrated Graphics with at least 16MB Video Memory	
10	Operating System Supports	Windows Server 2012 R2 Enterprise	
11	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	

12	Power	Redundant Power Supply (N+1, hot-swappable)	
13	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
14	Additional Management with industry standard compliance	IPv4 and IPv6 support and compliance	
15	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, VMware® ESXi, FCC, UL, ROHS	
16	Form Factor	Max. 4U Rackable form factor with sliding rails	
17	OEM certification	The server OEM must be ISO- 9001, 14001 and 20000 and Green peace or equivalent certified	
18	Warranty support (part/labor/onsite) in year	5x5x5	

Server – 3

SI. No	Items	Specification	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 32 core, 50MB Cache and 2.1 Ghz	
2	Socket	4 (Half populated)	
3	Memory	At least memory of 128 GB DDR-4 ECC RDIMM /LDIMM (with a scalability of up-to 12TB).	
4	Internal Hard Disk Drive	At least 1TB usable with Raid 5 using SAS 10K RPM Drives. System should support a minimum of 48 Drives in the same system.	
5	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCIe Gen 3 slots & 4USB ports or higher, 1 Serial, 1 VGA.	
6	RAID support	Support for RAID 5 or above.	
7	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
8	Connectivity with Storage	At least Dual port 16 Gbps FC HBA (scalable up-to 2 Cards)	

9	Graphics	Integrated Graphics with at least 16MB Video Memory	
10	Operating System Supports	Windows Server 2012 R2 Enterprise	
11	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	
12	Power	Redundant Power Supply (N+1, hot-swappable)	
13	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
14	Additional Management with industry standard compliance	IPv4 and IPv6 support and compliance	
15	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, VMware® ESXi, FCC, UL, ROHS	
16	Form Factor	Max. 4U Rackable form factor with sliding rails	
17	OEM certification	The server OEM must be ISO- 9001, 14001 and 20000 and Green peace or equivalent certified	
18	Warranty support (part/labor/onsite) in year	5x5x5	

Server - 4

Sl. No.	Items	Change Suggested	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 4 core, 50MB Cache and 2.1 Ghz	
2	Socket	4 (Half populated)	
3	Memory	At least memory of 16 GB DDR-4 ECC RDIMM /LDIMM (with a scalability of up-to 12TB).	
4	Internal Hard Disk Drive	At least 500 GB usable with Raid 5 using SAS 10K RPM Drives. System should support a minimum of 48 Drives in the same system.	
5	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCIe Gen 3 slots & 4 USB ports or higher, 1 Serial, 1 VGA.	
6	RAID support	Support for RAID 5 or above.	

7	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
8	Connectivity with Storage	At least Dual port 16 Gbps FC HBA (scalable up-to 2 Cards)	
9	Graphics	Integrated Graphics with at least 16MB Video Memory	
10	Operating System Supports	Windows Server 2012 R2 Enterprise	
11	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	
12	Power	4 x 1620 W 80 PLUS® platinum-level efficiency, easy-swap power supply units (N+1 redundant, hot-swappable)	
13	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
14	Additional Management with industry standard compliance	IPv4 and IPv6 support and compliance	
15	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, VMware® ESXi, FCC, UL, ROHS	
16	Form Factor	Max. 4U Rackable form factor with sliding rails	
17	OEM certification	The server OEM must be ISO- 9001, 14001 and 20000 and Green peace or equivalent certified	
18	Warranty support (part/labor/onsite) in year	5x5x5	

Server - 5

SI. No	Items	Specification	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 8 core, 50MB Cache and 2.1 Ghz	
2	Socket	4 (Half populated)	
3	Memory	At least memory of 64 GB DDR-4 ECC RDIMM /LDIMM (with a scalability of up-to 12TB).	
4	Internal Hard Drive	At least 300 GB usable with Raid 5 using SAS 10K RPM Drives. System should support a minimum of 48 Drives in the same system.	

5	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCIe Gen 3 slots & 4 USB ports or higher, 1 Serial, 1 VGA.	
6	RAID support	Support for RAID 5 or above.	
7	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
8	Connectivity with Storage	At least Dual port 16 Gbps FC HBA (scalable upto 2 Cards)	
9	Graphics	Integrated Graphics with at least 16MB Video Memory	
10	Operating System Supports	Windows Server 2012 R2 Enterprise	
11	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	
12	Power	4 x 1620 W 80 PLUS® platinum-level efficiency, easy-swap power supply units (N+1 redundant, hot-swappable)	
13	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
14	Additional Management with industry standard compliance	IPv4 and IPv6 support and compliance	
15	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, VMware® ESXi, FCC, UL, ROHS	
16	Form Factor	Max. 4U Rackable form factor with sliding rails	
17	OEM certification	The server OEM must be ISO- 9001, 14001 and 20000 and Green peace or equivalent certified	
18	Warranty support (part/labor/onsite) in year	5x5x5	

Server – 6

SI.No	Items	Specification	Compliance in Yes/No
1	Processor	At least 2 processor, each having minimum of 8 core, 50MB Cache and 2.1 Ghz	
2	Socket	4 (Half populated)	

3	Memory	At least memory of 64 GB DDR-4 ECC RDIMM /LDIMM (with a scalability of up-to 12TB).	
4	Internal Hard Disk Drive	At least 2TB usable with Raid 5 using SAS 10K RPM Drives. System should support a minimum of 48 Drives in the same system.	
5	I/O slots, USB/Serial/VGA/SD ports	At least I/O slots of 7 PCIe Gen 3 slots & 4 USB ports or higher, 1 Serial, 1 VGA.	
6	RAID support	Support for RAID 5 or above.	
7	Networking Ports	At least 2 x Internal Dual Gigabit adapter, optional 10G adapter without consuming any extra slot	
8	Connectivity with Storage	At least Dual port 16 Gbps FC HBA (scalable upto 2 Cards)	
9	Graphics	Integrated Graphics with at least 16MB Video Memory	
10	Operating System Supports	Windows Server 2012 R2 Enterprise	
11	Server Management	OEM embedded controller with IPMI 2.0 compliance and Server Management Tool from same OEM	
12	Power	Redundant Power (N+1, hot-swappable)	
13	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
14	Additional Management with industry standard compliance	IPv4 and IPv6 support and compliance	
15	Standard certifications	The quoted server models should have the following Certifications: Microsoft Windows Server2012, Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux, VMware® ESXi, FCC, UL, ROHS	
16	Form Factor	Max. 4U Rackable form factor with sliding rails	
17	OEM certification	The server OEM must be ISO- 9001, 14001 and 20000 and Green peace or equivalent certified	
18	Warranty support (part/labor/onsite) in year	5x5x5	

Server-7

Technical Specification for Blade Chassis

Sl. No	Items	Specification	Compliance
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			in Yes/No
1.	Compatibility Requirements	Compatible with Supplied Rack, Networking Switches,	
2.	Description	Blade Chassis shall accommodate the specified maximum number of Blade Servers with hot swappable HDD, Interconnect Modules, Power supplies, Fans and Management Modules. Should Provide common resources essential for the Blade Servers like Power, Network Fabric, Internal/External Storage etc.	
3.	Mounting	The Rack shall include all accessories so that it can be mounted on an Industry Standard 19" 42U Rack.	
4.	Blade Bay	Blade Chassis(s) to be capable of accommodating adequate quantities of Full/Half Height Hot Pluggable Blade Servers with Dual I/O Connectors. Number of blade bays should be sufficient to support the number of processors providing equivalent processing power as mentioned in the technical specs of Blade Servers. Blade Chassis should have at least one Blade slot empty for future scalability.	
5.	Modules	Redundant 10G Ethernet Modules per blade. Redundant FC Modules with minimum 14 ports. Redundant Management Module Chassis should be configured with integrated IP KVM switch Module for managing the Blade chassis locally as well as remotely.	
6.	Chassis Connectivity	Should provide complete I/O redundancy to blade servers to provide maximum uptime. Chassis shall have required number of Managed Ethernet Switches / Modules to provide at least two in number 10 Gbps ports for each Blade Server.	
7.	Power Modules	Chassis should be fully loaded with all the Power supplies with N+N redundancy. It shall be supplied with the PDUs to connect Power Cables to the Chassis power input terminals	
8.	Form Factor	Blade Chassis should than 10U height or more	
9.	System Panel	LED/LCD panel to provide power-on, location, over temperature, information and system error conditions and access control	
10.	Fan / Cooling	It shall be fully populated with fans for cooling with adequate redundancy built in for the entire enclosure & its components (assuming all blade slots are populated.	
11.	Management Software / Solution	Management Module (Internal to chassis or external but in the same rack) must provide a single point of control for intelligent management of the entire console including chassis and all blade servers.	

12.		It should provide setup & control of Enclosure and should report asset and inventory information for all the devices in the Enclosure.	
13.		It should report thermal & power information on per server & per Enclosure basis	
14.		It should provide KVM functionalities & access for all the Server Blades from the Management Module	
15.		Chassis should support Management or Virtualisation software to provide blade failover to a standby blade whenever any blade in the production fails.	
16.		Should support iSCSI boot	
17.		It should also have the capability to enforce policies in the system BIOS settings and configuration, so once administrators define a common policy for a server BIOS, all subsequent deployments use this policy.	
18.		Built in high availability for the management Modules and software	
19.	Virtualization	Must support virtualization through popular hypervisors like Hyper-V etc. Both bare metal and OS based hypervisors to be supported. Chassis Management Software must not interfere with hypervisor and private cloud management software.	
20.	Support / Warranty	Minimum 5 Years On-site comprehensive warranty with spares.	

Server-8

Technical Specification for Server (Blade)

Sl. No	Items	Specification	Compliance in Yes/No
1	CPU	Four number of latest generation Intel 8 E5-4600v4 processor or Equivalent(16 Core)	
2	Memory	512 GB DIMMS scalable to at least up-to 1 TB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules. Should be capable of identifying and reporting whether genuine OEM memory is installed. Each LRDIMM should work at 2133MHz, 1.2V even after populating all the DIMMs in the channel.	
3	Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode	
4	HDD Bays	Up to 8 SFF/4 LFF max, HDD/SSD	
5	Optical drive Bay	One optional optical drive bay to install DVD-ROM or DVD-RW.	
6	Hard disk drive	3*300GB hot plug SFF SAS/SSD/SATA drives	
7	Controller	Embedded 6Gb/s SATA controller RAID controller with RAID 0/1/5 for SATA Disk.	

8	Networking features	1Gb 2-port network adaptor supporting advanced features such as TCP segmentation offload, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMDQ.	
9	Connectivity with Storage	At least Dual port 2 x 16 Gbps FC HBA (scalable up-to 4)	
10	Bus Slots	Three PCI-Express 3.0 slots, at-least two x8 and one x16 slots	
11	Power Supply	Redundant Power Supplies	
12	Fans	Redundant hot-plug system fans	
13	Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications RHEL/ ASHRAE A3/A4	
14	Embedded system management	Should support monitoring ongoing management, service alerting, reporting and remote management with embedded Gigabit out of band management port Server should support configuring and booting securely with industry standard Unified Extensible Firmware System System should support RESTful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with Intelligent Provisioning System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support	
15	Operating Systems and Virtualization Software Support	RHEL 7.1 (at least 1 year)/ Microsofts Windows, VMware	
16	Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.	
17	Warranty	Server Warranty includes 5-Year Parts, 5-Year Labor, 5-Year Onsite support with next business day response.	

Server-9

Blade Server

Sl. No	Items	Specification	Compliance in Yes/No
1	Chassis	1 U Rack Mountable	
2	CPU	Two latest generation Intel 8 Core E5-2600v4	

		processor or higher	
3	Memory	1 TB DIMMS scalable to at least up to 2 TB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules. Should be capable of identifying and reporting whether genuine OEM memory is installed. Each LRDIMM should work at 2133MHz	
4	Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode	
5	HDD Bays	4 LFF max, SAS, SATA, SSD	
6	Optical drive Bay	One optional optical drive bay to install DVD-ROM or DVD-RW.	
7	Hard disk drive	3*300GB hot plug SFF SAS/SSD/SATA drives	
8	Controller	Embedded 6Gb/s SATA controller RAID controller with RAID 0/1 for SATA Disk.	
9	Networking features	10Gb 2-port network adaptor supporting advanced features such as TCP segmentation offload, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMDQ.	
10	Connectivity with Storage	At least Dual port 2 x 16 Gbps FC HBA (scalable up-to 4)	
11	Bus Slots	Three PCI-Express	
12	Power Supply	Redundant Power Supply(N+1)	
13	Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications USB 3.0 Support ASHRAE A3	
14	Embedded system management	Should support monitoring ongoing management, service alerting, reporting and remote management with embedded Gigabit out of band management port Server should support configuring and booting securely with industry standard Unified Extensible Firmware System should support Restful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with Intelligent Provisioning System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support	
15	Security	Power-on password Serial interface control Administrator's password TPM 1.2 UEFI	

16	Operating Systems and Virtualization Software Support	RHEL 7.1 (at least 1 year)/ Microsoft Windows, VMware, Citrix	
17	Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.	
18	Warranty	Server Warranty includes 5-Year Parts, 5-Year Labor, 5-Year Onsite support with next business day response.	

Reverse Proxy

Technical Specification for Reverse Proxy (3 VM), Staging (2 VM)

Sl. No	Items	Specification	Compliance in Yes/No
1	Chassis	1 U Rack Mountable	
2	CPU	Two latest generation Intel 8 Core E5-2600v4 processor or higher	
3	Memory	16 GB DIMMS scalable to at least up-to 256GB, using DDR4 Load Reduced DIMM (LRDIMM) memory modules. Should be capable of identifying and reporting whether genuine OEM memory is installed. Each LRDIMM should work at 2133MHz	
4	Memory Protection	Advanced ECC with multi-bit error protection and memory online spare mode	
5	HDD Bays	4 LFF max, SAS, SATA, SSD	
6	Optical drive Bay	One optional optical drive bay to install DVD-ROM or DVD-RW .	
7	Hard disk drive	3*300GB hot plug SFF SAS/SSD/SATA drives	
8	Controller	Embedded 6Gb/s SATA controller RAID controller with RAID 0/1 for SATA Disk.	
9	Networking features	10Gb 2-port network adaptor supporting advanced features such as TCP segmentation offload, VLAN tagging, MSI-X, Jumbo frames, IEEE 1588, and virtualization features such as VMDQ.	
10	Connectivity with Storage	At least Dual port 2 x 16 Gbps FC HBA (scalable up-to 4)	
11	Bus Slots	Three PCI-Express	
12	Power Supply	Redundant Power Supply(N+1))	
13	Industry Standard Compliance	ACPI 2.0b Compliant PCIe 3.0 Compliant PXE Support WOL Support Microsoft® Logo certifications ASHRAE A3	

14	Embedded system management	Should support monitoring ongoing management, service alerting, reporting and remote management with embedded Gigabit out of band management port Server should support configuring and booting securely with industry standard Unified Extensible Firmware System should support Restful API integration System management should support provisioning servers by discovering and deploying 1 to few servers with Intelligent Provisioning System should support embedded remote support to transmit hardware events directly to OEM or an authorized partner for automated phone home support	
15	Security	Power-on password Serial interface control Administrator's password TPM 1.2 UEFI	
16	Operating Systems and Virtualization Software Support	RHEL 7.1 (at least 1 year)/ Microsoft Windows, VMware, Citrix	
17	Secure encryption	System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.	
18	Warranty	Server Warranty includes 5-Year Parts, 5-Year Labor, 5-Year Onsite support with next business day response.	

Technical Specification for Operating System

S.N	Specification	Compliance in Yes/No
1	The operating system (including all variants) should have been certified on hardware from leading OEM.	
2	Operating system should also include upgrades, updates and web & telephonic support from OS vendor.	
3	The product should have Product life cycle upto 10 years or end of life.	
4	The OS should be EAL 4+ Certified	
5	The Bidder shall propose Linux operating system and Linux compatible solution components. An alternate operating system can be proposed only if any solution is not compatible with Linux. The alternate operating system proposed should be latest version from the OEM.	
6	The source code of the operating System should be freely available from the OEM	
7	The Enterprise grade Server operating system should support the essential network services like Directory Services (LDAP V3), DNS, DHCP, Radius, Web Server, Application server, Cluster services (High Availability and Fail over Support), Load Balancer ,with virtualization support.	

8	The OS should conform to TCP/IP communications standards interface based on Internet Standards. The OS should support protocols / services / standards including, but not limited to, IPv4, IPv6, ICMP, IP Multicasting, User Datagram Protocol, SNMP, HTTP, SSL with support for X.509 certificates, Domain Name Service, Telnet, SFTP, NFS, CIFS, SMB, Bootstrap Protocol, DHCP, Network Time Protocol, etc.	
9	Support of large files and file systems on a single host	
10	The proposed OS should support both hardware and software level clustering and should support Clustered File System.	
11	The proposed OS should support pre-compiled applications using Java Run Time Engine (JRE) and should have in-built Java Virtual Machine and Java Class Libraries.	
12	The OS should have a robust architecture built for reliability and availability. The OS should support features including, but not limited to, the following:	
12.1	• Online isolation of failed processor, memory and disk adapter	
12.2	• Online reconfiguration of CPU, Memory and I/O without interruption or suspension of the services.	
12.3	• Aggregation and load balancing across network adapters.	
12.4	• Dynamic kernel patching without reboot.	
13	Should have Fiber Channel over Ethernet (FCoE)	
14	Should have for iSCSI extension for RDMA (iSER) initiator and target	
15	Support for I/O load balancing and multiple pathing for storage subsystem and networking	
16	OS should also support mandatory access control for file system, processes & users.	
17	The OS should support of Security Enhanced features and be capable of managing public key infrastructure (PKI).	
18	Especially Indict languages (Unicode) Support within OS	
19	OS should support System Security Services Daemon which Manages communication with centralized identity and authentication stores, predictable caching for network accounts, handle multiple domains of user data and authentication	
20	The OS should support multiple virtualization hypervisor i.e. VMware, Hyper-V, KVM, XEN etc.	
21	OS should support Reliability, Availability, and Serviceability (RAS) features i. Physical memory hot add ii. Advanced Error Reporting (AER) for PCIe devices iv. CPU logical on-lining / off-lining	
22	OS should support security features like mandatory Access Control for OS level security hardening as per CBEC's security practices	
23	OS should integrate with CBEC's Identity management server for features like SSO, auditing, logging & should also have graphical admin control.	
24	OS should have Kernel Level Virtualization support	
25	OS should support high availability of application in its environment	
26	OS should support Cluster file system for application in its environment. Each member of the cluster thus has direct access to the same storage device and all cluster nodes access the same set of files.	

27	OS should support Network load balancer functionality to provide redundancy for web, application & database servers, networking, and storage.	
28	Should have Graphical User Interface, also accessible remotely via industry standard protocols viz. RDP/VNC/web browser based console.	

Technical Specification for Antivirus

S.N	Specification	Compliance in Yes/No
1	Endpoint Protection should provide 5-layers of protection-	
1.1	Network: Network threat protection should analyze incoming data and blocks threats while they travel through the network before hitting the system. Rules-based firewall and browser protection should be included to protect against web-based attacks.	
1.2	File: Signature-based antivirus should eradicate malware on a system to protect against viruses, worms, Trojans, spyware, bots, adware, and rootkits.	
1.3	Reputation: It should correlate tens of billions of linkages between users, files, and websites to detect rapidly mutating threats. By analyzing key file attributes, Endpoint protection should accurately identify whether a file is good and assign a reputation score to each file, effectively protecting against targeted attacks while reducing scan overhead by up to 70%.	
1.4	Behavior: It should leverage artificial intelligence to provide zero-day protection and stop new and unknown threats by monitoring nearly 1,400 file behaviors while they execute in real-time to determine file risk.	
1.5	Repair: Power Eraser to aggressively scans infected endpoints to locate Advanced Persistent Threats and remove tenacious malware. Remote support enables the administrator to trigger the Power Eraser scan and remedy the infection remotely from the Endpoint Protection management console.	
2	End point Protection should provide granular policy controls, including:	
2.1	2.1. System Lockdown: Should enhance protection for business critical systems by only allowing whitelisted applications (known to be good) to run or by blocking blacklisted applications (known to be bad) from running. Finger printing of applications should from centralized console.	
2.2	Application and Device Control: Should help prevent internal and external security breaches by monitoring application behavior and controlling file access, registry access, processes that are allowed to run, and devices information can be written to.	
2.3	Host Integrity Checking & Policy Enforcement: Should allow administrator to run script on their endpoints to verify and report compliance; quarantine location and peer-to-peer enforcement lockdown and isolate a non-compliant or infected system.	
2.4	Location Awareness: Should automatically detects what location a system is connecting from, such as a hotel, hotspot, wireless network, or VPN and adjusts the security to offer the best protection for the environment.	
2.5	Endpoint Protection should able to block devices based on Windows Class ID and should include USB,	

2.6	Infrared, Bluetooth, Serial, Parallel, fire wire, SCSI and PCMCIA. Solution should also be able to block and give read/write/execute permission for mentioned devices.	
3	Endpoint Protection should be able to deploy flexible and different security policies depending upon the	
3.1	AND/OR relationship of following network triggers – e.g. IP address (range or mask) - DNS Server, DHCP	
3.2	Server, WINS Server, Gateway Address, TMP Token Exists (hardware token), DNS Name Resolves to IP, Policy Manager Connected, Network Connection (wireless, VPN, Ethernet, dialup)	
4	Endpoint Protection should combine NIPS (network) and HIPS (host) both with Generic Exploit Blocking	
4.1	(GEB) for one signature to proactively protect against all variants, Granular application access control and behavior based technology mentioned above.	
5	If the host is non-compliant with security policies, Endpoint Protection must automatically initiate a restoration action, which can include running command line, downloading and executing/inserting a file, running scripts , remediating by setting required registries keys , rechecking the host for compliance, and ultimately granting access for the compliant host to the network.	
6	Endpoint Protection must have reports that incorporate multi-dimensional analysis and robust graphical reporting in an easy-to-use dashboard.	
7	Endpoint Protection must have group update provider reduces network overhead and decreases the time it takes to get updates by enabling one client to send updates to another, enabling more effective updates in remote locations.	
8	Endpoint Protection solution should scan POP 3 email traffic including email clients Microsoft outlook, lotus notes and outlook express.	
9	Endpoint Protection's Desktop Firewall rules should be configurable depending upon the adapters including Ethernet, wireless, Dialup, VPN (Microsoft PPTP, Nortel, Cisco.	
10	Endpoint Protection Desktop Firewall rules should be configurable depending upon the state of screen saver "ON" & "Off".	
11	Endpoint Protection must prevent clients from downloading full definition packages.	
12	Endpoint Protection must have reduced-size windows client package for embedded systems and VDI environments with a static base and function. The reduced-size should be 80% to 90% smaller than the standard-size client.	
13	Virtual Optimization	
13.1	Endpoint Protection protects your high-density virtual environment while maintaining performance levels superior to agentless solutions and providing end-to-end security visibility.	
14.1	VMware vShield Integration to allow higher VM density and reduces I/O and CPU usage.	
14.2	Virtual image exception to whitelists files from a standard virtual machine image to optimize scanning	
14.3	Resource leveling to randomize scan and update schedules to prevent resource utilization spikes.	

14.4	Shared Insight cache to scans files once, shares the results between clients, and de-duplicates file scanning to reduce bandwidth and latency.	
14.5	Virtual client tagging to automatically detects and reports whether the client is running in a virtual environment, making it easier to set different policies for virtual machines.	
14.6	Offline image scanning to find threats in offline virtual machine images.	
14.7	Scan throttling for virtualization to detect disk load and reduces scan speed to prevent utilization spikes.	
15	Endpoint Protection solution should provide early launch anti-malware (ELAM) protection for the computers in network when they start up and before third-party drivers initialize.	
16	Endpoint Protection solution should provide CleanWipe tool to remove itself only on demand	

Server NAS 24 TB

Sl. No	Items	Specification	Compliance in Yes/No
	Model Name		
1	Processor	At least 2 processor, each having minimum of 18 core	
2	Socket	4 (half of the socket should be populated)	
3	Memory	At least memory of 16 GB	
4	Hard Disk Drive	At least 24 TB with Raid 5 or above and Extendable upto 50TB	
5	Host Interface	At least I/O slots of 5PCIe Gen 3 slots & 2 USB 3.0 ports or higher, 1 Serial, 1 VGA & 1 SD port and Internal DVD/ROM drive.	
6	RAID support	Support for RAID 5 and above.	
7	Networking Ports	1Gb Ethernet (4) and 8 Gb Fiber Channel (8) and 10Gb Ethernet (8) Ports per controller Host interface type and number of ports per controller. 1 Gb Ethernet standard, 10 GbE SFP, 10GbE-T, 8Gb FC optional can be added in any configuration up to max quantity 4	
8	Operating System Supports	Latest in windows	
9	Power	Redundant Platinum rated efficient Power Supply to sustain above configuration. Power Supply with 80+ Gold certified for better utilization.	

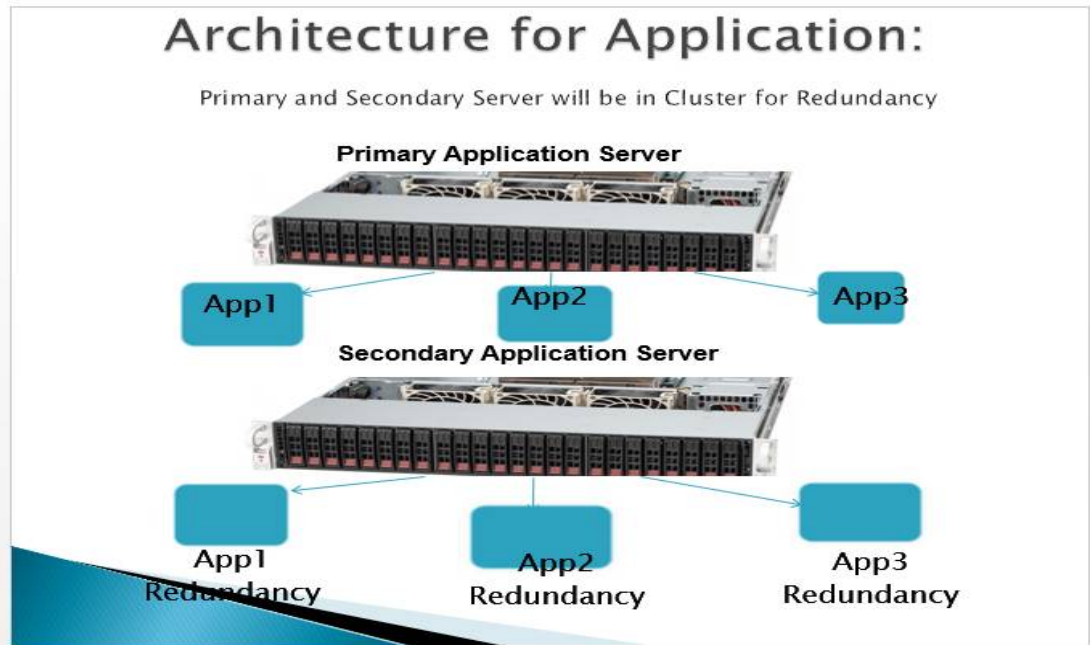
10	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
11	Standard certifications	The quoted server models should have Certifications: latest Microsoft Windows Sever	
12	Form Factor	Max. 2U Rackable form factor with sliding rails	
13	OEM certification	The server OEM must be ISO-14001 and Green peace or equivalent certified	
14	Warranty support (part/labor/onsite) in year	5x5x5	

SAN Expansion Enclosure (Up-gradation up-to 35 TB of Model 1814-20A)

SI.No	Feature	Specification	Compliance in Yes/No
1	Part Number & Make	1814-52A & IBM	
2	Capacity	Offered Storage array shall be supplied with Expansion up-to 35 TB or higher	
3	Expansion Bay	16 & Hot-swappable	
4	Host Connectivity	FC, iSCSI	
5	Drive Compatibility	SATA and SAS	
6	High Availability	Storage Array shall be configured in a no single point of failure configuration including array controller cards, cache memory, fan, Power supply etc.	
7	Fiber Channel Ports	Offered Storage shall have minimum of 4 Fiber channel 4 Gbps host ports and four numbers of 1Gbps iSCSI ports across controllers	
8	Support for EXP Units	2 EXP520s per DS5020	
9	RAID	Array should support equipment/item based RAID 0, 1, 5, 6 and 10.	
10	Power	Redundant Platinum rated efficient Power Supply to sustain above configuration. Power Supply with 80+ Gold certified for better utilization.	
11	Cooling	Hot swap and redundant cooling unit and all fans should be fully populated.	
12	Form Factor	Max. 4U Rackable form factor with sliding rails	
13	Warranty	5 years comprehensive warranty inclusive of parts and labor.	

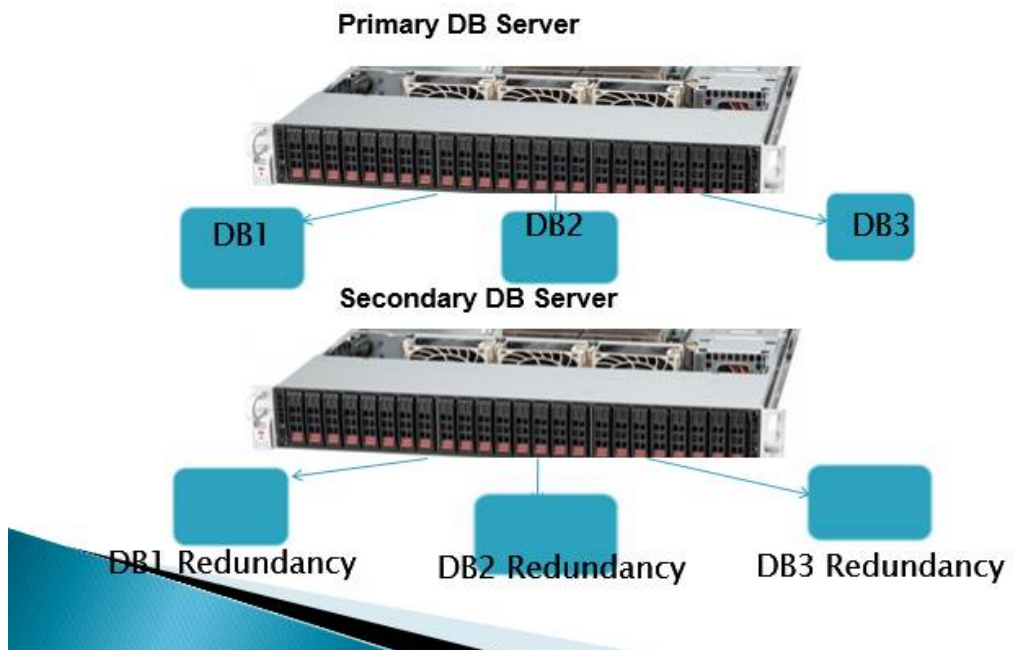
ANNEXURE- 9.1 (ARCHITECTURE)

Architecture for Existing Infrastructure of JDC



Architecture for Data Base

Primary and Secondary Server will be in Cluster for Redundancy



ANNEXURE- 9.2 (EXISTING/REQUIRED INFRASTRUCTURE)

Existing JDC Infrastructure including Non-IT

Equipment/item resources:

Sl. No.	Equipment's
1	Centralized Fire Extinguisher
2	Centralized Air Conditioner
3	UPS Power Supply
4	DG Set
6	Bio-metric Devices

Existing JDC Cloud Infrastructure including Cloud Software

Equipment/item& Software resources:

Sl. No.	Equipment's	Description	Qty.
1	Server		03
2	Software	ProxmoxVm is running in 02 server & Citrix Xen(6.2) Cloud in 01 Server	

ANNEXURE- 9.3

List of immediate hardware requirement

Sl. No.	Equipment's	Description	Qty
1	Server	As above	10
2	Storage devices	As above	01
3	ALTO/VTL	As above	01
4	Security Devices	UTM	01
5	Router	At least 4 Gigabit port	02
6	Switch	At least 24 Gigabit port	02
7	Licenses (Data Centre Edition)	RHEL 7.0 or higher	04
		Windows 2012 or higher	06
		Cloud and management	10 servers

Note: Compliance sheet in context of specification of cloud hardware infrastructure provided by respective bidders against each of the items should be supported with OEM's Data Sheet. Deviation to specification only is accepted in case of higher specification, other deviation will leads to non-compliance of the product and bidders also.

ANNEXURE-10 (FINANCIAL BID)

(Uploaded in Financial Bid Envelope)

Price Format			
S N	Item Name	Qty.	Cost per unit (Rs.) Exclusive of Taxes
A. Immediate Requirements			
1.	Server	01	
2.	SAN Storage	01	
3.	SAN Switch	01	
4.	ALTO	01	
5.	VTL	01	
6.	UTM	01	
7.	Router	01	
8.	Switch	01	
9.	Licensing (RHEL)	01	
10.	Licensing (Windows)	01	
11.	Licensing (Cloud)	01	
B. Other Requirements			
12.	Server -1	01	
13.	Server -2	01	
14.	Server-3	01	
15.	Server -4	01	
16.	Server -5	01	
17.	Server -6	01	
18.	Server -7	01	
19.	Server -8	01	
20.	Server -9	01	
21.	Reverse Proxy	01	
22.	Anti Virus	01	
23.	Server NAS	01	
24.	SAN Expansion Enclosure	01	

Note: Taxes and other duties as applicable may be calculated at the time of submission of bills.

Total Amount in Rupees:

(In figures) _____

(In Words) _____

Date_____

Signature of Bidder/ Seal