

Open Competitive Bid (OCB)

for

**Procurement of Rack Servers and blade Servers
for MeeSeva Portal**

February 2012

Proprietary & Confidential

**Andhra Pradesh Technology Services Limited,
Boorgula Ramakrishna Rao Bhavan, B-block, 4th floor,
Tankbund Road, Hyderabad, AP 500 063, India.
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Proprietary & Confidential

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News paper advertisement

apts

Tender Call Notice for Procurement of Rack Servers and Blade Servers for Mee Seva Portal

Time schedule of various tender related events:

Bid calling date	03-02-2012
Pre-bid conference date/time	07-02-2012, 12-00 PM
Bid closing date/time	13-02-2012, 03-00 PM
Bid Document Fee	Rs.5,000/-
APTS Contact person	General Manager (Tech), 9963029392
APTS Reference No.	APTS/HWP/MeeSeva2/Servers/2012

For further details regarding detailed Tender Notification, specifications and digital certificate please visit <http://www.apts.gov.in> and **www.eprocurement.gov.in**. Contact Phone Nos.: (40) 2322 4289, 23222865; Fax: 23227458

Managing Director, A.P. Technology Services Ltd.

Section A

Tender Call Notice

**Andhra Pradesh Technology Services Limited (APTS),
Boorgula Rama Krishna Rao Bhavan, B- Block, 4th floor,
Tank Bund Road, Hyderabad, AP 500 063, India.
Phones: (40) 23224289; (40) 23223865; Fax: (40) 23227458**

Tender Call Notice for Procurement of Rack Servers and Blade Servers for Mee Seva Portal

Time schedule of various tender related events:

Bid calling date	03-02-2012
Pre-bid conference date/time	07-02-2012, 12-00 PM
Last date/time for clarification	07-02-2012, 5-00 PM
Last date/time for Sale of document	13-02-2012, 02-00 PM
Bid closing date/time	13-02-2012, 03-00 PM
Bid opening date/time	13-02-2012, 03-30 PM
Bid Document Fee	Rs.5,000/-
APTS Contact person	General Manager (Tech),9963029392
APTS Reference No.	APTS/HWP/MeeSeva2/Servers/2012

A.1. The solution, service or material required:

On behalf of the Director, EDS (eSeva),Hyderabad, APTS invites bids for Supply and Commissioning of the following Rack Servers(7Nos.), Blade Servers (9 Nos.) and Blade Servers Enclosure (1No.) at AP State Data Centre, Gachibowli. (Detailed specifications are given in Section-D).

Schedule-I	Qty
D.1.1. DB Server (Rack)	2 Nos.
D.1.2. BM Server (Rack)	1 No.
D.1.3. WEB server (Rack)	2 Nos.
D.1.4. DR App Server (Rack)	1 No.
D.1.5. DR DB Server (Rack)	1 No.
D.1.6. App Server (Blade)	2 Nos.
D.1.7. SMS Server (Blade)	1 No.
D.1.8. Test App Server (Blade)	1 No.
D.1.9. Proc Server (Blade)	1 No.
D.1.10. Gateway Server (Blade)	1 No.
D.1.11. Report Server (Blade)	1 No.
D.1.12. Test DB Server (Blade)	1 No.
D.1.13. File Server(Blade)	1 No.
D.1.14. Blade Servers Enclosure	1 No.

A.2. Scope of incidental services:

1. Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods.
2. Warranty period services are for three years for all the items.

A.3. Maintenance:

Successful bidder has to supply & maintain all the items including re-installation of System Softwares incase gets corrupted.

If the items mentioned in Schedule-I are down and not working, same need to be repaired and restored for normal functioning as per agreed Service Level Requirements. Failing which penalty will be recovered from Performance Security as per Clause C. 15.

A.4. Delivery and Installation period

The Successful Bidder shall deliver the goods/services within **Four (4) weeks** from the date of contract signing, install and commission the same within **Two (2) weeks** from the date of delivery of the items. The items are to be delivered and installed at AP State Data Centre, Gachi Bowli, Hyderabad.

A.5. Warranty

Warranty period is for **3 Years** comprehensive (including Spares-Parts/Service/Labour/On-site) for all the items from the date of installation of items. During warranty period the bidders should conduct preventive maintenance once in Three months besides attending the calls.

SLA for performance during maintenance period:

1. The original call log for all the logged calls of complaints & calls closed status should be sent by email to APTS on fortnightly basis for monitoring.
2. Along with the above mentioned call log, a date wise abstract of calls logged and repair status within SLA and outside SLA should be provided to APTS in the following format with supporting call reports duly signed by the user:

Date	No.of calls logged	Calls closed						
		Within 1 hour	Within 2 hrs	Within 8 hrs	Within 12hrs	Within 1 day	Within 2 days	Within 3 Days

The above table may be used for calculation of penalties for not meeting the SLA requirements during maintenance/warranty period.

Section B

B.1 Pre-Qualification criteria:

1. The bidder should be a manufacturer/ authorized representative of a manufacturer/whole sale dealer and should be in business of manufacture and or supply and maintenance of the offered items for a minimum period of **Two years** in **AP** as on bid calling date.

The Manufacturer's Authorization form specific to this tender should be submitted as per the Annexure-III.

2. The Bidder/OEM should have minimum One Service centre Authorized or own in Hyderabad. Details of the service centers should be enclosed in Form P4.

In case Bidder is not having the service centers as on bid calling date, bidder should give an undertaking in PQ bid to open the service centers as specified above and should submit the Service Centers details before the due date of Delivery in case the contract is awarded. Failing which the Purchaser may forfeit the PBG and cancel the contract.

3. The bidder should have the minimum **turnover** for the items/products mentioned (irrespective of brand/model) and for the brand offered, during the period 2008-11 (up to December 2011) as follows:-

Schedule-I

Sl. No.	Item name	Financial Years	Total Sales (nos.)	Brand offered sales(nos)
1	Rack Serves	2008-11 (up to Dec. 11)	14	7
2	Blade servers	2008-11 (up to Dec. 11)	18	9
3	Blade Servers Enclosure	2008-11 (up to Dec. 11)	2	1

4. The bidder should furnish the information on major past supplies under the relevant product/services and satisfactory performance for the last Two financial years.
5. Bidder should give a Declaration that the bidder has not been debarred/ blacklisted by any Central or State Govt. / Quasi –Govt. Departments or organizations for non-satisfactory past performance, corrupt, fraudulent or any other unethical business practices as per Format given in Form P7.
6. APTS/The Department (IT&C Department/EDS(eSeva)) reserves their right in not considering a bid of the bidder, if such bidder/consortium member was a previous supplier and had a past bad track record or their earlier performance was unsatisfactory on any count.

Note : Relevant documents in support of above should be furnished.

Section C

C1. Statement of important limits/values related to bid

S.No.	Item	Description								
1	EMD Schedule – I	Rs. 1,60,000/- Note: 1. Scanned copy of EMD document should be uploaded on e-Procurement website. The Original Copy of EMD should be submitted to APTS before opening of Financial Bids. 2. APTS Empanelled SME units should upload relevant document to avail the facility of exemption of EMD with validity period on e-Procurement Website. The Physical copy of the same should be submitted to APTS before opening of Financial Bids.								
2	Bid Validity Period	90 days from the date of opening of bids								
3	EMD Validity Period	Up to 30/06/2012								
4	Maintenance Period	3 years maintenance including warranty period for all items mentioned schedule – I from the date of installation								
5	Variation in quantities	+/- 25%								
6	Period for furnishing performance security	Within 7 days from date of receipt of Notification of Award								
7	Performance security value for Schedule I	10% of Bid Value in favor of “The Managing Director, A.P. Technology Services Limited” from any Nationalized / Scheduled Bank.								
8	Performance security validity period	60 days beyond warranty period								
9	Period for signing contract	Within 10 days from date of receipt of Notification of Award								
10	Warranty period	36 months from the date of successful installation of all the goods								
11	Run Time & Up time	Run time: 24 X 7 Up time: 99% calculated over 3 calendar months period. For the purpose of up time calculation, day will be counted of 24 hours duration on all days.								
12	Payment terms	<table border="1" style="width: 100%;"> <thead> <tr> <th>Payment terms</th> <th>Cumulative payment</th> </tr> </thead> <tbody> <tr> <td>On delivery & successful installation.</td> <td>90% of contract value</td> </tr> <tr> <td>On Acceptance</td> <td>100% of contract value (Acceptance Test will be completed within 30 days from the date of submission of Installation Reports to APTS by Vendor. Two sets to be submitted. One set to Bills division and one set to AT division).</td> </tr> <tr> <td>Incase site not ready</td> <td>75% of the Contract value for that site / location.</td> </tr> </tbody> </table> <p>Note : All the Delivery Challans & Installation Reports/Site Not Ready Certificate/report to be Counter signed by the respective Competent Authority.</p>	Payment terms	Cumulative payment	On delivery & successful installation.	90% of contract value	On Acceptance	100% of contract value (Acceptance Test will be completed within 30 days from the date of submission of Installation Reports to APTS by Vendor. Two sets to be submitted. One set to Bills division and one set to AT division).	Incase site not ready	75% of the Contract value for that site / location.
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Incase site not ready	75% of the Contract value for that site / location.									
13	LD for late deliveries/installations	LD for late deliveries/Installations: 1% of the late delivered or deemed late delivered/installed goods for One week or part thereof, 1.5% for Two weeks or part thereof, 2% for Three weeks or part thereof, 2.5% for 4 weeks or part thereof and so on.								
14	Maximum LD for late deliveries/installation	Maximum LD for late deliveries/installations: 10% on the Total value of goods for that location/site for late delivery/installation or deemed late delivered/installed goods.								

15	Penalty for failure to maintain during warranty period for Schedule-I items	If down time is more than the permissible down time following penalties shall apply : For every 1% reduction in up time from 99%, penalty will be 1% of equipment cost, which is down or deemed down as the case may be. The same will be deducted from the Performance Bank Guarantee.
16	Options for the required equipment	If the bidder wants to give option, he may submit it as separate bids along with separate EMD. This will be treated as separate bid for evaluation.
17	Conditional bids	Not acceptable and liable for rejection
18	Eligibility Criteria	As per Section B
19	Transaction Fee	Transaction fee: All the participating bidders who submit the bids have to pay an amount @ 0.03% of their final bid value online with a cap of Rs. 10,000/- for quoted value of purchase up to Rs.50 crores and Rs.25000/- if the purchase value is above Rs.50 crores & service tax applicable @ 10.30% as levied by Govt. of India on transaction fee through online in favour of MD, APTS. The amount payable to APTS is non refundable. Corpus Fund: Successful bidder has to pay an amount of 0.04% on quoted value through demand draft in favour of Managing Director, APTS, Hyderabad towards corpus fund at the time of concluding agreement.
20	Transaction Fee Payable to	The Managing Director, A.P. Technology Services Ltd., Hyderabad
21	Bid submission	On Line. Bidders are requested to submit the bids after issue of minutes of the pre bid meeting duly considering the changes made if any, during the pre bid meeting. Bidders are totally responsible for incorporating/complying the changes/amendments issued if any during pre bid meeting in their bid.
22	Procedure for Bid Submission	Bids shall be submitted online on www.eprocurement.gov.in platform 1. The participating bidders in the tender should register themselves free of cost on e-procurement platform in the website www.eprocurement.gov.in . 2. Bidders can log-in to e-procurement platform in Secure mode only by signing with the Digital certificates. 3. The bidders who are desirous of participating in e-procurement shall submit their technical bids, price bids as per the standard formats available at the e-market place. 4. The bidders should scan and upload the respective documents in Pre Qualification and Technical bid documentation as detailed at Section E & G of the RFP including EMD. The bidders shall sign on all the statements, documents certificates uploaded by them, owning responsibility for their correctness/authenticity. 5. The rates should be quoted in online only
23	Other conditions	1.After uploading the documents, the copies of the uploaded statements, certificates, documents, original Demand Drafts in respect of Bid Security (except the Price bid/offer/break-up of taxes) are to be submitted by the bidder to the O/o The Managing Director, APTS , BRKR Bhavan, Hyderabad as and when required.

		<p>Failure to furnish any of the uploaded documents, certificates, will entitled in rejection of the bid. The APTS shall not hold any risk on account of postal delay. Similarly, if any of the certificates, documents, etc., furnished by the Bidder are found to be false / fabricated / bogus, the bidder will be disqualified, blacklisted, action will be initiated as deemed fit and the Bid Security will be forfeited.</p> <p>2. APTS will not hold any risk and responsibility regulating non-visibility of the scanned and uploaded documents.</p> <p>3. The Documents that are uploaded online on e-market place will only be considered for Bid Evaluation.</p> <p>4. Important Notice to Contractors, Suppliers and Department users (i) In the endeavor to bring total automation of processes in e-Procurement, the Govt. has issued orders vide G.O.Ms.No. 13 dated. 5.7.2006 permitting integration of electronic Payment Gateway of ICICI/HDFC/Axis Banks with e-Procurement platform, which provides a facility to participating suppliers / contractors to electronically pay the transaction fee online using their credit cards.</p> <p>5. In case of consortium either the prime bidder or the consortium partner can purchase the bid document. The bid can be filed either with user ID of prime bidder or consortium partner.</p>
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Section D

D Technical specifications (Schedule 1):

D.1.1. DB Server (Rack) : 2Nos.

1	Make	
2	Model	
3	Processor	Server with 4 sockets, populated with 2Nos of Intel Xeon 10 Core E7-4850 2.00 GHz or AMD Equivalent or higher
4	Cache memory	24 MB
5	Chipset	Compatible Intel Or AMD equivalent OEM Chipset
6	Memory	64 GB memory PC3-1066MHz LP 240-pin Registered ECC DIMMs
7	DIMM Slots	Server should support 64 DIMM Slots or higher
8	Memory Property	Advanced ECC memory protection, Memory mirroring or Equivalent
9	Hard Disk Drives	4 x 300GB 10K SAS 6Gbps 2.5in Slim-HS HDD (Hot swappable) scalable up to 12 drives
10	RAID Controller	Integrated hardware RAID controller and should support Raid 0, 1 and 5 Should have a provision for RAID Controller with 512 MB Battery back cache
11	Optical Drive	DVD-RW
12	Graphics Controller	Minimum 8 MB Memory
13	Ethernet Ports	2 * 10GbE and 4 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
14	PCI Slots	Minimum 7 PCI-E slots or Higher
15	Remote Management	Ability to remotely configure machines completely via command scripts with Advance Settings Utility
16	Redundant Power Supply	Redundant hot swap power supplies
17	Redundant Cooling Fans	Minimum Six hot-swap redundant cooling fans. Fans should automatically adjust speeds depending on the temperature inside the server chassis
18	Failure Alerting Mechanism	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should at least include Processors, memory, PCIe slots, VRMs, power supplies, fans, hard disk drives
19	Ease of failure identification	Server should send an alert notification on the system front panel for failure of any component like Processors, voltage regulator modules (VRMs),memory, power supplies, fans, HDDs, adapters and system temperature which will allow system administrator to identify the component failure
20	Cluster Support	Should support High Availability Clustering
21	Form Factor	4 U or more
22	OS Support	Latest version of Microsoft windows, Redhat
23	Warranty	3 Years Comprehensive Onsite Warranty
24	HBA	Should be Supplied with 2 Nos of Dual Port 8 Gbps fiber channel HBA.
25	Server Management	Server should support Management features as :
		Latest OS failure screen capture
		Graphical console redirection over LAN
		Remote virtual floppy and CD-ROM
		Support for IPMI v2.0 compliant management software

		SSL (Secure Socket Layer) and LDAP (Lightweight Directory Access Protocol) support
		IPMI over LAN
		Serial Over LAN
		Highly secure remote power on/off
		NMI/SMI detection and generation
		System reset control
		Monitoring of system and battery voltage, system temperature, fans, power supplies,
		processor and DIMM status
		NMI/SMI detection and generation
26	Server Management	Should be able to discover systems and other resources in a heterogeneous environment and Collect inventory data about hardware and software that is currently installed on systems
		Should be able to view and manage the status, problems and events for discovered systems
		Should be able to determine the health, compliance, and performance of managed systems by viewing detailed information about the problems by inspecting the event log
		Capable of automatically send the notifications for hardware events or when thresholds are exceeded
		Capable of doing configuration management of other systems by Initially configuring one or more systems (hardware and operating systems). Automatically configure newly discovered systems
		Should have feature like update manager for detecting and viewing out-of-date systems and also get a notification when systems are in need of updates and which updates are needed. Download, distribute and install available and requisite updates
		Should e able to do the graphical remote control tools including VNC, RDP, and web-based remote control for AMM, ILO, IMM, and RSA
		Able to discover and Work with virtualized environments including Microsoft Virtual Server, VMware, and Xen. Capable of viewing topology that shows the connections between physical and virtual resources
		Create automation plans based on events from virtual and physical resources and automation actions such as relocating a virtual server based on critical hardware alerts
		Create, delete and manage virtual servers and virtual farms for several virtualization technologies
		Relocate virtual servers to alternate physical hosts
		Ability to discover network devices and review network device inventory . Able to Monitor the health and status of network devices. View network device configuration settings, and apply templates to configure devices
		Management software should have upward integration with HP OpenView , Microsoft System Center Operations Manager , CA Unicenter , Tivoli Enterprise
27	Benchmark	Server should have published 20L SPECjbb2005 bops benchmark
		Server should have published 2.3M TPCC benchmark
28	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
29	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
30	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.2. BM Server (Rack) : 1No.

1	Make	
2	Model	
3	Processor	2xIntel Xeon Hexa Core E-5645 2.4 GHz or AMD Equivalent or higher
4	Cache memory	12 MB
5	Chipset	Intel / OEM Chipset / Or AMD Equivalent
6	Memory	16 GB memory PC3-1066MHz LP 240-pin Registered ECC DIMMs
7	DIMM Slots	Server should support 16 DIMM Slots or higher
8	Memory Property	Advanced ECC memory protection, Memory mirroring or Equivalent
9	Hard Disk Drives	2 * 300GB 10K SAS 6Gbps 2.5in Slim-HS HDD (Hot swappable) scalable up to 12 drives
10	RAID Controller	Integrated hardware RAID controller and should support Raid 0, 1 and 5 Should have a provision for RAID Controller with 512 MB Battery back cache
11	Optical Drive	DVD-RW
12	Graphics Controller	Minimum 8 MB Memory
13	Ethernet Ports	2 * 10GbE and 4 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
14	PCI Slots	Minimum 4 PCI-E slots or Higher
15	HBA	Should be Supplied with 2 Nos of Dual Port 8 Gbps fiber channel HBA.
16	Remote Management	Ability to remotely configure machines completely via command scripts with Advance Settings Utility
17	Redundant Power Supply	Redundant hot swap power supplies
18	Redundant Cooling Fans	Minimum Six hot-swap redundant cooling fans. Fans should automatically adjust speeds depending on the temperature inside the server chassis
19	Failure Alerting Mechanism	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should at least include Processors, memory, PCIe slots, VRMs, power supplies, fans, hard disk drives
20	Ease of failure identification	Server should send an alert notification on the system front panel for failure of any component like Processors, voltage regulator modules (VRMs),memory, power supplies, fans, HDDs, adapters and system temperature which will allow system administrator to identify the component failure
21	Cluster Support	Should support High Availability Clustering
22	Form Factor	2 U or more
23	OS Support	Latest version of Microsoft windows, Redhat
24	Warranty	3 Years Comprehensive Onsite Warranty
25	Server Management	Server should support Management features as :
		Latest OS failure screen capture
		Graphical console redirection over LAN
		Remote virtual floppy and CD-ROM
		Support for IPMI v2.0 compliant management software

		SSL (Secure Socket Layer) and LDAP (Lightweight Directory Access Protocol) support
		IPMI over LAN
		Serial Over LAN
		Highly secure remote power on/off
		NMI/SMI detection and generation
		System reset control
		Monitoring of system and battery voltage, system temperature, fans, power supplies,
		processor and DIMM status
		NMI/SMI detection and generation
26	Server Management	Should be able to discover systems and other resources in a heterogeneous environment and Collect inventory data about hardware and software that is currently installed on systems
		Should be able to view and manage the status, problems and events for discovered systems
		Should be able to determine the health, compliance, and performance of managed systems by viewing detailed information about the problems by inspecting the event log
		Capable of automatically send the notifications for hardware events or when thresholds are exceeded
		Capable of doing configuration management of other systems by Initially configuring one or more systems (hardware and operating systems). Automatically configure newly discovered systems
		Should have feature like update manager for detecting and viewing out-of-date systems and also get a notification when systems are in need of updates and which updates are needed. Download, distribute and install available and requisite updates
		Should e able to do the graphical remote control tools including VNC, RDP, and web-based remote control for AMM, ILO, IMM, and RSA
		Able to discover and Work with virtualized environments including Microsoft Virtual Server, VMware, and Xen. Capable of viewing topology that shows the connections between physical and virtual resources
		Create automation plans based on events from virtual and physical resources and automation actions such as relocating a virtual server based on critical hardware alerts
		Create, delete and manage virtual servers and virtual farms for several virtualization technologies
		Relocate virtual servers to alternate physical hosts
		Ability to discover network devices and review network device inventory . Able to Monitor the health and status of network devices. View network device configuration settings, and apply templates to configure devices
		Management software should have upward integration with HP OpenView , Microsoft System Center Operations Manager , CA Unicenter , Tivoli Enterprise
27	Benchmark	Server family should have published benchmark (Spec_int_rate2006)
28	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
29	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
30	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.3. WEB server (Rack) : 2 Nos.

1	Make	
2	Model	
3	Processor	2xIntel Xeon Hexa Core E-5645 2.4 GHz or AMD Equivalent or higher
4	Cache memory	12 MB
5	Chipset	Intel / OEM Chipset / Or AMD Equivalent
6	Memory	32 GB memory PC3-1066MHz LP 240-pin Registered ECC DIMMs
7	DIMM Slots	Server should support 16 DIMM Slots or higher
8	Memory Property	Advanced ECC memory protection, Memory mirroring or Equivalent
9	Hard Disk Drives	2 * 300GB 10K SAS 6Gbps 2.5in Slim-HS HDD (Hot swappable) scalable up to 12 drives
10	RAID Controller	Integrated hardware RAID controller and should support Raid 0, 1 and 5 Should have a provision for RAID Controller with 512 MB Battery back cache
11	Optical Drive	DVD-RW
12	Graphics Controller	Minimum 8 MB Memory
13	Ethernet Ports	2 * 10GbE and 4 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
14	PCI Slots	Minimum 4 PCI-E slots or Higher
15	HBA	Should be Supplied with 2 Nos of Dual Port 8 Gbps fiber channel HBA.
16	Remote Management	Ability to remotely configure machines completely via command scripts with Advance Settings Utility
17	Redundant Power Supply	Redundant hot swap power supplies
18	Redundant Cooling Fans	Minimum Six hot-swap redundant cooling fans. Fans should automatically adjust speeds depending on the temperature inside the server chassis
19	Failure Alerting Mechanism	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should at least include Processors, memory, PCIe slots, VRMs, power supplies, fans, hard disk drives
20	Ease of failure identification	Server should send an alert notification on the system front pannel for failure of any component like Processors, voltage regulator modules (VRMs),memory, power supplies, fans, HDDs, adapters and system temperature which will allow system administrator to identify the component failure
21	Cluster Support	Should support High Availability Clustering
22	Form Factor	2 U or more
23	OS Support	Latest version of Microsoft windows, Redhat
24	Warranty	3 Years Comprehensive Onsite Warranty
25	Server Management	Server should support Management features as :
		Latest OS failure screen capture
		Graphical console redirection over LAN
		Remote virtual floppy and CD-ROM
		Support for IPMI v2.0 compliant management software
		SSL (Secure Socket Layer) and LDAP (Lightweight Directory Access Protocol) support
IPMI over LAN		

		Serial Over LAN
		Highly secure remote power on/off
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		processor and DIMM status
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		Should e able to do the graphical remote control tools including VNC, RDP, and web-based remote control for AMM, ILO, IMM, and RSA
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27	Benchmark	Server family should have published benchmark (Spec_int_rate2006)
28	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
29	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
30	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.4. DR App Server (Rack) : 1No.

1	Make	
2	Model	
3	Processor	2xIntel Xeon Hexa Core E-5645 2.4 GHz or AMD Equivalent or higher
4	Cache memory	12 MB
5	Chipset	Intel / OEM Chipset / Or AMD Equivalent
6	Memory	32 GB memory PC3-1066MHz LP 240-pin Registered ECC DIMMs
7	DIMM Slots	Server should support 16 DIMM Slots or higher
8	Memory Property	Advanced ECC memory protection, Memory mirroring or Equivalent
9	Hard Disk Drives	2 * 300GB 10K SAS 6Gbps 2.5in Slim-HS HDD (Hot swappable) scalable up to 12 drives
10	RAID Controller	Integrated hardware RAID controller and should support Raid 0, 1 and 5 Should have a provision for RAID Controller with 512 MB Battery back cache
11	Optical Drive	DVD-RW
12	Graphics Controller	Minimum 8 MB Memory
13	Ethernet Ports	2 * 10GbE and 4 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
14	PCI Slots	Minimum 4 PCI-E slots or Higher
15	HBA	Should be Supplied with 2 Nos of Dual Port 8 Gbps fiber channel HBA.
16	Remote Management	Ability to remotely configure machines completely via command scripts with Advance Settings Utility
17	Redundant Power Supply	Redundant hot swap power supplies
18	Redundant Cooling Fans	Minimum Six hot-swap redundant cooling fans. Fans should automatically adjust speeds depending on the temperature inside the server chassis
19	Failure Alerting Mechanism	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should at least include Processors, memory, PCIe slots, VRMs, power supplies, fans, hard disk drives
20	Ease of failure identification	Server should send an alert notification on the system front pannel for failure of any component like Processors, voltage regulator modules (VRMs),memory, power supplies, fans, HDDs, adapters and system temperature which will allow system administrator to identify the component failure
21	Cluster Support	Should support High Availability Clustering
22	Form Factor	2 U or more
23	OS Support	Latest version of Microsoft windows, Redhat
24	Warranty	3 Years Comprehensive Onsite Warranty
25	Server Management	Server should support Management features as :
		Latest OS failure screen capture
		Graphical console redirection over LAN
		Remote virtual floppy and CD-ROM
		Support for IPMI v2.0 compliant management software
		SSL (Secure Socket Layer) and LDAP (Lightweight Directory Access Protocol) support
		IPMI over LAN

		Serial Over LAN
		Highly secure remote power on/off
		NMI/SMI detection and generation
		System reset control
		Monitoring of system and battery voltage, system temperature, fans, power supplies,
		processor and DIMM status
		NMI/SMI detection and generation
26	Server Management	Should be able to discover systems and other resources in a heterogeneous environment and Collect inventory data about hardware and software that is currently installed on systems
		Should be able to view and manage the status, problems and events for discovered systems
		Should be able to determine the health, compliance, and performance of managed systems by viewing detailed information about the problems by inspecting the event log
		Capable of automatically send the notifications for hardware events or when thresholds are exceeded
		Capable of doing configuration management of other systems by Initially configuring one or more systems (hardware and operating systems). Automatically configure newly discovered systems
		Should have feature like update manager for detecting and viewing out-of-date systems and also get a notification when systems are in need of updates and which updates are needed. Download, distribute and install available and requisite updates
		Should e able to do the graphical remote control tools including VNC, RDP, and web-based remote control for AMM, ILO, IMM, and RSA
		Able to discover and Work with virtualized environments including Microsoft Virtual Server, VMware, and Xen. Capable of viewing topology that shows the connections between physical and virtual resources
		Create automation plans based on events from virtual and physical resources and automation actions such as relocating a virtual server based on critical hardware alerts
		Create, delete and manage virtual servers and virtual farms for several virtualization technologies
		Relocate virtual servers to alternate physical hosts
		Ability to discover network devices and review network device inventory . Able to Monitor the health and status of network devices. View network device configuration settings, and apply templates to configure devices
		Management software should have upward integration with HP OpenView , Microsoft System Center Operations Manager , CA Unicenter , Tivoli Enterprise
27	Benchmark	Server family should have published benchmark (Spec_int_rate2006)
28	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
29	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
30	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.5. DR DB Server (Rack) : 1No.

1	Make	
2	Model	
3	Processor	Server with 4 sockets, populated with 2Nos of Intel Xeon 10 Core E7-4850 2.00 GHz or AMD Equivalent or higher
4	Cache memory	24 MB
5	Chipset	Intel / OEM Chipset / Or AMD Equivalent
6	Memory	64 GB memory PC3-1066MHz LP 240-pin Registered ECC DIMMs
7	DIMM Slots	Server should support 64 DIMM Slots or higher
8	Memory Property	Advanced ECC memory protection, Memory mirroring or Equivalent
9	Hard Disk Drives	4 * 300GB 10K SAS 6Gbps 2.5in Slim-HS HDD (Hot swappable) scalable up to 12 drives
10	RAID Controller	Integrated hardware RAID controller and should support Raid 0, 1 and 5 Should have a provision for RAID Controller with 512 MB Battery back cache
11	Optical Drive	DVD-RW
12	Graphics Controller	8 MB Memory
13	Ethernet Ports	2 * 10GbE and 4 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
14	PCI Slots	Minimum 7 PCI-E slots or Higher
15	Remote Management	Ability to remotely configure machines completely via command scripts with Advance Settings Utility
16	Redundant Power Supply	Redundant hot swap power supplies
17	Redundant Cooling Fans	Minimum Six hot-swap redundant cooling fans. Fans should automatically adjust speeds depending on the temperature inside the server chassis
18	Failure Alerting Mechanism	The server should be able to alert impending failures on maximum number of components. The components covered under alerting mechanism should at least include Processors, memory, PCIe slots, VRMs, power supplies, fans, hard disk drives
19	Ease of failure identification	Server should send an alert notification on the system front pannel for failure of any component like Processors, voltage regulator modules (VRMs),memory, power supplies, fans, HDDs, adapters and system temperature which will allow system administrator to identify the component failure
20	Cluster Support	Should support High Availability Clustering
21	Form Factor	4 U or more
22	OS Support	Latest version of Microsoft windows, Redhat
23	Warranty	3 Years Comprehensive Onsite Warranty
24	HBA	Should be Supplied with 2 Nos of Dual Port 8 Gbps fiber channel HBA.
25	Server Management	Server should support Management features as :
		Latest OS failure screen capture
		Graphical console redirection over LAN
		Remote virtual floppy and CD-ROM
		Support for IPMI v2.0 compliant management software
		SSL (Secure Socket Layer) and LDAP (Lightweight Directory Access Protocol) support

		IPMI over LAN
		Serial Over LAN
		Highly secure remote power on/off
		NMI/SMI detection and generation
		System reset control
		Monitoring of system and battery voltage, system temperature, fans, power supplies,
		processor and DIMM status
		NMI/SMI detection and generation
26	Server Management	Should be able to discover systems and other resources in a heterogeneous environment and Collect inventory data about hardware and software that is currently installed on systems
		Should be able to view and manage the status, problems and events for discovered systems
		Should be able to determine the health, compliance, and performance of managed systems by viewing detailed information about the problems by inspecting the event log
		Capable of automatically send the notifications for hardware events or when thresholds are exceeded
		Capable of doing configuration management of other systems by Initially configuring one or more systems (hardware and operating systems). Automatically configure newly discovered systems
		Should have feature like update manager for detecting and viewing out-of-date systems and also get a notification when systems are in need of updates and which updates are needed. Download, distribute and install available and requisite updates
		Should e able to do the graphical remote control tools including VNC, RDP, and web-based remote control for AMM, ILO, IMM, and RSA
		Able to discover and Work with virtualized environments including Microsoft Virtual Server, VMware, and Xen. Capable of viewing topology that shows the connections between physical and virtual resources
		Create automation plans based on events from virtual and physical resources and automation actions such as relocating a virtual server based on critical hardware alerts
		Create, delete and manage virtual servers and virtual farms for several virtualization technologies
		Relocate virtual servers to alternate physical hosts
		Ability to discover network devices and review network device inventory . Able to Monitor the health and status of network devices. View network device configuration settings, and apply templates to configure devices
		Management software should have upward integration with HP OpenView , Microsoft System Center Operations Manager , CA Unicenter , Tivoli Enterprise
27	Benchmark	Server should have published 20L SPECjbb2005 bops benchmark
		Server should have published 2.3M TPCC benchmark
28	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
29	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
30	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.6. App Server (Blade) : 2 Nos.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	48 GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, **Any two flavors of Linux/ RHEL. FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.7. SMS Server (Blade) : 1No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	32 GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	4 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.8. Test App Server (Blade) : 1No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	16 GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.9. Proc Server (Blade) : 1No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	24 GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.10. Gateway Server (Blade) : 1No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	16GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.11. Report Server (Blade) :1 No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	24GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.12. Test DB Server (Blade) : 1No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	24GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.13. File Server (Blade) :1 No.

1	Make	
2	Model	
3	Processor	2 x Intel® Xeon® Processor X5650 (2.66GHz/6-core/12MB Cache /95W) Processor or 2 x AMD Opteron 6172 (2.1GHz/12-core/12MB/80W) or 2 x AMD Opteron 6234 (2.4GHz/12-core/12MB/115W) or higher
4	Chipset	Latest Intel / AMD Chipset supporting above processor
5	Memory	24GB PC3 ECC DDR3 RAM using 8GB DDR3 scalable to 128GB or more
6	Memory Protection	Advanced ECC with multi-bit error protection supporting memory mirroring
7	Hard Drives	2 x 300GB 10K RPM SAS HDD or more hot swappable system disk with mirroring using integrated RAID 0,1 on internal disks, It should be possible to hot swap the drives without shutting down the server.
8	SAN Connectivity	Should be connected using 8Gbps throughput - cables and others accessories to be provided with NSPOF.
9	Ethernet	2 * 10GbE and 2 * GbE multifunctional network ports with support for iSCSI, FCoE protocols based on future datacenter needs.
10	Bus Slots	Minimum of 2 PCI expansions/Mezzanine expansions. Bus slots should support for Dual/Quad Gigabit, Dual 10Gbps and Dual port 4x QDR Infini band options for increased bandwidth and additional network port requirements.
11	Certification	Microsoft Windows 2008 R2 Enterprise Server, <u>**Any two flavors of Linux/ RHEL.</u> FCC, CE and UL or CSA
12	Virtualization Support	Vmware ESX server 4.x, RHEV.
13	Diagnostics	Pre Failure Notification for all active and important components like processors, Memory, Hard drives, etc. and automatic calls logging.
14	Systems Management	Should support unified management suite that can monitor and manage all the servers from the Vendor deployed in our data center.
15	Remote Management	<ul style="list-style-type: none"> • Should be possible to manage the servers and get access to critical information about the health of the server from any remote location with just the help of a standard Web browser (Internet Explorer). • Remote management should support remote power on/off of the server and should have the capability to boot the blade server from a remote floppy or CDROM drive or an image of the same. • Should be possible to remotely manage each blade server individually. • Should support access rights for administrators for each blade server individually. Should be able to manage multiple blades in the same enclosure at the same time. • Server management software should be of the same brand as the supplier.
16	Security	Power-on password, administrator password.
17	Systems Management Software	The server should come with systems management software to provide update management, configuration management, patch management and virtualization management. The software should be able to Cap data based on the report.
18	Warranty	3 years warranty. Pre failure warranty on CPU,Memory & Hard disks.
19	Delivery	All the necessary tools & tackles licenses, cables / connectors for Ethernet / Fibre / USB / Power etc. required for making the system operational shall be provided by the bidder.
20	Note	The vendor has to give part nos. of every component which will be cross verified with OEM.

D.1.14. Blade Servers Enclosure: 1No.

Make	-Specify-
Model	-Specify-
1	Rack Mountable Chassis to accommodate Support for full height and half height blades in the same enclosure holding Minimum 16 half / 8 full Height blades per enclosure
2	Same enclosure should support Intel Xeon and AMD Opteron based blades
3	Should support Hot Pluggable & Redundant Management Modules.
4	The blade chassis should be configured with Hot swap IP based KVM Switch for Management or KVM Management should be integrated in Remote Management Controller.
5	Should have passive/active mid-plane/back-plane architecture.
6	Hot swap and redundant cooling fans and all fans should be fully populated
7	Dual end-to-end redundant Network connectivity for each blade
8	The blade chassis should have at least 4 I/O Modules
9	The enclosure should be populated fully with power supplies of the highest capacity available with the vendor. Power supplies should support N+N as well as N+1 redundancy configuration, where N is greater than 1
10	Power Management Features like ; 1. To cap the power of individual server or a group. 2. Intelligently assign power to the appropriate server in the pool based on policy settings. 3. To show the actual power usage and thermal measurements data of servers. 4. To generate comprehensive power reports.
11	The blade chassis should be configured with cables, connectors and accessories required to connect the Power distribution units to the power supplies.
12	The Chassis should have redundant 10GbE network switches with at least 14 10GbE downlink ports and at least 4 x 10GbE and 4 x 1GbE (copper) uplink ports per switch for connecting to the Core Switch and redundant 20 or more ports fiber channel SAN switch with at least 14 8gbps auto negotiating FC downlink ports and 6 8gbps uplink ports per SAN switch or Equivalent interconnect with 14 10Gb downlink ports and at least 4 x 10GbE and 4 x 1GbE (copper) and 6 8Gbps FC uplink Ports.
13	The chassis should have minimum 1 DVD ROM which can be used by all the blade servers or should support virtual media to mount DVD/CD from remote system.
14	Should support combination housing of Ethernet, FC, iSCSI, FCOE, IB interconnect fabrics offering Hot Pluggable & Redundancy as a feature.
15	System Management and deployment tools to aid configuring the Blade Servers and OS Deployment should be provided.
16	The chassis should be equipped for providing MAC & WWN address across the slots or chassis instead of individual Host Bus Adapter/NIC of the Blade. The solution provided must not have any single point of failure and must be configured in failover.
17	The Power and cooling requirements of the configuration should be submitted along with technical document.
18	3 Years Comprehensive On-site Warranty

Section E

E.1. Bidding Procedure: Separate Bid for each Schedule:

Offers should be made in three parts namely, "Pre-qualification bid", "Technical bid" and "Financial bid" and in the format given in bid document. Each offer should be placed in a separate envelop super scribed "Pre-Qualification Bid", "Technical Bid" and " Financial Bid", as the case may be, followed by the title mentioned above against "Tender Call".

- 1.) EMD details should be given in the "Pre-qualification bid".
- 2.) Tenders will be accepted only from those who have purchased the Bid Document.
- 3.) All correspondence should be with APTS contact person.
- 4.) A complete set of bidding documents may be purchased by interested bidders from the APTS contact person upon payment of the bid document price which is non-refundable. Payment of bid document price should be by demand draft / cashier's cheque or certified cheque drawn in favour of "The Managing Director, Andhra Pradesh Technology Services Ltd." and payable at Hyderabad (India) not later than 1 hour before bid closing date & time.

E.2. Pre-qualification bid:

It shall include the following information about the firm and/or its proposal.

1. General information on the bidder's company in Form P-1
2. Turn over details in relevant field in Form P-2A for Schedule-I
3. Turn over details of the product (Brand) offered in Form P-2B for Schedule- I
4. List of major customers in support of turnover in Form P-3
5. Details of service centers in AP in Form P-4
6. Certificates like ISO, Microsoft etc. in Form P-5 (Bidder's format)
7. Manufacturer's authorization to participate in bidding process apart from such other documents like authorization certificate for dealing in the products for which bid is submitted.(However this will not apply to Manufacturers) in Form P-6 (Bidder's format)

E.3. Technical Bid:

1. Deviation(s) to technical specifications, if any in Form T-1
2. Check list in Form T-2
3. Detailed technical documentation, reference to various industry standards to which the products/services included in vendor's offer conform, and literature concerning the proposed solution in Form T-3 (Bidder's format)
4. Other information, if any required in the bid document in Form T-4 (Bidder's format)

E.4. Financial bid:

The financial bid should provide cost calculations corresponding to unit price of each item of the schedule-I in Form F-1.

E.5. Pre-bid Meeting:

All those bidders who had purchased bid document can participate in the meeting to seek clarifications on the bid, if any.

Section F

Bid evaluation procedure:

Bids would be evaluated for entire Schedule. Bidders should offer prices for all the items of Schedule and for the full quantity of an item of Schedule failing which such bid will not be considered. Technical bid documentation should be in the prescribed format. If a vendor has any comment to offer about the procedural aspects of this tender, it should be intimated to APTS during the pre-bid meeting. In case the schedule or procedure of tender processing is revised, the same shall be communicated by telephone, fax, courier or e-mail as the case may be to all the vendors who have paid the tender document fee.

F.1. Opening of bids:

Immediately after the closing time, the APTS contact person shall open the pre-qualification bid', and list them for further evaluation. The Technical bids of only those bidders who qualify in the pre-qualification bid will be opened at the date that will be informed by APTS. After evaluation of technical bids, the financial bids of only those bidders who qualify in technical evaluation will be opened.

F.1.1 EMD Validity:

The EMD will be scrutinized first for the amount and validity period. The bids submitted with required EMD amount and validity only be considered for the evaluation. The bids submitted with insufficient EMD amount/validity will be treated as disqualified bids and those bids will not be considered for further evaluation.

F.2. Pre-qualification bid documentation:

The Pre-qualification bid documentation shall be evaluated in two sub-steps. Firstly, the documentation furnished by the vendor shall be examined prima facie to see if the technical skill base and financial capacity and other vendor attributes claimed therein are consistent with the needs of this project. In the second step, APTS may ask vendor(s) for additional information, visit to vendors site and/or arrange discussions with their professional, technical faculties to verify claims made in Pre-qualification bid documentation.

F.3. Technical bid documentation:

Technical bid documentation shall be evaluated in two sub-steps. Firstly, the documentation furnished by the vendor shall be examined prima facie to see if the product /services offered, technical skill base and financial capacity and other vendor attributes claimed therein are consistent with the needs of this project. In the second step, APTS may ask vendor(s) for additional information, visit to vendors site and/or arrange discussions with their professional, technical faculties to verify claims made in technical bid documentation.

F.4. Award Criterion:

Final choice of firm to execute the project shall be made on the basis of conformity to technical specifications, appropriateness of the product offered, capability of bidder to execute and service the project and appropriateness of financial offer from the point of view of cost-effectiveness over the entire maintenance period for the product/services.

Managing Director, APTS