



Department of Aerospace Engineering

September 6, 2013

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Quotations invited

Sealed quotations are invited for **RN31443E (12TB) NAS server** with the specification outlined below. **Technical as well as the commercial quotations must be sent separately in sealed envelope.** Quotations may be sent by post/courier to the above mentioned address. The details of the requirement are mentioned below.

- Enquiry No: AE/AD/003
- Opening date: 1000hrs, 6th September, 2013
- Closing date: 1700hrs, 15th September, 2013
- Essential requirement: RN31443E (12TB) NAS server with the following specifications

S.No.	Technical Specifications	
1	Physical Specifications	CPU: Intel® Atom 2.1GHz dual core or higher
		Memory: 2 GB
		Drive Bays: 4
		Drive Types Supported: SATA/SSD 2.5" or 3.5"
		Hot Swappable Drives
		Tool-less 3.5" Disk Installation
		eSATA Expansion Ports: 2
		Gigabit LAN Ports: 2 (link aggregation and failover)
		USB Ports: 1 # USB 2.0, 2 # USB 3.0
		HDMI Port: 1
		Power Supply: 12V, 7A External 90W; input 100-240V AC, 50-60Hz
		Power Consumption: Operation: 50W max
		LCD Display
		Flash: 128MB for OS
		Programmable One-Touch USB Backup button
		LEDs: Power, Activity, Disk, Backup, LAN
2	Data Protection (Backup & Replication)	Unlimited block-based snapshots for continuous data protection.
		Restore Snapshots to any point in time.
		Restore Snapshot data from local admin GUI, CLOUD, or native Windows File Explorer
		Scheduled and manual snapshots
		Encrypted Remote Replication
		Cloud managed Remote Replication (NAS to NAS) without any extra licenses.

		AES 256-bit volume based encryption
		automatic single volume online expansion
		Single Disk, JBOD
		RAID Levels: 0, 1, 5, 6, 10 (RAID level support depends on number of drives/bays)
		RAID Global Hot Spare
		eSATA Expansion
		Backup to external storage (USB/eSATA)
		USB One-Touch Copy
		Apple Time Machine support
		Remote Apple Time Machine backup and restore
		NAS Vault Cloud backup support
		Sync folder on Mac/Windows to a folder on ReadyNAS
		DropBox file synchronization (requires DropBox account)
		Real-time Anti-Virus scanning using signature and heuristic algorithms. (end-user licenses required) Protection for viruses, malware, worms, and Trojans
3	Storage Area Networks (SAN), Virtualization	Unlimited iSCSI LUN Snapshot
		Thin or Thick provision LUNs
		Multi-LUN per target
		LUN mapping
		LUN masking
		SPC-3 Persistent Reservation (iSCSI)
		MPIO (iSCSI)
		MC/S (iSCSI)
		Max # iSCSI Target: 256
		Max # iSCSI LUN: 256
		VMware vSphere 5
		Citrix XenServer 6
		Windows Server 2008 Hyper-V
		Windows Server 2008 Failover Clustering
		Windows Server 2012
4	Cloud access to NAS	CLOUD portal based data access and management
		VPN quality remote data transfer and management
		Share data with friends & co-workers directly from portal
5	File System & Transfer Protocols	NAS Remote clients for Apple Mac OSX, Microsoft Windows, Android, Apple iOS (Remote file access and management client)
		VPN quality remote data transfer and management
		Linux 3.x
		Internal File System: BTRFS
		External File System: EXT3, EXT4, NTFS, FAT32, HFS+
		Copy-on-write filesystem
		Microsoft Network (CIFS/SMB3)
		Apple OS X (AFP 3.3)
		Linux/Unix (NFS v3)
		Internet (HTTP)
		Secure Internet (HTTPS)
		File Transfer Protocol (FTP)
		FTP over SSL / TLS (explicit)
		FTP Passive mode with port range setup

		FTP Bandwidth control
		FTP Anonymous
		FTP Transfer Log
		Secure Shell (SSH)
		SSH File Transfer Protocol (SFTP)
		Web Authoring (WebDAV)
		Storage Array Network (iSCSI)
		File Synchronization (rsync)
		Local web file manager
6	Users/Groups	Max # Users: 8192
		Max # User Groups: 8192
		Max # Share Folder: 1024
		Max # Concurrent Connections: 1024
		Share Folder Level ACL Support
		Advanced Folder Permissions with Subfolder ACL support for CIFS/SMB, AFP, FTP
		Microsoft Active Directory (AD) Domain Controller Authentication
		Local access list
		CLOUD based ACL
		Domain user login via CIFS/SMB, AFP, FTP
7	Management	Cloud based discovery and management
		Local discovery agent Software (Windows/ Mac)
		Save and restore system configuration (clone devices)
		Local event log
		Send events to SYSLOG server
		Connection reporting (SMB)
		Local Graphical User Interface (GUI)
		Marketplace integration to add productivity, media, backup, surveillance and other applications
		Unicode support
		Volume Management
		Thin provision Shares and LUNs
		Instant Provisioning/Expansion with data protection
		Restore to factory default
		Supported Operating Systems (Microsoft Windows Vista (32/64-bit), 7 (32/64-bit), 8 (32/64-bit), Microsoft Windows Server 2008 R2/2012, Apple OS X, Linux/Unix, Solaris, Apple iOS, Google Android)
		Supported Web Browsers (Microsoft Internet Explorer 9+, Mozilla Firefox 14+, Google Chrome 20+, Apple Safari 5+)
8	System Monitoring	Device capacity, performance, resource and health monitoring
		Bad block scan
		Hard Drive S.M.A.R.T.
		File System Check
		Disk Scrubbing
		Disk Defragment
		Alerts (SMTP email, LCD, SNMP, syslog, local log)
		Auto-shutdown (hard drive, fan, UPS)
		Auto-restart on power recovery
9	Networking Protocols	TCP/IP
		IPv4
		Next-generation Internet Protocol (IPv6)

		Static & Dynamic IP Address, Multiple IP settings
		DHCP Client
		Link Aggregation IEEE 802.3ad
		Port Trunking (balanced round robin, active backup, balance xor, broadcast, 802.3ad link aggregation LACP, transmit load balancing, adaptive load balancing)
		Hash Types IEEE 802.3ad LACP or XOR (Layer 2, Layer3, Layer 4)
		Jumbo Frames
		Virtual LAN (VLAN), SSH, SNMP v2,v3, NTP
10	Compliance	ENGR 10049 EST Environmental Stress Test Guideline
		ENGR 10045 EVT Engineering Validation Test Guideline
		ENGR 10048 CVT Compliance Validation Test Guideline
		ENGR 10046 SVT System Validation Test Guideline
		ENGR 10023 HALT Highly Accelerated Life Test Guideline
		ENGR 10036 CDG Component Derating Guideline
11	Environment	Noise levels: <25dBA
		Operating Temperature: 0°-40° C
		Operating Humidity: 5-95% relative humidity, non-condensing
		Smart Fan
		Scheduled Power on/off
		UPS Support
		Network UPS with SNMP Management
		Wake on LAN
		Schedule power on/off
		Auto-power on (after shutdown)
		HDD Spin Down
		AC Input Power Voltage 100V to 240V
		Power Frequency: 50Hz to 60Hz, Single Phase
		Certification: FCC Class B, CE Class B, RoHS, VCCI Class B

Terms & Conditions

- 1. Installation and integration of all supplied hardware and software shall be done by the vendor.**
- Bidder should be OEM/Authorized Partner of the OEM and a Letter of Authorization from OEM, specific to the tender should be enclosed.
- The firm/company should be ISO 9001 certified (Maintenance & System Integration). Please attach a copy of the certificate.
- Bidder should have support center in Kanpur/Lucknow.
- 5. Provide the quotations in INR only.**

Sincerely,
Ashoke De