In lot 1, position 1 - Server for Data Base

1. **Q: You order Microsoft Windows Server 2008, 64 bit, Enterprise, License with 25 or more CALs, English language, OEM version. How many CALs do you need?**

    A: This will be the Database the CEC Web Server, hosting the CEC Website (lot 1 position 3) will be connecting to. We are under the advice of the vendor as to how many CALs would be needed.

2. **Q: SERVER (for Data Base) 2x - Usable 1 TB in raid 10 of Storage, which type, any other requirements for storage?**

    A: 1TB of physical hard drives in RAID10 configuration will render far less usable space. The requirement is to have 1 TB of usable space after RAID10 is applied. The other specification is that the spindle configuration should be optimized to have a throughput of 3GB/s. More spindles (hard drives), higher throughput. The specified 15K SAS drives should be configured to have at least one hot swappable drive. It is up to the vendor to calculate the size and number of the 15K SAS drives and configure the storage to have 1TB after RAID10 configuration and format, with a throughput of 3GB/s.

3. **Q: Server for DB: You requested HDD no less than 1TB within RAID level 10. This means that HDDs with total capacity of 2 TB should be installed to the server. The major of servers doesn't support so many HDDs. Is it possible to offer as alternative proposal solution with external Storage system?**

    A: Yes. Similar systems such as StorageWorks whereby the box with drives is connected via two 3GB/s SAS cables in redundant mode, can be proposed. The vendor should then provide a small RAID1 capacity (63GB) for the operating system on the Server itself.

4. **Q: SERVER (for Data Base): Usable Hard disk space in RAID 10: 1TB. Does that mean that it requires a total space of 2TB?**

    A: The minimum space after RAID10 configuration and after Formatting should be 1TB.

5. **Q: What is the acceptable deviation from requested value 1TB for usable HDD space in Server for Database? For example, is 0.9TB usable space covering Customer's needs?**

    A: The minimum space after RAID10 configuration and after Formatting should be 1TB.

7. **Q: May we offer servers with CPU type QuadCore?**

    A: Yes. Keep in mind the licensing scheme needed for MS SQL and Windows Server.

    In lot 1, position 2 - Backup Tape Drive

8. **Q: BACKUP TAPE DRIVE for Data Base Server 1x - Is this request for backup library with 1 drive and 10 slots?**

A: The requirement is to supply 10 LTO Tapes of 400GB (without compression). The tape drive should have at least one writing/reading head. The number of slots for the Tape Drive should be one.

9. **Q: Management and Monitoring: Availability in a delivery set of standard software (such as Backup Exec) supporting the tape library installation, configuration, monitoring and tape library management with possibility of notifying authorized administrator about appeared problems. Does that mean that the supply must include SW for backup? (backup utility in Win2008 does not support work with tapes)**

A: Correct. The Vendor should supply Backup Software supporting the specified throughput with the supplied Tape Drive on Windows Server 2008 64 bit. The final solution should be able to back up data from MS SQL Server 2008 on the Database Server, should be able to access the folders on the Web Server, such as the Web Site folder and backup the Web Site files to tape drive with the specified throughput. CEC should not need to purchase or acquire any additional software, modules, agents or hardware to be able to achieve this.

10. **Q: What systems should be supported and what is the number of agents that should be included in supply except 1 Windows Server + 1 SQL Server?**

A: The Vendor should supply Backup Software supporting the specified throughput with the supplied Tape Drive on Windows Server 2008 64 bit. The final solution should be able to back up data from MS SQL Server 2008 on the Database Server, should be able to access the folders on the Web Server, such as the Web Site folder and backup the Web Site files to tape drive with the specified throughput. CEC should not need to purchase or acquire any additional software, modules, agents or hardware to be able to achieve this.

11. **Q: Which host interfaces are acceptable for a Backup Tape Drives**

A: Any interface with the specified throughput supporting MS SQL Server 2008 on Windows Server 2008 64 bit. Any additional Software to support this requirement should be supplied by the Vendor. The Vendor should supply Backup Software supporting the specified throughput with the supplied Tape Drive on Windows Server 2008 64 bit. The final solution should be able to back up data from MS SQL Server 2008 on the Database Server, should be able to access the folders on the Web Server, such as the Web Site folder and backup the Web Site files to tape drive with the specified throughput. CEC should not need to purchase or acquire any additional software, modules, agents or hardware to be able to achieve this.

12. **Q: SW with tape management functionality is requested. Is backup management functionality also required?**

A: Yes. The Vendor should supply Backup Software supporting the specified throughput with the supplied Tape Drive on Windows Server 2008 64 bit. The final solution should be able to back up data from MS SQL Server 2008 on the Database Server, should be able to access the folders on the Web Server, such as the Web Site folder and backup the Web Site files to tape drive with the specified throughput. CEC should not need to purchase or acquire any additional software, modules, agents or hardware to be able to achieve this.

In lot 1, position 3 - Server for Web Application

13. **Q: SERVER (for Web Application). Backup data: Support internal tape for backup. Should supply include tape drive for the server? What are tape drive parameters?**

A: See Lot 1 Position 2. The Vendor should supply Backup Software supporting the specified throughput with the supplied Tape Drive on Windows Server 2008 64 bit. The final solution should be able to back up data from MS SQL Server 2008 on the Database Server, should be able to access the folders on the Web Server, such as the Web Site folder and backup the Web Site files to tape drive with the specified throughput. CEC should not need to purchase or acquire any additional software, modules, agents or hardware to be able to achieve this.

14. **Q: May we offer server with external tape drive and what tape parameters should be considered: LTO or DDS, Rack or common, SAS or USB?**

    A: See Lot 1 Position 2. The Vendor should supply Backup Software supporting the specified throughput with the supplied Tape Drive on Windows Server 2008 64 bit. The final solution should be able to back up data from MS SQL Server 2008 on the Database Server, should be able to access the folders on the Web Server, such as the Web Site folder and backup the Web Site files to tape drive with the specified throughput. CEC should not need to purchase or acquire any additional software, modules, agents or hardware to be able to achieve this.

15. **Q: MS Windows Server 2008 Enterprise Edition also support an unlimited number of network access and is suitable for web application servers. Is it an acceptable option as an operating system for Web Application Server?**

    A: Yes, Enterprise Edition is acceptable.

16. **Q: You order Microsoft Windows Server 2008, 64 bit, Edition Datacenter or Web, License per CPU (Datacenter), English language, OEM version. We can offer you both options, but which edition do you need, Datacenter or Web? If it's Datacenter, how many physical CPU's will you use. This information is necessary for choose the best option between Windows Server Datacenter 2008, 64 bit English 4 CPU and Windows Server Datacenter 2008, 64 bit English 2 CPU.**

    A: This will be the CEC Web Server (lot 1 position 3) connecting to the CEC Database (lot 1 position 1). We are under the advice of the vendor as to which option would be the best.

    A: The specification calls for 4 x Quad Core CPU (lot 1 position 3). We are under the advice of the vendor as to how many licensed CPU's this would be.

17. **Q: Operating System: Microsoft Windows Server 2008, 64 bit, Edition Datacenter or Web, License per CPU (Datacenter), English language, OEM version. Which version of Windows is required?**

    A: This will be the CEC Web Server (lot 1 position 3) connecting to the CEC Database (lot 1 position 1). We are under the advice of the vendor as to which option would be the best, within the established requirements.

18. **Q: Windows 2008 x64 Web Edition supports up to 32GB RAM and 4 CPU Sockets, i.e. is it valid for this server?**

    A: This will be the CEC Web Server (lot 1 position 3) connecting to the CEC Database (lot 1 position 1). We are under the advice of the vendor as to which option would be the best, within the established requirements.

19. **Q: Server for DB, Server for WEB Application: Some of the components(PS, HDD, Memory, etc) are requested for the reserve purpose. The mentioned quantity should be offered for each servers or for both ones?**

   A: The Reserve should be offered for each Server. Every Server should have its own reserve components.

20. **Q: If some reserve parts are common for two or more servers (power supply or memory *e.g.*) is it possible to optimize costs by offering smaller quantity of such parts?**

   A: The Reserve should be offered for each Server. Every Server should have its own reserve components.

21. **Q: What is the correct quantity of reserve HDD - 1 or 4?**

   A: 4 x additional HDD reserve for Database Server (same size as calculated for the 1TB in RAID10) and 1 x additional 73GB HDD reserve for the Web Application Server

22. **Q: 1GB reserve memory is requested. Normally large memory configurations use big memory DIMMs, 1GB DIMM seems to be unlikely option. Can we offer more optimized memory configurations and respective reserve parts?**

   A: Yes. The optimized DIMM size would be preferred for the respective Servers. The Servers should have at least one DIMM module/card spare.

23. **Q: 1GB reserve memory is requested for 2GB. Normally large memory configurations use big memory DIMMs, 1GB DIMM seems to be unlikely option. Can we offer more optimized memory configurations and respective reserve parts?**

   A: Yes. The optimized DIMM size would be preferred for the respective Servers. The Servers should have at least one DIMM module/card spare.

   In lot 1, position 4 – Bastion Host

24. **Q: BASTION HOST: Is 1U rack form-factor acceptable for (requested is 2U) providing all other parameters do conform?**

   A: Yes, it is acceptable. 2U is the maximum space.

25. **Q: You order Microsoft Windows Server 2008 R2 32-bit, English. Do you mean Standard Edition, OEM version?**

   A: Please provide the OEM version

26. **Q: BASTION HOST: 1GB reserve memory is requested for 2GB. Normally large memory configurations use big memory DIMMs, 1GB DIMM seems to be unlikely option. Can we offer more optimized memory configurations and respective reserve parts?**

27. A: Yes. The optimized DIMM size would be preferred for the respective Servers. The Servers should have at least one DIMM module/card spare.

28. **Q: Bastion Host: There was Xeon® Processor E5450/L5240/X5365 requested. These processors are obsolete. There are replacement products such as Xeon 5500 series. The CPU that best matches requested specs and has almost the same rate - is Intel Xeon X5570 (2.93 GHz, 8MB**

L3 Cache, 95W, DDR3-1333, HT, Turbo 2/2/3/3). Is it acceptable to offer mentioned variant of processor within requested server?

A: The minimum Processor Type specified for the Bastion Host is Dual Core Processor 3.0 GHz, 2MB L2 cache, FSB min. 1000 MHz.

Other

29. **Q: SWITCH: IP routing: *Advanced IP unicast routing protocols (OSPF, Interior Gateway Routing Protocol [IGRP], EIGRP, and Border Gateway Protocol Version 4 [BGPv4]). Should the supply already include support for these options, or should it be optional?**

    A: This is not optional.

30. **Q: Switch: Is it acceptable to offer 2 alternative variants of switches?**

    A: If two types of switches are offered with different pricing options, then the vendor should submit an offer for every different price.

31. **Q: Workstations: You requested MS Windows Vista Ultimate Edition. Most vendors doesn't deliver desktops for business users with mentioned OS. Is it allowed to offer Microsoft Vista Business Edition instead of Microsoft Vista Ultimate Edition? The main difference between these versions is that Business doesn't have some entertainment features (like DVD maker, office games, some small utilities) and BitLocker drive encryption. BitLocker feature requires TPM module to be installed in PC/Laptop. From other side, vendors who ship products with TPM module installed practically always provide their own software for security and encryption. Manufacturer of Windows Vista recommends Windows Vista Ultimate Edition for home users.**

    A: The requirement is to supply Vista Ultimate Edition.

32. **Q: Should video card be installed into PCI-E slot or it possible to offer onboard graphic adapter?**

    A: The onboard graphics adapter is acceptable.

33. **Q: Printers: Three additional cartridges should be offered for each of the printers?**

    A: For each printer one additional cartridge is required.

34. **Q: One cartridge is already included to the printer; could it be considered as an additional cartridge?**

    A: No, the included cartridge does not count as an additional cartridge.

35. **Q: Are DVD writing capabilities a must for all servers (database, web application, bastion host)?**

    A: Yes.

36. **Q: KVM SWITCH: Incompatible equipment is requested for KVM Switch (Item 7): PS/2 ports for mouse and keyboard and USB mouse.**

    A: 8 x USB connections to be used for Mouse, 8 x USB connections to be used for Keyboard with 8 x VGA D-Sub for Video. Additionally at least 1 x PS/2 connection for Mouse and at least 1 x PS/2 connection for Keyboard is required.

37. **Q: KVM SWITCH: TFT console monitor requires DVI-D connection; however the servers do not support this connection type. Can this requirement be ignored?**

A: The Servers will connect the video to the KVM via normal VGA D-Sub connectors. From the KVM to the TFT Console Monitor one can use either DVI-D or a VGA D-Sub.

38. **Q: RACK: All equipment fits into one rack however two racks are requested. Could you please specify how the equipment should be distributed between two racks?**

A: If all equipment can be placed in one rack (including UPS's and Disk Storage Array), then this is the preferred option. The second rack would then not be required. If not, then the switches, UPS's and Disk Storage Array could be placed in second Rack with sufficient cables to reach the Servers in first Rack.

39. **Q: RACK: Judging by the number of UPS and KVM it seems that everything will be set in one Rack. Why do you need the 2nd?**

A: The request is 2 (two) racks to provide for comfortable placement of all the required equipment.

40. **Q: Should it be considered when calculating the space in the rack?**

A: All the 4 x Servers, the Bastion Host, the KVM (and possibly KVM Switch if not integrated), the Tape Drive, the 2x Switches, the UPS's (more than one might be required), Disk Storage Array System and free 4U space, should be used to calculate the Rack Space. One rack should not exceed 42U.

41. **Q: In lot 2, position 1 - Database Management System (Microsoft SQL Server 2008, 64 bit, Enterprise Edition, License per CPU, English language, 2008 version), how many physical CPU's will you use?**

A: MS SQL Server will run on the CEC Database Servers mentioned in lot 1 position 1. The specification calls for 4 x dual core CPU. We are under the advice of the vendor as to how many licensed CPU's this would be.

42. **Q: In Lot 2 you requested MS SQL Server 2008 for one processor only. But server for DB has 4 processors by default. Please clarify the quantity of licenses.**

A: The specifications call for license *per* CPU. CEC Database Servers mentioned in lot 1 position 1 specificy 4 x dual core CPU. We are under the advice of the vendor as to how many licensed CPU's the MS SQL would require.