**DB Servers:**

**Physical machine**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Item | Specification | Per Server | For 2 servers |
| 1 | Server | 2 Socket Server, Xeon 4C, Rack Mountable - 2U Height | 1 | 2 |
| 2 | CPU/Socket | Intel Xeon Processor 4C, minimum 2,4GHz with minimum 10MB Cache | 2 | 4 |
| 3 | RAM Module | 4 GB, DDR3, ECC, 1333 MHz (PC3L-10600) LP UDIMM support up to 64GB RAM or above | 4 | 8 |
| 4 | RAID Controller | SAS/SATA controller, support RAID 0,1,5,10,50 and up to 8 SAS/SATA drives, Hot-swappable | 1 | 2 |
| 5 | HDD | 146GB 15K 6Gbps SAS 2.5" SFF HS HDD | 2 | 4 |
| 6 | Optical Drive | SATA DVD-ROM | 1 | 2 |
| 7 | Video Controller | VC with min. 16MB RAM  | 1 | 2 |
| 8 | HBA | 8GB FC Single-port HBA | 2 | 4 |
| 9 | LAN | 1Gb Ethernet Ports  | 4 | 8 |
| 10 | Power Supply | High Efficiency Redundant AC Power Supply 750W - Hot Swappable or similar adequate Power Supply | 2 | 4 |
| 11 | Out of band management card | Out of band management card with license key | 1 | 2 |
| 12 | Power Cable | 2.8m, 10A/230V, C13 to CEE7-VII (Europe) | 2 | 4 |
| 13 | OS | RHEL Server 2 Skts Unlimited Guests Std RH Support 3Yr, Microsoft®Windows Server 2003-2012, VMware ESX 4.0 и VMware ESX5.0 | 1 | 2 |
| 14 | Diagnostic | PFA(predictive failure analysis) Predictive fail notification for HDD, RAM, Power and Cooling | 1 | 2 |

**Application Servers**

**Virtual Servers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Item | Specification | Per Server | For 2 servers |
| 1 | Virtual CPU | Virtual CPU hosted onIntel Xeon Processor 4 Socket 10Cores with minimum 2,4GHz with minimum 30MB Cache | 4 | 8 |
| 2 | RAM | 16GB hosted onDDR3, ECC, 1333 MHz (PC3L-10600) LP UDIMM | 1 | 2 |
| 3 | LAN | 1Gb Ethernet Ports connected to virtual switch | 2 | 4 |
| 4 | Storage Connection | 8Gb Fibre Channel port | 2 | 4 |
| 5 | OS | RHEL Server 2 Skts Unlimited Guests Std RH Support 3Yr, Microsoft®Windows Server 2003-2012 | 1 | 2 |
| 6 | Virtualization Platform | VMWare 4.0-5.0 | 1 | 2 |

**Storage:**

**Storage for DB Servers**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Item | Specification | Per Storage |   |
| 1 | Storage Controllers | Storage Controller | 2 |   |
| 2 | Cache | Minimum 8 GB per Controller | 2 |   |
| 3 | Ports | Minimum 4x 8Gbps FC ports per Controller | 8 |   |
| 4 | Disk Types | 146GB or bigger, 6 Gbps SAS or faster  | N/A |   |
| 5 | RAID Levels | RAID 0, 1, 5, 6 , 10 | N/A |   |
| 6 | Functionality | Local copy or Snap Shot  | 1 |  |

**Back-up**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Item | Specification | Per server | For 2 servers  |
| 1 | DB Back-up | Online, Integrated with DB Back-up with 1y retention | 1 |  2 |
| 2 | App. Server Back-up | Online, Integrated with VMware 4.0-5.0 with 1 year retention | 1 |  2 |
| 3 | Back-up software | Centralized client – server Back-up software over SAN and LAN | 1 |  1 |

**Одобрявам :**

.................................... инж.Ясен Гочев

*ръководител отдел „ИСТК” в „БДЖ-ПП”ЕООД*