

Appendix 3. Specifications for e-Portal

1. e-Portal H/W and S/W

No	Equipment	Specification	Unit	Q'ty
1	Web Server for users and administrator	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 16GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	3
2	WAS Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 16GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	2
3	LMS Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1
4	DB Server	<ul style="list-style-type: none"> • 4U Rack Type • 8 Core Intel Xeon 2.13GHz/24MB L3 Cache * 4EA 	Set	2

		<ul style="list-style-type: none"> • Memory: 32GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Window Server 2008 R2 Enterprise 		
5	LDAP Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 16GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	2
6	Content and Uploading Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1
7	Search Engine Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1

8	CMS Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1
9	Media Server with VoD Transcoding	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 16GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1
10	SMS Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1
11	DBMS Server for Digital Repository System	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW 	Set	1

		<ul style="list-style-type: none"> • Dual Power Supply • OS: Linux 		
12	Web Analytic Server & Reporting Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	2
13	Backup Server	<ul style="list-style-type: none"> • 2U Rack Type • 4 Core Intel Xeon 2.4GHz/10MB L3 Cache * 2EA • Memory: 8GB • HDD: 300GB 10K SAS * 2EA, RAID 1 • HBA: 8Gb FC * 2EA • LAN: 1Gbps Fiber Ethernet Card * 2EA • ODD: DVD RW • Dual Power Supply • OS: Linux 	Set	1
14	Backup Device	<ul style="list-style-type: none"> • Three backup methods LTO 5 • Drives: 4 EA • Slot: 48 or more • Support capacity per: 1.5/3TB(uncompressed / compressed) • Built-in Barcode Reader • A variety of OS environments (Solaris, HP-UX, AIX, etc.) can be configured • A variety of online backup of the database (Hot-backup) and recovery support • Licenses purchased, regardless of the platform can be used • Tape backup provides the data integrity verification function • Tape backup media for the efficient use of available data integration • Operational efficiency and provide a 	Set	1

		<p>variety of reporting capabilities (Including the ability using standard SQL statements)</p> <ul style="list-style-type: none"> • Using the Web interface from a remote backup / recovery provides • Data De-duplication backup software support • Management efficiency and compatibility of the product by considering the same manufacturer recommended (backup servers, LTO, backup software) <p>Including Cartridge 50Pack, FC Cable</p>		
15	SAN Switch	<ul style="list-style-type: none"> • Ports: 40 EA or more (Including SFP) • Link speed: 8,4,2.1 Gbps auto-sensing 	Set	2
16	SAN Storage	<ul style="list-style-type: none"> • Dual Active / Active configuration. • Controller liver failure, fail-over support • Offers more than 16GB of data cache • Host Interface: 8Gbps FC 8 port, 1Gbps iSCSI 4 port, 10Gbps 4 port (optional) provide at least • Provided more than Usable 20TB (900GB 2.5 in. 10k SAS HDD) • RAID 0, 1, 5, 6, 10 support • The major components (Power, Fan, Controller, etc.) redundancy 	Set	1
17	NAS Storage	<ul style="list-style-type: none"> • Dual Active / Active configuration. • Controller liver failure, fail-over support • Controller NAS: Per controller supports Intel Hexa core 2.66 GHz processor or higher • Controller FC: Per controller supports Intel Quad core 2.1 GHz processor or higher • Offers more than 16GB of data cache • NAS: Provides more than 72GB of data cache • Host Interface: 8Gbps FC 8 port, 1Gbps iSCSI 4 port, 10Gbps 4 port (optional) provide at least • NAS interface 1Gbps 4 port, 10Gbps 4 ports provide more than • Provided more than Usable 24TB (900GB 2.5 in. 10k SAS HDD) • RAID 0, 1, 5, 6, 10 support • Storage virtualization can support other 	Set	1

		<p>models</p> <ul style="list-style-type: none"> • The major components (Power, Fan, Controller, etc.) redundancy 		
18	Monitoring PC	<ul style="list-style-type: none"> • Processor: Intel core i5-2400 processor (3.10 GHZ,6MB) and above • Graphics: GDDR3 1GB and above • Memory: 6GB(DDR3 1333MHZ/4GB+2GB) • HDD: 1TB(7200RPM S-ATA2) • Monitor: 22" LCD Monitor • O/S: Windows 7 Home Premium(64-bit) • Keyboard: Spanish and English • Mouse: USB Type <p>Including Anti-Virus Program</p>	Set	1
19	L4 Switch	<ul style="list-style-type: none"> • Layer 4~7 Switching • Backplane: 16Gbps or more • Concurrent Session: 4,000,000 or more • 1G Fiber Ethernet: 8ports or more (Including SFP) 	Set	2
20	Backbone Switch	<ul style="list-style-type: none"> • 9slots chassis • Backplane: 720Gbps or more • Dual Switch Fabric Engine • 10G Ethernet: 16ports or more • 1G Fiber Ethernet: 24ports or more (Including SFP) • 10/100/1000 Mbps Ethernet: 48ports or more • Dual Power Supply 	Set	2
21	Workgroup Switch	<ul style="list-style-type: none"> • Backplane: 32Gbps or more • 1G Fiber Ethernet: 4ports or more (Including SFP) • 10/100/1000 Mbps Ethernet: 48ports or more 	Set	2
22	RACK	<ul style="list-style-type: none"> • 42U Rack & KVM Switch, PDU, Panel Monitor 	Set	5