

TECHNICAL SPECIFICATION

APPLICATION SERVER

Specification Name	DELL POWER EDGE 8450
Quantity	- 1 unit Application Server - 1 unit Back-Up Server (Application+Database) - 1 unit Database Server
Processor Specification	- Enterprise Server based with fault-tolerant system and high-availability solution - Multi processors with minimum 2 processors and upgradable to 8 processors with Symmetric Multiprocessing - Support 32-bit and 64-bit application - L1 cache 128 KB Data/128 KB Instruction - L2 cache 2 MB per processor
System Boards	- Supporting 10 slot I/O
Random Access Memory	- ECC SDRAM min. 1 GB expandability to 32 GB
Form Factor	Rack
Drive	One Floppy Disk 3.5 inch One DVD drive One Internal Hard Disk 36 GB with transfer rate 80 MBps
Keyboard and mouse	One keyboard 101-keys One Mouse min 400 dpi
Video	One 17-inch color monitor One Graphics Card 2 MB Memory
Supporting Operating System	UNIX with Graphical User Interface Linux Red Hat 6.2
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Security Features	Power On Privileged access password Keyboard password Mechanical Lock Selectable boot
Network	Intel Pro100+ Network Interface Card Support TCP/IP
Power Supply	UPS 220 volts
Disk Array (for database server and back-up server)	Dell PowerVault 660F RAID Level 5 Capacity : min. 500 GB (net) up to 4.3 TB Controller : Dual Form Factor min. 3,1 inch Latency max 4.7-m sec. Rotational Speed : 7200 RPM Transfer data rate : 106 MBps Features Raid 0,5 Capability Concurrent maintenance on power supplies and cooling fans
Tape	DLT 35 to 70 GB with transfer rate 5 to 10 MBps included 20 DLT Media
System Performance	57,014 TPMC/8 processor
Configuration	Cluster mode with high-availability solution
Ancillary service	Included

NETWORK MANAGEMENT SERVER

Specification Name	DELL POWER EDGE 6450
Quantity	1 unit
Processor Specification	<ul style="list-style-type: none"> - Enterprise Server based with fault-tolerant system and high-availability solution - Multi processors with minimum 1 processors and upgreable to 4 processors with Sysmmetric Multiprocessing - Support 32-bit and 64-bit application - L1 cache 128 KB Data/128 KB Instruction - L2 cache 1 MB per processor
System Boards	- Supporting 7 slots I/O
Random Access Memory	- ECC SDRAM 1 GB
Form Factor	Rack
Drive	One Floppy Disk 3.5 inch One DVD drive 12X One Internal Hard Disk 18 GB with transfer rate min. 80 MBps
Keyboard and mouse	One keyboard 101-keys One Mouse min 400 dpi
Video	One 17-inch color monitor One Graphics Card 16 MB Memory
Supporting Operating System	UNIX with Graphical User Interface (Red Hat 6.2 Linux)
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Security Features	Power On Privileged access password Keyboard password Mechanical Lock Selectable boot
Network	Intel Pro 10/100 Network Interface Card Support TCP/IP
Power Supply	UPS 220 volts
System Performance	30231.37 TPMC
Network Management Software	Included
Ancillary service	Included

SPECIFICATION OF NETWORK MANAGEMENT SOFTWARE

I. MANAGEMENT FRAMEWORK OPERATING SYSTEM

Supporting various UNIX platform and Microsoft Windows Platform

FEATURES

- (1) Provides a common framework for unified management of all computing resources
- (2) Relieves users from integrating many different system management products
- (3) Provides secure and encrypted communication means between every managed entity
- (4) Scalable and support 3 (three) tier architecture in order to reduce network traffic

II. NETWORK MANAGEMENT OPERATING SYSTEM FEATURES

UNIX operating system

- (1) Enterprise scalability
- (2) Provide integration with system management applications
- (3) Web browser interface
- (4) User-defined discovery
- (5) Dynamic object collection
- (6) Policy based management
- (7) Automated problem detection and response at local level
- (8) Ruled based event correlation
- (9) True end to end network management system
- (10) Vendor-neutral RDBMS support for data export

III. DISTRIBUTED MONITORING OPERATING SYSTEM

The server monitoring software must run under various UNIX and Microsoft Windows operating system

FEATURES

- (1) Central policy based configuration
- (2) Automated global distribution and installation
- (3) Ready to use monitoring collections
- (4) Intelligent local response agent
- (5) Multi-threshold, dynamic, automatic response triggers
- (6) Unattended remote party or user-defined monitors
- (7) Unattended remote branch office management
- (8) Integration with central management server to provide enterprise wide event management solution
- (9) Web-based trend charting

WEB SERVER

Specification Name	DELL POWER EDGE 8450
Quantity	1 unit
Processor Specification	<ul style="list-style-type: none"> - Enterprise Server based with fault-tolerant system and high-availability solution - Multi processors with 2 processors and upgreable to 8 processors with Symmetric Multiprocessing - Support 32-bit and 64-bit application - L1 cache 128 KB Data/128 KB Instruction - L2 cache 1 MB per processor
System Boards	- Supporting minimum 10 slot I/O
Random Access Memory	- ECC SDRAM 1 GB expandability to 32 GB
Form Factor	Rack
Drive	<ul style="list-style-type: none"> One Floppy Disk 3.5 inch One DVD drive 12X One Internal Hard Disk 72 GB with transfer rate min. 80 MBps
Keyboard and mouse	<ul style="list-style-type: none"> One keyboard 101-keys One Mouse min 400 dpi
Video	<ul style="list-style-type: none"> One 17-inch color monitor One Graphics Card 16 MB Memory
Supporting Operating System	UNIX with Graphical User Interface (Linux Red Hat 6.2)
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Security Features	<ul style="list-style-type: none"> Power On Privileged access password Keyboard password Mechanical Lock Selectable boot
Network	<ul style="list-style-type: none"> Intel Pro100+ Network Interface Card Support TCP/IP
Power Supply	<ul style="list-style-type: none"> UPS 220 volts
Supporting Disk Array	<ul style="list-style-type: none"> Capacity : 72 GB Controller : Dual Form Factor min. 3,1 inch Latency 4.17-m sec. Rotational Speed : min. 7200 RPM Transfer data rate : min 100 MBps Features Raid 0,5 Capability Concurrent maintenance on power supplies and cooling fans
Tape	DLT 35 to 70 GB with transfer rate 5 to 10 MBps
System Performance	57014.93 TPMC
Ancillary service	Included cable respectively

SPECIFICATION OF UPS

Specification Name	Best Power S4000/5000
Quantity	1 Unit
Back-up Time	2 hours
KVA	30 KVA
Input Voltage	220 Volt
Maximum Voltage	380 Volt

MULTIMEDIA PERSONAL COMPUTER

Specification Name	DELL OPTIPLEX GX 150 SMT
Quantity	150 units
Processor Specification	PC based with Pentium III 866 MHz upgradeable to 1000 MHz (or The latest PC available at the procurement time)
Random Access Memory	ECC SDRAM 128 MB upgradeable to 512 MB
Cache Memory	256 KB Level 2
Drive	One Floppy Disk 3.5 inch Internal One DVD-ROM 16x Internal Hard disk with capacity 10 GB
Monitor	TFT Active Matrix Color Display 14.1" up yo 16 million colors at 1024 x 768
Keyboard and mouse	One keyboard 101-keys with PS/2 port One Mouse min 400 dpi with PS/2 port
Video	One 17-inch SVGA monitor One Graphics Card 4 MB with 3D Accelerator
I/O Supported	5 PCI Slot
Graphic Controller	Supporting in hand Multimedia
Supporting Operating System	Windows NT 3.4x4.x Windows 2000 SCO Unix Linux (Windows 2000 installed and 1 media for 20 computers)
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Security Features	Power On Privileged access password Keyboard password Mechanical Lock Selectable boot
Network	Fast Ethernet Card 10/100 BASE-TX PCI Controller Support TCP/IP IPX/SPX, and NetBIOS
Power Supply	220 volts
Multimedia	16-bit sound card, stereo
Disk Array	None
Ancillary service	Included cable respectively
Installation	Included

PERSONAL COMPUTER

Specification Name	DELL OPTIPLEX GX 150 SD
Quantity	120 units
Processor Specification	PC based with min Pentium III 866 MHz upgradeable to 1000 MHz (or The latest PC available at the procurement time)
Random Access Memory	ECC SDRAM with minimum 128 MB and upgradeable to 512 MB
Drive	One Floppy Disk 3.5 inch Internal One DVD-ROM 16x Internal Hard disk 10 GB upgradable 60 GB
Cache Memory	256 KB Level 2
Architecture	PCI
I/O Supported	3 PCI Slot
Modem (internal)	56,6 Kbps PCI Aztech
Keyboard and mouse	One keyboard 101-keys with PS/2 port One Mouse min 400 dpi with PS/2 port
Video	One 15-inch SVGA monitor One Graphics Card 4 MB with 3D Accelerator
Supporting Operating System	Windows NT 3.5x4.x Windows 2000 (Windows 2000 installed and 1 media for 20 computers)
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Security Features	Power On Privileged access password Keyboard password Mechanical Lock Selectable boot
Network	Intel Pro100+ Network Interface Card Support TCP/IP IPX/SPX, and NetBIOS
Power Supply	None
Multimedia	None
Disk Array	None
Ancillary service	Included cable respectively
Installation	Included

MULTIMEDIA NOTEBOOK COMPUTER

Specification Name	DELL LATITUDE C600
Quantity	15 units
Processor Specification	PC based with min Pentium III 650 MHz upgradeable to 1000
Random Access Memory	ECC SDRAM 128 MB upgradeable to 512 MB
Drive	One Floppy Disk 3.5 inch One DVD-ROM 8x max speed Internal Hard disk 10 GB HDD
Monitor	14.1" TFT active matrix SVGA
Keyboard and mouse	One keyboard 88-keys internal keyboard One External Mouse min 400 dpi with PS/2 port One Internal Mouse
Support Operating System	Windows NT 3.5x4.x Windows 2000 (Windows 2000, Microsoft Office installed and 1 media included for 5 Notebook)
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Network Adapter	3Com Ethernet 10/100 + PSION 56K PCMCIA modem Support TCP/IP IPX/SPX, and NetBIOS
Power Supply	220 volts
Multimedia	16-bit sound card, stereo
Battery	LiON
Spare Battery	2 Unit LiON
Installation	Included
Ancillary service	Included cable respectively

HIGH SPEED COLOR SCANNER

Specification Name	HP ScanJet 6300 C
Quantity	6 units
Scanner Specification	Flat Bed, one-pass color and monochrome 10 ppm
DPI	1200 DPI True Color
Ancillary Service	Included cable respectively
Installation	Included

NETWORK HIGH SPEED LASER PRINTER

Specification Name	HP LASER JET 8150N
Quantity	2 units
Speed	32 ppm
Processor	250 MHz RISC Processor
Input Capacity	Min 1100
Media sizes Monarch	Letter, legal, executive, A3, A4, B/ledger, B4, B5
Internal Memory	Approximately 16 MB
Interface	Centronics type 8-bit parallel
Network	Built-in Network Interface Card 100/10 RJ-45
Spare	4 set toner
Features	Support Postscript
Ancillary service	Included cable respectively
Installation	Included

NETWORK DOT MATRIX PRINTER

Specification Name	Epson DFX 8500
Quantity	6 units
Speed	1120 cps (draft at 10 cpi) 136 characters per line (at 10 CPI) 233 characters per line (at 17 CPI condensed) 210 cps (NQL at 10 cpi)
Interface	Centronics type 8-bit parallel
Network	Printer Server Network Interface Card 100/10 RJ-45
Features	Min. 132 characters per line at 10 cpi Min. 200 characters per line at 10 cpi condensed
Spare	4 Ribbon
Ancillary service	Included cable respectively
Installation	Included

NETWORK LINE PRINTER

Specification Name	PRINTRONIX PS 5210
Quantity	2 units
High Speed (LPM) UC/LC	1000/856
Data Processing	750/600
Near Letter Quality	400/306
Plot Speed (LPM)	
High Speed - 60x48 dpi	125
Normal IGP Mode - 60x72 dpi	83
High Density - 90x96 dpi	42
Interface	Centronics type 8-bit parallel
Network	Printer Server Network Interface Card 100/10 RJ-45
Spare	4 Ribbon
Ancillary service	Included cable respectively
Installation	Included

NETWORK LASERJET COLOR PRINTER

Specification Name	HP LASER JET 4550
Quantity	2 units
Spesification	Min 10 ppm Black Min 4 ppm Colour Parallel Port
DPI	1200 DPI True Colour
Internal Memory	Approximately 16 MB
Ancillary service	Included cable respectively
Installation	Included

DIGITAL CAMERA

Spesification Name	CANON POWERSHOT S10
Quantity	2 Units
Computer type	PC
Interface	PCMCIA Type II
Maximum resolution	1344x1024
Type	Still
Memory (MB)	8
Memory Type	PC Card, Memory Stick
Video output	NTSC
Lens features	Zoom, Manual focus, Auto focus
Colour/Monochrome	Colour
Feature	Including utilities, installation and training for operator

LCD

Specification Name	INFOCUS LP 755
Quantity	2 unit
LCD	3x0.9" polysilicon TFT LCD panels 1024x768 Pixels per panel (1,049,088 pixels x 3 panels or 3,147,264)
Projection Lens	1.2xzoom lens, F2.2 to 2.5 f 44.6-53.6 mm
Lamp	200W UHP 1.4mm short arc length 1000 hours in standard or Normal Mode 2000 hours in Low or Cinema Mode
Screen Coverage	16:9 aspect ratio: 40" to 300" (viewable area measured diagonally) 4:3 aspect ratio: 34" to 245" (viewable area measured diagonally)
Light Output	1900 ANSI*Lumen (16:9 aspect ratio) 750 ANSI*Lumen (4:3 aspect ratio)
Throw Distance	16:9/4:3 16:9 4:3 40-inch 1260 to 1470 mm 1560 to 1820 mm 60-inch 19300 to 2240 mm 2380 to 2760 mm 80-inch 2060 to 3010 mm 3200 to 3700 mm 100-inch 3270 to 3780 mm 40200 to 4650 mm 120-inch 3930 to 4550 mm 4830 to 5590 mm 150-inch 4940 to 5710 mm 6060 to 7000 mm 180-inch 5940 to 6860 mm 7290 to 9420 mm 200-inch 6610 to 7630 mm 8100 to 9360 mm 250-inch 8270 to 9560 mm 10150 to 11720 mm 300-inch 9940 to 11480 mm 12190 to 14070 mm
Colour System	NTSC3.58, PAL, SECAM, NTSC4.43 (automatically selected), PAL-M, PAL-N, PAL60 (automatically selected/manual selected)
Acceptable Signal	DTV (480i, 480p, 720p, 1080i) Progressive Component 15K component 50/60 Hz system Composite Video, Y/C video RGB: Horizontal: 15~91kHz, Vertical: 50~85 Hz White & Silver
Cabinet Colour	White & Silver
Power Requirements	AC 240V, 50/60 Hz
Power Consumption	300 W (max); 6 W (standby)
Dimensions	(WxHxD) 395(W) x 168(H) x 427(D) mm (15 5/8x6 5/8x 16 7/8)
Weight	Approximately 4.4 kg
Screen	Included
Training for use	Included

COMPUTER NETWORK

Specification Name	Cisco 1601 R Ethernet/Serial Modular Router
Quantity	1 unit
Fixed LAN Port	1 Ethernet
Fixed WAN Port	1 Serial, Synch/Asynch support synchronous modes up to 2 Mbps, support asynchronous modes up to 115.2 Kbps
Flash ROM	4MB to 16MB Flash Factory Upgrade for Cisco 1600 R
Memory	8MB to 24MB DRAM Factory Upgrade for Cisco 1600 R V.35 Cable, DTE, Male, 10 Feet

MAIN NETWORK SWITCHING

Specification Name	CATALYST 5505
Quantity	1 unit
Chassis	Catalyst 5505 Chassis
Modules	Catalyst 5000/5505 AC Power Supply Catalyst 5500/5000 Supervisor III G Catalyst 5K Supervisor 3G, Flash Image, Release 5.5(1) 100BaseFX Backbone Switching (FEC, 802.1Q/ISL, SC, 12 port) C5000 24 Port Desktop 10/100 Switching Module (RJ-45)
Module Switch	Catalyst 5000 Route Switch Module Cisco Catalyst 5000 Series IOS ENTERPRISE

100BASE-TX switching

Specification Name	CATALYST 2924
Quantity	20 units
Module	24 port 100/10 auto sensing dual port 100BaseFX
Support Protocol	TCP/IP, IPX/SPX, NetBIOS
Media Interface	UTP/FO
Software	Included
Management	SNMP-compliant
Indicator	Power status, Packet Reception, Collision, and Partition
Box	Included
Ancillary service	Included cable respectively
Installation	Included

Cable UTP Level VI

Specification Name	NORDX cable
Quantity	1 Lot
Cable Category	Cat. 6
Conductor Unshielded	8 Cable 4 Pairs Data Twist Cable
Insulation	0077" (.19 MM) Polypropylene
Length	1,000' per roll
Cable Protector	Galvanize Steel
Connector	RJ-45 Category 6
Accessories	Connector Min 1.000 Units

Cable Fiber Optic

Specification Name	NORDX Cable
Quantity Name	1500 Meters
Specification	Multi mode, 6 core, outdoor type
Transmitter output power	-19 to -14 dBm5
Receiver sensitivity	-32.5 to -14 dBm
Wavelength	850 to 1360 nm
Optical source	LED
Span	1.24 miles (2 km)
Accessories	Connectors, Panels a prior required to installation

Rack Modem

Specification Name	SuperStack II Remote Access System 1500
Quantity	1 unit (central)
Modem Specification	Min 56 Kpbs Synchronous/Asynchronous Leased Line/Dial Line
Configuration	Standalone
Standard	V.32 bis, V.24 bis
Interface	RS-232C
Management	SNMP-compliant
Ancillary Service	Included cable respectively
Installation	Included

Modem

Specification Name	3Com US Robotic Courier V. Everything Corporate Modem
Quantity	30 units
Modem Specification	56 Kpbs Synchronous/Asynchronous Leased Line/Dial Line
Configuration	Standalone
Standard	V.32 bis, V.24 bis
Interface	RS-232C
Management	SNMP-compliant
Ancillary Service	Included cable respectively
Installation	Included

Remote Access Server

Specification Name	CISCO 2600
Quantity	1 unit
Fixed LAN Port	2 serial, Sync/Async Support synchronous modes up to 2 Mbps Support asynchronous modes up to 115.2 Kbps
Modular Slots	1 T1/E1, T1/FT1, Leased line
Flash Memory	8 MB
DRAM Memory	16 MB
Power Supply	AC 220 Volt
IOS	IP, IP/IPX, Remote Access Server
Cable	v.35 Cable
Ancillary Service	Included cable respectively
Installation	Included

Software Development Tool

Operating System

Machine Name	APPLICATION SERVER, WEB SERVER, NETWORK MANAGEMENT SERVER
Operating System	UNIX with Graphical User Interface True Multitasking and Multiprocessor
Network Protocol	IP, TCP/IP, Net BIOS

Operating System

Machine Name	PROXY SERVER, MAIL SERVER, FIREWALL SERVER
Operating System	sco-Open Server Novell Netware 3.1x, 4.1x, 5x Windows NT 3.5x4.x UnixWare 2.1 Linux
Network Protocol	IP, TCP/IP, Net BIOS

RDBMS Software

Specification Name	Oracle 8i
RDBMS Software	Web based platform
Software Developments	- Case Tolls - Software Development Tools

FIREWALL SOFTWARE

General Requirement:

- Supporting VPN-Gateway;
- Seamless integration with Enterprise Management and Multi-Domain Management architectures;
- Includes award-winning graphical object-based management console;
- Ensures maximum security for corporate resources and Internet communications;
- Enables management locally, centrally within an enterprise or as a managed service;
- Delivers centralized policy-based management and proven ease of use;
- Provides unparalleled choice in cost-effective Internet security solutions.

Specification Name	Firewall Software
Support Operating System	Windows NT 4.xx Sun Solaris IBM AIX Linux
Network Interface	ATM, Ethernet, Fast Ethernet, FDDI, Token Ring
Hardware Platform	VPN-1 Appliances
User numbers	Unlimited
Media	CDROM

WEB Software

Specification Name	WEB Software
WEB Software Software Developments	- Case Tools - Software Development Tools
User numbers	Min 20 users

Application

Machine Name	APPLICATION SERVER
Operating System	UNIX with Graphical User Interface True Multitasking and Multiprocessor
Network Protocol	TCP/IP or IPX/SPX

Specification of Air Condition Type 1

Specification Name	Air Condition Split
Quantity	24 Unit
EER	9.9 (cool)
Cooling Capacity	6.000/-
Kcal/h	24.000/-
BTU/h	6.980/-
W	
50/60 Hz	
Power Source	1-220, 230, 240V (50Hz)
Power Consumption 50/60 Hz	2.42/-
Cooling	
Kw	
Air Volume	Lo : 14 (494)/-
M2/min (cfm) 50/60 Hz	Me: 16 (565)/- Hi : 18 (635)/-
Piping Connection	15.88
Gas Pipe	(5/8)
O.D. mm (inchi)	
Piping Connection	9.52
Gas Pipe	(3/8)
O.D. mm (inchi)	
Compressor Related Output	1.9
KW	
Fan Motor Output	
Indoor (kW)	0.12
Outdoor (kW)	0.03 x 2
Noise Level	
Hi (dB) (A)	44
Me (dB) (A)	43
Lo (dB) (A)	42
Installation	Included

Specification of Air Condition Type 2

Specification Name	Air Condition Standing
Quantity	2 Unit
EER	9.9 (cool) 10.4 (Heat)
Cooling Capacity	22.400/-
Kcal/h	89.600/-
BTU/h	18.600/-
W	
50/60 Hz Heating Capacity	24.000 (30.880)
Kcal/h	96.000 (123.520)
BTU/h	27.910 (35.910)
W	
50/60 Hz Power Source	3N-380V, 415V (50Hz)
Power Consumption 50/60 Hz Cooling	9.90/-
Kw	
Power Consumption 50/60 Hz Heating	9.20 (17.20)/-
Kw	
Air Volume	
M2/min (cfm) 50/60 Hz	82/- (2.894/-)
Piping Connection	
Gas Pipe	28.58 (1-1/8)
O.D. mm (inchi)	Brazed
Piping Connection	
Liquid Pipe	15.88 (5/8)
O.D. mm (inchi)	Flared
Compressor Related Output	7
KW	
Fan Motor Output	
Indoor (kW)	1.5
Outdoor (kW)	0.45
Noise Level	
(dB) (A)	58/-
Air Filter	Included
Installation	Included

SPECIFICATION OF RENOVATION TRAINING ROOM

TRAINING ROOM

Specification Name	TRAINING ROOM
Quantity	Min. 60 M2
Eternity	Gypsum + Wall Paper
Wall	Gypsum + Wall Paper
List	Aluminium
Floor	Carpet

SPECIFICATION OF WHITE BOARD

WHITE BOARD

Specification Name	WHITE BOARD
Quantity	1 Unit
Size	6 Meters X 2 Meters
Material	Magnetic

SPECIFICATION OF RENOVATION SERVER ROOM

SERVER ROOM

Specification Name	SERVER ROOM
Quantity	Min. 60 M2
Eternity	Gypsum + Wall Paper
Wall	Gypsum + Wall Paper
List	Aluminium
Security Lock Modern	Included Instillation

- Available on multiple partner appliance platforms
- Ensures maximum security for corporate resources and Internet communications
- Enables management locally, centrally within an enterprise or as a managed service
- Delivers centralized policy-based management and proven ease of use
- Provides unparalleled choice in cost-effective Internet security

Specification Name	FIREWALL SOFTWARE
Support Operating System	Windows NT 4.xx Sun Solaris HP-UX IBM AIX Linux
Network Interface	Ethernet
Hardware Platform	WatchGuard Firebox II Plus
User Numbers	Unlimited
Media	Flash-ROM

WEB SOFTWARE

Specification Name	Lotus Domino R5
Web Software	
Software Developments	Case Tools Software Development Tools
User numbers	min. 20 users

Application

Machine Name	APPLICATION SERVER
Operating System	UNIX with Graphical User Interface True Multitasking and Multiprocessor
Network Protocol	TCP/IP or IPX/SPX

SPECIFICATION OF COMPUTER TABLE

Computer Table Type 1

Dimension	H X W X D = 75.0 X 90.1 X 60.7 cm
Individual Packing	H X W X D = 17.4 X 97.4 X 64.4 cm
Volume	0.1091 m3
Material	Melamine Chipboard
Mouse Panel	Included

Computer Table Type 2

Dimension	H X W X D = 75.0 X 201.0 X 120.7 cm
Individual Packing	H X W X D = 17.4 X 208.0 X 104.8 cm
Volume	1.1700 m3
Material	Melamine Chipboard

Computer Chair

Dimension (cm)

Seat width	48 cm
Seat Depth	43 cm
Back Height	50 cm

Printer Desk

Dimension	H X W X D = 75.0 X 60.0 X 48.0 cm
Individual Packing	H X W X D = 12.6 X 79.4 X 54.2 cm
Volume	0.0542 m3
Material	Melamine Chipboard

SPECIFICATION OF SHELF

Upper Cabinet

Dimension	H X W X D = 98.0 X 81.2 X 43.3cm
Individual Packing	H X W X D = 19.4 X 102.9 X 47.0 cm
Volume	0.0938 m3

Upper Cabinet

Dimension	H X W X D = 98.0 X 93.0 X 43.3 cm
Individual Packing	H X W X D = 19.4 X 102.9 X 48.7 cm
Volume	0.0972 m3

Upper Cabinet

Dimension	H X W X D = 98.0 X 120.1 X 43.3 cm
Individual Packing	H X W X D = 23.0 X 126.4 X 47.0 cm
Volume	0.1366 m3

Credenza

Dimension	H X W X D = 82.0 X 81.0 X 43.3 cm
Individual Packing	H X W X D = 19.8 X 88.4 X 47.0 cm
Volume	0.0823 m3

Filing Cabinet

Dimension	H X W X D = 82.0 X 93.6 X 43.3 cm
Individual Packing	H X W X D = 12.6 X 79.4 X 88.4 cm
Volume	0.3993 m3

Credenza

Dimension	H X W X D = 82.0 X 120.0 X 43.3 cm
Individual Packing	H X W X D = 24.8 X 127.4 X 47.0 cm
Volume	0.1485 m3

Cabinet

Dimension	H X W X D = 181.5 X 81.5 X 43.3 cm
Individual Packing	H X W X D = 10.5 X 185.0 X 47.0 cm
Volume	0.00913 m3

PROXY SERVER UPGRADE

alternative 1

Specification Name	COMPAQ PROLINE 3000
Quantity	1 unit Proxy Compaq Proline 3000
Processor	Dual processor PIII 600MHz
Random Access Memory	ECC SDRAM 1 GB
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Disk array	RAID Level 5 Capacity 64 GB up to 150 GB Form factor min. 3.1 " Latency min. 4.2 msec Rotational Speed: min. 7200 RPM Transfer data rate: min 20 Mbps
Operating System	Windows NT for 200 user
Ancillary service	Included cable respectively

alternative 2

Specification Name	DELL POWER EDGE 2400
Quantity	1 unit Dell Power Edge 2400
Processor	Dual processor PIII 866MHz
Random Access Memory	ECC SDRAM 1 GB
Warranty	Three-year maintenance on-site
Maintenance	Three-year maintenance on-site
Disk array	RAID Level 5 Capacity 64 GB up to 150 GB Form factor min. 3.1 " Latency min. 4.2 msec Rotational Speed: min. 7200 RPM Transfer data rate: min 20 Mbps
Operating System	Windows NT for 200 user
Ancillary service	Included cable respectively

SPECIFICATION OF ELECTRICITY

KABEL

Dari PLN ke Panel PLN & COS	NYY 3 x (4Cx240mm2)
Quantity	12 m

Dari GENSET ke Panel PLN & COS	NYY 2 x (4Cx240mm2)
Quantity	30 m

Tarikan kabel dari Panel PLN & COS

Ke Panel LV-MDP 1 NYFGbY 2 x (4Cx240mm2)	112 m
Ke Panel LV-MDP 2 NYFGbY 4 x (4Cx240mm2)	150 m

Tarikan kabel dari LV-MDP 1

Ke Panel PGL. Lantai 2 NYY 4Cx95mm2	18 m
Ke Panel PGL. Lantai 3 NYY 4Cx25mm2	27 m
Ke Panel PGL. Lantai 4 NYY 4Cx35mm2	37 m
Ke Panel PGL. Lantai 5 NYY 4Cx25mm2	48 m

Tarikan kabel dari PGL.Lantai 2

Ke Panel UPS Lantai 2 Ke Panel UPS Lantai 1	NYY 4Cx16mm2
Quantity	18 m

Tarikan kabel dari PGB. LV-MDP 2

Ke Panel PGB. Lantai 2	NYY 4Cx35mm2
Quantity	25 m
Ke Panel PGB. Lantai 3	NYY 4Cx25mm2
Quantity	36 m

GALIAN

Gali urug	280 m
Pasir & Bata Pelindung	280 m
Kedalaman Galian	750 mm

KABEL TRAY

Kabel Tray 200Wx100Hx3000L	244 batang
Kabel Tray 150Wx100Hx3000L	85 batang
Elbow	18 Pcs
Tee	38 Pcs
Jointing	670 Pcs
Support & accessories	1lot

STOP KONTAK

Lantai 1 Gedung Lama	62 titik
Lantai 2 Gedung Lama	78 titik
Lantai 3 Gedung Lama	63 titik
Lantai 4 Gedung Lama	80 titik
Lantai 5 Gedung Lama	38 titik
Lantai 1 Gedung Baru	79 titik
Lantai 2 Gedung Baru	123 titik
Lantai 3 Gedung Baru	90 titik
Instalasi	included

PANEL

Panel PLN & COS consists of: (DWG. No. 6141000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
Volt Meter 0-500V	1 pc
Volt Selector Switch	1 pc
Ampere Meter 0-1000A	3 pcs
Ampere Meter 0-600A	3 pcs
Current Transformer 1000/5A	3 pcs
Current Transformer 600/5A	3 pcs
MCCB 3P 1000A - 50kA	1 pc
MCCB 3P 150A - 36kA	1 pc
MCCB 3P 350A - 45kA	1 pc
MCCB 3P 300A - 45kA	1 pc
Change Over Switch 4P 630A	1 pc
MCCB 3P 630A - 45kA	1 pc
MCCB 3P 400A - 45kA	1 pc
MCCB 3P 250A - 45kA	1 pc
CU Busbar & Acc	1 lot
Internal Wiring	1 lot
Free Standing Panel	1 set

Panel LV-MDP 1 consists of: (DWG. No. 6121000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
Volt Meter 0-500V	1 pc
Volt Selector Switch	1 pc
Ampere Meter 0-400A	3 pcs
Current Transformer 400/5A	3 pcs
MCCB 3P 400A - 45kA	1 pc
MCCB 3P 200A - 36kA	1 pc
MCCB 3P 80A - 25kA	1 pc
MCCB 3P 63A - 25kA	4 pcs
MCCB 3P 50A - 25kA	1 pc
MCB 3P 10A - 10kA	2 pcs
MCB 3P 10A - 10kA	24 pcs
CU Busbar & Acc	1 lot
Internal Wiring	1 lot
Free Standing Panel	1 set

Panel PGL. Lantai 2 consists of : (DWG.No.6041000A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 200A - 36kA	1 pc
MCCB 3P 80A - 25kA	1 pc
MCCB 3P 10A - 10kA	6 pcs
MCB 3P 6A - 10kA	7 pcs
MCB 3P 10A - 10kA	27 pcs
CU Busbar & Acc	1 lot
Internal Wiring	1 lot
Free Standing Panel	1 set

Panel PGL. Lantai 3 consists of : (DWG.No.6051000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 63A - 25kA	1 pc
MCB 3P 6A - 10kA	2 pcs
MCB 3P 10A - 10kA	3 pcs
MCB 3P 10A - 10kA	24 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

Panel PGL. Lantai 4 consists of : (DWG.No.6061000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 80A - 25kA	1 pc
MCB 3P 10A - 10kA	2 pcs
MCB 3P 10A - 10kA	30 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

Panel PGL. Lantai 5 consists of : (DWG.No.6071000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 50A - 25kA	1 pc
MCB 3P 10A - 10kA	2 pcs
MCB 3P 6A - 10kA	2 pcs
MCB 3P 10A - 10kA	17 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

Panel LV-MDP2 consists of (DWG.No.6131000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
Volt Meter 0-500V	1 pc
Volt Selector Switch	1 pc
Ampere Meter 0-250A	3 pcs
Current Transformer 250/5A	3 pcs
MCCB 3P 250A - 36kA	1 pc
MCCB 3P 100A - 25kA	1 pc
MCCB 3P 63A - 25kA	4 pcs
MCB 3P 10A - 10kA	4 pcs
MCB 3P 10A - 10kA	29 pcs
CU Busbar & Acc	1 lot
Internal Wiring	1 lot
Free Standing Panel	1 set

Panel PGB. Lantai 2 consists of : (DWG.No.6091000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 100A - 25kA	1 pc
MCB 3P 10A - 10kA	2 pcs
MCB 3P 10A - 10kA	45 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

Panel PGB. Lantai 3 consists of : (DWG.No.6101000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 63A - 25kA	1 pc
MCB 3P 10A - 10kA	5 pcs
MCB 3P 10A - 10kA	34 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

Panel UPS Lantai 1 consists of : (DWG.No.6161000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 40A - 25kA	1 pc
MCB 3P 10A - 10kA	3 pcs
MCB 3P 10A - 10kA	7 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

Panel UPS Lantai 2 consists of : (DWG.No.6151000-A)

Pilot Light 220VAC RST	3 pcs
Fuse Control 2A	3 pcs
MCCB 3P 80A - 25kA	1 pc
MCCB 3P 40A - 25kA	1 pc
MCB 3P 10A - 10kA	3 pcs
MCB 3P 10A - 10kA	7 pcs
Internal Wiring	1 lot
Wall Mounting Panel	1 set

GROUNDING

Grounding	1 lot
-----------	-------

PENAMBAHAN DAYA 400KVA

Biaya penyambungan	1 lot
UJL	1 lot
Pengesahan Gambar Instalasi	1 lot

SPECIFICATION OF COMPUTER NETWORK CABLING

GEDUNG LAMA

	Floor 1 (node)	Floor 2 (node)	Floor 3 (node)	Floor 4 (node)	Floor 5 (node)
UTP Cable	11	14	11	18	6
Patch cord RJ45 to RJ45 3m length	82	108	84	136	48
Patch panel 24 port rackmount	2	3	2	3	1
Modular jack RJ45	48	72	48	72	24
Close rack 19" 30U	1	0	1	1	1
Close rack 19" 45U	0	1	0	0	0
Single surface outlet	41	54	42	68	24
Pipe PVC 20mm conduit	250	325	250	425	125
Socket 20mm	250	325	250	425	125
Flexible conduit 20mm	1	1	1	1	1
T-dus cab 3	15	18	14	23	8
Trunking 45 x 45	2	2	2	2	2
TD 5 Protector	45	60	45	60	25
TD 3 Protector	82	108	84	136	48
Installation and termination	1	1	1	1	1

Small materials

Cable ties 20cm	1	1	1	1	1
Lakban	1	1	1	2	1
Screw / Fisher 56	2	2	2	2	1
Casio Label	1	1	1	1	1

GEDUNG BARU

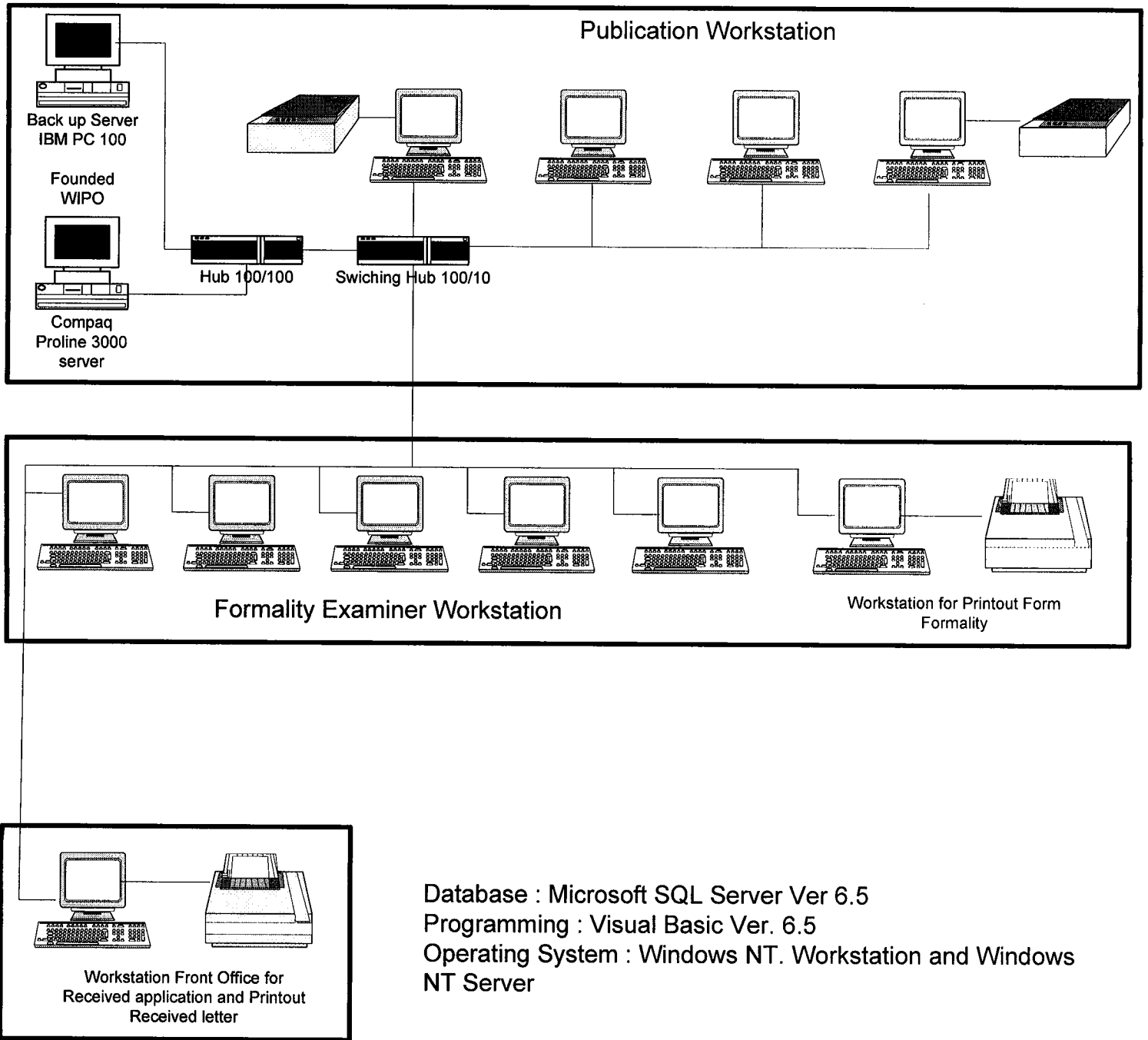
	Floor 1 (node)	Floor 2 (node)	Floor 3 (node)
UTP Cable	56	76	78
Patch cord RJ45 to RJ45 3m length	14	19	19
Patch panel 24 port rackmount	112	152	156
Modular jack RJ45	75	96	96
Close rack 19" 30U	0	1	1
Close rack 19" 45U	1	0	0
Single surface outlet	56	76	78
Pipe PVC 20mm conduit	325	450	450
Socket 20mm	325	450	450
Flexible conduit 20mm	1	1	1
T-dus cab 3	19	26	26
Trunking 45 x 45	2	2	2
TD 5 Protector	60	60	75
TD 3 Protector	112	152	156
Installation and termination	1	1	1

Small materials

Cable ties 20cm	1	1	1
Lakban	1	1	1
Screw / Fisher 56	2	2	2
Casio Label	1	1	1

旧特許システム構成図
NETWORK CONFIGURATION DIREKTORAT PATENT

2004.2.24



1'floor

Database : Microsoft SQL Server Ver 6.5
 Programming : Visual Basic Ver. 6.5
 Operating System : Windows NT. Workstation and Windows NT Server