OFFICE ASSISTANT COMPUTER INFRASTRUCTURE UPGRADE



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The computer infrastructure used by the office assistant staff at BioPhys Research must be replaced. The new expandable system will improve security and efficiency as well as perform automated data backup. Wireless networking will connect all stations and peripheral devices. Recommendations meet the needs of the end-users over the next 5 years and are sensitive to budget considerations.

Office Assistant Computer Infrastructure Upgrade

JUSTIFICATION

The current office assistant computer infrastructure is a Windows XP-based, RS232 wired network that was installed in 2002. BioPhys Research Associates has since expanded its office support staff from 2 to 3 assistants. The company will be hiring a fourth office assistant in the coming months. The network needs to be expanded, which requires the services of a wiring contractor. The current computers, printer, and network components are slow by today's standards and are no longer under any form of warranty or service agreement. There is no protection of the equipment from electrical surge, brownout, or blackout. Any of the old infrastructure components will be difficult to replace if unexpected failure occurs. No regular backup of files is being performed, which would make the situation of a component failure even more damaging.

REQUIREMENTS

The new system must be affordable and expandable to meet the expected company growth. The computers must have improved data processing power and up-to-date anti-virus, operating system, and office suite software. The network must be secure from both external and internal threats. Data backups need to be automated. Equipment must be protected from electrical issues.

SOLUTIONS

For detailed specifications on the equipment and software, refer to the price list on the following page. The main supplier of equipment will be TigerDirect.com, an online retailer that provides quality equipment at reasonable prices. 4 computers will be purchased. The computers will run at 2.2 GHz with 3Gb of DDR3 ram, significantly faster than the previous machines. The operating system will be Windows Home 7 Premium 64-bit, which is more affordable than Windows 7 Professional and capable of meeting the needs of our medium-sized business. The computers and printer will be protected from electrical issues with uninterruptable power supplies (UPS), which provide surge and brownout protection plus gives the user time to shut down properly in case of electrical failure. To be economical, the printer and router will share UPS with computers.

The printer is a color laser, which is more economical and reliable than an inkjet printer for high-demand usage. This printer is capable of automatic duplex printing, which saves money by reducing paper usage. Printing services will be networked from the router using Ethernet (RS232) wiring, which is faster than the current arrangement of sharing a printer wired to a computer. The router will be wired using the current ISP for internet access. The office assistant computers will use wireless N adapters to connect to the router, which will allow users access to other computers on the network, the printer, and the internet.

The router will secure the network from outside users by using MAC address filtering. Anti-virus and anti-spyware software has been included to protect the network from outside threats. Although many businesses worry about threats from outside sources, most damage is done by employees; therefore, a network monitoring program has been included to protect from internal threats. BioPhys Research Associates has not suffered any major data loss to date. A major drive failure would be financially catastrophic. To prevent such an event, the new system will include a wireless automatic backup device.

To ease the transition for the office assistants, we will be purchasing licensed copies of the current software, Microsoft Office and Quick Books Pro. We recommend training on the updated versions and Windows 7 for any staff who may want to attend.

The proposed system meets the needs of the office staff of our expanding company while remaining affordable. Protection from external and internal threats, possible data loss, and electrical issues has been provided. A bonus is that it has updated versions of familiar software packages, which will ease the transition to the new system. **Comment [x1]:** many words for an adjectival phrasel could you omit 'assistant', not least because I'm not sure what it means

Comment [x2]: A good place for a 'and' – then you can omit 'the company'

Comment [x3]: The equipment is not protected from (in the case of?) an electrical

Comment [x4]: current ?

Comment [x5]: excellent first two sections

Comment [x6]: .. and give ... Comment [x7]: insert 'the'?

Comment [x8]: I suggest you need a Summary section, if only for those who won't bother to read your excellent detail. Parts of this para, with some numbers, would dothe job. You do need to quote the cost in the body of the document, not only in the appendix, which is susually reserved for material that most readers may not need to

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Office Assistant Computer Infrastructure Upgrade

PRICE LIST

Tiger Direct			
eMachines EL1850-20c PV.NCA02.006 Desktop	4	450.00	1800.00
PC - Intel Celeron 450 2.2GHz,			
3GB DDR3, 320GB HDD, DVDRW, Intel GMA			
X4500, 18.5" Display, Windows 7 Home			
Premium 64-Bit, Black			
Ultra ULT31502 Xfinity 1000VA 600w	4	100.00	400.00
Uninterruptable Power Supply w/ AVR - 5 Outlets,			
120V, 1065 Joules, 4 Battery Backup/Surge & 1			
Surge Only Outlets, USB Interface			
HP Color LaserJet CP2025dn Printer - Laser, Up to	1	520.00	520.00
600 x 600 dpi, Up to 22 PPM, USB, Ethernet, 540			
MHz, 128MB, Duplex			
EnGenius EUB-9801 Wireless N Adapter -	4	50.00	200.00
300Mbps, USB, Dual-Band			
D-Link DIR-655 Xtreme Wireless Router -	1	90.00	90.00
300Mbps, 802.11n (Draft N), 4x			
Gigabit Ports			
Microsoft Office 2007 Small Business Edition OEM	4	240.00	960.00
License Only			
AVG Anti-Virus & Anti-Spyware 2011 (2 users, 2	2	55.00	110.00
years)			
HHG Software			
Accurate Network Monitor	1	\$30.00	\$30.00
Clickfree			
1TB Wireless Backup Device	1	\$250.00	\$250.00
Intuit Quick Books			
QuickBooks Pro 2011 Small Business Accounting &	1	37.00/month	2220.00
Payroll Software			(over 5 years)
		Total	6330.00
		Taxes (14% HST)	886.00
		Total + Taxes	7216.00

COMMENT: Great report, Lynn – well written, well argued, well organized, and a delight for the eyes! I like your short, snappy sentences – occasionally you could combine two that have a similar topic to vary the pace. I also applaud your writing as if you are simply informing the director of the changes that will be made – in a real case, the director might have to be persuaded, or even manipulated into thinking it was his or her decision! I think you do need a summary section that includes some of the numbers that anyone reading the report needs to know.

Tony

Appendix