

RESERVE STUDY FOR TECHNOLOGY

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- ▶ Create a complete inventory of IT resources
- ▶ Develop a budget that includes hardware and software replacement & upgrades as well as third party support
- ▶ Learn available options when replacing hardware and software

OBJECTIVES



- ▶ If you don't know what you have, how can you budget for it's replacement?
 - ▶ Workstations
 - ▶ Servers
 - ▶ Printers / Copiers
 - ▶ Network Infrastructure
 - ▶ Support Agreements

INVENTORY



- ▶ Computer Name
- ▶ Location
- ▶ Primary User
- ▶ Make
- ▶ Model
- ▶ Monitor
- ▶ Operating System
- ▶ Purchase Date
- ▶ Warranty Expiration
- ▶ Replacement Date
- ▶ Replacement Cost

WHAT TO INCLUDE



PC Name	Location	Computer Make	Computer Model	Computer Serial Number	Monitor Type	Processor	Hard Drive Size	Installed Memory	Operating System	Date of Purchase	Replacement Date	Replacement Cost
1	Maintenance	Dell	OptiPlex GX110	FVHP001	CRT	600MHz Celeron	6.4 GB	128MB (2x64)	Windows 2000 Professional	8/21/2000	8/1/05	\$1000
2	Maintenance	Dell	OptiPlex GX110	CT54101 7KBXW01	CRT	600MHz Celeron	4.3 GB	128MB (1x128)	Windows 2000 Professional	8/30/2000	8/1/05	\$1000
3	Security	Dell	DIM 2100		CRT	900MHz Celeron	20 GB	128 (1x128)	Windows XP Professional	9/26/2001	9/1/06	\$1000
4	Security	Dell	OptiPlex GX50	1TNHK11 8TNHK11	Touch Screen	1.2GHz Celeron	20 GB	128MB (1x128)	Windows 2000 Professional	6/11/2002	6/1/07	\$1000
5	Golf Shop	Dell	OptiPlex GX50	09D224	Touch Screen	1.2GHz Celeron	20 GB	128MB (1x128)	Windows 2000 Professional	6/11/2002	6/1/07	\$1000
6	Golf Shop	Dell	OptiPlex GX50		Touch Screen	1.2GHz Celeron	20 GB	128MB (1x128)	Windows 2000 Professional	6/11/2002	6/1/07	\$1000
7	Accounting	Dell	OptiPlex GX260	F6B4Q11	Flat Panel	1.7GHz Celeron	20 GB	256MB (2x128)	Windows 2000 Professional	7/29/2002	7/1/07	\$1000
8	Accounting	Dell	OptiPlex GX260	G6B4Q11	CRT	1.7GHz Celeron	20 GB	256MB (2x128)	Windows 2000 Professional	7/29/2002	7/1/07	\$1000
9	Administration	Dell	OptiPlex GX260	B5B4Q11	Flat Panel	1.7GHz Celeron	20 GB	256MB (2x128)	Windows 2000 Professional	7/29/2002	7/1/07	\$1000
10	Administration	Dell	OptiPlex GX260	F5B4Q11	CRT	1.7GHz Celeron	20 GB	256MB (2x128)	Windows 2000 Professional	7/29/2002	7/1/07	\$1000
11	Clubhouse	Dell	OptiPlex GX260	85B4Q11	CRT	1.73GHz Celron	20 GB	256MB (2x128)	Windows 2000 Professional	7/29/2002	7/1/07	\$1000

THE RESULT



- ▶ Calculations
 - ▶ Total Replacement Cost of Hardware Assets
 - ▶ Annual Training Budget
 - ▶ \$500 per Key User
 - ▶ Annual Application Support
 - ▶ Third Party IT Support

CREATING YOUR BUDGET



Our hypothetical club has 3 major buildings, excluding security gates. The buildings consist of a Clubhouse, with the Golf Shop, Admin and Accounting offices under the same roof, a Maintenance Facility and an Activity Center (pool, tennis, etc.) The buildings are networked together using fiber or products from the local telephone company and use a single firewall / Internet connection for web access. There are a total of 25 computers, including POS stations, and 2 physical file servers on the property. The monthly recurring cost for the club would break down this way:

File Servers	2 @ \$165	\$330
Computers	25 @ 33	\$825
Switches	3 @ \$11	\$33
Firewall	1 @ \$27.50	\$27.50

Total Monthly \$ 1215.50

Total Annually \$ 14,586.00

THIRD PARTY SUPPORT



Replacement

1. $\frac{\text{Cost}}{5 \text{ (yrs)}} + \text{Training} + \text{Support} + \text{Third Party} = \text{ATMB}$

2. $\frac{\$50,000}{5} + \$500 \times 10 + \$25,000 + \$14,586 = \text{ATMB}$
(10 key users)

3. $\$10,000 + \$5,000 + \$25,000 + \$14,586 = \$54,586$ (\$4500 per month)

YOUR ANNUAL TECHNOLOGY MAINTENANCE BUDGET (ATMB)

- ▶ Servers
- ▶ Workstations
- ▶ POS Hardware
- ▶ Copiers / Printers
- ▶ Infrastructure

HARDWARE OVERVIEW



- ▶ Single Server or Multiple Servers
- ▶ Tower or Rack Mount
- ▶ Virtualization

SERVERS

- ▶ Desktop or Tower or All-in-One
- ▶ Dual Monitors
- ▶ Thin Clients

WORKSTATIONS



- ▶ Terminals
 - ▶ Touchcomputers
- ▶ POS Printers
 - ▶ Impact
 - ▶ Thermal
- ▶ Barcode Printers
 - ▶ Direct Thermal – slightly lower TCO, short label life
 - ▶ Thermal Transfer – longer label life, esp. in direct sunlight

POS HARDWARE



- ▶ Lease vs Purchase
- ▶ Network vs Workstation Printers

COPIERS / PRINTERS



- ▶ Network Switches
- ▶ Wireless Access Points
- ▶ Firewalls

INFRASTRUCTURE



- ▶ Is Volume Licensing an Option
 - ▶ Available from Major Vendors such as Microsoft and Adobe

- ▶ Is your version available
 - ▶ Office Home & Business
 - ▶ Word, Excel, PowerPoint & Outlook \$ 220.00
 - ▶ Office Professional
 - ▶ + Publisher & Access \$ 400.00

OFFICE APPLICATIONS





QUESTIONS?

