Compression and Suballocation Analysis

Estimated cost of RAM and disk space with and without using suballocation and compression in NetWare 4

Cost per MB RAM   50
Cost per MB disk   1

	w/o S&C	w/ S&C	w/o S&C	w/ S&C	w/o S&C
Volume size (vs) [K]	1024000	1024000	1024000	1024000	1024000
Block size (bs) [K]	64	64	32	32	16
Average file size (afs) [K]	35	35	35	35	35
Blocks on disk (vs/bs)	16000	16000	32000	32000	64000
Directory entries (vs/afs)	29257	29257	29257	29257	29257
Mem for FAT tables [K]	1312	1312	2624	2624	5248
Mem for suballocation [K]	0	666.477	0	404.333	0
Mem for compression (250K)	0	250	0	250	0
Mem for dir entries [K]	292.57	292.57	292.57	292.57	292.57
Cost of RAM	Err:508	Err:508	Err:508	Err:508	Err:508
Wasted Space:					
Ave wasted space/file	0.35	0.35	0.35	0.35	0.35
Ave wasted space/file [bytes]	22937.6	179.2	11468.8	179.2	5734.4
Without compression [K]	512000	0	512000	0	512000
Max w/o suballocation [K]	655356.8	5119.975	327678.4	5119.975	163839.2
Cost of wasted disk space	Err:508	Err:508	Err:508	Err:508	Err:508
Estimated Total Cost	Err:508	Err:508	Err:508	Err:508	Err:508

Block size	w/o S&C	with S&C
64K	Err:508	Err:508
32K	Err:508	Err:508
16K	Err:508	Err:508
8K	Err:508	Err:508

The purpose of this spreadsheet is to estimate how much RAM and disk storage
can be saved by implementing NetWare 4's compression and suballocation features.
The formulae were developed by Novell engineers, and the results are only estimates.

How to use:
Adjust the following parameters to better suit your needs:

Cost per MB RAM	The cost to add 1MB or RAM to the server
Cost per MB disk	The cost for each MB of disk storage
Volume size (vs) [K]	The server's volume size (in KB)
Average file size (afs) [K]	The average file size on the server (in KB)

To get more accurate results, use the utility SSAVER, available on NetWire.

w/ S&C	w/o S&C	w/ S&C
1024000	1024000	1024000
16	8	8
35	35	35
64000	128000	128000
29257	29257	29257
5248	10496	10496
273.261	0	207.725
250	0	250
292.57	292.57	292.57
Err:508	Err:508	Err:508
0.35	0.35	0.35
179.2	2867.2	179.2
0	512000	0
5119.975	81919.6	5119.975
Err:508	Err:508	Err:508
Err:508	Err:508	Err:508