

System Information Tools and Performance Monitors

Contents

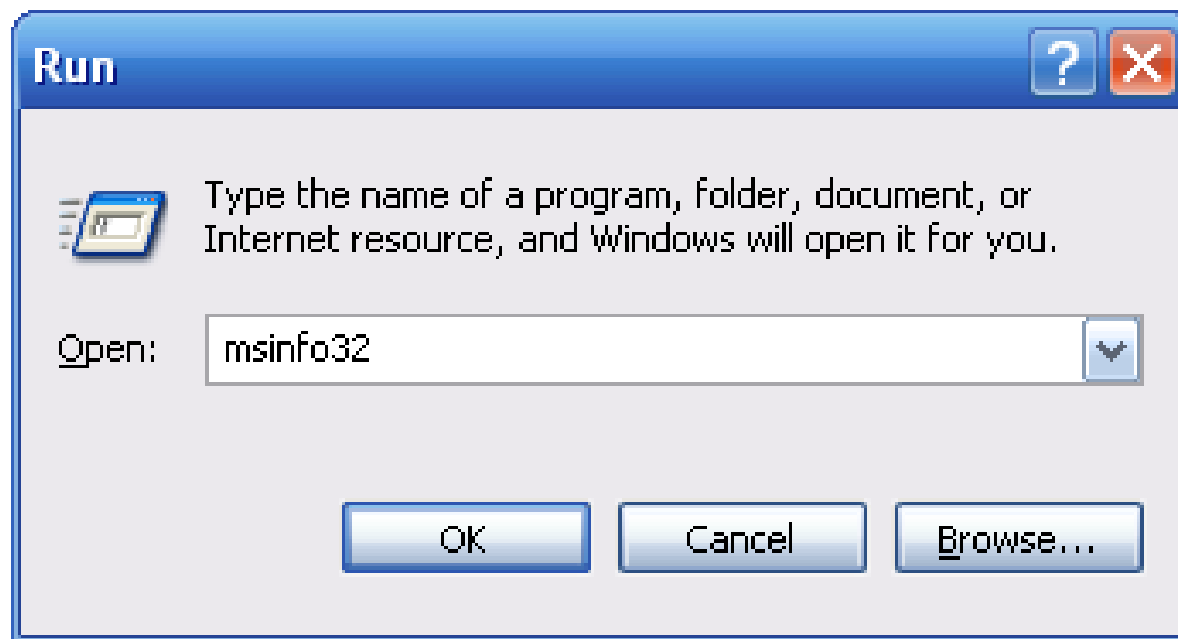
- Windows XP system information
- Windows 7 system information
- CPU-Z
- Task manager
- Windows XP performance monitor
- Windows 7 performance monitor
- Hexagora performance monitor

Basic system tasks

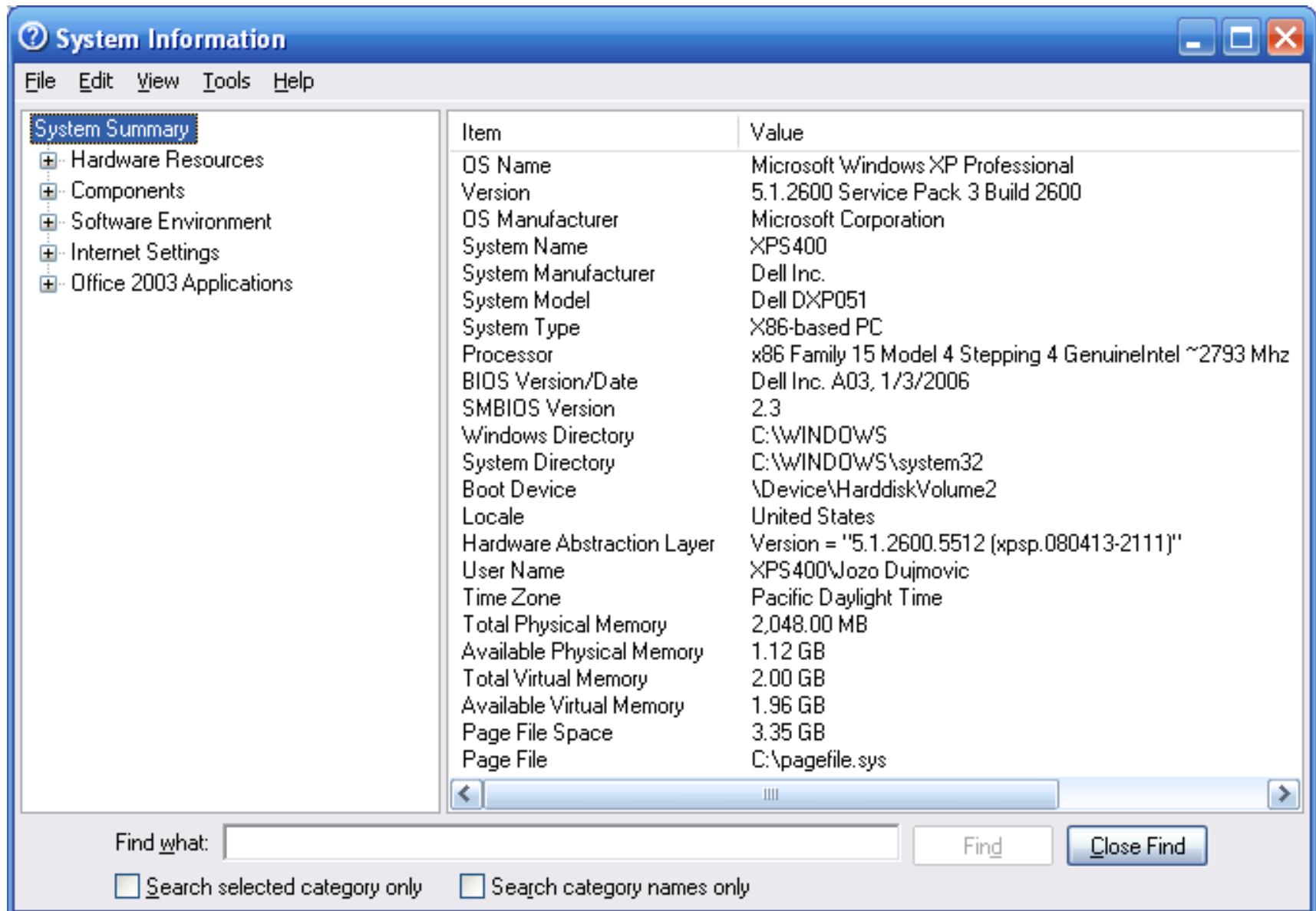
- **System information**: information about all hardware and software components of a computer system and their performance indicators
- **System monitoring**: dynamic measurement, monitoring and graphic presentation of the utilization of all computer resources during the execution of selected workload

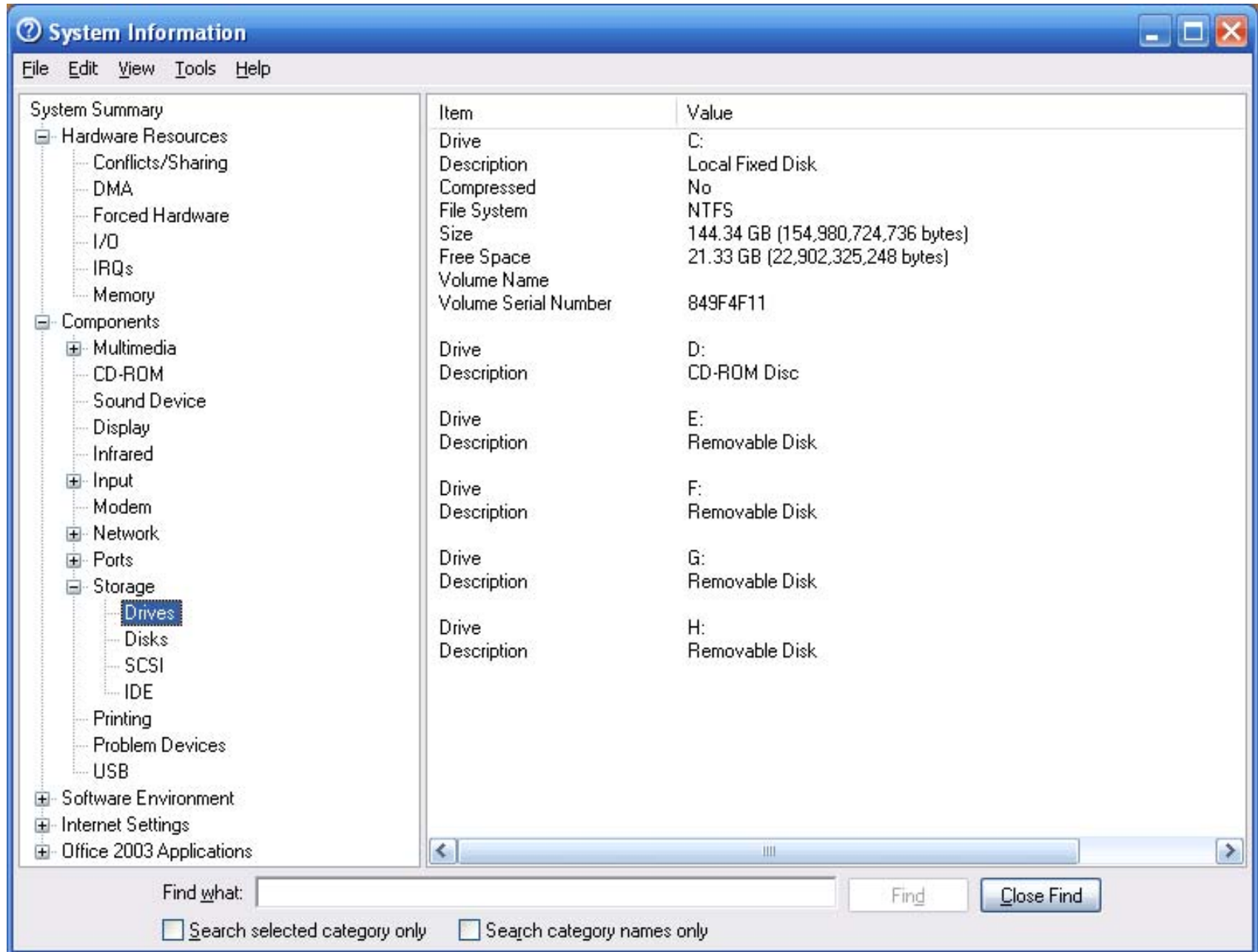
Windows XP System Information

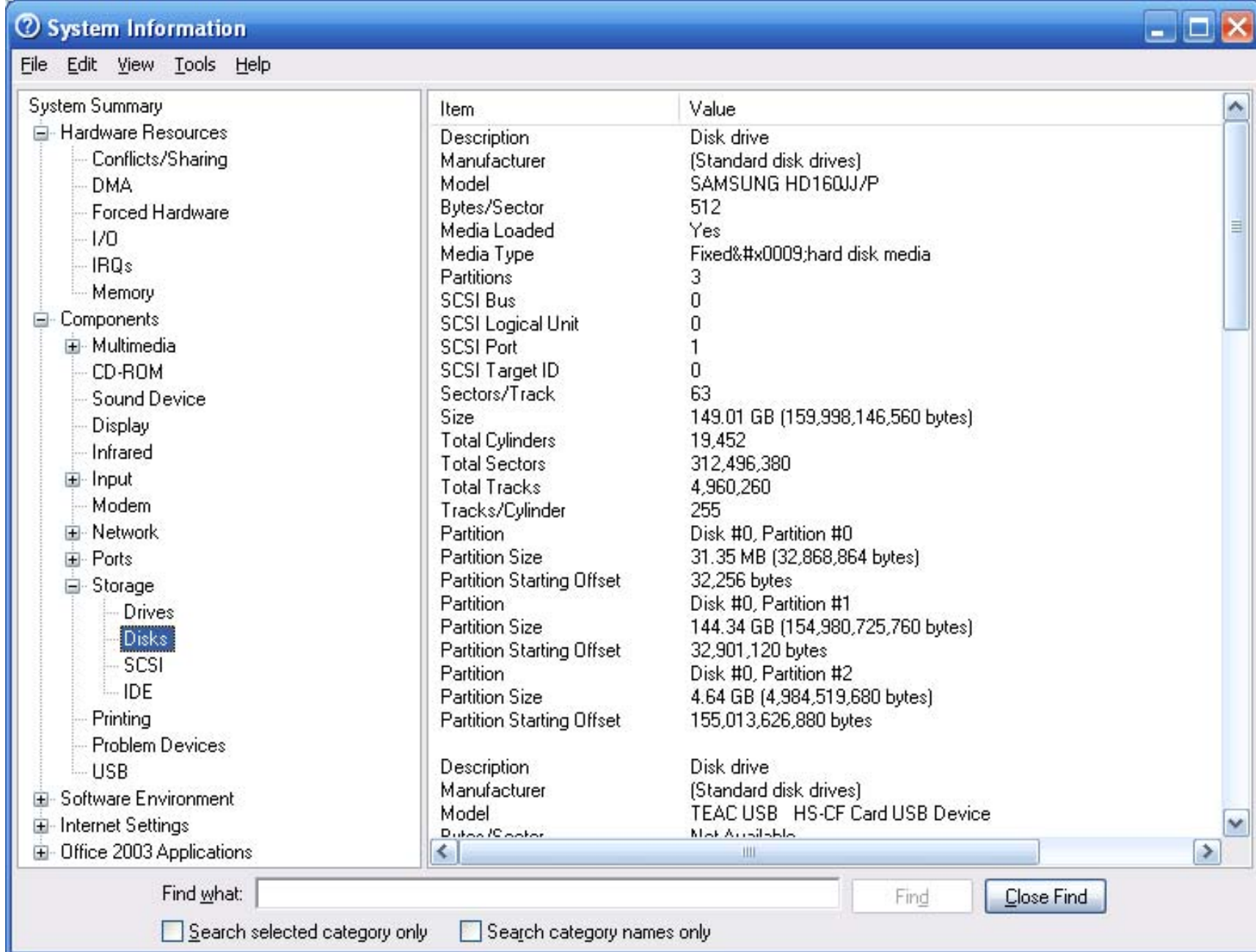
- Activation: Start > Run msinfo32 > OK



Windows XP system information tool







System Information

File Edit View Tools Help

- Infrared
- Input
- Modem
- Network
- Ports
- Storage
 - Drives
 - Disks
 - SCSI
 - IDE
- Printing
- Problem Devices
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- Software Environment
 - System Drivers
 - Signed Drivers
 - Environment Variables
 - Print Jobs
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 - Running Tasks**
 - Loaded Modules
 - Services
 - Program Groups
 - Startup Programs
 - OLE Registration
 - Windows Error Reporting
- Internet Settings
- Office 2003 Applications

Name	Path	Process ID	Priority	Min Workin...	Max Worki...	Start Time	Version	Size
acrotray.exe	c:\program files\adobe\acrobat 7.0\d...	3104	8	204800	1413120	9/22/2012 9:06 AM	7.1.0.2008042300	472.00 KB (4...
adobeearm.exe	c:\program files\common files\adobe\...	3956	8	204800	1413120	9/22/2012 9:06 AM	1.5.7.0	823.94 KB (8...
agent.exe	c:\program files\common files\installs...	2952	8	204800	1413120	9/22/2012 9:07 AM	4, 50, 100, 33433	604.00 KB (6...
agentsvr.exe	c:\windows\msagent\agentsvr.exe	4788	8	204800	1413120	10/4/2012 8:24 PM	2.00.0.3427	250.50 KB (2...
alg.exe	Not Available	3160	8	Not Available	Not Available	9/22/2012 9:03 AM	Not Available	Not Available
cocimanager.exe	c:\program files\common files\logishr...	2604	8	204800	1413120	9/22/2012 9:06 AM	12.00.1280.0	546.77 KB (5...
csrss.exe	Not Available	704	13	Not Available	Not Available	9/22/2012 9:02 AM	Not Available	Not Available
ctfmon.exe	c:\windows\system32\ctfmon.exe	388	8	204800	1413120	9/22/2012 9:06 AM	5.1.2600.5512 (...)	15.00 KB (15...
devcpp.exe	c:\dev-cpp\devcpp.exe	5992	8	204800	1413120	10/4/2012 11:47 PM	4.9.9.2	941.50 KB (9...
dlactrlw.exe	c:\windows\system32\dla\dlactrlw.exe	3060	8	204800	1413120	9/22/2012 9:06 AM	5.20.08a	120.06 KB (1...
dlg.exe	c:\program files\digital line detect\dlg...	2176	8	204800	1413120	9/22/2012 9:07 AM	1, 0, 0, 1	24.00 KB (24...
dllhost.exe	c:\windows\system32\dllhost.exe	2976	8	204800	1413120	9/22/2012 9:03 AM	5.1.2600.5512 (...)	5.00 KB (5,1...
dmxlauncher.exe	c:\program files\dell\media experienc...	1872	8	204800	1413120	9/22/2012 9:06 AM	Not Available	92.00 KB (94...
dsagnt.exe	c:\program files\dellsupport\dsagnt.exe	2272	6	204800	1413120	9/22/2012 9:06 AM	3, 0, 0, 197	449.98 KB (4...
ehmsas.exe	c:\windows\ehome\ehmsas.exe	3080	8	204800	1413120	9/22/2012 9:06 AM	5.1.2710.2732 (...)	45.50 KB (46...
ehrecvr.exe	c:\windows\ehome\ehrecvr.exe	1760	10	204800	1413120	9/22/2012 9:03 AM	5.1.2715.3011 (...)	232.00 KB (2...
ehsched.exe	c:\windows\ehome\ehsched.exe	1772	8	204800	1413120	9/22/2012 9:03 AM	5.1.2710.2732 (...)	100.50 KB (1...
ehtray.exe	c:\windows\ehome\ehtray.exe	2940	8	204800	1413120	9/22/2012 9:06 AM	5.1.2715.2765 (...)	66.00 KB (67...
explorer.exe	c:\windows\explorer.exe	2248	8	204800	1413120	9/22/2012 9:05 AM	6.00.2900.5512 ...	1,009.50 KB ...
frameworkservice.exe	c:\program files\mcafee\common fra...	376	8	204800	1413120	9/22/2012 9:03 AM	4.5.0.1810	117.31 KB (1...
googletoolbarnotifier....	c:\program files\google\googletoolbar...	2456	8	204800	1413120	9/22/2012 9:06 AM	2, 0, 301, 1654	67.24 KB (68...
helpctr.exe	c:\windows\pchealth\helpctr\binaries...	1748	8	204800	1413120	10/5/2012 12:11 AM	5.1.2600.5512 (...)	751.00 KB (7...
helpctr.exe	c:\windows\pchealth\helpctr\binaries...	6084	8	204800	1413120	10/6/2012 10:53 AM	5.1.2600.5512 (...)	751.00 KB (7...
helpctr.exe	c:\windows\pchealth\helpctr\binaries...	584	8	204800	1413120	10/6/2012 10:57 AM	5.1.2600.5512 (...)	751.00 KB (7...
helpctr.exe	c:\windows\pchealth\helpctr\binaries...	4892	8	204800	1413120	10/6/2012 11:17 AM	5.1.2600.5512 (...)	751.00 KB (7...
helphost.exe	c:\windows\pchealth\helpctr\binaries...	504	8	204800	1413120	10/6/2012 10:53 AM	5.1.2600.0 (xpcli...	97.50 KB (99...
helpsvc.exe	c:\windows\pchealth\helpctr\binaries...	1744	8	204800	1413120	10/5/2012 12:11 AM	5.1.2600.5997 (...)	727.00 KB (7...
hpqste08.exe	c:\program files\hewlett-packard\digit...	2140	8	204800	1413120	9/22/2012 9:08 AM	70.0.170.000	233.71 KB (2...
hpqtra08.exe	c:\program files\hewlett-packard\digit...	3708	8	204800	1413120	9/22/2012 9:07 AM	70.0.170.000	281.71 KB (2...
hpqwshd2.exe	c:\program files\hewlett-packard\hps...	1840	8	204800	1413120	9/22/2012 9:06 AM	80, 1, 0, 0	53.55 KB (54...

Find what: Find Close Find

☐ Search selected category only ☐ Search category names only

System Information



Hide



Back



Forward



Options

Contents

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Search

Type in the keyword to find:

applications

viewing system information about
automatically-started programs, information about
CD-ROM drives

viewing system information about
CDs, CD drives, and CD players

viewing system information about
codecs, viewing system information about
command-line utilities

System Information

components

(See also System Information tool)

configuration information, system

displaying

exporting to text file

finding data

overview

saving to System Information file

viewing system summary information

configuration profiles, information about See System Information tool

device drivers

information about installed drivers

Display

System Information



System Information collects and displays information about the configuration of your system. You can view information for the local computer or for a computer to which you are connected.

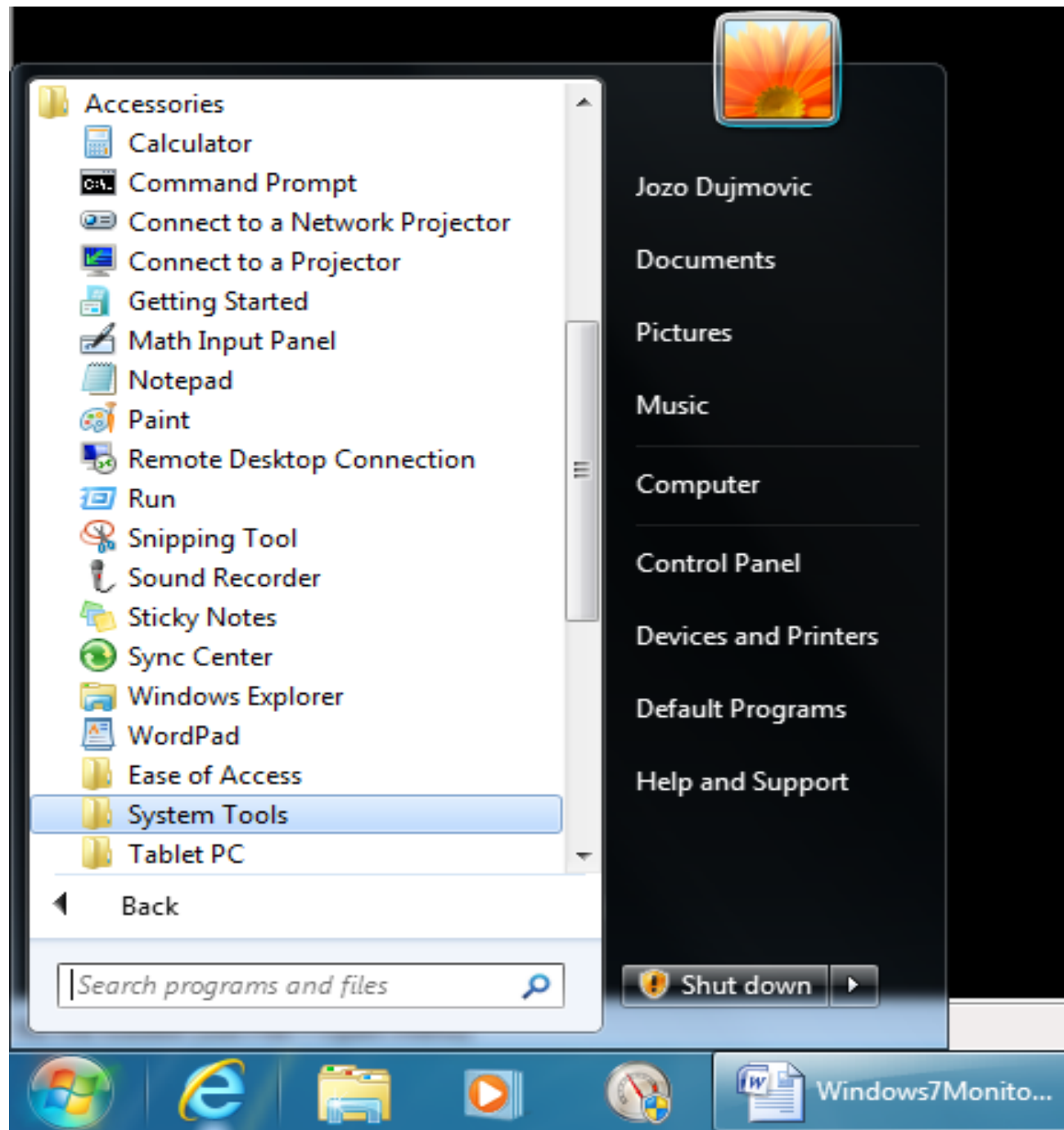
- For help with specific tasks, see [How to](#).
- For general background information, see [Concepts](#).

Windows 7 system information

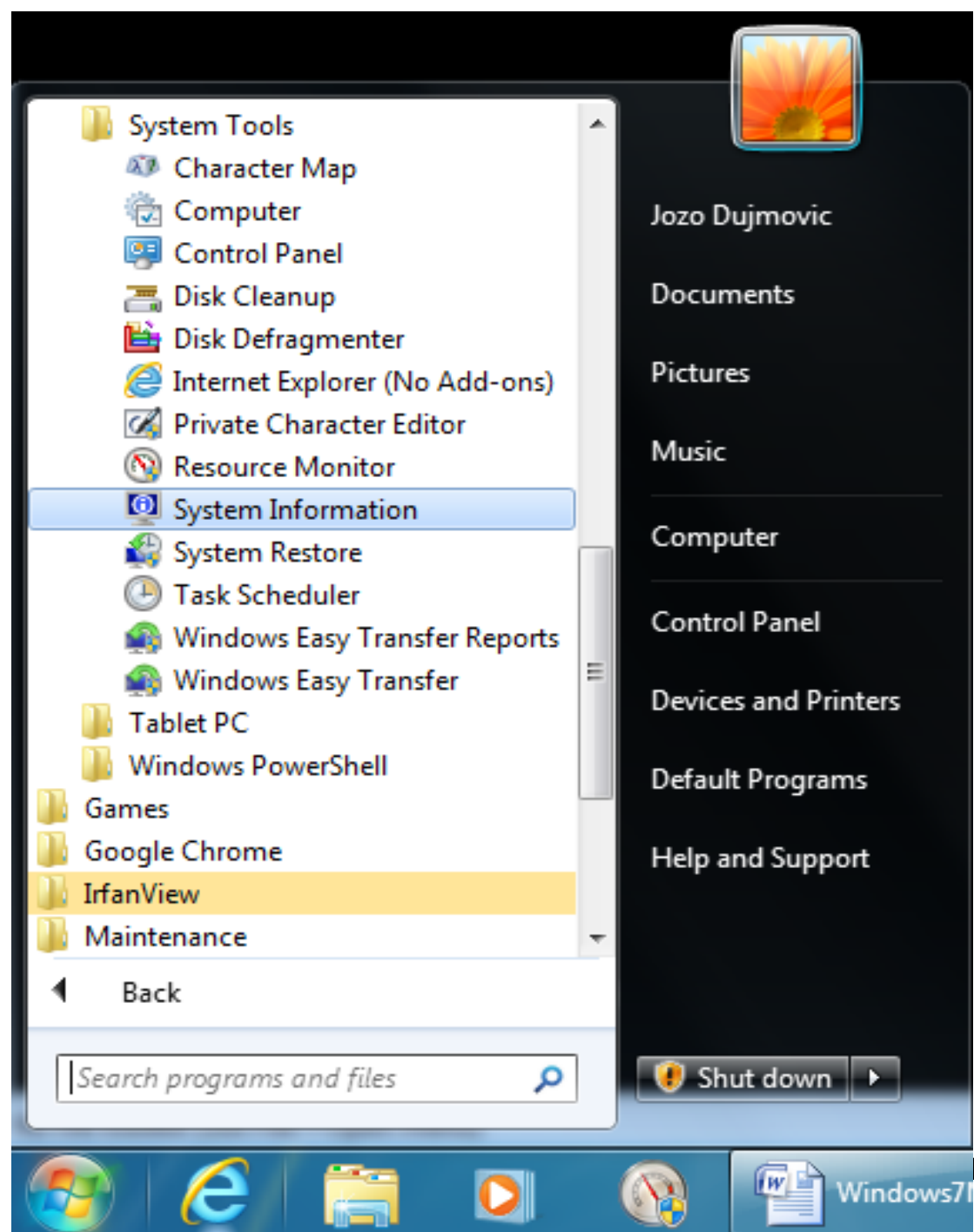
Activation:

Start > All programs > Accessories >
System Tools > System Information

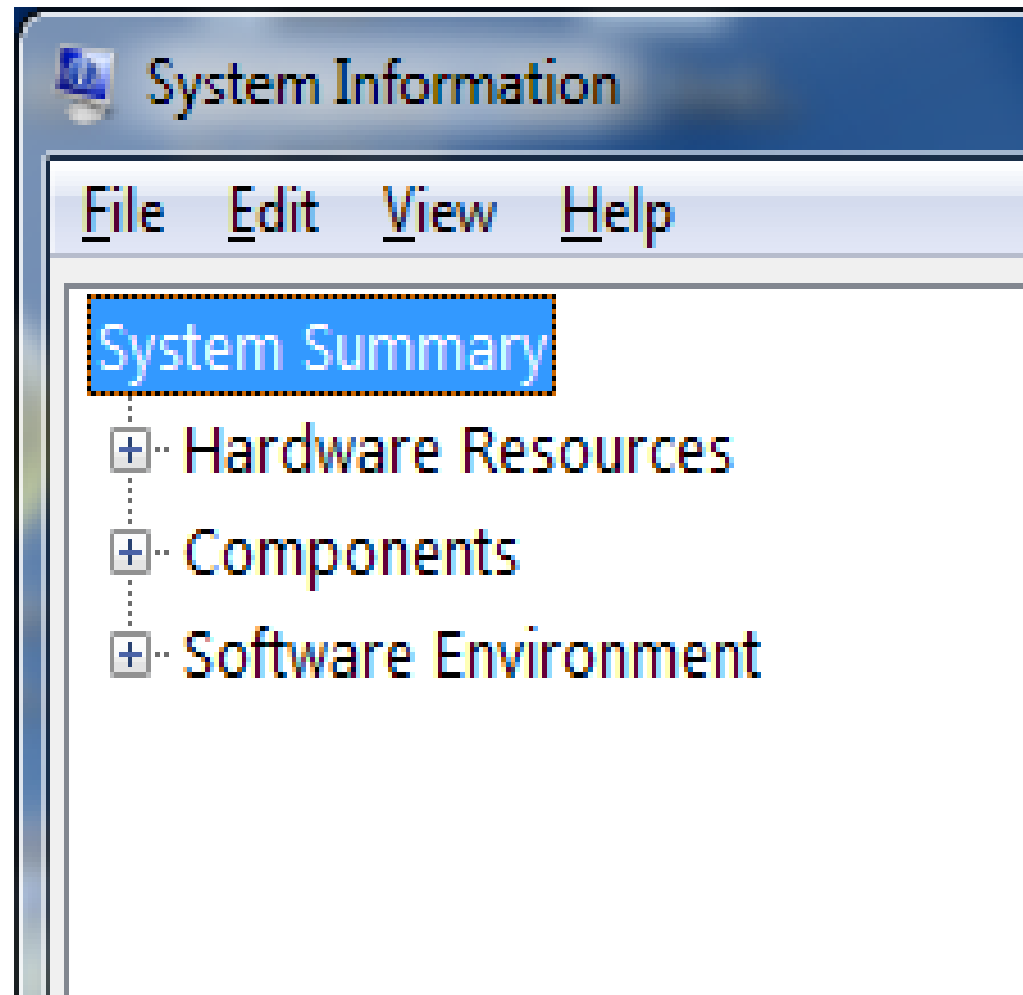
Windows 7 Accessories



System tools



Windows 7 System Information



Item	Value
OS Name	Microsoft Windows 7 Professional
Version	6.1.7601 Service Pack 1 Build 7601
Other OS Description	Not Available
OS Manufacturer	Microsoft Corporation
System Name	ZT
System Manufacturer	MICRO-STAR INTERNATIONAL CO.,LTD
System Model	MS-7596
System Type	x64-based PC
Processor	AMD Phenom(tm) II X4 955 Processor, 3200 Mhz, 4 Core(s), 4 Logical Processor(s)
BIOS Version/Date	American Megatrends Inc. V1.0B1, 4/20/2010
SMBIOS Version	2.5
Windows Directory	C:\windows
System Directory	C:\windows\system32
Boot Device	\Device\HarddiskVolume1
Locale	United States
Hardware Abstraction Layer	Version = "6.1.7601.17514"
User Name	ZT\Jozo Dujmovic
Time Zone	Pacific Daylight Time
Installed Physical Memory (RAM)	6.00 GB
Total Physical Memory	5.75 GB
Available Physical Memory	4.04 GB
Total Virtual Memory	11.5 GB
Available Virtual Memory	9.86 GB
Page File Space	5.75 GB
Page File	C:\pagefile.sys

System Summary

Hardware Resources

- Conflicts/Sharing
- DMA
- Forced Hardware
- I/O
- IRQs
- Memory

Components

Multimedia

- Audio Codecs
- Video Codecs

- CD-ROM

- Sound Device

- Display

- Infrared

Input

- Keyboard
- Pointing Device

- Modem

Network

- Adapter
- Protocol
- WinSock

Ports

- Serial
- Parallel

Storage

- Drives
 - Disks**
- SCSI
- IDE

- Printing

- Problem Devices

- USB

Item

Value

Description

Disk drive

Manufacturer

(Standard disk drives)

Model

SAMSUNG HD103SJ ATA Device

Bytes/Sector

512

Media Loaded

Yes

Media Type

Fixed hard disk

Partitions

2

SCSI Bus

0

SCSI Logical Unit

0

SCSI Port

0

SCSI Target ID

0

Sectors/Track

63

Size

931.51 GB (1,000,202,273,280 bytes)

Total Cylinders

121,601

Total Sectors

1,953,520,065

Total Tracks

31,008,255

Tracks/Cylinder

255

Partition

Disk #0, Partition #0

Partition Size

100.00 MB (104,857,600 bytes)

Partition Starting Offset

1,048,576 bytes

Partition

Disk #0, Partition #1

Partition Size

931.41 GB (1,000,097,931,264 bytes)

Partition Starting Offset

105,906,176 bytes

Description

Disk drive

Manufacturer

(Standard disk drives)

Model

Generic USB CF Reader USB Device

Bytes/Sector

Not Available

Media Loaded

Yes

Media Type

Not Available

Partitions

0

SCSI Bus

Not Available

SCSI Logical Unit

Not Available

SCSI Port

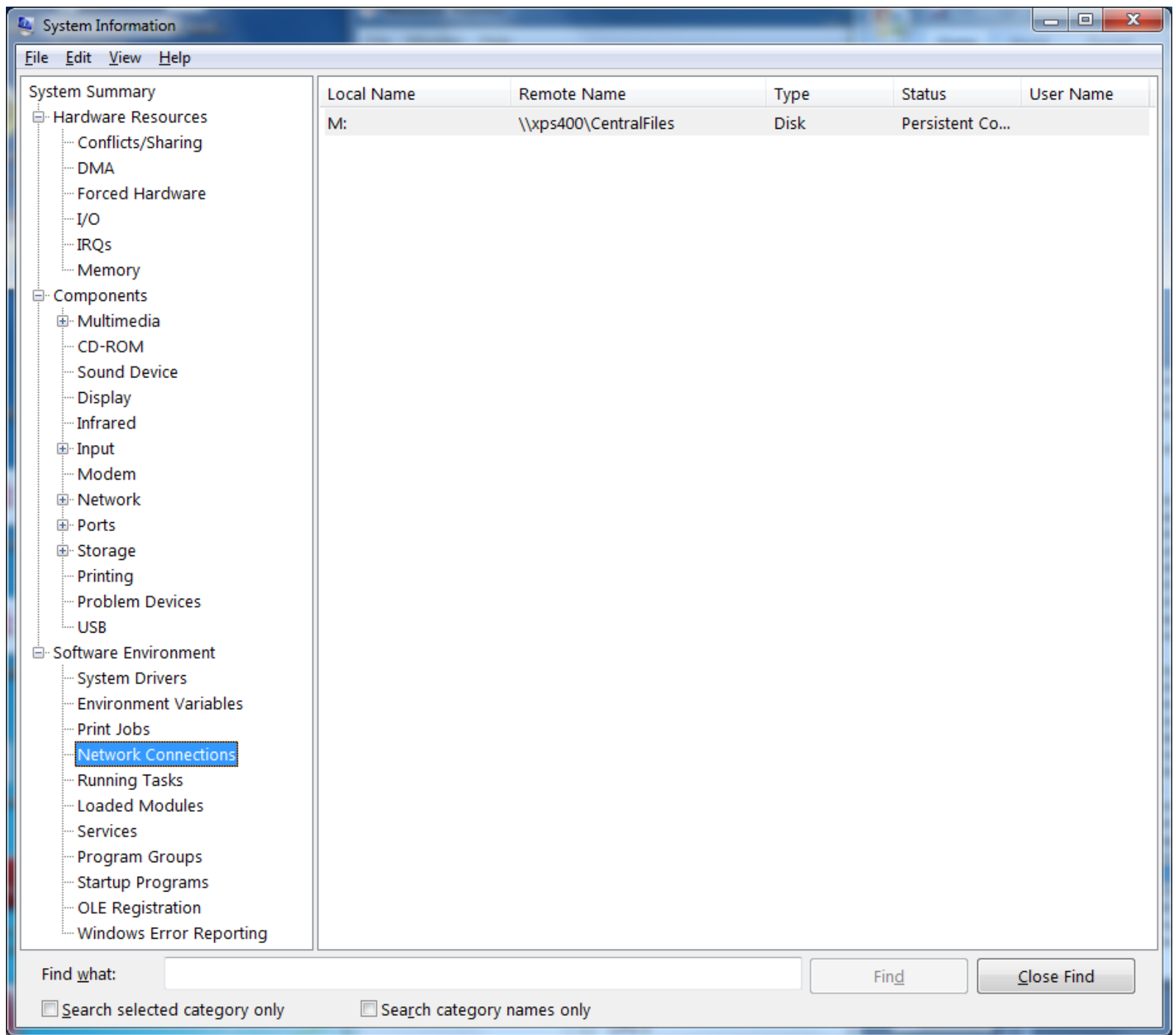
Not Available

SCSI Target ID

Not Available

Sectors/Track

Not Available



CPU-Z

- Provider: CPUID
- Location of provider: Dunkerque
- Country: France
- Internet: www.cpubid.com
- Tool: CPU-Z
- Legal: freeware

Collected information

CPU

- Name and number.
- Core stepping and process.
- Package.
- Core voltage.
- Internal and external clocks, clock multiplier.
- Supported instruction sets.
- Cache information.

Mainboard

- Vendor, model and revision.
- BIOS model and date.
- Chipset (northbridge and southbridge) and sensor.
- Graphic interface.

Memory

- Frequency and timings.
- Module(s) specification using SPD (Serial Presence Detect) :
vendor, serial number, timings table.

System

- Windows and DirectX version.

CPU-Z

CPU

Caches

Mainboard

Memory

SPD

Graphics

About

Processor

Name

Intel Pentium D 820

Code Name

Smithfield

Brand ID

Package

Socket 775 LGA

Technology

90 nm

Core Voltage

Specification

Intel(R) Pentium(R) D CPU 2.80GHz

Family

F

Model

4

Stepping

4

Ext. Family

F

Ext. Model

4

Revision

A0

Instructions

MMX, SSE (1, 2, 3), EM64T

Clocks (Core #0)

Core Speed

2795.18 MHz

Multiplier

x 14.0

Bus Speed

199.7 MHz

Rated FSB

798.6 MHz

Cache

L1 Data

2 x 16 KBytes

8-way

Trace

2 x 12 Kuops

8-way

Level 2

2 x 1024 KBytes

8-way

Level 3

Selection

Processor #1

Cores

2

Threads

2

CPU-Z

Version 1.61.3.x32

Validate

OK

L1 D-Cache

Size

Descriptor

Trace Cache

Size

Descriptor

L2 Cache

Size

Descriptor

L3 Cache

Size

Descriptor

Size

Descriptor

CPU Caches **Mainboard** Memory SPD Graphics About

Motherboard

Manufacturer	Dell Inc.				
Model	0FJ030				
Chipset	Intel	i945P		Rev.	00
Southbridge	Intel	82801GB (ICH7/R)		Rev.	A1
LPCIO	SMSC				

BIOS

Brand	Dell Inc.				
Version	A03				
Date	01/03/2006				

Graphic Interface

Version	PCI-Express		
Link Width	x16	Max. Supported	x16
Side Band			

CPU

Caches

Mainboard

Memory

SPD

Graphics

About

General

Type

DDR2

Channels #

Single

Size

2048 MBytes

DC Mode

NB Frequency

Timings

DRAM Frequency

332.7 MHz

FSB:DRAM

3:5

CAS# Latency (CL)

5.0 clocks

RAS# to CAS# Delay (tRCD)

5 clocks

RAS# Precharge (tRP)

5 clocks

Cycle Time (tRAS)

15 clocks

Bank Cycle Time (tRC)

21 clocks

Command Rate (CR)

DRAM Idle Timer

Total CAS# (tRDRAM)

Row To Column (tRCD)

Memory Slot Selection

Slot #1

DDR2

Module Size

2048 MBytes

Correction

None

Max Bandwidth

PC2-6400 (400 MHz)

Registered

Manufacturer

Corsair

Buffered

Part Number

CM2X2048-6400C5

SPD Ext.

Serial Number

Week/Year

Timings Table

			JEDEC #1	JEDEC #2
Frequency			270 MHz	400 MHz
CAS# Latency			4.0	5.0
RAS# to CAS#			4	5
RAS# Precharge			4	5
tRAS			13	18
tRC			15	22
Command Rate				
Voltage			1.80 V	1.80 V

CPU | Caches | Mainboard | Memory | SPD | **Graphics** | About

Display Device Selection

NVIDIA GeForce 7300 LE

Perf Level

GPU

Name NVIDIA GeForce 7300 LE

Code Name G72

Revision A3

Technology 90 nm



Clocks

Core

Shaders

Memory

Memory

Size

128 MBytes

Type

Bus Width

CPU Caches Mainboard Memory SPD Graphics **About**

About CPU-Z

Version 1.61.3 - July 2012

Author : Franck Delattre, CPUID

Infos and last updates at www.cpuid.com



CPU-Z is a freeware based on the
[CPUID Software Development Kit](#)

Validation by [Canard PC](#)

Windows Version

Microsoft Windows XP Media Center Edition Professional

Service Pack 3 (Build 2600)

DirectX 9.0c

Tools

Save Report (.TXT)

Validation

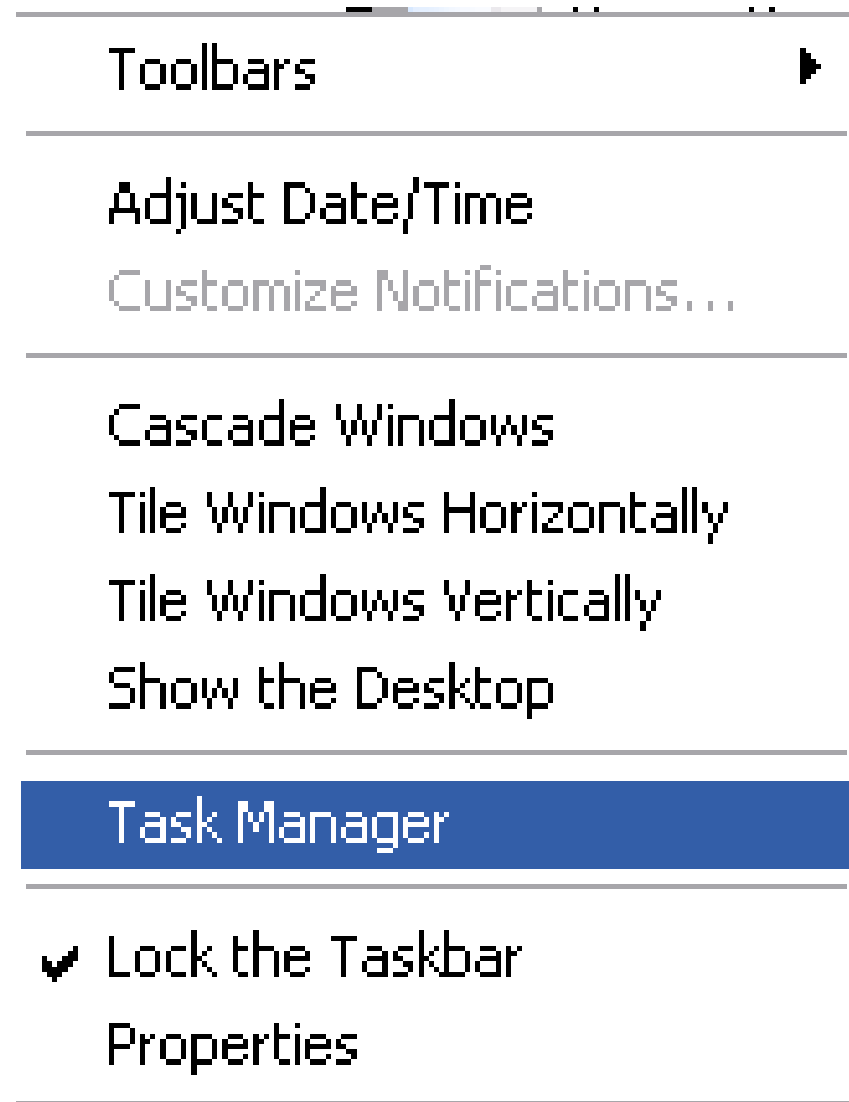
Save Report (.HTML)

Other CPUID performance products

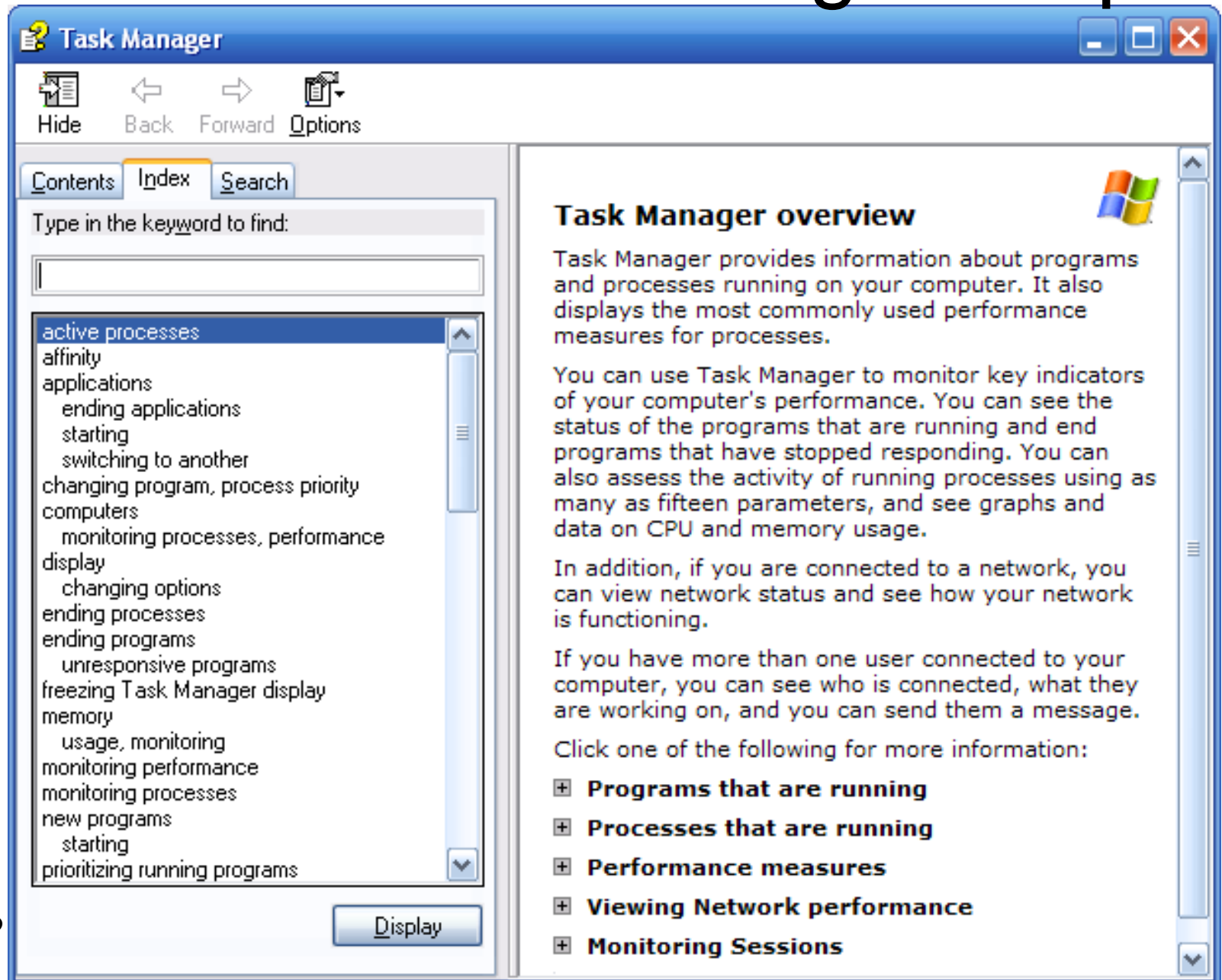


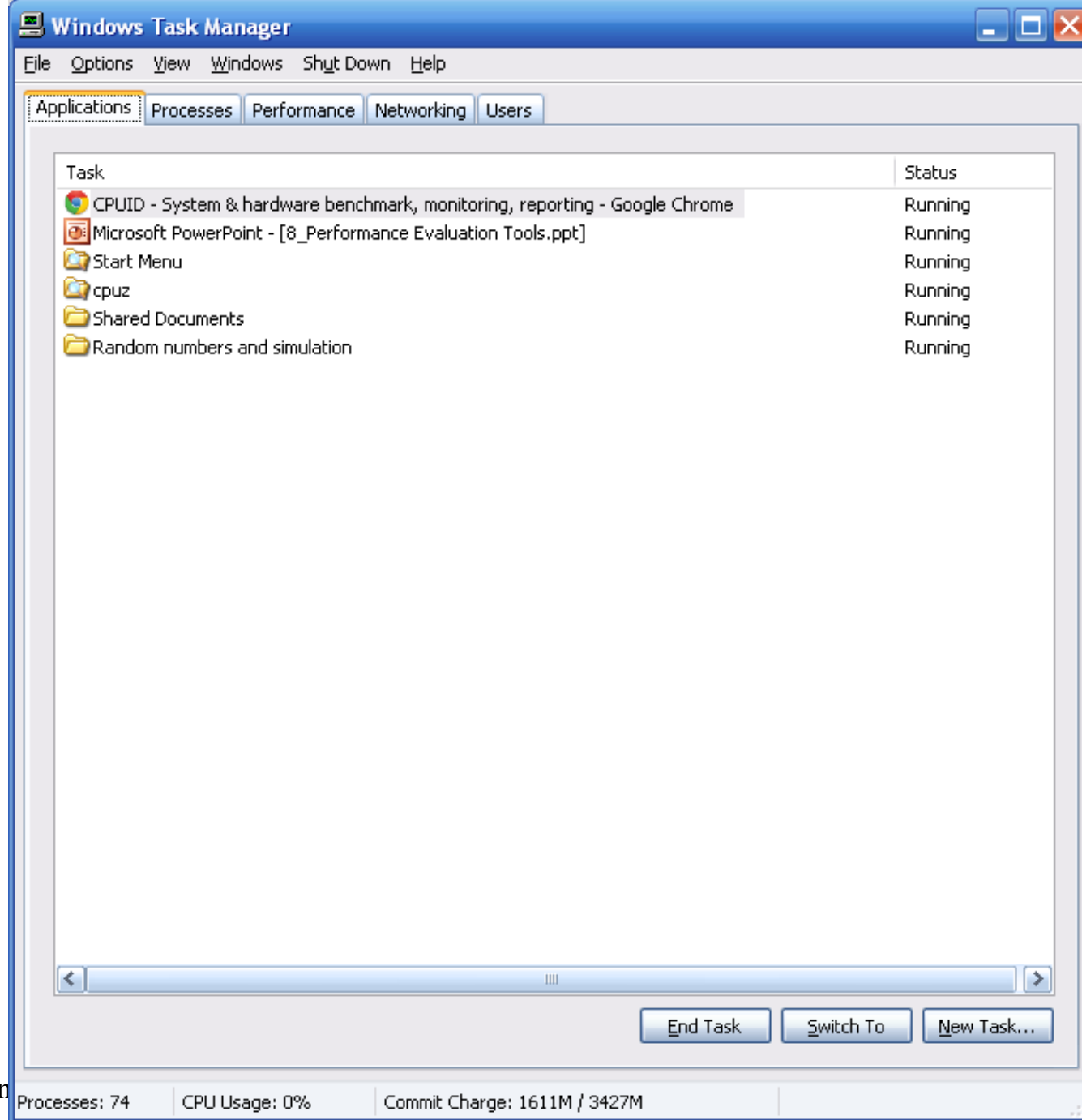
Windows XP Task Manager

- Right mouse click on taskbar
- Select Task Manager



Windows Task Manager Help





Windows Task Manager

File Options View Shut Down Help

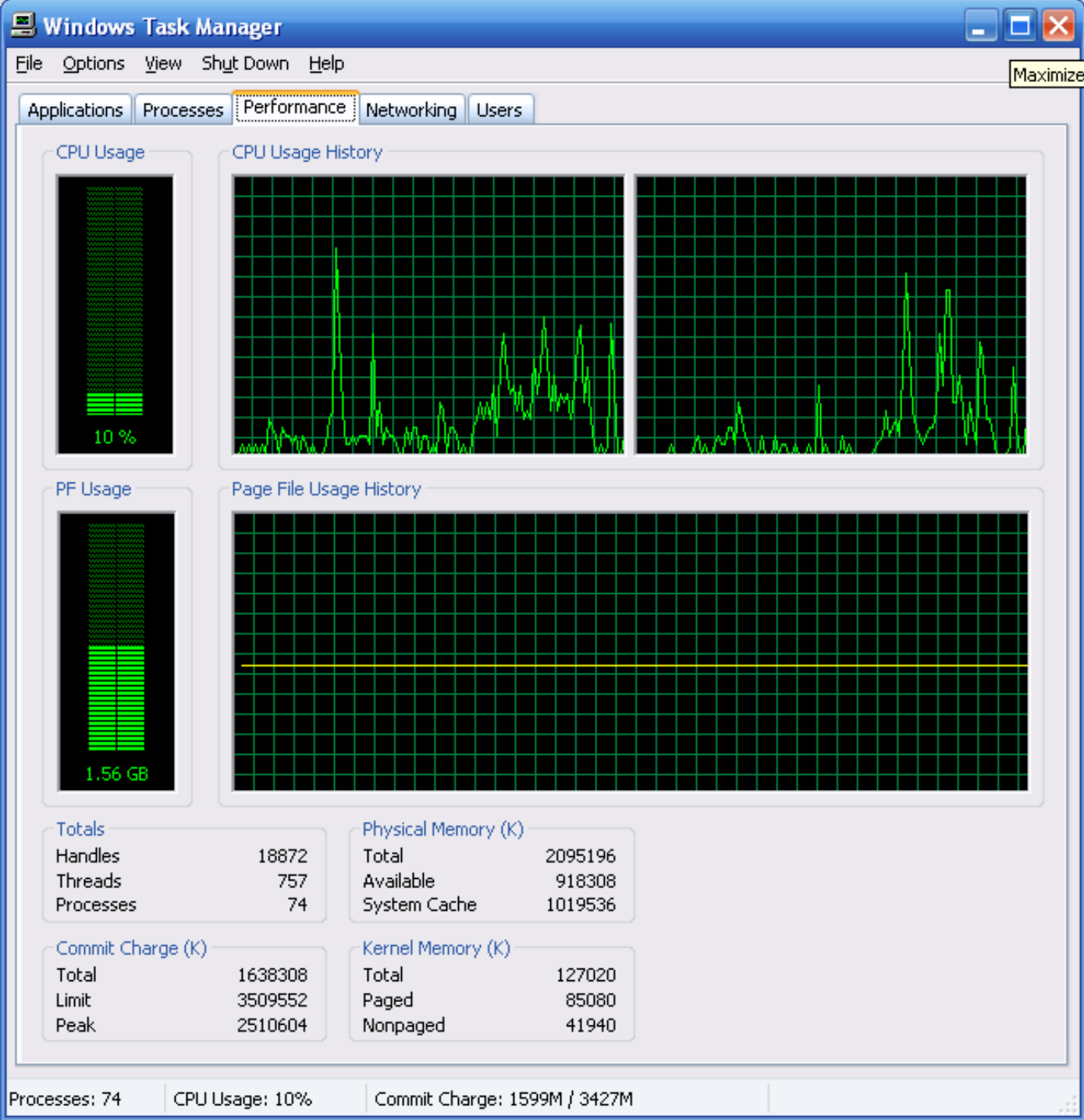
Applications Processes Performance Networking Users

Image Name	User Name	Session ID	CPU	Mem Usage
chrome.exe	Jozo Dujmovic	0	00	11,276 K
chrome.exe	Jozo Dujmovic	0	00	84,304 K
chrome.exe	Jozo Dujmovic	0	00	11,308 K
chrome.exe	Jozo Dujmovic	0	00	68,164 K
agentsvr.exe	Jozo Dujmovic	0	00	296 K
AdobeARM.exe	Jozo Dujmovic	0	00	3,416 K
chrome.exe	Jozo Dujmovic	0	00	12,976 K
LWS.exe	Jozo Dujmovic	0	00	6,556 K
hpqtra08.exe	Jozo Dujmovic	0	00	3,812 K
chrome.exe	Jozo Dujmovic	0	00	95,672 K
jusched.exe	Jozo Dujmovic	0	00	5,120 K
Newsflsh.exe	Jozo Dujmovic	0	00	4,072 K
MSASCui.exe	Jozo Dujmovic	0	00	9,176 K
shstat.exe	Jozo Dujmovic	0	00	724 K
alg.exe	LOCAL SERVICE	0	00	1,372 K
sprtcmd.exe	Jozo Dujmovic	0	00	1,992 K
acrotray.exe	Jozo Dujmovic	0	00	1,608 K
ehmsas.exe	Jozo Dujmovic	0	00	776 K
DLACTRLW.EXE	Jozo Dujmovic	0	00	2,660 K
issch.exe	Jozo Dujmovic	0	00	864 K
dllhost.exe	SYSTEM	0	00	2,232 K
stsysstra.exe	Jozo Dujmovic	0	00	1,308 K
agent.exe	Jozo Dujmovic	0	00	1,596 K
ehtray.exe	Jozo Dujmovic	0	00	748 K
Vid.exe	Jozo Dujmovic	0	00	33,912 K
taskmgr.exe	Jozo Dujmovic	0	00	5,688 K
COCIManager.exe	Jozo Dujmovic	0	00	2,224 K
SSScheduler.exe	Jozo Dujmovic	0	00	3,488 K
GoogleToolbarNot...	Jozo Dujmovic	0	00	728 K
McTray.exe	Jozo Dujmovic	0	00	484 K
mcshield.exe	SYSTEM	0	00	44,884 K
D5Agt.exe	Jozo Dujmovic	0	00	14,416 K
explorer.exe	Jozo Dujmovic	0	00	133,452 K
DLG.exe	Jozo Dujmovic	0	00	1,452 K

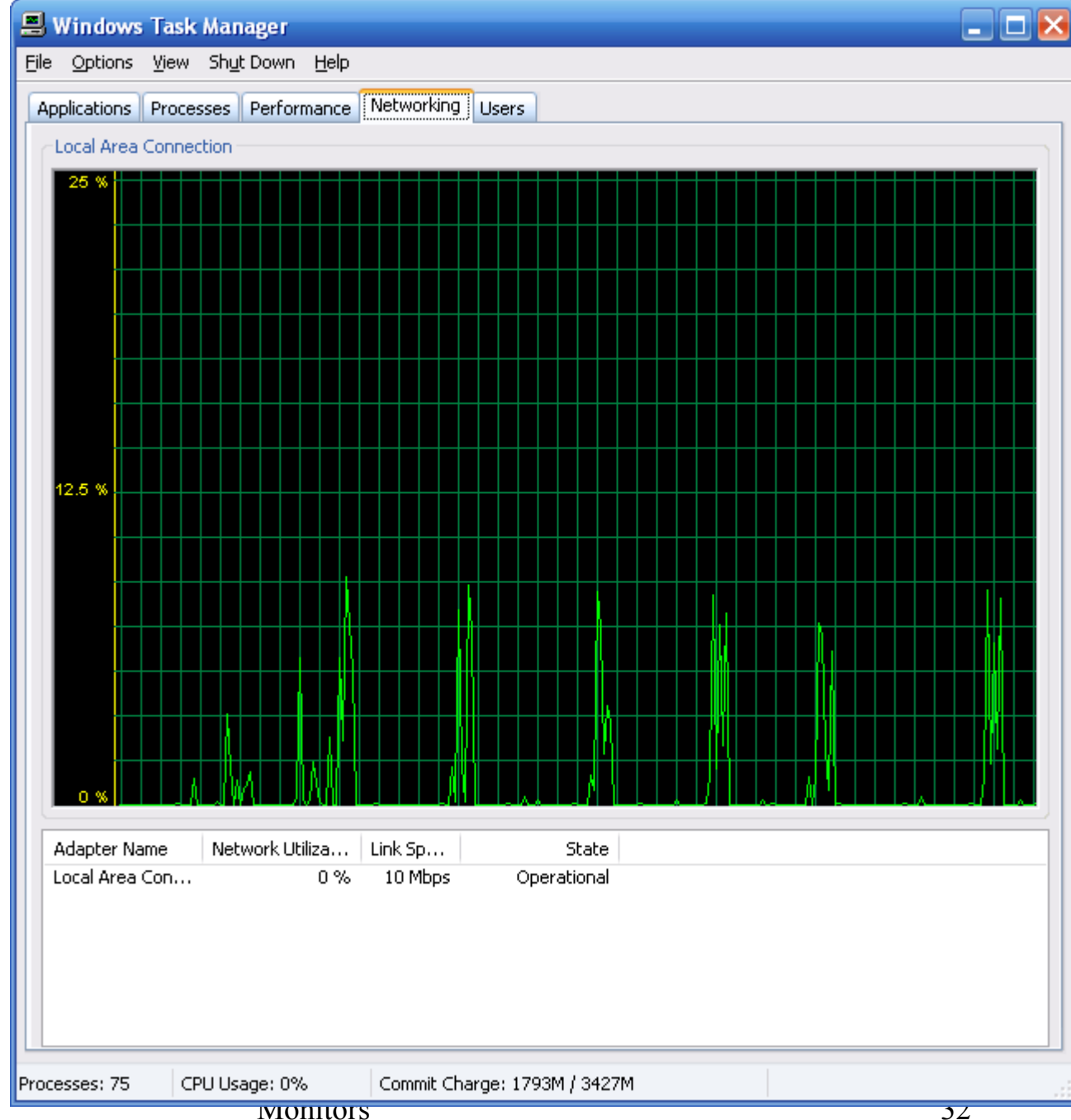
☒ Show processes from all users

End Process

Processes: 74 CPU Usage: 0% Commit Charge: 1610M / 3427M

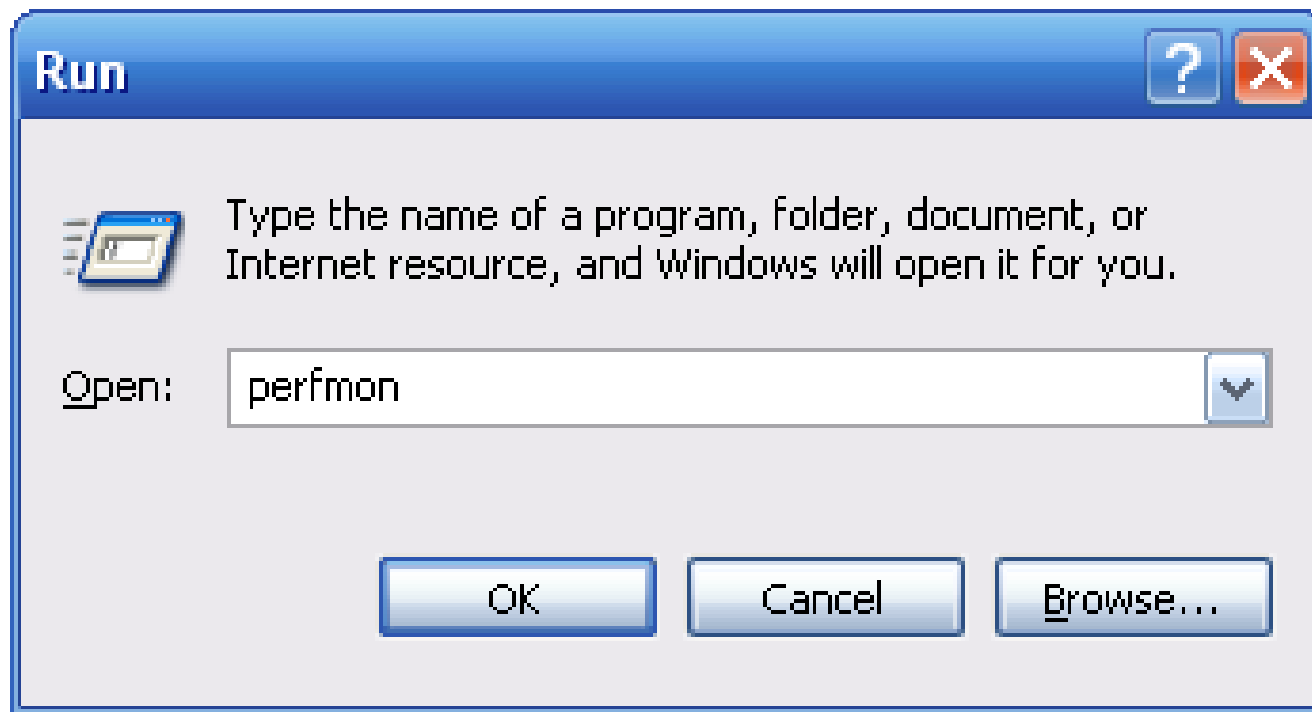


Each pulse shows the network activity for loading an e-mail

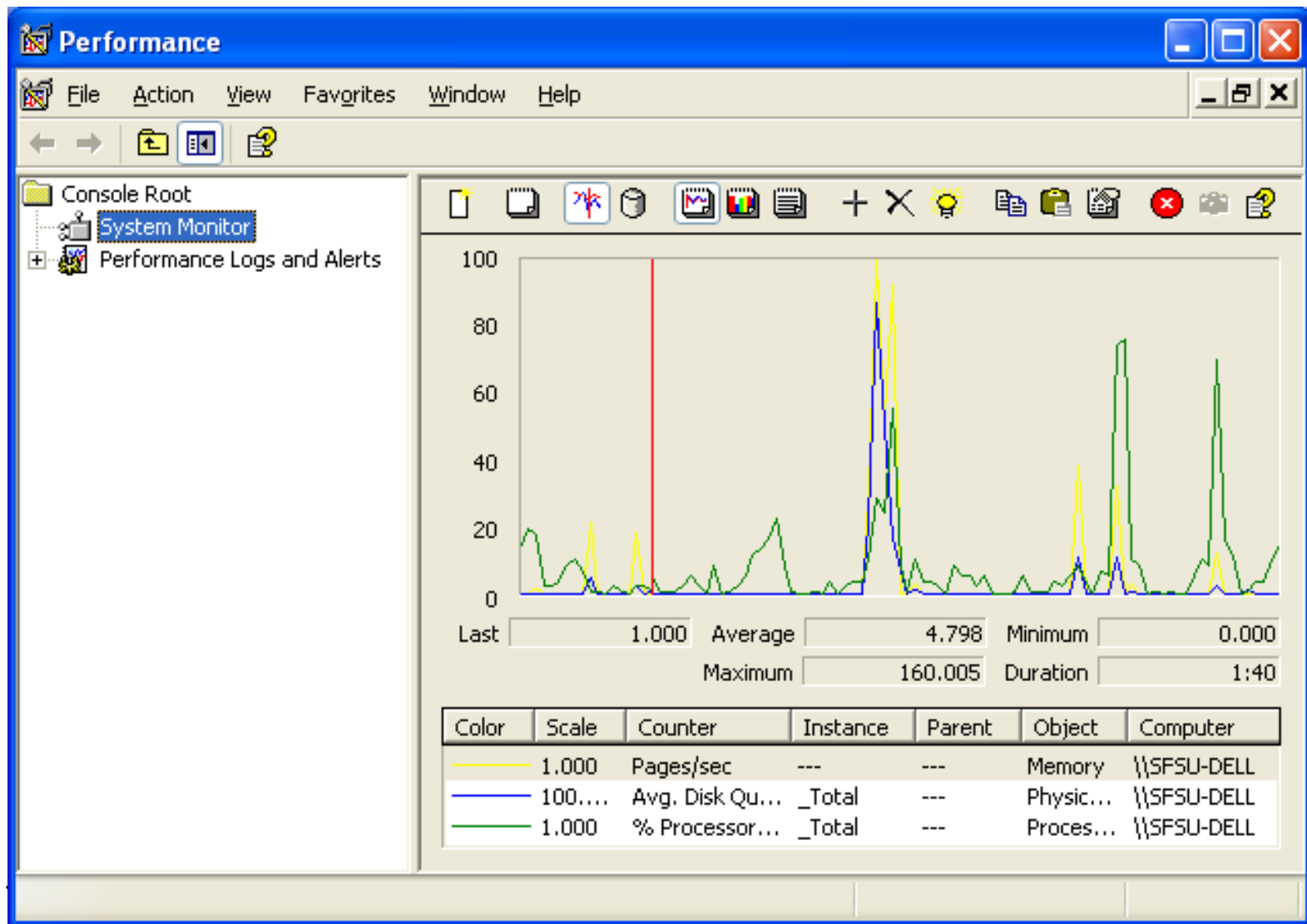


Win XP Performance Monitor

- Start > Run perfmon > OK



perfmon - Win XP Performance Monitor



System Monitor Properties [?] [X]

General Source Data Graph Appearance

View

☒ Graph ☐ Histogram ☐ Report

Display elements

☒ Legend ☒ Value bar ☒ Toolbar

Report and histogram data

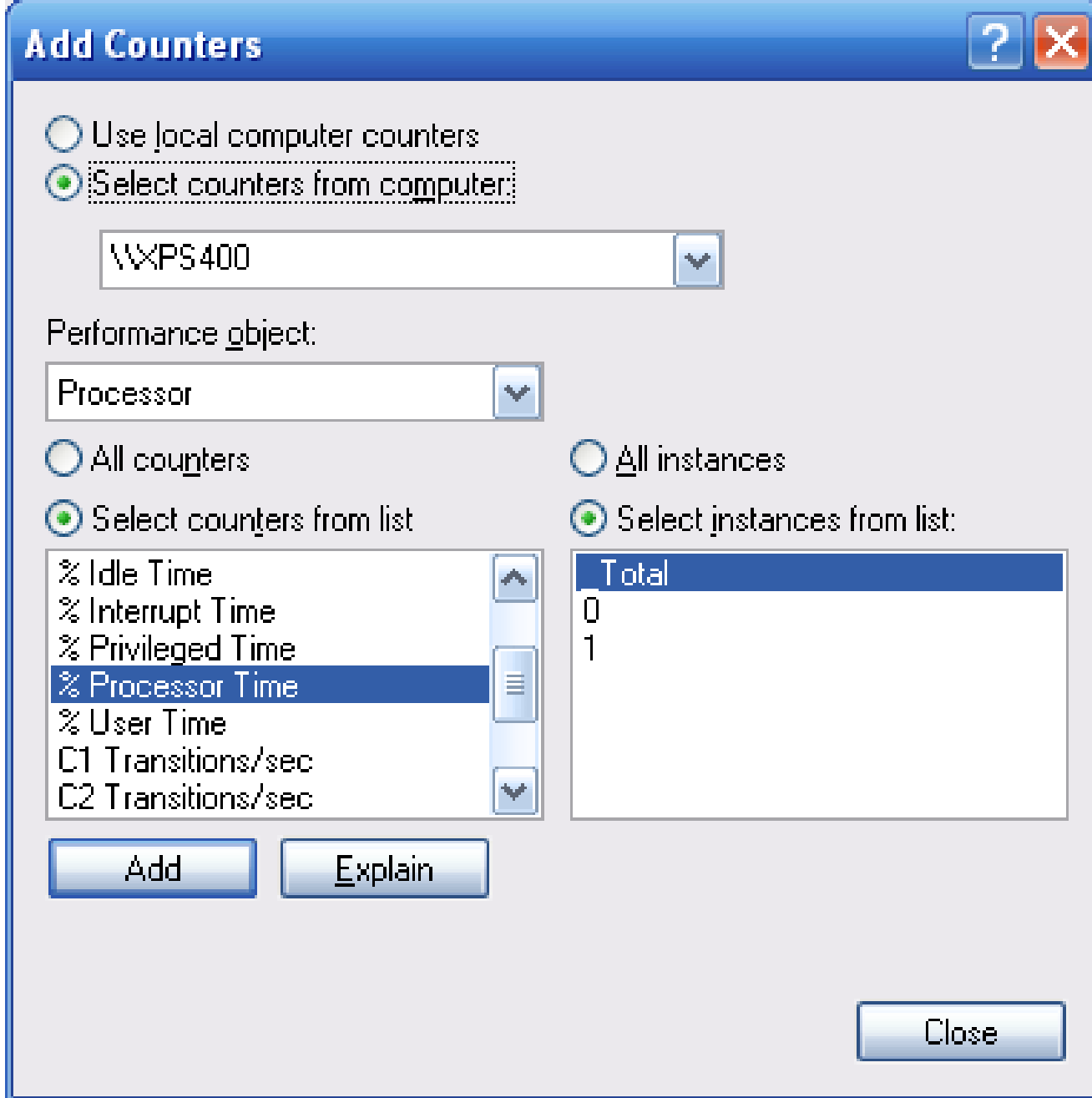
☒ Default ☐ Minimum ☐ Average
☐ Current ☐ Maximum

Appearance: 3D [v] Border: None [v]

☒ Sample automatically every: 1 seconds

☒ Allow duplicate counter instances

OK Cancel Apply



% User Time is the percentage of elapsed time the processor spends in the user mode. User mode is a restricted processing mode designed for applications, environment subsystems, and integral subsystems. The alternative, privileged mode, is designed for operating system components and allows direct access to hardware and all memory. The operating system switches application threads to privileged mode to access operating system services. This counter displays the average busy time as a percentage of the sample time.

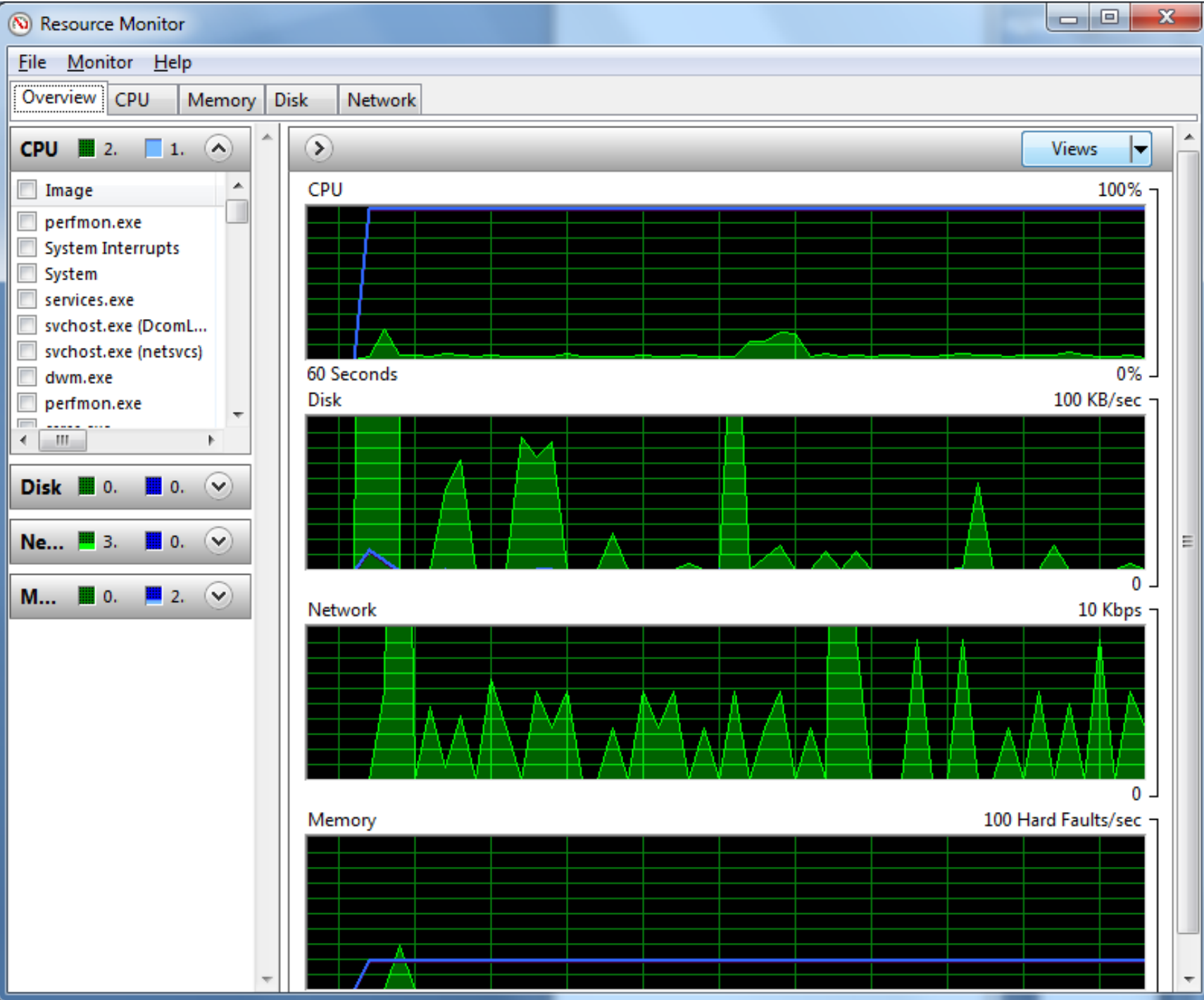
% Privileged Time is the percentage of elapsed time that the process threads spent executing code in privileged mode. When a Windows system service is called, the service will often run in privileged mode to gain access to system-private data. Such data is protected from access by threads executing in user mode.

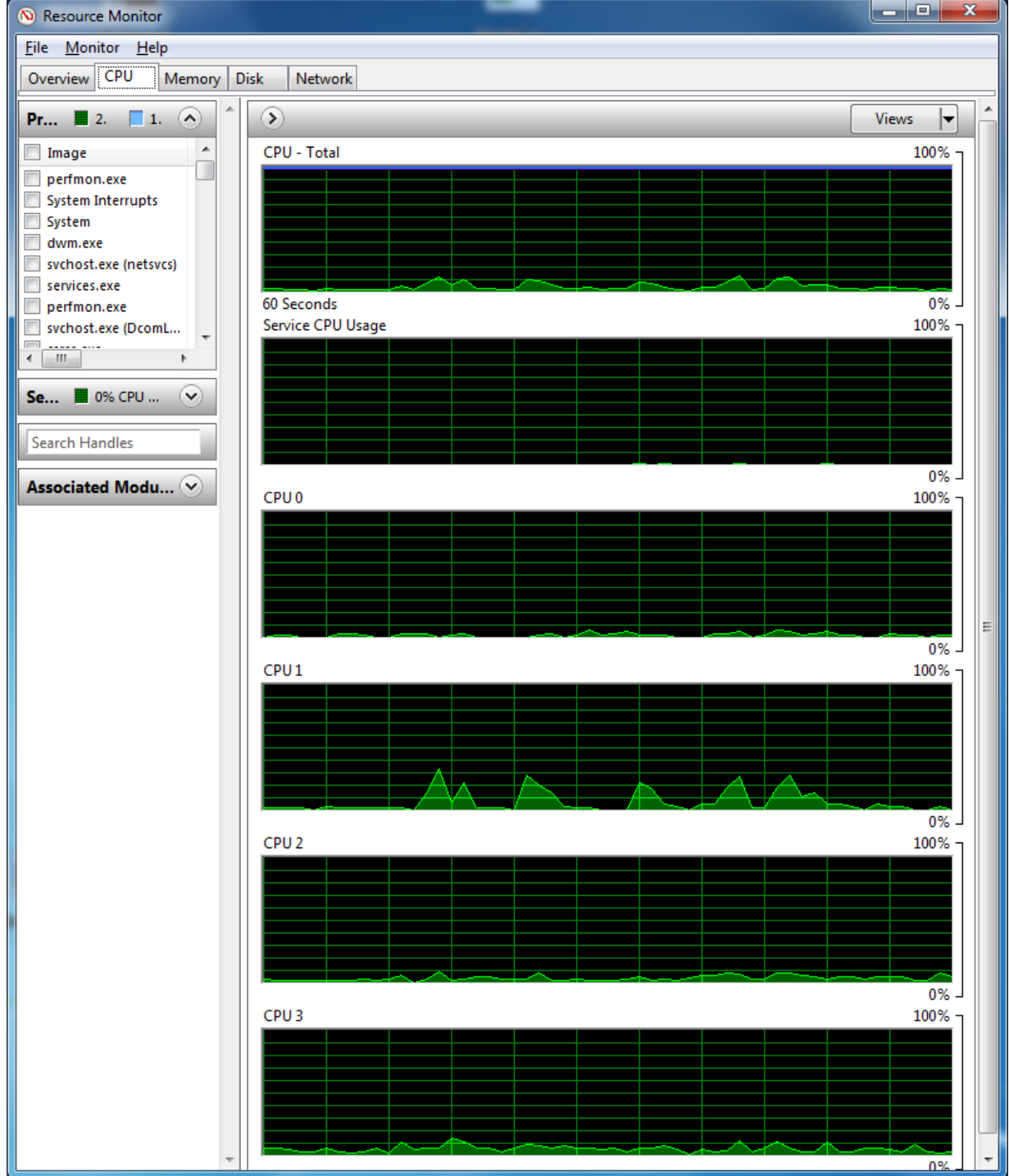
% Processor Time is the percentage of elapsed time that the processor spends to execute a non-Idle thread. It is calculated by measuring the duration of the idle thread is active in the sample interval, and subtracting that time from interval duration. (Each processor has an idle thread that consumes cycles when no other threads are ready to run). This counter is the primary indicator of processor activity, and displays the average percentage of busy time observed during the sample interval. It is calculated by monitoring the time that the service is inactive, and subtracting that value from 100%.

% Interrupt Time is the time the processor spends receiving and servicing hardware interrupts during sample intervals. This value is an indirect indicator of the activity of devices that generate interrupts, such as the system clock, the mouse, disk drivers, data communication lines, network interface cards and other peripheral devices. These devices normally interrupt the processor when they have completed a task or require attention. Normal thread execution is suspended during interrupts. Most system clocks interrupt the processor every 10 milliseconds, creating a background of interrupt activity. suspends normal thread execution during interrupts. This counter displays the average busy time as a percentage of the sample time.

Windows 7 Resource Monitor

“Windows Resource Monitor is a system tool that allows you to view information about the use of hardware (CPU, memory, disk, and network) and software (file handles and modules) resources in real time. You can filter the results according to specific processes or services that you want to monitor. In addition, you can use Resource Monitor to start, stop, suspend, and resume processes and services, and to troubleshoot when an application does not respond as expected.”





Resource Monitor

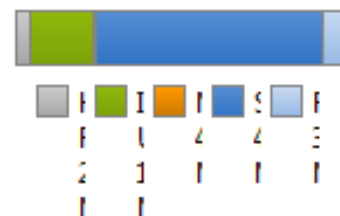
File Monitor Help

Overview CPU Memory Disk Network

Pr... 20% Use...

- ☐ Image
- ☐ svchost.exe (LocalS...
- ☐ mcshield.exe
- ☐ perfmon.exe
- ☐ svchost.exe (secsvcs)
- ☐ perfmon.exe
- ☐ svchost.exe (netsvcs)
- ☐ svchost.exe (Netwo...
- ☐ sidebar.exe

Ph... 1. 4.



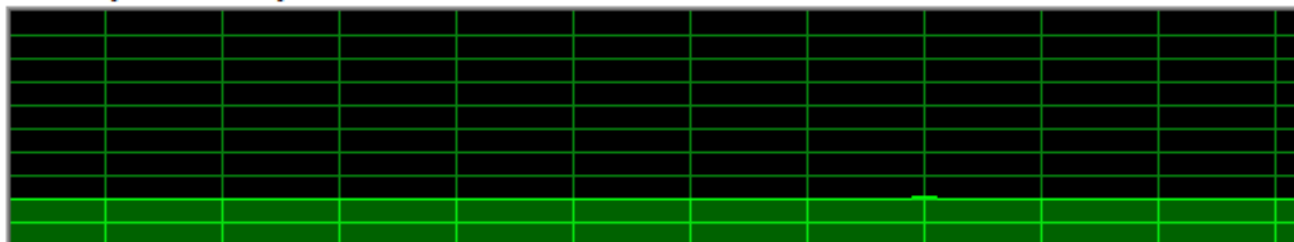
Available	4618 MB
Cached	4270 MB
Total	5887 MB
Installed	6144 MB

>

Views

Used Physical Memory

100%

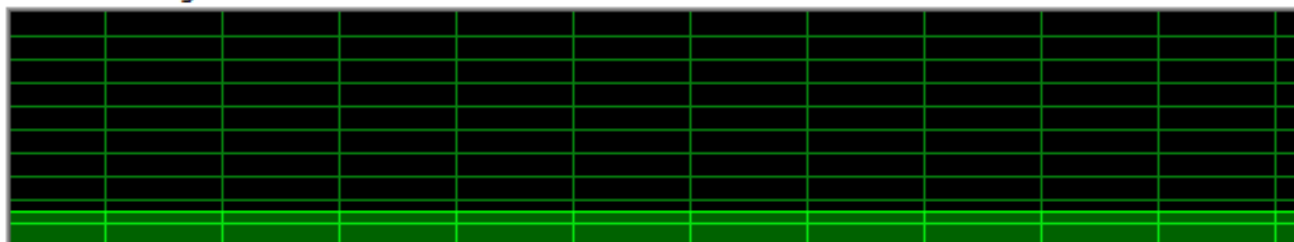


60 Seconds

0%

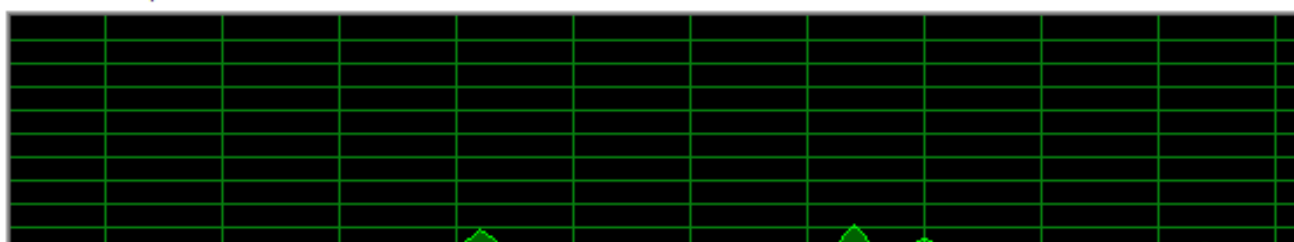
Commit Charge

100%



Hard Faults/sec

100



0

Resource Monitor

File Monitor Help

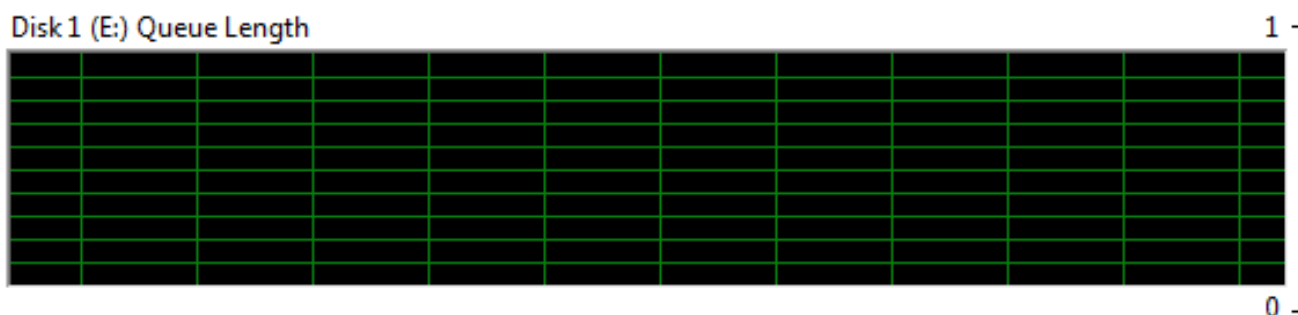
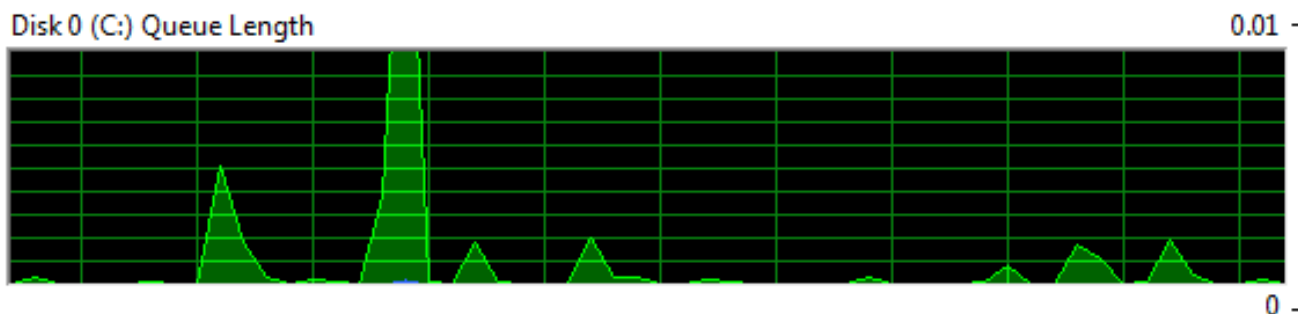
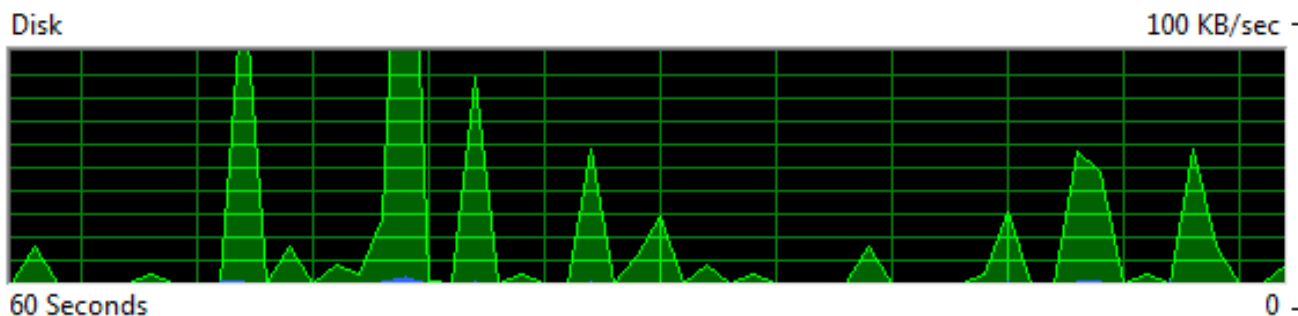
Overview CPU Memory **Disk** Network

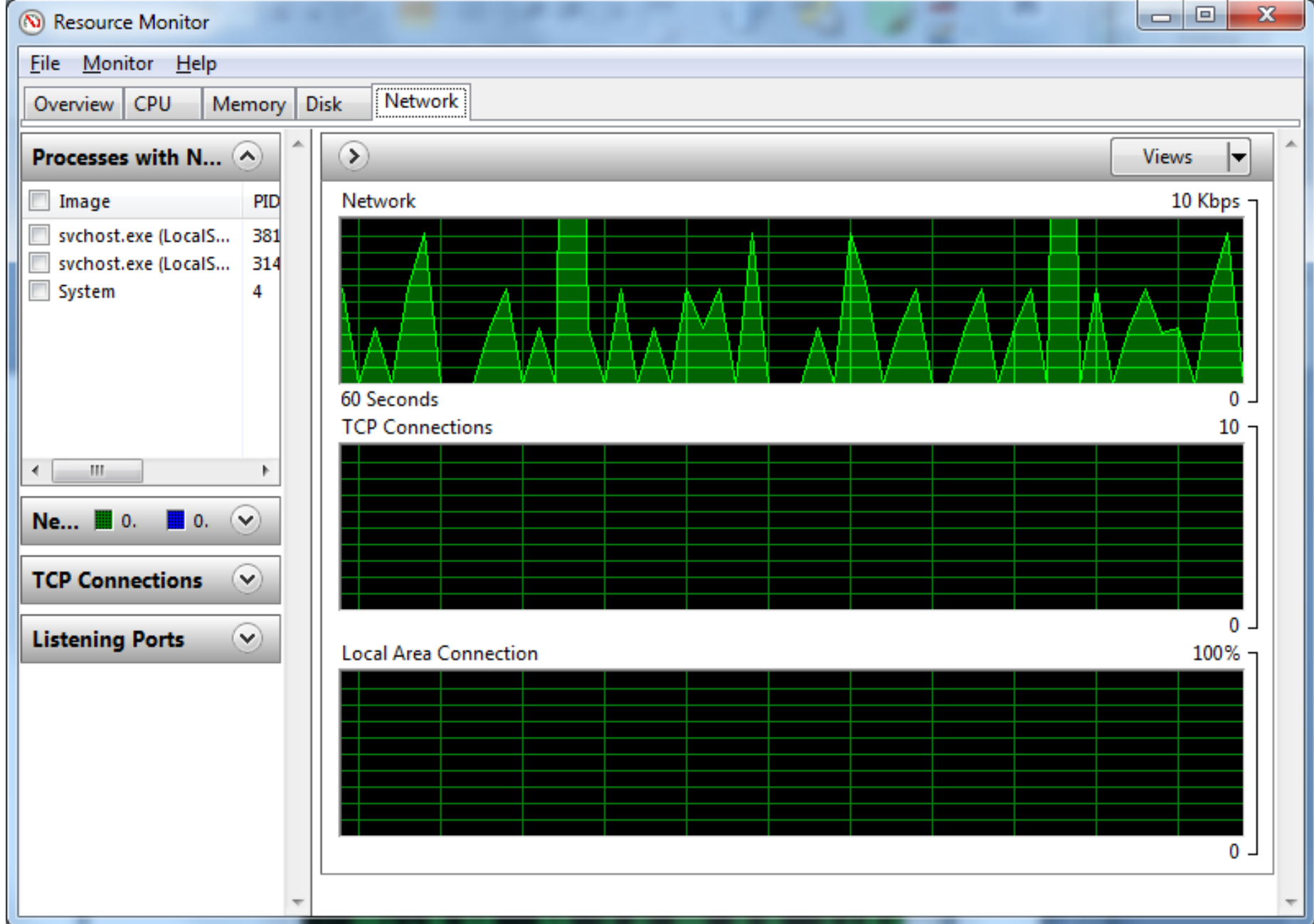
Processes with Di...

<input type="checkbox"/> Image	PID
<input type="checkbox"/> System	4
<input type="checkbox"/> taskhost.exe	275
<input type="checkbox"/> POWERPNT.EXE	322
<input type="checkbox"/> audiodg.exe	408
<input type="checkbox"/> svchost.exe (LocalS...	944

Di... 0. 0.

Storage

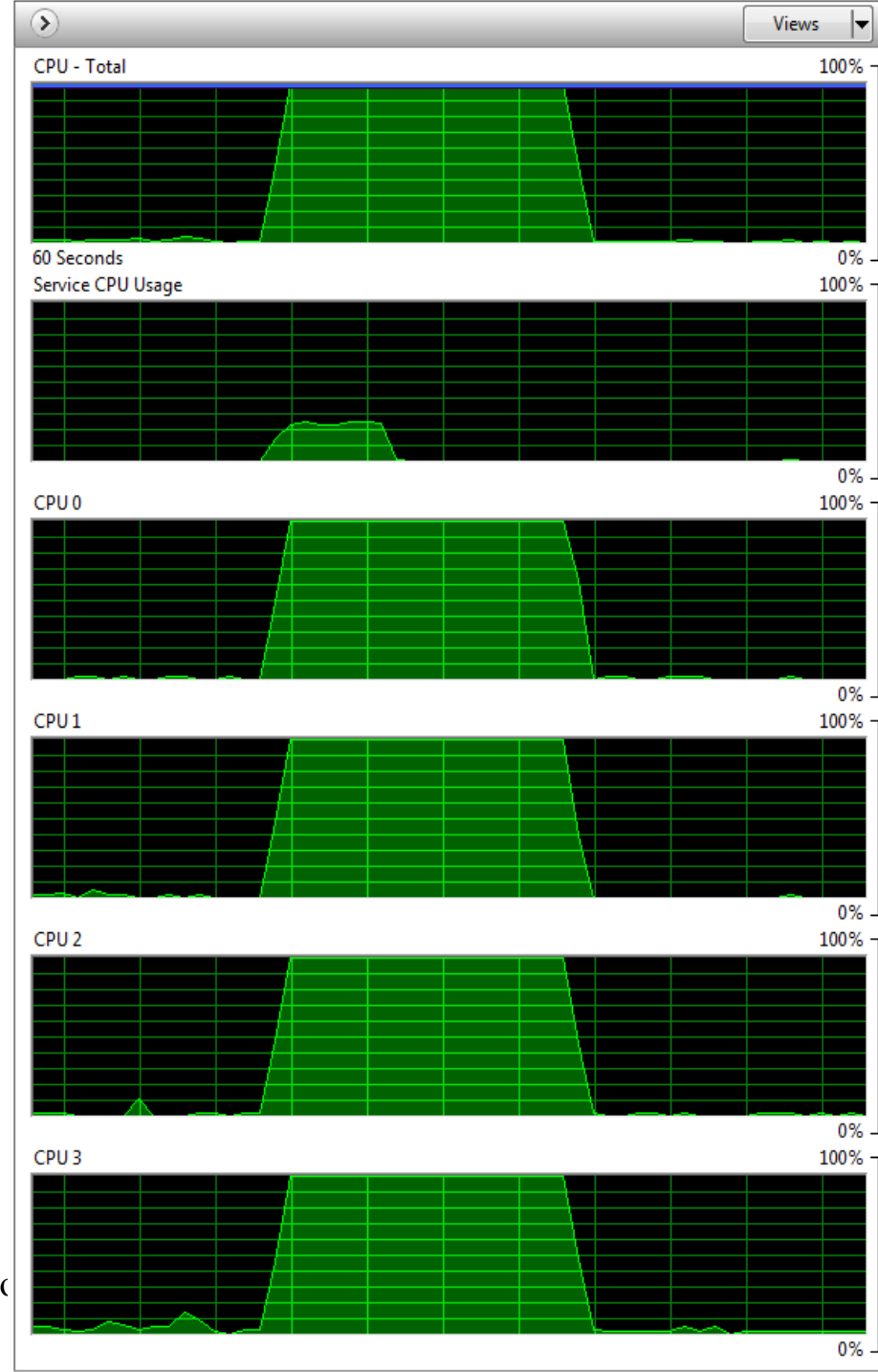




Parallel execution of four SpeedMark benchmarks

Jozo Dujmović

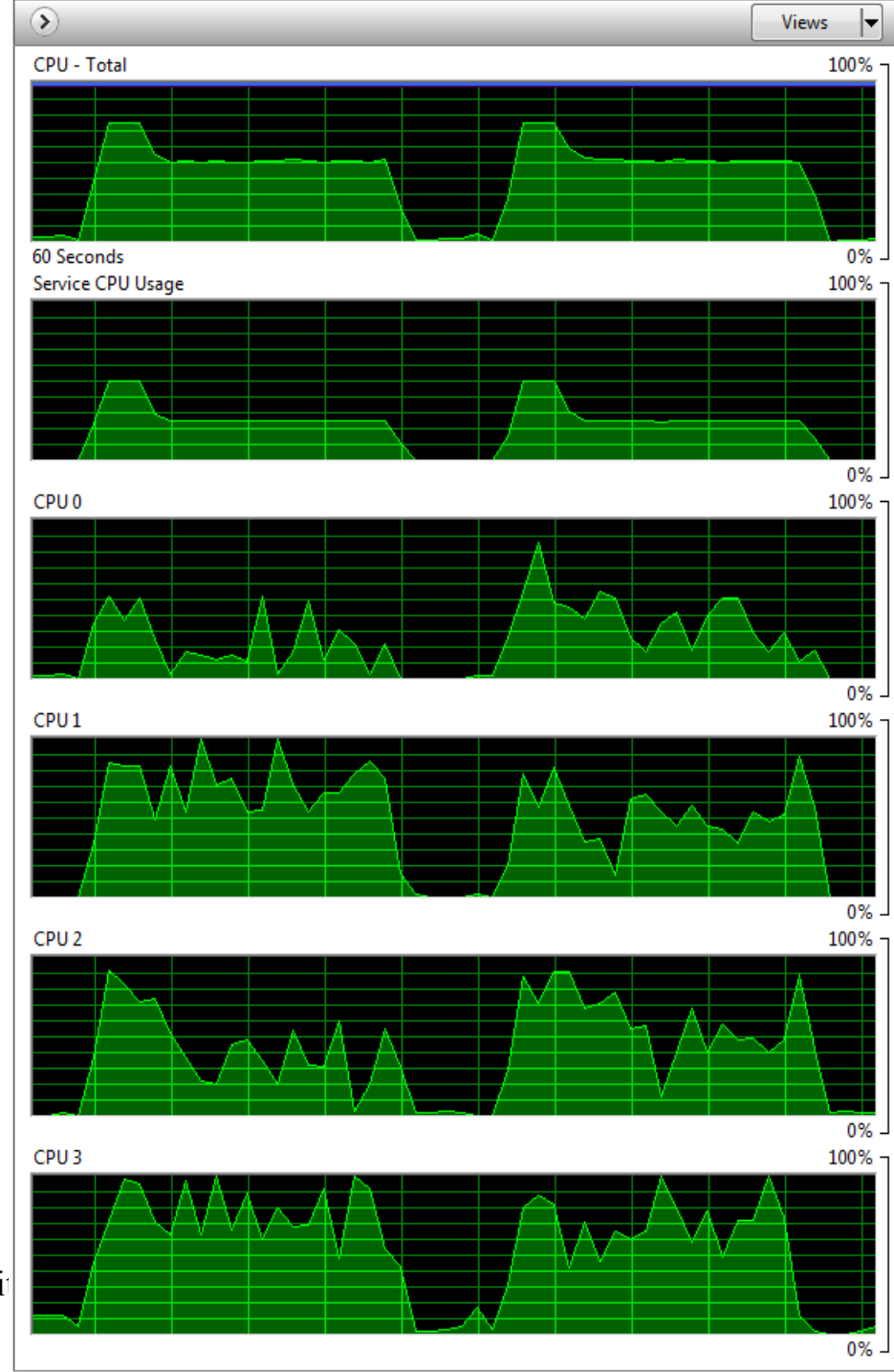
Monito



Two SpeedMark benchmarks executed two times

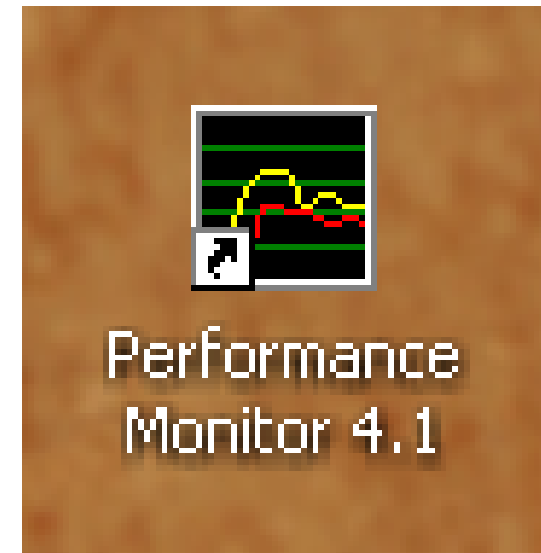
Jozo Dujmović

Moni



Hexagora Performance Monitor

- Free product (freeware)
- Version 4 (currently 4.1)
- Platform: Windows XP, Vista, Win7
- Size: small (zipped package: 300KB)
- Location:
http://www.hexagora.com/en_dw_davperf.asp
- Author: Lorenzi Davide
- Country: Italy





About Performance Monitor



Performance Monitor

Version 4.1.0

This program shows Processor, Memory, Disk and Network utilization on Windows 2000, XP+ systems.

Copyright 2002-2011 by Lorenzi Davide.

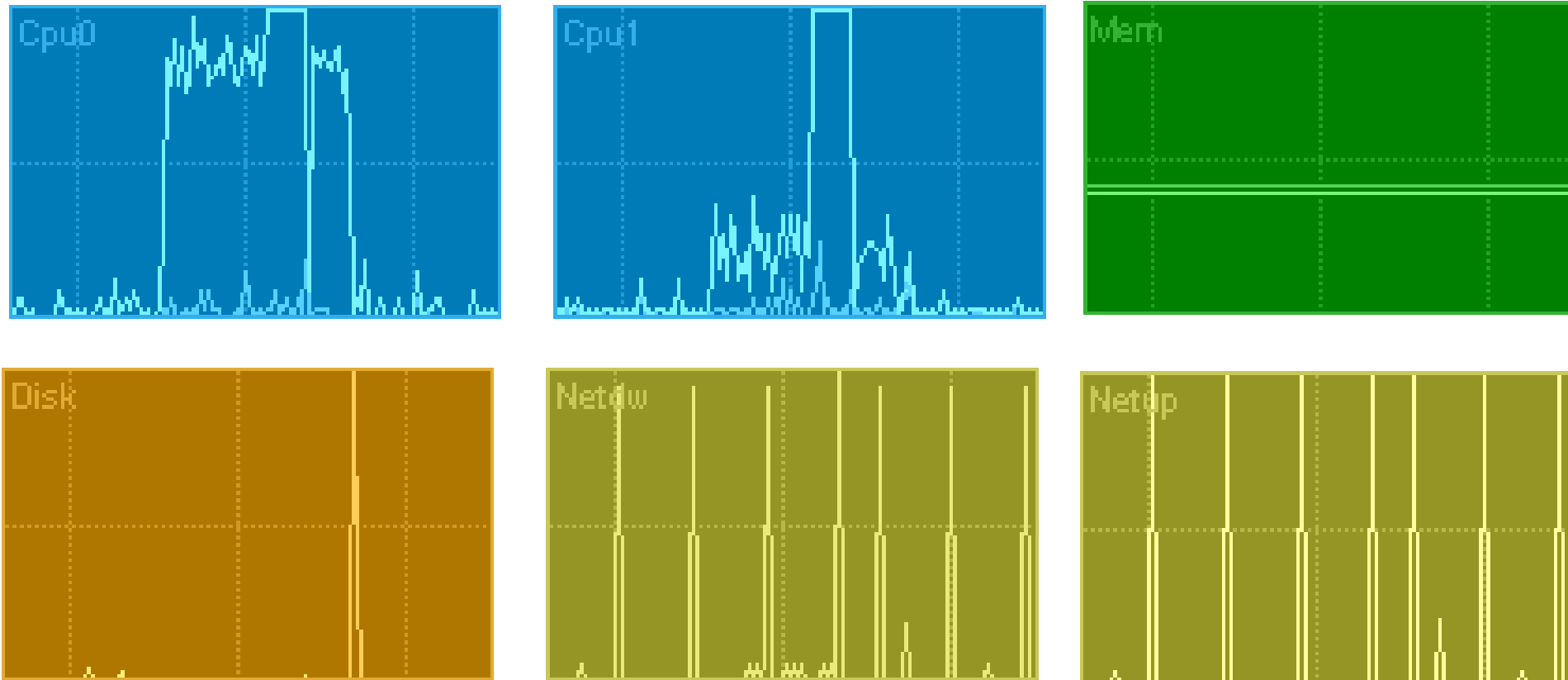
<http://www.hexagora.com>

OK

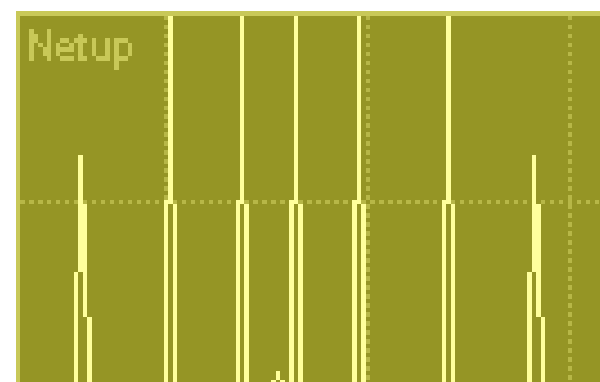
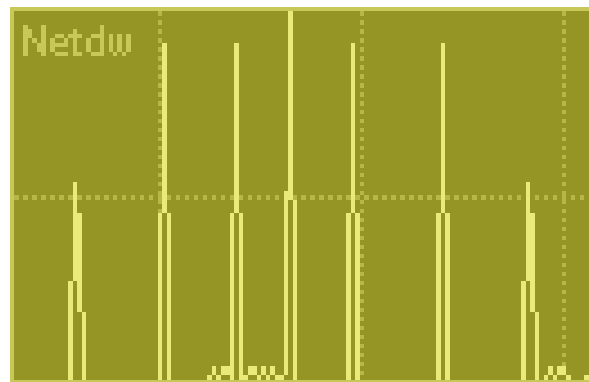
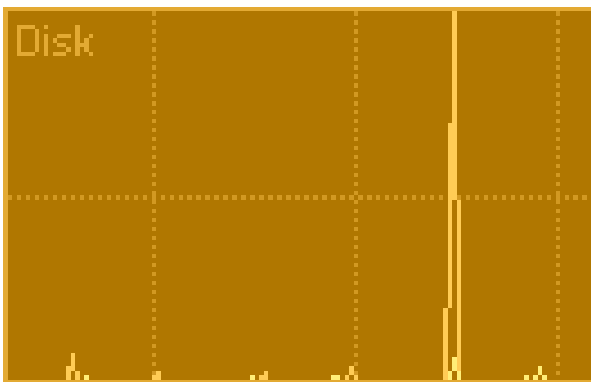
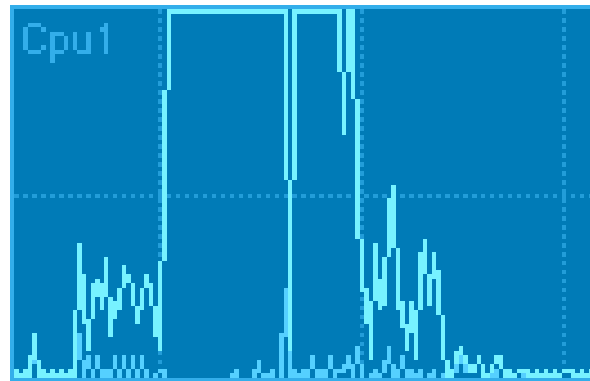
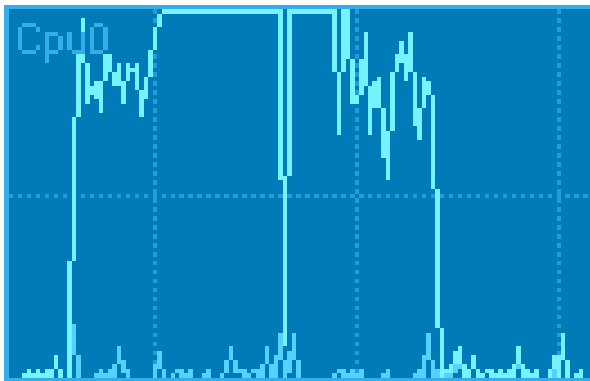
Measured indicators

- CPU utilization separately for each core
- Memory consumption
- Disk activity
- Network activity
- Each indicator is shown in a separate small graphs that are removable and anchorable on the screen

Execution of SpeedMark benchmark



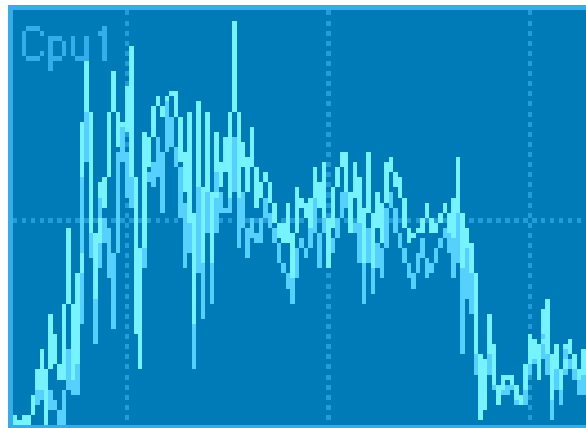
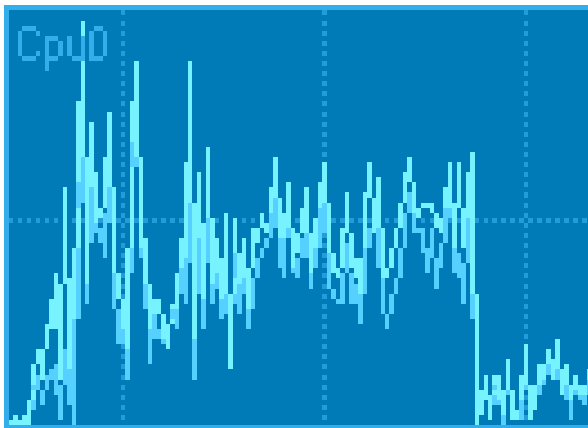
Execution of 2 SpeedMark Benchmarks



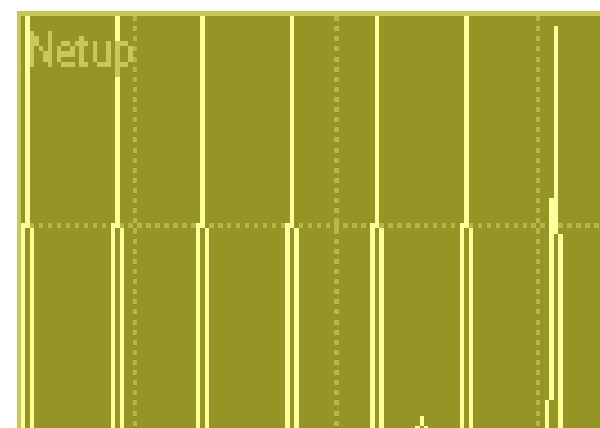
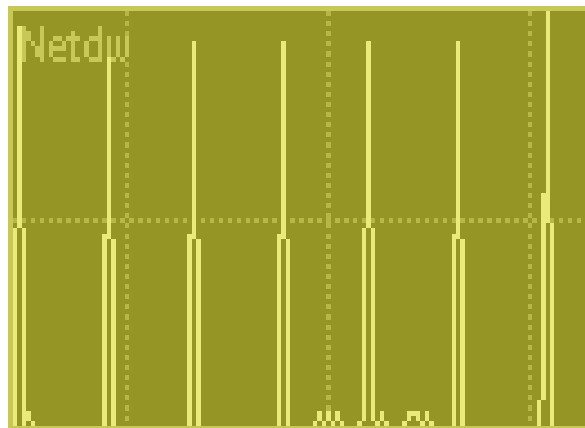
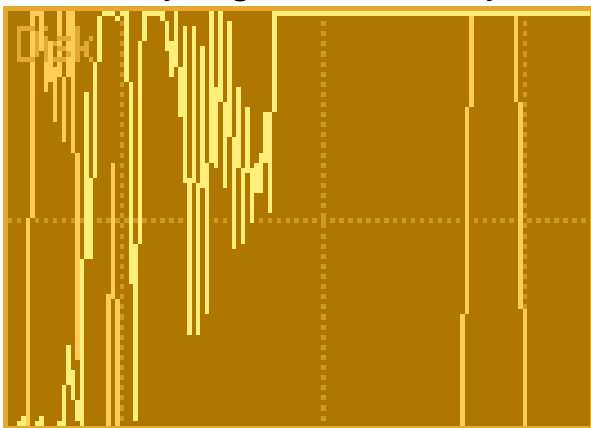
Execution of DiskMark Benchmark

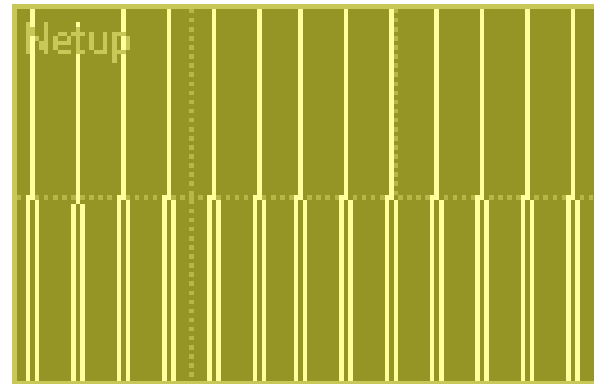
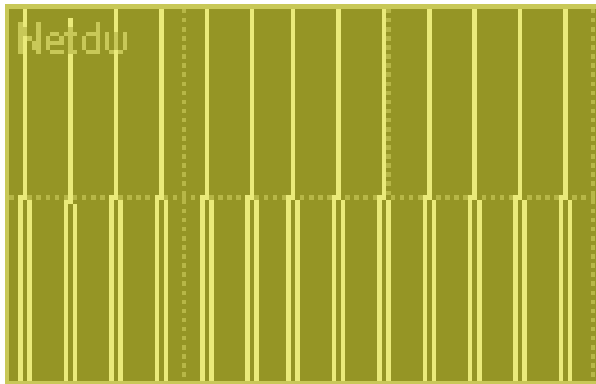
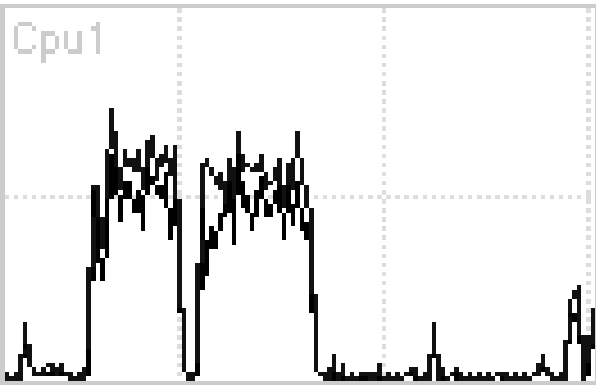
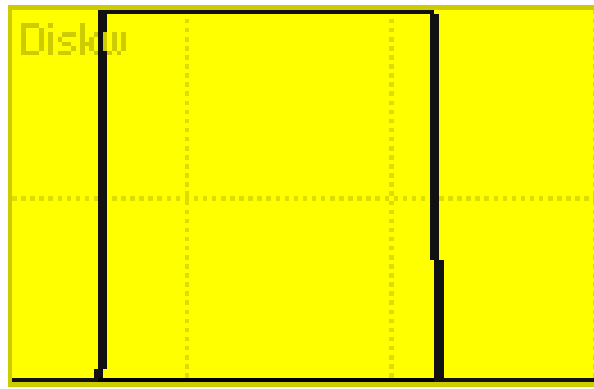
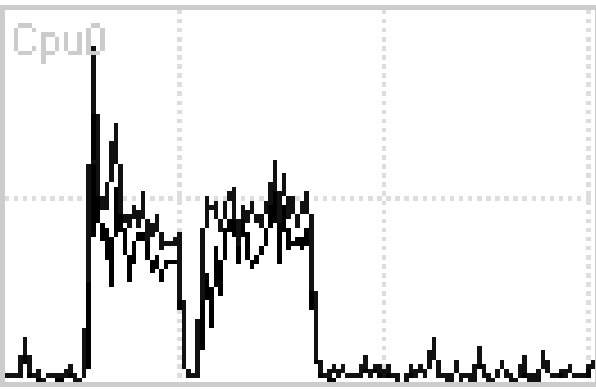
High activity of both CPU's for file processing in cache memory

Loading of memory cache



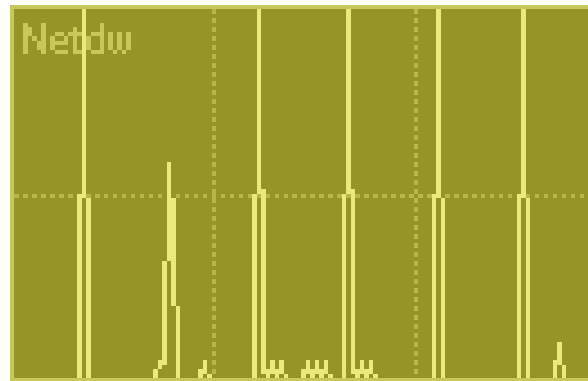
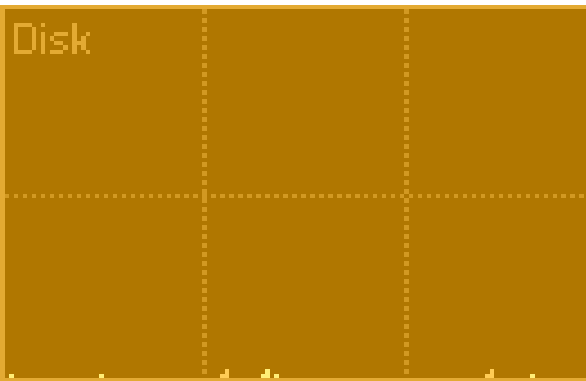
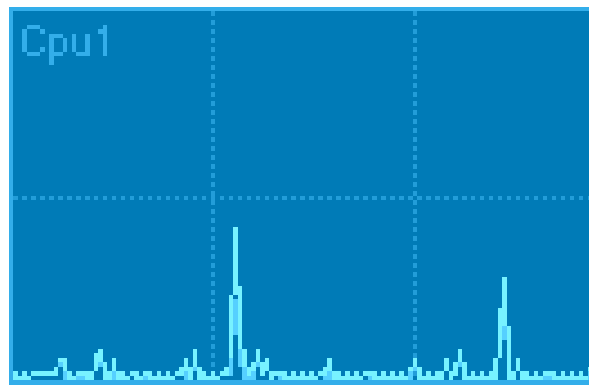
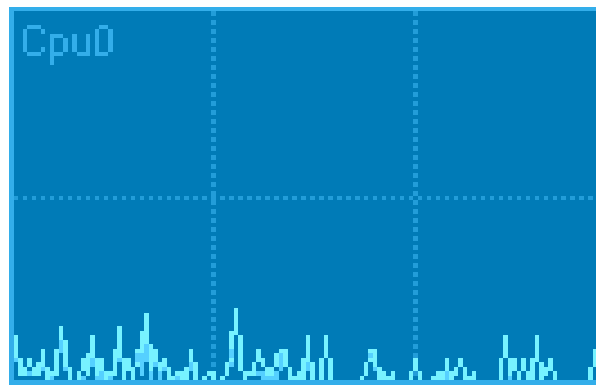
Very high disk activity





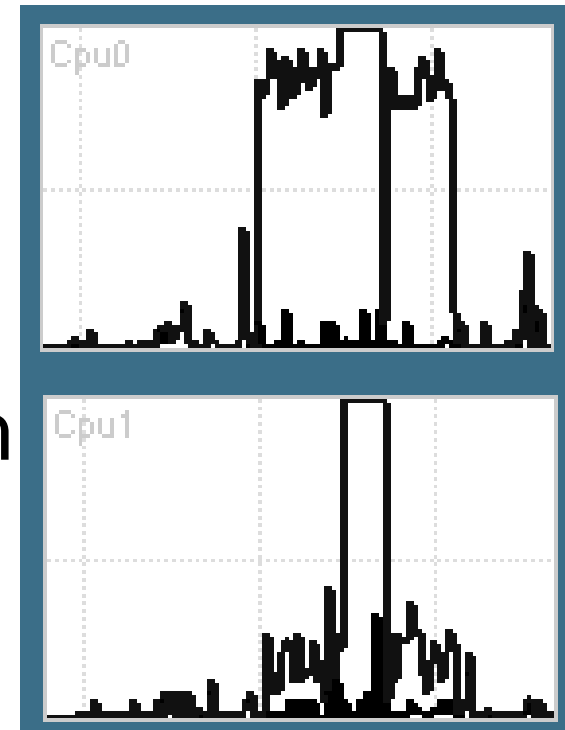
Using
memory as
a cache for
disk write
operations

Characteristic low activity pattern



Advantages

- Portability
- Adjustment of background/foreground colors
- Left mouse click on the graph shows numeric results
- Adjustable graph size
- Can run in the tray area:



Numerical results

These results are temporarily available when users brings mouse over a selected graph. Unfortunately, these results cannot be recorded in a file.

- CPU (each core)
 - Kernel [%]
 - User [%]
- Memory
 - Physical memory (absolute and %)
 - Paged memory (absolute and %)
- Disk
 - Read [%]
 - Write [%]
- Network
 - Received KB/sec
 - Max received KB/sec
 - Sent KB/sec
 - Max sent KB/sec

Disadvantages

- Provides predominantly qualitative results
- Graphs are too small and not very precise
- Default colors are not attractive
- Help is rather modest
- Results of measurement cannot be saved in a file for later processing

Settings

- General
- CPU
- Memory
- Disk
- Network



Settings...



General

Cpu

Memory

Disk

Network

☐ Autostart with Windows

☐ Pass-Through Mode (mouse actions don't interfere with panels on desktop, only the tray icon responds to mouse)

Ultra Fast - 0.5 sec



Update Interval

Above Normal



Priority



Always on Top

100%



Visibility



Always show labels

Flat

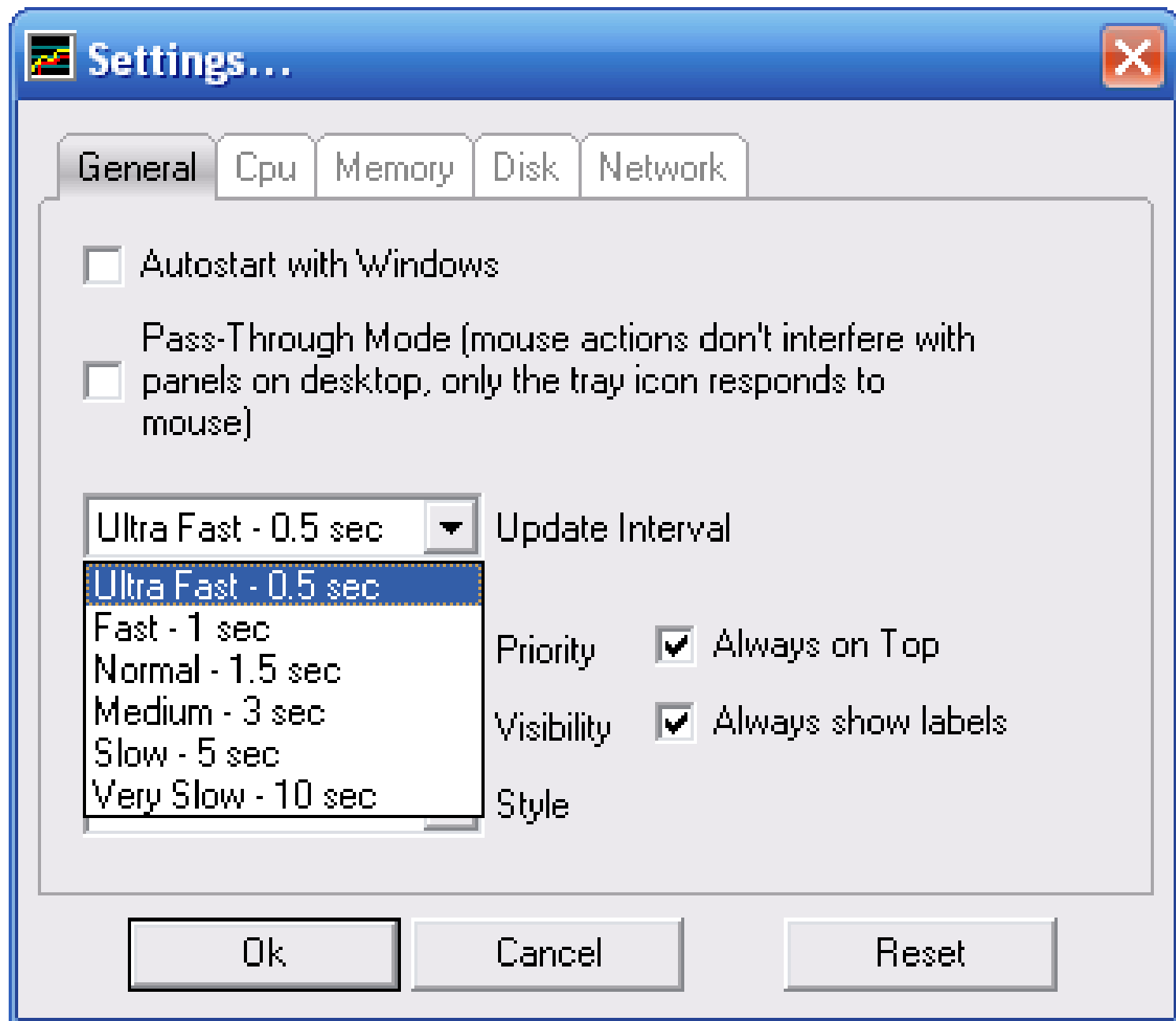


Style

Ok

Cancel

Reset





Settings...



General

Cpu

Memory

Disk

Network

☐ Autostart with Windows

☐ Pass-Through Mode (mouse actions don't interfere with panels on desktop, only the tray icon responds to mouse)

Ultra Fast - 0.5 sec



Update Interval

Above Normal



Priority



Always on Top

Below Normal

Normal

Above Normal

Visibility



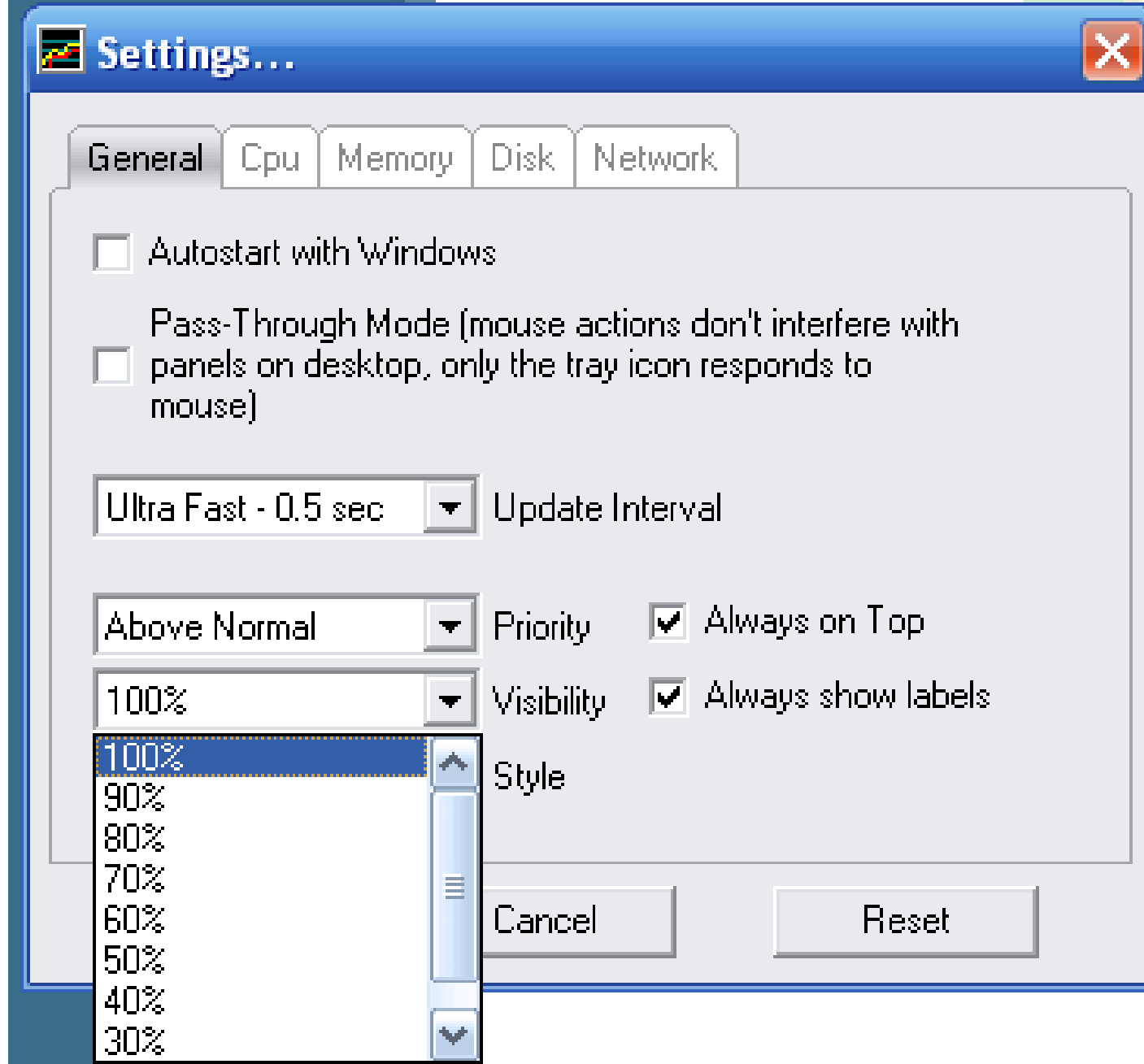
Always show labels

Style

Ok

Cancel

Reset





Settings...



General

Cpu

Memory

Disk

Network

☐ Autostart with Windows

☐ Pass-Through Mode (mouse actions don't interfere with panels on desktop, only the tray icon responds to mouse)

Ultra Fast - 0.5 sec Update Interval

Above Normal Priority ☒ Always on Top

100% Visibility ☒ Always show labels

Flat Style

Glass 1

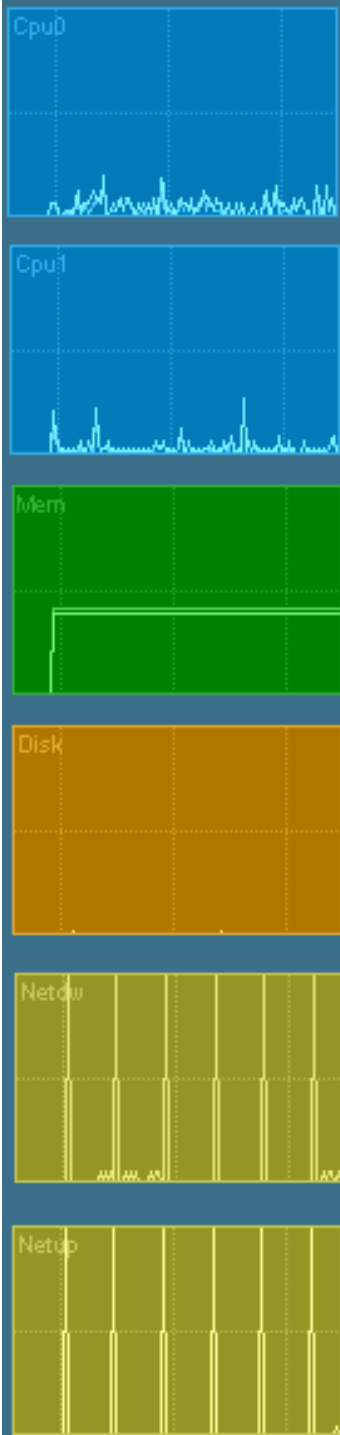
Glass 2

Flat

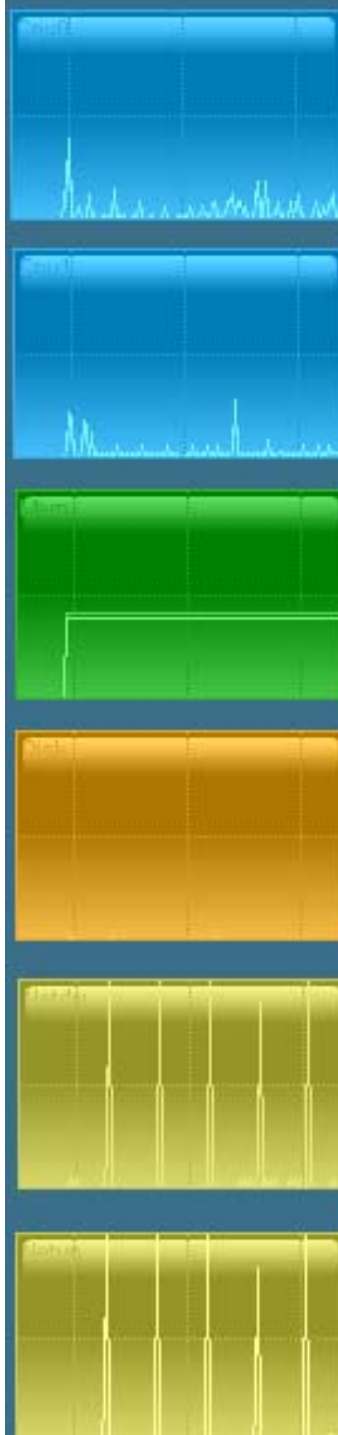
Cancel

Reset

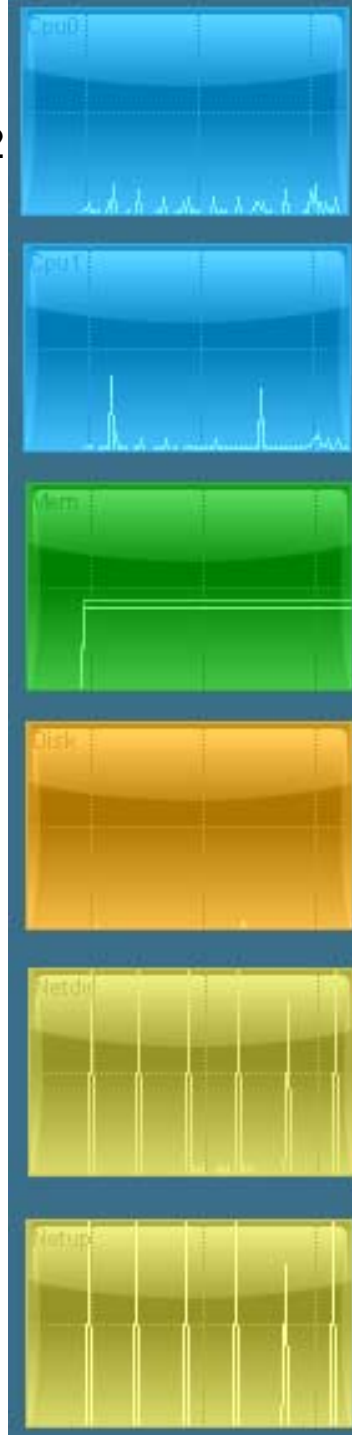
Flat



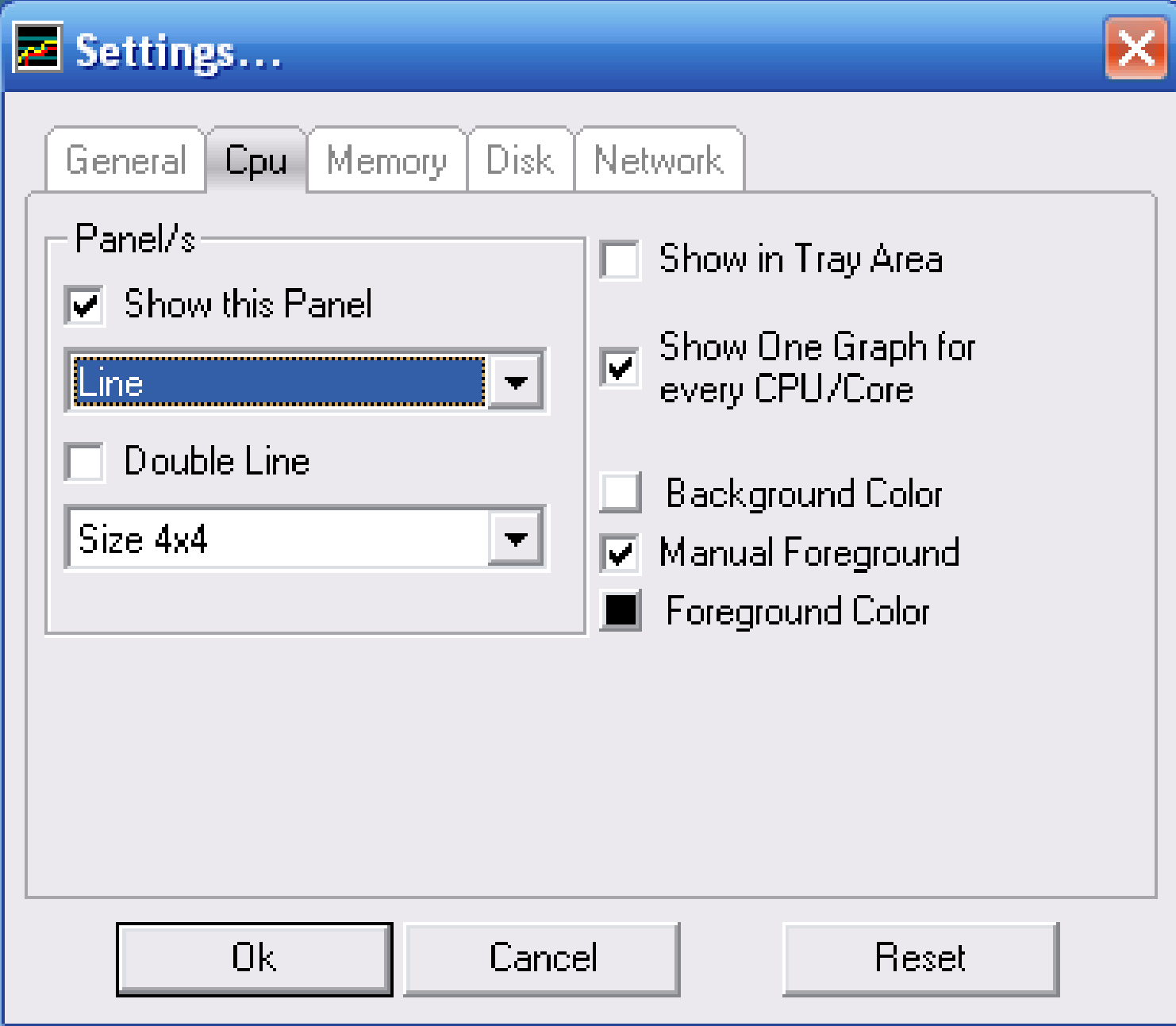
Glass 1



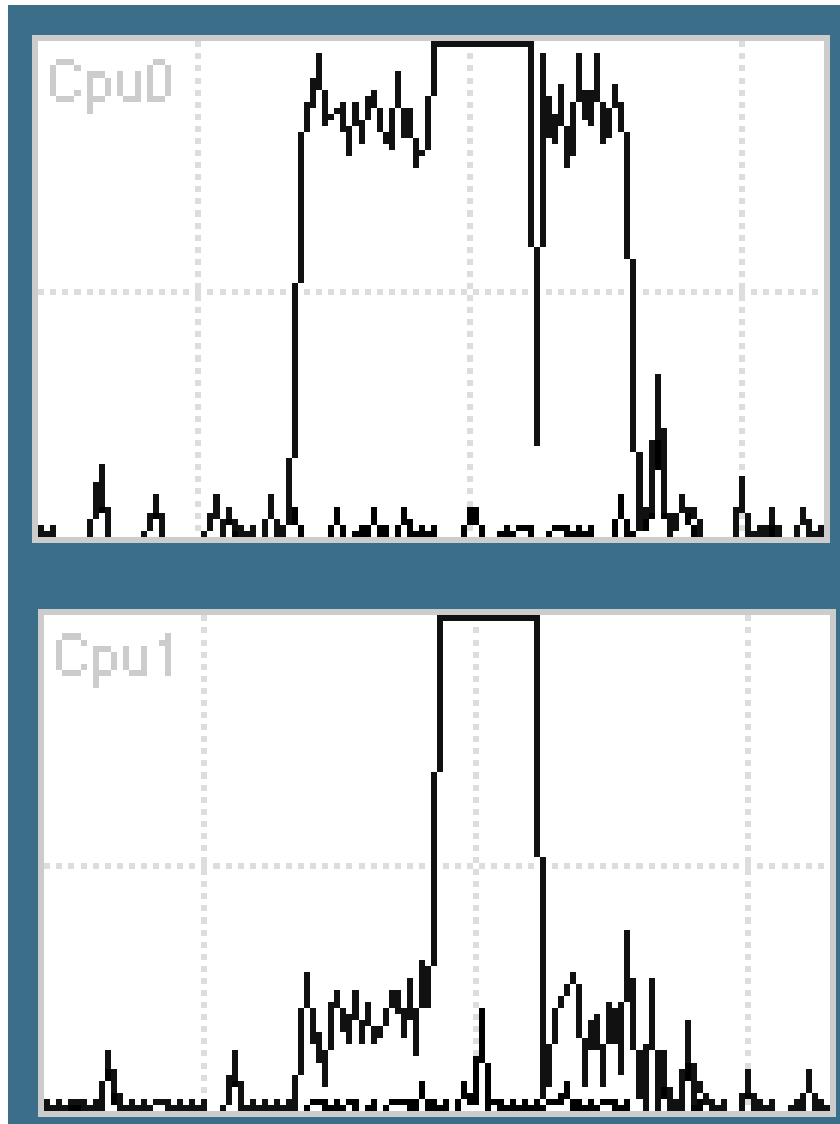
Glass 2



Jozo

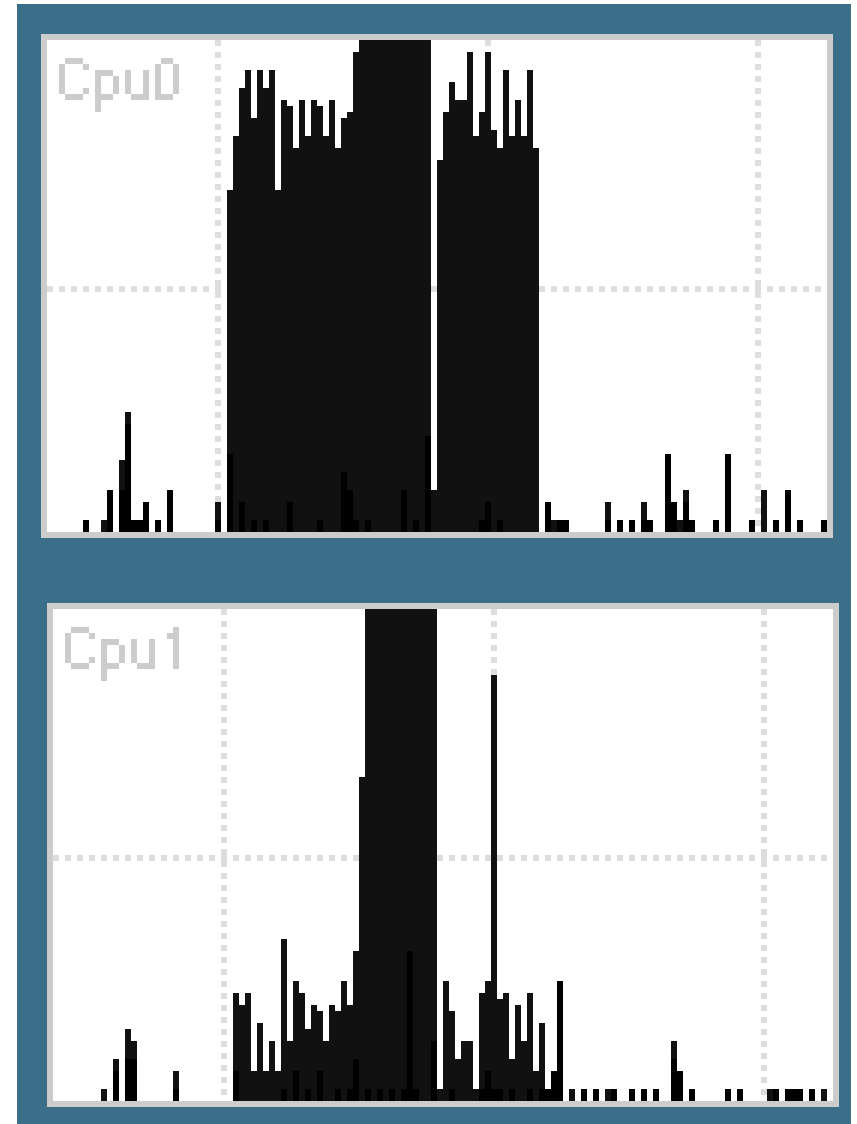


Line versus pile (SpeedMark)

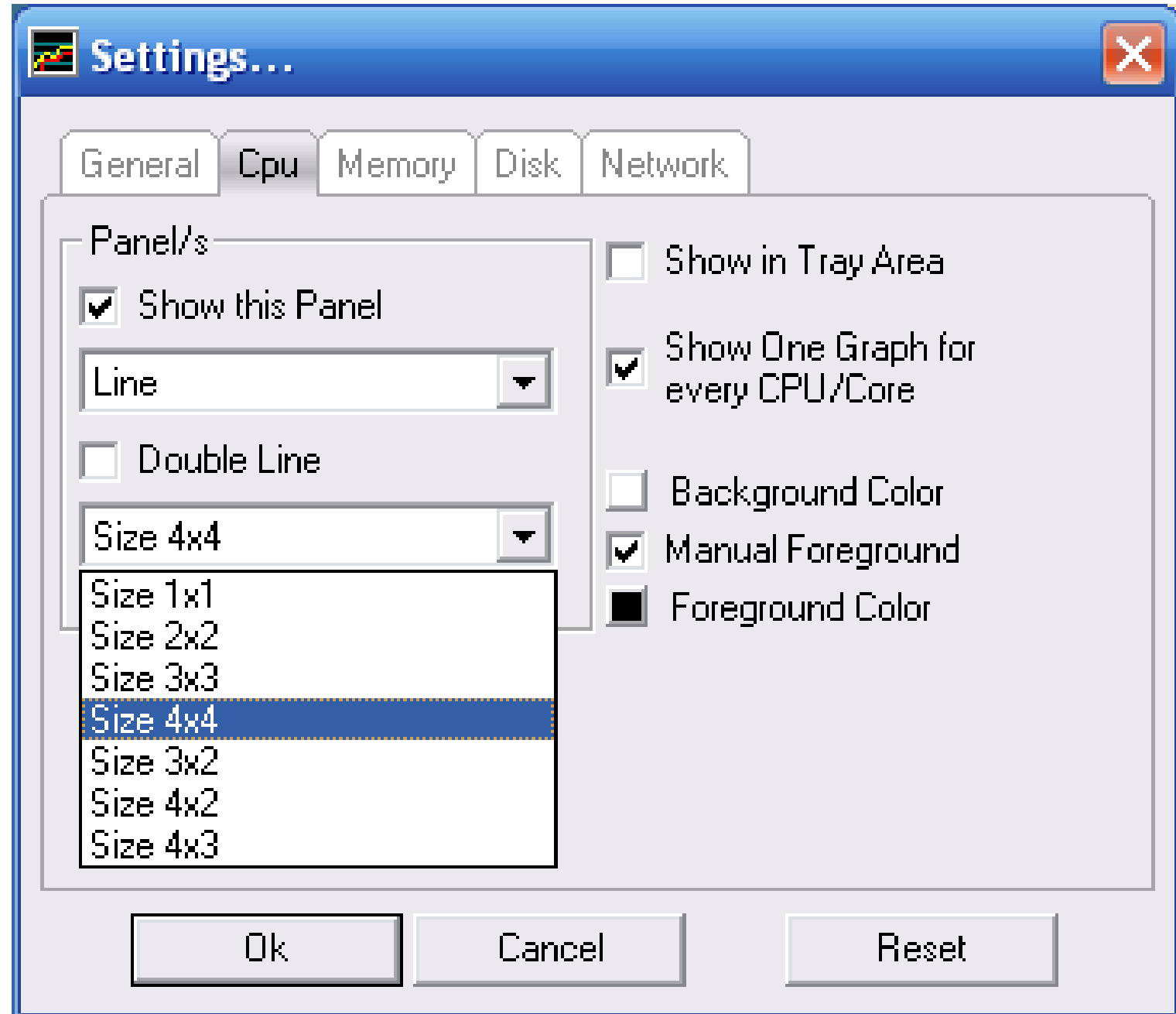


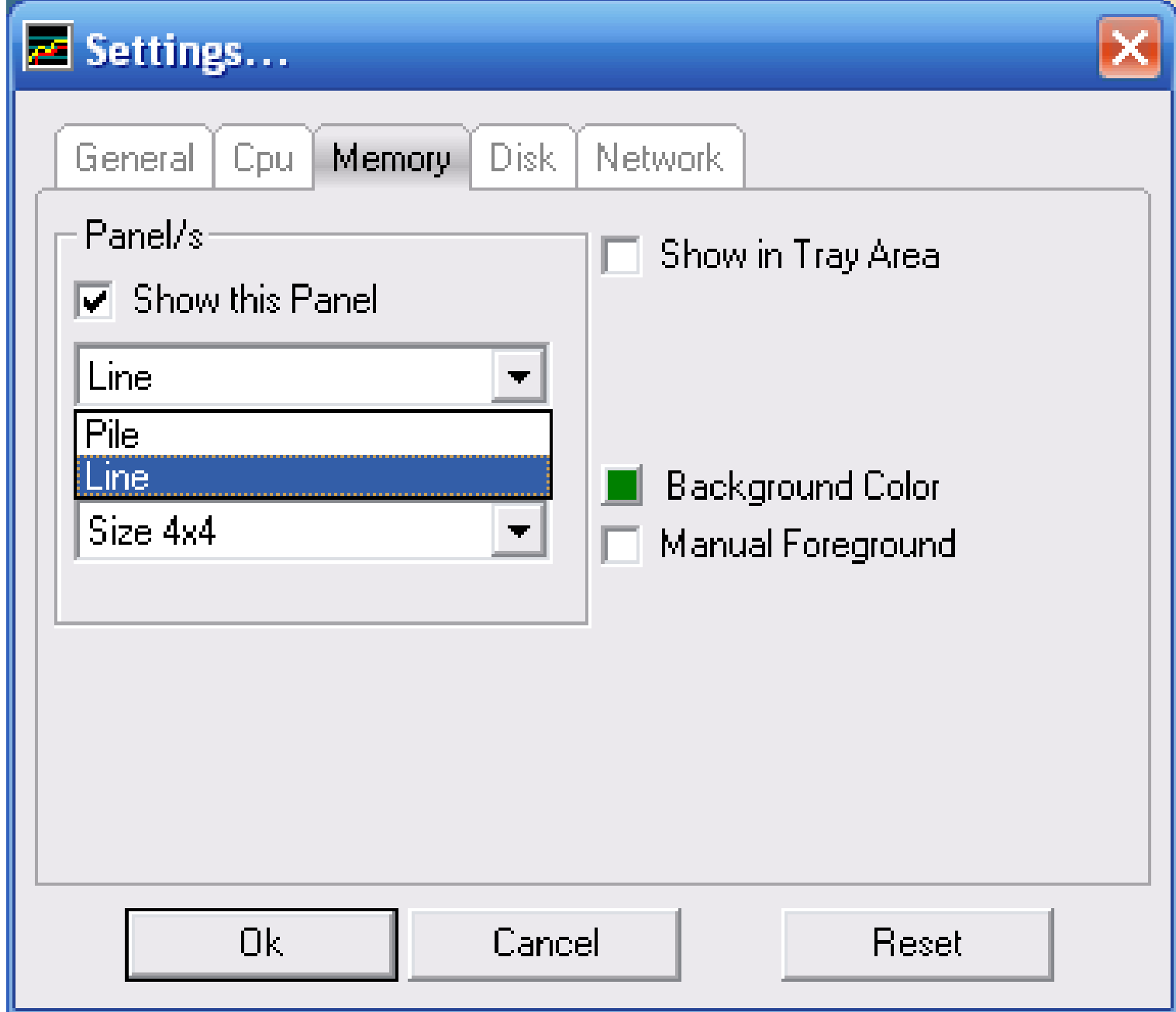
Jozo Dujmović

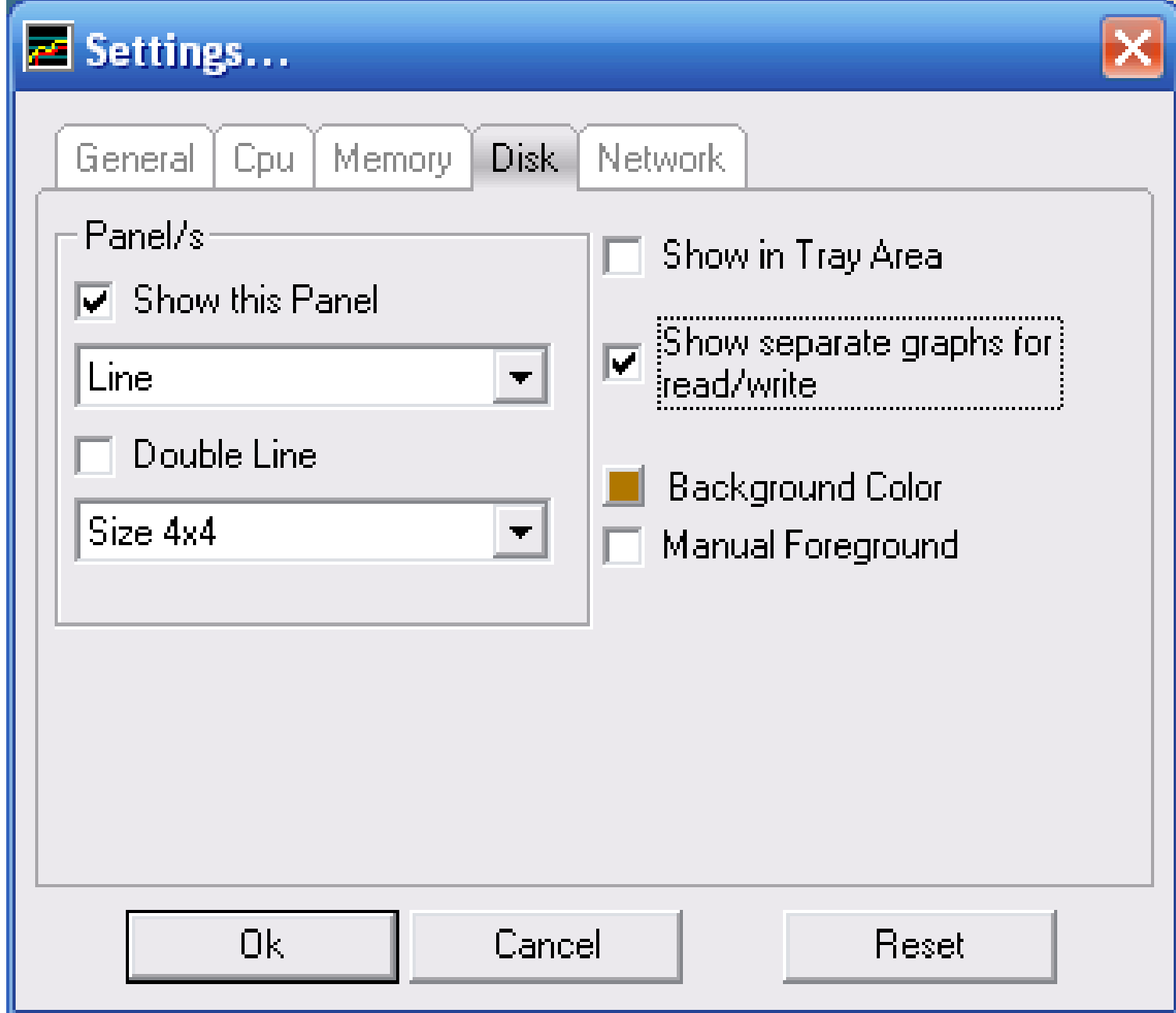
Monitors



65









Settings...



General

Cpu

Memory

Disk

Network

Panel/s

☒ Show this Panel

Line

☐ Double Line

Size 4x4

☐ Show in Tray Area

☒ Show separate graphs for up/dw

☐ Background Color

☐ Manual Foreground

☐ Ignore traffic < 1Kb

Net Interface

Max Bandwidth

(Auto)

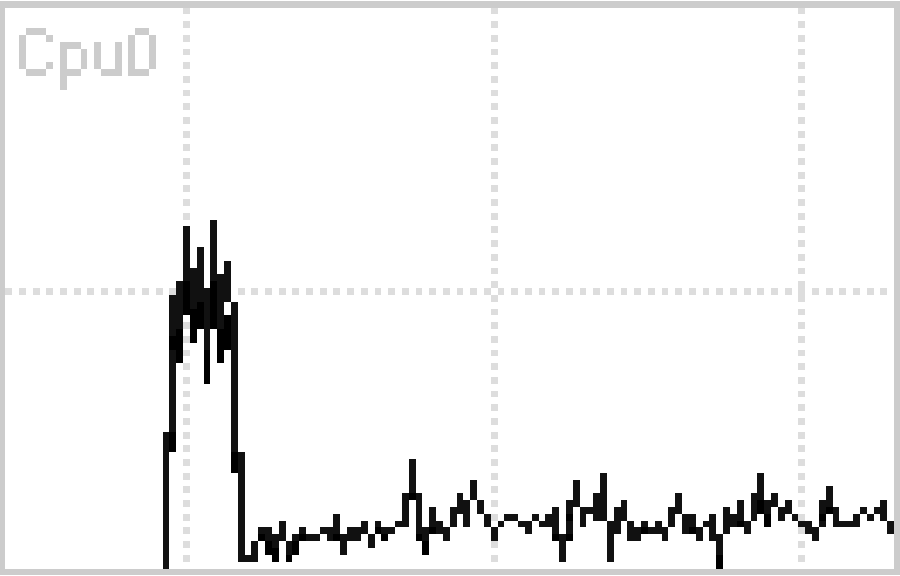
(All)

Ok

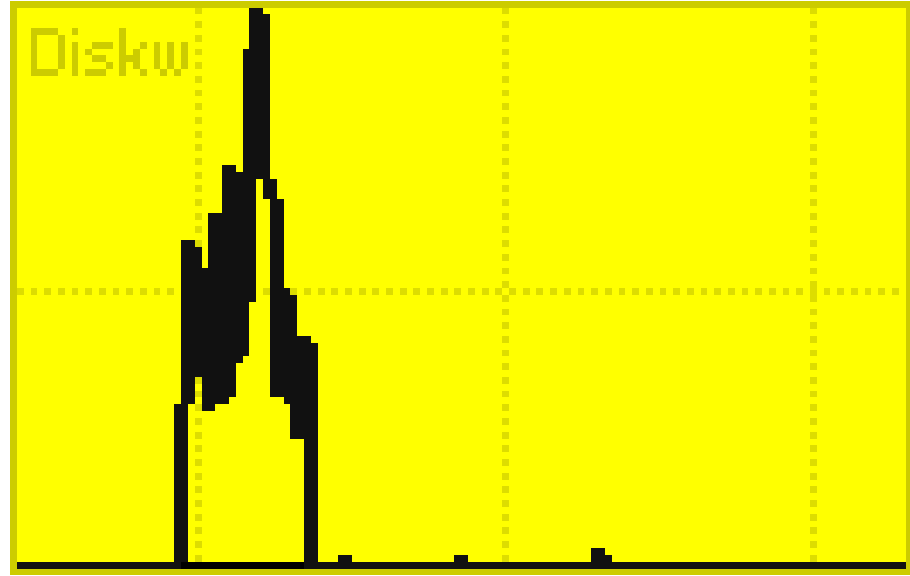
Cancel

Reset

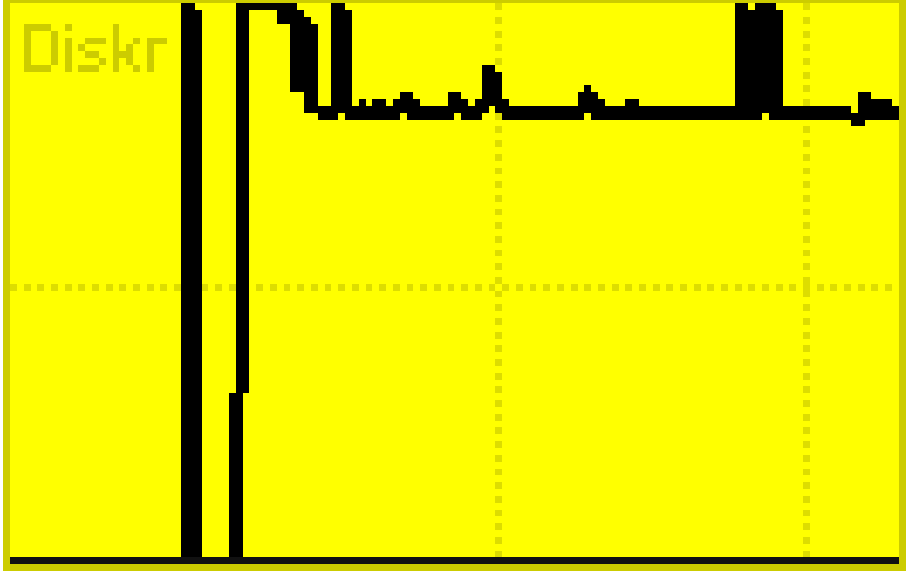
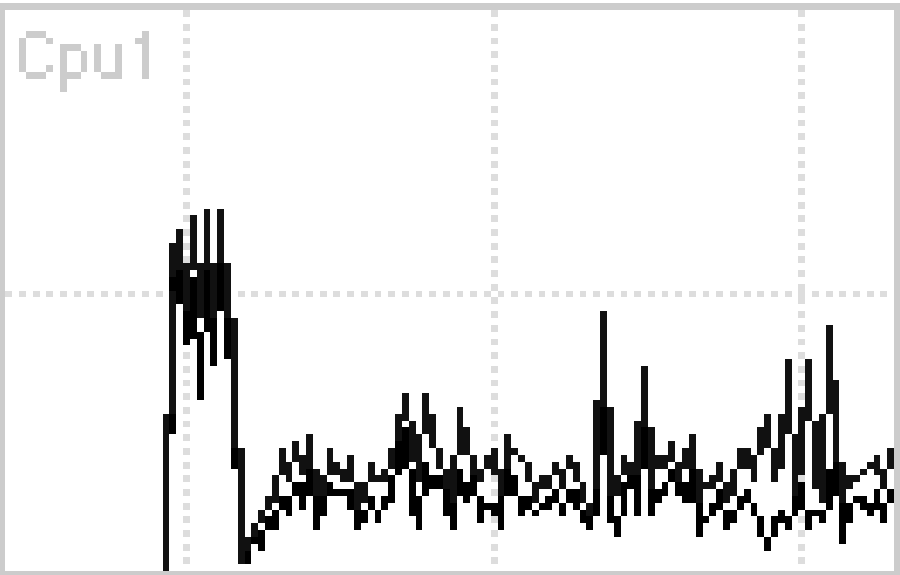
DiskMark: Sequential write and read phases



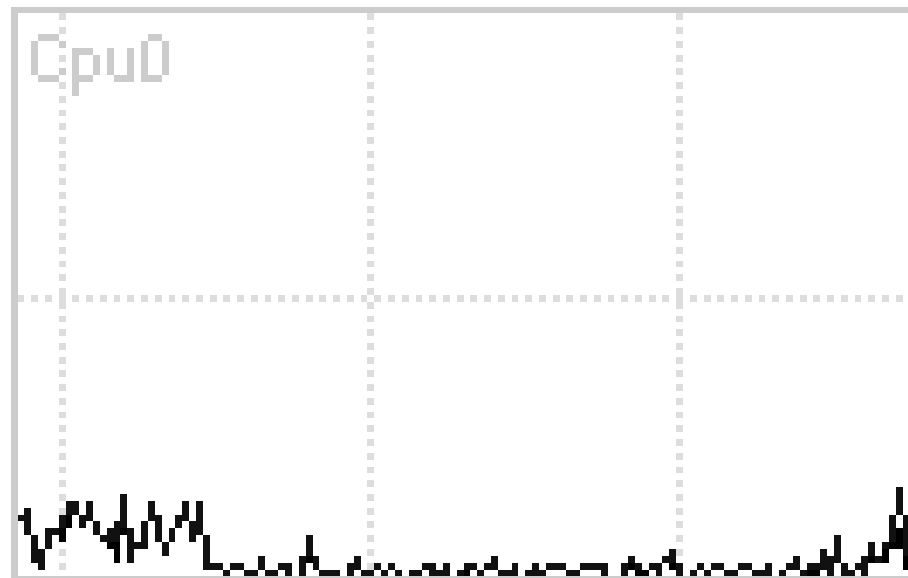
Write Sequential read



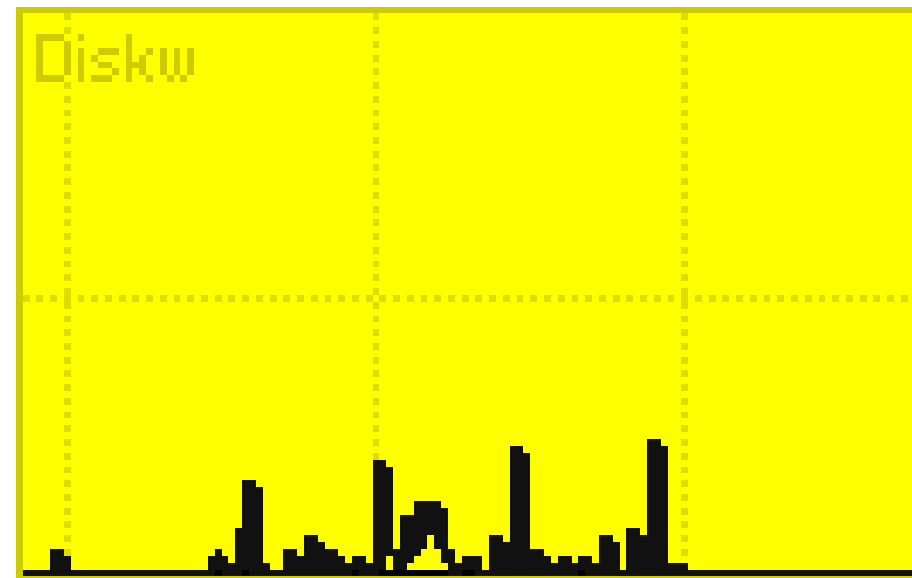
Write Sequential read



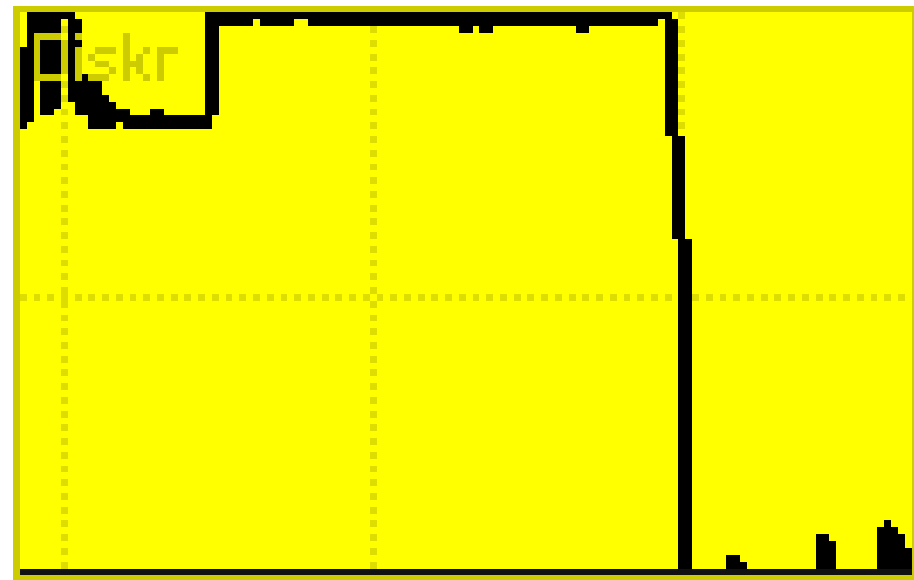
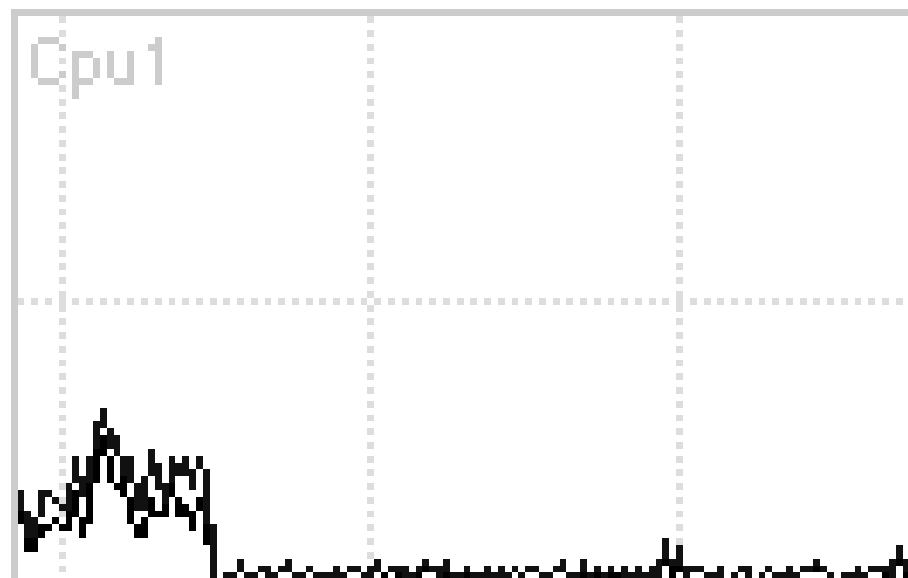
DiskMark: Random read phase



Seq read Random read ($U_{cpu} = 0$)



Seq read Random read ($U_{disk} = 1$)



Conclusions

- Performance monitors are important tools that should be active during benchmarking
- Monitoring a benchmarking process substantially contributes to understanding of performance phenomena
- Monitoring resource consumption is indispensable for system tuning and capacity planning