



# F1 Solutions August 2004



## ::REM

Hello All,

It's hard to believe that summer is more than half over. I always have grand plans for what I want to accomplish over the summer. I suppose if I can meet half my goals I'm doing fine. One goal is to extend the reach of this newsletter and JDH Information Technology Solutions. I'm glad to be adding new subscribers on a monthly basis. If you know of anyone you think would enjoy or benefit from this newsletter, please pass on the link the newsletter archive and encourage them to subscribe for themselves.



This month we take a look at some Resource Kit utilities and explore how to use them to build your own stress test kit. There is a great deal of material to cover and we'll finish up the mini-series next month.

Our book review feature is back this month with a look at an excellent reference book, no matter what your level of experience with Windows 2000 or Windows XP. I recommend this title whenever I teach an XP or Windows 2000 class.

Barring a last minute crisis, I will be attending the MCP Magazine TechMentor Conference in San Jose this September. If I had to pick one conference to attend, this is the one. Outstanding training sessions, terrific networking opportunities, great speakers and a chance to enjoy Silicon Valley. If you're attending, I hope you'll let me know. To find out more about the conference go to <http://techmentorevents.com>.

As always, I appreciate your continued support and welcome all comments, suggestions and feedback at [jhicks@jdhitsolutions.com](mailto:jhicks@jdhitsolutions.com).

## Product Feature – Sygate Personal Firewall

I pretty much live full time with my laptop. My work takes me to all sorts of networks. Some trustworthy, some not. I also test a lot of software and like to know when the software is "reaching out" somewhere. It should come as no surprise that I need a solid personal firewall product. I've been a long time fan of Sygate's Personal Firewall (SPF). This product is targeted for small to mid-size companies. There is a free standard version which I've been using (if it meets my needs why not?) and a slightly more full featured Pro version. The Pro version offers intrusion detection, advanced VPN support as well as a number of other features. Sygate offers other products for larger enterprises that require centralized desktop firewall management.

SPF works right out of the box and with minimal configuration. I have created additional application specific rules and customized the logging feature, but that is about it. A system tray icon provides quick access to the program. With a quick mouse

Volume 1, Issue 6

August 2004

### Special points of interest:

- Sygate Personal Firewall
- Windows XP/2000 Answer Book
- Stress Test
- WMI Computer Properties

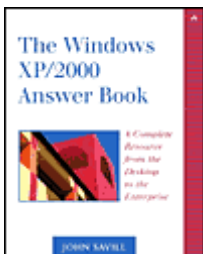
### Inside this issue:

Web Crawling	2
IT Bookshelf	2
Tech Tutor	3
10 Minute Scripts	4



*“Excessive organizational and business-process complexity is the root cause of many IT problems. Complexity is sometimes driven by misalignment between business needs and IT goals. In other instances, IT goals are aligned with an ill-defined business model. For example, in service-based businesses such as insurance, a poorly planned product architecture drives fragmentation, complexity, and high cost in the systems required to support the business model.”*

—Booze Allen  
Hamilton



## Sygate Personal Firewall - cont'd.

click I can also block or allow all traffic. Great when troubleshooting a connection problem or detecting an attack.

I especially like the notification alerts I get when a service or application attempts to access the network.

The main interface provides graphs depicting network traffic and attack history. The bottom window displays what programs and services are currently using network resources. This window is customizable to hide standard Windows services. But it's

nice to be able to tell at a glance who or what is using your network connection.

Sygate also offers a free online scan of your system so you can see how secure you really are.

I used Zone Alarm in the past and it had a similar feature set. However, I felt that Zone Alarm was really targeted for a home user. Sygate Personal Firewall is much more complex and consequently more powerful. It all depends on how much control you want. If you have a solid un-

derstanding of firewall concepts and TCP/IP, and are looking for a rock-solid desktop firewall product, I encourage you to take a look at Personal Firewall. You can learn more and download the product at <http://www.sygate.com>.



## Web Crawling - RealTimePublishers



realtimepublishers.

The Internet is an obvious source of almost unlimited technical information. While I enjoy reading a good computer book, some valuable topics never make it to the book shelf. Fortunately, there is a place that publishes online texts on a wide variety of subjects and in “real time”. RealTimePublishers.com offers free online books as they are being written. If you find a title of interest, you can read each chapter as it is written and posted to the web. Given how quickly technology changes, this “real-time” approach has its advantages, especially when you consider how long it takes a printed book to make it to your local bookseller. Of course, nothing is totally free. Each title is sponsored by a vendor with a vested interest in the topic. You might be subjected to some marketing efforts, but the odds are that if you are interested in the topic, you might be looking at the vendor's products as well. The books are often authored by independent experts in their respective areas of interest, not necessarily by the sponsor. Membership is free and all chapters are in PDF format. Crawl over to <http://www.realtimepublishers.com> and see for yourself.

## The Windows XP/2000 Answer Book

by John Savill (Addison-Wesley 2003)

The subtitle for this book is “A Complete Resource from the Desktop to the Enterprise”, and is it ever. At over 1200 pages it is a formidable reference book. This title is a point in time snapshot of the Windows 2000 FAQ web site which grew from the equally popular Windows NT FAQ site. The book is organized by category. Each entry is a FAQ such as “How do I enable folder name completion?” or “How do I enable unsolicited Remote Assistance?” This is probably not the type of book you want to read from start to finish but it is an excellent source of information for common and questions and problems you might encounter in Windows 2000 or XP.

Don't let the title fool you, this is not just a book for desktop support staff, there is plenty of information on Windows 2000 server and enterprise services. I hope you'll take a look at this impressive book and think about adding it to your book shelf.

## Tech Tutor – Stress Test

The Windows Resource Kit has many goodies and this month we want to look at two command utilities, CONSUME.EXE and CREATFIL.EXE. We will look at these tools and explore how you can utilize them to stress test your servers. **WARNING:** These utilities can have a disastrous impact on server performance. **DO NOT** use on any production system until you have evaluated the system in a test environment and fully understand the implications and have a formal stress test plan in-place. Both tools must be installed and run locally. At a command prompt type the “consume /?” and “createfil /?” to see the help and usage information.

Consume.exe creates a temporary resource bottleneck for a specified period of time. You can temporarily consume physical memory, page file, disk space, cpu time or the kernel. For example, to simulate a system running out of physical ram, open a command prompt and type:

```
Consume -physical-memory -time 10
```

This will temporarily consume all physical memory for approximately 10 seconds. Unfortunately, there is no way to consume more than one resource type from a single command. You have to open two separate command windows and execute the programs. Or write a batch file like this:

```
@echo off
::stress.bat
start cmd /c "consume -physical-memory -time 30"
sleep 5
start cmd /c "consume -cpu-time -time 30"
```

Of course, you could simulate usage by consuming resources in a more “random” fashion like this:

```
@echo off
::stress2.bat
Call :UseIT 40
Sleep 30
Call :UseIT 30
Goto :EOF
:USEIT %1
consume -physical-memory -time %1
```

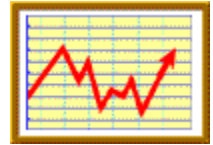
As a stress test script, you will want to increase the time for resource utilization and add as many Call and Sleep combinations as necessary. You might also want to consume other resources as well. For true randomization, you can use a vbscript file like this:

```
'CPUStress.vbs
set wshShell=CreateObject("WScript.Shell")
upperbound=30 'the longest time to run in seconds
lowerbound=5 'the minimum time to run in seconds
iLoops=3 'number of times to loop through
strCMD="consume -cpu-time -time "

for x=1 to iLoops
 'wscript.Echo strCMD & iRandomNumber
 wshShell.Run strCMD,0,True
 wscript.Sleep iRandomNumber*1000
next

Function iRandomNumber
Randomize
 iRandomNumber=Int((upperbound - lowerbound + 1) * Rnd + lowerbound)
end function
```

Next month we'll look at Createfil .exe and explore not only how to stress out your file server but how this tool can bail you out when space gets tight.



*“When you do not know what you are doing and what you are doing is the best—That is inspiration.”*

*- Robert Bresson*

**JDH Information Technology Solutions**

4233 Lafayette Road  
Jamesville, NY 13078

Phone: (315) 256-7023  
Fax: (315) 295-2534  
E-mail: jhicks@jdhitsolutions.com

---

WE'RE ON THE WEB AT  
HTTP://  
WWW.JDHITSOLUTIONS.COM

---




---

If you wish to no longer receive this newsletter, please send an email to:

newsletters@jdhitsolutions.com

Use a subject line of Unsubscribe.

**This newsletter was created with  
Microsoft Publisher 2003**

**Copyright 2004 All Rights Reserved  
JDH Information Technology Solutions, Inc.**

**All trademark names are property of their  
respective owners**

**Disclaimer:**

**All code and script samples are provided  
'as is' with no warranty, either expressed  
or implied.**

**Use at your own risk and test thoroughly in  
a non-production environment.**

**Mission Statement**

*Our mission is to provide outstanding information technology consulting services and solutions to our clients utilizing a value-oriented approach. We recognize that most information technology projects are goal not hour driven. Our aim is to leverage technology to solve our clients' business challenges in the most cost-effective manner possible. We succeed when they succeed.*

**10 Minute Scripts**

WMI is a powerful tool. Sometimes you don't know what you want until you see it. This script will display all properties for the specified computer that have a value defined. Different systems may populate additional properties. If you want to see all properties, defined or otherwise, comment out the IF THEN ELSE statement.

The script defaults to the local computer but you can specify any Windows 2000 or later system where you have administrative rights.

```
'ComputerProperties.vbs
'usage: cscript|wscript computerproperties.vbs

dim objSrv, prop, wshNetwork
On Error Resume Next
set wshNetwork=CreateObject("WScript.Network")
strSrv=InputBox("What server do you want to query?","Computer
Properties",wshNetwork.ComputerName)
set objSrv=GetObject("WinMgmts:{impersonationLevel=impersonate}!
Win32_ComputerSystem.Name='" & strSrv &'")

strHeader="Computer properties for " & UCase(strSrv)

strResults=strHeader & vbCrLf & String(LEN(strHeader),"-" ) &
vbCrLf

for each prop in objSrv.Properties_
  If prop.value<>" " then
    strResults=strResults & prop.name & ": " & prop.value &
vbCrLf
  end if
next

wscript.Echo strResults

set objSrv=Nothing
set prop=Nothing
set wshNetwork=Nothing
wscript.quit

'EOF
```