



F1 Solutions - July 2004



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Hello All,

Summer is in full swing and while this newsletter may not be beach reading material, I hope you'll find some time to leaf through it. I've made a few minor departures from the established format, but I believe you'll find them worthwhile.



I've replaced the formal product review with a preview look at a beta product, ISA Server 2004. This is Microsoft's follow-up edition to a rather decent version 1 product. If you hesitated on ISA 2000 you may want to reconsider with ISA 2004. I'll be back with a "regular" product or service review next month.

I've also temporarily shelved the monthly book review to provide additional space for the last segment in the Tech Tutor series on the FOR command. I'm planning on putting all three articles together in a single document. Look for it later on the web site in the resources section.

Speaking of the web site, if you haven't visited it lately I hope you will take a moment to do so. I'm continuing to add new content and features. I will also be making some slight cosmetic changes to better suit a 1024x768 screen resolution. My logs show that this is the preferred resolution by a large number of visitors so I will do what I can to make the experience even better.

As always, I appreciate your continued support and welcome all comments, suggestions and feedback at jhicks@jdhitsolutions.com.

~Jeff

First Look – ISA Server 2004 (Beta)



I thought I would make a minor departure from the usual format and offer a first glimpse at a new product. Since it is in beta this is not a formal review but rather my impressions and a feature preview. Microsoft's Internet Security and Acceleration Server 2000 is a popular and effective firewall/proxy server solution. Microsoft has greatly improved the product in the 2004 edition which is still in beta testing. I've been running the beta for a few months now.

The biggest challenge I met was the new interface. It is a cleaner, task oriented MMC but it took me some time to figure out how to configure the server. Like ISA 2000, the server is locked down by default. You have to manually configure packet filters and http rules. ISA 2004 offers deeper stateful packet inspection and a more robust firewall. HTTP filtering can be on a per-rule basis. I can create HTTP signatures, and configure constraints on HTTP traffic.

Rule generation is made easier with the addition of network objects. Microsoft has

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Special points of interest:

- ISA Server 2004
- Tech Tutor—Expanded!
- File Exists script

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An independent analysis of long-term Linux deployments concludes that operating expenses for some companies can overcome initial purchase savings, making Linux's total cost of ownership greater than that of Windows. In particular:

- *Linux planning costs were 5% to 25% higher.*
- *Linux training costs were 15% higher on average.*

— Forrester Research

ISA Server 2004- cont'd.

added network templates and better support for different deployment scenarios such as a perimeter based firewall or 3 legged firewall. Support has also been added for VPN networks, including a VPN Quarantine, and wireless networks.

Reporting and logging is greatly improved with options for MSDE or SQL databases. In addition, I can get real time query results from the log. I've been troubleshooting some problems lately with the product and real time logs are

very handy. Other new features include: granular control over IP options, link translation for internally published sites, support for secure RPC connections, improved report publishing including email notification, IPsec tunnel mode for site to site VPN connections, and authentication to RADIUS or SecurID devices. This is by no means an exhaustive list.

Once I became familiar with the new interface I found it much easier to create rules and client sets. Monitoring

and reporting are greatly enhanced.

If you are running ISA 2000 now you should be evaluating this product or at least reviewing the new feature set and documentation.

You can read more about ISA 2004 at <http://www.microsoft.com/isaserver/> or visit <http://www.isaserver.org> for an excellent set of discussion forums on the product.

Web Crawling - Desktop Engineers Junk Drawer

Admit it, you have a drawer either at home at work full of odds and ends, bits and pieces of "stuff" you know might come in handy someday. Well that is the premise behind this month's web recommendation. The Desktop Engineers Junk Drawer (<http://www.desktopengineer.com>) is full of useful bits of information, news about handy utilities, and alerts to current trends and events. And if you are looking for excellent information on the Windows Installer or msi technology this is definitely the site to visit. Like Labmice.com, the site does a lot of the grunt work of ferreting out just the right tool or piece of information. Sometimes you don't even realize you "need" something until you see it mentioned on the site.

The site also offers a free weekly newsletter that summarizes the key features and finds of the week. I have to confess I used to frequent this site often but as usually happens work habits change. Fortunately, I still had my weekly subscription and now am working hard to make it one of the sites I visit at least once a week. Even if you can't make it a habit, at least subscribe to the newsletter and take a minute to scan it each week. You might even find that darn DB9 to DB15 adapter you knew was hiding somewhere.

Tech Tutor — What Are You Waiting FOR (Part 3)

There is a lot to cover so let's get right into it. In fact there's so much material we've temporarily expanded out of our regular section. If you haven't read the previous two lessons, download the May and June newsletters.

The last option we want to look at has three variations:

```
FOR /F ["options"] %variable IN (file-set) DO command [command-parameters]
FOR /F ["options"] %variable IN ("string") DO command [command-parameters]
FOR /F ["options"] %variable IN ('command') DO command [command-parameters]
```

In the first variation you use a text file, perhaps a list of computers, as the file set. Let's create a text file called Machines.txt:

Tech Tutor – cont'd

```
;Machines.txt
DC01
DC02
WebSrv01
```

By default, the file is read one line at a time from beginning to end (blank lines are skipped). Your server list file may begin with a title or other comments which you don't want processed. You can use the EOL option to skip those lines.

With this file you would run: for "eol=" %i in (machines.txt) do @c:\scripts\myscript.vbs %i. You can use any character you want, but you are limited to one. You could also have used the SKIP option to start at line 2: for "skip=1" %i in (machines.txt) do @c:\scripts\myscript.vbs %i.

The FOR command not only allows you to read a line from a file, but to parse it as well. To do this we use the DELIMS option. The default delimiters are the space and tab, but you can use anything you want, such as a comma. To tell FOR which element, or elements, of the line you want to extract, you use the TOKENS option. Now we have a csv file of new users:

```
'first,last,samid,dept
Alice,Jones,ajones,Engineering
Bob,Smith,bsmith,Sales
Chris White,cwhite,Marketing
```

We can use the following command (all on one line) to parse the file as parameters for DSADD to create new users in Active Directory.

```
for /f "eol=' delims=, tokens=1-4" %a in (users.txt) do@dsadd user "CN=%a %b, OU = Employees,DC=Mycompany,DC=local" -samid %c -fn %a -ln %b -pwd P@ssw0rd -dept %d -mustchgpwd yes
```

The FOR command lets us skip the first line since it as an EOL delimiter. We specify a comma as the delimiter and that we want to use all the values, identified as %a, %b, %c and %d. DSADD creates new users in the Employees OU, defines the user's department, sets the default password and forces the user to change password at next logon. You could also put this in a batch file, just remember that %a becomes %%a.

Using a text file is handy for routine and planned events, or where you know what your "file set" will be. What if you want to run something on the fly? You can use the /F switch to parse through a command sequence like this:

```
for /f "tokens=1 delims=." %i in ('dir /b') do @echo %i
```

Let's say you have a script that requires the file name as a parameter and you want to run it on every exe file on the c: drive.

```
For /f "tokens=*" %x in ('dir /s /b *.exe') do @c:\scripts\fixfile.vbs %x
```

One final note on parsing command strings, if you are using a special character, such as |, <, or >, you need to put a caret (^) before it so that the FOR command processes properly. Without it you'll probably get messages like "| was unexpected at this time."

There are many great command line utilities in Windows Support Tools and the Resource Kits. Not to mention your own scripting solutions. As you've seen over the last few lessons, the FOR command is a veritable Swiss Army knife utility. I hope you'll find room for it in your tool belt.



“ It is the supreme art of the teacher to awaken joy in creative expression and knowledge. ”

Albert Einstein

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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 File Exists

This quick script uses WMI to verify if a file exists on the C: drive. Although not necessarily in the path. The function returns TRUE if the file is found.

```
'FileExists.vbs
'usage: cscript fileexists.vbs
On Error Resume Next
strFile=InputBox("What file do you want to search for on the C:
drive?", "Find File", "")
    If strFile="" then WScript.Quit
Else
    strFile=Trim(oArgs(0))
End If
WScript.Echo "Looking for " & strFile
strFileName=Mid(strFile,1,InStr(strFile,".")-1)
strFileExtension=Mid(strFile,InStr(strFile,".")+1)
if wmiFileExists(strFileName,strFileExtension) then
    WScript.Echo strFile & " found"
Else
    WScript.Echo strFile & " NOT found"
    End If
Set oArgs=Nothing
WScript.Quit

Function wmiFileExists(strFileName,strFileExtension)
On Error Resume Next
Dim oWMI,oRef
wmiFileExists=False
strQuery="Select FileName,Extension FROM CIM_DATAFILE WHERE File-
name='" & strFileName & "' AND Extension='" & strFileExtension &
'"
Set oWmi=GetObject("winmgmts:")
Set oRef=oWMI.ExecQuery(strQuery)
For Each item In oRef
    wmiFileExists=True
Next
Set oWMI=Nothing
Set oRef=Nothing
End function

'EOF
```