This lab will use Tini as a backdoor program and mFileBinder as a wrapper program to disguise Tini inside another program as a backdoor Trojan horse. Tini is a program that allows backdoor command line access to the victim computer across a telnet connection using TCP port 7777.

Windows2008 server will be the victim computer Win7 will be the hacker computer

Lab Preparation

Use VMware workstation to open the Win2008 and Win7 VMware images. The password is Windows1.

Assign IP addresses to both computers to be on the same subnet.

Assign IP address 10.81.10.1 to the Win7 image

Assign IP address 10.81.10.2 to the Win2008 image

Subnet mask 255.255.255.0 Leave the Default Gateway blank

Assign the network adapters for both images to **Host-only**

On the Win2008 image create a user account with your FOLusername and assign administrator privileges

Start - Control Panel - User Accounts - Manage Another Account - Create a new account Assign

FOLusername - Select - Administrator - Create account

Enable Telnet Client on Win7 VMware Image

Select the following

Start – Control Panel – Programs

Under the Programs and Features option click on Turn Windows features on or off

Scroll down in the menu box and select Telnet Client – OK Close Control Panel

Exploit #1 – Backdoor access with Tini

On Win2008 victim computer login with the user account with your *FOLusername* Open the Task Manager.

Pressing the Ctrl Alt & Insert keys will open Task Manager in the VMware guest operating system.

Remember that your keyboard and mouse normally connect to the host computer operating system. To direct input to the VMware guest operating system press the Ctrl and G keys or click the mouse in the VMware window.

Verify with the **Task Manager** that no **cmd.exe** sessions are running in the Win2008 **victim** image

If a **cmd.exe** session is open, then stop the application with Task Manager

Logoff as administrator and logon as the user with your FOLusername

On drive C: find the **security** folder and the **Tini** folder

Have both **Task Manager** and the **Tini** folder shown on the desktop view

Select **tini.exe** and double click to execute the program

From the **Task Manager Process** tab note that a **Tini** session is now running and **cmd.exe** is now running. The cmd.exe program is running in the background and is not shown on the monitor screen.

1. Take a screen capture showing the Task Manager window Processes tab (Tini & cmd.exe)

These processes are owned by the user that launched the programs. Since we logged on as your **FOLusername** cmd.exe lists the user as your name

The **netstat** command can be used to list all running process and the port that they are listening on for a connection. Tini listens on TCP port 7777 for a connection.

On the Win2008 victim computer open a command prompt (Start – Run – enter cmd in the Run window)

At the prompt enter the following command

C:\> netstat -nao

This will display all of the listening process.

To just verify that Tini is running use the following command

C:\> netstat -nao | find "7777"

2. Take a screen capture of the netstat command make sure the process id (PID) is included

On the **Win2008** image open notepad.exe and enter your full name as the text content and save a file in the C:\security\tini directory (folder) with your **first name** as the file name.

From the hacker computer use tini to establish a backdoor connection to the victim computer
On the **Win7 Hacker** computer open a command prompt and enter the following command **C:\> telnet 10.81.10.2 7777**

Press **enter twice** to complete the command

This command instructs the telnet program to use port 7777 for the connection rather than the default port 23 You will now have command line access in the directory that Tini resides on the Win2008 victim computer C:\security\tini

From the command prompt *C:\security\tini>* use the **dir** command and find the file **your First Name.txt** to verify this is the victim computer file system.

3. Take a screen capture of the directory listing

On the **Win2008** computer verify that **Tini** is running and a connection has been established from the hacker computer use the following command

C:\> netstat -nao

Note that **10.81.10.2:7777** has a connection established from the *foreign* host 10.81.10.1

4. Take a screen capture of the netstat command make sure the process id (PID) is included

Close the **cmd.exe** window on the **Win7 hacker** computer to terminate the session

Exploit #2 – Add tini.exe to startup menu of the users on the victim computer

To ensure that the hacker has access to the victim computer when different users logon tini.exe could be copied to the startup menu

Use the task manager to halt any running sessions of tini.exe & cmd.exe on Win2008 image

Logoff as the user with your FOLusername and logon as the administrator

Open a command prompt and change to this directory

C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Startup

 $Copy \ the \ \textbf{tini.exe} \ program \ to \ the \ \textbf{C:} \\ \textbf{ProgramData} \\ \textbf{Microsoft} \\ \textbf{Windows} \\ \textbf{Start Menu} \\ \textbf{ProgramSata} \\ \textbf{Startup}$

C:\ProgramData\Microsoft\Windows\Start Menu\Programs\Startup> copy c:\security\tini\tini.exe Use the dir command to verify tini.exe is now in the startup directory

On the victim computer restart and log back on as a user with your FOLusername

Use the **Task Manager** to verify that **tini.exe & cmd.exe** are both running on the victim PC. Note the logon user is the owner of the process

5. Take a screen capture of Task Manager showing your name as the owner of tini.exe

Note that Tini is now running with your username

Exploit #3- Create a Trojan Horse Program

On the Win7 computer use Task Manager to stop tini.exe and all cmd.exe sessions that are running

Find the program **felix.exe** in the Security folder (look for the paw print icon) Double click on **felix.exe** to run the program.

You will see a black and white cat moving around on the desktop.

This is the program which we will use to hide the Tini backdoor program to create a Trojan Horse program.

Use Task Manager to stop the felix program

From INFO6001 course content download the file **mFileBinder v1.0.rar** and copy into the Win7 **C:\security** folder

Right click on the **mFileBinder v1.0.rar** and extract the executable program

The executable file will be copied into C:\security\mFileBinder folder

Open a File Explorer window and copy the felix.exe and tini.exe files into the mFileBinder folder

Double click on the **mFileBinder.exe** program

When the **mFileBinder v1.0** program opens click on click *here to Browse* Select the **tini.exe** file - **Click Open -** Next click **Add File** Repeat the above steps for the **felix.exe** file.

Next click on the **Set Icon** button. Select the **8Ball** from the available icons and click **Open** Next click **Build/Bind Files**

For File name enter your initials as the filename

In the location bar at the top save the file to the C:\security\mFileBinder folder Click **OK** for message box File Successfully Binded

Notice that a file has been added to the folder with your *initials* and the **8Bal**l icon *This new program is actually a Trojan horse program that combines both Felix and the backdoor program Tini*.

Double click on the newly created file. Felix the cat will appear on the screen and tini.exe and a command prompt will also be opened and be running in the background

Run netstat to verify that port 7777 is now listening

6. Take a screen capture that shows the netstat –nao | find "7777" and also shows felix on the desktop