



OWASP

The Open Web Application Security Project
<http://www.owasp.org>

Running WebGoat v5 on OWASP LabRat 0.1

The OWASP LiveCD Education Project

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SECUR[IT]Y DISTRO

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A1 Objective

In this tutorial, we are going to configure WebGoat 5 on the OWASP LabRat 0.1 live security distribution. WebGoat is a pre-built web application that provides a playground for learning how to exploit various web application security flaws. This tutorial is made for beginners and requires you to have working knowledge of [booting live operating systems in Vmware](#) or knowledge on [how to burn and boot a live ISO image](#).

A2 Requirements

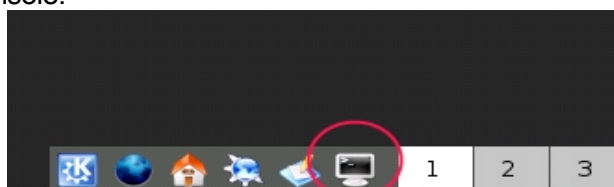
For the purposes of this tutorial you will need the LabRat 0.1 ISO configured in VMware. Any other configurations are welcome as long as you know how to navigate for this tutorial.

A3 Running WebGoat

The first thing to do is acquire an address from the dhcp server. This will allow you to navigate the web and play with the distro after finishing this tutorial. Getting an address is not required to use WebGoat because it uses the local address (127.0.0.1). If you already know how to get an address or only want to use WebGoat please skip to step 3.

Step 1: Getting an address

To do this you click the terminal icon which is show below. This gives you a menu where you choose Linux Console.



Once the Linux Console opens type `sudo dhclient` and hit enter.

```
morph@Morphix:~$ sudo dhclient
```

The last line will read bound to "address." The address in the last line should be a familiar address given by your DHCP server. In our case we received 192.168.0.5.



```
ip length 314 disagrees with bytes received 534.  
accepting packet with data after udp payload.  
DHCPACK from 192.168.0.1  
bound to 192.168.0.5 -- renewal in 43200 seconds.  
morph@Morphix:~$
```

Step 2: Verifying connection

Now we can verify that we have a network connection by pinging google as shown below.

In this example we use: `ping -c 3 www.google.com`

The `-c` stands for count. This means that we will only send out 3 requests to see if the server is up and then stop. Without the `-c` switch the ping utility will run continuously.

```
Linux Console - Konsole  
Session Edit View Bookmarks Settings Help  
morph@Morphix:~$ ping -c 3 www.google.com
```

Step 3: Configuring LabRat for WebGoat

The next step is get Webgoat running so that the learning can begin. Located on the desktop there is an icon that says Starting-Webgoatv5.txt. We are going to use the truncated version below.

In the Linux Console that was used earlier go through the following steps.

All commands are highlighted in yellow.

3.1: Set the new root password.

Command:

```
morph@Morphix:~$ sudo passwd  
Enter new UNIX password: <your password here>  
Retype new UNIX password: <your password here>  
passwd: password updated successfully
```



3.2: Switch to the root user.

Command:
morph@Morphix:~\$ su -
Password: <your password here>

3.3: Change into the OWASP/WebGoat directory.

Command:
root@Morphix:~# cd /OWASP/Releases/Tools/WebGoat-5.0-RC1/

3.4: Set the permissions on WebGoat.sh

Command:
root@Morphix:/OWASP/Releases/Tools/WebGoat-5.0-RC1# chmod +x webgoat.sh

3.5: Set JAVA_HOME.

Command:
root@Morphix:/OWASP/Releases/Tools/WebGoat-5.0-RC1# export
JAVA_HOME=/usr/local/jdk1.5.0_09/

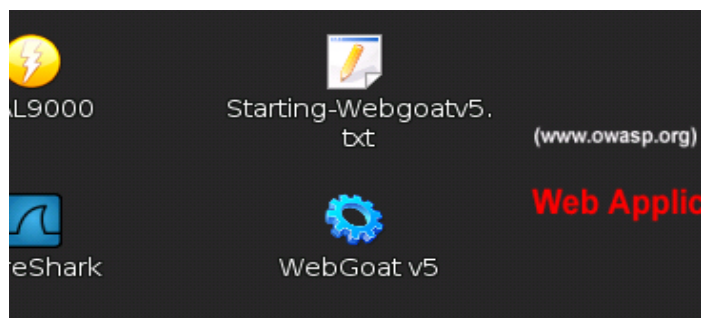
3.6: Start WebGoat.

Command:
root@Morphix:/OWASP/Releases/Tools/WebGoat-5.0-RC1# ./webgoat.sh start8080
Using CATALINA_BASE: ./tomcat
Using CATALINA_HOME: ./tomcat
Using CATALINA_TMPDIR: ./tomcat/temp
Using JAVA_HOME: /usr/local/jdk1.5.0_09/

Open <http://127.0.0.1:8080/WebGoat/attack>
Username: guest
Password: guest
Or try <http://guest:guest@127.0.0.1:8080/WebGoat/attack>

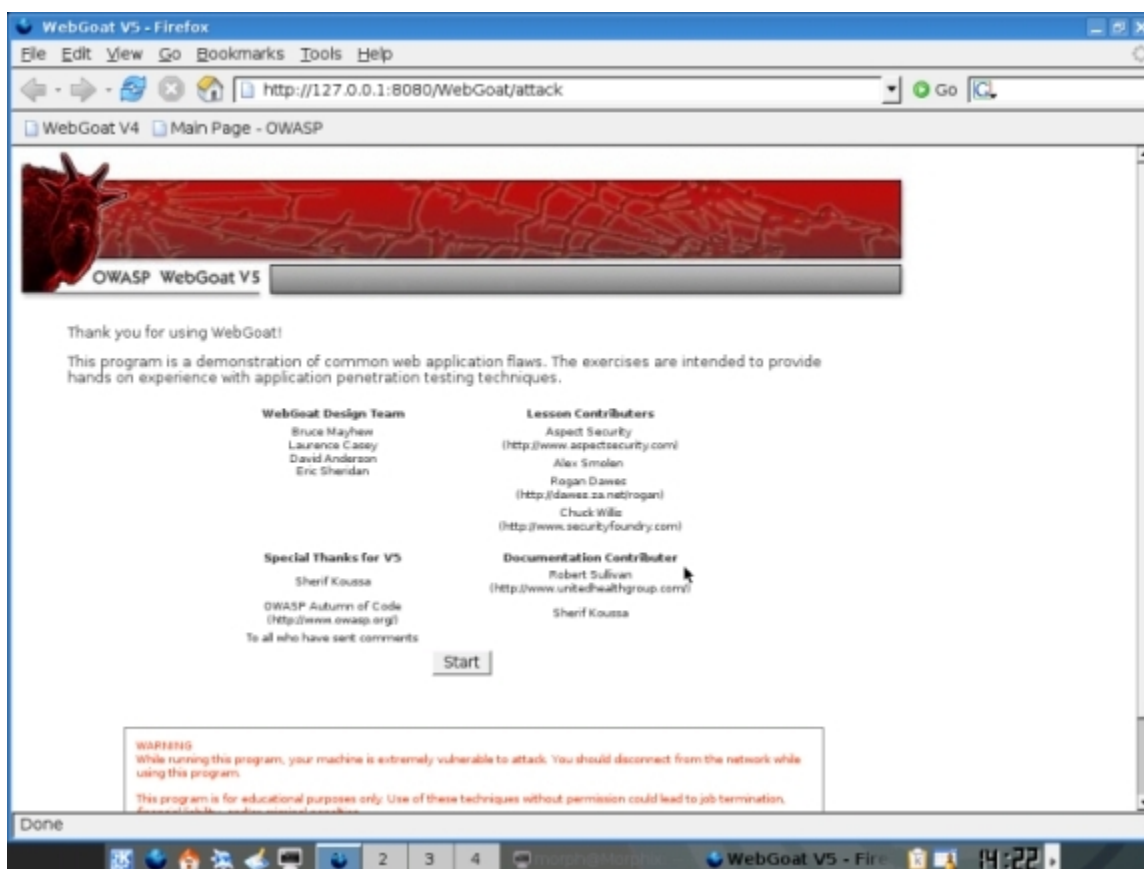
Step 4: Running WebGoat

Once you have completed these steps minimize the console and click the desktop icon that says WebGoat v5.



This will launch the Firefox browser and begin to load WebGoat. It will take a few seconds depending on the speed of your system. This will get you on the track to learning the various ways that web applications can be insecure.

Once WebGoat is loaded click the start button and follow the information provided.



You have now gone through the steps to set an IP address in LabRat and configure it to run WebGoat v5. Now, all that is left is to click start and move through all of the lessons provided. WebGoat will provide you with step by step directions and hints as they are needed.

