

# Disko 3

- Same logic, it's just that this time it's FAT32 distro, and the flag is hidden in a deleted file called flag.gz...
- We copy it's features to a new file we create and we extract it...

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Kali Linux [En fonction] - Oracle VM VirtualBox
Fichier Machine Écran Entrée Périphériques Aide

capscorpion142@asaad: ~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3

File Actions Edit View Help
zsh: corrupt history file /home/capscorpion142/.zsh_history
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ gzip disko-3.dd.gz
gzip: disko-3.dd.gz already has .gz suffix -- unchanged
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ gunzip disko-3.dd.gz
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ ls
disko-3.dd
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ strings -td disko-3.dd | grep pico
10074662 pico desta partici
10078477 Description-it.UTF-8: Utilizzo tipico di questa partizione:
10087641 pico desta parti
10267589 Description-it.UTF-8: Utilizzo tipico:
10268827 pico:
16511904 Aug 30 01:59:37 debbootstrap: update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mode
16617804 Aug 30 02:00:42 in-target: mailx | mailutils snmpttrapd libtts-pico-utils espeak mbrola
48188912 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.81' (uid=1000 pid=12105 comm="/usr/share/code
e/code Desktop/picoctf-2025")
49777336 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.66' (uid=1000 pid=43129 comm="/usr/share/code
e/code Desktop/picoctf-2025")
51049904 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.65' (uid=1000 pid=2141 comm="/usr/share/code
/code Desktop/picoctf-2025")
52784336 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.65' (uid=1000 pid=2584 comm="/usr/share/code
/code Desktop/picoctf-2025")
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
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10078477 Description-it.UTF-8: Utilizzo tipico di questa partizione:
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File Actions Edit View Help
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16511904 Aug 30 01:59:37 debbootstrap: update-alternatives: using /bin/nano to provide /usr/bin/pico (pico) in auto mode
16617804 Aug 30 02:00:42 in-target: mailx | mailutils snmpttrapd libtts-pico-utils espeak mbrola
48188912 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.81' (uid=1000 pid=12105 comm="/usr/share/code
e/code Desktop/picoctf-2025")
49777336 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.66' (uid=1000 pid=43129 comm="/usr/share/code
e/code Desktop/picoctf-2025")
51049904 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.65' (uid=1000 pid=2141 comm="/usr/share/code
/code Desktop/picoctf-2025")
52784336 MESSAGE=[system] Activating via systemd: service name='org.bluez' unit='dbus-org.bluez.service' requested by ':1.65' (uid=1000 pid=2584 comm="/usr/share/code
/code Desktop/picoctf-2025")
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ mmls disko-3.dd
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ ls
disko-3.dd
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ ls
disko-3.dd
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ mmls disko-3.dd
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ mmls -t gpt disko-3.dd
```

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Kali Linux [En fonction] - Oracle VM VirtualBox
Fichier Machine Écran Entrée Périphériques Aide
1 2 3 4
capscorpion142@asaad: ~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3
File Actions Edit View Help
$ ls
disko-3.dd
(capscorpion142@asaad)-[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ mmls disko-3.dd
(capscorpion142@asaad)-[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ mmls -t gpt disko-3.dd
Invalid magic value (GPT Header: 0)
(capscorpion142@asaad)-[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ strings disko-3.dd | tr -d '\n' | grep -o 'picoCTF{.*}'
(capscorpion142@asaad)-[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ # Extract all ASCII characters (0x20-0x7E) from the file
tr -cd '\11\12\15\40-176' < disko-3.dd | grep -o 'picoCTF{.*}'
(capscorpion142@asaad)-[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ fsstat disko-3.dd
FILE SYSTEM INFORMATION
File System Type: FAT32
OEM Name: mkfs.fat
Volume ID: 0x49838d0b
Volume Label (Boot Sector): NO NAME
Volume Label (Root Directory):
File System Type Label: FAT32
Next Free Sector (FS Info): 36434
Free Sector Count (FS Info): 1375
Sectors before file system: 0
```

```
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Fichier Machine Écran Entrée Périphériques Aide
1 2 3 4
capscorpion142@asaad: ~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3
File Actions Edit View Help
OEM Name: mkfs.fat
Volume ID: 0x49838d0b
Volume Label (Boot Sector): NO NAME
Volume Label (Root Directory):
File System Type Label: FAT32
Next Free Sector (FS Info): 36434
Free Sector Count (FS Info): 1375
Sectors before file system: 0
File System Layout (in sectors)
Total Range: 0 - 204799
* Reserved: 0 - 31
** Boot Sector: 0
** FS Info Sector: 1
** Backup Boot Sector: 6
* FAT 0: 32 - 1607
* FAT 1: 1608 - 3183
* Data Area: 3184 - 204799
** Cluster Area: 3184 - 204799
*** Root Directory: 3184 - 3184
METADATA INFORMATION
Range: 2 - 3225862
Root Directory: 2
CONTENT INFORMATION
Sector Size: 512
Cluster Size: 512
Total Cluster Range: 2 - 201617
FAT CONTENTS (in sectors)
3184-3184 (1) -> EOF
```

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1 2 3 4
capscorpion142@asaad: ~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3
File Actions Edit View Help
85947-200634 (114688) → EOF
200635-204794 (4160) → EOF
204795-204799 (5) → EOF
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ ls -r -f fat disko-3.dd
d/d 4: log
+ d/d 22: private
+ d/d 24: sysstat
+ d/d 26: stunnel4
++ r/r 70: stunnel.log
+ d/d 28: mysql
+ d/d 30: inetssim
++ d/d 102: report
+ d/d 32: installer
++ d/d 134: cdebconf
+++ r/r 150: questions.dat
+++ r/r 152: templates.dat
++ r/r 136: Xorg.0.log
++ r/r 138: partman
++ r/r 140: syslog
++ r/r 143: hardware-summary
++ r/r 145: status
++ r/r 519091: lsb-release
+ r/r 519123: vmware-vmtoolsd-root.2.log
+ r/r 519125: kern.log.4.gz
+ r/r 519127: Xorg.0.log
+ r/r 519130: vmware-network.4.log
+ r/r 519132: boot.log
+ r/r 519134: syslog.3.gz
+ r/r 519137: vmware-vmtoolsd-root.log
+ r/r 522627: daemon.log
+ r/r 522628: flag.gz
+ r/r * 522628: ESSAGES
+ r/r 522632: alternatives.log.2.gz
+ r/r 522634: debug
```

```
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1 2 3 4
capscorpion142@asaad: ~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3
File Actions Edit View Help
+++ r/r 3225815: user-1000094309907b19d4653afc79e24b6eac039-00000000000005b4-0005e76be8304b42.journal
+++ r/r 3225820: system@0006054e6fd33237-813b83aec6062020.journal-
+++ r/r 3225828: user-10000185488d5eb13416d80fa5b1c5fafd0-0000000000002374d-00062eff8e6c0038.journal
+++ r/r 3225836: system@fe4e86893ffe4006869e03921f0c0c32-000000000000058b3-0006054edc51935b.journal
+++ r/r 3225844: user-100007fe4e86893ffe4006869e03921f0c0c32-000000000000058b2-0006054edc4fe35c.journal
+++ r/r 3225849: user-1000000006054e70c65fc3-7af43b1c79f1269a.journal-
+++ r/r 3225857: system@7a442d5ca4df4e0f9507094c9269ca6a-0000000000000605c-0006054ee0dded41.journal
+ r/r 603184: vmware-network.log
+ r/r 603186: dnkg.log.2.gz
v/v 3225859: $MBR
v/v 3225860: $FAT1
v/v 3225861: $FAT2
V/V 3225862: $orphanFiles
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ ls
disko-3.dd
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ icat -f fat disko-3.dd 522628 > flag.gz
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ gunzip flag.gz
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ ls
disko-3.dd flag
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$ cat flag
Here is your flag
picoCTF{n3v3r_z1p_2_h1d3_7e0a17da}
(capscorpion142@asaad)~[~/Desktop/Autoformation/CTFs/PicoCTF/Disko 3]
$
```