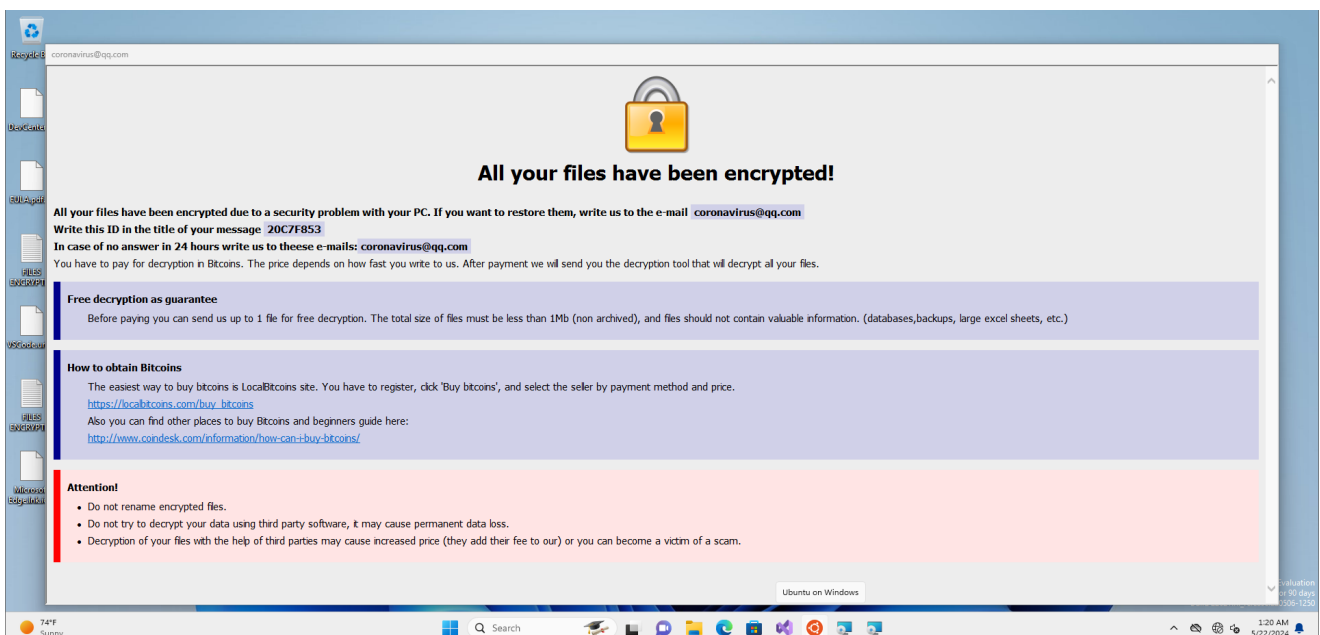
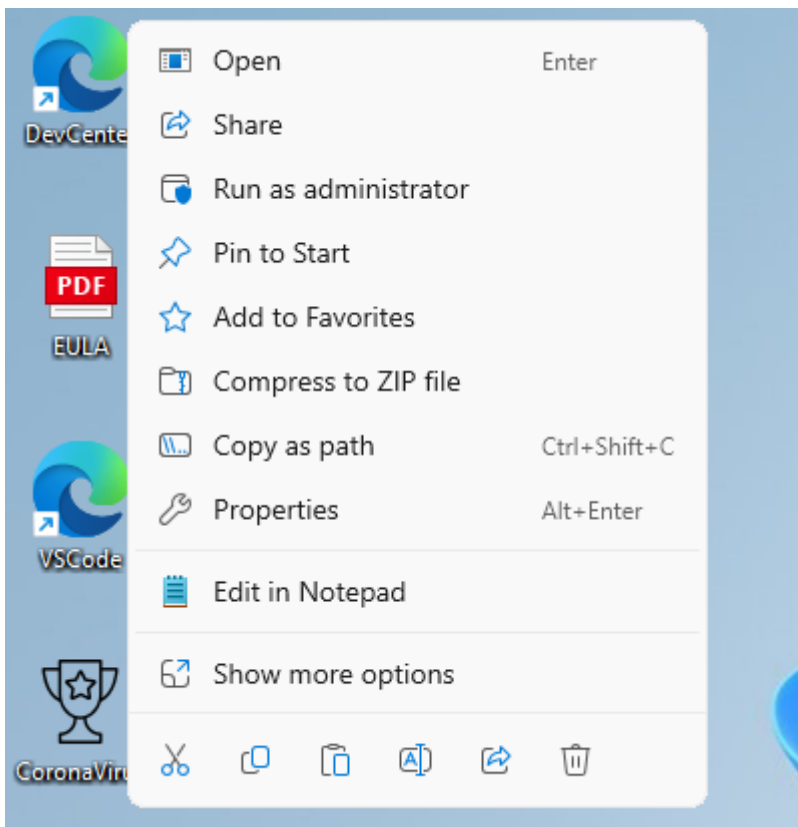
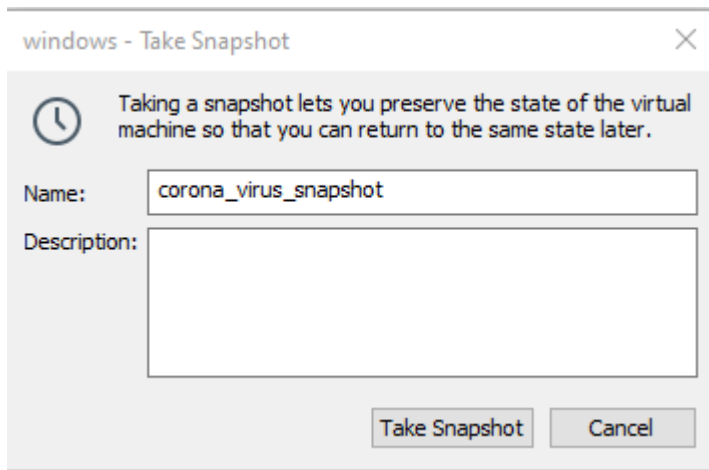


lab 3





caches	5/22/2024 10:39 AM	File folder	
kali-linux-2023.4-virtualbox-amd64	2/28/2024 10:23 AM	File folder	
windows.vmx.lck	5/22/2024 10:36 AM	File folder	
vmware	5/22/2024 11:21 AM	Text Document	187 KB
vmware-0	5/22/2024 11:16 AM	Text Document	202 KB
vmware-1	5/22/2024 11:12 AM	Text Document	191 KB
vmware-2	5/22/2024 10:51 AM	Text Document	197 KB
windows.scoreboard	5/22/2024 11:16 AM	SCOREBOARD File	8 KB
windows	5/22/2024 11:20 AM	VMware snapshot metadata	1 KB
windows	5/22/2024 11:16 AM	VMware Team Member	1 KB
windows-0.scoreboard	5/22/2024 11:12 AM	SCOREBOARD File	8 KB
windows-1.scoreboard	5/22/2024 10:53 AM	SCOREBOARD File	8 KB
windows-2.scoreboard	5/22/2024 10:36 AM	SCOREBOARD File	8 KB
windows-disk1.vmdk	5/22/2024 10:55 AM	VMDK File	44,811,968 ...
windows-disk1-000001.vmdk	5/22/2024 11:20 AM	VMDK File	12,392,192 ...
windows-disk1-000002.vmdk	5/22/2024 11:21 AM	VMDK File	368,512 KB
windows-file1	5/22/2024 11:21 AM	VMware Virtual Machine nonvolatile RAM	265 KB
windows-Snapshot1.vmem	5/22/2024 11:01 AM	VMEM File	8,388,608 KB
windows-Snapshot1	5/22/2024 11:01 AM	VMware virtual machine snapshot	4,476 KB
windows-Snapshot2.vmem	5/22/2024 11:21 AM	VMEM File	8,388,608 KB
windows-Snapshot2	5/22/2024 11:21 AM	VMware virtual machine snapshot	4,211 KB
windows	5/22/2024 11:21 AM	VMware virtual machine configuration	4 KB

- .vmem - dump
- .vmsn - config pentru vmware

python .\vol.py -f ..\vm\windows-Snapshot2.vmem windows.pslist

```

>> python .\vol.py -f .\vm\windows-Snapshot2.vmem windows.pslist
Volatility 3 Framework 2.7.0
Progress: 100.00
PDB scanning finished

```

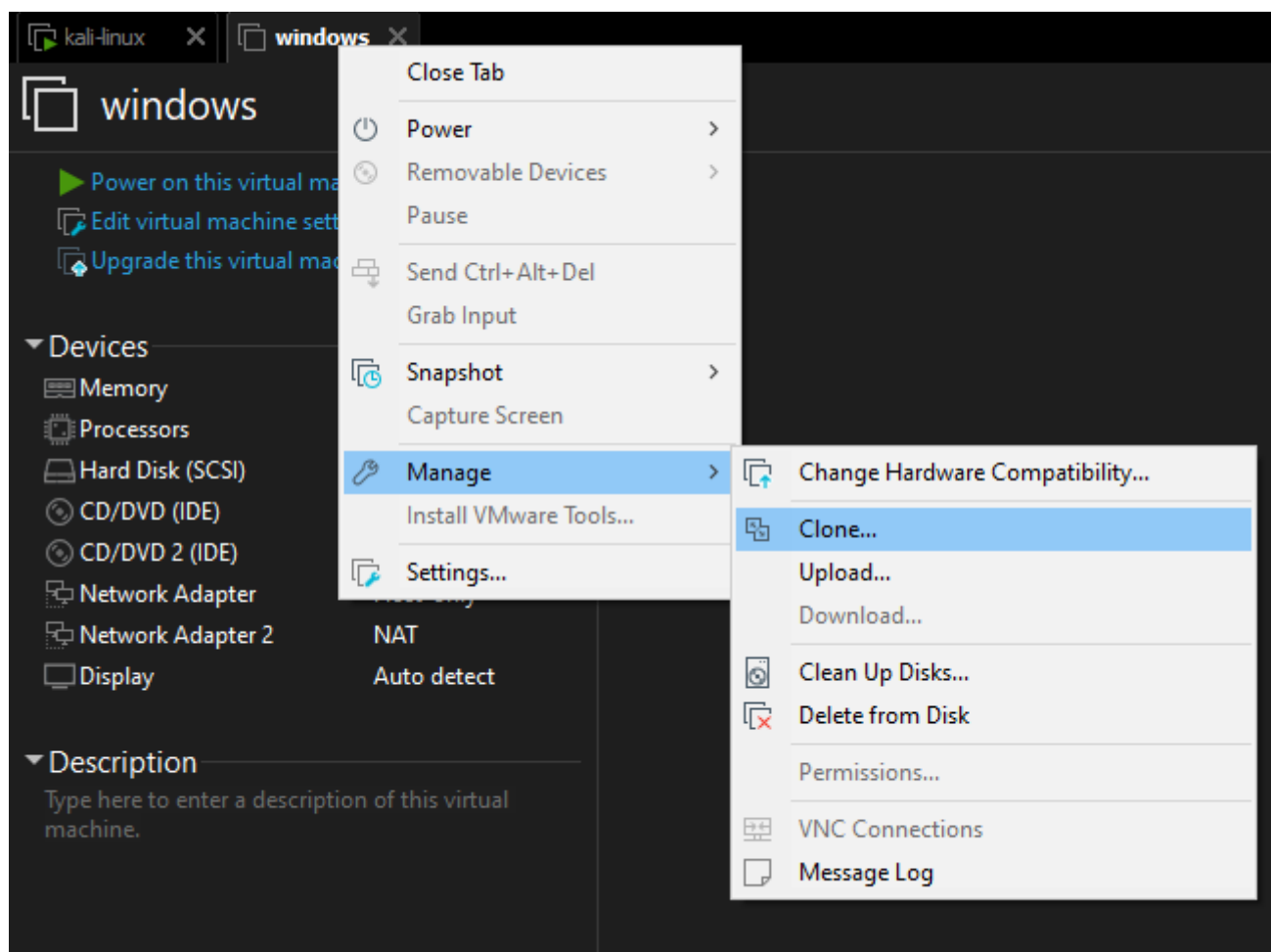
PID	PPID	ImageFileName	Offset(V)	Threads	Handles	SessionId	Mow64	CreateTime	ExitTime	File output
4	0	System	0xc28f1d4a9000	190	-	N/A	False	2024-05-22 17:37:45.000000	N/A	Disabled
76	4	Secure System	0xc28f1d602080	0	-	N/A	False	2024-05-22 17:37:43.000000	N/A	Disabled
112	4	Registry	0xc28f1d520080	4	-	N/A	False	2024-05-22 17:37:43.000000	N/A	Disabled
420	4	smss.exe	0xc28f20260040	2	-	N/A	False	2024-05-22 17:37:45.000000	N/A	Disabled
556	548	csrss.exe	0xc28f20e2d2c0	10	-	0	False	2024-05-22 17:37:46.000000	N/A	Disabled
656	548	wininit.exe	0xc28f21103080	2	-	0	False	2024-05-22 17:37:46.000000	N/A	Disabled
664	648	csrss.exe	0xc28f2110a140	14	-	1	False	2024-05-22 17:37:46.000000	N/A	Disabled
748	648	winlogon.exe	0xc28f21141080	4	-	1	False	2024-05-22 17:37:46.000000	N/A	Disabled
796	656	services.exe	0xc28f211491c0	8	-	0	False	2024-05-22 17:37:46.000000	N/A	Disabled
816	656	lsass.exe	0xc28f21170180	4	-	0	False	2024-05-22 17:37:46.000000	N/A	Disabled
832	656	lsass.exe	0xc28f21172180	11	-	0	False	2024-05-22 17:37:46.000000	N/A	Disabled
964	796	svchost.exe	0xc28f2122c380	21	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
992	748	fontdrvhost.exe	0xc28f2122f280	5	-	1	False	2024-05-22 17:37:47.000000	N/A	Disabled
1000	656	fontdrvhost.exe	0xc28f2122d080	5	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
648	796	svchost.exe	0xc28f21260240	12	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
920	796	svchost.exe	0xc28f212ca380	6	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
1056	796	sppsvc.exe	0xc28f21309080	0	-	0	False	2024-05-22 17:37:47.000000	2024-05-22 07:42:45.000000	Disabled
1084	748	dmv.exe	0xc28f21311140	25	-	1	False	2024-05-22 17:37:47.000000	N/A	Disabled
1124	796	svchost.exe	0xc28f21375380	1	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
1188	796	svchost.exe	0xc28f2139e240	2	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
1180	796	svchost.exe	0xc28f213ef0c0	1	-	0	False	2024-05-22 17:37:47.000000	N/A	Disabled
1496	796	svchost.exe	0xc28f214823c0	2	-	0	False	2024-05-22 17:37:51.000000	N/A	Disabled
1544	796	svchost.exe	0xc28f1d5a9080	7	-	0	False	2024-05-22 17:37:51.000000	N/A	Disabled
1644	796	svchost.exe	0xc28f1d570080	3	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1652	796	svchost.exe	0xc28f1d56a080	4	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1704	796	svchost.exe	0xc28f1d550080	9	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1868	796	svchost.exe	0xc28f2147d080	2	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1892	796	svchost.exe	0xc28f215b9380	11	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1908	796	svchost.exe	0xc28f215b1280	9	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1908	796	svchost.exe	0xc28f216020c0	1	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1940	796	svchost.exe	0xc28f216240c0	7	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1948	796	svchost.exe	0xc28f21626380	1	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
8	796	svchost.exe	0xc28f216723c0	2	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
1468	796	svchost.exe	0xc28f21671080	5	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
2104	796	svchost.exe	0xc28f216f3080	3	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
2320	796	svchost.exe	0xc28f2178d380	7	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
2396	796	svchost.exe	0xc28f217ea380	5	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
2476	796	svchost.exe	0xc28f21830380	4	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
2492	796	svchost.exe	0xc28f21858380	5	-	0	False	2024-05-22 17:37:52.000000	N/A	Disabled
2572	796	svchost.exe	0xc28f21865080	7	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2644	796	svchost.exe	0xc28f2186e080	6	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2668	796	svchost.exe	0xc28f2190f080	4	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2676	796	svchost.exe	0xc28f2190e3c0	6	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2704	796	svchost.exe	0xc28f21915380	4	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2852	4	MemCompression	0xc28f219a5040	34	-	N/A	False	2024-05-22 17:37:53.000000	N/A	Disabled
2868	796	svchost.exe	0xc28f219a7380	5	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2952	796	svchost.exe	0xc28f21a2e0c0	9	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
3008	796	svchost.exe	0xc28f21c873c0	3	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2652	796	svchost.exe	0xc28f21ae50c0	1	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
2788	796	svchost.exe	0xc28f21d11140	2	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
3136	796	svchost.exe	0xc28f21b480c0	2	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
3168	796	svchost.exe	0xc28f21b4e0c0	1	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
3176	796	spoolsv.exe	0xc28f21ddc0c0	7	-	0	False	2024-05-22 17:37:53.000000	N/A	Disabled
3320	796	svchost.exe	0xc28f21c1fb0c0	9	-	0	False	2024-05-22 17:37:54.000000	N/A	Disabled
3368	796	svchost.exe	0xc28f21c130c0	13	-	0	False	2024-05-22 17:37:54.000000	N/A	Disabled
3440	796	svchost.exe	0xc28f21c650c0	5	-	0	False	2024-05-22 17:37:54.000000	N/A	Disabled
3596	796	svchost.exe	0xc28f21fac0c0	1	-	0	False	2024-05-22 17:37:54.000000	N/A	Disabled
3708	796	MsMpEng.exe	0xc28f2219a0c0	21	-	0	False	2024-05-22 17:37:55.000000	N/A	Disabled
3940	796	svchost.exe	0xc28f21c44300	23	-	0	False	2024-05-22 17:37:55.000000	N/A	Disabled
3892	796	SearchIndexer.exe	0xc28f21ac4340	12	-	0	False	2024-05-22 17:37:56.000000	N/A	Disabled
4968	796	svchost.exe	0xc28f21b2d080	5	-	0	False	2024-05-22 17:38:02.000000	N/A	Disabled
4976	796	svchost.exe	0xc28f22043380	9	-	0	False	2024-05-22 17:38:02.000000	N/A	Disabled
4984	796	svchost.exe	0xc28f220ba340	11	-	0	False	2024-05-22 17:38:02.000000	N/A	Disabled

5012	796	svchost.exe	0xc28f21f223c0	3	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
5068	796	VAuthService.	0xc28f21f55080	2	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
5072	796	vmtoolsd.exe	0xc28f21f4d080	3	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
5080	796	vmtoolsd.exe	0xc28f21f77080	13	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
5100	796	wlms.exe	0xc28f21f21080	2	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
5116	796	svchost.exe	0xc28f22042080	6	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
5836	796	svchost.exe	0xc28f21edc080	8	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
4172	5072	vmtoolsd.exe	0xc28f21f32340	4	-	1	False	2024-05-22	17:38:02.000000	N/A	Disabled
4392	796	svchost.exe	0xc28f21e213c0	12	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
4588	796	svchost.exe	0xc28f227040c0	17	-	0	False	2024-05-22	17:38:02.000000	N/A	Disabled
4896	4976	AggregatorHost	0xc28f22796080	1	-	0	False	2024-05-22	17:38:03.000000	N/A	Disabled
948	796	svchost.exe	0xc28f2296b080	5	-	0	False	2024-05-22	17:38:05.000000	N/A	Disabled
4468	796	svchost.exe	0xc28f21f33080	8	-	0	False	2024-05-22	17:38:05.000000	N/A	Disabled
5140	964	WmiPrvSE.exe	0xc28f22aa83c0	4	-	0	False	2024-05-22	17:38:06.000000	N/A	Disabled
5240	796	svchost.exe	0xc28f21b66080	1	-	0	False	2024-05-22	17:38:06.000000	N/A	Disabled
5248	796	svchost.exe	0xc28f22ad13c0	20	-	0	False	2024-05-22	17:38:06.000000	N/A	Disabled
5340	3320	sihost.exe	0xc28f22b30080	15	-	1	False	2024-05-22	17:38:06.000000	N/A	Disabled
5360	796	svchost.exe	0xc28f22b323c0	4	-	1	False	2024-05-22	17:38:06.000000	N/A	Disabled
5396	796	svchost.exe	0xc28f22b750c0	2	-	1	False	2024-05-22	17:38:06.000000	N/A	Disabled
5440	796	svchost.exe	0xc28f22b773c0	8	-	1	False	2024-05-22	17:38:06.000000	N/A	Disabled
5592	796	svchost.exe	0xc28f22c26980	7	-	0	False	2024-05-22	17:38:06.000000	N/A	Disabled
5716	796	svchost.exe	0xc28f22c6d0c0	5	-	0	False	2024-05-22	17:38:06.000000	N/A	Disabled
5808	748	userinit.exe	0xc28f22ba32c0	0	-	1	False	2024-05-22	17:38:06.000000	2024-05-22 07:38:33.000000	Disabled
5832	5808	explorer.exe	0xc28f219c7080	80	-	1	False	2024-05-22	17:38:06.000000	N/A	Disabled
5860	964	WmiPrvSE.exe	0xc28f22c943c0	12	-	0	False	2024-05-22	17:38:06.000000	N/A	Disabled
6068	1892	taskhostw.exe	0xc28f22c9b3c0	9	-	1	False	2024-05-22	17:38:07.000000	N/A	Disabled
6092	1892	taskhostw.exe	0xc28f22cea080	3	-	1	False	2024-05-22	17:38:07.000000	N/A	Disabled
6484	796	dllhost.exe	0xc28f22eb53c0	10	-	0	False	2024-05-22	07:38:07.000000	N/A	Disabled
6544	5080	VMwareResoluti	0xc28f22ec080	0	-	1	False	2024-05-22	07:38:08.000000	2024-05-22 07:38:08.000000	Disabled
6604	796	msdtc.exe	0xc28f22ef03c0	9	-	0	False	2024-05-22	07:38:08.000000	N/A	Disabled
6696	796	svchost.exe	0xc28f22f6c380	2	-	0	False	2024-05-22	07:38:08.000000	N/A	Disabled
6800	796	svchost.exe	0xc28f22f7d080	6	-	0	False	2024-05-22	07:38:08.000000	N/A	Disabled
7072	796	svchost.exe	0xc28f23072380	3	-	0	False	2024-05-22	07:38:08.000000	N/A	Disabled
6320	3008	ctfmon.exe	0xc28f231b0340	12	-	1	False	2024-05-22	07:38:08.000000	N/A	Disabled
6992	796	svchost.exe	0xc28f23207380	4	-	0	False	2024-05-22	07:38:08.000000	N/A	Disabled
7484	7416	msedge.exe	0xc28f232cd080	0	-	1	False	2024-05-22	07:38:09.000000	2024-05-22 07:38:11.000000	Disabled
7312	796	svchost.exe	0xc28f234223c0	13	-	1	False	2024-05-22	07:38:12.000000	N/A	Disabled
7912	964	SearchHost.exe	0xc28f23069080	54	-	1	False	2024-05-22	07:38:12.000000	N/A	Disabled
7492	964	StartMenuExper	0xc28f233d080	14	-	1	False	2024-05-22	07:38:12.000000	N/A	Disabled
8024	964	Wdgts.exe	0xc28f233c2080	18	-	1	False	2024-05-22	07:38:12.000000	N/A	Disabled
6148	964	RuntimeBroker.	0xc28f236153c0	6	-	1	False	2024-05-22	07:38:12.000000	N/A	Disabled
8096	964	RuntimeBroker.	0xc28f236193c0	6	-	1	False	2024-05-22	07:38:12.000000	N/A	Disabled
7268	796	svchost.exe	0xc28f237103c0	3	-	1	False	2024-05-22	07:38:13.000000	N/A	Disabled
8408	796	svchost.exe	0xc28f238b9380	10	-	0	False	2024-05-22	07:38:13.000000	N/A	Disabled
8924	964	dllhost.exe	0xc28f23cd080	7	-	1	False	2024-05-22	07:38:15.000000	N/A	Disabled
8760	796	svchost.exe	0xc28f234e8080	6	-	0	False	2024-05-22	07:38:28.000000	N/A	Disabled
3780	796	svchost.exe	0xc28f231e53c0	3	-	0	False	2024-05-22	07:38:39.000000	N/A	Disabled
4184	5832	SecurityHealth	0xc28f238bd080	4	-	1	False	2024-05-22	07:39:31.000000	N/A	Disabled
7552	796	SecurityHealth	0xc28f23af4380	14	-	0	False	2024-05-22	07:39:31.000000	N/A	Disabled
8240	5832	vmtoolsd.exe	0xc28f238d3080	7	-	1	False	2024-05-22	07:39:31.000000	N/A	Disabled
7992	6356	OneDrive.exe	0xc28f236240c0	21	-	1	False	2024-05-22	07:39:56.000000	N/A	Disabled
3376	7992	Microsoft.Shar	0xc28f24fc60c0	0	-	1	False	2024-05-22	07:39:58.000000	2024-05-22 07:49:59.000000	Disabled
2512	796	uhssvc.exe	0xc28f244e1080	3	-	0	False	2024-05-22	07:40:02.000000	N/A	Disabled
9012	796	svchost.exe	0xc28f24fc2080	13	-	0	False	2024-05-22	07:40:02.000000	N/A	Disabled
5232	796	svchost.exe	0xc28f231bc080	1	-	1	False	2024-05-22	07:40:02.000000	N/A	Disabled
2540	964	WidgetService.	0xc28f231ed080	7	-	1	False	2024-05-22	07:40:05.000000	N/A	Disabled
6640	796	svchost.exe	0xc28f23055080	11	-	0	False	2024-05-22	07:44:18.000000	N/A	Disabled
7512	964	ShellExperien	0xc28f23d4d080	26	-	1	False	2024-05-22	07:44:26.000000	N/A	Disabled
1172	796	svchost.exe	0xc28f2344c080	3	-	1	False	2024-05-22	07:44:27.000000	N/A	Disabled
6744	964	RuntimeBroker.	0xc28f235c1080	15	-	1	False	2024-05-22	07:44:27.000000	N/A	Disabled
5096	964	SystemSettings	0xc28f23453080	6	-	1	False	2024-05-22	07:44:27.000000	N/A	Disabled
7128	796	svchost.exe	0xc28f2178e080	1	-	0	False	2024-05-22	07:44:28.000000	N/A	Disabled
5980	796	svchost.exe	0xc28f23351080	12	-	0	False	2024-05-22	07:44:29.000000	N/A	Disabled
2516	796	svchost.exe	0xc28f24f4d080	6	-	0	False	2024-05-22	07:45:24.000000	N/A	Disabled
4036	796	svchost.exe	0xc28f232f7080	29	-	0	False	2024-05-22	07:45:24.000000	N/A	Disabled
5676	796	svchost.exe	0xc28f23632080	5	-	0	False	2024-05-22	07:45:24.000000	N/A	Disabled
7700	8408	MoUsCoreWorke	0xc28f23ce5080	9	-	0	False	2024-05-22	07:45:24.000000	N/A	Disabled
1824	3892	SearchProtocol	0xc28f23fe0080	7	-	0	False	2024-05-22	07:47:06.000000	N/A	Disabled
6404	796	TrustedInstall	0xc28f24455080	5	-	0	False	2024-05-22	07:48:20.000000	N/A	Disabled
2080	964	TiWorker.exe	0xc28f23bf4080	5	-	0	False	2024-05-22	07:48:20.000000	N/A	Disabled
808	7700	MoNotification	0xc28f23af7080	0	-	1	False	2024-05-22	07:48:47.000000	2024-05-22 07:48:47.000000	Disabled
6624	796	svchost.exe	0xc28f258cb080	5	-	0	False	2024-05-22	07:49:28.000000	N/A	Disabled
1596	964	smartscreen.ex	0xc28f25bd4380	9	-	1	False	2024-05-22	07:49:32.000000	N/A	Disabled
7924	7700	MoNotification	0xc28f24a80080	0	-	1	False	2024-05-22	07:51:11.000000	2024-05-22 07:51:11.000000	Disabled
8568	7700	MoNotification	0xc28f238ed080	0	-	1	False	2024-05-22	07:51:13.000000	2024-05-22 07:51:13.000000	Disabled
6452	796	svchost.exe	0xc28f2689d080	11	-	0	False	2024-05-22	07:54:16.000000	N/A	Disabled
8164	796	svchost.exe	0xc28f26830380	6	-	0	False	2024-05-22	07:54:17.000000	N/A	Disabled
4828	5176	setup.exe	0xc28f27480080	4	-	0	False	2024-05-22	07:54:32.000000	N/A	Disabled
8632	4828	setup.exe	0xc28f2749d080	6	-	0	False	2024-05-22	07:54:32.000000	N/A	Disabled
1928	8024	msedgewebview2	0xc28f22978080	45	-	1	False	2024-05-22	07:54:34.000000	N/A	Disabled
7940	1928	msedgewebview2	0xc28f24f0f080	7	-	1	False	2024-05-22	07:54:34.000000	N/A	Disabled
516	1928	msedgewebview2	0xc28f23ad0080	20	-	1	False	2024-05-22	07:54:35.000000	N/A	Disabled
3896	1928	msedgewebview2	0xc28f235bc080	13	-	1	False	2024-05-22	07:54:35.000000	N/A	Disabled
1772	1928	msedgewebview2	0xc28f21b20080	7	-	1	False	2024-05-22	07:54:35.000000	N/A	Disabled
6948	1928	msedgewebview2	0xc28f233a2080	16	-	1	False	2024-05-22	07:54:35.000000	N/A	Disabled
9200	796	svchost.exe	0xc28f25eeb080	16	-	0	False	2024-05-22	07:55:06.000000	N/A	Disabled
5172	3340	msedge.exe	0xc28f2323a080	0	-	1	False	2024-05-22	07:55:10.000000	2024-05-22 08:17:44.000000	Disabled
11252	7700	MoNotification	0xc28f26936080	0	-	1	False	2024-05-22	07:55:21.000000	2024-05-22 07:55:21.000000	Disabled
10716	964	ApplicationFra	0xc28f2680a380	4	-	1	False	2024-05-22	08:16:56.000000	N/A	Disabled
11432	7700	MoNotification	0xc28f2429a080	0	-	1	False	2024-05-22	08:16:59.000000	2024-05-22 08:17:00.000000	Disabled
12216	796	svchost.exe	0xc28f26ac2080	5	-	1	False	2024-05-22	08:17:10.000000	N/A	Disabled
7880	964	FileCoAuth.exe	0xc28f2687b080	5	-	1	False	2024-05-22	08:17:37.000000	N/A	Disabled
1780	3340	msedge.exe	0xc28f24289080	50	-	1	False	2024-05-22	08:17:44.000000	N/A	Disabled
10524	1780	msedge.exe	0xc28f26e12080	8	-	1	False	2024-05-22	08:17:44.000000	N/A	Disabled
7884	1780	msedge.exe	0xc28f24b2c080	17	-	1	False	2024-05-22	08:17:44.000000	N/A	Disabled
11744	1780	msedge.exe	0xc28f231c5080	14	-	1	False	2024-05-22	08:17:44.000000	N/A	Disabled
9544	1780	msedge.exe	0xc28f26812080	9	-	1	False	2024-05-22	08:17:44.000000	N/A	Disabled
7188	1780	msedge.exe	0xc28f24911080	16	-	1	False	2024-05-22	08:17:50.000000	N/A	Disabled
4768	1780	msedge.exe	0xc28f27ad6240	14	-	1	False	2024-05-22	08:17:50.000000	N/A	Disabled
11628	964	Microsoft.Phot	0xc28f23570080	15	-	1	False	2024-05-22	08:18:05.000000	N/A	Disabled
11492	964	RuntimeBroker.	0xc28f242a2080	6	-	1	False	2024-05-22	08:18:07.000000	N/A	Disabled
5912	964	CHXSmartScreen	0xc28f21c5a080	36	-	1	False	2024-05-22	08:18:		

- **python .\vol.py -f ..\vm\windows-Snapshot2.vmem windows.cmdline**

```

1  System Required memory at 0x20 is not valid (process exited)
2  SecuritySystem Required memory at 0x20 is not valid (process exited)
3  Registry Required memory at 0x20 is not valid (process exited)
4  SystemClock SystemClock.exe C:\Windows\System32\smss.exe
5  csrss.exe SystemClock\SystemClock.exe ObjectDirectory\Windows ShareSystem-1024,20480,768 WindowsOn SubSystem\pewindows ServerDll\baserv1,1 ServerDll\msrvr\pewindowsServerDll\Initialization,1 ServerDll\ssxrv4,4 ProfileControl\Off MaxRequestThreads=16
6  wininit.exe wininit.exe
7  winlogon.exe winlogon.exe
8  csrss.exe C:\Windows\System32\services.exe
9  lsass.exe V77(C:\Windows\System32\lsass.exe -CredGuard -KeyGuard
10 lsass.exe C:\Windows\System32\lsass.exe
11 svchost.exe C:\Windows\System32\svchost.exe -K DcomLaunch -p
12 fontdrvhost.exe "fontdrvhost.exe"
13 svchost.exe "fontdrvhost.exe"
14 svchost.exe C:\Windows\System32\svchost.exe -K RPCSS -p
15 svchost.exe C:\Windows\System32\svchost.exe -K DcomLaunch -p -s Lsm
16 spoolsv.exe Required memory at 0xa8d522b020 is not valid (process exited)
17 csrss.exe C:\Windows\System32\services.exe
18 svchost.exe C:\Windows\System32\svchost.exe -K DcomLaunch -p -s DeviceInstall
19 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetwork
20 svchost.exe C:\Windows\System32\svchost.exe -K LocalService -p -s Display
21 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s AudioEndpointBuilder
22 svchost.exe C:\Windows\System32\svchost.exe -K LocalServiceNetworkRestricted -p -s LocalService -p -s nls
23 svchost.exe C:\Windows\System32\svchost.exe -K LocalService -p -s nls
24 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s netprose
25 svchost.exe C:\Windows\System32\svchost.exe -K UserProfileService -p -s ProfSvc
26 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s SchedSvc
27 svchost.exe C:\Windows\System32\svchost.exe -K NetworkService -p
28 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s WMI
29 svchost.exe C:\Windows\System32\svchost.exe -K NetworkService -p
30 svchost.exe C:\Windows\System32\svchost.exe -K wscntfrg -p -s ClipSVC
31 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s MscService
32 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s TimeBrokerSvc
33 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s AppIDSvc
34 svchost.exe C:\Windows\System32\svchost.exe -K appomodel -p -s StateRepository
35 svchost.exe C:\Windows\System32\svchost.exe -K LocalServiceNetworkRestricted -p -s Dhcp
36 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s gsvc
37 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s ms
38 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s Eventlog
39 svchost.exe C:\Windows\System32\svchost.exe -K LocalService -p -s EventSystem
40 svchost.exe C:\Windows\System32\svchost.exe -K LocalServiceNetworkRestricted -p -s MIMMailboxProxySvc
41 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s SysMain
42 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s Themes
43 NetCompression Required memory at 0x20 is not valid (process exited)
44 svchost.exe C:\Windows\System32\svchost.exe -p -s SNE
45 svchost.exe C:\Windows\System32\svchost.exe -K LocalService -p -s FontCache
46 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s TextInputManagementService
47 svchost.exe C:\Windows\System32\svchost.exe -K LocalServiceNetworkRestricted -p -s
48 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p
49 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s ShellDetection
50 svchost.exe C:\Windows\System32\svchost.exe -K NetSvc -p -s nvgant
51 spoolsv.exe C:\Windows\System32\spoolsv.exe
52 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s UserManager
53 svchost.exe C:\Windows\System32\svchost.exe -K LocalServiceNetworkFirewall -p
54 svchost.exe C:\Windows\System32\svchost.exe -K NetworkService -p -s Lsm
55 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s ShareAccess
56 svchost.exe C:\ProgramData\Microsoft\Windows\Defender\Platform\HIT_2020-7-0\MSDefEng.exe"
57 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s WMI
58 SearchIndexer.exe C:\Windows\System32\SearchIndexer.exe (Embedding
59 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s Iptlmp
60 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s WMI
61 svchost.exe C:\Windows\System32\svchost.exe -K netprose -p -s DPS
62 svchost.exe C:\Windows\System32\svchost.exe -K LocalSystemNetworkRestricted -p -s Trunks
63
64 Vmtoolsd.exe "C:\Program Files\VMware\VMware Tools\VMware Vmtoolsd\VmtoolsdService.exe
65 Vmtoolsd.exe "C:\Program Files\VMware\VMware Tools\Vmtoolsd.exe"
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158 vmtoolsd.exe
```



```
the type of the destination disk is missing.
PS C:\Program Files (x86)\VMware\VMware Workstation> .\vmware-vdiskmanager.exe -p "E:\vm\infected_windows\windows-disk1-c11.vmdk" -t 0 "E:\vm\dump_disk\windows_disk1.raw"
SSLConfigLoad: Failed to load OpenSSL config file.
Creating disk 'E:\vm\dump_disk\windows_disk1.raw'
Convert: 100% done.
Virtual disk conversion successful.
PS C:\Program Files (x86)\VMware\VMware Workstation>
```

