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8b1a99f

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examples

Get-GPPPassword.py

GetADUsers.py

GetNPUsers.py

GetUserSPNs.py

addcomputer.py

atexec.py

dcomexec.py

dpapi.py

esentutl.py

exchanger.py

findDelegation.py

getArch.py

getPac.py

getST.py

getTGT.py

goldenPac.py

karmaSMB.py

keylistattack.py

kintercept.py

lookupsid.py

machine_role.py

mimikatz.py

mqtt_check.py

mssqlclient.py

mssqlinstance.py

netview.py

nmapAnswerMachine.py

ntfs-read.py

ntlmrelayx.py

ping.py

ping6.py

psexec.py

raiseChild.py

rbcd.py

impacket / examples / dcomexec.py

martingalloar

Arrange tagline, copyright and license notes across...

cd4fe47 · 3 years ago

History

Code

Blame

Executable File · 657 lines (574 loc) · 28.2 KB

Raw

1

#!/usr/bin/env python

2

Impacket - Collection of Python classes for working with network protocols.

3

#

4

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5

#

6

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7

of the Apache Software License. See the accompanying LICENSE file

8

for more information.

9

#

10

Description:

11

A similar approach to psexec but executing commands through DCOM.

12

You can select different objects to be used to execute the commands.

13

Currently supported objects are:

14

1. MMC20.Application (49B2791A-B1AE-4C90-9B8E-E860BA07F889) - Tested Windows 7, W

15

2. ShellWindows (9BA05972-F6A8-11CF-A442-00A0C90A8F39) - Tested Windows 7, Window

16

3. ShellBrowserWindow (C08AFD90-F2A1-11D1-8455-00A0C91F3880) - Tested Windows 10,

17

#

18

Drawback is it needs DCOM, hence, I have to be able to access

19

DCOM ports at the target machine.

20

#

21

Original discovery by Matt Nelson (@enigma0x3):

22

https://enigma0x3.net/2017/01/05/lateral-movement-using-the-mmc20-application-com-o

23

https://enigma0x3.net/2017/01/23/lateral-movement-via-dcom-round-2/

24

#

25

Author:

26

beto (@agsolino)

27

Marcello (@byt3bl33d3r)

28

#

29

Reference for:

30

DCOM

31

#

32

ToDo:

33

[] Kerberos auth not working, invalid_checksum is thrown. Most probably sequence n

34

getInterface() method

35

#

36

37

from __future__ import division

38

from __future__ import print_function

39

import argparse

40

import cmd

41

import logging

42

import ntpath

43

import os

44

import sys

45

import time

46

from base64 import b64encode

47

48

from six import PY2, PY3

49

from impacket import version

50

from impacket.dcerpc.v5.dcom.oaut import IID_IDispatch, string_to_bin, IDispatch, DISPP

51

VARIANT, VARENUM, DISPATCH_METHOD

52

from impacket.dcerpc.v5.dcomrt import DCOMConnection, CONVERSION

53

from impacket.dcerpc.v5.dcomrt import OBJREF, FLAGS_OBJREF_CUSTOM, OBJREF_CUSTOM, OBJRE

54

OBJREF_EXTENDED, OBJREF_STANDARD, FLAGS_OBJREF_HANDLER, FLAGS_OBJREF_STANDARD, FLAG

55

IRemUnknown2, INTERFACE

56

from impacket.dcerpc.v5.dtypes import NULL

57

from impacket.examples import logger

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- rdp_check.py
- reg.py
- registry-read.py
- rpcdump.py
- rpcmap.py
- sambaPipe.py

```
57 from impacket.examples import logger
58 from impacket.examples.utils import parse_target
59 from impacket.smbconnection import SMBConnection, SMB_DIALECT, SMB2_DIALECT_002, SMB2_D
60 from impacket.krb5.keytab import Keytab
61
62 OUTPUT_FILENAME = '__' + str(time.time())[:5]
63 CODEC = sys.stdout.encoding
64
65 class DCOMEXEC:
66     def __init__(self, command='', username='', password='', domain='', hashes=None, ae
67         noOutput=False, doKerberos=False, kdcHost=None, dcomObject=None, shell
68         self.__command = command
69         self.__username = username
70         self.__password = password
71         self.__domain = domain
72         self.__lmhash = ''
73         self.__nthash = ''
74         self.__aesKey = aesKey
75         self.__share = share
76         self.__noOutput = noOutput
77         self.__doKerberos = doKerberos
78         self.__kdcHost = kdcHost
79         self.__dcomObject = dcomObject
80         self.__shell_type = shell_type
81         self.shell = None
82         if hashes is not None:
83             self.__lmhash, self.__nthash = hashes.split(':')
84
85     def getInterface(self, interface, resp):
86         # Now let's parse the answer and build an Interface instance
87         objRefType = OBJREF(b''.join(resp))['flags']
88         objRef = None
89         if objRefType == FLAGS_OBJREF_CUSTOM:
90             objRef = OBJREF_CUSTOM(b''.join(resp))
91         elif objRefType == FLAGS_OBJREF_HANDLER:
92             objRef = OBJREF_HANDLER(b''.join(resp))
93         elif objRefType == FLAGS_OBJREF_STANDARD:
94             objRef = OBJREF_STANDARD(b''.join(resp))
95         elif objRefType == FLAGS_OBJREF_EXTENDED:
96             objRef = OBJREF_EXTENDED(b''.join(resp))
97         else:
98             logging.error("Unknown OBJREF Type! 0x%x" % objRefType)
99
100         return IRemUnknown2(
101             INTERFACE(interface.get_cinstance(), None, interface.get_ipidRemUnknown(),
102                 oxid=objRef['std']['oxid'], oid=objRef['std']['oxid'],
103                 target=interface.get_target()))
104
105     def run(self, addr, silentCommand=False):
106         if self.__noOutput is False and silentCommand is False:
107             smbConnection = SMBConnection(addr, addr)
108             if self.__doKerberos is False:
109                 smbConnection.login(self.__username, self.__password, self.__domain, se
110             else:
111                 smbConnection.kerberosLogin(self.__username, self.__password, self.__do
112                     self.__nthash, self.__aesKey, kdcHost=self.
113
114             dialect = smbConnection.getDialect()
115             if dialect == SMB_DIALECT:
116                 logging.info("SMBv1 dialect used")
117             elif dialect == SMB2_DIALECT_002:
118                 logging.info("SMBv2.0 dialect used")
```



```
584                                     '(128 or 25
585     group.add_argument('-dc-ip', action='store',metavar = "ip address",  help='IP Address
586                                     'omitted it use the domain part (FQDN) specified in the target p
587     group.add_argument('-A', action="store", metavar = "authfile", help="smbclient/moun
588                                     "See smbclient
589     group.add_argument('-keytab', action="store", help='Read keys for SPN from keytab f
590
591     if len(sys.argv)==1:
592         parser.print_help()
593         sys.exit(1)
594
595     options = parser.parse_args()
596
597     # Init the example's logger theme
598     logger.init(options.ts)
599
600     if options.codec is not None:
601         CODEC = options.codec
602     else:
603         if CODEC is None:
604             CODEC = 'utf-8'
605
606     if ' '.join(options.command) == ' ' and options.nooutput is True:
607         logging.error("-nooutput switch and interactive shell not supported")
608         sys.exit(1)
609     if options.silentcommand and options.command == ' ':
610         logging.error("-silentcommand switch and interactive shell not supported")
611         sys.exit(1)
612
613     if options.debug is True:
614         logging.getLogger().setLevel(logging.DEBUG)
615         # Print the Library's installation path
616         logging.debug(version.getInstallationPath())
617     else:
618         logging.getLogger().setLevel(logging.INFO)
619
620     if options.com_version is not None:
621         try:
622             major_version, minor_version = options.com_version.split('.')
623             COMVERSION.set_default_version(int(major_version), int(minor_version))
624         except Exception:
625             logging.error("Wrong COMVERSION format, use dot separated integers e.g. \"5
626             sys.exit(1)
627
628     domain, username, password, address = parse_target(options.target)
629
630     try:
631         if options.A is not None:
632             (domain, username, password) = load_smbclient_auth_file(options.A)
633             logging.debug('loaded smbclient auth file: domain=%s, username=%s, password
634
635         if domain is None:
636             domain = ''
637
638         if options.keytab is not None:
639             Keytab.loadKeysFromKeytab(options.keytab, username, domain, options)
640             options.k = True
641
642         if password == '' and username != '' and options.hashes is None and options.no_
643             from getpass import getpass
644             password = getpass("Password:")
645
646         if options.aesKey is not None:
647             options.k = True
648
649         executer = DCOMEXEC(' '.join(options.command), username, password, domain, opti
650                             options.share, options.nooutput, options.k, options.dc_ip,
651         executer.run(address, options.silentcommand)
652     except (Exception, KeyboardInterrupt) as e:
653         if logging.getLogger().level == logging.DEBUG:
```

```
654             import traceback
655             traceback.print_exc()
656             logging.error(str(e))
657         sys.exit(0)
```