Product Solutions Resources Open Source Enterprise Pricing Sign in Sign up

fortra / impacket Public Notifications Fork 3.6k Star 13.5k

Code Issues 196 Pull requests 150 Actions Projects Security Insights

Files

8b1a99f

Go to file

.github
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 / atexec.py

martingalloar Arrange tagline, copyright and license notes across... cd4fe47 · 3 years ago History

Code Blame Executable File · 319 lines (276 loc) · 12.6 KB Raw

```
1   #!/usr/bin/env python
2   # Impacket - Collection of Python classes for working with network protocols.
3   #
4   # SECUREAUTH LABS. Copyright (C) 2021 SecureAuth Corporation. All rights reserved.
5   #
6   # This software is provided under a slightly modified version
7   # of the Apache Software License. See the accompanying LICENSE file
8   # for more information.
9   #
10  # Description:
11  #   ATSVC example for some functions implemented, creates, enums, runs, delete jobs
12  #   This example executes a command on the target machine through the Task Scheduler
13  #   service. Returns the output of such command
14  #
15  # Author:
16  #   Alberto Solino (@agsolino)
17  #
18  # Reference for:
19  #   DCE/RPC for TSCH
20  #
21
22  from __future__ import division
23  from __future__ import print_function
24  import string
25  import sys
26  import argparse
27  import time
28  import random
29  import logging
30
31  from impacket.examples import logger
32  from impacket import version
33  from impacket.dcerpc.v5 import tsch, transport
34  from impacket.dcerpc.v5.dtypes import NULL
35  from impacket.dcerpc.v5.rpcrt import RPC_C_AUTHN_GSS_NEGOTIATE, \
36      RPC_C_AUTHN_LEVEL_PKT_PRIVACY
37  from impacket.examples.utils import parse_target
38  from impacket.krb5.keytab import Keytab
39  from six import PY2
40
41  CODEC = sys.stdout.encoding
42
43  class TSCH_EXEC:
44      def __init__(self, username='', password='', domain='', hashes=None, aesKey=None, d
45                   command=None, sessionId=None, silentCommand=False):
46          self.__username = username
47          self.__password = password
48          self.__domain = domain
49          self.__lmhash = ''
50          self.__nthash = ''
51          self.__aesKey = aesKey
52          self.__doKerberos = doKerberos
53          self.__kdcHost = kdcHost
54          self.__command = command
55          self.__silentCommand = silentCommand
56          self.sessionId = sessionId
57
```

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

```
58              if hashes is not None:
59                  self.__lmhash, self.__nthash = hashes.split(':')
60
61          def play(self, addr):
62              stringbinding = r'ncacn_np:%s[\pipe\atsvc]' % addr
63              rpctransport = transport.DCERPCTransportFactory(stringbinding)
64
65              if hasattr(rpctransport, 'set_credentials'):
66                  # This method exists only for selected protocol sequences.
67                  rpctransport.set_credentials(self.__username, self.__password, self.__domai
68                                               self.__aesKey)
69                  rpctransport.set_kerberos(self.__doKerberos, self.__kdcHost)
70              try:
71                  self.doStuff(rpctransport)
72              except Exception as e:
73                  if logging.getLogger().level == logging.DEBUG:
74                      import traceback
75                      traceback.print_exc()
76                  logging.error(e)
77                  if str(e).find('STATUS_OBJECT_NAME_NOT_FOUND') >=0:
78                      logging.info('When STATUS_OBJECT_NAME_NOT_FOUND is received, try runnin
79
80          def doStuff(self, rpctransport):
81              def output_callback(data):
82                  try:
83                      print(data.decode(CODEC))
84                  except UnicodeDecodeError:
85                      logging.error('Decoding error detected, consider running chcp.com at th
86                                    'https://docs.python.org/3/library/codecs.html#standard-e
87                                    'again with -codec and the corresponding codec')
88                      print(data.decode(CODEC, errors='replace'))
89
90              def xml_escape(data):
91                  replace_table = {
92                       "&": "&amp;",
93                       '"': "&quot;",
94                       "'": "&apos;",
95                       ">": "&gt;",
96                       "<": "&lt;",
97                       }
98                  return ''.join(replace_table.get(c, c) for c in data)
99
100             def cmd_split(cmdline):
101                 cmdline = cmdline.split(" ", 1)
102                 cmd = cmdline[0]
103                 args = cmdline[1] if len(cmdline) > 1 else ''
104
105                 return [cmd, args]
106
107             dce = rpctransport.get_dce_rpc()
108
109             dce.set_credentials(*rpctransport.get_credentials())
110             if self.__doKerberos is True:
111                 dce.set_auth_type(RPC_C_AUTHN_GSS_NEGOTIATE)
112             dce.connect()
113             dce.set_auth_level(RPC_C_AUTHN_LEVEL_PKT_PRIVACY)
114             dce.bind(tsch.MSRPC_UUID_TSCHS)
115             tmpName = ''.join([random.choice(string.ascii_letters) for _ in range(8)])
116             tmpFileName = tmpName + '.tmp'
117
118             if self.sessionId is not None:
```

```
246         parser.add_argument('target', action='store', help='[[domain/]username[:password]@]
247         parser.add_argument('command', action='store', nargs='*', default=' ', help='comman
248         parser.add_argument('-session-id', action='store', type=int, help='an existed logon
249         parser.add_argument('-ts', action='store_true', help='adds timestamp to every loggi
250         parser.add_argument('-silentcommand', action='store_true', default = False, help='d
251                                                                                            'g
252         parser.add_argument('-debug', action='store_true', help='Turn DEBUG output ON')
253         parser.add_argument('-codec', action='store', help='Sets encoding used (codec) from
254                                                            '"%s"). If errors are detected,
255                                                            'map the result with '
256                                'https://docs.python.org/3/library/codecs.html#standard-encod
257                                'again with -codec and the corresponding codec ' % CODEC)
258
259         group = parser.add_argument_group('authentication')
260
261         group.add_argument('-hashes', action="store", metavar = "LMHASH:NTHASH", help='NTLM
262         group.add_argument('-no-pass', action="store_true", help='don\'t ask for password (
263         group.add_argument('-k', action="store_true", help='Use Kerberos authentication. Gr
264                            '(KRB5CCNAME) based on target parameters. If valid credentials c
265                            'ones specified in the command line')
266         group.add_argument('-aesKey', action="store", metavar = "hex key", help='AES key to
267                                                                                  '(128 or 25
268         group.add_argument('-dc-ip', action='store',metavar = "ip address",  help='IP Addre
269                                                'If omitted it will use the domain part (FQDN)
270         group.add_argument('-keytab', action="store", help='Read keys for SPN from keytab f
271
272         if len(sys.argv)==1:
273             parser.print_help()
274             sys.exit(1)
275
276         options = parser.parse_args()
277
278         # Init the example's logger theme
279         logger.init(options.ts)
280
```

```
281         if options.codec is not None:
282             CODEC = options.codec
283         else:
284             if CODEC is None:
285                 CODEC = 'utf-8'
286
287         logging.warning("This will work ONLY on Windows >= Vista")
288
289         if ''.join(options.command) == ' ':
290             logging.error('You need to specify a command to execute!')
291             sys.exit(1)
292
293         if options.debug is True:
294             logging.getLogger().setLevel(logging.DEBUG)
295             # Print the Library's installation path
296             logging.debug(version.getInstallationPath())
297         else:
298             logging.getLogger().setLevel(logging.INFO)
299
300         domain, username, password, address = parse_target(options.target)
301
302         if domain is None:
303             domain = ''
304
305         if options.keytab is not None:
306             Keytab.loadKeysFromKeytab (options.keytab, username, domain, options)
307             options.k = True
308
309         if password == '' and username != '' and options.hashes is None and options.no_pass
310             from getpass import getpass
311
312             password = getpass("Password:")
313
314         if options.aesKey is not None:
315             options.k = True
316
317         atsvc_exec = TSCH_EXEC(username, password, domain, options.hashes, options.aesKey,
318                                ' '.join(options.command), options.session_id, options.silen
319         atsvc_exec.play(address)
```