

(Advisory no 55)Oct 18

1. **Introduction.** A **cyber-attack has been identified** targeting Pakistani nationals' especially **private firms doing contracts with Pakistan Defence Forces.**

2. **Attack Methodology**

- a. Target individual receives a call from an unknown Pakistani number claiming to be a Pakistani government official/ Pakistan Armed Forces. Caller Officer requests for details on defence related products being developed and provided to defence organizations.
- b. The caller (attacker) also refers to ongoing products provided by the firms to Pakistan defence organizations to establish credibility.
- c. Following initial telephonic conversation (on GSM and WhatsApp) **emails containing malicious link** are sent to the target.
- d. Downloading and opening the file from email executes the **malware in the background** and the system is compromised/ hacked.
- e. Attackers are using fake domain names similar to existing official domains/ websites owned by Government Institutes to convince the recipient that the emails are sent by the actual government departments. Following are the observed fake domains:-

- (1) **fbrgov.com**
- (2) **moitgovpk.com**
- (3) **fpmadgovpk.com**

3. **Summary of Malicious Email**

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- a. **Subject** : **Malfunctioning of TI Sight TK**
 - b. **Sender's Email** : **fatehgeeiani@gmail.com**
 - c. **Malicious Link** : **http ://sharefile.site**
 - d. **Downloaded Document(s)** : **sharedfile.coc**
 - e. **Document Signature (MD5)** : **47E52A73F0C0CD0F3863A9CD17981F95**

4. **Technical Analysis of Malware**

- a. **Exploit.** Attacker has used vulnerability in **Microsoft Word (CVE-2017-8570)** to target the victim.
- b. **Capabilities of Malware.** The malware uploads data including documents and files to C&C server.
- c. **Anti-Virus Detection.** The malware "winc.exe" is not detected by major Anti-Virus software.

- (1) **Detection Rate.** 0/67
- (2) **Detection Percentage.** 0
- d. **Malicious Domains/ IPs**

Ser No	Malicious URL	IP Address	Hosting Country
(1)	https://sharefile.site	23.95.9.107	United States
(2)	C&C Server	193.22.98.226	Ukraine

5 **Indicators of Compromise**

a. **Created Files.** Malware drops 3 x files at location "VoAppDataLocal1Temp", following are the details:-

- (1) "winc.exe", a malicious executable file with signature (MD5): 25d3508a5e887cfd7343e798d839ad5a.
- (2) "LS4TJPBO1V00Y3A.sct", a script used to run the executable.
- (3) "decoy.doc", a blank document.

b. **Created processes.** Malware runs as "winc.exe" (32 Bit Application) and has a size of 6.4MB.

c. **Persistence.** The malware creates a file "Win Setting Loader" in windows startup folder.

6. **Mitigation Methods.** Following mitigation measures are suggested in this regard:-

- a. Kill process "winc.exe" using Windows Task Manager.
- b. Delete the following dropped files.
 - (1) "%AppData1Local1Temp\winc.exe"
 - (2) "%AppDatMLocalITemp\LS4TJPB01V00Y3A.sct"
 - (3) "1AppData1Roaming1Microsoft1Windows1Start Menu1Programs1Startup1Win Setting Loader"
- c. Implement filters at the email gateway to filter out email with known indicators and block suspicious IP addresses at the firewall.
- d. Formulate a policy regarding suspicious emails so that all suspicious emails should be reported to the security or IT department.
- e. Provide employees basic cyber security awareness training.

7. **Recommendations**

- a. Do not respond to such fake telephone calls and avoid sharing details of

SECRET

products supplied to Pakistan Defence Forces.

- b. Install and update licensed and well reputed antiviruses such as Kaspersky, Avira, Avast etc.
- c. Block C&C Servers at Para 4d in firewalls of own networks.
- d. In case, if indicators of compromise (para 5) are found in the system, disconnect the computer from the internet and re-install Windows OS.
- e. Update all software including windows OS, Microsoft Office etc.
- f. Do not download attachments from emails unless you are sure about the source.
- g. Discard emails received from ambiguous/ fake domains mentioned at Para 2e.