GOVERNMENT OF PAKISTAN CABINET SECRETRIAT, CABINET DIVISION NATIONAL TELECOM & INFORMATION TECHNOLOGY SECURITY BOARD (NTISB)

No. 1-5/2003 (NTISB-II)

Islamabad 13 August, 2021

Subject:

Cyber Security Advisory – Netwire RAT (Remote Access Trojan) (Advisory No. 53)

1. Recently, a spear phishing campaign is targeting a wide range of government organizations in Pakistan using netwire RAT (Remote Access Trojan) malware. The combination of spear phishing and the use of information stealing RAT makes it a sophisticated attack vector. Therefore, an advisory is attached at Annexure-A to Asensitize all concerned to take recommended corrective measures.

Forwarded for information / dissemination to concerned, please.

M(Admin1HR)

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All Secretaries of Ministries / Divisions of Federal Government and Chief Secretaries of Provincial Governments.

Copy to: -

- 1. Secretary to the Prime Minister, Prime Minister Secretariat, Islamabad
- 2. Secretary to the President, Aiwan-e-Sadar, Islamabad
- Cabinet Secretary, Cabinet Division, Islamabad
 - Additional Secretary-III, Cabinet Division, Islamabad
 - Director General (Tech), Dte Gen, ISI Islamabad
 - Secretary, NTISB, Cabinet Division, Islamabad
- 7. Deputy Secretary, NTISB, Cabinet Division, Islamabad
- Director (IT), Cabinet Division, Islamabad

everyed in Chairman's Section 17 AUG-2021

Cyber Security Advisory - Netwire RAT (Remote Access Trojan) (Advisory No. 53)

- 1. Recently, a spear phishing campaign is targeting a wide range of government organizations in Pakistan using Netwire RAT (Remote Access Trojan) malware. The combination of spear phishing and use of information stealing RAT makes it a sophisticated attack vector. Therefore, recommendations given at **Para 3** must be adhered to prevent against the ongoing attack campaign.
- Technical Details. Attached at Appex-I.

3. Recommendations

a. For System / Network Administrators

- (1) Windows commands / utilities not required by endusers should be blacklisted for endpoint execution like mshta.exe, bitsadmin.exe, finger.exe, certutil.exe, cipher.exe and syskey.exe
- (2) Block execution of scripts with .vbs, .vbe, .hta, .js, .wsh, wsf, .com, .pif, .ps1 extensions as this attack relies upon free execution of scripts and powershell.
- (3) Blacklist / Block outbound network connections from winword.exe, notepad.exe, explorer.exe, powershell.exe, bitsadmin.exe, mshta.exe, excel.exe and egnedt32.exe.
- (4) Centralized monitoring of endpoint windows logs must be performed to detect anomalous user behavior
- (5) Regularly update antimalware solutions running on endpoints in enterprise environment as well as standalone systems.
- (6) Educate endusers regarding cyber security best practices and antimalware measures

b. For Endusers.

- (1) Regularly update well reputed antiviruses such as Kaspersky, Avira, Avast etc. and scan system regularly.
- (2) Do not download attachments from emails or websites unless you are sure about the source.
- (3) Avoid downloading softwares from untrusted websites or torrents
- (4) Use chrome / firefox for browsing internet instead of internet explorer
- (5) Make sure that web browser is up to date and no plugins other than adblock or adblock plus is enabled

4. Reporting of Cyber Security issues / Queries. For reporting malware or any other query / issues regarding Cyber Security, details may please be forwarded to this organization on the following email address: -

asntisb2@cabinet.gov.pk

5. Forwarded for perusal and dissemination of information to all concerned and under command, please.

TECHNICAL DETAILS - NETWIRE MALWARE

Attack Vectors.

Phishing Emails and RAT (Remote Access Trojan)

Utility Abused.

Powershell + VBS based scripts

Attack Cycle

- a. Attackers send phishing email with macro document or with a known exploit.
- b. Upon downloading and opening attachment, macro / exploit gets executed.
- Malicious macro / exploit is preprogrammed to download additional payload from its
 C&C server or compromised website using powershell .vbs based script.
- d. Data (including word, PowerPoint, excel, pdfs) is exfiltrated to C&C server.

Netwire Features

- a. Includes taking screenshots
- b. Keylogging
- c. Stealing browser logs
- d. Clipboard data
- e. File harvesting, the theft of OS information, and the ability to download and execute additional malware.