

Subject: **Advisory - Prevention Against Cyber Espionage via Malicious Excel Files (Advisory No. 17)**

1. **Context.** **Malicious excel files** are being used for targeting users via phishing emails. The malicious files are not standard **Excel Spreadsheets** and have **low detection rate** and higher chance of **evading security systems**. The malicious Excel files can also bypass security scanners.

2. **Technical Details**

- a. The malicious excel files are not compiled in standard Microsoft Office Excel, but with a **.NET library** called **EPPlus**, that creates an Office Open XML (OOXML) format.
- b. The **OOXML spreadsheet files** lack a section of **compiled VBA code**, specific to Excel documents compiled in Microsoft's proprietary Office software.
- c. The malicious excel files contain a **malicious macro script**. If user opens the Excel files and allows the script to execute (by clicking the **"Enable editing"** button), the macros download and installs malware on the user's system.
- d. The payloads of malicious excel files are **info stealer trojans** like **Azorult, AgentTesla, Formbook, Matiex** and **njRat**.
- e. The information stealer trojans dump **passwords from the user's browsers, emails, and FTP clients** and send them to C&C servers.

3. **Recommendations**

- a. Install and update licensed and well reputed antiviruses such as Kaspersky, Avira and Avast.
- b. Update all software including **Windows OS, Microsoft Office** and **web browsers**.
- c. Do not download attachments from **emails** unless they are from the trusted source.