SUMMARY

TrickBot malware—first identified in 2016—is a Trojan developed and operated by a sophisticated group of cybercrime actors. The cybercrime group initially designed TrickBot as a banking trojan to steal financial data. Through continued development and new functionality, TrickBot has become a highly modular, multi-stage malware that provides its operators a full suite of tools to conduct a myriad of illegal cyber activities. Since TrickBot’s inception, the cybercrime group has used the malware to attack individuals and businesses globally across a wide range of sectors.

KEY TAKEAWAYS

TrickBot Operators

- Are a sophisticated cybercrime group known by several aliases in open-source reporting, including:
  - Wizard Spider (CrowdStrike),
  - UNC1878 (FireEye),
  - Gold Blackburn (Secureworks).
- Employ malware from other ‘trusted’ cybercrime actors, including Emotet and Bokbot.
- Enable high impact “big game hunting” ransomware attacks.
- Have a toolset capable of using the entire cyber kill chain, from delivery to post-exploitation.

Initial Access

- The TrickBot operators typically achieve initial access through the following infection vectors: spearphishing, spam campaigns, malvertising, and network vulnerabilities (e.g., Server Message Block).
  - Spear phishing campaigns use tailored emails that contain malicious links or documents that contain macros, which—if enabled—execute malware.

Execution

- The TrickBot operators may:
  - Execute TrickBot as either a first- or second-stage payload;
  - Deploy additional malware (e.g., Ryuk and Conti ransomware, Emotet downloader); and
  - Load TrickBot into networks using other malware to achieve additional objectives.

Capabilities

- TrickBot may be used:
  - To exfiltrate data (e.g., email, credentials, point-of-sale info);
  - For cryptomining; and
  - For host enumeration (e.g., reconnaissance of Unified Extensible Firmware Interface or Basic Input/Output System [UEFI/BIOS] firmware).
    - For host enumeration, the operators deliver TrickBot in modules containing a configuration file with specific tasks.

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2 https://www.secureworks.com/research/threat-profiles/gold-blackburn
4 https://www.crowdstrike.com/blog/wizard-spider-lunar-spider-shared-proxy-module/
6 https://www.crowdstrike.com/blog/wizard-spider-adversary-update/
8 https://eclypsium.com/2020/12/03/trickbot-now-offers-trickboot-persist-brick-profit/#background
ADDITIONAL REFERENCES

CISA Alert AA21-076A: TrickBot Malware (to be published March 17, 2021)
Multi-State Information Sharing and Analysis Center (MS-ISAC) Security Primer — TrickBot
CISA Alert AA20-302A: Ransomware Activity Targeting the Healthcare and Public Health Sector
CISA and MS-ISAC’s Joint Ransomware Guide
CISA Tip: Avoiding Social Engineering and Phishing Attacks
Federal Bureau of Investigation Public Service Announcement: High-Impact Ransomware Attacks Threaten U.S. Businesses And Organizations
FireEye Blog: A Nasty Trick: From Credential Theft Malware to Business Disruption
FireEye Blog: It’s Your Money and They Want It Now — The Cycle of Adversary Pursuit
Malwarebytes Blog: Trojan.TrickBot
Microsoft Security Blog: TrickBot Disrupted
MITRE ATT&CK: Wizard Spider
National Institute of Standards and Technology Special Publication 1800-26 – Data Integrity
National Cyber Security Centre (United Kingdom) Advisory: TrickBot
Palo Alto — Unit 42: TrickBot Campaign
SANS Threat Analysis Rundown Recap: The Return of UNC1878

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