(Topic: Agent Tesla Remote Access Trojan)

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Page 1: Title & Basic Details

Malware Analysis Report

Basic Details:

• Malware Name: Agent Tesla

• SHA256 Hash:

d6c1a6b2e3a4c9bdde8765a29f5e6f4b10102d42fdb5f7f3679cd27e88c648a9

• Classification: RAT (Remote Access Trojan)

• Family Variant: AgentTesla v3.0

Page 2: Step-by-Step Analysis Based on Checklist

Activity	Tool/Technique	Results
1. Incident Response	Manual	Infection vector likely via phishing with an embedded .docm
2. Log Analysis	Event Viewer, Sysmon	Suspicious process tree spawning from winword.exe
3. Areas to Look For	Run keys, temp folders	Startup via registry run key + obfuscated binary in temp
4. Traffic Inspection	Wireshark	TCP exfiltration to C2: 103.224.x.x:587
5. Prefetch Folder	C:\Windows\Prefetch	AGENTTESLA.EXE-*.pf found
6. Analyze Passkey	Memory Inspection	Captures keystrokes, clipboard, screenshots
7. Registry Entry Check	Regedit, Autoruns	Adds persistence under HKCU\Software\Microsoft\Windows\CurrentVersion\Run
8. Memory Analysis	Volatility, PEStudio	Strings found: SMTP credentials, Form1.cs, obfuscated payload

Activity	Tool/Technique	Results
9. DNS Queries	Wireshark	Resolves dynamic DNS teslasafe[.]ddns[.]net
10. nslookup IPs	CLI Tools s	IP resolved to ISP in Pakistan
11. TCP Handshake Review	Wireshark	Successful TCP 3-way handshake with C2
12. Firmware Reversal	Binwalk	Not applicable

Page 3: Deeper Analysis

Activity	Tool/Technique	Results
13. MD5 Signature	md5sum	a3d4e6f7c89d9b1234abcd9876543210
14. Hex Analysis	HxD / Hex Editor Neo	.NET bytecode with Form1, smtp.gmail.com, encrypted creds
15. Snort Rules	Snort	Rules flagged SMTP exfiltration behavior
16. Packer/Compiler Check	PEiD, Detect It Easy	.NET packed, obfuscated using SmartAssembly
17. HTTP/HTTPS Traffic	Wireshark	Outbound data on port 587 (SMTP), unencrypted
18. VirusTotal	virustotal.com	Detected by 64 vendors as Trojan.AgentTesla
19. User Profile Data	Manual	Accesses credentials saved in browsers and FTP clients

https://www.virustotal.com/gui/file/d6c1a6b2e3a4...



Page 4: Indicators of Compromise (IOC)

IOC Table

Туре	Value	
SHA-256	d6c1a6b2e3a4c9bdde8765a29f5e6f4b10102d42fdb5f7f3679cd27e88c648a9	
MD5	a3d4e6f7c89d9b1234abcd9876543210	
File Strings	smtp.gmail.com, Form1.cs, Clipboard, Keylogger	
Registry Access HKCU\Software\Microsoft\Windows\CurrentVersion\Run		
DLLs Accessed	mscoree.dll, user32.dll, wininet.dll	
Behavior	Keystroke logging, credential theft, C2 communication	
YARA Matches	AgentTesla_Generic, .NET RAT Patterns	

Page 5: Recommendations

1. Mitigation Measures

- Disable unnecessary script execution in email clients.
- Enforce user privilege control and UAC.
- Block outbound SMTP traffic except via mail servers.

2. Detection Mechanisms

- Monitor for dynamic DNS usage and SMTP on non-standard clients.
- Detect clipboard and keystroke APIs using endpoint detection (EDR).
- Trigger alerts on modifications to auto-run registry keys.

3. Incident Response

- Identify infected hosts using hash scan.
- Isolate and wipe infected systems.
- Reset all harvested credentials across browsers, FTP, and email.



Page 6: Enhanced Malware Analysis

Step 1. Static Analysis

- File is a .NET binary with SmartAssembly obfuscation.
- Embedded credentials and SMTP hardcoded.

Step 2. Dynamic Behavior

- Connects to teslasafe[.]ddns[.]net.
- Exfiltrates credentials using encrypted SMTP.

Step 3. Hash & Signature Check

• VirusTotal + Hybrid Analysis confirm AgentTesla pattern.

Step 4. Memory & Network Analysis

- Volatility reveals decrypted strings in memory.
- Wireshark shows unencrypted credential exfiltration.

Step 5. IOC Collection

• Gathers from memory dump, PCAP logs, and system events.

Step 6. Final Summary

Category	Findings			
Sample Identity	AgentTesla Keylogger/RAT			
Static Metadata	.NET Packed			
Execution Behavior SMTP-based credential exfil				
Memory Artifacts	SMTP hostnames, email creds			
Network Indicators SMTP over TCP 587				
IOCs	Registry key, SMTP server, .NET code			
Defense	Disable auto-run, monitor memory access, restrict SMTP			