

## Contact Person

**Full name**

Ahmed Emad Nasr

**Job title / role**

Incident Response Analyst

**Department / team**

Security Operations Center (SOC)

**Email address**

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## The Incident

**Date and time discovered:**

Jul, 22, 2025, 01:07 PM.

**How was the incident detected? (E.g., user report, monitoring system alert)**

A Critical severity alert was triggered in the Monitoring system under the rule "SOC342 - CVE-2025-53770 SharePoint ToolShell Auth Bypass and RCE".

**Detailed description of the incident (include what occurred, where, and how):**

- An external source IP (107.191.58.76) targeted the internal destination IP 172.16.20.17 (Hostname: SharePoint01) with a suspicious unauthenticated HTTP POST request.
- The request targeted the URL `/_layouts/15/ToolPane.aspx?DisplayMode=Edit&a=...` and the security controls logged the Device Action as "Allowed".
- The Threat Intelligence feed associates the source IP (107.191.58.76) directly with the "CVE-2025-53770" tag.
- Endpoint security logs for SharePoint01 reveal that the attacker achieved Remote Code Execution (RCE) by executing heavily obfuscated PowerShell commands (`powershell.exe -nop -w hidden -e ...`).
- Running under the IIS APPPOOL\SharePoint - 80 process user context, the attacker spawned `cmd.exe` to write a malicious ASPX file.
- The file, named `spinstall0.aspx`, was dropped into the directory `C:\Program Files\Common Files\Microsoft Shared\Web Server Extensions\16\TEMPLATE\LAYOUTS\` and contained code designed to fetch a secondary payload (`payload.exe`) from the attacker's server.
- VirusTotal analysis of the dropped file's hash (`92bb4ddb98eeaf11fc15bb32e71d0a63256a0ed826a03ba293ce3a8bf057a514`) confirms it is a Trojan webshell (ToolShell), flagged by 41 out of 60 security vendors.
- A successful outbound network connection was subsequently established from the compromised SharePoint01 server back to the attacker's IP (107.191.58.76) on Jul 22, 2025, at 13:08:04.

**Was the incident ongoing at the time of report?**

- Yes  No

**Have any files, accounts, or systems been compromised?**

- Yes  No

**If yes, please describe:**

The SharePoint01 server (172.16.20.17) is confirmed compromised with an active webshell (`spinstall0.aspx`) installed within the web server's directory structure, allowing the attacker persistent remote access and execution capabilities.

## Notification

**Was your supervisor or manager notified?**

- Yes  No

**Date/time of notification:**

April 3, 2026

**Was the IT/security team alerted?**

- Yes  No

**If yes, who was contacted and how? (e.g., email, phone, ticket)**

Escalated to the Incident Response team.

## Containment Measures

### What immediate actions were taken to contain the threat? (E.g., system shutdown, network isolation)

- Immediately isolate SharePoint01 (172.16.20.17) from the network to halt lateral movement and sever the attacker's active command and control (C2) connection.
- Block the malicious IP address 107.191.58.76 on all perimeter firewalls and Web Application Firewalls (WAF).

### Were any user accounts disabled, firewalls updated, or services suspended?

- Yes  No

### If yes, provide details:

Outbound traffic rules updated to deny any connections to 107.191.58.76. SharePoint services on the affected host are suspended pending forensic imaging and rebuild.

## Impacted Services Measures

### List any systems, devices, or applications affected by the incident:

Server: SharePoint01 (IP: 172.16.20.17) running on-premises SharePoint Server software.

### Estimated number of affected users, if applicable:

System-wide compromise; potentially impacts all internal users utilizing the SharePoint deployment.

### Was there any known data loss or exposure?

- Yes  No

### If yes, describe the type of data (e.g., personal info, credentials, financial):

The installation of a ToolShell webshell running under IIS application pool privileges provides the attacker with full access to the SharePoint database, site contents, and local system files, making data exposure highly probable.

## Preliminary Analysis *(Optional)*

### Suspected cause or entry point (e.g., phishing email, unpatched software):

#### Suspected cause or entry point (e.g., phishing email, unpatched software):

- Exploitation of a critical zero-day vulnerability (CVE-2025-53770) involving an authentication bypass and remote code execution flaw in the ToolShell component of on-premises SharePoint Server deployments.

### Was the threat internal, external, or unknown?

- Internal  External  Unknown

### Submitted by:

Ahmed Emad Nasr

Name

Ahmed Emad Nasr

Signature

Date submitted

Case Management - 1 X Monitoring - LetsDefend X Email Security - LetsDefend X Threat Intelligence F X Sandbox - LetsDefend X Log Management - L X M: LetsDefend - A SOC X NVD - CVE-2025-537 X

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MAIN CHANNEL INVESTIGATION CHANNEL CLOSED ALERTS

SEVERITY	DATE	RULE NAME	EVENTID	TYPE	ACTION
Critical	Jul, 22, 2025, 01:07 PM	SOC342 - CVE-2025-53770 SharePoint ToolShell Auth Bypass and RCE	320	Web Attack	
<p>★ A critical zero-day vulnerability named ToolShell (CVE-2025-53770) has been discovered in on-premises SharePoint Server deployments.</p> <p>EventID : 320</p> <p>Event Time : Jul, 22, 2025, 01:07 PM</p> <p>Rule : SOC342 - CVE-2025-53770 SharePoint ToolShell Auth Bypass and RCE</p> <p>Level : Security Analyst</p> <p>Hostname : SharePoint01</p> <p>Source IP Address : 107.191.58.76</p> <p>Destination IP Address : 172.16.20.17</p> <p>HTTP Request Method : POST</p> <p>Requested URL : /_layouts/15/ToolPane.aspx?DisplayMode=Edit&amp;a=/ToolPane.aspx</p> <p>User-Agent : Mozilla/5.0 (Windows NT 10.0; Win64; x64; rv:120.0) Gecko/20100101 Firefox/120.0</p> <p>Referer : /_layouts/SignOut.aspx</p> <p>Content-Length : 7699</p> <p>Alert Trigger Reason : Suspicious unauthenticated POST request targeting ToolPane.aspx with large payload size and spoofed referer indicative of CVE-2025-53770 exploitation.</p> <p>Device Action : Allowed</p>					
Critical	Mar, 13, 2025, 09:44 AM	SOC338 - Lumma Stealer - DLL Side-Loading via Click Fix Phishing	316	Data Leakage	
Medium	Jan, 22, 2025, 02:37 AM	SOC335 - CVE-2024-49138 Exploitation Detected	313	Privilege Escalation	
Medium	Sep, 17, 2024, 12:05	SOC326 - Impersonating Domain.MX Record Change Detected	304	ThreatIntel	

8:18 PM 4/2/2026

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Free text search: 107.191.58.76

Date range: Select Date

Search by data type: Select

Search by data: Search

Search by tag: Search

Search

Minimize

DATE	DATA TYPE	DATA	TAG	DATA SOURCE
Jul, 22, 2025, 06:30 PM	IP	107.191.58.76	CVE-2025-53770	OnlyHunt

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8:25 PM 4/2/2026

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172.16.20.17

SharePoint01  
172.16.20.17

Processes 27

Network Action 29

Terminal History 4

Browser History 0

Results: 10

EVENT TIME	DESTINATION DOMAIN/IP ADDRESS
Jul 22 2025 13:06:08	132.232.40.201
Jul 22 2025 13:06:16	142.250.190.35
Jul 22 2025 13:06:18	34.104.35.123
Jul 22 2025 13:06:20	172.67.139.19
Jul 22 2025 13:06:23	172.31.12.250
Jul 22 2025 13:06:36	35.190.80.1
Jul 22 2025 13:07:15	77.88.21.119
Jul 22 2025 13:07:59	34.104.35.123
Jul 22 2025 13:08:04	107.191.58.76

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172.16.20.17

SharePoint01  
172.16.20.17

2025-07-22 13:06:02.000	821	dnsapi.dll	svchost.exe	Loaded as DLL b...
2025-07-22 13:07:11.000	4560	w3wp.exe	services.exe	C:\Program Files\...
2025-07-22 13:07:24.000	9876	powershell.exe	w3wp.exe	powershell.exe -...
2025-07-22 13:07:27.000	9901	<b>csc.exe</b>	powershell.exe	csc.exe /out:C\W...

Event Time: 2025-07-22 13:07:27.000  
 Process ID: 9901  
 Image Path: C:\Windows\Microsoft.NET\Framework64\v4.0.30319\csc.exe  
 Process User: IIS APPPOOL\SharePoint - 80  
 Parent Name: powershell.exe  
 Parent Path: C:\Windows\System32\WindowsPowerShell\v1.0\powershell.exe  
 Command Line: csc.exe /out:C:\Windows\Temp\navload.exe C:\Windows\Temp\...

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172.16.20.17

SharePoint01  
172.16.20.17

2025-07-22 13:07:29.000	9910	cmd.exe	csc.exe	cmd.exe /c echo ...
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Event Time: 2025-07-22 13:07:29.000  
 Process ID: 9910  
 Image Path: C:\Windows\System32\cmd.exe  
 Hash: 92bb4ddb98eeaf11fc15bb32e71d0a63256a0ed826a03ba293ce3a8b0...  
 Process User: IIS APPPOOL\SharePoint - 80  
 Parent Name: csc.exe  
 Parent Path: C:\Windows\Microsoft.NET\Framework64\v4.0.30319\csc.exe  
 Command Line: cmd.exe /c echo <WebShell> > C:\Program Files\Common Files\...

2025-07-22 13:07:34.000	9920	powershell.exe	cmd.exe	powershell.exe -...
2025-07-22 13:08:00.000	9950	taskhostw.exe	services.exe	taskhostw.exe

< 1 2 3 >

41 / 60  
Community Score -77

41/60 security vendors flagged this file as malicious

92bb4ddb98eef11fc15bb32e71d0a63256a0ed826a03ba293ce3a8bf057a514  
spinstall0.aspx

Size: 756 B | Last Analysis Date: 1 hour ago

html detect-debug-environment attachment cve-2025-53770 checks-disk-space exploit long-sleeps

DETECTION DETAILS RELATIONS BEHAVIOR COMMUNITY 22+

Join our Community and enjoy additional community insights and crowdsourced detections, plus an API key to automate checks.

Popular threat label trojan.webshell/toolshell Threat categories trojan Family Labels webshell toolshell msil

Security vendors' analysis Do you want to automate checks?

AhnLab-V3	Exploit/ASP.Shell.SC289272	AllCloud	Trojan:MSIL/Webshell.JB
Antiy-AVL	Trojan/MSIL.WebShell	Arcabit	Trojan.ToolShell.C
Avast	ASP:ToolShell-C [Trj]	AVG	ASP:ToolShell-C [Trj]
Avira (no cloud)	TR/Agent.jglj	BitDefender	Trojan.ToolShell.C
Bkav Pro	W32.Common.1E655755	ClamAV	Asp.Webshell.SharpyShell-10056352-3
CTX	Asp.trojan.msil	Cynet	Malicious (score: 99)
DrWeb	ASP.Shell.113	Emsisoft	Trojan.ToolShell.C (B)
eScan	Trojan.ToolShell.C	ESET-NOD32	MSIL/Webshell.JS Trojan
Fortinet	HTML/Sharept.RCE/tr	GData	Script.Backdoor.WebShell.R

