



Threat Level  
 Red

CISA: AA23-320A

HiveForce Labs

# THREAT ADVISORY



## ACTOR REPORT

### Scattered Spider Cyber Threat Key Findings and Security Measures

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Admiralty code

A1

TA Number

TA2023466

# Summary

**First Appearance:** May 2022

**Attack Region:** United States, Canada, United Kingdom, Singapore, India, France, Sweden, and Australia

**Malware:** BlackCat/ALPHV Ransomware, AveMaria, Raccoon Stealer, VIDAR Stealer, Spectre RAT, DragonForce Ransomware, RansomHub Ransomware, Qilin Ransomware

**Threat Actor:** Scattered Spider (Starfraud, UNC3944, Oktapus, Storm-0875, LUCR-3, Scatter Swine, Muddled Libra, Octo Tempest and Oktapus)

**Targeted Industries:** Commercial facilities, Telecommunications, Technology, Business-Process Outsourcing (BPO), Financial services, Hospitality, Media and entertainment, Healthcare, Retail, Insurance, Managed Service Providers (MSPs), Manufacturing, Cryptocurrency, and Food services

**Affected Platform:** Windows

## Alien Actor Map



Scattered  
Spider

Powered by Bing  
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## ✿ CVEs

CVE	NAME	AFFECTED PRODUCT	ZERO-DAY	CISA KEV	PATCH
<a href="#">CVE-2015-2291</a>	Intel Ethernet Diagnostics Driver for Windows Denial-of-Service Vulnerability	Microsoft Windows	✖	✓	✓
<a href="#">CVE-2021-35464</a>	ForgeRock Access Management (AM) Core Server Remote Code Execution Vulnerability	ForgeRock Access Management (AM) Core Server	✖	✓	✓
<a href="#">CVE-2024-37085</a>	VMware ESXi Authentication Bypass Vulnerability	VMware ESXi	✖	✓	✓

## Actor Details

#1

Scattered Spider, a cybercriminal group primarily targets commercial facilities sectors and subsectors, specializing in data theft for extortion and utilizing BlackCat/ALPHV ransomware. Scattered Spider employs social engineering techniques, such as phishing, push bombing, and SIM swap attacks, to obtain credentials.

#2

The threat actors register their own multi-factor authentication (MFA) tokens for persistence, perform privileged escalation, and leverage common endpoint detection and response (EDR) tools for remote access and command execution. They conduct discovery, lateral movement, and exfiltration, targeting specific information like SharePoint sites, credential storage documentation, and code repositories.

#3

The threat actors pose as IT or helpdesk staff to gain access to networks, often using legitimate tools like Fleetdeck.io and Teamviewer. Additionally, they use malware like AveMaria, Raccoon Stealer, and VIDAR Stealer for remote access and data theft.

#4

Scattered Spider is known to join incident response calls and teleconferences, potentially to identify how security teams are responding to their activities and proactively develop new intrusion avenues. The group may also create new identities in the environment, supported by fake social media profiles. Scattered Spider is known for major breaches like the Twilio/Okta incident and the MGM breach.

## #5

In recent campaigns, Scattered Spider has expanded its focus to include large retailers, insurance companies, and telecommunications providers—most notably in the UK and North America. Noteworthy incidents in early 2025 included attacks on prominent UK brands such as Marks & Spencer, Co-op, and others, resulting in operational disruptions and the exfiltration of sensitive data. These attacks involved the use of adversary-in-the-middle (AiTM) phishing kits, ESXi ransomware payloads, and partnerships with newer ransomware groups like DragonForce and RansomHub.

## #6

The group's updated toolkit includes remote access tools like Atera Agent, AnyDesk, and Splashtop, alongside modern C2 frameworks. They have also deployed newer malware families like Lumma Stealer, and Spectre RAT, in addition to their legacy tools. Despite multiple arrests of group affiliates in late 2024, Scattered Spider rapidly restructured and resumed operations, now showing signs of increased automation and AI-driven phishing techniques, indicating continued evolution and high operational maturity.

## Actor Group

Name	Origin	Target Regions	Target Industries
Scattered Spider (Starfraud, UNC3944, Oktapus, Storm- 0875, LUCR-3, Scatter Swine, Muddled Libra, Octo Tempest and Oktapus)	Suspected English speaking US and UK individuals	United States, Canada, United Kingdom, Singapore, India, France, Sweden, and Australia	Commercial facilities, Telecommunications, Technology, Business-Process Outsourcing (BPO), Financial services, Hospitality, Media and entertainment, Healthcare, Retail, Insurance, Managed Service Providers (MSPs), Manufacturing, Cryptocurrency, and Food services
	Motive		
	Financial gain		



# Recommendations



**Patch Management:** Ensuring that all systems, especially those exposed to the internet are updated promptly with the latest security patches is essential. Regular vulnerability assessments and automated patch deployment can minimize the window of opportunity for adversaries to exploit known vulnerabilities.



**Harden Identity and Access Controls:** Enforce strong multi-factor authentication (MFA) across all accounts, prioritizing phishing-resistant methods such as FIDO2 tokens or certificate-based smart cards. Monitor for and block rogue MFA registrations, especially following helpdesk interactions or high-privilege access changes. Implement conditional access policies to restrict access based on device posture, IP reputation, and geographic context.



**Monitoring and Detection:** Enhancing network visibility and monitoring can significantly improve an organization's defensive posture. Deploying advanced security monitoring tools and integrating threat intelligence feeds enable rapid detection of suspicious activities. Continuous logging and real-time analysis of network traffic, combined with periodic security audits, provide a robust mechanism to uncover potential breaches in the early stages.



**Network Segmentation:** Proper network segmentation limits the damage that can be done if an attacker gains access to one part of the system. By segmenting critical infrastructure from less sensitive data, organizations can better contain breaches and make lateral movement more difficult for attackers.



**Enhance Social Engineering Defenses:** Conduct regular simulated phishing exercises and user awareness training, particularly focused on helpdesk impersonation and MFA fatigue tactics. Deploy browser isolation or email security solutions with link rewriting and AI-based detection to counter adversary-in-the-middle (AiTM) phishing kits. Verify all internal IT/helpdesk requests through out-of-band verification channels.



**Reduce Remote Access Tool Threats:** Audit remote access tools on the network to identify currently used and authorized software. Review logs for abnormal use of remote access software running as a portable executable. Use security software to detect instances of remote access software being loaded only in memory.

# ✿ Potential MITRE ATT&CK TTPs

<b><u>TA0043</u></b> Reconnaissance	<b><u>TA0042</u></b> Resource Development	<b><u>TA0001</u></b> Initial Access	<b><u>TA0002</u></b> Execution
<b><u>TA0007</u></b> Discovery	<b><u>TA0008</u></b> Lateral Movement	<b><u>TA0009</u></b> Collection	<b><u>TA0011</u></b> Command and Control
<b><u>TA0003</u></b> Persistence	<b><u>TA0004</u></b> Privilege Escalation	<b><u>TA0005</u></b> Defense Evasion	<b><u>TA0006</u></b> Credential Access
<b><u>TA0010</u></b> Exfiltration	<b><u>TA0040</u></b> Impact	<b><u>T1657</u></b> Financial Theft	<b><u>T1567</u></b> Exfiltration Over Web Service
<b><u>T1585.001</u></b> Social Media Accounts	<b><u>T1585</u></b> Establish Accounts	<b><u>T1566</u></b> Phishing	<b><u>T1660</u></b> Phishing
<b><u>T1566.004</u></b> Spearphishing Voice	<b><u>T1199</u></b> Trusted Relationship	<b><u>T1078.002</u></b> Domain Accounts	<b><u>T1078</u></b> Valid Accounts
<b><u>T1648</u></b> Serverless Execution	<b><u>T1204</u></b> User Execution	<b><u>T1136</u></b> Create Account	<b><u>T1556.006</u></b> Multi-Factor Authentication
<b><u>T1556</u></b> Modify Authentication Process	<b><u>T1484.002</u></b> Domain Trust Modification	<b><u>T1484</u></b> Domain Policy Modification	<b><u>T1578.002</u></b> Create Cloud Instance
<b><u>T1578</u></b> Modify Cloud Compute Infrastructure	<b><u>T1656</u></b> Impersonation	<b><u>T1606</u></b> Forge Web Credentials	<b><u>T1621</u></b> Multi-Factor Authentication Request Generation
<b><u>T1552.001</u></b> Credentials In Files	<b><u>T1552.004</u></b> Private Keys	<b><u>T1552</u></b> Unsecured Credentials	<b><u>T1217</u></b> Browser Bookmark Discovery
<b><u>T1538</u></b> Cloud Service Dashboard	<b><u>T1083</u></b> File and Directory Discovery	<b><u>T1018</u></b> Remote System Discovery	<b><u>T1539</u></b> Steal Web Session Cookie

<b>T1021</b> Remote Services	<b>T1021.007</b> Cloud Services	<b>T1213.003</b> Code Repositories	<b>T1213.002</b> Sharepoint
<b>T1526</b> Cloud Service Discovery	<b>T1218</b> System Binary Proxy Execution	<b>T1562</b> Impair Defenses	<b>T1568</b> Dynamic Resolution
<b>T1003</b> OS Credential Dumping	<b>T1036</b> Masquerading	<b>T1041</b> Exfiltration Over C2 Channel	<b>T1071</b> Application Layer Protocol
<b>T1213</b> Data from Information Repositories	<b>T1074</b> Data Staged	<b>T1114</b> Email Collection	<b>T1530</b> Data from Cloud Storage
<b>T1219</b> Remote Access Software	<b>T1486</b> Data Encrypted for Impact	<b>T1567.002</b> Exfiltration to Cloud Storage	

## ☒ Indicators of Compromise (IOCs)

TYPE	VALUE
MD5	1e5ad5c2ffffac9d3ab7d179566a7844, 56fd7145224989b92494a32e8fc6f6b6, 6639433341fd787762826b2f5a9cb202, 828699b4133acb69d34216dc0a8376e, 9a218d69ecafe65eae264d2fdb52f1aa, d44071f255785c73909d64f824331ebf, b97812a2e6be54e725defbab88357fa2
SHA1	0272b018518fef86767b01a73213716708acbb80, 10b9da621a7f38a02fea26256db60364d600df85, d8cb0d5bbeb20e08df8d2e75d7f4e326961f1bf5, ec37d483c3c880fadcd8d048c05777a91654e41d3,

TYPE	VALUE
SHA256	4188736108d2b73b57f63c0b327fb5119f82e94ff2d6cd51e9ad92093023ec93, 443dc750c35afc136bfea6db9b5ccbdb6adb63d3585533c0cf55271eddf29f58, 982dda5eec52dd54ff6b0b04fd9ba8f4c566534b78f6a46dada624af0316044e, acadf15ec363fe3cc373091cbe879e64f935139363a8e8df18fd9e59317cc918, cce5e2ccb9836e780c6aa075ef8c0aeb8fec61f21bbef9e01bdee025d2892005
IPv4	159[.]223[.]213[.]174, 169[.]150[.]203[.]51, 37[.]19[.]200[.]142, 37[.]19[.]200[.]155, 144[.]76[.]136[.]153, 119[.]93[.]5[.]239, 146[.]70[.]103[.]228, 185[.]195[.]19[.]206, 198[.]54[.]133[.]45, 198[.]54[.]133[.]52, 37[.]19[.]200[.]151, 45[.]134[.]140[.]177, 45[.]86[.]200[.]81, 89[.]46[.]114[.]66, 100[.]35[.]70[.]106, 136[.]144[.]19[.]51, 136[.]144[.]43[.]81, 142[.]93[.]229[.]86, 143[.]244[.]214[.]243, 146[.]70[.]107[.]71, 146[.]70[.]112[.]126, 146[.]70[.]127[.]42, 146[.]70[.]45[.]166, 146[.]70[.]45[.]182, 152[.]89[.]196[.]111, 162[.]118[.]200[.]173, 172[.]98[.]33[.]195, 173[.]239[.]204[.]129, 173[.]239[.]204[.]130, 173[.]239[.]204[.]131, 173[.]239[.]204[.]132, 173[.]239[.]204[.]133, 173[.]239[.]204[.]134, 180[.]190[.]113[.]87, 185[.]120[.]144[.]101, 185[.]123[.]143[.]197,

TYPE	VALUE
IPv4	185[.]123[.]143[.]201, 185[.]123[.]143[.]205, 185[.]123[.]143[.]217, 185[.]156[.]46[.]141, 185[.]163[.]109[.]66, 185[.]181[.]102[.]18, 185[.]195[.]19[.]207, 185[.]202[.]220[.]239, 185[.]202[.]220[.]65, 185[.]240[.]244[.]3, 185[.]247[.]70[.]229, 185[.]45[.]15[.]217, 185[.]56[.]80[.]28, 188[.]166[.]101[.]65, 188[.]166[.]117[.]31, 188[.]214[.]129[.]7, 192[.]166[.]244[.]248, 193[.]27[.]13[.]184, 193[.]37[.]255[.]114, 194[.]37[.]96[.]188, 195[.]206[.]105[.]118, 198[.]44[.]136[.]180, 217[.]138[.]198[.]196, 217[.]138[.]222[.]94, 23[.]106[.]248[.]251, 31[.]222[.]238[.]70, 45[.]132[.]227[.]211, 45[.]132[.]227[.]213, 45[.]91[.]21[.]61, 5[.]182[.]37[.]59, 51[.]210[.]161[.]12, 51[.]89[.]138[.]221, 62[.]182[.]98[.]170, 64[.]190[.]113[.]28, 67[.]43[.]235[.]122, 68[.]235[.]43[.]20, 68[.]235[.]43[.]21, 82[.]180[.]146[.]31, 89[.]46[.]114[.]164, 91[.]242[.]237[.]100, 93[.]115[.]7[.]238, 98[.]100[.]141[.]70

TYPE	VALUE
IPv4	98[.]100[.]141[.]70, 138[.]68[.]27[.]0, 195[.]206[.]107[.]147, 193[.]149[.]129[.]177, 188[.]166[.]92[.]55, 188[.]166[.]101[.]65
CIDR	18[.]206[.]107[.]24/29
Domains	victimname-sso[.]com, victimname-servicedesk[.]com, victimname-okta[.]com, 7-eleven-hr[.]com, activecampiagn[.]net, acwa-apple[.]com, bbtplus[.]com, bell-hr[.]com, bestbuy-cdn[.]com, birdsso[.]com, citrix-okta[.]com, commonspiritcorp-okta[.]com, consensys-okta[.]com, corp-hubspot[.]com, cts-comcast[.]com, doordash-support[.]com, duelbits-cdn[.]com, freshworks-hr[.]com , gemini-sso[.]com, gucci-cdn[.]com, itbit-okta[.]com, iyft[.]net, klaviyo-hr[.]com , login[.]freshworks-hr[.]com, login[.]hr-intercom[.]com, morningstar-okta[.]com, mytsl[.]net, okta-ziffdavis[.]com, pfchangs-support[.]com, prntsdc[.]net, pure-okta[.]com, signin-nydig[.]com, simpletexting-cdn[.]com, squarespacehr[.]com, systemstern[.]net, sso-instacart[.]com, sts-vodafone[.]com,

TYPE	VALUE
Domains	twitter-okta[.]com, xn--gryscale-ox0d[.]com, x-sso[.]com

## ✿ Patch Links

<https://www.intel.com/content/www/us/en/security-center/advisory/intel-sa-00051.html>

<https://backstage.forgerock.com/knowledge/advisories/article/a47894244>

<https://support.broadcom.com/>

<https://techdocs.broadcom.com/us/en/vmware-cis/vsphere/vsphere/8-0/release-notes/esxi-update-and-patch-release-notes/vsphere-esxi-803-release-notes.html>

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<https://www.silentpush.com/blog/scattered-spider-2025/>

<https://www.trustwave.com/en-us/resources/blogs/trustwave-blog/trustwave-spiderlabs-insights-history-and-mitigations-for-scattered-spider/>

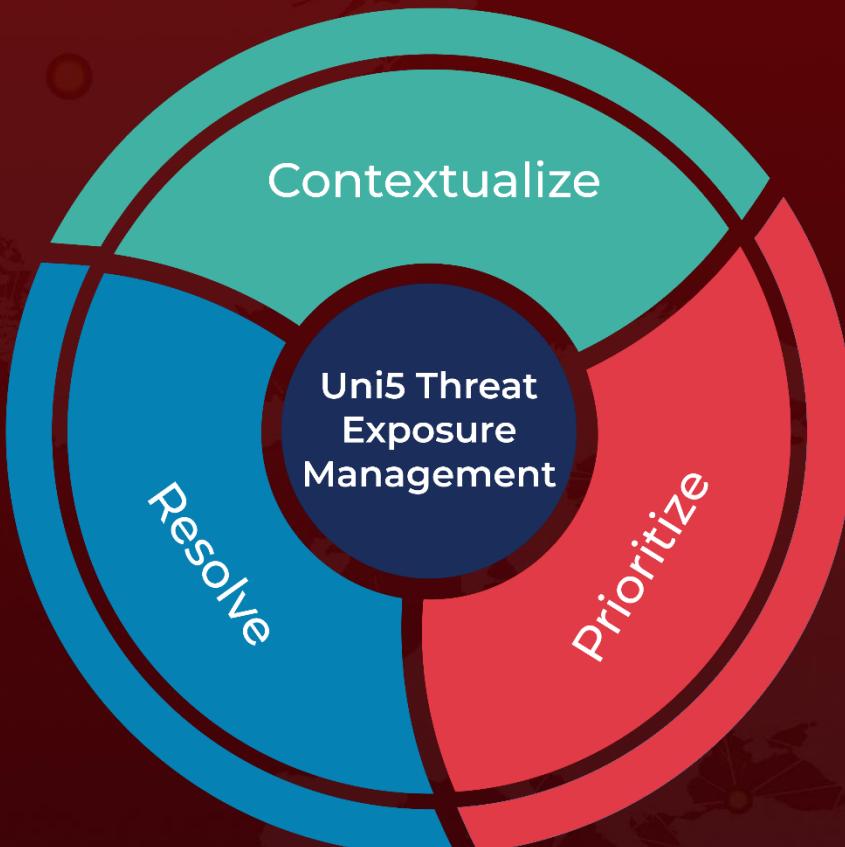
<https://www.quorumcyber.com/threat-intelligence/scattered-spider-targets-us-insurance-sector-in-new-ransomware-wave/>

<https://cyberint.com/blog/dark-web/meet-scattered-spider-the-group-currently-scattering-uk-retail-organizations/#CVEs>

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