

Detection of CVE-2022-30190 (Follina) using Clear NDRTM

Microsoft published a Common Vulnerabilities and Exposure (CVE) CVE-2022-30190 alert identifying a vulnerability in the Microsoft Support Diagnostic Tool (MSDT) that allows the user to run any arbitrary code <u>EVEN if macro scripts are disabled</u> in any Microsoft tool supporting MSDT (like Word for example) when opening a file containing the attack. This zero day is known to have been used by some attackers.

As of publication time, there is no patch available from Microsoft. We recommend you apply workarounds described in the Microsoft bulletin as soon as possible. <u>https://msrc-blog.microsoft.com/2022/05/30/guidance-for-cve-2022-30190-microsoft-support-diag nostic-tool-vulnerability/</u>

In the meantime, you may take the following steps to help determine if any of your systems have been attacked in the past, are currently under attack or vulnerable.

DETECTION AND ESCALATION

Please follow the steps listed below in the Clear NDR at the Stamus ND/NDR license tiers (formerly Scirius Security Platform), "Hunt" interface.

Create a Filter

NOTE: Portions of this are not applicable to the Stamus Probe Management license tier

Any CVE number can be searched in the Hunt interface.

To create a filter:

1. In Hunt, click on the magnifying icon next to any signature (first group Signatures on the Dashboard tab).

- 2. Click on the pencil/Edit icon on the resulting filter displayed as "Active Filters:".
- Type the CVE number or a text descriptor with a wildcard (*) it at each end (for example: *CVE-2022-30190* or *Follina*)
- 4. Select the checkbox "Wildcard view"
- 5. Click Save
- 6. You are now ready to review the results and events in the Dashboard, Host Insights and Alert views

The example screenshot below shows how to do that for "CVE-2022-30190"

| | / Stamus Enriched Hunting / Dashboard | Edit filter | × |
|---------------------|---|---------------|--|
| 🚯 Dashboard | IP V Filter by IP Informational ON Relevant | Filter | alert.signature +CVE-2022-30190+ |
| Alerts | Active Filters: alert.signature: *CVE-2022-30190* 🥕 🗙 Clear Save | Wildcard view | Wildcard characters (* and 2) can match on word boundaries. No spaces allowed. |
| U Signatures | | Negated | |
| Hosts | | | Cancel Save |
| T Policy | 0 | | |
| | | | |

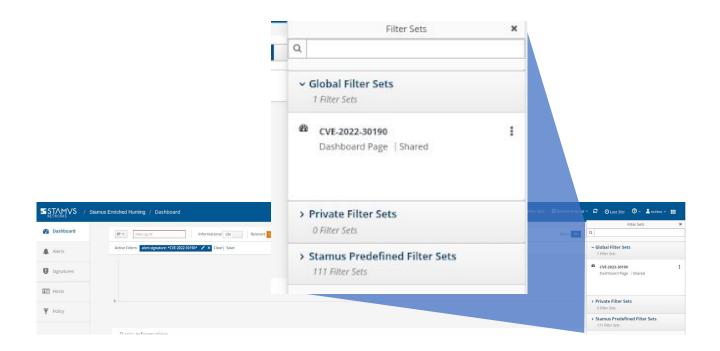
Save the Filter

NOTE: some items described here are not applicable to Stamus Probe Management license tier

The resulting filter can be saved by simply clicking on the "Save" link on the right-hand side of the "Active filter". Check "Shared" in the resulting dialog box if you want to make the filter available to all users.

| STAMVS / Sta | amus Enriched Hunting / Dashboard | Create new Filter Set | x |
|-----------------|--|-----------------------|---|
| Dashboard | IP V Filter by IP Informational ON Relevant | Name | CVE-2022-30190 |
| Alerts | Active Filters: alert.signature: *CVE-2022-30190* 💉 X Clear Save | Page | Dashboard |
| U Signatures | | Description: | Detection for <u>CVE</u> -2022-30190 https://msrc-blog.microsoft.com/2022/05/30/guidance-for- <u>cye</u> - |
| Hosts | | | 2022-30190-microsoft-support-diagnostic-tool-vulnerability/ |
| T Policy | · | | Cancel Save |
| | | | |

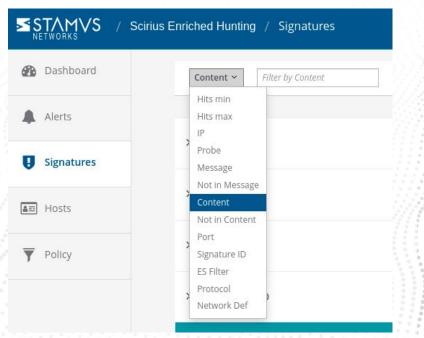
The newly created filter is now available in "Global Filter Sets" or "Private Filter Sets"



Review Detection Methods in Hunt

To review exactly what detection methods are available in Hunt for that specific vulnerability you can:

- 1. Head to the Signatures tab on the left-hand side in Hunt.
- Select the "Content" option from the dropdown menu.
- Type in the full CVE (i.e. CVE-2022-30190), hit Enter



| STAMVS / St | amus Enriched Hunting / Signatures | | 🎝 i≣ History | ▼ Filter Sets ② Refree | sh Interval 🗸 🤰 🤅 |
|--------------|---|---|--------------------|------------------------|-------------------|
| 🚯 Dashboard | Content ~ Filter by Content | Created ~ \$1 Informational ON Relevant ON Untagge | ed on | | Alert |
| Alerts | Active Filters: Content: CVE-2022-30190 | Clear Save | | | |
| U Signatures | > 😲 2036726 | ET EXPLOIT Possible Microsoft Support Diagnostic Tool Exploitation Inbound (CVE-2022-30190) | Created: 2022-05-3 | Updated: 2022-05-31 | Category: exploit |
| Hosts | 6 ^ per page | | | | |

Automated Escalation and RestAPI Notification

NOTE: Portions are not applicable to Stamus ND or Stamus Probe Management license tiers.

If needed, an automated escalation to a Declaration of Compromise[™] (DoC) and webhooks is also possible, including from historical data.

For example, if it happened 24hrs or 7 days ago, it will still be detected and escalated based on that custom filter.

To do so:

- 1. After creating your filter as above
- 2. From the right-hand side drop down menu, *Policy Actions*, select "Create DoC events".

| | Stamus Enriched Hunting / Dashboard 🕹 IIII Hotory 🕈 Filter Sets Officence Interval - 🗘 O Last 300 💿 | × 🛓 scirius × 🏢 |
|------------|---|--|
| Dashboard | IP × Elter by P Informational ON Relevant ON Untagged ON Arres ON Sightings ON | Policy Actions ~ |
| Alerts | Active Filters' detraignature 40/6-2022-301904 🖌 🗙 Clear Sove | Suppress Threshold |
| Signatures | 0 | Tag Tag and Keep Create DoC events |
| AE Hosts | current co | |

- 3. Choose the plus (+) next to the Threat: Name
- 4. Fill in the Threat Name, Description, and Additional information.
- 5. Enter an Offender Key (i.e. src_ip)
- 6. Enter an Asset Key (i.e. dest_ip)
- 7. Leave Asset Type "IP"
- 8. Set a Kill Chain phase (i.e. Exploit)
- 9. Select "Generate DoC events from historical data". [This will make sure historical events are also checked]
- 10. If desired and webhooks are setup also select "Generate webhooks events from historical data"

The screenshot below shows the DoC event creation form:

| STAMVS / SI | tamus Enriched Hunting / Dashboard | Define custom Declaration(s) of C | Compromise X |
|-----------------|--|---|---|
| 🚯 Dashboard | IP Y Filter by IP Informational ON | Relevant C These Declaration(s) of Compromise (D | OoC) will appear in the Custom Threats family |
| Alerts | Active Filters: alert.signature: *CVE-2022-30190* 💉 🗶 Clear Save | alert.signature * | CVE-2022-30190* |
| U Signatures | | Threat: Name | Choose a Threat 4 |
| E Hosts | | Parameters: Offender Key si | rc.jp |
| T Policy | 0 | | test_ip |
| | Basic Information | | P v Exploitation v |
| | Signatures | Apply to historical data: | |
| | | Generate DoCs from historical data | |
| | Organizational Information | Generate webhooks events from hi | istorical data |
| | Sources | Targ Ruleset: | |
| | Lateral | ✓ dev-ruleset | |
| | AS Organization | COU Optional comment Auto escalation on CVE-2022-30190 ev | rents |
| | Metadata | | |
| | Signature severity | Attack targe | Cancel Submit |

Automated Classification and Tagging

Auto Tagging all relevant events is also an option. This will allow for any logs (alerts or protocol transaction events related to the alerts) to have a "Relevant" tag inserted in the JSON logs:

| "tag" | : 1 | relevant" |
|-------|-----|-----------|
|-------|-----|-----------|

To do so:

- 1. After creating your filter as above.
- 2. From the right-hand side drop down menu Policy Actions , Select "Tag".
- 3. Add in an optional comment and select a ruleset.
- 4. Update the threat detection (upload button in the middle of the top bar on the Hunt page, on the left-hand side of History, Filter Sets)

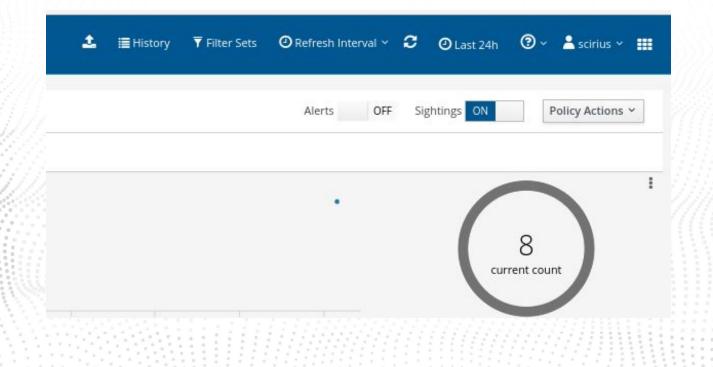
| | | Add a tag action | | |
|---------------------|---|--|------------------|-------------|
| | | Add a tag action | | × |
| Dashboard | IP Filter by IP Informational ON Relevant | alert.signature | *CVE-2022-30190* | |
| Alerts | Active Filters: alert.signature: *CVE-2022-30190* 🖌 X Clear Save | Тад | Relevant | ~ |
| | | Ruleset: | | |
| U Signatures | | dev-ruleset | | |
| | | | | |
| Hosts | 0 | Optional comment Classification on CVE-2022-30190 | | |
| Policy | | Classification on CVE-2022-50190 | evenis | |
| • 1000 MA | | | | |
| | Basic Information | | Ca | ncel Submit |
| | | | | |
| | Signatures | Categor | es | |

Using Sightings to Uncover an Attack

"Sightings" is a new feature in U38 that allows for Stamus customers to differentiate and detect new encrypted connections and data transfer never seen before in the enterprise.

Our research team has explored a publicly-available sample of an exploit to this vulnerability. And we have determined that by using the new "Sightings" functionality, Stamus users may quickly filter through the noise to identify new malicious TLS connections to known malicious domains.

Here's how: In Hunt, disable Alerts view by switching off the Alert tab. This will filter results down to only Sightings. The screen below shows a drop to 8 Sightings after switching off alerts:



If we dive deeper into the Sightings (Clicking the 3 dots on the Signatures card) we can see all the Sightings are for TLS:

| STAMVS / Stamu | s Enriched Hunting / Dashboard | More results | | × | 🏝 I≣ History 🔻 Filter Sets | ⊙ Refresh Interval × 🗢 ⊙ Last 24h |
|-----------------|--|--------------|--|---|---|---|
| Dashboard | IP Y Fater by IP Informational ON Relevant | SN SIGHTING | 55 Newly discovered TLS JA3 clients not seen | 2 | | Alerts OFF Sightings ON Policy Actions > |
| Alerts | Active Filters: hostname_info.domain: xmiformats.com 💉 X Clear Save | SN SIGHTING | 55 Newly discovered TLS JA35 servers not seen | 2 | | |
| | | SN SIGHTING | 55 Newly discovered TLS Issuer servers not seen | 1 | | |
| U Signatures | 6 | SN SIGHTING | 55 Newly discovered TLS SNI servers not seen | | | 8 |
| E Hosts | 4 | SN SIGHTING | 55 Newly discovered TLS Serial servers not seen | | | current count |
| | 0 2022-05-30 2022-05-30 2022-05-30 2022-05-30 15-20 7720 15-32 20.00 21-33 | SN SIGHTING | IS Newly discovered TLS Subject servers not seen | 1 | 2022-05-31 2022-05-31 2022-05-31 09-30 11:00 12:30 | 2022-05-31 1400 previous count III current count |
| T Policy | | _ | | | | |
| | | | | | | edit • reset |
| | Signatures | : | Categories | | Severities | Probes |
| | SN SIGHTINGS Newly discovered TLS JA3 clients not seen | 2 | Unknown Traffic | | Contextual | SSProbe-1 |
| | SN SIGHTINGS Newly discovered TLS JA3S servers not seen | 2 | | | | |
| | SN SIGHTINGS Newly discovered TLS issuer servers not seen | 0 | | | | |
| | SN SIGHTINGS Newly discovered TLS SNI servers not seen | 0 | | | | |
| | SN SIGHTINGS Newly discovered TLS Serial servers not seen | | | | | |

Now we can scroll down to the TLS information section and see a list of SNI's. Looking at each one we can hover over them and click the "external info" icon to query VirusTotal for that SNI to see if it is compromised. This will give you a quick way to check unknown SNI's for this threat.

| Dashboard | ocsp | 2 | bing.com | 3 | bing | 3 | www.bing.com | E |
|------------|----------------------------|----------------------------------|------------------|----------------------------------|---------------|--------------------|--|----|
| | ctidi | 1 | digicert.com | | digicert | | ctldl.windowsupdate.com | 1 |
| Alerts | | | usertrust.com | 10 | usertrust | 1 | ocsp.digicert.com | |
| Signatures | | | windowsupdate.co | m 1 | windowsupdate | 1 | ocsp.usertrust.com | |
| Hosts | DNS information | | | | | | | |
| Policy | Name | | Тур | e | | | | |
| | TLS information | | | Subject DN | | Issuer DN | | |
| | www.xmlformats.com | | 8 | CN=www.bing.com | 3 | C=GB, ST=Greater | Manchester, L=Salford, O=Sectigo Limited, CN | |
| | www.bing.com | | 3 | CN=xmlformats.com | 3 | C=US, O=Microsof | t Corporation, CN=Microsoft RSA TLS CA 01 | E |
| | Fingerprint | | | JA3 Hash | | JA3 User-Agent | | |
| | 1b:c8:e6:76:e0:33:0f:a2:f2 | :7f:14:fe:82:1a:b4:b5:47:7d:9a:6 | i2 3 | 5182f54f9c6e99d117d9dde3fa2b4cff | 9 | Mozilla/5.0 (Windo | ws NT 6.1; WOW64; Trident/7.0; tb-gmx/2.7.8; | i. |
| | ae:3d:60:31:50:3c:5a:ad:a | b:e0:21:39:02:fb:32:14:d1:a5:23 | 3 | 05af1f5ca1b87cc9cc9b25185115607d | 2 | User-Agent:Mozill | a/4.0 (compatible; MSIE 6.0; Windows NT 5.2; | |
| | JA3S Hash | | | | | | | |
| | 15381d64ba148f31a70eb | 87b53085230 | 9 | | | | | |
| | b74704234e6128f33bff98 | 65696e31b3 | 2 | | | | | |

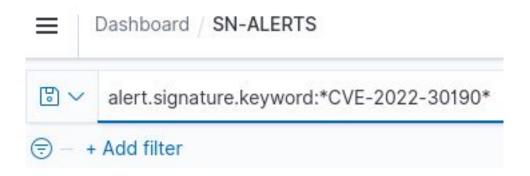
Export Data - SIEM / Elasticsearch / Kibana

All data generated by Clear NDR (with the Stamus ND/NDR license tiers), such as alerts, protocol transactions, sightings events or Host Insights information, may be exported and shared with any SIEM or SOAR system.

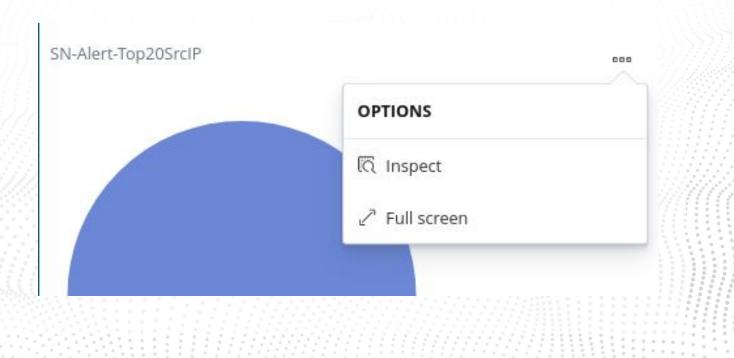
Over 4000 fields are available -- from domain requests, http user agents used, hostnames, usernames logged in -- to encrypted analysis including JA4/JA4S fingerprinting, TLS certificates and more.

Any query of the Stamus Networks data (protocol transaction or alert logs) can be exported via a regular JSON log query or visualization export. Example of Kibana query on alert events

To export CSV data from any info of the alerts you can open the SN-ALERT dashboard in Kibana, type in the filter "alert.signature.keyword:*CVE-2022-30190*", then you can export a CSV of any visualization using "Inspect" (see example below):



Click on "Inspect" in any visualization to export a CSV



Export Data - Spunk

NOTE: portions of this section are not applicable to Stamus Probe Management.

Any query of the Stamus Networks data (protocol transaction or alert logs a like) in Splunk can be exported via a regular Splunk query or visualization export.

Example of a Splunk query on alert events

Splunk "event_type=alert "alert.signature"="*CVE-2022-30190*"

| splunk> | enterprise Apps - | | | | | | | |
|---|----------------------------|--------------------|------------------|--------|----------|---------|--------|------------|
| Home | Stamus Security Platform 🔻 | Suricata Sensors 🔻 | Administration - | Search | Datasets | Reports | Alerts | Dashboards |
| New Search | | | | | | | | |
| event_type=alert alert.signature="*CVE-2022-30190*" | | | | | | | | |
| | | | | | | | | |

Protocol transactions

Stamus Networks provides a free Splunk app <u>https://splunkbase.splunk.com/app/5262</u> that can be used to do specific "CVE-2022-30190" searches.

If there are any Splunk visualizations queries that have supporting information for the CVE that needs to be exported, it can be done so by the native Splunk export functionality.

| Export Results | × | |
|---|--------|-------------------|
| Format File Name [?] Number of Results | CSV + | No results found. |
| | Cancel | |
| | | |

Troubleshooting and Help

Please feel free to reach out to <u>support@stamus-networks.com</u> with any questions or feedback.

ABOUT STAMUS NETWORKS

Stamus Networks believes that cyber defense is bigger than any single person, platform, company, or technology. That's why we leverage the power of community to deliver the next generation of open and transparent network defense. Trusted by security teams at the world's most targeted organizations, our flagship offering – Clear NDR[™] – empowers cyber defenders to uncover and stop serious threats and unauthorized network activity before they harm their organizations. Clear NDR helps defenders see more clearly and act more confidently through detection they can trust with results they can explain.



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