

SYHUNT HYBRID: CLI SCAN TOOLS

The information in this document applies to **version 6.9.17** of Syhunt Hybrid.

INTRODUCTION

Follow along with this guide to learn how to perform a dynamic or code scan and generate a vulnerability report via command-line.

Syhunt's CLI scan tools location depends on the Syhunt version and your OS:

OS	Default Location
Windows	C:\Program Files\Syhunt Hybrid\
	C:\Program Files (x86)\Syhunt Hybrid\
	C:\Program Files\Syhunt Community Core\
Linux	/home/[user]/syhunt-hybrid/carbon/
	/home/[user]/syhunt-community/carbon/
macOS	/Applications/Syhunt Hybrid Core/carbon
	/Applications/Syhunt Community Core/carbon

HOW TO PERFORM A DYNAMIC SCAN VIA COMMAND-LINE

- 1. Go to the directory Syhunt Hybrid is installed using the command prompt.
- 2. Use the following command-line:

```
scanurl [starturl] -hm:[a huntmethod]]
Example:
scanurl http://www.somehost.com -hm:appscan
```

Syhunt scanurl tool reports are automatically generated and saved unless the -nr parameter is provided. You can also open the session by launching Syhunt and using the ■ Menu -> Past Sessions option. The following parameters can be provided when calling the scanurl tool, all of which are **optional**:

Parameter	Description	Default Value	
sn :[name]	A session name that must be unique. If omitted, an unique ID will be generated and assigned	auto generated ID	
hm :[name]	the Hunt Method to be used during the scan. If omitted, the default method will be used	appscan	
emu :[mode]	Browser Emulation Mode. Available modes include: chrome, edge, firefox, msie, safari	chrome	
srcdir :[local dir]	Sets a Target Code Folder for a Hybrid Scan (eg. "C:\www\docs\" or "/home/user/www/")		
tk : [trackername]	Sends vulnerabilities to a tracker after scanning. Can be combined with the -pfcond parameter		
tk2 : [trackername]	Same as above		
tk3 : [trackername]	Same as above		
nr	Disables the report generation after scanning		
or	Opens report after generation		
rout : [filename]	Sets the report output filename and report format	Report_[session name].html	
rtpl :[name]	Sets the report template	Standard	
xout : [filename]	Sets the export output filename and report format	Export_[session name].xml	
xout2 : [filename]	Sets a second export output filename and report format	Export_[session name].xml	
pfcond : [condition]	Sets a pass/fail condition to be reported		

nv	Turn off verbose. Error and basic info still gets printed					
inc:[mode]	Sets the incremental scan mode targetpref					
inctag:[name]	Optionally stores the incremental scan data within a tag					
mnl :[n]	Sets the maximum number of links per server	10000				
mnr :[n]	Sets the maximum number of retries	2				
tmo :[ms]	Sets the request timeout time	8000				
tml :[time]	Sets the maximum scan time limit (eg: 1d, 3h, 2h30m, 50m)	No limit				
ver :[\/]	Sets the HTTP Version 1.1					
nofris	Disables auto follow off-domain redirect in Start URL					
nodos	Disables Denial-of-Service tests					
nojs	Disables JavaScript emulation and execution					
atype:[type]	Sets the auth type; Basic, Form and Manual					
auser : [username]	Sets a username for authentication					
apass : [password]	Sets a password for authentication					
about	Displays information on the current version of Syhunt					
help (or /?)	Displays the list of available parameters					

SCANNING IPV6 ADDRESSES

Syhunt Dynamic fully supports the scanning of IPv6 addresses. To scan an IPv6 target, remember to enclose the address in square brackets, eg:

```
http://[2001:4860:0:2001::68]/index.php
```

HOW TO PERFORM A CODE SCAN VIA COMMAND-LINE

- 1. Go to the directory Syhunt is installed using the command prompt.
- 2. Use the following command-line:

```
scancode [target] -hm:[a huntmethod]]
```

```
// Examples:
scancode git://sub.domain.com/repo.git
scancode https://github.com/user/repo.git -rb:master
scancode /source/www/
```

TFS repositories and local Windows path:

```
// Local path
scancode c:\source\www\
scancode c:\source\www\file.php
scancode c:\mobile\myapp.apk
scancode "c:\source code\www\"
// TFS repositories
scancode https://dev.azure.com/user/project
scancode https://myserver/tfs/project
scancode collection:https://dev.azure.com/user$/project
```

Syhunt scancode tool reports are automatically generated and saved unless -nr parameter is provided. You can also open the session by launching Syhunt and using the ≡ Menu -> Past Sessions option.

The following parameters can be provided when calling the scancode tool, all of which are **optional**:

Parameter	Description	Default Value	
sn :[name]	A session name that must be unique. If omitted, an unique ID will be generated and assigned	auto generated ID	
hm :[name]	the Hunt Method to be used during the scan. If omitted, the default method will be used	appscan	
rb :[branch]	Sets a GIT repository branch		
tfsv :[version]	Sets a TFS version	default	

tk : [trackername]	Sends vulnerabilities to a tracker after scanning. Can be combined with the -pfcond parameter					
tk2 : [trackername]	Same as above					
tk3 : [trackername]	Same as above					
nr	Disables the report generation after scanning					
or	Opens report after generation					
rout : [filename]	Sets the report output filename and report format	Report_[session name].html				
rtpl:[name]	Sets the report template	Standard				
xout : [filename]	Sets the export output filename and report format	Export_[session name].xml				
xout2 : [filename]	Sets a second export output filename and report format	Export_[session name].xml				
pfcond : [condition]	Sets a pass/fail condition to be reported					
nv	Turn off verbose. Error and basic info still gets printed					
inc:[mode]	Sets the incremental scan mode	targetpref				
inctag:[name]	Optionally stores the incremental scan data within a tag					
excp : [pathlist]	Excludes paths from the analysis (eg: -excp:/path/*,/path2/*					
refurl:[url]	Sets an URL associated with the current source code for reference	purposes only				
noifa	Disables input filtering analysis					
tml :[time]	Sets the maximum scan time limit (eg: 1d, 3h, 2h30m, 50m) No limit					

help (or /?) Displays the list of available parameters

HOW TO PERFORM A BREACH CHECK VIA COMMAND-LINE

- 1. Go to the directory Syhunt is installed using the command prompt.
- 2. Use the following command-line:

scandark [target] -hm:[a huntmethod]]

// Example: scandark mydomain.com

Syhunt scandark tool reports are automatically generated and saved unless the -nr parameter is provided. You can also open the session by launching Syhunt and using the ■ Menu -> Past Sessions option.

The following parameters can be provided when calling the scandark tool, all of which are **optional**:

Parameter	Description Default Value					
sn :[name]	A session name that must be unique. If omitted, an unique ID will be generated and assigned	auto generated ID				
hm :[name]	the Hunt Method to be used during the scan. If omitted, the default method will be used	darkplus				
nr	Disables the report generation after scanning					
or	Opens report after generation					
er	Emails report after generation					
tk : [trackername]	Sends breaches to a tracker after scanning. Can be combined with the -pfcond parameter					
tk2:	Same as above					

[trackername]

tk3 : [trackername]	Same as above				
rout : [filename]	Sets the report output filename and report format	Report_[session name].html			
rtpl:[name]	Sets the report template	Standard			
xout : [filename]	Sets the export output filename and report format	Export_[session name].xml			
xout2 : [filename]	Sets a second export output filename and report format	Export_[session name].xml			
pfcond : [condition]	Sets a pass/fail condition to be reported				
nv	Turn off verbose. Error and basic info still gets printed				
tml :[time]	Sets the maximum scan time limit (eg: 1d, 3h, 2h30m, 50m)	No limit			
about	Displays information on the current version of Syhunt				
help (or /?)	Displays the list of available parameters				

PASS/FAIL CONDITIONS

A pass/fail testing condition can be passed to scancode, scanurl or scandark with the -pfcond parameter, The following are the pass/fail conditions currently supported by Syhunt:

- high or fail-if:risk=high Fail if a High risk vulnerability or threat is found
 - medium or fail-if:risk=mediumup Fail if a Medium or High risk vulnerability or threat is found
- Iow or fail-if:risk=lowup Fail if a Low, Medium or High risk vulnerability or threat is found

INCREMENTAL SCAN MODES & COMMANDS

auto Automatically manages the incremental scan cache (recommended option)

disabled	Disables the incremental scan cache. This will slow down scans, taking 3 to 4 more time to complete
forced	Forces the incremental scan to be always enabled. If you run scans with this mode, make sure you have a separate non-forced scan to be run every month or so
targetpref	Uses the incremental scan mode defined in target preferences

You can reset the incremental scan cache by calling scancore -runcmd:clearinc.

AVAILABLE REPORT FORMATS & TEMPLATES

.html	HTML report
.pdf	Adobe PDF report
.xml	XML export
.json	JSON vulnerabilities export
.CSV	CSV (Comma-Separated Values)
.mse.csv	CSV (Comma-Separated Values) for MS Excel
.txt	Text report

The following templates are available:

Standard	This is the standard report with low to high-risk vulnerability information					
Comparison	Includes the standard information plus evolution information about the vulnerabilities					
Compliance	Includes OWASP Top 10, CWE/SANS Top 25 2019 and PCI DSS v3.2.1 compliance information					
Mobile	Includes OWASP Mobile Top 10, CWE/SANS Top 25 2019 and PCI DSS v3.2.1 compliance information					

Complete

DIFFERENCES BETWEEN HUNT METHODS

Hunt Method	CLI name	Туре	Brute F.	Injection	DoS	Time-Con.
Application Scan (Default)	appscan		Y	Y	Y	Ν
Structure Brute Force	structbf	•	Y (Deep)	Ν	Ν	Y (Very)
Old & Backup Files	fileold		Y	Ν	Ν	Y
Fault Injection	faultinj		Ν	Y	Y	Ν
Top 10 (OWASP)	top10		Ν	P (TOP10)	Y	Ν
Top 25 (CWE)	top25cwe		Ν	P (TOP25)	Y	Ν
Top 5 (OWASP PHP)	top5php		Ν	P (TOP5)	Ν	Ν
Cross-Site Scripting	XSS		Ν	P (XSS)	Ν	Ν
SQL Injection	sqlinj		Ν	P (SQL)	Ν	Ν
File Inclusion	fileinc		Ν	P(FI)	Ν	Ν
Unvalidated Redirects	unvredir		Ν	P (UR)	Ν	Ν
Malware Content	malscan		P (Malware)	P (Malware)	Ν	Ν
Passive	passive		Ν	Ν	Ν	Ν
Spider Only	spider		Ν	Ν	Ν	Ν
Complete Scan	complete		Y	Y	Y	Y (Very)
Complete Scan, No DoS	compnodos		Y	Y	Ν	Y (Very)
Complete Scan, Paranoid	comppnoid		Y (Deep)	Y	Y	Y (Very)

TYPE OF TESTING

- 🛛 Hybrid (Gray Box), Dynamic & Code
- Dynamic Only (Black Box)
- 🗈 Code Only (White Box)

TIME-CONSUMING

A Yes means that extra checks and attack mutations will be performed and the number of checks will be influenced by the number of directories found during the spidering stage.

DESCRIPTION

The Application Scan method is the default scan method in Syhunt. If you want to use a different scan method, you will be able to select one of the following options:

APPLICATION SCAN

Identifies flaws in custom web applications, web server software and third-party components. This scan method crawls the web site and performs attacks against the web site structure and the web applications. This includes looking for fault injection vulnerabilities such as XSS, SQL Injection, File Inclusion, and more.

STRUCTURE BRUTE FORCE

A structure brute force will check for:

- Common Vulnerable Scripts
- Common File Checks
- Custom File Checks (User File Checks)
- Database Disclosure
- Web-Based Backdoors

The number of checks is influenced by the number of directories found during the spidering stage.

OLD & BACKUP FILES

Executes extension checking around the mapped web site structure.

OWASP TOP 10

Scans specifically for the OWASP Top 10 2017 vulnerabilities:

- 1. A1 2017: Injection
- 2. A2 2017: Broken Authentication
- 3. A3 2017: Sensitive Data Exposure
- 4. A4 2017: XML External Entities (XXE)
- 5. A5 2017: Broken Access Control
- 5. A6 2017: Security Misconfiguration
- 7. A7 2017: Cross-Site Scripting (XSS)
- 3. A8 2017: Insecure Deserialization
- 9. A9 2017: Using Components with Known Vulnerabilities
- D. A10 2017: Insufficient Logging & Monitoring

CWE TOP 25

Scans specifically for the 2019 CWE Top 25 Most Dangerous Software Errors.

See the full list at: https://cwe.mitre.org/top25/archive/2019/2019_cwe_top25.html

OWASP PHP TOP 5

Scans specifically for the OWASP Top Five List of PHP Vulnerabilities:

- 1. Remote Command Execution
- 2. Cross-Site Scripting (XSS), including DOM XSS
- 3. SQL Injection
- 4. PHP Misconfiguration
- 5. File System Attacks, including File Inclusion

FAULT INJECTION

Scans specifically for fault injection vulnerabilities. If this scan method is selected, all other checks that does not require injection are disabled and Syhunt will then specifically check for SQL injection, XSS, file inclusion, and similar flaws.

CROSS-SITE SCRIPTING (XSS)

Scans specifically for XSS vulnerabilities, including DOM XSS.

SQL INJECTION

Scans specifically for SQL & NoSQL Injection vulnerabilities.

FILE INCLUSION

Scans specifically for File Inclusion and Directory Traversal vulnerabilities.

UNVALIDATED REDIRECTS

Scans specifically for Unvalidated Redirect vulnerabilities.

MALWARE SCAN

Scans specifically for malware content, such as:

- Web Backdoors
- Malicious Content
- Hidden Debug Parameters

PASSIVE SCAN

Maps the web site structure and reports vulnerabilities discovered without launching any kind of attacks, such as:

- 1. Vulnerabilities in Client-Side JavaScript
- 2. Various Form Weaknesses
- 3. Web Technology Disclosure
- 4. Insecure HTTP Headers
- 5. Outdated, Vulnerable Server Software
- 5. Outdated, Vulnerable Referenced Scripts
- 7. Suspicious HTML Comments
- 3. Source Code Disclosure
- 9. Malicious Content being served

SPIDER ONLY

Maps the web site structure without testing or reporting any kind of vulnerability or weakness.

COMPLETE SCAN

Scans for all kinds of web application vulnerabilities using all kinds of mutantions and pen-tester methods, including Header Manipulation attacks. A Complete Scan can sometimes be very time-consuming when performed against a web server that has a large quantity of web folders and entry points.

COMPLETE SCAN (NO DOS)

Same as before, but with denial-of-service tests disabled.

COMPLETE SCAN (PARANOID)

Scans for all kinds of web application vulnerabilities using deep structure brute force, all kinds of mutantions and pen-tester methods, including Header Manipulation attacks. This scan method can be very time-consuming, specially when executed against large web sites. This method also executes triple checking structure brute force, which applies to case-sensitive servers - Syhunt will try all file name possibilities (all uppercase, all lowercase, all leading capitals, etc).

MODIFYING SYHUNT PREFERENCES

If you have Syhunt 6.9.6.3 or superior, you can update Syhunt's permanent preferences (global or targetspecific) via CLI by using the new -prefset parameter. You can also use the -prefprint parameter to print and view the value of any preference.

```
-- Example 1 - Setting a logo to be displayed in newly generated reports
scancore -prefset:hybrid.report.company.logo.url -v:https://www.mydomain.com/mylogo.png
-- Example 2 - Printing the current report logo URL
scancore -prefprint:hybrid.report.company.logo.url
-- Example 3 - Setting Basic authentication for a specific site
scancore -tg:http://127.0.0.1 -prefset:dynamic.servauth.type -v:Basic
scancore -tg:http://127.0.0.1 -prefset:dynamic.servauth.username -v:myuser
scancore -tg:http://127.0.0.1 -prefset:dynamic.servauth.username -v:myuser
-- Example 4 - Enabling or disabling preferences for a specific site
scancore -tg:http://127.0.0.1 -prefset:enabled -v:true
scancore -tg:http://127.0.0.1 -prefset:enabled -v:tfalse
-- Example 5 - Setting a value from a list file
scancore -tg:http://127.0.0.1 -prefset:dynamic.lists.cookies -fromfile:mycookies.lst
```

A list of available preference IDs is available here.

CLEARING ALL PREFERENCES

You can remove all preferences by calling commands below.

```
-- Clear global preferences
scancore -runcmd:clearpref
-- Clear preferences for all sites
scancore -runcmd:clearsite
```

USING ISSUE TRACKERS

If you have Syhunt 6.9.6.3 or superior, you can add, manage and use issue trackers via CLI by using the new -tracker parameter.

```
-- Example 1 - Adding a new GitHub tracker
scancore -tracker:add
-- Specify the type GitHub and the name of the tracker, and press enter
-- Configure the GitHub tracker
scancore -tracker:set to:mytrackername -key:project.name -v:owner/repo
scancore -tracker:set to:mytrackername -key:auth.token.encrypted -vsecret
-- Example 2 - Adding a new email tracker
scancore -tracker:add
-- Specify the type Email and the name of the tracker, and press enter
scancore -tracker:set to:myemailtracker -key:message.from -v:robot@yourdomain.com
 scancore -tracker:set to:myemailtracker -key:message.tolist -v:security@yourdomain.com,team@yourdomain
 scancore -tracker:set to:myemailtracker -key:smtp.targethost -v:smtp.yourdomain.com
scancore -tracker:set to:myemailtracker -key:smtp.targetport -v:587
 scancore -tracker:set to:myemailtracker -key:auth.username -v:myusername
scancore -tracker:set to:myemailtracker -key:auth.password -vsecret
-- Example 3 - Testing a tracker
scancore -tracker:send -tid:TEST -to:mytrackername -note:"My comment"
-- Example 4 - Sending a vulnerability from report to the tracker
-- 1596281007-7-4771 is a vulnerability track ID taken from the report. Each vulnerability has its own
scancore -tracker:send -tid:1596281007-7-4771 -to:mytrackername -note:"My comment"
-- Example 5 - Listing available trackers
scancore -tracker:list
-- Example 6 - Deleting a tracker
 scancore -tracker:del to:mytrackername
```

A list of available tracker preference IDs is available here.

SENDING VULNERABILITIES TO A TRACKER AFTER SCANNING

Syhunt can automatically send a summary of the identified vulnerabilities to a tracker if you provide the -si parameter to the scanurl or scancode command.



REMOVING ALL TRACKERS

You can remove all added trackers by calling: scancore -runcmd:cleartrack

UPDATING SYHUNT

On Linux or macOS, you can use the command scanupdate to check for updates. If updates are available, Syhunt will ask if you want to download and install them. If you call scanupdate auto, Syhunt will check for updates and automatically install them when the command is executed without asking for user confirmation.

On Windows, you should download and install the updates directly from the Syhunt website.

WORKING WITH THIRD-PARTY LAUNCHERS

See this document on how to generate a complete command-line that allows to start Syhunt from within batch files, third-party task schedulers, Jenkins and other launchers.

For additional product documentation, visit syhunt.com/docs

