

# ATT&CK & OSQuery

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MY PATH

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OPERATING SYSTEM DEVELOPER

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PEN TESTER

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**BUT WHERE AM I COMING FROM?**

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I BELIEVE ATT&CK IS A POSITIVE  
DEVELOPMENT.

I WISH FOR SUSTAINED SUCCESS

**WHAT IS THE TIMEFRAME?**

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**FUTURE**

**TEN MINUTES... GO!**

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- 1. ASSERT A CHALLENGE**
- 2. INTRODUCE OSQUERY**
- 3. PROPOSE A CONVERSATION**



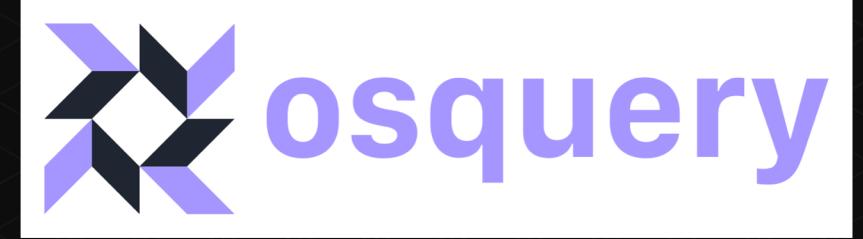
**THE COMBINATION OF TECHNICAL COMPLEXITY AND  
COMPETITIVE LANDSCAPE POSES A LONG-TERM THREAT TO  
THE ATT&CK FRAMEWORK**

# INTRODUCING OSQUERY

## **ASSERTION: ATT&CK NEEDS AN ECOSYSTEM**

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- TESTING FRAMEWORKS ARE ABSOLUTELY THE FIRST STEP
- REFERENCE DETECTION IMPLEMENTATIONS ARE THE NEXT



## INTRODUCING OSQUERY

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- DEVELOPED BY FACEBOOK
- ENDPOINT AGENT
- OPEN-SOURCE
- EXTENSIBLE
- CROSS-PLATFORM

## A SQL FRONT-END FOR ENDPOINT TELEMETRY

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- 226+ TABLES
- ENDPOINT AGENT
- OPEN-SOURCE
- CROSS-PLATFORM

- arp\_cache
- listening\_ports
- logged\_in\_users
- kernel\_modules
- rpm\_packages
- scheduled\_tasks
- bitlocker\_info
- autoexec
- process\_open\_files
- process\_open\_sockets

# PROPOSING THE CONVERSATION

**THREE-LEGGED STOOL**

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# ATT&CK FRAMEWORK

**OPEN TESTING  
FRAMEWORK**

**OPEN REFERENCE  
DETECTIONS**

# EXISTING REFERENCE DETECTION IMPLEMENTATIONS

FILIPPO MOTTINI, OLAF HARTONG, POLYLOGX

A screenshot of a GitHub repository page. The top navigation bar shows 'Code', 'Issues 3', 'Pull requests 0', 'Projects 0', and 'Wiki'. Below the navigation, it says 'Branch: master' and 'osq-ext-bin / README.md'. A pull request from 'polylogyx' is shown, titled 'Update README.md', which has 1 contributor and 171 lines (124 sloc) of code, 7.75 KB in size. The commit message is 'Update README.md'.



A screenshot of a GitHub repository page. The top navigation bar shows 'Code' and 'Issue'. Below the navigation, it says 'Branch: master' and 'osquery-attck / network\_connection\_listening.conf'. A pull request from 'teoseller' is shown, titled 'Update network\_connection\_listening.conf', which has 1 contributor and 35 lines (33 sloc) of code, 1.88 KB in size. The commit message is '277c025' and it was made 6 days ago. The file content is partially visible at the bottom.

## 1. PolyLogyx osquery Extension for Windows

PolyLogyx OSQuery Extension (plgx\_win\_extension.ext.exe) for Windows platform adding real time event collection capabilities to osquery on Windows platform services library of PolyLogyx. The current release of the extension is a 'com' aimed at increasing osquery footprint and adoption on Windows platform. By hooking into the Windows kernel for osquery, the possibilities can be enormous.

```
<Sysmon schemaversion="4.0">
<!-- Capture all hashes -->
<HashAlgorithms></HashAlgorithms>
<CheckRevocation/>
<EventFiltering>
<!-- Event ID 1 == Process Creation. -->
<ProcessCreate onmatch="exclude">
<!--SECTION: Microsoft:Office:Click2Run-->
<Image condition="is">C:\Program Files\Microsoft Shared\ClickToRun\OfficeC2RClient.exe</Image> <!--Microsoft:Office: Background process-->
<ParentImage condition="end with">C:\Program Files\Microsoft Shared\ClickToRun\OfficeClickToRun.exe</ParentImage> <!--Microsoft:Office: Background process-->
<ParentImage condition="is">C:\Program Files\Common Files\Microsoft Shared\ClickToRun\OfficeC2RClient.exe</ParentImage> <!--Microsoft:Office: Background process-->
</ProcessCreate>
```



Olaf Hartong  
olafhartong

Carbon Black.

## PUTTING FORWARD OSQUERY

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- OPEN
- EXTENSIBLE
- CROSS-PLATFORM
- APPROACHABLE

```
SELECT * FROM T1197;
```

# THINK & CONVERSE