

Inside SOC: Triage Smarter, Not Harder

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About Me

BHIS SOC

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Education

Information Technology Degree

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Today's Agenda

Triage Fundamentals



Triage Mindset



Anatomy Of An Alert



Triage Process



Real Threat vs Noise



Escalation vs Closure



Common Mistakes



Real World Tips



Live Demo



Q&A



What Is Triage?

Key Goals

- Determine severity & impact of an alert

- Identify real threats that need escalation or immediate action

- Document decisions & findings

- Filtering out false positives

What It Involves

- Reviewing alert metadata

- Judging if behavior is normal, suspicious, or malicious

- Make a decision: escalate, further investigation, or close

- Enriching data with threat intel or internal context



why Triage Matters

- Becoming more efficient
- Reducing alert fatigue
- Improving threat detection
- Building trust in your decisions

Triage Mindset

Efficient & Decisive

- Efficient not rushed
- Decision oriented
- Calm under pressure

Analytic & Context Aware

- Curious not complacent
- Context driven
- Pattern oriented
- Skeptical not paranoid

Clear & Communicative

- Communicative
- Consistent documentation
- Ask questions

Anatomy of an Alert

Core Elements

- Alert/Rule Name
- Detection Logic
- Timestamp
- Username
- Hostname
- Process ID
- Process Name
- Command Line
- File Path
- Hashes
- Domain
- Source IP/Port
- Destination IP/Port

Questions to Ask

1. Is this normal for the user/host?
2. Does the command/domain look suspicious?
3. Have I seen this pattern before?
4. Do I have enough context?
5. What logs or tools can verify this?

Work Smarter

- Spot red flags early
- Focus on key data fields
- Check for enrichments
- Correlate with other alerts or logs
- Refer to internal documentation

e0568715-1259-43e5-90e0-a63c6942638f

[VIEW TIMELINE](#) → [COPY SOURCE](#) [MARK FALSE POSITIVE](#) [VIEW RULE](#) →

CATEGORY

Potentially Suspicious Rundll32 Activity

TIME

2025-12-17 08:02:22

SOURCE

desktop-9r92o0e.localdomain

[DETECTION](#) [ROUTING](#) [AI EXPLAIN](#)

```
~ "detection": {
  "author": "_ext-sigma-7a14fbc3-54d9-4b4d-8700-61eddada04f0[bulk][segment]"
  "cat": "Potentially Suspicious Rundll32 Activity"
  ~ "detect": {
    ~ "event": {
      "COMMAND_LINE": "rundll32.exe url.dll,FileProtocolHandler http://8.8.8.8"
      "FILE_IS_SIGNED": 1
      "FILE_PATH": "C:\Windows\system32\rundll32.exe"
      "HASH": "076592ca1957f8f357cc201f0015072c612f5770ad7de85f87f254253c754dd7"
      ~ "PARENT": {
        "BASE_ADDRESS": 140700588507136
        "COMMAND_LINE": "\"C:\Windows\system32\cmd.exe\""
        "FILE_IS_SIGNED": 1
        "FILE_PATH": "C:\Windows\system32\cmd.exe"
        "HASH": "badf4752413cb0cbdc03fb95820ca167f0cdc63b597ccdb5ef43111180e088b0"
        "MEMORY_USAGE": 2076672
        "PARENT_ATOM": "5e8679047aae5e9c4717bb5a69424bff"
        "PARENT_PROCESS_ID": 5116
        "PROCESS_ID": 5940
        "THIS_ATOM": "7b7c00ee65c37f0c2500c71f6942638a"
        "THREADS": 1
        "TIMESTAMP": 1765958538048
        "USER_NAME": "DESKTOP-9R9200E\TomDeJong"
      }
      "PARENT_PROCESS_ID": 5940
      "PROCESS_ID": 5560
    }
  }
}
```

https://github.com/refractionPOINT/sigma-limacharlie/blob/rules/latest/windows_process_creation/proc_creation_win_rundll32_susp_activity.yml

The Triage Process



Review The Alert

- Carefully read the alert
- Check severity, rule name, detection logic, and key metadata
- Ask What triggered the alert? What behavior was flagged?



Gather Context

- Check the user's role and behavior history
- Check the asset involved such as the endpoint or server
- Enrich the alert with threat intel
- Review relevant logs or previous alerts



Make a Decision

- Based on the alert and context decide one of the following
 - **Escalate:** Malicious or highly suspicious
 - **Investigate Further:** Still unclear or potentially important
 - **Close:** Benign, false positive, or known behavior



Document Outcome

- Document a note saying
 - What you reviewed
 - What context you found
 - Why you chose to escalate, close, or investigate further
- Include URLs or screenshots
- Follow internal documentation standards

Real Threat or Just Noise

Real Threat

Identify red flags that spark a deeper investigation

- Behavior that is abnormal for the user/host
- Hacking tools (e.g. mimikatz, metasploit)
- Sequence of alerts showing multi-step activity (e.g. execution → lateral movement → exfiltration)

Tools & Techniques

- SIEM/EDR enrichment
- Threat intelligence platforms (e.g. VirusTotal, URLScan)
- Internal playbooks (What's the SOP for this alert type)
- Host/user baselining (What's normal for this environment)

Just Noise

Identify benign patterns that are expected in the environment

- Scheduled PowerShell Backups
- Admins using RMM tools (e.g. PsExec, RDP)
- Known good external domains (e.g. Microsoft Telemetry)
- Vulnerability scanners hitting systems

When in Doubt

- Search for past occurrences of the alert
- Default to "Investigate More" instead of blindly escalating
- Ask a senior analyst for help
- Document what you tried, even if you're still unsure

Escalate or Close

Criteria For Escalation

- Confirmed malicious behavior
- Behavior matches known attack patterns

- Abnormal behavior for the user/host
- Connections to suspicious/malicious IP/domain

- Use of unauthorized tools
- Activity on critical system

- Persistence mechanism or signs of backdoor
- Requires containment or isolation

Criteria For Closure

- Alert from a noisy or broad rule
- Expected behavior of a known business process

- Activity covered by existing tuning/allowlist
- Benign network behavior

- Alerts triggered by internal tools
- No indicators of compromise

- Alert in test or lab environment
- Repeated alert that is already escalated or handled

Common Mistakes To Avoid

Escalating Without Evidence

Why it's harmful: Wastes time, erodes trust, & creates unnecessary alert noise

What to do instead: Investigate, enrich, & document. Escalate with proper justification

Skipping Context Checks

Why it's harmful: Can lead to false positives or missed threats

What to do instead: Check internal documentation before fully digging into an alert

Not Asking For Help When Needed

Why it's harmful: Can slow analyst growth, increases risk of mistakes, & leads to burnout

What to do instead: Ask questions to your team

Over Investigating Low Risk Alerts

Why it's harmful: Reduces time for higher priority work & increases burnout

What to do instead: Use internal resources & context to confidently close benign alerts

Weak or Missing Documentation

Why it's harmful: Creates gaps for audit & leads to repeated triage of the same alert

What to do instead: Clearly document what was investigated, what you found, & what decision you made

Treating All Alerts The Same

Why it's harmful: Leads to alert fatigue, burnout, & can be a misallocation of time

What to do instead: Prioritize high value assets, suspicious behavior or known threat patterns.

Tips For Making The Right Call



Don't escalate out of fear

- Escalation should be evidence based not an emotionally driven decision
- If you feel unsure investigate more until you have the evidence you need



Use a checklist

Before escalating or closing an alert ask yourself

- Is this activity abnormal?
- Does this activity pose a risk to the business?
- Is there enough context to justify an action?
- Can I describe why this is suspicious/malicious?



Know your environment

- What looks suspicious in one company may be totally normal in another
- Build familiarity with asset roles, user behavior, and common processes & procedures

Smart Documentation Tips

What To Include In a Good Triage Note

Tips for Better Smarter Notes

Summary

Description of what triggered the alert

Findings

Key details found during investigation

Be Specific

Document detailed findings

Be Consistent

Use the same structure across investigations

Actions Taken

Checks performed during investigation

Decisions

Why you chose to escalate, close, or investigate further

Be Concise

Summarize findings

References

Include links to resources used/found

Basic Documentation Template

[Summary]

Brief description of the alert and what triggered it

[Actions Taken]

Checks you performed (tools, logs, enrichment sources)

[Findings]

Key context, suspicious or benign behavior, notable evidence

[Decision]

Escalated, closed, Investigate further | Document your reasoning for this decision

- Use bullet points for clarity
- Keep it short but meaningful
- Link to relevant tools or logs if allowed

Soft Skills That Make A Difference

Communication

- Write concise & clear notes
- Asking good questions
- Sharing relevant updates

Active Listening

- Listening carefully before reacting
- Taking time to understand context
- Asking clarifying questions

Collaboration

- Sharing findings or shortcuts with team
- Picking up slack when things get busy
- Giving & receiving feedback without ego

Composure

- Using playbooks when its chaotic
- Think before you escalate
- Managing time and focus when busy

Managing Alert Fatigue



Alert Fatigue Symptoms

- Skimming alerts
- Escalating to be “safe”
- Closing alerts too quickly
- Feeling burnout



Why It Happens

- Poorly tuned detections
- Pressure to act quickly on every alert
- Repetitive low-fidelity alerts
- Growing workload without automation or support



Managing Fatigue

- Leverage internal documentation
- Use enrichment wisely
- Tune & improve detections
- Take mental breaks



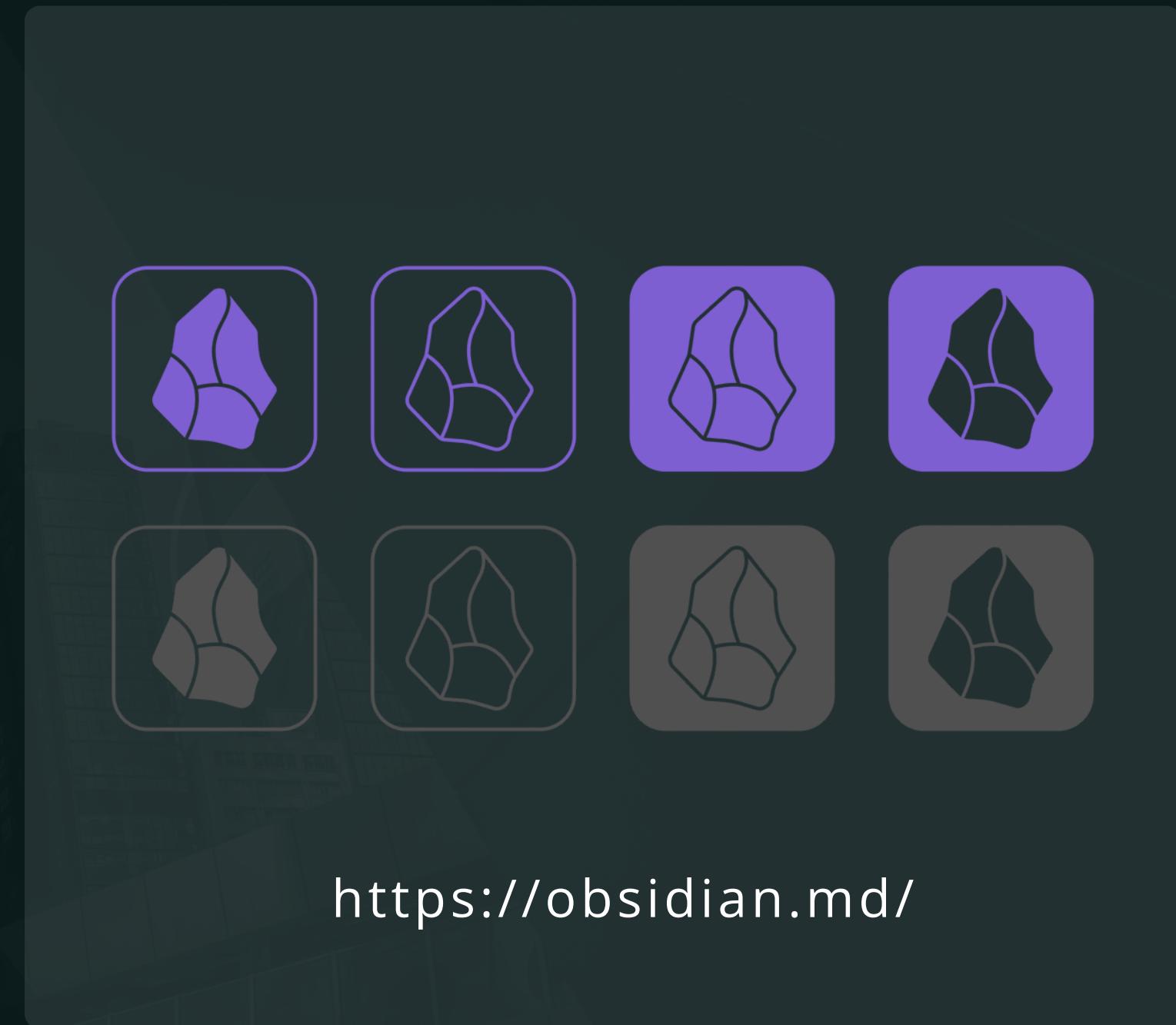
Shift Mindset

- Triage is about consistency
- Focus on progress
- Trust the process
- Lean on your team

Live Demo



<https://limacharlie.io/>



<https://obsidian.md/>

Rule Logic

- https://github.com/refractionPOINT/sigma-limacharlie/blob/rules/latest/windows_process_creation/proc_creation_win_powershell_non_interactive_execution.yml
- https://github.com/refractionPOINT/sigma-limacharlie/blob/rules/latest/windows_process_creation/proc_creation_win_powershell_encode.yml
- https://github.com/refractionPOINT/sigma-limacharlie/blob/rules/latest/windows_process_creation/proc_creation_win_powershell_base64_encoded_cmd.yml

<https://limacharlie.io/>

Thank You

for Your Time and Attention

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