Splunk Queries for SOC Analyst Splunk>

 Query to identify failed login attempts: sourcetype=auth* "authentication failure"
 stats count by user
 sort -count

2. Query to identify potential security threats:

sourcetype=access_* method=POST status=200 |
rex field=_raw "password=(?<password>[^&]+)"
| eval password_length=length(password)
| where password_length >= 8

3. Query to identify privilege escalation attempts:

sourcetype=linux_secure su* | where user!=root AND user!=""

4. Query to identify failed SSH attempts: sourcetype=linux_secure "Failed password for" | stats count by src_ip
| sort -count

5. Query to identify successful SSH attempts: sourcetype=linux_secure "Accepted publickey for" | stats count by src_ip
| sort -count

6. Query to identify unusual network traffic:

sourcetype=network_traffic
| stats sum(bytes) as total_bytes by src_ip, dest_ip
| where total_bytes > 1000000

7. Query to identify suspicious processes:

sourcetype=processes | search "Isass.exe" OR "svchost.exe" OR "explorer.exe" | stats count by user | sort -count

8. Query to identify brute force attacks:

sourcetype=access_* | stats count by clientip, action | where action="failure" AND count>=5
9. Query to identify privilege escalation attempts on Windows systems:
sourcetype="WinEventLog:Security" EventCode=4672
| eval user_account=mvindex(Account_Name,1)
| search "Security ID" NOT IN ("SYSTEM","LOCAL SERVICE","NETWORK SERVICE")

10. Query to identify abnormal user activity:

sourcetype=access_* action=purchase | stats count by clientip, user | where count > 50

11. Query to identify potential DNS tunneling activity:

sourcetype=dns
| rex field=answer "data\"\s*:\s*\"(?<data>[^\"]+)\""
| eval data_length=len(data)
| where data length > 32 AND (data length % 4) == 0

12. Query to identify suspicious PowerShell activity:

sourcetype="WinEventLog:Microsoft-Windows-PowerShell/Operational" EventCode=4103 | eval script_block=mvindex(Message,3) | search script_block="*Start-Process*"

13. Query to identify unusual file access:

sourcetype=access_* action=file_delete OR action=file_rename
| stats count by user
| where count > 10

14. Query to identify network port scans:

sourcetype=network_traffic
| stats count by src_ip, dest_port
| where count > 100

15. Query to identify suspicious email activity: sourcetype=email

| search "phishing" OR "malware" OR "suspicious link"

16. Query to identify potential data exfiltration: source type=access_* action=file_download
| stats count by user, dest_ip, dest_port
| where count > 10
17. Query to identify failed VPN attempts: sourcetype=access_* VPN AND action="failure"

18. Query to identify successful VPN attempts: sourcetype=access * VPN AND action="success"

19. Query to identify successful login attempts from new or unknown IP addresses: sourcetype=access_* action=login
| stats count by user, src_ip
| where count=1

20. Query to identify potential SQL injection attempts:

sourcetype=access_* method=POST | rex field=_raw "SELECT\s+(?<query>[^;]+)" | eval query_length=length(query) | where query_length > 50 AND query_length < 100</pre>

21. Query to identify unusual file extensions:

sourcetype=access_* action=file_upload
| rex field=file_path ".*\.(?<extension>[^\.]+)"
| stats count by extension
| where count > 10

22. Query to identify potential phishing attacks:sourcetype=emailsearch "password" OR "reset" OR "verify" OR "login"

23. Query to identify traffic to known malicious IP addresses: sourcetype=network_traffic dest_ip=malicious_ip

24. Query to identify unusual login times: sourcetype=access_* action=login
| eval hour=strftime(_time,"%H")
| stats count by user, hour
| where count < 3

25. Query to identify privilege escalation attempts on Linux systems:

sourcetype=linux_secure "sudo:" |
where user!="root" AND user!=""
26. Query to identify potential brute force attacks against a specific user:
sourcetype=access_* user=username AND action=failure
| stats count by src_ip
| where count >= 5

27. Query to identify unusual DNS requests:

sourcetype=dns stats count by query | where count > 10

28. Query to identify potential spear-phishing attempts:

sourcetype=email | search "CEO" OR "CFO" OR "Finance" OR "Accounting" OR "Payment"

29. Query to identify potential malware infections:

sourcetype=access_* action=file_download |
rex field=file_path ".*\.(?<extension>[^\.]+)"
| search extension="exe" OR extension="dll"

30. Query to identify unusual user activity:

sourcetype=access_* action=purchase | stats count by user | where count > 100

31. Query to identify potential DDoS attacks:

sourcetype=network_traffic
| stats sum(bytes) as total_bytes by src_ip
| where total bytes > 100000000

32. Query to identify potential ransomware activity:

sourcetype=access_* action=file_delete
| rex field=file_path ".*\.(?<extension>[^\.]+)"
| search extension="encrypted" OR extension="locked" OR extension="ransom"

33. Query to identify potential insider threats:

sourcetype=access_* action=file_upload
| stats count by user, file_path
| where count > 10
34. Query to identify successful authentication attempts from unknown IP addresses:
sourcetype=access_* action=login
| stats count by src_ip
| where count >= 5 AND NOT src_ip IN (192.168.0.0/16, 10.0.0/8)

35. Query to identify potential brute force attacks on a specific service:

sourcetype=network_traffic service=ssh | stats count by src_ip | where count >= 10

36. Query to identify successful SSH logins from unusual countries:

sourcetype=access_* action=login service=ssh
| iplocation src_ip
| stats count by src_country
| where count > 10 AND NOT src_country="United States"

37. Query to identify potential attempts to exploit known vulnerabilities:

sourcetype=access_* method=POST | rex field=_raw "(?<exploit>CVE-\d{4}-\d+)" | stats count by exploit | where count > 5

38. Query to identify potential brute force attacks on a specific user:

sourcetype=access_* user=username AND action=failure
| stats count by src_ip
| where count >= 5

39. Query to identify potential man-in-the-middle attacks:

sourcetype=network_traffic protocol=tcp
| stats count by dest_ip
| where count > 100

40. Query to identify potential data exfiltration:

sourcetype=access_* action=file_upload
| stats count by user, file_path
| where count > 10

41. Query to identify potential ransomware activity on Windows systems:

sourcetype=WinEventLog:Security EventCode=4663 |
rex field=Object_Name "\\\\.*\\\\(?<filename>.+)"
| rex field=filename ".*\.(?<extension>[^\.]+)"
| search extension="encrypted" OR extension="locked" OR extension="ransom"

42. Query to identify unusual network traffic patterns:

sourcetype=network_traffic
| stats count by dest_ip, dest_port
| where count > 100 AND NOT dest_ip="192.168.0.1"

43. Query to identify potential brute force attacks on a specific protocol:

sourcetype=network_traffic protocol=http
| stats count by src_ip
| where count >= 50

44. Query to identify potential account takeover attempts:

sourcetype=access_* action=login | stats count by user | where count > 10

45. Query to identify potential DNS tunneling activity:

sourcetype=dns | stats count by query | where count > 5 AND NOT match(query, "\.")

46. Query to identify potential SQL injection attempts on web servers:

sourcetype=access_* method=POST uri_path="*.php"
| rex field=_raw "SELECT\s+(?<query>[^;]+)"
| eval query_length=length(query)
| where query_length > 50 AND query_length < 100</pre>

47. Query to identify potential brute force attacks on a specific domain: sourcetype=access_* host=example.com AND action=failure
| stats count by src_ip
| where count >= 10

48. Query to identify potential brute force attacks on a specific application: sourcetype=access_* uri_path="/app/login" AND action=failure | stats count by src_ip | where count >= 5

49. Query to identify potential phishing attempts through email attachments: sourcetype=email

| search attachment="*.exe" OR attachment="*.zip"

50. Query to identify potential exploitation attempts on vulnerable services:

sourcetype=network_traffic
| stats count by src_ip, dest_port
| where count > 10 AND dest_port IN (22, 3389, 1433, 3306, 8080)

51. Query to identify potential reconnaissance activity: sourcetype=access_* method=GET | stats count by uri_path | where count > 100

52. Query to identify potential cross-site scripting (XSS) attacks on web servers: sourcetype=access_* method=POST uri_path="*.php" | rex field=_raw "document\.write\('(?<payload>[^']+)'\)" | search payload="<script>"

53. Query to identify potential privilege escalation attempts:

sourcetype=access_* action=privilege_escalation
| stats count by user
| where count > 5

54. Query to identify potential web application attacks: sourcetype=access_* method=POST uri_path="*.php" | rex field=_raw "(?<attack>sql_injection|xss|csrf)" | stats count by attack | where count > 5

55. Query to identify potential lateral movement attempts:

sourcetype=network_traffic protocol=tcp dest_port=445
| stats count by src_ip, dest_ip
| where count > 10
56. Query to identify potential unauthorized changes to critical files:
sourcetype=access_* action=file_write
| search file_path="*/etc/*" OR file_path="*/var/*"

57. Query to identify potential port scanning activity:

sourcetype=network_traffic protocol=tcp | stats count by src_ip, dest_port | where count > 20 AND NOT dest_port IN (22, 3389, 1433, 3306, 8080)

58. Query to identify potential malicious PowerShell activity on Windows systems:

sourcetype=WinEventLog:Windows PowerShell EventCode=4104 | search (New-Object System.Net.WebClient).DownloadString OR (Invoke-WebRequest -Uri)

59. Query to identify potential SQL injection attempts on web servers: sourcetype=access_* method=POST uri_path="*.php" | rex field=_raw "SELECT\s+(?<query>[^;]+)" | eval query_length=length(query) | where query_length > 100 AND query_length < 200</p>

60. Query to identify potential brute force attacks on a specific domain controller: sourcetype=WinEventLog:Security EventCode=4625 domain_controller="DC01"
| stats count by src_ip
| where count >= 5

61. Query to identify potential DDoS attacks:

sourcetype=network_traffic
| stats count by src_ip
| where count > 1000

62. Query to identify potential web shell activity:

sourcetype=access_* action=command_execution
| search (echo|print|printf)\s+(base64_decode|eval|gzinflate|str_rot13)

63. Query to identify potential brute force attacks on a specific network device:

sourcetype=cisco:asa |
stats count by src_ip
| where count >= 10
64. Query to identify potential privilege escalation attempts on Linux systems:
sourcetype=access_* action="sudo command"
| stats count by user
| where count >= 10

65. Query to identify potential DNS tunneling activity:

sourcetype=dns
| rex field=_raw "\d{1,3}\.\d{1,3}\.\d{1,3}\.\d{1,3}#(?<query>.+)\s+\(\d+\)\s+type:
(?<type>.+)\s+class: (?<class>.+)\s+[\d\s]+flags: (?<flags>.+)\s+;[\s\S]+response:\s+no error"
| search type="A" AND class="IN" AND flags="rd"

66. Query to identify potential lateral movement attempts using RDP:

sourcetype=WinEventLog:Security EventCode=4624 OR EventCode=4625 | search Logon_Type=10

67. Query to identify potential command and control (C2) traffic:

sourcetype=network_traffic | stats count by dest_ip | where count > 500 AND NOT dest ip IN (192.168.0.0/16, 10.0.0.0/8)

68. Query to identify potential PowerShell Empire activity:

sourcetype=WinEventLog:Windows PowerShell

| search (powershell.exe -nop -w hidden -ep bypass -c)|(iex(new-object net.webclient).downloadstring)

69. Query to identify potential ransomware activity:

sourcetype=access_* action=file_write | search file_path="*.crypt" OR file_path="*.locky"

70. Query to identify potential malicious traffic from a specific IP address: sourcetype=network_traffic src_ip=10.1.1.1
| stats count by dest_ip
| where count > 10

71. Query to identify potential brute force attacks on web applications: sourcetype=access_* method=POST uri_path="*.php" | stats count by src_ip | where count >= 50

72. Query to identify potential unauthorized access attempts to sensitive files: sourcetype=access_* action=file_read

| search file_path="*/etc/shadow" OR file_path="*/etc/passwd"

73. Query to identify potential lateral movement attempts using SMB: sourcetype=WinEventLog:Security EventCode=5140 | search Object Name="*\\ADMIN\$" OR Object Name="*\\C\$"

74. Query to identify potential brute force attacks on SSH servers:

sourcetype=linux_secure action=invalid
| stats count by src_ip
| where count >= 10

75. Query to identify potential phishing attacks:

sourcetype=access_* method=POST uri_path="*.php"
| search form_action="http://www.evilsite.com/login.php" AND (input_password=* OR
input_password=*)

76. Query to identify potential command injection attempts on web servers:

sourcetype=access_* method=POST uri_path="*.php"
| rex field=_raw "(?<command>cat|ls|dir)\s+(?<argument>[^;]+)"
| where isnotnull(command) AND isnotnull(argument)

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77. Query to identify potential lateral movement attempts using WinRM:
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sourcetype=WinEventLog:Microsoft-Windows-WinRM/Operational EventCode=146 | search "winrs: client" AND "is starting a command" AND NOT user="NETWORK SERVICE" AND NOT user="LocalSystem"

78. Query to identify potential brute force attacks on FTP servers: sourcetype=access_* method=POST uri_path="*/wp-login.php" | stats count by src_ip | where count >= 20 79. Query to identify potential privilege escalation attempts on Windows systems: sourcetype=WinEventLog:Security EventCode=4688
| search (New_Process_Name="*\\runas.exe" OR New_Process_Name="*\\psexec.exe") AND NOT User="SYSTEM"
80. Query to identify potential beaconing activity from a compromised host: sourcetype=network_traffic src_ip=10.1.1.1
| stats count by dest_port
| where count > 1000

81. Query to identify potential brute force attacks on SSH servers (failed login attempts): sourcetype=linux_secure action=failed | stats count by src_ip | where count >= 10

82. Query to identify potential data exfiltration attempts over HTTP:

sourcetype=access_* action=file_download | search uri_path="*.zip" OR uri_path="*.rar" OR uri_path="*.tgz" OR uri_path="*.tar.gz"

83. Query to identify potential lateral movement attempts using WMI: sourcetype=WinEventLog:Security EventCode=5861
| search (Operation="ExecQuery" AND QueryLanguage="WQL") OR (Operation="MethodCall" AND NOT MethodName="GetSecurityDescriptor" AND NOT MethodName="SetSecurityDescriptor")

84. Query to identify potential brute force attacks on MSSQL servers:

sourcetype=mssql_access action=failed
| stats count by src_ip
| where count >= 10

85. Query to identify potential privilege escalation attempts using PowerShell:

sourcetype=WinEventLog:Microsoft-Windows-PowerShell/Operational EventCode=400 | search "PowerShell pipeline execution details" AND NOT "UserPrincipalName=SYSTEM@*" AND NOT "UserPrincipalName=NETWORK SERVICE@*"

86. Query to identify potential brute force attacks on email accounts:
sourcetype=exchangeps
| stats count by src_ip
| where count >= 10

87. Query to identify potential lateral movement attempts using RDP (successful logins): sourcetype=WinEventLog:Security EventCode=4624
| search Logon_Type=10
88. Query to identify potential brute force attacks on MSSQL servers (successful logins): sourcetype=mssql_access action=success
| stats count by src_ip
| where count >= 10

89. Query to identify potential data exfiltration attempts over FTP:

sourcetype=access_* action=file_upload
| search uri_path="*/ftp" OR uri_path="*/sftp"

90. Query to identify potential lateral movement attempts using SMB (successful connections): sourcetype=WinEventLog:Security EventCode=5140

| search Object_Name="*\\ADMIN\$" OR Object_Name="*\\C\$"

91. Query to identify potential brute force attacks on RDP: sourcetype=WinEventLog:Security EventCode=4625 | search Logon Type=10 AND Status="0xC000006D"

92. Query to identify potential brute force attacks on web applications: sourcetype=access_* method=POST | stats count by src_ip, uri_path | where count >= 100

93. Query to identify potential lateral movement attempts using Remote Registry Service:

sourcetype=WinEventLog:Security EventCode=4663 | search Object_Name="*\\REGISTRY\\MACHINE\\SOFTWARE" AND NOT User="SYSTEM" AND NOT User="NETWORK SERVICE" AND NOT User="LOCAL SERVICE"

94. Query to identify potential privilege escalation attempts on Linux systems (sudo usage): sourcetype=linux_secure "sudo:"

95. Query to identify potential data exfiltration attempts over DNS:

sourcetype=dns

| search query_type=A AND query !="*.google.com" AND query !="*.facebook.com" AND query !="*.twitter.com" AND query !="*.microsoft.com"

96. Query to identify potential lateral movement attempts using SMB (failed connections):

sourcetype=WinEventLog:Security EventCode=5152 | search Object_Name="*\\ADMIN\$" OR Object_Name="*\\C\$" AND Status="0xC000006D"

97. Query to identify potential brute force attacks on MSSQL servers (failed logins):

sourcetype=mssql_access action=failed
| stats count by src_ip
| where count >= 10

98. Query to identify potential data exfiltration attempts over SMTP:

sourcetype=smtp action=send_message | search recipient!="*@gmail.com" AND recipient!="*@yahoo.com" AND recipient!="*@hotmail.com" AND recipient!="*@aol.com"

99. Query to identify potential lateral movement attempts using NetBIOS:

sourcetype=WinEventLog:Security EventCode=5719

| search "No Domain Controller is available" OR "This computer was not able to set up a secure session with a domain controller"

100. Query to identify potential brute force attacks on Telnet servers:

sourcetype=access_* method=POST uri_path="*/telnet"
| stats count by src_ip
| where count >= 10

101. Query to identify potential data exfiltration attempts over FTP:

sourcetype=ftp action=putfile | stats count by src_ip | where count >= 10

102. Query to identify potential lateral movement attempts using WMI (failed connections):

sourcetype=WinEventLog:Security EventCode=5605 | search Object_Name="*\\ROOT\\CIMV2" AND NOT User="SYSTEM"

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103. Query to identify potential brute force attacks on SSH servers:
sourcetype=access_* method=POST uri_path="*/ssh"
| stats count by src_ip
| where count >= 10
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104. Query to identify potential privilege escalation attempts on Windows systems (services configuration changes):

sourcetype=WinEventLog:Security EventCode=4697 OR EventCode=7045
| search Image_Path="*\\System32*" AND NOT User="SYSTEM"

105. Query to identify potential brute force attacks on SNMP:

sourcetype=snmptrap | stats count by src_ip | where count >= 10

106. Query to identify potential data exfiltration attempts over HTTP: sourcetype=access_* method=POST uri_path="/upload" | stats count by src_ip | where count >= 10

107. Query to identify potential lateral movement attempts using DCOM (failed connections):

sourcetype=WinEventLog:Security EventCode=10009 | search "DCOM was unable to communicate with the computer" AND NOT User="SYSTEM"

108. Query to identify potential brute force attacks on MySQL servers: sourcetype=mysql_access action=failed | stats count by src_ip | where count >= 10

109. Query to identify potential privilege escalation attempts on Windows systems (scheduled tasks creation):

sourcetype=WinEventLog:Security EventCode=4698 | search "Task Scheduler service found a misconfiguration" AND NOT User="SYSTEM"

110. Query to identify potential data exfiltration attempts over HTTPS: sourcetype=ssl method=POST | stats count by src_ip, dest_ip | where count >= 10