
Windows Event ID for Cyber Defense

A Windows Event ID is a unique numeric code assigned to a specific type of event recorded in the Windows Event Log. These IDs help identify and categorize actions or incidents such as user logons, failed login attempts, file access, or system changes.

In cyber defense, Event IDs are crucial for:

- Detecting unauthorized or suspicious activities
- Investigating security breaches
- Monitoring user behaviour and system health
- Creating automated alerts and incident responses using tools like SIEMs

1.Authentication & Logon Events

| Event ID | Description | Explanation & Example |
|----------|--|--|
| 4624 | Account successfully logged on | Indicates a successful logon. Useful to track who accessed the system. Example: A user logs into a workstation—Event 4624 will be logged with logon type (e.g., Type 2 for interactive). |
| 4625 | Account failed to log on | Unsuccessful logon attempt. Indicates brute-force attempts. Example: A user enters the wrong password 3 times—3 instances of Event 4625. |
| 4634 | Account was logged off | Indicates the user has logged off the system. Example: After finishing work, a user logs off at 6 PM—Event 4634 is recorded. |
| 4647 | User initiated logoff | Different from 4634, this confirms that the user initiated logoff. Example: Helps distinguish between system shutdown vs. user logoff. |
| 4648 | Logon with explicit credentials | Occurs when a user runs a program as another user (e.g., "RunAs"). Example: Admin opens cmd.exe using another account—Event 4648 logs both users. |
| 4672 | Special privileges assigned to new logon | Typically logs when a privileged (admin) account logs in. Example: Domain Admin logs into a server—Event 4672 is logged. |

2. User & Account Management

| Event ID | Description | Explanation & Example |
|----------|--|---|
| 4720 | User account created | New user account was made. Example: Sysadmin creates a new intern account—Event 4720 is logged. |
| 4722 | User account enabled | Disabled account is re-enabled. Example: Reactivating an employee's account after leave. |
| 4798 | Local group membership enumerated | A process (or user) is checking local group memberships. Example: Pen-testing tool scans group members—logs Event 4798. |
| 4799 | Security-enabled group membership enumerated | Similar to 4798, but for security-enabled groups. Example: Queries against "Administrators" or "Domain Admins" groups. |

3. Kerberos & Domain Controller Events

| Event ID | Description | Explanation & Example |
|----------|------------------------------------|---|
| 4768 | Kerberos TGT requested | Indicates a Kerberos logon request (TGT - Ticket Granting Ticket). Example: When a user logs into the domain, Kerberos provides TGT—Event 4768 is triggered. |
| 4769 | Kerberos service ticket requested | After a TGT is granted, the user requests access to a service (like a file share). Example: Accessing a shared folder triggers 4769. |
| 4771 | Kerberos pre-authentication failed | Might indicate a wrong password or malicious attempts. Example: Attackers using brute-force against Kerberos—this event shows failed pre-auth attempts. |
| 4776 | DC validates credentials | Logged by the domain controller when validating a username/password. Example: Useful for auditing password attempts across domain. |

4. Process and Task Tracking

| Event ID | Description | Explanation & Example |
|----------|----------------------------|---|
| 4668 | A new process was created | Logs process creation. Critical for detecting malware behavior. Example: A script runs PowerShell—this is logged as 4688. |
| 4698 | Scheduled task was created | Used for persistence by attackers. Example: Malicious task to run a script daily is created—Event 4698 logs it. |

5. Network and Resource Access

| Event ID | Description | Explanation & Example |
|----------|----------------------------------|---|
| 5140 | Network share object accessed | User accessed a shared folder/file. Example: Employee accesses \\server\documents—logs Event 5140. |
| 5145 | Network share checked for access | Access check (even if denied). Example: User tried to open a restricted folder—5145 logs both successful and denied attempts. |

6. Audit & Log Management

| Event ID | Description | Explanation & Example |
|----------|-------------------|---|
| 1102 | Audit log cleared | Someone cleared the security log—high alert! Example: If Event 1102 appears without prior alerts, it may be an attempt to cover tracks. |
