



Login/Logoff Auditing

This quick reference guide shows how to track user logins and logoffs to important workstations or servers in security event log.

□ Audit Policy Settings

- Run GPMC.exe (url2open.com/gpmc) create a new policy and link this GPO to an organizational unit (OU) that contains the computers in which you'd like to track user activity on. Once the GPO is created you must go into > Computer Configuration > Policies > Windows Settings > Security Settings > Advanced Audit Policy Configuration > Audit Policies:
 - System > Audit Security State Change set to success
 - Audit Policies > Logon/Logoff > "Audit Logon" and "Audit Logoff" and set to success and failure
 - Audit Policies > Logon/Logoff > Audit other logon/logoff events set to success and failure

□ Query The Security Event Logs of All Computers

- Edit and run the following code in Powershell ISE:


```
Get-ADComputer -SearchBase 'OU=yourOU,DC=domain,DC=com' -Filter * |
Select-Object Name #query all of the target computers in the OU
$Computers = (Get-ADComputer -SearchBase
'OU=yourOU,DC=domain,DC=com' -Filter * | Select-Object Name).Name
#Put all computers into a variable
$EventFilterXPath = "(Event[System[EventID='4647']] or Event[System
[EventID='4648']]" #Query each computer and find all the instances of
both the user logon event (ID 4648) and user logoff event (ID 4647)
foreach ($Computer in $Computers) {Get-WinEvent -ComputerName
$Computer -LogName Security -FilterXPath $EventFilterXPath} #Use Get-
WinEvent against each computer using this Xpath filter
$SelectOutput = @( @{n='ComputerName';e={$_.MachineName}},
@{n='Event';e={if ($_.Id -eq '4648') { 'Logon' } else { 'LogOff'}}},
@{n='Time';e={$_.TimeCreated}},
@{n='Account';e={if ($_.Id -eq '4647') { $i = 1 } else { $i = 3 }
[regex]::Matches($_.Message,'Account Name:\s+(.*)\n').Groups
[$i].Value.Trim()}}) #find both user logon and logoff events which user
generated and from which computer the event came from
foreach ($Computer in $Computers) {
Get-WinEvent -ComputerName $Computer -LogName Security -FilterXPath
$EventFilterXPath | Select-Object $SelectOutput | Format-Table -AutoSize}
```

Event ID Reference

- 4608 Startup
- 4609 Shutdown
- 4624 Logon
- 4625 An account failed to log on
- 4634 Logoff
- 4647 Begin Logoff
- 4648 Logon Attempt
- 4778 Session Reconnected
- 4779 Session Disconnected
- 4800 Workstation Locked
- 4801 Workstation Unlocked
- 4802 Screensaver Invoked
- 4803 Screensaver Dismissed
- 4768 A Kerberos authentication ticket (TGT) was requested.
- 4769 A Kerberos service ticket was requested.
- 4770 A Kerberos service ticket was renewed.
- 4771 Kerberos pre-authentication failed.
- 4772 A Kerberos authentication ticket request failed.
- 4776 The domain controller attempted to validate the credentials for an account.
- 4777 The domain controller failed to validate the credentials for an account.
- 5378 The requested credentials delegation was disallowed

- Gain **#completevisibility** into who logged into what, when, and from where and get a video record of that session with Netwrix Auditor for Windows Servers: netwrix.com/go/trial-ws