

# Lateral Movement Detection

## GPO Settings Cheat Sheet

The very basic universal GPO settings v1.0, September 2020  
<https://blog.compass-security.com/2020/09/101-for-lateral-movement-detection>



### Pass the Hash (PTH)

Computer Configuration\Policies\Administrative Templates\SCM: Pass the Hash Mitigations

Lsass.exe audit mode	Enabled
LSA Protection	Enabled



### Tracking and Security

Computer Configuration\Policies\Windows Settings\Security Settings\Local Policies\Security Options

Audit: Force audit policy subcategory settings to override audit policy category settings	Enable
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Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\DS Access

Audit Directory Service Changes	Success
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Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Policy Change

Audit Audit Policy Change	Success
Audit MPSSVC Rule-Level Policy Change	Success

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\System

Audit Security System Extension	Success
Audit System Integrity	Success & Failure



### Accounts, Users and Groups

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Account Logon

Audit Kerberos Authentication Service	Success & Failure
Audit Kerberos Service Ticket Operations	Success & Failure

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Account Management

Audit Computer Account Management	Success
Audit Other Account Management Events	Success
Audit Security Group Management	Success
Audit User Account Management	Success & Failure

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Logon / Logoff

Audit Account Lockout	Failure
Audit Group Membership	Success
Audit Logoff	Success
Audit Logon	Success & Failure
Audit Other Logon/ Logoff Events	Success & Failure
Audit Special Logon	Success



### Permissions, Privileges and Access

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Object Access

Audit File Share	Success & Failure
Audit File System	Success & Failure
Audit Handle Manipulation	Success

Audit Kernel Object	Success & Failure
Audit Other Object Access Events	Success & Failure
Audit Registry	Success & Failure
Audit SAM	Success & Failure

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Privilege Use

Audit Non Sensitive Privilege Use	Success & Failure
Audit Sensitive Privilege Use	Success & Failure



### Processes

Computer Configuration\Policies\Windows Settings\Security Settings\Advanced Audit Policy Configuration\Detailed Tracking

Audit Process Creation	Success
Audit Process Termination	Success

Computer Configuration\Policies\Administrative Templates\System\Audit Process Creation

Include command line in process creation events	Enabled
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Computer Configuration\Policies\Administrative Templates\WindowsComponents\WindowsPowerShell

Turn on Module Logging	Enabled Add wildcard in Module names: *
Turn on PowerShell script Block Logging	Enabled

**BEWARE** that "Audit File System" and "Audit Handle Manipulation" are pretty noisy. The daily volume can easily top 100MB. Thus, configure adequate log sizes and mind log rotation to assure you have what you need when it matters!