

Recursive Enumeration of Files and Directories Across Privilege Contexts, Detection Strategy DET0370

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AN1040

Execution of file enumeration commands (e.g., 'dir', 'tree') from non-standard processes or unusual user contexts, followed by recursive directory traversal or access to sensitive locations.

Log Sources

Mutable Elements

Field	Description
CommandLineRegex	Allows tuning based on tools/scripts used for enumeration (e.g., tree, dir /s /b)
UserContext	Scoping for standard vs elevated or service accounts
TimeWindow	Defines burst activity over short periods (e.g., >50 directory queries in 30s)

AN1041

Use of file enumeration commands (e.g., 'ls', 'find', 'locate') executed by suspicious users or scripts accessing broad file hierarchies or restricted directories.

Log Sources

Mutable Elements

Field	Description
FilePathDepth	Max depth of recursive access to tune noise vs anomaly
UserContext	Helpful to exclude known scripts or automation accounts

AN1042

Execution of file or directory discovery commands (e.g., 'ls', 'find') from terminal or script-based tooling, especially outside normal user workflows.

Log Sources

Mutable Elements

Field	Description
PredicateScope	Adjust macOS unified log filter to include/exclude system paths
TimeWindow	Tune based on burst access patterns

AN1043

Execution of esxcli commands to enumerate datastore, configuration files, or directory structures by unauthorized or remote users.

Log Sources

Mutable Elements

Field	Description
CLICommandPattern	Match on esxcli storage filesystem commands
AccessSource	Limit alerting to non-vCenter or remote IPs

AN1044

Execution of file discovery commands (e.g., 'dir', 'show flash', 'nvram:') from CLI interfaces, especially by unauthorized users or from abnormal source IPs.

Log Sources

Mutable Elements

Field	Description
CommandWhitelist	Filter allowed commands by account or IP
SessionOrigin	Tunable to restrict detection to remote terminal or Telnet/SSH

Source: <https://attack.mitre.org/detectionstrategies/DET0370#AN1044>