Microsoft Defender for Endpoint, Attack Surface Reduction rules

Attack Surface Reduction (ASR) rules are a set of security policies that are designed to reduce the potential attack surface of an operating system. In this sheet, I am going to share KQL use cases with graph for ASR rules.

ActionType name	Details	Example
AsrOfficeChildProcessBlocked AsrLsassCredentialTheftBlocked AsrScriptExecutableDownloadBlocked	These ActionTypes capture ASR rules blocking activities. In particular, if you want to capture all ASR rule activities, then the "startswith" operator is a great choice.	<pre>DeviceEvents where Timestamp > ago(30d) where ActionType startswith "asr" extend Parsed = parse_json(AdditionalFields) where Parsed.IsAudit == "false"</pre>
AsrOfficeChildProcessAudited AsrLsassCredentialTheftAudited AsrScriptExecutableDownloadAudited	These ActionTypes capture ASR rules auditing activities. In particular, if you want to capture all ASR rule activities, then the "startswith" operator is a great choice.	<pre>DeviceEvents where Timestamp > ago(30d) where ActionType startswith "asr" extend Parsed = parse_json(AdditionalFields) where Parsed.IsAudit == "true"</pre>

```
// ASR rules blocking activities
                                                                                                              AsrExecutableEmailContentBlocked 5.0 %
DeviceEvents
  where Timestamp > ago(30d)
                                                                                                                         AsrLsassCredentialTheftBlocked
  where ActionType startswith "asr"
                                                                      AsrUntrustedExecutableBlocked
  extend Parsed = parse_json(AdditionalFields)
  where Parsed.IsAudit == "false"
  summarize count() by ActionType
                                                                                                                               AsrObfuscatedScriptBlock
| render piechart
// ASR rules Auditing activities
DeviceEvents
 where Timestamp > ago(30d)
                                                                 AsrScriptExecutableDo
  where ActionType startswith "asr"
                                                                                                                         AsrOfficeChildProcessBlocked
  extend Parsed = parse json(AdditionalFields)
                                                                             AsrRansomwareBlocked
                                                                                                                         25.0 %
  where Parsed.IsAudit == "true"
  summarize count() by ActionType
                                                                                      croWin32ApiCallsBl
                                                                              5.0 %
  render piechart
```

```
// A graph showing ASR rules block activities per day
DeviceEvents
 where Timestamp > ago(30d)
 where ActionType startswith "asr"
 extend Parsed = parse_json(AdditionalFields)
 where Parsed.IsAudit == "false"
 summarize Email = countif(ActionType in ("AsrExecutableEmailContentBlocked", "AsrOfficeCommAppChildProcessBlocked")),
            Script = countif(ActionType in ("AsrObfuscatedScriptBlocked", "AsrScriptExecutableDownloadBlocked")),
                  = countif(ActionType in ("AsrPersistenceThroughWmiBlocked", "AsrPsexecWmiChildProcessBlocked")),
                       = countif(ActionType in ("AsrOfficeChildProcessBlocked", "AsrOfficeMacroWin32ApiCallsBlocked",
           OfficeApp
"AsrExecutableOfficeContentBlocked", "AsrOfficeProcessInjectionBlocked")),
            3rdPartyApp = countif(ActionType == "AsrAdobeReaderChildProcessBlocked"),
            WindowsCredentials = countif(ActionType == "AsrLsassCredentialTheftBlocked"),
            PolymorphicThreats = countif(ActionType in ("AsrUntrustedExecutableBlocked", "AsrUntrustedUsbProcessBlocked",
"AsrRansomwareBlocked", "AsrVulnerableSignedDriverBlocked")) by bin(Timestamp, 1d)
render columnchart
```

Reference: Attack surface reduction (ASR) rules reference

https://learn.microsoft.com/en-us/microsoft-365/security/defender-endpoint/attack-surface-reduction-rules-reference?view=o365-worldwide

PolymorphicThreats

WindowsCredentials