

Session 5-2023 |



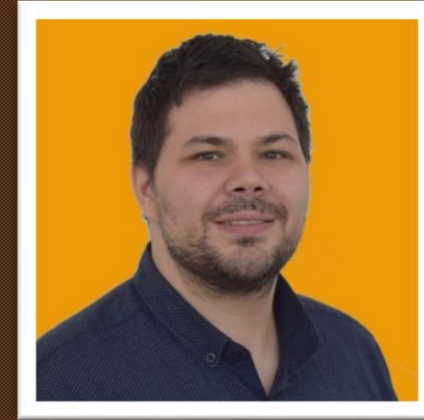
KQL | Cafe

Your | hosts

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Show | Agenda

Welcome

What is new/updates for KQL

Our KQL Guest

What did you do with KQL this month?

Today's | Guest



Clive Watson
Solutions Director @ Quorum Cyber, Microsoft Security MVP

[Clive Watson \(@clive_watson\) / Twitter](#)

What did you do with KQL this month?

search for domains based on the 10 Most Abused Top Level Domains

```
// search for domains based on the 10 Most Abused Top Level Domains
// https://www.spamhaus.org/statistics/tlds/
let abusedTLD = dynamic(["rest", "okinawa", "live", "beauty", "bar", "fit", "gq", "cfd", "zone", "top"]);
DeviceNetworkEvents
| where isnotempty(RemoteUrl)
| extend tld = tostring(split(RemoteUrl, ".")[-1])
| where tld in~ (abusedTLD)
| summarize
    StartTime = min(Timestamp),
    EndTime = max(Timestamp),
    NameCount = count()
    by RemoteUrl, RemoteIP, tld
| order by NameCount desc
```


What did you do with KQL this month?

TI Sign-In Logs

```
let ioc_lookBack = 90d;
let IncTitle = "TI map IP entity to SigninLogs";
SecurityIncident
| where TimeGenerated > ago(90d)
| where Title == IncTitle
| summarize arg_max(TimeGenerated,*) by IncidentNumber
| mv-expand AlertIds
| extend AlertId = tostring(AlertIds)
| join (SecurityAlert)
on $left.AlertId == $right.SystemAlertId
| mv-expand parse_json(Entities)
| extend EType = tostring((Entities.Type))
| where EType == 'ip'
| extend IPAddress = tostring(Entities.Address)
// Count the # of alerts per IP address
| summarize Alertcount = dcount(SystemAlertId) by IPAddress
| join kind=innerunique (ThreatIntelligenceIndicator
  | where TimeGenerated >= ago(ioc_lookBack) and ExpirationDateTime > now()
  | summarize LatestIndicatorTime = arg_max(TimeGenerated, *) by IndicatorId
  | where Active == true
// Picking up only IOC's that contain the entities we want
  | where isnotempty(NetworkIP)
    or isnotempty(EmailSourceIPAddress)
    or isnotempty(NetworkDestinationIP)
    or isnotempty(NetworkSourceIP)
// As there is potentially more than 1 indicator type for matching IP, taking NetworkIP first, then others if that is empty.
// Taking the first non-empty value based on potential IOC match availability
  | extend TI_ipEntity = iff(isnotempty(NetworkIP), NetworkIP, NetworkDestinationIP)
  | extend TI_ipEntity = iff(isempty(TI_ipEntity) and isnotempty(NetworkSourceIP), NetworkSourceIP, TI_ipEntity)
  | extend TI_ipEntity = iff(isempty(TI_ipEntity) and isnotempty(EmailSourceIPAddress), EmailSourceIPAddress, TI_ipEntity)
) on $left.AlertId == $right.TI_ipEntity
| project IPAddress, Alertcount, LatestIndicatorTime, SourceSystem, ConfidenceScore, Description, ThreatType, Tags
// find the successfull sign-ins
| join SigninLogs
on $left.IPAddress == $right.IPAddress
| where ResultType != 0
| summarize SignInAttempts = dcount(CorrelationId) by IPAddress, Alertcount, Description, ThreatType, Tags, AutonomousSystemNumber, Location
```

Thanks for attending



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