Session 7 | Advanced KQL Techniques

KQL|Cafe

Session 7 | Advanced KQL Techniques

Your | hosts

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Today's | Guest

Ashwin Patil

Senior Security Researcher, Microsoft Threat Intelligence Center

https://twitter.com/ashwinpatil
ashwin-patil/blue-teaming-with-kql: Repository with Sample KQL Query examples for Threat Hunting (github.com)

Show | Agenda

Welcome

Whats New

- TimeStamp - TimeGenerated
- Sentinel – Data Retention, Archive & Restore
- Guided Hunting in Microsoft 365 Defender

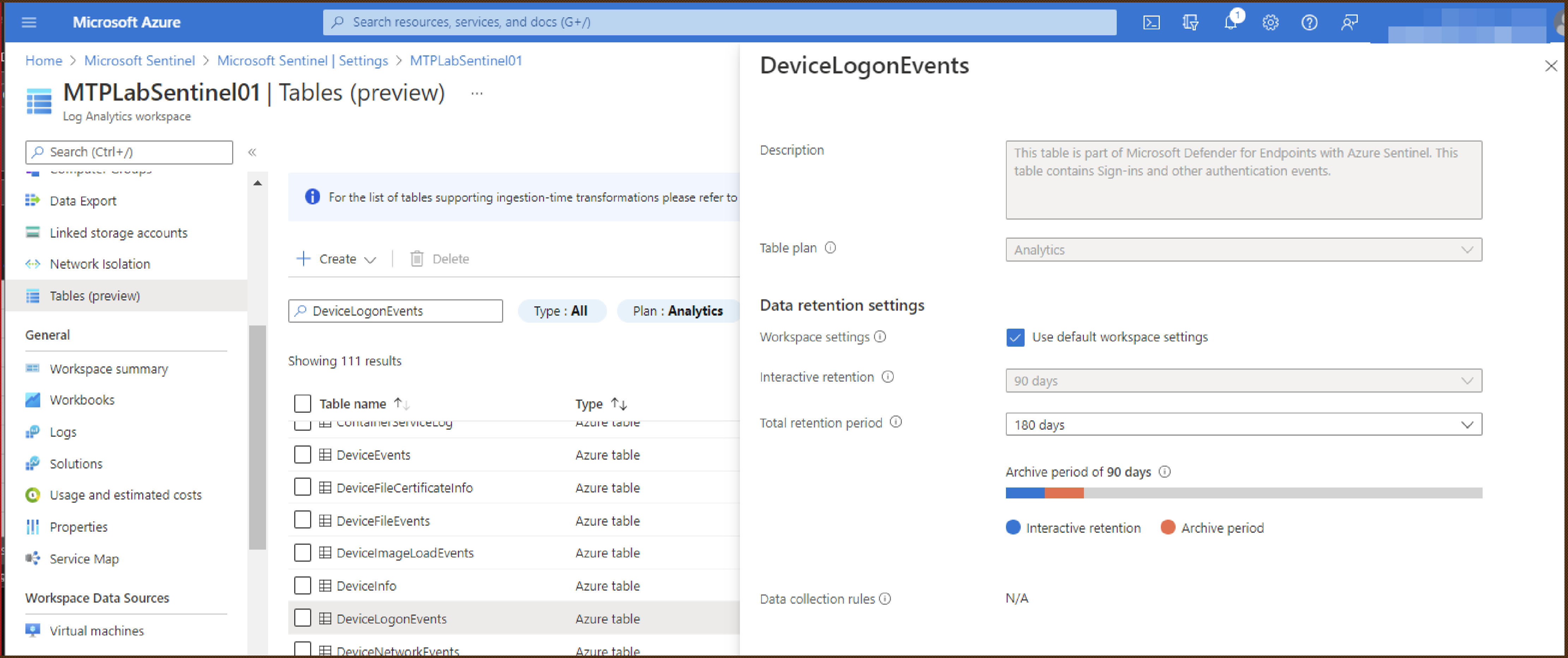
Working with IOCs

Learning KQL - parse-kv

Our KQL Guest

What did you do with KQL this month?

Sentinel – Data Retention , Archive and Restore



MTPLabSentinel01 | Tables (preview)

Log Analytics workspace

For the list of tables supporting ingestion-time transformations please refer to

DeviceLogonEvents Type : **All** Plan : **Analytics**

Showing 111 results

Table name	Type
ContainerServiceLog	Azure table
DeviceEvents	Azure table
DeviceFileCertificateInfo	Azure table
DeviceFileEvents	Azure table
DeviceImageLoadEvents	Azure table
DeviceInfo	Azure table
DeviceLogonEvents	Azure table
DeviceNetworkEvents	Azure table

DeviceLogonEvents

Description: This table is part of Microsoft Defender for Endpoints with Azure Sentinel. This table contains Sign-ins and other authentication events.

Table plan: Analytics

Data retention settings

Workspace settings: ☑ Use default workspace settings

Interactive retention: 90 days

Total retention period: 180 days

Archive period of **90 days**

● Interactive retention ● Archive period

Data collection rules: N/A

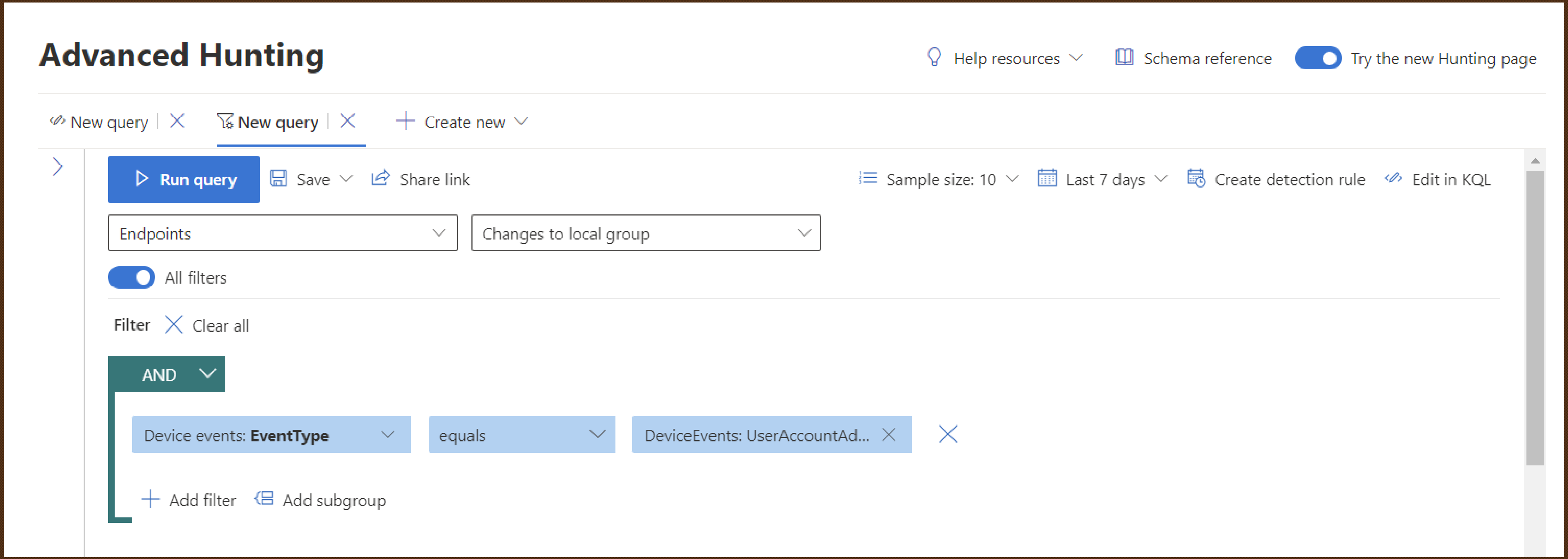
Topic 1

Session 7 | Advanced KQL Techniques

Sentinel – Data Retention , Archive and Restore

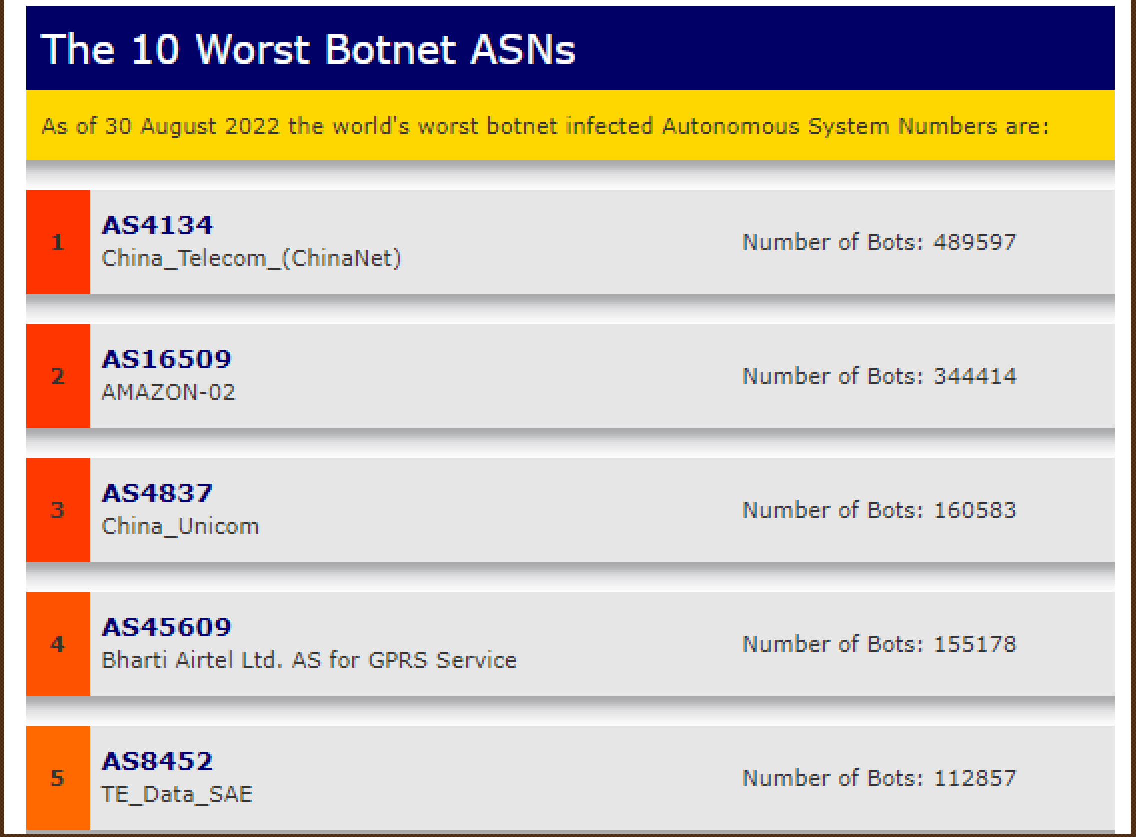
```
DeviceLogonEvents
| where TimeGenerated between (datetime(2022-05-01) .. datetime(2022-08-30))

DeviceLogonEvents_8373182_SRCH
| project-reorder  _OriginalTimeGenerated, TimeGenerated

DeviceLogonEvents_8171567_RST
| where TimeGenerated between (datetime(2022-03-01) .. datetime(2022-05-30))

DeviceLogonEvents_8171567_RST
| where TimeGenerated between (datetime(2022-03-01) .. datetime(2022-05-30))
| summarize arg_min(TimeGenerated,*)

DeviceLogonEvents_8171567_RST
| where TimeGenerated between (datetime(2022-03-01) .. datetime(2022-05-30))
| summarize arg_max(TimeGenerated,*)
```

Defender 365 Guided Hunting



https://techcommunity.microsoft.com/t5/microsoft-365-defender-blog/hunt-in-microsoft-365-defender-without-kql/ba-p/3607989

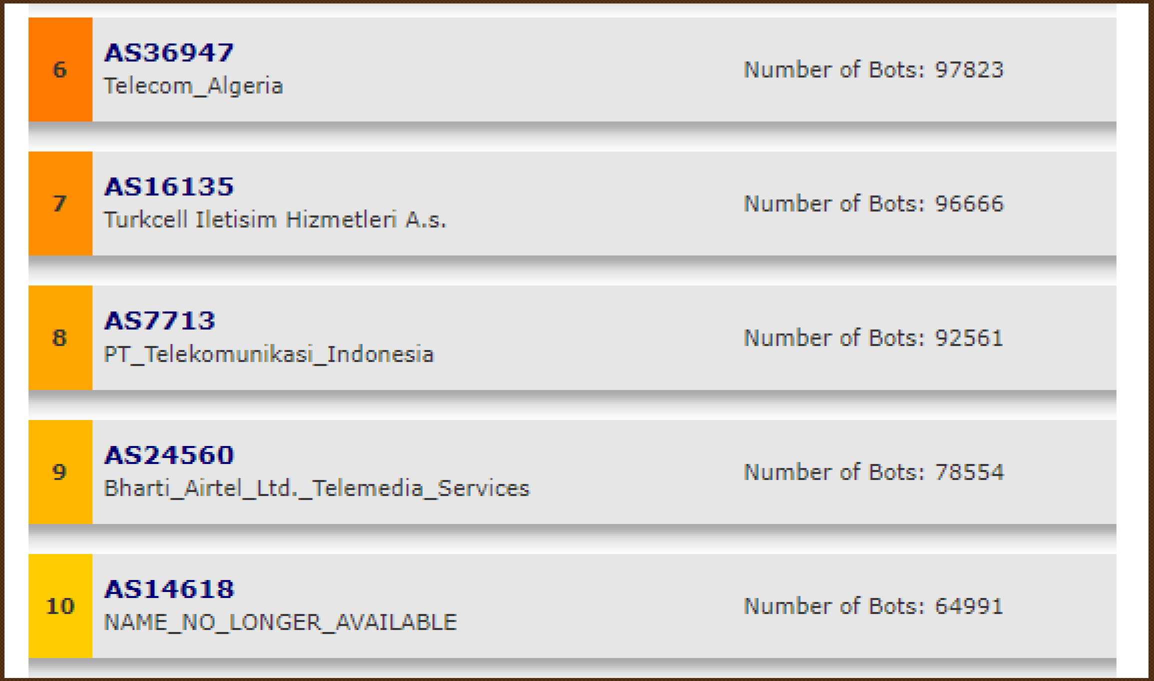
IOCs
https://www.spamhaus.org/statistics/botnet-asn/



The 10 Worst Botnet ASNs

As of 30 August 2022 the world's worst botnet infected Autonomous System Numbers are:

1	**AS4134** China_Telecom_(ChinaNet)	Number of Bots: 489597
2	**AS16509** AMAZON-02	Number of Bots: 344414
3	**AS4837** China_Unicom	Number of Bots: 160583
4	**AS45609** Bharti Airtel Ltd. AS for GPRS Service	Number of Bots: 155178
5	**AS8452** TE_Data_SAE	Number of Bots: 112857



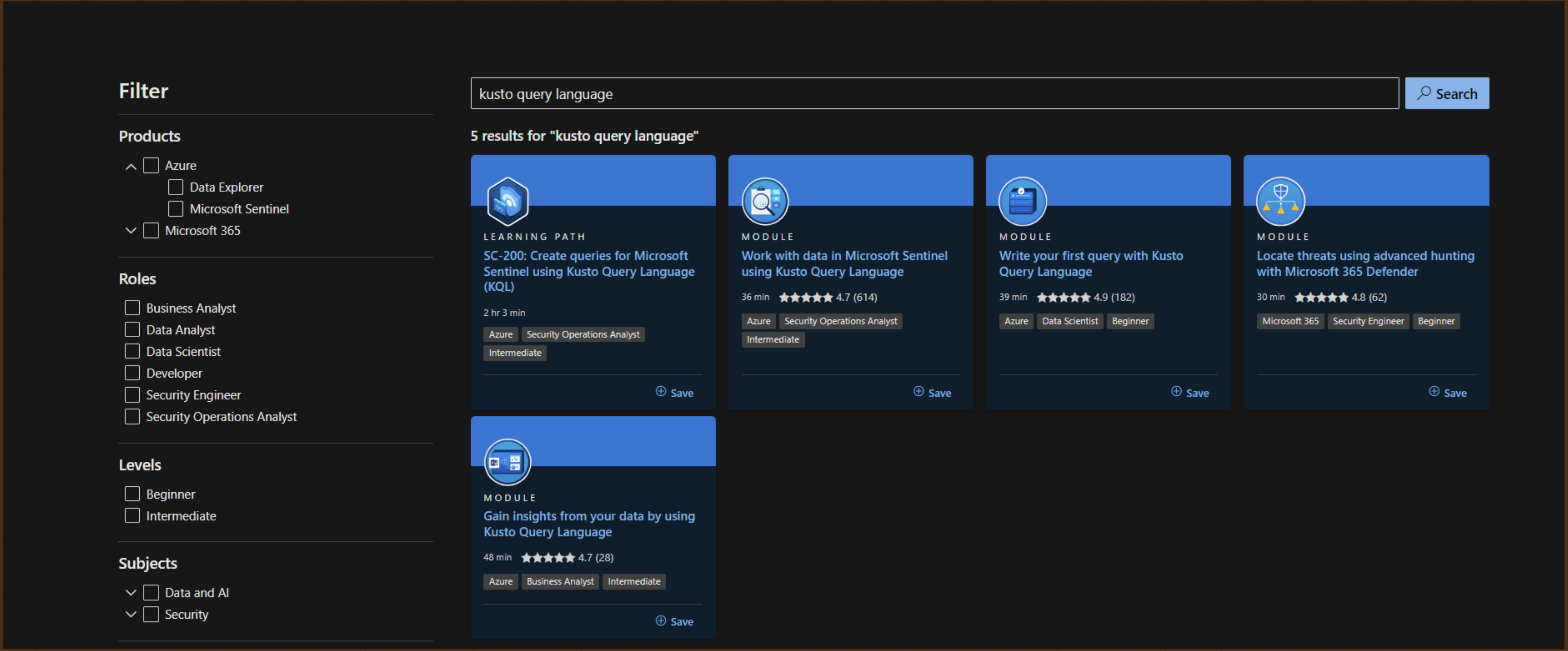
6	**AS36947** Telecom_Algeria	Number of Bots: 97823
7	**AS16135** Turkcell Iletisim Hizmetleri A.s.	Number of Bots: 96666
8	**AS7713** PT_Telekomunikasi_Indonesia	Number of Bots: 92561
9	**AS24560** Bharti_Airtel_Ltd._Telemedia_Services	Number of Bots: 78554
10	**AS14618** NAME_NO_LONGER_AVAILABLE	Number of Bots: 64991

Learning KQL – parse-kv

- Faster
- Less complex
- Less error prone
- Cleaner KQL

Learning KQL – Microsoft learn

https://docs.microsoft.com/en-us/learn/browse/?expanded=azure&terms=kusto%20query%20language



Filter

Products

- □ Azure
  - □ Data Explorer
  - □ Microsoft Sentinel
- □ Microsoft 365

Roles

- □ Business Analyst
- □ Data Analyst
- □ Data Scientist
- □ Developer
- □ Security Engineer
- □ Security Operations Analyst

Levels

- □ Beginner
- □ Intermediate

Subjects

- □ Data and AI
- □ Security

kusto query language | Search

5 results for "kusto query language"

LEARNING PATH
SC-200: Create queries for Microsoft Sentinel using Kusto Query Language (KQL)
2 hr 3 min
Azure | Security Operations Analyst | Intermediate
⊕ Save

MODULE
Work with data in Microsoft Sentinel using Kusto Query Language
36 min ★★★★★ 4.7 (614)
Azure | Security Operations Analyst | Intermediate
⊕ Save

MODULE
Write your first query with Kusto Query Language
39 min ★★★★★ 4.9 (182)
Azure | Data Scientist | Beginner
⊕ Save

MODULE
Locate threats using advanced hunting with Microsoft 365 Defender
30 min ★★★★★ 4.8 (62)
Microsoft 365 | Security Engineer | Beginner
⊕ Save

MODULE
Gain insights from your data by using Kusto Query Language
48 min ★★★★★ 4.7 (28)
Azure | Business Analyst | Intermediate
⊕ Save

KQL Quest: Ashwin Patil

Senior Security Researcher, Microsoft Threat Intelligence Center

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What did you do with KQL this month?

IP Addresses, IP Ranges

Azure-Threat-Research-Matrix-KQL

Questions?

Thanks for attending

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