



EUROPEAN **MiCROSOFT** **FABRiC** Community Conference

VIENNA 15-18 SEPTEMBER 2025

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#FABCONEUROPE25





End-to-End security in Real-Time Intelligence

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MVP and Data geek, Denmark



<https://aka.bi/brian>



<https://kql.how>



<https://dcode.bi>



<https://aka.bi/slides>

BUT WHY, BRIAN?
Should I really care?

BUT WHY, BRIAN? Should I really care?



OneLake security



Application could do it



Just like any other
database in Fabric

1



**END-TO-END
SECURITY**

2



**OPTIONS IN KQL
DATABASE**

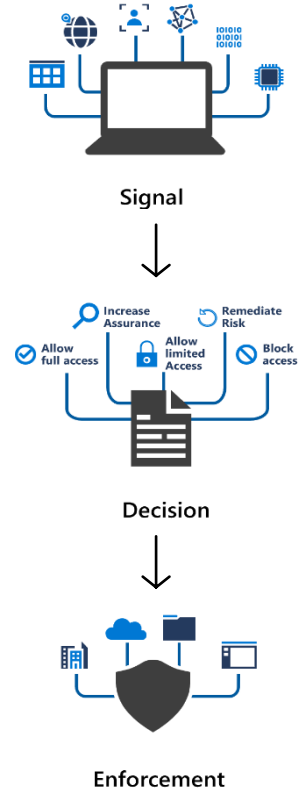
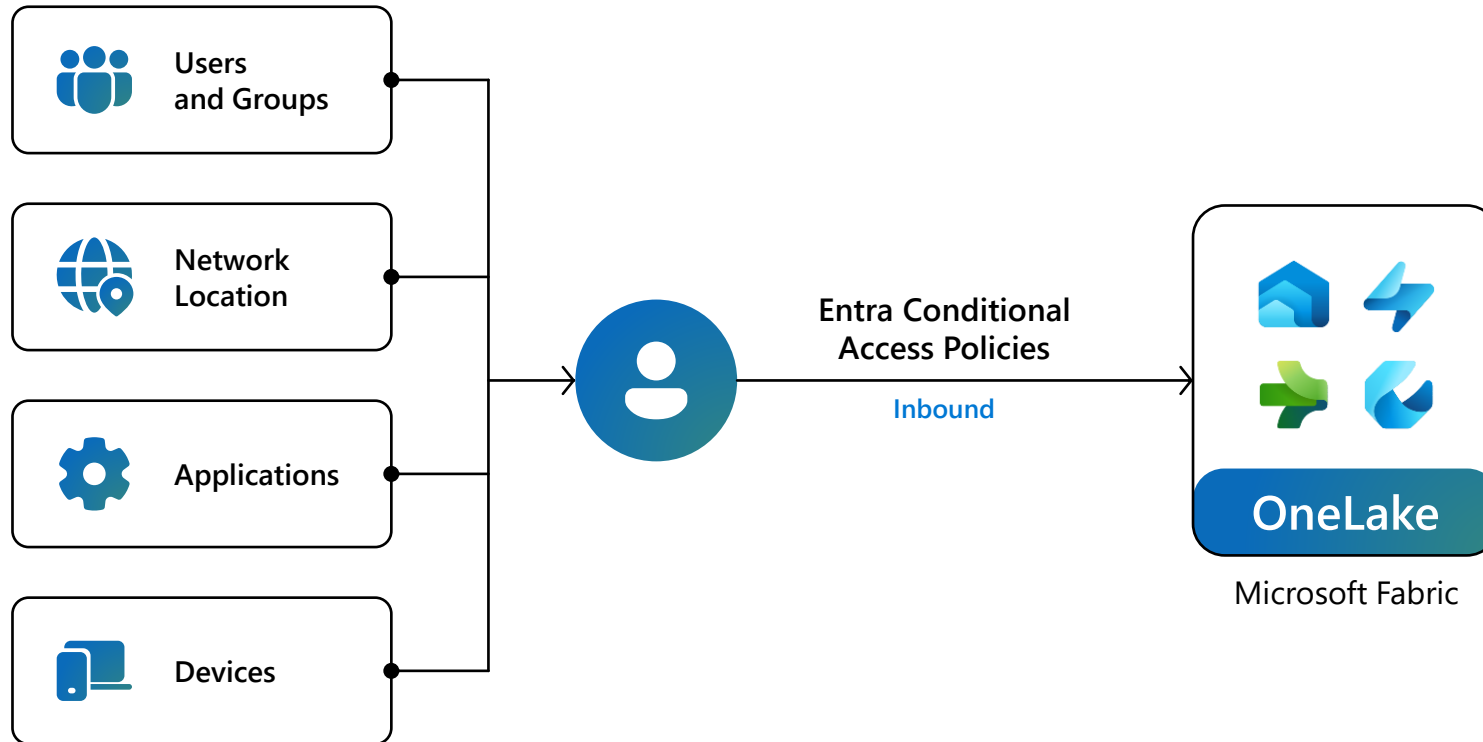
3



OBJECT SECURITY

End-to-end security in Real-Time Intelligence

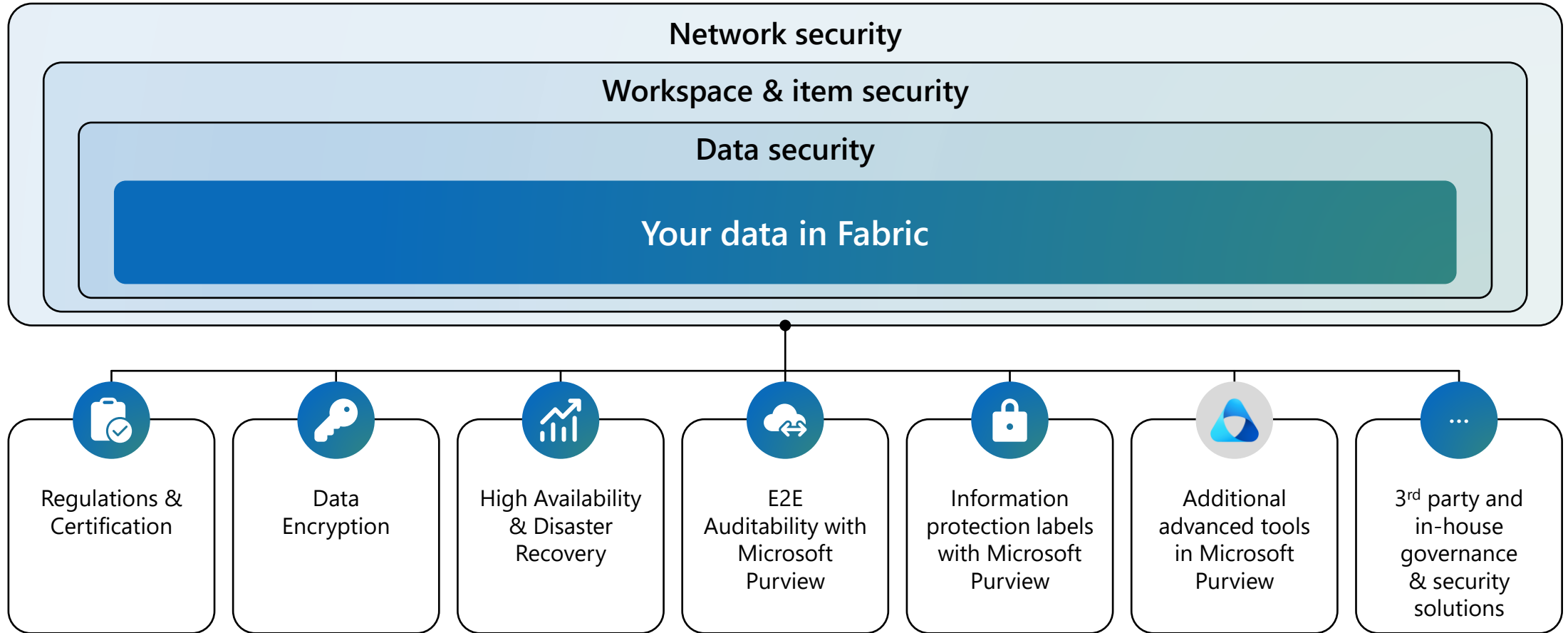
The big picture and what are my options



End-to-end security in Real-Time Intelligence



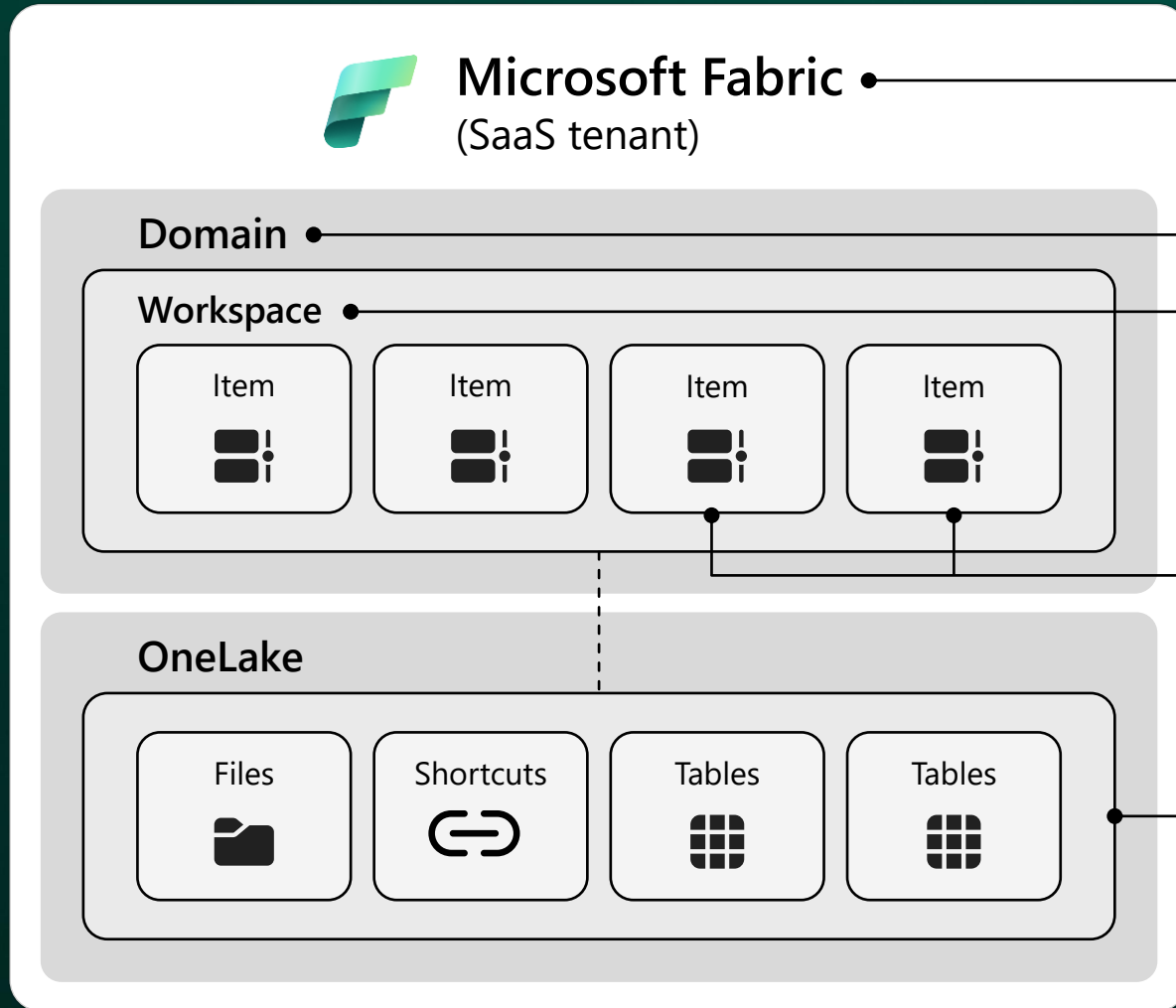
The big picture and what are my options



End-to-end security in Real-Time Intelligence



The big picture and what are my options



Platform level access.

Authentication through Entra ID. Inbound through Private Link or Conditional access

Domain specific configuration.

by domain admins

Workspace level access.

Boundary for managing items. E.g. admin, contributor and viewers.

Compute security.

e.g. Warehouse access through GRANT/DENY or Semantic Models & Warehouse RLS \ OLS.

Item level access.

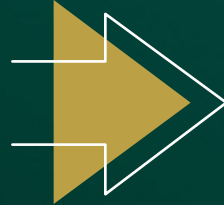
e.g. read all only via OneLake or read access to only subset of data. More granular roles for files and folders.

End-to-end security in Real-Time Intelligence

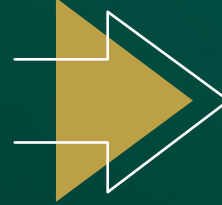
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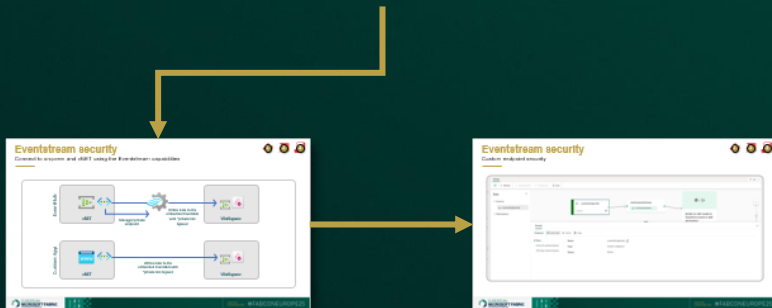
Eventstream



Eventhouse

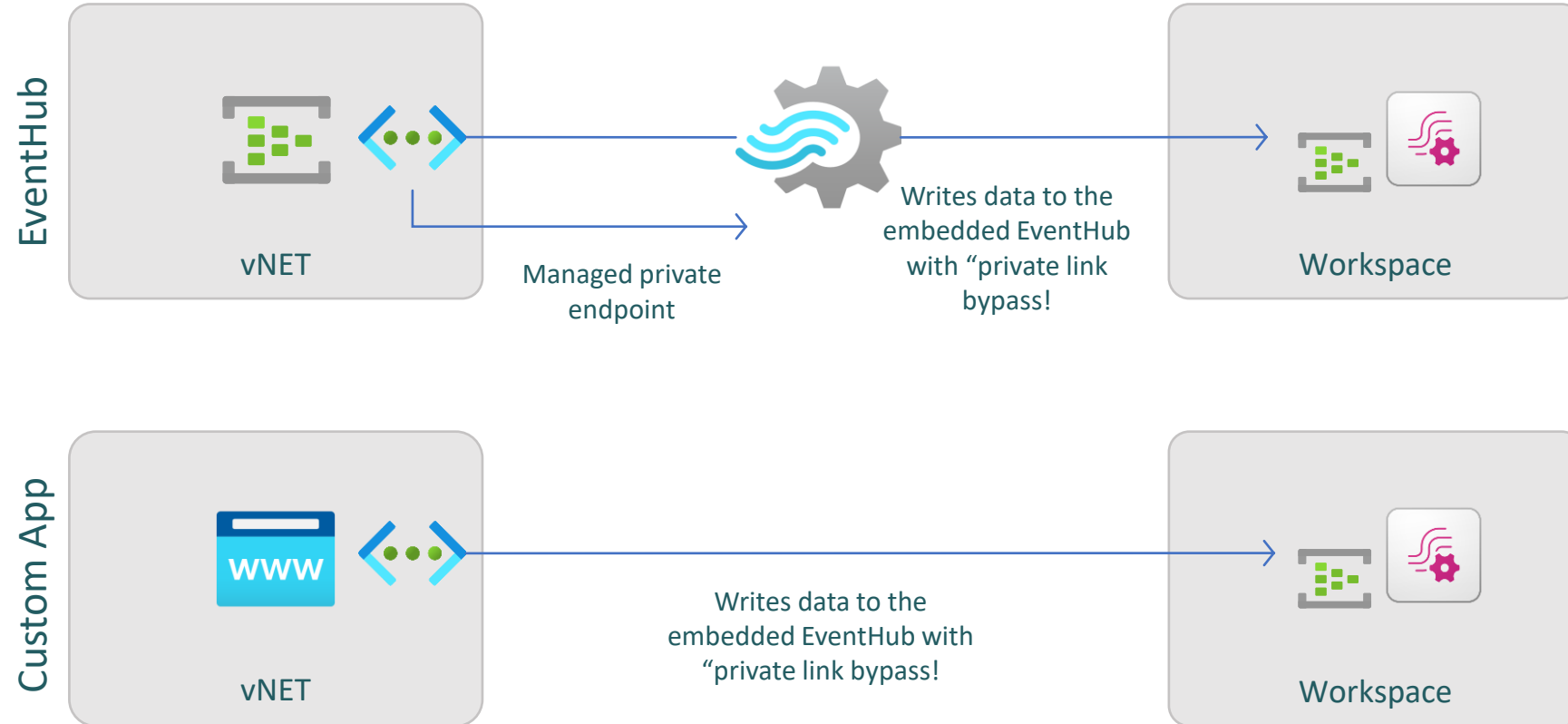


Dashboard



Eventstream security

Connect to on-prem and vNET using the Eventstream capabilities



Eventstream security

Custom endpoint security



Home

⚙️ Refresh | 🛑 Deactivate all | ▶️ Activate all | ✎ Edit

Data

Sources

customEndpointIn

Destinations

customEndpointIn

Active

contosoeventstream

contosoeventstrea...

⚙️ / ➡️

Switch to edit mode to Transform event or add destination

Details

Protocol: Event Hub | AMQP | Kafka

Basic

Entra ID Authentication

SAS Key Authentication

Name

Type

Status

customEndpointIn

Custom endpoint

Active

Eventstream security

Custom endpoint security



Protocol: Event Hub AMQP Kafka

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Entra ID Authentication

SAS Key Authentication

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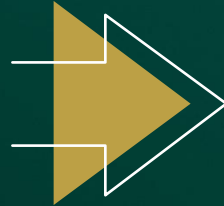
Full Entra ID support

End-to-end security in Real-Time Intelligence

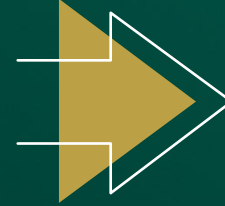
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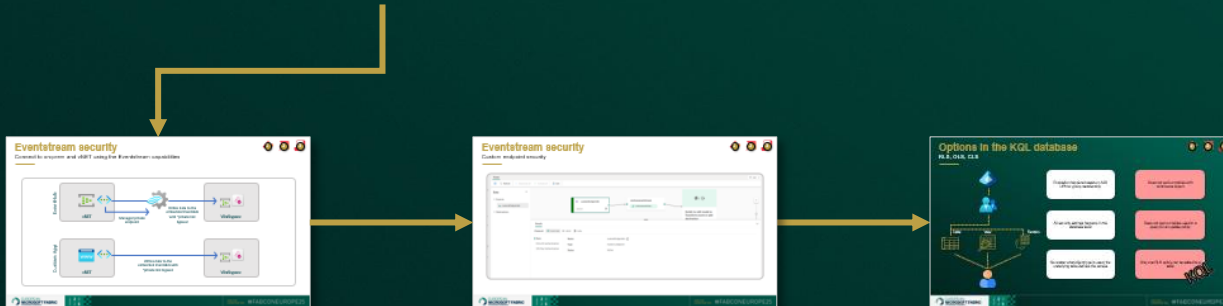
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Eventhouse

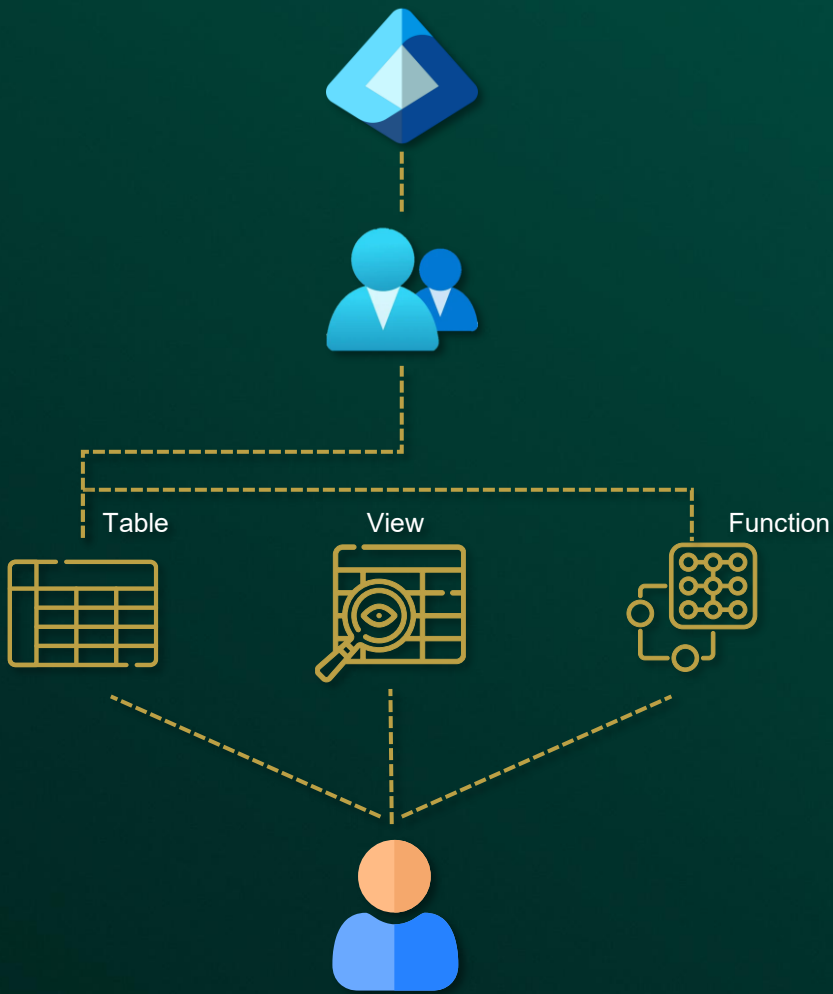


Dashboard



Options in the KQL database

RLS, OLS, CLS



Evaluation happens based on AAD UPN or group membership

Does not work on tables with continuous import

All security settings happens in the database level

Does not work on tables used in a query for an update policy

No matter what object type is used, the underlying table defines the access

Only one RLS policy can be added to a table



Options in the KQL database

RLS, OLS, CLS – Use cases



Data masking

Col A	Col B	Col C
xxxx@gmail.com	Name	4571 xxxx xxxx 1234
xxx@microsoft.com	Name	4571 xxxx xxxx 1234

“Column Level Security”

Col B	Col C
Name	4571 xxxx xxxx 1234
Name	4571 xxxx xxxx 1234

Row Level Security

Col A	Col B	Col C
xxx@microsoft.com	Name	4571 xxxx xxxx 1234

LIVE DEMOS

60% OF THE TIME, IT WORKS EVERY TIME

Options in the KQL database

RLS, OLS, CLS – Use cases



ⓘ Note

- To avoid throttling from Microsoft Entra ID, the `current_principal_is_member_of()` function only works with string literals. Using values that aren't string literals will result in an error in order to avoid a potentially large number of queries to Microsoft Entra ID.
- Checking group memberships can be resource-intensive. Since group memberships don't change frequently, the membership check results are cached. The caching duration varies and determines how quickly changes to group memberships are updated.
- For more information on Group Membership cache behavior, see [Access control overview](https://learn.microsoft.com/en-us/kusto/query/current-principal-is-member-of-function?view=microsoft-fabric).

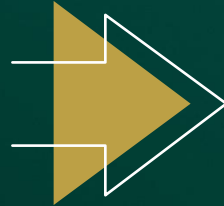
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End-to-end security in Real-Time Intelligence

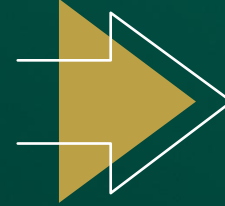
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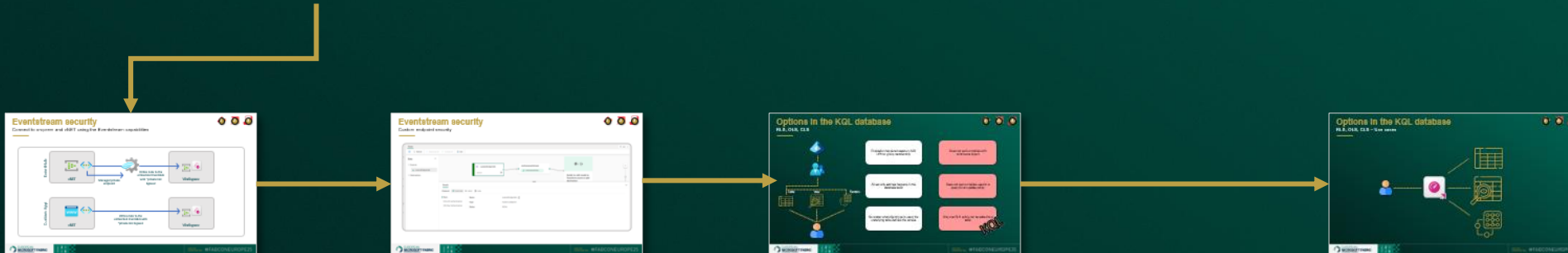
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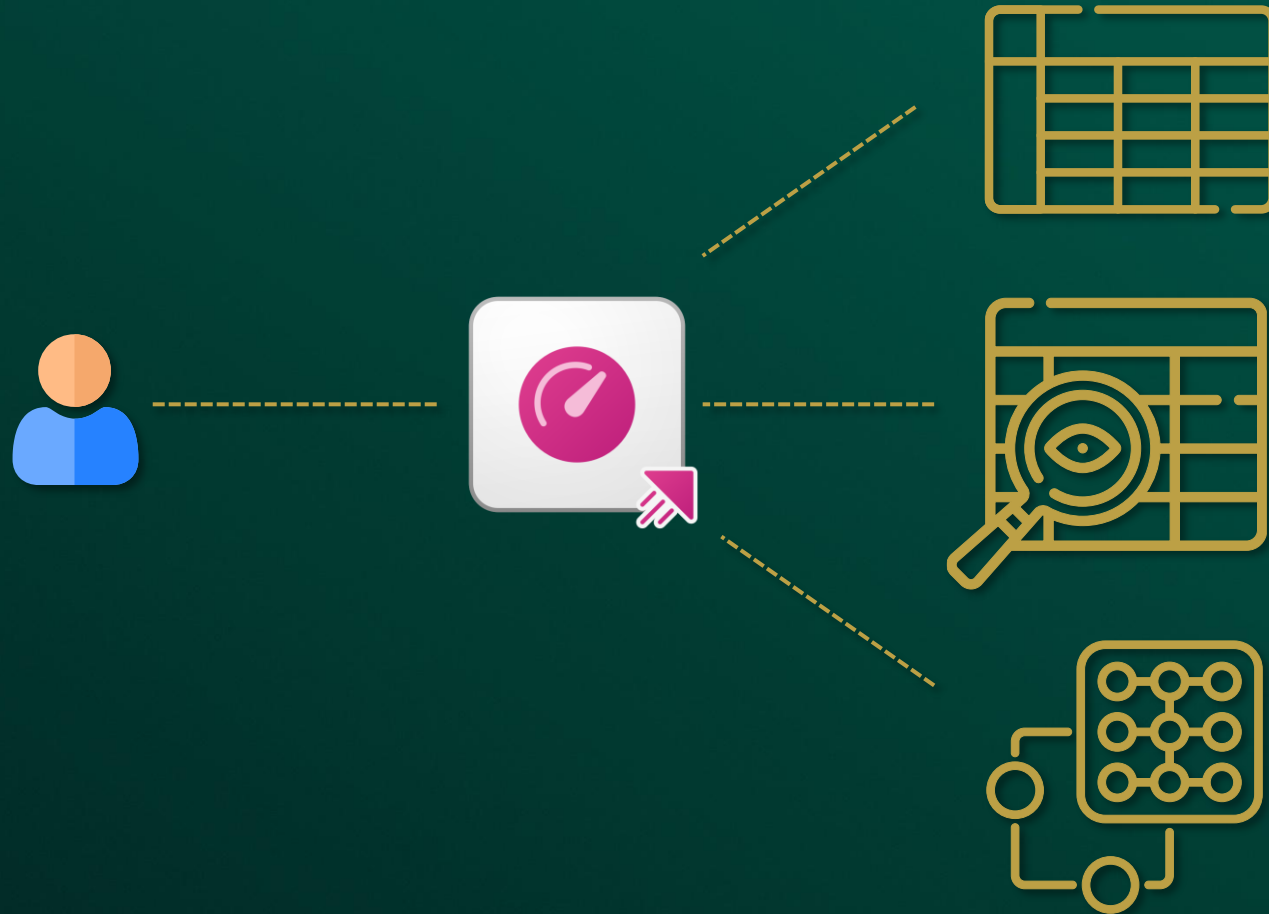


Dashboard



Options in the KQL database

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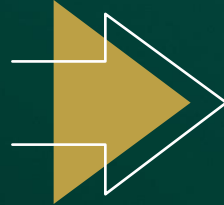


End-to-end security in Real-Time Intelligence

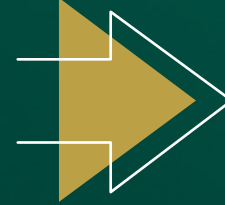
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END-TO-END SECURITY

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OPTIONS IN KQL DATABASE

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OBJECT SECURITY







Thank you

Brian Bønck

MVP and Data geek, Denmark

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this session
on the app



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