

# Row-level security

INTERMEDIATE DAX IN POWER BI



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# What is row-level security?

Row-level security (RLS) in Power BI can be used to restrict data access for given users:

- Way to restrict data access for the logged in user
- You can define roles and rules with Power BI desktop
- A dashboard could look completely different depending on the person accessing it

# What is row-level security?

Row-Level Security (RLS) uses filters to restrict data at the row level

Name	Total Sales	Region
Jenny	48,431	East
Jane	76,528	West
Dwayne	24,167	West
Thomas	52,125	East

```
Region = East
```

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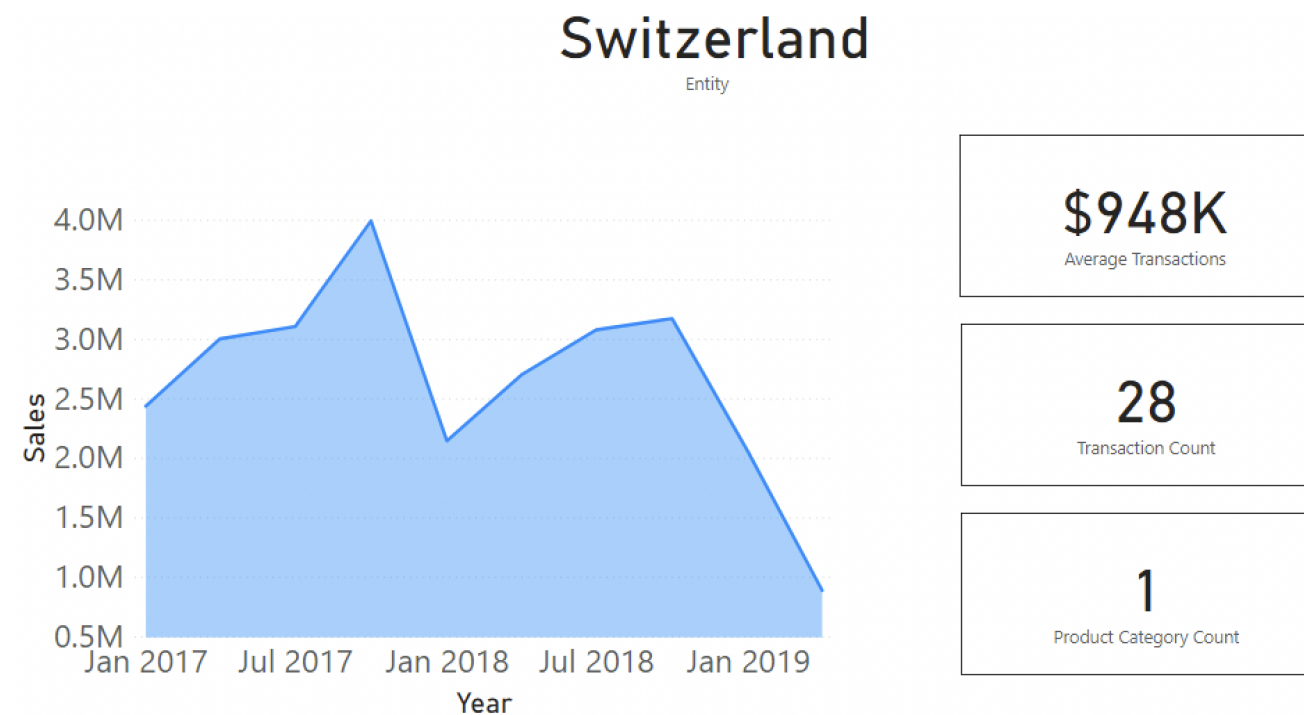
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# Use cases of row-level security in Power BI

- Row-level security has multiple use cases:
  - User access requirements based on role (such as sales)
  - Restricting access requirements for a specific user or group of users
  - User wants specific/filtered data presented (such as a customer)

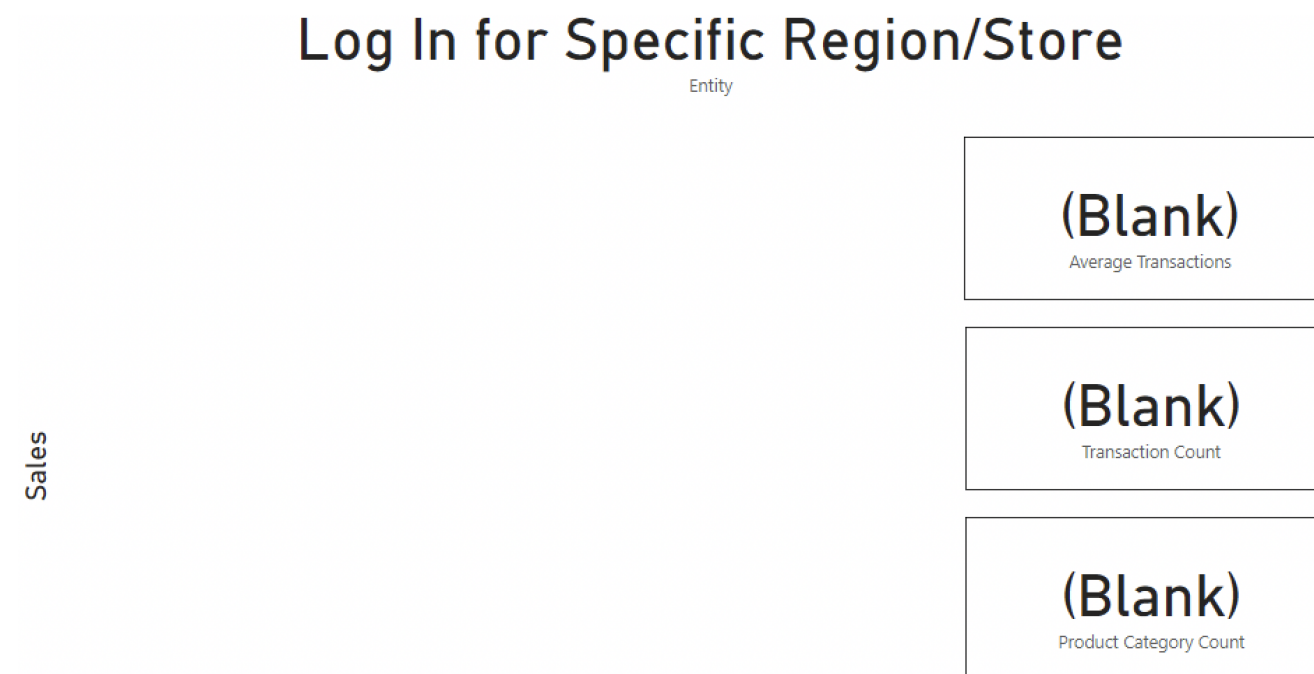
# Use cases of row-level security in Power BI

- Row-Level Security has multiple use cases:
  - User access requirements based on role (such as sales)
  - Restricting access requirements for a specific user
  - User wants specific/filtered data presented (such as a customer)
- Switzerland Sales dashboard



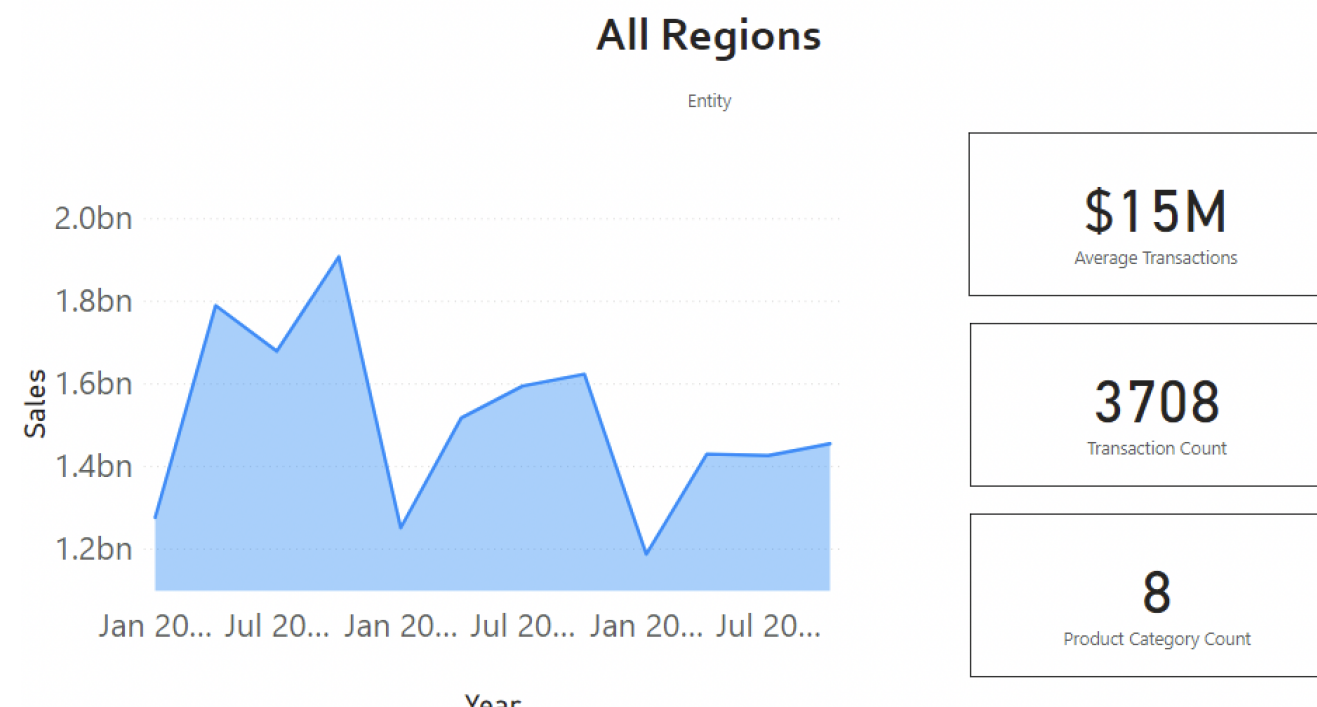
# Use cases of row-level security in Power BI

- Row-Level Security has multiple use cases:
  - User access requirements based on role (such as sales)
  - **Restricting access requirements for a specific user or group of users**
  - User wants specific/filtered data presented (such as a customer)
- Non sales dashboard



# Use cases of row-level security in Power BI

- Row-Level Security has multiple use cases:
  - User access requirements based on role (such as sales)
  - Restricting access requirements for a specific user or group of users
  - **User wants specific/filtered data presented (such as a customer)**
- General Manager





# DAX and row-level security

Row-level security utilizes DAX to:

- Provide filtered values at a row level
- Filter on fact or dimension tables
- *Example:* `[Is Salesperson] = True`

# Dynamic row-level security

Ensures users only see the information appropriate for their roles

DAX has two main functions to enable this:

- `USERPRINCIPALNAME()`
  - Returns the user principal name (UPN), which is equal to the email address
  - Gives the same result in Power BI Desktop and Power BI Service
  - Preferred method
- `USERNAME()`
  - Alternative method to enable RLS with its own use cases
  - Outside the scope of this course

You can use these functions to create **personalized dashboards!**

# Let's secure it!

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# Managed roles in Power BI

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# Let's practice!

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