A close-up of a person smiling

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# Lab 03: Row Level Security

### Introduction

In this lab you will implement Row Level Security using a T-SQL script and see how a user can only query their data from a shared table, while data belonging to other users remains hidden. This requires no change in the application code.

### Objectives

After completing this lab, you will be able to:

* Understand and use the RLS feature available in Fabric DW.

**Estimated time to complete this lab**

30 minutes

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**Lab Prerequisites**

* Fabric Workspace: You should have already created a workspace in the previous lab. If you don’t have a workspace already, please follow the instructions [here](https://learn.microsoft.com/en-us/fabric/get-started/create-workspaces) to create a workspace.
* Fabric Warehouse. You should have already created a warehouse in the previous lab. If you don’t have one already, please follow the instructions [here](https://learn.microsoft.com/en-us/fabric/data-warehouse/create-warehouse) to create a warehouse.

**Information provided by your training provider**

* Trial tenant (if applicable): login & password, workspace to use for the lab.

### Task 1: Prepare the users

Fabric Data Warehouse only supports authenticating using Microsoft Entra ID (Azure AD). Because we will test access using different users, for this lab you need 2 users:

1. your Entra ID user (provided to you at the beginning of the workshop)
2. and another Entra ID user from one of your colleagues. **Please ask one of your colleagues for the username and the password of their users.**

### Task 2: Assign the new user access to the DW

1. Sign in to <https://fabric.microsoft.com/> with your account, then navigate to your workspace and data warehouse.
2. Next, you must assign to the user received from your colleague permission on the DW.

Click on the “Share” button next to the warehouse

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1. **Select** the user (received in task 1), **unselect** all the additional permissions and click **Grant**:

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***Note*: If no additional permissions are selected** - The shared recipient by default receives "Read" permission, which only allows the recipient to connect to the SQL analytics endpoint, the equivalent of CONNECT permissions in SQL Server. The shared recipient will not be able to query any table or view or execute any function or stored procedure unless they are provided access to objects within the Warehouse using T-SQL [GRANT](https://learn.microsoft.com/en-us/sql/t-sql/statements/grant-transact-sql?view=fabric&preserve-view=true) statement.

Highlighted in yellow is the view of the user to which you granted ReadData and in green is the view of your user who created a table. In the T-SQL script which you will follow in the next task, you will grant SELECT permission on the table to the user.

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### Task 3: T-SQL script to implement RLS

In this task you will follow the T-SQL script called “Row Level Security.sql” located in the ***scripts*** folder.

You can either run the script from **SSMS** or from the Fabric UI in the **browser**.

***Note***: if you are going to use the browser for this lab, navigate to the workspace, click on **Manage access** , click on **+ Add people** and select the user and grant **Viewer** access to the secondary user to the Fabric workspace, like below:

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This is the end of the lab. Congratulations for finishing the lab!