

Secure Your Data Without Slowing Down



What is RLS?

- A security feature in Power BI
- Restricts data access for specific users
- Ensures users see only their own data
- Crucial for multi-tenant environments
- Maintains a single report source
- Filters data at the row level



The Core Challenge

- One report serves many users
- Each user belongs to a specific tenant
- Data must be isolated between tenants
- Security must be automatic and reliable
- Manual filtering is not a scalable solution
- Requires a dynamic, automated approach



How It Works

- Define roles within Power BI
- Write DAX rules to filter data
- Rules use a user identity function
- This function identifies the logged-in user
- The filter applies automatically upon report open
- Data is filtered before it's rendered



Key DAX Function

- Use `USERPRINCIPALNAME()`
- This function fetches the user's email
- Email is typically the unique identifier
- Compare it to a table column
- For example, filter Sales table by `Sales[OwnerEmail]`
- Creates a personalized data view



Basic Setup Steps

- Import a table with user emails
- Import a table with tenant identifiers
- Link these tables in your data model
- Navigate to Manage Roles in Power BI
- Create a new role for the table
- Write the DAX filter rule



Sample DAX Rule

- A simple rule for a User table: [Email] = USERPRINCIPALNAME()
- A rule for tenant isolation: [TenantID] = LOOKUPVALUE(
UserTenantTable[TenantID],
UserTenantTable[Email],
USERPRINCIPALNAME())
- The rule returns TRUE for rows the user can see
- FALSE rows are hidden from view
- Test roles using View As in Power BI



Pro Tips

- **Use a dedicated user-to-tenant mapping table**
- **Test security thoroughly before publishing**
- **Utilize the View As feature for testing**
- **Remember RLS does not filter imported data in Power BI Desktop**
- **Publish to the service to enforce security**
- **Combine RLS with other security layers**



Your Next Step

- Audit your reports for security needs
- Identify a user/tenant identifier column
- Try a simple filter on a small table
- Test it with a colleague's account
- Implement gradually across your reports
- Achieve secure, scalable multi-tenant analytics



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