# Enabling table level-DML Auditing on Azure SQL DB failed with error

Last updated by | Vitor Tomaz | Feb 24, 2023 at 3:28 AM PST

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## Issue

A configuration issue (with PowerShell) has been identified when you try enabling auditing of DML statements (Insert/Update/Select/Delete) on a table in an Azure SQL DB. If you directly try running the PowerShell command to enable the Audit Action (Along with the Audit Action group), you may receive an error as shown below:



## Investigation/Analysis

**Error:**In addition to the error above- on activating debug logs, we may also notice this error in the debug logs: DEBUG: (False) MSAL 4.30.1.0 MSAL.Desktop Windows 10 Enterprise [06/02/2022 20:35:35 - ] Azure region was not configured or could not be discovered. Not using a regional authority.

## Impacted Region:

WEST US

## Mitigation

Customers hitting this problem often are recommended to set up Action Items in phases rather than setting them up all at the same time. Here's an example of the same:

1. Enable Database Level Auditing:

```
Set-AzSqlDatabaseAudit -ResourceGroupName "xx-yy-zz-01" -ServerName "pp-qq-rr-01" -DatabaseName "xyzdb" -
BlobStorageTargetState Enabled -StorageAccountResourceId "/subscriptions/0000-1111-2222-
3334444/resourceGroups/MyRGname-rg-01/providers/Microsoft.Storage/storageAccounts/mystorageaccount01"
```

2. Get the status of DB level Audit:

```
Get-AzSqlDatabaseAudit -State Enabled -ResourceGroupName "MyRgName-01" -ServerName "Mysrvrname-sqlsrv-01" -
StorageAccountName "MyStorageAccountName" -DatabaseName "MyDBname"
```
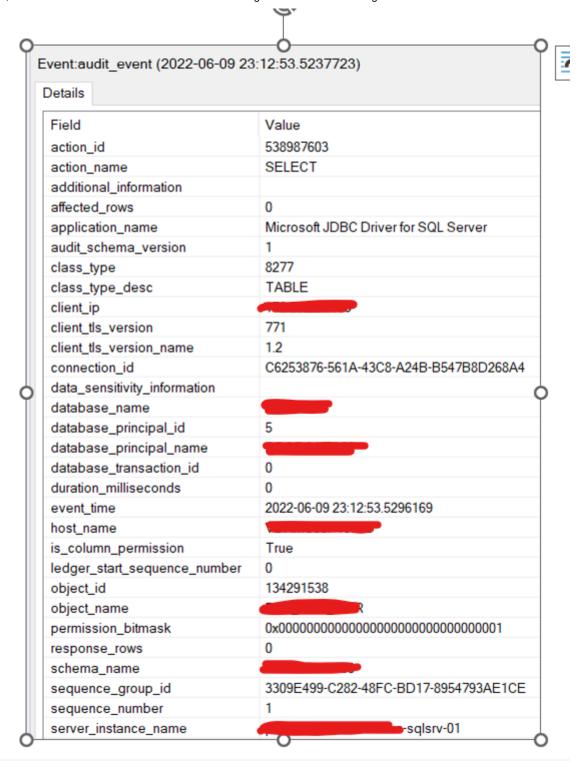
3.

3.1 Enable table-level auditing by adding the correct AuditActionGroup:

```
Set-AzSqlDatabaseAudit -ResourceGroupName " MyRgName-rg-01" -ServerName " Mysrvrname-01" -DatabaseName "
MyDBname" -BlobStorageTargetState Enabled -StorageAccountResourceId
"/subscriptions/MySubsID/resourceGroups/MyResourceGroup-rg-
01/providers/Microsoft.Storage/storageAccounts/pabssqlbkpdevst01" -AuditActionGroup
"SCHEMA_OBJECT_PERMISSION_CHANGE_GROUP"
```

3.2. Enable table-level auditing by adding the correct AuditAction:

```
Set-AzSqlDatabaseAudit -ResourceGroupName "MyRgName-01" -ServerName "Mysrvrname-01" -DatabaseName "MyDbName" -
BlobStorageTargetState Enabled -StorageAccountResourceId
"/subscriptions/MysubcrID/resourceGroups/MyResourceGroup-rg-
01/providers/Microsoft.Storage/storageAccounts/MyStorageAcctName" -AuditActionGroup
"SCHEMA_OBJECT_PERMISSION_CHANGE_GROUP" -AuditAction "SELECT ON Schema.MyTableName BY public"
```

4. Verify that the select was captured by the Auditing:

Event:audit_event (2022-06-09 23:12:53.5237723)

Details

| Field | Value |
|---|---|
| action_id | 538987603 |
| action_name | SELECT |
| additional_information | |
| affected_rows | 0 |
| application_name | Microsoft JDBC Driver for SQL Server |
| audit_schema_version | 1 |
| class_type | 8277 |
| class_type_desc | TABLE |
| client_ip | ▓▓▓▓▓▓▓ |
| client_tls_version | 771 |
| client_tls_version_name | 1.2 |
| connection_id | C6253876-561A-43C8-A24B-B547B8D268A4 |
| data_sensitivity_information | |
| database_name | ▓▓▓▓▓ |
| database_principal_id | 5 |
| database_principal_name | ▓▓▓▓▓▓ |
| database_transaction_id | 0 |
| duration_milliseconds | 0 |
| event_time | 2022-06-09 23:12:53.5296169 |
| host_name | ▓▓▓▓▓▓ |
| is_column_permission | True |
| ledger_start_sequence_number | 0 |
| object_id | 134291538 |
| object_name | ▓▓▓▓▓▓R |
| permission_bitmask | 0x00000000000000000000000000000001 |
| response_rows | 0 |
| schema_name | ▓▓▓▓▓ |
| sequence_group_id | 3309E499-C282-48FC-BD17-8954793AE1CE |
| sequence_number | 1 |
| server_instance_name | ▓▓▓▓▓▓▓-sqlsrv-01 |

| | |
|---|---|
| server_principal_id | 0 |
| server_principal_name | ████████████ |
| server_principal_sid | 0x010600000000006400000000000000000027E1E66A9… |
| session_context | |
| session_id | 221 |
| session_server_principal_name | ████████████ |
| statement | SELECT distinct IH.INVC_HDR_SK as INVC_HDR_… |
| succeeded | True |
| target_database_principal_id | 0 |
| target_database_principal_name | |
| target_server_principal_id | 0 |
| target_server_principal_name | |
| target_server_principal_sid | 0x |
| transaction_id | 969820151 |
| user_defined_event_id | 0 |
| user_defined_information | |

## RCA Template (optional)

For recurring [by design] issues where there is an RCA template for the engineer to customize with timestamps and server details, provide that here.

## More Information (optional)

Detailed information/background that may be useful but isn't strictly required for troubleshooting. Often this is the "verbose" details that one usually doesn't need

## Public Doc Reference (optional)

External documentation that may be beneficial to the engineer or customer reporting this issue.

## Internal Reference (optional)

This may include links to architecture, training material, etc. that are helpful for understanding the steps given above.

## Root Cause Classification

Azure SQL DB/Auditing/Setup and configuration/Known Issue

**How good have you found this content?**

😊 ☹️