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| **Topic:** | Script to help trouble shoot mailbox permisions |

Document Control

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| **Rev** | **Date** | **Changes Made** | **By (User)** |
| 1.0 | 25/09/2024 | Initial document creation | Mathew Gallehawk |

# Requirements

* Requires powershell Exchange online module, will install if missing
* Powershell in Admin mode.
* execution policy set to unrestricted

# Process

**Steps to Use the Script**

1. **Open PowerShell**: Launch PowerShell with administrative privileges.
2. **Navigate to Script Location**: Change the directory to where the script is located.   
   For example: cd "C:\Path\To\Script"
3. **Run the Script**: Execute the script by typing its name.   
   For example: .\Mailbox\_permision\_tool.ps1
4. **If the required modules are not detected follow the prompts to install them**.
5. **Once the modules are installed you will be given a menu in the terminal to choose from, follow the prompts.**

# Script Review

**This PowerShell script is a tool designed to audit who has access to various mailboxes in an Exchange Online environment. Below is a detailed explanation of the script's functionality:**

**Script Overview**

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**Requested by: Brett Luck**

**Purpose: To audit who has access to email accounts.**

**Functions**

**check\_module($module)**

**Checks if a specified PowerShell module is installed.**

**If not installed, it installs the module.**

**module\_setup**

**Lists required modules (PowerShellGet, ExchangeOnlineManagement).**

**Ensures all required modules are installed.**

**get-sharedMailboxes**

**Retrieves all shared mailboxes (where AccountDisabled is true).**

**get-nonsharedMailboxes**

**Retrieves all non-shared mailboxes (where AccountDisabled is false).**

**Get-TargetMailbox**

**Prompts the user to enter a mailbox or username.**

**Returns the mailbox object and its name.**

**get\_UserAccess($mailbox)**

**Retrieves all mailboxes a specified user has access to.**

**Returns an array of mailboxes with access details.**

**get-mailboxAccess($mailbox)**

**Retrieves all users who have access to a specified mailbox.**

**Returns an array of users with access details.**

**run-workflow($mailboxArray)**

**Runs the get-mailboxAccess function for each mailbox in the provided array.**

**Returns a consolidated array of access details.**

**Export-Report($array, $fileName)**

**Exports the provided array to a CSV file with the specified filename.**

**UI**

**Displays a menu for the user to select an action.**

**Returns the user's selection.**

**main**

**Sets up required modules and connects to Exchange Online.**

**Displays the UI and handles user selections.**

**Executes the appropriate function based on user input.**

**Disconnects from Exchange Online upon exit.**

**User Interface Options**

**Export all shared mailboxes**

**Retrieves and exports a list of all shared mailboxes.**

**Export all non-shared mailboxes**

**Retrieves and exports a list of all non-shared mailboxes.**

**Export all mailboxes a user has access to**

**Prompts for a user mailbox.**

**Retrieves and exports a list of all mailboxes the user has access to.**

**Export all users that can access a mailbox**

**Prompts for a target mailbox.**

**Retrieves and exports a list of all users who have access to the specified mailbox.**

**Export who has access to shared mailboxes**

**Retrieves and exports a list of users who have access to all shared mailboxes.**

**Export who has access to non-shared mailboxes**

**Retrieves and exports a list of users who have access to all non-shared mailboxes.**

**Exit**

**Exits the script.**

**Execution Flow**

**Module Setup: Ensures all required modules are installed.**

**Connect to Exchange Online: Establishes a connection to Exchange Online.**

**User Interaction: Displays a menu for the user to select an action.**

**Action Execution: Executes the selected action and exports the results to a CSV file.**

**Disconnect: Disconnects from Exchange Online upon exit.**

**This script provides a comprehensive tool for auditing mailbox access in an Exchange Online environment, allowing administrators to generate detailed reports on mailbox permission**