

Microsoft 365 Audit Log Data Collection Process Steps

Step 1: Activate Microsoft 365 Business Premium Trial

Step 2: Create 8 Users (1 Admin + 7 Users)

Step 3: Access Microsoft Purview Portal

Step 4: Enable 'Start recording user and admin activity'

Step 5: Login to all user accounts and perform actions

Step 6: Perform Suspicious Activities (VPN, failed logins, etc.)

Step 7: Wait for a few hours to let logs generate

Step 8: Search Audit Logs in Purview (with filters)

Step 9: Download and Export Audit Logs (CSV)

Step 10: Clean and Format Logs using Excel Power Query

Step 11: Save as Final Dataset File

Process Details for Collecting Microsoft 365 Audit Log Data

Phase 1: Setup Microsoft 365 Environment

1. **Activate Trial Subscription:**
 - Subscribed to **Microsoft 365 Business Premium (Trial)**.
 2. **Create User Accounts:**
 - Created **8 total users** (1 Admin + 7 Standard Users).
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Phase 2: Enable Audit Logging

3. **Access Microsoft Purview:**
 - Navigated to **Microsoft Purview Compliance Portal**.
 4. **Enable Audit Logging:**
 - Enabled "**Start recording user and admin activity**" to begin capturing logs.
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Phase 3: Perform User Activities

5. **User Logins and File Activities:**
 - Logged into all **8 user accounts** individually.
 - Performed the following activities:

- **Created** new files in Word, Excel, and PowerPoint.
 - **Read, sent, and received** emails among the users.
 - **Deleted multiple files** at once.
 - **Downloaded files** from OneDrive.
6. **Suspicious and Security-Test Activities:**
- Logged in to the same user account from **multiple laptops**.
 - Logged in using a **VPN** to simulate suspicious access.
 - **Sent emails** to invalid/unavailable email addresses.
 - Attempted **multiple failed logins** with incorrect passwords.
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Phase 4: Retrieve Audit Logs

7. **Wait for Log Generation:**
- Waited **a few hours** after performing the activities to ensure log capture.
8. **Search Audit Logs in Purview:**
- Accessed **Microsoft Purview** → **Audit** section.
 - Applied:
 - **Date and time range** filter.
 - **All 8 user accounts** in the search.
9. **Run the Search:**
- Executed the audit log search.
 - Waited for the search results to complete.
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Phase 5: Format and Export Logs

10. **Export Logs:**
- Downloaded the audit log **CSV file** from the portal.
11. **Clean and Format Logs:**
- Used **Excel Power Query** to clean and transform the audit data.
 - Selected **only required columns** for analysis.
 - Saved the formatted data as a **dataset file** for further use.