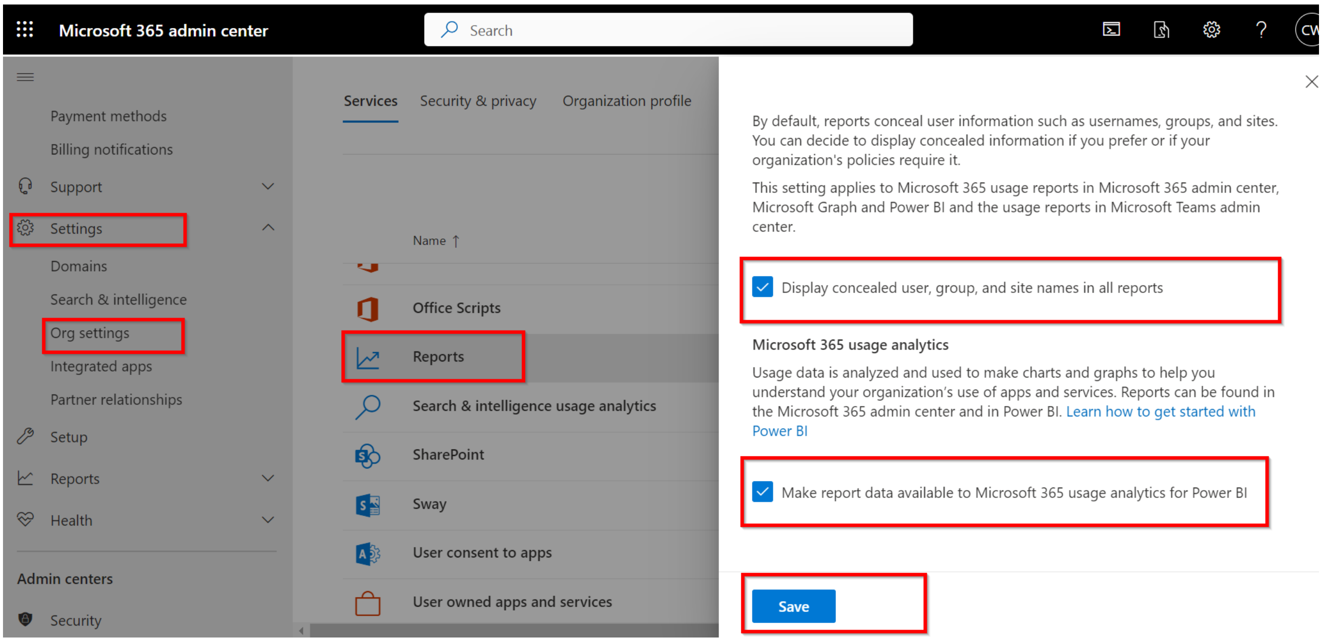
M365 Usage Reports

This script uses Microsoft Graph PowerShell to generate M365 usage reports.

Display Concealed Information

In order to generate reports the below settings need to be enabled. If you do not allow the report to display usernames, groups and site you the script may not function correctly and the reports will not display the correct data.

- Navigate to https://admin.microsoft.com
- Click on Setting -> Org Settings -> Reports
- Ensure that that the following options are checked:
    - Display concealed user, groups, and site names in all reports
    - Make report data available to Microsoft 365 usage analytics for Power BI
- Save changes.



By default, reports conceal user information such as usernames, groups, and sites. You can decide to display concealed information if you prefer or if your organization's policies require it.

This setting applies to Microsoft 365 usage reports in Microsoft 365 admin center, Microsoft Graph and Power BI and the usage reports in Microsoft Teams admin center.

☑ Display concealed user, group, and site names in all reports

Microsoft 365 usage analytics

Usage data is analyzed and used to make charts and graphs to help you understand your organization's use of apps and services. Reports can be found in the Microsoft 365 admin center and in Power BI. Learn how to get started with Power BI

☑ Make report data available to Microsoft 365 usage analytics for Power BI

Certificate

In order to complete the below step for App Registration you will require a certificate. A certificate from a certificate authority is recomended but if you do not have a certificate signed by a certificate authority you can create a self signed certificate as described below.

- From the project directory exicute the PowerShell script called self_signed.ps1 , this will generate a self signed certificate.

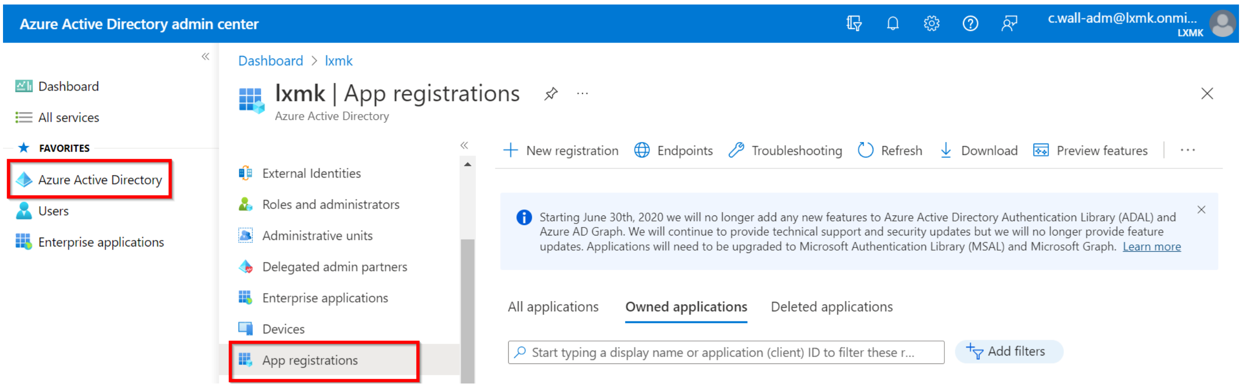
For more information regarding certificates, view the official documentation on the Microsoft Site

App Registration

To Authenticate with your tenant an Azure AD App Registration is required, follow the belwo steps to enable App Registration for your tenant:

Please Note: App Registration requires Application permissions for User.Read.All, Group.Read.All, Directory.Read.All, Reports.Read.All and AuditLog.Read.All

- Navigate to Azure Active Directory
- From the portal Select Azure Active Directory and then select App registration



Starting June 30th, 2020 we will no longer add any new features to Azure Active Directory Authentication Library (ADAL) and Azure AD Graph. We will continue to provide technical support and security updates but we will no longer provide feature updates. Applications will need to be upgraded to Microsoft Authentication Library (MSAL) and Microsoft Graph. Learn more

- Select New registration. On the Register an application page, set the values as follows
  - Add a name
  - Set Supported account types to Accounts in this organizational directory only.
  - Leave Redirect URI blank.
- Click on Register
- Once the app has been registered, save the ApplicationId and TenantId to the respective fields of the config.json file
- Select API Permissions under Manage. Choose Add a permission.
- Select Microsoft Graph, then Application Permissions. Add User.Read.All, Group.Read.All, Directory.Read.All and Reports.Read.All, then select Add permissions.
- In the Configured permissions, remove the delegated User.Read permission under Microsoft Graph by selecting the ... to the right of the permission and selecting Remove permission. Select Yes, remove to confirm.
- Select the Grant admin consent for... button, then select Yes to grant admin consent for the configured application permissions. The Status column in the Configured permissions table changes to Granted for ....
- Select Certificates & secrets under Manage. Select the Upload certificate button. Browse to your certificate's public key file and select Add.
  - Copy the certificate Thumbprint and save it to the config.jsone file
  - ***Please Note***: The certificate will have an experation date, if the certificate expires an new certificate will be required

Install the Microsoft Graph PowerShell SDK

For updated information, review the official documentation

Run the below comand as an admin user:

```
Install-Module Microsoft.Graph -Scope AllUsers
```

To verify the modules were installed run:

```
Get-InstalledModule Microsoft.Graph
```

Configuration

Script configuration definitions are stored in the config.json file in the Config directory. Please ensure your AppId, TenantId and CertificateThumprint are added to the config.json file as per the below exammple

```
{
    "Tenant": {
        "AppId": "YOUR_APP_ID",
        "TenantId": "YOUR_TENANT_ID",
        "CertificateThumbprint" : "YOUR_CERTIFICATETHUMBPRINT"
    }
}
```

Generated Reports

Reports generated by the script will be stored in the Output folder. Each time you run the script the files in the folder will be purged so ensure you copy required files before running the script.

Executing the script

To execut the script navigate to the folder where the script is stored and run the below command:

```
.\usage_report.exe
```

> ***NOTE:*** The Config folder and config.json file need to be present as per the below structure.

Folder Structure

- Config/config.json contains all configuration to run the scrip
- Executing `.\usage_report.exe` will create a folder called Output and store all generated reports.
- MSGraphCert.cer is the self signed certificate generated by the script `self_signed.ps1` . The certificate is required for authentication.
- The script `usage_report.ps1` is used to generate the required reports.

```
📦BPW
 ┣ 🗀Config
 ┃ ┗ 🗎config.json
 ┣ 🗀Output
 ┃ ┣ 🗎AdminReport.csv
 ┃ ┣ 📃AllUser.csv
 ┃ ┣ 📃assignedPlans.csv
 ┃ ┣ 📃Audit-Azure Advanced Threat Protection.csv
 ┃ ┣ 📃Audit-Dynamics CRM Online.csv
 ┃ ┣ 📃Audit-Microsoft Cloud App Security.csv
 ┃ ┣ 📃Audit-Microsoft Flow.csv
 ┃ ┣ 📃Audit-Microsoft Forms.csv
 ┃ ┣ 📃Audit-Microsoft Planner.csv
 ┃ ┣ 📃Audit-Microsoft Stream.csv
 ┃ ┣ 📃Audit-Microsoft To-Do.csv
 ┃ ┣ 📃Audit-Office Sway.csv
 ┃ ┣ 📃Audit-Power BI Premium.csv
 ┃ ┣ 📃Audit-Project Online.csv
 ┃ ┣ 📃getEmailActivityUserDetail.csv
 ┃ ┣ 📃getMailboxUsageDetail.csv
 ┃ ┣ 📃getOffice365ActivationsUserCounts.csv
 ┃ ┣ 📃getOffice365ActivationsUserDetail.csv
 ┃ ┣ 📃getOffice365ActiveUserDetail.csv
 ┃ ┣ 📃getOffice365GroupsActivityDetail.csv
 ┃ ┣ 📃getOffice365ServicesUserCounts.csv
 ┃ ┣ 📃getOneDriveActivityUserDetail.csv
 ┃ ┣ 📃getOneDriveUsageAccountDetail.csv
 ┃ ┣ 📃getSharePointActivityUserDetail.csv
 ┃ ┣ 📃getSkypeForBusinessActivityUserDetail.csv
 ┃ ┣ 📃getTeamsUserActivityUserDetail.csv
 ┃ ┣ 📃getYammerActivityUserDetail.csv
 ┃ ┣ 📃LicenseAssignmentPath.csv
 ┃ ┣ 📃LicensingGroups.csv
 ┃ ┗ 📃unusedlicense.csv
 ┣ 📃Readme.pdf
 ┗ 📃usage_report.exe
```