ManageEngine
ADManager Plus

Microsoft 365 tenant configuration in ADManager Plus

https://www.manageengine.com/products/ad-manager/

Organizations deploy Microsoft 365 to ensure continuous availability of resources to their employees and enhance their productivity. However, managing this cloud-based environment can be quite a challenge. ManageEngine ADManager Plus alleviates the Microsoft 365 administrative burden by letting you create user accounts in single and bulk, and set and manage necessary licenses. It also enables the effortless generation of Microsoft 365 reports.

Given below are the prerequisites–hardware and software requirements essential for ensuring a trouble free ADManager Plus–Microsoft 365 integration.

System requirement

Essential hardware

Hardware	Minimum	Recommended
Processor	2.4 GHz	3 GHz
Number of cores	4	6 or more
RAM	8 GB	16 GB
Disk space	200 GB (SSD preferred)	500 GB (SSD preferred)
Disk throughput	5 MB/s	20 MB/s

Supported platforms

The following Microsoft Windows operating system versions are supported:

Windows Server 2022	Windows 11
Windows Server 2019	Windows 10
Windows Server 2016	Windows 8.1
Windows Server 2012 R2	Windows 8
Windows Server 2012	Windows 7
Windows Server 2008 R2	Windows Vista
Windows Server 2008	Windows XP

Supported browsers

The application works seamlessly with the latest version of modern browsers. It requires one of the following browsers to be installed in the system for working with the client:

- Internet Explore 9.0 and above
- Mozilla Firefox 45.0 and above
- Google Chrome 45.0 and above
- Microsoft Edge

*we recommend using the latest version of the browser for better security and best possible experience.

Prerequisites for Microsoft 365 Integration

Ensure the installation of the below-listed modules:

1. **Microsoft .NET framework 4.8 or later**
   Refer this link to determine the version of .NET framework installed on your computer. You can download .NET framework 4 from here.

2. **Windows PowerShell 5.1**
   To determine the version of PowerShell installed, run the command $PSVersionTable from Windows PowerShell. If the version is below 5.1 or if PowerShell is not installed download from here.

3. **MSOnline PowerShell for Azure Active Directory[(V1) 1.1.166.0]**
   Run the PowerShell Cmdlet Import-Module MSOnline from Windows PowerShell to determine whether this module is installed. The PowerShell Cmdlet returns an error if the module is not installed and there will be no message to be displayed if the module is already installed. To install the module, open PowerShell as an administrator and enter the following cmdlet: *Install-Module -Name MSOnline -RequiredVersion 1.1.166.0 -Force.*

4. **Administrative privileges**
   The account must have global administrator (preferred) or user management administrator privilege in Microsoft 365.

5. **Other requirements**
   - Make sure your firewall settings allow access to these domains.
   - The 64-bit version of the product must be installed.

Steps for automatic Microsoft 365 tenant configuration in ADManager Plus

1. Navigate to **Domain/Tenant Settings > Microsoft 365** tab.
2. Click on **+Add New Tenant.**
3. Click **Configure using Microsoft 365 Login** button.
4. Select the required AD domains which are to be linked with this account. It is essential to link the on-premises domains with Microsoft 365 domains as it is needed to apply OU-based restrictions.
5. Click **Proceed** in the dialog box that appears. You will be redirected to the Microsoft 365 login page where you will be required to login with the Global Administrator's credentials.
6. The Microsoft 365 login portal will list the permissions requested for your organization. Once you are informed of these permissions, click **Accept**.
7. Once the tenant configuration is successful, it will be listed in the Microsoft365 window.

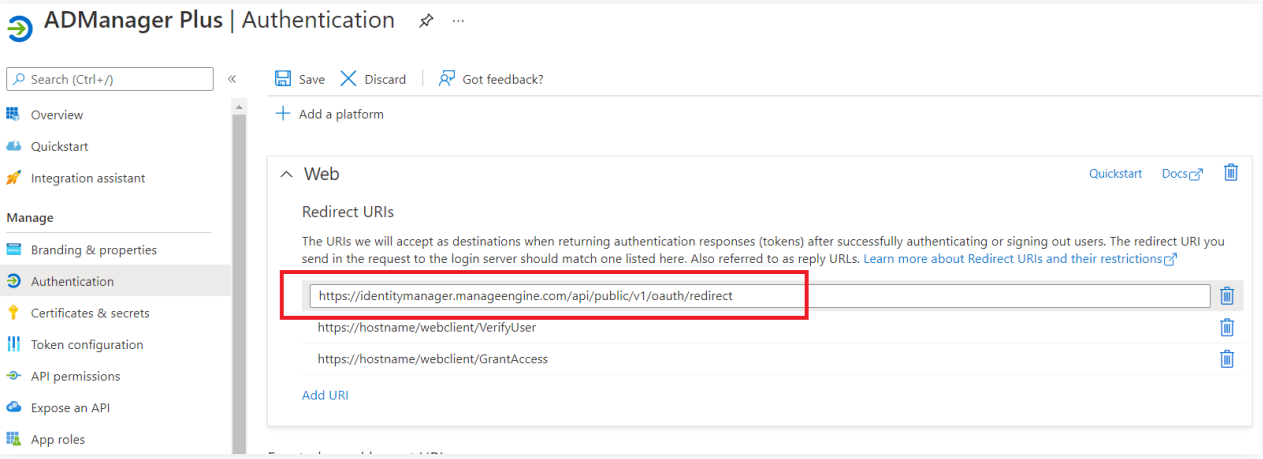
Note: If the automatic configuration fails due to permission issues, the tenant must be configured manually.

Steps to manually configure Microsoft 365 tenant

Prerequisite: A service user account with at least View-Only Organization Management, View-Only Audit Logs, and Service Administrator permissions.

Steps to create an Azure AD application

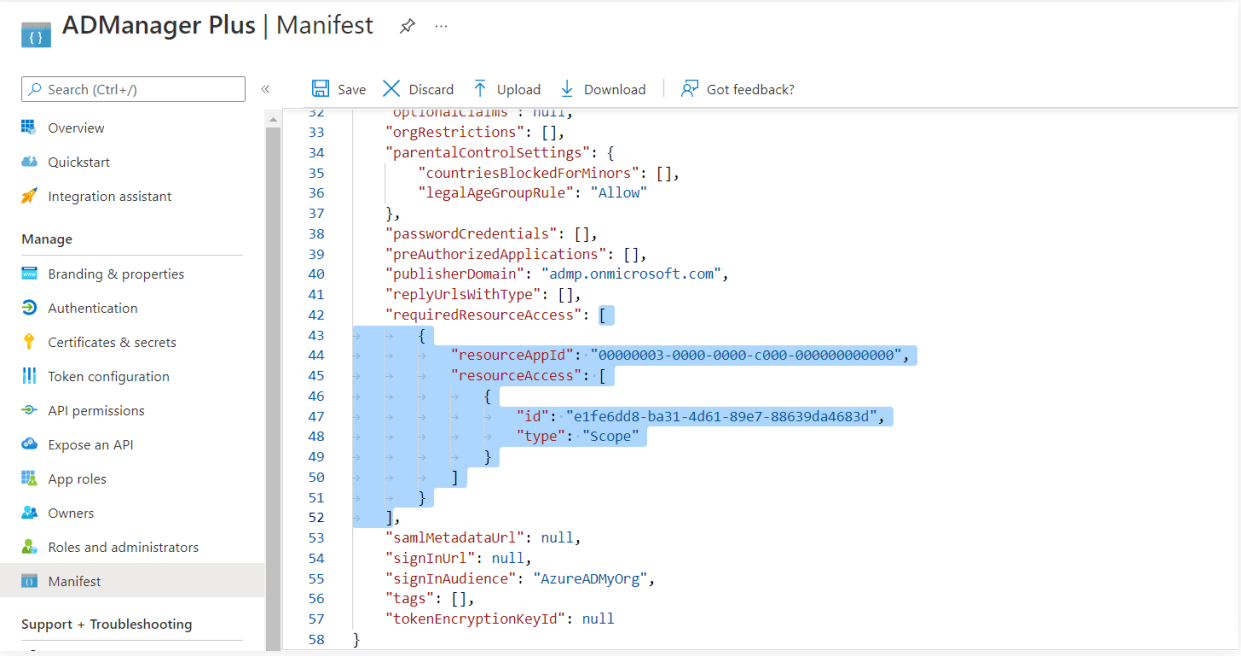
1. Sign in to the Azure AD portal using the credentials of a Global Administrator account.
2. Select **Azure Active Directory** from the left pane.
3. Select **App registrations.**
4. Click **New registration.**
5. Provide a **Name** for the ADManager Plus application to be created.
6. Select a supported account type based on your organizational needs.
7. Leave **Redirect URI (optional)** blank; you will configure it in the next few steps.
8. Click **Register** to complete the initial app registration.
9. You will now see the Overview page of the registered application.
10. Click **Add a Redirect URI.**
11. Click **Add a platform** under Platform configurations.
12. In the Configure platforms pop-up, click **Web** under Web applications.
13. In the **Redirect URI** field, enter **http://localhost:port_number/webclient/VerifyUser**. For example, http://localhost:8080/webclient/VerifyUser or https://192.345.679.345:8080/webclient/VerifyUser.
14. You can leave the Logout URL and Implicit grant fields empty. Click **Configure.**
15. On the *Authentication* page, under *Redirect URIs*, click **Add URI.**
16. Enter **http://localhost:port_number/webclient/ GrantAccess** as the Redirect URI. For example, **http://localhost:8080/webclient/GrantAccess or https://192.345.679.345:8080/ webclient/GrantAccess.**
17. Similarly, using the Add URI option add **http://localhost:port_number/AADAppGrantSuccess.do** and **http://localhost:port_number/AADAuthCode.do** as URIs as well.
18. Again click **Add URI** to add the below REDIRECT URIs in the subsequent rows. Please note that for **users with ADManger Plus build 7200 or higher, REDIRECT URIs (b) and (c) are optional.**
    - https://identitymanager.manageengine.com/api/public/v1/oauth/redirect
    - https://demo.o365managerplus.com/oauth/redirect
    - https://manageengine.com/microsoft-365-management-reporting/redirect.html



Note:

1. The REDIRECT URI must adhere to the following:
   - It must be fewer than 256 characters in length.
   - It should not contain wildcard characters.
   - It should not contain query strings.
   - It must start with HTTPS or http://localhost.
   - It must be a valid and unique URL.
   - For HTTP, the URI value is: http://localhost:8080. If HTTP is used, the machine name or IP address cannot be used in the place of localhost.
   - For HTTPS, the URI value is: https://192.345.679.345:8080 or https://testmachine:8080 (where <testmachine> is the hostname of the machine where ADManager Plus is installed).
2. The REDIRECT URI format varies according to the connection type (HTTP/HTTPS) that has been configured in ADManager Plus.
3. To find your machine's IP, open the **Command Prompt**, type **ipconfig**, and click **enter.** ou can find your IPv4 Address in the results shown.

19. Click **Save.**
20. Click **Manifest** from the left pane.
21. Look for *requiredResourceAccess* array in the code.
22. Copy the contents of this file and paste the content as highlighted in the image below, then click **Save**. If you want to modify the permissions to be provided, skip this step and follow the steps mentioned in this guide.



Note:

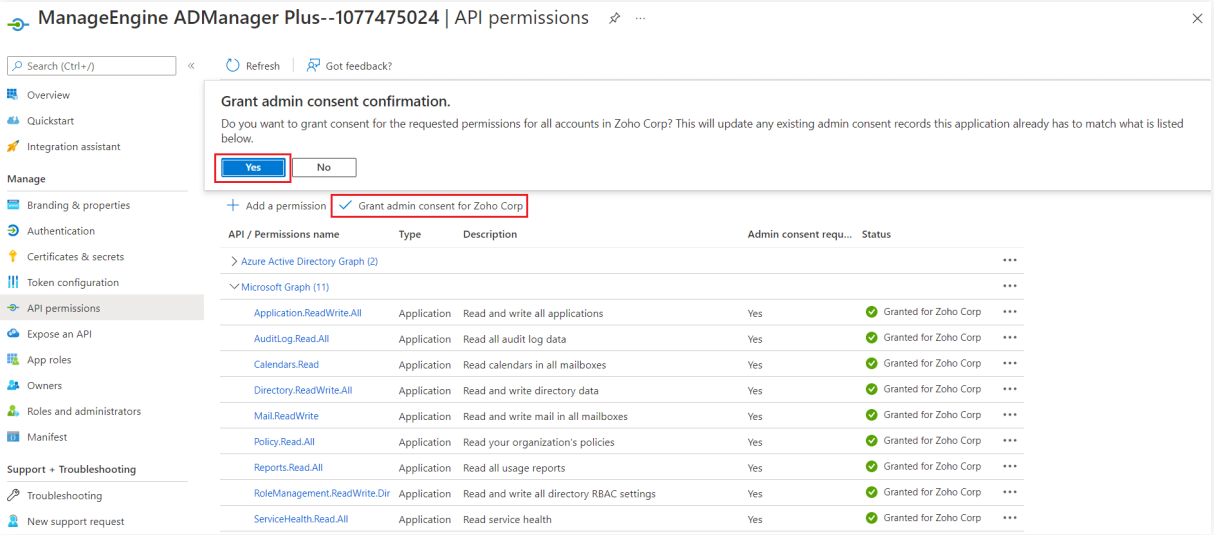
Copy-paste content only from the open square bracket to the closed square bracket. Ensure that all punctuation marks are retained correctly. Once you have pasted the content in the file, it should look like the image below.


```
34    "parentalControlSettings": {
35        "countriesBlockedForMinors": [],
36        "legalAgeGroupRule": "Allow"
37    },
38    "passwordCredentials": [],
39    "preAuthorizedApplications": [],
40    "publisherDomain": "admpmsdn.onmicrosoft.com",
41    "replyUrlsWithType": [],
42    "requiredResourceAccess": [
43        {
44            "resourceAppId": "00000003-0000-0000-c000-000000000000",
45            "resourceAccess": [
46                {
47                    "id": "1bfefb4e-e0b5-418b-a88f-73c46d2cc8e9",
48                    "type": "Role"
49                },
50                {
51                    "id": "19dbc75e-c2e2-444c-a770-ec69d8559fc7",
52                    "type": "Role"
53                },
54                {
55                    "id": "e2a3a72e-5f79-4c64-b1b1-878b674786c9",
56                    "type": "Role"
57                },
58                {
59                    "id": "9492366f-7969-46a4-8d15-ed1a20078fff",
60                    "type": "Role"
61                },
62                {
63                    "id": "230c1aed-a721-4c5d-9cb4-a90514e508ef",
64                    "type": "Role"
65                },
66                {
67                    "id": "b0afded3-3588-46d8-8b3d-9842eff778da",
68                    "type": "Role"
69                },
70                {
71                    "id": "741f803b-c850-494e-b5df-cde7c675a1ca",
72                    "type": "Role"
73                },
74                {
75                    "id": "9e3f62cf-ca93-4989-b6ce-bf83c28f9fe8",
76                    "type": "Role"
77                },
78                {
79                    "id": "79c261e0-fe76-4144-aad5-bdc68fbe4037",
80                    "type": "Role"
81                },
82                {
83                    "id": "246dd0d5-5bd0-4def-940b-0421030a5b68",
84                    "type": "Role"
85                },
86                {
87                    "id": "798ee544-9d2d-430c-a058-570e29e34338",
88                    "type": "Role"
89                }
90            ]
91        },
92        {
93            "resourceAppId": "c5393580-f805-4401-95e8-94b7a6ef2fc2",
94            "resourceAccess": [
95                {
96                    "id": "e2cea78f-e743-4d8f-a16a-75b629a038ae",
97                    "type": "Role"
98                }
99            ]
100       },
101       {
102           "resourceAppId": "00000002-0000-0000-c000-000000000000",
103           "resourceAccess": [
104               {
105                   "id": "abefe9df-d5a9-41c6-a60b-27b38eac3efb",
106                   "type": "Role"
107               }
108           ]
109       }
110   ],
111   "samlMetadataUrl": null,
```

Note:

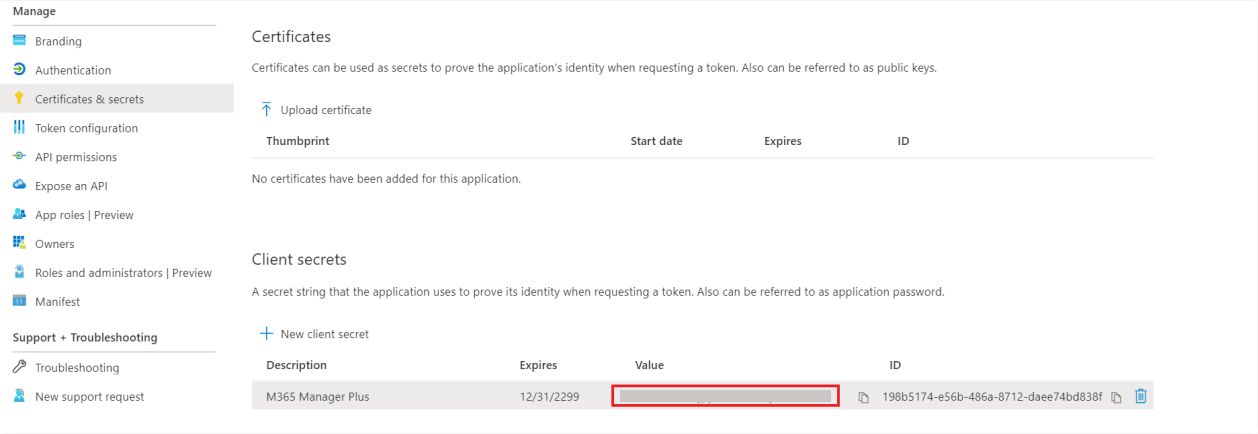
- If your tenant is being created in **Azure Germany,** copy the entire content of this file and paste it into the section highlighted in the image above.
- If your tenant is being created in **Azure China**, copy the entire content of this file and paste it into the section highlighted in the image above.

22. Click **Save.**
23. Click **API permissions** from the left pane and click **Grant admin consent for <your_company_name>** option listed under *Grant consent* section. Grant the necessary permissions as required. The API permission and its scope are available in this table.

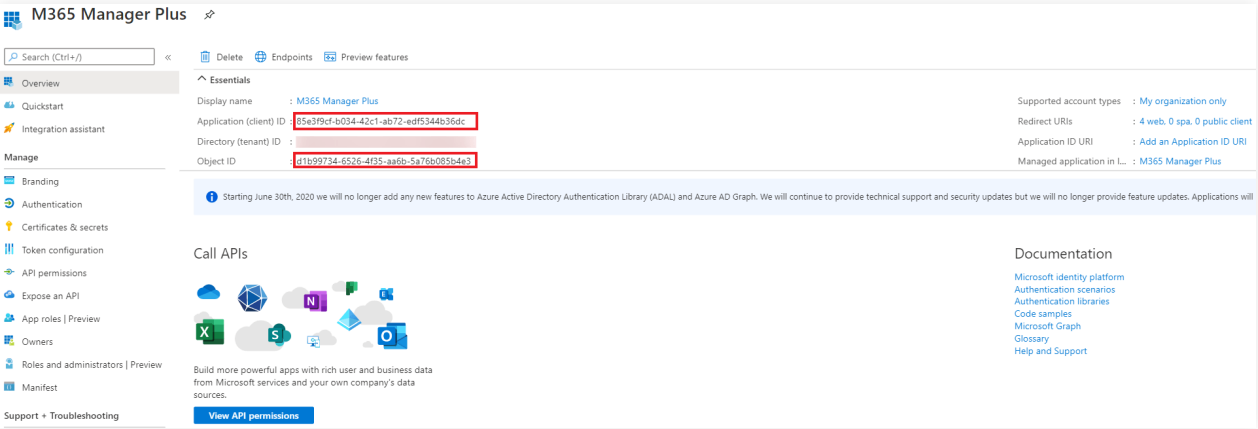


25. Click **Yes** in the pop-up that appears.
26. Click **Certificates & secrets** from the left pane.
27. Under the *Client secrets* section, click **New client secret.**
28. This section generates an app password for ADManager Plus. In the **Description** field of the pop-up, provide a name to identify the app to which the password belongs.
29. Choose when the password should expire.
30. Click **Add.**
31. Copy the string under *Value* and save it. This is the **Application Secret Key**, which you will require later.
32. Go to **Certificates** and click **Upload certificate**. Upload your application certificate as a .cer file.
33. If the user has an SSL certificate, the same can be used here. Otherwise, click here for steps to create a self-signed certificate.

Note: Certificate-based authentication is used to contact Microsoft 365 securely and fetch data. During manual configuration, you will be asked to enter your application Secret and upload the Application Certificate.

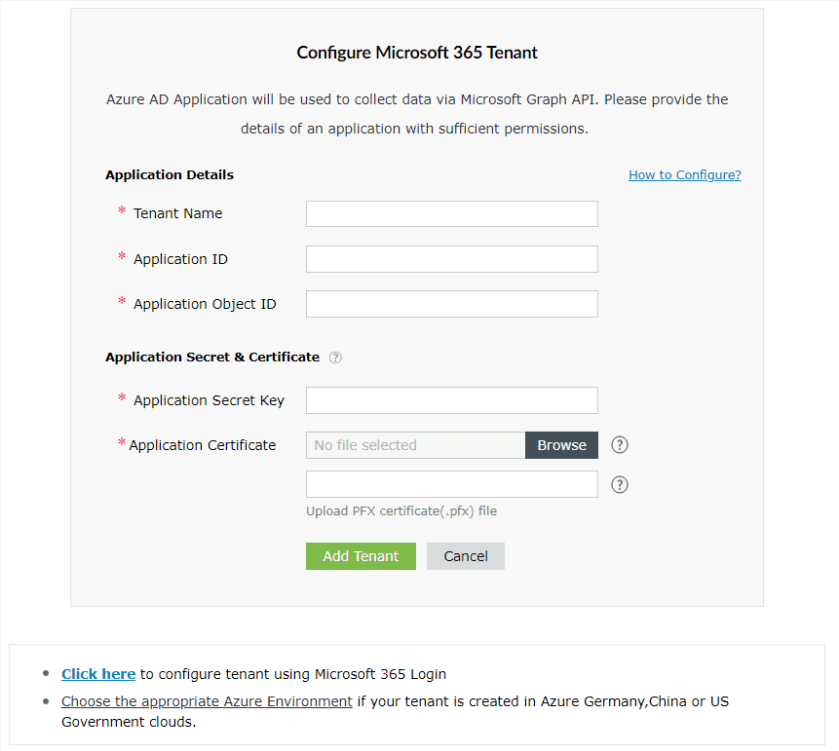


34. Now go to the **Overview** section in the left pane.
35. Copy the **Application (client) ID** and **Object ID** values and save them. You will need these values to configure your tenant in the ADManager Plus portal.



Steps to manually configure Microsoft 365 tenant in ADManager Plus

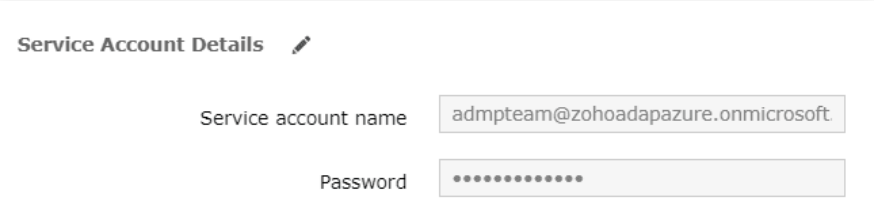
1. Open the ADManager Plus portal with the below pop-up:



2. Enter your **Tenant Name**. For example, test.onmicrosoft.com.
3. Paste the **Application (client) ID** and **Application Object ID** which were saved earlier in Step 35, in the respective fields.
4. Enter the **Application Secret Key** that was saved during Step 31.
5. Upload a .pfx file of the certificate that has been uploaded in the Azure portal. Refer to Step 33.
6. Enter your **Certificate Password.**
7. If you have an SSL certificate, you can upload the same in the appropriate field.
8. Click **Add Tenant**. The tenant will be added in ADManager Plus. If you wish to modify the details in it, click *Edit* Option once the configuration is listed and proceed to make the changes.
9. Click **Update** once the necessary modifications are done. The Rest API Access should now be *Enabled* for the configured account.

Steps to update a service account in ADManager Plus

1. Now the service account must be configured. To do this, navigate to **Domain/Tenant Settings > Microsoft 365** and click the **edit** option under the *Actions* column.
2. Click the **edit** icon found near *Service Account Details.*



3. Enter the credentials of the service account you need to configure in the respective fields.
4. Click **Update,** and close the pop-up window.

Steps to create a self-signed certificate

1. Run the following command in PowerShell:
   Set-ExecutionPolicy -ExecutionPolicy RemoteSigned -Force -Scope process
2. Now, run the *Create-selfsignedcertificate.ps1* script.
3. While running the script, you will be asked to add a common name for the certificate, start and end date (yyyy-MM-dd) for the certificate's validity and a private key to protect it.
4. Once you enter the values, the script will create a .pfx file (contains both public and private key) in the *bin* folder.
5. The .pfx file needs to be uploaded in ADManager Plus, while the .cer file should be uploaded in the Azure portal of your application.