

KNOWLEDGE BASE ARTICLE

Display Custom Attribute of an Entra ID (Azure AD) User in Employee Directory



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Extension attributes in **on-premise Active Directory** (AD) allow organizations to extend directory objects with new attributes tailored to their specific needs. These custom attributes can be synchronized with **Microsoft Entra ID**, enabling seamless integration across platforms.

Once synchronized, these attributes can be displayed on SharePoint sites and **Microsoft Teams** using the [Employee Directory](#) web part, enhancing user visibility and accessibility.

This article provides a comprehensive guide on how to set up the Employee Directory web part to display custom attributes of user objects from Entra ID.

Attribute Name

Custom **extension attributes** in Entra ID are not named the same way as they are in on-premises AD. For instance, an attribute like *fax* in on-premises AD will have a different naming convention in Entra ID. The format for custom attribute names in Entra ID is as follows:

```
extension_{uniqueid}_attributeName
```

To effectively use these custom attributes, you must retrieve their names from Entra ID.

Precondition

Before proceeding, ensure that you have the necessary PowerShell modules installed to interact with the Microsoft 365 environment. Open PowerShell and run the following commands to install the **MSOnline** and **AzureAD** modules:

```
Install-Module -Name MSOnline
```

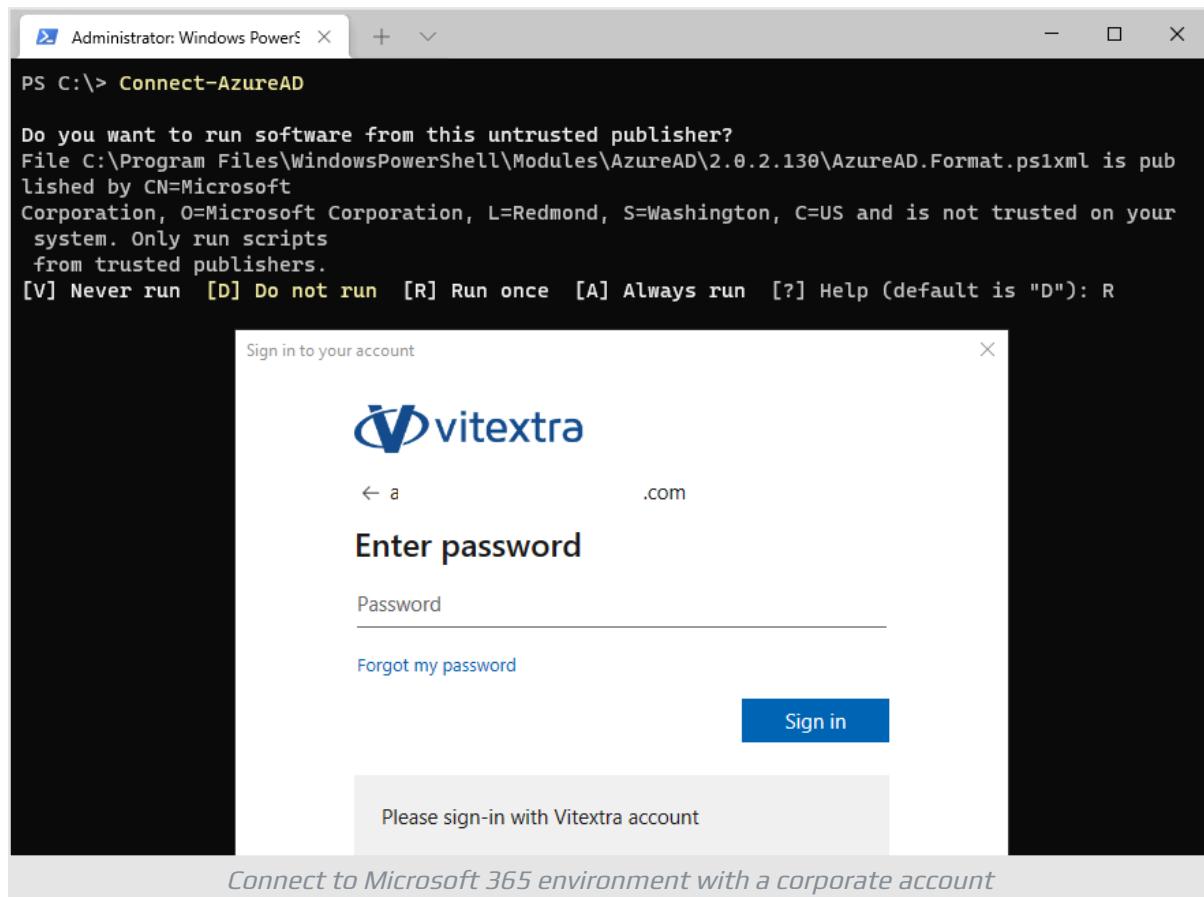
```
Install-Module -Name AzureAD
```

Connect to Your Environment

To connect to your Microsoft 365 environment, execute the *Connect-AzureAD* cmdlet:

```
Connect-AzureAD
```

You will be prompted to sign in with your corporate account. This connection is essential for accessing and managing your Entra ID attributes.

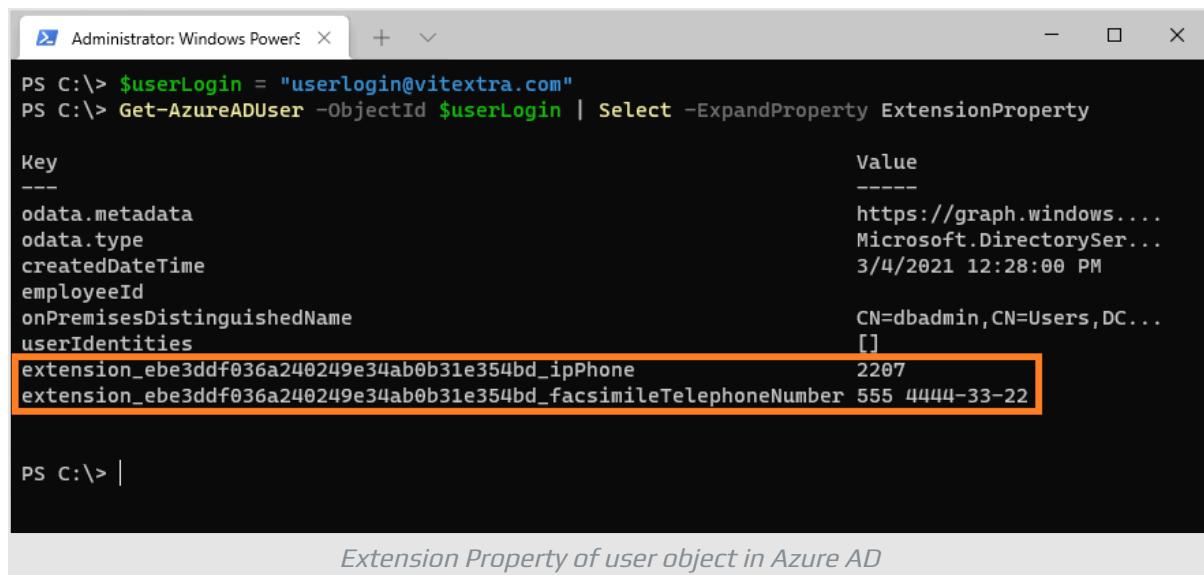


Getting Custom Attributes

To retrieve custom attributes, replace **dbadmin@vitextra.onmicrosoft.com** with the user login in your Entra ID that has the necessary attributes. Run the following script:

```
$userLogin = "dbadmin@vitextra.onmicrosoft.com"
Get-AzureADUser -ObjectId $userLogin | Select -ExpandProperty
ExtensionProperty
```

This command will list the extension properties that can be utilized as custom attributes in the Employee Directory web part.



```
Administrator: Windows PowerShell
PS C:\> $userLogin = "userLogin@vitextra.com"
PS C:\> Get-AzureADUser -ObjectId $userLogin | Select -ExpandProperty ExtensionProperty

Key
-----
odata.metadata
odata.type
createdDateTime
employeeId
onPremisesDistinguishedName
userIdentities
extension_ebe3ddf036a240249e34ab0b31e354bd_ipPhone
extension_ebe3ddf036a240249e34ab0b31e354bd_facsimileTelephoneNumber

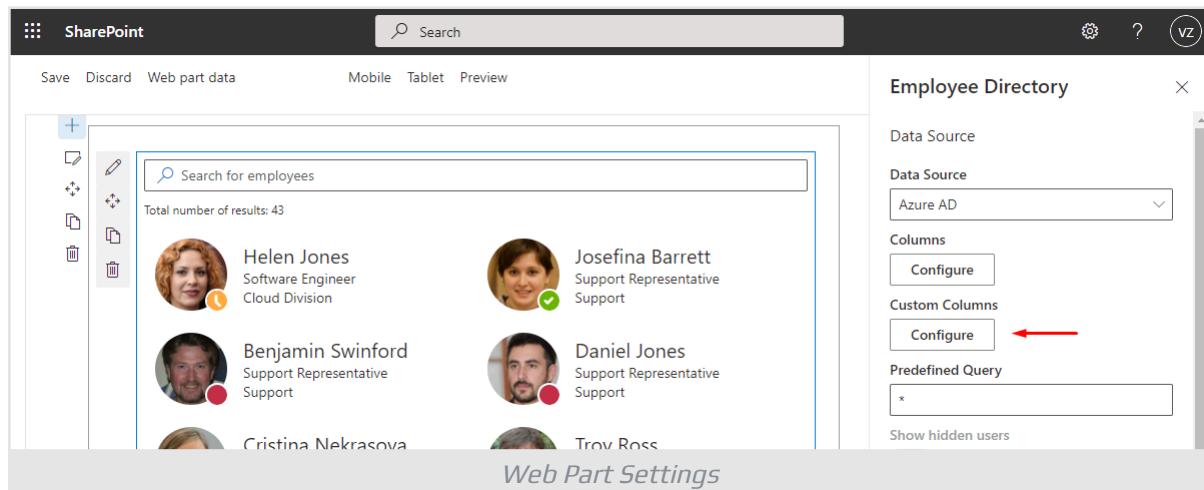
Value
-----
https://graph.windows...
Microsoft.DirectorySer...
3/4/2021 12:28:00 PM
CN=dbadmin,CN=Users,DC...
[]
2207
555 4444-33-22

PS C:\> |
```

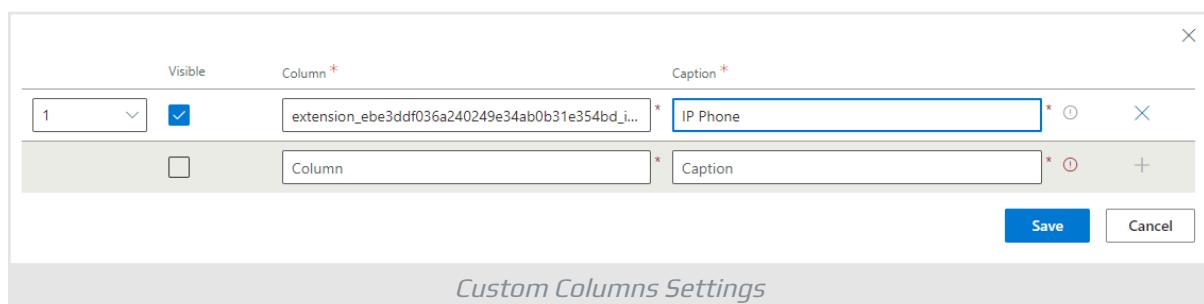
Extension Property of user object in Azure AD

Web Part Properties

To configure the Employee Directory web part, navigate to the page where the web part is placed and enter edit mode. Access the web part settings and select **Configure** under the **Custom Columns** heading:



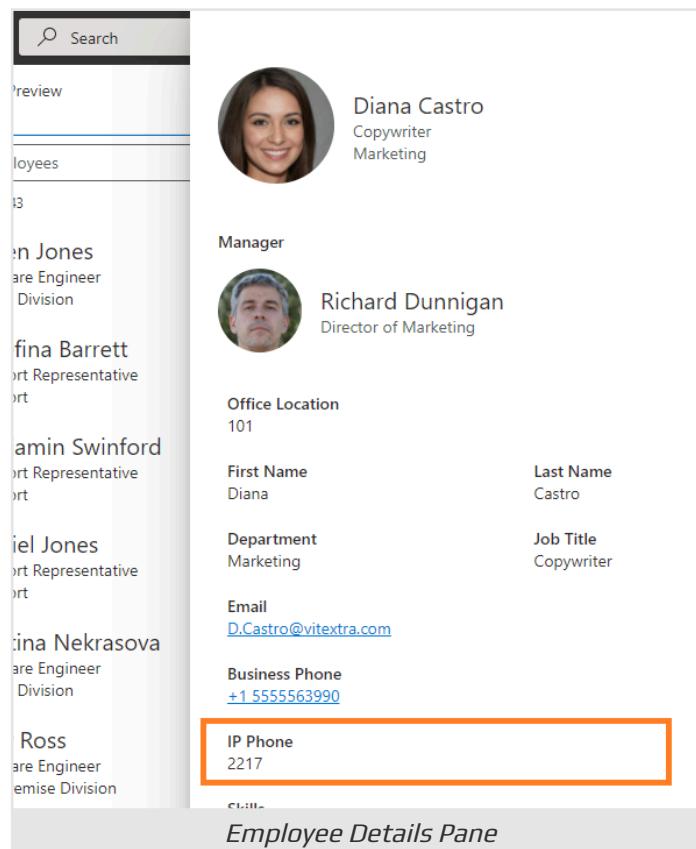
Add the custom attributes to the list and click the **Save** button to apply your changes.



Note

Both Employee Directory and Employee Directory (Entra ID) have similar settings regarding custom user properties.

Once the custom attributes are defined and marked as visible, they will appear in the employee details pane:



The screenshot shows the Employee Details pane for a user named Diana Castro. The pane is divided into two main sections: a list of employees on the left and detailed information on the right. The detailed information section includes a profile picture of Diana, her name, title (Copywriter, Marketing), and manager (Richard Dunnigan, Director of Marketing). Below this, there are fields for Office Location (101), First Name (Diana), Last Name (Castro), Department (Marketing), Job Title (Copywriter), Email (D.Castro@vitextra.com), and Business Phone (+1 5555563990). A custom attribute, IP Phone (2217), is listed at the bottom and is highlighted with an orange box. The pane is titled "Employee Details Pane".

Finally, publish the page to save your changes and make the custom attributes accessible to users.

Summary

In summary, extending directory objects with custom attributes in Entra ID enhances the functionality of the Employee Directory web part in SharePoint and Microsoft Teams.

By following the steps outlined in this article, you can successfully retrieve and display these attributes, improving user experience and information accessibility within your organization.

For further assistance, consider exploring additional resources or reaching out to your IT support team.

Terms

Active Directory

Active Directory (AD) is a directory service developed by Microsoft for Windows domain networks. It provides a centralized platform for managing and storing information about network resources, including users, computers, and services. Active Directory facilitates authentication and authorization, allowing administrators to control access to resources and enforce security policies across the network.

Entra ID

Microsoft Entra ID (formerly Azure Active Directory) is a cloud-based identity and access management service offered by Microsoft. This service allows organizations to efficiently manage and secure their users' identities and access to a variety of resources, both internal and external. These resources include Microsoft 365, the Azure platform, and thousands of other software-as-a-service (SaaS) applications.

Extension attributes

Extension attributes in Microsoft Entra ID are additional properties that can be added to the default set of attributes provided by the service. These attributes allow organizations to extend the schema of Microsoft Entra ID by incorporating custom data fields that are specific to their business needs.

Microsoft Teams

A chat-based collaboration platform for business communications with useful features for online meetings, live events, document sharing.