KNOWLEDGE BASE ARTICLE

How to Display Custom Entra ID Attributes in the Employee Directory Web Part

2026 © Vitextra SIA. All rights reserved.

Disclaimer

For the purposes of this Disclaimer:

- **Company** (referred to as either "the Company", "We", "Us" or "Our" in this Disclaimer) refers to Vitextra SIA, LV-1009 Riga, Matise iela 61 - 25.
- **Document** refers to the Knowledgebase Article.
- **You** means the individual accessing the Document, or the company, or other legal entity on behalf of which such individual is accessing or using the Document, as applicable.
- **Website** refers to Vitextra, accessible from https://vitextra.com

Disclaimer

The information contained in the Document is for general information purposes only.

The Company assumes no responsibility for errors or omissions in the contents of the Document.

In no event shall the Company be liable for any special, direct, indirect, consequential, or incidental damages or any damages whatsoever, whether in an action of contract, negligence, or other torts, arising out of or in connection with the use of the contents of the Document. The Company reserves the right to make additions, deletions, or modifications to the contents in the Document at any time without prior notice.

Errors and Omissions Disclaimer

The information given by the Document is for general guidance on matters of interest only. Therefore, errors can occur even if the Company takes every precaution to ensure that the Document's content is current and accurate. Plus, given the changing nature of laws, rules, and regulations, there may be delays, omissions, or inaccuracies in the information contained in the Document.

The Company is not responsible for any errors or omissions, or for the results obtained from the use of this information.

Fair Use Disclaimer

The Company may use copyrighted material that the copyright owner has not explicitly authorized. The Company is making such material available for criticism, comment, news reporting, teaching, scholarship, or research.

The Company believes this constitutes a "fair use" of any such copyrighted material as provided for in section 107 of the United States Copyright law.

If You wish to use copyrighted material from the Document for your own purposes that go beyond fair use, You must obtain permission from the copyright owner.

"Use at Your Own Risk" Disclaimer

All information in the Document is provided "as is", with no guarantee of completeness, accuracy, timeliness or of the results obtained from the use of this information, and without warranty of any kind, express or implied, including, but not limited to warranties of performance, merchantability and fitness for a particular purpose.

The Company will not be liable to You or anyone else for any decision made or action taken in reliance on the information given by the Service or for any consequential, special or similar damages, even if advised of the possibility of such damages.

Contact Us

If you have any questions about this Disclaimer, You can contact Us by email: support@vitextra.com.

Table of contents

Supported attributes 4

Prerequisites 5

Connect to Your Environment 6

Getting Custom Attributes 7

Web Part Properties 8

Where custom columns appear 10

Summary 11

Terms 12

Organizations often keep information in their directory that the standard user fields don't cover - a cost center, a badge number, a building. In on-premise **Active Directory** (AD) such data is stored in custom or **extension attributes**, which can be synchronized with **Microsoft Entra ID**; cloud-only organizations can add the same kind of data directly in Entra ID.

The Vitextra Employee Directory web parts can show these attributes on **SharePoint** sites and in **Microsoft Teams**. This article explains which Entra ID attributes are supported, how to find their exact names, and how to add them as custom columns in:

- the **Employee Directory (Entra ID) web part**, and
- the **Employee Directory** web part with the **Entra ID (Azure AD)** data source.

Tip

If the **Employee Directory** web part uses the **User profiles** data source, custom attributes come from SharePoint user profiles and search managed properties instead. See KB10049. How to Add Custom User Profile Attributes to the Employee Directory Web Part.

Supported attributes

Both web parts read Entra ID data through **Microsoft Graph**. A custom column is the name of a property of the Graph user resource type, and the web part requests it together with the built-in fields. Three kinds of names are supported:

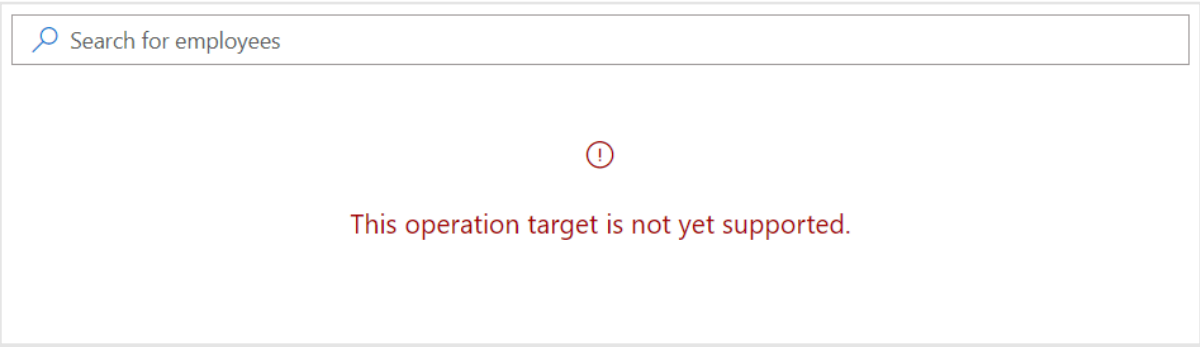
Attribute type	What to enter in Column	Example
Directory extensions - custom attributes synchronized from on-premises AD by Microsoft Entra Connect (directory extension sync) or registered by an application	The full extension name in the format `extension_{appId}_{attributeName}`, where `{appId}` is the application ID without hyphens	`extension_8f2a1c0e4b7d4c3a9e6f5d4c3b2a1f0e_costCenter`
On-premises extension attributes - the 15 attributes `extensionAttribute1`–`extensionAttribute`	Just the attribute name; the web part reads the value from `onPremisesExtensionAttributes`	`extensionAttribute1`

Attribute type	What to enter in Column	Example
`15` (the Exchange custom attributes), synchronized from AD or set for cloud-only users		
Other user properties that the built-in fields don't cover	The Graph property name	`employeeHireDate`, `faxNumber`, `preferredLanguage`, `usageLocation`

Custom attribute names in Entra ID are not the same as in on-premises AD. For example, an AD attribute such as `costCenter` that is synchronized as a directory extension appears in Entra ID as `extension_{appId}_costCenter`. Always use the Entra ID name, spelled exactly as Microsoft Graph returns it - names are case-sensitive.

Warning

Schema extensions and open extensions are not supported. Also avoid user properties that Microsoft Graph returns only for a single user and not in a **list** of users - for example `aboutMe`, `skills`, `interests`, `hireDate` and `mySite`. If a custom column refers to such a property or to a name that doesn't exist, the directory can't load the users and shows an error instead.



Error caused by an unsupported property

Prerequisites

To find the attribute names, you can use Graph Explorer or Microsoft Graph PowerShell. This section uses PowerShell. Open PowerShell and install the Microsoft Graph PowerShell SDK:

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

Note

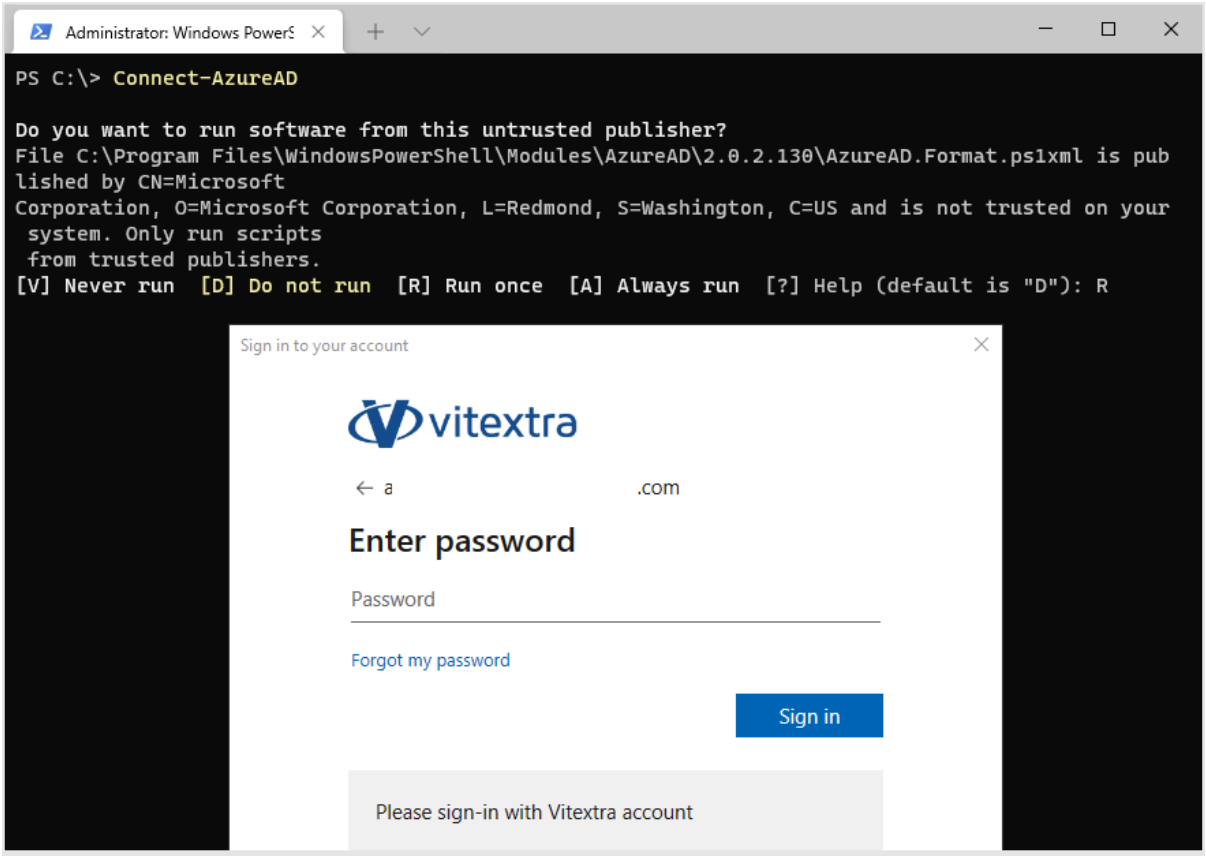
The older `AzureAD` and `MSOnline` PowerShell modules are retired. Use the Microsoft Graph PowerShell cmdlets shown below instead of `Connect-AzureAD` and `Get-AzureADUser`.

Connect to Your Environment

Connect to Microsoft Graph with permissions to read users and directory data:

```
Connect-MgGraph -Scopes "User.Read.All",
"Directory.Read.All"
```

You'll be prompted to sign in with your work account and, if needed, to consent to the requested permissions.



Connecting to Microsoft Graph with a work account

Getting Custom Attributes

To list the directory extensions registered in your **tenant**, run:

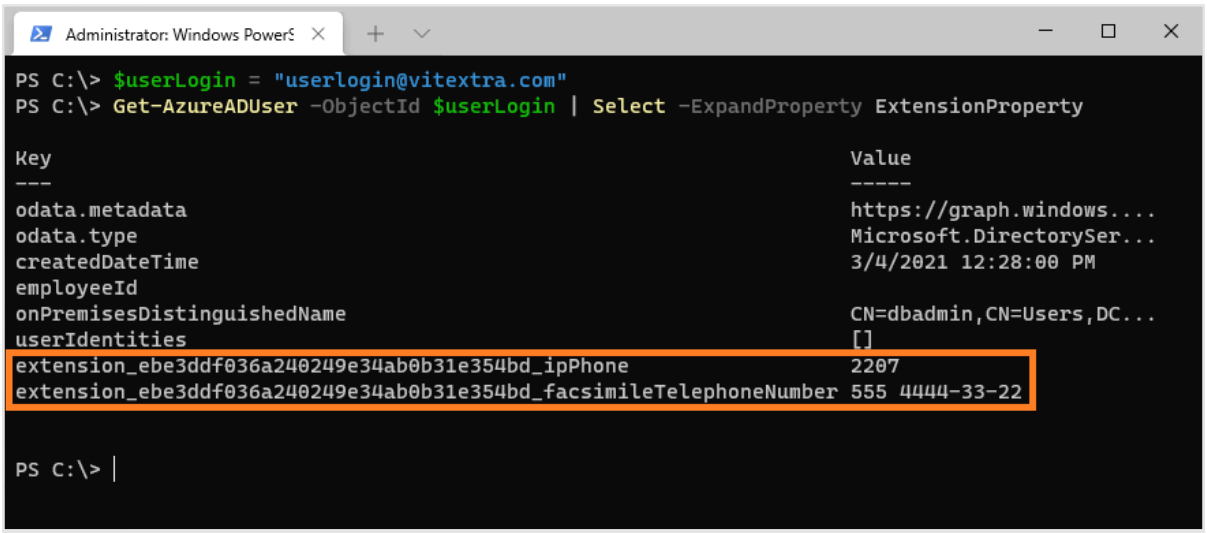
```
Get-MgDirectoryObjectAvailableExtensionProperty | Select-
Object Name, DataType, IsSyncedFromOnPremises
```

The **Name** column contains the full names (`extension_{appId}_{attributeName}`) to use in the web part. Extensions with **IsSyncedFromOnPremises** set to `True` come from on-premises AD.

To check the values of a particular user, replace `dbadmin@vitextra.onmicrosoft.com` with the sign-in name of a user who has the attributes you need, and run:

```
$userLogin = "dbadmin@vitextra.onmicrosoft.com"
# extensionAttribute1-15
(Get-MgUser -UserId $userLogin -Property "onPremisesExtensio
nAttributes").OnPremisesExtensionAttributes | Format-List
# a directory extension (use a name from the list above)
(Get-MgUser -UserId $userLogin -Property "extension_8f2a1c0e
4b7d4c3a9e6f5d4c3b2a1f0e_costCenter").AdditionalProperties
```

In Graph Explorer, the same information is returned by `GET https://graph.microsoft.com/v1.0/users/{user}?$select=displayName,onPremisesExtensionAttributes` and by `POST https://graph.microsoft.com/v1.0/directoryObjects/getAvailableExtensionProperties`.

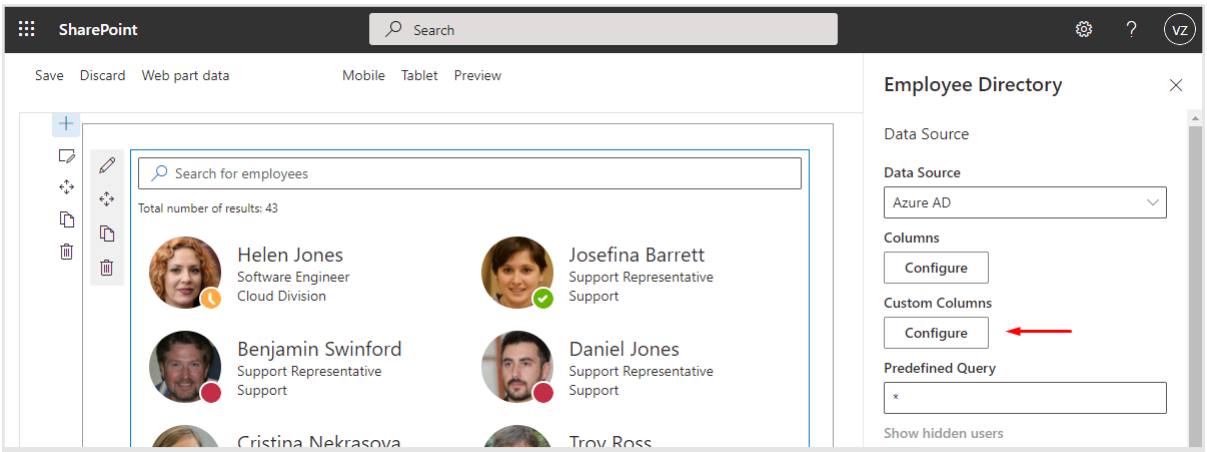


Custom attributes of a user object in Microsoft Entra ID

Web Part Properties

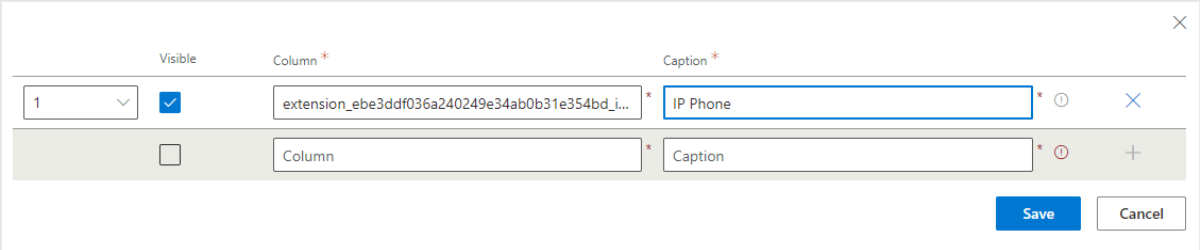
The custom columns are configured the same way in both web parts:

1 Open the page with the web part, select **Edit**, and then select the edit (pencil) icon of the web part to open its property pane.
2 In the **Data Source** section - in the **Employee Directory** web part, make sure **Data Source** is set to **Entra ID (Azure AD)** - select **Configure** under **Custom Columns**.



Custom Columns in the web part settings

1 The **Columns** panel opens. In the empty row at the bottom of the table, enter the attribute name in **Column** and the label your users will see in **Caption**, and choose where the column is shown.
2 Select **Add new item** (the plus icon at the end of the row). Repeat for each attribute you need.
3 Use **Order** to change the position of the columns, and select **Save**.
4 Publish the page to make the custom attributes available to users.



Custom columns settings

Each custom column has the following settings:

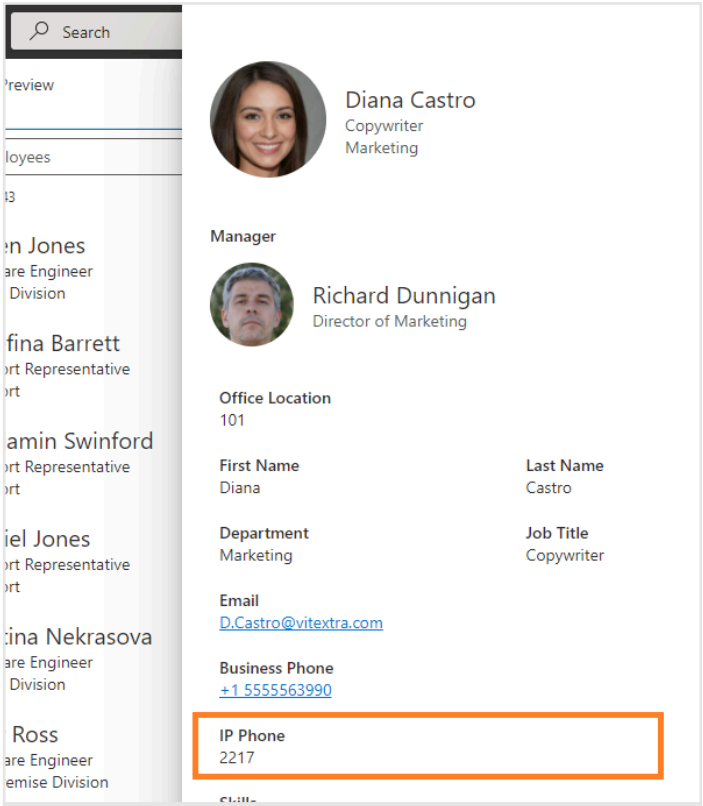
Setting	Description
Show in list	Shows the attribute as a column in the **Details view** and includes it in the Excel export. Selected by default for a new row.
Show on card	Shows the attribute in the employee details pane that opens when you select a person.
Searchable	**Employee Directory (Entra ID)** only. The search box also looks for the typed text in this attribute.
Column	The attribute name, as described in **Supported attributes**. Required.
Caption	The label shown as the column header and in the details pane. Required.
Order	The position of the column among the custom columns. Custom columns are placed after the built-in columns.

To remove a custom column, select **Delete Row** (the trash can icon) at the end of its row and then select **Save**.

Note

The **Employee Directory** web part keeps one list of custom columns for both data sources and doesn't offer the **Searchable** option. If you switch its **Data Source** to **User profiles**, replace the Entra ID attribute names with search managed properties as described in KB10049.

Once saved, the custom attributes with **Show on card** selected appear in the employee details pane when the person has a value:



Employee details pane

Where custom columns appear

A custom column can be used in the same places as the built-in fields:

- **Details view** and **Export to Excel** - when **Show in list** is selected. See KB10062. How to Export Employee Directory Results to Microsoft Excel.
- **Details pane** - when **Show on card** is selected. See KB10199. Employee Directory: Customizing the Details Pane.
- **Contact cards** and **Group by** - custom columns are offered in the **Content Fields** dropdowns and in the **Group by** dropdown of the **Appearance** section. See KB10314. Employee Directory Layouts: Details and Cards, Card Size, Card Fields and Group By.
- **Filter** (**Employee Directory (Entra ID)** only) - custom columns can be used in filter

conditions to limit who is shown. See KB10311. How to Configure the Employee Directory (Entra ID) Web Part: Filters, Exclusions and A–Z Navigation.

Note

The **Employee Directory (Entra ID)** web part keeps a copy of the directory in the browser and refreshes it automatically after 24 hours. When you change the custom columns, the data is reloaded for you; other users see new attribute values after the next refresh, or immediately if they select the **Refresh** link next to **Last updated**.

Summary

Custom Entra ID attributes - directory extensions synchronized from on-premises AD, `extensionAttribute1`–`extensionAttribute15` and other user properties - extend what the Employee Directory web parts can show in SharePoint and Microsoft Teams. Find the exact attribute name with Microsoft Graph PowerShell or Graph Explorer, add it under **Custom Columns**, and choose whether it appears in the list, in the details pane, in search, in groups or in the export.

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.

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. They allow organizations to extend the Microsoft Entra ID schema with custom data fields that are specific to their business needs.

List
A list is a storage unit in SharePoint. A list can contain columns of different types, content types, and views. A document library is a special type of list and therefore inherits the functionality of a list.

Microsoft Entra ID
Microsoft Entra ID (formerly Azure Active Directory) is a cloud-based identity and access management service offered by Microsoft. It 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.

Microsoft Graph
Microsoft Graph is a REST API secured with Microsoft Entra ID (formerly Azure Active Directory) and OAuth 2.0. It provides a single endpoint for accessing data and services in Microsoft 365, such as SharePoint, Outlook, OneDrive, Teams, and others.

Microsoft Teams
Microsoft Teams is a chat-based collaboration platform for business communications with features for online meetings, live events, and document sharing.

SharePoint

Terms

SharePoint is a web-based collaboration platform that provides content management, document management, workflow applications, search, and other tools that empower employees and teams to work together. SharePoint is also a secure place to store, organize, and access shared information.

Tenant
A Microsoft 365 tenant is a dedicated instance of Microsoft 365 services. The tenant holds the organization's information, such as users and domains (Microsoft Entra ID), configurations, subscriptions, and services. An organization receives a tenant by signing up for Microsoft 365 services.

View
A view is a saved configuration that determines which items of a list or library are displayed and how, including the columns, sorting, filtering, grouping, and layout. Views can be personal or public.

Web Part
A web part is a primary building block of functionality or content placed on a SharePoint page. Some web parts support customization, such as configuring the web part or changing its appearance.