

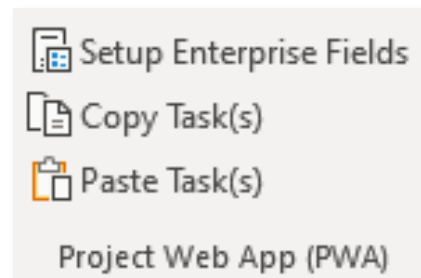
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SSI's Project Web App (PWA) Tools

Overview

The *Project Web App (PWA)* group in the SSI Analysis Tools ribbon includes features that are relevant to users who are working in a *Microsoft Project Server* or *Project Online* environment and are connected to their *Project Web App (PWA)* in the *Microsoft Project Professional Desktop Client*.



Use any of the tools in the Project Web App (PWA) group, you must be using the Microsoft Project Professional Desktop Client with a profile that is connected to *Project Web App (PWA)*. If your current profile is connected to PWA, the Project Web App (PWA) group will appear at the right side of the *SSI Analysis Tools* ribbon in *Microsoft Project*.

Understanding Project Server/Online

Microsoft Project Server and *Project Online* are enterprise *Project Portfolio Management (PPM)* tools. A Project Portfolio Management (PPM) tool is a tool that helps a company facilitate the process of organizing and managing collections of projects to achieve strategic goals. Both Project Server and Project Online store all project data in a consolidated database server, which provides ease of reporting and standardizes features and functionality.

Project Server is an on-premise product that stores all data in a *SQL Server database*. *On-premise* means that the server is physically located within a building at the company.

Project Online is a cloud-based product that stores all data in a *Microsoft Azure database*. *Cloud-based* means that the server is not physically located within a building at the company, instead, the server is owned and managed by a hosting company, in this case, Microsoft.

Project Web App (PWA) is the web-based user interface for both Project Server and Project Online. This is *not* to be confused with *Project for the Web*, which is entirely different. PWA is built on

SharePoint technology. Anyone with the proper license can access PWA through a web browser, including project managers, schedulers, resource managers, executives and business leaders, application administrators, and other project team members. **Application Administrators** have the highest permission level within PWA and can maintain and configure the system.

Project Managers and Schedulers can connect the **Microsoft Project desktop client** to Project Web App (PWA), which allows them to use the features of either Project Server or Project Online. Specifically, this allows them to save their Projects in the system database, to access and enter data into **Enterprise Custom Fields**, and to build their project team with Enterprise Resources.

What about Project for the Web?

Project for the Web is a browser-based planning tool. Microsoft has marketed Project for the Web as a web-based version of Microsoft Project, but it is missing many key features you normally get from the Microsoft Project desktop client, including the ability to set a baseline, load resources, apply custom filters, tables, and groups, and many more.

Project for the Web was designed to compete with planning tools like Smartsheet and Monday.com, but because of its marketing and the similar use of terms like “web” and “online”, a great deal of confusion has been created about the difference between *Project for the Web*, *Project Online*, and *Project Web App (PWA)*.

Understanding Enterprise Fields

Microsoft Project offers many local fields that allow users to enter attributes about a project's Tasks and Resources. Many SSI Tools require the user to pick fields from which data can be read or to which data can be written, depending on the tool. For example, *SSI Trace Tools* (Driving Path Analysis Tool) requires the user to pick a **Flag** or **Text** field into which it will write Trace Log values. Without this field, the tool would not be able to function properly. Microsoft Project has a finite number of local fields that users can use, however, users who have connected *the Microsoft Project Desktop Client* to *Project Web App (PWA)* may have access to many additional fields to store information about tasks and resources in the project. These additional fields are known as **Enterprise Custom Fields**.

Enterprise Field Properties

To setup **Enterprise Fields** to work with *SSI Tools*, a user must be aware of the following properties of their Enterprise Fields:

- **Enterprise Field Name** – The custom name of the Enterprise Field.
- **Department** – The name of the department associated with the Enterprise Field.
- **Entity Type** – Specifies the *Microsoft Project* entity an **Enterprise Field** is associated with. Entity Type can be one of the following:

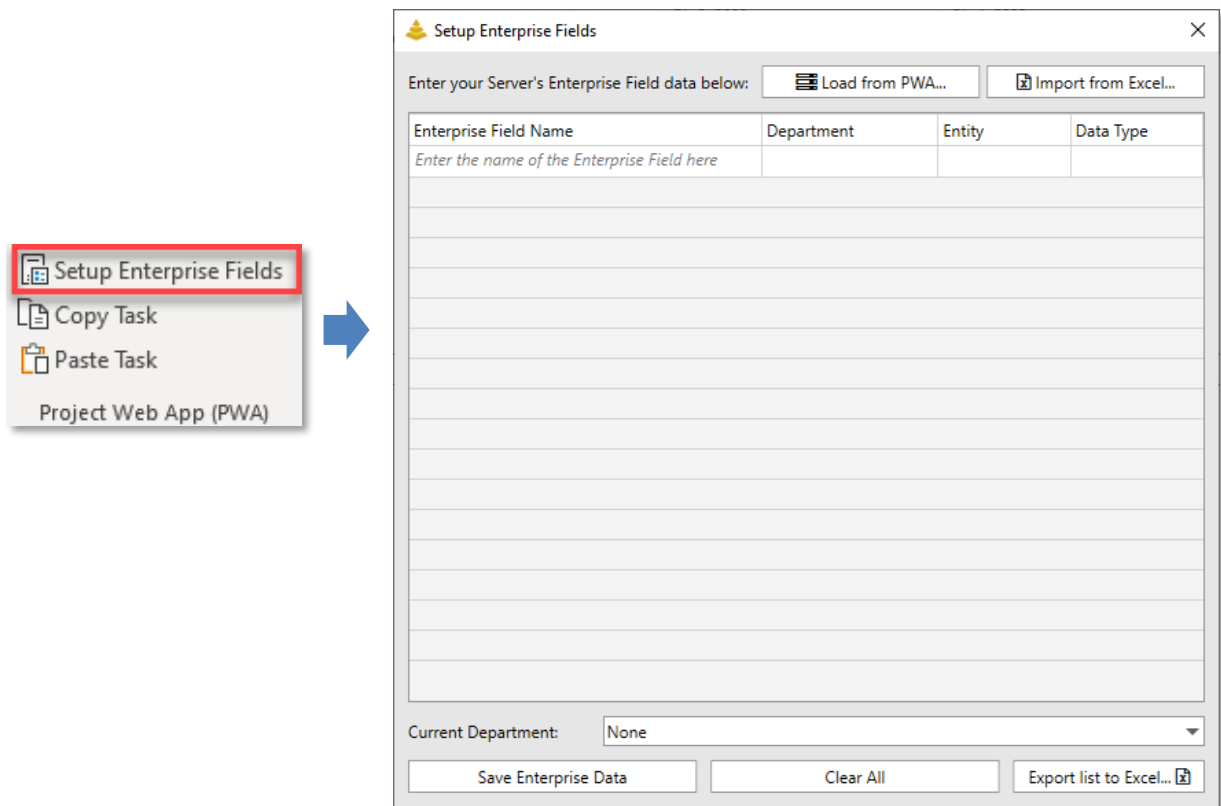
Attribute	Description
Project	Specifies that the Enterprise Field is used for project level items
Resource	Specifies that the Enterprise Field is used for resources
Task	Specifies that the Enterprise Field is used for tasks

- **Data Type** – Specifies what *type* of data an Enterprise Field holds. Data Type can be one of the following:

Attribute	Description
Text	Specifies the Enterprise Field holds alphanumeric data
Number	Specifies the Enterprise Field holds numeric data
Flag	Specifies the Enterprise Field holds a binary "Yes" or a "No" value
Duration	Specifies the Enterprise Field holds duration data (ex: 10 days)
Date	Specifies the Enterprise Field holds date-driven data
Cost	Specifies the Enterprise Field holds currency data

Using the Enterprise Fields Setup Dialog

The *Enterprise Fields Setup dialog* allows users to provide their list of Enterprise Custom Fields to SSI Tools in a one-time setup, which will allow them to pick these fields in SSI Tools controls.



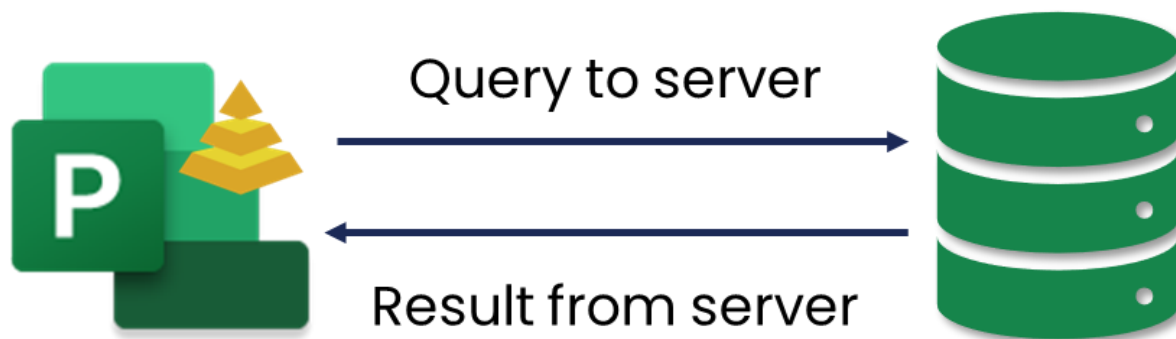
This tool will allow users to enter their Enterprise Custom Fields three different ways:

1. Loading them directly from PWA
2. Importing them from an Excel Spreadsheet
3. Manually entering them in the table

Enterprise Custom Field data is displayed in the main table of the *Enterprise Fields Setup* dialog.

Loading Enterprise Custom Fields From PWA

Clicking the **Load from PWA** button will attempt to automatically load all Enterprise fields from the connected Project Web App (PWA). You must have an active internet connection and be able to access the PWA SharePoint site in order to work. This function will query the PWA server for all Enterprise Custom Fields:



Note that the query to the server is not always successful and depends on many things, including:

- How stable your internet connection is.
- Security protocols on your computer.
- The default internet browser your computer uses.
- Etc.

If the query doesn't work the first time, sometimes additional attempts will work.



Importing Enterprise Fields from an Existing *Excel*/File

Before importing Enterprise Custom fields from an Excel Workbook, a user must ensure that the workbook that exists on their file system that contains columns for ***Enterprise Field Name***, ***Department***, ***Entity***, and ***Data Type***.

	A	B	C	D
1	Field Name	Department	Entity Type	Data Type
2	Enterprise POC		Task	Text
3	Enterprise Manager		Task	Text
4	Prior Week Finish	Program Office	Task	Date
5	Prior Month Duration	Program Office	Task	Duration
6	Internal Resource		Resource	Flag
7	Enterprise Work		Task	Number
8	Enterprise Cost		Task	Cost

To import ***Enterprise Field*** data from an existing *Excel* file, click the ***Import from existing Excel file...*** button in the upper right corner of the ***Enterprise Fields Setup*** dialog. This will open the Import Wizard dialog.

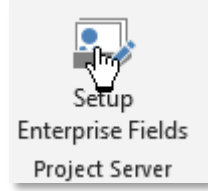
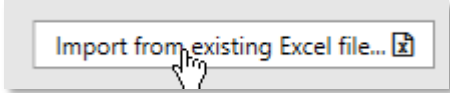
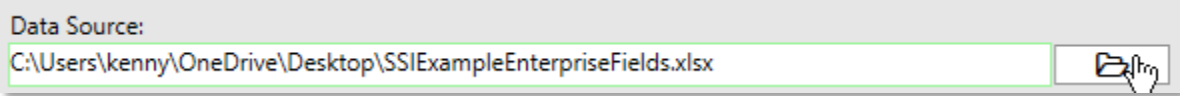
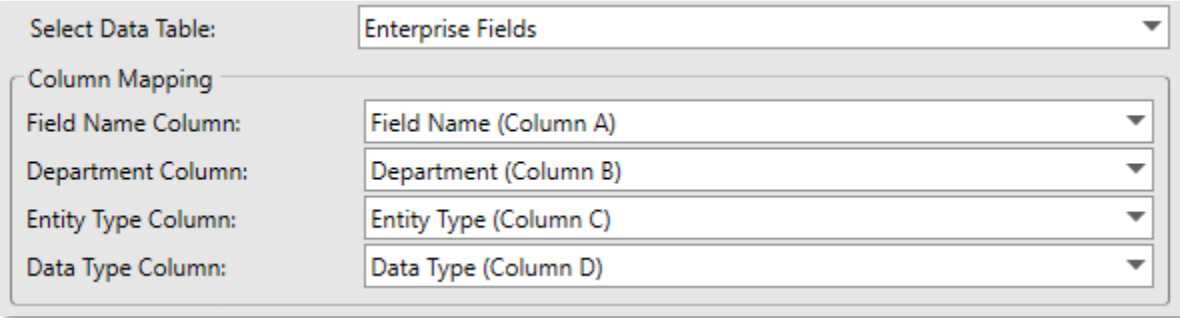
Using the Import Wizard

1. Browse to a data source by clicking the  button in the upper right corner of the Import Wizard window. Locate the desired file in the *Windows File Explorer*, then click ***Open***.
2. Ensure the Data Table selected is the worksheet that contains the appropriate data. To change the worksheet, click the Data Table drop-down menu and choose the desired worksheet.
3. Ensure the proper columns corresponding to the appropriate data are selected. To change a column mapping, click the column drop-down menu and choose the desired column.
4. Preview the data that will be imported in the preview section of the Import Wizard. If the data looks good, click the ***Import...*** button.

If the data import was successful, rows in the Enterprise Fields Setup dialog will automatically be filled in with the data from the existing spreadsheet.

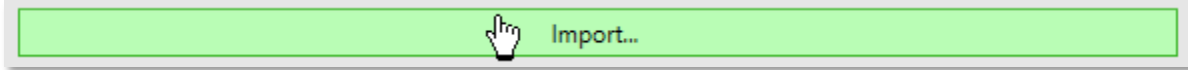


Class Exercise – Importing Enterprise Fields

Practice – On your own	
1. Download and save the SSIExampleEnterpriseFields.xlsx file	
2. Open Microsoft Project and select a profile that is connected to Project Server.	
3. Open the Setup Enterprise Fields Form by Clicking the Setup Enterprise Fields button in the SSI Analysis Tools Tab.	
4. Click the <i>Import from Existing Excel file...</i> button.	
5. When the Import Wizard opens, click the  button to browse to the previously saved <i>SSIExampleEnterpriseFields.xlsx</i> file.	
6. Ensure the <i>Data Table</i> is set to <i>Enterprise Fields</i> , and all of the columns are mapped to their corresponding data columns from the Excel Sheet.	
7. Ensure the preview displayed matches the data from the <i>SSIExampleEnterpriseFields.xlsx</i> file	



8. Click the *Import* button



9. Observe the Enterprise field data from the *SSIExampleEnterpriseFields.xlsx* file has now been imported onto the main table of the **Setup Enterprise Fields** dialog.

End of Practice Exercise

Manually Entering Enterprise Fields

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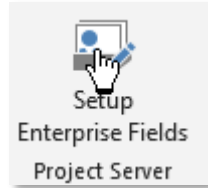
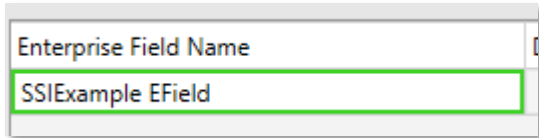
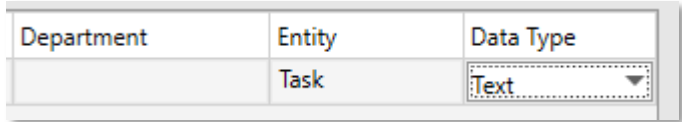
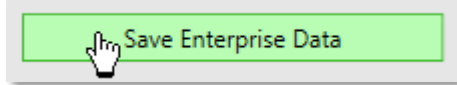
To manually enter Enterprise Field data, follow these steps:

1. Click the cell in the table that says, *“Enter the name of the enterprise field here”* and begin typing the name of the Enterprise Field. The Enterprise field name is mandatory and cannot be left blank.
2. Once the Enterprise field name is entered, the Enterprise Field Department, Entity, and Data Type can be adjusted. Entering the Department is optional.
3. Once satisfied with the selections, press the Enter key on the keyboard to add a new blank row.
4. Repeat steps 1-3 to add additional ***Enterprise Field*** data.

To delete an existing row, click anywhere on that row and press the *Delete* key on the keyboard.



Hands-on Exercise – Manually Entering Enterprise Fields

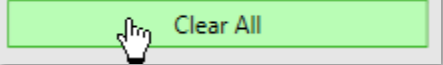
Practice – On your own	
1. Open Microsoft Project and select a profile that is connected to Project Server.	
2. Open the Setup Enterprise Fields Form by Clicking the Setup Enterprise Fields button in the SSI Analysis Tools Tab.	
3. In the Setup Enterprise Fields Dialog click into the first cell in the <i>Enterprise Field Name</i> column and Type in the name of an Enterprise field used by your organization.	
4. Adjust the department, Entity Type, and Data Type as necessary to match the Enterprise Field properties.	
5. Click the <i>Save Enterprise Data</i> button.	
End of Practice Exercise	

Setting the Current Department

The image shows a dropdown menu with the text "Current Department:" followed by a box containing the word "None" and a small downward-pointing arrow on the right side.

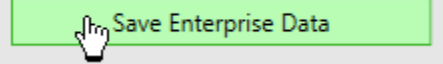
Setting the *Current Department* controls which *Enterprise Fields* will be allowed as selectable options in *SSI Tools for Microsoft Project* controls. When the current department is set to "None", only Enterprise fields with an empty department name or a department name of "None" will be options. If the current department is set to any other value, only the Enterprise Fields that have that exact same value set as their department will be options for the user to pick in *SSI Tools* controls. To change the current department, click the Current Department drop-down menu and choose the desired department.

Clearing Enterprise Field Data

The image shows a green rectangular button with the text "Clear All" in the center. A hand cursor icon is positioned over the left side of the button.

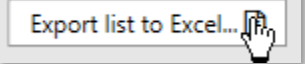
Clicking the *Clear All* button will remove all entries from the *Enterprise Fields* list. There is no undo option, so be careful when using this button.

Saving Enterprise Field Data

The image shows a green rectangular button with the text "Save Enterprise Data" in the center. A hand cursor icon is positioned over the left side of the button.

Clicking the *Save Enterprise Data* button will save the *Enterprise Field* data for *SSI Tools* to remember in the future. Once the Enterprise Field data is saved, a user will not need to use the *Setup Enterprise Fields* dialog again unless they would like to make changes to the saved data.

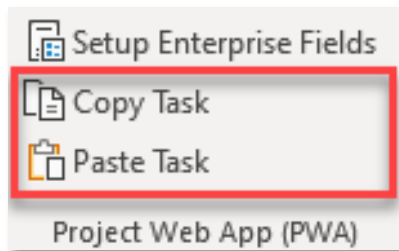
Exporting Enterprise Field Data to Excel

The image shows a button with the text "Export list to Excel..." and a small Excel icon on the right. A hand cursor icon is positioned over the button.

Clicking the *Export List to Excel...* button will export the current *Enterprise Fields* list into an Excel spreadsheet. This spreadsheet will be saved on the desktop and will open automatically. This feature is great for distributing *Enterprise Field* data to other *SSI Tools* users who are connected to the same *Project Web App (PWA)*. Because the export will automatically be formatted properly, these users can then use the *Import from Existing Excel File...* button to easily import the *Enterprise field* data.

Copy/Paste Tools

Within the *Project Web App (PWA) Group*, there is a button to *Copy Task(s)* and a button to *Paste Task(s)*.



Why are these buttons here and why would someone use them to copy/paste task rows rather than the standard windows copy/paste functions they have become accustomed to? Interestingly, copying and pasting tasks within a project that is saved on a Project Server or Project Online database can cause file corruption issues. To quote this article, "Over time, enterprise projects can become corrupted in either Project Online or Project Server. Although no one knows every cause of project corruption, one of the primary causes has been the process of cutting/copying and pasting entire task rows in the Microsoft Project schedule."

When an entire task row is cut/copied, all of its *Enterprise Custom Field* values are also copied. When a paste occurs, the Project Server/Project Online database can mess up how it stores Enterprise Custom Fields for the project, leading to file corruption.

In order to circumvent this issue and help Microsoft Project users who are connected to PWA avoid file corruption, Structured Solutions has created our own Copy/Paste tools. These buttons will allow users to still be able to copy/paste entire task rows without any of the file corruption risk.

Clicking the *Copy Task(s)* button will copy all currently selected tasks into SSI Tool's memory. Note - this is not the same as the Windows Clipboard memory. You can continue to use the standard Windows copy/paste functions to copy/paste data from the Windows Clipboard, even after you have clicked this button.

Clicking the *Paste Task(s)* button will paste the task(s) saved in SSI Tools memory using the "safe" method. The tasks will be pasted above the currently selected task in Project.