Copilot User Guide

Copilot is a package of two apps:

- 1. The canvas app, commonly called the Copilot app, that people will use during construction, operations, maintenance, and inspection of industrial facilities. A typical user would be a construction foreman or inspector completing tasks within the app. These are tasks that were previously completed on paper forms, like inspection checklists.
- 2. The model-driven app, commonly called the Copilot Configuration and Data app, that one admin will use to configure the application. There are instructions within this app on how to configure several data tables before using the Copilot app. If you use the Copilot app without these table being configured, the Copilot app will not work properly.
 - These configuration tables are for settings things up like: Unit names/numbers, Assets, Categories and Priorities to use throughout the app, Craft types, Company names, and the types of Forms that the user wants to "digitize" in the app, among other tables.
 Please see the "Welcome" and "Get Started" pages within the model-driven app for more clarification, or review the following pages which reflect the same information.

There are two apps needed to use Copilot for your company:

The first is this Copilot Configuration and Data app. This is a Model-driven Microsoft Power App, and what you are looking at right now.
 The second is the Copilot app. That is a Canvas-type Microsoft Power App.

1. Copilot Configuration and Data app

Purpose

The purpose of this Copilot Configuration and Data app is to configure the tables that the Copilot app uses to run. It also allows you to see (and edit if desired) the raw data that users create while using the application. Only certain admin users have access to this configuration app.

Sharing and Access

To share this Copilot Configuration and Data app with other admin-level users, read the related Microsoft articles by searching "Share a Model-driven Power App" in your web browser. When you find and select a user to share this app with, you also need to assign a security role. Search for the Copilot Admin security role when sharing this Copilot Configuration and Data app. This security role allows for full create, read, edit, and delete access to all data tables. There is also a Copilot Basic User security role, but that is only used when sharing the Copilot canvas app. When sharing the app, you may also have to grant a Power Apps license for the user to use a model-driven Power App. Please consult with your organization's IT department on how to share licenses or configure your environment for pay-as-you-go Power Apps licenses.

Navigation and Instructions

In this application, the main navigation is by using the menu on the left side of the screen. There are three sections...Home, Configuration Tables, and App Generated Data. The Home section includes this Welcome screen and a Get Started tab. The Get Started tab will share instructions on how to configure each table. The Configuration Tables section has a list of many tabs corresponding to different tables needing configuration. The App Generated Data section has a few tabs corresponding to the data that users generate while using the Copilot app. These are the main data tables. Use caution when editing or deleting any records.

See next page for 2. Copilot app



2. Copilot app

Purpose

The Copilot app is the main application that individuals will use. It is designed as a mobile-first experience, but can also be used in a web browser on a computer. Each person that wants to use this application needs to have it shared with them, or belong to a Security Group that the app was shared with.

Sharing and Access

To share the Copilot app with any user, read the related Microsoft articles by searching "Share a Canvas Power App" in your web browser. When you find and select a user (or Security Group) to share this app with, you also need to assign a security role. Search for the Copilot Basic User security role when sharing the Copilot app. This security role only allows users to create, read, and edit most data, except for some configuration tables where they can only read the data. This security role does not allow a user to delete rows from the data tables. When sharing the app, you may also have to grant a Power Apps license for the user to use a canvas Power App. Please consult with your organization's IT department on how to share licenses or configure your environment for pay-as-you-go Power Apps licenses.

Navigation and Instructions

The Copilot app is designed to be relatively intuitive using best practices for modern app design. The home screen has the list of Forms (also called Tools in the app) for the user to navigate to. They can also navigate to any of the Forms (Tools) using the menu at the bottom of the app. Users can quickly access the Work Orders and Assets using the bottom menu too. Finally, the Settings screen is where there users can configure several settings and see information about their offline data. The Copilot app is designed with an offline mode which allows user to view, edit, and create Forms when offline. They only have access to view and edit Forms that were previously downloaded to the phone/tablet before losing internet connection. Please see the Settings screen in the Copilot app for the full list of capabilities.

Table Configuration Instructions (this is also in the Copilot Configuration and Data app)



Table Name	What is the table used for?	How do I configure this table?
Units	This table is a list of the Units (process units, plant areas, etc.) for your facility. Assets, Work Orders, and Forms will have Units assigned to them.	Create a new Unit by adding a Row to the table (click the New button in the menu bar). You can also mass import Units: 1. Click the Export to Excel feature in the menu bar. This downloads an Excel copy of the Units table with the relevant columns and current data. 2. Open the Excel file that automatically downloads, and add/save your data in the Excel file 3. Import the file using the Import from Excel feature in the menu bar For more detailed instructions on importing/exporting data to the table, search "Import data in model driven Power Apps" in your browser and read the article on Microsoft's website.
Zones	This table is a list of the Zones or Areas that you may define inside a Unit. Assets, Work Orders, and Forms can have Zones assigned to them.	Create a new Zone by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table.
Asset Types	This table is a list of Asset Types that categorize all of your assets. Examples could be Exchanger, Heater, Pump, Vessel, etc. Assets will have Asset Types assigned to them.	Create a new Asset Type by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table.
Categories	This table is a list of Categories that can be assigned to Forms and Work Orders. Categories can be used for whatever you want. When you create a new Form Type, you will select which Categories are available for the user to select for that particular Form Type.	Create a new Category by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table.
Priorities	This table is a list of Priorities that can be assigned to Forms. Priorities can be used for whatever you want. When you create a new Form Type, you will select which Priorities are available for the user to select for that particular Form Type.	Create a new Priority by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table.
Crafts	This table is a list of Crafts in your facility. Examples could be Boilermaker, Pipefitter, Electrician, Inspector, Operator, etc. Work Orders can have Crafts assigned to them.	Create a new Craft by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table.
Companies	This table is a list of Companies in your facility. Work Orders can have Companies assigned to them.	Create a new Company by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table.

Table Configuration Instructions (this is also in the Copilot Configuration and Data app)



Table Name	What is the table used for?	How do I configure this table?
Response Templates	This table is a list of Response Templates. Response templates are the set of multiple choice answers available for a step/question in a form. For example, if you want a question's response choices to be Yes, No, or NA, then you would make a response template called Yes/No/NA, with those three choices listed in the appropriate columns.	Create a new Response Choice by adding a Row to the table (click the New button in the menu bar). Type the name of the response template in the Response Template Name column (the 1st column), and the response choices in the following columns. You can have up to 10 choices. You can also mass import Zones by following the same mass import instructions for the Units table.
Form Types	A Form Type can be anything from Safety Audit, Punch List, Closure Form, Welds, to any other category of forms that you want to create for the Copilot app. Think of each Form Type as it's own module in the Copilot app with its own icon. Each row in this table is a different Form Type. A Form Template is a subset of a Form Type, and a unique form that is assigned to its parent Form Type. For example, you may have Safety Audit as a Form Type, and have multiple Form Templates for different types of audits, like Permit Audit, Confined Space Audit, Hot Work Audit, etc. You can have up to 25 unique Form Types.	Create a new Form Type by adding a Row to the table (click the New button in the menu bar). The Order In App column should be whole numbers, and specifies the order the Form Icons are shown in the Copilot app. Also, when creating a new Form Type, leave the Icon SVG Code column empty. You can assign an icon after creating the new Form Type. After you save the new Form Type, there are three things to complete: 1. Select which Categories (if any) you want available for this Form Type. 2. Select which Priorities (if any) you want available for this Form Type. 3. Click on the Form Icons section and assign one of the included icons to this Form Type, or upload and assign your own custom icon.
Form lcons	Clicking on Form Icons opens an interactive page where you can assign icons to your different Form Types. You can choose from the included icons, or you can upload and assign your own custom icons to be used in the Copilot app. If you want to upload your own custom icons, please see the instructions in step #3 on the Form Icons page.	To set which icon to use for a new Form Type, follow the instructions on the Form Icons page in this configuration app.
Form Templates	A Form Template is a subset of a Form Type. There can be multiple Form Templates for one Form Type. For example, you may have Safety Audit as a Form Type, and have multiple Form Templates for different types of audits, like Permit Audit, Confined Space Audit, Hot Work Audit, etc. This table is unique because multiple rows make up one Form Template. Each row is a different step/question for the Form Template. Every row with the same Form Template name (the 1st column) will be grouped as one Form Template in the Copilot app, and the steps/questions will be ordered based on the Order column. For example, when a user wants to create a new Hot Work Audit in the Copilot app, they will select the Hot Work Audit template, and all of the questions/steps will be pre-populated based on the Form Template.	Create a new Form Template by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table. Multiple rows make up one Form Template. For example, if your Hot Work Audit Form Template has 5 questions, you should enter 5 rows. These 5 rows will have the same Form Template name (the 1st column) and Form Type, but the rest of the columns may be different. When creating a new Form Template, you will have to complete these columns: 1. Form Type is a lookup column where you select an existing Form Type. This will be the same for all rows of a Form Template. 2. Form Template is the name for the template you are creating. This will be the same for all rows of a Form Template. 3. Step/Question is the primary field the user sees in the app. 4. Order is a whole or decimal number that the Steps/Questions are ordered by. 5. Owner is the person/craft/company etc. responsible for this step/question. 6. Status When At This Step is the Form's status when the next step/question to be completed is this one. For example, Waiting on Inspection. 7. Response Choices? is where you select the multiple choice response template that will show for this step/question. This is optional. 8. Response Signature Needed? is where you select if you want to show the signature box or not for this step/question. This will allow the user to reply with any text they want to a step/question.

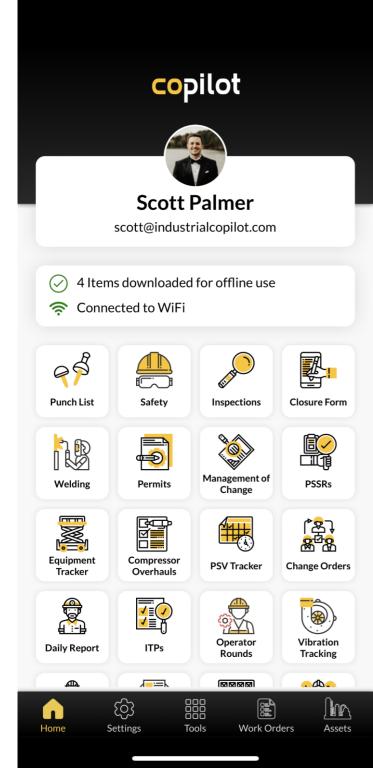
Table Configuration Instructions (this is also in the Copilot Configuration and Data app)



Table Name	What is the table used for?	How do I configure this table?
Custom Columns	The Custom Columns table is a list of Custom Columns available to use in Forms, Assets, or Work Orders. You can use these Custom Columns to make these tables more useful to your organization in the event that a default column doesn't work for your use case.	Create a new Custom Column by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table. When creating a Custom Column, you first need to select which Table the columns will be used on. If you select Forms, you much also select which Form Type these Custom Columns will appear on. You can have different Custom Columns for different Form Types. You can have up to 5 Custom Columns for each Form Type, and up to 5 Custom Columns for Assets and Work Orders.
User Settings	This table shows all of the users that have opened the app at least once. When a new user opens the Copilot app for this first time, a new row is created with their information. You don't need to add users to this table or configure any information in this table.	Create a new User Setting by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table. Since the rows on this table are created automatically when a new user opens the Copilot app for the first time, you don't need to create any rows. The Days Until Auto-Delete of Untouched Cached Items column refers to how long the Copilot app should keep data saved locally in the application if it hasn't been used for a certain number of days. The default is 14 days. The user can change this on the Settings page in the Copilot app, or you can change it here for them. When 14 days (or whatever the user sets it to) has been reached without opening a saved form, that form will be removed from their device's local memory (called cache), but it won't be removed from the master database online. This keeps the device's memory from getting bogged down with too much unused data.
Assets	This table is a list of Assets in your facility that will be used in the Copilot app. Work Orders and Forms will have Assets assigned to them.	Create a new Asset by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table. When mass importing Assets with Excel, it is important that the Asset Type, Unit, and Zone information is typed exactly as they appear in their relevant tables. Since these are lookup columns, the app will assign the appropriate lookup column based on what is in Excel. For example, if your have 101-A as a Unit in the Units table, and you type in 101a in the Excel import table, the app may not associate the two. Upon import, the Asset will be missing a Unit.
Work Orders	This table is a list of Work Orders available in the Copilot app. Forms may have Work Orders assigned to them.	Create a new Work Order by adding a Row to the table (click the New button in the menu bar). You can also mass import Zones by following the same mass import instructions for the Units table. Many of the columns on the Work Order table are lookup columns that point to other tables. When mass importing Work Orders with Excel, it is important that the date typed into Excel is the exact text as in the lookup column's relevant table. The app will assign the appropriate lookup column based on what is in Excel, and if the text doesn't match, that piece of data may not be imported.

Using the Copilot app

- 1. To open the Copilot app, ensure that the application has been shared with the user by following the instructions on page 3 (Copilot app overview)
- 2. You can launch this app in a web browser by logging into make.powerapps.com and searching for the Copilot app under the "Apps" tab. You can also launch the app on a mobile device by downloading the Power Apps app from the Apple App Store or Google Play. Then, log in with your Microsoft credentials and search for the Copilot app.
- 3. The Home screen primarily displays your list of Forms (also called "Tools" in the Copilot app). Click on one of these to navigate to a list or grid viewing showing all Forms of that type. Then, you can create a new Form by clicking the + icon, or open an existing Form.
- 4. Within each Form there are four tabs: Steps, Details, Photos, History. Click on these tabs to navigate to the different aspects of that Form. To view a Step and respond or comment, click on that Step and follow the prompts. To add a new Step, click the + icon and fill out the required information for the new steps.
- 5. When using the Copilot app on a mobile device, there is an offline mode available. Some things, like Assets and Work Orders, will always be viewable offline. Other things like individual Forms need to be downloaded (or just opened, which also downloads that individual Form) for offline access later. The Forms that are downloaded for offline use (as indicated by the check mark icon next to the Form) are updated with the latest information every time the app is re-opened, or every time you return to any Form screen if more than 5 minutes has elapsed. Individual Forms are always checked for the most up-to-date information whenever opening them, as long as you have a current internet connection.
- 6. See the Settings screen for more information about Offline Data. You can view how many Forms are saved for offline use, clear the cache of all Forms stored on your device for offline use, manually look for updates to all Forms stored on your device for offline use, and set your preference for how long to keep untouched offline Forms in your device's local memory.
- 7. Whenever you save a change in the app (for example: creating a new Form, editing a Form, responding to the steps in a Form, adding steps to a Form, or adding a photo), the app will attempt to upload that data to the master data tables in the cloud. If that upload is unsuccessful or you don't have internet, it will store it locally until you reconnect to internet, or the next time you open the app with internet. You can see pending uploads in the Settings screen, and manually submit or delete any pending uploads.
- 8. If a user edits a Form, and another user edits the same Form moments later, the changes of the 2nd user (the last in) will overwrite the changes of the first, assuming they were changing the same thing, or responding to the same step. The History of both updates will still be stored for you to review.



Application Features

- Create your own Tools (Forms) in minutes
- Create Templates for each Form
 - Example: Create multiple Safety Form templates under the Safety category. Each template has its own unique name and steps to complete.

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- Respond to the Steps in each Form
- Take Photos and see History
- View your Work Orders and Assets
- Download items for offline use
- Your data lives in your Microsoft cloud, protected by Microsoft
- Easily access and visualize your data with Power BI
- Configure the mobile app and access your data in our separate configuration app for your admins with step-by-step instructions
- iOS or Android (Phone or Tablet), or Computer

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L	ist Grid		St	ep
101-P2A Cr	rude Charge Pump	\downarrow	1	Wo Coo Yes
Number Unit Template Description	F-000029 101 Standard Punch List Remove scaffold around 101-P2A befo	2/4	2	We Cra Cor
101-E2 Cruc Number Unit	de Preheater Exchanger F-000028 101	$\underline{\downarrow}$	3	Wo Coo
Template Description	Operations Walk Down Steam tracing at outlet of 101-E2 found	1/3	4	W o Ope

Showing 1 - 2

Tools

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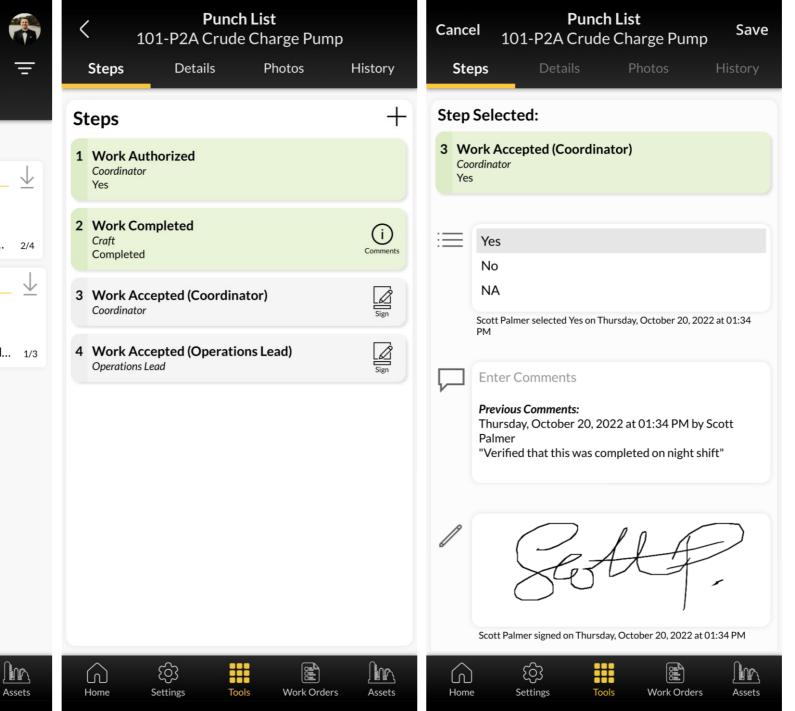
Settings

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Home

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Work Orders



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Forms

- List/Grid view
- Steps
- Details
- Photos
- History

Respond

- Signature
- Choices
- Free Text
- Comment

Assets

101-E2	
Unit Asset Type Description	101 Exchanger Crude Preheater Exchanger
101-P2A	
Unit	101
Asset Type	Pump
Description	Crude Charge Pump

101-T5

Unit	101
Asset Type	Tower
Description	Crude Distillation Tower

102-E7

102 Unit Asset Type Exchanger **Description** Feed/Effluent Exchanger

102-R1

Unit	102
Asset Type	Reactor
Description	Diesel Hydrotreater Reactor

102-V8				
Unit Asset Type Description	102 Vessel Fractional	tor Reflux V	lessel	
Home	දිටු Settings	aaa aaa Tools	Work Orders	Assets

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Asset Details

Asset	101-E2
уре	Exchanger
Jnit	101

Zone А

Description Crude Preheater Exchanger

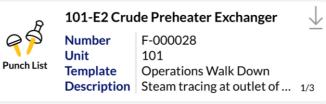
Related Work Orders - 1

101-E2 Crude Preheater Exchanger Work Order 100562 Unit 101 Title **Crude Preheater Exchanger** Description - Remove cover and channel head, send to w...

Asset View

101-E2

Related Forms - 1



Saved offline

History

Punch List # F-000028 Sten #1 (Work Authorized) responded to

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Assets

- See all Assets
- Always available offline

Features

- Asset Details
- Related Work Orders
- Related Forms (Tools)
- History of all Forms tied to Asset

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Work Orders

🔍 Search Asset or Work Order

103-P16A Sulfur Pump		
Work Order	100192	
Unit	103	
Title	Sulfur Pump	
Description	- Remove pump during shutdown per operati	

101-T5 Crude Distillation Tower

Work Order100261Unit101TitleCrude Distillation TowerDescription- Open, Tunnel, Clean, Inspect - Replace Tray...

101-E2 Crude Preheater Exchanger

Work Order	100562
Unit	101
Title	Crude Preheater Exchanger
Description	- Remove cover and channel head, send to w

102-V8 Fractionator Reflux Vessel

Work Order100676Unit102TitleFractionator Reflux VesselDescription- Open, clean, inspect - Remove and clean de...

103-E10 Waste Heat Boiler

Work Order	100757
Unit	103
Title	Waste Heat Boiler
Description	- Open visual inspection ports for tube OD in

Home Settings Tools Work Orders Assets



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Work Order: 100562 101-E2

Location

Work Order100562Asset01-E2DescriptionCrude Preheater ExchangerAsset TypeExchangerUnit101ZoneACategoryExchangerMOC
Number

Work Details

- Title Crude Preheater Exchanger
- **Description** Remove cover and channel head, send to
 - wash pad
 - Perform as-found process inspection
 Pull bundle and clean at wash pad
 - Pull bundle and clean at v
 - Clean snell in place
 - Perform Eddy Current Testing on 20% of tubes
- Notes Exchanger has been underperforming. Process engineer wants to see as-found conditions to evaluate next run length

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Work Orders

- See all Work Orders
- Always available offline

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Features

- Location Details
- Work Details
- Other Details (Assignees)
- Related Forms (Tools)

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	Units		F-000	0029		F	lemove	e scaff	old ar	ound 1	101-P2	A	Punch	List		S	Standa	rd Pu	nch Li	st 1	01342				101-P	2A		
	Zones		F-000	0035		9	OT RT :	#6 Ins	pectio	n			Safety	,		0	Crane	nspec	tion		-			-				
	Asset Types	F-000036				F	Removing refractory in 103-H4						Safety				JHA				101819				103-H4			
	Categories	F-000037				h	Inspection for 102-V28							Inspections				Vessel Inspection				100676				102- V 8		
	Priorities Crafts	F-000038				1	102-R1 closure process when wo						Closure Form				Vessel Closure				100676				102-V8			
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Configuration Application

- See all data tables
- Configure app
- View instructions
- Import/Export data
- Admin access only