



PMWeb Version 8.0

RELEASE NOTES

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Overview

PMWeb version 8.0 features three brand new features—Adaptive Forms, Power BI Reporting, and Multi Factor Authentication—as well as a bunch of enhancements to existing features and bug fixes.

Adaptive Forms

PMWeb has long had a page designer (Classic Form Builder) but version 8.0 introduces an all-new companion tool, Adaptive Forms.

Designer Preview	JSON Editor Translation		\leftarrow	엚	\rightarrow		Form
System Fields General Controls	Property Intake Form If you have questions, please contact Kate Parker at ext. 1155		PM//eb		General		
Radio Button Group Rating Scale Creckboxes Dropdown	1. General Property Information Enter basic information about the property	Enter basic information about the property		¢ .	Description If you have questions, please contact Kate Parker at		
Multi-Select Dropdown	Level * Select *	Status Select	*	*	Show the title Module Toolbox		
Text Controls Containers Matrixes	Record #	Description			Form language Default (English) Editable or read-only Editable Read-only		* Read-only
Misc	Address Property Name Address 1				Width mode Auto Width (in CSS-accept 1720px	Static ed values)	Responsive
	Address 2				Logo in Form Title		

Figure 1 - The New PMWeb Adaptive Form Designer

Adaptive Forms highlights include:

- A brand-new designer interface
- Drag and drop to add controls and move them
- Dozens of controls with detailed configuration options for each
- Use native PMWeb data and create data options on the fly
- Adaptive Forms automatically reformat themselves to fit the screen
- Design one form that automatically works on desktops, laptops, tablets, and phones
- Preview adaptive behavior on various devices with a click, from inside the designer
- Create forms at System, Project Program, Project, Initiative, Location Program, or Location level
- Designer is fast, easy, and intuitive
- Build your own tables in seconds
- Add custom calculations and conditional logic
- Easily create validation rules to guide users completing your forms
- Copy forms quickly and easy
- Use PMWeb Visual Workflow and sign your forms digitally



	Property Intake Form If you have questions, please contact Kate Parker at ext. 1155	PM/eb	
•	1. General Property Information Enter basic information about the property		\bigcirc
	Level * Select	•	

Figure 2 – Immediately Preview your Adaptive Form on Various Devices

	M/eb	() (Portfolio) > Tools > Forms > PROPERTY INTAKE FORM > 001 - Harrision Annex	
		言 ⑦ 001 - Harrision Annex ▼	
	PLANS	MAIN NOTES ATTACHMENTS	WORKFLOW
ß	FORMS	Property Intake Form If you have questions, please contact Kate Parker at ext. 1155	PM//eb
\$	COSTS		
=	SCHEDULES		
Ħ	ASSETS	1. General Property Information Enter basic information about the property	
~	WORKFLOWS	Encel basic mormation about the property	
⊕	PORTFOLIO	Level * Status	
	TOOLS	ACMH - ACME HOSPITAL CAMPUS 🖉 👻 Draft	⊘
9	PROFILE	Record # Description	
Q	SEARCH	001 Harrision Annex	
Э	RECENT		
Þ	UNIVERSITY	Address	
•	EXIT	Property Name Harrison Executive Center	
		Address 1 100 Main Street	
		Address 2 Suite 1	

Figure 3 - Adaptive Forms work just like PMWeb System Forms



Power BI Reporting

With version 8.0, PMWeb is now integrated with Microsoft's advanced reporting platform, Power BI.

		i (Portfolio) > Portfolio > Reports > BI REPORTING CENTER	
P	Meb	V C SQL REPORTS	
		Assets	
- ***	PLANS	Forms A/P Payment Batches Form A/B Payments Form A/B Payments Form	
۵	FORMS	A/P Payments Form A/R Payments Form A/R Payments Form	
\$	COSTS	Lease Administrator Form Name Sample Power BI Report Lease Administrator - Escalations Name Sample Power BI Report Lease Administrator - Overages URL https://app.powerbi.com/MyMicrosoftPowerBI ReportU	DI
=	SCHEDULES	Lease Administrator - Recoveries Lease Effective Rate by Year Location Form RUN	
	ASSETS	Contract Form Contract Form Contract Form Contract Form	
~	WORKFLOWS	Costs Initiative Scenario 1 S3.98M S185M	
	PORTFOLIO	▷ Portfolio 2005	
Ê	TOOLS	Workflows D POWER BI REPORTS	
~	SHORTCUTS	Image: Constraint of the state of the st	
0	PROFILE	Sample Subjective Subjectiv	

Figure 4 - PMWeb / Microsoft Power BI Reporting

Users can easily add reports by right-clicking on one of the new Power BI Report folders. In the dialog, type or paste the Power BI Report URL, upload an optional preview image, and you are done!

Add / Edit Power	BI Report	×
	\otimes	
URL Name Image (•	https://app.powerbi.com/MyMicrosoftPowerBI ReportURL Sample Power BI Report Image: Sample Sector	

Figure 5 - The Add / Edit Power BI Report Dialog

Reports run from the *PMWeb Power BI* folder will enforce all PMWeb security restrictions that are designed in them. If you run the same report from the *Public Power BI* folder, PMWeb security restrictions will not be enforced.



Multi Factor Authentication

To enhance security, system administrators can now require users to enter both a password and a randomly generated access key when logging in. To enable multi factor authentication (MFA) for a user, in Security/Define Users click the Multi Factor checkbox for the user to select it.

GROUP NAME*	PASSWORD	MULTI FACTOR	RESET MFA
er Group 1	•••••	1	RESET MFA

Figure 6 - The New Multi Factor and Reset MFA Columns

The first time the user logs in after MFA has been activated for their account, they will see this dialog:

AUTHENTICATION	
PMWeb needs a second	d form of authentication to log you
	o store and install Microsoft thenticator, scan the QR code
	nd then enter the identification es you in the field below.
Enter Authe	enticator Code
	CANCEL

Figure 7 - The Authentication Dialog

After they scan the QR code, the user will see something like this for PMWeb in the Microsoft Authenticator app:

Authe	enticator + Q :
W	PMWeb 7.5 - My Database ^{JParker} 895 823
€	Dropbox carotxolement@cullocik.com 439 651
Ģ	Facebook carotxdement@cutlook.com 339 813
0	GitHub carobalement@cutlocik.com 889 812

The user will enter the code in the Authentication dialog. As soon as the sixth correct digit is entered, the dialog will close and PMWeb will open.

Enhanced Features

PM/eb

In addition to the new Adaptive Forms and Power BI Reports, PMWeb version 8.0 also includes these enhancements:

- Workflow calendar You can now define calendars of work and off days in the Workflow module. Calendars are then considered when calculating due dates in each Visual Workflow step.
- Enhanced schedule linking When linking in Schedules you can now select XML ZIP files. Plus, we made several improvements to the function and layout of the Link Schedule dialog.
- Generating improvements Now all project- and location-based record types, as well as Classic Custom Forms and the new Adaptive Forms, are available in the From and To fields of the Generating setup page.
- We added Field Level security to:
 - o All Details table fields in all Plans, Costs, and Forms record types
 - o All Header and Details fields in Risk Analysis, Stage Gates, and Timesheets
- You can now use the Notifications tab in Project records
- There is now an option in the Specifications setup page to hide the UOM column for a specification tab
- Header Specifications fields are now available to be shown in layouts in Manager Pages
- Attachments field A new field, Attachments, is available in Manager Page layouts. This field shows the total count of attachments for each record. Please note that individual users might not be able to view all of the attachments shown in the count, due to security restrictions.
- Audit Trail improvements:
 - A new field—"Program/Location Prog."—has been added to the audit trail
 - A new multi-select filter search parameter—"Program(s)—has been added to the Audit Trail page
 - o All lines in Portfolio/Settings/General Settings have been made available to the audit trail

Conclusion

Version 8.0 brings major new and improved features to the award-winning PMWeb platform. Easy and sophisticated custom forms, Power BI, more advanced security, and dozens of improvements and fixes make this the best version yet. Contact PMWeb Support to schedule your upgrade, today.





PMWeb Adaptive Forms

Version 8.0 and Higher

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Designing Adaptive Forms

Introduction

PMWeb's Adaptive Forms let you quickly and easily design, build, and deploy virtually any kind of form within our awardwinning project management platform. Simply drag and drop sophisticated controls onto the design canvas, configure them with a few clicks, and immediately see what your form will look like on various devices. Adaptive forms can then be shared with any PMWeb users you wish. You can build improved versions of the forms you already use or invent entirely new ones.

New Property Form To be submitted with property financial plans				PM	Web
General Information					
Location *	Record # * C10548-9876	Description Holmes Loding House	Visual Workflow Status Draft	⊘	•
Zoning District	PMWeb Location Type	Inspector Carey Woodson	Included in BOMA Budget?	02	
Amenities		Attach Photos and Planning Files	Condition		
Name	Quality Usable?		Excellent	Good	Poor
Fitness center	τ ★ ★ ☆ No Yes 🗎	A CANALAN	Exterior O		
Swimming pool	r ★ ☆ ☆ ☆ No Yes 🗎		Interior	0	
Add Row			Grounds	0	
Next					

Figure 1 - PMWeb Adaptive Form

This document outlines in general terms the process of designing Adaptive Forms and using them within the PMWeb application. For more information, please consult PMWeb online help and your PMWeb implementation consultant or trainer.

The Designer Tab

The general workflow for creating an Adaptive Form is to:

- Click the Form settings button and use the Settings pane to set form basics
- Complete the Title section by typing over the default title and subtitle and selecting a logo
- Drag a control from the Controls tree on the left side of the Design tab
- Drop it on the Design canvas in the center of the page
- With the control still selected, configure it using the Settings pane on the right side of the page

Controls tree	Title section	Design canvas	Form settings	button Set	tings pane
Designer Preview	JSON Editor Translation		S → 2	\rightarrow	Form
System Fields General Controls	New Property Form To be submitted with property financial plans		PM∦/eb	General Title	
 Radio Button Group Rating Scale Checkboxes 	General Information Description		• • •	New Property Form Description To be submitted with property fir	nancial plans
Dropdown Multi-Select Dropdown Yes/No (Boolean)	Basics	Record #*	Descriptio	Show the title	Æ
File Upload Image Picker Ranking	Select	•		Toolbox Form language	*
Text Controls Containers Matrixes	Zoning District	PMWeb Location Type	Inspector	Default (English) Editable or read-only	•
Misc	Select Commercial	▼ Select	•	Editable Width mode	Read-only
	Mixed Use			Auto Static	Responsive

Figure 2 - The Adaptive Forms Designer Tab

Form Level Settings

Key settings at form level include:

- Module Select a PMWeb module from the list. The Adaptive Form will appear under that module in the main menu.
- Form language Select the default language for the form. You can use the Translation tab to translate the form into other languages.
- Width settings Determine the adaptive behavior of the form and its default width
- Navigation Set behavior for navigating page to page
- Field Set default layouts for controls added to the form
- Pages Add and edit pages
- Validation Determine when your validation rules are run
- Logic Create calculated values and custom triggers



Controls

The Controls tree is organized by category.

System Fields

- Level Adaptive forms can be assigned to System, Project Program, Project, Initiative, Location Program, or Location level. The choice you make here determines the most basic security for the form as well as what types of PMWeb data you can use on it.
- System List Drop this control on the form and then use the System section in the Settings pane to link to an existing PMWeb list
- Status, Record Number, and Description are standard fields that appear on most other PMWeb record types

General Controls

- Dropdown Use this control to define a list of values within the form for users to select from. If you want values from predefined PMWeb lists, use the System List control in the System Fields section.
- Multi-Select Dropdown The same as above but with the option for users to select multiple values
- File upload Prompt users to upload one or more files and use settings to determine which file types will be accepted
- Checkboxes, Yes/No switches, radio buttons, and many more general controls are available

Text Controls

• Add single-line, memo, and grouped text fields to the form

Containers

• These are panels that let you group controls on the page

Matrixes

- Single-Select Matrix Great for ratings tables, with multiple lines and multiple columns to select from
- Multi-Select Matrix Create tables with a fixed number of lines and multiple columns of different data types
- Dynamic Matrix The same as the Multi-Select Matrix, but allowing the user to add lines

Misc

- Expression Display custom calculations
- Image Display a preselected image
- Signature Provide a digital block for the user to write a signature

The Settings Pane

To use the settings pane, click on a control in the design canvas to select it, and then use the options in the pane to configure the control. The settings that appear in the pane vary, depending on the control that is selected in the canvas. You can also click the Form Settings button to view and edit form-level settings in the pane.



The Preview Tab

Use this tab to preview what your form will look like on various devices. You can also practice entering data in the controls to see how they will behave.

esigner	Preview	JSON Editor	Translation		Preview button:
		erty Fori			PM veb
	e ral Info i	rmation			
	cation * Select		Ţ	Record # *	
	ccription			Vieual Workflow Status	

Figure 3 - Immediately Preview your Adaptive Form on Various Devices

The tab includes these Preview buttons:

- Device Type Select from a list of devices
- Orientation Switch between portrait and landscape orientation on the same device
- Invisible Elements Show or hide invisible controls

The JSON Editor Tab

All of the data in a PMWeb Adaptive Form is saved in a single data file in the JSON format. That data appears in the JSON tab. You can copy the data and then paste it into a new form to make an exact copy.

The Translation Tab

Language columns Import/Export buttons Languages pane					ges pane	
Designer Preview	JSON Editor Translation	All Pages	Used Strings Only		\rightarrow	Language Settings
	Default (English)	Français	简体中文		Languages	Ð
Title	New Property Form	Translation	Translation	1	- curbaoges	
Description	To be submitted with property financial plans	Translation	Translation		 Default (English) Français 	
Logo (URL or base64- encoded string)	 w0KGgoAAAANSUhEUgAAAlg AAADICAIAAAHM+jh3AAAABn	Translation	Translation		✓ 简体中文	
	RSTIMA/wD/AP83WBt9AAAAC XBIWXMAAC4jAAAuIwF4pT92 AAAACXRFWHRDb21tZW50AA CJK00GAAAgAEIEQVR4nOxdC XBIJId7/Stk/D0201000000			-	Ac	d language button
	XRURdZuFkkQQQZwwaODolC KcwQ84DIKhADBYQbxZzXOsI					

Figure 4 - The Translation Tab

Click the Add Language button and select a language from the list to add a translation. A new column for that language automatically appears in the Language columns section, alongside the default. For each element in the language column, type a translation. You can also use the Import/Export buttons to translate via .csv files.

The Assign Permissions Tab

Use this tab to assign security rights to PMWeb users, by group or individually.

	(<u>Portfolio</u>) > Tools > Forms > NEW PROPERTY					
	3 C10548-9876 - Holmes Loding House •	🖺 🕂 I+ 🗊 🗖 I+ Language [n 💌			
PLANS	Main	NOTES		ATTACHMENTS		
FORMS	New Property Form				DM	
\$ COSTS	To be submitted with property Form To be submitted with property financei plans					
ASSETS	General Information					
	Basics					
WORKFLOWS						
	Location *	Record #*	Description	Visual Workflow Status		
TOOLS	ACMH - ACME HOSPITAL CAMPUS	C10548-9876	Holmes Loding House	Draft	⊘ .*	
	Zoning District	PMWeb Location Type	Inspector	Included in BOMA Budget?		
Q SEARCH	Mixed Use 🖉 👻	Medical	🖉 👻 Carey Woodson	No Yes		
	Amenities		Attach Photos and Planning Files	Condition		
EXIT	Name	Quality Usable?		Excellent	Good Poor	
	Fitness center	* ★ ★ ☆ No Yes		Exterior	0	
	Swimming pool	r★☆☆☆ No Yes		Interior	o 💿	
	Add Row			Grounds	•	
	Next					
	,					

Figure 5 - Adaptive Forms work just like PMWeb System Forms





PMWeb Multi Factor Authentication

Version 8.0 and Higher

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Introduction

If Multi Factor Authentication (MFA) is enabled for a user, they are required to provide both a password and a randomly generated access code when logging in to PMWeb. MFA does not require separate licensing. If you have PMWeb version 8.0 or higher you can enable it by user.

Administering Multi Factor Authentication

Enabling MFA by User

- 1. Navigate to Security/Define Users
- 2. In the Details table, click the Multi Factor checkbox for each desired user

GROUP NAME*	PASSWORD	MULTI FACTOR	RESET MFA
er Group 1		1	RESET MFA

Figure 1- The Multi Factor and Reset MFA Columns

The next time the user tries to log in, and every time thereafter, they will be required to follow the steps described below.

Notes

- MFA can be turned off at any time by unchecking the Multi Factor checkbox
- MFA can be used with LDAP users
- MFA cannot be used with SAML users

Resetting MFA by User

If you click the reset MFA button, the current connection between the user's Microsoft Authenticator account and the PMWeb database will be deleted. The next time that the user tries to log in to PMWeb they will be prompted to establish a new connection by scanning the QR code again.

Logging in with Multi Factor Authentication

Logging in the First Time

The first time you log in to PMWeb after MFA is enabled for your user account, you are required to establish a connection between PMWeb and Microsoft Authenticator. This section describes that process.

On the PMWeb Login page, select a database (if applicable), enter, or select your user name, enter your password, and then click the Login button, as usual. If MFA has been enabled for your account, and if this is your first login since then, you see this dialog:



AUTH	ENTICATION
i A a	PMWeb needs a second form of authentication to log you n. Please visit your app store and install Microsoft Authenticator. Open Authenticator, scan the QR code above using the app, and then enter the identification code Authenticator gives you in the field below.
	Enter Authenticator Code
	CANCEL

Figure 2 - The Authentication Dialog - First Login Version

Follow these steps:

- On a mobile device, download the Microsoft Authenticator app. The app is available for both iOS and Android operating systems.
- Open Authenticator
- Click the plus button to add a new account
- You are prompted to select what kind of account you are adding. Select "Personal account".
- You are prompted to sign in with Microsoft or scan a QR code. "Select Scan a QR code".
- Scan the QR code in the Authentication Login dialog
- You will then see a PMWeb account added to the Authenticator screen. The account will look something like this:

Authe	enticator + Q	:
W	PMWeb 7.5 - My Database ^{JParkar} 895 823	
•	Dropbox carokolement@outlook.com 439 651	
Ð	Facebook carotxclement@outlook.com 339 813	
0	GitHub carotxclement@outlook.com 889 812	

Figure 3 - Microsoft Authenticator with a PMWeb Account



• In the PMWeb Login page, type the 6 digit code into the Authentication dialog. When the sixth correct digit is entered, the Authentication dialog will automatically close and PMWeb will open.

Notes

PM/eb

- A new code is automatically generated by Authenticator every 30 seconds. Only the code currently showing in Authenticator will open PMWeb.
- Authenticator accounts are specific to one PMWeb database. If you need to access multiple PMWeb databases, you will need to create an Authenticator account for each and be sure to enter the code for the correct database when logging in.
- If an incorrect code is entered, you will see an error message:

AUTHENTICATION	
Please enter your authorization code	
111111	
That didn't work. Please try again.	
	CANCEL

Figure 4 - Authentication Dialog Error Message

Subsequent Logins

In subsequent logins, if PMWeb sees that you have an Authenticator account for the database and user name combination, you see a different version of the Authentication dialog:

AUTHENTICATION	
Please enter your authorization code	
Enter Authenticator Code	
	CANCEL

Figure 5 - The Authentication Dialog - Regular Version

Follow these steps:

- Open the Authenticator app
- Note the 6 digit code for the account
- In the PMWeb Login page, type the 6 digit code into the Authentication dialog. When the sixth correct digit is entered, the Authentication dialog will automatically close and PMWeb will open.