



Pro-development with Power Pages

Powerful Devs Conference 2023

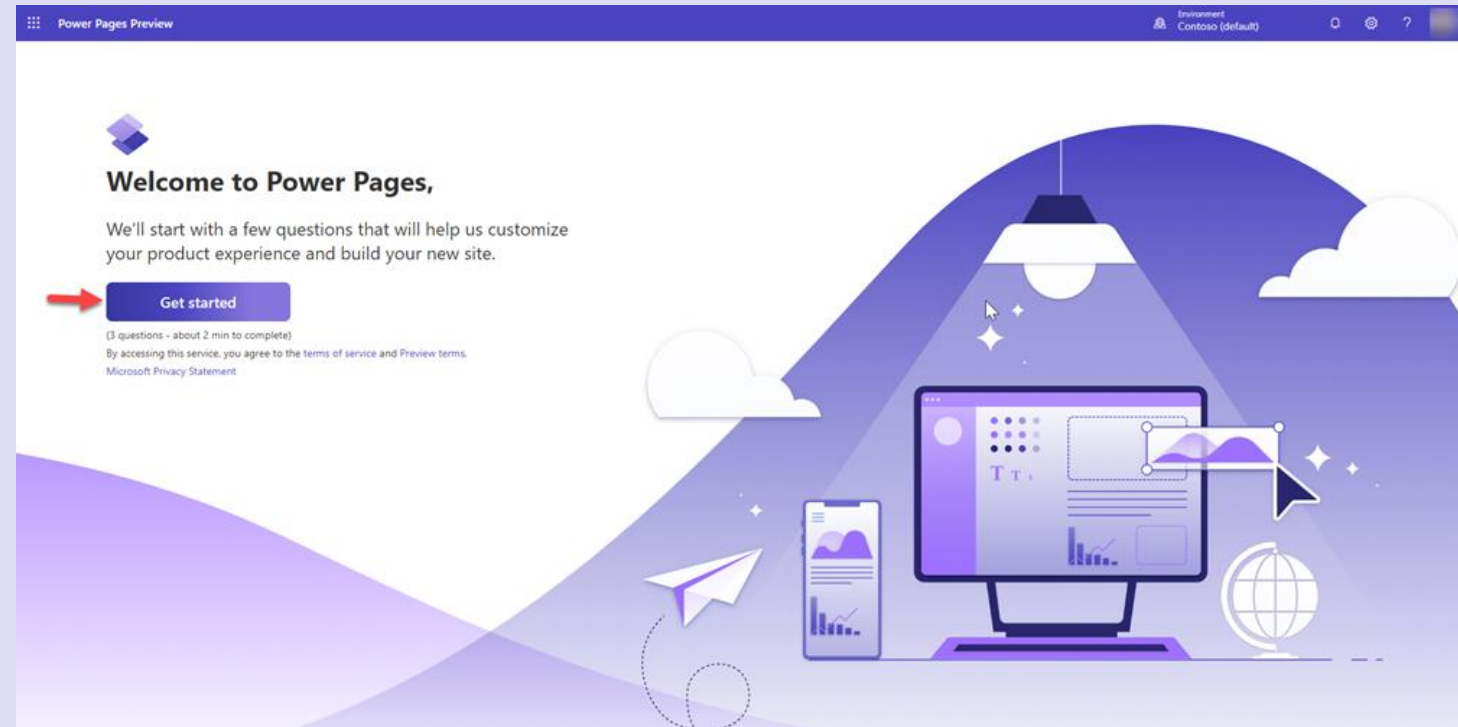
Sandeep Dhanrajani – Principal PM, Power Pages

What is Power Pages?

Microsoft Power Pages is a secure, enterprise-grade, low-code software as a service (SaaS) platform for creating, hosting, and administering modern external-facing business websites.

More information:

<https://learn.microsoft.com/power-pages/introduction>





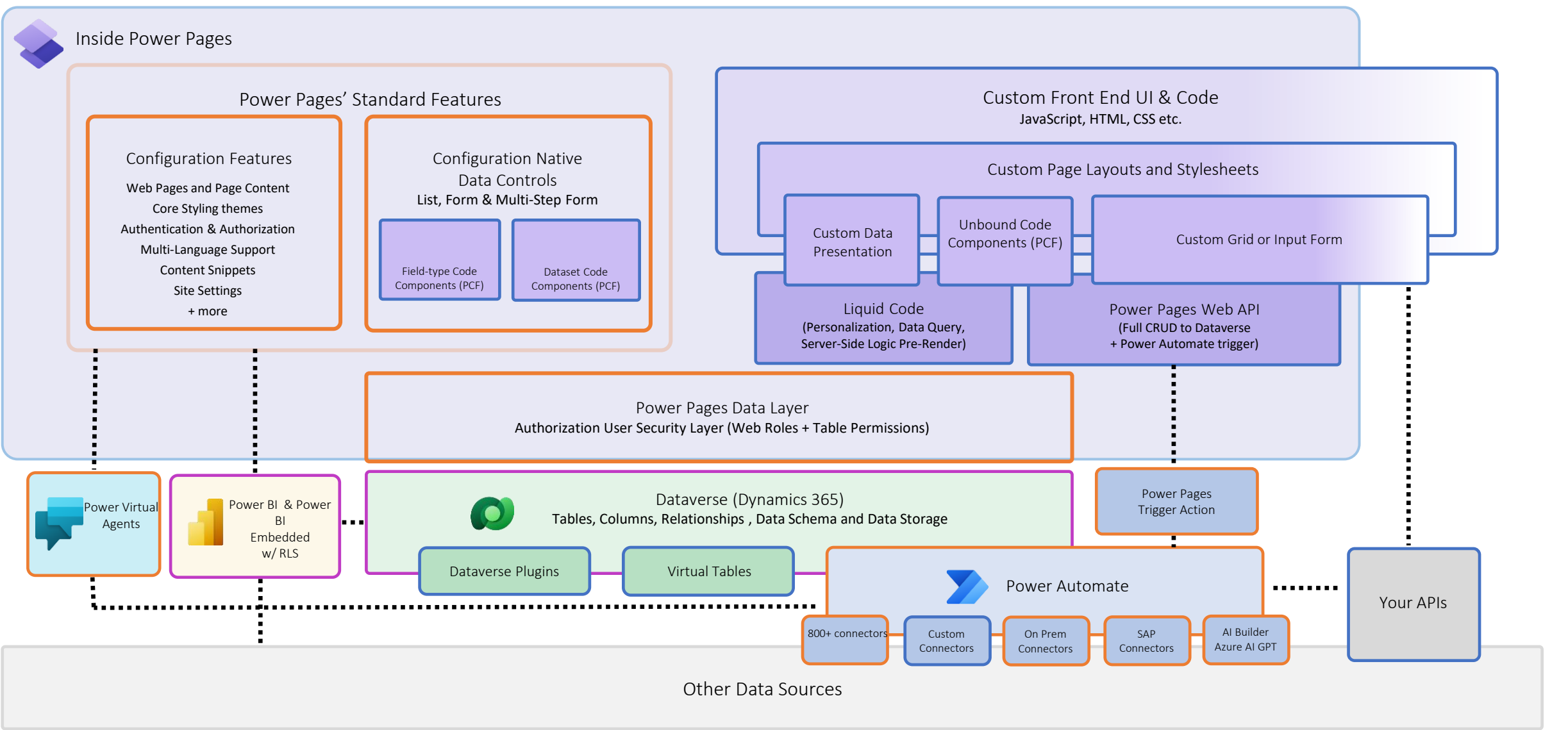
Power Pages Fusion Teams

Website development by team members
of all tech fluencies



Microsoft Power Pages: Low Code to Pro Code Capabilities

NO/LOW CODE 
PRO CODE 



Developer Productivity

- ✓ Visual Studio Code Extension
- ✓ Command Line Interface
- ✓ Visual Studio Code for Web Integration

Design studio | Power Pages

https://make.preview.powerpages.microsoft.com/e/d92861b6-6a16-41fa-ba29-8f6457c70c24/sites/b94c7520-3ae3...

Power Pages

Environment PowerPortals

Akme marketing - Private - Saved

Feedback Preview Sync

Pages

+ Page

Main navigation

Home

Pages

Contact us

Other pages

Access Denied

Page Not Found

Company name

Create an engaging headline, welcome, or call to action

Add a call to action here

Edit code

Build rich experiences and implement advanced scenarios

- ✓ Rich, consistent & reusable experiences - Code Components (PCF)
- ✓ Familiar web dev languages and frameworks - HTML, CSS, JS, Liquid, WEB APIs
- ✓ Visual Studio Code for Web Integration

Power Pages

Environment

GS

Site 1 - Private - Saved

Feedback Preview Sync

Pages

Styling

Data

Set up

...

Pages

+ Page

Main navigation

Home

Pages

Contact us

Other pages

Access Denied

Default Offline Page


Page Not Found

Contoso Ltd.

Home | Pages | Contact us | Search | John Doe

Create an engaging headline, welcome, or call to action

Add a call to action here



Introduction section

Create a short paragraph that shows your target audience a clear benefit to them if they continue past this point and offer direction about the next steps

Create Purchase Request

This website uses sample data for illustration purposes. You can create pages using any of the multiple templates available.

Step 1 - Drafted By Details ✓

Step 2 - Requestor and Approval ✓

Step 3 - Request Details

Step 4 - Request Line Items

Step 5 - Signature

Request Details

Request Details


Request Category

Legal ▾


Request Type

Other ▾


Org Code




Requesting Office



Funding office



Fiscal year



Previous

Next


Use familiar web technologies – HTML, CSS (Bootstrap), JS, Liquid, WEB APIs


The image shows a Visual Studio Code editor window with the following components:

- Explorer Panel:** Displays a file tree for a project named "PORTALS-CAT-DEV-2-PORTAL---SUPPLIERPORTALDEV2". The tree includes folders like "ad-template", "blank-page", "breadcrumbs", "category", "category-topic", "child-navigation", "default-studio-template", "faceted-search---facets-template", "faceted-search---main-template", "faceted-search---paging-template", "faceted-search---results-template", "faceted-search---sort-template", "footer", "full-page", "full-page-without-child-links", "header", "home", "languages-dropdown", "layout-1-column", "layout-2-column-wide-left", "layout-2-column-wide-right", "layout-3-column", "listing", "page", "page-copy", "page-header", "page-with-side-navigation-(2-columns)", "page-with-side-navigation-and-sidebar-...", "pagination", "poll", "poll-template", "portal-web-api-purchase-request-li...", "portal-web-api-purchase-request-...", "portal-web-api-purchase-request-line...", "portal-web-api-wrapper-ajax", "portal-web-api-wrapper-ajaxwebtem...", "power-virtual-agents", "purchase-request", "random-ad", "random-poll", "search", "search-results", "side-navigation", and "sitemap".
- Editor Panel:** Shows the file "Portal-Web-Api-Wrapper-AJAX.webtemplate.source.html". The code is a JavaScript script that defines a "safeAjax" function. The function uses jQuery's "Deferred" object to handle AJAX requests. It includes a "shell.getTokenDeferred()" call to retrieve a token, which is then used in the "headers" of the AJAX request. The function also includes a "validateLoginSession" call and a "fail" handler for token failure. The script is wrapped in a "webapi" namespace and a "jQuery" namespace.
- Terminal Panel:** Shows the command "script" being executed.
- Bottom Panel:** Displays the "Pluralsight Dashboard" with a status bar showing "Ln 1, Col 1", "Spaces: 4", "UTF-8", "CRLF", "HTML", "Go Live", "4 Spell", and "4".

```
1 <script>
2 (function (webapi, $) {
3     function safeAjax(options) {
4         var deferredAjax = $.Deferred();
5
6         shell.getTokenDeferred().done(function (token) {
7             // add headers for AJAX
8             if (!options.headers) {
9                 $.extend(options, {
10                     headers: {
11                         "_RequestVerificationToken": token
12                     }
13                 });
14             } else {
15                 options.headers["_RequestVerificationToken"] = token;
16             }
17             $.ajax(options)
18                 .done(function (data, textStatus, jqXHR) {
19                     validateLoginSession(data, textStatus, jqXHR, deferredAjax.resolve);
20                 })
21                 .fail(deferredAjax.reject); //AJAX
22             deferredAjax.resolveWith(this, arguments); // on token failure pass the token AJAX and args
23         });
24         return deferredAjax.promise();
25     }
26     webapi.safeAjax = safeAjax;
27 })(window.webapi = window.webapi || {}, jQuery)
28 </script>
```

```
/*User object(contact entity) is a global objet in the portal so there is no need to do a request param by id to set the entity object
Always declare JavaScript variables with var,let, or const.
The var keyword is used in all JavaScript code from 1995 to 2015.
The let and const keywords were added to JavaScript in 2015.
If you want your code to run in older browser, you must use var.
With liquid, you can declare JS variables and set them to liquid entity object values
*/
var userLastName = '{{user.lastname}}' //declaring JS variable as the liquid object value for the logged in user attributes
var userFirstName = '{{user.firstname}}'
//var userMiddleName = '{{user.middlename}}'
var userEmail = '{{user.emailaddress1}}'
var userPhoneNumber = '{{user.telephone1}}'
```


 Contoso Ltd

Home | Purchase Request | Admin Tools | Contact us |  | Donovan Goode ▾


Home > Purchase Request

Purchase Request

Search



New Purchase Request

Purchase Request Title 	Request Category	Request Type	Fiscal year	Purchase Request Line Items Total	Request Line Items Total Cost	Initial Purchase Request Manager	Purchase Request Portal Requestor	Created On
There are no records to display.								

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Create Purchase Request

This website uses sample data for illustration purposes. You can create pages using any of the multiple templates available.

Step 1 - Drafted By Details ✓

Step 2 - Requestor and Approval

Step 3 - Request Details

Step 4 - Request Line Items

Step 5 - Signature

Requestor and Approval

Initial Approval Manager

Initial Purchase Request Manager



Requestor Information

Request For Myself

☐ No☒ Yes

Requestor First Name

Donovan

Requestor Last Name

Goode

Requestor Phone Number

Requestor Email

dgoode@pagescatdev1.onmicrosoft.com

[Previous](#)[Next](#)

Admin Tools



Request Line Item	Model Number	Item Description	Unit Cost	Purchase Quantity	Total Cost	Portal Requestor
Chargers	Surface Pro Charger, 65W 15V 4A	Surface Pro Charger, 65W 15V 4A Power Adapter for Microsoft Surface Pro 3/4/5/6/7/X. Compatible for Both Microsoft Surface Book Laptop/Tablet. New Surface Pro Charger with USB Charging Port (THIS IS NEW TEXT BEING ADD IN-LINE AS I AM TYPING ON THE ROW)	<div>✕</div> <div>✓</div>			
Microsoft Surface Dock for Surface Pro and Surface Book	Microsoft Surface Dock for Surface Pro and Surface Book	General Information Get right to work Instantly transform your Surface into a desktop PC. Plug in the Surface Connect cable to charge your device and access external monitors, keyboard, mouse, and more. Find the perfect viewing angle, or position your device to take advantage of the robust pen capabilities. All the ports you need With two high-definition video ports, a Gigabit Ethernet port, four high-speed USB 3.0 ports, and an audio output, you've got all the connections you need in a sleek, compact design. Lightning fast with minimalist design Surface Dock uses Surface Connect technology which enables high-speed transfer of video, audio, and data over a single cable, keeping your desk clutter-free. It also has a Gigabit Ethernet port giving you a fast, reliable connection to your network. Easy setup Surface Dock is quick and easy to set up. Connect your peripherals to Surface Dock and then attach the magnetic Surface Connect cable to your device. It's that easy. Technical Information Connectivity Technology: Wired Device Supported: Notebook/Tablet PC Interfaces/Ports Host Interface: USB 3.0 Audio Line Out: Yes Total Number of USB Ports: 4 Number of USB 3.0 Ports: 4 Network (RJ-45): Yes DisplayPort: Yes Physical Characteristics Height: 1.2" Width: 5.1" Depth: 2.4" Weight (Approximate): 1.21 lb Miscellaneous Compatibility: Microsoft Tablet PC/Notebook: Surface Go Surface Laptop Surface Laptop 2 Surface Pro Surface Pro 3 Surface Pro 4 Surface Pro 6 Surface Pro 7 Surface Pro X Surface Book Surface Book 2 Warranty Limited Warranty: 1 Year Microsoft Surface Dock for Surface Pro and Surface Book We aim to show you accurate product information. Manufacturers, suppliers and others provide what you see here, and we have not verified it. See our disclaimer Specifications Brand Microsoft Manufacturer Part Number	<div>✕</div> <div>✓</div>			
Stuff	S		<div>✕</div> <div>✓</div>			
Surface Dock	Surface Dock 2	Surface Dock 2 Wish list Bring more power to your laptop. Surface Dock 2 transforms your Surface into a desktop PC with a 199W power supply to charge most Surface devices, plus USB...More The Microsoft Store Promise for Surface Shop with confidence at Microsoft Store. We're offering 60-day returns on Surface products, plus 90 days of free support, and more to help you get the most from your new device.* Compatibility Surface Pro 7+ Surface Pro 8 Surface Laptop Studio Surface Laptop 4 Surface Book 3 (13.5" & 15") Surface Laptop 3 Surface Pro 7 Supports dual 4k monitors at 60Hz: Surface Go 3 Surface Laptop Go Surface Book 2 Surface Laptop 2 Surface Laptop Surface Pro X Surface Pro 6 Surface Pro (5th Gen) Surface Go 2 Surface Go Not compatible with: Surface Pro 4 Surface Pro 3 Surface Book (1st Gen) Dimensions 5.12" x 2.75" x 1.18" (130 mm x 70 mm x 30 mm) Weight 1.13 lb (515 g) Connections 199 W power supply Supports dual 4K at 60 Hz Surface Connect cable (80 cm) 2 front-facing USB-C® (10 Gbps) (15 W) 2 rear-facing USB-C® (10 Gbps) video display enabled (7.5 W) 2 rear-facing USB-A 3.2 (10 Gbps) (7.5 W) 3.5 mm in/out audio jack 1 gigabit Ethernet Security lock support (Kensington compatible) Warranty1 1-year limited warranty	<div>✕</div> <div>✓</div>			

Deletes Record



Updates record

ALM

Power Pages

Build and Deploy

Create CI/CD pipelines with GitHub Actions or use Azure DevOps pipelines



GitHub Actions

ALM Powered by Azure DevOps

Initiate

Getting started, faster



Initial Build Pipeline instantiates pristine Development Environment daily

Build

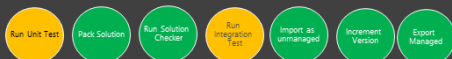
Build and Walk away



Build Pipeline Automates manual steps. No more upload to Solution checker and manually export solution, unpack and push to repo

Release

Automated, Predictive, Repeatable



Automated Release Pipeline removes manual steps. Weekly, daily or hourly releases becomes the new standard


Powered by Azure DevOps

GitHub Flow with GitHub Actions



Thank you!

To learn more about pro-development with Power Pages – Scan the QR Code or visit <https://learn.microsoft.com/power-pages/>

 Microsoft

Learn

Documentation

Training

Certifications

Q&A

Code Samples

Assessments

Shows

Events

Power Platform

Get started

Products

Guidance

Troubleshooting

Resources

Search

Sign in

Microsoft Power Pages documentation

Use Power Pages to create external-facing websites that allow users outside their organizations to sign in with a wide variety of identities, create and view data in Dataverse, or even browse content anonymously.

OVERVIEW

Introducing Power Pages

GET STARTED

Try Power Pages

VIDEO

Getting started videos

TRAINING

Power Pages training

Getting started

Overview of Power Pages

- What is Power Pages
- Power Pages capabilities
- Create and manage Power Pages sites
- How Power Pages security works
- Architecture and security white papers
- Power Pages community

Tutorials

Follow step-by-step tutorials with videos to learn about Power Pages

- Tutorials and training videos overview
- Design your home page
- Set up your brand kit
- Create a page with a list
- Create a page with a simple form
- Configure site authentication

Design and build

Create sites using Power Pages

- Use the new design studio
- Pages workspace: Create and design pages
- Styling workspace: Theme and style your site
- Create Power Pages sites with templates
- Use the Portal Management app
- Use Visual Studio Code and Power Platform CLI
- Plan your Power Pages project

Connect to Dataverse

Extend Dataverse capabilities with Power Pages

- Dataverse and Power Pages
- Use the data workspace
- Add lists to pages
- Add basic forms to pages
- Add multistep forms on pages
- Secure your data with table permissions
- Create, update, and view Dataverse information

Customize and extend

Use professional developer tools and methods

- Use Liquid
- Web templates
- Portals web API
- Code components
- Advanced configuration

Security

Protect your sites and data

- Power Pages security overview
- Set up authentication
- Configure web roles
- Configure table permissions
- Architecture and security white papers

Go live

Launch your site

- Go live checklist
- Assign licensing
- Overview of Power Pages ALM

Administer and monitor

Administer and monitor your Power Pages sites

- Use the portals admin center
- Troubleshooting and diagnostics
- Maintain and update Power Pages
- Review consumption



<https://learn.microsoft.com/power-pages/>