

# Designing and Developing Power Apps Portals



# Agenda

- Creating a Power Apps Portal
  - Adding and Editing Portal Content
  - Writing Liquid Template Language Expressions
  - Understanding Portal Configuration
  - Configuring Portal Security
  - Publishing Dynamic CDS Content



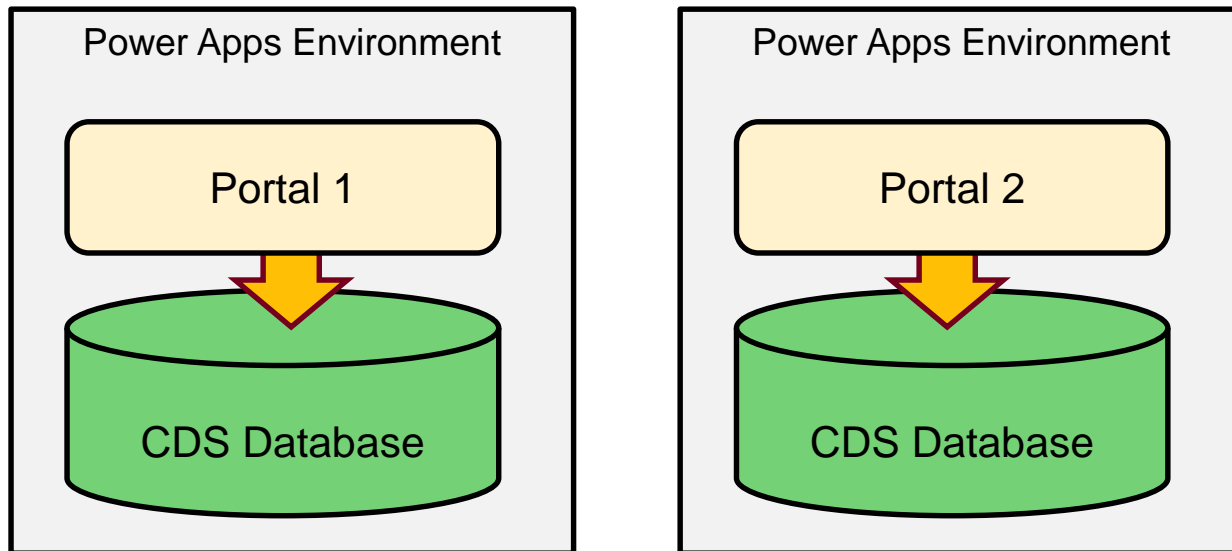
# Power Apps Portals

- Power Apps portals provide web development platform
  - Create websites for anonymous users and/or authenticated user
  - Allows for registration and authentication of internal users
  - Allows for authentication through LinkedIn, Facebook, Twitter, etc.
- Portal content managed by business users
  - Portal Editor used to add pages and author content
  - Portal Management app created along with portal
- Portal can be customized by web developers
  - Liquid template language used to add dynamic content
  - Developers can surface data from CDS entities
  - Developers can extend portal with custom page templates



# Power Apps Portal Architecture

- Power Apps portals built on Common Data Service
  - You must create an environment with CDS database to create portal
  - CDS used to track data for pages, templates and site content
  - Creating portals triggers installation of several ADX solutions



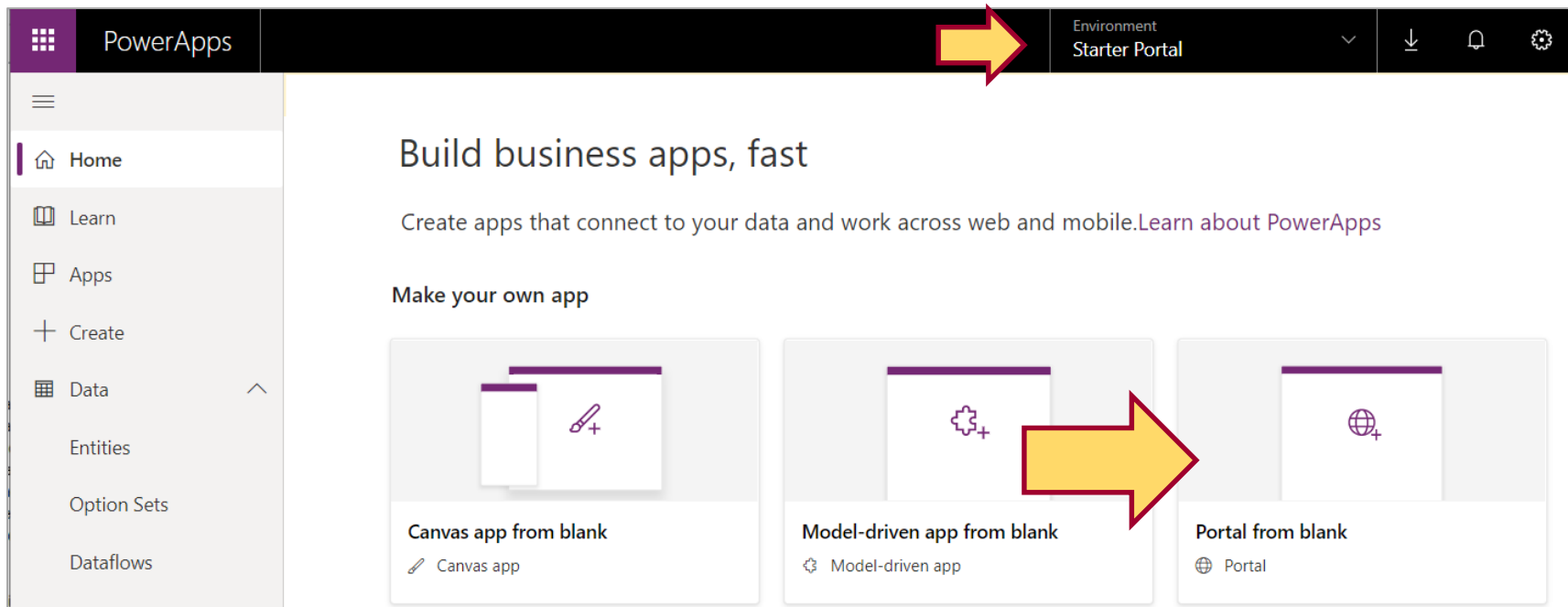
# Portal Templates

- **Customer self-service portal**
  - Provides customers with access info, support resources and order status
- **Partner portal**
  - Provides portal for with resellers, distributors, suppliers and/or partners
- **Employee self-service portal**
  - streamline common tasks and allows for sharing resource
- **Community portal**
  - Facilitates interactions between customers and experts
- **Portal from blank**
  - Minimum portal with a small set of sample pages
  - The **ONLY** template available unless you have a Dynamics 365 license



# Creating a New Power Apps Portal


- New portal created using Power Apps Maker Portal
  - Select your target environment
  - Create portal using **Portal from blank** template




# Providing Portal Provisioning Data

- Portal requires Name and unique address

**Portal from blank**



Create a website to share data with external and internal users. This template comes with sample pages to get you quickly started. [Learn more](#)

 Portal

① We'd need to install certain prerequisites for try portals, use an environment with them installed or create a new one using [Create new environment](#)

Name \*  
Teds Starter Portal

Address \* ①  
TedsStarterPortal

✓ TedsStarterPortal.powerappsportals.com

Language  
English

By clicking on Create, you agree to our [Privacy Statement](#) and the [Terms of service](#).

Create Cancel

Name \*

Teds Starter Portal

Address \* ①

TedsStarterPortal .powerappsportals.com

✓ TedsStarterPortal.powerappsportals.com

Environment				
Starter Portal	▼	↓	🔔	⚙️ ?
<div>Portal provisioning in progress</div> <p>Your portal Teds Starter Portal is currently being provisioned and this can take time. You'll be notified via Notifications pane once it is provisioned.</p>				





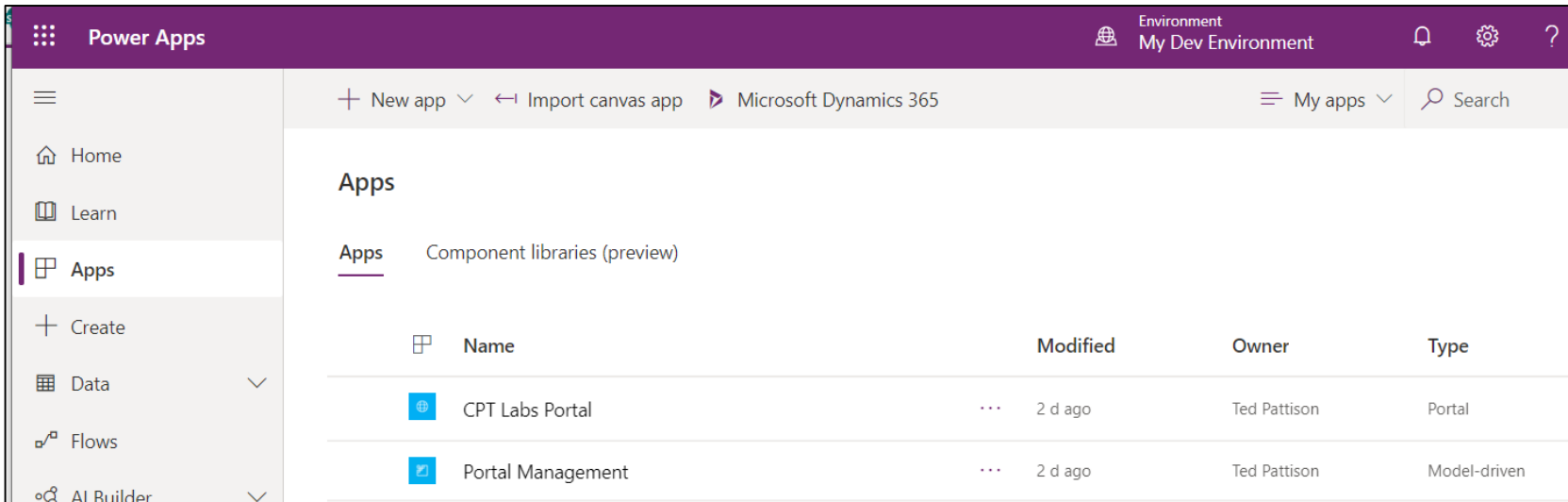
**DEMO**

# Creating a New Power Apps Portal



# Portal Apps

- Provisioning a portal creates two applications
  - Power Apps portal
  - Model-driven app named **Portal Management**



The screenshot shows the Power Apps interface. The left sidebar contains navigation options: Home, Learn, Apps (selected), Create, Data, Flows, and AI Builder. The main area displays the 'Apps' section with a table of applications. The table has columns for Name, Modified, Owner, and Type. Two applications are listed: 'CPT Labs Portal' and 'Portal Management', both created 2 days ago by Ted Pattison. The 'Portal Management' app is identified as a 'Model-driven' app.

Name	Modified	Owner	Type
CPT Labs Portal	2 d ago	Ted Pattison	Portal
Portal Management	2 d ago	Ted Pattison	Model-driven



# Launching the Portal

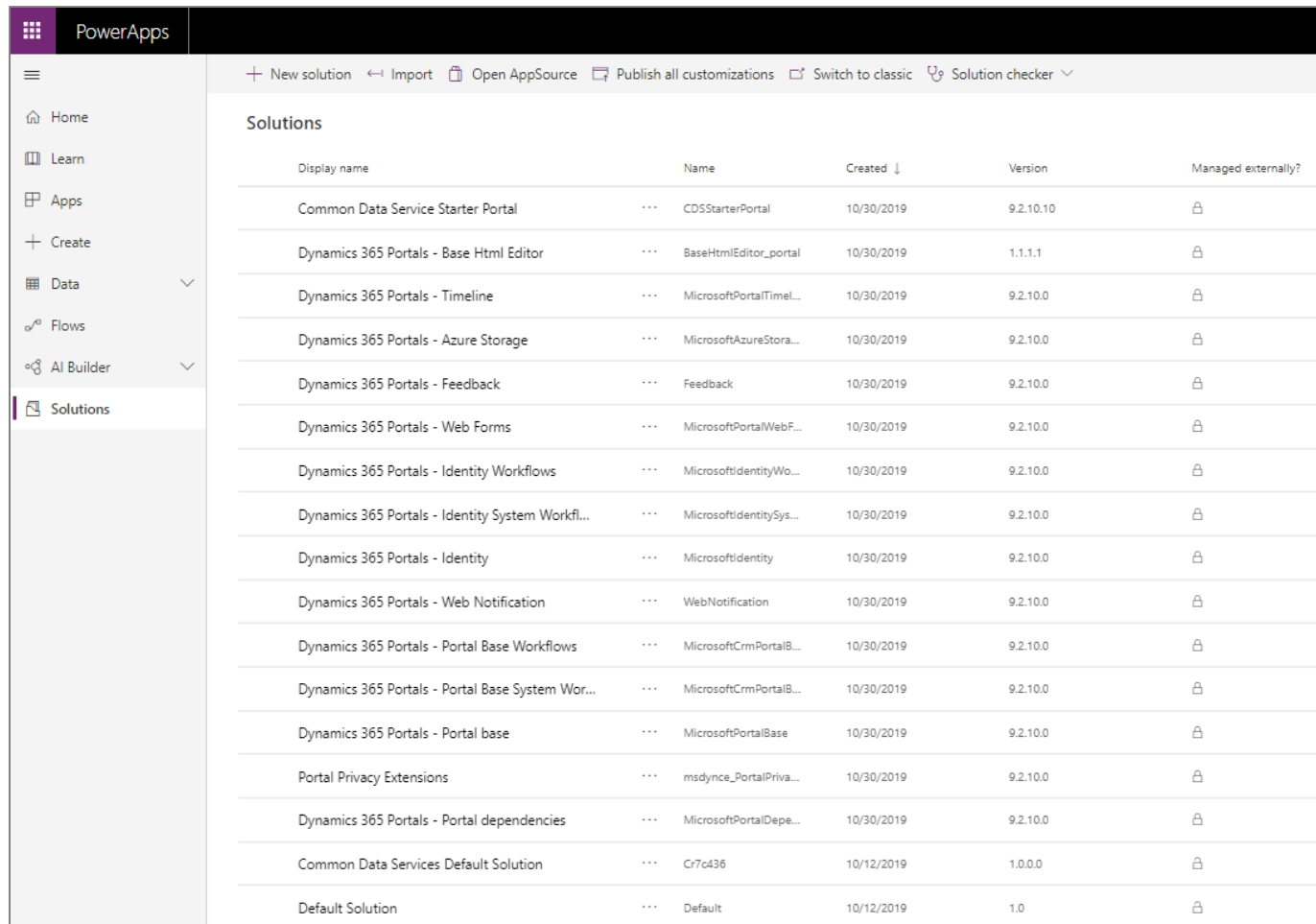
The image shows the Power Apps interface on the left and a web browser window on the right. The Power Apps interface has a purple header with the 'Power Apps' logo and a user profile 'Environment My Dev E'. A sidebar on the left contains navigation links: Home, Learn, Apps (selected), Create, Data, and Flows. A yellow arrow points from the 'Apps' link to the 'Browse' button in the top navigation bar, which also includes 'Share', 'Settings', and 'Details'.

The web browser window displays the 'Home - Starter Portal' page. The address bar shows the URL 'tedsstarterportal.powerappsportals.com'. The page header for 'Contoso Ltd' includes links for 'Home', 'Services', 'About us', and 'Sign in'. The main content area features a large blue banner with the text 'Build your website!' and a subtext 'This is a sample landing page for your website to get started with.' Below the banner is a section titled 'Getting started' with the text 'This is a dummy text. You can start editing directly here.' At the bottom, there are three placeholder cards, each with an icon and the text 'Sample title' followed by 'This is a dummy text. You can start editing directly'.



# Solutions Installed to Support Portals

- Creation of portal triggers installation of ADX solutions



The screenshot shows the PowerApps interface with the 'Solutions' tab selected in the left-hand navigation pane. The main area displays a table of installed solutions. At the top of the table area, there are buttons for '+ New solution', 'Import', 'Open AppSource', 'Publish all customizations', 'Switch to classic', and 'Solution checker'. The table has columns for 'Display name', 'Name', 'Created', 'Version', and 'Managed externally?'. The solutions listed include various Dynamics 365 Portal components and extensions.

Display name	Name	Created ↓	Version	Managed externally?
Common Data Service Starter Portal	CDStarterPortal	10/30/2019	9.2.10.10	🔒
Dynamics 365 Portals - Base Html Editor	BaseHtmlEditor_portal	10/30/2019	1.1.1.1	🔒
Dynamics 365 Portals - Timeline	MicrosoftPortalTimel...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Azure Storage	MicrosoftAzureStora...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Feedback	Feedback	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Web Forms	MicrosoftPortalWebF...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Identity Workflows	MicrosoftIdentityWo...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Identity System Workfl...	MicrosoftIdentitySys...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Identity	MicrosoftIdentity	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Web Notification	WebNotification	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Portal Base Workflows	MicrosoftCrmPortalB...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Portal Base System Wor...	MicrosoftCrmPortalB...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Portal base	MicrosoftPortalBase	10/30/2019	9.2.10.0	🔒
Portal Privacy Extensions	msdynce_PortalPriva...	10/30/2019	9.2.10.0	🔒
Dynamics 365 Portals - Portal dependencies	MicrosoftPortalDepe...	10/30/2019	9.2.10.0	🔒
Common Data Services Default Solution	Cr7c436	10/12/2019	1.0.0.0	🔒
Default Solution	Default	10/12/2019	1.0	🔒



# Power Apps Portal Entities

Ad	adx_ad
Ad Placement	adx_adplacement
Alert Subscription	adx_alertsubscription
Change Password for Portals Contact	adx_bpf_c2857b638fa7473d
Content Snippet	adx_contentsnippet
Entity Form	adx_entityform
Entity Form Metadata	adx_entityformmetadata
Entity List	adx_entitylist
Entity Permission	adx_entitypermission
External Identity	adx_externalidentity
Invitation	adx_invitation
Invite Redemtion Page Alert	adx_inviteredemtion adx_pagealert
Page Notification	adx_pagenotification
Page Tag	adx_pagetag
Page Template	adx_pagetemplate
Poll	adx_poll
Poll Option	adx_polloption
Poll Placement	adx_pollplacement
Poll Submission	adx_pollsubmission
Portal Comment	adx_portalcomment
Portal Language	adx_portallanguage
Publishing State	adx_publishingstate
Publishing State Transition Rule	adx_publishingstatetransitionrule
Redirect	adx_redirect
Setting	adx_setting
Shortcut	adx_shortcut

Site Marker	adx_sitemarker
Site Setting	adx_sitesetting
Tag	adx_tag
URL History	adx_urlhistory
Web File	adx_webfile
Web File Log	adx_webfilelog
Web Form	adx_webform
Web Form Metadata	adx_webformmetadata
Web Form Session	adx_webformsession
Web Form Step	adx_webformstep
Web Link	adx_weblink
Web Link Set	adx_weblinkset
Web Notification Entity	adx_webnotificationentity
Web Notification URL	adx_webnotificationurl
Web Page	adx_webpage
Web Page Access Control Rule	adx_webpageaccesscontrolrule
Web Page History	adx_webpagehistory
Web Page Log	adx_webpagelog
Web Role	adx_webrole
Website	adx_website
Website Access	adx_websiteaccess
Website Binding	adx_websitebinding
Website Language	adx_websitelanguage
Web Template	adx_webtemplate







**DEMO**

## **Inspecting a New Power Apps Portal**

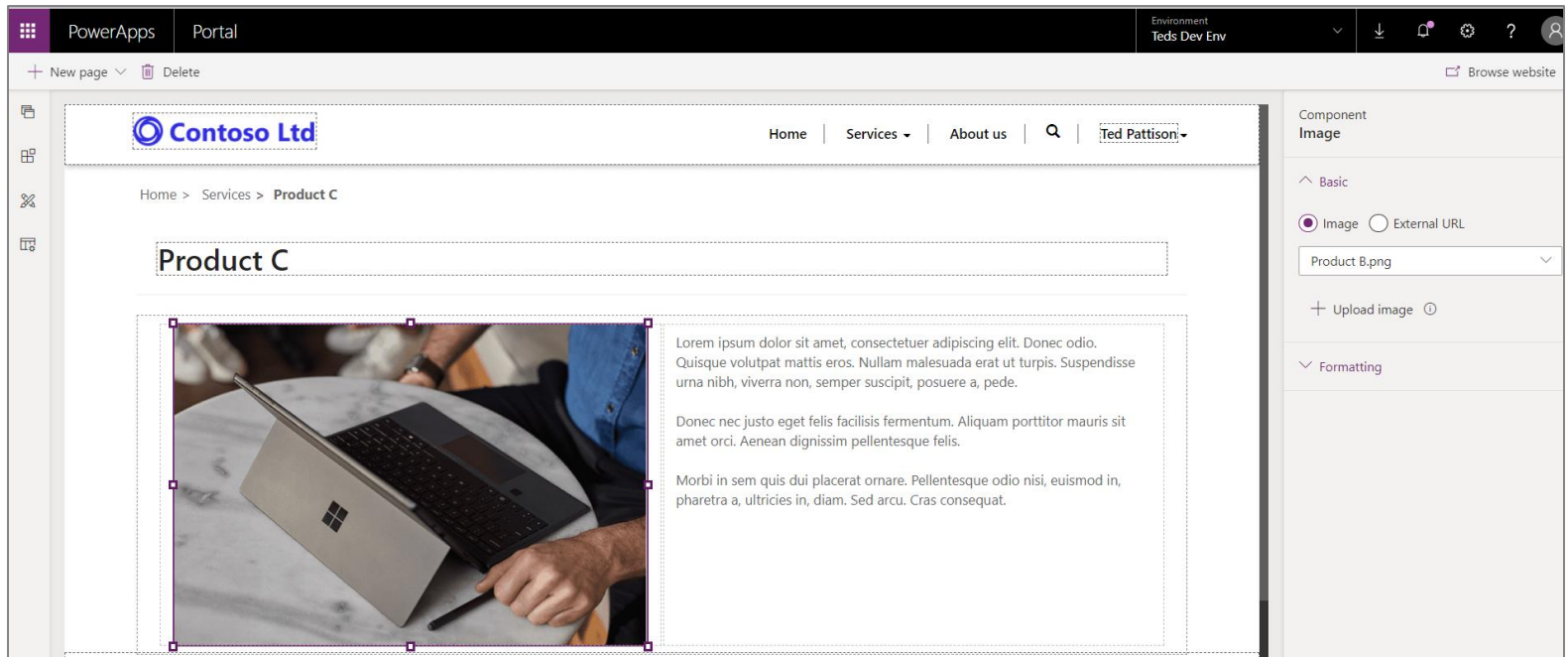
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# Portal Editor

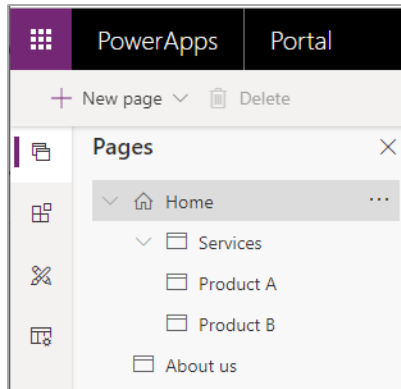
- Used to add pages and author page content
  - Designed for less-technical users
  - Editor does not require web designer/developer skills





# Page Hierarchy

- Web Page can have one or more child pages
  - Provides foundation for building page hierarchy



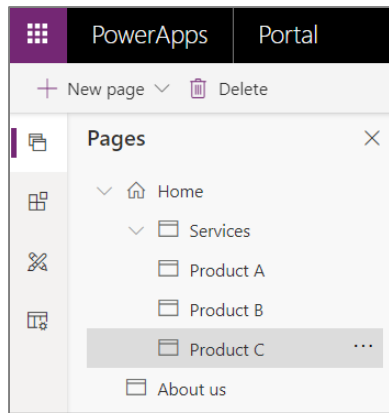
- Page hierarchy used to build navigation menu



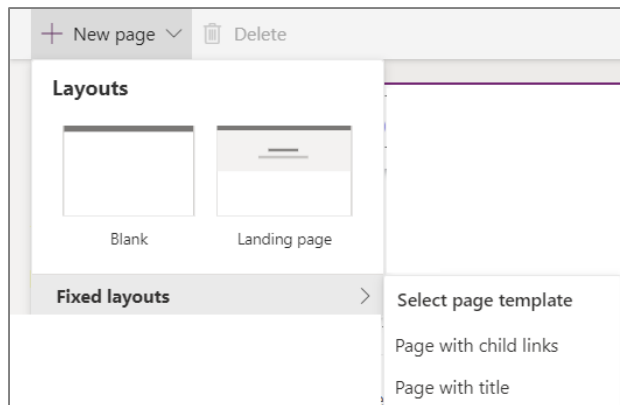


# Adding and Navigating Pages

- **Pages** tab provides navigation across pages

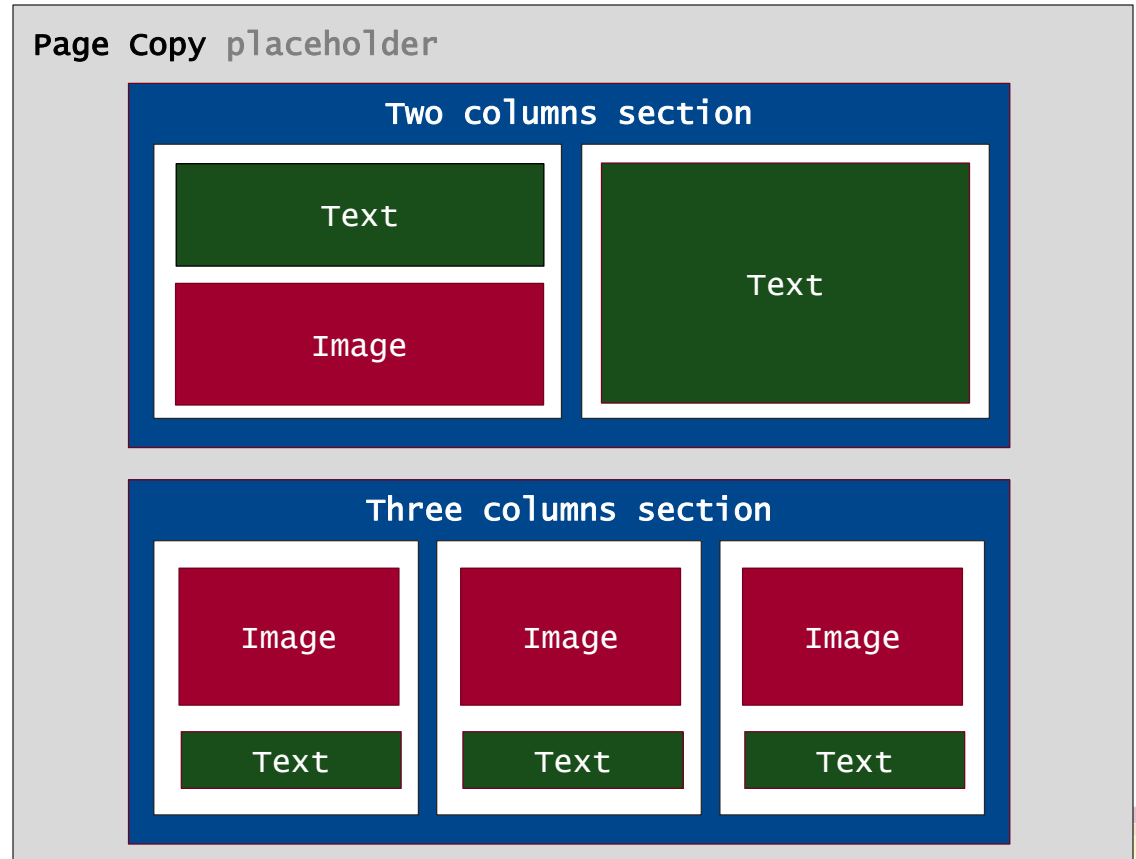
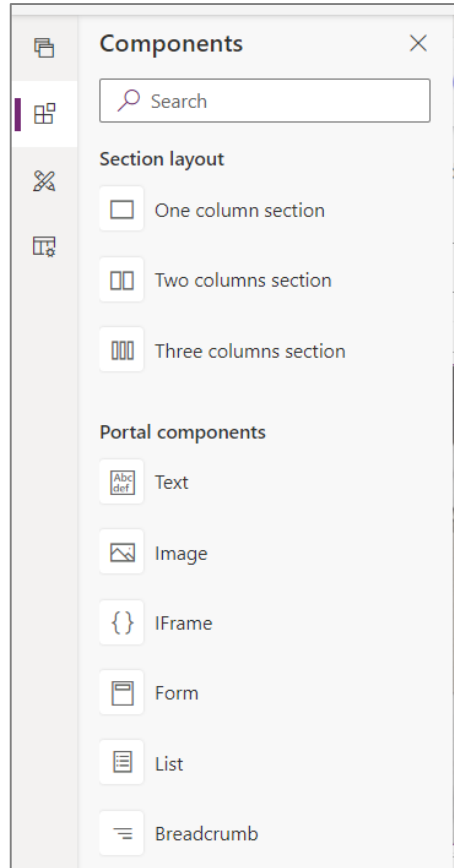


- Pages added using **New page** menu button



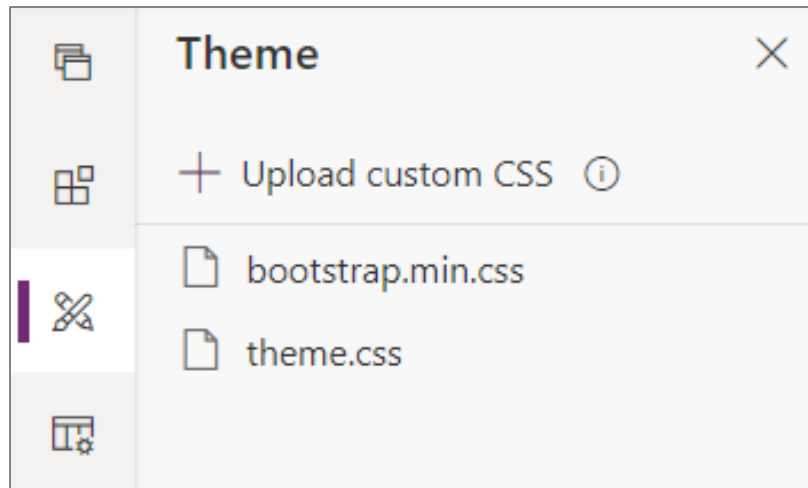
# Adding Page Content using Components

- Portal Editor provides Components for content authors
  - You drag components onto the Page Copy placeholder
  - Sections used to constrain max page width and create responsive design



# Portal Themes

- Portals out-of-box branding based on Bootstrap 3
  - bootstrap.css version 3.3 automatically included
  - You can add custom CSS style rules to themes.css
  - Upgrading to newer version of Bootstrap (e.g. v4) not supported



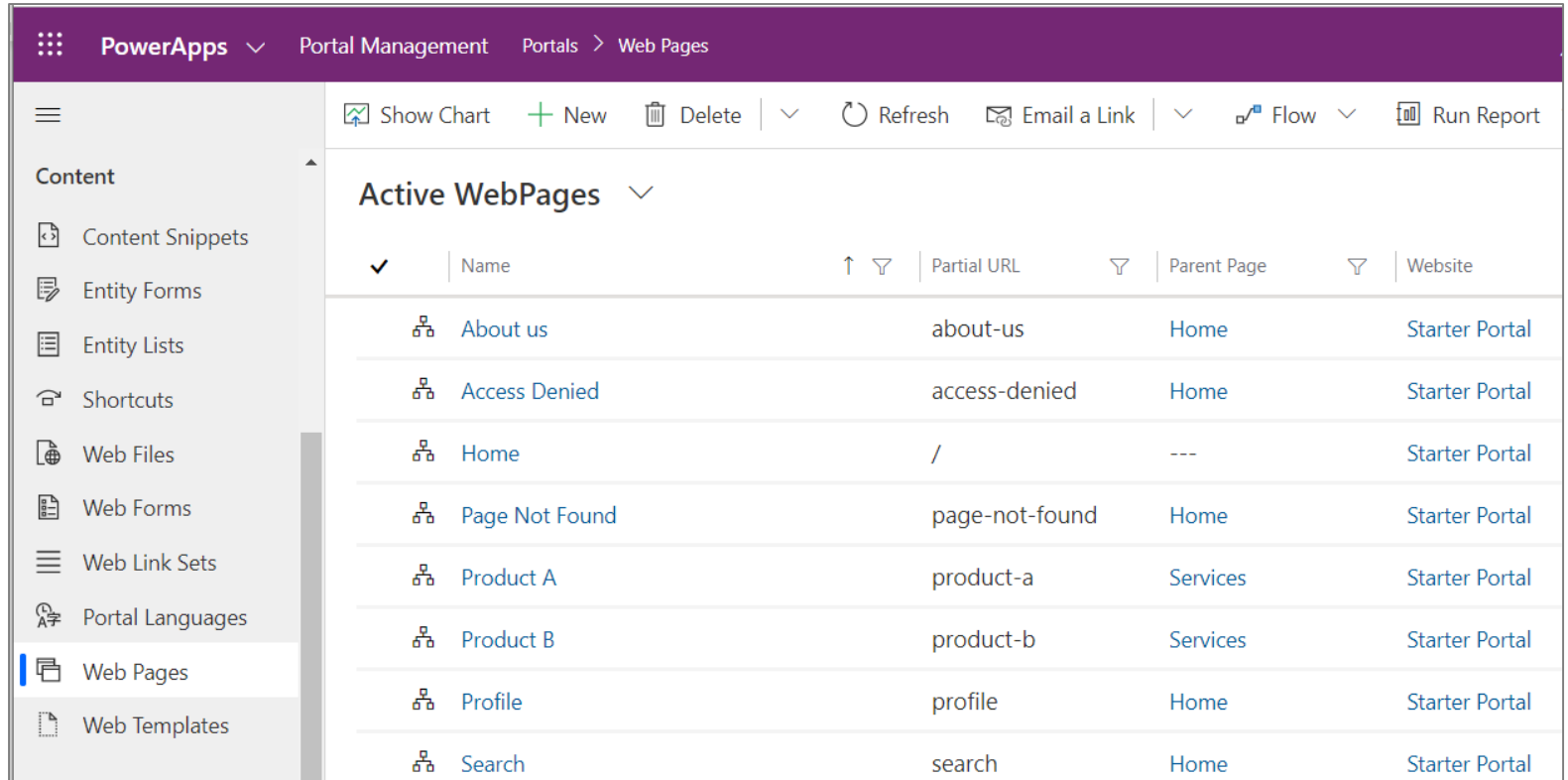
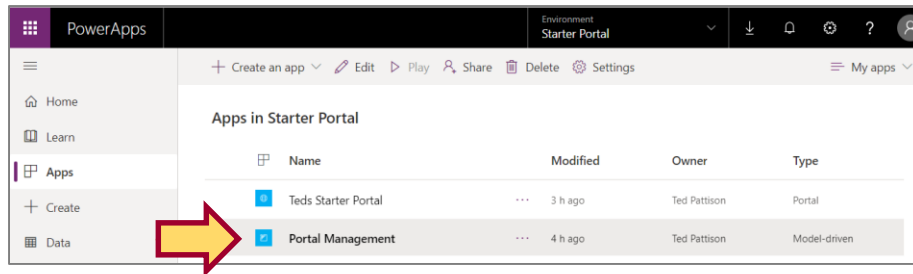


**DEMO**

# **Adding and Editing Web Content with the Power Apps Portal Editor**

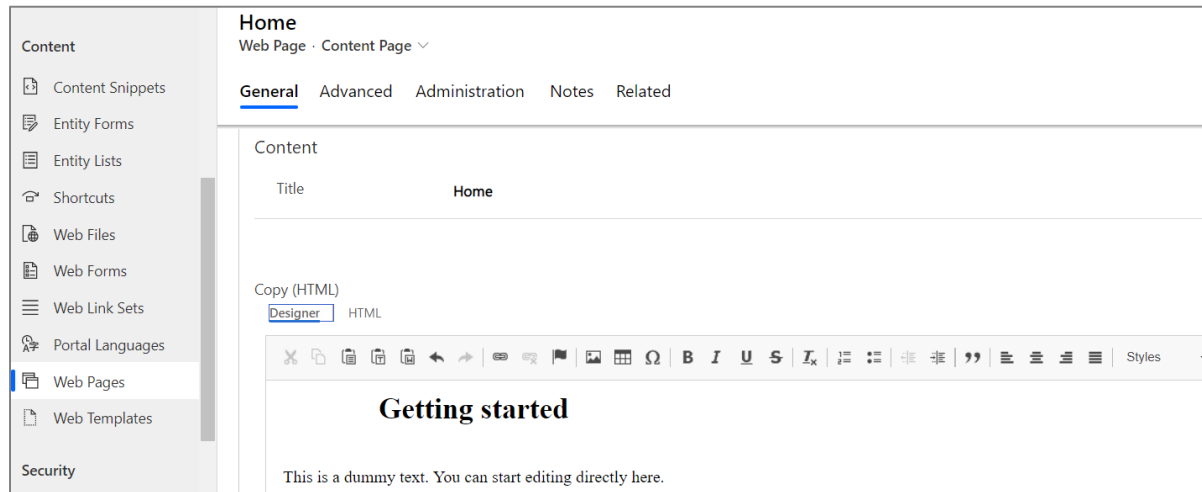


# Portal Management App

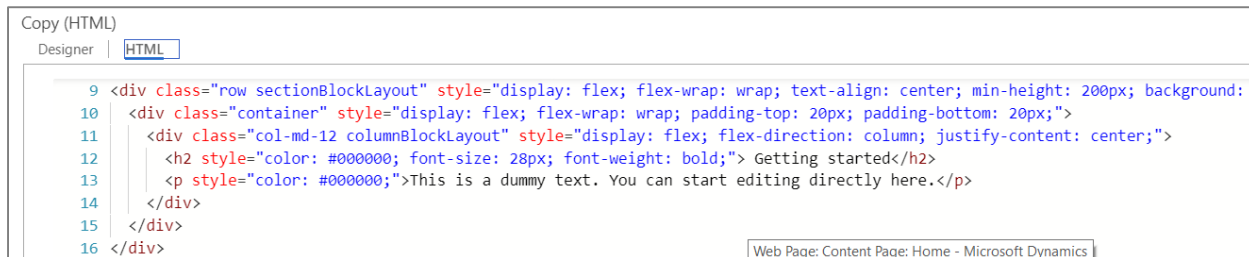


# Editing Page Content

- Portal Management App provides access to web pages
  - You can edit web page properties
  - You can editor page content using the Designer editor



- You can editor page content using the Designer editor



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# Liquid Template Language

- Power Apps Portals use Liquid Template Language
  - Open-source template language created by Shopify in 2006
  - Currently used by 100s of websites and ISVs
- Liquid used on portal pages to generate dynamic content
  - Liquid markup code stored in CDS along with HTML
  - Liquid was designed to surface data from databases on web pages
- Learning the fundamentals of the Liquid template language
  - Liquid Objects
  - Liquid Tags
  - Liquid Filters





# Liquid Objects

- The follow Liquid objects are available in Power Apps portals

<b>now</b>	A date/time object that refers to the current UTC time at the time the template is rendered.
<b>page</b>	current portal request page with title and URL
<b>params</b>	request.parameters from query string.
<b>request</b>	Contains information about the current HTTP request.
<b>settings</b>	Allows you to load any Site Setting by name.
<b>sitemap</b>	Allows access to the portal site map.
<b>sitemarkers</b>	Allows you to load any Site Markers by name.
<b>snippets</b>	Allows you to load any Content Snippet by name.
<b>user</b>	Refers to the current portal user. If no user is signed in, this variable will be null.
<b>weblinks</b>	Allows you to load any Web Link Set by name or ID.
<b>website</b>	current portal Website record with website properties.

- Power Apps-specific reference for Liquid template language
  - <https://docs.microsoft.com/en-us/Power Apps/maker/portals/liquid/liquid-overview>



# Liquid Objects

- Liquid objects are referenced by name

```
user  
page  
request
```

- Object properties referenced using dot notation

```
user.fullname  
page.title  
request.params['HTTP_CLIENT_IP']
```

- Object properties displayed using output tags {{ ... }}

```
{{ user.fullname }}  
{{ page.title }}  
{{ request.params['HTTP_CLIENT_IP'] }}
```



# Liquid Tags - {% ... %}

- Liquid provides tags with control-of-flow logic
  - if statement tags

```
{% if user %}  
  <p>Hello {{ user.firstname }}</p>  
{% else %}  
  <p>Hello Mr Anonymous User</p>  
{% endif %}
```

Hello Ted

Hello Mr Anonymous User

- for loops tags

```
<h4>Child Pages</h4>  
<ul>  
  {% for child_page in page.children %}  
    <li>  
      <a href={{ child_page.url }}>  
        {{ child_page.title }}  
      </a>  
    </li>  
  {% endfor %}  
</ul>
```

## Child Pages

- Product A
- Product B



# Liquid Filters

- Filters used to transform data
  - Use of filter requires pipe operator | followed by filter name
  - Filter arguments (if any) passed using colon operator :

BOB'S YOUR UNCLE

bob's your uncle

Bob's Your Uncle

Robert's your uncle

Bob...

Bob's your...

<h1>My example html</h1>

April 20, 2020

May 20, 2020

```
{% assign quote = "Bob's your uncle" %}
```

```
<p>{{ quote | upcase }}</p>
```

```
<p>{{ quote | downcase }}</p>
```

```
<p>{{ quote | capitalize }}</p>
```

```
<p>{{ quote | replace: 'Bob', 'Robert' }}</p>
```

```
<p>{{ quote | truncate: 6 }}</p>
```

```
<p>{{ quote | truncate_words: 2 }}</p>
```

```
<p>{{ "<h1>My example html</h1>" | escape }}</p>
```

```
<p>{{ now | date: 'MMM dd, yyyy' }}</p>
```

```
<p>{{ now | date_add_days: 30 | date: 'MMM dd, yyyy' }}</p>
```



# Agenda

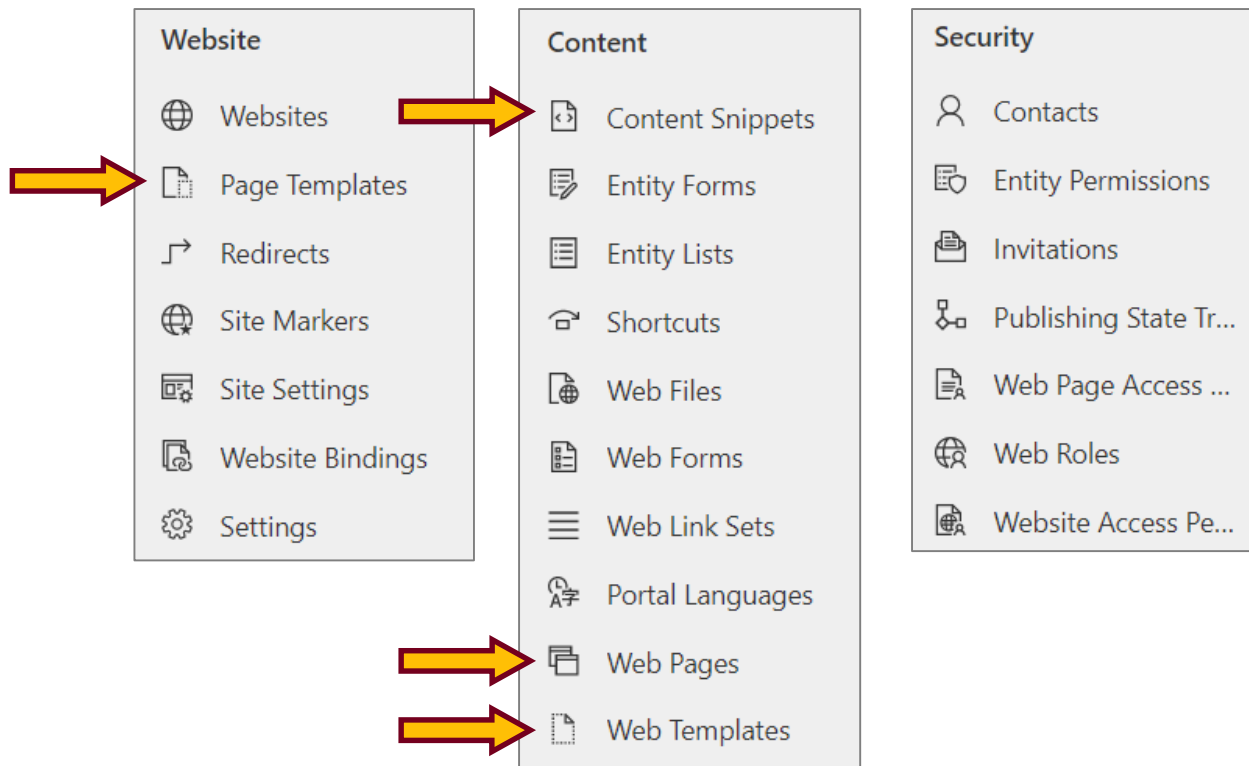
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# Portal Management App Entities

- Portal Management app provides access to portal entities
  - Website entities
  - Content entities
  - Security entities



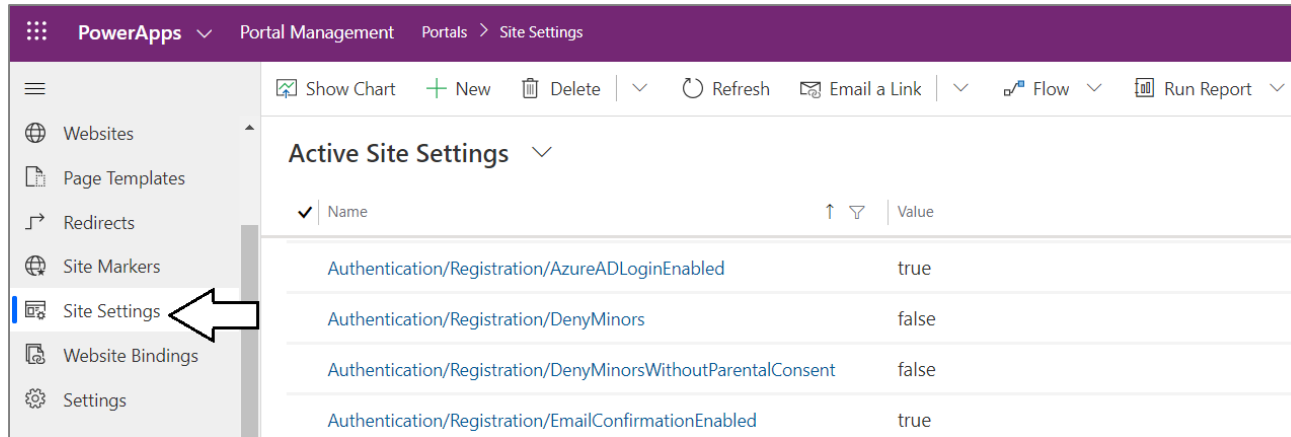
# Web Templates and Page Templates

- Every Web Page is based on a Page Template
  - Several page templates are available out of the box
  - You can add new page templates
- Every Page Template is based on a Web Template
  - Some Web Templates are designed as full page templates
  - Some Web Templates are designed as partial page templates
- Web Templates can pull content from Content Snippets
  - Snippets provide *easy-to-edit* sections in a portal web site



# Configuring Portal Registration Features

- Portal authentication features configured using Site Settings



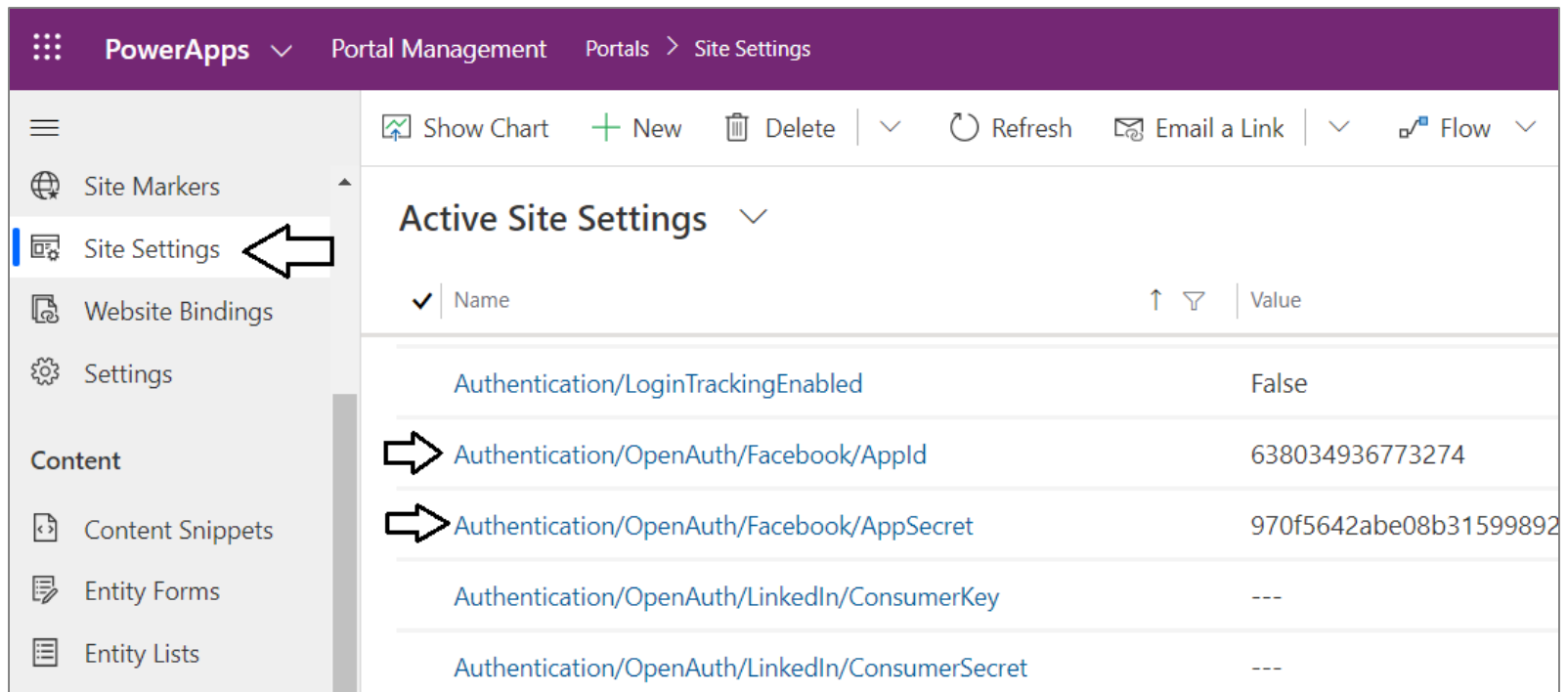
- Site Setting key documented by Microsoft

Site Setting Name	Description
Authentication/Registration/Enabled	Enables or disables all forms of user registration. Registration must be enabled for the other settings in this section to take effect. Default: true
Authentication/Registration/OpenRegistrationEnabled	Enables or disables the sign-up registration form for creating new local users. The sign-up form allows any anonymous visitor to the portal to create a new user account. Default: true
Authentication/Registration/InvitationEnabled	Enables or disables the invitation code redemption form for registering users who possess invitation codes. Default: true
Authentication/Registration/CaptchaEnabled	Enables or disables captcha on the user registration page. Default: false <b>Note:</b> This site setting might not be available by default. To enable captcha, you must create the site setting and set its value to true.



# Configuring Third Party Identity Providers

- External identity providers configured using Site Settings
  - Requires pre-creating app with identity provider
  - App ID and App Secret added as Site settings



The screenshot displays the PowerApps Portal Management interface, specifically the 'Site Settings' page. The left-hand navigation pane is visible, with 'Site Settings' highlighted and a white arrow pointing to it. The main content area is titled 'Active Site Settings' and contains a table of configuration settings.

✓	Name	Value
	Authentication/LoginTrackingEnabled	False
➡	Authentication/OpenAuth/Facebook/AppId	638034936773274
➡	Authentication/OpenAuth/Facebook/AppSecret	970f5642abe08b31599892
	Authentication/OpenAuth/LinkedIn/ConsumerKey	---
	Authentication/OpenAuth/LinkedIn/ConsumerSecret	---



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# Power Apps Portal Audiences

- Anonymous users
  - Users that usually just need to view public content
- Authenticated users
  - Users that need to view secured content
  - Users that need to add and edit content
- Content managers
  - Users that need to author pages and CDS records
- Portal administrators
  - Users that need to monitor and administrate portal



# Power Apps Portal Security Model

- Every portal user associated with Contact record
  - Contact entity provides foundation for user identity
  - Contact records used to manage permissions and authorization
- Configurable Authorization for Portal Access
  - Page viewing: *is the user authorized to view a page*
  - Page authoring: *is the user authorized to edit & publish pages?*
  - CDS Entities: *is the user allowed to view or edit CDS records?*
  - Website authoring: *can the user edit site settings and navigation?*



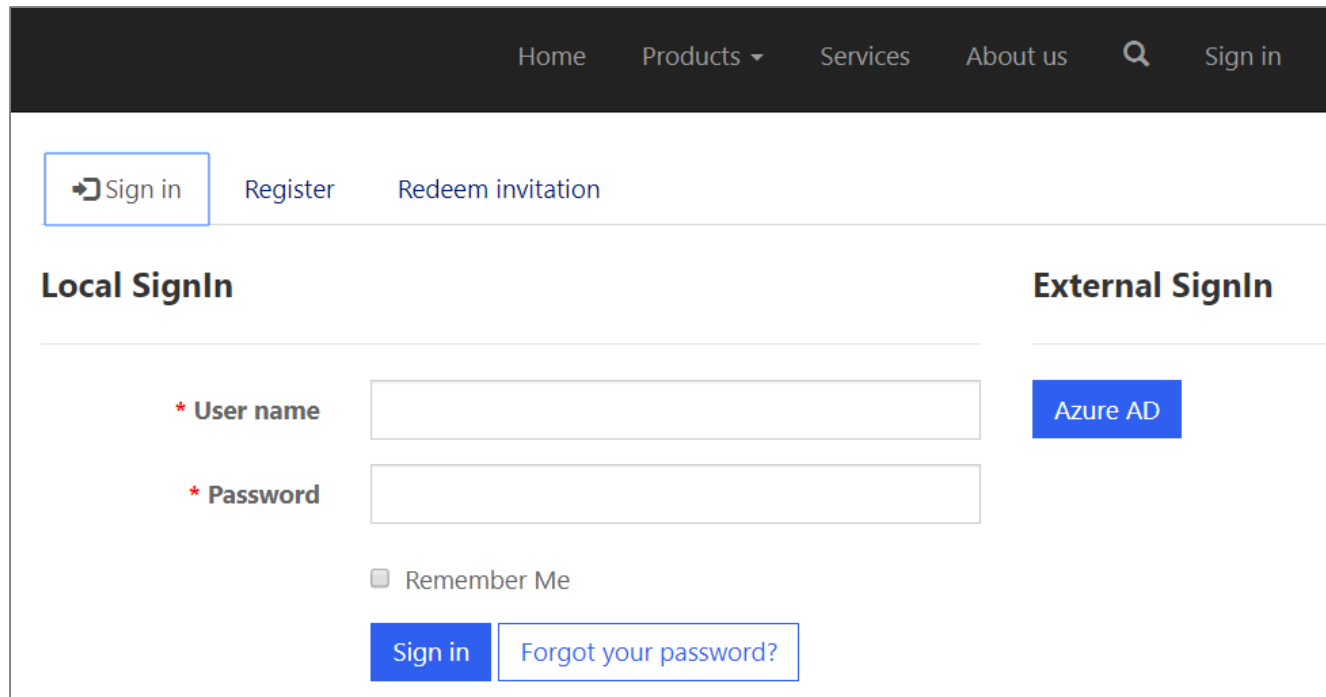
# User Authentication in Power Apps Portals

- Local authentication
  - Everything about user identity stored in Contact record
  - User name and hashed password stored in Contact
  - No need for external identity providers
- External authentication
  - Authentication provider by external identity provider
  - Azure AD used to authenticate users from same tenant as portal
  - Azure AD can be used to authenticate guest users for other tenants
  - Third party identity providers can be used to authenticate external users



# Default Logon Screen

- What type of login is supported by default?
  - Local registration and authentication
  - Azure AD authentication (auto-registration)

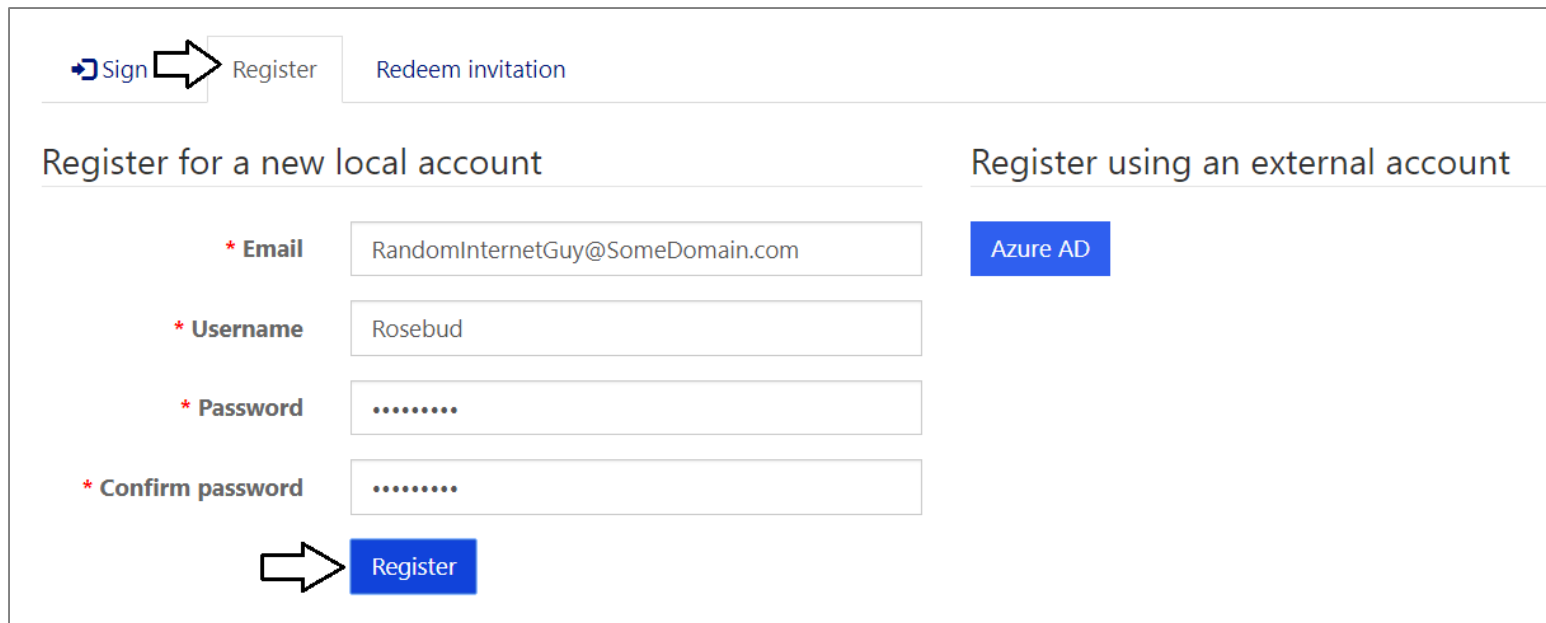


The screenshot displays a web application's default logon screen. At the top, a dark navigation bar contains links for Home, Products (with a dropdown arrow), Services, About us, a search icon, and a Sign in link. Below this, a white header section features a 'Sign in' button with a key icon, followed by 'Register' and 'Redeem invitation' links. The main content area is divided into two columns: 'Local SignIn' and 'External SignIn'. The 'Local SignIn' column contains two text input fields labeled '\* User name' and '\* Password', a 'Remember Me' checkbox, and a 'Sign in' button. A 'Forgot your password?' link is positioned next to the 'Sign in' button. The 'External SignIn' column features a blue 'Azure AD' button.



# Registering a Local Account

- Local authentication requires account registration
  - Registration results in new Contacts record for user
  - User password saved in Contacts records as hashed value
  - Portal requires email confirmation by default



The screenshot displays a registration form with two main sections: "Register for a new local account" and "Register using an external account".

**Navigation:** At the top left, there are links for "Sign" (with a left-pointing arrow) and "Register" (with a right-pointing arrow). To the right is a link for "Redeem invitation".

**Local Account Registration Fields:**

- \* Email:** Input field containing "RandomInternetGuy@SomeDomain.com".
- \* Username:** Input field containing "Rosebud".
- \* Password:** Input field with masked characters ".....".
- \* Confirm password:** Input field with masked characters ".....".

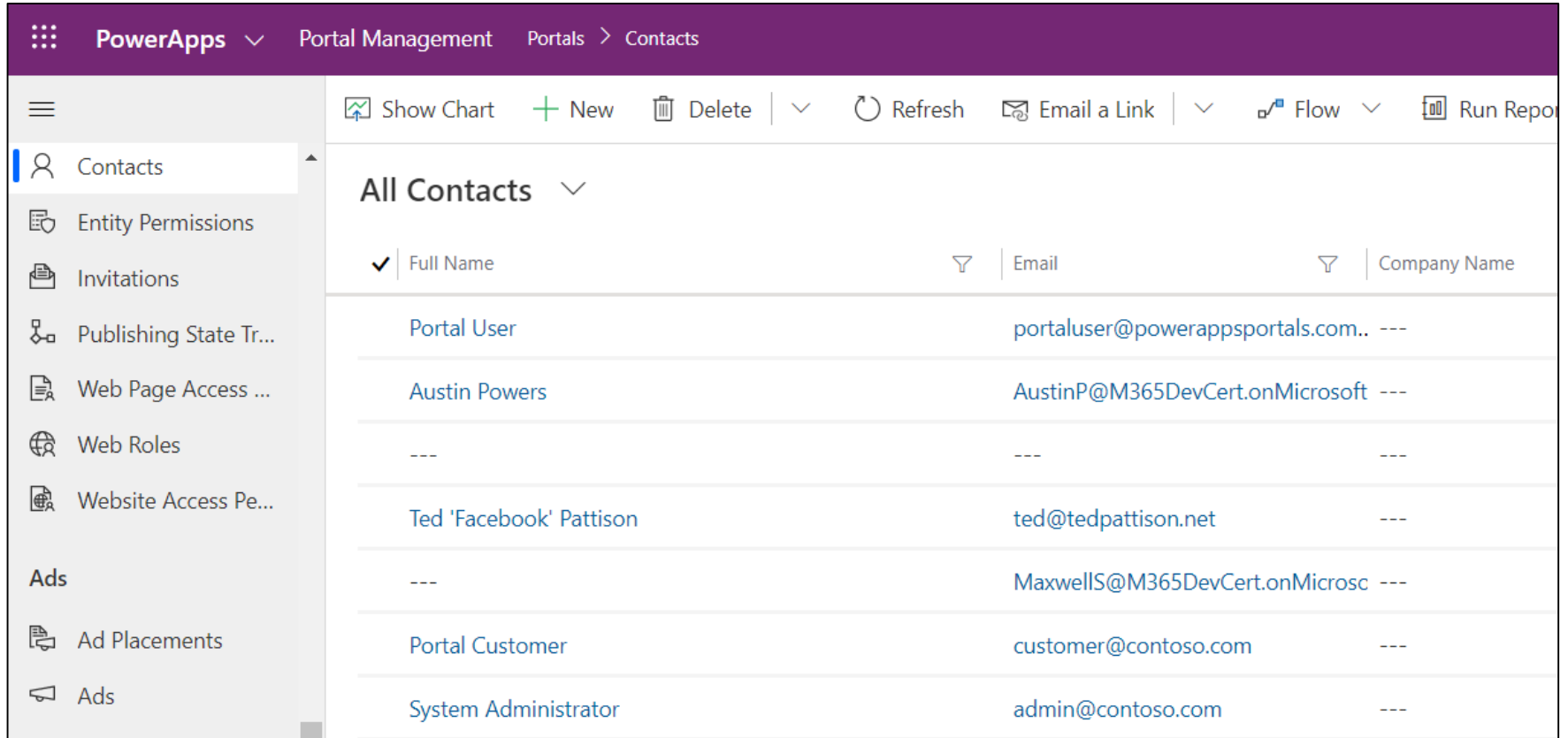
**External Account Registration:** A blue button labeled "Azure AD" is present under the "Register using an external account" heading.

**Action:** A blue button labeled "Register" is located at the bottom of the local account section, with a right-pointing arrow pointing to it.





# Examining Portal Contacts



The screenshot shows the PowerApps Portal Management interface. The top navigation bar includes 'PowerApps', 'Portal Management', and 'Portals > Contacts'. The left sidebar lists various management options, with 'Contacts' selected. The main area displays a table of contacts under the heading 'All Contacts'.

Table Columns: Full Name, Email, Company Name

Full Name	Email	Company Name
Portal User	portaluser@powerappsportals.com..	---
Austin Powers	AustinP@M365DevCert.onMicrosoft	---
---	---	---
Ted 'Facebook' Pattison	ted@tedpattison.net	---
---	Maxwells@M365DevCert.onMicrosc	---
Portal Customer	customer@contoso.com	---
System Administrator	admin@contoso.com	---



# Configuring Portal Authorization

- Web Roles
- Web Page Access Rules
- Website Permissions
- Entity Permissions



# Web Roles

- Web roles allow administrator to control access
  - Contact can be assigned to one or more web roles
  - Account can be assigned to one or more web roles
  - Invitation associated with parent account and set of web roles

Active Web Roles 	
 Name	  Website
Administrators	Wingtip Toys Portal
Anonymous Users	Wingtip Toys Portal
Authenticated Users	Wingtip Toys Portal
News Authors	Wingtip Toys Portal
Partners	Wingtip Toys Portal
Product Managers	Wingtip Toys Portal



# Web Page Access Rules

- Web page access rule records used to manage access
  - Web page access rule used to restrict page viewing
  - Web page access rule used to provide editing/publishing permissions
  - Web page access rule associated with a single page
  - Child page access control through parent page access rule
- Web page access control rule rights
  - Restrict read access
  - Allow content editing

Active Web Page Access Control Rules ▾			
✓ Name	↑ ▾ Website	▾ Right	▾ Web Page
Grant Change to Administrators	Wingtip Toys Portal	Grant Change	Home
Grant Change to News Authors	Wingtip Toys Portal	Grant Change	News
Partner Page Read	Wingtip Toys Portal	Restrict Read	Partners
Restrict Product Management	Wingtip Toys Portal	Restrict Read	Product List



# Website Access Permissions

- Used to give permissions to content authors


Active Website Access Permissions ▾

✓ Name	↑ Website	Manage Content Sni...
Administrative permissions for Basic Portal	Wingtip Toys Portal	Yes
Content Manager Access Permissions	Wingtip Toys Portal	
News Author Access Permissions	Wingtip Toys Portal	
Preview permission for Basic Portal	Wingtip Toys Portal	

**Administrative permissions for Basic Portal**  
Website Access

General Web Roles Administration Related

Name \* Administrative permissions for Basic Portal

Website \*  Wingtip Toys Portal

Permissions

Manage Content Snippets	<input checked="" type="checkbox"/>
Manage Site Markers	<input checked="" type="checkbox"/>
Manage Web Link Sets	<input checked="" type="checkbox"/>
Preview Unpublished Entities	<input checked="" type="checkbox"/>






# Agenda











- ✓ Creating a Power Apps Portal
- ✓ Adding and Editing Portal Content
- ✓ Writing Liquid Template Language Expressions
- ✓ Understanding Portal Configuration
- ✓ Configuring Portal Security
- Publishing Dynamic CDS Content



# Entity Permissions

- Entity permissions grants access to CDS records
  - Permissions can be read-only
  - Permissions can allow inserts, updates and deletes

Active Entity Permissions 

	Name	 	Entity Name		Scope		Read		Write		Cre...		Del...		App...		Append ...
	Edit Products		cptlabs_product		Global		Yes		Yes		Yes		Yes		Yes		Yes
	View Products		cptlabs_product		Global		Yes		No		No		No		No		No



# Accessing CDS Entity Data using Liquid

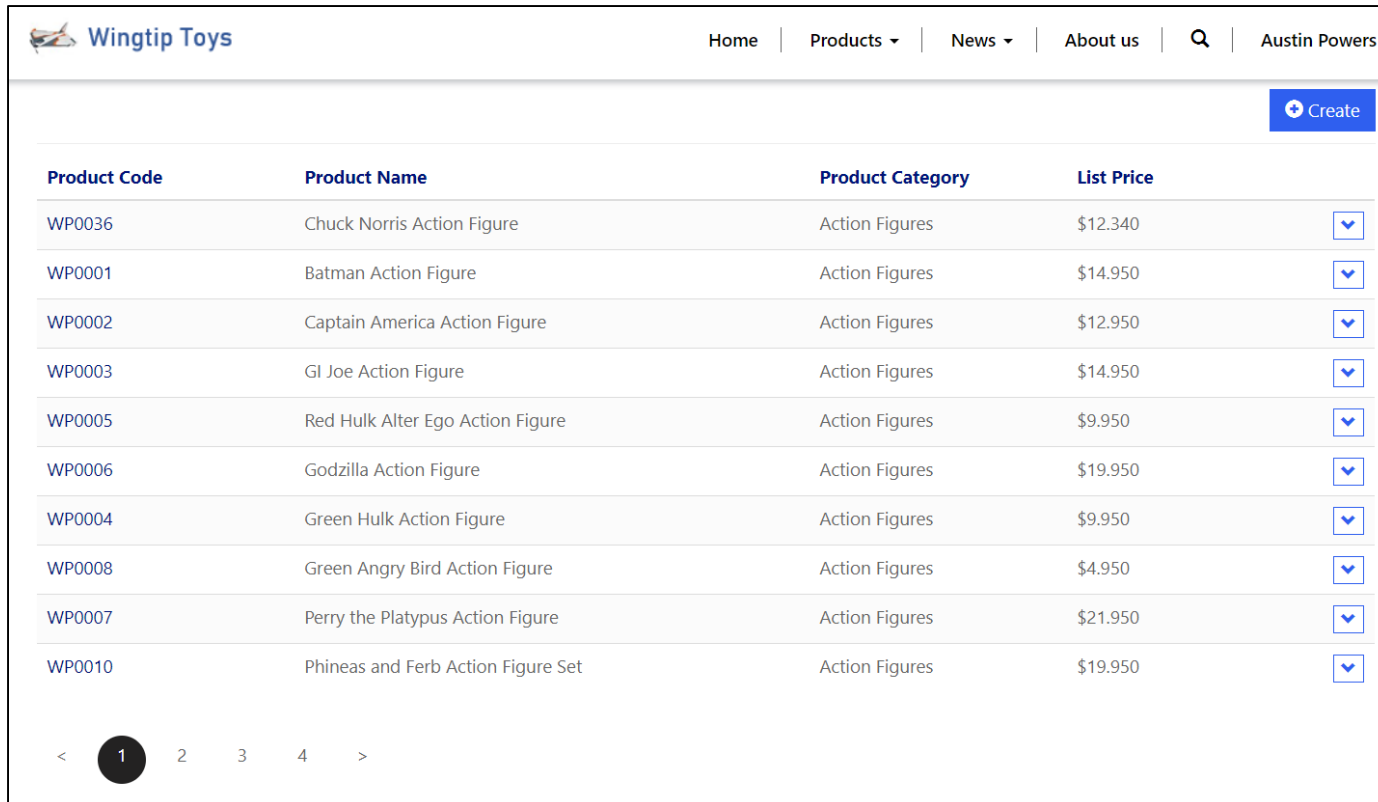
- You can write liquid expressions to CDS surface data

```
<div class="container">
  <div class="row" style="padding-top:8px;">
    {% entityview logical_name:'cptlabs_product', name:"Active Products", page_size: 50 %}
    {% assign category = request.params['category'] %}
    {% if category %}
    {% assign products = entityview.records | where: "cptlabs_productcategory.label", category | order_by: "cptlabs_productcode" %}
    {% else %}
    {% assign products = entityview.records | order_by: "cptlabs_productcode" %}
    {% endif %}
    {% for item in products %}
    <div class="col-lg-4">
      <div class="panel panel-default">
        <div class="panel-heading">{{ item.cptlabs_productname }}</div>
        <div class="panel-body" style="border:1px solid #CCCCCC;height:90px;">
          
          <div>{{ item.cptlabs_productdescription }}</div>
          <div>List Price: ${{ item.cptlabs_listprice | round:2 }}</div>
          <div style="clear:left"></div>
        </div>
      </div>
    </div>
    {% endfor %}
    {% endentityview %}
  </div>
</div>
```



# View CDS Data with Entity View

- CDS Allows you to add entity views
  - Use views from a custom entity to surface data on portal page



The screenshot shows a web application for 'Wingtip Toys'. The header includes a logo, navigation links (Home, Products, News, About us), a search icon, and a user profile 'Austin Powers'. A blue 'Create' button is in the top right. The main content is a table of action figures with columns for Product Code, Product Name, Product Category, and List Price. Each row has a dropdown arrow on the right. At the bottom, there is a pagination control showing page 1 of 4.









Product Code	Product Name	Product Category	List Price	
WP0036	Chuck Norris Action Figure	Action Figures	\$12.340	▼
WP0001	Batman Action Figure	Action Figures	\$14.950	▼
WP0002	Captain America Action Figure	Action Figures	\$12.950	▼
WP0003	GI Joe Action Figure	Action Figures	\$14.950	▼
WP0005	Red Hulk Alter Ego Action Figure	Action Figures	\$9.950	▼
WP0006	Godzilla Action Figure	Action Figures	\$19.950	▼
WP0004	Green Hulk Action Figure	Action Figures	\$9.950	▼
WP0008	Green Angry Bird Action Figure	Action Figures	\$4.950	▼
WP0007	Perry the Platypus Action Figure	Action Figures	\$21.950	▼
WP0010	Phineas and Ferb Action Figure Set	Action Figures	\$19.950	▼


< 1 2 3 4 >




# Updating CDS Data with Entity Forms

- Entity forms can be used to allow user editing
  - Users can edit existing CDS records
  - Users can add new CDS records

List Price	
\$12.340	
\$14.950	
\$12.950	 <div> View details</div>
\$14.950	
\$9.950	
\$19.950	
\$9.950	
\$4.950	

 Wingtip Toys

Home | Products ▾ | News ▾ | About us |  Austin Powers ▾

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**Product Code**

WP0001

**Product Name \***

Batman Action Figure

**Product Category**

Action Figures ▾

**List Price**

\$ 14.950

**Product Description**

A super hero who sometimes plays the role of a dark knight.

**Product Image URL**

<http://classresources.blob.core.windows.net/images/WP0001.jpg>

Submit



# Summary

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