

# Intro to PowerApps Portals

Nick Doelman  
Microsoft Business Applications MVP

POWER PLATFORM  
**SATURDAY**  
**STOCKHOLM**  
**05-OCT-2019**

**#PPSatSwe**



# THANKS TO OUR SPONSORS!



Microsoft

POWER  
OBJECTS

An HCL Technologies Company

KingswaySoft

The avanade logo, featuring a stylized orange and red abstract shape.

avanade

The NORTH52 logo, featuring a red mountain icon above the word "NORTH52" and the tagline "Turbocharge Dynamics 365" below it.

b3

Solgari  
INNOFACTOR®



POWER PLATFORM  
**SATURDAY**  
**STOCKHOLM**  
**05-OCT-2019**

#PPSatSwe

# Who Am I?

**Nick Doelman, Microsoft MVP - Business Applications**

Power Platform/Dynamics 365 Specialist

Ottawa, ON, CANADA

@readyxrm

<https://readyxrm.blog>

<https://www.linkedin.com/in/nickdoelman/>

<https://crm.audio/category/podcasts/dynamics365-portals/>



# Intro to PowerApps Portals

## Goal Today

- In the next 50(?) minutes...
- Provision a portal and surface CDS data to an authenticated external user
- LIVE demonstration
- Assume knowledge of Model-Driven Configuration (Entities, Forms, Views, etc)

# Intro to PowerApps Portals

**DEMO**

# Intro to PowerApps Portals

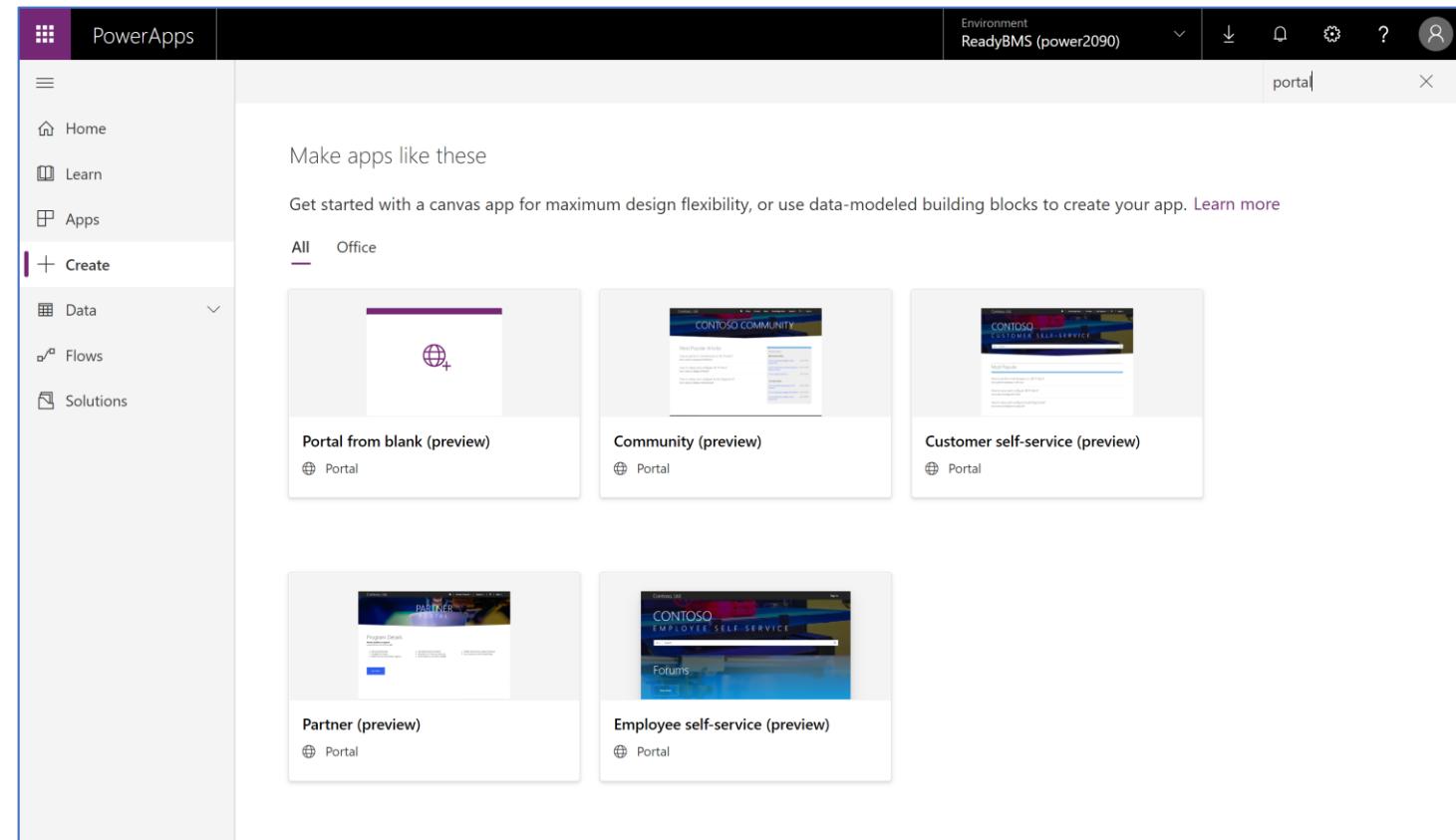
- Provision Portal

The screenshot shows the PowerApps portal interface. At the top, there's a navigation bar with icons for Home, Learn, Apps, Create, Data, Flows, and Solutions. The main content area features a yellow banner stating "Your trial environment will expire in 29 days. Convert it to production to keep it. Learn more about trials." Below this, a heading says "Build business apps, fast" followed by the subtext "Create apps that connect to your data and work across web and mobile. Learn about PowerApps". A section titled "Make your own app" displays three templates: "Canvas app from blank" (Icon: smartphone with a pencil), "Model-driven app from blank" (Icon: two overlapping shapes with a plus sign), and "Portal from blank (preview)" (Icon: globe with a plus sign). The "Portal from blank (preview)" template is highlighted with a yellow box. At the bottom, there's a link "All templates →". The "Recent apps" section lists three items: "Asset Checkout", "Innovation Challenge", and "Fundraiser", each with a small icon, name, modified date (5 d ago), owner (Nick Doelman), and type (Model-driven).

Name	Modified	Owner	Type
Asset Checkout	5 d ago	Nick Doelman	Model-driven
Innovation Challenge	5 d ago	Nick Doelman	Model-driven
Fundraiser	5 d ago	Nick Doelman	Model-driven

# Intro to PowerApps Portals

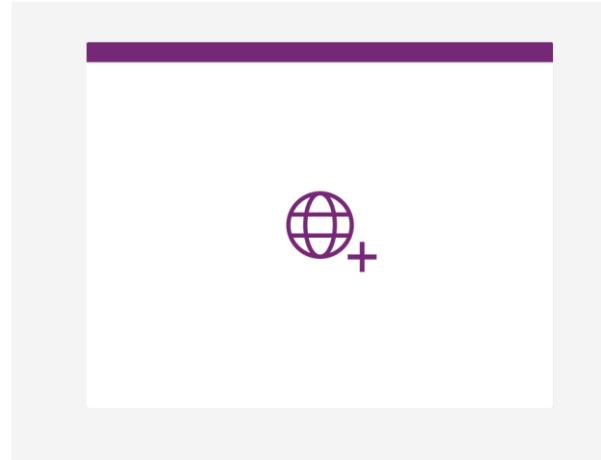
- If Dynamics 365, you can choose other starter portals



# Intro to PowerApps Portals

- Provision Portal

### Portal from blank (preview)



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

We'd need to install certain prerequisites. If you'd like to quickly try portals, use an environment with portal package already installed or create a new one using this link.  
[Create new environment](#)

Name \*  
classroomportal

Address \* ⓘ  
classroomportal .powerappspportals.com

✓ classroomportal.powerappspportals.com

Language  
English

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

Privacy Statement

Create Cancel

# Intro to PowerApps Portals

The screenshot shows the PowerApps portal creation interface. On the left, a sidebar menu includes Home, Learn, Apps, Create, Data, Flows, and Solutions. The main area features a yellow banner at the top stating, "Your trial environment will expire in 29 days. Convert it to production to keep it. [Learn more about trials.](#)" Below this, a large button says "Build business apps, fast" with the sub-instruction "Create apps that connect to your data and work across web and mobile. [Learn about PowerApps](#)". A modal window titled "Portal provisioning in progress" informs the user that their portal is currently being provisioned. At the bottom, sections for "Recent apps" and "Shared with me" show three recent applications: "classroomportal" (Portal), "Asset Checkout" (Model-driven), and "Innovation Challenge" (Model-driven). A table lists these apps with columns for Name, Modified, Owner, and Type.

Name	Modified	Owner	Type
classroomportal	...		Portal
Asset Checkout	5 d ago	Nick Doelman	Model-driven
Innovation Challenge	5 d ago	Nick Doelman	Model-driven

# Intro to PowerApps Portals

The screenshot shows the PowerApps portal interface. The left sidebar includes links for Home, Learn, Apps, Create, Data, Flows, and Solutions. The main area features a yellow banner about trial expiration and a central message: "Build business apps, fast". Below this are three app creation templates: "Canvas app from blank", "Model-driven app from blank", and "Portal from blank (preview)". A "Recent apps" section lists three items: "Portal Management" (highlighted in yellow), "Asset Checkout", and "Innovation Challenge", all created by Nick Doelman and categorized as Model-driven.

Your trial environment will expire in 29 days. Convert it to production to keep it. [Learn more about trials.](#)

Environment  
classroomportal (org9430c51d)

Build business apps, fast

Create apps that connect to your data and work across web and mobile. [Learn about PowerApps](#)

Make your own app

Canvas app from blank

Model-driven app from blank

Portal from blank (preview)

All templates →

Name	Modified	Owner	Type
Portal Management	2 min ago	Nick Doelman	Model-driven
Asset Checkout	5 d ago	Nick Doelman	Model-driven
Innovation Challenge	5 d ago	Nick Doelman	Model-driven

# Intro to PowerApps Portals

The screenshot shows the PowerApps portal interface. The top navigation bar includes the 'PowerApps' logo, environment name 'classroomportal (org9430c51d)', and various settings icons. A yellow banner at the top right indicates a trial environment will expire in 29 days, with a link to learn more about trials.

The main content area features a central message: 'Build business apps, fast' followed by 'Create apps that connect to your data and work across web and mobile.' with a link to 'Learn about PowerApps'. Below this, there's a section titled 'Make your own app' with three cards:

- Canvas app from blank** (Icon: smartphone and pencil)
- Model-driven app from blank** (Icon: puzzle piece)
- Portal from blank (preview)** (Icon: globe with plus sign)

At the bottom right of this section is a link to 'All templates →'.

Below these cards, there are two tabs: 'Recent apps' (underlined) and 'Shared with me'. The 'Recent apps' table lists the following items:

Name	Modified	Owner	Type
classroomportal	1 min ago	Nick Doelman	Portal
Portal Management	12 min ago	Nick Doelman	Model-driven
Asset Checkout	5 d ago	Nick Doelman	Model-driven

# Intro to PowerApps Portals

The screenshot shows a web browser displaying a PowerApps portal. The header is dark blue with white text. On the left is the Contoso Ltd. logo and name. To the right are navigation links for 'Home', 'Sample pages', a search icon, and 'Sign in'. The main content area has a dark blue background with a geometric pattern. It features a large white 'Welcome to your website!' heading and a smaller text below it stating 'This is a sample landing page for you to start creating your website.' At the bottom of the page, there is a white footer section containing two paragraphs: 'This website uses sample data for illustration purposes.' and 'You can create pages by using the available templates.' In the bottom right corner of the footer, there is a small gray downward-pointing arrow.

Contoso Ltd.

Home | Sample pages |  | Sign in

## Welcome to your website!

This is a sample landing page for you to start creating your website.

This website uses sample data for illustration purposes.

You can create pages by using the available templates.

Copyright © 2019. All rights reserved.

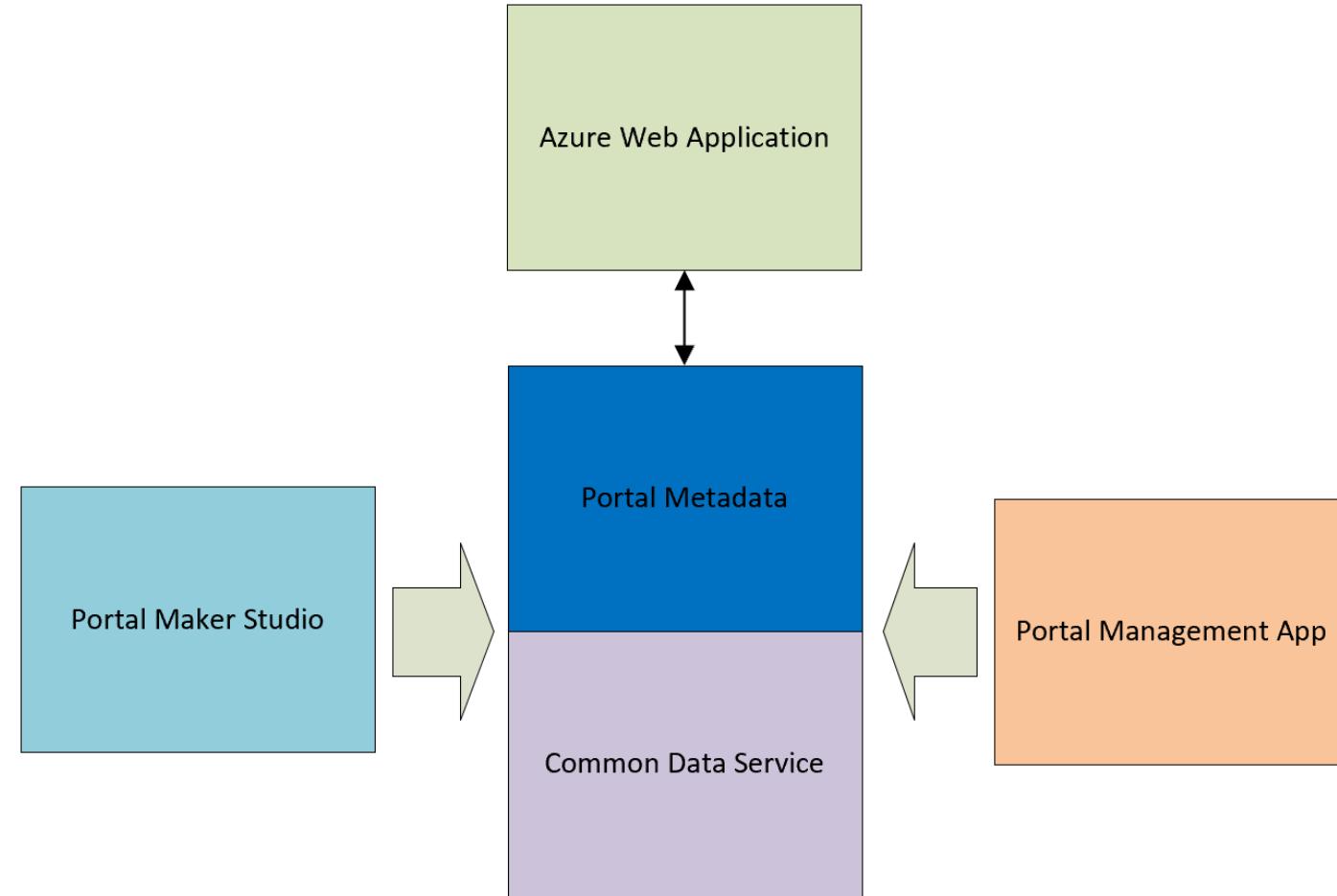
# Intro to PowerApps Portals

- Portal Theory



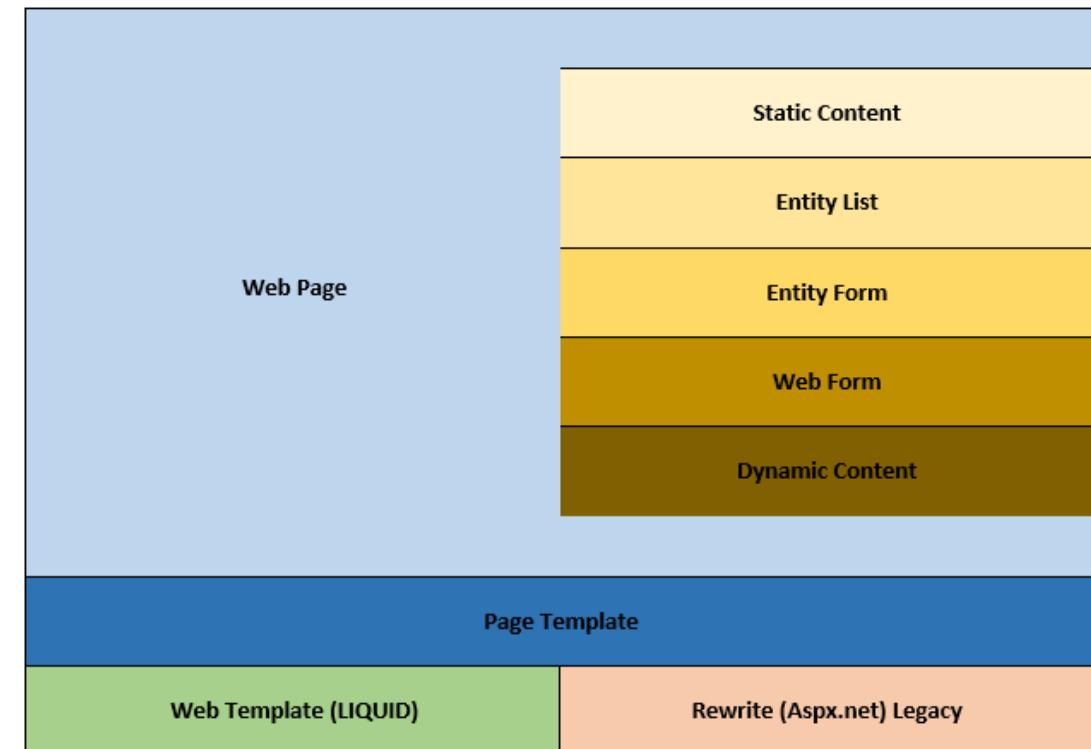
# Intro to PowerApps Portals

- Portal components



# Intro to PowerApps Portals

- Portal structure
- Portal metadata stored in CDS
- Different Portal Components for rendering



# Intro to PowerApps Portals

- Preconfigured templates
- HTML
- Uses Liquid Markup
- Good place to store JavaScript, CSS

The screenshot shows the PowerApps Portal Management interface. The left sidebar has a tree view with 'Content' expanded, showing 'Content Snippets', 'Entity Forms', 'Entity Lists', 'Shortcuts', 'Web Files', 'Web Forms', 'Web Link Sets', 'Portal Languages', 'Web Pages' (selected), and 'Web Templates'. Under 'Web Templates', 'Full Page' is selected. The top navigation bar shows 'PowerApps', 'Portal Management', 'Portals > Web Templates > Full Page', and various action buttons like 'New', 'Delete', 'Refresh', 'Email a Link', 'Flow', 'Word Templates', 'Run Report', and user info for 'Nick Doelman'. The main area displays the 'WEB TEMPLATE Full Page' with tabs for 'General' (selected) and 'Related'. It shows fields for 'Name' (Full Page) and 'Website' (Starter Portal). Below is the 'Source' code in Liquid Markup:

```
1  {% extends 'Layout 1 Column' %}  
2  
3  {% block main %}  
4    {% include 'Page Copy' %}  
5    {% include 'Child Navigation' showdescriptions: true %}  
6    {% if page.adx_entitylist %}  
7      {% include 'entity_list' key: page.adx_entitylist.id %}  
8    {% endif %}  
9  
10   {% if page.adx_entityform %}  
11     {% entityform id: page.adx_entityform.id %}  
12   {% endif %}  
13  
14   {% if page.adx_webform %}  
15     {% webform id: page.adx_webform.id %}  
16   {% endif %}  
17   {% endblock %}
```

# Intro to PowerApps Portals

```
{% extends 'Layout 1 Column' %}

{% block main %}
    {% include 'Page Copy' %}
    {% include 'Child Navigation' showdescriptions: true %}
    {% if page.adx_entitylist %}
        {% include 'entity_list' key: page.adx_entitylist.id %}
    {% endif %}

    {% if page.adx_entityform %}
        {% entityform id: page.adx_entityform.id %}
    {% endif %}

    {% if page.adx_webform %}
        {% webform id: page.adx_webform.id %}
    {% endif %}
{% endblock %}
```

# Intro to PowerApps Portals

## Requirement

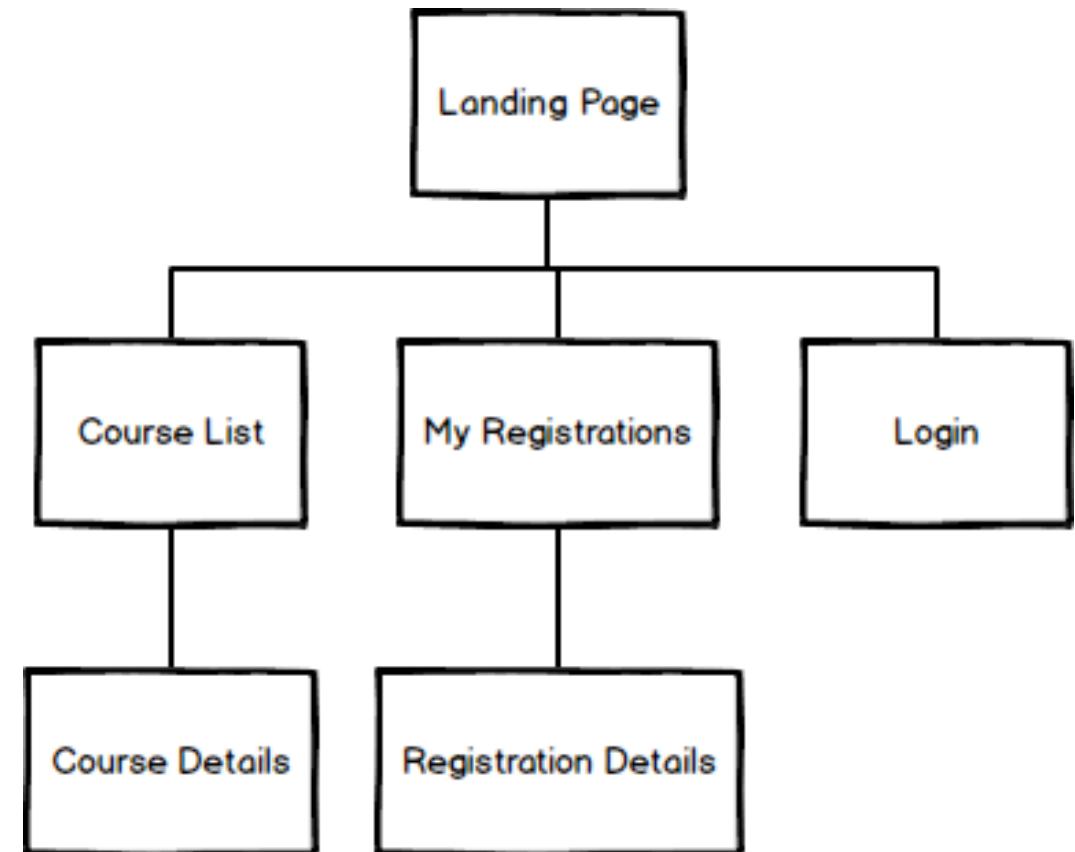
- We have a class management model driven app
- We want folks to see class information on a portal
- We want instructors to see just the classes they are teaching



Created by Håkan Forss @hakanforss <http://hakanforss.wordpress.com>

# Intro to PowerApps Portals

- Design Portal
- Site Map a good place to start
- Consider “Minimal Viable Product”



# Intro to PowerApps Portals

## Design – Web Pages

Class room

http://classroom.powerappspportals.com

### My Registrations

Registration ID	Student	Class	Date
<a href="#">REG-002</a>	Bob Smith	Intro to Portals	2019-8-20
<a href="#">REG-005</a>	Bob Smith	SSRS	2019-6-13
<a href="#">REG-007</a>	Bob Smith	Power Apps	2019-10-16

Class room

http://classroom.powerappspportals.com

### REG-002

Course	<input type="text" value="Portals"/>
Start Date	<input type="text" value="3/10/2019"/> 
Student	<input type="text" value="Bob Smith"/>
Fee	<input type="text" value="\$1000"/>

# Intro to PowerApps Portals

## Model Driven App

The screenshot shows a PowerApps portal interface titled "Class Room App" under "Classroom > Registrations". The left sidebar includes links for Home, Recent, Pinned, Management (Courses, Classes, Registrations), and a Classroom dropdown. The main area displays a list of "Active Registrations" with columns for Registration ID, Class, Student, Student Account, Registration Status, and Date. Three entries are listed:

Registration ID	Class	Student	Student Account	Registration Status	Date
REG-01000	Intro to PowerApps Portals-8/1	Maria Campbell (sample)	---	Registered	8/9/2019
REG-01001	SSRS for the PowerApps-8/21/2	Maria Campbell (sample)	---	Registered	8/5/2019
REG-01002	Intro to PowerApps Portals-9/1	Nancy Anderson (sample)	---	Registered	8/6/2019

At the bottom, there is a navigation bar with letters A through Z and a footer message: "1 - 3 of 3 (0 selected)".

# Intro to PowerApps Portals

## Model Driven App

The screenshot shows a PowerApps portal interface for a "Class Room App". The top navigation bar includes the app name, a back arrow, and links for Classroom, Registrations, and REG-01000. Below the navigation is a toolbar with New, Deactivate, Delete, Refresh, Assign, Share, Email a Link, and Flow icons. On the left, a sidebar menu under "Management" shows Home, Recent, Pinned, Courses, Classes (selected), and Registrations. The main content area displays a registration record titled "REGISTRATION REG-01000" with a green icon. The "General" tab is selected, showing details for a student named Maria Campbell. The registration number is REG-01000, the class is "Intro to Pow...", the registration date is 8/9/2019, the amount paid is \$1,000.00, and the status reason is Registered.

Class	Registration Number
Intro to Pow...	REG-01000

Registration Date	Amount Paid
8/9/2019	\$1,000.00

Student	Student Account
Maria Campbell	---

Status Reason
Registered

# Intro to PowerApps Portals

Create New  
Page

The screenshot shows the PowerApps Portal (preview) interface. At the top, there's a navigation bar with a purple square icon, the text "PowerApps", "Portal (preview)", and "Environment classroomportal (org9430c51d)". On the far right of the bar are icons for a user profile, a gear, a question mark, and a refresh symbol.

In the center, a blue-themed landing page is displayed with the heading "Contoso Ltd." and a "Welcome to your website!" message. The page includes sample text and a note about using sample data for illustration purposes.

A dropdown menu titled "+ New page" is open on the left side of the screen, listing several options: "100% Blank page", "Blank Page", "Blank page with title", "Landing page", "Page with child links", and "Page with side navigation".

On the right side, there are two panels: "Component Webpage" and "Display". The "Display" panel contains fields for "Name" (set to "Home"), "Partial URL" (set to "/"), and "Formatting" settings where the "Template" is set to "Landing page".

At the bottom right of the main workspace, there are "Saved" and "Unsaved" status indicators.

# Intro to PowerApps Portals

## Edit Page

The screenshot shows the PowerApps Portal (preview) editor interface. At the top, there's a navigation bar with icons for PowerApps, Portal (preview), Environment (classroomportal (org9430c51d)), and various settings. Below the navigation is a toolbar with 'New page' and 'Delete' buttons. The main area displays a web page titled 'Contoso Ltd.' with a breadcrumb 'Home > Available Classes'. A section titled 'Available Classes' contains a message: 'This website uses sample data for illustration purposes. You can build pages using multiple templates available.' At the bottom, there's a footer with 'Copyright © 2019. All rights reserved.' and a note 'Save failed'.

PowerApps

Portal (preview)

Environment  
classroomportal (org9430c51d)

New page Delete

Component  
Webpage

Display

Name  
Available Classes

Partial URL  
classes

Formatting

Template  
Blank page with title

Save failed

# Intro to PowerApps Portals

## Add List

The screenshot shows the PowerApps Portal (preview) builder interface. The top navigation bar includes 'PowerApps', 'Portal (preview)', 'Environment classroomportal (org9430c51d)', and various icons for saving, publishing, and help.

The main area is titled 'Add List'. On the left, a sidebar titled 'Components' contains a search bar and sections for 'Section layout' (One column section, Two columns section, Three columns section) and 'Portal components' (Text, Image, IFrame, Form, List, Breadcrumb). The 'List' component is currently selected, highlighted with a purple border.

The central workspace displays a preview of a portal page. The page has a blue header with 'Ltd.' and a menu icon. Below the header, there's a section labeled 'Classes' with a placeholder message: 'Fake data for illustration purposes. You can build pages using multiple templates'. At the bottom of the page, there's a footer with 'All rights reserved.'

On the right side of the workspace, there's a 'Component Editable Area' and a note: 'No properties to show'.

At the bottom right of the workspace, there are 'Save failed' and 'Cancel' buttons.

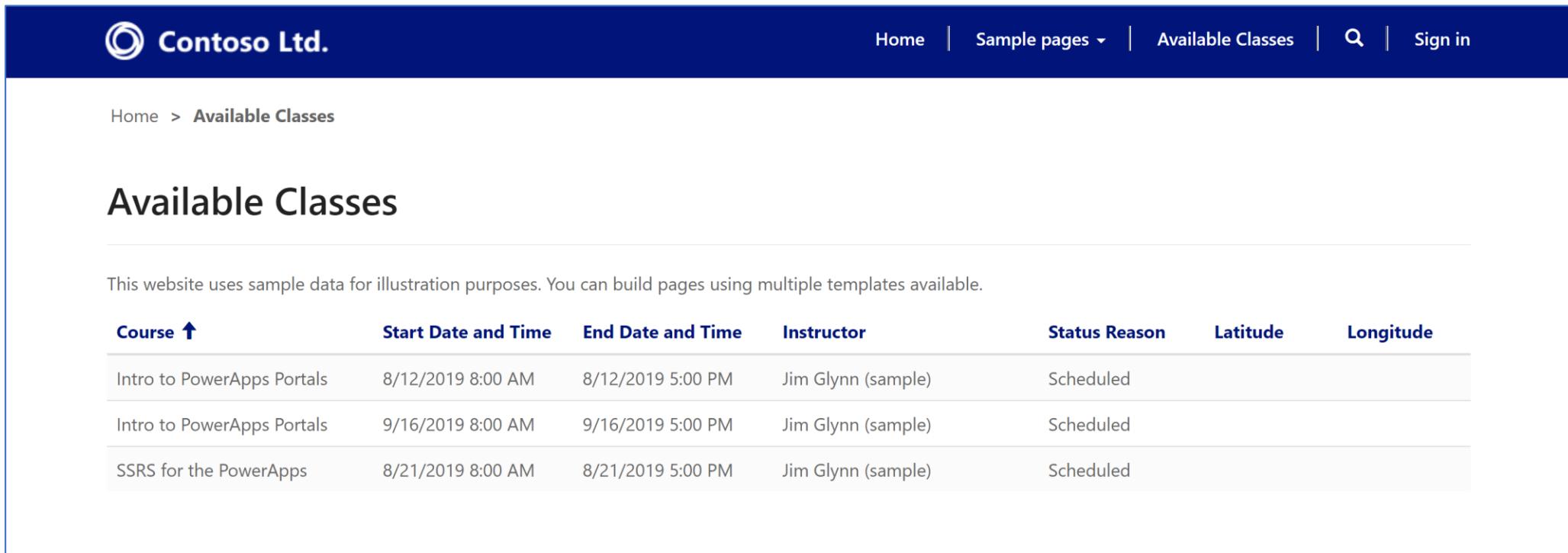
# Intro to PowerApps Portals

**Link List to  
Model Driven  
View**

The screenshot shows the PowerApps Portal (preview) interface. The top navigation bar includes 'PowerApps', 'Portal (preview)', 'Environment classroomportal (org9430c51d)', and various icons for search, refresh, and help. Below the navigation is a toolbar with 'New page' and 'Delete' options. The main content area displays a 'Contoso Ltd.' logo and a breadcrumb trail 'Home > Available Classes'. A large 'Available Classes' section contains a message about sample data and a 'List' component placeholder. To the right, a 'Component List' pane is open, showing a 'Display' section with 'Create new' selected, a 'Name' field containing 'ClassList', an 'Entity' dropdown set to 'Class (avngr\_class)', a 'Views' dropdown set to 'Active Classes', and several toggle switches for 'Create new record', 'View details', 'Edit record', and 'Delete record'. A 'Settings' section is also present.

# Intro to PowerApps Portals

## Preview Portal App



The screenshot shows a web browser displaying a PowerApp portal for "Contoso Ltd.". The header is dark blue with the company logo and name on the left, and navigation links for "Home", "Sample pages", "Available Classes", a search icon, and "Sign in" on the right. Below the header, the breadcrumb navigation shows "Home > Available Classes". The main content area has a light gray background and features a title "Available Classes" in bold. A note below the title states: "This website uses sample data for illustration purposes. You can build pages using multiple templates available." Below this note is a table with the following data:

Course ↑	Start Date and Time	End Date and Time	Instructor	Status Reason	Latitude	Longitude
Intro to PowerApps Portals	8/12/2019 8:00 AM	8/12/2019 5:00 PM	Jim Glynn (sample)	Scheduled		
Intro to PowerApps Portals	9/16/2019 8:00 AM	9/16/2019 5:00 PM	Jim Glynn (sample)	Scheduled		
SSRS for the PowerApps	8/21/2019 8:00 AM	8/21/2019 5:00 PM	Jim Glynn (sample)	Scheduled		

# Intro to PowerApps Portals

## Add Detail Form

The screenshot shows the PowerApps Portal (preview) interface. At the top, there's a navigation bar with 'PowerApps' and 'Portal (preview)' tabs, and a dropdown for 'Environment' set to 'classroomportal (org9430c51d)'. On the left, a sidebar has icons for 'New page', 'Delete', and other portal management options. The main area displays a 'Class Details' page with a heading, a note about sample data, and a large empty form placeholder. Below the form, there's a message about preview functionality and a link to edit the form through the property panel. At the bottom, a footer says 'Copyright © 2019. All rights reserved.' On the right, a detailed configuration pane is open under the heading 'Component Form'. It includes sections for 'Display' (with 'Use existing' selected), 'Name' (set to 'Class Details'), 'Entity' (set to 'Class (avngr\_class)'), 'Form layout' (set to 'Web - Class Details'), 'Edit form' (with a pencil icon), 'Mode' (set to 'ReadOnly'), and expanded sections for 'Form success settings' and 'Advanced settings'.

# Intro to PowerApps Portals

**Edit List Control  
to navigate to  
form**

The screenshot shows the PowerApps Portal (preview) editor interface. The main area displays a page titled "Available Classes" under "Contoso Ltd." with a breadcrumb navigation bar. The page content includes a message about sample data and a placeholder for a list of classes. The "Component List" pane on the right side shows settings for a "List" control component. Key settings visible in the pane include:

- Name:** classlist
- Entity:** Class (avngr\_class)
- Views:** Active Classes
- Create new record:** Enabled (switch is green)
- View details:** Enabled (switch is red)
- Target type:** Form (selected option in dropdown)
- Class Details:** Selected option in dropdown (highlighted in yellow)
- Edit record:** Disabled (switch is grey)
- Delete record:** Disabled (switch is grey)

The status bar at the bottom indicates "Saved".

# Intro to PowerApps Portals

## Portal Management App

The screenshot shows the Microsoft PowerApps Portal Management interface. The left sidebar contains a navigation menu with the following items:

- Entity Forms
- Entity Lists** (selected)
- Shortcuts
- Web Files
- Web Forms
- Web Link Sets
- Portal Languages
- Web Pages
- Web Templates
- Security
- Contacts
- Entity Permissions
- Invitations
- Publishing State Tr...
- Web Page Access ...
- Web Roles
- Website Access Pe...
- Ads
- Ad Placements

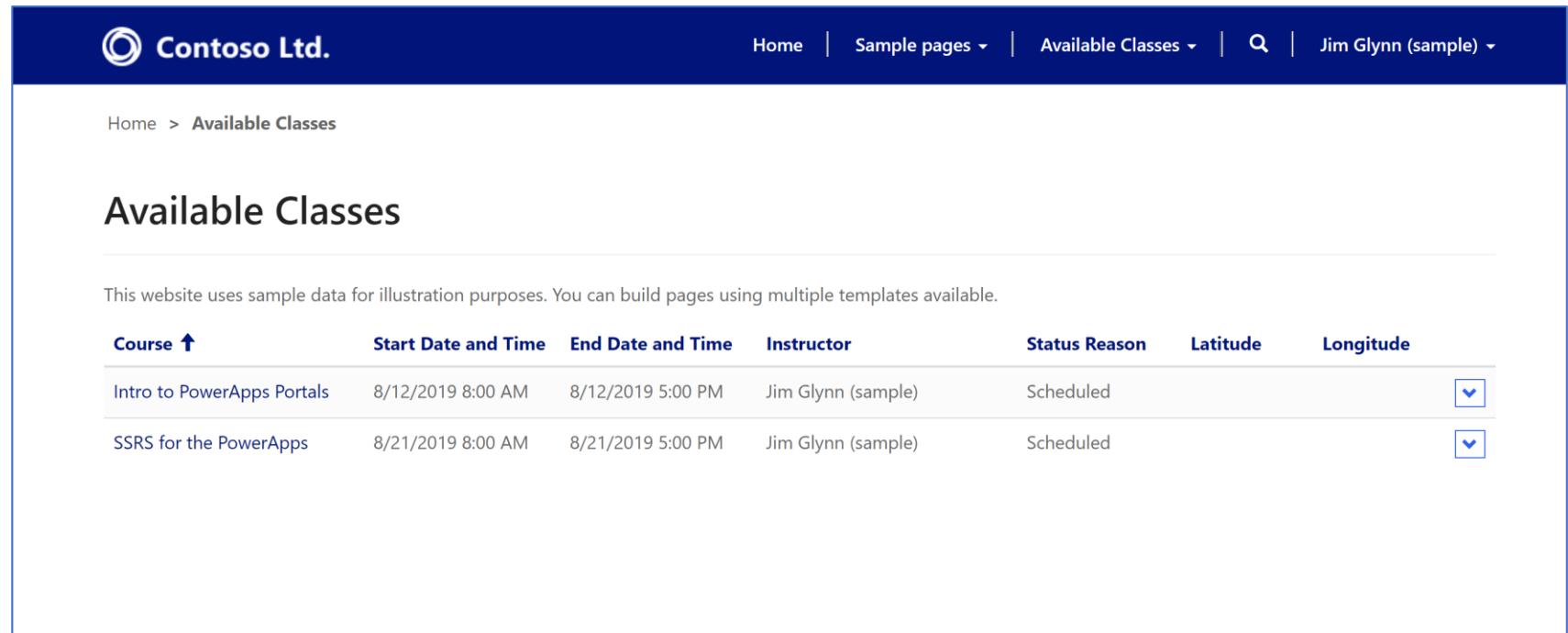
The main content area is titled "Active Entity Lists". It displays a table with two rows of data:

Name	Entity Name	P..	Enable Entit...	Sea...	File...	Calendar Vi...	Ma...	OD...
classlist	avngr_class	10	No	No	No	No	No	No
Courselist	avngr_course	10	No	No	No	No	No	No

At the bottom of the table, there is a navigation bar with letters A through Z, and a message indicating "1 - 2 of 2 (0 selected)".

# Intro to PowerApps Portals

**Allow users to  
login (Entity  
Permissions)**

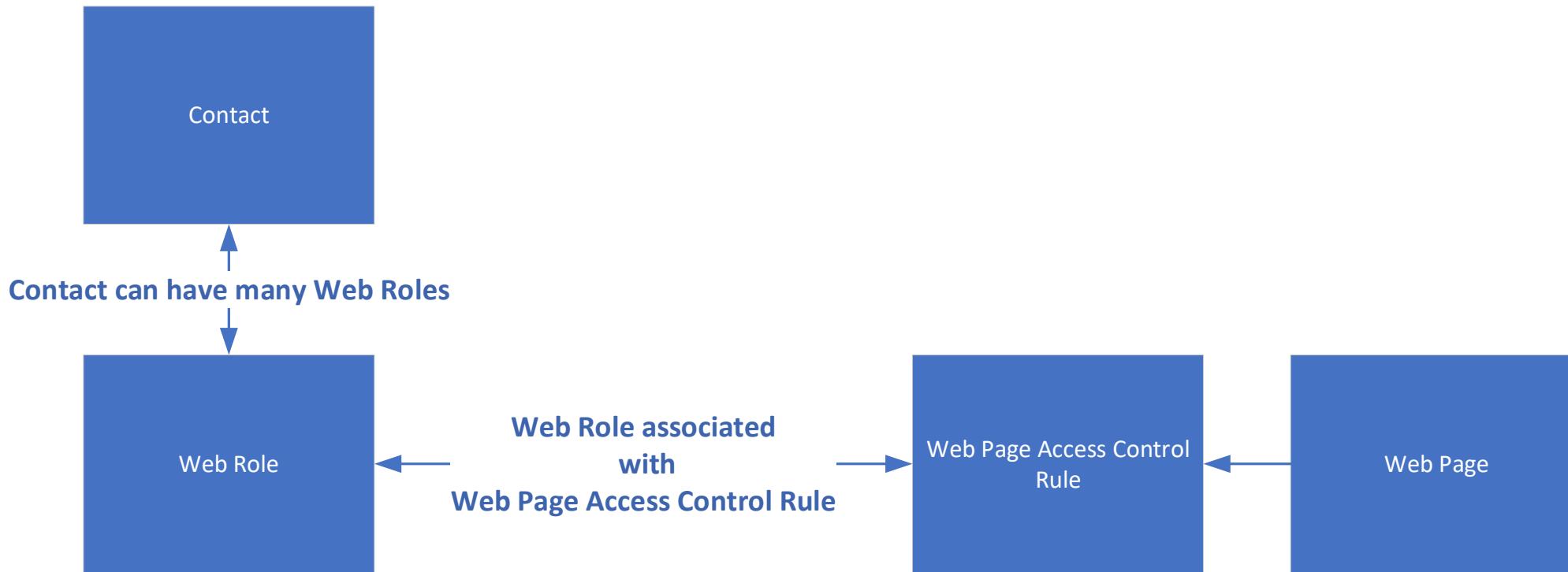


The screenshot shows a web browser displaying a PowerApps portal for 'Contoso Ltd.' The header is dark blue with the company logo and name. Navigation links include 'Home', 'Sample pages', 'Available Classes', a search icon, and a user profile for 'Jim Glynn (sample)'. Below the header, a breadcrumb trail shows 'Home > Available Classes'. The main content area has a light gray background and features a title 'Available Classes'. A note below the title states: 'This website uses sample data for illustration purposes. You can build pages using multiple templates available.' A table lists two available classes:

Course ↑	Start Date and Time	End Date and Time	Instructor	Status Reason	Latitude	Longitude
Intro to PowerApps Portals	8/12/2019 8:00 AM	8/12/2019 5:00 PM	Jim Glynn (sample)	Scheduled	<input type="button" value="▼"/>	<input type="button" value="▼"/>
SSRS for the PowerApps	8/21/2019 8:00 AM	8/21/2019 5:00 PM	Jim Glynn (sample)	Scheduled	<input type="button" value="▼"/>	<input type="button" value="▼"/>

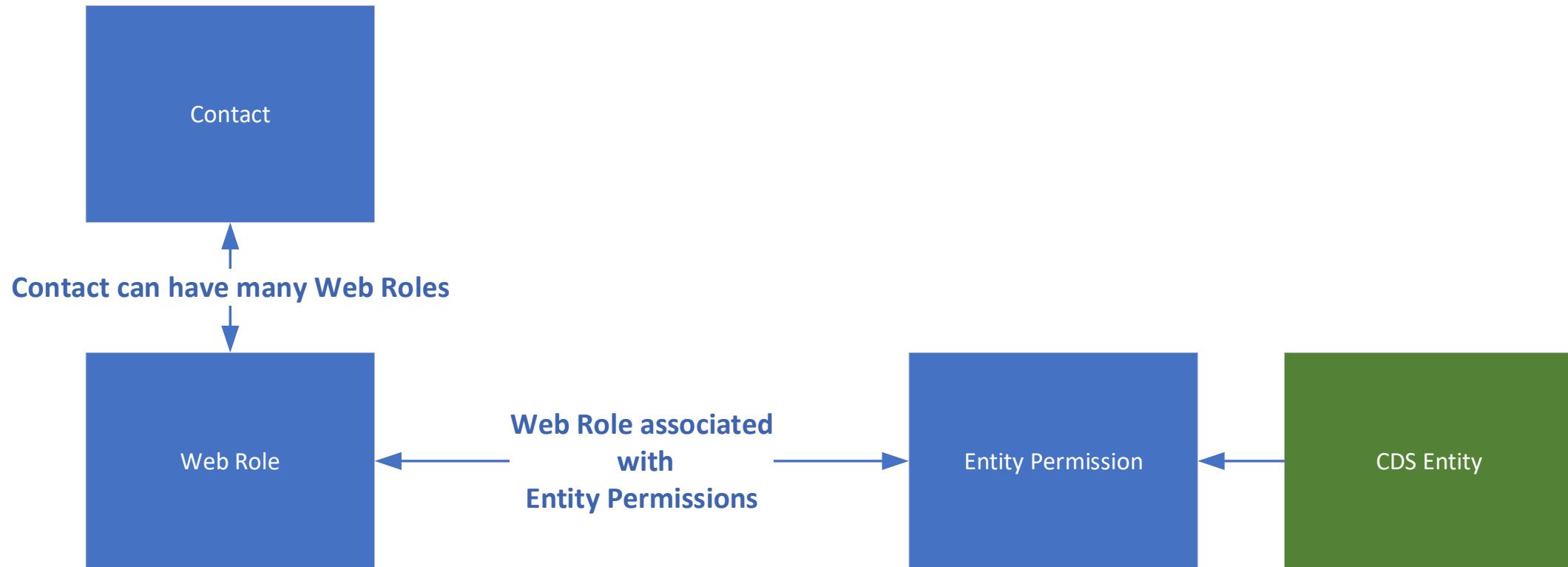
# Intro to PowerApps Portals

## Web Page Access Control Rule



# Intro to PowerApps Portals

## Entity Permissions



# PowerApps Portals Licensing

User Type	Model	SKU Names	Unit capacity	Price/month	Channel	Comments
External user (authenticated)	Per log in	PowerApps Portals login capacity add-on	100 logins	\$200	All	<ul style="list-style-type: none"> <li>A login provides the authenticated user with access to a single portal for up to 24 hours</li> <li>Multiple logins during the 24-hour period count as 1 billable login</li> </ul>
		PowerApps Portals login capacity add-on Tier 2	1000 logins	\$1000	All	
		PowerApps Portals login capacity add-on Tier 3	5000 logins	\$3500	CSP Only	
External user (Unauthenticated)	Per page view	PowerApps Portals page view capacity add-on	100,000 page views	\$100	All	
Internal user	Via license	Dynamics 365 (various) PowerApps per app plan PowerApps per user plan	N/A	N/A	N/A	<ul style="list-style-type: none"> <li>Custom portal use rights are aligned with custom app use rights</li> </ul>

# Intro to PowerApps Portals

## Next Steps – “Homework”

- Provide feedback! <https://experience.dynamics.com/insider>
- Create Portal Content (Wizard in Portal Management App)
- Create custom web templates
- View on Mobile (responsive design)
- Change CSS Themes/Logos/etc.
- Explore Entity Permissions for tighter security
- Azure B2C for Authentication
- Custom Scripting and integration to Azure (Payment Button)
- Subscribe to [crm.audio](#) “Refresh the Cache” podcast

# Intro to PowerApps Portals

## Learning Resources

- MS Learn

<https://docs.microsoft.com/en-us/learn/patterns/extend-dynamics-365-portals/>

<https://docs.microsoft.com/en-us/learn/patterns/work-with-portals-in-dynamics-365/>

<https://docs.microsoft.com/en-us/learn/patterns/get-started-dynamics-365-portals/>

- Portals at UG Academy (Come to Orlando!)
- Online Learning (working on it!)

# THANKS TO OUR SPONSORS!



Microsoft

POWER  
OBJECTS

An HCL Technologies Company

KingswaySoft

The avanade logo, featuring a stylized orange and red abstract shape resembling a brain or a network.

avanade

The NORTH52 logo, featuring a red graphic element that looks like a mountain range or a series of peaks.

NORTH52

Turbocharge Dynamics 365

The b3 logo, consisting of three large, bold, black lowercase letters 'b' and '3'.

Solgari

INNOFACTOR®



POWER PLATFORM  
**SATURDAY**  
**STOCKHOLM**  
**05-OCT-2019**

#PPSatSwe

# Next Up...

14:30-15:20



## Revolutionizing the Customer and User Experience with the Power Platform

**Lucy Muscat & Lee Baker**

This session will provide an overview and demonstration of a Customer Journey created using low or no code solutions that provide functionality to extend and improve your offerings to your customers and deliver better experience to users.

The solution will leverage the combination of Virtual Assistant, Forms Pro Power Apps Portals, PowerApps, Flow, Flic buttons, Teams, Azure Cognitive Services and Power BI.



## Deep dive using Microsoft flow with CDS

**David Yack**

Microsoft Flow is quickly becoming the preferred automation engine for working with CDS. In this session, David will deep dive into using the CDS connectors and how to work with different entity types, data types, relationships, custom actions, batching and more.



## Top 10 things people mess up with PowerApps

**Timo Pertilä**

With every tool, you can do things perfectly, fine or almost fine. This is ok but in some cases, you can make horrible mistakes.

In this session, I go through common mistakes people do with Canvas PowerApps. Some are just small details, some are bigger ones. But as a PowerApps maker, you should be aware of these.



## Introduction to A.I. Building and Manufacturing Use Cases

**Pavlos Vasileiadis**

The session will be focused on the AI Builder feature and specifically cover the Object Detection functionality and how it can be applied in the manufacturing industry. The session concludes with a live demo of a app that allows Engineer to scan spare parts of a broken engine, check inventory and finally order spare parts if required.