



NOVEMBER 2019

FREE TICKETS,
LIMITED CAPACITY

DYNAMICS POWER! PARIS 365

FRANCE'S FREE ANNUAL
BUSINESS APPLICATIONS
TECHNICAL CONFERENCE BY
365 SATURDAY



365 Saturday



NORTH52
Turbocharge Dynamics 365

dox42
automate your documents
upgrade your data

FireStart

XRM VISION

TIBCO

CognitiveGroup
Microsoft Talent Solutions

ClickDimensions



Dynamics 365



Flow



PowerApps



Power BI

Time	Dynamics 365	Power Platform
09:00 - 10:00	Keynote with Microsoft France General Manager	Keynote with Microsoft France General Manager
10:00 - 11:00	Envoyez une communication prédictive sur les comportements d'un client avec la plate-forme Dynamics Power Azure - Aurelian	Dynamics 365 - Que pouvez-vous faire avec la combinaison PowerPlatform - Moreau
11:00 - 12:00	Utilisation de PowerPlatform avec les ERP Microsoft (cas d'utilisation et techniques) - Mehdi	Transformation numérique @ sncf avec PowerApps - - Cedric Martin
12:00 - 13:00	Document Automation for Dynamics 365 - Christian	Solving Complex Data Integrations and Migrations - Nick
13:00 - 14:00	Lunch Break	
14:00 - 15:00	Omnichannel for Customer Service "A USD killer, maybe not!" - Neil	Construisons une PowerApp en moins de 60 minutes! - Julien
15:00 - 16:00	Omni Channel Integration for Dynamics 365 - Vance	No Code Advanced Business Rules and Automated Testing with North52 - Bruce
16:00 - 17:00	Comprendre les Customer Insights de Microsoft CDP D365 - Mehdi	Dynamics 365 Marketing - Guro
	Close & Swag	

Time	Developer
09:00 - 10:00	Keynote with Microsoft France General Manager
10:00 - 11:00	Top conseils pour les développeurs de Canvas App - Clement
11:00 - 12:00	Commencer avec Liquid Templates pour Power Portals - Victor
12:00 - 13:00	Crée ton XrmToolBox plugin - Tanguy
13:00 - 14:00	Lunch Break
14:00 - 15:00	Présentation du framework de composants PowerApps! - Allan
15:00 - 16:00	Azure for Dynamics 365 Projects - Tricia
16:00 - 17:00	Devops CICD for Dynamics 365 – Wael/ Raz

365

Saturday

Allan De Castro

Power Apps Component
Framework

Who I am ?



Allan De Castro

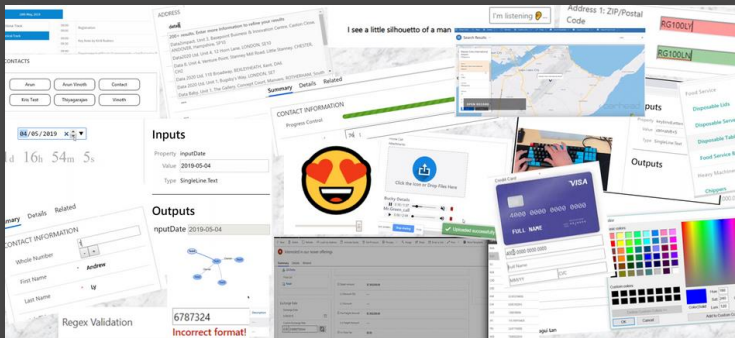
- ▶ ~~CRM~~ Power Platform Consultant
- ▶ Paris Power Platform Happy Hour
- ▶ linkedin.com/in/allandecastro/
- ▶ twitter.com/decastroallan
- ▶ www.blog.allandecastro.com



▶ Agenda

1

Introduction What is the Power Apps Component Framework?



2

Demo

4

QnA

3

Getting started with PCF (a.k.a.
Goodbye Web Resources)

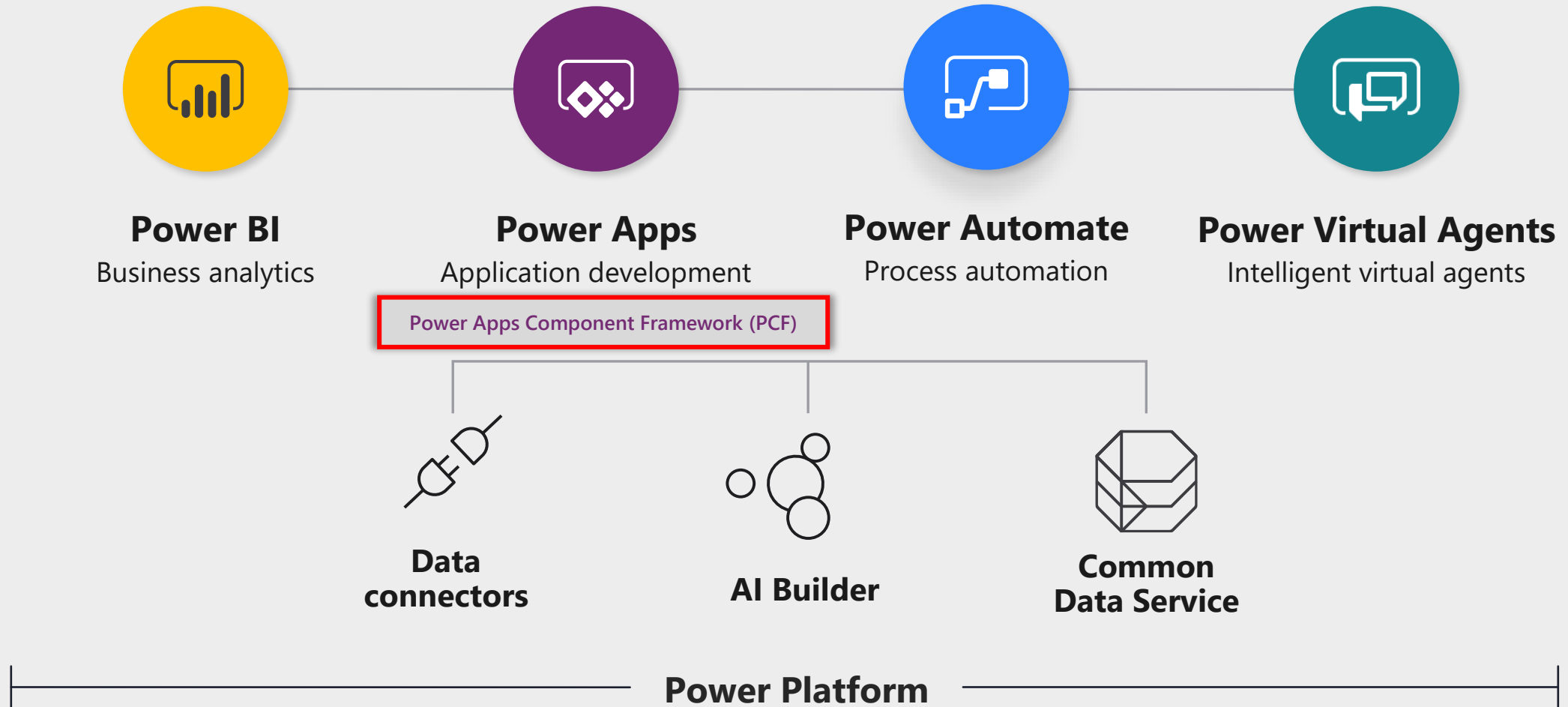
▶ What is the Power Apps Component Framework ?

1

Introduction

What is the Power Apps Component Framework?

▶ What is the Power Apps Component Framework ?



▣ What is the Power Apps Component Framework ?

▶ First components introduced in 2016

Set of optimized mobile controls.



▶ Unified Interface -> Components for all

At that time we were talking about Custom Control using an exclusive Microsoft framework.



▶ Power Platform, renamed into Power Apps Component Framework

~~Custom Control~~ → PCF → Power Apps Component Framework

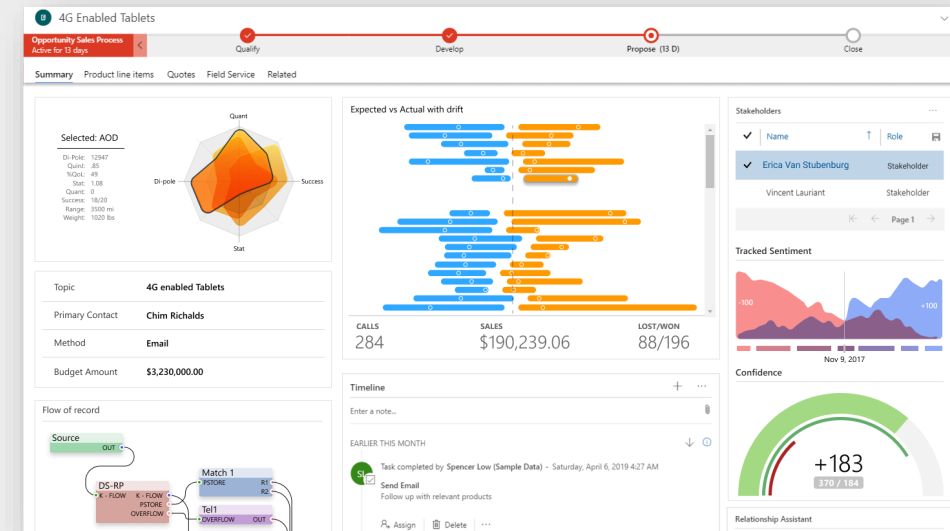
▶ What is the Power Apps Component Framework ?

▶ Public Preview, April 23, 2019

[The PowerApps component framework and the PowerApps CLI is now available for public preview](#)



Power Apps Component Framework

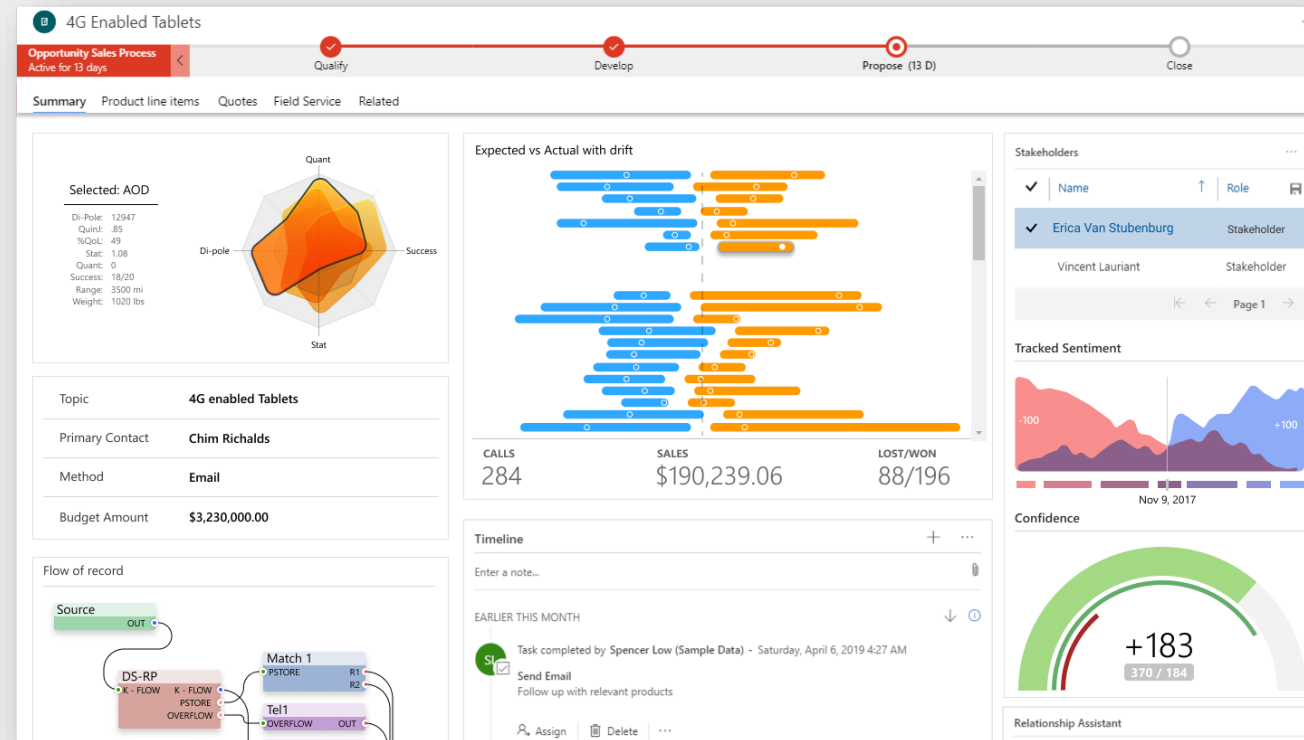


▶ General Availability, October 1, 2019

[Announcing the general availability of the PowerApps component framework for model-driven applications and PowerApps CLI](#)

▶ What is the Power Apps Component Framework ?

- ▶ Model Driven App and Canvas Apps
- ▶ 1st and 3rd party developers
- ▶ Professionally developed controls with well defined contracts, lifecycle and interaction model
- ▶ Improves performance
- ▶ Create your own user experience
- ▶ Modern Tooling (CLI)



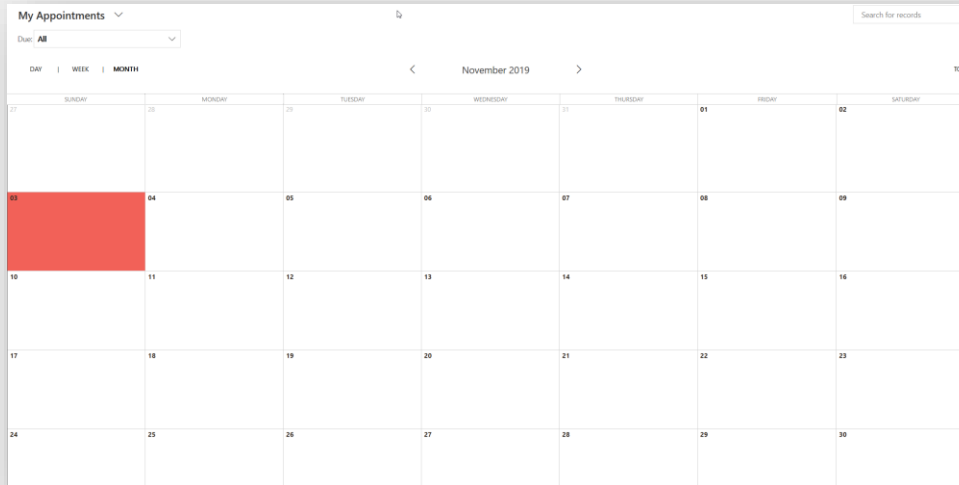
Ignite 2019: Using Power Apps component framework to build reusable custom user experiences.

▶ What type of components ?

▶ Field on the form

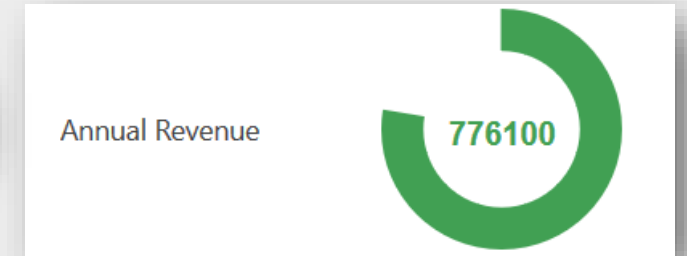
Annual Revenue **US\$776,100**

▶ DataSet (Entity Grid/SubGrid)



▶ Business Process step

▶ Display/Use external content (LinkedIn, API, Azure Maps...)

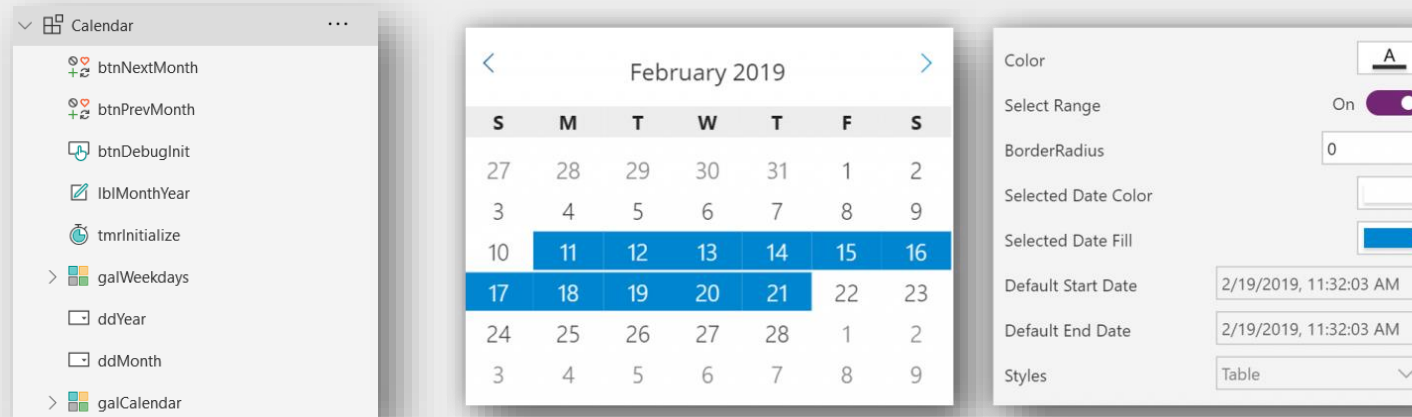


▶ What is the Power Apps Component Framework ?

▶ Two different types of components:

Custom Canvas Compositions : Low-code composition using expressions and connectors (CanvasApp)

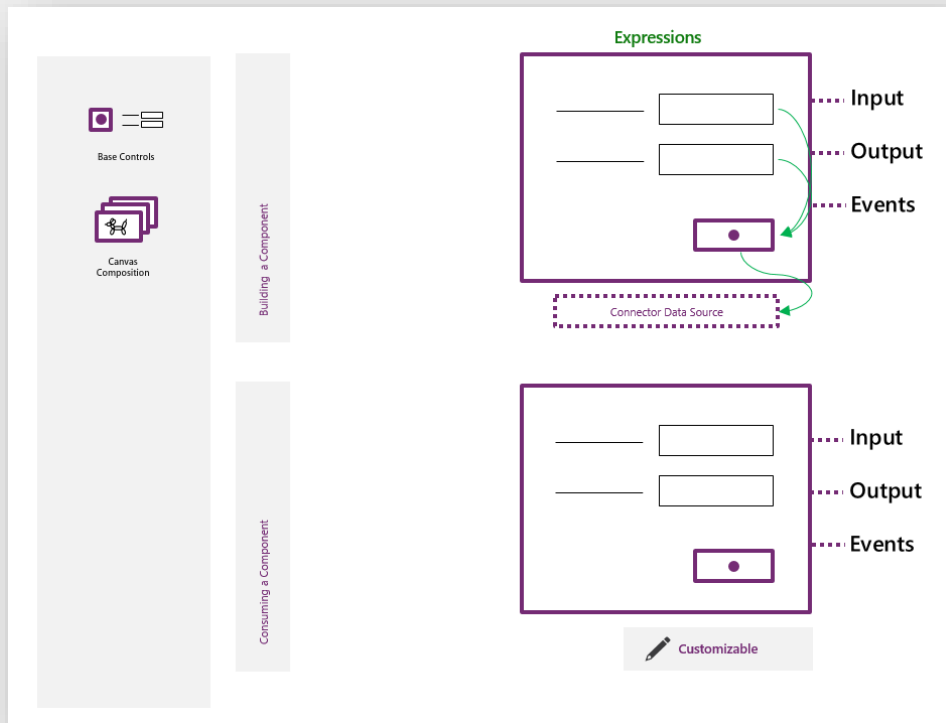
Exemple : 10 Reusable Components: tab control, calendar, dialog box, map control and more



Custom Pro Components : Create more sophisticated component using code (Model Driven App & Canvas App)

▶ What is the Power Apps Component Framework ?

▶ Custom Canvas Compositions:



Allows you to connect the basic commands between base control and the connectors using expressions.

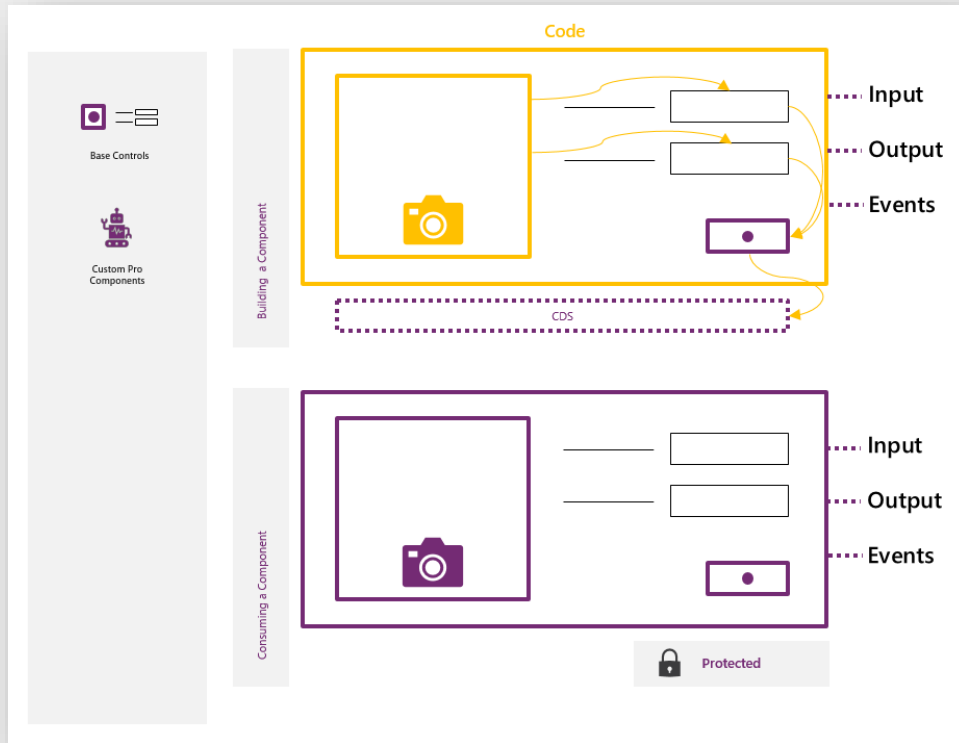
Use of OOB controls available, enriched with expressions and connected data (using connector) to produce reusable components.

Input and output properties to interact with the component by passing data (can be used to change the visual aspect).

Business App Summit 2019: Microsoft PowerApps: Building and Extending Applications

▶ What is the Power Apps Component Framework ?

▶ Custom Pro Developer Components:



Using code to connect base controls.

Custom Pro Developer components use input and output properties, and can connect **only to CDS**.

Custom Pro Developer components are consumed as black box components to Makers, and can't be customized through maker experiences, except for developer designated properties.

Business App Summit 2019: Microsoft PowerApps: Building and Extending Applications

▶ What is the Power Apps Component Framework ?

- ▶ An extensibility Framework for professional developer to create custom component and user experiences to be leveraged by citizen developers:



▶ What is the Power Apps Component Framework ?

Products By Industry

Disposable Tableware

Food Service

Disposable Lids

Disposable Serveware

Disposable Tableware

Food Service Baskets

Heavy Machinery

Chippers

Indie Flower

PowerFont sample

This is a test

PCF Component

HTML Text control

EAN13

5 901234 123457

EAN13 customized

Custom Text

PCF Controls

Siren

38012966

Is Valid Siren

Yes

France	+33 6 34 55 66 77	
USA	+44 20 8366 1177	
Algeria	+213 634 55 66 77	
Swiss	+41 44 668 18 00	
Italy	+39 365 478 9145	
Portugal	+351 22 040 4000	

Component

Azure PaaS Azure SaaS Field Services Finance and Operations IoT Marketing Power BI Project Service Automation Retail



RECENT OPPORTUNITIES



RECENT CASES



OPPORTUNITIES NEXT MONTH





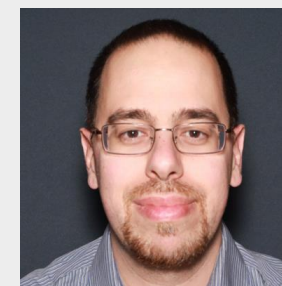
Demo

2

Demo

BusinessProcessFlowViewer & Community Stuff

▶ PCF Gallery by Guido Preite @crmanswers



PCF Gallery Categories Please select

Search Type and hit enter... Authors Ideas About

Notification Control

Back Camera LIVE Camera OFF

Message From: PowerApps

Received Image:

Send message

Received Text: PowerApps 2 can send message

PCF AppInsights

6.5K users

Energy Efficiency Rating Control

Energy Efficiency Rating: 40

Energy Efficiency Rating: 11.6

Energy Efficiency Rating: 93

RECENT OPPORTUNITIES

Interested to buy something!

I really need to buy something!

Let me tell you once more: I WANT TO BUY SOMETHING

Another BPF with one more stage

Business Process Flow Viewer

YouTube Player

Account Account Test Account

Summary Details Youtube Related

Youtube Embed URL: <https://www.youtube.com/embed/4ZwkeW9ytcQ>

IN 1 MINUTE!

Gantt Progress Timeline

Text

This control extracts the text from the image.

WE CREATED MYTHS to unite our species

WE TAMED NATURE to give us power

WE ARE NOW REDESIGNING LIFE to fulfil our wildest dreams

BUT DO WE KNOW OURSELVES ANY MORE? Or will our inventions make us irrelevant?

Image To Text Control

Status Reason Kanban

All Tasks - Kanban

Not Started	In Progress	Waiting on someone else
Code review with interns Winona Bartle 9/5/2019 12:00 AM 9/5/2019 12:00 AM	Develop new features Winona Bartle 9/5/2019 12:00 AM 9/16/2019 12:00 AM	Request customer approval Winona Bartle 9/5/2019 12:00 AM 9/5/2019 12:00 AM
Finalize FDD Winona Bartle 9/5/2019 12:00 AM 9/5/2019 12:00 AM	Deploy in production Winona Bartle 9/5/2019 12:00 AM 9/5/2019 12:00 AM	

Attachment Manager

Attach files

Choose files you want to attach to the email

Attach

Copy files from OneDrive to an email

Name	Type	Last Modified On	Last Modified By
Dynamic 365 Learning Guide Aug 2017.pdf	pdf	11/26/2019 12:04:41 pm	Aung Mying
Feedback.doc	doc	11/26/2019 12:04:41 pm	Aung Mying
Security update report.doc	doc	9/5/2019 12:00:00 pm	Aung Mying
Security update report.pdf	pdf	9/5/2019 12:00:00 pm	Aung Mying
Security update report.docx	docx	9/5/2019 12:00:00 pm	Aung Mying
Team document.docx	docx	9/5/2019 12:00:00 pm	Aung Mying
Security update.docx	docx	9/5/2019 12:00:00 pm	Aung Mying

Immersive Reader Control

Immersive Reader Demo

The quick brown fox jumps over the lazy dog. The cow then moos. But what does the fox say?

Sentiment Score

83.73%

LANGUAGES: English

KEY PHRASES: N/A

ENTITIES: Seattle (Location)
last week (DateTime)

Rich Text Editor with Chart & UML Designer

Summary Details Related

Connected Users

JH Josh Hetherington

Owner

Ben Bartle



Demo



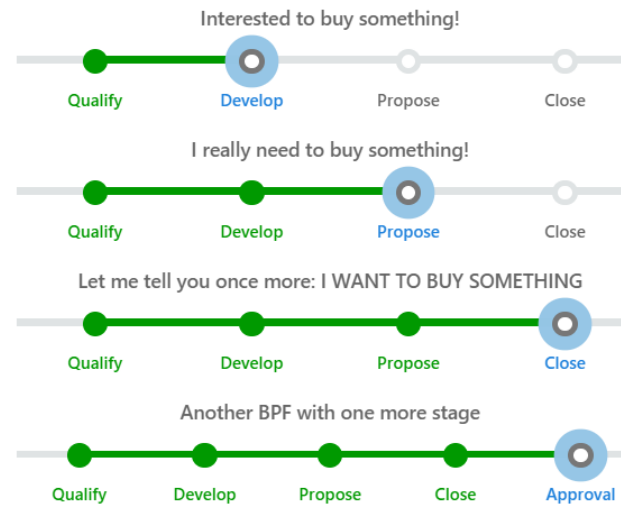
Business Process Flow Viewer

Displays BPFs with all process stages categories of grid/views.

Benefits:

- Improves information's visualization
- Fully configurable
- Supports any entities (OOB, custom...)
- Supports any BPFs (OOB, custom...)
- **FREE!** <https://github.com/allandecastro/Busin>

RECENT OPPORTUNITIES



RECENT CASES



OPPORTUNITIES NEXT MONTH



completedColor: **#090**
completedTextColor: **#090**
activeColor: **#777**
activeTextColor: **#2183DD**
notActiveColor: **#DFE3E4**
notActiveTextColor: **#666666**
progressTrackLineColor: **#DFE3E4**
pulseColor: **#95c6e6**
displayEntityName: **true**

completedColor: **#F50109**
completedTextColor: **#F50109**
activeColor: **#777**
activeTextColor: **#E5BDBE**
notActiveColor: **#DFE3E4**
notActiveTextColor: **#666666**
progressTrackLineColor: **#DFE3E4**
pulseColor: **#E1B3B5**
displayEntityName: **true**

completedColor: **#0029FC**
completedTextColor: **#0029FC**
activeColor: **#777**
activeTextColor: **#2183DD**
notActiveColor: **#F26728**
notActiveTextColor: **#F26728**
progressTrackLineColor: **#799EDF**
pulseColor: **#DFA2E4**
displayEntityName: **false**



Demo

Dynamics 365

Sales > Accounts

SANDBOX

+

☰

Home

Recent

Pinned

My Work

Dashboards

Activities

Customers

Accounts

Contacts

Sales

Leads

Opportunities

Competitors

Collateral

Quotes

Orders

Invoices

Products

Sales Literature

Marketing

Show Chart

New

Delete

Refresh

Email a Link

Flow

Run Report

Excel Templates

Export to Excel

Import from Excel

Quick Campaign

My Active Accounts

Search for records

✓	Account Name	Main Phone	Address 1: City	Primary Contact	Email (Primary Contact)
	Allan De Castro, Inc.	+33 6 24 08 51 06	---	---	---

All

#

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- ▶ Getting started with PCF (a.k.a Goodbye Web Resources)

3

Getting started with PCF (a.k.a. Goodbye Web Resources)

Technologies , Approach, tools & architecture

▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ What technologies ?



TypeScript

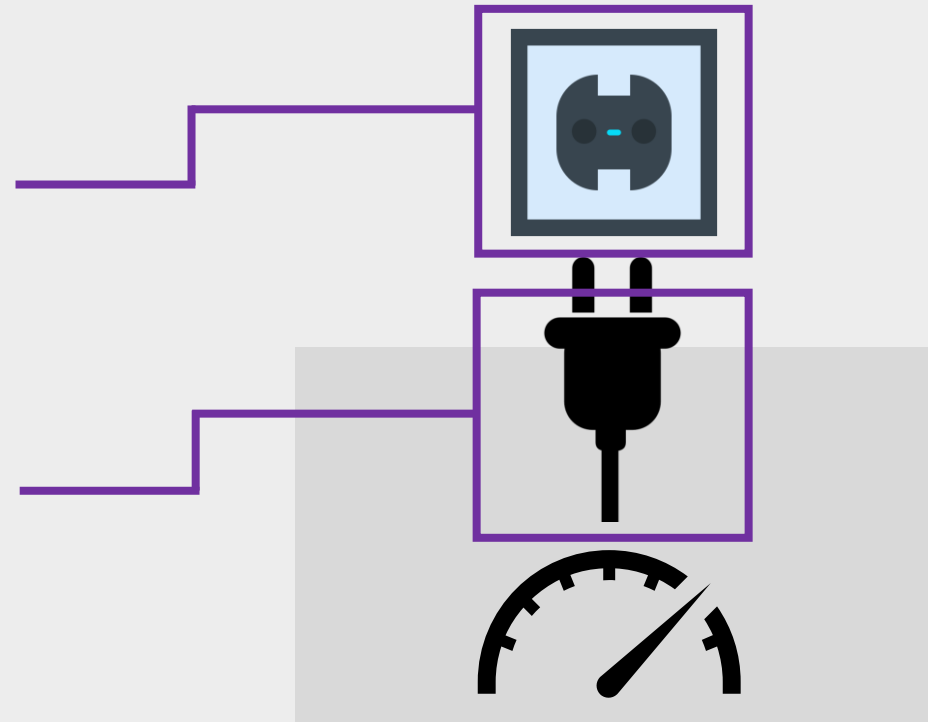


▶ What is the Power Apps Component Framework ?

▶ Framework Interface aka Socket

Interface API SDK provides methods for control lifecycle, data/metadata access and more.

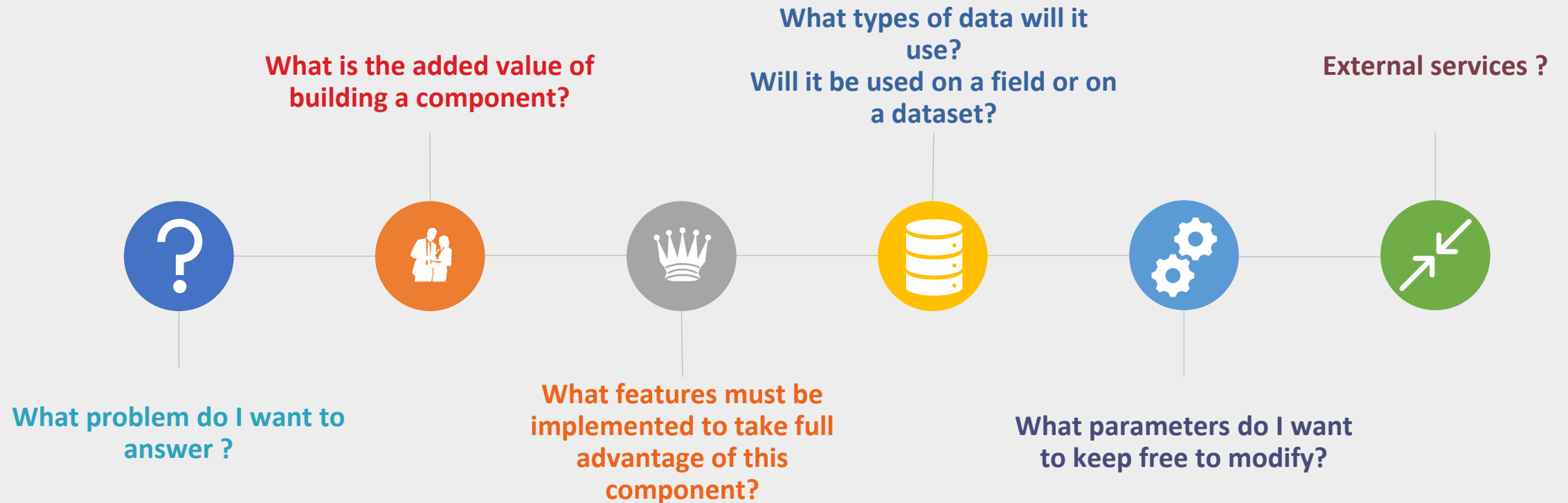
Component implement the framework interface and functional logic.



Ignite 2019: Using Power Apps component framework to build reusable custom user experiences.

▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Think before you act!



▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Equip yourself!

Install [Npm](#) or [Node.js](#), one will come with the other in any case!

Make sure you have the [.NET Framework 4.6.2 Developer Pack](#).

Install [Microsoft PowerApps CLI](#).

Note: XrmToolBox plugin exists [PCF Custom Control Builder](#).



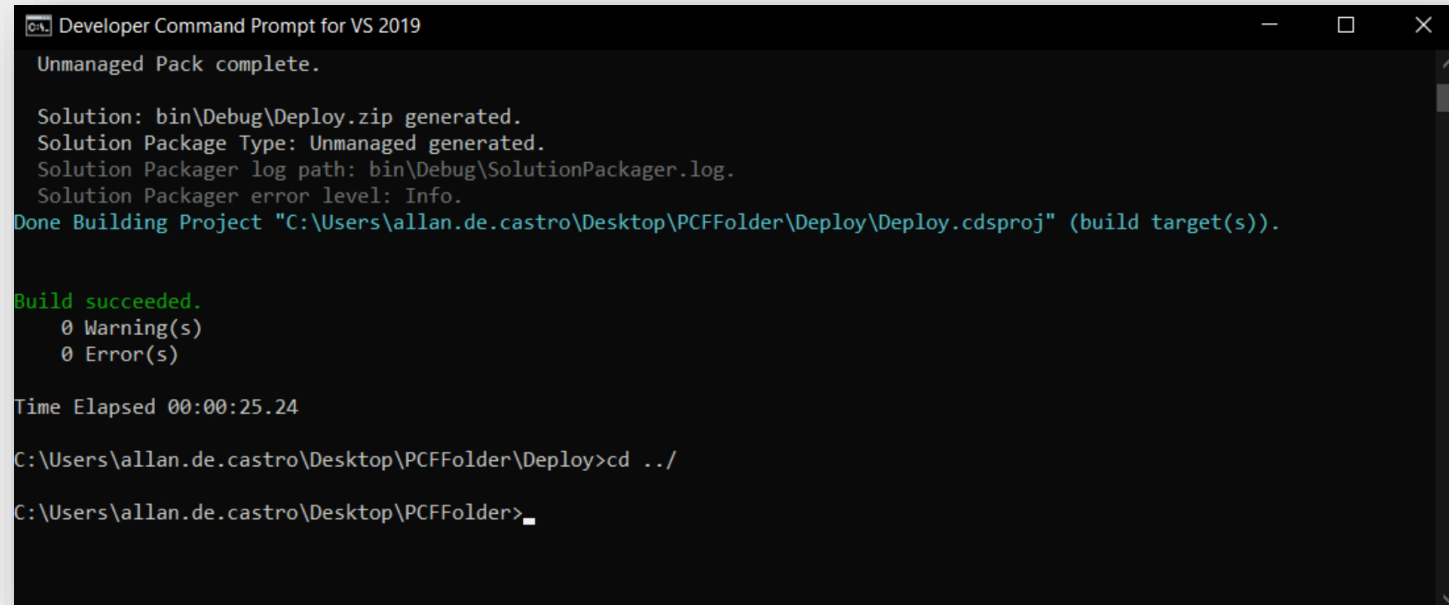
▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Power Apps CLI

A unique tool that initially focuses on developing **custom controls** and will evolve to support other types of components such as **plugins** and **web resources**.

Command Line Interface which enables developers to be more efficient in their PCF development !

- Control templates (field and dataset)
- Build in validations to catch issues prior to deployment
- Can be used as part of your automated processes



```
Developer Command Prompt for VS 2019

Unmanaged Pack complete.

Solution: bin\Debug\Deploy.zip generated.
Solution Package Type: Unmanaged generated.
Solution Packager log path: bin\Debug\SolutionPackager.log.
Solution Packager error level: Info.
Done Building Project "C:\Users\allan.de.castro\Desktop\PCFFolder\Deploy\Deploy.cdsproj" (build target(s)).

Build succeeded.
    0 Warning(s)
    0 Error(s)

Time Elapsed 00:00:25.24

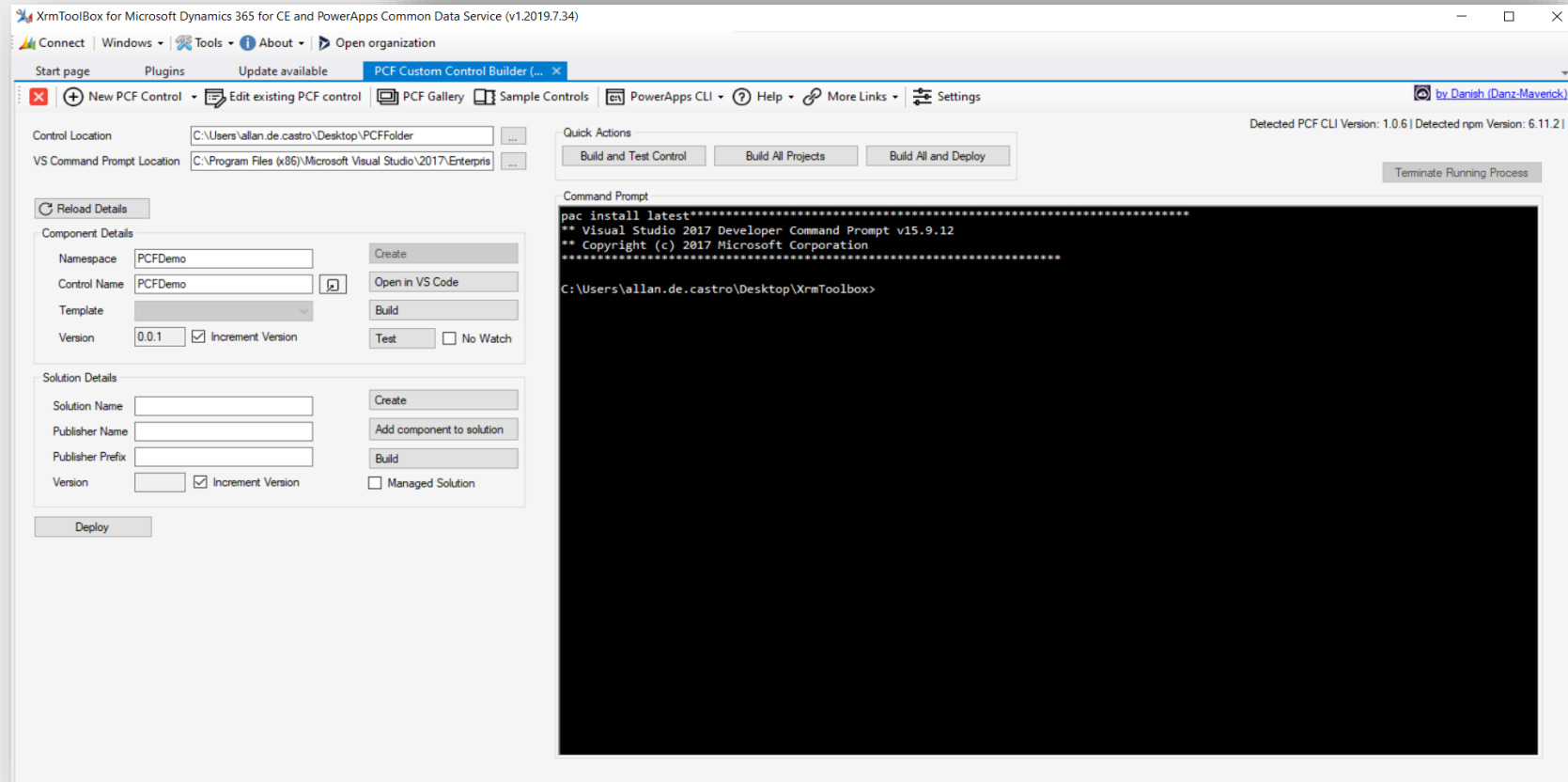
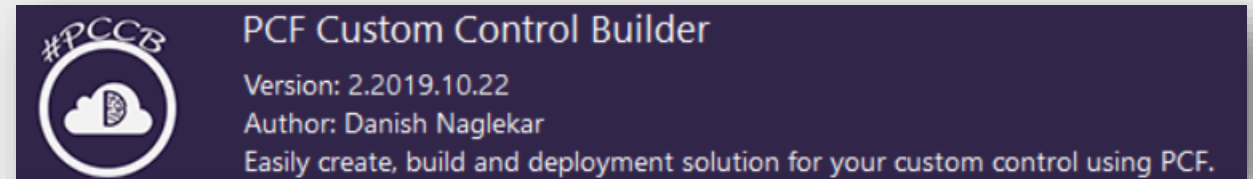
C:\Users\allan.de.castro\Desktop\PCFFolder\Deploy>cd ../
C:\Users\allan.de.castro\Desktop\PCFFolder>
```

▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ XrmToolBox Plugin by [Danish](#)

Makes it easy to create and build PCF custom control by removing the need to write commands.

CLI opens according to the action desired.



▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ What makes a custom component ?

Manifest Input
File

Control Definition:

- Name
- Version
- Properties
- Resource files

Component
Implementation

Code:

- TypeScript / Javascript
- User Interface
- Functionality

Resource Files

Static Resources

- CSS
- Images
- ...

▶ Getting started with PCF (a.k.a Goodbye Web Resources)

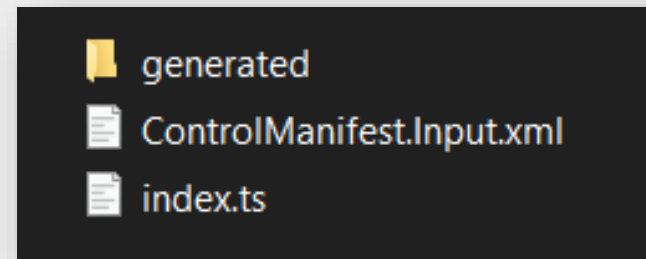
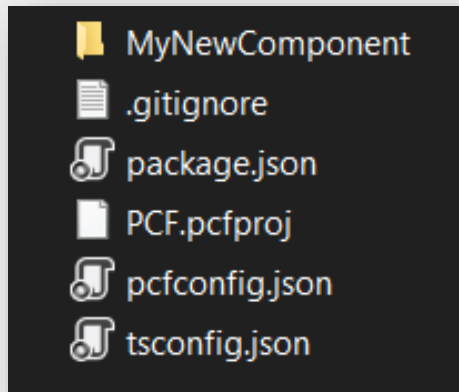
▶ Create a component

```
pac pcf init --namespace MyNewComponentNameSpace --name MyNewComponent --template field
```

Namespace for this component

Name of the component

Type of PCF project



Note: *npm install* to ensure to get required project dependencies.

▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Manage properties & add resources

```
<?xml version="1.0" encoding="utf-8" ?>
<manifest>
  <control namespace="BusinessProcessFlowViewer" constructor="BusinessProcessFlowViewer" version="1.0.0" display-name-key="BusinessProcessFlowViewer" />
  <data-set name="dataSet" display-name-key="DataSet View Used" cds-data-set-options="displayCommandBar:true;displayViewSelector:true" />
  <property name="parametersBPF" display-name-key="parametersBPF" description-key="This parameter is used to retrieve the different business process flows." />
  <property name="completedColor" display-name-key="completedColor" description-key="This Hex Color define the background color of the completed items." />
  <property name="completedTextColor" display-name-key="completedTextColor" description-key="This Hex Color define the text color of the completed items." />
  <property name="activeColor" display-name-key="activeColor" description-key="This Hex Color define the background color of the active items." />
  <property name="activeTextColor" display-name-key="activeTextColor" description-key="This Hex Color define the text color of the active items." />
  <property name="notActiveColor" display-name-key="notActiveColor" description-key="This Hex Color define the background color of the not active items." />
  <property name="notActiveTextColor" display-name-key="notActiveTextColor" description-key="This Hex Color define the text color of the not active items." />
  <property name="progressTrackLineColor" display-name-key="progressTrackLineColor" description-key="This Hex Color define the background color of the progress track line." />
  <property name="pulseColor" display-name-key="pulseColor" description-key="This Hex Color define the pulse color. If empty pulse color will be the same as the active color." />
  <property name="displayEntityName" display-name-key="displayEntityName" description-key="This value is used to display or not the entity name." />
  <resources>
    <code path="index.ts" order="1"/>
    <css path="css/style.css" order="1" />
    <img path="img/preview.png" />
  </resources>
  <feature-usage>
    <uses-feature name="WebAPI" required="true" />
  </feature-usage>
</manifest>
```

Display Formatting Controls

Control	Web	Phone	Tablet
Read-only Grid (default)	<input type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/>
BusinessProcessFlowViewer	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>

Add Control...

BusinessProcessFlowViewer

activeTextColor *	#2183DD (SingleLine.Text)	
notActiveColor *	#DFE3E4 (SingleLine.Text)	
notActiveTextColor *	#666666 (SingleLine.Text)	
progressTrackLineColor *	#DFE3E4 (SingleLine.Text)	
pulseColor	#95c6e6 (SingleLine.Text)	
displayEntityName	true (SingleLine.Text)	

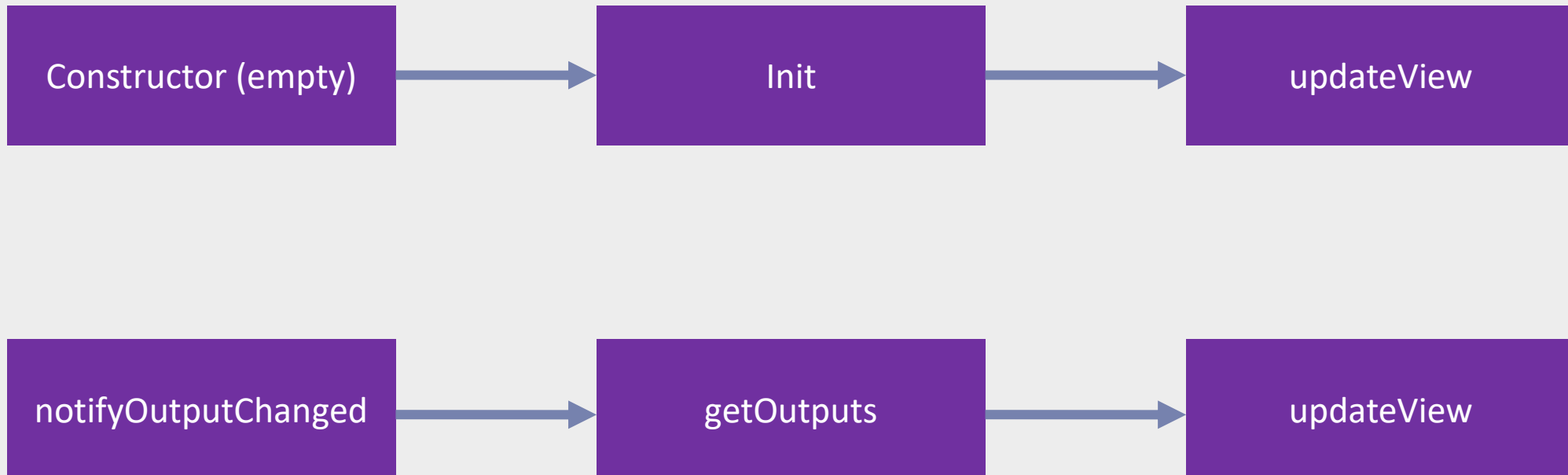
▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Life cycle of a component (index.ts)

```
/* initialize component instance*/  
init(context, notifyOutputChanged, state, container)  
  
/* update call when value in the context changes */  
updateView(context)  
  
/* control is to be removed from the DOM tree*/  
destroy()  
  
/* updated values for the bound properties*/  
getOutputs()
```

▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Life cycle of a component (index.ts)

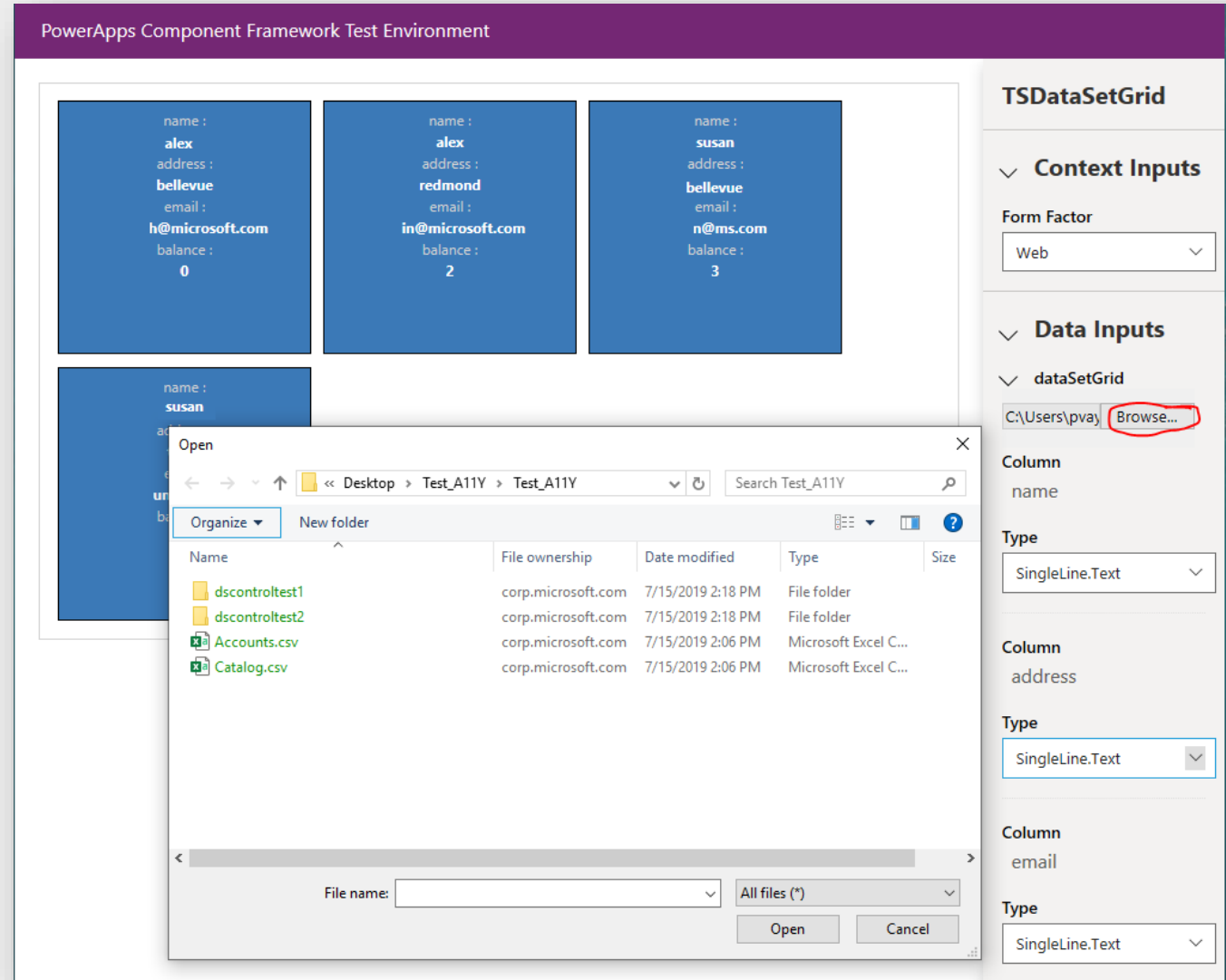


▶ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Build & Debug

npm run build

npm start *watch* (or you can use **start npmstart** to open a new window)



▢ Getting started with PCF (a.k.a Goodbye Web Resources)

▶ Package a Component & Import the solution

Use CLI to create a solution (Managed/UnManaged) containing the custom control.

1. **cd** <solution folder>
2. **pac solution init**--publisher-name <enter your publisher name> --publisher-prefix <enter your publisher prefix>
3. **pac solution add-reference**--path <path of your PowerApps component framework project on disk>
4. **msbuild** /t:build /restore (msbuild must be in the path)
*If you want to build a managed package, add add /p:configuration=Release
5. **msbuild** /t:build /restore **/p:configuration=Release**
6. **Import** the solution into CDS Environement using the UI.

How to build a PCF component

Credit : Nicolas Kirrmann

Get Tooling



1

Install Npm & Node.js

2

Install .NET Framework 4.6.2 Dev Pack

3

Install Visual Studio 2017

Install .Net Core 2.2 SDK

Install Visual Studio Code

4

Install PowerApps CLI (only on Windows 10)

Build

Create a Build folder

5

Initialize folder content

```
pac pcf init --namespace <specify your namespace here> --name <put component name here> --template <component type>
```

6

Retrieve dependencies

```
npm install
```

7

Implement Manifest

This is an XML file that reference valid components

8

Implement Component logic

This is a Typescript file, referenced in the manifest

9

Add Style

This is a CSS file, referenced in the manifest

10

Build the component & test it

```
npm run build
```

```
npm start watch
```

Package

Create a solution folder

11

Initialize folder content

```
pac solution init --publisher-name <specify your publisher here> ---publisher-prefix <put prefix here>
```

12

Reference the build folder

```
Pac solution add-reference --path <build folder path>
```

13

First build

```
Msbuild /t:build /restore
```

Next builds

```
Msbuild /t:rebuild  
Do not forget to update version
```

14

Get the solution file

The solution is located in `\bin\debug`

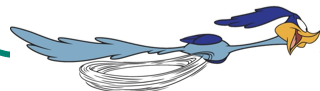
Import solution in target environment

Push updated component directly into environment

```
pac pcf push --publisher-prefix <your publisher prefix>
```

Create auth profile

```
pac auth create --url <your CDS org's url>
```





Links / References



PCF forum: <https://aka.ms/PCFForum>

Documentation: <https://aka.ms/PCFDocs>

Feature ideas: <https://aka.ms/PCFIdea>

Community components/blogs/demos: <https://aka.ms/PCFDemos>

Business App Summit 2019: Microsoft PowerApps: Building and Extending Applications

Ignite 2019: Using Power Apps component framework to build reusable custom user experiences.



PCF Gallery: <https://pcf.gallery/>



QnA

4

QnA



Thanks you!

Thank you !
Form: <https://bit.ly/2KCEVK4>

Social

- ▶ www.365portal.org
- ▶ Twitter: @Dyn365Community
- ▶ LinkedIn: @365-Saturday
- ▶ Hashtags
- ▶ #365Saturday #msdyn365
- ▶ Wifi: TBC
- ▶ Pass: msevent116mu
- ▶ Community.Dynamics365.com

Feedback

- ▶ **We really value your feedback. Log-in to the 365portal event page and click on the session title.**
- ▶ **Make sure you have added the session to your schedule and you have checked in.**
- ▶ **You can now leave feedback which will help the speaker and improve our future events for the community.**

DynamicsPower! 365 Saturday South Africa

DynamicsPower! 365 Saturday South Africa is coming to Johannesburg on the 17th August delivering 3 Tracks of Deepdives into Dynamics 365 CE, Fin and internationally renowned MVPs. Modelling with the Principle Product register for and is completely free of

ADD TO SCHEDULE/CHECK IN

Add to my event schedule

[View your event schedule](#)

WHEN

17 August 2019

1 day, 18 hours and 49 minutes

SESSION OVERVIEW

This session which explains the functionality, purposes the organization hierarchies (level 200/300).

WHAT TIME

15:00 - 16:00

EVENT

[DynamicsPower! 365 Saturday South Africa](#)

OmniChannel Engagement Hub, A Cool New Tool...but not a USD Killer

Session Added: [View your event schedule](#)

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WHAT TIME

14:00 - 14:50

EVENT

[365 Saturday Amsterdam 2019](#)

OmniChannel Engagement Hub, A Cool New Tool...but not a USD Killer

Please provide your feedback for this session!

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WHAT TIME

14:00 - 14:50

EVENT

[365 Saturday Amsterdam 2019](#)

SPEAKER



Neil Parkhurst

Feedback

Your feedback is very important to us, so please complete this form to tell us your thoughts. If you would prefer that your feedback remains anonymous, check the option below.

Rating: ☐ ☐ ☐ ☐ ☐

Comments

I learnt a lot about the new Session Management Feature and support for Chrome and Edge which will be really helpful in our [caliente](#)

☐ Submit anonymous feedback

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