

# Contact Editor Creation steps

Dynamics CRM Development Task

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# ÍNDICE

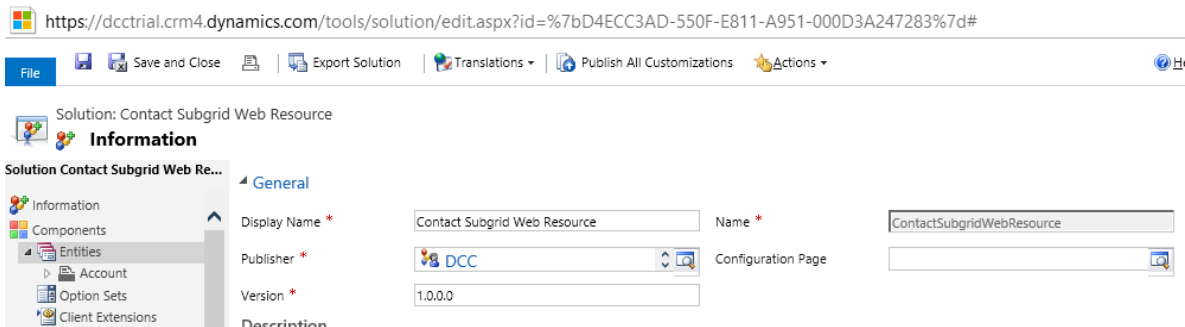
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## 1. Introduction

The objective of this document is to summarize the steps I followed to complete the Dynamics CRM Task.

## 2. CRM

- I created my own Dynamics 365 trial environment.
- I created a solution "" with my own publisher DCC "dcc\_".
- I added the Account form to this solution.



## 3. Visual Studio 2015

- I created a new solution in VS with a CRM Web Resource Project, where I created the .html, .js, .css.
- I added JQuery using NuGet Package Manager.
- I used Developer Extensions Tool to deploy these component into CRM.

## 4. The Task

Although the task has three levels, but I did not create three different html web resources. I create just one, and I added the functionality required in the following levels.

### Contacts

CONTACTS						
Full Name	First Name	Last Name	Email	Preferred Contact Method		
Eva Corets	Eva	Corets	evacorets@fabrikam.com	Any	▼	Save
Ofer Dalot	Ofer	Dalot	Odalot@fabrikam.com	Email	▼	Save
Robert Lyon	Robert	Lyon	rlyon@fabrikam.com	Phone	▼	Save

- The contacts full name is a hyperlink to open the contact record.
- First Name, Last Name and Preferred Contact Method are editable fields, and with the bottom Save the changes can be saved to update the contact information.
- Last Name field is required; an alert message appears if you try to save a contact without this field filled.
- The + button allows to create a new contact record using the Quick Create form.
- Preferred Contact Method is multilingual, its values will be shown always in the user CRM selected language.

#### 4.1 Task Level 1

These are the steps I followed to create the Contact editor web resource.

Create an HTML Web Resource that:

- **Can be placed on an Account Form :**

- I inserted a new Tab, new section, and a web resource into the Account main form.

- **Shows a grid of Contacts that are associated with the parent Account (a similar UI Style to the standard sub-grid):**

- I created a table in html.
- Using javascript and web API, I created a function to retrieve the contacts related with the current account. (`function GetContact(successCallback)`)
- I created a .css file, trying to copy the CRM styles.

- **Allows selecting and opening of a contact form from the grid :**

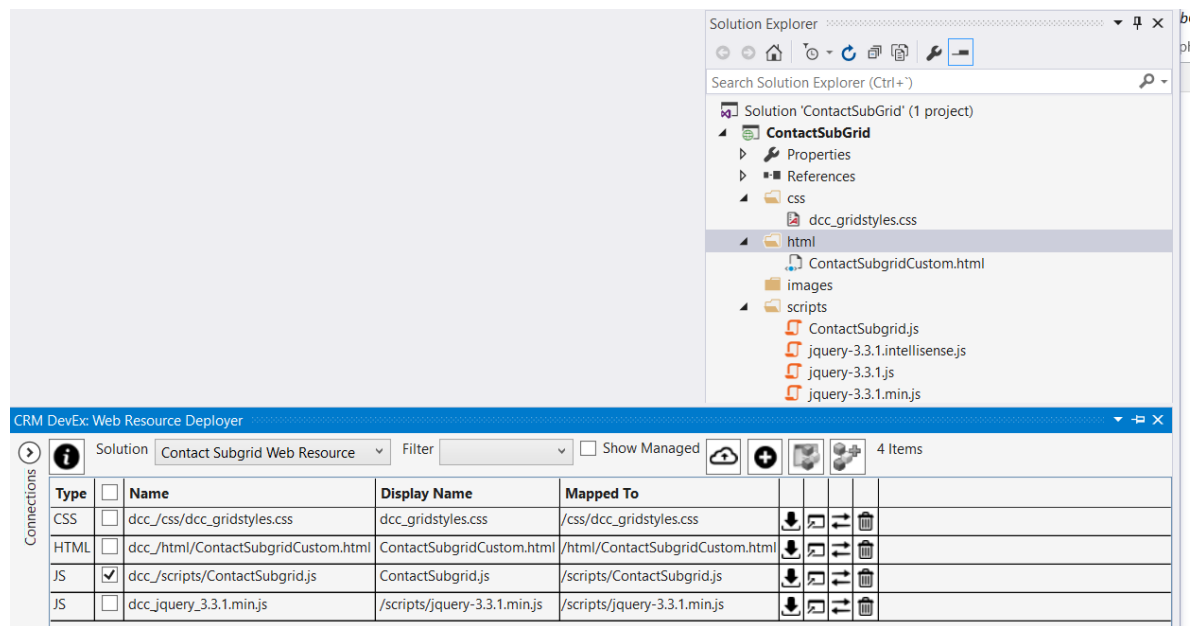
- Using javascript, each cell in the column Full Name is a hyperlink to open the contact.

- **Allows adding new contacts using a '+' button.**

- I added an image as a button to open Contact Quick Create Form. When the quick create form is opened, the parent account field is informed.
- I used an image that already exists in CRM.

- **Create a Visual Studio solution to deploy the HTML Web Resource**

- I created a solution in VS, and I used Developer Extensions Tools to deploy each web resource into my CRM solution.



## 4.2 Task Level 2

I modified the web resource created for the level 1.

Create an HTML Web Resource that additionally:

- **Allows inline grid editing of the fields:**

- **First Name**
- **Last Name**
- **Preferred Contact Method (As a drop down)**

- I update my javascript function to retrieve these fields.
- I added new columns in the html table and edit their properties.
- I created a function to update entities with javascript and web API.( `function UpdateEntity(clientURL, entityId, entityType, entityTobeUpdated, apiVersion) {}`)
- To show Preferred Contact Method I created a <select> component. To set the selected value I use the retrieved data.


- **The Last Name must be a mandatory field and cannot be blank.**

- I created a javascript validation to control the Last Name is filled before the update can be saved.

ADDRESS

3397 Rancho View Drive  
Redmond, WA 72052  
US

Message from webpage

 Last Name is required.

OK

Item defective

Case: Created by Jamie Reding (Sample Dat  
On Item defective's wall  
31/01/2018 13:45:52

Fabrikam, Inc.

Account: Created By Jamie Reding (Sample  
On Fabrikam, Inc.'s wall  
31/01/2018 13:40:25

Contacts

CONTACTS

Full Name	First Name	Last Name	Email	Preferred Contact Method	
<a href="#">Eva Corets</a>	Eva	Corets	evacorets@fabrikam.com	Any	Save
<a href="#">Ofer Daliot</a>	Ofer	Daliot	Odaliot@fabrikam.com	Email	Save
<a href="#">Robert Lyon</a>	Robert		rlyon@fabrikam.com	Phone	Save

### 4.3 Task Level 3

I modified the web resource created for the level 2.

Create an HTML Web Resource that additionally:

- **Load option set values and labels from the CRM Metadata rather than hard code**
  - I created a javascript function to retrieve the metadata of the option set. Another function get the information retrieved and create a html <select> component dynamically, using the current crm user language. (`function GetMetadataByName(entityLogName, attLogName, successCallback)`)
- **Provide Multi-Language support for English and Spanish (Grid Labels and Drop Down Values etc.) based on the user's language preference**
  - The function that creates the select component uses the `UserLocalizedLabel`, to show the labels in the user language.

```
prefConMethOptions = prefConMethOptions + "<option value='" +
data.OptionSet.Options[i].Value +
"'">" + data.OptionSet.Options[i].Label.UserLocalizedLabel.Label +
"</option>";
```

**English:**

ADDRESS

3397 Rancho View Drive  
Redmond, WA 72052  
US



**Item defective**  
Case: Created by [Jamie Reding \(Sample Data\)](#)  
On [Item defective's](#) wall  
31/01/2018 13:45:52



**Fabrikam, Inc.**  
Account: Created By [Jamie Reding \(Sample D](#)  
On [Fabrikam, Inc.'s](#) wall  
31/01/2018 13:40:25

Contacts


CONTACTS						+
Full Name	First Name	Last Name	Email	Preferred Contact Method		
<a href="#">Eva Corets</a>	Eva	Corets	evacorets@fabrikam.com	Any	<input type="checkbox"/>	Save
<a href="#">Ofer Daliot</a>	Ofer	Daliot	Odaliot@fabrikam.com	Email	<input type="checkbox"/>	Save
<a href="#">Robert Lyon</a>	Robert		rlyon@fabrikam.com	Phone	<input type="checkbox"/>	Save

Project Price Lists

Spanish:

DIRECCIÓN

3397 Rancho View Drive  
Redmond, WA 72052  
US



Caso: creado por [Eric Gruber \(Sample Data\)](#)  
En el muro de [Item defective on delivery](#)  
31/01/2018 13:46:09



**Product service time**  
Caso: creado por [Dan Jump \(Sample Data\)](#) p  
En el muro de [Product service time](#)  
31/01/2018 13:46:01

**Product information required**

Contacts

CONTACTS						+
Full Name	First Name	Last Name	Email	Preferred Contact Method		
<a href="#">Eva Corets</a>	Eva	Corets	evacorets@fabrikam.com	Cualquiera	<input type="checkbox"/>	Save
<a href="#">Ofer Daliot</a>	Ofer	Daliot	Odaliot@fabrikam.com	Teléfono	<input type="checkbox"/>	Save
<a href="#">Robert Lyon</a>	Robert	Lyon	rlyon@fabrikam.com	Correo electrónico	<input type="checkbox"/>	Save

Note: I did not translate the title of the columns or the value of the button Save, although the information is available in the javascript code.