

# Installing Data8 PredictiveAddress for Microsoft Dynamics 365/CRM

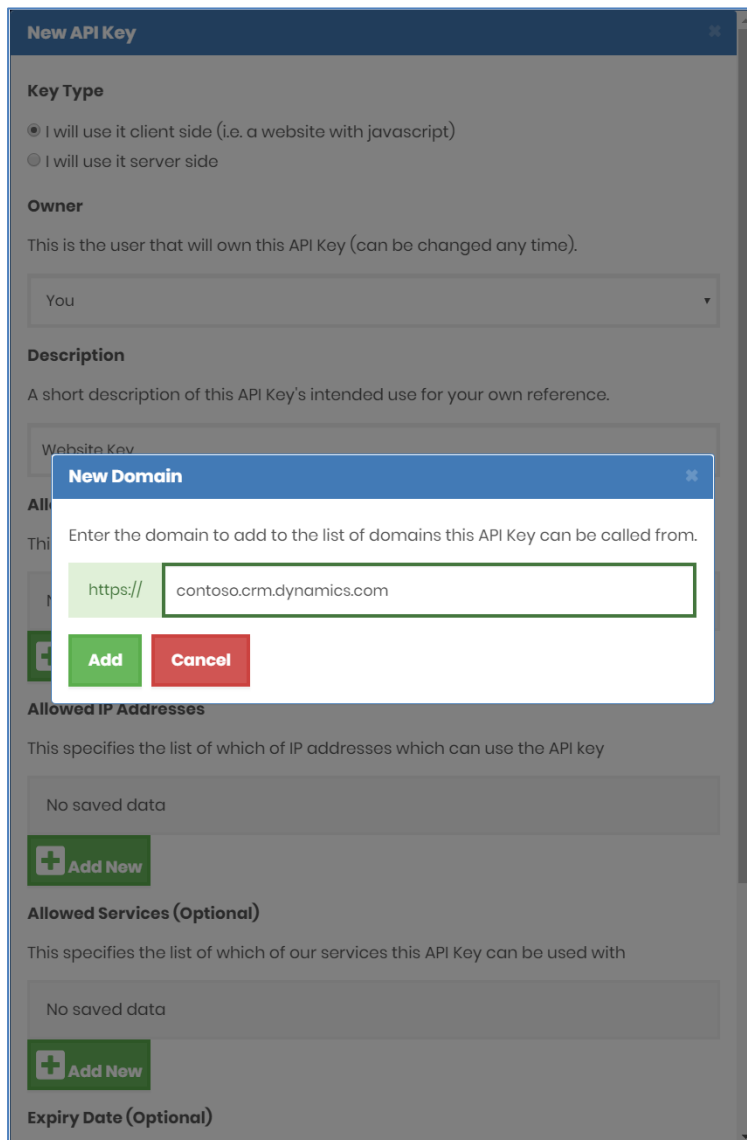
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## Obtaining an API Key

Go to <https://www.data-8.co.uk/dashboard/api-keys/>. Click “Add API Key” and select “I will use it client side” Under “Allowed Domains”, click “Add New” and enter the domain name of your Microsoft Dynamics 365/CRM instance. For example, if you go to <http://contoso.crm.dynamics.com/> to access your CRM system, enter “contoso.crm.dynamics.com”. Click on “Add Domain” to enable the use of the PredictiveAddress service from this domain name.



The screenshot shows the 'New API Key' form in a web application. The form has several sections: 'Key Type' with two radio buttons ('I will use it client side' is selected), 'Owner' with a dropdown menu showing 'You', 'Description' with a text area, 'Allowed Domains' with a modal open, 'Allowed IP Addresses' with a text area and an 'Add New' button, 'Allowed Services (Optional)' with a text area and an 'Add New' button, and 'Expiry Date (Optional)'.

The 'New Domain' modal is open, showing a text input field with the domain 'contoso.crm.dynamics.com' and a green 'Add' button.

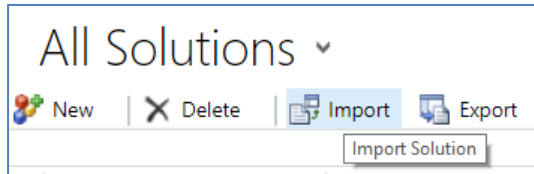
If more than one domain name can be used to access your CRM system, e.g. internal users use <http://crmserver/> while home workers use <http://crmserver.example.com/>, add all applicable domain names in turn.

On this page you can also configure additional options, such as giving your API Key a helpful description. Finally, click Save at the bottom of this screen and your new API Key will be shown in the list. Copy the key for later.

## Installing the solution

You will have been provided with a zip file containing the postcode lookup solution. To install it, open Microsoft Dynamics 365/CRM and go to Settings > Solutions. Click “Import” to start the installation.

**Note:** If you installed the solution from AppSource then this step will have been completed for you.



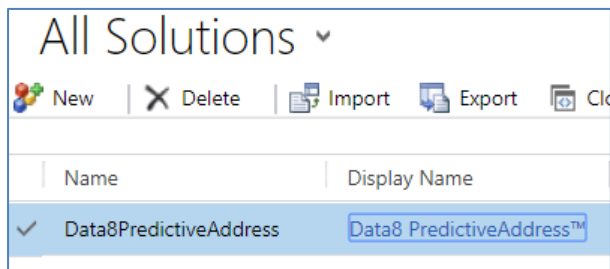
Click “Browse” and select the zip file you have been sent, and then click “Next”.

Click “Next” again and the solution will be imported.

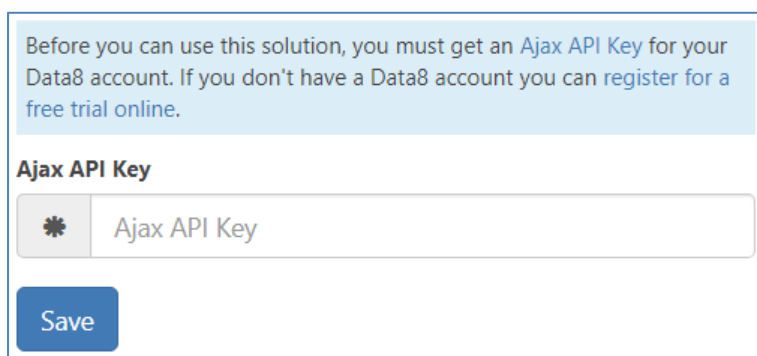
Click “Close” and the solution has now been imported.

## Initial Configuration of the solution

From the list of solutions, open the Data8PredictiveAddress entry to bring up the configuration screen.



After the "Loading" message has finished, you will be shown a screen to enter your Ajax API Key you retrieved earlier.



The screenshot shows a configuration screen. At the top, a light blue box contains the text: "Before you can use this solution, you must get an [Ajax API Key](#) for your Data8 account. If you don't have a Data8 account you can [register for a free trial online](#)." Below this, the heading "Ajax API Key" is followed by a text input field with a password icon (a small square with a dot) and the placeholder text "Ajax API Key". At the bottom left is a blue "Save" button.

Enter your API key you took from the Data8 website earlier and click "Save"

## Configuring PredictiveAddress

**Add PredictiveAddress™ configuration for**  

Accounts ▼

Add

To add the PredictiveAddress functionality to a form, select the type of entity (e.g. Account) that you want to add it to, then click Add.

**Note:** If you installed the solution from AppSource, these configuration entries will already be added for all standard address fields. You may still need to complete the steps outlined in the “Form scripts customization” section below

### Account

**Quick Configuration**  
Select a set of address fields from the list below to set up a default configuration for that address.

Address 1 ▼

Configure

**Manual Configuration**  
If the address fields you require are not shown in the list above, you can configure the details manually.

Manual

Cancel

If you are adding postcode lookup to an entity that has standard CRM address fields (Street 1, Street 2, Street 3, City, State/Province and Zip/Postal code), the configuration wizard can do a lot of the configuration for you. You will be shown the screen above, with the Quick Configuration drop down list containing the names of the address blocks in the entity. Select the one you want to add postcode lookup functionality to and click Configure.

Using quick configuration, if there is an associated Name field, e.g. Address 1: Name, this will be used to hold any company name included in an address. Otherwise, any company name will be ignored. If this is not the desired behaviour, you can still continue to use the quick configuration wizard, but you will then need to click on the Configure link next to the entity type on the main configuration screen to edit the configuration manually.

## Advanced Manual configuration of PredictiveAddress

If you want to add postcode lookup functionality to some other fields, click the Manual button and you will be able to select what fields to use to store the address details in. If no standard blocks of address fields can be found by the wizard, this step will be skipped and you will be taken straight to the manual configuration screen.

### Account

**Organization**  
If an address contains an organization name,

place it in a separate field ▼

Organization field:

Account Name ▼

☐ Auto-complete in this field as well as Address 1

**Address Fields**  
Select the fields in which to place the main part of the address. Add the fields in the order you want to see the address filled in.

☒ Keep town and county in last two fields

Account Name

Account Number

Address 1: City

Address 1: Country/Region

Address 1: County

Address 1: Fax

Address 1: Name

Address 1: Post Office Box

Address 1: Primary Contact

Address 1: State/Province

>

<

**Postcode**

Account Name ▼

**Country**

-- None -- ▼

[Advanced Address Settings »](#)

Save

Remove

Cancel

You can now set up what fields the address details should be placed in. For example, on an account screen you may want the company name to go into the Account Name field, while the address goes into address 1-3, city and state fields, with the postcode in the zip code field.

## Account

**Organization**  
If an address contains an organization name,

place it in a separate field ▼

Organization field:

Account Name ▼

☐ Auto-complete in this field as well as Address 1

**Address Fields**  
Select the fields in which to place the main part of the address. Add the fields in the order you want to see the address filled in.

☒ Keep town and county in last two fields

Account Number  
Address 1: Country/Region  
Address 1: County  
Address 1: Fax  
Address 1: Name  
Address 1: Post Office Box  
Address 1: Primary Contact  
Address 1: Telephone 2  
Address 1: Telephone 3  
Address 1: UPS Zone

>  
<

Address 1: Street 1  
Address 1: Street 2  
Address 1: Street 3  
Address 1: City  
Address 1: State/Province

**Postcode**

Address 1: ZIP/Postal Code ▼

**Country**

Address 1: Country/Region ▼

[Advanced Address Settings »](#)

Note that the fields for the address have been added in order, and the “Keep town and county in last two fields” box has been checked.

When you are happy with the layout of your address fields, click “Save”.

You may alternatively choose to treat the organisation name as a normal part of the address, in which case any organisation name will be placed in the first address line and the other address details will be moved as appropriate, or you can choose to ignore it, in which case any organisation details will be lost.

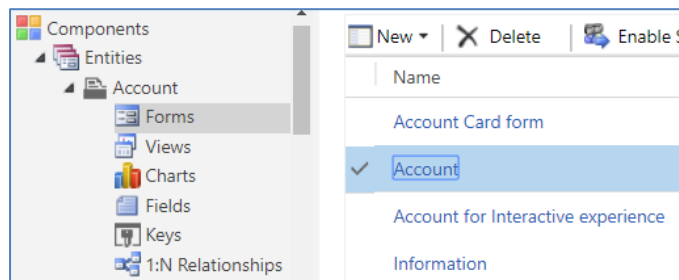
Repeat this process for any other forms you want to add PredictiveAddress functionality to.

## Legacy Forms

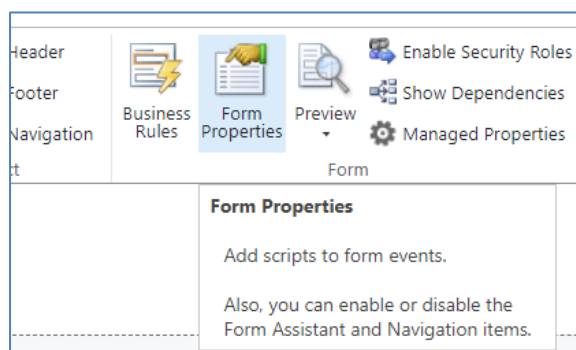
### Form script customization

As well as adding configuration entries for the address fields you want to populate with PredictiveAddress, you also need to add an event handler to your form to start the PredictiveAddress functionality.

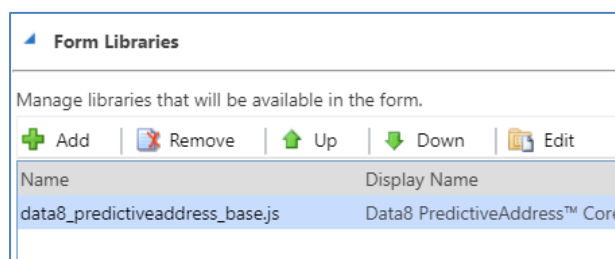
Under Settings > Customization > Customize the System, navigate to the entity you've added a PredictiveAddress configuration for and select the main form.



Open the form and click Form Properties in the ribbon.



Add the data8\_predictiveaddress\_base.js library to the Form Libraries section.



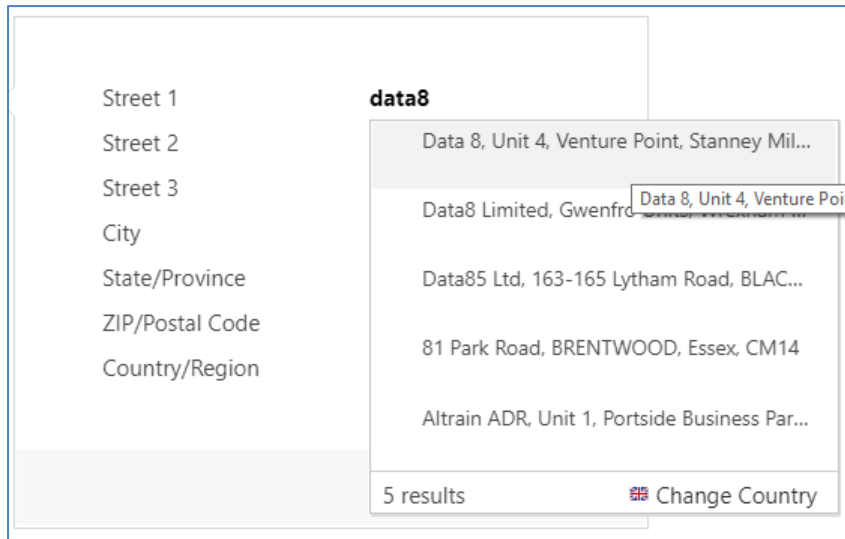
In the Event Handlers section, ensure the Control is set to Form, the Event to OnLoad, and click Add. Select the data8\_predictiveaddress\_base.js library from the list and enter the Function name as data8\_predictiveaddress\_start. Click OK to save the event handler, then OK again to close the Form Properties dialog. Save the form and publish the changes.

If you have multiple forms for the entity, repeat this process to add the event handler for any other forms you require.



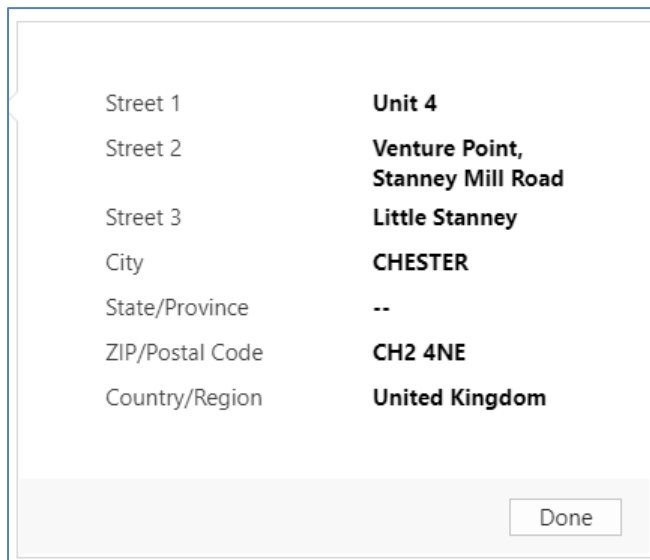
## Using PredictiveAddress

In a form that you have configured PredictiveAddress for, simply start typing the address in the Address 1 field. An autocomplete dropdown will appear beneath the field showing possible addresses. When you see the address you require, select it from the list.
























The screenshot shows a form with address fields: Street 1, Street 2, Street 3, City, State/Province, ZIP/Postal Code, and Country/Region. The 'Street 1' field contains the text 'data8'. An autocomplete dropdown menu is open, displaying five suggestions: 'Data 8, Unit 4, Venture Point, Stanney Mil...', 'Data8 Limited, Gwenfro', 'Data85 Ltd, 163-165 Lytham Road, BLAC...', '81 Park Road, BRENTWOOD, Essex, CM14', and 'Altrain ADR, Unit 1, Portside Business Par...'. At the bottom of the dropdown, it says '5 results' and 'Change Country' with a small flag icon.

After selecting address, the other fields will be populated according to the configuration for the entity.
















The screenshot shows the same form as before, but now the address fields are populated. The 'Street 1' field contains 'Unit 4', 'Street 2' contains 'Venture Point, Stanney Mill Road', 'Street 3' contains 'Little Stanney', 'City' contains 'CHESTER', 'State/Province' contains '--', 'ZIP/Postal Code' contains 'CH2 4NE', and 'Country/Region' contains 'United Kingdom'. A 'Done' button is visible at the bottom right of the form.

The suggestions will come from the country that the user is currently in by default. The country being searched is shown at the bottom right of the autocomplete dropdown. To change the country, click this link and select the required country from the list.

Street 1	<b>data8</b>																					
Street 2	<table border="1"> <tr> <td></td> <td>Afghanistan</td> <td>AF</td> </tr> <tr> <td></td> <td>Aland Islands</td> <td>AX</td> </tr> <tr> <td></td> <td>Albania</td> <td>AL</td> </tr> <tr> <td></td> <td>Algeria</td> <td>DZ</td> </tr> <tr> <td></td> <td>American Samoa</td> <td>AS</td> </tr> <tr> <td></td> <td>Andorra</td> <td>AD</td> </tr> <tr> <td></td> <td>Angola</td> <td>AO</td> </tr> </table>		Afghanistan	AF		Aland Islands	AX		Albania	AL		Algeria	DZ		American Samoa	AS		Andorra	AD		Angola	AO
	Afghanistan	AF																				
	Aland Islands	AX																				
	Albania	AL																				
	Algeria	DZ																				
	American Samoa	AS																				
	Andorra	AD																				
	Angola	AO																				
Street 3																						
City																						
State/Province																						
ZIP/Postal Code																						
Country/Region																						
	251 results <a href="#">Edit Country</a>																					

You can also start typing into the Country field to change the country there. That country will then be used when you start typing an address into the Street 1 field.

Street 1	--												
Street 2	--												
Street 3	--												
City	--												
State/Province	--												
ZIP/Postal Code	--												
Country/Region	<div>  <b>uni</b> </div> <table border="1"> <tr> <td></td> <td>United Arab Emirates</td> <td>AE</td> </tr> <tr> <td></td> <td>United Kingdom</td> <td>GB</td> </tr> <tr> <td></td> <td>United States</td> <td>US</td> </tr> <tr> <td></td> <td>United States Minor Outlying Islands</td> <td>UM</td> </tr> </table>		United Arab Emirates	AE		United Kingdom	GB		United States	US		United States Minor Outlying Islands	UM
	United Arab Emirates	AE											
	United Kingdom	GB											
	United States	US											
	United States Minor Outlying Islands	UM											
	4 results												

## Unified Interface

Due to the removal of the AutoComplete functionality within the Unified Interface, moving forward the PredictiveAddress tool will be built using the PowerApps Component Framework.

## Form customization

Before we begin, you will need to make a custom field that is around 500 characters in length. Make this custom field in the entity you are going to configure for PredictiveAddress and make a note of the name.

Open the form editor you wish to add PredictiveAddress onto. At the time of writing, you cannot add a custom control through the “new” editor, so make sure you select “Switch to Classic” to pop out the legacy editor.



The PredictiveAddress custom control does not work with composite fields. This is a restriction placed by Microsoft so you will need to replace the composite fields with the unique fields instead, like so:

A screenshot of a form structure for 'Address 1'. The form is enclosed in a dashed border and has a title 'ADDRESS' at the top. Below the title, there are seven text input fields, each with a label: 'Address 1: Street 1', 'Address 1: Street 2', 'Address 1: Street 3', 'Address 1: City', 'Address 1: State/Province', 'Address 1: ZIP/Postal Code', and 'Address 1: Country/Region'. Each field is separated by a dashed line.



From there, select the “Street 1” field and select “Change Properties”. On the “Field Properties” window, select “Controls” and add the “Data8PredictiveAddress” control.

When you select the control, there are a number of settings you will need to set up, details on the next page.

Control	Web	Phone	Tablet
Text Box (default)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data8PredictiveAddress	<input checked="" type="radio"/>	<input checked="" type="radio"/>	<input checked="" type="radio"/> X

[Add Control...](#)

Data8PredictiveAddress

Property	Value
InputValue *	address1_line1
FieldName *	address1_line1 (SingleLine.Text) 
ResultValue *	crf3a_addressjsonstring (SingleLine.Text) 

“InputValue” will already be populated with the currently field you are editing.

“FieldName” is the name of the field you are on (i.e. address1\_line1). This should always be a XXX\_line1 field. In order to set this field, you should “Bind to a static value” like so:

☒ **Bind to a static value**

SingleLine.Text ▼	address1_line1
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“ResultValue” is the name of the temporary field we will store some results. This is the field you made at the very start of this section.

☒ **Bind to a value on a field**

crf3a_addressjsonstring (SingleLine.Text) ▼
---------------------------------------------

Once you have set those values, you can save and publish your form. The PredictiveAddress popup will now start working – however it will not correctly populate the results quite yet. In order to do that, please follow the next section.

## Making Results Persist

In order to populate order fields when you have a selection using Data8 PredictiveAddress, you need to make a few more form tweaks.

Again in the “classic” form editor at the time of writing, please complete the following steps:

1. Add the custom field you are using for “FieldName” somewhere onto your form – it can be hidden, it just needs to be on there.
2. Add “data8\_predictiveaddress\_ui.js” to the form
3. Add an Event Handler to the custom field you are using step 1 – the event handler is called “data8\_processAddress”. Ensure the “Pass execution context as first parameter” option is ticked.
4. Save, publish and close.

The screenshot shows the 'Event List' tab in the Data8 Form Editor. It has two main sections: 'Form Libraries' and 'Event Handlers'.

**Form Libraries**

Manage libraries that will be available in the form.

Buttons: + Add, - Remove, ↑ Up, ↓ Down, Edit

Name	Display Name	Description
data8_predictiveaddress_ui.js	Data8 Predictive A...	

**Event Handlers**

Manage functions that are called for form or field events.

Control: Address JSON String

Event: OnChange

Buttons: + Add, - Remove, ↑ Up, ↓ Down, Edit, Edit Library

Library	Function	Enabled
data8_predictiveaddress_ui.js	data8_processAddress	True

After all these steps are completed, your address should start auto populating within the Unified Interface.

## Global Configuration

### Controlling access to the PredictiveAddress™ system

For a user to have access to the PredictiveAddress system, they must have read access to the “Data8 PredictiveAddress™ Configuration” entity. This can be achieved by either adding individual users to the “Data8 PredictiveAddress™ User” security role, or modifying an existing security role to include read access to this entity.