crmpartners

PART OF / FELLOWMIND

Quick Find - Manual

Version 9.2

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Quick Find - Introduction

Welcome to the implementation guide for CRM PARTNERS QUICK FIND! This document describes how to install and configure this product, and provides both a functional and a technical reference.

Product summary

CRM PARTNERS QUICK FIND is a solution for targeted search in Microsoft Dynamics 365 CE. It allows users to quickly find the proper records based on multiple input fields. The solution is fully configurable to search those entities and fields you want.

Position of QuickFind compared to other search methods

Requirement	QuickFind	Global Search	Relevance Search	Find in View	Advanced Find
Combined Search over multiple fields	✔	✖	✖	✖	✔
Multiple searchfields combined search	✔	✖	✖	✖	✔
Find records outside of own authorization scope	✔	✖	✖	✖	✖
Configurable Result listview	✔	Max 3 Columns	Max 3 Columns	✔	✔
Usability	✔	✔	✔	✔	✖
Configurability	✔	✖	✖	✖	✖
Fuzzy Search	✖	✖	✔	✖	✖
Results over multiple entities	✔	✔	✔	✖	✖

Compatibility with Microsoft Dynamics CRM

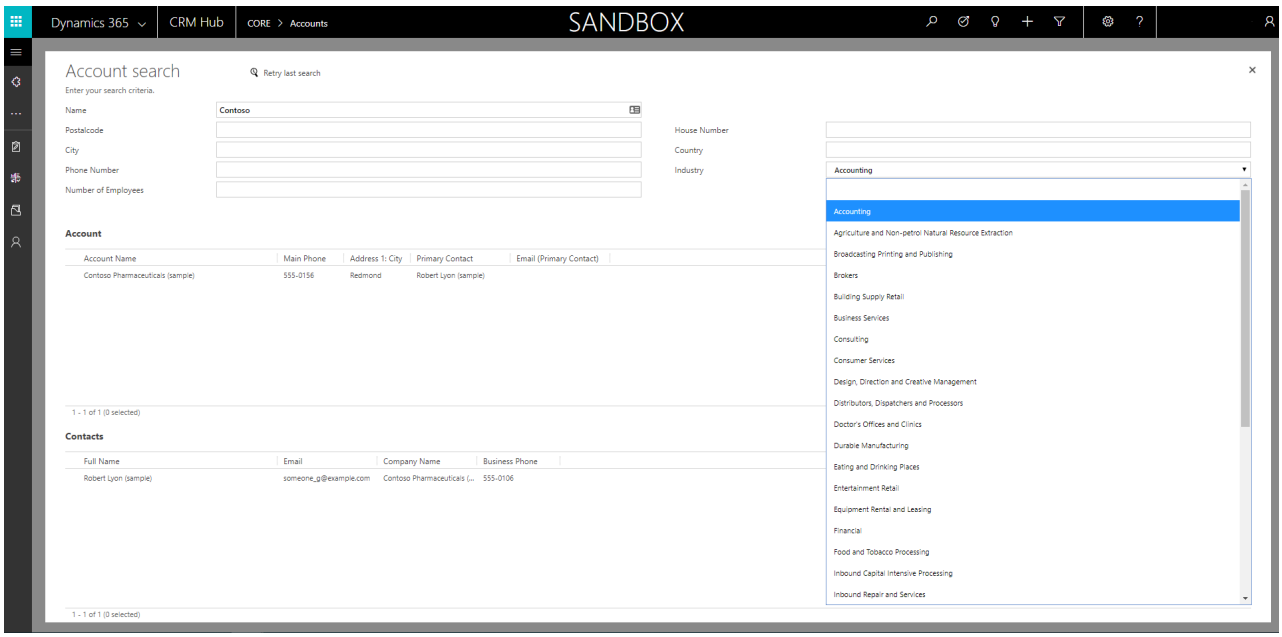
The latest version of CRM PARTNERS QUICK FIND supports Microsoft Dynamics 365 Customer Engagement version 9.1 and higher (both online and on premise).

Feature summary

CRM PARTNERS QUICK FIND enables end users to quickly find records using a fully configurable search form, containing different search fields for targeted search. Our solution provides the following features:

- Search multiple target fields from the same search field
- Search multiple entities with a single search action (f.e. search Accounts, Contacts and Leads)
- Find records based on properties on related entities (f.e. search Accounts by Case Number)
- Create new records from the search form (passing search values to the new form)
- Easily access the last search results with just a single mouse click
- Apply custom formatting of the search values
- Load the search form in a dashboard
- Use the search form as replacement of CRM's lookup dialog
- Prefill the search form based on fixed values, form values or URL parameters and execute search right after loading the form These features are described in more detail in the following sections.

The Quick Find search form consists of two areas: the upper area contains the search fields in which you can enter your search criteria, the bottom area is displays the result records.



You have several methods to search:

1. Search by partial information
2. Support for different data types: text/numbers/Boolean/dates
3. Information that is stored on related records.
4. Search with preconfigured values
5. Create new records based on search fields

Functional Reference

Feature Reference

Search by partial information

You can automatically search with partial information at the back of the given search string. Example: by entering 'Cont' you will also find 'Contoso'. To use a leading wildcard, use an asterisk. ('*')

Support for different data types: text/numbers/Boolean/dates

You can search by different data types. Types supported are:

1. Text
2. Numbers (also currency)
3. Booleans
4. Option Sets
5. Dates

Not supported:

1. Datetime
2. Comparators (!=,<,>)

Information that is stored on related records

You can find records (A) by searching on information on related records (B). For example you can find accounts of which the primary contact has the firstname 'Bill'. See the administration reference.

Search with preconfigured values

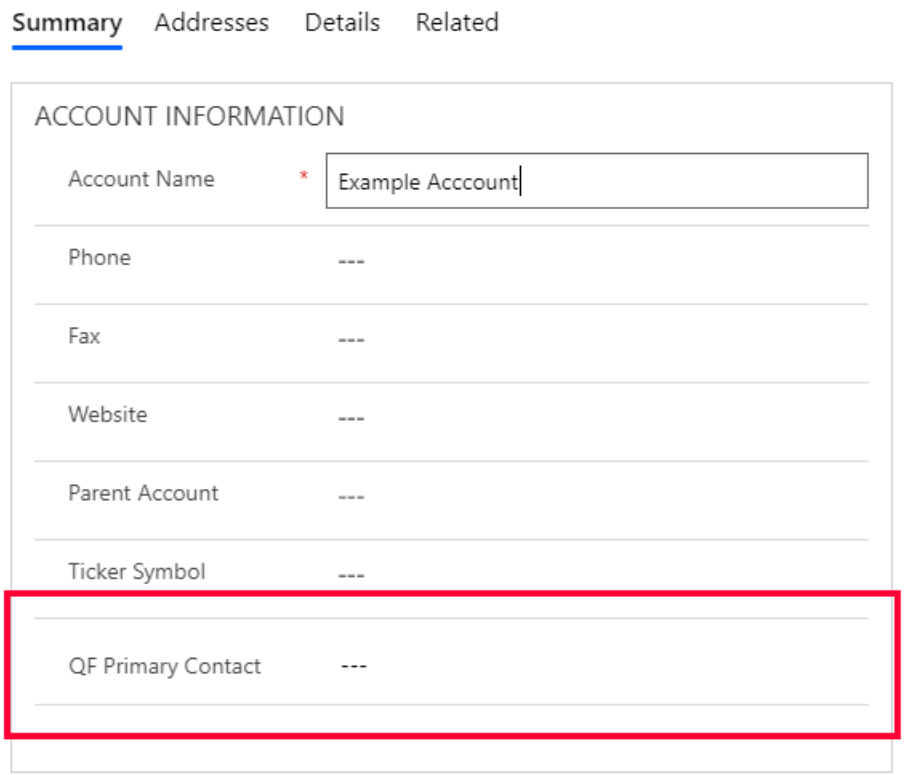
You can configure Quick Find to have certain search fields prefilled. For example the type of customer, or industry of an account. The fields are still editable for the search function, but save some time for certain custom default search values. Configuration is described here

Create new Records based on search fields

If no record is found, or if the 'right' record is not found, you can directly create a new record. In the configuration you can select which fields of the search screen should be copied to the new created record. You can do so by clicking the + icon on the search form.

Quick Find as replacement of lookup dialog

You can also use Quick Find to fill lookup fields (as a replacement of the standard lookup dialog). In this case, a link is added above the lookup field. When you click this link, a Quick Find search form will be opened in which you can find the proper record. The selected record will be filled into the lookup field. Quick Find is fully configurable to fit on any form and to search any field or entity you may wish for a lookup. **todo: nieuwe screenshot, kleiner (alleen het lookup veld + iframe)**



The Quick Find Lookup function is added to the form, you can give it any label you like and configure it to any Lookup you want.

Prefill the search form

You can search with preconfigured values by setting the prefill field value in the configuration of the search field. This is useful if you want to select a default value for the type of account for example. See the administration reference to learn how to set this up.

Another scenario might be that you want to use data from the current form to use on the lookup form, you can configure this in the webresource's attributes..

Administration Reference

This chapter provides information for administrators or implementation consultants to set up the Quick Find for a specific entity. You can find the administration entities in the Settings area.

Installation

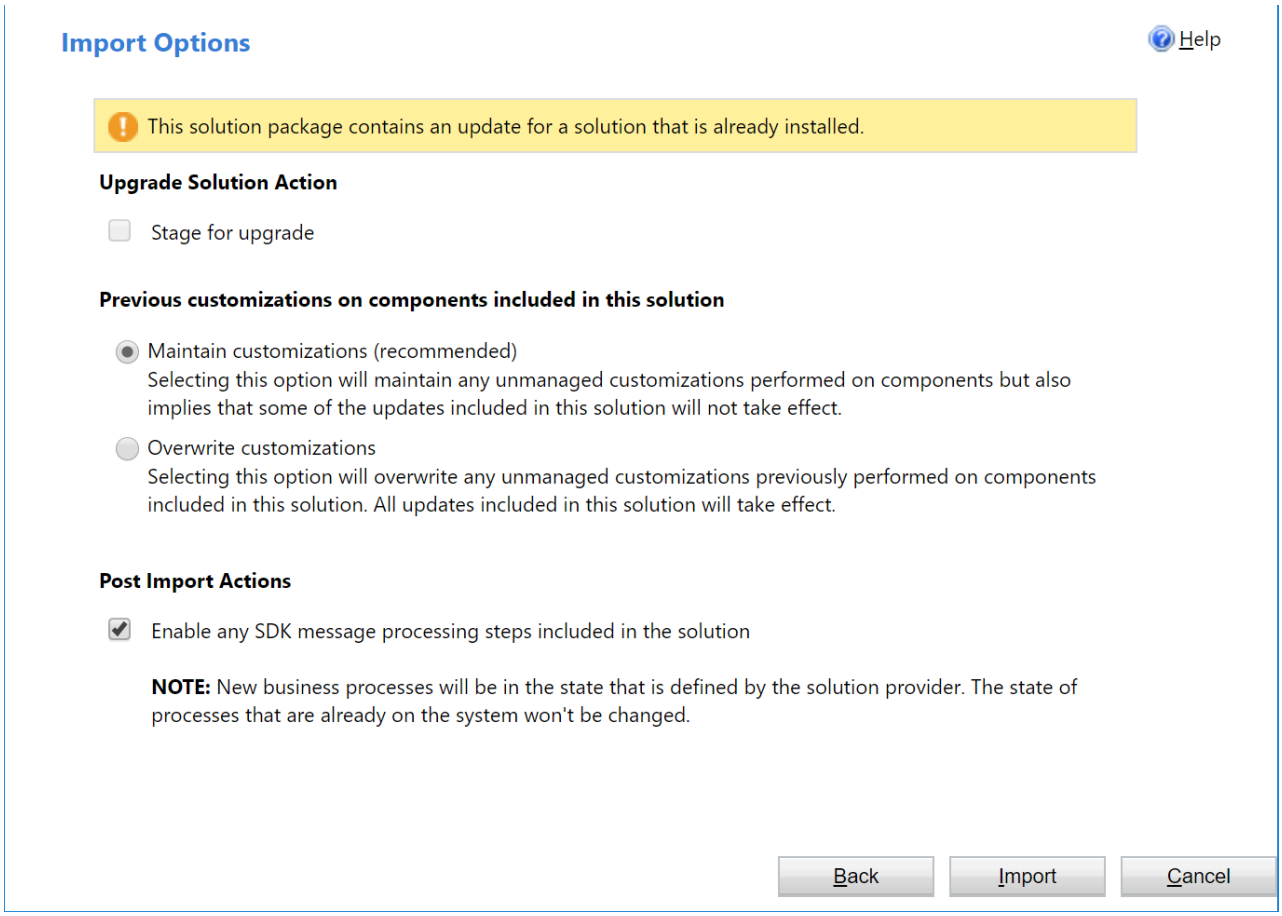
Install Quick Find via the App Source

You can install Quick Find via the App Source. Go to the App source or use the 'Get Solutions from marketplace' button from within CRM. (Go to solutions and click the marketplace icon.)

By installing this way, you will get the full package including a data set to get you going.

Install via the solution package (zip-file)

Once you have obtained the zipfile with the solution, you can import this via 'Settings'-> 'Solutions' and then the import button. Select your Zip-file and import.



1. Check the option: 'Maintain customizations'
2. Check the option 'Activate any processes and enable any SDK message processing steps included in the solution.'

Installing the configuration dataset

If you have installed the solution via the solution package, you need to install the data set to have a standard

configuration in your environment. Upload the provided data set via the Data Transfer Tool of CRM Partners. Or build your own configuration.

Install a license

In order to start using Quick Find you have to install a (trial) license. Open the License Administration via the settings in CRM. The first time it will open with a registration page, as you need to register your CRM organization before you can install a license.

First CRM organization registration

Register your first CRM organization by providing a name and e-mail address, your company name and whether this instance is a production environment or a sandbox. When registration is done, the license dashboard will be displayed from which you can install the license.

Additional CRM organizaton registration

You have to register additional organizations with an activation token. You can obtain a token by opening the license dashboard in a CRM organization that is already registered. Click the 'New Organization' button, which will open a dialog in which you can copy the activation token. Paste this activation token in the license registration form for your new CRM organization. Next, the license dashboard will be displayed, see next paragraph.

Install license

In the license dashboard, press the button 'Request licenses'. This will automatically install a trial license for 30 days. In order to get a full license, contact CRM Partners via our contact page.

Once the license is purchased, it will be displayed in the 'Available licenses' section on the dashboard. You can click the 'Request Licenses' button again to install the final license.

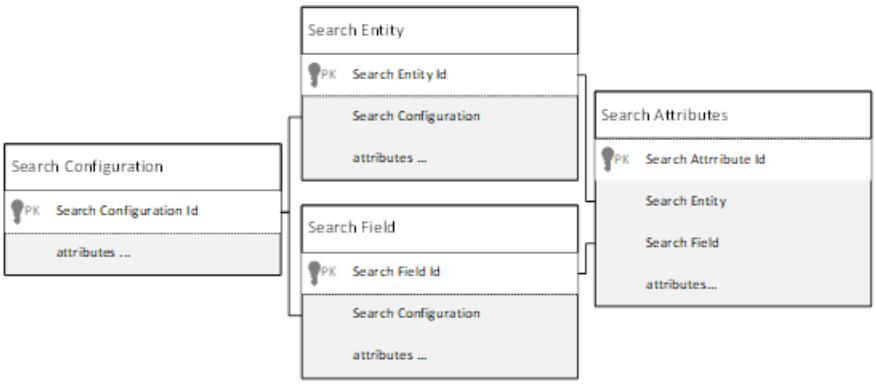
Configuration overview

Most elements of Quick Find can be configured to your business case. You can configure what entity to search, what fields, what type of data the search field must accept, and so on. You can design your own Quick Find search form: locate the search fields within rows and columns, specify field labels and define the result view layout. These configuration capabilities are described in more detail in the following sections.

Entity Configuration reference

This paragraph describes how to configure your search forms using the search configuration entities.

The configuration data model consists of four entities. The picture below displays how these entities are related to



each other.

Field descriptions

The table below describes the fields on the search configuration entities.

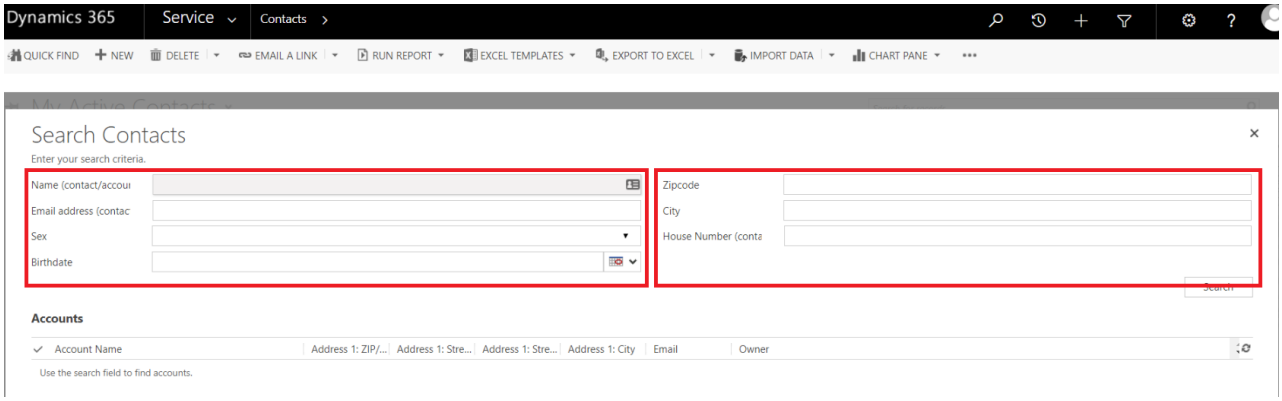
Field	Description
Search Configuration	*The main configuration entity, representing a search form with its entities an fields.*
Name	Name of the configuration
Unique Name	A unique name that is used as URL parameter to load this search form. Please note that the unique name may only contain alphanumeric characters. Other characters will result in an plugin error, when trying to save the search configuration record.
Maximum Search Result	The maximum number of result records (per entity) that will be retrieved in a single search.
Enable Create Record	Indicates whether a new record can be created from the search form.
Search Inactive Records	Indicates whether results should include inactive records.
Search on Behalf of	Indicates which user should execute the search query (determines the effective security permissions for this search).
Alternate Form Url	Enter the URL to a (custom) web resource that shows the record information when a result record is opened for which the user has no read permissions.
Search Entity	*The entity(/entities) to be searched for in the search form.*
Name	Name of the search entity record, usually the plural form of the entity name (is displayed above the search results).
Entity	Schema name of the entity that will be searched.

Field	Description
Entity View	Name of the entity's system view that is used to display the search results. If not specified, the default public view will be used.
Display Order	The order in which the search entity will be displayed on the search form (in case of multiple search entities).
Search Configuration	The Search Configuration to which this search entity record belongs.
Search Field	*Represents a search field on the search form.*
Name	The name of this record. Use a meaningful name that is unique within the search configuration.
Display Name	The field label that is displayed on the search form.
Search Configuration	The Search Configuration to which this search field record belongs.
Row	The row position of the field on the search form.
Column	The column position of the field on the search form.
Format	Format of the input value (text, numeric, date, option list, checkbox).
Prefill Value	If specfied, this value will be pre-filled while loading the search form. The value depends on the field's Format: for Text enter plain text, for Date enter a date value (e.g. 25-12-2018), for Checkbox enter 0 or 1, for Option List enter the numeric value, for Numeric enter a numeric value (floating values should be separated with a dot, e.g. 10.50).
Apply Wildcard	Indicates whether to apply wildcards or not.
Format Script	A JavaScript code snippet, to be executed to format the search value before the search is executed (e.g. trimming strings, to match data in database).
Search Attribute	*The attribute on the search entity in which the system will actually search for the search value.*
Name	The schema name of the attribute in which the system will search.
Search Path	The path to a related entity if the search attribute exists on another entity (related to the search entity).
Auto Fill On New Record	Indicates if the attribute should be filled with the search value when creating a new record from the search form.
Search Entity	The Search Entity on which this attribute exists.
Search Field	The Search Field to which this attribute is mapped.

Field	Description
Description	A description of this search attribute, allowing administrators to leave some comments about this search attribute.

Adjusting the field layout in the Quick Find search form

The Quick Find search fields are arranged in 2 columns and multiple rows (up to 10).



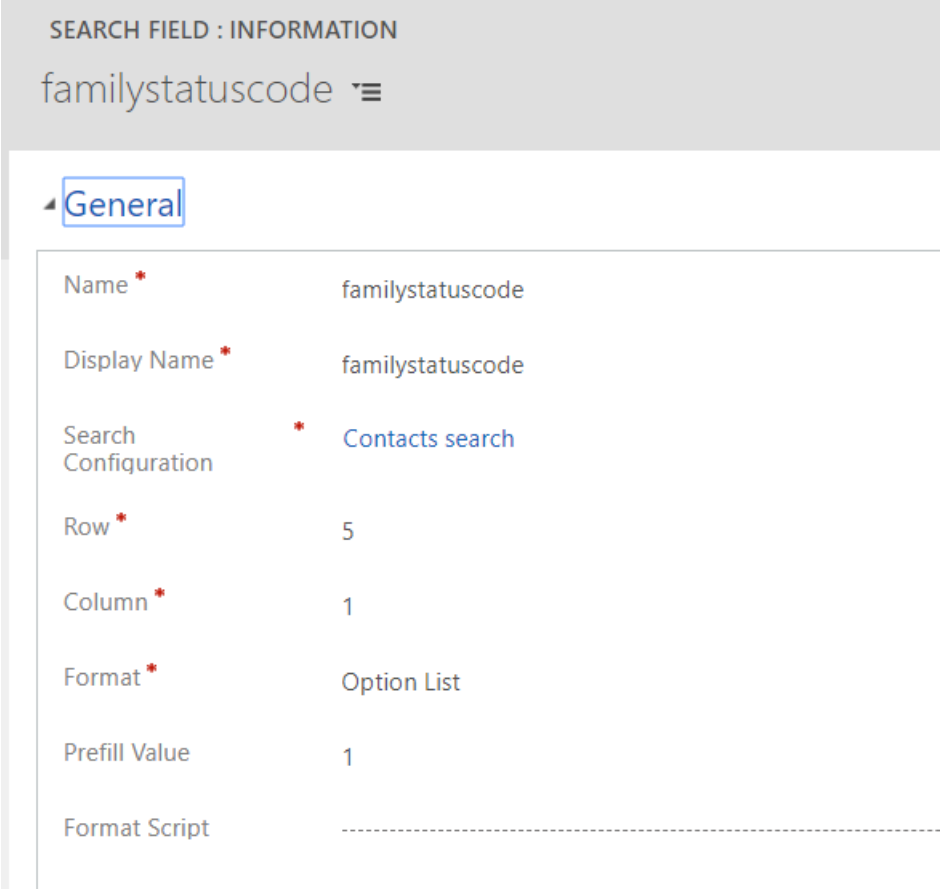
You can configure the location of the search fields in the Search Field configuration (Search Configuration -> Search Field Configuration).

To place fields in the left column, set the 'Column' field to 1. To place fields in the right column set the 'Column' field to 2. Similarly, adjust the 'Row' field to locate the field on the desired row.

Searching with prefilled field values

In case you want to have default values filled in your Quick Find window, for example the customer type, or industry, you can set the prefill value of the searchfield. Format: for Text enter plain text, for Date enter a date value (e.g. 25-12-2018), for Checkbox enter 0 or 1, for Option List enter the numeric value, for Numeric enter a numeric value (floating values should be separated with a dot, e.g. 10.50).

You can also use prefill-values based on formdata on Quick Find lookup screens



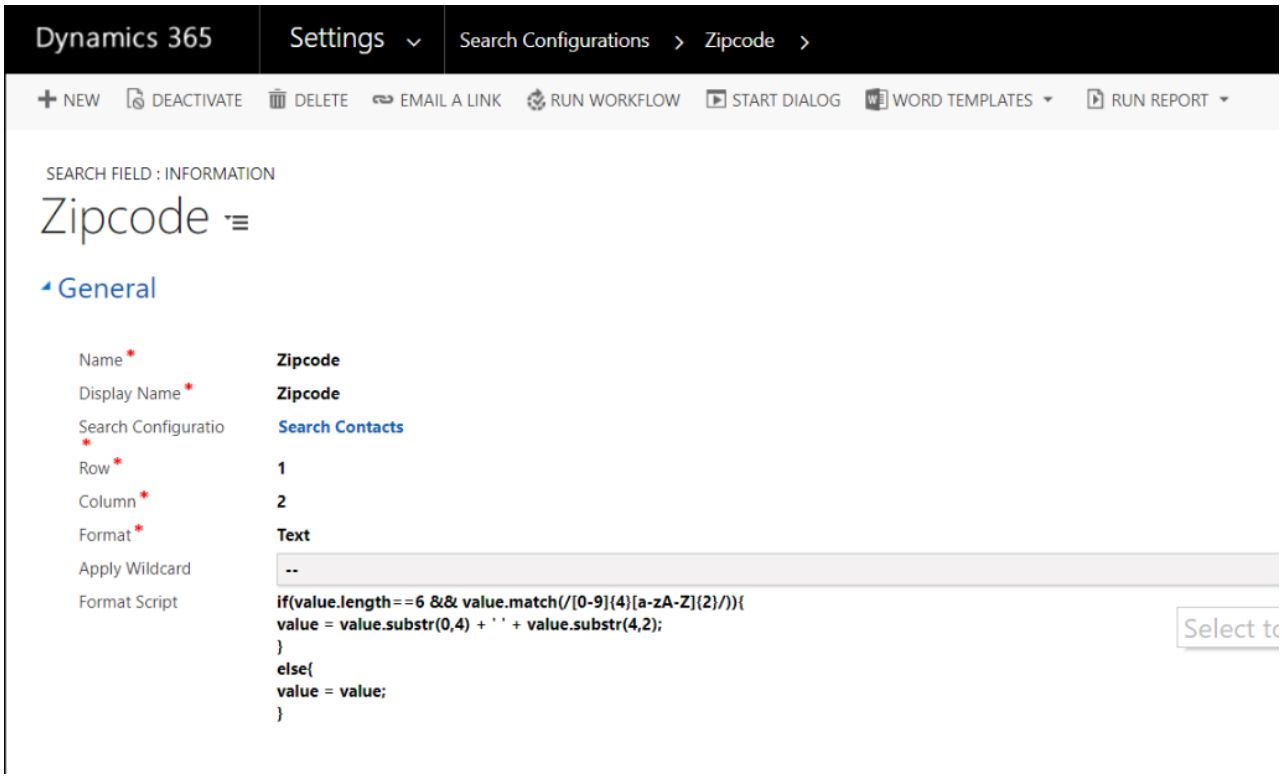
Adjusting search values using Format Scripts

It can be useful to validate or adjust the search value before performing the search. This might be the case for example in postal codes that are stored in the database as '1111 AB' while the user search input is '1111AB'. In that case, you want to adjust the search value. You can do so by adding a JavaScript code snippet to the 'Format Script' field on the Search Field.

This code snippet can use the 'value' variable, which will hold the current search value. **Note:** the last statement that is executed must always be the assignment of the 'value' variable.

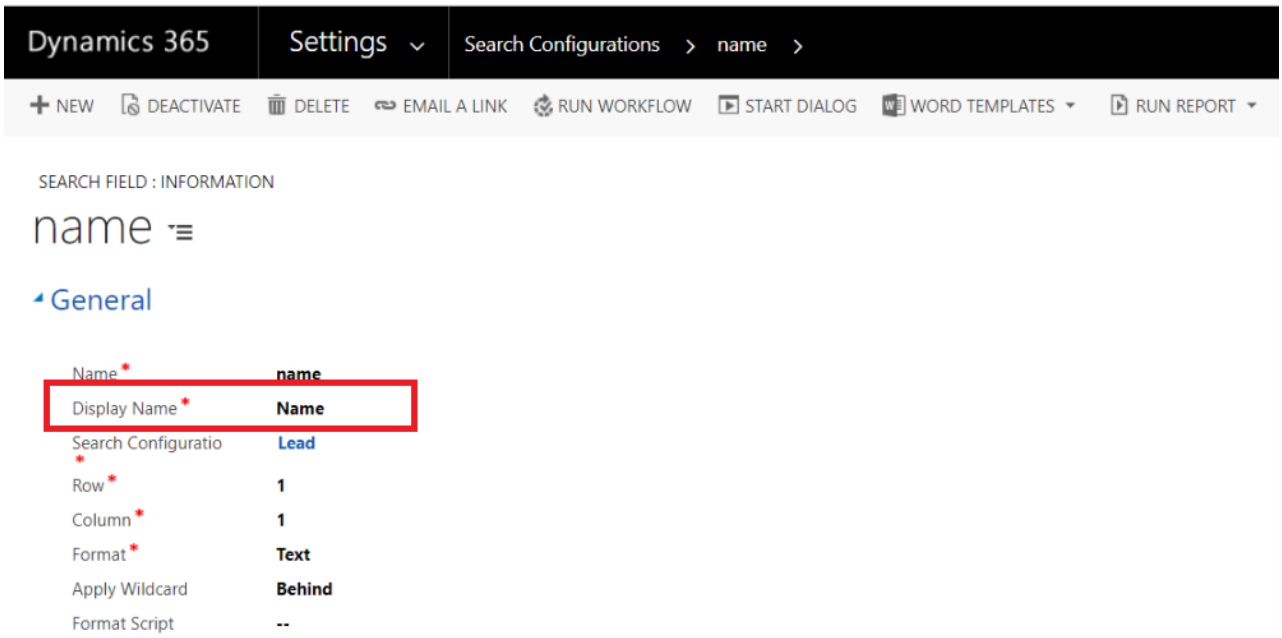
An example of the implementation of the beforementioned use case is:

View in Dynamics



Modify Field labels on the search form

You can modify the field label on the search form by editing the 'Display Name' field of the corresponding Search Field.

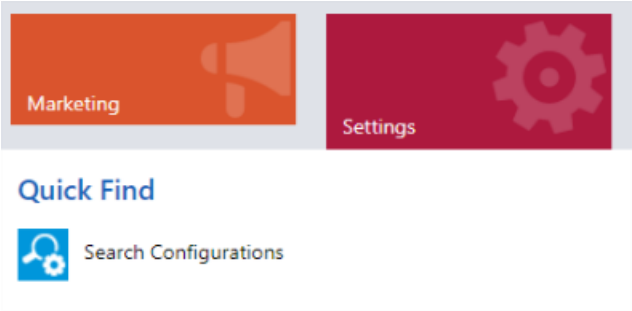


Using Quick Find on other entities

Quick Find is installed with a standard configuration for Account and Contact, which can be adjusted to fit your business needs. If you would like to use Quick Find on any other entity, you can add additional search configurations. This following sub-sections describe how implement new search forms.

Create a custom search configuration

To create a new search configuration, navigate to Settings -> Quick Find -> Search Configurations.



In this example we will be making a new Quick Find for Leads. Click on the new button to create a new Search Configuration. Enter a name a display name and save the record.

Create a view Create a view for 'Leads'. For a search Entity we need an 'Entity view' to list the results. Create a System View on the Lead Entity, with the desired columns. Make sure it is a System View so all your users can use it. Now return to your Search Configuration. If no specific view is created, Quick Find will use the default public view.

Create a Search Entity Add a 'Search Entity' by clicking on the new button in the subgrid view. Type 'Lead' for Name and for Entity. For Entity view we will use the Leads view we just created. But we can change it later. For Display Order, we will choose 1. Since it will be the first (and only) entity we will be using in this view. The Search Configuration is already set to the right record, since we created this record from the 'Lead' Search Configuration. Save the record.

Create a Search Field We need some search fields for the lead object. From the Search Configuration we create a new 'Search Field' record. For 'Name' use the field name of the entity. 'Display Name' gives it a label in the 'Quick Find' window. Row and column indicate the position in the table of the 'Quick Find' window. For 'Format' choose between 'Text', 'Numeric', 'Date', 'Option List' or 'Checkbox'. Choose whether or not you want to add a prefill value in the search window and enter it in the field: 'Prefill Value'. Save the record

Create a search Attribute From the Search Field record (or the Search Entity record) we can create a new Search Attribute record. The name of the search attribute must correspond with the field name you want to search in. This must be the schema name of the field.

If you set 'Auto Fill on New Record' to 'Yes', and the user creates a new record from within the quickfind window, the entered data will be copied to the newly created record. On Search Field, you need to lookup the 'Search Field' record you just created. On 'Search Entity' you need to select the 'Search Entity' you just created. Save the record.

Add the button to the CommandBar Now the only thing left to do is add the button to the CommandBar. To do so you can use the Ribbon Editor from the XrmToolBox. Add a button with these properties:

Library: $webresource:cnm_/QuickFind/Scripts/quickfind_util.js

Function Name: openQuickfind

Stringparameter: [specify the unique name of the search onfiguration]

You can use these images to show the button icon in the CommandBar:

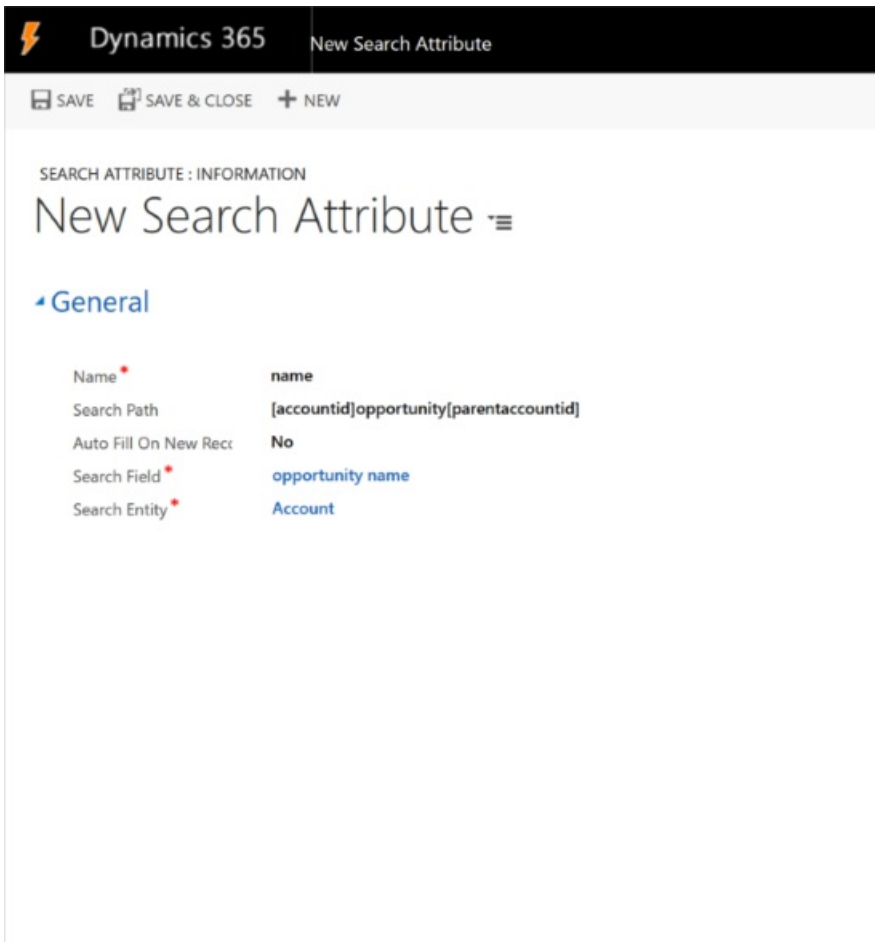
Image 16: $webresource:cnm_/QuickFind/Icons/quickfind_16.png

ModernImage: $webresource:cnm_/QuickFind/Icons/zoomlogo.svg

Search records by information on related entities

In some situations you want to find records by information that is stored on a related record. You might for example want to find an account by the name of an opportunity that is related to that account.

To do so, you can configure a search attribute for a related entity by filling the 'Search Path' field. This search attribute will look like:



You have to specify the following fields:

Field	Description
Name	The schemaname of the field on the **related** entity.
Search Path	[from-identifier]relatedentity[to-identifier]
Search Entity	The entity for which the records will be retrieved.

So in our example we want to search accounts that have a certain name in a related opportunity. For this example we need to specify these values:

Field	Value
Name	'name' (the schemaname of the opportunity's name field).

Field	Value
Search Path	[accountid]opportunity[parentaccountid]
Search Entity	'Accounts' (lookup value to the account search entity)

In this example we use an 1:N relationship from Account (parent) to underlying Opportunities (childs), which requires these indentifiers in the search path:

- the 'from-identifier' is 'accountid' (the ID of the Account entity).
- the related entity name is 'opportunity'
- the 'to-identifier' is 'parentaccountid' (the lookup field on the Opportunity entity).

In case of an N:1 relationship from Account (child) to primary Contact (parent), we need these identifiers:

- the 'from-identifier' is 'primarycontactid' (the lookup field on the Account entity)
- the related entity name is 'contact'
- the 'to-identifier' is 'contactid' (the ID of the contact entity)

Multiple levels

It is possible to search more than one level deep. For example: you want to search accounts by the fullname of the contact that is the primary contact for an opportunity linked to the account. Then you need to create a search attribute with the field Name: 'fullname' and for Search Path, you separate the relationship levels with a dot. ('.') E.g.

```
[accountid]opportunity[parentaccountid].[parentcontactid]contact[contactid]
```

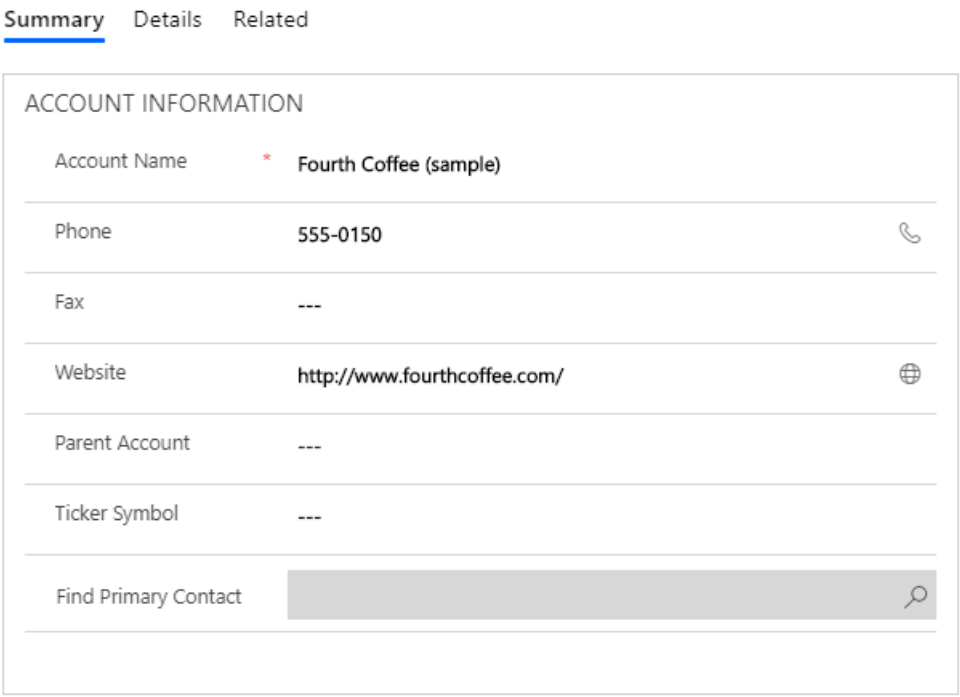
N:N relationships

If you need to configure a search path for a N:N relationship, you can use the relationship name as the entity name of the intersect entity. The from-identifier is the ID of the source entity in this relationship, the to-identifier is the ID of the target entity.

Use Quick Find to select lookup records

This feature is intended to replace the lookup dialog.

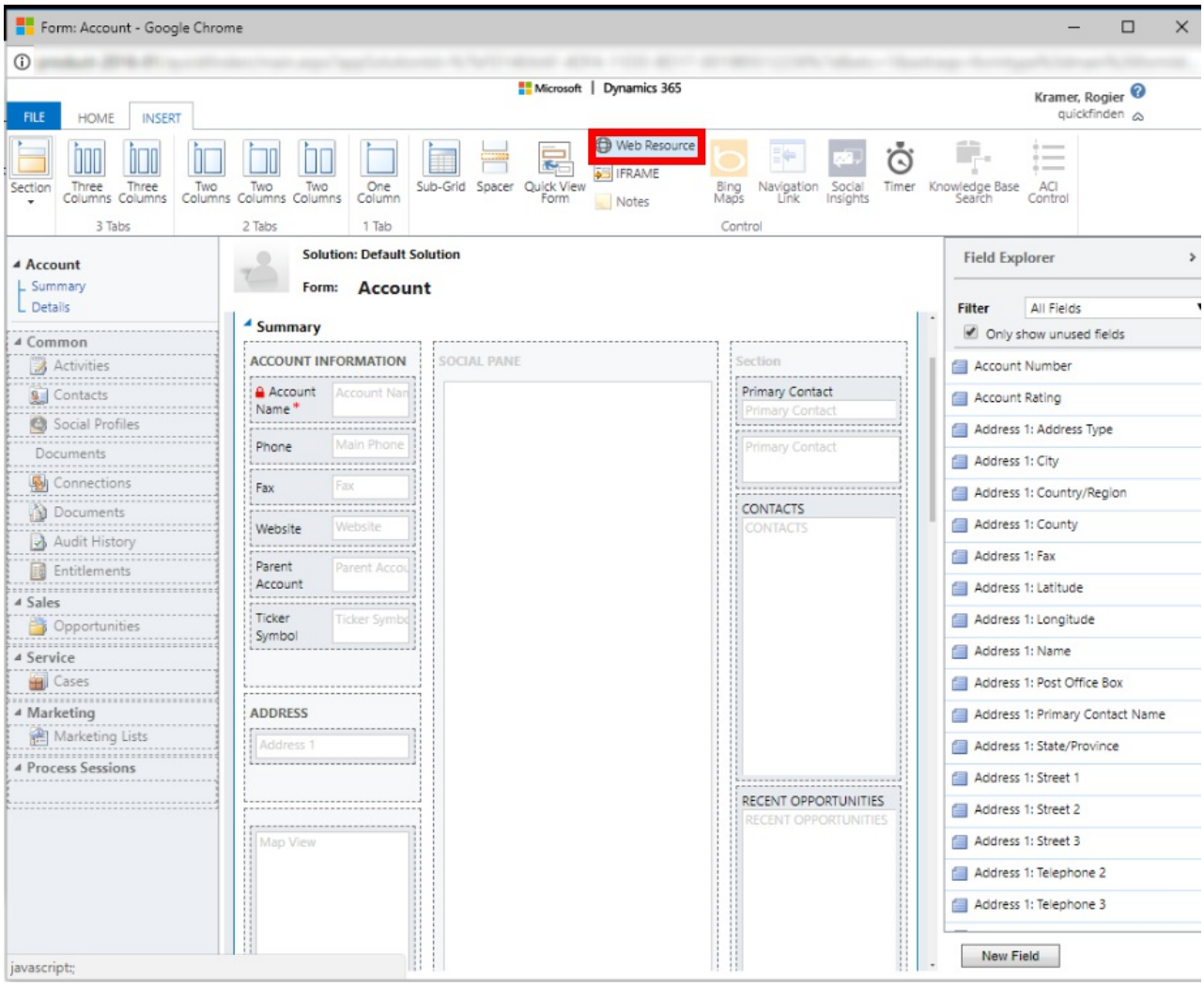
You can use Quick Find to select a value for a lookup field on an entity form. For example, you can use the Quick Find search form to select a Primary Contact on an Account form.



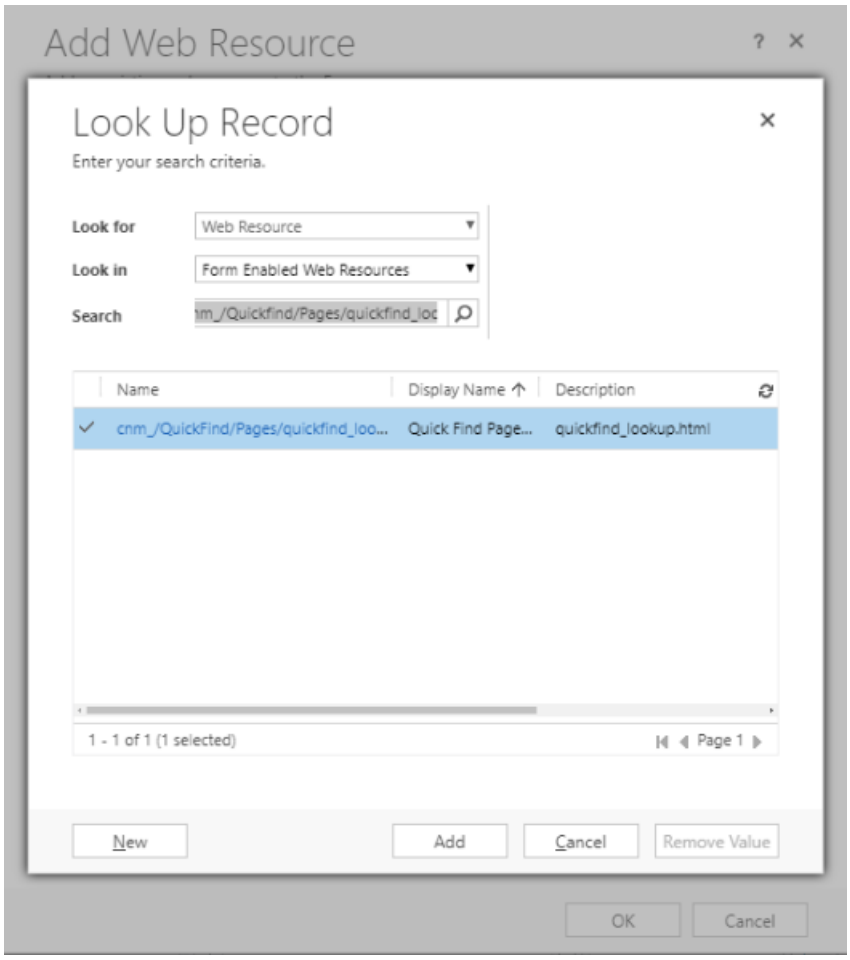
Here you can see the Quick Find Lookup for Primary contact on the form.

Add a webresource

The QuickFind lookup form gets activated via a webresource, you can add this to the form. To do so, you can add a Web Resource to your form, right above the lookup field.



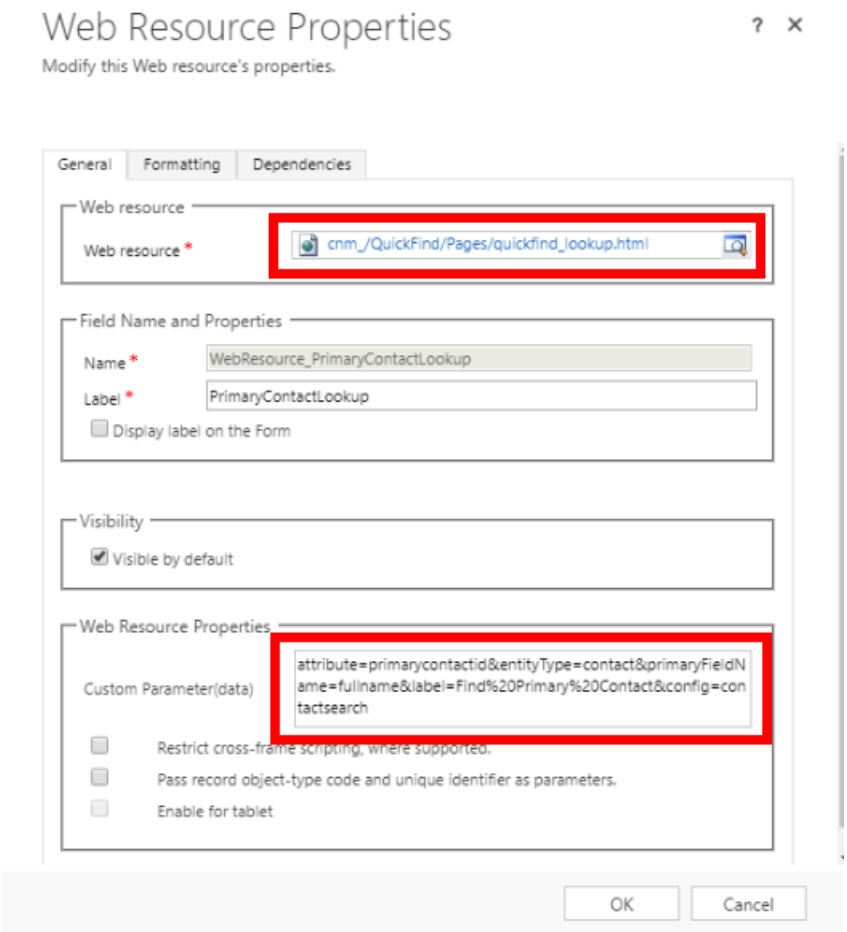
Select the Webresource: cnm_/Quickfind/Pages/quickfind_lookup.html



Next, configure the Web Resource to populate the lookup field, using the Custom Parameter field in the Web Resource configuration. The following table describes the various parameters.

Parameter	Description	Example
attribute	The schemaname of the lookup field you want to populate.	primarycontactid
entityType	The schemaname of the entity you will select a record from.	contact
primaryFieldName	The attribute of the lookup record that holds the name to be displayed in the lookup field.	fullname
label	The link label that will be displayed on the form. Labels with spaces need to be ASCII-encoded.	Find%20contact
config	The 'Unique Name' of the Quick Find 'Search Configuration' that is used to load the right search form.	contactsearch
prefillfields	Prefill Fields can be used to fill data from the form as input data for the search field. See here	

In this example we want to use a Quick Find search form to select the Primary Contact on Account.



The Custom Pararameter will look like this:

```
attribute=primarycontactid&entityType=contact&primaryFieldName=fullname&label=Find%20Primary%20Contact&conf
ig=contactsearch
```

Pre-fill search fields with dynamic form values (when using Quick Find as lookup dialog)

For a search form that is used as lookup dialog to fill a lookup field, you can pre-fill search fields using dynamic values from the current record form. You can map any form field to a search field, as long as the form field exists on the form.

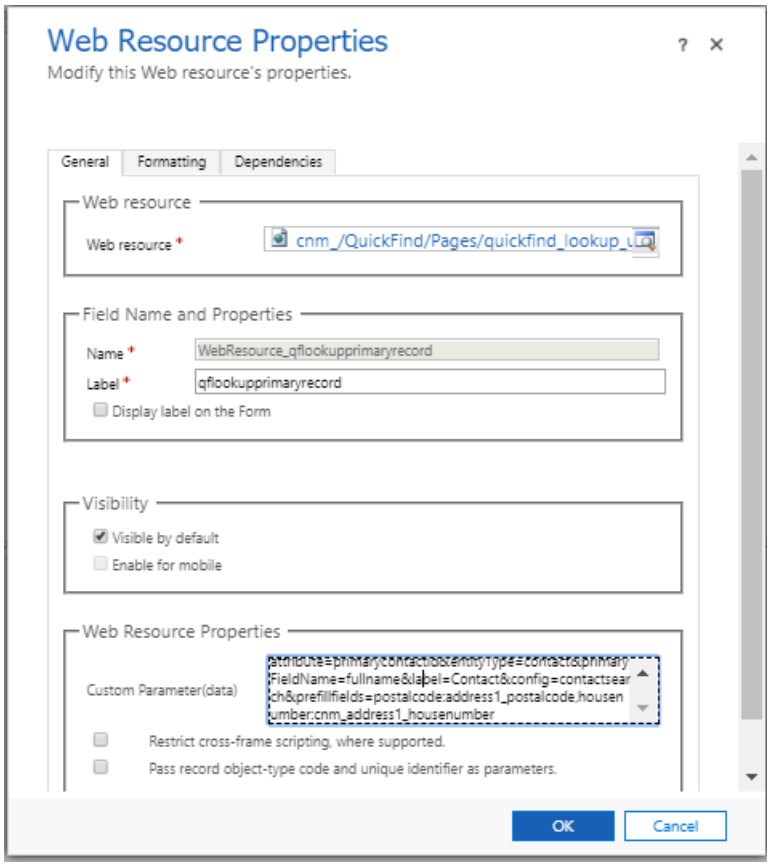
In order to configure this behavior, you need to set the 'prefillfields' parameter in the webresource. The syntax of this parameter is:

```
prefillfields=searchfield1:formfield1,searchfield2:formfield2

Example: prefillfields=postalcode:address1_postalcode,city:address1_city
```

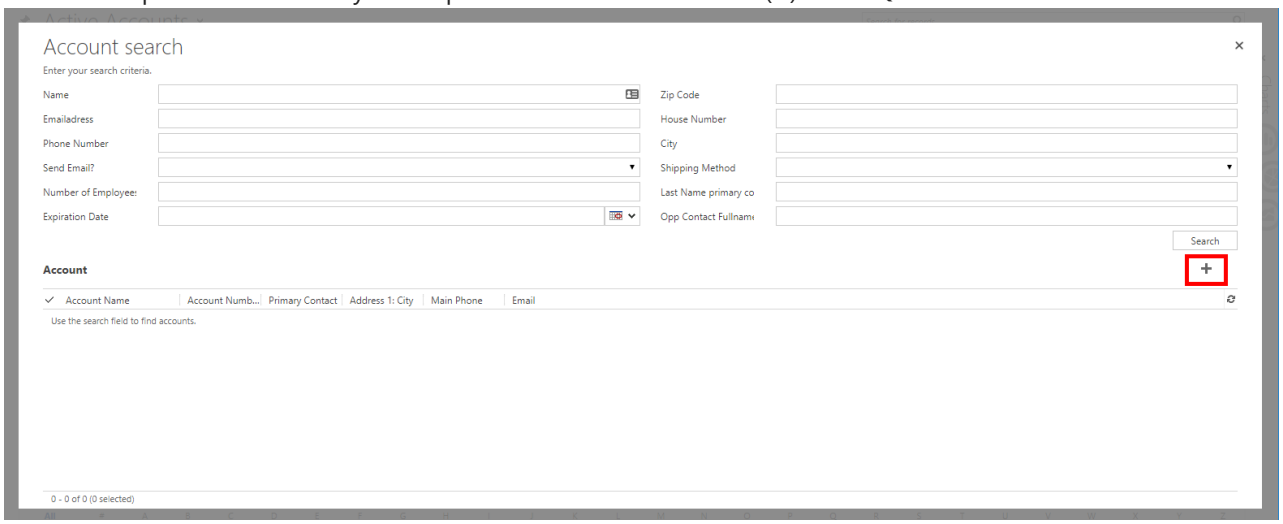
The 'searchfield' element must contain the name of the search field (the value in the 'Name' field). The 'formfield' element must contain the schemaname of the form field.

Note: The prefillfields parameter needs to be the last parameter that is added in the webresource's parameters.

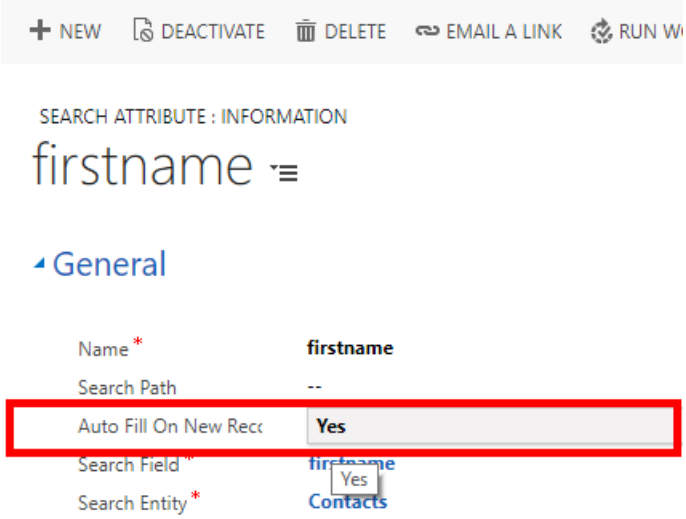


Create a new record from the search form

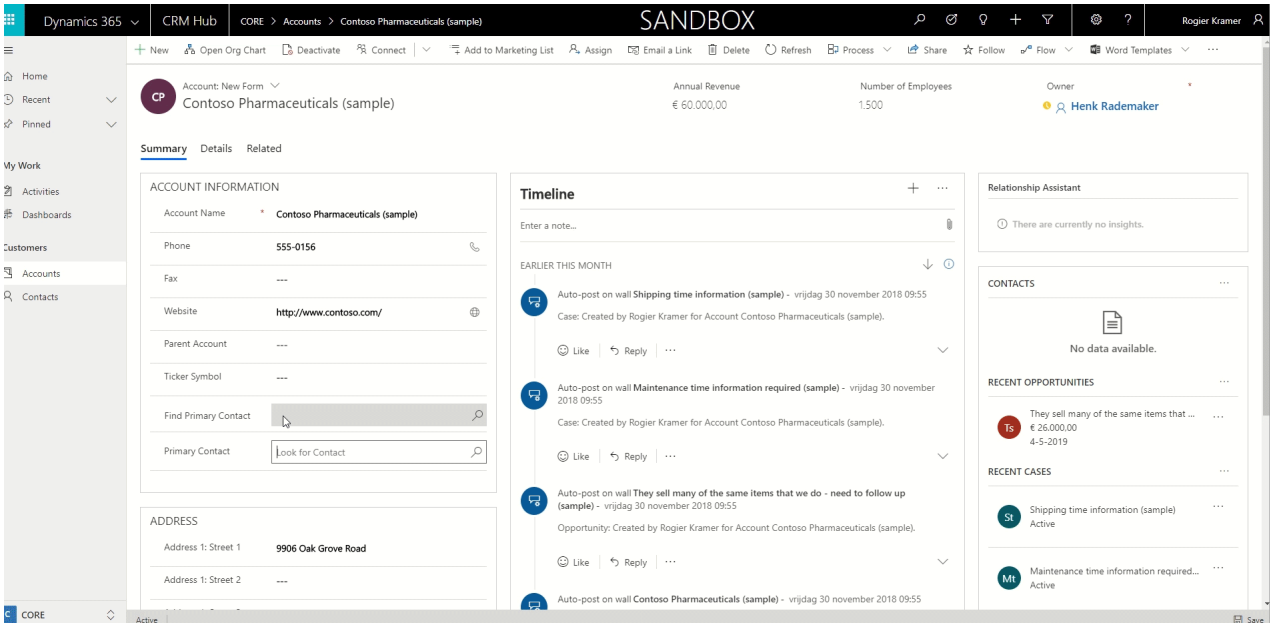
If you can not find the record you are looking for, you probably need to create a new record based on the information provided. To do so you can press the new record button (+) in the Quick Find search form.



If you want the search values to be copied to the new record, you can enable the 'Auto Fill On New Record' option on the Search Attribute records. As this will probably not apply for all fields, you can configure this behavior on each search attribute individually.



You can also create records from the Quick Find Lookup screen. To do so, you need to have a Quick Create Form on the entity you are looking for. Also you need to make sure you configured the webresource correctly. Since this will not work, if you have not specified the entitytype.



Troubleshooting

This chapter describes some errors that can occur and specifies how you can solve them.

Error messages

"The view with the name 'XYXY' doesn't exist for entity 'lead'" – while creating a 'Search Entity'.
Solution: The view is either non-existent, or is not a system view. Create the view in the default solution of the desired entity. Or leave the field empty, the system will choose the defauilt public view.

In case you do not succeed in solving your problem, please contact support@crmpartners.com.