



# **Fun with Fields**

## **A Dynamics CRM Customization Training Guide**

**Help make this training guide better!**

If you encounter issues with the training guide, have suggestions for improvement, or would just like to provide some general feedback, then please click [here](#) to send us an email.



# Table of Contents

Chapter 1	Creating Dynamics CRM Fields .....	1
Exercise 1.1	Creating the Classification Entity .....	1
Exercise 1.2	Creating the Sample Entity .....	3
Exercise 1.3	Adding Fields to the Sample Entity .....	4
Exercise 1.4	Adding Standard Fields to the Sample Entity .....	6
Exercise 1.5	Adding Calculated Fields to the Sample Entity .....	20
Exercise 1.6	Adding Fields to the Form .....	31
Exercise 1.7	Verifying Your Work .....	39
Chapter 2	Additional Reading .....	43

# Chapter 1    Creating Dynamics CRM Fields

There are a wide variety of field types within the Dynamics CRM system and it is sometimes easy to overlook some of the more esoteric types or maybe some of the newer variations added to Dynamics CRM 2015 or 2016.

That is why we created this training guide.

It will walk you step-by-step through the creation of almost every type and variation of a Dynamics CRM data field. Here is the process:

1. We will create two custom entities (Classification and Sample).
2. Working with the Sample entity we will:
  - a. Add fields
  - b. Add them to the form
  - c. Publish the entity
3. We will then create a Sample record and some associated activities to populate the fields we have created so that you can see them in action.



## Exercise 1.1 Creating the Classification Entity

Perform these steps to create the Classification entity that will be used to provide a lookup field later in this training guide.

1. Navigate to **Settings, Customization**, as shown in Figure 1-1. This will open the Default Solution.

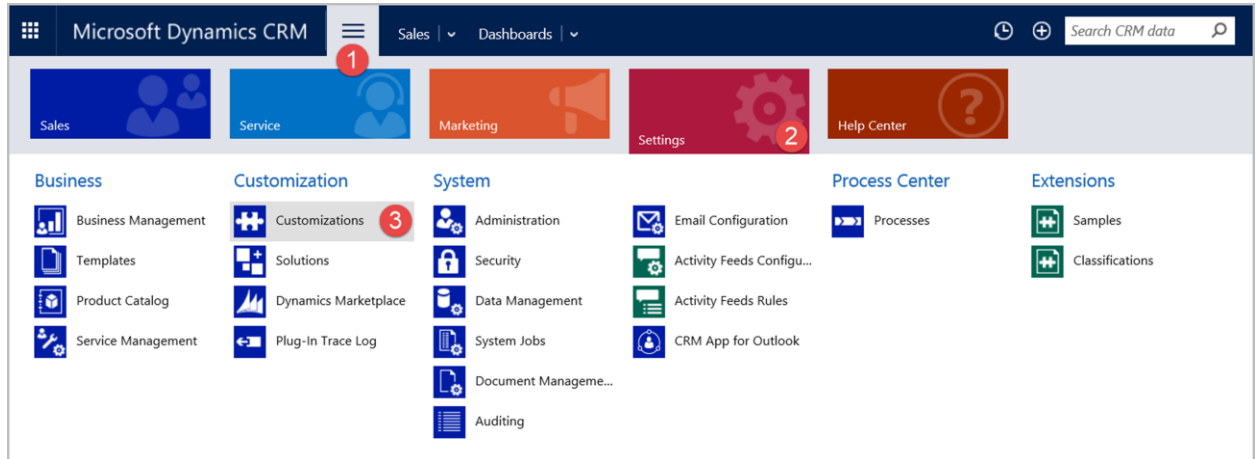


Figure 1-1. Navigating to the Customizations area

2. Click **Customize the System**, as shown in Figure 1-2, to open the Default Solution.

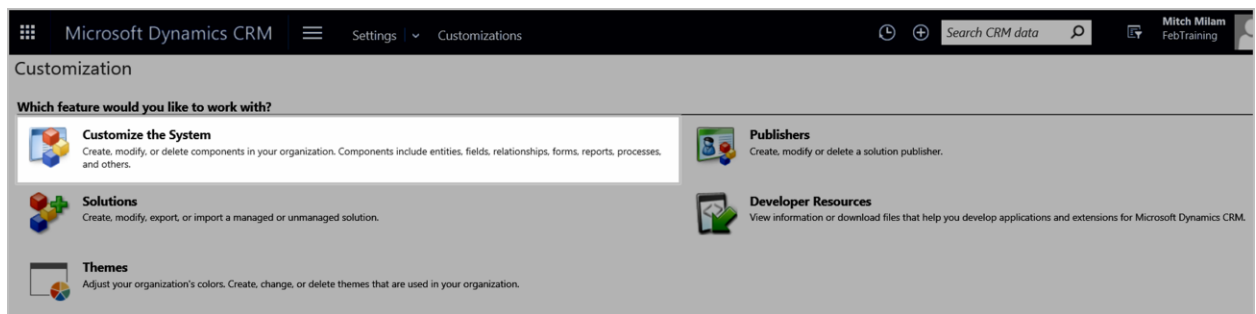


Figure 1-2. Customize the System

- From the Component list toolbar, click the **New** dropdown-button, then select **Entity**, as you can see in Figure 1-3.

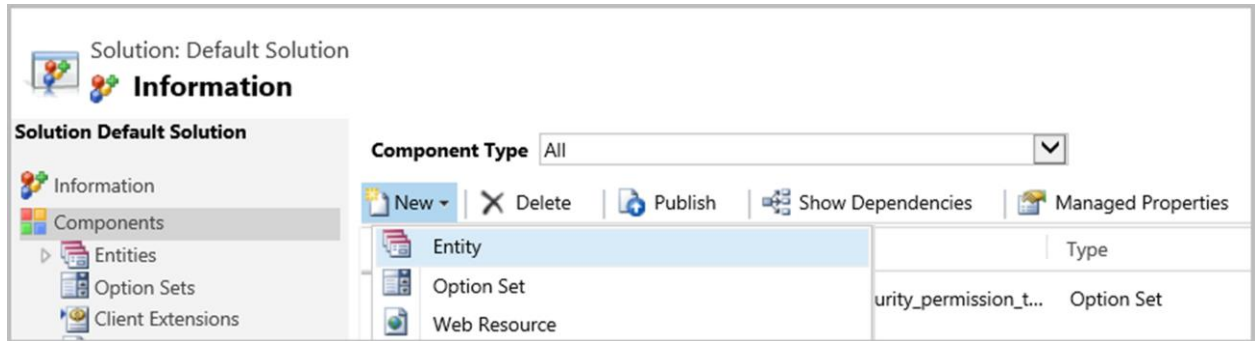


Figure 1-3. Creating a new entity

- Complete the fields to resemble Figure 1-4.

The screenshot shows the 'Entity Definition' form in Dynamics CRM. The 'General' tab is active. The 'Entity Definition' section contains the following fields: 'Display Name' (Classification), 'Plural Name' (Classifications), 'Name' (new\_classification), 'Primary Image' (dropdown), 'Color' (green), and 'Description' (empty). The 'Ownership' dropdown is set to 'User or Team'. The 'Define as an activity entity' checkbox is unchecked, and the 'Display in Activity Menus' checkbox is checked. The 'Areas that display this entity' section has checkboxes for 'Sales', 'Service', 'Marketing', 'Help Center', and 'Settings' (checked). The 'Options for Entity' section has an unchecked checkbox for 'Enable for interactive experience'. The 'Process' section has an unchecked checkbox for 'Business process flows (fields will be created)'. The 'Communication & Collaboration' section has checkboxes for 'Notes (includes attachments)', 'Activities', 'Connections', 'Sending email (If an email field does not exist, one will be created)', 'Mail merge' (checked), and 'Document management'.

Figure 1-4. Classification entity

- Click the **Save and Close** button to create the Classification entity.



## Exercise 1.2 Creating the Sample Entity

Perform these steps to create the main Sample entity:

1. Click on the Entities node under Components tree, as shown in Figure 1-5.

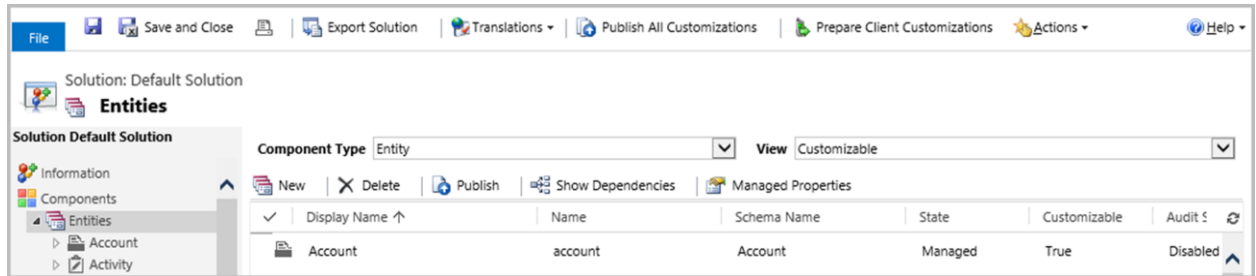


Figure 1-5. The Entities list in the Default Solution

2. From the Entity list toolbar, click the **New** button to display the New Entity dialog.
3. Complete the fields to resemble Figure 1-6.

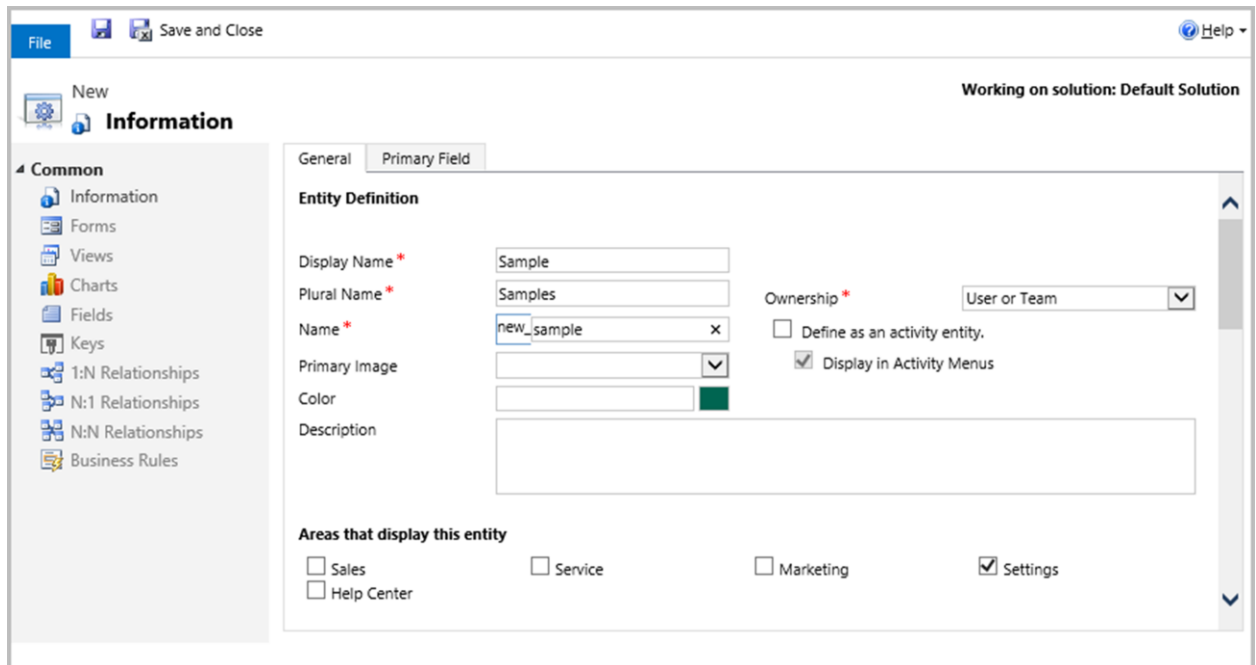


Figure 1-6. Creating the Sample entity

4. Click the **Save** button to create the Sample entity.

## Exercise 1.3 Adding Fields to the Sample Entity

In the following exercises we will be creating the following fields:

Field Name	Type	Properties
<a href="#">First Name</a>	Single line of text	Simple
<a href="#">Last Name</a>	Single line of text	Simple
<a href="#">Full Name</a>	Single line of text	Calculated
<a href="#">Email Address 1</a>	Single line of text	Format: Email
<a href="#">Abstract</a>	Single line of text	Format: Text Area
<a href="#">Website</a>	Single line of text	Format: URL
<a href="#">Stock Symbol</a>	Single line of text	Format: Ticker Symbol
<a href="#">Telephone</a>	Single line of text	Format: Phone
<a href="#">Job Title</a>	Option Set	Simple
<a href="#">Level</a>	Option Set	Global Option Set
<a href="#">Active</a>	Two Options	Simple
<a href="#">Needs Callback</a>	Two Options	Calculated
<a href="#">Image</a>	Image	
<a href="#">Age</a>	Whole Number	Simple
<a href="#">Duration</a>	Whole Number	Format: Duration
<a href="#">Time Zone</a>	Whole Number	Format: Time Zone
<a href="#">Language</a>	Whole Number	Format: Language
<a href="#">Employment Days</a>	Whole Number	Calculated
<a href="#">Number of Phone Calls</a>	Whole Number	Rollup
<a href="#">Probability for Hire</a>	Floating Point Number	Simple
<a href="#">Bonus Potential</a>	Decimal Number	Simple
<a href="#">Bonus Percent of Salary</a>	Decimal Number	Calculated
<a href="#">Engagement This Month</a>	Decimal Number	Rollup
<a href="#">Salary</a>	Currency	Simple
<a href="#">Salary Difference</a>	Currency	Calculated
<a href="#">Existing Salary</a>	Currency	Pricing Decimal Precision
<a href="#">Description</a>	Multiple Lines of Text	Simple

Field Name	Type	Properties
<a href="#">Start Date</a>	Date and Time	Simple
<a href="#">End Date</a>	Date and Time	Simple
<a href="#">Next Phone Call</a>	Date and Time	Calculated
<a href="#">Last Phone Call</a>	Date and Time	Rollup
<a href="#">Birthday</a>	Date and Time	Behavior: Date Only
<a href="#">Check-In Date</a>	Date and Time	Behavior: Time–Zone Independent
<a href="#">Classification</a>	Lookup	Simple

## Exercise 1.4 Adding Standard Fields to the Sample Entity

In this exercise we will be adding standard field types, and their variations.

1. Click the **Fields** link on the left-hand navigation as shown in Figure 1-7.

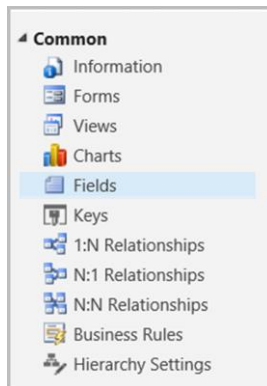


Figure 1-7. Entity Fields link

2. From the Field list toolbar, click the **New** button, as shown in Figure 1-8.

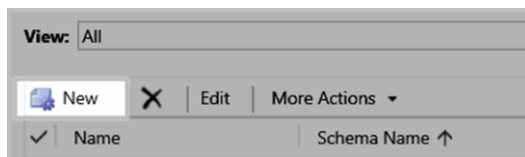
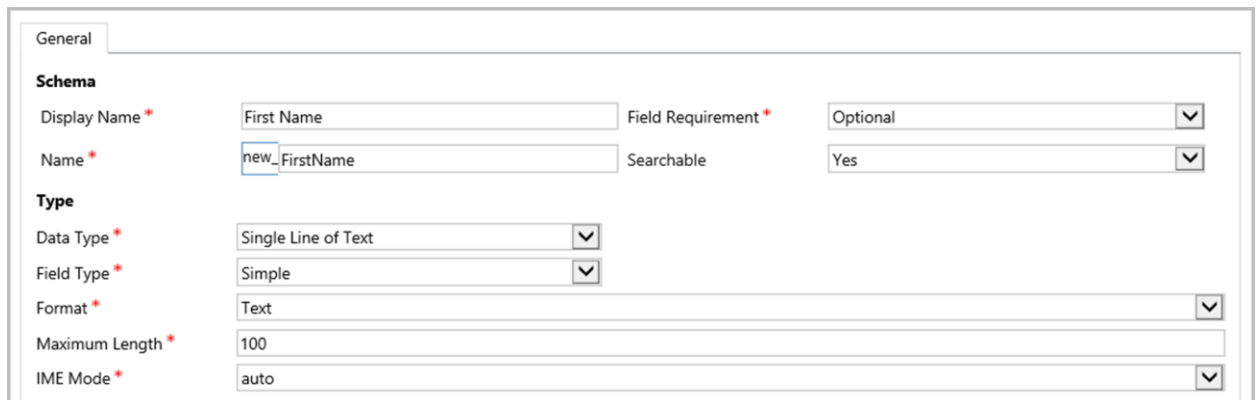


Figure 1-8. New Field button

3. Complete the First Name field properties as shown in Figure 1-9.

A screenshot of the 'First Name' field properties dialog box. The 'General' tab is selected. The 'Schema' section contains 'Display Name' (First Name), 'Name' (new\_FirstName), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section contains 'Data Type' (Single Line of Text), 'Field Type' (Simple), 'Format' (Text), 'Maximum Length' (100), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	First Name	Field Requirement *	Optional
Name *	new_FirstName	Searchable	Yes
<b>Type</b>			
Data Type *	Single Line of Text		
Field Type *	Simple		
Format *	Text		
Maximum Length *	100		
IME Mode *	auto		

Figure 1-9. First Name field

4. Click the **Save and New** button to create the field and open a new Create Field dialog.

5. Complete the Last Name field properties as shown in Figure 1-10

The screenshot shows the 'General' tab of a field configuration dialog. Under the 'Schema' section, 'Display Name' is 'Last Name' and 'Field Requirement' is 'Optional'. Under 'Name', the value is 'new\_LastName' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Single Line of Text', 'Field Type' is 'Simple', 'Format' is 'Text', 'Maximum Length' is '100', and 'IME Mode' is 'auto'.

General			
<b>Schema</b>			
Display Name *	Last Name	Field Requirement *	Optional
Name *	new_LastName	Searchable	Yes
<b>Type</b>			
Data Type *	Single Line of Text		
Field Type *	Simple		
Format *	Text		
Maximum Length *	100		
IME Mode *	auto		

Figure 1-10. Last Name field

6. Click the **Save and New** button to create the field and open a new Create Field dialog.
7. Complete the Email Address 1 field properties as shown in Figure 1-11.

The screenshot shows the 'General' tab of a field configuration dialog. Under the 'Schema' section, 'Display Name' is 'Email Address 1' and 'Field Requirement' is 'Optional'. Under 'Name', the value is 'new\_EmailAddress1' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Single Line of Text', 'Field Type' is 'Simple', 'Format' is 'Email', 'Maximum Length' is '100', and 'IME Mode' is 'auto'.

General			
<b>Schema</b>			
Display Name *	Email Address 1	Field Requirement *	Optional
Name *	new_EmailAddress1	Searchable	Yes
<b>Type</b>			
Data Type *	Single Line of Text		
Field Type *	Simple		
Format *	Email		
Maximum Length *	100		
IME Mode *	auto		

Figure 1-11. Email Address 1 field

8. Click the **Save and New** button to create the field and open a new Create Field dialog.
9. Complete the Abstract field properties as shown in Figure 1-12.

The screenshot shows the 'General' tab of a field configuration dialog. Under the 'Schema' section, 'Display Name' is 'Abstract' and 'Field Requirement' is 'Optional'. Under 'Name', the value is 'new\_Abstract' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Single Line of Text', 'Field Type' is 'Simple', 'Format' is 'Text Area', 'Maximum Length' is '200', and 'IME Mode' is 'auto'.

General			
<b>Schema</b>			
Display Name *	Abstract	Field Requirement *	Optional
Name *	new_Abstract	Searchable	Yes
<b>Type</b>			
Data Type *	Single Line of Text		
Field Type *	Simple		
Format *	Text Area		
Maximum Length *	200		
IME Mode *	auto		

Figure 1-12. Abstract field

10. Click the **Save and New** button to create the field and open a new Create Field dialog.
11. Complete the Website field properties as shown in Figure 1-13.

The screenshot shows the 'Create Field' dialog box with the 'General' tab selected. The 'Schema' section includes 'Display Name' (Website), 'Name' (new\_Website), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Single Line of Text), 'Field Type' (Simple), 'Format' (URL), 'Maximum Length' (200), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	Website	Field Requirement *	Optional
Name *	new_Website	Searchable	Yes
<b>Type</b>			
Data Type *	Single Line of Text		
Field Type *	Simple		
Format *	URL		
Maximum Length *	200		
IME Mode *	auto		

Figure 1-13. Website field

12. Click the **Save and New** button to create the field and open a new Create Field dialog.
13. Complete the Stock Symbol field properties as shown in Figure 1-14

The screenshot shows the 'Create Field' dialog box with the 'General' tab selected. The 'Schema' section includes 'Display Name' (Stock Symbol), 'Name' (new\_StockSymbol), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Single Line of Text), 'Field Type' (Simple), 'Format' (Ticker Symbol), 'Maximum Length' (10), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	Stock Symbol	Field Requirement *	Optional
Name *	new_StockSymbol	Searchable	Yes
<b>Type</b>			
Data Type *	Single Line of Text		
Field Type *	Simple		
Format *	Ticker Symbol		
Maximum Length *	10		
IME Mode *	auto		

Figure 1-14. Stock Symbol field

14. Click the **Save and New** button to create the field and open a new Create Field dialog.

15. Complete the Telephone field properties as shown in Figure 1-15

General

**Schema**

Display Name \* Telephone Field Requirement \* Optional

Name \* new\_Telephone Searchable Yes

**Type**

Data Type \* Single Line of Text

Field Type \* Simple

Format \* Phone

Maximum Length \* 20

IME Mode \* auto

Figure 1-15. Telephone field

16. Click the **Save and New** button to create the field and open a new Create Field dialog.

17. Complete the Job Title field properties as shown in Figure 1-16.

General

**Schema**

Display Name \* Job Title Field Requirement \* Optional

Name \* new\_JobTitle Searchable Yes

**Type**

Data Type \* Option Set

Field Type \* Simple

Use Existing Option Set ☐ Yes ☒ No

Default Value Unassigned Value

**Options**

CEO  
CFO  
CIO  
VP

Label \* CEO

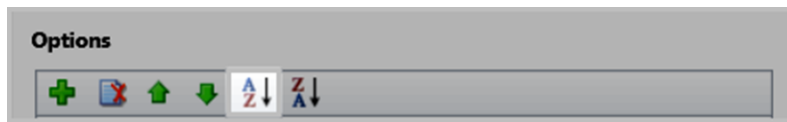
Value \* 100,000,000

Description

Color #0000ff

Figure 1-16. Job Title field

18. Click the **A/Z button** to sort alphabetically.



19. Click the **Save and New** button to create the field and open a new Create Field dialog.

20. Complete the Level field properties as shown in

A screenshot of the "Create Field" dialog box, specifically the "General" tab. The "Schema" section includes "Display Name" (Level), "Name" (new\_Level), "Field Requirement" (Optional), and "Searchable" (Yes). The "Type" section includes "Data Type" (Option Set), "Field Type" (Simple), "Use Existing Option Set" (Yes selected), "Option Set" (empty dropdown), "Default Value" (Unassigned Value), and buttons for "Edit" and "New".

Figure 1-17. Level field

21. Click the **New** button to create a new global option set, as shown in Figure 1-18.

A close-up screenshot of the "Create Field" dialog box, focusing on the "Option Set" section. The "Use Existing Option Set" radio buttons are set to "Yes". The "Option Set" dropdown is empty, and the "New" button is highlighted with a white border.

Figure 1-18. New button used to create a new global option set



22. Complete the properties for the Level global option set as shown in Figure 1-19.

Option Set Working on solution: Default Solution

**New**

**Schema**

Display Name \* Level Name \* new\_Level

Description

**Options**

60  
61  
62  
63  
64  
65

Label \* 65

Value \* 100,000,005

Description

Color #0000ff

Figure 1-19. Creating the Level global option set

23. When finished, click the **Save and Close** button, and you will be returned to the Level field. As you can see in Figure 1-20, you may select a default value that is specific to the Level field on the Sample entity.

General

**Schema**

Display Name \* Level Field Requirement \* Optional

Name \* new\_Level Searchable Yes

**Type**

Data Type \* Option Set

Field Type \* Simple

Use Existing Option Set ☒ Yes ☐ No

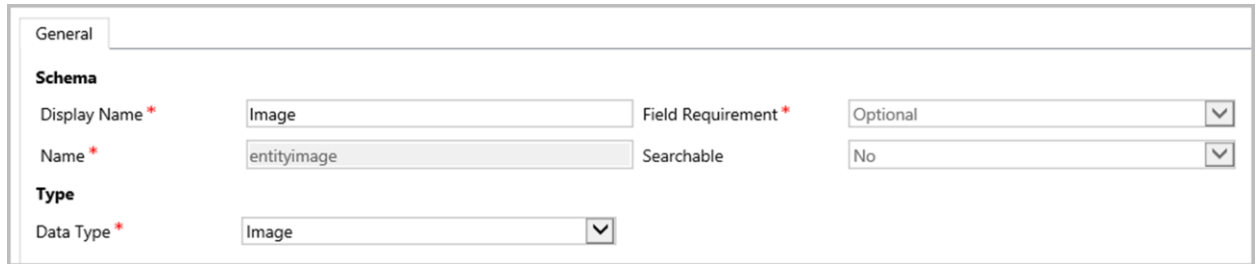
Option Set \* Level Edit New

Default Value

Unassigned Value  
60  
61  
62  
63  
64  
65

Figure 1-20. Selecting a default value for the Level field

24. Click the **Save and New** button to create the field and open a new Create Field dialog.
25. Complete the Image field properties as shown in Figure 1-21.

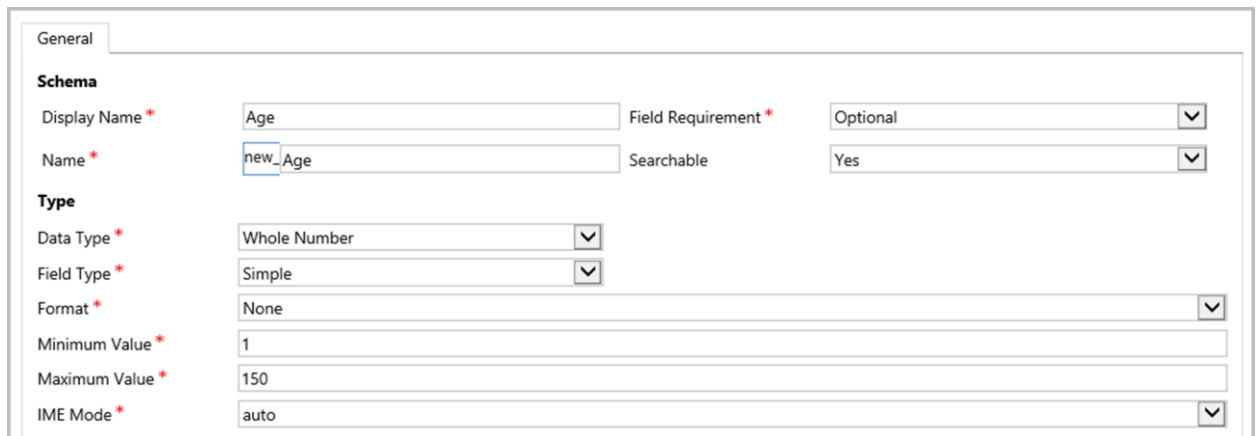


The screenshot shows the 'General' tab of a field properties dialog box for an 'Image' field. The 'Schema' section includes 'Display Name' (Image), 'Name' (entityimage), 'Field Requirement' (Optional), and 'Searchable' (No). The 'Type' section includes 'Data Type' (Image).

<b>General</b>			
<b>Schema</b>			
Display Name *	Image	Field Requirement *	Optional
Name *	entityimage	Searchable	No
<b>Type</b>			
Data Type *	Image		

Figure 1-21. Image field

26. Click the **Save and New** button to create the field and open a new Create Field dialog.
27. Complete the Age field properties as shown in Figure 1-22.

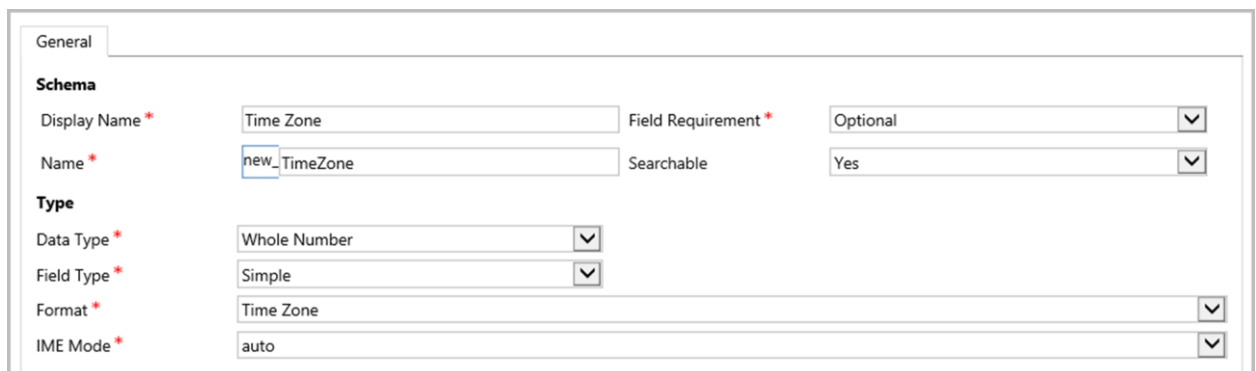


The screenshot shows the 'General' tab of a field properties dialog box for an 'Age' field. The 'Schema' section includes 'Display Name' (Age), 'Name' (new\_Age), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Whole Number), 'Field Type' (Simple), 'Format' (None), 'Minimum Value' (1), 'Maximum Value' (150), and 'IME Mode' (auto).

<b>General</b>			
<b>Schema</b>			
Display Name *	Age	Field Requirement *	Optional
Name *	new_Age	Searchable	Yes
<b>Type</b>			
Data Type *	Whole Number		
Field Type *	Simple		
Format *	None		
Minimum Value *	1		
Maximum Value *	150		
IME Mode *	auto		

Figure 1-22. Age field

28. Click the **Save and New** button to create the field and open a new Create Field dialog.
29. Complete the Time Zone field properties as shown in Figure 1-23.



The screenshot shows the 'General' tab of a field properties dialog box for a 'Time Zone' field. The 'Schema' section includes 'Display Name' (Time Zone), 'Name' (new\_TimeZone), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Whole Number), 'Field Type' (Simple), 'Format' (Time Zone), and 'IME Mode' (auto).

<b>General</b>			
<b>Schema</b>			
Display Name *	Time Zone	Field Requirement *	Optional
Name *	new_TimeZone	Searchable	Yes
<b>Type</b>			
Data Type *	Whole Number		
Field Type *	Simple		
Format *	Time Zone		
IME Mode *	auto		

Figure 1-23. Time zone field

30. Click the **Save and New** button to create the field and open a new Create Field dialog.

31. Complete the Language field properties as shown in Figure 1-24.

The screenshot shows the 'General' tab of a field properties dialog box for a field named 'Language'. The 'Schema' section includes 'Display Name' (Language), 'Name' (new\_Language), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Whole Number), 'Field Type' (Simple), 'Format' (Language), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	Language	Field Requirement *	Optional
Name *	new_Language	Searchable	Yes
<b>Type</b>			
Data Type *	Whole Number		
Field Type *	Simple		
Format *	Language		
IME Mode *	auto		

Figure 1-24. Language field

32. Click the **Save and New** button to create the field and open a new Create Field dialog.

33. Complete the Number of Phone Calls field properties as shown in Figure 1-25.

The screenshot shows the 'General' tab of a field properties dialog box for a field named 'Number of Phone Calls'. The 'Schema' section includes 'Display Name' (Number of Phone Calls), 'Name' (new\_NumberofPhoneCalls), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Whole Number), 'Field Type' (Rollup), 'Format' (None), 'Minimum Value' (-2,147,483,648), 'Maximum Value' (2,147,483,647), and 'IME Mode' (auto). There is an 'Edit' button next to the 'Field Type' dropdown.

General			
<b>Schema</b>			
Display Name *	Number of Phone Calls	Field Requirement *	Optional
Name *	new_NumberofPhoneCalls	Searchable	Yes
<b>Type</b>			
Data Type *	Whole Number		
Field Type *	Rollup	Edit	
Format *	None		
Minimum Value *	-2,147,483,648		
Maximum Value *	2,147,483,647		
IME Mode *	auto		

Figure 1-25. Number of Phone Calls field

34. Click the **Edit** button to open the calculated field editor.

35. Create the **Condition** and **Action** steps as shown in Figure 1-26.

SAVE SAVE AND CLOSE

ROLLUP FIELD

## Number of Phone Calls

**SOURCE ENTITY**  
Source: **Sample**  
Use Hierarchy: **NO**

**RELATED ENTITY**  
Related: **Phone Calls (Regarding)**

**FILTERS (OPTIONAL)**  
+ Add condition

**INCLUDE INDIRECTLY RELATED ACTIVITIES**  
+ Add related entity

**AGGREGATION**  
**COUNT of Phone Call**

Figure 1-26. Number of Phone Calls calculation

36. Click the **SAVE AND CLOSE** button to save the calculation.

37. Click the **Save and New** button to create the field and open a new Create Field dialog.

38. Complete the Active field properties as shown in Figure 1-27.

General

**Schema**

Display Name \* Active Field Requirement \* Optional

Name \* new\_Active Searchable Yes

**Type**

Data Type \* Two Options

Field Type \* Simple

No

Yes

Move Up

Move Down

Edit

Default Value No

Figure 1-27. Active field

39. Click the **Save and New** button to create the field and open a new Create Field dialog.

40. Complete the Probability of Hire field properties as shown in Figure 1-28.

The screenshot shows the 'General' tab of a field properties dialog. Under the 'Schema' section, 'Display Name' is 'Probability of Hire' and 'Field Requirement' is 'Optional'. 'Name' is 'new\_ProbabilityofHire' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Floating Point Number', 'Precision' is '4', 'Minimum Value' is '0.0000', 'Maximum Value' is '100.0000', and 'IME Mode' is 'auto'.

General	
<b>Schema</b>	
Display Name *	Probability of Hire
Field Requirement *	Optional
Name *	new_ProbabilityofHire
Searchable	Yes
<b>Type</b>	
Data Type *	Floating Point Number
Precision *	4
Minimum Value *	0.0000
Maximum Value *	100.0000
IME Mode *	auto

Figure 1-28. Probability of Hire field.

41. Click the **Save and New** button to create the field and open a new Create Field dialog.

42. Complete the Bonus Potential field properties as shown in Figure 1-29.

The screenshot shows the 'General' tab of a field properties dialog. Under the 'Schema' section, 'Display Name' is 'Bonus Potential' and 'Field Requirement' is 'Optional'. 'Name' is 'new\_BonusPotential' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Decimal Number', 'Field Type' is 'Simple', 'Precision' is '2', 'Minimum Value' is '0.00', 'Maximum Value' is '500.00', and 'IME Mode' is 'auto'.

General	
<b>Schema</b>	
Display Name *	Bonus Potential
Field Requirement *	Optional
Name *	new_BonusPotential
Searchable	Yes
<b>Type</b>	
Data Type *	Decimal Number
Field Type *	Simple
Precision *	2
Minimum Value *	0.00
Maximum Value *	500.00
IME Mode *	auto

Figure 1-29. Bonus Potential field

43. Click the **Save and New** button to create the field and open a new Create Field dialog.

44. Complete the Salary field properties as shown in Figure 1-30.

The screenshot shows the 'General' tab of a field properties dialog box for a field named 'Salary'. The 'Schema' section includes 'Display Name' (Salary), 'Name' (new\_Salary), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Currency), 'Field Type' (Simple), 'Precision' (Currency Precision), 'Minimum Value' (0.0000), 'Maximum Value' (10,000,000.0000), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	Salary	Field Requirement *	Optional
Name *	new_Salary	Searchable	Yes
<b>Type</b>			
Data Type *	Currency		
Field Type *	Simple		
Precision *	Currency Precision		
Minimum Value *	0.0000		
Maximum Value *	10,000,000.0000		
IME Mode *	auto		

Figure 1-30. Salary field

45. Click the **Save and New** button to create the field and open a new Create Field dialog.

46. Complete the Existing Salary field properties as shown in Figure 1-31.

The screenshot shows the 'General' tab of a field properties dialog box for a field named 'Existing Salary'. The 'Schema' section includes 'Display Name' (Existing Salary), 'Name' (new\_ExistingSalary), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Currency), 'Field Type' (Simple), 'Precision' (Pricing Decimal Precision), 'Minimum Value' (0.00), 'Maximum Value' (922,337,203,685,477.0000), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	Existing Salary	Field Requirement *	Optional
Name *	new_ExistingSalary	Searchable	Yes
<b>Type</b>			
Data Type *	Currency		
Field Type *	Simple		
Precision *	Pricing Decimal Precision		
Minimum Value *	0.00		
Maximum Value *	922,337,203,685,477.0000		
IME Mode *	auto		

Figure 1-31. Existing Salary field

47. Click the **Save and New** button to create the field and open a new Create Field dialog.

48. Complete the Description field properties as shown in Figure 1-32.

The screenshot shows the 'General' tab of a field properties dialog box for a field named 'Description'. The 'Schema' section includes 'Display Name' (Description), 'Name' (new\_Description), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Multiple Lines of Text), 'Maximum Length' (2,000), and 'IME Mode' (auto).

General			
<b>Schema</b>			
Display Name *	Description	Field Requirement *	Optional
Name *	new_Description	Searchable	Yes
<b>Type</b>			
Data Type *	Multiple Lines of Text		
Maximum Length *	2,000		
IME Mode *	auto		

Figure 1-32. Description field

49. Click the **Save and New** button to create the field and open a new Create Field dialog.
50. Complete the Start Date field properties as shown in Figure 1-33.

The screenshot shows the 'General' tab of a 'Create Field' dialog. The 'Schema' section contains 'Display Name' (Start Date) and 'Name' (new\_StartDate). The 'Type' section contains 'Data Type' (Date and Time), 'Field Type' (Simple), 'Behavior' (User Local), 'Format' (Date Only), and 'IME Mode' (auto). The 'Field Requirement' is set to 'Optional' and 'Searchable' is set to 'Yes'. A warning icon and text at the bottom state: 'When the behavior of a field is "User Local," field values are displayed in the user's local time. In the SDK, these values will be returned using a common UTC time zone format.'

Figure 1-33. Start Date field

51. Click the **Save and New** button to create the field and open a new Create Field dialog.
52. Complete the End Date field properties as shown in Figure 1-34.

The screenshot shows the 'General' tab of a 'Create Field' dialog. The 'Schema' section contains 'Display Name' (End Date) and 'Name' (new\_EndDate). The 'Type' section contains 'Data Type' (Date and Time), 'Field Type' (Simple), 'Behavior' (User Local), 'Format' (Date Only), and 'IME Mode' (auto). The 'Field Requirement' is set to 'Optional' and 'Searchable' is set to 'Yes'. A warning icon and text at the bottom state: 'When the behavior of a field is "User Local," field values are displayed in the user's local time. In the SDK, these values will be returned using a common UTC time zone format.'

Figure 1-34. End Date field

53. Click the **Save and New** button to create the field and open a new Create Field dialog.

54. Complete the Birthday field properties as shown in Figure 1-35.

The screenshot shows the 'General' tab of a field configuration dialog for a field named 'Birthday'. The 'Schema' section includes 'Display Name' (Birthday) and 'Field Requirement' (Optional). The 'Name' is 'new\_Birthday' and 'Searchable' is 'Yes'. The 'Type' section includes 'Data Type' (Date and Time), 'Field Type' (Simple), 'Behavior' (Time-Zone Independent), 'Format' (Date Only), and 'IME Mode' (auto). A warning icon and text at the bottom state: 'When the behavior of a field is "Time-Zone Independent," field values are displayed with no time zone conversion. The date and time values are stored and retrieved as specified in the UI and SDK. The behavior of this field can't be changed once it's saved.'

Figure 1-35. Birthday field

55. Click the **Save and New** button to create the field and open a new Create Field dialog.

56. Complete the Check-in Date field properties as shown in Figure 1-36.

The screenshot shows the 'General' tab of a field configuration dialog for a field named 'Check-In Date'. The 'Schema' section includes 'Display Name' (Check-In Date) and 'Field Requirement' (Optional). The 'Name' is 'new\_CheckInDate' and 'Searchable' is 'Yes'. The 'Type' section includes 'Data Type' (Date and Time), 'Field Type' (Simple), 'Behavior' (Time-Zone Independent), 'Format' (Date and Time), and 'IME Mode' (auto). A warning icon and text at the bottom state: 'When the behavior of a field is "Time-Zone Independent," field values are displayed with no time zone conversion. The date and time values are stored and retrieved as specified in the UI and SDK. The behavior of this field can't be changed once it's saved.'

Figure 1-36. Check-in Date field

57. Click the **Save and New** button to create the field and open a new Create Field dialog.



58. Complete the Classification field properties as shown in Figure 1-37.

The image shows a configuration window for a field named 'Classification'. The window has a 'General' tab selected. Under the 'Schema' section, the 'Display Name' is 'Classification', 'Name' is 'new\_Classification', 'Field Requirement' is 'Optional', and 'Searchable' is 'Yes'. Under the 'Type' section, the 'Data Type' is 'Lookup', 'Target Record Type' is 'Classification', and 'Relationship Name' is 'new\_sample\_Classification'.

General	
<b>Schema</b>	
Display Name *	Classification
Name *	new_Classification
Field Requirement *	Optional
Searchable	Yes
<b>Type</b>	
Data Type *	Lookup
Target Record Type *	Classification
Relationship Name *	new_sample_Classification

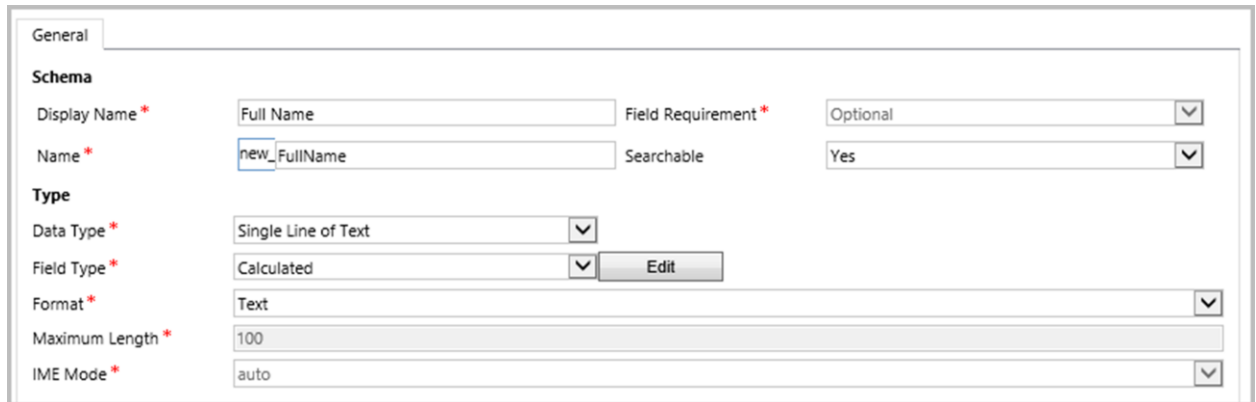
*Figure 1-37. Classification field*

59. Click the **Save and Close** button to create the field.

## Exercise 1.5 Adding Calculated Fields to the Sample Entity

Now that we have our standard fields created, we need to create variations of those fields that are either calculated or rollups.

1. Complete the Full Name field properties as shown in Figure 1-38.



The screenshot shows the 'General' tab of a field properties dialog in Dynamics CRM. The 'Schema' section includes 'Display Name' (Full Name), 'Name' (new\_FullName), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Single Line of Text), 'Field Type' (Calculated), 'Format' (Text), 'Maximum Length' (100), and 'IME Mode' (auto). An 'Edit' button is located next to the 'Field Type' dropdown.

Figure 1-38. Full name field

2. Click the **Edit** button. This will save the field and open the calculated field editor, as shown in Figure 1-39.



The screenshot shows the 'CALCULATED FIELD' editor for 'Set Full Name'. It features a 'SAVE' button, a 'SAVE AND CLOSE' button, and a tree view with 'IF...THEN' expanded. Under 'IF...THEN', there is a 'CONDITION (OPTIONAL)' section with an 'Add condition' button, and an 'ACTION' section with an 'Add action' button.

Figure 1-39. Full Name field calculated field editor

3. Click the **Add action** button, as shown in Figure 1-40.



Figure 1-40. Add Action button on the calculated field editor

4. Add the formula shown in Figure 1-41.

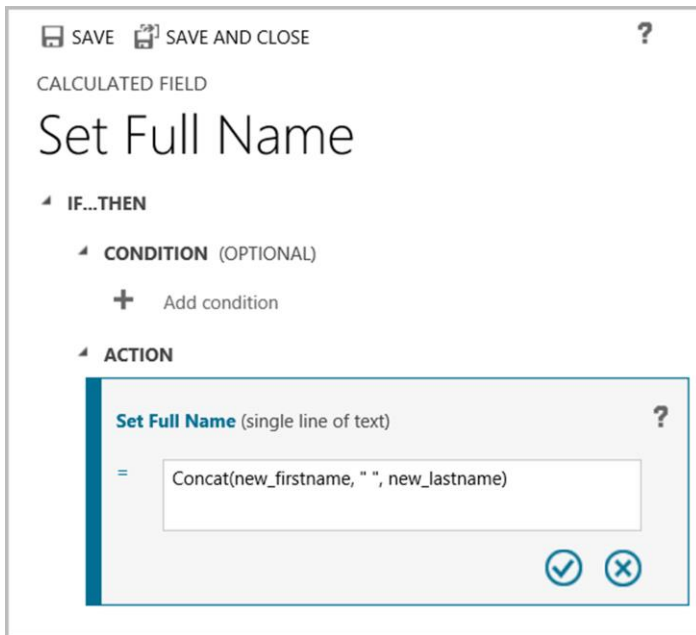


Figure 1-41. Editing the Full Name calculation

5. When you have finished, click the checkmark button, as you can see in Figure 1-42.

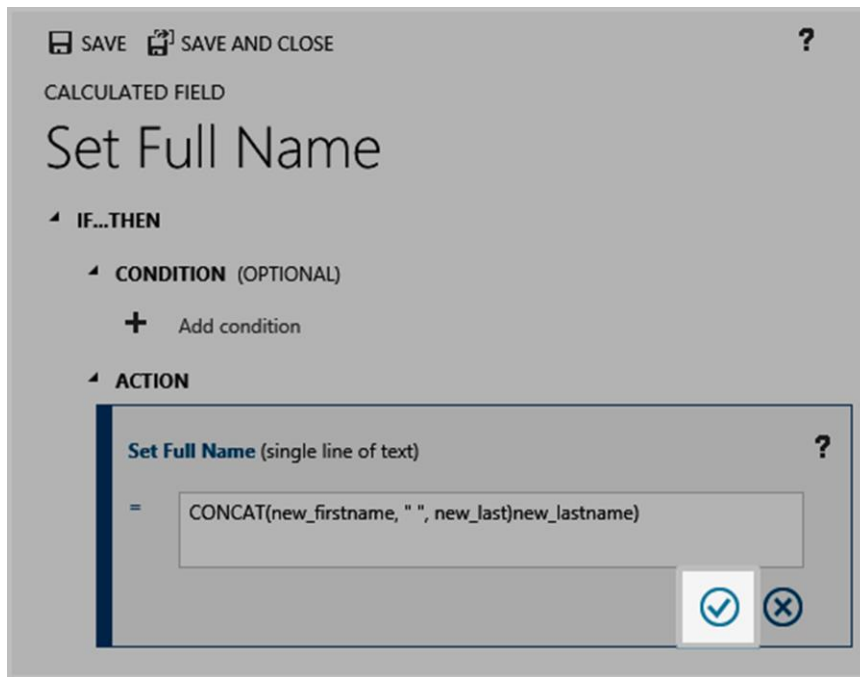


Figure 1-42. Calculated field Action confirmation checkmark button

6. Assuming there are no issues with the calculation, you will see a final compiled calculation, as seen in Figure 1-43



Figure 1-43. Compiled calculation

7. Click the **SAVE AND CLOSE** button to close the calculated field editor.
8. Click the **Save and New** button to create the field and open a new Create Field dialog.

9. Complete the Needs Callback field properties as shown in Figure 1-44.

The dialog box shows the 'General' tab for a field named 'Needs Callback'. The 'Schema' section includes 'Display Name' (Needs Callback), 'Field Requirement' (Optional), 'Name' (new\_NeedsCallback), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Two Options) and 'Field Type' (Calculated). Below these are two buttons: 'Move Up' and 'Move Down'. At the bottom, there is a 'Default Value' dropdown set to 'No'.

Figure 1-44. Needs Callback field

10. Click the **Edit** button to open the calculated field editor, as shown in Figure 1-45.

This is a close-up of the 'Type' section of the dialog box. It shows 'Data Type' as 'Two Options' and 'Field Type' as 'Calculated'. An 'Edit' button is located to the right of the 'Field Type' dropdown.

Figure 1-45. Edit button to edit the calculated field

11. Create the **Condition** and **Action** steps as shown in Figure 1-46.

The editor shows a calculated field named 'Set Needs Callback'. It has an 'IF...THEN' structure. Under 'CONDITION (OPTIONAL)', there is a condition: 'If Number of Phone Calls equals 0'. Under 'ACTION', there is an action: 'Set Needs Callback to "Yes"'. There are buttons for 'Add condition', 'Add Else', 'SAVE', and 'SAVE AND CLOSE'.

Figure 1-46. Needs Callback calculation

12. Click the **Save and Close** button to close the calculated field editor.
13. Click the **Save and New** button to create the field and open a new Create Field dialog.

14. Complete the Employment Days field properties as shown in Figure 1-47.

The image shows a 'General' tab in a field properties dialog box for a field named 'Employment (Days)'. The 'Schema' section includes 'Display Name' (Employment (Days)), 'Name' (new\_EmploymentDays), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Whole Number), 'Field Type' (Calculated), 'Format' (None), 'Minimum Value' (-2,147,483,648), 'Maximum Value' (2,147,483,647), and 'IME Mode' (auto). An 'Edit' button is visible next to the 'Field Type' dropdown.

Figure 1-47. Employment Days field

15. Click the **Edit** button to open the calculated field editor.

16. Create the **Condition** and **Action** steps as shown in Figure 1-48.

The image shows the 'CALCULATED FIELD' editor for 'Set Employment (Days)'. It features a toolbar with 'SAVE' and 'SAVE AND CLOSE' buttons. The main area is divided into 'IF...THEN' and 'ACTION' sections. The 'IF...THEN' section has a 'CONDITION (OPTIONAL)' step with the text 'If Start Date contains data and End Date contains data'. The 'ACTION' section has a step 'Set Employment (Days) to DiffInDays(Start Date, End Date)'. There are also buttons for 'Add condition' and 'Add Else'.

Figure 1-48. Employment Days calculated field

17. Click the **SAVE AND CLOSE** button to save the calculation.

18. Click the **Save and New** button to create the field and open a new Create Field dialog.

19. Complete the Duration field properties as shown in Figure 1-49.

The image shows a 'General' tab configuration window for a field named 'Duration'. The 'Schema' section includes 'Display Name' (Duration), 'Name' (new\_Duration), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Whole Number), 'Field Type' (Calculated), 'Format' (Duration), and 'IME Mode' (auto). An 'Edit' button is located next to the 'Field Type' dropdown.

General			
<b>Schema</b>			
Display Name *	Duration	Field Requirement *	Optional
Name *	new_Duration	Searchable	Yes
<b>Type</b>			
Data Type *	Whole Number		
Field Type *	Calculated	Edit	
Format *	Duration		
IME Mode *	auto		

Figure 1-49. Duration field

20. Click the **Edit** button to display the calculated field editor.

21. Create the **Condition** and **Action** steps as shown in Figure 1-50.

The image shows a 'CALCULATED FIELD' editor titled 'Set Duration'. It features an 'IF...THEN' logic structure. Under the 'CONDITION (OPTIONAL)' section, there are two conditions: 'If Start Date contains data' and 'and End Date contains data'. An 'ACTION' section contains the step 'Set Duration to DiffInMinutes(Start Date, End Date)'. There are buttons for 'SAVE', 'SAVE AND CLOSE', 'Add condition', and 'Add Else'.

SAVE SAVE AND CLOSE

CALCULATED FIELD

## Set Duration

IF...THEN

- CONDITION (OPTIONAL)
  - If Start Date contains data
  - and End Date contains data
  - + Add condition
- ACTION
  - Set Duration to DiffInMinutes(Start Date, End Date)
  - + Add Else

Figure 1-50. Duration calculated field

22. Click the **Save and New** button to save the calculation.
23. Click the **Save and New** to create the field and open a new Create Field dialog.
24. Complete the Bonus Percent of Salary field properties as shown in Figure 1-51.

The image shows a 'General' tab in a field properties dialog box. Under the 'Schema' section, 'Display Name' is 'Bonus Percent of Salary' and 'Field Requirement' is 'Optional'. 'Name' is 'new\_BonusPercentofSalary' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Decimal Number', 'Field Type' is 'Calculated' (with an 'Edit' button), 'Precision' is '2', 'Minimum Value' is '-100,000,000,000.00', 'Maximum Value' is '100,000,000,000.00', and 'IME Mode' is 'auto'.

Figure 1-51. Bonus Percent of Salary field

25. Click the **Edit** button to open the calculated field editor.
26. Create the **Condition** and **Action** steps as shown in Figure 1-52.

The image shows a 'CALCULATED FIELD' editor titled 'Set Bonus Percent of Salary'. It has 'SAVE' and 'SAVE AND CLOSE' buttons at the top. The logic is defined under an 'IF...THEN' section. The 'CONDITION (OPTIONAL)' step includes two conditions: 'If Bonus Potential contains data' and 'and Salary contains data'. The 'ACTION' step is 'Set Bonus Percent of Salary to (Bonus Potential / Salary) \* 100'. There is an 'Add condition' button and an 'Add Else' button at the bottom.

Figure 1-52. Bonus Percent of Salary calculation

27. Click the **SAVE AND CLOSE** button to save the calculation.
28. Click the **Save and New** button to create the field and open a new Create Field dialog.



29. Complete the Engagement This Month field properties as shown in Figure 1-53.

The dialog box shows the 'General' tab for a new field. The 'Schema' section includes 'Display Name' (Engagement (this month)), 'Name' (new\_Engagementthismonth), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Decimal Number), 'Field Type' (Rollup), 'Precision' (2), 'Minimum Value' (-100,000,000,000.00), 'Maximum Value' (100,000,000,000.00), and 'IME Mode' (auto). An 'Edit' button is next to the 'Field Type' dropdown.

Figure 1-53. Engagement This Month field

30. Click the **Edit** button to open the calculated field editor.

31. Create the **Condition** and **Action** steps as shown in Figure 1-54.

The editor shows the 'Engagement (this month)' rollup field configuration. It includes sections for 'SOURCE ENTITY' (Sample), 'RELATED ENTITY' (Activities (Regarding)), 'FILTERS (OPTIONAL)' (Add condition), 'INCLUDE INDIRECTLY RELATED ACTIVITIES' (Add related entity), and 'AGGREGATION' (SUM of Actual Duration). Buttons for 'SAVE' and 'SAVE AND CLOSE' are at the top.

Figure 1-54. Engagement This Month calculation

32. Click the **SAVE AND CLOSE** button to save the calculation.

33. Click the **Save and New** button to create the field and open a new Create Field dialog.

34. Complete the Salary Difference field properties as shown in Figure 1-55.

Figure 1-55. Salary Difference field

35. Click the **Edit** button to open the calculated field editor.

36. Create the **Condition** and **Action** steps as shown in Figure 1-56.

Figure 1-56. Salary Difference calculation

37. Click the **SAVE AND CLOSE** button to save the calculation.

38. Click the **Save and New** button to create the field and open a new Create Field dialog.

39. Complete the Last Phone Call field properties as shown in Figure 1-57.

The image shows a 'General' tab in a field configuration dialog. Under the 'Schema' section, 'Display Name' is 'Last Phone Call' and 'Field Requirement' is 'Optional'. 'Name' is 'new\_LastPhoneCall' and 'Searchable' is 'Yes'. Under the 'Type' section, 'Data Type' is 'Date and Time', 'Field Type' is 'Rollup' (with an 'Edit' button), 'Behavior' is 'User Local', 'Format' is 'Date Only', and 'IME Mode' is 'auto'. A warning icon and text at the bottom state: 'When the behavior of a field is "User Local," field values are displayed in the user's local time. In the SDK, these values will be returned using a common UTC time zone format.'

Figure 1-57. Last Phone Call field

40. Click the **Edit** button to open the calculated field editor.

41. Create the **Condition** and **Action** steps as shown in Figure 1-58.

The image shows a 'ROLLUP FIELD' configuration dialog for 'Last Phone Call'. At the top are 'SAVE' and 'SAVE AND CLOSE' buttons. The configuration is divided into sections: 'SOURCE ENTITY' with 'Source: Sample' and 'Use Hierarchy: NO'; 'RELATED ENTITY' with 'Related: Phone Calls (Regarding)'; 'FILTERS (OPTIONAL)' with a '+ Add condition' button; 'INCLUDE INDIRECTLY RELATED ACTIVITIES' with a '+ Add related entity' button; and 'AGGREGATION' with 'MAX of Actual End'.

Figure 1-58. Last Phone Call calculation

42. Click the **SAVE AND CLOSE** button to save the calculation.

43. Click the **Save and New** button to create the field and open a new Create Field dialog.

44. Complete the Next Phone Call field properties as shown in Figure 1-59.

The image shows the 'General' tab of a field properties dialog box for a field named 'Next Phone Call'. The 'Schema' section includes 'Display Name' (Next Phone Call), 'Name' (new\_NextPhoneCall), 'Field Requirement' (Optional), and 'Searchable' (Yes). The 'Type' section includes 'Data Type' (Date and Time), 'Field Type' (Calculated), 'Behavior' (User Local), 'Format' (Date Only), and 'IME Mode' (auto). An 'Edit' button is next to the 'Field Type' dropdown. A warning icon and text at the bottom state: 'When the behavior of a field is "User Local," field values are displayed in the user's local time. In the SDK, these values will be returned using a common UTC time zone format.'

Figure 1-59. Next Phone Call Field

45. Click the **Edit** button to open the calculated field editor.
46. Create the **Condition** and **Action** steps as shown in Figure 1-60.

The image shows the 'CALCULATED FIELD' editor for 'Set Next Phone Call'. It has buttons for 'SAVE' and 'SAVE AND CLOSE'. The logic is defined under 'IF...THEN':

- CONDITION (OPTIONAL)**: If **Last Phone Call** contains data.
- ACTION**: Set **Next Phone Call** to **AddDays(1, Last Phone Call)**.

There is an 'Add condition' button and an 'Add Else' button at the bottom.

Figure 1-60. Next Phone Call calculation

47. Click the **SAVE AND CLOSE** button to save the calculation.
48. Click the **Save and New** button to create the field and open a new Create Field dialog.

**Field creation is now complete.**

## Exercise 1.6 Adding Fields to the Form

To add the fields we just created to the Sample entity data entry form, perform these steps:

1. Click **Forms** on the left-hand navigation area of the Sample entity as you can see in Figure 1-61.

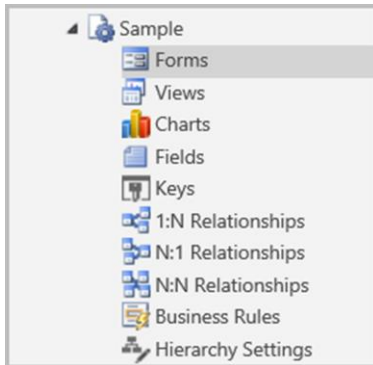


Figure 1-61. Forms area of Sample entity

2. Double-click the Information form, as shown in Figure 1-62, and the Form Editor will be displayed.

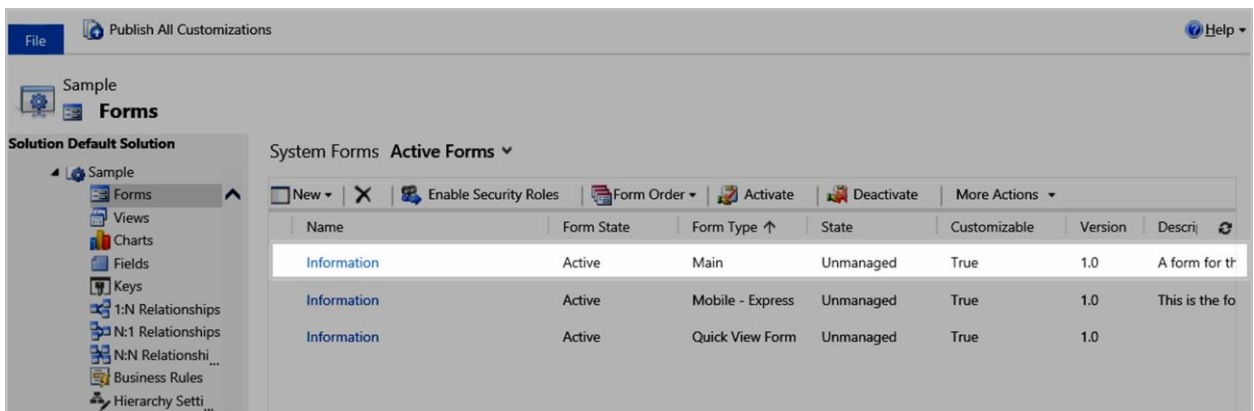


Figure 1-62. Sample entity Information form

3. Change the **Filter** of the Field Explorer to **Custom Fields**, as you can see in Figure 1-63. This will narrow the field list to only show fields we'll be working with in this exercise.

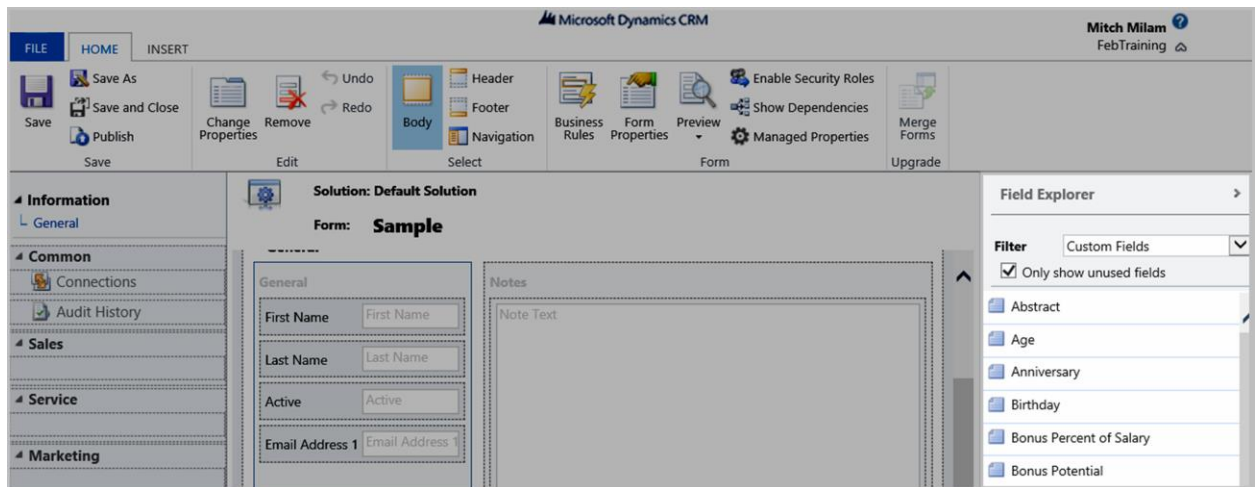


Figure 1-63. Field Explorer in the Form Editor

4. Click on the Insert tab of the Ribbon, as shown in Figure 1-64.

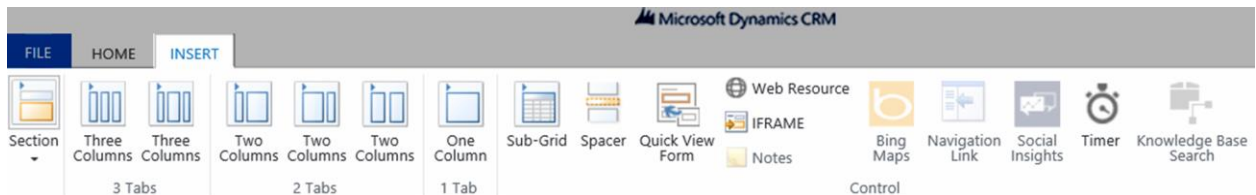


Figure 1-64. Form Editor Insert tab

5. Click the **Section** dropdown button, then click the **One Column** button as shown in Figure 1-65. This will insert a one-column section into the form.

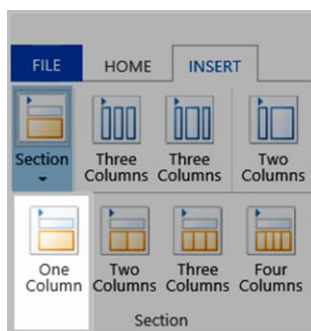
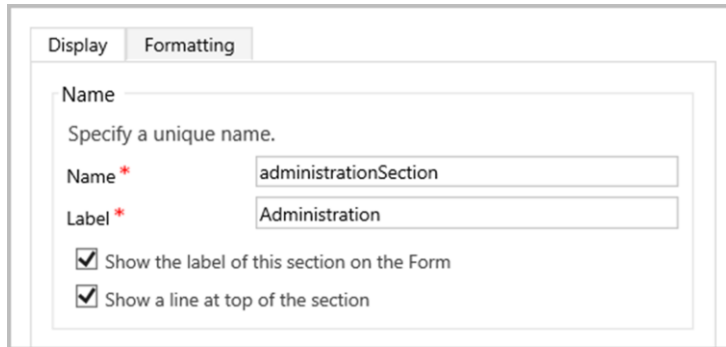


Figure 1-65. Insert a One Column section

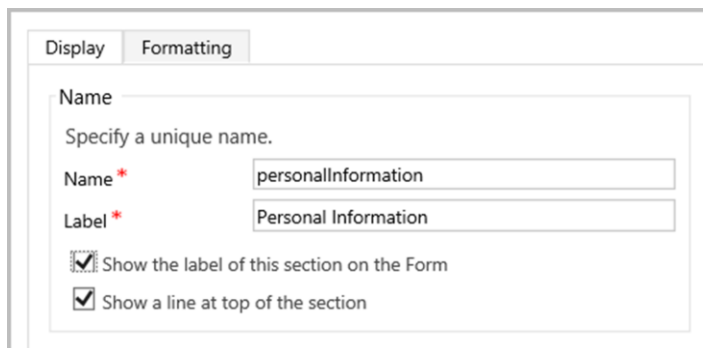
6. Double-click on the newly inserted section. Change the section properties as shown in Figure 1-66.



The screenshot shows a dialog box with two tabs: 'Display' and 'Formatting'. The 'Formatting' tab is selected. Inside the dialog, there is a section titled 'Name' with the instruction 'Specify a unique name.' Below this, there are two input fields: 'Name \*' with the value 'administrationSection' and 'Label \*' with the value 'Administration'. At the bottom, there are two checked checkboxes: 'Show the label of this section on the Form' and 'Show a line at top of the section'.

*Figure 1-66. Administration section*

7. Click **OK** to save your changes.
8. Insert *five* more one-column sections.
9. Double-click on the newly inserted section. Change the section properties as shown in Figure 1-67.



The screenshot shows a dialog box with two tabs: 'Display' and 'Formatting'. The 'Formatting' tab is selected. Inside the dialog, there is a section titled 'Name' with the instruction 'Specify a unique name.' Below this, there are two input fields: 'Name \*' with the value 'personalInformation' and 'Label \*' with the value 'Personal Information'. At the bottom, there are two checked checkboxes: 'Show the label of this section on the Form' and 'Show a line at top of the section'.

*Figure 1-67. Personal Information section*

10. Click **OK** to save your changes.

11. Double-click on the newly inserted section. Change the section properties as shown in Figure 1-68.

The screenshot shows a dialog box with two tabs: 'Display' and 'Formatting'. The 'Formatting' tab is selected. Inside the dialog, there is a section titled 'Name' with the instruction 'Specify a unique name.' Below this, there are two input fields: 'Name \*' with the value 'salaryInformationSection' and 'Label \*' with the value 'Salary Information'. At the bottom, there are two checked checkboxes: 'Show the label of this section on the Form' and 'Show a line at top of the section'.

Figure 1-68. Salary Information section

12. Click **OK** to save your changes.
13. Double-click on the newly inserted section. Change the section properties as shown in Figure 1-69.

The screenshot shows a dialog box with two tabs: 'Display' and 'Formatting'. The 'Formatting' tab is selected. Inside the dialog, there is a section titled 'Name' with the instruction 'Specify a unique name.' Below this, there are two input fields: 'Name \*' with the value 'companyInformationSection' and 'Label \*' with the value 'Company Information'. At the bottom, there are two checked checkboxes: 'Show the label of this section on the Form' and 'Show a line at top of the section'.

Figure 1-69. Company Information section

14. Click **OK** to save your changes.
15. Double-click on the newly inserted section. Change the section properties as shown in Figure 1-70.

The screenshot shows a dialog box with two tabs: 'Display' and 'Formatting'. The 'Formatting' tab is selected. Inside the dialog, there is a section titled 'Name' with the instruction 'Specify a unique name.' Below this, there are two input fields: 'Name \*' with the value 'hiringInformationSection' and 'Label \*' with the value 'Hiring Information'. At the bottom, there are two checked checkboxes: 'Show the label of this section on the Form' and 'Show a line at top of the section'.

Figure 1-70. Hiring Information section



16. Click **OK** to save your changes.
17. Double-click on the newly inserted section. Change the section properties as shown in Figure 1-71.

The image shows a dialog box with two tabs: 'Display' and 'Formatting'. The 'Formatting' tab is selected. Inside the dialog, there is a section titled 'Name' with the instruction 'Specify a unique name.' Below this, there are two text input fields. The first is labeled 'Name \*' and contains the text 'miscSection'. The second is labeled 'Label \*' and contains the text 'Misc Information'. At the bottom of the dialog, there are two checked checkboxes: 'Show the label of this section on the Form' and 'Show a line at top of the section'.

*Figure 1-71. Misc Information section*

18. Click **OK** to save your changes.
19. Move the Name and Owner fields to the Administration section. The results should look like Figure 1-72.

The image shows a form section titled 'Administration' with a dashed border. Inside the section, there are two text input fields. The first is labeled 'Name \*' with a red lock icon to its left, and contains the text 'Name'. The second is labeled 'Owner \*' with a red lock icon to its left, and contains the text 'Owner'.

*Figure 1-72. Administration section fields*

20. Add the following fields to the General section, as shown in Figure 1-73.

The image shows a screenshot of a CRM form's 'General' section. The section is titled 'General' in a bold, dark font. Below the title, there are ten fields, each with a label on the left and a text input box on the right. The fields are: First Name, Last Name, Full Name, Job Title, Active, Email Address 1, Telephone, Age, Birthday, and Classification. Each field is separated by a horizontal dashed line. The 'Active' field is a checkbox. The 'Email Address 1' field has a small '1' next to the label. The 'Telephone' field has a small '1' next to the label. The 'Age' field has a small '1' next to the label. The 'Birthday' field has a small '1' next to the label. The 'Classification' field has a small '1' next to the label.


*Figure 1-73. General section fields*

21. Add fields to the Personal Information section as shown in Figure 1-74.

The image shows a screenshot of a CRM form's 'Personal Information' section. The section is titled 'Personal Information' in a bold, dark font. Below the title, there are three fields, each with a label on the left and a text input box on the right. The fields are: Start Date, End Date, and Duration. Each field is separated by a horizontal dashed line. The 'Start Date' field has a small '1' next to the label. The 'End Date' field has a small '1' next to the label. The 'Duration' field has a small '1' next to the label.

*Figure 1-74. Personal Information section fields*

22. Add fields to the Salary Information section as shown in Figure 1-75.



The figure shows a form section titled "Salary Information". It contains five rows, each with a label on the left and a text input field on the right. The labels are "Bonus Percent of Salary", "Bonus Potential", "Existing Salary", "Salary", and "Salary Difference". The input fields contain placeholder text: "Bonus Percent of Salary", "Bonus Potential", "Existing Salary", "Salary", and "Salary Difference".

Salary Information	
Bonus Percent of Salary	Bonus Percent of Salary
Bonus Potential	Bonus Potential
Existing Salary	Existing Salary
Salary	Salary
Salary Difference	Salary Difference

Figure 1-75. Salary Information section fields

23. Add fields to the Company Information section as shown in Figure 1-76.



The figure shows a form section titled "Company Information". It contains two rows, each with a label on the left and a text input field on the right. The labels are "Stock Symbol" and "Website". The input fields contain placeholder text: "Stock Symbol" and "Website".

Company Information	
Stock Symbol	Stock Symbol
Website	Website

Figure 1-76. Company Information section fields

24. Add fields to the Hiring Information section as shown in Figure 1-77.

Hiring Information	
Employment (Days)	Employment (Days)
Engagement (this month)	Engagement (this month)
Last Phone Call	Last Phone Call
Level	Level
Needs Callback	Needs Callback
Next Phone Call	Next Phone Call
Number of Phone Calls	Number of Phone Calls
Probability	Probability
Probability of Hire	Probability of Hire

Figure 1-77. Hiring Information section fields

25. Add fields to the Misc Information section as shown in Figure 1-78.

Misc Information	
Check-In Date	Check-In Date
Language	Language
Time Zone	Time Zone

Figure 1-78. Misc Information section fields

26. On the Ribbon, click on the **Home** tab.

27. Click the **Save** then **Publish** buttons.

28. You may close the Form Editor at this point, if you wish.

## Exercise 1.7 Verifying Your Work

To test our work, we need to create a new Sample record. Perform these steps:

1. Navigate to **Settings, Samples**, as shown in Figure 1-79.

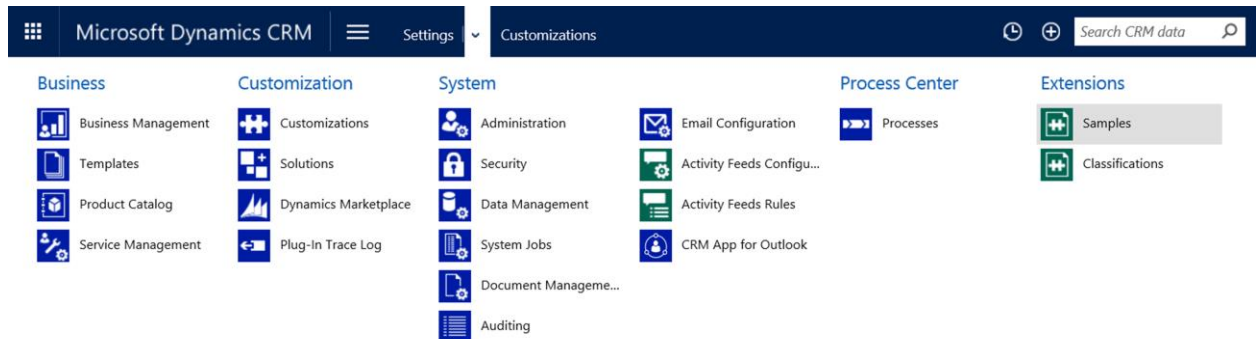


Figure 1-79. Navigating to the Samples entity

**Note:** If you do not see **Samples**, then press **Ctrl+F5** to reload the web page, then repeat step 1.

2. Click **Samples** to display the Samples entity records.
3. On the Command Bar, click the **New** button, as shown in Figure 1-80.

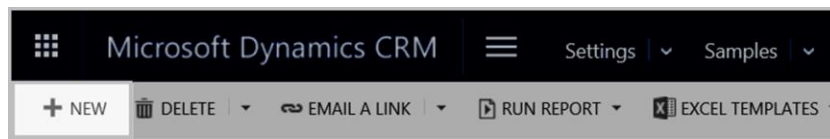


Figure 1-80. New button on the Sample entity view

4. With the exception of the Administration section, complete all of the fields on the form.

**Note:** You will notice fields with locks beside them, as shown in Figure 1-81. These are calculated fields that will be automatically populated when you save the record. Since they are automatically populated, they are not editable by the user.

Hiring Information	
Employment (Days)	--
Engagement (this moi	--
Last Phone Call	--
Level	61
Needs Callback	No
Next Phone Call	--
Number of Phone Cal	--
Probability	--
Probability of Hire	--
Summary	--

Figure 1-81. Hiring Information section while editing data

- Click the **Save** button to save the record. When the form is refreshed, the calculated fields have been populated, as you can see in Figure 1-82.

Hiring Information	
Employment (Days)	365
Engagement (this moi	0.00
Last Phone Call	--
Level	61
Needs Callback	Yes
Next Phone Call	--
Number of Phone Cal	0
Probability	Cold
Probability of Hire	90.0000
Summary	0

Figure 1-82. Hiring Information section containing calculated data

6. Click on the **ACTIVITIES** tab of the Social Pane, as shown in Figure 1-83.

The screenshot shows the 'SAMPLE : INFORMATION' header for Jerry Smith. Below the name is a 'General' section with fields: First Name (Jerry), Last Name (Smith), Full Name (Jerry Smith), Job Title (CEO), and Active (No). To the right, the 'ACTIVITIES' tab is selected, showing a message: 'We didn't find any activity records.' The 'NOTES' tab is also visible.

Figure 1-83. The Activities tab of the Social Pane

7. Click the **Add Phone Call** button, as shown in Figure 1-84, to add a phone call.

This screenshot is similar to Figure 1-83, but the 'Add Phone Call' button is highlighted in the 'ACTIVITIES' tab. The 'NOTES' tab is also visible.

Figure 1-84. Add Phone Call button on the Social Pane

8. Complete the phone call fields, as shown in Figure 1-85. (you may enter any data you wish)

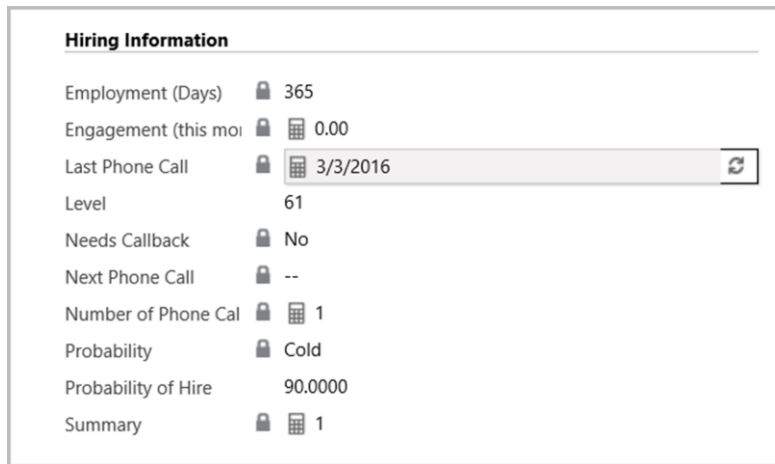
The screenshot shows a 'Phone call form' with the following fields and data:

- Called:** Jerry
- Call With:** A. Datum Corporation (sample)
- Direction:** Outgoing
- Left voice mail:** ☒

The form has 'OK' and 'Cancel' buttons at the bottom right.

Figure 1-85. Phone call form with data

9. Click the **OK** button when finished
10. Scroll to the Hiring Information section.
11. The Last Phone Call field has a calculator icon just to the left of the data value. This is to inform you that this is a calculated field. When you hover over the field, a refresh button will be displayed as you can see in Figure 1-86. Clicking the refresh button will cause the field to refresh.



**Hiring Information**

Employment (Days)	365
Engagement (this mo	0.00
Last Phone Call	3/3/2016
Level	61
Needs Callback	No
Next Phone Call	--
Number of Phone Cal	1
Probability	Cold
Probability of Hire	90.0000
Summary	1

*Figure 1-86. Refreshing a calculated field*

***This concludes this exercise.***



## Chapter 2    Additional Reading

Here are a few additional topics that you need to review to complete your understanding of how fields work:

[Define Calculated Fields](#)

[Define Rollup Fields](#)