

Lecture 1: Creating formula fields to render results.

Under this lecture we will learn about how in salesforce we can apply formulas to any specific field and the results can be generated.

Step 1: Click on object manager and select any object, for this lecture we are selecting “lead” as the object after that go to the option fields and relationship and select new.

The screenshot shows the Salesforce Setup interface for the 'Lead' object. The breadcrumb trail is 'SETUP > OBJECT MANAGER Lead'. The left sidebar contains navigation options: Details, Fields & Relationships (highlighted), Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Fields & Relationships' with a sub-header '27+ Items, Sorted by Field Label'. A 'Quick Find' search bar and a 'New' button are at the top right. A table lists existing fields with columns for Field Label, Field Name, and Data Type.

FIELD LABEL	FIELD NAME	DATA TYPE
Address	Address	Address
Annual Revenue	AnnualRevenue	Currency(18, 0)
Clean Status	CleanStatus	Picklist
Company	Company	Text(255)
Company D-U-N-S Number	CompanyDunsNumber	Text(9)
Created By	CreatedById	Lookup(User)
Current Generator(s)	CurrentGenerators__c	Text(100)
D&B Company	DandbCompanyId	Lookup(D&B Company)

Step 2: As you click on new you will be directed to the next page step 1 to choose the field type where you can select the formula field.

The screenshot shows the 'Step 1. Choose the field type' page. A red arrow points to the 'Step 1. Choose the field type' header. Another red arrow points to the 'Formula' radio button, which is selected. A red box highlights the description for the Formula field type: 'A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.' A 'Next' button is visible in the top right corner.

Specify the type of information that the custom field will contain.

Data Type

Select one of the data types below.

- ☐ None Selected
- ☐ Auto Number
- ☒ **Formula**
- ☐ Roll-Up Summary
- ☐ Lookup Relationship
- ☐ External Lookup Relationship
- ☐ Checkbox
- ☐ Currency
- ☐ Date
- ☐ Date/Time
- ☐ Email

A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

Step 3: As you click next step 2 is to choose the output type. There are two options given field name and field label here in this lecture I want the purpose of the field lead to calculate the “number of days open” so the field label will be days open and the field name will be generated automatically.

Lead
New Custom Field

Step 2. Choose output type

Field Labeldays open

Field Namedays_open

Auto add to custom report type☒ Add this field to existing custom report types that contain this entity

Formula Return Type

☒ None Selected

Select one of the data types below.

☐ Checkbox

Calculate a boolean value
Example: `TODAY() > CloseDate`

☐ Currency

Calculate a dollar or other currency amount and automatically format the field as a currency amount.
Example: `Gross Margin = Amount - Cost__c`

☐ Date

Calculate a date, for example, by adding or subtracting days to other dates.
Example: `Reminder Date = CloseDate - 7`

☐ Date/Time

Calculate a date/time, for example, by adding a number of hours or days to another date/time.
Example: `Next = NOW() + 1`

☐ Number

Calculate a numeric value.
Example: `Fahrenheit = 1.8 * Celsius__c + 32`

Step 4: As you scroll down just below you will see an option for “formula return type” which means what type of value will be populated by this field. For this lecture I will select number as the difference between the days will be in numbers.

Formula Return Type

☐ None Selected

Error: You must select a data type

Select one of the data types below.

☐ Checkbox

Calculate a boolean value
Example: `TODAY() > CloseDate`

☐ Currency

Calculate a dollar or other currency amount and automatically format the field as a currency amount.
Example: `Gross Margin = Amount - Cost__c`

☐ Date

Calculate a date, for example, by adding or subtracting days to other dates.
Example: `Reminder Date = CloseDate - 7`

☐ Date/Time

Calculate a date/time, for example, by adding a number of hours or days to another date/time.
Example: `Next = NOW() + 1`

☒ Number

Calculate a numeric value.
Example: `Fahrenheit = 1.8 * Celsius__c + 32`

☐ Percent

Calculate a percent and automatically add the percent sign to the number.
Example: `Discount = (Amount - Discounted_Amount__c) / Amount`

☐ Text

Create a text string, for example, by concatenating other text fields.
Example: `Full Name = LastName & ", " & FirstName`

☐ Time

Calculate a time, for example, by adding a number of hours to another time.
Example: `Next = TIMEVALUE(NOW()) + 1`

Options

Decimal Places2Example: 999.00

Step 5: Step 3 is to enter the formula in this step you can create the formula you will be able to see two options available stated as simple formula and advance formula, under simple formula you can see three options select field type, insert field and insert operations .

LEADU
New Custom Field

Step 3. Enter formula

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.

Example: `Fahrenheit = 1.8 * Celsius__c + 32` [More Examples...](#)

Simple Formula **Advanced Formula**

Select Field Type: **Lead** **Insert Field** **Insert Operator**

`-- Insert Merge Field --`

days open (Number) =

Step 6: Moving to the advanced formula we can see that the advanced formula provides various functions. For example, “contain” if you select it it will show you the description of the formula and how to use it.

Example: `Fahrenheit = 1.8 * Celsius__c + 32` [More Examples...](#)

Simple Formula **Advanced Formula**

Insert Field **Insert Operator**

days open (Number) =

Functions

`-- All Function Categories --`

CASESAFEID
CEILING
CONTAINS
CURRENT_DATE
DATE
DATETIMEVALUE

Insert Selected Function

Step 7: Now let's apply a simple formula so search for "today" in the function, click on it and then click on insert selected function .

Now as you click on insert selected function it will appear on the screen so after that I am adding the sign of subtraction again go to function and search for "datevalue" and click on insert function after that clicking on insert option available on top and select created date and press insert. according to the formula that we have written from today created date will be subtracted and the difference will be written as a number.

The screenshot shows the 'Simple Formula' editor interface. The formula bar contains the text: `days open (Number) = TODAY() - DATEVALUE(CreatedDate)`. The 'Insert Field' button is highlighted. The 'Functions' panel on the right shows a list of functions: DATE, DATETIMEVALUE, DATEVALUE, DAY, DISTANCE, and EXP. The 'DATEVALUE' function is selected and highlighted. Below the list, the 'Insert Selected Function' button is visible. The description for DATEVALUE is shown: 'DATEVALUE(expression) Creates a date from its datetime or text representation. Help on this function'.

Step 8: moving on as you scroll down you can see the option given treat blank fields as zero and treat blank fields as blank so that you can choose accordingly and click on next.

The screenshot shows the bottom section of the formula editor. The 'Check Syntax' button is visible, followed by the message: 'No syntax errors in merge fields or functions. (Compiled size: 62 characters)'. Below this is the 'Description' field and the 'Help Text' field. The 'Blank Field Handling' section is highlighted, showing the instruction: 'If your formula references any number, currency, or percent fields, specify what happens to the formula output when their values are blank.' Two radio buttons are present: 'Treat blank fields as zeroes' (which is selected) and 'Treat blank fields as blanks'.

Step 9: Step 4 is to establish field level security click on visible to all profiles now you can see that similar to rollup summary formula fields are also read only so that will be selected automatically.

Step 4. Establish field-level securityStep

PreviousNext

Field Labeldays open

Data TypeFormula

Field Namedays_open

Description

Select the profiles to which you want to grant edit access to this field via field-level security. The field will be hidden from all profiles if you do not add it to field-level security.

Field-Level Security for Profile	<input checked="" type="checkbox"/> Visible	Read-Only
Analytics Cloud Integration User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analytics Cloud Security User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Contract Manager	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Custom: Marketing Profile	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Custom: Sales Profile	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Custom: Support Profile	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Gold Partner User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Marketing User	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Step 10: Step 5 is to select page layout and for this lecture I am selecting all page layouts and clicking on save .

Lead

New Custom Field

Step 5. Add to page layouts

Field Labeldays open

Data TypeFormula

Field Namedays_open

Description

Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear

To change the location of this field on the page, you will need to customize the page layout.

When finished, click Save & New to create more custom fields, or click Save if you are done.

Step 11: Now if we search for the field days open so you can see that the field is created where it's data type is formula.

Fields & Relationships
1 Items, Sorted by Field Label

New Delete

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROL
days open	days_open__c	Formula (Number)	

Step 12: Now as we move to the lead tab and opening a particular record and moving to details we can see that the formula field is available so basically the created date is subtracted and so this value is generated.

Sales Home Opportunities Leads Tasks Files Accounts Contacts Campaigns Dashboards R

Lead Ms. Bertha Boxer Start timer

Working - Contacted

Closed - Not Converted

Activity Details Chatter News

Lead Owner
astha gupta

Name
Ms. Bertha Boxer

Company
Farmers Coop. of Florida

Title
Director of Vendor Relations

Lead Source
Web

Industry
Agriculture

Annual Revenue
\$900,750,000

days open
44.00

Phone
(850) 644-4200

Mobile

Fax
(850) 644-4300

Email
bertha@fcf.net

Website

Lead Status
Working - Contacted

Rating
Hot

No. of Employees