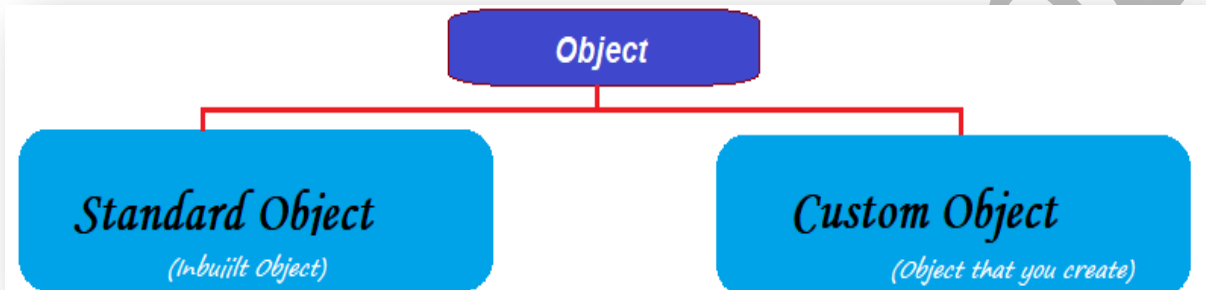**Object** :

1. Objects are nothing but tables in the regular database.

2. Any data stored in the salesforce will be saved to objects.

3. It consist of Field (columns) and record (rows)

4. There are two types of objects
   a. Standard Objects.
   b. Custom Objects



4. **Standard Objects**:

   a. Objects which are created by the salesforce are called standard objects.
      Example: Account, Contact, User, Profile , UserRole, Lead, Opportunity etc.,
   b. Standard Objects cannot be deleted but can be customized.



Object consists of fields to store specific type of data. Example shown below is a representation of data from an Account object and its fields.

**Fields** are nothing but columns in tables. For standard object Account, we have fields such as "Account Owner", "Account Name", "Industry", "Billing City" etc., as shown in the screen shot below.

The record highlighted box denotes a row in the object called as "**Record**" (or Phil Smith record).

| | A | B | C | D |
|---|---|---|---|---|
| 1 | Account Owner | Account Name | Industry | Billing City |
| 2 | Phil Smith | ABC Labs | Biotechnology | San Jose |
| 3 | Phil Smith | Acme Inc. | Manufacturing | Atlanta |
| 4 | Phil Smith | Acme-NY | Manufacturing | New York |
| 5 | Phil Smith | American Bank | Banking | Charlotte |
| 6 | Phil Smith | American Package | Shipping | Atlanta |
| 7 | David Hudson | American Package_UK | Shipping | London |
| 8 | Phil Smith | AMP Industries | Manufacturing | San Francisco |
| 9 | Phil Smith | AmShip Corporation | Shipping | Memphis |
| 10 | Phil Smith | Arbuckle Laboratories | Biotechnology | Arbuckle Park |
| 11 | David Hudson | Arbuckle Laboratories - Austria | Biotechnology | Vienna |
| 12 | David Hudson | Arbuckle Laboratories - France | Biotechnology | Paris |
| 13 | Anjana Shah | Arbuckle Laboratories - Germany | Biotechnology | Weisbaden |
| 14 | Phil Smith | Cable Inc. | Entertainment | New York |
| 15 | Jin Chang | Canson | Technology | Ohta-ku |

Admin can also create new custom fields under standard object to capture your business specific information.
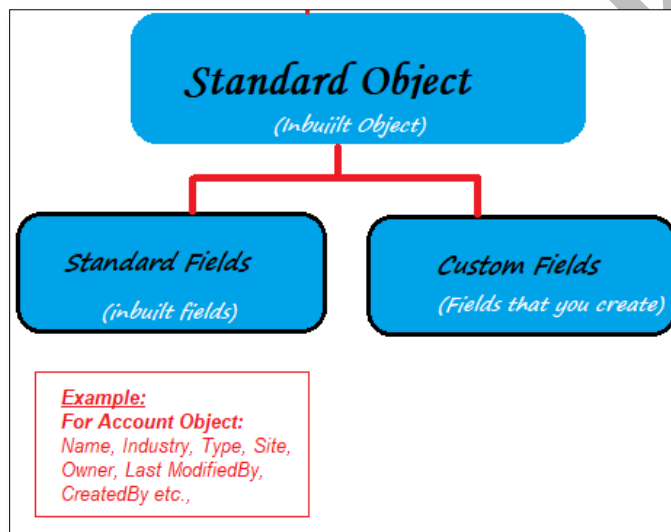


**Record** -A collection of fields that store information about a specific item of a specific type (represented by an object), such as a contact, an account, or an opportunity.

For example, you might have a contact record to store information about Joe Smith, and a case record store information about his training inquiry.

There are different types of Fields available in Salesforce to capture the data specific to your business need.

Example shows the Account Object and its fields such as Account Name is text type to store company name, Phone is to store phone number and Annual Revenue is to hold currency value.

| Column / Field | Id | Account Name | Site | Phone | Industry | AnnualRevenue |
|---|---|---|---|---|---|---|
| Record | 0017F00000Jloh | CTS | India | 123 | IT | $50000 |
| | | Talyor | US | 3563 | Communication | |

5.**Custom Objects** :
   a. These are the objects created by user to meet his organizational business requirement.     .
   b. All the custom objects are appended with __c  (double underscore with character 'c')
   Example : Training__c, Department__c , Employee__c ,Project__c .

6. Steps to create Custom Objects
   a. Classic :
       Setup
         |--->Build
               |--->Create
                     |--->Objects
                           |--->New Custom Objects
   b. Lightning:
       Setup
         |---> Platform tools
                 |---> Objects and Fields
                         |---> Create New Object

  **Step 1**: Enter Object Label
         Example: Training
         **Note** : Objects are  displayed on the User Interface with object Label

 **Step 2:** Enter Plural Label
         **Example** : Trainings
             **Note** : If we create a tab for this object ,label that should be display on the tab is
                 called plural Label.

 **Step 3:** Enter Object Name
         **Example** : Training
             **Note** : Name used to refer the object in API (Program) .

  **Step 4:** Context sensitive help
           1. On Every object salesforce provides help for this page Link.
           2. When we click on the link which document should be opened is defined
              using this settings.
              a. Open the standard Salesforce.com Help and Training window.
              If this option is selected salesforce standard document will be opened.

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    b. Open a window using a Visualforce page .

If we choose this option we can create our own visualforce page as help document.

**Step 5**:: Record Name Label and DataType

    a. Salesforce by defualt on every custom object creates one standard field with name " Name".
    b. With what label this field should be displayed on the ui is define as Record Name Label.
    c. This is a required field.
    d. This will accept only Text and AutoNumber as datatype.
    e. If we choose the data type as Text ,This will accept alphanumeric data and user has to manually enter the data.
    f. If we choose the data Type as Autonumber, Then system will generate the data based on the format what we have given .

**Example :**
Format  : DPT{0000}
Start     : 0
DPTO0001
DPTO0002
DPTO0003

Format : OR-{000}
Start    : 501
OR-501
OR-502

Format : {mm}{dd}{000}
Start    :1
1029001
1029002

**Step 6:** Optional Features:

    These options can be enabled or disabled at any stage of the application

  a. Allow Reports     : If you enable this option, we can create reports on this object data.
  b.Allow Activities    : If you enable this option we can create Events and Tasks on this object.
  c.Track Field History   : If you enable this option we can track the changes made on the fields of this object .
  d.Allow in chatter Group: If you enable this option we can create chatter groups on this object.

**Step 7:** Object Classification:
  a. Allow Sharing
  b. Allow Bulk API Access
  c. Allow Streaming API Access

Note : If we enable all the  three options then it is Enterprise Application object.
    If we disable any one of this option we call it as Lightning application object.

**Step 8 :** Deployment Status :

   In Development: If we enable this option only Administrator will be able to access this object ,no other user can see this object .

   Deployed  : If we enable this option, then all the users in the organization can access this object based on security model of the organization.

**Step 9**: Allow Search : If we enable this option content of this object can be searched from global search.

    .

**Step 10:** Object Creation Option:

   These options can be enabled or disabled only at the time of creating an object.
   a. Add Notes and Attachments related list to default page layout.
   b. Launch New Custom Tab Wizard after saving this custom object.

**Schema Builder:**

1. We can also build custom objects using Schema builder.
2. Setup

  |--->Build

    |--->Develop

      |--->Lightning Bolt

        |--->Schema Builder

          |--->Elements

            |--->Drag and drop objects icon.

**Q:: In How many ways we can create custom objects?**

A:: Three ways

  1. Standard Navigation
  2. Schema Builder
  3. Metadata SOAP API web service

**Q:: Objects falls under which part of MVC ?**

A:: Model

**Q:: How many custom objects we can create in the salesforce ?**

A:: It depends on the edition .

  Unlimited Editions  : 2000
  Enterprise    : 200
  Developer    : 400
  Professional   : 50

**Note : In salesforce every object has three character unique Id (Entity Id).**

| | |
|---|---|
| Account | -- 001 |
| Contact | -- 003 |
| User | -- 005 |
| Opportunity | -- 006 |
| Profile | -- 00e |
| Lead | -- 00Q |
| Order | -- 801 |
| Case | -- 500 |
| Solution | -- 501 |
| Training__c | -- a01 |

**Usecase1:** Create Custom Objects.

**a.Object :Department**

| | |
|---|---|
| Record Name Label | : DepartmentNo |
| Name  Field | : AutoNumber |
| Format | : DP-{000} |
| Start | : 1 |

**b.Object :Employee**

| | |
|---|---|
| Record Name Label | : EmpNo |
| DataType | : AutoNumber |
| Format | : EMP{mm}{000} |
| Start | : 1 |

**c.Object :Project**

| | |
|---|---|
| Record Name Label | : ProjectNo |
| DataType | : AutoNumber |
| Format | : PRJ-{00} |
| Start | : 1 |

**c.Object :Trainee**

| | |
|---|---|
| Record Name Label | : Trainee |
| DataType | : AutoNumber |
| Format | : TRN-{00} |
| Start | : 1 |