

Forecast Category:

Forecast Category is the group within the sales cycle to which an Opportunity is assigned based on its Opportunity stage. It is a forecast of revenue from your sales team relating to Opportunities. The standard forecast categories in Salesforce are: Pipeline, Best Case, Commit, Omitted, and Closed.

Error 'Closed/Lost opportunity stage should match with Omitted forecast'

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Description

Users might be unable to edit Opportunity Stage and they will receive the following error message:

Error:

Closed/Lost opportunity stage should match with **Omitted** forecast category (Related field: Forecast Category)

Resolution

This can happen when custom code uses a future method to make an update. It can also happen when field level security is not set up properly in the code. Batch jobs where you update the forecast category without the stage have also been found to cause this issue

This is working as designed based on the Closed/Lost stage Type. Any stage with a Type of Closed/Lost must be set to omitted .

In Salesforce Classic

1. From **Setup | Customize | Opportunity | Fields**, go to **Stage** picklist field and check the current values.
2. Scroll to the Opportunity Stages Picklist Values.
3. Click on **Edit** on Closed Lost.
4. Set the Forecast Category to **Omitted**
5. Click on **Save**.

In Lightning Experience

1. Click on **Setup** from the gear icon.
2. Click on **Object Manager**.

3. Click on **Opportunity**.
4. Click on **Fields & Relationships**.
5. Click on **Stage** field.
6. Scroll to the Opportunity Stages Picklist Values.
7. Click on **Edit** on Closed Lost.
8. Set the Forecast Category to **Omitted**.
9. Click on **Save**.

You need to make sure that **Closed Lost** stage is set to **Omitted** in the **Forecast Category** column and not as 'Closed' or any other value.

Lookups vs. Master-Detail Relationships

| Lookup relationship | Master-detail relationship |
|--|--|
| Loosely coupled. | Strongly coupled. |
| Roll-up summary field not available. | Parent record is not required when creating a child record. |
| Parent record is not required when creating a child record. | Parent record is required in order to save a child record. |
| Lookup fields are not required on the page layout of the detail record but if you make them a required field, it is advised! | Master-detail field is always required on the page layout of the detail record (because of the point above). |
| Standard object record can be on the detail side of a custom object in a lookup relationship. | Standard object record cannot be a child. |
| By default record ownership of child records is not controlled by the parent. | The parent controls the record ownership of child records. The owner field is not available on the detail record in master-detail relationship queues, sharing rules and manual sharing is not possible for detail records as it requires the owner field. |
| You can have a child record without a parent. | You cannot have a child record without a parent. |
| You can have a maximum of 40 lookups on an object. | You can have a maximum of two master details on an object. |
| No cascade delete. | Cascade delete. |

1. Lookup Relationships

A Lookup is a loosely coupled relationship, allowing you to connect one object to another in a one-to-many fashion.

In this example, you can see that an Asset may be involved with a number of cases. In this scenario, if the case is deleted, the Asset will remain and vice versa.

2. Master-Detail Relationship

A master-detail relationship is a strongly coupled relationship, meaning if the parent is deleted, so are the child records. This is a good thing and can be incredibly helpful.

This relationship seems to scare people, but it shouldn't!

Master-detail also allows the parent record to control child record attributes such as sharing and visibility. Whichever security setting you chose for the parent record, the child record inherits.

In this example, you have a list of rooms in which employees can book out for meetings. However, should the room be deleted, what use would the meetings be? None, so they go too. However, when creating a master-detail relationship, you can check a box to allow reparenting... so you could be kind and allow them to select a new room!

The sweet spot with Master-detail relationships is that you can create rollup summary fields! Do take note, a single object can have a maximum of 2 master-detail relationships.

3. Many-to-Many Relationships

Say you have a situation where it is required you have many of one record related to many of another. Duplicating that lookup field a number of times on each object is not best practice and will get very messy. This is where we should leverage Junction Objects.

In the image below, we see that a session can have multiple speakers but also speakers can present at multiple sessions. A perfect place to add that junction object of 'Session Speaker' in between to handle this relationship!

Read More: [What is a Junction Object in Salesforce?](#)

4. Self Relationship

Let's say, for example, you have a Campaign. This campaign is part of a bigger campaign. You can use a lookup field from campaign to... campaign! Why? This would be a great situation to show how multiple child campaigns relate to the main parent campaign (known as a Campaign Hierarchy).

5. External Relationships

There are two more types of Lookups for working with external objects we should cover briefly:

Indirect lookup relationships: allow a relationship to be formed between a Salesforce object and an external object. If your Salesforce org was the family, then the objects would be related but not in the same family. A great example of such is relating payment records to an account from an ERP system – the ERP system is external to Salesforce but the records are important. The way they relate is via an external ID to match the payments to the account.

External lookup relationships: allow a relationship to be formed between two external objects. Your two friends from outside of your group are now in a relationship. Maybe that ERP system links the payment records to a bank account.

Read More: [Introduction to Salesforce Connect for External Applications](#)

6. Hierarchical Relationships

A simple but commonly forgotten relationship in Salesforce is hierarchical. This unique relationship can only be used on the user object and is designed to create a hierarchy of users. For example, it could be used to create a lookup field for the user object, which can be used to list the user's manager.

Not being able to delete Master-Detail Relationship field on an object

Let me give you a scenario, you have 2 objects and you have a Master-Detail relationship between them.

You went ahead and created a roll-up summary field on the parent object.

For some reason, you now want to delete the relationship field on the child object.

As usual, you will try to delete the roll-up summary field first, then you will navigate to the child object. You will click on the relationship field and click on the delete button, only to realize that the platform is not allowing you to delete the relationship field.

Assume you even checked if this field is not being referenced in any other entities like workflows, process builders and etc.

If you are like me, you would have banged your head to the keyboard and ran in circles for an hour to understand why is that Salesforce being rude to you.

But the catch is the platform is actually trying to save you.

This behavior happens when you have the deleted roll-up summary field in the deleted fields section.

Try to delete that too and you will be able to easily delete the relationship field on the child.

TYPE OF OBJECT

These relational tables are roughly referred to as API Objects or only objects in Salesforce. There are three kinds of Salesforce objects.

- **Standard Objects** – The objects already created for you by the Salesforce platform.
- **Custom Objects** – These are the objects created by you based on your business processes.
- **External Objects** – The objects which you create map to the data stored outside your organization.
- **Setup Objects** - Setup objects are objects that are used to interact with the metadata. One common example is the user object. Take a look at this for more information.

Setup Object

1. Profiles
2. Users
3. Record Type

- **Big objects** - Big objects provide consistent performance for a *billion* records or more, and are accessible with a standard set of APIs to your org or external system. Think of all that data! We basically took a gigant-o-ray to the objects you already know and love to create big objects.

There are two flavors of big objects.

- **Standard big objects** - are defined by Salesforce and are included in Salesforce products. FieldHistoryArchive, part of our Field Audit Trail product, is an example of a standard big object. FieldHistoryArchive allows you to store up to 10 years' worth of archived field history data, helping you comply with industry regulations related to auditing and data retention.
- **Custom big objects** - are defined and deployed in Setup. You can create a custom big object in Setup, where you set its definition, fields, and index. The

fields defined in a big object's index determine the big object's identity and its ability to be queried. We get into how this is all put together in the next unit.

Standard Objects

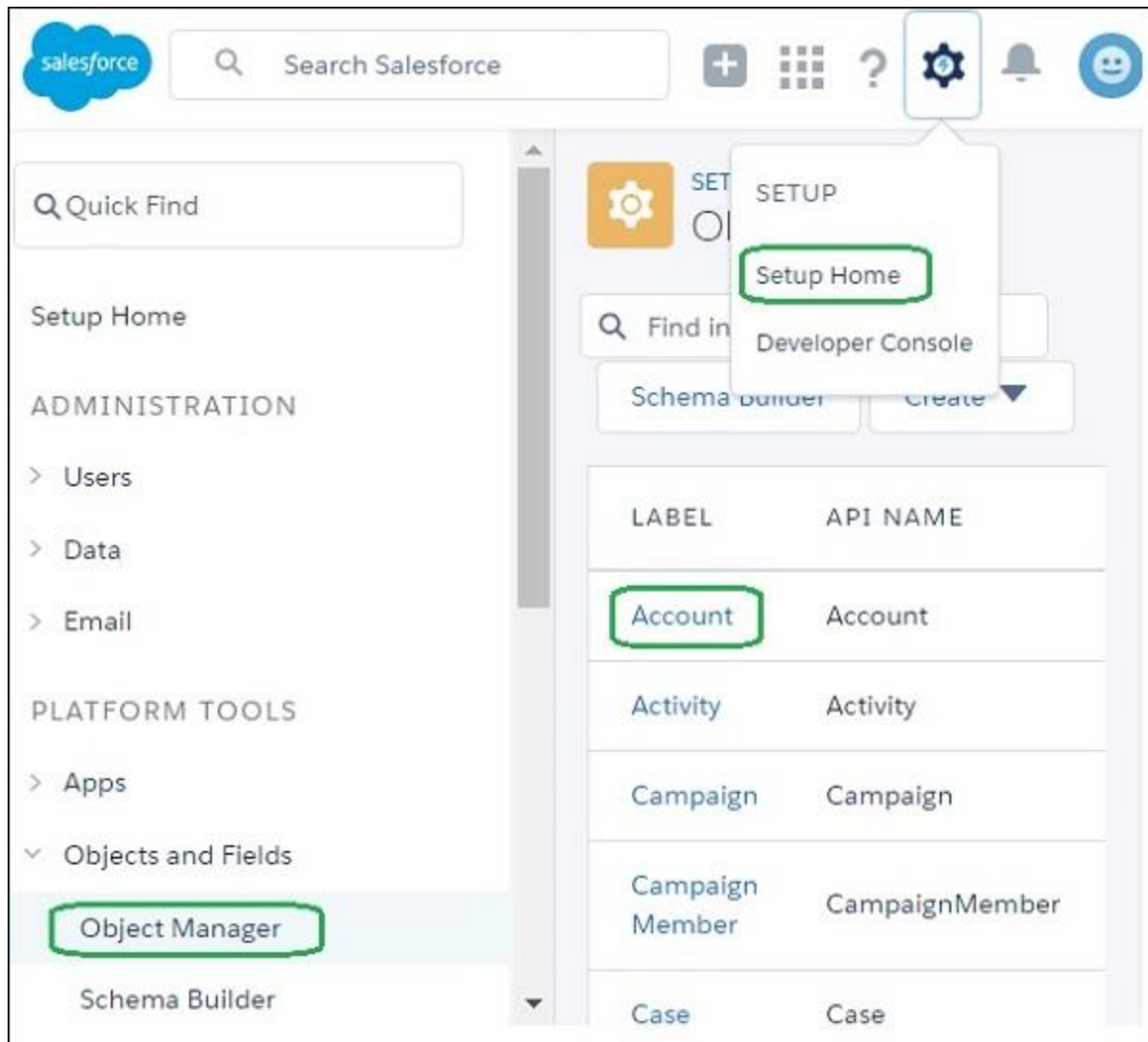
These are the objects which already exist in the Salesforce platform to manage the configurations and settings of the environment. Once you log in to the salesforce platform, you can see the available objects.

Example

The most commonly referred standard object is called the **Account Object**. It is the object which stores the preliminary information about a customer, partner, competitor or another organization. We can explore the account object by following the steps below.

Step 1

Login to the Salesforce platform and follow the link path **Settings → Setup Home → Object Manager - Account**.



Step 2

In this step, click on the **Schema Builder**. It shows the complete Account table with field names and data types. There are fields marked red. The fields marked red indicate that it is mandatory to fill the fields when an account is created.



Search Salesforce



Schema Builder

Help for this Page ?

Close

Auto-Layout

View Options ▼

Account



| | |
|------------------|-----------------------|
| Account Name | Name |
| Account Number | Text(40) |
| Account Owner | Lookup(User) |
| Account Site | Text(80) |
| Account Source | Picklist |
| Annual Revenue | Currency(18, 0) |
| Billing Address | Address |
| Created By | Lookup(User) |
| Data.com Key | Text(20) |
| Description | Long Text Area(32000) |
| Employees | Number(8, 0) |
| Fax | Fax |
| Industry | Picklist |
| Last Modified By | Lookup(User) |
| Ownership | Picklist |
| Parent Account | Hierarchy |
| Phone | Phone |
| Rating | Picklist |
| Shipping Address | Address |
| SIC Code | Text(20) |
| SIC Description | Text(80) |
| Ticker Symbol | Content(20) |
| Type | Picklist |



using the similar steps as above we can explore all the standard objects available.

Important Standard Objects

In this section, we will discuss the important standard objects in Salesforce. The following table lists down the objects —

| Object Name | Meaning | usage |
|-----------------|---|---|
| Account | Represents an individual account, which is an organization or person involved in the business like customers, competitors, partners, etc. | use this object to query and manage accounts in your organization. |
| Account History | Represents the history of changes to the values in the fields of an account. | use this object to identify changes to an account. |
| Case | Represents a case, which is a customer issue or problem. | use the case object to manage cases for your organization. |
| Contact | Represents a contact, which is an individual associated with an account. | This object is used to manage individuals who are associated with an Account in the organization. |
| User | Represents a user in the organization. | This object is used to query information about users and also helps to provide and modify the information concerning the users. |
| Asset | Represents an item of commercial value, such as a product sold by the company or a competitor that a customer has purchased and | This object is used to track assets previously sold into customer accounts. With asset tracking, a client application can quickly determine which products were previously sold |

| | | |
|---------------|--|--|
| | installed. | or are currently installed at a specific account. |
| Domain | Read-only object that represents a custom web address assigned to a site in your organization. | This read-only object is used to object to query the domains that are associated with each website in your organization. |

The organization's data will always not fit into the existing standard objects. So we can extend and customize many sales force objects to meet this need. For example, a courier company can create a custom object to store the schedule and dispatch details for every week. So these objects store the data that is unique to the business. The custom objects can also have custom fields along with the standard fields available in Salesforce.

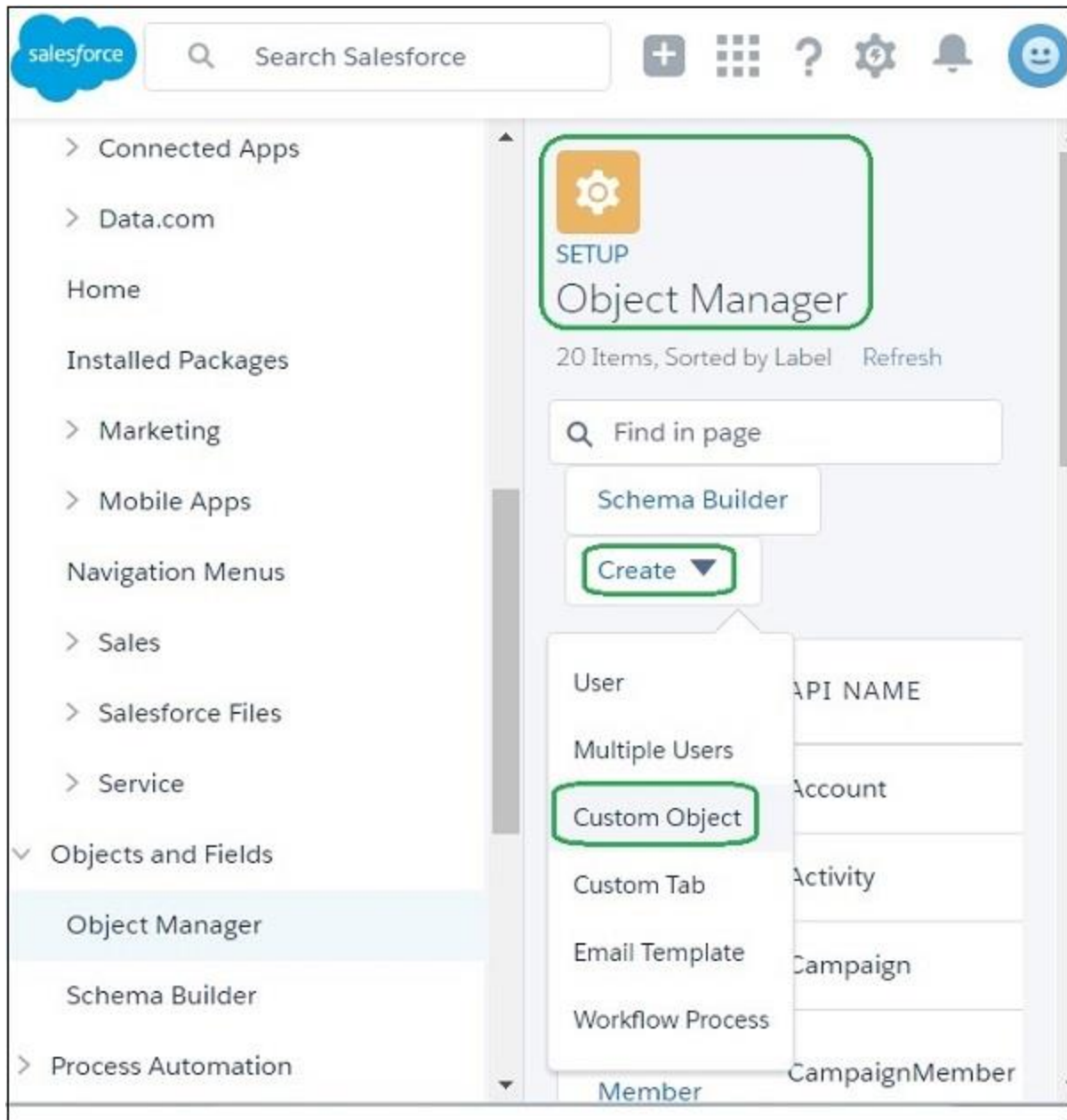
Custom Object features

Following are the features available on Custom Objects. The features help you perform the following features –


- Build page layouts to control which fields users can view and edit when entering data for the custom object record.
- Import custom object records.
- Create reports and dashboards to analyze custom object data.
- Create a custom tab for the custom object, to display the object's data.
- Track tasks and events for custom object records.
- Import custom object records.

Create a Custom Object

To create a custom object, we go to the line path as shown in the following screenshot –



Now we fill in the details of the custom object we want to create. There are mandatory fields which should be filled before the object can be saved. In our case, we give the object a name called Delivery schedule and save it.


SETUP
Object Manager
Create ▼

New Custom Object Help for this Page ?

Custom Object Definition Edit
Save
Save & New
Cancel

Custom Object Information
! = Required Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label **Example: Account**
 Plural Label **Example: Accounts**
 Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name **Example: Account**

Description

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window
☐ Open a window using a Visualforce page
 Content Name


Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.

Record Name **Example: Account Name**

Create a Custom Field

To Add more granularity to the business data, we can add custom fields on the custom object we created. In this case, let us add a field called delivery date to the custom object named Delivery schedule. To do this, we follow the path **Setup Home → Objects and Fields → Object Manager → Delivery Schedule**. Later, scroll down to the Fields and Relationship tab and click New. The page to add custom field appears wherein, we fill the details as shown below.

 **SETUP**
Object Manager

Create ▼

DeliverySchedule


New Custom Field

Help for this Page ?


Step 2. Enter the details **Step 2 of 4**

Previous Next Cancel

Field Label

DeliveryDate 


Field Name

DeliveryDate 

Description

The date of the courier delivery

Help Text

The expcted date on which you plan to deliver the courier.


Required

☒ Always require a value in this field in order to save a record

Default Value

Show Formula Editor

Use formula syntax: e.g., Text in double quotes: "hello", Number: 25, Percent as decimal: 0.10, Date expres
+ 7

Previous Next Cancel

Next, we can verify the successful addition of the above custom field by following the same link path as above. The custom field appears as shown in the following screenshot –

| <div> <div> Fields & Relationships (5) </div> <div> New </div> <div> Field Dependencies </div> <div> Set History Tracking </div> </div> | | | |
|---|------------------|--------------------|-------------------|
| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD |
| Created By | CreatedById | Lookup(User) | |
| DekiverySchedule Name | Name | Text(80) | |
| DeliveryDate | DeliveryDate__c | Date | |
| Last Modified By | LastModifiedById | Lookup(User) | |
| Owner | OwnerId | Lookup(User,Group) | |

unlike the relationships in relational database, the relationships in Salesforce are not through Primary and Foreign Keys. The relationships are maintained by using the **Relationship Fields**. It is a custom field which links one object record to another. Through the creation of relationships, we can display the data of all the related records in the record's details page.

The **Master Detail** relationship is used when we want to control the display of detail records based on the value in the master record. For example, in the courier company model a delivery schedule is always linked to a delivery location. If we remove a delivery location from our list, then all the related delivery schedules should also be eliminated. Such a dependency can be achieved through Master-detail relationship between the sales force objects.

Features of Master-Detail Relationship

In this section, we will discuss the features of Master-detail Relationship. The features are listed below –

- Deleting a Master Record, deletes all the detail records.
- A detail record cannot be created without a Master record.

- The permission on the detail record cannot be set. It inherits the permission from the master record.
- The detail record also inherits the sharing rule from master records.
- Both the master and detail records are automatically included in the report record types.

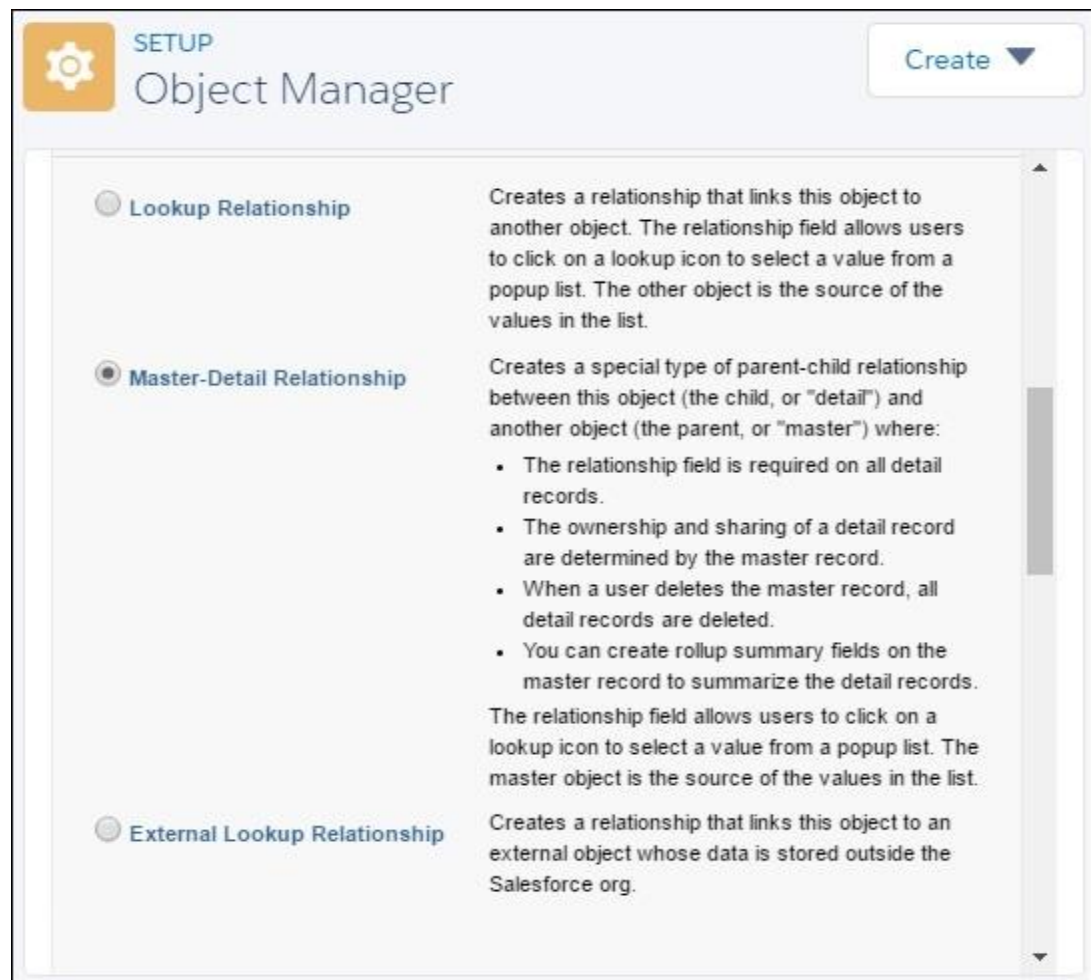
Creating Master-detail Relationship

In the courier company example, we will consider the relationship between delivery location and delivery schedule. There is a many-to-one relationship between the delivery schedule records and the delivery location record.

Following are the steps followed to create this relationship –

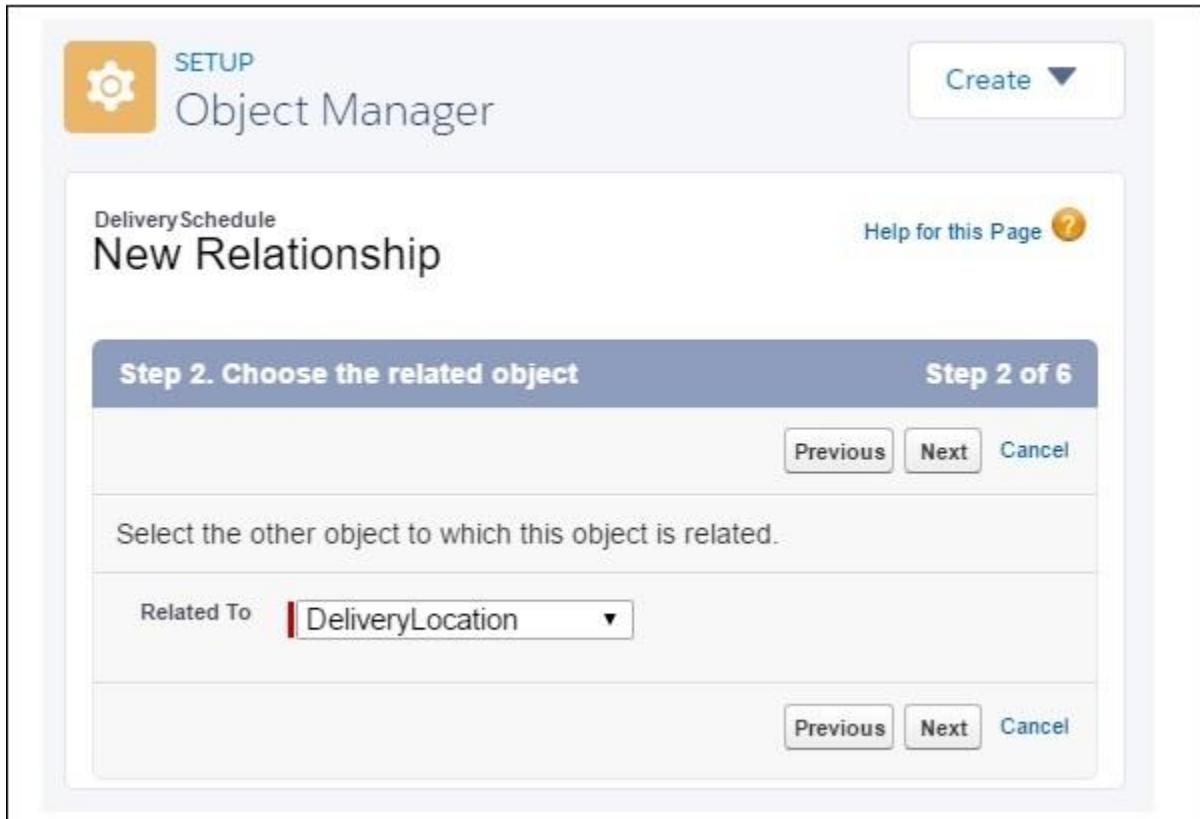
Choose the Relationship Type

In setup home, find the object named Delivery Schedule. In it under the Custom Fields and Relationships related list, click New. Choose the Master-detail Relationship as shown in the screenshot below.



Choose the Related Object

In the next step, select the object with which this relationship will be created. We choose DeliveryLocation.



The screenshot shows the Salesforce Setup interface for creating a new relationship. The top navigation bar includes the 'SETUP' gear icon, the 'Object Manager' title, and a 'Create' button with a dropdown arrow. The main content area is titled 'Delivery Schedule' and 'New Relationship', with a 'Help for this Page' link and a question mark icon. A progress bar indicates 'Step 2. Choose the related object' out of 6 steps. Below the progress bar, there are 'Previous', 'Next', and 'Cancel' buttons. The instruction 'Select the other object to which this object is related.' is displayed. A 'Related To' label is followed by a dropdown menu currently showing 'DeliveryLocation'. At the bottom, there are again 'Previous', 'Next', and 'Cancel' buttons.

Name the Relationship and Field

In this step, enter the Relationship Name as well as the name of the Field.



SETUP

Object Manager

Create ▼

Step 3. Enter the label and name for the lookup field

Step 3 of 6

Previous

Next

Cancel

Field Label

DeliveryLocation



Field Name

DeliveryLocation



Description

Help Text

Child
Relationship
Name

DeliverySchedules

Sharing
Setting

Select the minimum access level required on the Master record to create child records.



Read Only: Allows users with at least Read access to the Master record to view the records.



Read/Write: Allows users with at least Read/Write access to the Master record to view and edit the records.

Allow
reparenting

Child records can be reparented to other parent records after they are created.

Lookup Filter

Optionally, create a filter to limit the records available to users in the lookup field. [Tell me more!](#)

► [Show Filter Settings](#)

Previous

Next

Cancel

Add field to page layout

In the Next step we accept the defaults and move on to add the reference field to the page layout.

The screenshot shows the 'New Relationship' page in the Salesforce Setup Object Manager. The page is titled 'DeliverySchedule New Relationship' and is at 'Step 5 of 6: Add reference field to Page Layouts'. The 'Field Label' is 'DeliveryLocation' and the 'Data Type' is 'Master-Detail'. The 'Description' section states: 'These are the page layouts that will include this field. Because this is a Master-Detail relationship, the field is required.' Below this, there is a table with two columns: 'Add Field' and 'Page Layout Name'. The table has one row with a checked checkbox and the text 'DeliverySchedule Layout'. Navigation buttons 'Previous', 'Next', and 'Cancel' are visible at the top right and bottom right of the step area.

| Add Field | Page Layout Name |
|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | DeliverySchedule Layout |

Add Custom Related Lists

Next, we specify the title for the related list that is associated layout with the parent.

SETUP
Object Manager

Create ▼

Step 6. Add custom related lists Step 6 of 6

Previous Save & New Save Cancel

Field Label DeliveryLocation
Data Type Master-Detail
Description

Specify the title that the related list will have in all of the layouts associated with the parent.
Related List Label

These are the page layouts that will include this field. Because this is a Master-Detail relationship, the field is required.

| Add Related List | Page Layout Name |
|-------------------------------------|-------------------------|
| <input checked="" type="checkbox"/> | DeliveryLocation Layout |

☒ Append related list to users' existing personal customizations

Previous Save & New Save Cancel

This completes the creation of Master-Detail relationship between DeliveryLocation and DeliverySchedule.

A Lookup relationship involves finding value of a field based on the value in another field in another object. It is mostly used in the case of commonly shared data between two objects.

Example


In the courier company, we have a delivery location which must be related to a delivery schedule. So we have a field "DeliverySchedule" in the object Delivery location that looks up for values from the other custom Object named "Delivery Schedule". Let us now see the steps to create such a lookup relation.

Step 1

First we identify the objects and the fields which need to have the relationship. In our example, these two objects are **Delivery Schedule** and **Delivery Location**.



Step 2

Create a Custom Object named `DeliveryLocation` as we did in the previous chapter. In it, go to the tab fields and relationships. Click **New** → **Custom Field** → **Lookup Relationship**. Choose the field type as lookup field and enter the details as shown below.

 **SETUP**
Object Manager

Create ▼


DeliverySchedule

Have feedback on lookup filters? [Comment on IdeaExchange!](#)  [Help for this Page](#) 

Custom Field Definition Edit

Change Field Type Save Cancel

Field Information

 = Required Information

Field Label

DeliverySchedule

Data Type


Lookup

Field Name

DeliverySchedule

Description

Help Text



Lookup Options

Related To

DeliverySchedule

Child Relationship Name

DeliveryLocations

Related List Label

DeliveryLocations

Required

☐ Always require a value in this field in order to save a record

What to do if the lookup record is deleted?

☒ Clear the value of this field. You can't choose this option if you make this field required.

☐ Don't allow deletion of the lookup record that's part of a lookup relationship.

Lookup Filter

Optionally, create a filter to limit the records available to users in the lookup field. [Tell me more!](#)

► [Show Filter Settings](#)

Change Field Type Save Cancel

Step 3

You can verify the lookup relationship created by going to the schema builder and choosing the two objects for display.

The screenshot displays the Salesforce Schema Builder interface. On the left, a sidebar lists various objects, with **DeliveryLocation** and **DeliverySchedule** selected. The main workspace shows two object cards. The **DeliverySchedule** card lists fields: Created By (Lookup(User)), DeliveryDate (Date), DeliverySchedule Name (Text(80)), Last Modified By (Lookup(User)), Owner (Lookup(User+1)), and User (Lookup(User)). The **DeliveryLocation** card lists fields: Created By (Lookup(User)), DeliveryLocation Name (Text(80)), DeliverySchedule (Lookup(DeliverySchedule)), Last Modified By (Lookup(User)), and Owner (Lookup(User+1)). A blue line connects the **DeliverySchedule** field in the **DeliveryLocation** card to the **DeliverySchedule** field in the **DeliverySchedule** card, indicating a lookup relationship. The interface includes a search bar at the top, a 'Help for this Page' link, and buttons for 'Close', 'Auto-Layout', and 'View Options'.

salesforce Search Salesforce

Schema Builder Help for this Page

Close Auto-Layout View Options

Elements Objects

Select objects to display on the builder.

Select from All Objects

Quick Find...

Select All Clear All

☐ Account

☐ Activity

☐ Asset

☐ Badge

☐ Badge Received

☐ Campaign

☐ Campaign Member

☐ Case

☐ Contact

☐ Contract

☒ DeliveryLocation

☒ DeliverySchedule

☐ Duplicate Record Item

☐ Duplicate Record Set

☐ Email Message

☐ Endorsement

☐ Event

☐ Idea

☐ Lead

☐ Macro

☐ Opportunity

☐ Opportunity Product

DeliverySchedule

Created By Lookup(User)

DeliveryDate Date

DeliverySchedule Name Text(80)

Last Modified By Lookup(User)

Owner Lookup(User+1)

User Lookup(User)

DeliveryLocation

Created By Lookup(User)

DeliveryLocation Name Text(80)

DeliverySchedule Lookup(DeliverySchedule)

Last Modified By Lookup(User)

Owner Lookup(User+1)

What is the difference between a record and a field?

Fields and records are two basic components of a database, which is an organized collection of information, or data. The term "fields" refers to columns, or vertical categories of data while the term "records" refers to rows, or horizontal groupings of unique field data.

What is the difference between a field and a record give a specific example?

Each row in a database table is a record, because it contains information on a single data item. A field defines the individual elements of a record. For example, fields in Figure 11.3 include item, serial number, and value. Fields, then, are table columns, whereas records are rows.

Is a field a record?

A table has records (rows) and fields (columns). Fields have different types of data, such as text, numbers, dates, and hyperlinks. A record: Contains specific data, like information about a particular employee or a product.

What is the difference between record and field in Salesforce?

A field is one data point within an object (e.g. "First Name" on the lead object). A record is row of field data within an object (e.g. the lead "John Smith"). An object is comprised of its field definitions and records.

What is a field in a database?

A database field is a single piece of information from a record. A database record is a set of fields. The Fields window displays the record-level fields that are contained in a Progeny database. ... Individual database fields—Individual database fields are stored at the individual record level.

What is the difference between a field and record?

Answer: Fields and records are two basic components of a database, which is an organized collection of information, or data. The term "fields" refers to columns, or vertical categories of data while the term "records" refers to rows, or horizontal groupings of unique field data.

Are rows fields or records?

Fields and records are two basic components of a database, which is an organized collection of information, or data. The term "fields" refers to columns, or vertical categories of data; the term "records" refers to rows, or horizontal groupings of unique field data.

Is a field a collection of related records?

A record is a collection of related fields. An Employee record may contain a name field(s), address fields, birthdate field and so on. A file is a collection of related records. Tables are also called datasheets.

What is a field in data?

A field is an area in a file or known location in a unit of data such as a record, message header, or computer instruction that has a purpose and usually a file size. In some contexts, a field can be subdivided into smaller fields. ...

1) In a database table, a field is a data structure for a single piece of data.

What does record mean in Salesforce?

According to Salesforce documentation: "Record types let you offer different business processes, picklist values, and page layouts to different users. You might create record types to differentiate your regular sales deals from your professional services engagements, offering different picklist values for each.

What is a field in Salesforce?

Fields in Salesforce represents what the columns represent in relational databases. It can store data values which are required for a particular object in a record.

What is a field and record in a database?

Each row in a database table is a record, because it contains information on a single data item. A field defines the individual elements of a record. For example, fields in Figure 11.3 include item, serial number, and value. Fields, then, are table columns, whereas records are rows.

What do record types do in Salesforce?

Record types determine the business processes, page layouts, and picklist values users have access to. Setting up record types will ensure that when Noah's Consulting Team views customer accounts, they won't also see the partner accounts.

Database tables as objects,

Database columns as fields,

Database rows as records.

Introduction to Roll-Up Summary Fields

While formula fields calculate values using fields within a single record, roll-up summary fields calculate values from a set of related records, such as those in a related list. You can create roll-up summary fields that automatically display a value on a master record based on the values of records in a detail record. These detail records must be directly related to the master through a master-detail relationship.

You can perform different types of calculations with roll-up summary fields. You can count the number of detail records related to a master record, or calculate the sum, minimum value, or maximum value of a field in the detail records. For example, you might want:

- A custom account field that calculates the total of all related pending opportunities.
- A custom order field that sums the unit prices of products that contain a description you specify.

Defining a Roll-up Summary Field

Since roll-up summary fields are based on master-detail relationships, it's useful to review object relationships before creating a roll-up summary field.

Master-Detail Relationships

Master-detail relationships closely link objects together so that the master record controls specific behaviors of the detail and subdetail record.

You define a roll-up summary field on the object that is on the master side of a master-detail relationship. For example, you can create a roll-up summary field on the Account object, summarizing related opportunities:

The screenshot displays a Salesforce record for an Account named "Pyramid Construction Inc.". The account number is CC213425, and the industry is Construction. A roll-up summary field, "Sum of Opportunities", is highlighted with a blue box and shows a value of \$350,000.00. Below the account details, there are tabs for "RELATED", "DETAILS", and "NEWS". The "RELATED" tab is selected, showing a list of related Opportunities. Two opportunities are listed: "Pyramid Solar Generators" with a stage of "Value Proposition", an amount of \$250,000.00, and a close date of 6/22/2017; and "Pyramid Emergency Generators" with a stage of "Closed Won", an amount of \$100,000.00, and a close date of 4/11/2015. A blue arrow points from the "Sum of Opportunities" field to the list of opportunities, indicating that the roll-up summary is calculated based on these related records.

| Account Number | Industry | Sum of Opportunities | Phone |
|----------------|--------------|----------------------|---------|
| CC213425 | Construction | \$350,000.00 | (014) 4 |

| Opportunities (2) |
|-------------------------------------|
| Pyramid Solar Generators |
| Stage: Value Proposition |
| Amount: \$250,000.00 |
| Close Date: 6/22/2017 |
| Pyramid Emergency Generators |
| Stage: Closed Won |
| Amount: \$100,000.00 |
| Close Date: 4/11/2015 |

There are a few different types of summaries you can use.

| Type | Description |
|-------|---|
| COUNT | Totals the number of related records. |
| SUM | Totals the values in the field you select in the Field to Aggregate option. Only number, currency, and percent fields are available. |
| MIN | Displays the lowest value of the field you select in the Field to Aggregate option for all directly related records. Only number, currency, percent, date, and date/time fields are available. |
| MAX | Displays the highest value of the field you select in the Field to Aggregate option for all directly related records. Only number, currency, percent, date, and date/time fields are available. |

What is a "Lookup Relationship"?

Up to 25 allowed for object

Parent is not a required field.

No impact on a security and access.

No impact on deletion.

Can be multiple layers deep.

Lookup field is not required.

What is "Master-Detail Relationship"?

Master Detail relationship is the Parent child relationship. In which Master represents Parent and detail represents Child. If Parent is deleted then Child also gets deleted. Rollup summary fields can only be created on Master records which will calculate the SUM, AVG, MIN of the Child records.

Up to 2 allowed to object.

Parent field on child is required.

Access to parent determines access to children.

Deleting parent automatically deletes child.

A child of one master detail relationship cannot be the parent of another.

Lookup field on page layout is required.

Creating the Summary Field


1. From Setup, open Object Manager and click Account.
2. On the left sidebar, click Fields & Relationships.
3. Click New.
4. Choose the Roll-up Summary field type, and click Next.
5. For Field Label, enter Sum of Opportunities and click Next.
6. The Summarized Object is the detail object that you want to summarize. Choose Opportunities.
7. Choose the SUM summary type and choose Amount as the Field to Aggregate.
8. Click Next, Next, and Save.

Examples of Roll-up Summary Fields

Here are more examples of detail data rolling up to master records.

Date Opportunity First Created

A roll-up field was created on the Accounts object. The MIN of all Created Date fields on the Opportunities object displays the earliest date an opportunity was created related to an account.

 ACCOUNT

Express Logistics and Transport

+ Follow

Edit

Account Number
CC947211


Industry
Transportation

Date First Opportunity Created
5/1/2017 2:21 PM

RELATED

DETAILS

NEWS

 Opportunities (2)

New

▼

▼

View All

Express Logistics Generator Replacement Parts

Created Date: 6/5/2017 12:44 PM

Stage: Needs Analysis

Amount: \$15,000.00

Express Logistics Portable Truck Generators


Created Date: 5/1/2017 2:21 PM

Stage: Value Proposition

Amount: \$80,000.00

Total Price of All Products Related to an Opportunity

A roll-up field was created on the Opportunities object. Total Price is summarized on the Opportunity Product object to find the grand total of all products related to an opportunity.

 OPPORTUNITY
Pyramid Emergency Generators

+ Follow

Edit

New Case

New Note

▼

Account Name
Pyramid Construction Inc.

Total List Price
\$175,000.00

✓ > ✓ > ✓ > ✓ >

◀ ▶

Change Closed Stage

DETAILS


Email

Add

Expand All

↺

Steps

 Products (2) ▼

GenWatt Diesel 1000kW ▼

Quantity: 2.00

Sales Price: \$100,000.00

Date:

GenWatt Gasoline 750kW ▼

Quantity: 1.00

Sales Price: \$75,000.00

Date:

View All

Minimum List Price of An Opportunity

A roll-up field was created on the Opportunities object. List Price is summarized on the Opportunity Product object to find the product with the lowest price related to an opportunity.

OPPORTUNITY
Pyramid Emergency Generators

Account Name
Pyramid Construction Inc.

Minimum List Price
\$75,000.00

Close... Change Closed Stage

DETAILS

Email

Add

Expand All

Products (2)

| | | | |
|------------------------|----------------|---------------------------|-------|
| GenWatt Diesel 1000kW | Quantity: 2.00 | Sales Price: \$100,000.00 | Date: |
| GenWatt Gasoline 750kW | Quantity: 1.00 | Sales Price: \$75,000.00 | Date: |

View All

Community user License: It is cheaper less than salesforce license.

What is Salesforce Community?

In 2013, Salesforce introduced Community cloud with an aim to create a platform for customers, partners, and employees. It provides companies to work effectively, understand their customers' requirements, and fulfill it. In simple terms, you can also say that the Salesforce community is the advanced version of portals.

With the help of communities, your users can work collaboratively. It is built on the Salesforce platform and easily integrates with CRM.

Communities are developed such that they can be perfect choices for your partners, customers, vendors, employees, or anyone else.

Let's see each type in brief:

- Customer Community
- Customer Community Plus
- Partner Community

You can see each of them in brief and understand the differences between portals and communities in our previous blog post [here](#).

Each of them has its own merits and demerits. They are a vital part of Salesforce products and can be useful in a variety of professions. Over the years, communities help a lot to enhance businesses in three major areas.

- Enhance brand experience
- Provide a dedicated space to users
- Culture of collaboration

Costs of each of them and features they provide:

Customer community/ Partner Community is available for \$2/ login or \$5/member on a monthly basis. It provides features like:

- Digital Experience Management
- Customer Service and Account Portal Templates
- Knowledge
- Case Management
- Lightning Flow Automation

On the other hand, Customer Community Plus is available for \$6/ login or \$15/ member on a monthly basis. In addition, to the above features in Customer Community Plus, you get below features.

- Roles and Advanced Sharing

- Delegated Administration
- Customizable Reports and Dashboards

Talking about the licenses, Salesforce provides access to these communities' plans in various licenses.

Salesforce provides licenses in six different types of licenses. Listed below:

- **Customer Community:**
It is useful for business to consumer experiences using large numbers of external users who need access to case objects or knowledge. You can also use the customer community with personal accounts.
- **Customer Community Plus:**
Customer Community Plus is useful for business to consumer experiences with external users who have access to reports and dashboards and need advanced sharing options. Customer Community Plus can also be used with personal accounts.
- **Partner Community:**
Partner community is useful for B2B communication. It gives access to sales data like partner relationship management and can't be useful for personal accounts.
- **Commerce Portals:**
Commerce portals are for custom digital experience to engage any external users, like brand engagement and customer loyalty. It provides limited access to CRM objects and can be used with personal accounts.
- **External Apps:**
External apps are very customizable experiences while incorporating CRM objects, custom objects, and external data and require additional storage. Its ideal use case is a dealer, vendor, or supplier portal. It is useful for franchise management, marketplaces, and multi-level marketing. The external app's license cannot be useful with personal accounts.
- **Channel Account:**
It is useful for business to business communities and portals that calculate their usage on the basis of numbers of partners instead of numbers of individual users.

Each of the above mentioned licenses is available in two ways i.e.:

- Member-based
- Login-based

Difference between both types of license:

Community member-based license is similar to standard Salesforce internal license. External users who have member-based licenses can have access to a community multiple times. But, they do not have access to internal organizations.

Whereas, in login based license you need to purchase a specific number of logins for monthly usage. Here, external users can use one log in each time they log into the community. After that, they can use the same credentials multiple times for the same day. Additionally, once logged in they can easily switch between communities. You can configure the session timeout period of login to a maximum of 24 hours.

Well, that's a lot of information about the Salesforce license. Now, comes the main question. Which license should you purchase?

All types of licenses serve different purposes. Decide on the basis of your company's requirements and see to it that it fulfills the requirements.

Two type of sharing:

Metadata sharing

Data Sharing

Profile we control metadata and data which object to see

From user login attempt changed it get locked, Login history

password policies to set password

login policies

User Licenses

A user license determines the baseline of features that the user can access. Every user must have exactly one user license. You assign user permissions for data access through a profile and optionally one or more permission sets.

REQUIRED EDITIONS

Available in: Salesforce Classic (not available in all orgs) and Lightning Experience

Edition requirements vary for each user license type.

Example

EXA

MPLE

Assign a Lightning Platform user license to Employee A. The Lightning Platform user license only supports standard object permissions for accounts and contacts, so Employee A can't access cases.

Salesforce offers these license types.

Standard User Licenses

Chatter User Licenses

Experience Cloud User Licenses

Service Cloud Portal User Licenses

Sites and Site.com User Licenses

Authenticated Website User Licenses

4445NOTE If you purchase a permission set license, you might receive user licenses related to it as well. Your Salesforce org can also have other licenses that are supported but no longer available for purchase. Contact Salesforce for more information.

The following license types are available only for orgs that use a Customer Portal or partner portal.

Customer Portal User Licenses

Customer Portal—Enterprise Administration User Licenses

User Licenses

If you don't have a Customer Portal or partner portal but want to share information with your customers or partners, see Experience Cloud User Licenses .

View Your Organization's User Licenses

View the user licenses that your company has purchased to know what you have available to assign to your users.

Standard User Licenses

Find information about standard user licenses that you can get for your org, such as the Salesforce and Lightning Platform user licenses.

Chatter User Licenses

All standard Salesforce licenses allow free Chatter access for everyone in your organization. Salesforce also offers Chatter-specific licenses: Chatter External, Chatter Free, and Chatter Only (also known as Chatter Plus). The Chatter Only license is available for purchase only by existing Chatter Plus customers. For new customers, the Lightning Platform Starter license is a step up from Chatter Only, giving your users access to a more robust set of features.

Experience Cloud User Licenses

The following licenses are used for external users: Customer Community, Customer Community Plus, Partner Community, External Apps, External Identity, and Channel Account.

Channel Account Licenses

The Channel Account license is available for Experience Cloud sites and has the same permission and feature access as the Partner Community license. Unlike login or member-based licenses, Channel Account licenses are priced per partner account. Partners then open up access to users.

Lightning Platform Starter and Lightning Platform Plus Details

Lightning Platform Starter and Lightning Platform Plus both contain a Salesforce Platform license and a Company Communities Permission Set License. This table shows which features are available to users granted a Salesforce Platform license and assigned the Company Communities Permission Set License.

Database.com User Licenses

Service Cloud Portal User Licenses

Sites and Site.com User Licenses

Sites and Site.com users can have Guest User or Site.com Only user licenses.

Authenticated Website User Licenses

Platform portal users have the Authenticated Website license, which is designed to be used with Salesforce Sites. It gives named sites users unlimited logins to your Platform Portal to access customer support information.

Customer Portal User Licenses

Users of a Customer Portal site have the Customer Portal Manager Standard license.

Customer Portal—Enterprise Administration User Licenses

Customer Portal—Enterprise Administration users have the Customer Portal Manager Custom license. This license gives contacts unlimited logins to your Salesforce Customer Portal to manage customer support.

Partner Portal User Licenses

Partner Portal users have the Gold Partner user license. They can only access Salesforce using the partner portal.