

****Salesforce Admin****

1.Environments

2.Editions

3.Licenses

4.Trail Account

5.Company Profile

6.Documents

7.Application

8.Objects

9.Tabs

10.Fields

11. Master-Details

12. Junction Object

13. Lookup

14. Hierarchical

15. Rollup Summary

16. Search Layouts

17. Formules

18. Validation

19. Roles

20. Profiles

21. Users

22. User Login Restrictions

23. PageLayouts

24. RecordTypes

25. Queue ,Assignment Rules

26. Public Group

27. Object Level Permissions

28. OWD

29. Sharing Rules

30. Field Level Security

31. Workflow

32. Tasks ,FieldUpdate,Outbound,Email

33. Mon ,Tue : Approval Process and process Builder

34. Wen : Data Loader and Import wizard

35. Thur:Reports and Dashboards

36. Friday :

Environments-Licenses-Editions

Environment :

It is a instance of force.com

These environments are classifeid into three types :

1. Production
2. Developer Environment
3. Testing Environment

➤ **Production :**

1. It is a instance of force.com
2. Where data needed to run the business logic is stored
3. Live is stored / Active Paying users are stored.

➤ **Development/Developer Environment :**

- it is a instance of force.com
- It is used to extend/enhance the application based on business needs of your organization without effecting production environment.

➤ **Testing Environment**

1. It is a a instance of force.com
2. It is used to test your application / functionalities

Sandbox :

1. It is a instance of force.com which contains production Metadata or Productions Metadata and data.

2. It is a independent copy of production .
3. It is used for Development /Testing /Training activities
4. Sandboxes are created from Production .
5. Sanbox's are classified into four types

1. Developer Sandbox
2. Developer Pro Sandbox
3. Partical Copy Sandbox
4. Full Sandbox

1. Development &Unit Testing
2. QA

3. Integration Test
4. Batch Test
5. UAT
6. Load Testing
7. Performance Testing
8. Staging

➤ **Developer Sandbox :**

1. It is an instance of force.com
2. It is designed for development activities by individual developer.
3. It is an independent copy of production's meta data .
4. Datasize : 200 MB
5. File Size : 200 MB
6. Refresh Rate : 1 time in a day
7. Actions : Development /Unit Testing by individual developer

➤ **Developer Pro Sandbox:**

1. It is an instance of force.com
2. It is designed for Development and Testing
3. It is an independent copy of production meta data
4. It is generally called as QA environment / Sandbox
5. Datasize : 1 GB
6. File Size : 1 GB
7. Refresh Interval : 1 time in a day
8. Actions : Development +Testing +QA by multiple developers

➤ **Partial Copy Sandbox :**

1. It is an instance of force.com
2. It is an independent copy of Production metadata with sample data
3. Maximum of 10,000 records per object
4. It is generally called UAT environment
5. Datasize : 5 GB
6. File Size : 5 GB
7. Refresh Rate : 1 time in every five days
8. Actions : Development +All types of Testing (QA+Integration Testing +UAT.....) except load testing and performance testing
9. It is generally used for testing activities .

➤ **Full Sandbox :**

1. It is a instance of Force.com
2. it is exact copy of production's metadata and data
3. it is designed for testing activities .
4. Data size : Exact size of production
5. File Size : Exact size of production
6. Refresh Interval : 1 time in 29 days
7. Actions : All types of testing including load and performance testing
8. It is a also called as staging environment

Editions

1. Editions in the salesforce specify what set of features are offered by the salesforce on your force.com environment

2. Based on the cloud we have chosen we get different types of editions

3. Salesforce IQ CRM Starter :

This edition is designed for those organization who need access to basic sales cloud application for maximum of 5 users .

4. Lightning Professional Edition :

This edition is designed for those organization who need complete CRM application

with complete declarative functionalities for any no of users .

5. Lightning Enterprise Edition :

This edition is designed for those organizations who need complete CRM application with both declarative and programatical functionalities for any no of users.

6. Lightning Unlimited Edition :

This edition is designed for those organization who need complete CRM application with both declarative and programatical functionalities for any of user with 24/7 toll free support Unlimited online training 100+ Admin services

Note : We get the sandboxes based on the edition what we purchased .

Edition	Developer	DeveloperPro	Particalcopy	FullSandbox

Enterprise	25	0	1	-
Unlimited	100	5	1	1
Performance	100	5	1	1

Note : Based on your organization need we can purchase additional sandboxes except Developer sandbox

Note : Developer sandboxes will come as add-on with other sandbox.

Developer Pro ----5 Developer sandbox will come as add-on

Partial Copy ----10 Developer Sandbox will come as add-on

Full Sandbox ---- 15 Developer sandbox will come as add-on

License

License in the salesforce will specify what set of basic features are offered by the salesforce to the users .

Note :Every user in the salesforce need to have one license .

Standard user Licenses :

a .Salesforce License :

This license is designed for those users who need access to Complete CRM and force.com environment

b. Saelsforce Platform License :

1. This license is designed for those users who need access to only force.com environment

2. Users with this license cannot access CRM applications developed by salesforce.

c.Knowledge only users :

1. This license is designed for users who only need access to Salesforce Knowledge app.

2. This license provides access to custom objects, custom tabs.

d. Identity :

1. This license will Grants access to Salesforce Identity features.

e. Work.com Only User

1. This license is Designed for users who don't have a Salesforce license and need access to Work.com application.

Salesforce -Trail-Account

Q:: How to register salsforce Trail Account ?

URL : <https://developer.salesforce.com>

Step1 : Enter the Primary Details Like LastName ,FirstName, Email

Step 2: Enter Company Name , Your Role

Step 3: Enter the username

Note : name@yourcompanyname.com

Ex: satish@captial.com

ravi@abc.com

Step 4: Register

Step 5: Confirmation Link will sent to the registered email Activate the linke and reset the password.

Q:: What are the sever instance of salesforce

Production : NA , EU, AP

Sandbox : CS

Q:: How to login to the salesforce

ANS : Production : <https://login.salesforce.com>

sandbox : <https://test.salesforce.com>

Q:: How to track the status of the server ?

ANS:: URL :<https://trust.salesforce.com>

Trail Account :

Edition : Developer Edition (CRM +Force.com)

Environment : Production (Admin Apex+Visualforce+Lightning)

License : Salesforce : 2

: Salesforce Platform : 3

Space : 5 MB
Salesforce Releases : Spring 17, Summer 17, Winter 17
Api Version : 39.0

Company Information :

1. This will maintain basis primary details of your organization like
Timezone , Currency format , Local Language , Licenses etc.....

2. Organization Id :

Salesforce by default create 18 character unique id for every force.com instance based on this unique id salesforce will recognize your organization on force.com

3. Corporate Currency :

Currency format of your organization is called Corporate Currency.

Note : Salesforce by default doesn't provide multiple currency format .

Note : Based on your organizational need we can raise a case with salesforce tech support team enable the multiple currency

Note : Once the multiple currency option is enabled salesforce will provide Conversion table , where need to provide conversion rates based on corporate currency of your organization

4. We can track the detail about the licenses that are purchased by your organization .

Setup

|---Administer

|---Company Profile

|---Company Information

|----Edit

Profiles

1. Profiles in the salesforce control what user can access and what user can see in the organization.

2. Every profile is designed for a specific license.

3. Profile Controls

- a. Which applications user can access .
- b. Which objects user can access .
- c. Field level permissions.
- d. Tab permissions
- e. Record Type permissions
- f. Administrative permissions
- g. User level permissions

4. There are two types of Profiles in salesforce .

- a. Standard Profiles
- b. Custom Profiles

5. Standard Profiles :

Profiles created by the salesforce to meet the global CRM requirements.

Ex : System Adminster

Ex : Salesforce Platform user

6. Custom Profiles :

These are the profiles created by the users to meet his organizational business requirement.

Note : Every custom Profile is a clone of any one of the existing profile

7. Steps to create Custom Profile :

Navigation :

Setup

|---Adminster

|---Manage Users

|---Profiles---|---New Profile

Step 1: Choose the existing profile.

Step 2: Check the License.

Step 3: Enter the Custom Profile Name .

Step 4: Save

Step 5: Click on Edit Button.

Step 6: Customize the permissions

Step 7: Save

UseCase :

1 .Create a new profile :

License Name : Salesforce
Copy Existing : System Adminster
Profile Name : Manager Profile

2. Create a new Profile

License Name : Salesforce Platform
Copy Existing : Salesforce Platform user
Profile Name : Clerk Profile

3. Create a new Profile

License Name : Salesforce Platfrom
Copy Existing : Salesforce Platform user
Profile Name : Field Executive Profile

4. Create a new Profile

License Name : Salesforce Platform
Copy Existing : Salesforce Platform user
Profile Name : HR Manager Profile

5. Create a new Profile :

License Name : Chatter Free
Copy Existing : Chatter Free
Profile Name : Customer

Lighting Navigation:

Setup

|---> Adminstration

|---> Users

|---> Profiles

|--->New Profile

Step 1: Choose Any one of the Profile Built on License you want

Step 2: Check the License

Step 3: Enter New Profile New

Step 4: Save

Step 5: Edit

Step 6: Modify the permissions

Step 7: Save

Company Profile:

1. This will specify basic information about your organization

2. Name, Communication Address, Primary Contact ,

Company Information

Business Hours

Languages

Licenses

Editions

Holidays ..etc

3. Company Information :

Navigation :

Classic :

Setup

|--->Adminster

|--->Company Profile

|--->Company Information

|--->Edi

Lightning :

Setup

|---> Settings

|--->Company Settings

|---> Company Information

|--->Edit

a. This will specify complete details about the instance of your organization

1. Organization Id :

a. Every force.com instance will have 18 character Organization Id .

b. Based on this Id salesforce will recognize the your org.

2. Corporate currency:

a. This will specify the currency format your organization is following

3. Time Zone,Default language ,Edition ,ServerInstance, space used all other details can be tracked from here.

4. This will also specify the number of licenses purchased,used and remaining

Q: To how many users we can assign the same profile ?

ANS: To any number of users

Q: If two users have same profile will they get same permissions ?

ANS: Yes

Q::Can we delete a standard Profile ?

ANS : No we can not delete ,but we can customize

Q::Can we delete custom profile ?

ANS : Yes we can delete

Q::Which users can see the setup menu

ANS :users whoes profile has view setup and configuration option enabled

Q:: Who can manage the profile ?

ANS: users whoes profile has the following permissions

1. Manage profiles and permission sets

2. Customize the Application can create /edit /delete the profiles

Q:: Can we deploy the profiles from sandbox to production ?

ANS : No

Roles

1. Roles in the salesforce tell about the structure/heirarchy of your organization business model and where you standard in the hirerarchy
2. It tell to whom you have to report and who reports to you.
3. Role will not give any permissions it only says about the hirerarchy.
4. Steps to create New Roles

Setup

|---Adminster

|---Manager Users

|---Roles

|---Add Roles

Step 1: Enter Role Name.

Step 2: Select Reports to Role

Step 3: Save.

5. We can view the roles in three formats .

- a. Tree view
- b. sorted List View
- c. List View .

6. Who can create new Roles or manage the exiting roles ?

Users who profile has following the permission enabled

- a. Manage Roles
 - b. Customize Application
- create /Edit/ Delete the roles

User Case :

1. Add a new role

Name : VP Opearions

Reports : ItSlate

2. Add a new role

Name : Manager

Reports : VP Operations

3. Add a new role

Name : HRManager

Reports : VP Operations

4. Add a new role

Name : Clerk

Reports : Manager

5. Add a new role

Name : Field Executive

Reports : Manager

6. Delete All the roles under CEO

7. Reassing the Roles Manager,HRManager to CEO

8. Delete VP Oportions

Q:: If two users have the same roles ,will they get same profiles ???

ANS : May or Maynot .

Q:: If two users have same role will they report to same person ?

ANS : May or Maynot

Q:: if two users have same role ,will they report to same role ??

ANS : Yes

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Lighting

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How to create a role in the salesforce lightning ??

Setup

|--->Adminstration

|---> Users

|--->Role

|--->Add Role

Step 1: Enter Role Name

Step 2: Enter Role Label

Step 3: Reports to Role

Step 4: Save

Q:: Where can we create role ??

1. We can create on sandbox and deploy to production.

or

2. We can create them directly on production.

Users

1. These are the licensed end users ,who can login to applicaiton .

2. Once user is created we cannot delete him ,we can only de-activate him.

3. If you want to create a new user, we have to assign

1.License

2.Profile

3.Roles

4. Steps to create a new user

Setup

|---Adminster

|---Manager users

|---Users

|---New users

Step 1: Enter Required fields

FirstName, LastName, username, alias name,email

Step 2: Select the Role

Step 3: select the license

Step 4: select Profile

Step 5: Save

UseCase :

SNO	FirstName	UserName	License	Profile	Role
1.	satish	satish@batch0286.com	Salesforce	SystemAdmi	CEO//Yourn
2.	wilson	wilson@batch0286.com	salesforce	Manager Profile	Manager
3.	kavya	Kavya@batch0286.com	salesforce	Clerk Profile Clerk	Platform
4.	kiran	kiran@batch0286.com	salesforce	Field Executive	FieldExecutive
5.	divya	divya@batch0284.com	Salesforce	HR Profile	HRManager

Business Hours

1. These are the days and hours during which your support team is available.

2. We can set the business hours at two levels

a. Organization Level

b. Profile level

Organization Level :

1. Organization Level business hours restriction are applied to all the users in the organization.

2. All the users in the organization can login only during business hours .

3. Any user who logged in during the business hours can continue to work even after business hours , but he cannot create new session after business hours .

4. Navigation

Setup

|---Adminster

|---Company Profile

|---Business Hours

|---Edit

Lightning :

Setup

|---> Settings

|---> Company Settings

|---> Business Hours

|--->Edit

1. Enter the Name

2. Choose the timezone

3. Specify the business hours day wise in the week

5. Language Settings :

a. This will specify list of languages salesforce will support in translating them

b. There are two types of languages

1. End-User language

2. Platform-only Language.

c. End-User Language :

1. Salesforce will translate entire application into these language

2. Help and setup menu will not be translated.

d. Platform-Only Language :

1. Salesforce will not translate the application into this language.

2. This will provide the procedure to translate .

e. Navigation :

Classic :

Setup

|--->Adminster

|--->Company Profile

|---> Language setttings

Lightning :

Setup

|--->Settings

|--->Company Settings

|---> Language Settings

6. Fiscal year:

a. This will specify fiscal year of your organization

b. There are two types of fiscal years

1. Standard

2. Custom,

c. Standard :

1. if you specify start of the month ,then salesforce will manage the fiscal year.

2. It will break the year into four quaters based on 12 months format.

d. Custom Fiscal :

1. If you enable this ,you cannot disable.

2. If you dont want salesforce to manager fiscal year then enable this .

3. We have two options

a. 12 Months

b. 53 Weeks foramt

4.Usecase :

Set the Business hours for organization :

Time zone : IST 5:30 (Asia)

Monday : 8:00 AM to 6:00PM

TUESDAY : 24 Hours

Wen : 24 Hours

Thur : 10 AM to 10 PM

Fri : 24 Hours

Sat : 24 Hours

Sun : leave blank (Note : Blank indicates the holiday

5. Profile level Login Hours :

1. When we want to define different set of login hours for a group of users, We will define profile level login hours .

2. Setup

|---Adminster

|---Manage Users

|---Profiles

|---Profile Name

|---Login Hours

6. USECASE :

1. All the users with Clerk profile can login from 11:00AM to 3:00PM on MON
2. All the users with Manager profile can login from 2:00AM to 10:00PM on SAT

IP Address Restriction :

1. We can restrict the users from logging into their salesforce account based on IP Address

2. We can restrict user based on IP Address in two ways

a. Organization Level

b. Profile Level

➤ Organization Level :

a. If you want all the users of your organization to login only from given range of IP Address then we use organization Level restriction

b. Navigation

Setup

|---Adminster

|---Security Controllers

|---NetWork Access

|---Set the IPAddress

4. Profile Level :

a. If you want to set IP ranges for a group of users then we use profile level Login ranges .

b. Navigation

Setup

|---Manage Users

|---Profiles

|---Profile Name

|---Login IP Ranges

5. UseCase :

1. All the users with clerk profile can login only from IP Ranges

0.0.0.0 to 122.93.82.90

2. All the users with Manager profile can login from Any IP Address

0.0.0.0 to 255.255.255.255

Maximum Invalid Attempts:

1. This will specify how many invalid attempts that user can make before his account is locked out.

2. These can be defined in two levels

a. Organization Level

b. Profile Level

➤ Organization Level :

a. When we want to set maximum invalid attempts for all the users in the organization, we will use organization level restrictions using password policies

b. Navigation

Setup

|---Administer

|---Security Controllers

|---Password Policies

1. Choose the Maximum Invalid Attempts (3,5,10,No Limit)
2. Choose the Effective Lockout period.(15 MIN,30 MIN,60 MIN,ForEver)

➤ Profile Level :

a.If want to set maximum invalid attempts for specific group of users then we use Profile level restriction.

b.Navigation :

Setup

|---Adminster

|---Manage Users

|---Profile

|---Profile Name

|---Edit

1. Choose Maximim Invalid Attempts

2. Choose the lockout period

5. UseCase

a. All the users with Manager profile can only make three invalid attempts .
if more than three atempts are made account is lock for 15 MINS

b. All the users with Clerk profile can only make 10 invalid attempts .if more than ten attempts are made then account is locked for 30 MINS

6. If users can account is locked out due maximum no of invalid attempts then admin can reset the password or Unlock the user .

Freeze the user

1.When we freeze the user ,user will not be able to login to his account .

2.License given to user will still remains with the user.

De-Activate User :

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1. When we De-Activate the User ,User will not be able to login to his account .
 2. License given to the user will be released back to organization.

Login History :

Note : Admin can track the login issues related to the user from Login History.

Setup

|---Adminster

|---Manage Users

|----Login History

Q:: Which permission are required to Manage the users

1. Manage Roles: This permission is to create/edit/Delete roles
2. Manage Profiles & Permission set :This permission is to create/Edit/Delete profiles
3. Manage Password Policies :This permission is to change the password policies
4. Manage Login Access Policies: This permission is to controll who can login
5. Manage IP Addresses : This permission is to create /Edit/Delete IP restrictions
6. ResetPasword and unlock users.: This permission is unlock the user or reset the password
7. Manage Internal Users : This permission is used to create/Edit/Delete internal user
8. Manage users : Both internal and external users
- 9.Manage Business Hours Holidays : Users with permission can create /edit business hours or Holidays

Password Policies:

1. This will specify the rules of your password like
 - a. Minimum Length of password
 - b. Password format
 - c. Security Question to reset you password
 - d. How many old password's should be remembered .
i.e your new password cannot be your last three passwords
 - e. Password expiry time.

2. Navigation :For organization

Setup

|---Adminster

|---Security Controllers

|---Password Policies

3. Profile Level :

Setup

|---Adminster

|---Manage users

|---Profiles

|---Profile Name

|---Edit

|---Password Policies

Permission sets :

1. Permission sets are used to grant extra permissions to specific user ,apart from what he is able to access using his profile
2. Permission sets are created for specific license
3. Steps to create permission set

Setup

|---Adminster→|---Manage users →|---Permission Setup →---new

Step 1: Enter Permission set name

Step 2: Choose the license

Step 3: Choose the permissions

Step 4: Save .

4. sssHow to assign the permission set to the user ..

Setup

|---Adminster

|---Manage users

|----Users

|---user Name

Step 1: Select Assing Permission set

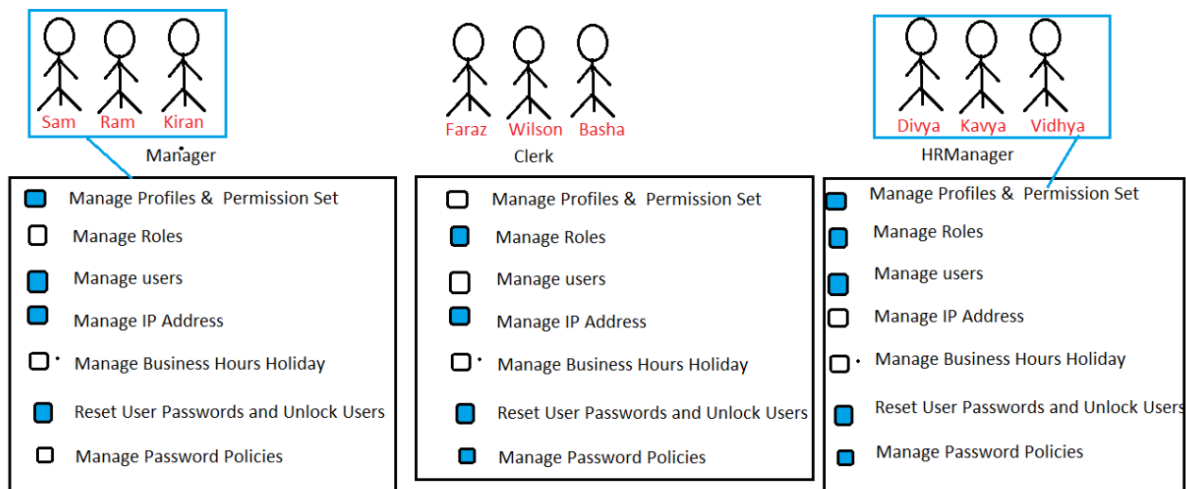
step 2 :Click on Edit

Step 3: Assign the permission set

Step 4: Save

	Manage Profile	Clerk Profile	HRManager
1. Manage Internal Users	No	No	Yes
2. Manager Role	Yes	No	Yes
3. Manage profile	Yes	No	Yes
4. Customze Application	Yes	Yes	No
5. IP Address Restriction	No	Yes	No
6. Business Hours Restriction	No	No	No
7. Reset Password	Yes	Yes	Yes

Manager Profile	Clerk Profile	HRManager Profile	System Admin
Sam	Faraz	Divya	Satish
Ram	Wilson	Kavya	



Object :

1. Objects are nothing but tables in the regular database .
2. Any data stored in the salesforce will be saved to objects.
3. There are two types of objects
 - a. Standard Objects .
 - b. Custom Objects

a. Standard Objects :

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

b. 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
Ex : Customer__c , Loan__c , Payment__c .

→ Steps to create Custom Objects

a. Navigation

Setup

|---Build

|---Create

|---Objects

|---New Custom Objects

Step 1 : Enter Object Label

Example : Customer

Note : Objects are displayed on the User Interface with object Label

Step 2: Enter Pural Label

Example : Customers

Note : If we create a tab for this object ,Name that should be displayed on the tab is called pural Label

Step 3: Enter Object Name

Example : Customer

Note : If you want to refer to object Programatically we use object Name.

Step 4: Context sensitive help

1. On Every object salesforce provides helpforthispage 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 & Training window.

If this option is selected salesforce standard document will be opened

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 default on every custom object creates one standard field with name " Name"
- b. With what label this field should be displayed ,that name we define as Record Name Label
- c. This is a required field
- d. This will accept the datatypes of Text and AutoNumber.
- e. If we choose the data type as Text ,This will alphanumeric data .
- f. If we choose the data Type as Autonumber, Then system will generate the data in the format what we have specified .

Ex :

Format : INVNO{0000}

Start : 0

INVNO0001

INVNO0002

INVNO0003

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 the data which is available in the object.

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.

Note : 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 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

|---Schema Builder

|---Elements

|---Drag and drop object icon.

3. Enter the details .

Q:: Who can create new Objects in the Salesforce ??

A:: users whose profile has Customize Application option enabled .

Q:: How to control the permissions on the Object .

A:: Object Level permissions are controlled at Profile Level.

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

A:: Three ways

1. Standard Navigation
2. Schema Builder
3. Metadata SOAP API webservice

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.

Account -- 001

Contct -- 003
 User -- 005
 Opportunity -- 006
 Profile -- 00e
 Lead -- 00Q
 Order -- 801
 Case -- 500
 Solution -- 501
 Loan__c -- a01

Usecase1: Create Custom Objects .

a.Object :Customer

Record name Label : CustomerNo
 Name Field : AutoNumber
 Format : CID-{000}
 Start : 1

Profile :

Name	Read	Create	Edit	Delete
------	------	--------	------	--------

Manager	Yes	Yes	Yes	No
Clerk	Yes	Yes	No	No
Field Executive	Yes	No	No	No

b.Object :Invoice

Record name Label : InvoiceNo
 DataType : AutoNumber
 Format : INV{mm}{000}
 Start : 1

Profile :

Name	Read	Create	Edit	Delete
------	------	--------	------	--------

Manager	Yes	Yes	Yes	Yes
Clerk	Yes	Yes	Yes	No
Field Executive	Yes	Yes	No	No

c.Object :Loan

RecordLabel : LoanNo

DataType : AutoNumber

Foramt : LIDP-{00}

Start : 51

Profile :

Name	Read	Create	Edit	Delete
------	------	--------	------	--------

Manager	Yes	Yes	Yes	No
Clerk	Yes	Yes	No	No
Field Executive	Yes	No	No	No

Note : Every object we create in salesforce will have three character unique id. Based on Id salesforce recognize the object.

Example :

Object Name	Unique Id
-------------	-----------

Account	001
Contact	003
User	005

Campaign 701
Lead 00Q

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Tabs :
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1. Tabs are interface between user and the application.
2. There are four types of tabs
 1. Custom Object Tab
 2. Visualforce Tab
 3. Web Tab
 4. Lightning Page Tab

→**Custom Object Tab :**

a. When we click on the tab corresponding object will be opened, where we can perform Read|Edit|Delete|Create operations.

b. Steps to create a Custom object Tab ;

Setup

|---Build

|---Create

|---Tabs

|---New Custom Object Tab

1. Select object
2. Choose the tab style
3. Choose the Visibility of tab to the Profile
4. Add the tabs to the application .
5. Save

Note :

Default On : Tab is visible to all the users with given profile and tab is added on Tab panel

Default off : Tab is visible to all the users with given profile ,Tab is not added to Tab panel.

Tab Hidden : Tab is not visible to all the users with given profile .

→Web Tab :

When we click on the web tab corresponding webpage will open.

→Visualforce Tab:

When we click on the Visualforce tab corresponding Visualforce page will open.

→Lightning page Tab :

When we click on the tab corresponding lightning Application page will open.

Q:: Which user can create a new Tab ?

ANS :Users whose profile has Customize Application permission enabled can create a tab .

Q:: What are the default permissions that are enabled when we add tab to the application?

ANS :

1. Global Search
2. Create new Shortcut
3. Recent Items

Use Case :

1. Create a Tab for Customer Object.
2. Create a Tab for Payment Object.
3. Create a Tab for Loan object.
4. Create a custom object 'Purchases' and create a tab for it which should be visible for only Admin,Manager ,clerk profiles .

Q:: How many tabs can be created on one object

ANS : one Tab

Q:: One Tab can be added in How many applications

ANS : Multiple Applications

=====

Fields :

=====

1.Fields are nothing but the columns in the regular database.

2.There are three types of fields.

a.System Fields.

b.Standard Fields.

c.Custom Fields

→ System Fields :

a.There are the fields which are created by salesforce and updated by salesforce .

b. There are 7 System Fields

1. ID :

a.Salesforce by default creates 18 Character unique Id for every record.

b. Records are in the salesforce are recognized uniquely based on 18 character unique id.

c.First Three characters of Id will represent object.

d.Last Four characters of Id will represent record .

e.18 Character Id is can also be represented using 15 characters ,but it will be case -sensitive

2.isDeleted :

a. When ever we delete any record ,value of isDeleted field is set as True.

b. When we delete any record it will move to recycle bin and stay there for 15 days.

c. After 15 days records are permently deleted .

3. CreatedById

a. This filed will store the 18 character Id of the user who created this record .

4.LastModifiedById

a. This field will store the 18 character Id of the user who lastly modified this record

5.CreatedDate :

a. This field will store date and time when the record was created .

6.LastModifiedDate :

- a. This field will store date and time when the record was lastly modified manually.

7.SystemModStamp

- a. This field will store date and time when the record was lastly modified manually or programmatically

4. Which fields we call as System Audit Fields ?

- a.CreatedById
- b.LastModifiedById
- c.CreatedDate
- d.LastModifiedDate
- e.SystemModStamp

→ Standard Fields :

- a. These fields are created by salesforce but can be updated by user.
- b. Salesforce has created many standard fields on standard object.
- c. Salesforce on every custom object created only four standard fields

- 1. CreatedBy
- 2. LastModifiedBy
- 3. Name
- 4. Owner

d. Properties of standard Fields :

Name	FieldLabel	DataType	Help	Modifications
Name	Any Thing	AutoNumber	Standard	Label Help
Text	Custom	Owner		
Owner	Lookup	(user,Standard Help queue)	Custom	
CreatedBy	CreatedBy	Lookup(User)	Standard	NO
LastModifiedBy	LastModifiedBy	Lookup(User)	Standard	NO

C:Q::which of the standard fields can be modified ?

ANS : Help / Label Name

→ Custom Fields :

a. These are the fields which are created by the user to meet his organizational business requirement.

b. Salesforce has defined predefined datatypes to create the custom fields

1. Text:

Format : Alphanumeric
MaxLength : 255 Characters
Single|Multiple : Single Line

2. TextArea:

Format : Alphanumeric
MaxLength : 255 Characters
Single|Multiple : Multiple Line

3. TextArea(Long) :

Format : Alphanumeric
MaxLength : 1,31,072 Characters
Default : 32,768 characters
Minimum Length : 256 Characters
Single|Multiple : Multiple

4. TextArea(Rich) :

Format : Formatted Data
Max Length : 1,31,072 characters
Default Length : 32,768 Characters
Minimum Lines : 10 Lines

5: Phone :

This data type is used to store the phone numbers

6. CheckBox :

This data types will store the value of true or false

7. Currency :

Currency values are stored in this fields .

Max Length : (Length of Integer +Length of Decimal)
should be at max 18 characters

Ex : 32000.20 (5+2= 7)

8.Date :

This field will store a particular in the calendar .

9.DateTime :

This field will store the particular day and time from the calendar .

10. Number :

These fields are used to store numerical values

Max Length : 18 characters(Length of Integer+length of Decimal)

11. Percent :

These fields are used to store the percentage value ,by default '%' symbol is appended to the data .

Max Length : 18 characters(Length of Integer+length of Decimal)

12. Email :

These field will store the email id's ,

Note : Salesforce has defined validation rules to check the format of the email address.

13. PickList :

- a. It is a dropdown list from which we can select one option at a time.
- b. Maximum we can provide 1000 options .
- c. Length of each option can be 255 characters
- d. All the options together can be 15000 characters.
- e. We can sort options in the ascending order.
- f. We can make the first option as default option by enabling the field.
- g. We can add /remove/edit /reorder the options based on business requirement.

14. PickList(Multi-Select) :

- a. It is also a picklist field but we can select more than one option at a time .
- b. We can at max provide 150 options .
- c .Maximum we select 100 options .

- d. Length of each option can be at max 40 characters
- e. All the options together can be 1500 characters.

15 .Text Encrypted :

a. When we want to save the data in the encrypted format ,we use data Type TextEncrypted

- b. Maximum length of the field is 175 characters .
- c. By default no one can access the data in the original format ,
- d. If you want to see the data in the original format ,users profile should have view encrypted data permission enabled
- e. Text encrypted fields can not be used in formulas
- f. Encrypted fields can not be used in search Criteria or filterConditon
- g. Encrypted fields can be used in validations ,search results, report results.

Q:: In How many ways we can create Custom Fields

Ans : Three ways

a. Standard Navigation :

Setup

|---Build

|---Create

|---Object

|---Object Name

|---Custom Fields &Relations

|----New

Step 1: Choose the dataType

Step 2: Enter field Details Like (Label,Name,Required, Unique)

Step 3: Choose the Field Level security

Step 4: Add the field to the default Layout .

b. Schema Builder

Setup

|---Build

|---Develop

|---Schema Builder

|----Select Object

|---Select Element

|----Select DataType and drop on the object.

c. Force.com ShortCut Menu.

Step 1: Click on the Tab

Step 2: Select Force.com Menu

Step 3: Choose view fields

Step 4: Select Custom Fields & Relations

Step 5: Select new and create the fields.

17. Field Dependency :

1.If you want to controll the values of one field by using another field then we use field dependency.

2.Controlling Field :

a.we can choose the any of PickList Field and Checkbox field as controlling field.

b. If we choose any picklist field as controlling field ,then picklist field can have only 300 options in it

3.Dependent Field :

We can choose PickList /MultiSelect PickList field as Dependent field.

4. can create multilevel dependency.

5.Steps to create fiel dependency

Setup

|---Build

|---Create

|---Object

|---Object Name

|----Custom Fields&Relations

|---Field Dependency

|---New

Step 1: Select the Controlling Field

Step 2: Choose the Dependent field

Step 3: Include and Exclude the dependent options for the Controlling Field.

Step 4: Save

UseCase : Create a Custom Object Customer

: Create Two Custom Fields

Field Name	DataType	Options
City	PickList	Hyd,Ban,Che
Places	PickList	SRNagar,LBNagar Chromepet, Tambaram ECity,Marthali

Create a field dependency.

=====
Relations :
=====

1. Relations are used to establish connection between two or more objects.
2. Salesforce provides different types of relations
 1. Master-Detail Relations
 2. Lookup Relation
 3. Many -Many Relation (Junction object)
 4. Hirerarchial Relations
 5. External Lookup Relations

→ Master-Detail Relations:

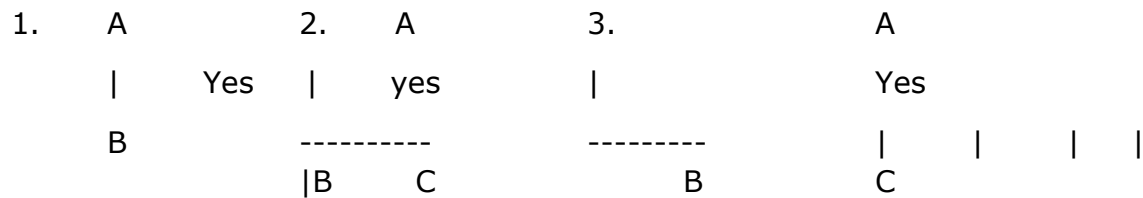
1. It is one to many relationship between two objects.
2. Master-Detail field can be created only on Custom objects.
3. Master-Detail field can be created only on those custom objects on which their are no records in it.
4. Master-Detail field is a required field.

5. In one to Many relation ship on many side of the realtion Object, Master-Detail field is created.
6. Object on which Master-Detail Field is creted that object we call it as child object /Detail Object/ Related Object.
7. In one to Many relation of Master-Detail ,Object whose data is reffered by Master-Detail field is called as Master object /Parent Object.
8. Which ever the record that master-detail field is reffering,That Master-Record record Id is stored in the Master-Detail field.
9. If the master record is deleted ,corresponding child records are also deleted. but deleted child record will not move to recylebin.
- 10.If we undelete the master record corresponding child records are also undeleted.
- 11.Object in which Master-Detail field is created , That object will not have any owner field in it.
12. Who ever is the owner of the master record ,he will be the owner of corresponding child records.
- 13.Sharing Setting This will specify the minimum access level required on the Master record to create, edit, or delete related Child records
 - a. Read Only:

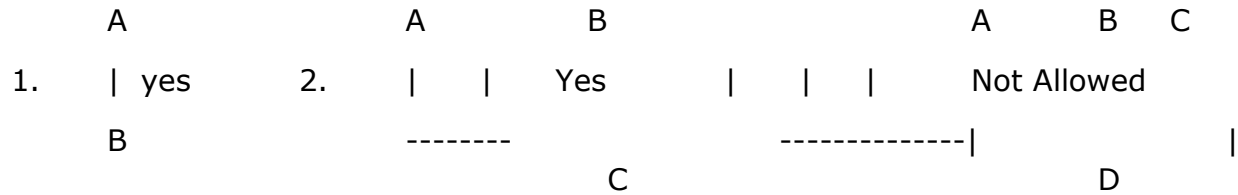
If you choose this option,Allows users who has atleast Read access to the Master record can perform create, edit, or delete operations on corresponding child records.
 - b.Read/Write:

If you choose this option,Allows users who has atleast Read|Write access to the Master record can perform create, edit, or delete operations on corresponding child records.
14. Allow Reparenting : If this option is enabled ,Child can change it's master record after creation of child record.

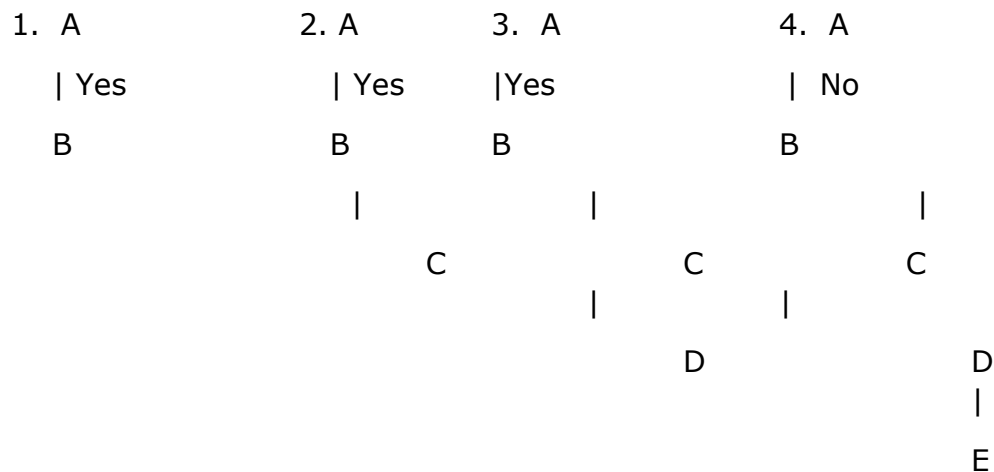
15. An object can be a Master to any no of objects .



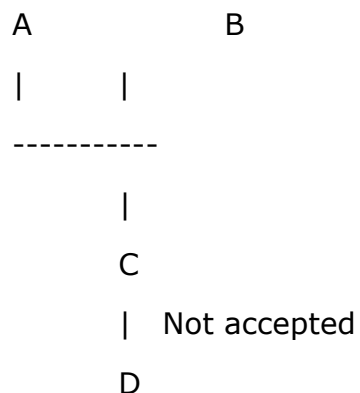
16. On an object we can create only two master -detail fields.



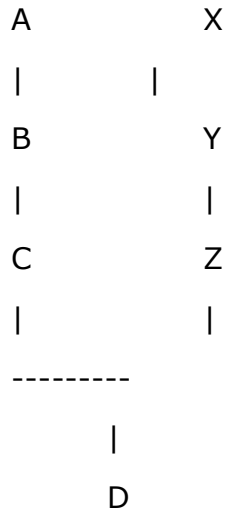
17. Child object can be parent to any other objects upto three levels



18.if an object has two parents on it ,it can not be parent to any other objet.



19.Maximum structure what we can form using master-Detail



4. Junction Object :

1. Junction object is a custom object .
2. Junction object has two master -detail fields on it .
3. Junction object maintains Many to Many relation.
4. First Master -Detail field created on the junction object is called primary master .
5. Second Master-Detail field created on the Junction object is called secondary master.
6. Look and feel and ownership is inherited from primary master .
7. If you delete any master record ,corresponding child records are deleted .
8. If any master record has more than 200 child records in the junction object, then we cannot delete that master record .

UseCase :

1. Create two Custom Objects

a. Course

SNO	Field Label	Field Name	DataType	Options
1	Coure Name	Name	Text	-
2.	Fee	Fee	Currency	-
3.	Status	Status	PickList	Active,Inactive

b. Branch

SNO	Field Label	Field Name	DataType	Options
1	Branch Name	Name	Text	-
2.	Phone	Phone	Phone	-
3.	Email	Email	Email	-

2. Create a Custom Object student using Schema Builder

SNO	Field Label	Field Name	DataType	Options
1.	StudentId	Name	AutoNumber	-
2.	FirstName	FirstName	Text	-
3.	LastName	LastName	Text	-
4.	Phone	Phone	Phone	-
5.	Email	Email	Email	-
6.	Course	Course	Master-Detail(Course)	
7.	Branch	Branch	Master-Detail(Branch)	

3. Goto Student Detail page and add the fields to the pagelayout.

4. Create new Application CapitalInfo

5. Create new Custom object tabs for Course ,Branch ,Student and them to CapitalInfo application.

→**Lookup Relation :**

1. It is one-to-Many Relation .
2. It can be created on both standard and custom object.
3. It can be created on both objects which contains data or which doesnt contain data.
4. If you delete master record,corresponding child records will not be eleted.
5. Owner of parent record and child record can be same or different.
6. We can create 40 lookup fields on a object .
7. It is an optional field.

8. We can create self lookup on a object.

9. Dont Allow deletion of Lookup Record which is a part of Lookup relation. if you enable this option parent record which has child using lookup cannot be deleted.

→ **Hierarchichal Relation :**

1. This can be created only on user object.
2. It is one-to-one relation ,
3. This is used to create a relation between user to user .
4. Steps to create Hirerarchiacal relation .

Setup

```
|---Build
    |---Customize
        |----User
            |---Fields
                |---Custom Fields &Relations
                    |----new
```

Step 1: Choose datatype as hiererarchical relation

Step 2: Enter field Name and details

Step 3: Add field level security

Step 4: Add the to the pageLayout.

Work around Process :Steps to create Master-Detail on Custom Object which contains the data

Step 1 : Create Lookup field choosing master object as parent .

Step 2: Goto every record existing the child object and assign some value in the Lookup field

Step 3: Change the data type from lookup to master-detail

Setup

```
|--Build
    |---Create
        |---Object
            |--Object Name
```

|---Fields

|--Choose the lookupfield

Step 1: Choose the Lookup field and click on edit

Step 2: Change Type

Step 3 :Choose Master-Detail

Step 4: Save

- | | |
|---|---------|
| 1. Standard object as master and Standard Object as child | : false |
| 2. Standard object as Master and custom object as child | : true |
| 3. Custom Object as Master and Standard object as child | : false |
| 4. Custom Object as Master and Custom Object as Child | : true |

Rollup-Summary :

1.Rollup summary fields can be created only on master object in master-detail relation.

2.Rollup summary is used for applying aggregate functions on corresponding child records

3.Count() : This will return count of no of child records which participating in the rollup operation.

4.sum(Number/Currency/ Percent) : This is used to make the summarized value of given child records participating in the rollup

5.Max(Number/Currency/Percent/Date/DateTime):

This is used to return the maximum value from the corresponding the child records participating in the rollup operation.

6.MIN(Number/Currency/Percent/Data/DateTime) ;

This will return the minimumvalue from the corresponding child record which are participating the rollup operation

7.We can create the filter condition to specify which child records should participate in the rollup operation.

a. allow all the child records :if we choose this all the child records of the master record will participate in the relation.

b. Allow only those child records which are meeting the filter condition.

if we choose this ,only those child records which are meeting the filter condition can participate in the relation.

8.We can create 25 rollup summary fields on a object .

UseCase :

1.Create Custom objects :

1. Object Course :

Fields :	Field Name	Field Label	DataType
	Name	Name	Text
	StartDate	startDate	Date

2. Student :

Fields :	Field Name	Field Label	DataType	Options
	FirstName	FirstName	Text	-
	LastName	LastName	Text	
	Amount	Amount	Currency	
	Mode	Mode	PickList	OnlineCash
	Course	Course	Master-Detail(Course)	

3. Create a rollup summary field on course object

Field Name : BatchSize

Child Object : Student

RollUpd :Count()

Records : All Records

4. Create a rollup summary field on Course object

Field Name : Total Amount

Child Object : Student

Rollup : Sum(Amount)

Records : All Records

5. Create a rollup summary field on Course object

Field Name : Total online Payments

Child Object: Student

Rollup : Sum(Amount)

Records : only those student records whose mode of payment is online .

6. Create a rollup summary field on Course object

Field Name : Total Cash Payments

Child Object: Students

Rollup : Sum(Amount)

Records : only those Student records whose mode of payment is cash

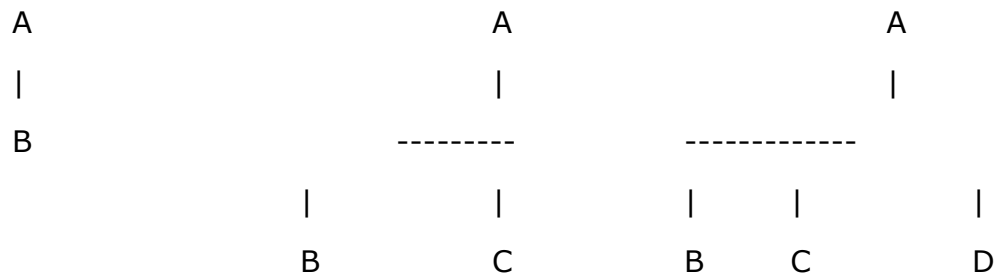
Master-Detail :

1. Master-Detail is one-to-Many Relations
2. Master-Detail field can be created only Custom Object
3. Master-Detail field can be created only on those custom object in which there are no records available.
4. It is a required field.
5. Master-Detail field will store 18 character unique id of the master record.
6. Object in which we have created master-detail field that object is called Detail object
7. Object to whose data master-detail field is referring ,that object is called master object
8. Object in which we have created master-detail field ,that object will not owner field.
9. Who ever is the owner of the master record he will be the owner of the corresponding child record.
10. When ever maser recrod is deleted corresponding child records will be deleted.

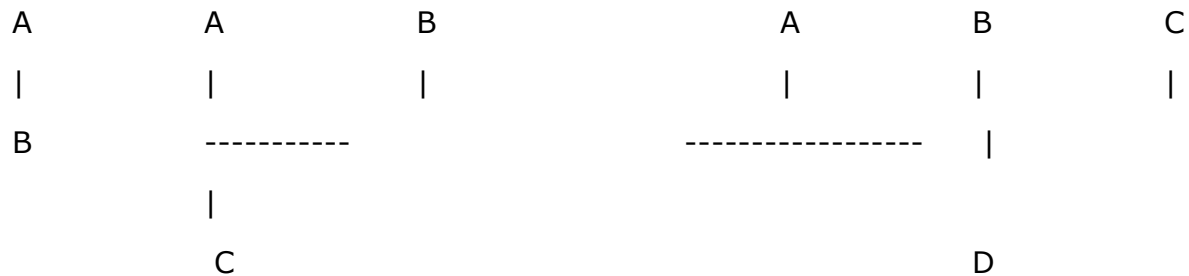
11. When ever master record is undeleted corresponding child records are also undeleted.

12. We can create only two master -detail fields on a object .

13. Can a object be a master to more than one object : yes



14. Can we have more than two master -detail fields on a object :No

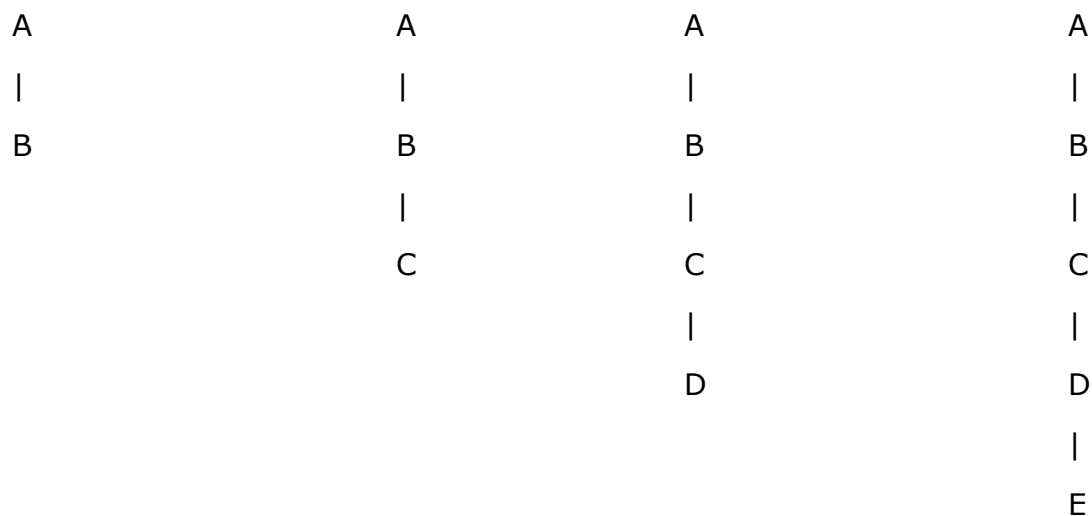


Accepted: yes

Accepted : yes

Accepted : No

15. Can a child object be parent to any other object . :Yes upto three level



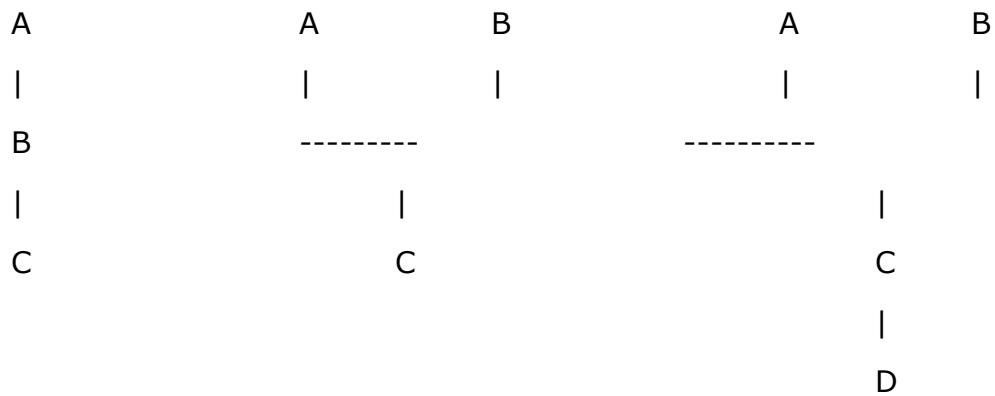
Accepted :yes

Accepted :yes

Accepted :yes

Accepted :No

16. Can a junction object be a parent to any other object.

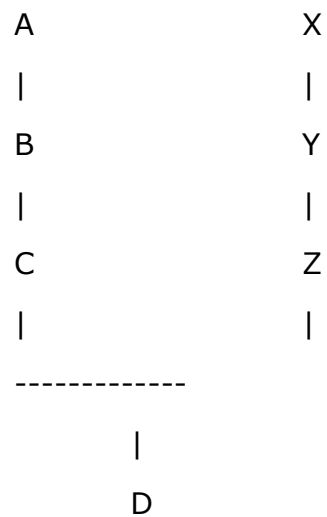


Accepted :yes

Accpeted :yes

Accepted :No : Any object which has two master's on it ,cannot be parent to any other object

17. What is the maximum structure we can form



Documents :

1. Document is a standard object created by the salesforce.
2. We use Document object to store Sensitive information (Files /Images /Docs).
3. Any user whoes profile has read access on the Document object can access the document.
4. Documents are classified as internal |Externaly available Image
5. Internal Document :
 - a. These documents can be accessed or shared with only internal users.
 - b. Content of the document is not visable directly.
6. Externally Available Image .
 - a. These documents can be shared with internal users and external users .
 - b. Content of this document is visable directly.
7. Maximum size of the document that we can upload at a time is 5MB.
8. If we want use the document as logo for your application then document size should be more than 3KB and less than 20KB.
9. All the Documents are stored in a Folder .Users who have access to this folder can view the documents .
- 10.Steps to create a new Document .

Navigation :

TabPanel

|---Click on '+' sign

|---Documents

|---New Document

Step 1: Enter Document Name :

Example : ICICILogo

Step 2: Enter Unique Name :

Example : ICICILogo

Step 3: Choose the document Type as Internal |External :

Example : External

Step 4: Choose the document .

Step 5: Save.

11. Steps to create Document Folder .

Navigation :

Setup

|---TabPanel

|----Click on '+' sign

|---Document

|---Create Document Folder

1. Enter Folder Name : Capital Info
2. Enter Visibility : Read | Readwrite
3. Choose the list of users to whom the folder should be visible .

UseCase :

1. Create New Folder MyLogoes
2. Upload the logoes of Hyndai and ICICI Bank
3. Enable them as externally available images .

Note : Ensure than size is more than 3KB Less than 20KB

Apps :

- 1.Application is a collection of tabs .
- 2.There are two types of applications
 - a. Standard Application
 - b. Custom Applicaiton

3.Standard Application :

- a. Applications which are created by the salesforce are called standard aplicaitons.

Example :

Sales

CallCenter

Marketing

- b. Standard applications cannot be deleted .
- c. Standard Applications can be customized .

4.Custom Application :

a.These are the applications which are created by the User to meet his organizational business requirement.

b.Steps to Custom Application

Navigation :

Setup

|---Build

|---Create

|---Apps

|---New Custom App

Step 1: Choose the Application Types as (Console|Custom) :

Example : Custom App

Step 2: Enter the App Details

a. Enter App Label :

Example : ICICI Creditcard

Note :Applications will be displayed on the UI with App Label

b. Enter App Name :

Example :ICICI_CreditCard

Note : Applications will be reffred in the programming using AppName.

Step 3: Choose the Logo for the Application

a.Minimum size of Logo : 3KB

b.Maximum size of Logo : 20 KB

c.Width and height : 300 px and 55 px

Step 4: Choose the Tabs and default Landing tab for Application.

a. Choose all the tabs which you want to display in the application.

b. Choose the default Landing tab

Note : Tab whose data we want to display on the first page of the Application that tab we choose as default landing tab.

Step 5: Choose the list of profile for whom you want to display this application

a.visible : If we enable Visible for a profile ,All users with this profile can access this application .

b.visible and Default :

a.If we enable Visible and Default,All Users with this profile when they login for the first time into salesforce account,default application will be opened .

b.we cant hide default applicaiton from profile.

Q :: How many Custom applications we can create in salesforce?

ANS : It Depends on the type of edition they have purchased.

Unlimited Edition : Unlimited Apps

Enterprise Edition : 10 APPS

Developer Edition : 10 APPS

Professional : 5 APPS

UseCase :

1. Create New Application ICICI CreditCards .

App Label : CreditCards

App Name : ICICI_CreditCard

Logo : Upload ICICI Logo as Externaly available image in Documents and use as logo

Tabs : Home ,Account, Contact

Default Landing : Home

Profiles : System Admin, Manager ,HRManager, Field Executive ,FieldManager

2. Create new Application Nissan with Home,Reports ,Dashborads tab

3. For System Admin Profile only Sales /ICICI Creditcard /Nissan Application should be visible

4. Manager Profile : ICICI creditcard/ Nissan

5. Clerk Profile : ICICI Credircard

6. Field Executive Profile : ICICI Creditcard

Formule Fields :

1. Formule is one of the data type of the field.
2. Formules in the salesforce are of two types

1. Simple formule
2. Advanced Formule

→ Simple Formule :

a. Value of this field is calculated using simple logic by using primitive operators like +,-,(,),...

b. Only Data of the record which is compatable with return type of the formule is saved.

→Advanced Formules :

a. Values of this fields are calculated using complexed logics .

b. To support complexed calculations, salesforce has provided some pre-defined functions .

c. To calcualte the value we use the data from the record and its corresponding parent and master record data.

5. Every formule in the salesforce provides result in the form

- a. Checkbox
- b. Currency
- c. Date
- d. DateTime
- e. Number
- f. Text
- g .Percent

6. Steps to create the formule .

Setup

|---Build

|---Create

|---Object

|---Custom Fields &Relations |---new

step 1: Choose the data type as formule

Step 2: Enter the field details and select the return type .

Step 3: Create the formule

Step 4: Give the field level security

Step 5 :Add the field to the layouts.

7.Global Data :

a. Data which remains constant through out the application is called global data

b. All global objects are prefixed with '\$' sign

Example :

\$Organization

\$User

\$UserRole

\$System

\$Api

Formules :

1. ISNULL(field): This will return true if the given field value is null.

Ex : ISNULL(Amount) :

ISNULL(Salary__c)

Note : It is used for numerical fields only.

2. ISBLANK(Field) : This will return true if the value of the field is blank

Note :It can be used for both numerical fields and text fields.

Ex: ISBLANK(PanCard__c)

ISBLANK(Email)

3. IF(Condition ,Stmt1 ,stmt2) :

If the given condition is true ,Stmt1 will be executed .

If the given condition is false ,stmt2 will be executed.

Ex : IF(Amount__c > 10000,'Selected' , 'Not Selected')

UseCase :

Object : Lead

Field Name : Lead Score

Return Tyoe : Number

Condition : FieldName Blank/Null NotBlank /Not Null

Phone	0	10
Email	0	10
FirstName	0	10

AnnualRevenue == 0 greater than zero then give 20 then give 0

Formule : IF(ISBLANK(Phone) ,0 ,10) +
IF(ISBLANK(Email), 0, 10) +
IF(ISBLANK(FirstName),0,10) +
IF(AnnualRevenue > 0 , 20 ,0)

4. CASE : If we have more than two choices we use case.

CASE(Expression ,
value1, res1,
value2, res2,
value3, res3 ,res4)

UseCase : 2

Object : Loan

Fields : Loan_Type__c : PickList (Eduction ,Housing ,Personal)

Formule Field : Instalments

Return Type : Number

Formule : Loan Type Instalments

None	0
Education	48
Personal	32

Housing

200

```
CASE( Loan_Type__c ,  
      'Education', 48,  
      'Personal',   32,  
      'Housing',   200,  
      0)
```

UseCase : 3

Object : Loan

Fields : Loan_Type__c : Picklist Education,Housing,Personal)

Formule Field : IntrestRate

Condition : Value IntrestRate

Education	10%
Housing	12%
Personal	14%
None	0 %

Return Type : Percent

```
CASE ( Loan_Type__c ,  
      'Education', 0.10 ,  
      'Housing',   0.12,  
      'Personal', 0.14,  
      0  
      )
```

5. IMAGE(URL,ErrorMessage) : This will print the image ,if the url is not working then it throws error message.

Note : if you want print image using formules we have to take return type of the formule as Text.

UseCase : 4

Object : Lead

Field Name : Lead Score : Formule field

Formule Field : Lead Rating :

Return Type : Text

Condition : LeadScore Rating

50	5 star
40	4 Star
30	3 Star
20	2 star
10	1 star
0	0 star

IMAGE (

```
CASE(LeadScore__c ,  
50,'img/samples/stars_500.gif',  
40, 'img/samples/stars_400.gif',  
30,  'img/samples/stars_300.gif',  
20, 'img/samples/stars_200.gif',  
10, 'img/samples/stars_100.gif',  
'img/samples/stars_000.gif'  
) ,  
'Image not Found'  
)
```

6. TODAY () : This will return today's date .

7. NOW() : This will give you current date and time .

8. DATE(YYYY,MM,DD) : This will return the instance of the date

DATE(2010,10,23)

DATE(2018,2,23)

9.DAY(Date) : This will return you the day in the month .

DAY(TODAY()) : 8

DAY(Date(2017,2,23)) : 23

10.MONTH(Date) :This will return the month in the date

MONTH(TODAY()) : 06

MONTH(DATE(2017,2,23)) :2

11.YEAR(Date) : This will return the year in the given date .

YEAR(TODAY()) : 2017

12.DATEVALUE(expression) :This will return the date in the expression

DATEVALUE(NOW()): TODAY

USECASE : 5

Object :

Object : Account

Formule Field : No of Days :

Condition : Calculate how many days back record was last modified.

LastModifiedDate : DateTime

TODAY() - DATEVALUE>LastModifiedDate)

UseCase : 6

Object : Contact

Formule Field : AnnualRevenue

Condition : On Every Contact record Corresponding Account
AnnualRevenue should be displayed.

Return Type : Currency

Formule : Account.AnnualRevenue

13. ISPICKVAL(PickListField ,Literal) :It will return true ,if the option selected in the picklist field is equal to the literal what we have given

Ex : ISPICKVAL(City__c, 'Hyd') : it will return true if the option what we have selected in the picklist field is Hyd

UseCase : 7

Object : Loan__c

Field : Security__c : PickList(Salary,Asserts)

: AssertCost : Currency

: Salary : Currency

Formule Field : MaxLimit

Return Value : Currency

Formule :If Security is Salary then 32 times of 40% of salary is max limit

: If Security is Asserts then 60% of Assert is the max limit.

IF(ISPICVAL(Security__c, 'Salary') ,

Salary__c*0.40*32 ,

IF (ISPICKVAL(Security__c,'Asserts'),

0.60*Assert_Cost__c ,

0))

Validations :

1. These are used to verify weather the data what we provided is compatable with your business requirement or not .
2. These rules are verified when a new record is inserted or When existing record is modified.
3. Validation rules are classifeid into two types .
 - a. Standard Validation rules .
 - b. Custom Validation rules .
4. Standard Validation Rules :

These rules are created by salesforce.

Ex : Data what we provided is compatable with Data type or not

Ex : All the required fields are entered or not .

5. Custom Validation Rules :

These rules are created by the user based on business requirement.

Ex : Age should not be less than 20

Ex : Close Date cannot be less than today

UseCase : 1

Object : Lead

Field : Lead Source : PickList (Email ,Web ,Other
: Email

Condition : If the lead Source is Email then Email Field cannot be blank .

AND(Cond1, Cond2,.....)

AND (

ISPICKVAL(LeadSource,'Email') ,

ISBLANK(Email)

)

UseCase : 2

Object : Account

Field : AnnualRevenue : Currency

Industry : PickList (Energy, Banking,Education)

Rule : AnnualRevenue cannot be less than 50K when Industry is
Energy

AND (

ISPICKVAL(Industry,'Energy') ,

AnnualRevenue < 50000

)

UseCase : 3

Object : Opportunity

Field : Amount

: StageName : PickList (Closed Won, Closed Lost)

Rules : If the stageName is closed won Amount cannot be less than or equal to zero

```
AND (
    ISPICKVAL(StageName,'Closed Won') ,
    ISNULL(Amount)
)
```

UseCase :4

Object : Loan

Field : Security : PickList(Asserts, Salary)
: Salary

Rule : If Security is Salary then Salary cannot be null.

```
AND (
    ISPICKVAL(Security__c, 'Salary'),
    ISNULL(Salary__c)
)
```

UseCase 5 :

Object : Loan

Field : Applied Date

Rule : Applied Date cannot be less than today when a new record is created .

ISNEW() : This will return true when a validation rule is fired due to new record.

```
AND(
    ISNEW() ,
    AppliedDate__c< TODAY()
)
```

UseCase 6 :

Object : Loan

elds : AssertCost

Rule : When ever AssertCost is modified new value should be more than old value

ISCHANGED(FieldName) : When ever a given field is modified it will return true .

PRIORVALUE(FieldName) : It will return old value of the given field.

Satish ---100000 :

Satish --120000 PRIORVALUE(Amount) : 100000 , Amount : 120000

AND(
ISCHANGED(Amount) ,
PRIORVALUE(Amount) > Amount
)

REGEXP(Text,Epression) :

[A-Z]---Any Alphabets Capital A to Capital Z

[a-z]---Any Alphabeets small A to small zero

[0-9] ---Digits 0-9

[A-Z]{5} --> Any text with alphabets A-Z with length 5

[0-9]{3} --> Any text with digits 0-9 maximum length of three characters

Usecase : 7

Object: Lead

Field : Company

Rule : Company Name should is not starting with Capital or length is less than 5 Characters

throw error message .

NOT(
REGEXP(Company,'[A-Z][A-Z,a-z]{4}')

)

UseCase : 8

Object : Account

Field : PanCard__c (Custom Text Field)

Rule : Pancard Number should be in the form of _ _ _ _ _ _ _ _ :

first Three character should be digit and Middle three characters should be alphabets last three character should be digits .

NOT(REGEXP(Pancard__c,'[0-9]{3}[A-Z,a-z]{3}[0-9]{3}'))

UseCase : 9

Object : Contact

Field : Phone__c

Rule : Phone number should start with 7,8,9 and length has to be 10 digits

DATE FUNCTIONS :

1. TODAY() : This will return Today's Date
2. NOW() : This will return Current date and time
3. DATE(YYYY,MM,DD) : This will refer to the instance of a date.

DATE(2017,10,23)

DATE(2016,2,26)

4. DAY(DATE) : This will return Day of the month

DAY(DATE(2017,2,23)) : 23

DAY(DATE(2015,10,28)) : 28

5. MONTH(DATE) : This will return month in the year

MONTH(DATE(2017,2,23)) : 2

MONTH(Date(2017,10,29)) : 10

6. YEAR(Date) : This will return Year in the Date

Note : Year Minimum 1900

YEAR(2017,10,23) : 2017

YEAR(2018,2,12) : 2018

7. DATEVALUE(Expression) : This will return date of the given expression

DATEVALUE(NOW()) : TODAY

Note : it will convert the date and time to date

UseCase :1

Object : Object

Field : Createddate

Formule : Age (Number)

Calculate the age of the record.

Solution :

TODAY()-DATEVALUE(createdDate)

=====

Formules

1. ISNULL(fieldName) :

- a. This will return true if the value of the field is null.
- b. This can be applied only on Numerical fields

Example :

ISNULL(salary__c) : true /false

2. ISBLANK(FieldName) :

- a. This will return true if the value of the field is blank .
- b. This can be applied on only text /numerical fields

Example :

ISBLANK(Name) : true/false

ISBLANK(City__c) : true/false

3. AND(cond1, cond2,.....) :

- a. If all the conditions are true ,it will return true .
- b. When we want to check more than one condition ,then we will use AND()

Example :

AND(City__c='Hyd' ,Salary__c > 50000)

4. OR(cond1,Cond2,.....)

- a. If any one of the condition is true ,then it will return true
 - b. When you want to check more than one condition ,then we will use OR
- OR(City__c='Hyd' ,Salary__c > 50000)

UseCase 1 :

Object : Lead

Field Name : Lead Score

Return Type : Number with zero decimals

UserStory :

Field Name	ISNULL/BLANK	NOT NULL/NOT BLANK

FirstName	0	10
Phone	0	10
Email	0	10
AnnualRevenue	0	10
900000 (91) 9999999		040-22222 +91
Mobile	0	10

5. **IF(condition , stmt1, stmt2)**

IF(ISBLANK(FirstName) , 0 ,10) +

IF(ISBLANK(Phone) , 0, 10) +

IF(ISBLANK(Email) ,0, 10) +

IF(ISBLANK(Mobile), 0, 10) +

IF(AnnualRevenue > 0 , 10 ,0)

6. IMAGE(url , defaultError) :

a. This will display the image whose url is provided .

b. If the url is not working then it throws default error message .

7. CASE(Expression ,

value1, result1,

value2, result2,

value3, result3,

result4

)

UseCase : 2

Object : Lead
Field Name : Lead Rating
UserStory :

Field Name	Score	URL

LeadScore	50	"/img/samples/stars_500.gif"
	40	"/img/samples/stars_400.gif"
	30	"/img/samples/stars_300.gif"
	20	"/img/samples/stars_200.gif"
	10	"/img/samples/stars_100.gif"
	0	"/img/samples/stars_500.gif"

IMAGE(

CASE (LeadScore__c ,

50 ,"/img/samples/stars_500.gif",

40, "/img/samples/stars_400.gif" ,

30, "/img/samples/stars_300.gif",

20, "/img/samples/stars_200.gif",

10, "/img/samples/stars_100.gif",

"/img/samples/stars_000.gif"

),

'Error'

)

8. HYPERLINK(url ,linkname)

This will create a link with give name .

When we click on the link, corresponding url will open .

HYPERLINK('https://www.google.com/'&firstname,'Google')

This will open :https://www.google.com/satish

HYPERLINK('https://www.yahoo.com?lastname='&lastname,'Google')

9. TODAY() :

This will return today's date

10. NOW() :

This will return Current date and time

11. DATE(YYYY,MM,DD) :

This will create instance of a particular date

DATE(2017,9,10)

12. DAY(Date) :

This will return day in the month .

DAY(DATE(2017,9,10)) : 10

DAY(TODAY()) : 11

13. MONTH(Date) :

This will return month in the date .

MONTH(TODAY()) : 09

MONTH(DATE(2017,10,23)) :10

14. YEAR(DATE) :

This will return year in the date .

YEAR(TODAY()) : 2017

15. DATEVALUE(Expression) :

This will return date value of given dateTime

DATEVALUE(NOW()) : TODAY

1. ISNULL(FieldName) :

a. If the value of the field is null then it will return true .

b. If the value of the field is not null then it will return false.

c. It will work for only numerical fields.

Example 1: Check whether salary is null or not

ISNULL(Salary__c)

Example 2: Check whether amount is null or not

ISNULL(Amount)

2. ISBLANK(FieldName) :

- a. If the value of the field is Blank then it will return true .
- b. If the value of the field is not Blank then it will return false ;
- c. It will work for text fields and numerical fields

Example 1: Check whether phone is blank or not

ISBLANK(Phone)

Example 2: Check whether email field is blank or not

ISBLANK(Email)

3. IF(condition ,stmt1, stmt2) :

- a. If the given condition is true ,then it will return stmt1
- b. If the given condition is false ,then it will return stmt2

Example 1: If the age is more than 30 years return Old other wise Young

IF(Age__c > 30 ,'Old','Young')

Example 2: If exp is more than 5 years then return selected otherwise not selected

IF(Exp__c > 5 ,'Selected','Not Selected')

UseCase 1 :

- 1. Object : Lead
- 2. Fields : FirstName ,Email, Phone, AnnualRevenue ,MobilePhone
- 3. Lead Score : Formule Field (Number)

SNO	FieldName	ISBLANK/NULL	NOTBLANK/NOT NULL
1	FirstName	0	10
2.	Email	0	10
3.	Phone	0	10
4.	AnnualRevenue	0	10
5	Mobile	0	1

Solution :

**IF(ISBLANK(FirstName) , 0, 10) +
IF(ISBLANK(Email),0,10) +**

**IF(ISBLANK(Phone), 0 ,10)+
 IF(AnnualRevenue >0 , 10, 0) +
 IF(ISBLANK(MobilePhone), 0, 10)**

1. IMAGE (url ,default Message) :

- a. This will print the image as value of hte field.
- b. All the image values are taken as text .

Example 1:

IMAGE(https://mysite.com/myimage.png','Image not found')

UseCase 1:

Object : Lead

FieldName : Flag ---Formule (Text)

IMAGE('/img/samples/flag_green.gif','Image not found')

2. CASE : This is used when we have multiple choices .

**CASE(Expression ,
 value1, result1,
 value2, result2,
 value3, result3,
 result4
)**

UseCase 2 :

Object : Loan

Fields : LoanType (PickList) ---Education ,Housing,Personal

Formule : IntrestRate

DataType : Percent

SNO	LoanType	IntrestRate

1	Eduction	10%
2.	Housing	12%

3. Personal 13%

Solution :

```
CASE (LoanType__c ,  
      'Education',0.10,  
      'Housing',0.12,  
      'Personal',0.13,  
      0  
    )
```

UseCase 3 :

Object : Loan

FieldName : LoanType : PickList(Education,Housing,Personal)

Formule : Instalments(Number)

SNO	LoanType	Instalments
-----	----------	-------------

1	Education	48
2.	Housing	150
3.	Personal	32

Solution :

```
CASE(LoanType__c ,  
      'Eduction', 48,  
      'Housing',150,  
      'Personal',32,  
      0  
    )
```

UseCase 4 :

Object : Lead

Fields : LeadScore__c

Formule : LeadRating__c(Text)

SNO	LeadScore	Rating
1	10	1 star
2	20	2 Star
3	30	3 star
4	40	4 star
5	50	5 star

IMAGE (

CASE(LeadScore__c

10, "/img/samples/stars_100.gif",

20, "/img/samples/stars_200.gif",

30, "/img/samples/stars_300.gif",

40, "/img/samples/stars_400.gif",

50, "/img/samples/stars_500.gif",

"/img/samples/stars_000.gif"

),

'Rating Image not found')

Logical-AND-OR-NOT

AND :

1. When we want to write more than on condition we use and
2. If all the conditions are true, then it returns true .
3. Syntax :

AND(Cond1,Cond2.....Condn)

OR

1. When we want to write more than on condition we use and
2. If any one conditions is true, then it returns true .
3. Syntax :

OR(Cond1,Cond2.....Condn)

NOT

1. It returns true if the condition is false .
2. It returns false if the conditions is true

NOT(Condition)

Validation-USECASES

Usecase 1:

Object : Lead

Fields : Lead Source

Rule : If the lead source is Phone and Phone is blank throw error

AND(
 ISPICKVAL(LeadSource,'Phone') ,
 ISBLANK(Phone)
)

UseCase 2 :

Object : Lead

Fields : Custom Fields : Lead Type : PickList(Personal,Organization)
 : Pancard : Text

Rule : If the LeadType is personal and Pancard number is blank then
throw error message

AND(
 ISPICKVAL(Lead_Type__c, 'Personal'),
 ISBLANK(Pancard__c)
)

UseCase 3:

Object : Loan__C

Fields : Custom Fields : Security : PickList(Asserts,Salary)
 : AssertCost: Currency

: Salary : Currency

Rule : If the Security is Asserts and AssertCost is null
or
if the security is Salary and salary is blank throw error .

OR(
AND (
ISPICKVAL(Security__c , 'Assert'),
ISNULL(Assert_Cost__c)
),
AND (
ISPICKVAL(Security__c, 'Salary'),
ISNULL(Salary__c)
)
)

UseCase 4:

Object: Loan __c

Fields : Custom Fields : Applied Date

Rule : AppliedDate cannot be less than today.

PageLayout :

1. This controls how an object should be displayed to the profile .
2. PageLayout controls which fields should be displayed .
3. In which order fields should be displayed .
4. In which format fields should be displayed .
5. Which buttons should be displayed on the detail page .
6. It controls the related list and fields in the related list .
7. On an Object we can create multiple pagelayouts .
8. One profile will have only one pagelayout on an object .

9.Steps to create PageLayout :

Setup

|---Build

|---Create

|---Object

|---Object Name

|---PageLayouts

|---New |Edit

Step 1: Add the Section to the pageLayout

Step 2: Choose no Columns and Tab order

Step 3: Choose the Fields

Step 4: Specify the format of the fields on the Layout (Read|Write|Required)

Step 5: Add the buttons to the layout .

Step 6: Add the related list to the layout.

Step 7: Specify the fields that need to be displayed on related list .

Step 8: Save

Note : We can reassign the visibility of the field at pageLayout

Field Level		PageLayout		Final View
Visible	Read	Visible	Read	
NO	NO	----Hidden----		Hidden
OK	NO	NO	NO	Hidden
	OK	Ok	Read	
	OK	NO	Read Write	
Ok	Ok	NO		NO Hidden
	Ok	Ok	Read	

Note : If we define any field as required field at field level ,by default this field is required field on all the pagelayouts

Note : If we define any field as required field at Profile Level ,only on that pageLayout field will be required

MiniPagelayout :

- 1.When we place the cursor over the reference link of a record ,a popup window opens showing you the detail of the record.
- 2.This popup window is called minipagelayout .
- 3.Every Pagelayout has corresponding minipage layout
- 4.When we assing the pagelayout to a profile , corresponding minipage layout will be assinged to the Profile
- 5.Sets to create minipagelayout :

Setup

|---Build

|---Create

|---Object

|---Object Name

|---PageLayouts

|---Choose the PageLayout

|--Edit

Step 1. Choose the Mini PageLayout from menu bar of pagelayout

Step 2. Choose the fields .

step 3. Save the mini pagelayout.

Step 4. Save the pagelayout

Record Type

1. If you want to assign more than one pageLayout to the same profile we use recordtype.

2. Setup

|--->Build

|--->Create

|--->Objects

|--->Object Name

|---> RecordType

|--->New

Step 1: Enter RecordType name

Step 2: Choose Master or Child

Step 3: Enable Active Button

Step 4: Choose the profiles for which recordType should be visible

Step 5: Assign the Pagelayouts to the corresponding Profiles based on recordType

Step 6: Save

Note : We can control the options in the picklist based on recordType.

==>CRM : Sales Process ,Lead process ,Service Process :

Sales Process:

1. This will specify life cycle of Opportunity based on RecordType.
2. Based on the recordtype what we have selected what are the options that should be displayed in the stage picklist field is controlled by salesprocess.

Lead Process:

1. This will specify life cycle of lead
2. This will specify which options should be displayed in status picklist field based on the recordtype

Usecase :

1. Step 1 : Create three profiles :

SNO	Profile Name	Choose Existing Profile

1.	Manager	Salesforce
2.	Clerk Profile	Salesforce Platform User

3. Field Executive Salesforce Platform user

2. Create Three users

UserName	Profile	License
wilson	Manager	Salesforce
kavya	Clerk	Salesforce Platform users
Kiran	Field Executive	Salesforce Platform users

3. Create Custom Object : ProductInfo

FieldName	DataType	Options	Field Level
Product Name	Text	-	Read Write
Product Code	Text	-	Read Write
Quantity	Number	-	Read Write
Availability	Checkbox	-	Read Write
Product Family	PickList	Laptops / Mobiles / Tabs	Read Write
UnitPrice	Currency	-	Read Write
Sales Price	Currency	-	Read Write

4. Create PageLayouts

PageLayout Name	Fields	Format
Manager Layout	ProductName	Read
	Product Code	Read
	Product Family	Read Write
	Availability	Read
Clerk Layout	ProductName	Read Write

ProductCode	Read Write
ProductFamily	Read Write
Availability	Read Write
Sales Price	Read Write
Unit Price	Read
Quantity	Read

5. Assign the pagelayout to the profile

SNO	Profile Name	PageLayout

1	Manager Profile	Manger Layout
2.	clerk Profile	Clerk Layout

6. Mini PageLayout :

PageLayout	MiniPageLayoutFields

Manager Layout	ProductName ,Product Family
Clerk Layout	ProductName, SalesPrice,Quantity

Q:: How to change the permissions on the fields of the object .

Setup

|---Adminster

|---Security Controllers

|---Field Accessibilty

|---Choose the Object

Step 1 :Choose the visability based on Field /Profile

Step 2 :Change the field level permissions.

UseCase : PageLayouts

1. Create custom Object: Student

Fieldsname	DataType	Required	Options
Name	Text	Yes	(Standard)
City	PickList	No	Hyd,Ban,Che
Phone	Phone	No	---
CollegeName	Text(90)	Yes	--
Passout	PickList	No	2014,2015,2016
Email	Email	No	---

2. Create two custom Profiles Faculty , HRManager and assing the pageLayouts

Profile Name	PagelayoutName	Fields
Faculty	Faculty	Section 1: Student Details Name ::Phone Email :: CollegeName
HRManager	Manager	Section1: Student Details : Name :: City Email :: Phone Section 2: Education CollegeName Passout

Note : On Manager profile Email and phone should de required

: Edit button should be removed

: Related List of : Approval History and Open Activities should be added

useCase 2:

1.Create a minipagelayout on Faculty PageLayout :

Fields : Name ,Phone ,email

2.Create a mini pagelayout on Manager PageLayout :

Fields : Name ,Phone ,Email, CollegeName

UseCase :3

1.Object : Application

2.Create Custom Fields

Field Name	DataType	Options

Firstname	Text	-
Lastname	Text	-
City	PickKList	Hyd,Ban,Che,Pune,Delhi
Phone	Phone	-
ApplicationType	PickList	New House,Under Construction , PGStudies , Graduation

3. Create a custom profile : Manager

4.Create a Two pagelayouts :

PageLayout Name	Fields

Education Loan	Firstname,lastName,Phone ,ApplicationType
Housing Loan	FirstName,LastName,City,Application Type,Phone

5.Create Two Record Types and assign the pagelayouts and picklist values

RecordTypeName	PageLayout	ApplicationType	City

Education	EducationLoan	PGStudies	-None- Graduation
Housing	Housing Loan	New House	Hyd,Ban,Che Under Construction

Object Level Security :

1. Object level security is controlled by
 - a. Profile
 - b. Permission Set
2. Profile Level :
 - a. Which objects user can see and what operations he can perform are controlled by profile
 - b. At the Profile level we have following permissions on a object .
 1. Read
 2. Create
 3. Edit
 4. Delete
 5. View All
 6. Modify All
 - c. Modify All data and view All Data on entire database,
3. Permission Set :
 - a. If you want to assign any extra set of permissions for a specific user ,then we use permission set.
 - b. We can assign additional permission apart from ,what user is getting through profile.

Navigation :

Classic :

Setup

|---> Adminster

|---> Manage users

|---> Permission Set

|---> New

Lightning :

Setup

|---> Administration

|---> Users

|---> Permission Set

|---> New

Example : Create a Course Object :

: Create a Profile Student with Read Access on Course object

: Assign this profile to a User .

Example : Create a permission set : Course Permissions

: Choose the License if you want

: Object Settings : Choose Course

: Grant Read,Create,Edit,Delete access on Course

: save

Example : Assign this permission set to the user who have student profile

Navigation to Assign permission set :

Setup

|---> Administer

|---> Manager Users

|---> Users

|---> Choose the user

|---> Assign Permission set

OWD-Sharing Rules

OWD : Organization wide Default settings :

1. This is used to define minimum level of Access that is granted to all the users in the organization .
2. There are different types of OWD
 - a. Private
 - b. Public Read
 - c. Public Read Write
 - d. Public ReadWriteTransfer
 - e. Public Full Access
 - f. Controlled by parent.

→ Private-OWD :

If you define OWD as Private on a object. only owner of the record can access the record and perform read ,write delete,transfer operation on the records. Users cannot see the records owned by other people .

Example :

CID	Owner

111	Sam
222	Ram
333	Kiran

Sam Login : 111---Sam : Read |Write |Delete |Transfer

If Kiran Logins's to Account : 333---Kiran : Read|Write |Delete|Transfer

→ Public Read -OWD:

- a. If you define OWD as Public Read on a object,every user can access every record in the object.
- b. Records for which he is the owner on those records he can perform

Read/Write /Delete/Transfer

- c. Records for which he is not the owner ,on those records he can only perform Read operation

CID Owner

111 Sam

222 Ram

333 Kiran

Sam Login :

111---Sam : Read |Write |Delete|Transfer

222---Ram : Read

333---Kian : Read

If Kiran Logins's to Account :

333---Kiran : Read|Write |Delete|Tranfer

111---Sam : Read

222---Ram : Read

→ OWD : Public Read |Write :

- a. If you define owd as public Read Write on a object ,every user can access every record in the object.

- b. Records which are owned by the user,on those records he can perform Read|Write |Delete|Transfer operation

- c. Records which are not owned by other users on other's record he can perform Read and write operations,

CID Owner

111 Sam

222 Ram

333 Kiran

Sam Login :

111---Sam : Read |Write |Delete|Transfer

222---Ram : Read |Write

333---Kian : Read |Write

If Kiran Logins's to Account :

333---Kiran : Read |Write |Delete |Transfer

111---Sam : Read |Write

222---Ram : Read |Write

→ OWD : Public Read|Write|Transfer

1. We can define OWD as Public Read |Write|Transfer only on Lead and Case object.
2. If you define OWD as Public Read|Write|Transfer on a object .
every user can access every record in the Lead/Case object.
3. Records owned by the users ,on those records he can perform
Read |Write|Delete|Transfer operation .
4. Record which are owned by other users on those records you can
they can perform Read|Write|Transfer

CID Owner

111 Sam

222 Ram

333 Kiran

Sam Login :

111---Sam : Read |Write |Delete |Transfer

222---Ram : Read |Write |Transfer

333---Kian : Read |Write |Transfer

If Kiran Logins's to Account :

333---Kiran : Read |Write |Delete | Transfer

111---Sam : Read |Write |Transfer

222---Ram : Read |Write |Transfer

→ **OWD : Public Full Access :**

1. This can be defined only on Campaign object.

2. If you define owd as public Full Access ,every user in the organization can access every record in the object and can perform Read|Write |Delte |Transfer operation on every record.

CID Owner

111 Sam

222 Ram

333 Kiran

Sam Login :

111---Sam : Read |Write |Delete |Transfer

222---Ram : Read |Write |Delete |Transfer

333---Kian : Read |Write |Delete |Transfer

If Kiran Logins's to Account :

333---Kiran : Read |Write |Delete | Transfer

111---Sam : Read |Write |Delete | Transfer

222---Ram : Read |Write |Delete |Transfer

Controlled By Parent

1. When two objects are connected by Master-Detail Relation ,Child object will not owner field,

2. What ever the OWD defined on the master object ,same owd is applied on child object.

Navigation to Define OWD :

Setup

|---Adminster

|---Security Controllers

|----Sharing settings

|---Edit

Grant Access Using Hierarchies

1. If we enable this options on a object.All the users who are standing above you in Role hierarchies can access all the records that are accessiable to you. and can perform Read/Write/Delete/Transfer operations.
2. By default this option is enabled on all the standard objects and we cannot disable it.
3. On Custom objects we can enable or disable based on our choices .

View All access on Object for a profile

1. if we enable this option for a profile ,All the users with this profile can can access all the records of this object irrespective of OWD .
2. All the users of this profile can perform read operation on all the records of the object

Modify All access on object for a Profile

1. if we enable this option for a profile ,All the users with this profile can can access all the records of this object irrespective of OWD .

2. All the users of this profile can perform read|write|Delete|Transfer operation on all the records of the object

Modify All Data

1. If you enable this options ,all the users with this profile can access all the records of all the objects in the salesforce and can perform Read/Edit/Delete/Transfer operations on all the records of entire database.

View All Data

If you enable this options ,all the users with this profile can access all the records of all the objects in the salesforce and can perform Read operations on all the records of entire database.

OWD Use Case

1. Create a custom objects Employee w
2. Create the following fields
 - a. Name
 - b. City
 - c. Exp
 - d. Salary
3. Define OWD as Private on employee
4. Create Role Sructure

CEO

|----PM

| |----TL

| ----TM

 |-----Tester

5.Create Custom Profile SalesProfile with Read/Edit/Create/Delete permission on Employee

6.Create three users with salesforce platform license

User	Name	Role	Profile	License
wilson	PM	SalesProfile	Salesforce Platform	
Ravi	TM	Sales Profile	Salesforce Platform	
Kiran	Tester	SalesProfile	Salesforce Platform	

7, Create the following records :

Name	City	Exp	Salary	Owner
aaa	Hyd	3	10000	Wilson
bbb	Hyd	4	3000	Wilson
ccc	Ban	10	50000	Wilson
ddd	Ban	8	34000	Ravi

8.Create a sharing rule where all the records which are owned by users whose role is testmanager are shared with users whose role is tester with read/write permission. Kiran will get access on ddd--ban---Read/write

9.Create a sharing rule where all the records whose city is hyd are shared with users who belong to Role & sub of Testmanager with read/write

10 .Share ccc-ban-10 record with user :Ravi

Sharing Rules :

1. Sharing rules are used to grant extra permission on records apart from what user is already getting through OWD .

2. Sharing Rules are classified as

- Owner Based Sharing Rules
- Criteria Based Sharing Rules
- Manual Sharing Rules
- Apex Based Sharing Rules

3. Using sharing Rules we can grant access of Read|Write on the record.

4. Owner based sharing Rules :

Records which are owned by the users who belongs to given role |role&sub |public Group|Queue. are shared with the users who have given role |role&sub |public group with read or Read/write access .

Example 1:

Records which are owned by the users who have HRManager role are shared with the users who belongs to the role clerk with read access.

Example 2:

Records which are owner by the users who belongs to public Group capital are shared with role &sub HRManager with read and write access.

5. Criteria based sharing rules :

Records which are meeting the given the condition are shared with the users who belongs to given Role | Role&Sub | public Group with Read or Read and Write access.

Example :

All the Opportunities whoes stageName is closed won are shared with Users who role Sales Manager with Read Access

Example 2:

All the Accounts whoes rating is Hot are shared with the users who belongs to the public Group Capital with read or Read and write access.

6. Manual Sharing Rules :

a. If you want to share a particular record with a specific role \Role&Sub|Public Group \user then we user manual sharing rule .

b. Open the detail page of the record,Click on sharing button and select the users

7. Apex Based Sharing Rules :

We can also share the records using apex programming

Assignment Rules :

1. These will specify who should be the owner of the record.
2. Generally the user who created the record ,will the owner of the record.
3. If you have business rules ,which will decide the owner of the record then, we create those rules as Assignment rules.
4. Assignment Rules are available only on Lead and Case object.
5. On other objects we have to automation process like Triggers and Process builder to assign the owner of the record based on your business rules.

Navigation :

Classic :

Setup

|---> Build

|---> Customize

|---> Leads

|---> Assignment Rules

|---> New Assignment Rules

Lightning :

Setup

|---> Platform Tools

|---> Feature Settings

|---> Marketing

|---> Lead Assignment Rules

|---> New

Example :1

Step 1: Enter Rule Name : City Rules

Step 2: Enable Active Button

Step 3: Add New Rules

Step 1: Add new Rule Entry

Step 2: Enter Order No :1

Step 3: Enter Criteria : City =Hyd

Step 4: Specify who should be the owner : Choose Corporate Queue a Owner

Step 5: Save

Step 4: Add New Entry

Step 1: Enter Order No :2

Step 2: Enter Criteria : City =Ban

Step 3: Specify owner as : Personal Queue

Testing :

Create a new lead Record with City as Hyd and Enable the Assign the owner based on Assignment rules checkbox.

Public Group:

1. It is a set of users wrapped under one name.
2. Members of the queue :
 - a. User
 - b. Role
 - c. Role and Sub
 - d. Public Group
3. We can use this public group to
 - a. Send a email to group of people
 - b. To share the record with group of people
 - c. To submit the record to a group of people
 - d. etc...

Navigation :

Classic :

Setup

|---> Adminster

|---> Manage Users

|---> Public Group |---> New

Lightning :

Setup

|---> Administration

|---> Users

|---> Public Group

|---> New

Example : 1

Step 1: Enter Name : Hyd Sales Team

Step 2: Choose Members: Role : HRManager

: Role : VPSales and Sub

Step 3: Save

Queue :

1. It is a group of users wrapped under one name to share the work load more effectively.

2. When a new record is created ,it is assigned to queue,

3. One of the member in the queue will re-assign the record to his name.

4. Queue is like a waiting process ,before the record is assigned to a specific user.

5. Members of the queue

a. User

b. Role

c. Role and Sub

d. Public Group

6. Navigation :

classic :

Setup

|--->Administer

|--->Manage Users

|---> Queue

|--->New Queue

Lightning :

Setup

|---> Administration

|---> Users

|---> Queue

|---> New Queue

Step 1 : Queue Name

Step 2 : Enter Queue Email

Step 3 : Choose the Objects

Step 4 : Choose the users

Step 5 : Save

Example :

1. Createa new Queue : Corporate Team
2. Choose Object : Lead and Case
3. Add Users : Users With Role : CEO

Example :

1. Create a new QUeue : Personal Team
2. Choose the Object : Lead and Case
3. Add users : users with role VP Sales and Sub

ApprovalProcess

Navigation :

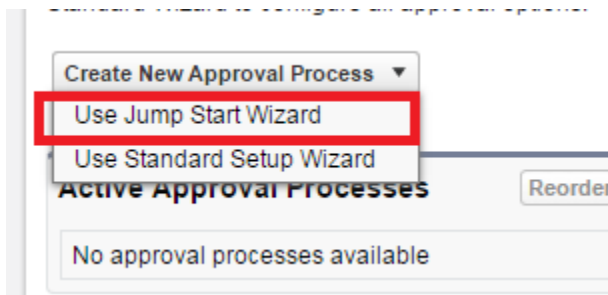
Setup→Build→Create→Workflow &Approvals→Approvals→New Approvals

→Choose the Object

→Choose single step Approval or MultiStep Approvals

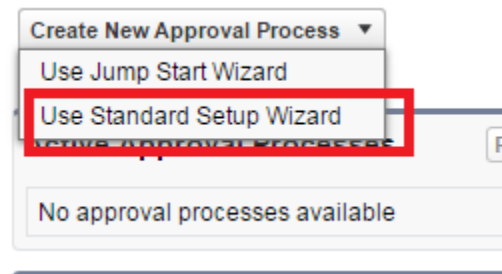
Jump Start Wizard : When we want to create single step Approval process then select

Jump Start Wizard



→Standard setup wizard : When we want to create multistep approval process then

We will select standard setup wizard



Step 1: Enter Approval process name and description

Step 1. Enter Name and DescriptionStep 1 of 1

[Next](#) [Cancel](#)

Enter a name and description for your new approval process.

Enter Name and Description ! = Required Information

Process Name	<input type="text" value="Withdraw ApprovalProcess"/>
Unique Name	<input type="text" value="Withdraw_ApprovalProcess"/> i
Description	<div>This process is get the record approved when we are trying to withdraw more than 50000</div>

Step 2: Specify the entry criteria :

The records which are meeting this criteria can only be submitted for approval

→ We can create criteria in two ways

- 1.using Formules
- 2.Criteria based condition

Specify Entry Criteria

Use this approval process if the following

criteria are met ▼

 :

Field

criteria are met

criteria are met

formula evaluates to true

C

If you are using criteria based condition then we can form 25 conditions in a single Condition

Note : We can use fields of the objects on which we are creating the approval process and its parent object fields and current user object fields

Field	Operator	Value
--None--	--None--	
Transaction: Created Date	--None--	
Transaction: Last Modified By	--None--	
Transaction: TransactionId	--None--	
Transaction: Type	--None--	
Customer: Active	--None--	
Customer: Address	--None--	
Customer: AType	--None--	
Customer: Balance		
Customer: CID		
Customer: City		
Customer: Created By		
Customer: Created Date		
Customer: Customer Name		

Previous

Ex: Create a condition when transaction type is withdraw submit the record for approval

Field	Operator	Value
Transaction: Type	equals	Withdraw
None	None	

Step 3:

Specify Automated Approver:

When the record is submitted by the user for approval specify the automated approver to whom the record should be submitted for approval

1.This automated approver can be any one of the user field (which mean any one hierarchal field value)

If you choose none in rest of the steps you cannot choose automated approver

Ex: When the record is submitted for approval send to submitters manager

Select Field Used for Automated Approval Routing

Next Automated Approver Determined By

Use Approver Field of Customer Owner

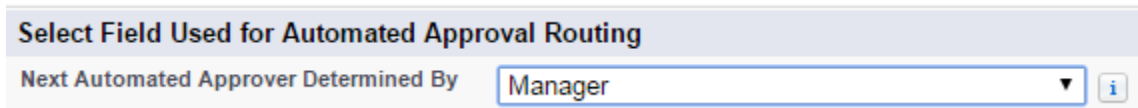
Record Editability Properties

☒ Administrators **ONLY** can edit records
☐ Administrators **OR** the currently assigned user can edit records

--None--
 --None--
Standard User Fields
 Manager
Custom User Fields
 HRManager

 Create New Hierarchical Relationship Field

If we choose none option we don't like to make it automated we will chose the approver later

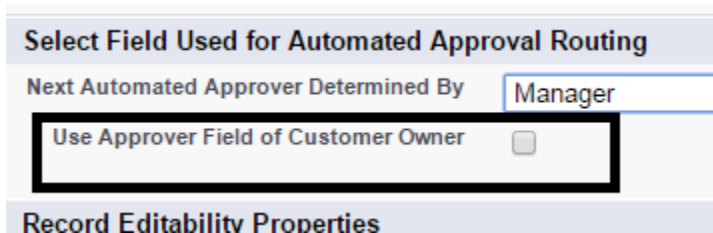


Select Field Used for Automated Approval Routing

Next Automated Approver Determined By Manager

Note : The record approver will be submitter user field value

In case if you want to make record owner as the automated approver then enable corresponding field



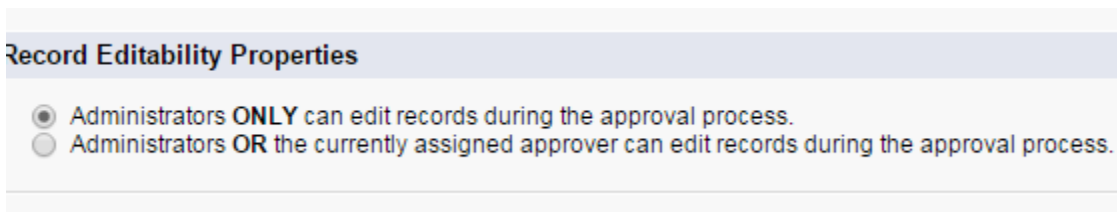
Select Field Used for Automated Approval Routing

Next Automated Approver Determined By Manager

☒ Use Approver Field of Customer Owner

Record Editability Properties

Note : When the record is submitted for approval automatically record is locked
Then specify who can unlock the record



Record Editability Properties

☒ Administrators **ONLY** can edit records during the approval process.

☐ Administrators **OR** the currently assigned approver can edit records during the approval process.

If you choose the first radio button then only administrator can unlock the record



Record Editability Properties

☐ Administrators **ONLY** can edit records during the approval process.

☒ Administrators **OR** the currently assigned approver can edit records during the approval process.

If we choose second radio both admin and approver can unlock the record

Step 4:

Select the email template to notify the approver that record is sent to him for approval

Step 4. Select Notification Templates
Step 4 of 6

PreviousNextCancel

Select the email template that will be used to notify approvers that an approval request has been assigned to them. Note that this template will be used for all steps for this process. [Create a new email template](#)

Email Template

Approval Assignment Email Template
Sales: New Customer Email

PreviousNextCancel

Step 5:

Select the list of fields which need to be displayed to the approver

Available Fields

Amount
CDetails
Created By
Last Modified By
Type

Add
Remove

Selected Fields

TransactionId

Up
Down

Approval History : if you enable the option previous approval history of the record will be displayed along with the field which you have selected

Approval Page Fields

☒ Display approval history information in addition to the fields selected above.

Select Who can approve

Security Settings

- ☒ Allow approvers to access the approval page only from within the Salesforce application. (Recommended)
- ☐ Allow approvers to access the approval page from within the Salesforce application, or externally from a wireless-enabled mobile device. [i](#)

If you select first radio button user can approve the record from the salesforce application

If you select the second option users can approve the record from salesforce application and wireless devices like mobile salesforce app browser /chatter /email

Step 6: Select the list of users who can submit the record for approval

Initial Submitters

Submitter Type Search: Owner for:

Available Submitters

- Owner
- Public Groups
- Role
- Role and Subordinates
- User

Allowed Submitters

- Customer Owner

Add

Remove

Approval History on Page Layouts

- ☒ Add the Approval History related list to all Transaction page layouts

If you enable this option approval history will be displayed on the related list of the record which is submitted for approval

Recall Option :

Submission Settings
<input type="checkbox"/> Allow submitters to recall approval requests

If you enable this option submitter can recall the record which he has submitted

Approval Steps :

1 :Enter the details for approval step

Step 1. Enter Name and Description		Step 1 of 3
		Save Next Cancel
Enter a name, description, and step number for your new approval step.		
Enter Name and Description		! = Required Information
Approval Process Name	WithdrawAlert	
Name	<input type="text" value="Satish Approval"/>	
Unique Name	<input type="text" value="Satish_Approval"/> i	
Description	<input type="text"/>	
		Save Next Cancel

2.Specify which records should enter the approval step

Step 2. Specify Step Criteria

Step 2 of 3

Previous

Save

Next

Cancel

Specify whether a record must meet certain criteria before entering this approval step. If these criteria are not met, the approval process can skip to the next step, if one exists. [Learn more](#)

Specify Step Criteria

☒ All records should enter this step.

☐ Enter this step if the following

criteria are met

 , else

reject record

 :

If you choose all records radio button all the records which are submitted by the users

Enter this step

Specify Step Criteria

☐ All records should enter this step.

☒ Enter this step if the following

criteria are met

 , else

reject record

 :

Field	Operator	Value
Transaction: Amount	greater than	50000
--None--	--None--	
--None--	--None--	
--None--	--None--	
--None--	--None--	

If choose the criteria : only the records which are meeting this criteria will enter given step .Other records can be approved |Rejected based on your business logic

Step 3: Choose the approver

Step 3. Select Assigned Approver

Specify the user who should approve records that enter this step. Optionally, choose whether allowed to approve these requests.

Select Approver

☐ Let the submitter choose the approver manually.
☒ Automatically assign to queue. 
☐ Automatically assign to approver(s).
☐ The approver's delegate may also approve this request. 

Approver can be chosen manually at the time of submitting the record

Or

Approver can be any queue (if choose queue as approver then any user in the queue can approve or rejected the record)

Or

Automatically assign to user

If choose automatically assign to user when the record enters this step this user has to approve

2 .ApprovalProcess-Scenario1

Object: Loan

Fields : Loan Type: (Education,Housing)

AppliedAmount : Currency

Manager Status :PickList(Approved,Rejected,Pending)

FieldManager :PickList(Approved,Rejected, Pending)

Loan Status : PickList(Approved,Rejected,Pending)

Users : UserName Manager

Kavya Wilson

wilson Satish

Satish -----

Approval Process :

Object : Loan

Wizard : StandardSetup wizard

Process Name : Housing Loan Approval

Entry Criteria : Loan Type is 'Housing'

Automated Approver : Manager

Approval PageLayout :

LoanId

Loan Type

AppliedAmount

Owner

Security Settings : Salesforce and wireless devices

Intital Submitters : kavya

Step1 : Step Name : Manager Approval

2. Allow all the records to enter this step
3. Approver : Manager
4. Approval Action : Update the Manager status as Approved
5. Rejection Action: Update the Manager status as Rejected.

Step 2: Step Name : Satish Approval

2. Allow all the records to enter this step .
3. Approver : User : Satish
4. Approval Action :Update the field FieldManager status as Approved
5. Rejected Action : Update the field FieldManager status as Rejected

Final Approval Actions:

1. Update the field Loan Status as Approved

Final Rejection Actions:

1. Update the field Loan Status as Rejected

Approval Process : 2

Object : Loan

Wizard : StandardSetup wizard

Process Name : Education Loan Approval

Entry Criteria : Loan Type is 'Education'

AutomatedApprover: Field Manager

Approval PageLayout :

LoanId

Loan Type

AppliedAmount

Owner

Security Settings : Salesforce and wireless devices

Intital Submitters : kavya

Step1 : Step Name : Verification Approval

2. Allow all the records to enter this step

3. Approver : Wilson or Satish

(First Response Approval)

4. Approval Action : Update the Manager status as Approved

5. Rejection Action: Update the Manager status as Rejected.

Step 2: Step Name : Satish Approval

2. Entry Criteria :

if Applied Amount is more than 10Lacs then enter this step.

3. Approver : User : Satish

4. Approval Action : Update the field FieldManager status as Approved

5. Rejected Action : Update the field FieldManager status as Rejected

Final Approval Actions:

1. Update the field Loan Status as Approved

Final Rejection Actions:

1. Update the field Loan Status as Rejected

Approval Approval -session2-ClassRoom-Scenario-s

1. UserName Delegated Approver Manager

Satish Wilson Kavya

Wilson Kavya Satish

Setup

|----Adminster

|-----Manage Users

|-----Users

|-----UserName

|----Edit

|--Set Manager|Delegated

Object: Opportunity

1. Entry Criteria :

When StageName='Prospect'

2. AutoMated Approver : Manager

3. Only Admin can edit/Unlock the record

4. Security Settings : Salesforce Application login

5. Initial Submitter : Kavya

Approval Step :

Step1 : Manager Approval :

1. Entry Criteria : Allow All records

2. Approver : Automated Approver (manager)

3. Approval Action :

Field Update : Description : Approved

4. Rejection Action :

Field Update : Description : Rejected

=====

1. UserName Manager

Satish Kavya

Wilson Satish

kavya Wilson

Object : Loan

Step 1: Submission Steps

1. Entrt Criteria : Loan Type : Education

2. Automated Approver : Manager

3. Unlock : Admin

4. Approval PageLayout :

Loan Type

Applied Amount

Owner

5. Security Settings :

Salesforce Login or wireless

6. Initial Submitter : Kavya ,Wilson

7. Recall : Yes

Step 2 Approval Steps :

Step 1:

a. Entry Criteria :All

b. Approver : Automater Manager

c. Approval Action :

Field Update : Manager Status : Approve

d. Rejection Action ;

Field Update : Manager Status : Rejected

Step 2:

a. Entry Criteria :All

b. Approver : Automater Manager

c. Approval Action :

Field Update : Field ManagerStatus : Approve

d. Rejection Action ;

Field Update : Field Manager Status : Rejected

Step 3: Final Approval :

Approval Action :

Field Update : Loan Status : Approve

Step 4: Rejection Approval :

Approval Action :

Field Update : Loan Status : Reject

=====

Complete Sceanario :

Create Custom Object : Application :

Create Fields :

Field Label	Field Name	DataType	Options	Description
-----	-----	-----	-----	-----
ApplicationId	Name	AutoNumber -		Standard Field
Type	Type	PickList	New Cancel Block	
Email	Email	Email	- -	
Phone	Phone	Phone	- -	
Status	Status	PickList	Pending Approved Rejected	
Application	AppStatus	Formule	value of status should be assigned to Application	
Status			Status	
Manager Status	ManagerStatus	PicKList	Pending Approved Rejected	

=====

PageLayouts

PageLayout Name	Fields	Read Write
New Application	Applicationid	Read
	Phone	Read Write
	Type	Read Write
	Email	Read Write
	ApplicationStatus	Read (formule)
Approval Status	ApplicationId	Read
	Type	Read
	Phone	Read
	Email	Read
	Status	Read
	Manager	Read

Record Type

RecordType Name	Pagelayout	Profiles
New Card	New Application	All profiles
Approved Card	Approval Status	All profiles

Workflow :

Object : Application

Evaluation Criteria : Created

Rule : Type is 'New Card'

workflow Action :

Field Update : Status='Pending'

=====

Approval Process:

1. Object : Application

- a.Entry Criteria : Status= 'Pending'
- b.Automated Approver : Manager
- c. Admin can unlock the record
- d. Security Setting :
 Approve from salesforce Application
- e. Initial Submitters : Kavya

2.Approval Steps :

- step 1: Manager Approval
 - a.Entry Criteria : All
 - b.Approver : Automated Approver

3.Final Approval Action :

- a.Field Update : Record Type=Approver Card

4.Rejection Action :

- a.Field Update : record Type=Approver Card
- b.Email Alert : Send the email to application about the rejection

→ Approvalprocess-Practise-UseCase

Object	: Student
Wizard	: Standard Setup wizard
Entry Condition	: If status is Pending
Automated Approver	: None
Record Editability	: Admin and Current Approver
Notiy Approver	:Email Alert

:Template : ApporvalNotification

Approval pageLayout :

Fields : Name ,Fee ,Status,StartDate

Approval History : Yes

Security Settings : Allow from Salesforce Account

Initial Submitter : Owner

Add to PageLayout Related List: Yes

Can I callBack : Yes

Approval Steps :

Step1 :

Approval Step Name : Admin Approval

Step Number : 1

Step 2: Choose which records should be enter this step

Allow all the records to enter this step

Step3: Choose the Approver :

Choose the approver manually

Step 4: Choose no Action

Step 5: Add the Approval Actions

Approved : Make field update :Status =Approver

Rejection ;Maked field Update : Status =Rejected

Approval Process Action

Student :

Name ::

Course : PickList (Java/Sfdc)

Fee :

Status : Pending

:Approved

:Rejected

StartDate:

Registered Date

registered for the course registered date is more than startdate then student should be

approved by HRManager

1. HRManager Approved: Field Update :Status =Approved

2. HRManager Rejected : Field Udate : Status =Rejected

Course :

Name :

Fee :

Branch :

Status: Approved

Rejected

Manager : PickList (Approved/Rejected)

Faculty :PicKlist(Approved/Rejected)

Start Date :

PageLayout : New Course : Name,Fee,Branch ,StartDate

: Approved Course: Name,Fee,Branch,StartDate,Faculty,Manger,Status
(Read on Fields)

Record Types :

New : New Course PageLayout

Approved : Approved Course

Default Record Type : New

Workflow Rules :

Evaluation Criteria : Created any time Edited

Rule : Status : Approved

Action :Field Update : RecordType=ApprovedLayout

Approval Process

1. When ever we create new Course , it should be submittedfor Approval

1. First Manager should approve the Course

Manager Approves : Field Update : Manager : Approved

Manger Rejects : Field Update :Manager :Rejected

2. After Manager Approves then submit to Satish for Approval

Faculty Approves : Field Update : Faculty : Approved

Facylty Rejects : Field Upage : Faculty :Rejected

3. If both of them Approve

Final Approval Action : Status ; Approved

Final Rejection Action : Status : Rejected

Workflow Rules :

1. Workflow rules are the automated actions which are performed by the system at the backend to meet business requirement.

Ex : Send the confirmation mail after every credicard transaction .

Ex : When ever new Customer is created send the email confirmation with his application details

Ex : Deactivate the customer's trail version account after thirty days

2. Technical Terms :

1 .Evalation Criteria :

a .This will specify when workflow should be verified/Checked.

b. There are three types of Evaluation criteria.

1. Created : if we choose this option when ever a new record is created on the selected object it checks the workflow rule
2. Created and every time it is edited :if we choose this option when ever a new record is created or every time existing cord is modified it will check the workflow rule
3. Created and any time it is edited to meet criteria : if we choose this option when ever a new record is created or any time the existing record which is not meeting the condition is modified it will check the workflow rule

2. Rule Criteria :

a. This will specify when an action should be performed .

b. We can build the rules in two formats

1. Criteria based rule
2. Formule based rule

→ Criteria based rule :

1. When we want form a simple workflow rule using the fields of the records with simple operators.
2. In this rule we can use the fields of the object on which workflow is defined
 3. Fields of the Master object
 4. Fields of the Currently loggedin user

5. We can frame 25 condition for a single rule

→**Formule based rule :**

1. When we want to frame rule using complexed logic then we use formule based rule

3. Actions :

a. This will specify types of actions that need to be performed when the rule is met.

b. There are two types of Actions

1. Immediate Action

2. Time Dependent Action

c. Immediate Action :

These actions are performed Immediately once the rule is met

d. Time Dependent Action :

These actions are performed at the given time Trigger

4. Action Types :

a. Task

b. Field Update

c. Email Alert

d. Outbound Message

5. Steps to create workflow rule

Setup

|---Build

|---Create

|----workflow&Approval

|-----Workflow Rule

|----New

Step 1: Choose the object .

Step 2: Enter the workflow Details

1. Workflow name
2. Evaluation Criteria
3. Workflow rule

Step 3: Specify the action .

Step 4: Click on Done and activate the Rule .

=====

Task :

=====

1.Task is nothing but assigning the work to user|Role |Owner and specifying due date for completion.

2.Task that are assigned to the user can be see on the Home page under My Taks

3.Taks that are assigned on a record for a user can be seen as Open Ativities on the detail page of the record

4.Taks can be assigned to : user |Owner | Role

a. When a task is assigned to owner of the record and if owner is the a user then he is the owner of the task.

b. When a task is assigned to the owner of the record and if the owner is a Queue then who ever has intiaded the workflow rule he will be the owner of the task

c. When is Task assigned to role , and there are more than one user with the same role then who ever is owner of the record ,he will be the owner user for the task

Workflow 1 :

Object : Account :

Evaluation Criteria : Created

Workflow Rule : Industry equals to Banking

Actions : Immediate

Action Type : Task

: Assigned to User Wilson
: Due Date 5 days from Rule Triggered Date
: Status is Not Started

Test :

Satish Credited New Account :

Name	Industry	Phone Annual	Revenue	Owner
ICICI	Banking	1234	5000000	Satish

O/p : New Task is created and assigned to Wilson and Wilson is the owner of the task

Workflow 2 :

User	Satish	Wilson	Divya	Kavya	Faraz
Role	CEO	HRE	HRE	HRE	HRM

Object : Account
Evaluation Criteria : Created
Workflow Rule : Industry equals to Education
Actions : Immediate
Action Type : Task
: Assigned Task to Role : HRM
: Due Date 5 days from Rule Triggered Date
: Status is Not Started

Test :

Satish Credited New Account :

Name	Industry	Phone Annual	Revenue	Owner
ICICI	Education	1234	5000000	Satish

O/p : New Task is created and assigned to Faraz

Workflow 3 :

User	Satish	Wilson	Divya	Kavya	Faraz
Role	CEO	HRE	HRE	HRE	HRM

Object : Account

Evaluation Criteria : Created

Workflow Rule : Industry equals to Energy

Actions : Immediate

Action Type : Task

: Assigned Task to Role : HRE

: Due Date 5 days from Rule Triggered Date

: Status is Not Started

Test :

Satish Created New Account :

Name	Industry	Phone	Annual Revenue	Owner
------	----------	-------	----------------	-------

ICICI	Energy	1234	5000000	Satish
-------	--------	------	---------	--------

O/p : New Task is created and assigned to Satish and satish is the owner of the task

Note : When a task is assigned to a role and there are more than one users with the same role then task is assigned to the owner of the record on which task is created

Workflow 4 :

Object : Lead
Evaluation Criteria : Created
Workflow Rule : LeadSource equals to Web
Actions : Immediate
Action Type : Task
: Assigned Task to :Owner
: Due Date 5 days from Rule Triggered Date
: Status is Not Started

Test :

Divya Creded New Account :

LastName	FirstName	Phone	LeadSource	Owner
Myla	Satish	1234	Web	Divya

O/p : New Task is created and assigned to and owner of Lead
i.e Divya

Workflow 5:

Object : Lead
Evaluation Criteria: Created and Every time edited
Workflow Rule : LeadSource equals to Email
Actions : Immediate
Action Type : Task
: Assigned Task to :Owner

: Due Date 5 days from Rule Triggered Date
: Status is Not Started

Test :

1. Create a new Queue on Lead object :Capital Queue With Wilson,
satish as members of the queue.

Divya Credted New Account :

LastName	FirstName	Phone	LeadSource	Owner
Myla	Satish	1234	Other	Divya

Kayva Changed the owner of the Lead as CapitalQueue and Lead Source as Email

LastName	FirstName	Phone	LeadSource	Owner
Myla	Satish	1234	Email	CapitalQue

O/p : New Task is created and assigned to kavya as Kavya intiated the operation.

Note : When a task is assigned to a owner and owner is a queue then user
who initiated this workflow rule he will be the owner of the task .

In the above case kavya intiated the operation by modifying the record .
so kavya is the owner of the task

Workflow : 6

User	Role	Queue : CapitalQueue :
------	------	------------------------

Sam	BranchManager	Sam ,HRManager
Ram	BranchManager	
Kiran	BranchManager	
Hari	Clerk	
Object		: Lead

Evaluation Criteria : Created and every time edited

Workflow rule : AnnualRevenue > 50000

Action :

Task 1: Subject : Assign to Owner Assigned : Owner

Task 2: Subject : Assign to the Role

Assigned : Role : BranchManager

Test It : When a new lead is created by Ram with Annual Revenue 90000

Task 1 : is assigned to Ram

Task 2 : is assigned to Ram

Test It : Ravi ,Reassign the owner of the lead as CapitalQueue and AnnualRevenue

as 10,00,000

Task 1: assigned to Ram

Task 2: assigned to Ram

=====

Email Alert :

a. We can send the email to 1000 users / per day .

b. If any email has failed due to day limit they will be discarded

=====

Workflow : 7

Object : Loan :

Custom Fields : AppliedAmount : Currency

: AppliedDate : Date

: Security : PickList(Salary ,Asserts)

: Loan_Type : Education ,Housing

Scenario : When a new Loan record is created then them the confirmation email

Step 1 : Create new Email Template :

setup

|---Adminster

|---Communication Template

|----Email Template

|----New Email Template

1. Choose Text Tempalte
2. Enter the Template name :Loan Acknowledgement
3. Enable the Active button
4. Enter the Subject

Dear Customer ,

Your Application for {!Loan__c.Loan_Type__c} is received on
{!Loan__c.Applied_Date__c} with following details .

Applied Amount : {!Loan__c.Applied_Amount__c}

Security Type : {!Loan__c.Security__c}

Thanks

Sales Team

Step 2: Create a workflow rule

Setup

|---Build

|---Create

|---Workflowrules &Apporvals

|---Workflow Rules

|--New

1. Choose the Object : Loan
2. Enter the Workflow Rule Name: Loan Alert
3. Choose Evaluation Criteria : Created
4. Enter workflow Rule : Applied Amount >0
5. Choose the Action : Immediate Action

6. Choose Email Alert : Loan Acknowledgement

7.Done

8.Acitivate

Test It : Create a new Loan Record with following data and test it

Loan Type-Education

AppliedDate : Today

AppliedAmount : 400000

Workflow : 8

1. Create a Custom Object

Object Name : Course

Fields :	Field Name	DataType
	Name	Text
	Fee	Currency
	StartDate	Date
	Total Registered	Number
	Total Fee	Currency
	Fee	Fee

2. Create Custom Object : Student

Feilds :

Field Name	DataType
Name	Text
Couse	Master-Detail (Course)

Course Fee	Formule (Course fee value should be displayed from parent)
Course Name	Formule (Course Name should be displayed from Parent)
Start Date	Formule (Course Start date should be displayed on every child)
Email	Email

3. When ever new Student is registred for the course confirmation mail along fee details

should to the student email

Dear {!Student__c.name}

Your registration for the {! Student__c.Course_Name__c} is completed

Batch Starts Date {! Student__c.Start_Date__c}

Course Fee :{! fee}

Total Registred Student :{! Course__c.RegistredStudents__c}

Thanks

management

4. When ever new Student is registred for the cours then assing the task to the owner of

the record to give confrimation call three days before batch start

=====

Field Update :

=====

a. Using Field Update we can updae the field of the records on which workflow rule is running

b. We can also update the fields of its master record .

c. When ever we define more than one workflow rule on the same object.

1. All the rules are verified first on orginal data.

2. All the rule which are meeting the condition, their actions are performed next according to order of action created date.
- c. Re-evaluate workflow rules on field modification
- if you enable this option if there is any field update due to this workflow then it will recheck the remaining workflow whose rules are failed earlier .

=====

Workflow : 9

Object : Lead
Evaluation Criteria : Created
Workflow Rule : Lead Source equals to Web
Immediate Action : Field Update : Rating as Hot

Workflow : 10 (Multiple Workflows on same object)

Workflow 1 :

Object : Account
Evaluation : Created
Workflow Rule : Industry is Banking
Action : Field Update : Ownership as Private

Workflow 2 :

Object : Account
Evaluation : Created
Workflow Rule : Ownership is Public
Action : Field Update : Industry as Energy
Test It : Name Industry Ownership Phone

Create New Account : ICICI---Banking---Public --- 1234

Output : ICICI---Energy---Private---1234

Workflow : 11

1. Create a Custom Object

Object Name : Course

Fields	: Field Name	DataType
	Name	Text
	Fee	Currency
	StartDate	Date
	Total Registered	Number
	Total Fee	Currency
	Fee	Fee

2. Create Custom Object : Student

Feilds :

Field Name	DataType
Name	Text
Couse	Lookup(Course)
Course Fee	Formule (Course fee value should be displayed from parent)
Course Name	Formule (Course Name should be displayed from Parent)
Start Date	Formule(Course Start date should be displayed on every child)
Email	Email

3. When ever new Student is registred for the course confirmation mail along fee

details should to the student email

Dear {!Student__c.name}

Your registration for the {! Student__c.Course_Name__c} is completed

Batch Starts Date {! Student__c.Start_Date__c}

Course Fee :{! fee}

Total Registred Student :{! Course__c.RegistredStudents__c}

Thanks

management

4. When ever new Student is registred for the cours then assing the task to the owner of the record to give confrimation call three days before batch start

5. Create Courses :

java

sfdc

6.Create two students

Satish

Ravi

7.Convert the lookup field to master -details

8. When ever new student student is registred then update

Course : Registred student by one

Course : Total Fee as Total Fee+Fee

Note : We can also update the record type using Workflow fieldUpdate.

=====

Outbound Message :

=====

1. When ever the condition is met if you want to send the record to external system,
then we use outbound message .
2. Url of the system to which we want to send the record should be transfer should be registred with remote site settings .

Navigation ,

Setup

|---Adminster

|--Security Settings

|---Remotesite settings

|---new

Step 1: Enter Name

Step 2: Enter Remote site settings

Step 3: save.

=====

Time-Based Workflow Actions :

=====

1. These actions are performed at given time trigger .
2. We can define 10 time triggers for every workflow rule .
3. On Every time trigger we can perform 40 Actions

Emails : 10

Outbound : 10

Task : 10

Email : 10

4. We can create time bound actions only when evaluation criteria is
 - a. Created
 - or
 - b. Created or any time edited to meet the evaluation criteria.
5. We cannot create time based workflow action when evaluation criteria is created and any time edited.
6. How to test time based actions .

Setup

|---Monitor

|---Time-based workflow queue

|----Specify the condition.

7. On a object we can create 500 workflow rules
8. At a time we can enable only 50 rules .
9. If there are more than one workflow rule defined on the same object .
 - a. All the rules will be verified first on the original record .
 - b. All the rules which are meeting the condition thier corresponding action will be performed in the next step.

DataLoader :

This is a ETL tool provided by salesforce to perform insert ,update,upsert,delete
export the data from salesforce to external system or external system to salesforce

1.How to download the dataloader ?

Setup

|-----Adminster

|-----DataManagement

|-----DataLoader

|-----Download dataloader for windows

2.How to install dataloader ?

- 1.select the dataloder.exe file
- 2.Click on run
- 3.Agree the terms
- 4.Give next -->next--Next-->Finish

Set the ssl configuration on Internet explorer

1. Open internet explorer
2. select the tools on the right corner
3. Tools
 - |----Internet Options
 - |-----Select Advaned Tab
- a .Enable USE TLS.1.0
- b. Enable USE TLS.1.1
- c. Enable Use TLS.1.2
- d. Disable USE SSL 2.0
- e. Disable use SSL 3.0

3.How to login to dataloader?

ANS: There are two ways to login to dataloader

1.Using OAuth

2.Using password

1. Using OAuth :

- a. Choose the environment type as (Production ,sandbox)
- b. Provide salesforce credential of user who want to login to dataloader
- c. Verification code will be sent to email
- d. Enter the verification code and click on Allow Access

2. Using Password

a. Generate security token

UserName

|

|---Mysettings

|

|-----Personal

|

|-----Reset My security Token

|-----Reset

SecurityToken

Note : Security token will be sent to registred email id of user

b.Open the dataloader and choose password format

c. UserName : salesforce username

password : salesforcepassword+securityToken

Q: Which standard objects are supported by dataloder ?

ANS: Lead ,Account,Contact,Opportunity,PriceBook,Product,Event,Task,user

Q:: Which custom objects are supported ?

ANS: All the custom objects

Q:: How many records are supported by dataloader ?

ANS: 5 MILLION records

Q:: How to export the data ?

1. Select Export options
2. Choose the object
3. Specify the location and extraction filename
4. Select the fields
5. Specify filter condition
6. Click on Finish

Q:: Export All :

It will export all the records in the object including the records which are in recyclebin

1. Select ExportAll
2. Select the object
3. Select Location and file where the data need to be exported
4. choose the fields
5. If you want to apply filter condition choose them
6. Finish

Q:: What is the difference between export and export all ?

1. When we export ,only the data in the object is exported
2. When we use export all ,all the data in the object including the data in the recyclebin is exported

Q: How to insert the data ?

1. Create source data in the CSV format
2. Select insert

3. Choose the object
4. Choose the source csv file
5. Make a field mapping between csv field and Object fields
6. Choose the destination folder
7. Click on finish

Note : All the Validations rules and required fields are respected while we insert the data

Note : If there are any lookup field or master-detail field provide 18 character record id in the csv

Q:: Update :

1. Prepare the CSV file with data that need to be updated
Note : Salesforce record id is a must to update the record
2. select Update in dataloader
3. Choose the object
4. Choose the CSV File
5. Create a mapping between csv columns and fields of object
6. Choose the folder where success and error fiels should be generated
7. finish

Q::Delete :

1. Prepare the CSV file with data that need to be deleted
Note ; Salesforce record id is a must to delete the record
- 2.select Update in dataloader
3. Choose the object
4. Choose the CSV File
5. Create a mapping between csv columns and fields of object
6. Choose the folder where success and error fiels should be generated
7. finish

Q:: How to perform upsert ?

1. To perform the upsert operation we need external id or salesforce record id
2. External id field can be any one of the text ,email,number field
3. If any external id value is already existing update the data
4. If external id field is not existing create the record
5. If duplicate external id is existing in the CSV it throws error on all the duplicates

Steps to Upsert

1. Create source data in the CSV format
2. Select Upsert
3. Choose the object
4. Choose the source file
5. Choose the external Id field
6. Make a field mapping between csv field and Object fields
7. Choose the destination folder
- 8 Click on finish

Note : All the Validations rules and required fields are respected while we insert the data

Q:: How to perform Update and delete

ANS: We have to provide salesforce record id to perform update or delete

Q:: How to insert null values in the field for which we have not provided values

ANS : DataLoader

```
|  
|----Settings  
|-----Insert Null values
```

Q:: What is the default size of dataloader ?

ANS:

Default Size : 200 records

Minimum size : 1

Maximum Size : 2000

Q::DataLoader is synchronous or Asynchronous?

ANS :Asynchronous

Q:: DataLoader is atomic or non -atomic

ANS: Non-Atomic

Q::How to use european Date format

ANS: Enable use european date format then it accepts date in the format of dd/mm/yyyy

Q:: Which time zone is applied on dataloader

ANS: By default user who logged to the dataloader his time zone is applied

Note :In case if we leave this field blank system time zone is taken

Q:: Can we avoid duplicates record while inserting the data

Satish-123--Hyd

Satish-123--Hyd

When we try insert these two records using dataloader two records are created in salesforce

DataLoader cannot prevent duplicate records .

Q:: Can we schedule the dataloader from commandLine

ANS :Yes

Q:: If there are any master-detail fields or lookup field how will u pass the data

1. We need to pass 18 character Id .
2. If can use VLookup function to get RecordId

Data Import Wizard :

1. Data import wizard can be used to insert ,update or upsert the data using built in Declarative wizard.
2. It will support all the Custom objects
3. It will support import on following standard object (Account,Contct,Lead, Solution ,Campaing Member)

4. It can support upto 50,000 records.
5. It can avoid duplicate records while insert .
6. Navigation :

Setup

|---Adminster

|---Data Manangement

|---Import Wizard

Step 1: Choose the object .

Step 2: Choose the operation type as Insert ,Update,Upsert

Step 3: Choose the source file

Step 4: Map the fields

Step 5: Save

7. It is a queue based operation.

Data Export Wizard :

1. We can export the data using the export wizard .
2. We dont have choice to choose which fields we want to export .
3. We dont have choice to apply the filter condition.

2 .DataLoader-CommandLine

- 1.Generte the Key and Encrypt the password :

Step 1: Goto DataLoader in Program Fiels

C: Drive

|---Program Files

|---Salesforce.com

|----DataLoader

|---bin

Step 2: Open the Command Prompt

Change the path

CD C:\Program Files (x86)\salesforce.com\Data Loader\bin

Step 3: Generate the Random key to encrypt the password .

encrypt.bat -g <Any Text

Ex: C:\Program Files (x86)\salesforce.com\Data Loader\bin\ encrypt.bat -g
'Capital'

Step 4: Copy the generated key and save it in a note pad

Step 5 : Save the note pad as key.txt in DataLoader file

C:\Program Files (x86)\salesforce.com\Data Loader\key.txt

Step 6: Encrypt the salesforce account password with key generated in the
above step

C:\Program Files (x86)\salesforce.com\Data Loader\bin\ encrypt.bat -e
<password> "<filepath>\key.txt"

Step 7: Copy the encrypted password.

2. Mapping File

This is used to map the fields of Source with fields of Destination table

#Mapping Value

Dated :

Source DatabaseField = Destination

Example : from salesforce pushing the data to oracle

#Mapping value

Name__c =EmpName

City__c =Employee_City

Salary__c=Salary

Example : Inserting the data from Oracle to salesforce

#Mapping value

EmpName=Name__c

Employee_City=City__c

Salary=Salary__c

save the file with extension of .sdl

3. Data-config.xml

This bean file contains the information about the external database from which we are fetching the data or inserting the data .

Step 1: Bean to establish the connection

```
<bean id="dbDataSource">
    <property name="driverClassName"
value="oracle.jdbc.driver.OracleDriver"/>
    <property name="url"
value="jdbc:oracle:thin:@my.server.com:1521:dataBaseName"/>
    <property name="username" value="user"/>
    <property name="password" value="password"/>
</bean>
```

Step 2: Specify the type of operation you want to perform on database

1. write sql and fetch data from oracle

```
<bean id="queryAccountAllSql" >
    <property name="sqlString">
        <value>
            SELECT ACCOUNT_NAME, BUSINESS_PHONE, SFDC_ACCOUNT_ID,
ACCOUNT_EXT_ID, ANNUAL_REVENUE, LAST_UPDATED, ACCOUNT_NUMBER
            FROM TableOwner.Accounts
        </value>
    </property>
</bean>
```

```

</property>
<property name="columnNames">
  <list>
    <value>account_name</value>
    <value>business_phone</value>
    <value>sfdc_account_id</value>
    <value>account_ext_id</value>
    <value>annual_revenue</value>
    <value>last_updated</value>
    <value>account_number</value>
  </list>
</property>
</bean>

```

2. Insert the data into oracle

```

<bean id="insertAccountSql" >
  <property name="sqlString">
    <value>
      INSERT INTO TableOwner.Accounts (
        ACCOUNT_NAME, BUSINESS_PHONE, SFDC_ACCOUNT_ID,
        ANNUAL_REVENUE, ACCOUNT_EXT_ID, ACCOUNT_NUMBER)
        VALUES (@account_name@, @business_phone@, @sfdc_account_id@,
        @annual_revenue@, @account_ext_id@, @account_number@)
    </value>
  </property>
  <property name="sqlParams">
    <map>
      <entry key="account_name" value="java.lang.String"/>
      <entry key="business_phone" value="java.lang.String"/>
    </map>
  </property>
</bean>

```

```

    <entry key="sfdc_account_id" value="java.lang.String"/>
    <entry key="annual_revenue" value="java.lang.Double"/>
    <entry key="account_ext_id" value="java.lang.String"/>
    <entry key="account_number" value="java.lang.String"/>
  </map>
</property>
</bean>

```

Step 3 :Establish the connection between database and operation bean

```

    <bean id="insertAccount"
    class="com.salesforce.dataloader.dao.database.DatabaseConfig"
    singleton="true">
    <property name="sqlConfig" ref="insertAccountSql"/>
    <property name="dataSource" ref="dbDataSource"/>
    </bean>

```

4. Process-Config.xml

Reports

Report Types :

1.Reports types specifies the following

- a. On Which object we are creating the report.
- b. On which set of data we are creating report.
- c. On which field we are creating the report.

2.Report Types are classified into two types

a. Standard Report Types

1. Standard Report Types are created by Salesforce on both standard and custom objects.

2. These are the report types which are created by Salesforce on all the standard objects and custom objects on which the allow reports option is enabled

b. Custom Report Types :

a. These are the report types which are created by the user to meet his organization's business requirement

c. Navigation

Setup

|---Build

|---Create

|---Report Types

|---New Custom Report Types

Step 1: Select Primary object

Step 2: Enter Report Type label and Name

Step 3: Enter the description

Step 4: Choose the folder in which you want to store the report type

Step 5: Deployment Status

Step 6: Specify on which set of data you want to create a report

a. If you want to include any child objects for the primary object we can select up to three levels

b. We have two choices to specify on which records we can create reports

1. Every parent record should have at least one child

Note : If we select this option only those parent records which have at least one child only included in report .

or

2. Every parent may or may not have child record

Note : if we select his option all the parent records with their corresponding child will be included in report. we can choose any one choice to include the data in the report

Step 7: Click on Edit layout and select the list of fields available in the report

Q: Who can create /Update/Delete the custom report type ?

ANS : Users whoes profile has the following permission enabled .

To create or update custom report types: Manage Custom Report Types

To Delete the report Types : Modify All data

=====

Reports Folder:

=====

- 1.Reports are the analysis on the data .
- 2.Any report that is created in the salesforce has to be save to folder.
- 3.There are four types of folder
 - a. Standard Report Folder
 - b. MyPersonal Custom Report Folder
 - c. Unified Report folder
 - d. Custom Report Folder
4. Standard Report Folder :
 - a.This folder will contain only standard reports .
 - b. We can not store custom reports in this folder
5. MyPersonal Custom Reports :
 - a. Any Reports stored to this folder are visable to only running user who created the report.
 - b. Reports stored in this folder cannot shared with any user

6. Unified Public Report folder ;

a. Reports which are stored in the unified public folder can be accessed by all the users whose profile has

1. Manage reports in public Folder

or

2. View reports in the public Folder

permissions enabled

7. Custom Report Folder :

a. Reports stored in this folder can be shared with

1. user

2. Role

3. Role and Sub

4. Public Group

b. we can grant access of View /Edit/Manage on this folder

c. User with "Create Report Folder" permission in the profile can create custom report folder

=====

Permissions required to handle the functionalities of reports

=====

1. New Report Button is visible only when profile has

Create and Customize Reports

2. To View the report builder Screen

Report Builder

Run Reports

3. Export Reports

Export Reports

4. Schedule Reports

Schedule Reports

5. Customize your Reports

Edit My Reports

=====
Reports & Report types:

- =====
1. A report is a list of records that meet the criteria you define.
2. It's displayed in Salesforce in rows and columns, and can be filtered, grouped, or displayed in a graphical chart.
3. We can create reports in four formats

- a. Tabular Report
- b. Summary Report
- C. Matrix Report
- d. Joined Report

=====
→Tabular Report :

- =====
a. This will return you the list of records which are meeting the filter criteria in the form of table

Ex : Create a report to get list of opportunities which are closed in this month

Ex :Create a report to get list of leads generated in this month

Ex :Create a report to list of last 10 opportunities which are closed

- b. In the tabular report we can perform the operations

- 1. Sorting Records
- 2. Summarizing the fields (Sum |Avg| Min |Max values of a given field)
- 3. Bucketing Field :Creating a new field whose values are generated based on the existing field in the report

Ex : Create a new buck field which shows Good if the probability is more than 50 otherwise bad

4. Show Details |Hide Details

5. Printable view

6. Export Details :

Note : Records on which report is built those records are expored To export the details user profile should have permission of export reports

Note : Reports can be exported in the form of .csv |XLS

7. Schedule Reports

8.Limits :

a. Maximum 200 rows

=====

→.Summary Report :

=====

a. Row wise grouping of the records based on the field is called summary

Note : We can group upto three fields

Ex : Create report on opportunity based on stageName

Ex : Create report on opportuntiy which are created in last three month based on lead Source

1. Sorting the records

2. Bucketing

3. Summarizing

4. Conditional Highlighting

5. Adding Chart

6. Schedule the repots

7. Formules

8. Export

9. Printable View

10 .Subscribe

=====

→Matrix Report :

=====

- a. Column wise and row wise grouping of records is called matrix report
- b. This is used to make B2B comparison

Ex: Create a report to about new Opportunities which are created in this month grouped based on Account wrt to Stagename

- 1. Sorting the records
- 2. Bucketing
- 3. Summarizing
- 4. Conditional Highlighting
- 5. Adding Chart
- 6. Schedule the reports
- 7. Formulas
- 8. Export
- 9. Printable View
- 10 .Subscribe

=====

→JoinedReport :

=====

a. We can join two or more report types and form a single report which we call it as joined report

Note : If we want to join two report types both of them should have same primary object.

Note 1: Reports always runs on user context user's OWD ,Profile ,Field Level security is taken into account while running the report

Running user :user who creates the report is called running user

Viewing User :user who opens the report is called viewing user

Note : Reports always run on user context (i.e user's profile, owd ,sharing rules are taken into consideration)

Dashboards:

1. Dashboard is graphical representation of report.
2. Dashboard can be created on Summary and Matrix report .
3. We have eleven types of Dashboard components.
 - a. Horizontal Bar Chart
 - b. Vertical Bar chart
 - c. Line Chart
 - d. aPie Chart
 - e. Donut Chart
 - f. Funnel Chart
 - g. Scattered Chart
 - h. VF
 - i. Matrix
 - j. Table
 - k. Gauge
4. Steps to create dashboard .
 - Setup
 - |---Dashboard
 - |---New Dashboard

Step 1: Choose the components

Step 2: Choose the Source Report .

Step 3: Choose the running user .

→ **Dynamic Dashboard :**

Dashboards can be created as logged in user or Specific user which we call as dynamic dashboard. We can only create 5 Dynamic dashboards

5. Dashboards are saved to a folder .

6. We can only add 20 components on a single dashboard.

7. How to display the dashboards on home page ?

Setup

|---Build

|---Customize

|---Home

|---Home PageLayout

|---Edit

|---Enable Dashboard Snapshot

→ **Dashboard Permissions :**

1. Create and Customize Dashboard : This permission is required to create or manage dashboard.

2. Create Dashboard folder : Users who have this permission they can create new dashboard custom folder .

3. View Dashboards in public Folder : Users with permission can view the dashboards which are in the public folder .

4. Manage Dashboards in public Folder: Users with permission can create/Edit/Delete the dashboards in public Folder.

5. Edit my Dashboards : Users with this permission can create /edit their own dashboards.
6. Manage All Private Reports and Dashboards : Users with permission can create/Edit/Delete private reports and dashboards.
7. Manager Dynamic Dashboard : users with permission can create /Edit/Delete dynamic Dashboards
8. Drag and drop Dashboard Builder : Users with this permission can see dashboard builder page.
9. View My Team's Dashboards : user with this permission can view dashboards of the team he belongs to .

Reporting SnapShot :

Target Object :

1. It should be Custom object .
2. It should not have any validation rules .
3. It should not have any workflow rules
4. It should not have any triggers on it.

Source Report :

1. We can create reporting snapshot only on Tabular or Summary report.

Steps to create :

Setup

|---Adminster

|---DataManagement

|----Reporting SnapShot

|----New Reporting SnapShot.

Step 1: Enter Reporting SnapShot Name

Step 2: Choose the running user .

Step 3: Choose the source report

Step 4: Choose the target object

Step 5: Map the fields

Step 6: Schedule the Reports

Territory Management

One often overlooked feature in Salesforce is Enterprise Territory Management. The term "Territory" often causes people to think of geography. However, a territory can be made up of anything; industry vertical, channel, product line, company size, geography, annual revenue, as well as any combination of data.

In addition, Salesforce's Enterprise Territory Management can be used to manage Cases. If your sales teams do not have a territory process, your support teams might. If so, territories could be setup based on an SLA or by a customer type.

Using rules, Enterprise Territory Management can then automatically assign those territories to Accounts, Opportunities, and Cases. A rule could be for example:

(Account: Industry EQUALS Biotechnology) AND (Account: Annual Revenue GREATER THAN 50000000).

In this case, every Account in the Biotechnology industry with more than \$50 million in revenue would be assigned to the territory for which this assignment rule was added.

Once a territory is assigned to an Account, Opportunity, or Case the functionality of Enterprise Territory Management provides two main features:

1. INFORMATIONAL

Enabling Enterprise Territory Management adds radio buttons for easily creating List Views that include only records in *My Territories*, or *My Territory Teams*

Any Report Types that include Accounts will have additional filters for *My Territories*, and *My Territory Teams*

Ability to create custom Report Types that Include territory details and their users

Page Layouts for Accounts, Opportunities, and Cases can include the related assigned territory(s) on the page.

2. SHARING AND PERMISSIONS

If using a Public Read Only or Private sharing model, Enterprise Territory Management will allow users who are assigned a territory, or assigned to a parent

of that territory, to have additional access for any Accounts, Opportunities, or Cases that are also assigned to that territory. This works regardless of who actually owns the record.

Territory Access that can be layered on top of any sharing defaults include:

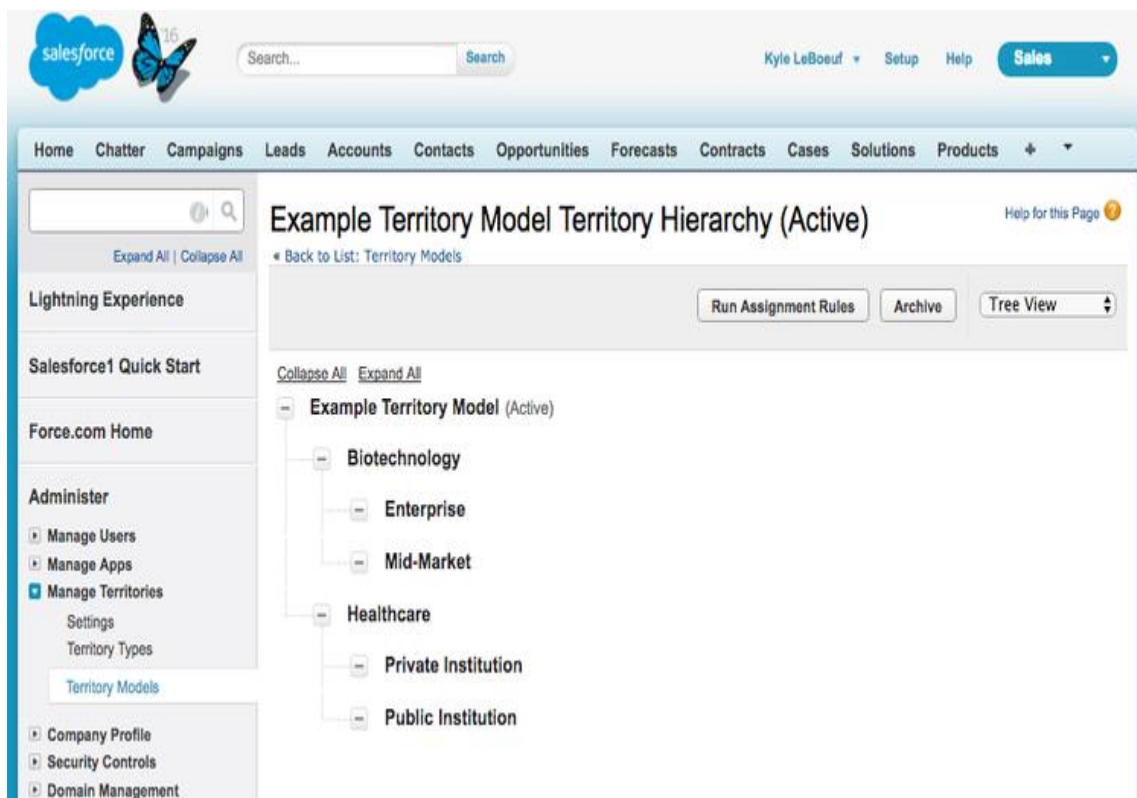
Account Access: View Only, View and Edit, or View, Edit, Transfer and Delete

Case Access: View Only, or View and Edit

Opportunity Access: View Only, or View and Edit

Creating the Territory Model

The first step to implementing Enterprise Territory Management is creating a hierarchy model. This is similar to a Role hierarchy in that users assigned to territories higher in the hierarchy can inherit the child territories lower in the hierarchy.



In this territory hierarchy, the users assigned to *Biotechnology* can have additional access to all accounts assigned to the child territories *Enterprise* or *Mid-Market*. And those accounts will appear in their lists and reports when viewing their territories.

However, unlike User Roles, both accounts and users can be assigned to multiple territories without regard to hierarchy. In this example a user could be assigned to both *EnterpriseBiotechnology* and *Public Healthcare Institutions*.

Assigning Accounts to Territories

After creating the territories and assigning the users, the next step is to create the assignment rules to automatically assign Accounts to each territory. There is also the option to manually assign Accounts if, for example, you wanted a territory for Named Accounts that will be managed manually.

The screenshot shows the Salesforce interface for configuring an Object Territory Assignment Rule. The left sidebar contains navigation links for Lightning Experience, Salesforce1 Quick Start, Force.com Home, and Administer (Manage Users, Manage Apps, Manage Territories, Settings, Territory Types, Territory Models, Company Profile, Security Controls, Domain Management). The main content area is titled 'Object Territory Assignment Rule' and 'Enterprise Biotechnology'. It includes a 'Back to List' link and an 'Assigned Territories (1)' link. The 'Object Territory Assignment Rule Detail' section has buttons for 'Edit', 'Delete', and 'Clone'. The 'Rule Details' section shows the Rule Name as 'Enterprise Biotechnology', the Territory Model as 'Example Territory Model', the Object as 'Account', and the Active status as checked. The 'Rule Criteria' section shows the criteria: '(Account: Industry EQUALS Biotechnology) AND (Account: Annual Revenue GREATER THAN 50000000)'. The 'Assigned Territories' table shows one entry: 'Enterprise' with parent territory 'Biotechnology' and an 'Apply to Child Territories' checkbox.

Action	Territory	Parent Territory	Apply to Child Territories
Remove	Enterprise	Biotechnology	<input type="checkbox"/>

Testing the Model

Once the rules have been activated and the users assigned, the *View Accounts* button on the territory detail page can be used to quickly validate if the correct Accounts are being assigned.

16

Search
Kyle LeBoeuf
Setup
Help
Sales

[Home](#)
[Chatter](#)
[Campaigns](#)
[Leads](#)
[Accounts](#)
[Contacts](#)
[Opportunities](#)
[Forecasts](#)
[Contracts](#)
[Cases](#)
[Solutions](#)
[Products](#)

Expand All
Collapse All

Lightning Experience

Salesforce1 Quick Start

Force.com Home

Administer

- Manage Users
- Manage Apps
- Manage Territories
 - Settings
 - Territory Types
- Territory Models

Build

- Customize
- Create
- Develop
 - Schema Builder
 - Lightning App Builder
 - Canvas App Previewer

Territory

Enterprise

[Edit Layout](#) | [Help for this Page](#)

Hierarchy: [Example Territory Model](#) » [Biotechnology](#) » Enterprise

[Assigned Users \(1\)](#) | [Manually Assigned Accounts \(0\)](#) | [Inherited Assignment Rules \(1\)](#) | [Assignment Rules Assigned to This Territory \(1\)](#) | [Child Territories \(0\)](#)

Territory Detail [Edit](#) [Delete](#) [Clone](#) [View Accounts](#)

Label	Enterprise	Territory Name	Enterprise
Territory Type	Example Territory Type	Territory Model	Example Territory Model
Parent Territory	Biotechnology		
Description			

► System Information

► Territory Access Levels

Assigned Users [Manage Users](#)

Action	Full Name	Active	Role in Territory	Assignment Date
Edit Remove	Kyle LeBoeuf	✓		6/3/2016 12:38 PM

Manually Assigned Accounts [Add Accounts](#)

No records to display

Inherited Assignment Rules

Rule Name	Active	Defined In	Modified Date
Biotechnology	✓	Biotechnology	6/3/2016 12:35 PM

Assignment Rules Assigned to This Territory [New](#) [Run Rules](#) [Assign Rules](#)

Action	Rule Name	Active	Apply to Child Territories	Modified Date
Edit Remove	Enterprise Biotechnology	✓	<input type="checkbox"/>	6/3/2016 12:34 PM

Child Territories [Create Territory](#)

No records to display

The screenshot shows the Salesforce interface for viewing accounts in the Enterprise territory. The page title is 'View Accounts in Enterprise'. Below the title, there is a search bar and a 'Territory: Enterprise' filter. A 'View: All' dropdown menu is visible, along with links for 'Edit' and 'Create New View'. A list of accounts is displayed in a table format, with columns for 'Account Name', 'Method', and 'Assignment Date'. The first account listed is 'GeneTek' with the method 'Territory Assignment Rule' and an assignment date of '6/3/2016 1:02 PM'.

Account Name	Method	Assignment Date
GeneTek	Territory Assignment Rule	6/3/2016 1:02 PM

Viewing Territories on Records

If the related lists have been added to the page, then any assigned territories, and optionally, their related users, will appear on the record detail.

The screenshot displays the Salesforce interface for the 'GeneTek' account. The top navigation bar includes links for Home, Chatter, Campaigns, Leads, Accounts (selected), Contacts, Opportunities, Forecasts, Contracts, Cases, Solutions, and Products. The left sidebar shows a 'Create New...' button, a 'Shortcut' for 'Unresolved Items', and 'Recent Items' including 'GeneTek' and a 'Recycle Bin'.

The main content area for the 'GeneTek' account includes a 'Show Feed' button and a list of links for various account-related items. Below this is the 'Account Detail' section, which includes fields for Account Owner (Kyle LeBoeuf), Account Name (GeneTek), Parent Account, Account Number, Account Site, Type, Industry (Biotechnology), Annual Revenue (\$100,000,000), Billing Address, Created By (Kyle LeBoeuf), and Last Modified By (Kyle LeBoeuf). There are also buttons for 'Edit', 'Delete', and 'Include Offline' for the account details.

The 'Assigned Territories' section shows a table with columns for Action, Territory, Territory Model, Model State, Assignment Date, and Method. The table contains one record: 'Enterprise' territory, 'Example Territory Model', 'Active' state, assigned on '6/3/2016 1:02 PM' using the 'Territory Assignment Rule' method.

The 'Users in Assigned Territories' section shows a table with columns for Full Name, Email, Role in Territory, Territory, and Territory Model. The table contains one record: 'Kyle LeBoeuf' with email 'kyleleboeuf@gmail.com', role 'VP of Enterprise Sales', assigned to the 'Enterprise' territory, and 'Example Territory Model'.

The 'Contacts' section shows a 'No records to display' message and buttons for 'New Contact' and 'Merge Contacts'.

One of advantages of using Enterprise Territory Management over creating a DIY custom solution using formulas and/or workflows is the ability to scale as new territories are needed. Formulas have maximum character and size limits that can easily be exceeded when trying to expand on a custom territory solution using those methods. The assignment rules in Enterprise Territory Management are independent and reusable. Handling larger scenarios can be accomplished by simply creating more rules.

In summary, leveraging Enterprise Territory Management in Salesforce allows you to easily manage an otherwise complex territory hierarchy, for sales or service, that is frequently changing, and be able to measure metrics, on a territory basis, by utilizing functionality that is already native to Salesforce.

Territory Management in Salesforce

Territory Management is an account sharing system that lets users access accounts based on the characteristics of the accounts, such as geography, product line, or business unit.

A territory is a flexible collection of accounts and users where the users have at least read access to the accounts, regardless of who owns the account. By configuring territory settings, users in a territory can be granted read, read/write, or owner-like access (that is, the ability to view, edit, transfer, and delete records) to the accounts in that territory. Both accounts and users can exist in multiple territories. You can manually add accounts to territories, or you can define account assignment rules that assign accounts to territories for you.

Not only can you control access to accounts for users in each territory, you can also control users' access to the opportunities and cases associated with the accounts in the territory, regardless of who owns the records.

Territory Access Levels:

Account Access	View only, View and Edit, or View, Edit, Transfer and Delete
Contact Access	No Access, View only, or View and Edit
Case Access	No Access, View only, or View and Edit
Opportunity Access	No Access, View only, or View and Edit

S*****