WORKFLOW RULES

Workflow Rules are used to automate certain business processes inside the organization.

Each Workflow Rule should be associated with an "Object". On a single object we can have one/more Workflow Rules.

Each Workflow Rule contains 2 Parts.

1. **Event/Evaluation Criteria**: Event describes the Occasion/Situation when the Workflow rule should fire.

Salesforce provides the below 3 Events for the Workflow Rules.

i. **Created**: This event will fire the Workflow Rule once a new record has been inserted inside the object.

ii. **Created and every time it is edited**: This event will fire the Workflow Rule once a new record has been inserted and an existing record is updated successfully.

iii. **Created, anytime it is edited to subsequently meet criteria**: This event will fire the Workflow upon creating a new record inside the object, upon updating when the record meets the specified conditions.

2. **Actions**: A Workflow rule can be associated with "One / More" actions. Salesforce supports the below 4 types of actions can be performed through Workflow Rules.

i. **Email Alerts**: By using this action we can send an Email Alert to one/more users based on a pre-existing email template.

ii. **Field Update**: By using Field Update action, we can update a field value by assigning the new value.

Each Field Update Action can update only one field value. To update multiple fields, add multiple field update actions which makes the workflow rule complex, which leads to performance issues.

To update a greater number of fields inside the object, use "Triggers" through Apex Programming.

iii. **Assigning a Task Record:** By using this action we can assign a task record to the user, which reminds the people regarding the requirement with a pop-up alert/notification.

iv. **Send an Outbound Message**: By using this action, we can send an XML Based SOAP message to the external system for the integration.

Types of Workflow Rules: Based on the event/time period on which the actions are getting fired, the Workflow Rules has been categorized into 2 types.

1. Immediate Action Workflow Rules: These Workflow Rules will fire the actions immediately, as soon as the criteria has been met.

2. Time-Dependent Action Workflow Rules / Time Triggers: These Workflow Rules will fire the actions based on the specified time period.

The Actions will reside inside the "Workflow Queue" till the scheduled time is up.

Governor Limits

i. We can create maximum of 500 Workflow Rules per an object. But maximum of 50 Rules can be in "Active Status" at a time per an object.

ii. Each Workflow Rule can have maximum of 40 Immediate Actions.

iii. An Organization can have maximum of 2,000 Workflow Rules.

iv. A Workflow Rule can have maximum of 10 Time-Triggers.

v. Each Time-Trigger can have max. of 40 Time-Dependent Actions.

Immediate Actions

Ex: Bank Account ----> Deposited ---> Immediately ---> Email, SMS.

Reserve ----> Movie Ticket ----> Immediately ---> Email, SMS.

Raise a Case -----> Registered ---> Immediately ---> Email, SMS.

Time-Dependent Actions

Ex: ICICI Bank Credit Card:

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----> Bill Generation Date: 1^{st} of the Month.

Bill Due Date: 20^{th} of the Month.

Bill has been Generated ---> Immediately ---> Send Email, SMS.

Reminders:

10 Days Before the Due Date (10^{th}) ----> SMS, Email.

5 Days Before the Due Date (15^{th}) ----> SMS, Email.

3 Days Before the Due Date (17^{th}) ----> SMS, Email.

2 Days Before the Due Date (18^{th}) ----> SMS, Email.

1 Day Before the Due Date (19^{th}) ----> SMS, Email.

0 Days Before the Due Date (20^{th}) ----> SMS, Email.

1 Day After the Due Date (21^{th}) ----> Block the Card.

Click on the "Setup" menu.

1. Search for the Option "Workflow Rules" from Quick Find box.
2. Click on "New Rule" button.
3. Select the "Object Name" from the Picklist.
4. Click on "Next" Button.
5. Enter the Workflow Rule Label, Name and Description.
6. Select the Event / Evaluation Criteria.
    6.1. Add the Rule Conditions/Filters to be verified before firing the actions.
7. Click on "Next" button.
8. Select the Required Actions and add the Actions.
9. Once all the actions are added, click on "Done" button.

10. Click on "Activate" button to make the Workflow Rule Active.

<u>Email Alerts</u>: By using this Action, we can send an Email Notification to one/More users with the required Subject and Content by using a Pre-Existing email template.

Note: We can add the CC Copy Email Addresses up to maximum of 5.

Use Case: Configure a Workflow Rule to send an Email Alert the HR Person upon creating a New Hiring Manager record inside the object.

Object Name: Hiring Manager.

Event / Evaluation Criteria: Created.

Rule Conditions: Hiring Manager: Email Address! = Null

Action Type: Immediate Action

Action Name: Email Alert

Recipient Type: Email Field

Assignments

1. Configure a Workflow Rule on the Lead Object to Send the Email Notification to the Lead Person's Email Id while creating a New Lead Record inside the Object.

2. Configure a Workflow Rule on the Candidate Object to notify the Candidate upon submitting the profile for a Position.

3. Configure a Workflow Rule on the Case Object to notify the "Case Owner" upon creating a High Priority Case and upon updating the record.

<u>Time-Dependent Actions / Time Triggers</u>

By using this feature, we can configure the Workflow Rule on an object, which can fire the actions based on the specified time period.

Till the Schedule Time is up, all the Time Dependent Actions will wait inside the "Workflow Queue".

A Workflow Rule can have both "Immediate Actions & Time-Dependent Actions".

Time-Dependent Actions can't be applicable on the Workflow Rule with the criteria "created and every time it is edited".

While Adding the Time Trigger, the schedule time can be either in terms of "Days/Hours".

Time-Dependent Actions can be fired either "Before / After" the specified time period.

Use Case: Configure a Workflow Rule on the Position Object to notify the Hiring Manager upon assigning a New Position Record. Send the Reminder Notifications to the HR Person based on the specified schedule time as below.

10 Days Before Position Milestone Date ----> Email Alert

5 Days Before Position Milestone Date ----> Email Alert

2 Days Before Position Milestone Date ----> Email Alert

1 Day Before Position Milestone Date ----> Email Alert

0 Days After Position Milestone Date ----> Email Alert

1 Day After Position Milestone Date ----> Close the Position.

Analysis: Object Name: Position Object.

Event / Evaluation Criteria: Created.

Rule Conditions: 1. Position: HR Email ID != Null.

2. Position: Milestone Date != Null

3. Position: Position Status != 'Closed'

Action Type : Immediate

Action Name : Email Alert

Action Type : Time-Dependent Actions

Action Name : Email Alerts, Field Update

10 Days Before Position Milestone Date ----> Email Alert

5 Days Before Position Milestone Date ----> Email Alert

2 Days Before Position Milestone Date ----> Email Alert

1 Day Before Position Milestone Date ----> Email Alert

0 Days After Position Milestone Date ----> Email Alert

1 Day After Position Milestone Date ----> Close the Position

Field Update: By using this action, we can update the fields inside the object, by assigning the new values for the fields.

Field update action can be either simple field update or cross object field update.

Using simple field update, we can update the field value in the same object on which the work flow rule is configured.

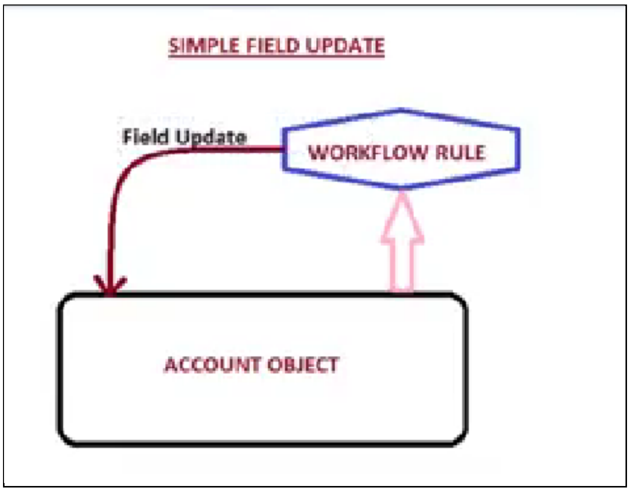

Figure: Simple Field Update

Using cross field update action, we can configure the work flow rule on the child object and update a field in the parent object which is associated with master detail relationship through the workflow rule.

Cross object field update action cannot be applied between the two objects associated with look up relationship. Also, we cannot update the field from parent to child object.

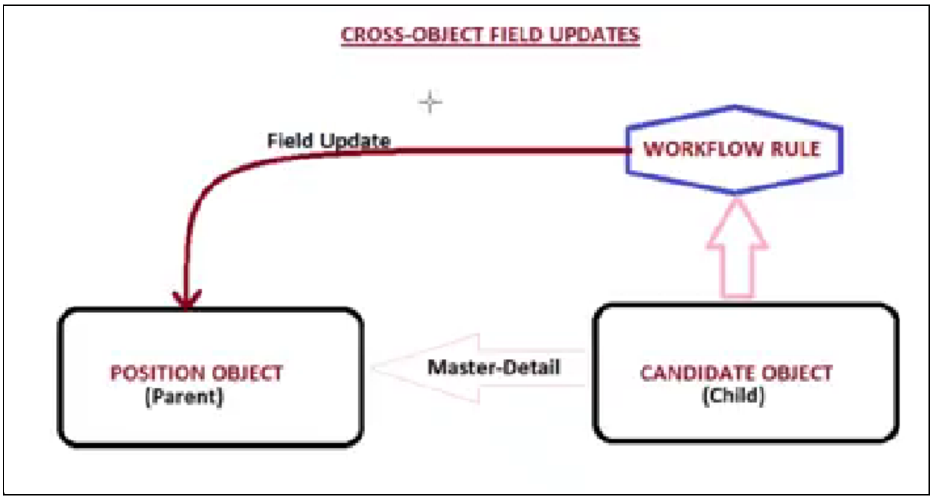

Figure: Cross Object Field Update

Use Case: Configure a workflow rule on the account object to synchronize the billing address to shipping address, if the checkbox 'Both the addresses are same' is selected.

Object Name: Account

Event: Created and anytime it is edited

Rule condition: Both the addresses are same checkbox = true

Action type: Immediate action

Action name: Field Update

Source field	Target field
Account: BillingStreet	Account: ShippingStreet
Account: BillingCity	Account: ShippingCity
Account: BillingState	Account: ShippingState
Account: BillingCountry	Account: ShippingCountry
Account: BillingPostalCode	Account: ShippingPostalCode

Pre-Requisite: Create the checkbox datatype field Both the addresses are same.

Use Case: Configure a workflow rule on opportunity object to synchronize the data from the opportunity stage field value into associated account description field.

Object Name: Opportunity

Event: Created and anytime it is edited

Rule condition: Opportunity: Stagename !=Null

Action type: Immediate action

Action name: Field Update

Field to Update: Account: Description field

Set the new value: Text(stagename)