

## **Enhanced Business Process Flow in CRM 2015**

As you may be aware, Microsoft has come up with Business process flow feature in CRM 2013 which provides assistance to users in CRM using stages to be followed in order to complete the whole process.

### **Earlier Limitations:**

- Strictly Linear Process: Business processes are designed to work only in linear manner, no branching is allowed.
- Cannot Revisit The Entity More Than Once: Cannot visit the same entity again in flow single business process flow.
- No programmability support

### **New improvements in VEGA:**

- Here, you have the ability to define branches as well as branching rules. You can create and update branching rules through UI and it can be evaluated in real time. Branching rules must be based on the steps involved in stages.
- Steps and stages can be configured easily where branching rules are defined.
- Selection of entity relationships – It can be optional. previously in CRM 2013 if you wanted to add an entity in business process flow, then it was necessary for the entity to be in 1:N relationship with another entity but now, if there is no 1:N relation between the two entities, you can still add that entity in process flow, the only requirement is that the entity must be enabled to create BPF.
- Branching supports – Single entity, cross entity and also supports multiple entity loops.
- Entity used in BPF can be revisited multiple times.
- Programmability through client API: Programmatically updates process state and hooks on to process events.

To elaborate this further, we can consider a scenario where you sell 'Software' as a product in your organization. The requests you receive on daily basis get classified as leads, some of them get Qualified if they are further interested in evaluating the trial of the software, if not, then the lead get disqualified.

Once a lead is interested in trial, the lead gets Qualified and an Opportunity gets created. Once the trial is completed, we ask if a Quote is required. If no, we close the Opportunity but if it is a yes, we create a quote and deliver the quote. After that, we offer maintenance for the product, if the Opportunity is interested in maintenance, we update the Quote, otherwise we create Invoice and at the end close Opportunity.

Now, we have created a Business process as follows. This shows the updated UI for designing the Business process flow.

# Product trial sales process

Details ▾

Stage Name*	Step Name	Value	Required
<b>Qualify</b>	<b>Purchase Timeframe</b>	<b>Purchase Timeframe</b>	<input type="checkbox"/>
Entity*	<b>Budget Amount</b>	<b>Budget Amount</b>	<input type="checkbox"/>
<b>Lead</b>	<b>Is Interested in trial</b>	<b>Is Interested in trial</b>	<input checked="" type="checkbox"/>
Stage Category			
<b>Qualify</b>			

+ Insert stage   Add branch

This provides UI to edit 'Stage Name', 'Entity' to be selected, 'Stage Category', then 'Step Name' and their Value which includes the fields required to show on BPF followed by the 'Required' status of the steps.

Further, you can see the 'Insert stage' button and the 'Add branch' button at the bottom of the stage as shown below:

Stage Category
<b>Qualify</b>
+ Insert stage   Add branch

**Insert stage:** Adds a new stage in the process.

**Add Branch:** Adds branching in flow. When you click on 'Add branch' button, it will allow to check some specific conditions and on that basis the branching will be done as shown below:

## Product trial sales process

Details ▾

Stage Name *	Step Name	Value	Required
<b>Qualify</b>	Purchase Timeframe	Purchase Timeframe	<input type="checkbox"/>
Entity *	Budget Amount	Budget Amount	<input type="checkbox"/>
Lead	Is Interested In trial	Is Interested In trial	<input checked="" type="checkbox"/>
Stage Category			
Qualify			

+ Insert stage after branch    + Add branch

Field	Operator	Type	Value
If Is Interested In trial	Equals	Value	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes

+ Insert stage

As you can see above, it will apply 'if' criteria to check condition, where we can specify field criteria and save the condition. Once it is saved, it will allow you to insert stage on that basis as shown below. It also allows to add else condition if the criteria to flow the process in another direction is not fulfilled. You can combine multiple conditions using And/or branching techniques.

If Is Interested In trial equals "Yes"



+ Insert stage

Stage Name *	Step Name	Value	Required
<b>Interested In Trial</b>	Actual Close Date	Actual Close Date	<input type="checkbox"/>
Entity *	Confirm Interest	Confirm Interest	<input type="checkbox"/>
Opportunity	Is Require Quotation	Is Require Quotation	<input checked="" type="checkbox"/>
Relationship			
Select relationships			
Stage Category			
Develop			

+ Insert stage after branch    + Add branch

If Is Require Quotation equals "Yes"



+ Insert stage

Stage Name *	Step Name	Value	Required
<b>Deliver Quote</b>	Effective To	Effective To	<input checked="" type="checkbox"/>
Entity *	Total Amount	Total Amount	<input checked="" type="checkbox"/>
Quote	Effective From	Effective From	<input type="checkbox"/>
Relationship			
Select relationships			
Stage Category			
Propose			

Here, it will also allow you to set relationship with another entity. If no relationships exist, then you can set it to none. Likewise, you can create complete BPF and it can be used as shown below:



A dialog box titled "Select Relationships" with a close button (X) in the top right corner. Below the title is the instruction "Select relationships to use that originate from the parent entity". The dialog contains three columns: "Previous Stage", "Entity", and "Relationship". Under "Previous Stage" is the text "Qualify". Under "Entity" is the text "Lead". Under "Relationship" is a dropdown menu currently showing "Originating Lead". The dropdown menu is open, showing two options: "None" and "Originating Lead". At the bottom right of the dialog are "OK" and "Cancel" buttons.

Previous Stage	Entity	Relationship
Qualify	Lead	Originating Lead

Likewise, you can create a complete BPF and it can be used as shown below:

As you can see below, it currently shows only two stages 'Qualify' and 'Close' and the step 'Is Interested In Trial' shows value as No.



A screenshot of a lead profile page for "Ron Henry". At the top, there is a header with a profile icon, the name "Ron Henry", and a "LEAD" label. To the right of the name are three tabs: "Lead Source", "Rating", and "Status". Below the header is a progress bar with two stages: "Qualify (Active)" and "Close". Below the progress bar is a table with two columns: "Field" and "Value". The table has three rows: "Budget Amount" with value "\$1,200.00", "Purchase Timeframe" with value "Immediate", and "Is Interested In trial" with value "No". Below the table is a "Summary" section. On the left, under "CONTACT", are fields for "Topic", "Name", "Job Title", "Business Phone", "Mobile Phone", and "Email". On the right, under "POSTS", "ACTIVITIES", and "NOTES", there is a "POST" button and a list of posts. The first post is from "Ron Henry" and says "admin Last name created Ron Henry". Below the posts is a "STAKEHOLDERS" section with a "Name" field and a "No stakeholders found." message.

Field	Value
Budget Amount	\$1,200.00
Purchase Timeframe	Immediate
Is Interested In trial	No

If you select 'Is Interested In Trial' as yes it will change the flow with additional stages as shown below:

LEAD  
Ron Henry

Lead Source: --- Rating: Warm Status: New Owner: admin

Quality (Active) → Interested In Trial → Close → Next Stage

✓ Budget Amount: \$1,200.00  
✓ Purchase Timeframe: Immediate  
✓ Is Interested In Trial: Yes

Similarly, after qualifying the lead, it will go to another stage where if you select 'Is Require Quotation' as yes, it will show some additional stages as 'Deliver Quote', 'Offer Maintenance' etc. as shown below:

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Interested in "Maplytics" trial

Est. Close Date: --- Est. Revenue: --- Status: In Progress Owner: admin

Quality → Interested In Trial (Active) → Deliver Quote → Offer Maintenance → Close → Next Stage

✓ Actual Close Date: 11/7/2014  
✓ Confirm Interest: Yes  
✓ Is Require Quotation: Yes

This is how you can include business process flow in CRM using advanced features.

**Note:**

- The process can span across maximum 5 unique entities
- It can include maximum of 30 stages per process and 30 steps per stage
- Each branch can be no more than 5 levels deep

With 2015, the following enhancements have been made to close the gap on those limitations:

- Support for multiple entity loops to return to a previous entity in the process
- Support to add entities to your BPF that don't have a relationship to the entity you're coming from. If your rule requires it, you can choose the relationship on the Stage tile using the "Select relationships" link, although this is now optional with 2015 and can be left blank.

+ Insert stage

Stage Name \*  
**New Customer**

Step Name  
Customer Name  
Number of Employees  
Annual Revenue

Value  
Customer Name  
Number of Employees  
Annual Revenue

Required  
☒  
☐  
☐

Entity \*  
**Opportunity**

Relationship  
Select relationships

Stage Category  
--

Select Relationships

Select relationships to use that originate from the parent entity

Previous Stage	Entity	Relationship
Quality	Opportunity	<div>None</div> <div>None</div> <div>Opportunity</div>

OK Cancel

- Client API Programmability
  - Access to available processes, active process, active stage, and active path
  - Move stages, change active process
  - Hook into stage selection, or changing active stage
  - Hide the Process Control completely from the form, or toggle whether or not the Process Control is expanded or collapsed on the form
- Rule Based Branching Support (If / Else)
  - Decisions made to branch to different stages
  - Defined in a single UI for rules, stages, steps, & branches
  - Evaluated Real Time
  - Branches on a single entity, cross entity, merge branches back to the main flow
  - Branching rules must be based on steps in the stage immediately preceding it
  - Can combine multiple conditions in a rule using AND/OR

In order to use Rule Based Branching, when you're editing your Business Process flow, you can click on the "Add Branch" from any stage to indent the flow to add your conditions and additional stages. If you want to have an "If" "Else If" branch, then simply click "Add Branch" to the parent stage and the new stage will be added under the other stages in that branch (e.g., if creating an Opportunity for a New Customer, then we should capture information about that new

customer. Otherwise, if it's an Existing Customer, we should select the customer from our existing Account list). You can also have a default "Else" stage by clicking "Add Branch" and not adding any conditions to the branch. The example below shows the configuration of an "If" "Else If" Business Process.

**BUSINESS PROCESS FLOW**  
**Sales Execution Flow**  
 Details ▾

Stage Name *	Step Name	Value	Required
<b>Qualify</b>	Purchase Timeframe	Purchase Timeframe	<input checked="" type="checkbox"/>
	Purchase Process	Purchase Process	<input type="checkbox"/>
	Existing Customer?	Existing Customer?	<input checked="" type="checkbox"/>
	Budget	Budget	<input type="checkbox"/>

+ Insert stage after branch   + Add branch

**If Existing Customer? equals "No"**

+ Insert stage

Stage Name *	Step Name	Value	Required
<b>New Customer</b>	Customer Name	⊗ --	<input checked="" type="checkbox"/>
	Number of Employees	⊗ --	<input type="checkbox"/>
	Annual Revenue	⊗ --	<input type="checkbox"/>
	Relationship	Select relationships	
Stage Category	--		

+ Insert stage   + Add branch

**Else If Existing Customer? equals "Yes"**

+ Insert stage

Stage Name *	Step Name	Value	Required
<b>Existing Customer</b>	Existing Customer	Account	<input checked="" type="checkbox"/>
	Relationship	Select relationships	

Now when I'm on my Opportunity in CRM, if I indicate that Existing Customer = No, then I get the New Customer stage where I can enter some quick details about the Customer that can be used later to create an Account record (or could be coupled with Workflow to automatically create the Account and associate it to the Opportunity).

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## New Opportunity

Est. Close Date	Est. Revenue	Status	Owner
--	--	In Progress	<u>Peter Majer</u>

Qualify (Active)

New Customer

Close

→ Next Stage

Purchase Timeframe *	<a href="#">click to enter</a>	Budget	<a href="#">click to enter</a>
Purchase Process	<a href="#">click to enter</a>		
✓ Existing Customer? *	<input type="text" value="No"/>		

OPPORTUNITY

## New Opportunity

Est. Close Date	Est. Revenue	Status	Owner
--	--	In Progress	<u>Peter Majer</u>

Qualify (Active)

New Customer

Close

→ Next Stage

Customer Name *	<a href="#">click to enter</a>		
Number of Employees	<a href="#">click to enter</a>		
Annual Revenue	<a href="#">click to enter</a>		

And when I indicate that Existing Customer = Yes, I get the Existing Customer stage where I can select the account I want to associate to this Opportunity.

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## New Opportunity

Est. Close Date	Est. Revenue	Status	Owner
--	--	In Progress	<u>Peter Majer</u>

Qualify (Active)

Existing Customer

Close

→ Next Stage

Purchase Timeframe *	<a href="#">click to enter</a>	Budget	<a href="#">click to enter</a>
Purchase Process	<a href="#">click to enter</a>		
✓ Existing Customer? *	<input type="text" value="Yes"/>		



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## New Opportunity

Est. Close Date	Est. Revenue	Status	Owner
--	--	In Progress	<u>Peter Majer</u>

▶

Qualify (Active)

▶ Existing Customer

▶ Close

▶ Next Stage

Existing Customer\* *click to enter*

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With all these enhancements that were made in Dynamics CRM 2015, there are still some limitations to Business Processes that you should be aware of:

- Processes can only span across a maximum of 5 unique entities
- Maximum of 30 stages per process, and 30 steps per stage
- Each branch can be no more than 5 levels deep
- Only one active process per record
- Can only leverage 1:N entity relationships (even though this is optional)