Dynamics 365 for BPO

The Solution is designed to address most of the day to day process functionalities in case management of D365

MICROSOFT LABS

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1. Overview

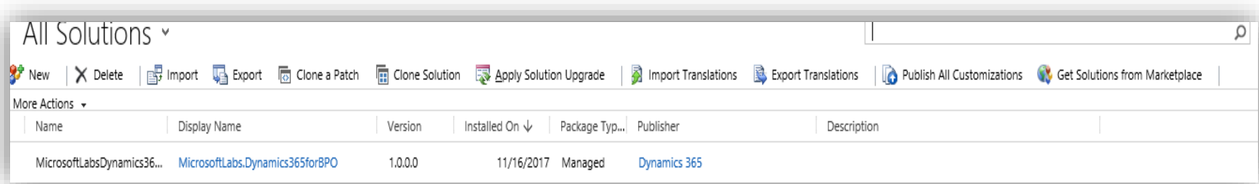
The Dynamics 365 for BPO Solution is designed to add more capabilities to an existing case management for the customers. This solution will provide the additional functionalities like escalate a case, put a case on custom hold status (Internal, 3rd Party and Customer), Automatic creation of child case on 3rd Party Hold status, define SLA of a case, Convert to Case from an incoming email and Email validations in Case management. All these functionalities are described through this guide with configuration and user experience.

This solution also includes Attachment Management, Actionable Audit, Email Alert, Email Machine Learning and Speech To Text. Individual solution user guides links are provided in this document for reference.

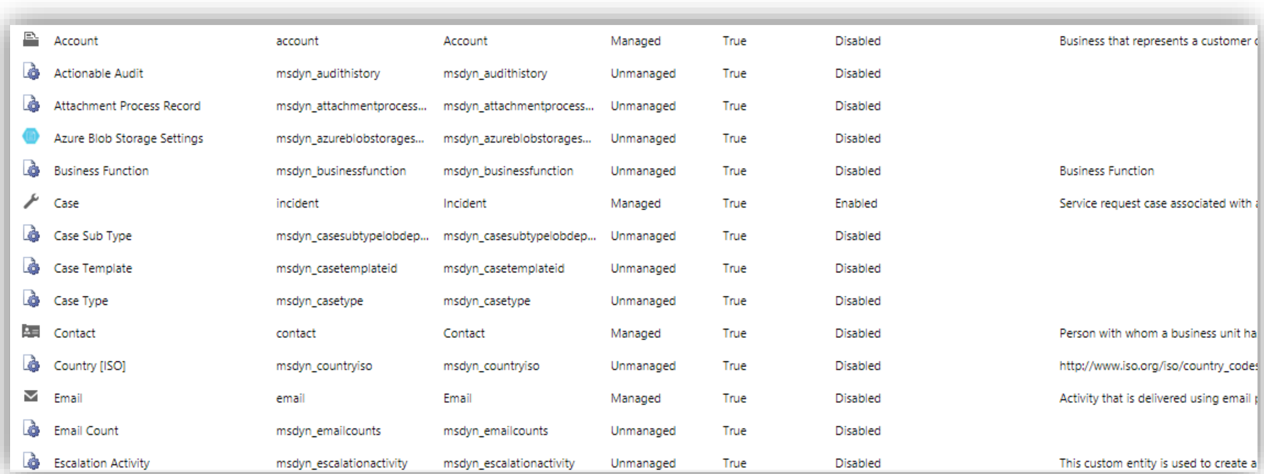
2. How to Verify the Solution after Installation?

After downloading the solution from https://appsource.microsoft.com/en-us , solution looks like below

Solution:



Below are the custom entities:



Account	account	Account	Managed	True	Disabled	Business that represents a customer o
Actionable Audit	msdyn_audithistory	msdyn_audithistory	Unmanaged	True	Disabled	
Attachment Process Record	msdyn_attachmentprocess...	msdyn_attachmentprocess...	Unmanaged	True	Disabled	
Azure Blob Storage Settings	msdyn_azureblobstorages...	msdyn_azureblobstorages...	Unmanaged	True	Disabled	
Business Function	msdyn_businessfunction	msdyn_businessfunction	Unmanaged	True	Disabled	Business Function
Case	incident	Incident	Managed	True	Enabled	Service request case associated with a
Case Sub Type	msdyn_casesubtypelobdep...	msdyn_casesubtypelobdep...	Unmanaged	True	Disabled	
Case Template	msdyn_casetemplateid	msdyn_casetemplateid	Unmanaged	True	Disabled	
Case Type	msdyn_casetype	msdyn_casetype	Unmanaged	True	Disabled	
Contact	contact	Contact	Managed	True	Disabled	Person with whom a business unit ha
Country (ISO)	msdyn_countryiso	msdyn_countryiso	Unmanaged	True	Disabled	http://www.iso.org/iso/country_codes
Email	email	Email	Managed	True	Disabled	Activity that is delivered using email p
Email Count	msdyn_emailcounts	msdyn_emailcounts	Unmanaged	True	Disabled	
Escalation Activity	msdyn_escalationactivity	msdyn_escalationactivity	Unmanaged	True	Disabled	This custom entity is used to create a

Escalation Mapping	msdyn_escalationmapping	msdyn_escalationmapping	Unmanaged	True	Disabled	This entity is used to configure the escalation mapping wi...
Hold Activity	msdyn_holdactivity	msdyn_holdactivity	Unmanaged	True	Enabled	
Hold Activity Reasons	msdyn_holdactivityreasons	msdyn_holdactivityreasons	Unmanaged	True	Disabled	
Hold Reason	msdyn_holdreason	msdyn_holdreason	Unmanaged	True	Disabled	
Line of Business	msdyn_lineofbusiness	msdyn_lineofbusiness	Unmanaged	True	Disabled	
NotesAttachmentEntitySetting	msdyn_notesattachmenten...	msdyn_notesattachmenten...	Unmanaged	True	Disabled	
Out Of SLA Reason	msdyn_outofslareason	msdyn_outofslareason	Unmanaged	True	Disabled	
Out Of SLA Sub Reason	msdyn_outofslasubreason	msdyn_outofslasubreason	Unmanaged	True	Disabled	
Product	product	Product	Managed	True	Disabled	Information about products and their pricing information.
Program	msdyn_program	msdyn_program	Unmanaged	True	Disabled	
Reason	msdyn_reasonlobdependent	msdyn_reasonlobdependent	Unmanaged	True	Disabled	
Root Cause	msdyn_rootcause	msdyn_rootcause	Unmanaged	True	Disabled	
Speech To Text Entity Configuration	msdyn_speechtotextentity...	msdyn_speechtotextentity...	Unmanaged	True	Disabled	
Speech To Text Global Configuration	msdyn_speechtotextglobal...	msdyn_speechtotextglobal...	Unmanaged	True	Disabled	
Sub Reason	msdyn_subreasonlobdepe...	msdyn_subreasonlobdepe...	Unmanaged	True	Disabled	
User	systemuser	SystemUser	Managed	True	Disabled	Person with access to the Microsoft CRM system and who...

Below are the plug-in assemblies:

MicrosoftLabs.ActionableAudit	1.0.0.0	neutral	2954010b1278a799	Sandbox	10/26/2017 11:3...	11/15/2017 3:38...
MicrosoftLabs.AttachmentManagement.Plugins	1.0.0.0	neutral	535de8cd49e5d642	Sandbox	10/6/2017 10:40...	11/15/2017 3:38...
MicrosoftLabs.Dynamics365forBPO	1.0.0.0	neutral	d7d4abb0e59c025f	Sandbox	11/16/2017 2:20...	11/16/2017 2:20...
MicrosoftLabs.EmailAlert	1.0.0.0	neutral	ce5e78260a69a84d	Sandbox	10/26/2017 11:3...	11/15/2017 3:38...
MicrosoftLabs.EmailTextAnalytics.Workflow	1.0.0.0	neutral	9e1f264d29e4a709	Sandbox	10/26/2017 11:3...	11/15/2017 3:38...

Below are the web resources:

/Images/Microphone_16x16.png	msdyn_/Images/Micropho...	PNG format	Unmanaged	True		
/Images/Microphone_32x32.png	msdyn_/Images/Micropho...	PNG format	Unmanaged	True		
/Images/Microphone_Filled_16x16.png	msdyn_/Images/Micropho...	PNG format	Unmanaged	True		
/Images/Microphone_Filled_32x32.png	msdyn_/Images/Micropho...	PNG format	Unmanaged	True		
/Scripts/Shell.js	msdyn_/Scripts/Shell.js	Script (JScript)	Unmanaged	True		English(1033)
Attachment jQuery	msdyn_jquery_2.2.1.min.js	Script (JScript)	Unmanaged	True		English(1033)
attachmentlogo	msdyn_attachmentlogo	ICO format	Unmanaged	True		
Audit History	msdyn_audithistory	Webpage (HTML)	Unmanaged	True		English(1033)
Azure Attachment Reporting	msdyn_azureAttachmentR...	Webpage (HTML)	Unmanaged	True		English(1033)
Azure Attachment Storage Configura...	msdyn_azureAttachmentC...	Webpage (HTML)	Unmanaged	True		English(1033)
AzureBlobStorageSetup32	msdyn_AzureBlobStorageS...	ICO format	Unmanaged	True		English(1033)
azurestorage_updated	msdyn_AzureStorage_Upd...	ICO format	Unmanaged	True		
azurestorage32X32_updated	msdyn_AzureStorage32X3...	ICO format	Unmanaged	True		
Busy Indicator	msdyn_busy_indicator	GIF format	Unmanaged	True		English(1033)
CaseTimeLine.html	msdyn_caseTimeLine.html	Webpage (HTML)	Unmanaged	True		English(1033)
Delete Icon	msdyn_deleteIcon	PNG format	Unmanaged	True		English(1033)
Download Icon	msdyn_DownloadIcon	PNG format	Unmanaged	True		English(1033)
dummyfile	msdyn_dummyfile	Webpage (HTML)	Unmanaged	True		English(1033)
Emoticon faces	msdyn_emoticonBasic	PNG format	Unmanaged	True		English(1033)
Emoticon Happyface	msdyn_emoticonHappy	PNG format	Unmanaged	True		English(1033)
Emoticon Okface	msdyn_emoticonOk	PNG format	Unmanaged	True		English(1033)
Emoticon Sadface	msdyn_emoticonSad	PNG format	Unmanaged	True		English(1033)
Emoticon Satisfiedface	msdyn_emoticonSatisfied	PNG format	Unmanaged	True		English(1033)
Files and Attachments	msdyn_filesandattachments	Webpage (HTML)	Unmanaged	True		English(1033)
FromFieldScript	msdyn_fromfieldscript	Script (JScript)	Unmanaged	True		
Grid	msdyn_grid	Script (JScript)	Unmanaged	True		English(1033)
jquery_1.9.1.min	msdyn_jquery_1.9.1.min	Script (JScript)	Unmanaged	True		
json2	msdyn_json2	Script (JScript)	Unmanaged	True		
msdyn_accountResources.js	msdyn_accountResources.js	Script (JScript)	Unmanaged	True	This script is used to open the search URL when clicking o...	English(1033)
msdyn_autoactivityclose.js	msdyn_autoactivityclose.js	Script (JScript)	Unmanaged	True	Auto Close the Activity based on close date provided	English(1033)

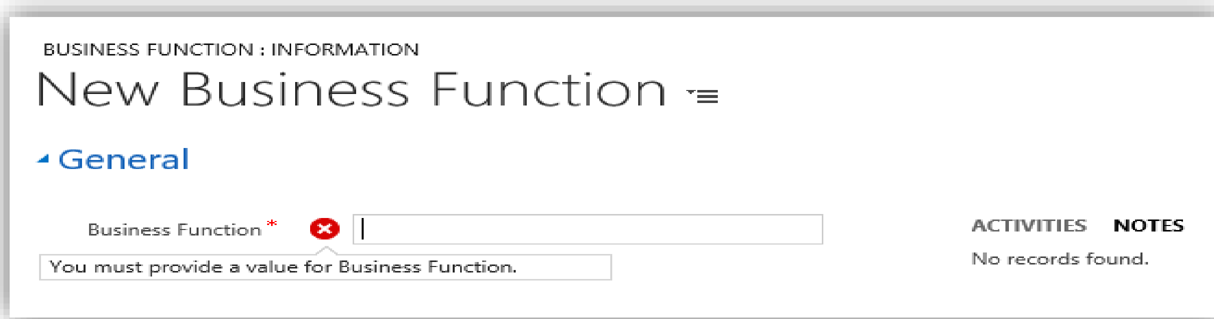
msdyn_commonResources.js	msdyn_commonResources.js	Script (JScript)	Unmanaged	True	Common Resources	English(1033)
msdyn_constants.js	msdyn_constants.js	Script (JScript)	Unmanaged	True		English(1033)
msdyn_converttocase.html	msdyn_converttocase.html	Webpage (HTML)	Unmanaged	True	Email to Case Conversion (when user clicks on Convert To...	English(1033)
msdyn_convertToCase.js	msdyn_convertToCase.js	Script (JScript)	Unmanaged	True	convert to Case	English(1033)
msdyn_escalationCaseResources.js	msdyn_escalationCaseRes...	Script (JScript)	Unmanaged	True	Escalate ribbon button click actions	English(1033)
msdyn_expandemailaddress.js	msdyn_expandemailaddre...	Script (JScript)	Unmanaged	True	Expand Email Address in To field	English(1033)
msdyn_getCaseTemplate.js	msdyn_getCaseTemplate.js	Script (JScript)	Unmanaged	True		English(1033)
msdyn_getCaseTimeLine.js	msdyn_getCaseTimeLine.js	Script (JScript)	Unmanaged	True		English(1033)
msdyn_OnHoldCaseResources.js	msdyn_OnHoldCaseResou...	Script (JScript)	Unmanaged	True	This is show LOB and Select Case Template based on Assi...	English(1033)
msdyn_openholdform.js	msdyn_openholdform.js	Script (JScript)	Unmanaged	True	When the Status of a case from changes to Customer Hol...	English(1033)
msdyn_processingcenterbasedoncou...	msdyn_processingcenterb...	Script (JScript)	Unmanaged	True	To populate Processing Center value based on Country se...	English(1033)
msdyn_webApiSDKHelper.js	msdyn_webapisdkhelper	Script (JScript)	Unmanaged	True		English(1033)
msdyn_workbenchWebapiHelper.js	msdyn_workbenchWebapi...	Script (JScript)	Unmanaged	True		English(1033)
Multiple Uploads	msdyn_multiple_uploads	Webpage (HTML)	Unmanaged	True		English(1033)
notesattachmententitysettings	msdyn_notesattachmenten...	Webpage (HTML)	Unmanaged	True		English(1033)
NotesAttachmentEntitySettings_Logo	msdyn_notesattachmenten...	ICO format	Unmanaged	True		English(1033)
ReportIcon	msdyn_ReportIcon	ICO format	Unmanaged	True		English(1033)
Sentiment Emotions Display	msdyn_SentimentEmotions	Webpage (HTML)	Unmanaged	True		English(1033)
UnreadEmail	msdyn_unreadEmail.js	Script (JScript)	Unmanaged	True		English(1033)
ValidateDetails	msdyn_validatedetails	Script (JScript)	Unmanaged	True		

3. Custom entities

There are 13 custom entities would be available as part of this solution. We need to make sure that all the custom entities must require a value to execute the below functionalities.

3.1 Business Function

Business Function is the parent value for all the routing information of a Case. Below is the snap shot of this entity.



3.2 Line of Business

Line of Business is having relation with Business Function. Business Function to Line of Business would be 1: N relationship. Below is the snapshot

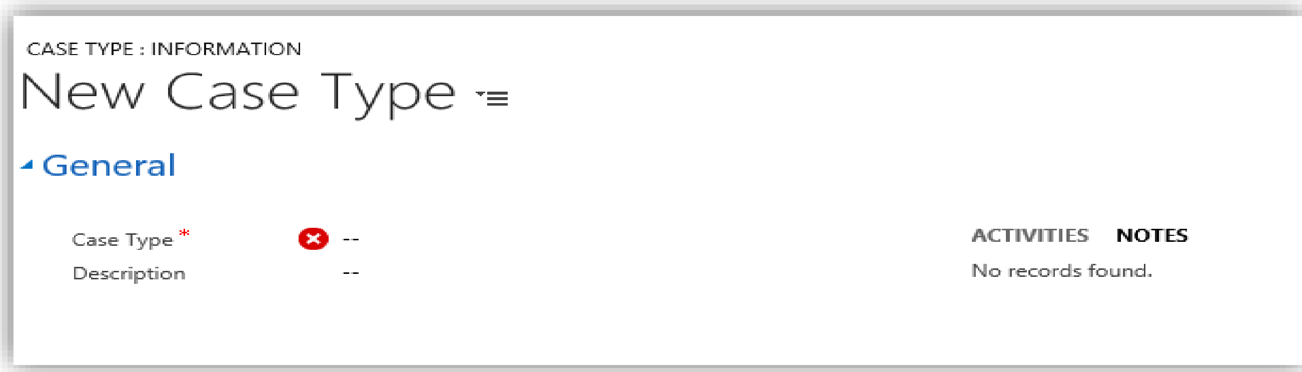
Hold Assign, Hold Assign To values (Yes/No) would be used to create Child Case for 3rd Party Hold.

3.3 Program

Program is independent value is used for Case creation. Below is the snap shot

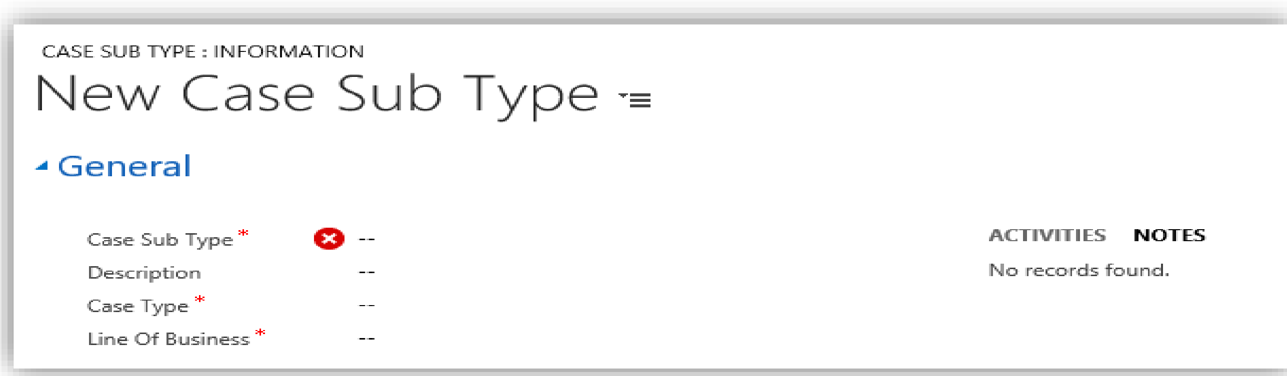
3.4 Case Type

Case Type is used to track the type of the case whether it is Transaction or Inquiry. This value drives the Case Sub Type, Reason, Sub Reason of the case. Below is the snap shot



3.5 Case Sub Type

Case Sub type values will be loaded on the form based on Case Type, Line of Business. Below is the snapshot



3.6 Reason

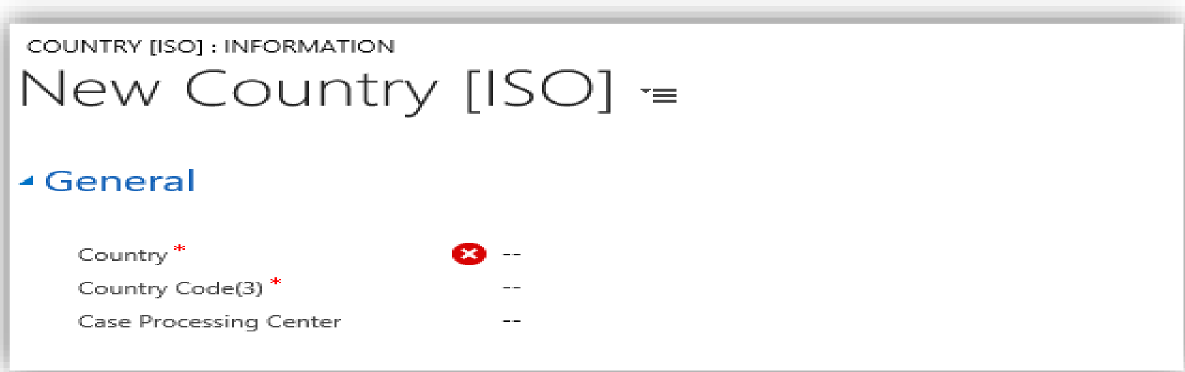
Reason values will be loaded on the case form based on Case Sub Type. Below is the snap shot

3.7 Sub Reason

Sub reason values will be loaded based on the Reason selected. Below is the snap shot

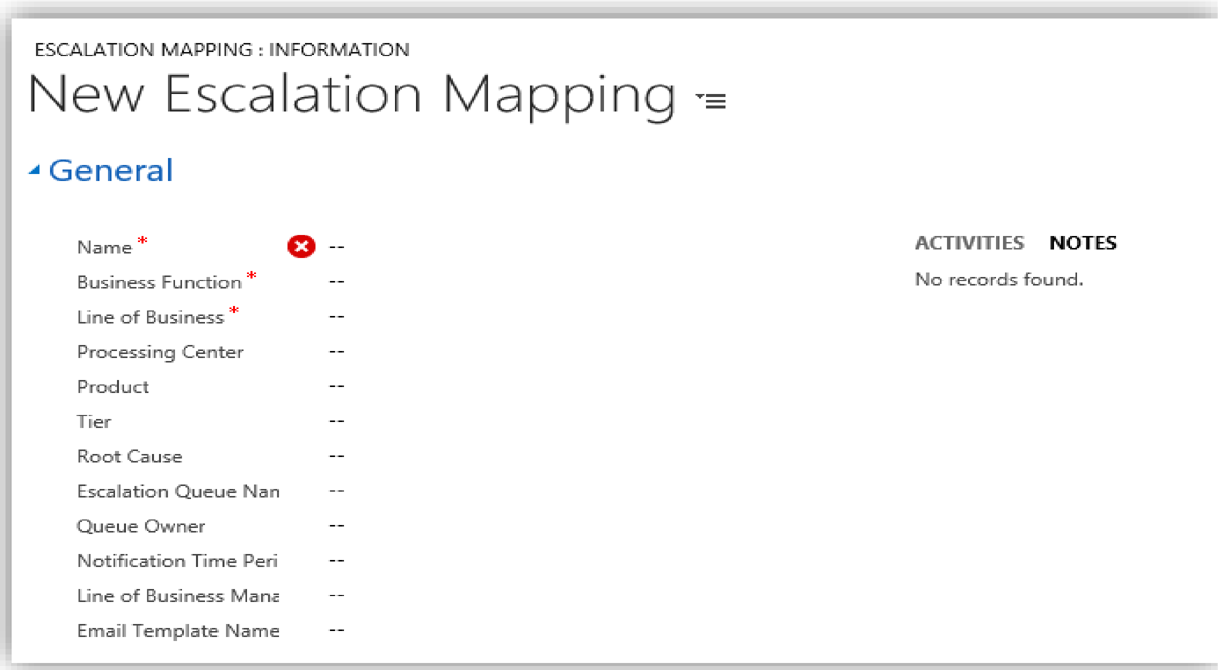
3.8 Country

Country is independent value. Every country value must be mapped to Processing Center. For example, United States is mapped to AOC (American Operations Center) processing center. Below is the snap shot



3.9 Escalation Mapping

Escalation mapping is linked with Business Function, Line Of Business. User has to provide Escalation Queue, Owner details while providing values to this custom entity. So that escalation functionality will work properly.

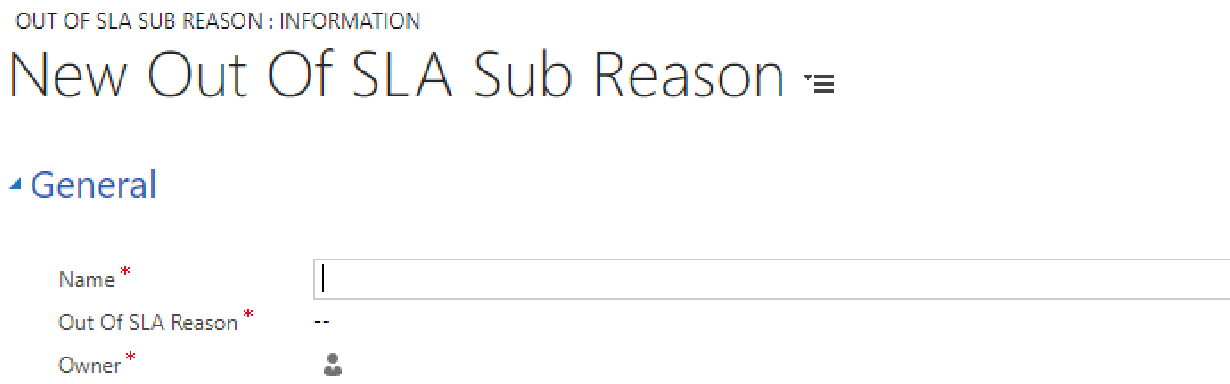


3.10 Out of SLA Reason

This value will be displayed when the case is having expired SLA. System will not allow the user to resolve the case unless until user selected this value.

3.11 Out of SLA Sub Reason

Based on the Out of SLA reason selected, this value will be displayed.

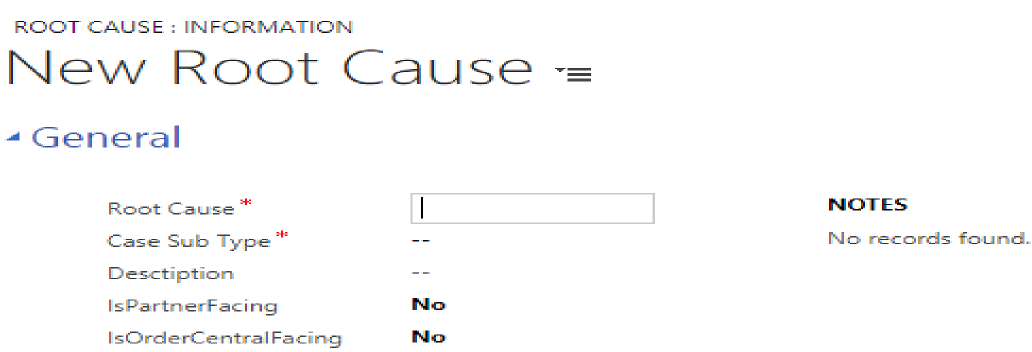


3.12 Hold Reason

Hold reasons are used to populate while case is put on hold. This value is linked with Hold Type (Customer Hold, 3rd Party Hold and Internal Hold). Below is the snap shot

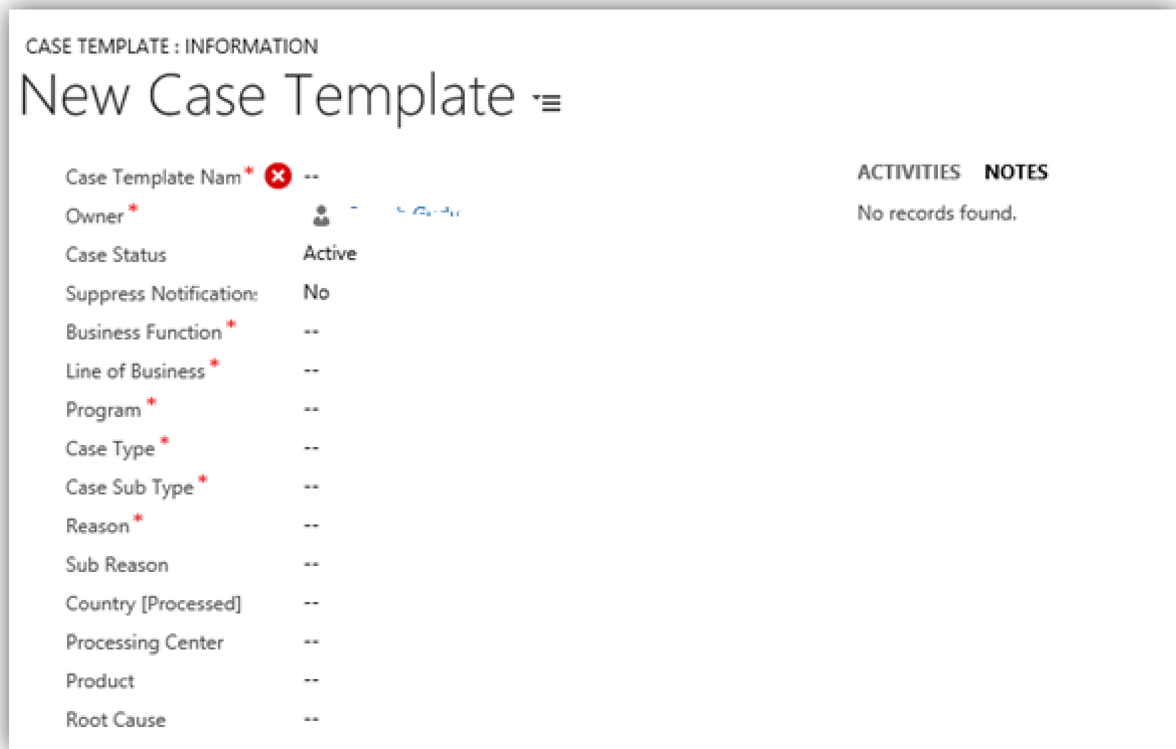
3.13 Root Cause

Root cause can be added by adding respective values of Case subtype. Significance of the entity is to enable user to detect cause of the problem.



3.14 Case Templates

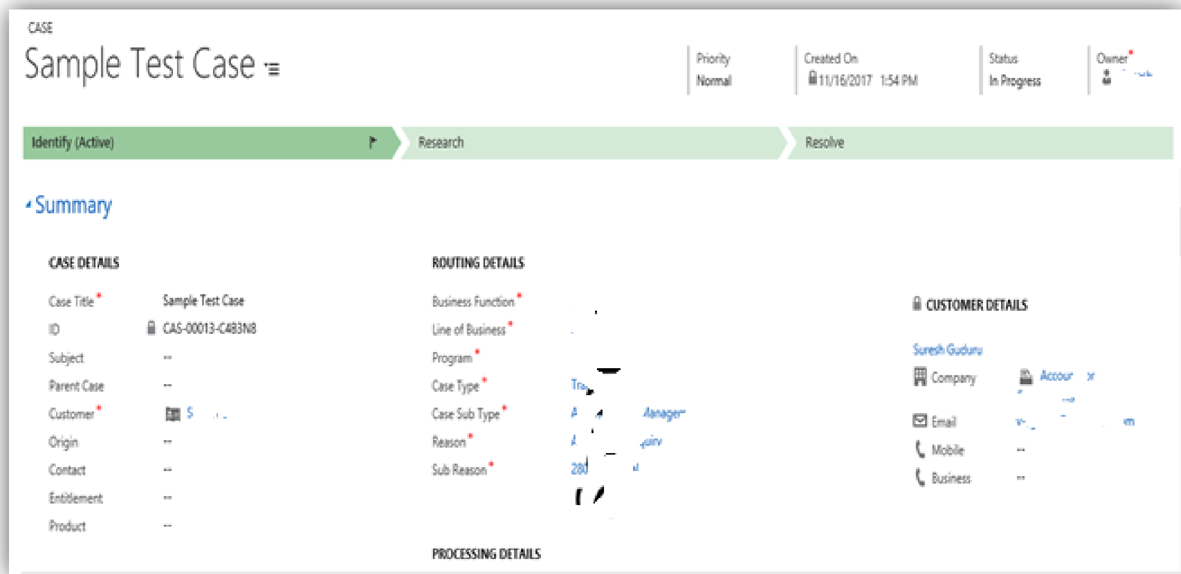
This is used to create a quick case with pre-defined set of values. After defining this values in Case Template, user can select this template while creating a case. Values will be auto populated once the user selects the template from Case Template drop down of Case form.



4. Sample case creation with custom values

Navigate to Dynamics 365 for BPO →Cases

Click on New Case. Enter all the mandatory information and Save the case. Based on above configuration values Case would be created. Below is the snap shot of sample case



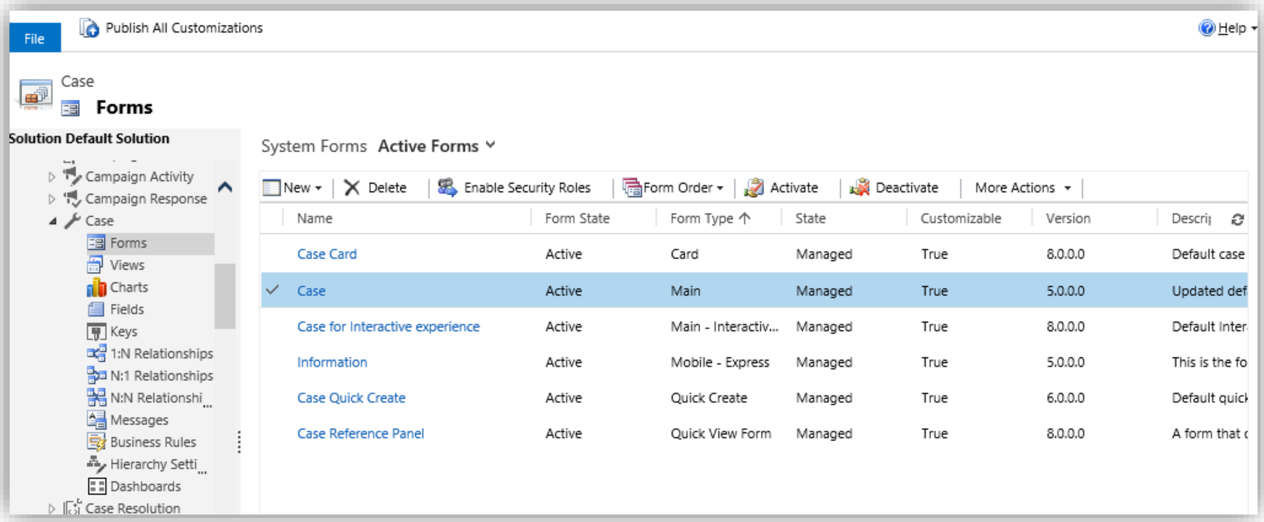
5. Escalation

Cases will be escalated at any time based on the severity established by the employee or vendor. Based on the Escalation Mapping details custom entity values, the case will be escalated to Tier 1, Tier 2, and Tier 3 and Tier 4 levels. Need to make sure that all the configurations are available.

5.1 Configuration

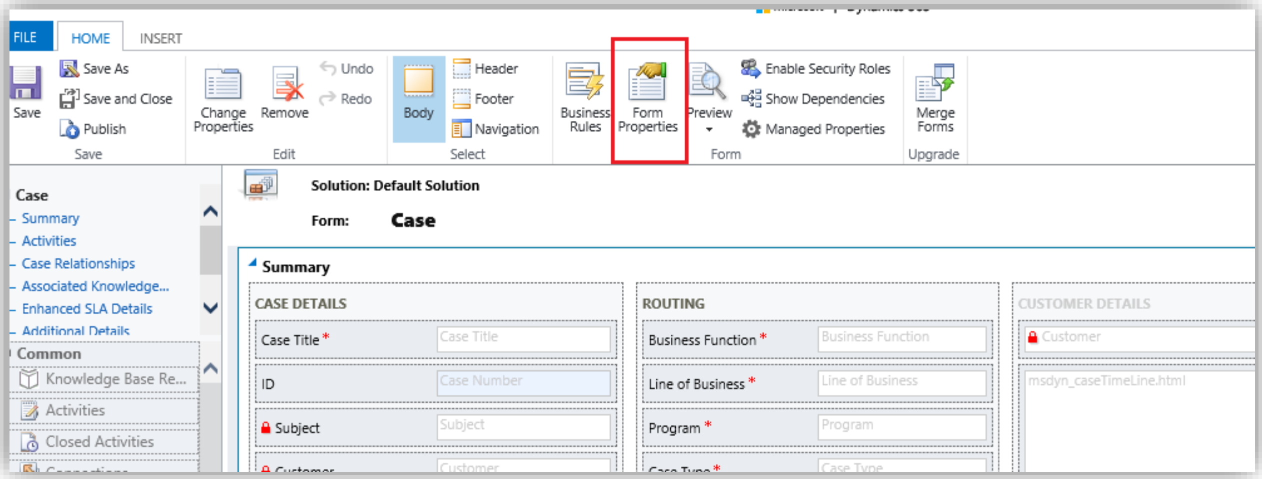
Prerequisite: Pls. see the **section** for detailed configuration of Escalation mapping custom entity.

Case Main form
Settings→Customization→Customize the System→Entity→Case→Forms

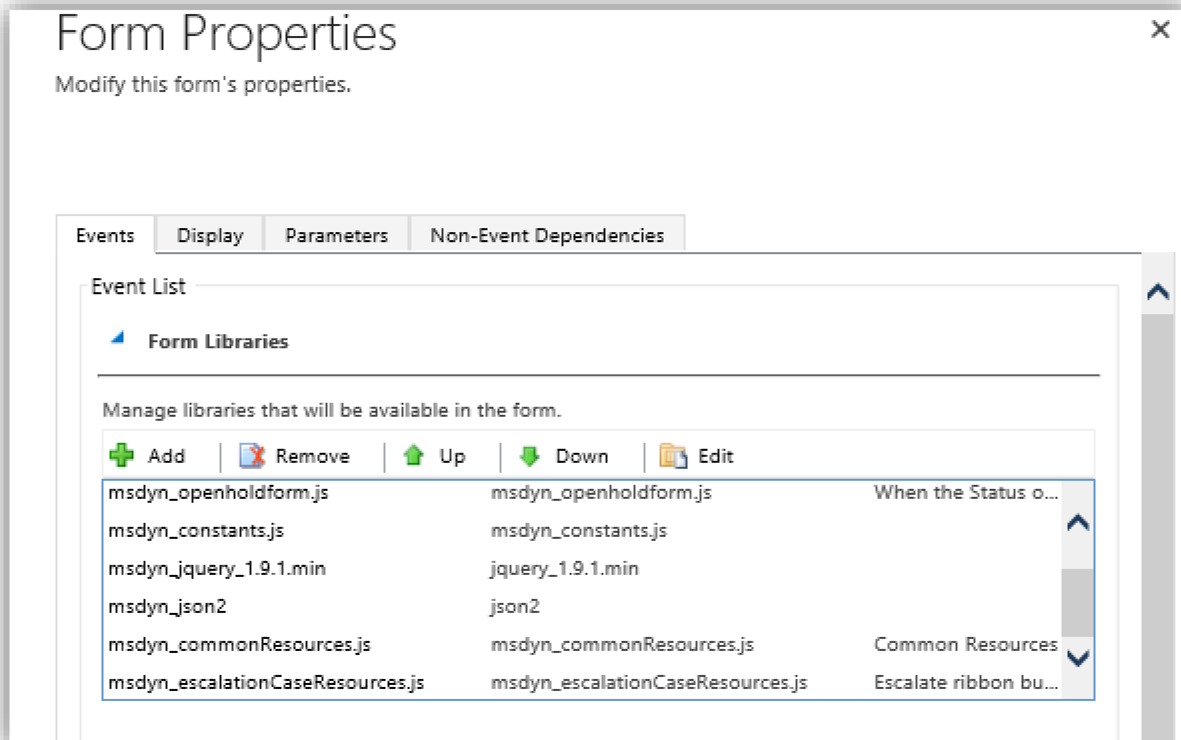


Add "Escalation details" section on the form along with the below mentioned mandatory fields as well and make those fields read only so that end user cannot change it from UI

Add following JavaScript web resources on the Case form libraries. For this user needs to click on “Form Properties”. Below is the snap shot for reference.



Needs to add below files by clicking on “+ Add” option



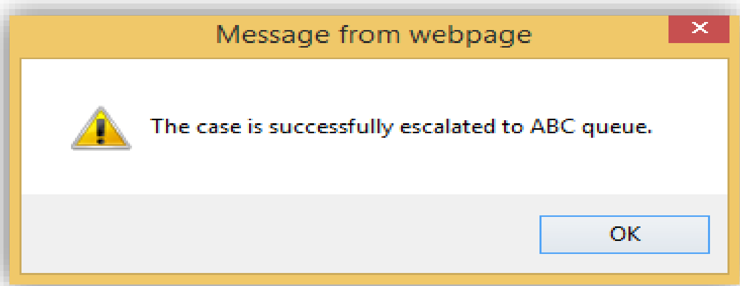
Add escalation activity Sub-Grid on the case form as shown to track the escalation activity record for the respective Case.

5.2 End User Experience

Create a Case with all the mandatory details and save the case

Click on Escalate button

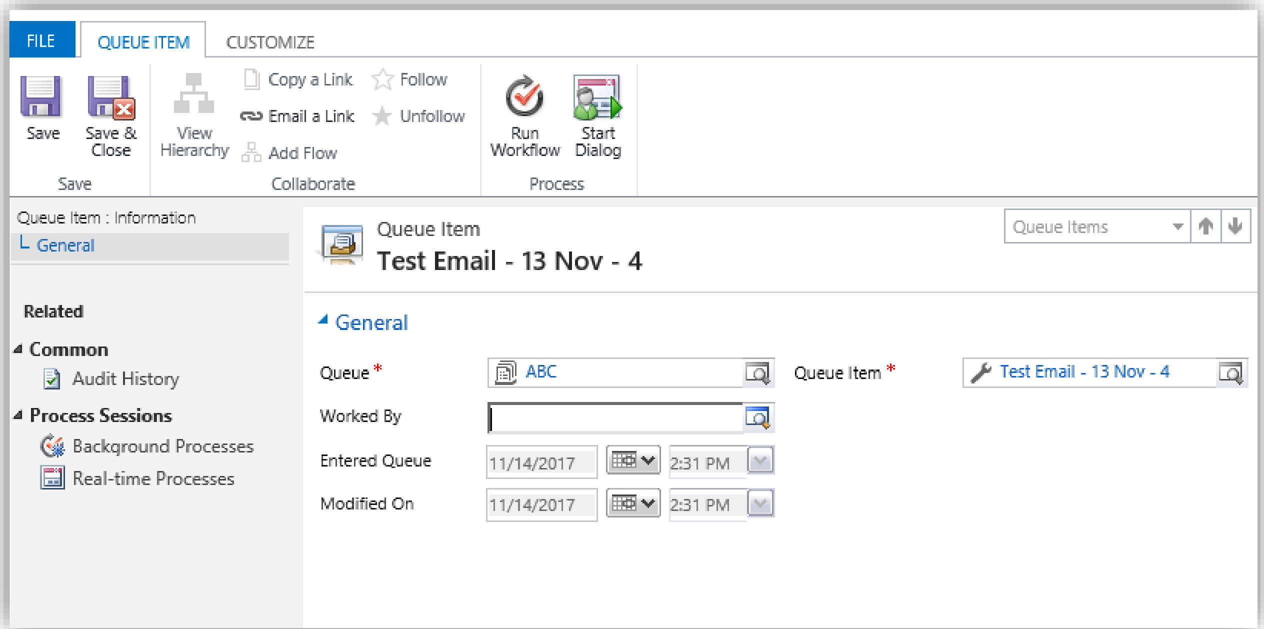
User will be prompted with the below message



Case will be escalated to configured queue as per Escalation mappings details

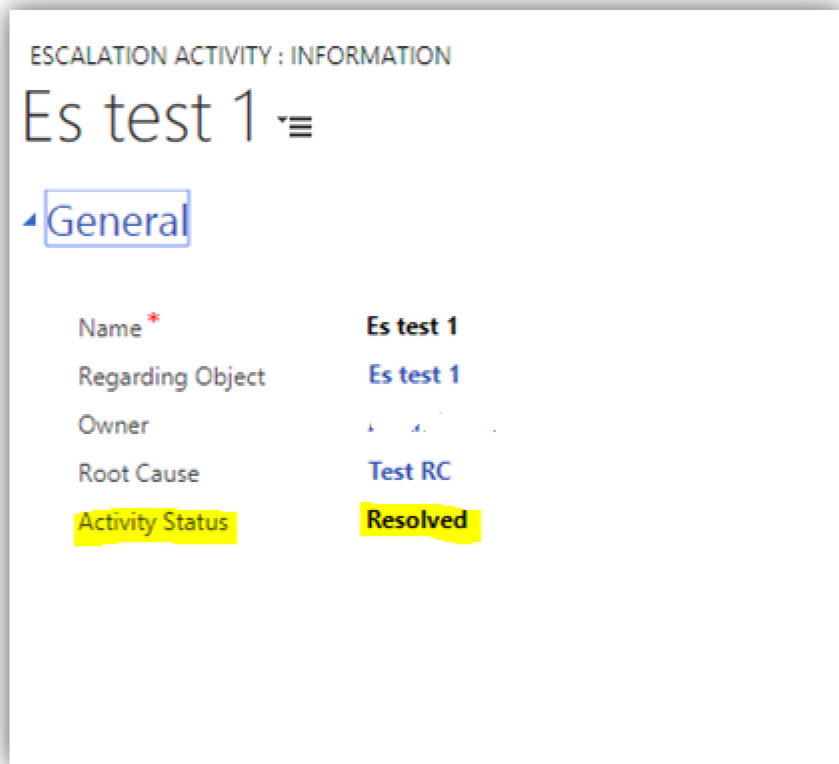
To check the escalated queue, User must click on 

which on the case form and we can see the queue detail. Below is the screenshot.

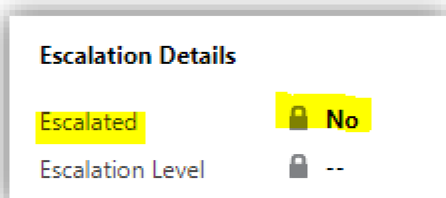


5.3 Resolve case escalation

Once case is escalated respective case escalation activity will be created as shown in the below screenshot.



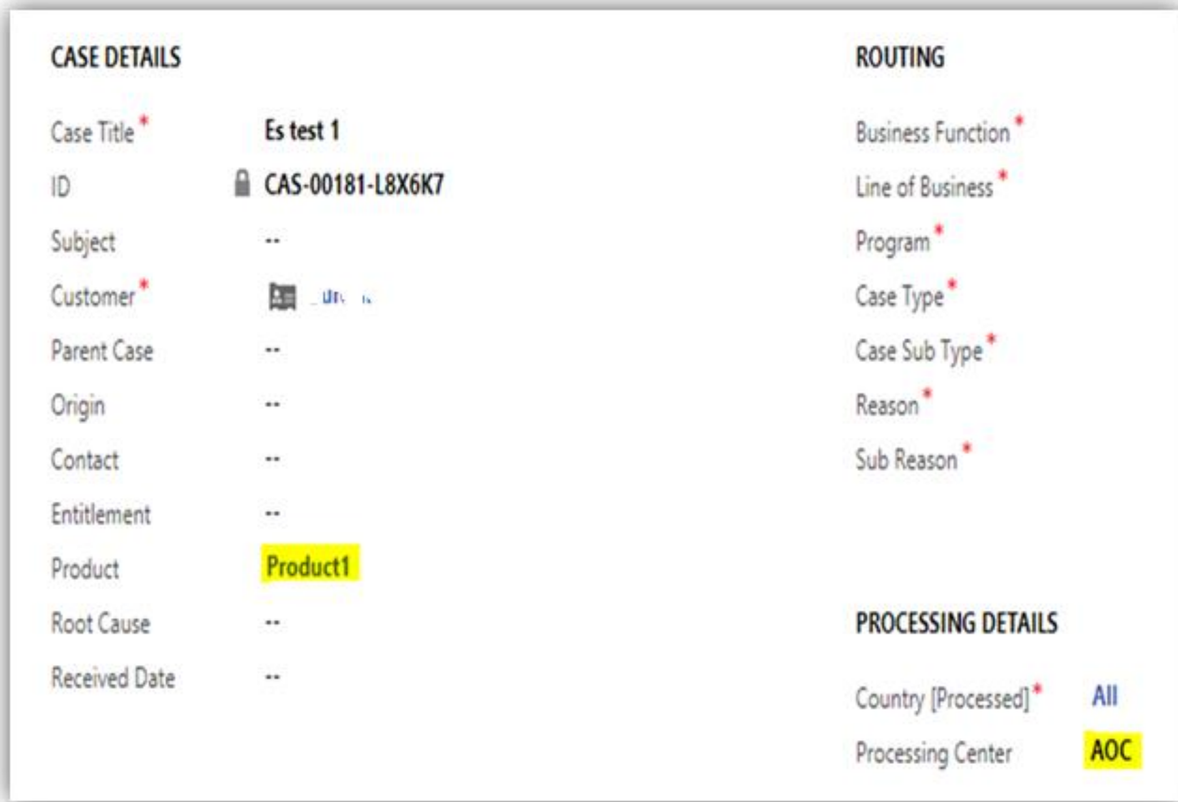
Once the activity status is changed to “Resolved” all the other parameters will be reset to normal values as per below screenshot.



NOTE 1: Queue to which case is supposed to be escalated should be available in the CRM system. If queue is not available, successful escalation alert will be displayed but case will not be routed to the queue.

NOTE 2: Case will be escalated to the appropriate respective level only if Product and processing center available on the case form is matching with the escalation mapping record.

i.e.: To escalate case to the Tier 1, if values available on case form is “Product 1” and “AOC” for product and processing center respectively.



As shown in the below screenshot Escalation mapping entity record is having same values for product and processing center. Hence the record will be escalated to Tier 1.

6. Custom Hold activities

There are three different custom Holds are available in this solution. Those are Customer Hold, 3rd party hold and Internal Hold, below are the examples when case can be put on any of these holds

Customer Hold: This custom hold can be used when user is waiting for additional information from request Submitter. For example, Documents are missing or missing mandatory information.

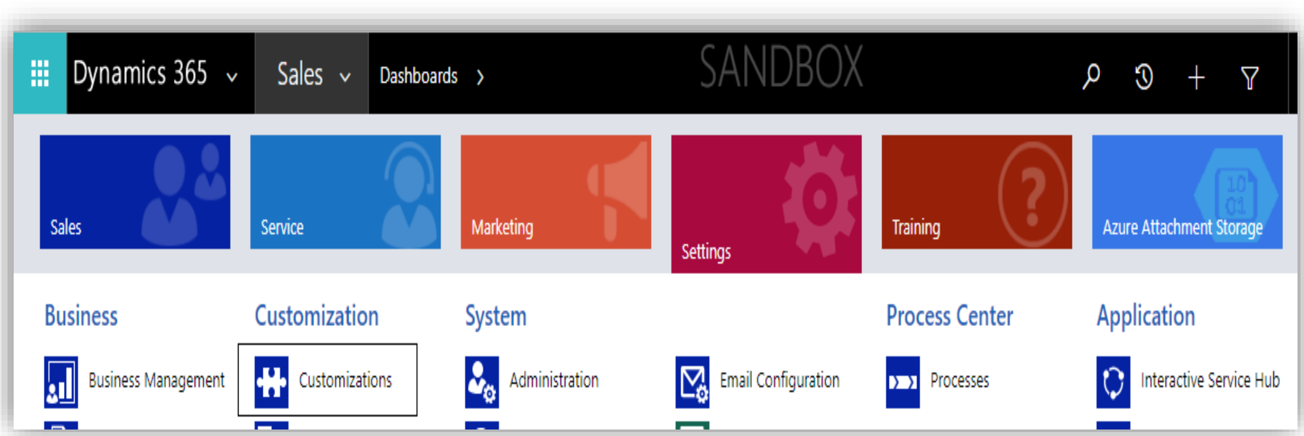
3rd Party Hold: This custom hold can be used when we need external additional information.

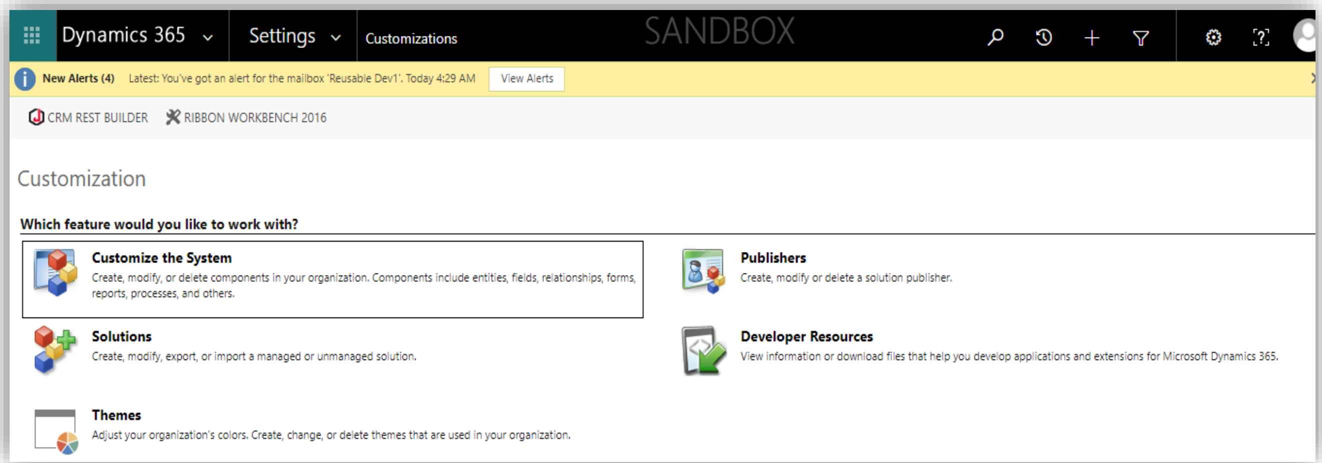
Internal Hold: This custom hold can be used, when user go on lunch break or attend any other scheduled meeting etc.

6.1 Hold Activity Configuration

Open Microsoft Dynamics 365

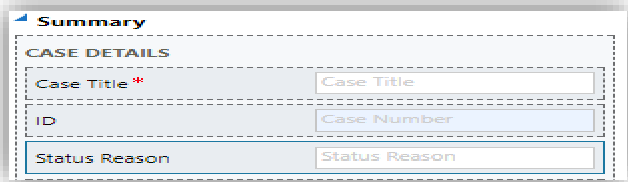
Navigate to Settings → Customizations →Customize the System



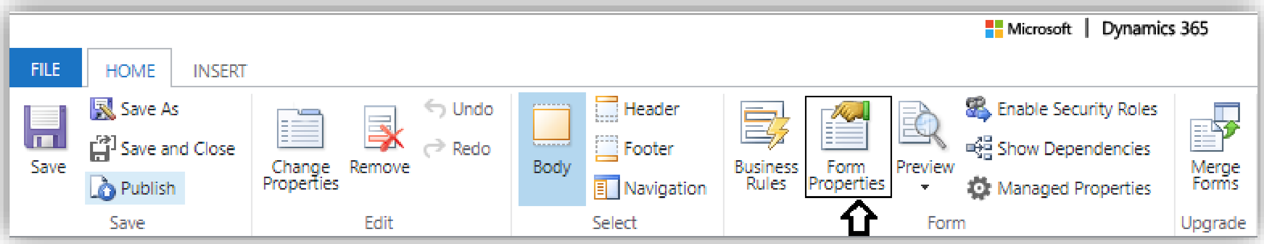


From the entity list in the customize system window chose **Case** entity, open main form.

Add, **Status Reason** field on the form and save the form

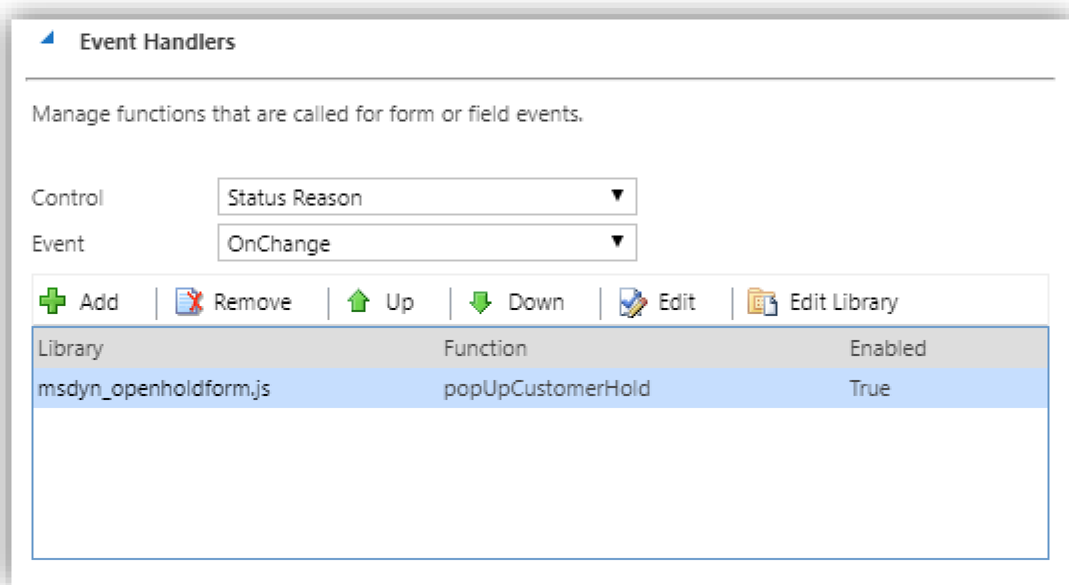


Go to **Form Properties** now, as shown below…



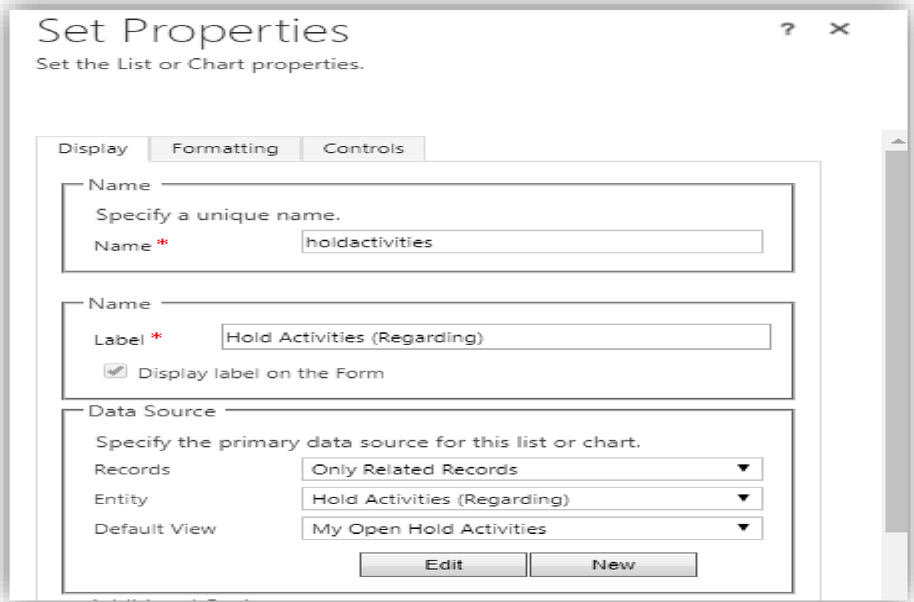
Click on Add in Form Libraries and chose **msdyn_openholdform.js** web resource and add that.

Go to **Even Handlers**, after adding the web resource. And add this on **Status Reason** change events and add **popUpCustomerHold** in function as shown below.



Note: Once, the even handler is added, remove the **Status Reason** field we have added in the Summary Section. Even we have removed it from the Summary Section, the event triggers on change of Status Reason.

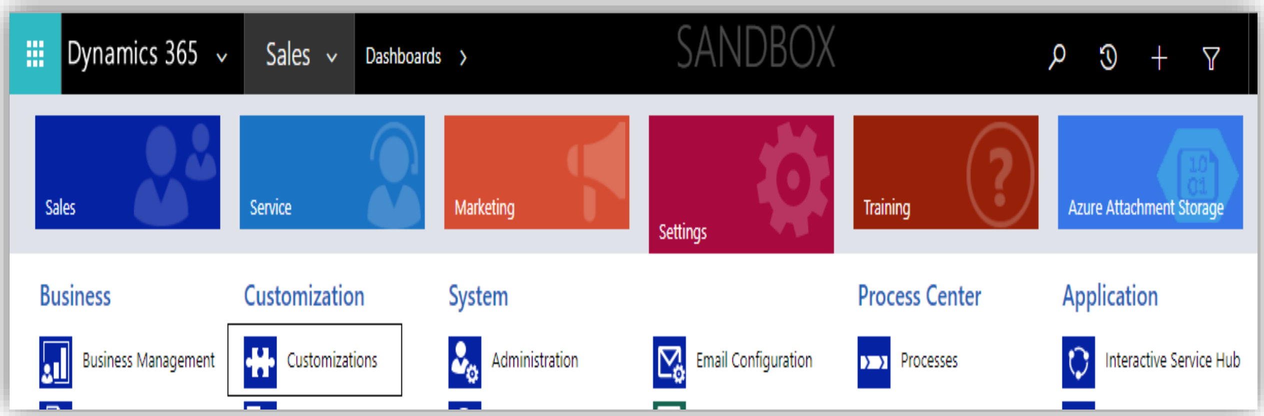
Add section on the Form and named it as **Hold Activities**. Add **Sub Grid** to that Section with below configuration as shown.

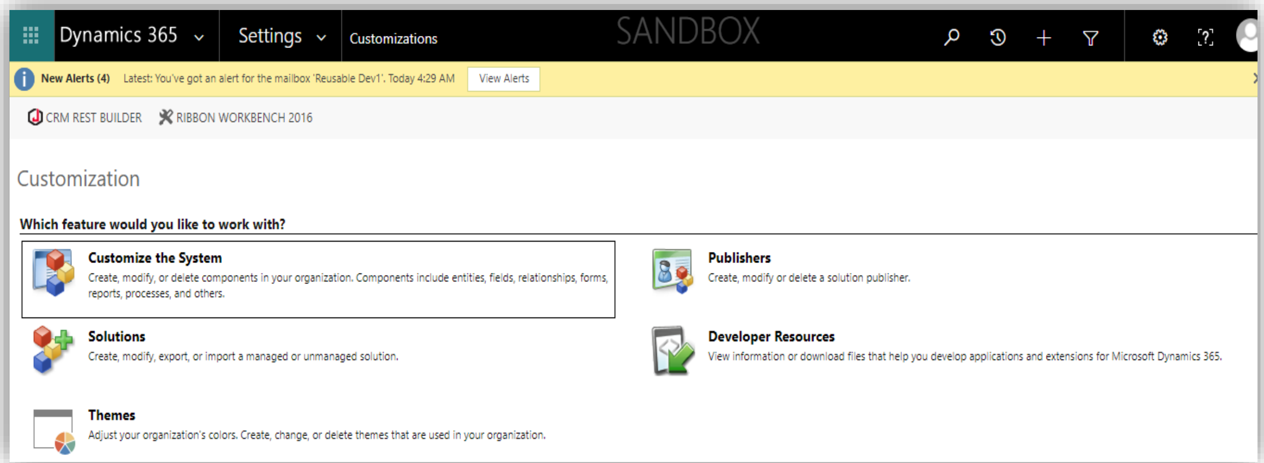


6.1.1. Auto Activity Close - Configuration

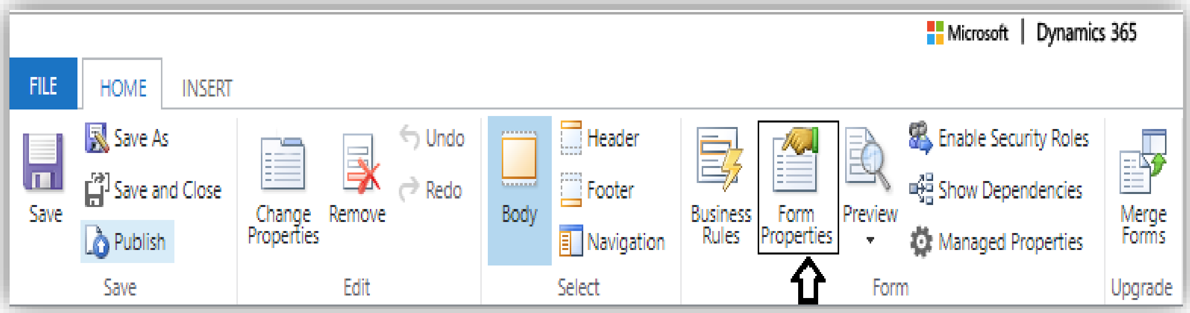
This **Auto Activity Close** functionality helps user closing the Hold Activity based on the close date given.

Navigate to Settings → Customizations → Customize the System

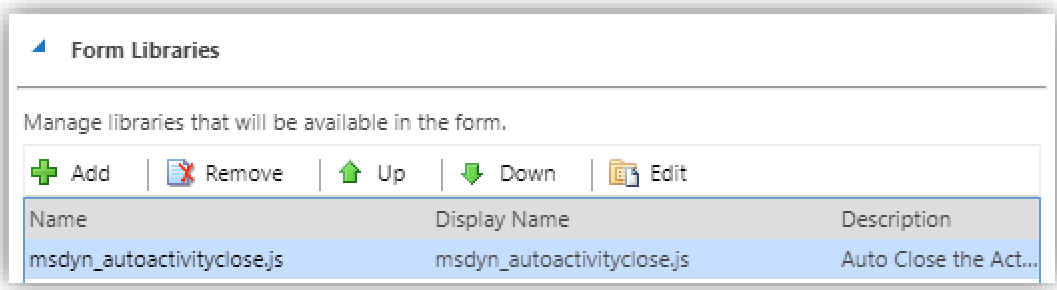




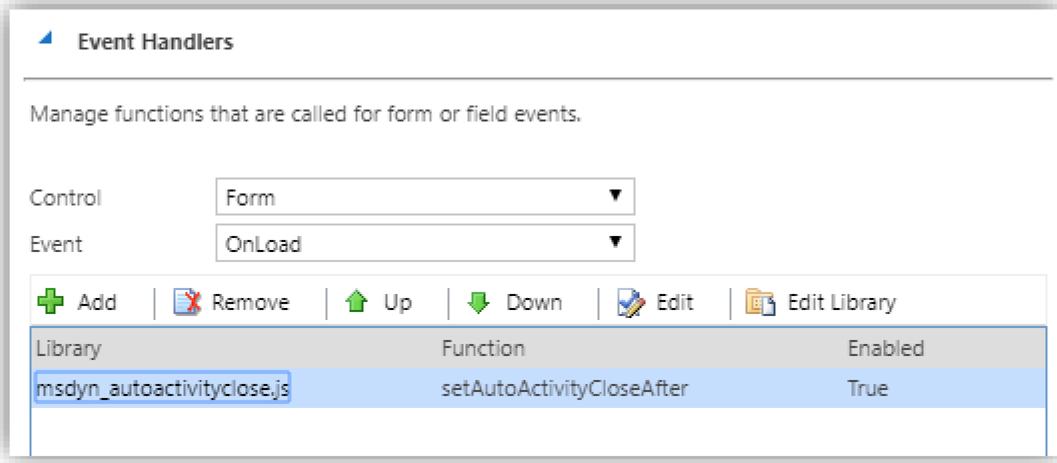
From the entity list in the customize system window chose **Hold Activity** entity, open main form and Go to **Form Properties** now, as shown below…

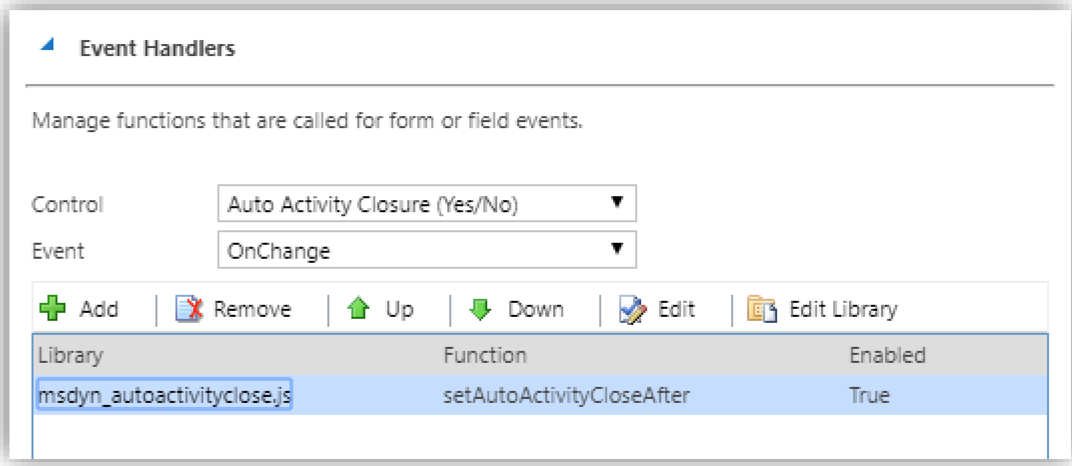


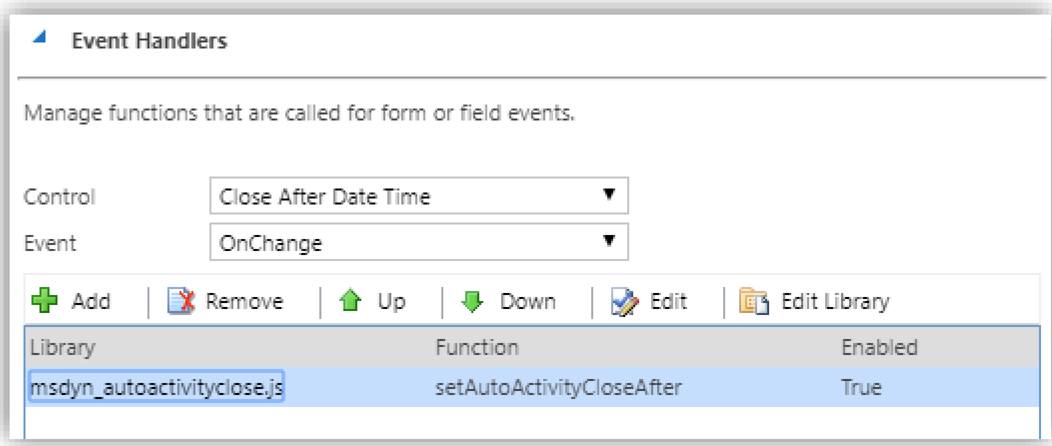
Click on Add in Form Libraries and chose **msdyn_openholdform.js** web resource and add that.



Go to **Even Handlers**, after adding the web resource. And add this **onLoad, Close After Date Time and Auto Activity Closure (Yes/No)** change events and add **setAutoActivityCloseAfter** in function as shown below


Event Handlers
Manage functions that are called for form or field events.
Control
Form
Event
OnLoad
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_autoactivityclose.js
setAutoActivityCloseAfter
True

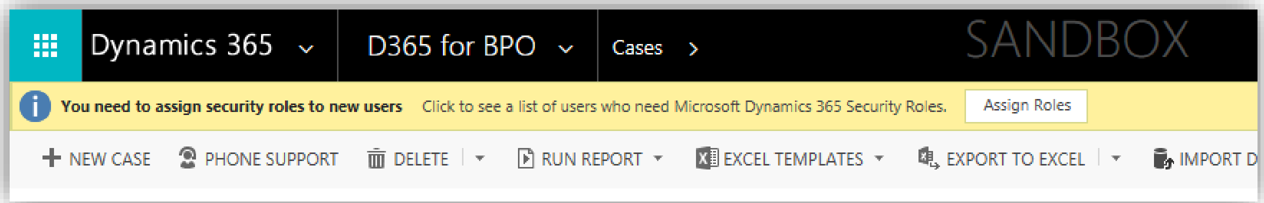

Event Handlers
Manage functions that are called for form or field events.
Control
Auto Activity Closure (Yes/No)
Event
OnChange
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_autoactivityclose.js
setAutoActivityCloseAfter
True


Event Handlers
Manage functions that are called for form or field events.
Control
Close After Date Time
Event
OnChange
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_autoactivityclose.js
setAutoActivityCloseAfter
True

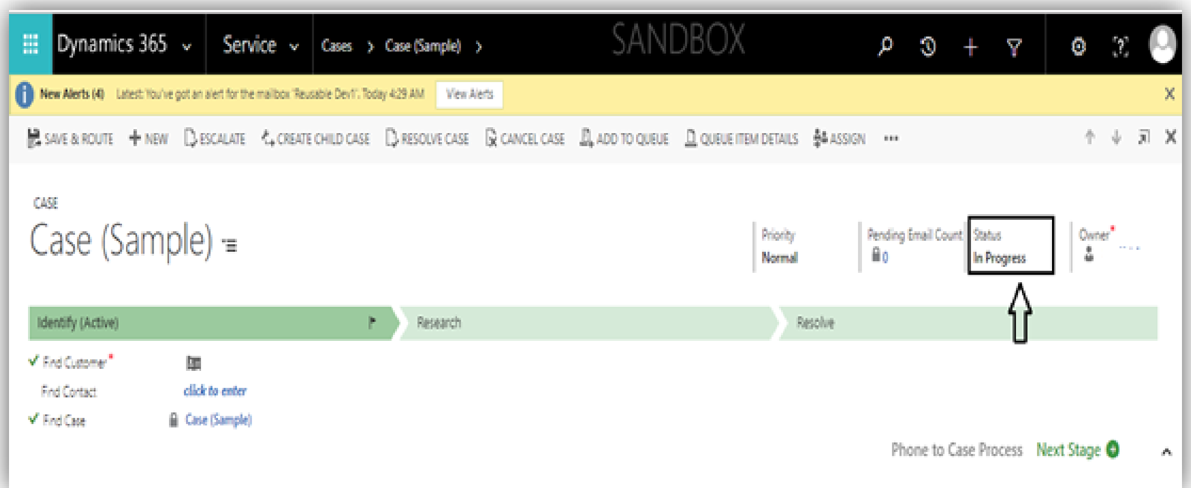
6.2 End User Experience

Once the configuration has been completed, in the Dynamics 365 organization, a user can create new activity record on change of case status reason. The steps outlined below illustrate creating a case from an Email Record.

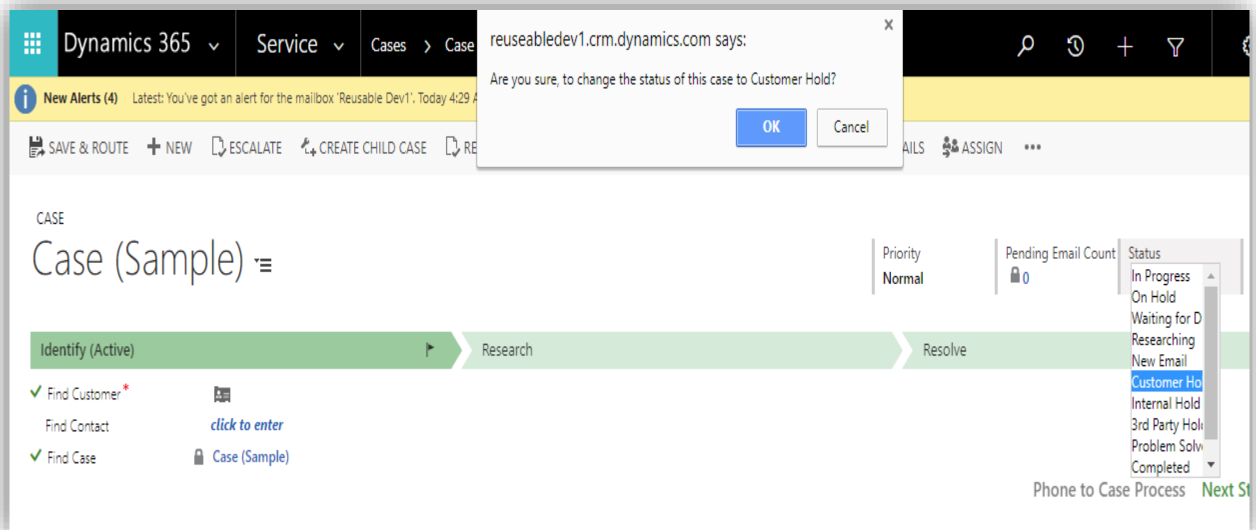
Navigate to D365 for BPO → Cases



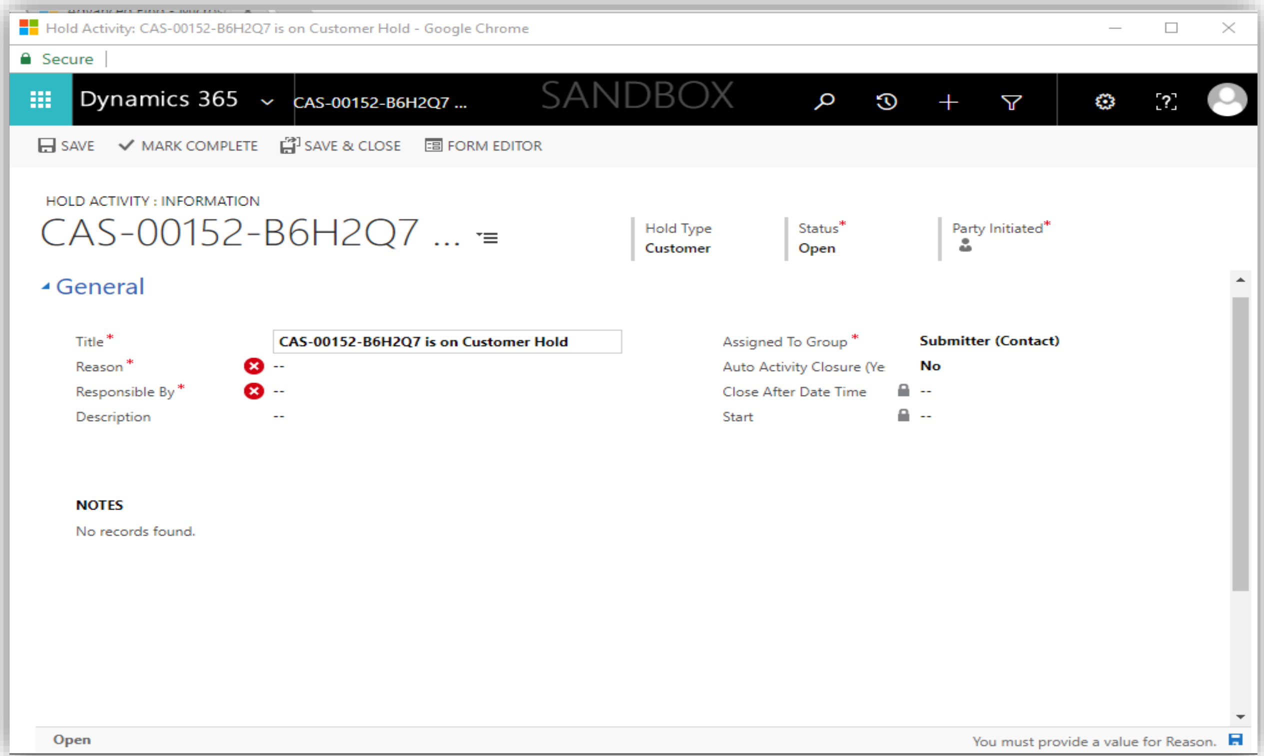
Click on **NEW CASE**, to create a new Case Record.



Now change the Status to **Customer Hold**. Then we give get a confirmation alert, whether user wants to open a new hold activity or not. If user clicks on Cancel, no form gets opened.

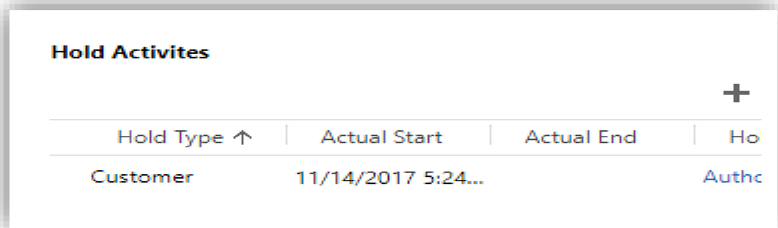


If user clicks on OK, a Hold Activity form gets opened as shown below… with case ticket number appended with Case Status Reason.

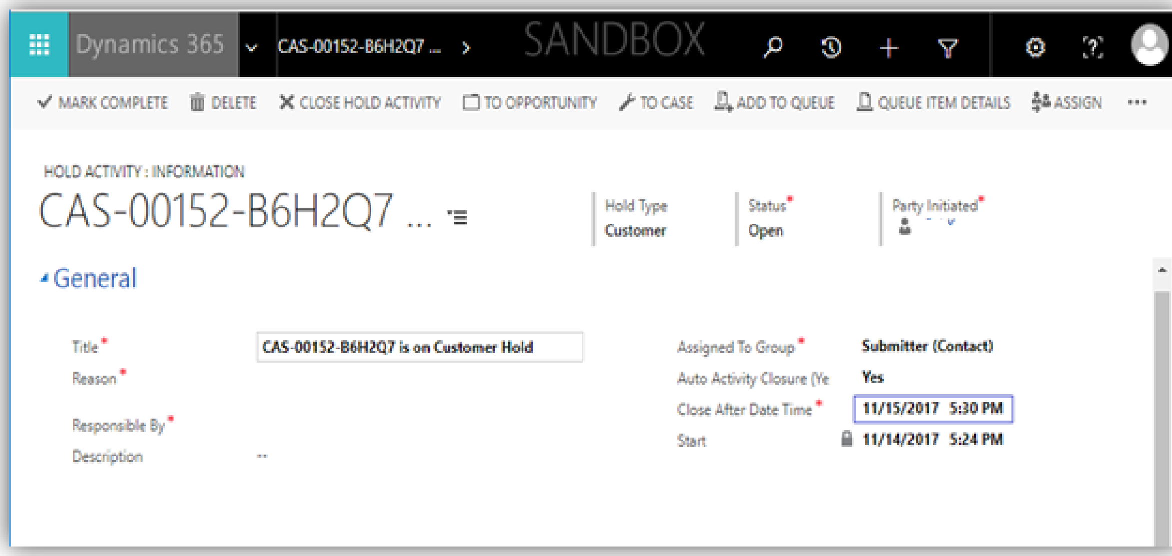


Fill the required field values – Reason and Responsible By.

Now this activity is mapped with the case.



Select Auto Activity Closure (Yes/No) to Yes. Then, Close After Date Time field to be filled out.



Automatically the hold activity gets closed, at the given close after date time.

6 Email expand and validation

This is around validations around Email entity. This will auto populate the From field to default queue, verify the To recipients and While sending the email, it will check on To recipients list and count of number of attachments on the email.

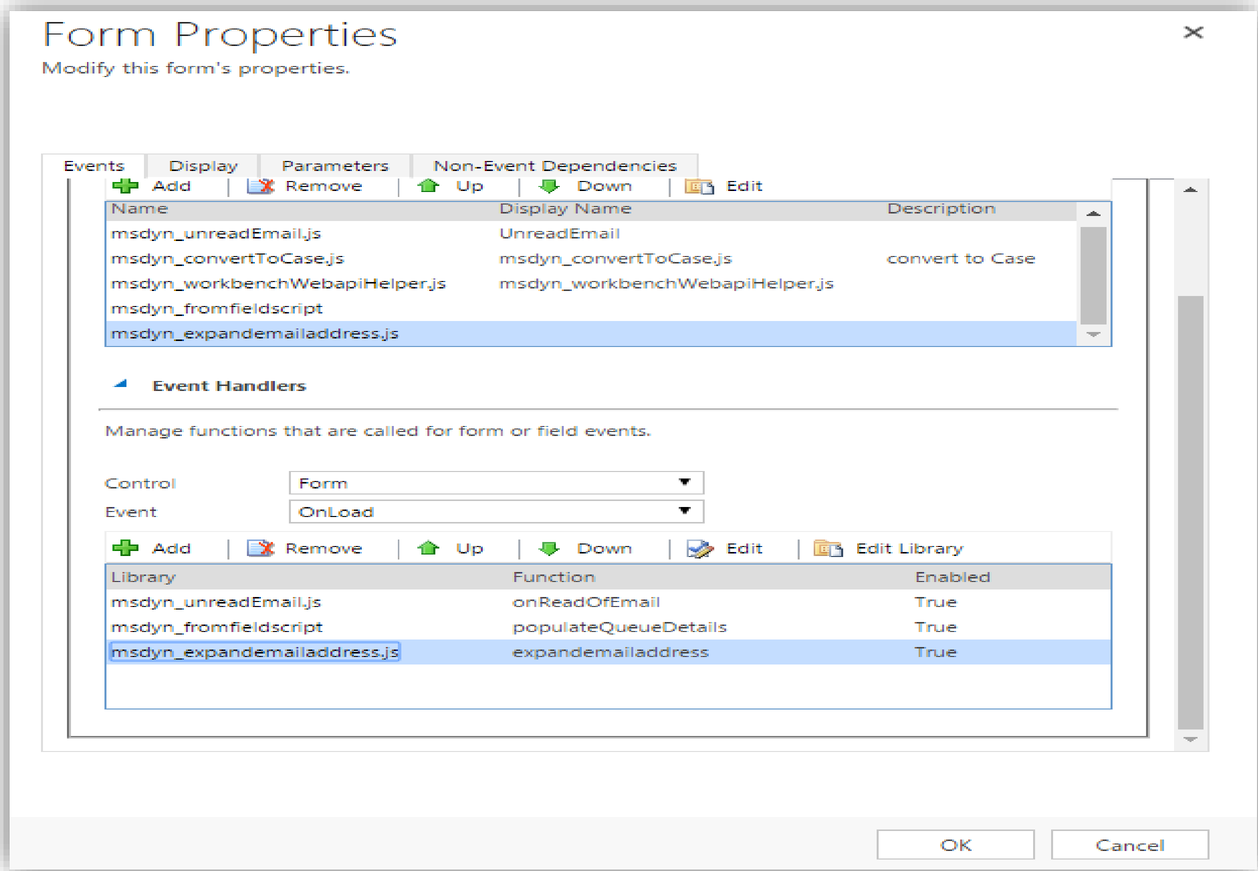
6.1 Configuration

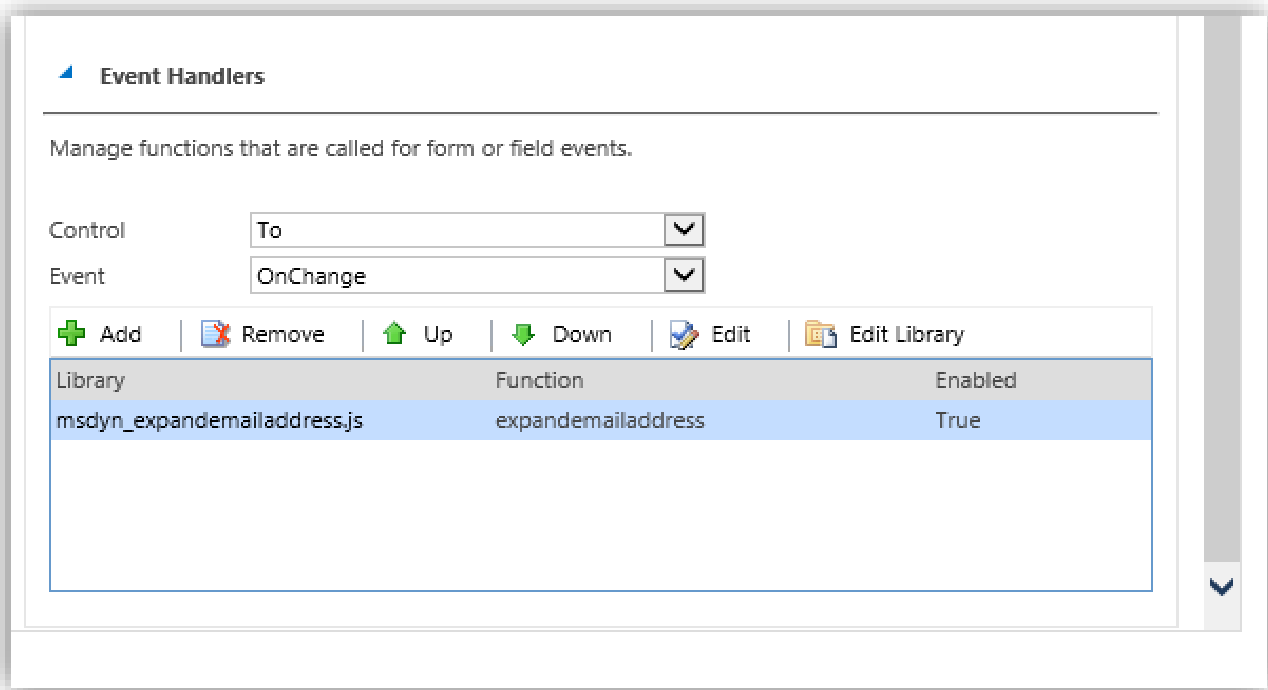
Navigate to Settings→Customizations→Customize the System

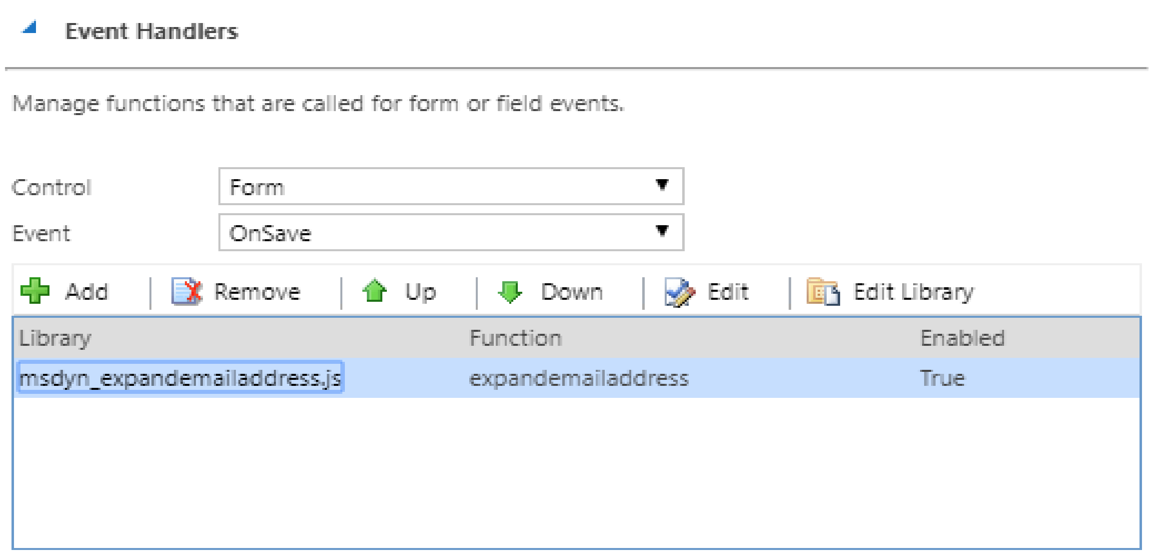
Select the Email Entity and Click on Forms

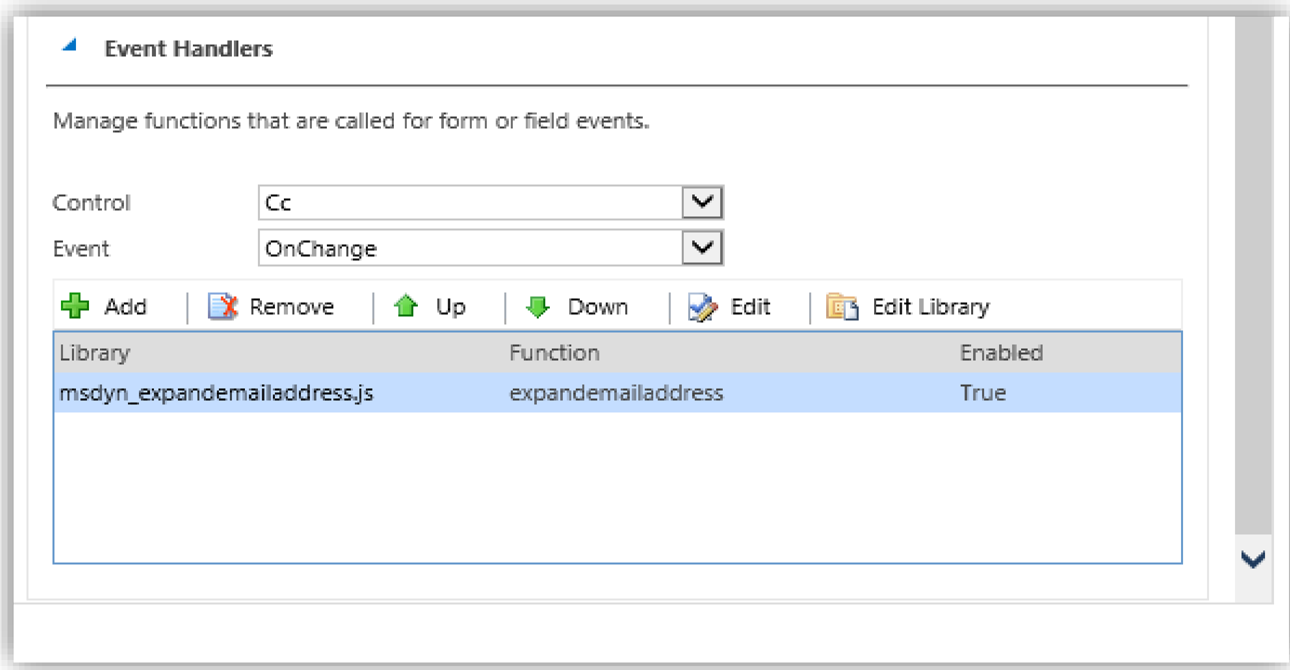
Select Email main form and Click on Form Properties

Add the msdyn_fromfieldscript and msdyn_expandemailaddress on the email form. Also provide necessary function names as per mentioned. populateQueueDetails () and expandemailaddress() for the scripts respectively.




Event Handlers
Manage functions that are called for form or field events.
Control
To
Event
OnChange
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_expandemailaddress.js
expandemailaddress
True


Event Handlers
Manage functions that are called for form or field events.
Control
Form
Event
OnSave
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_expandemailaddress.js
expandemailaddress
True



Note: To and CC fields accepts only Contact records and will not accept Account Records. If user tries to add any Account record, they will get automatically removed.

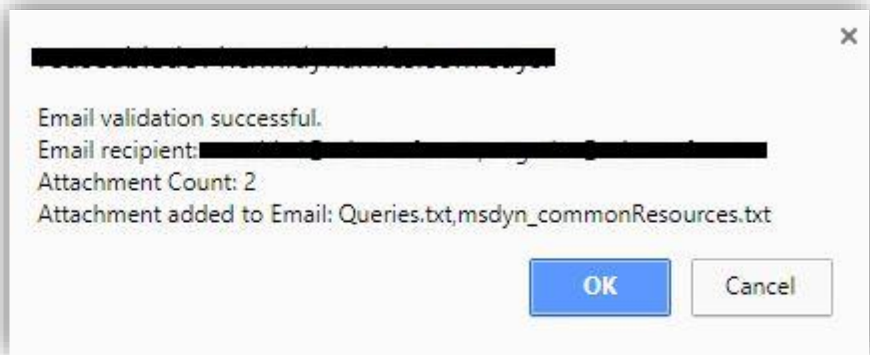
If, still user wants to add Account record, user must remove this web resource (msdyn_expandemailaddress.js) from Email Form Properties, as mentioned in above screenshot.

6.2 End user Experience

Once done with the configurations as mentioned above on Email form load the From field will be populated with default queue.

SEND button will have validations.

While sending email to the respective user following pop up will be visible to user from which user can chose to send or cancel email sending. Alert will show number of files attached and file names as well.



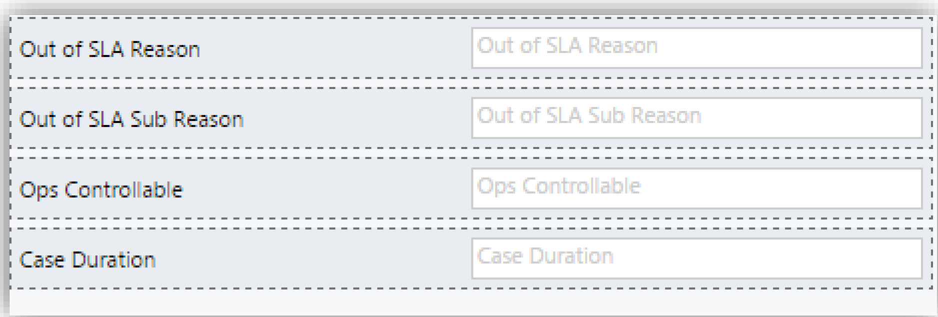
7 SLA

Prerequisite: Out of SLA Reason and Out of SLA Sub Reason custom entities should be configured.

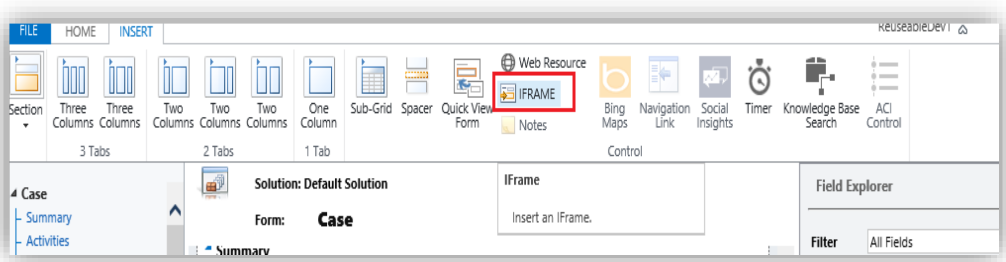
SLA is the OOB functionality

7.1 Configuration

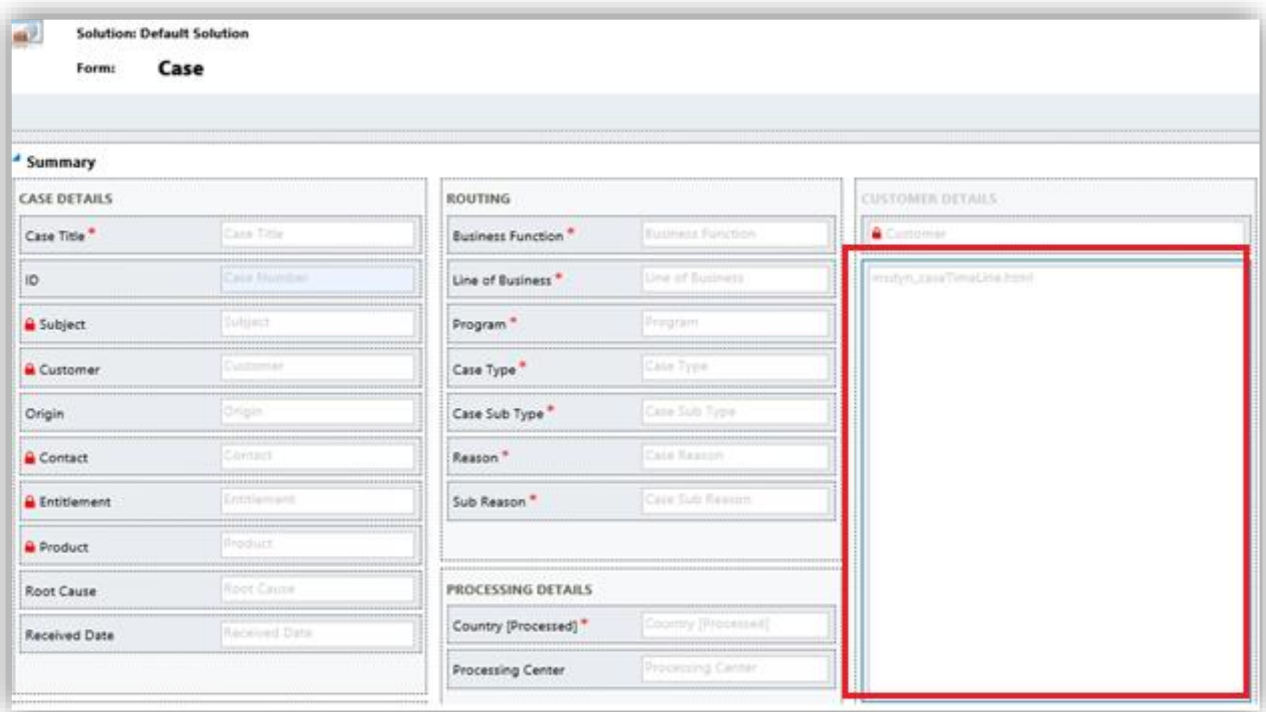
Add the following fields to the Case form provided with the solution as per mentioned.



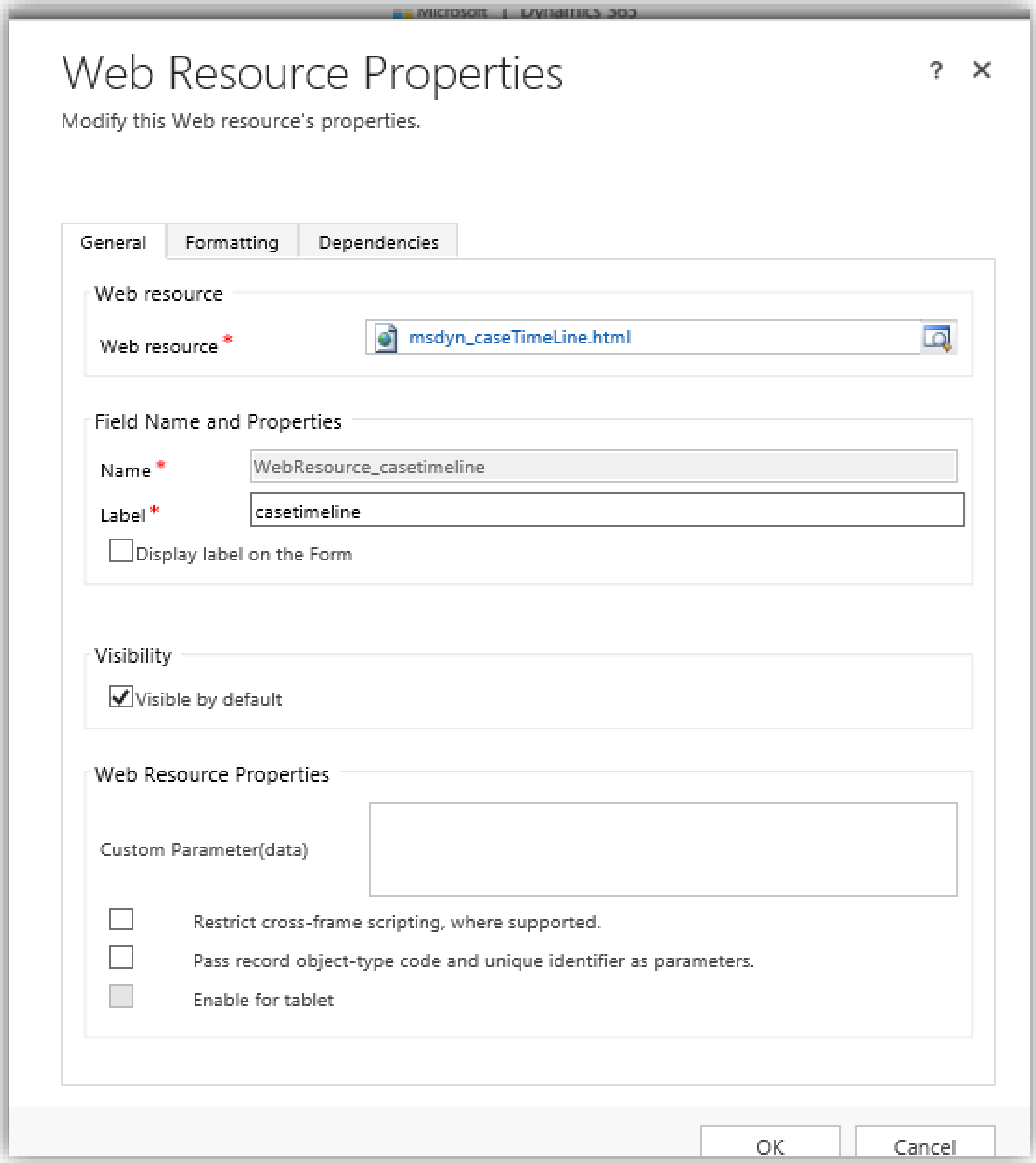
To add the Iframe of "case TimeLine" user must go form editor of case form and he has to click "Insert" option and need to add the Iframe which is mentioned in next point.

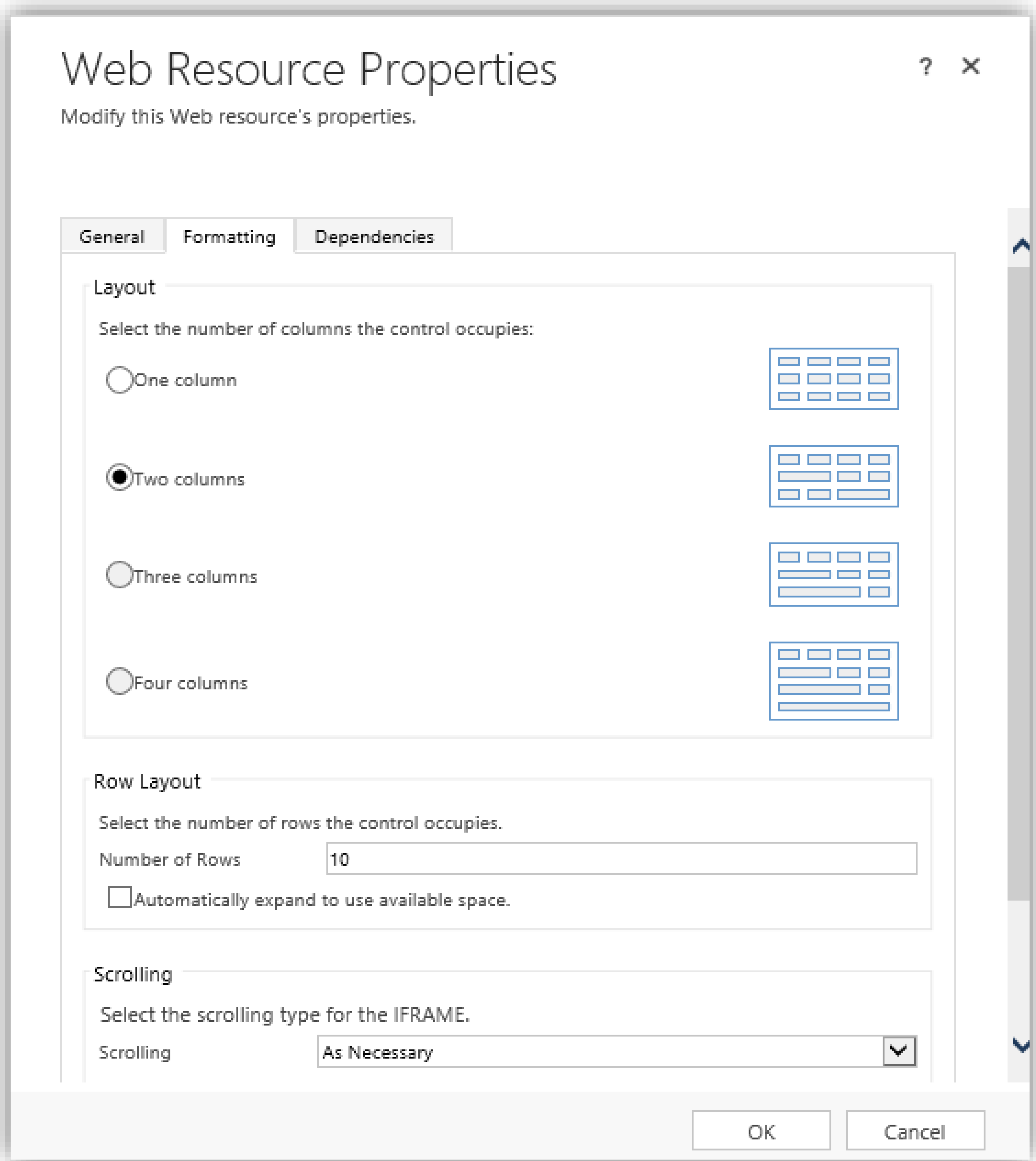


Add the “msdyn_caseTimeLine.html” on the case form as new section on the case form as per available below.



After adding msdyn_caseTimeLine.html web resource to case form then we have to double click on this and needs to do below property.

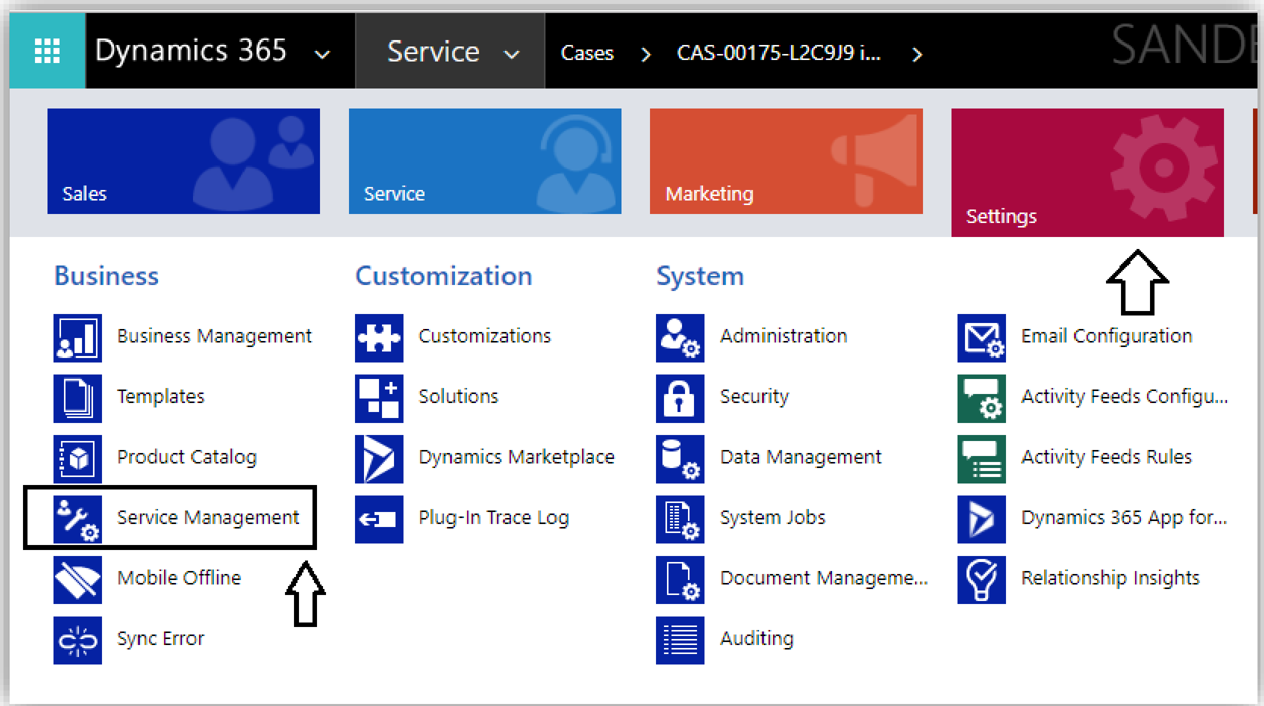

Web Resource Properties
Modify this Web resource's properties.
General
Formatting
Dependencies
Web resource
Web resource *
msdyn_caseTimeLine.html
Field Name and Properties
Name *
WebResource_casetimeline
Label *
casetimeline
Display label on the Form
Visibility
Visible by default
Web Resource Properties
Custom Parameter(data)
Restrict cross-frame scripting, where supported.
Pass record object-type code and unique identifier as parameters.
Enable for tablet
OK
Cancel



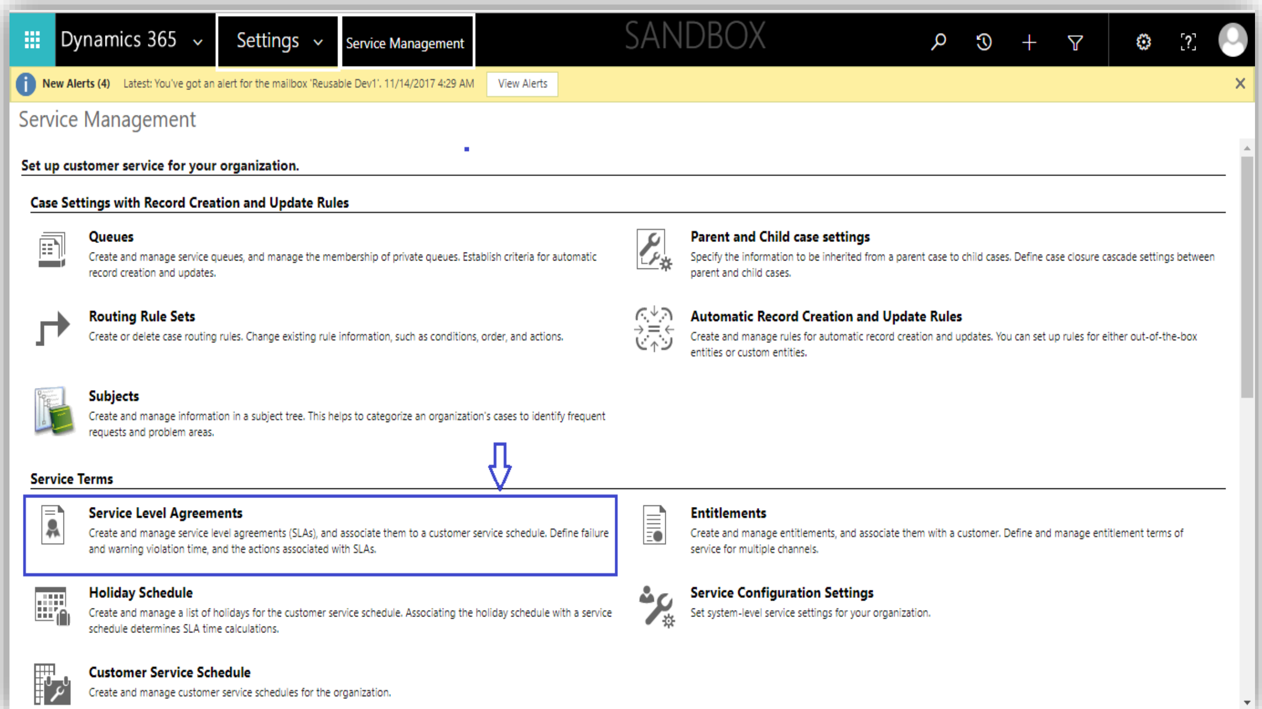
Configure the SLA with the proper condition such that it will trigger on the case creation. Once SLA is triggered SLA Left and actual SLA fields will be visible. Based on hold activities other fields will be populated respectively.

Below is an example on configuration of SLA

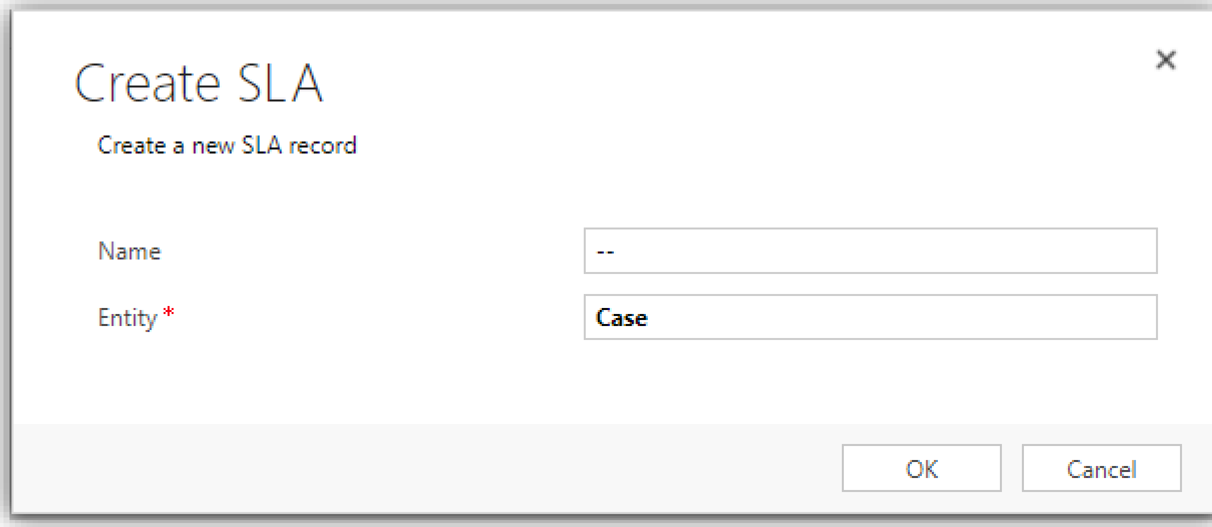
Navigate to Settings → Service Management



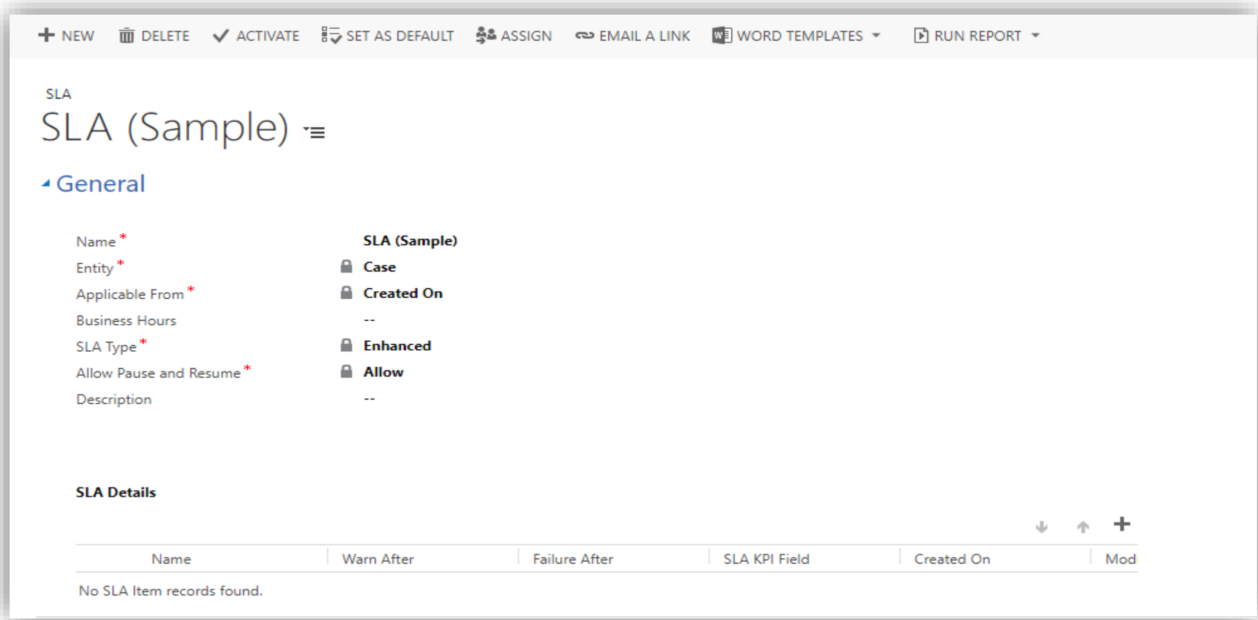
Go to **Service Level Agreements** in Service Terms section.



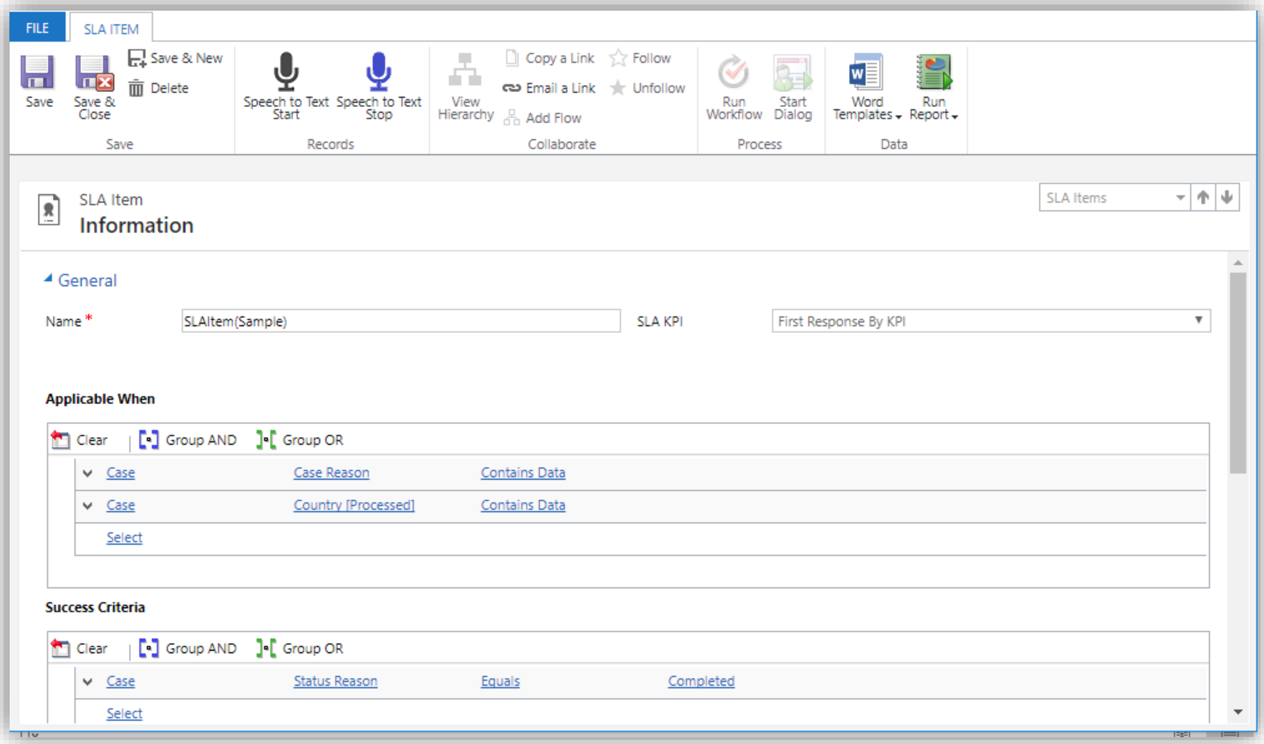
Click “New” to set up new SLA. A dialogue box comes out and to Create SLA, provide Name for SLA and chose Case entity from the drop down and click **ok**.

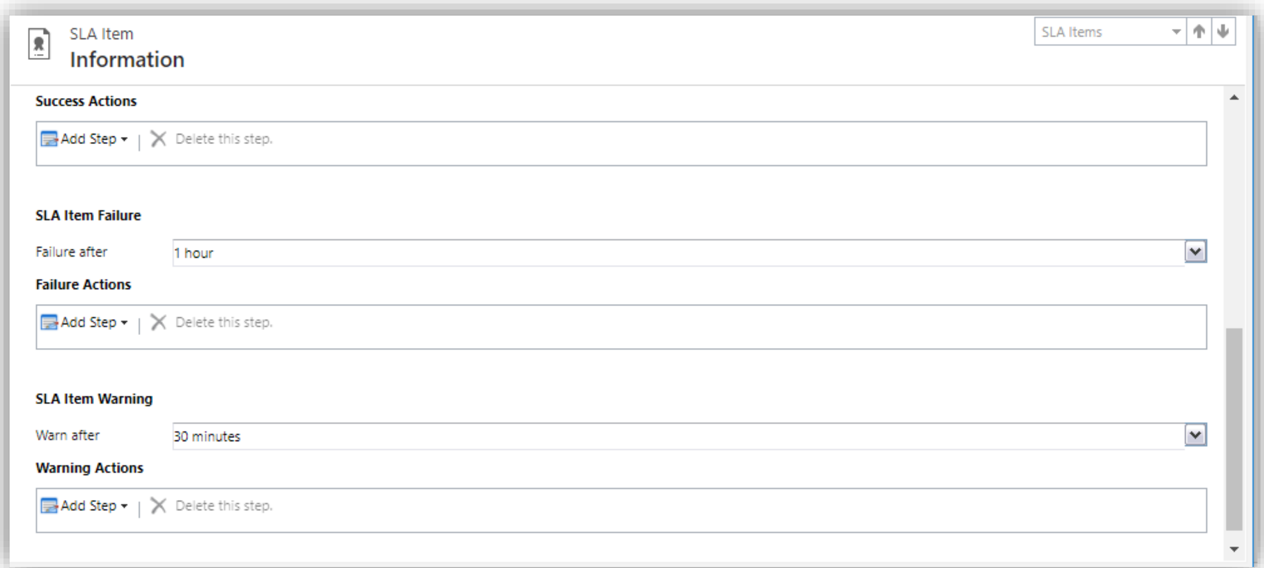


A SLA record gets opened and fill out the required fields and save the record as shown below



Now, click on **+** symbol in SLA Details section to configure SLA and a new window gets opened to configure SLA Details, in which we can mention the Success Criteria and Applicable When (to trigger SLA)





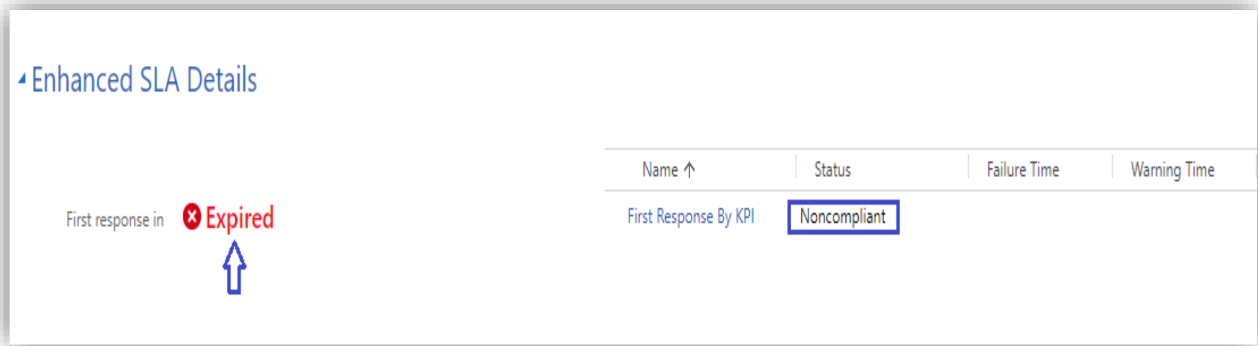
Once Applicable and Success Criteria is filled out, save and close the form.

Now click on activate the SLA to trigger that on the given conditions.

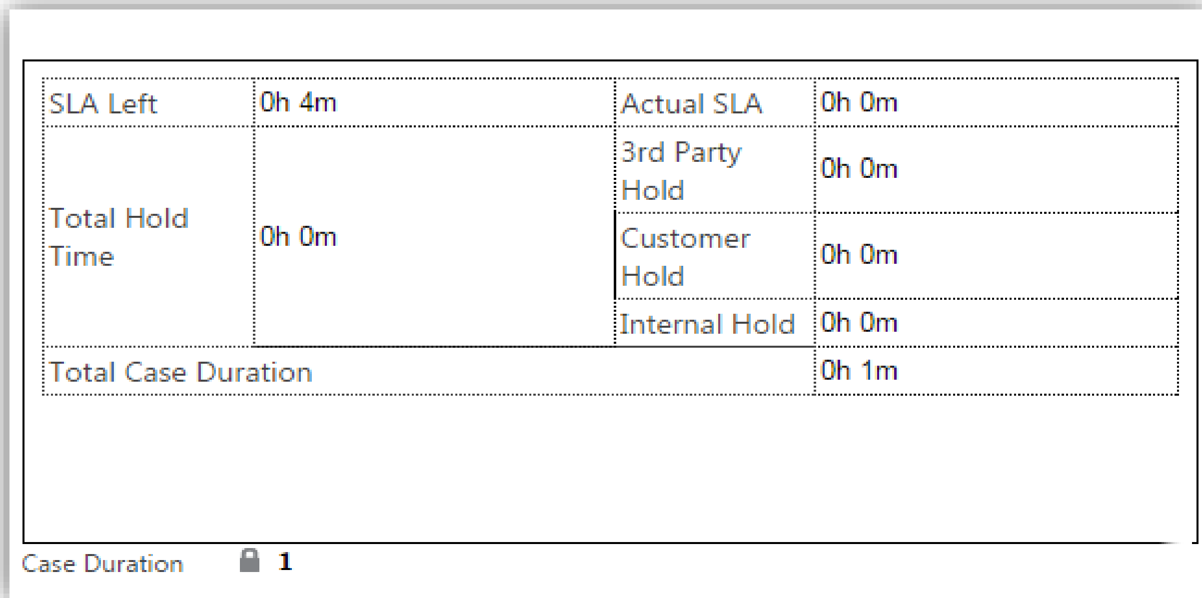
Reference(SLA): https://www.microsoft.com/en-us/dynamics/crm-customer-center/define-service-level-agreements-customer-service.aspx

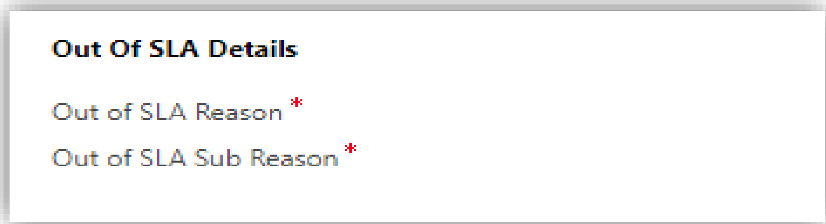
7.2 End User Experience

Once the SLA is expired and user tries to resolve the case, Out Of SLA Reason and Out Of SLA Reason fields get visible and mandatory fields. User needs to fill them as well.



After above SLA configuration, if user try to create a case then the SLA information would be update like below on case.





8 Convert to Case

The Convert To Case Solution is an add-on feature to dynamics 365 CRM to create a case from Email record.

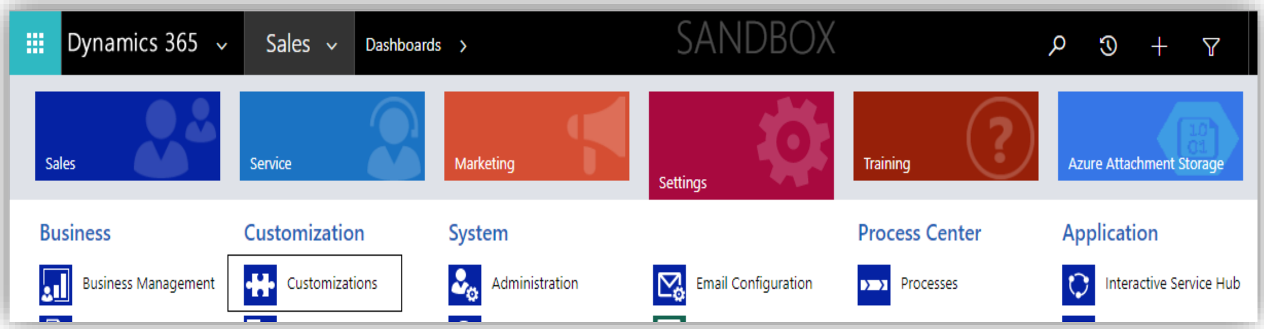
8.1 Configuration

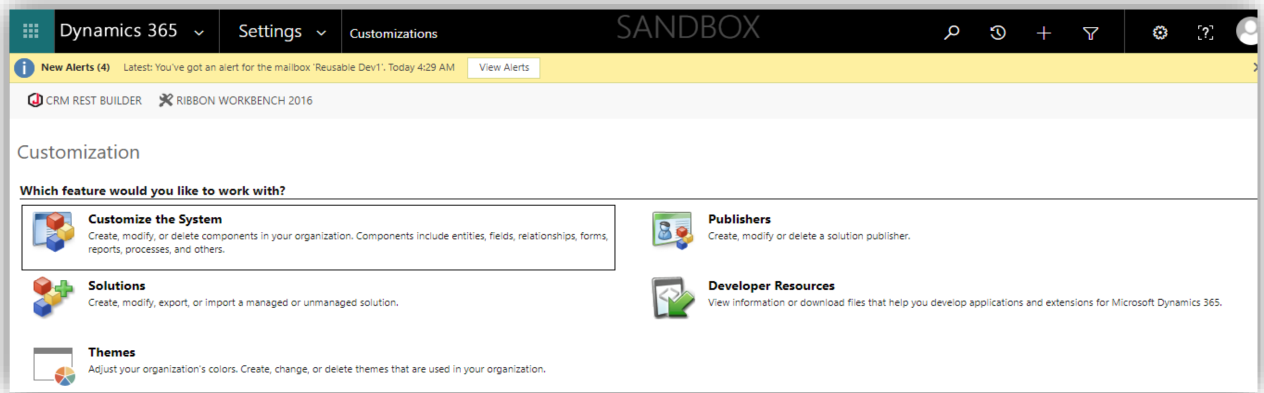
Pre-requisites:

- Fields to be added on Case Form.
- Records to be created in Case Template Entity (optional).
- Filter conditions to be applied on the fields added on Case Form.

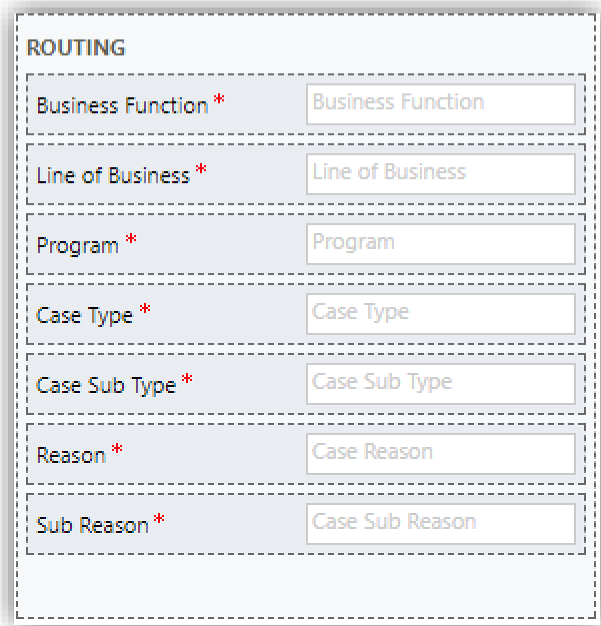
UI Configuration – Case Form

Navigate to Settings → Customizations → Customize the System



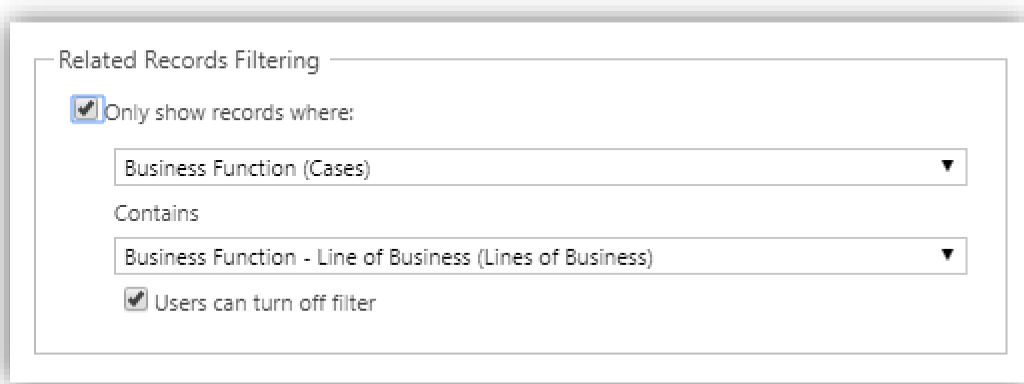


From the entity list in the customize system window chose Case entity, open main form and add a section with fields as shown in below screenshot



After adding this section with the above-mentioned Fields (Lookups), we need to add some filter conditions to the lookups. So, that based on the filter we have applied all the other lookup values get populates (Dependent Lookups, in fact).

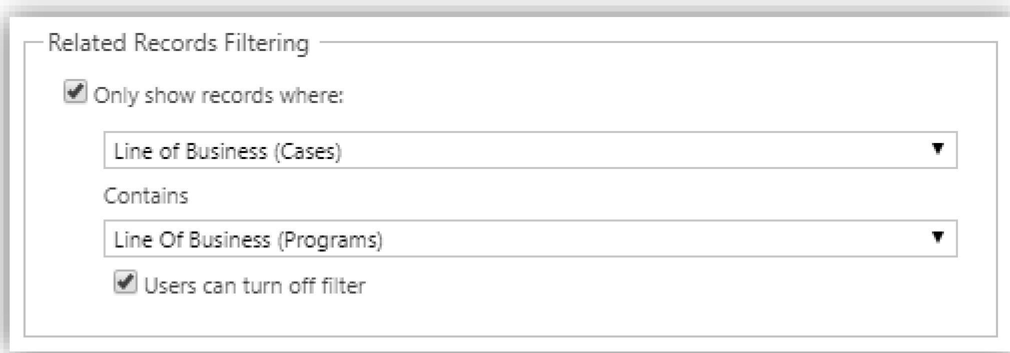
Go to **Field Properties** of **Line Of Business** field, and in **Display** tab, go to **Related Records Filtering** section and select **Business Function (Cases)** in **Only show records where** and choose **Business Function – Line Of Business (Lines Of Business)** in **Contains** as shown below.



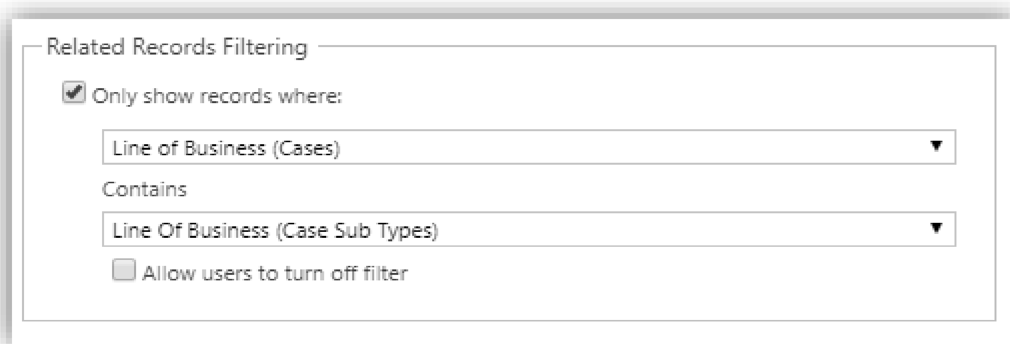
This filter condition helps in filtering out the LOBs (Line Of Business) records based on Business Function values.

Follow the same steps mentioned in above for all the other below fields as shown

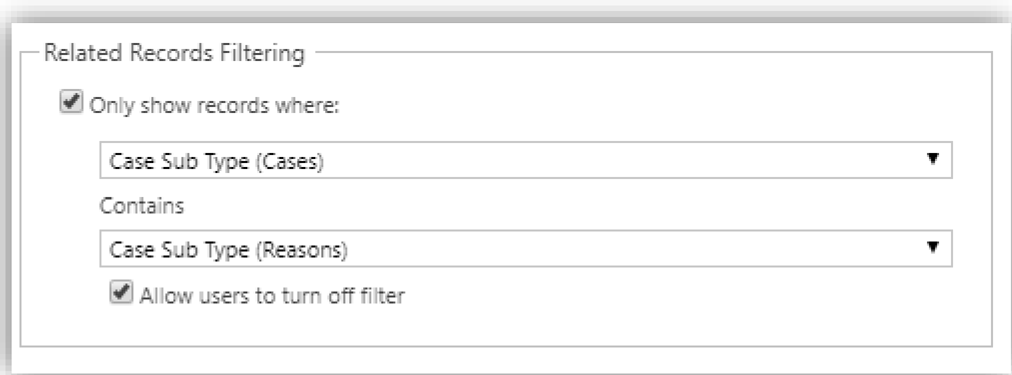
a. Program



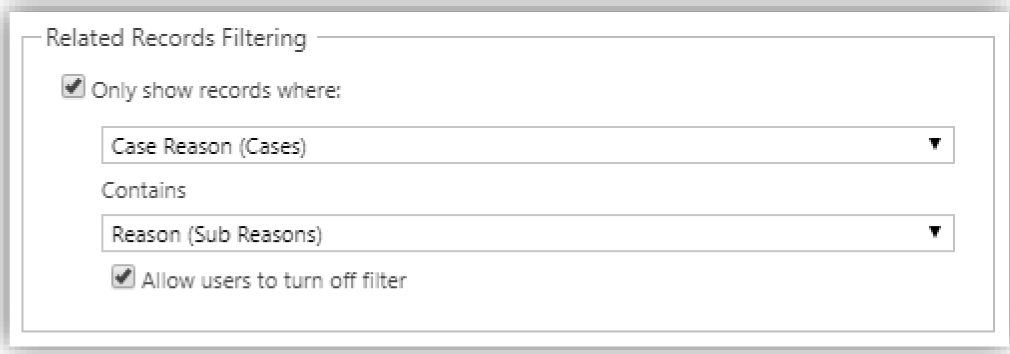
b. Case Sub Type



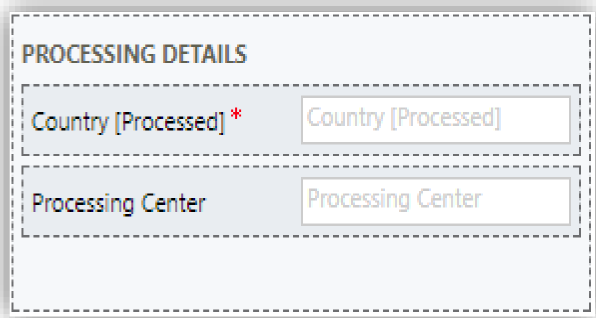
c. Reason



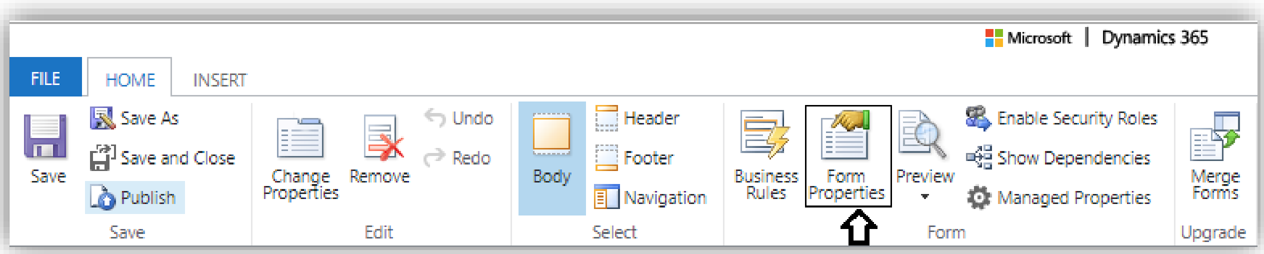
d. Sub Reason



Add one more section with fields as shown in below screenshot

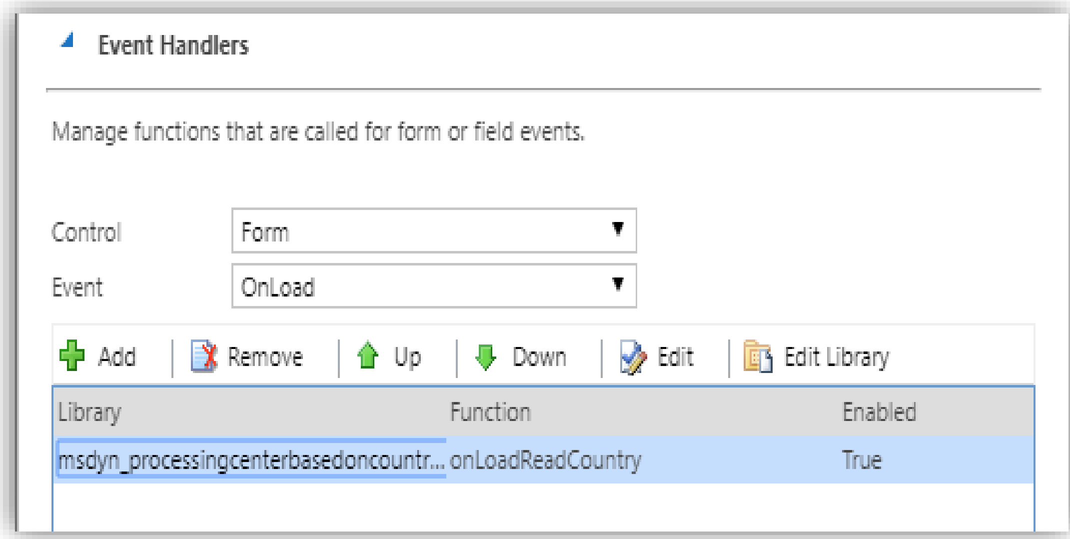


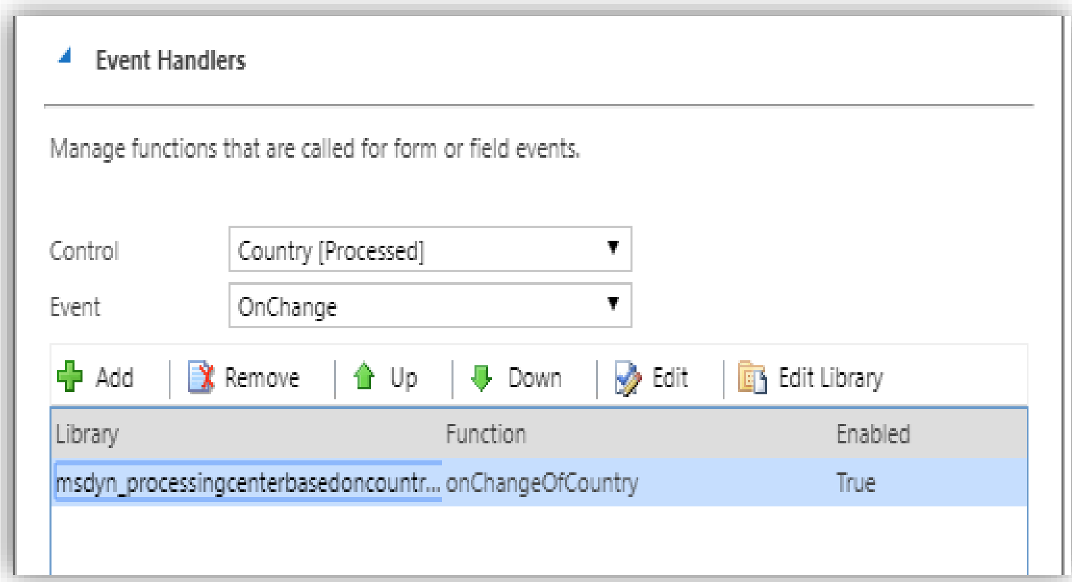
Now, go to **Form Properties**

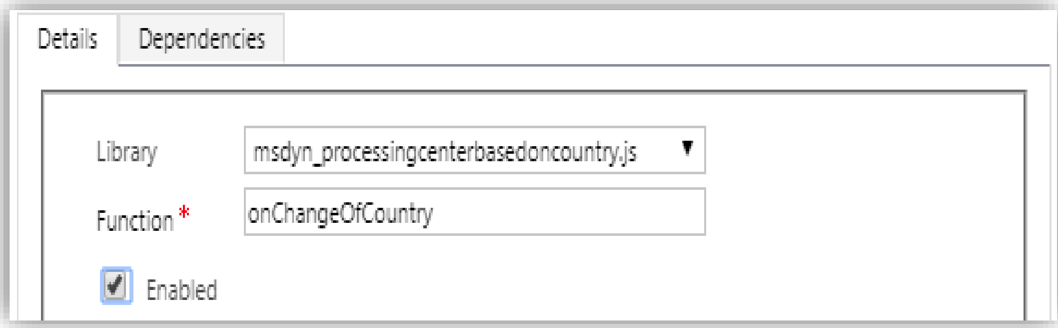


Click on Add in Form Libraries and chose **msdyn_processingcenterbasedoncountry.js and** add.

Go to **Even Handlers**, after adding the web resource. And add this **onLoad** and on Country[Processed] change events and add **onLoadReadCountry** in function as shown below.


Event Handlers
Manage functions that are called for form or field events.
Control
Form
Event
OnLoad
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_processingcenterbasedoncountr...
onLoadReadCountry
True

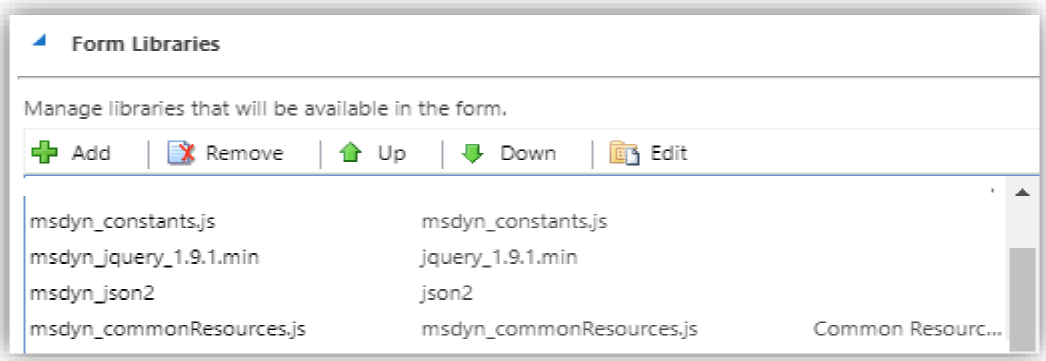

Event Handlers
Manage functions that are called for form or field events.
Control
Country [Processed]
Event
OnChange
Add
Remove
Up
Down
Edit
Edit Library
Library
Function
Enabled
msdyn_processingcenterbasedoncountr...
onChangeOfCountry
True



Note: **msdyn_processingcenterbasedoncountry.js**, is a web resource, which helps populating **Processing Center** information automatically based on the selected **Country [Processed].** We need to map processing center information in Countries Entity to auto-populate this in case form.

Make sure all the below mentioned web resources are added in **Form Libraries** from Form Properties.

a. msdyn_constants.js
b. msdyn_commonResources.js
c. jquery_1.9.1.min
d. msdyn_json2



8.1.1 Optional Configuration

This section provides information on optional configuration on functionality of Case Template entity. This entity helps to populate all the fields automatically while we are converting an email into a case.
Below are the required entities list to create Case Template.

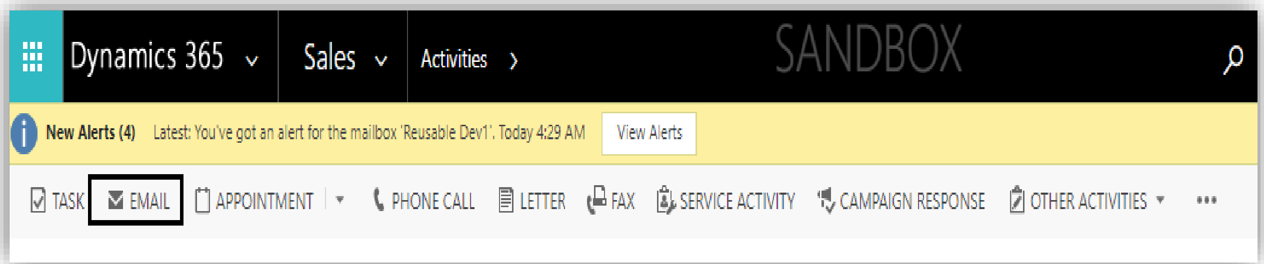
a. Navigate to D365 for BPO -> Case Templates
b. Click on New and Create a Case Template Record.

8.2 End User Experience

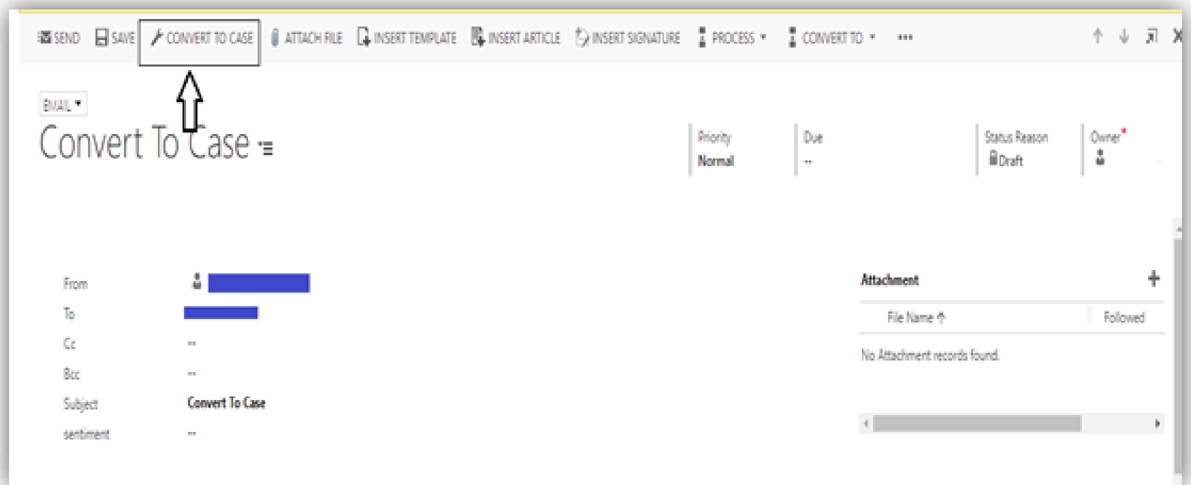
Dynamics 365 for BPO

Once the solution is imported and configured in the Dynamics 365 organization, a user can create a case from Email. The steps outlined below illustrate creating a case from an Email Record.

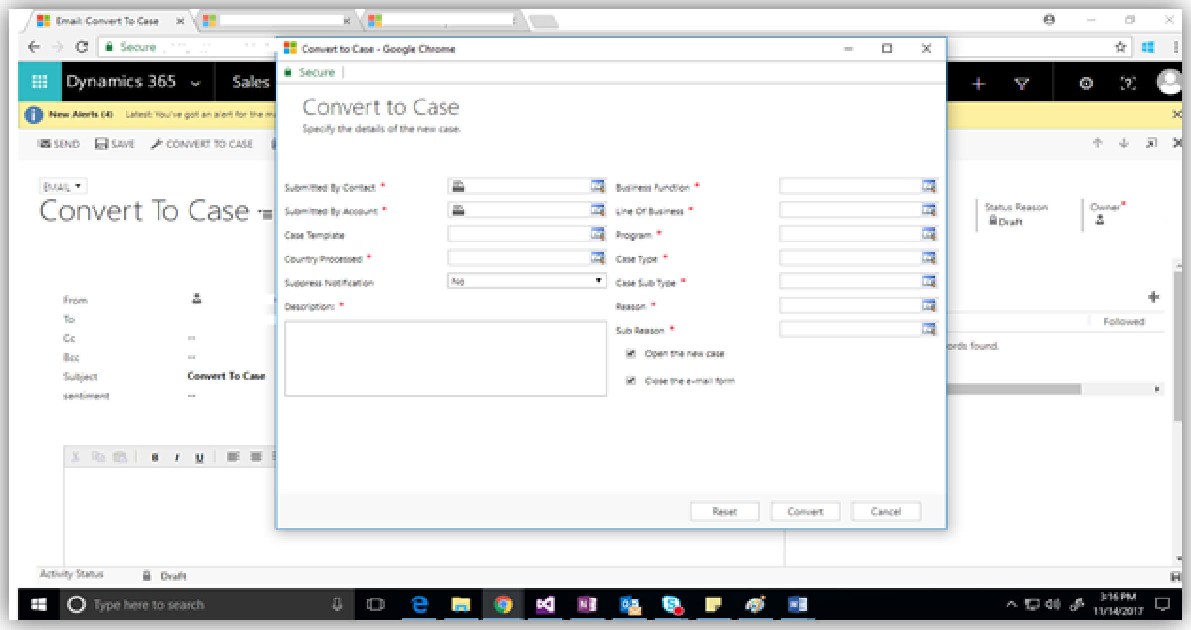
Navigate to D365 for BPO→ Activities → Email



Click on Email, to create a new Email Record. Provide From, To and Subject fields with required information.



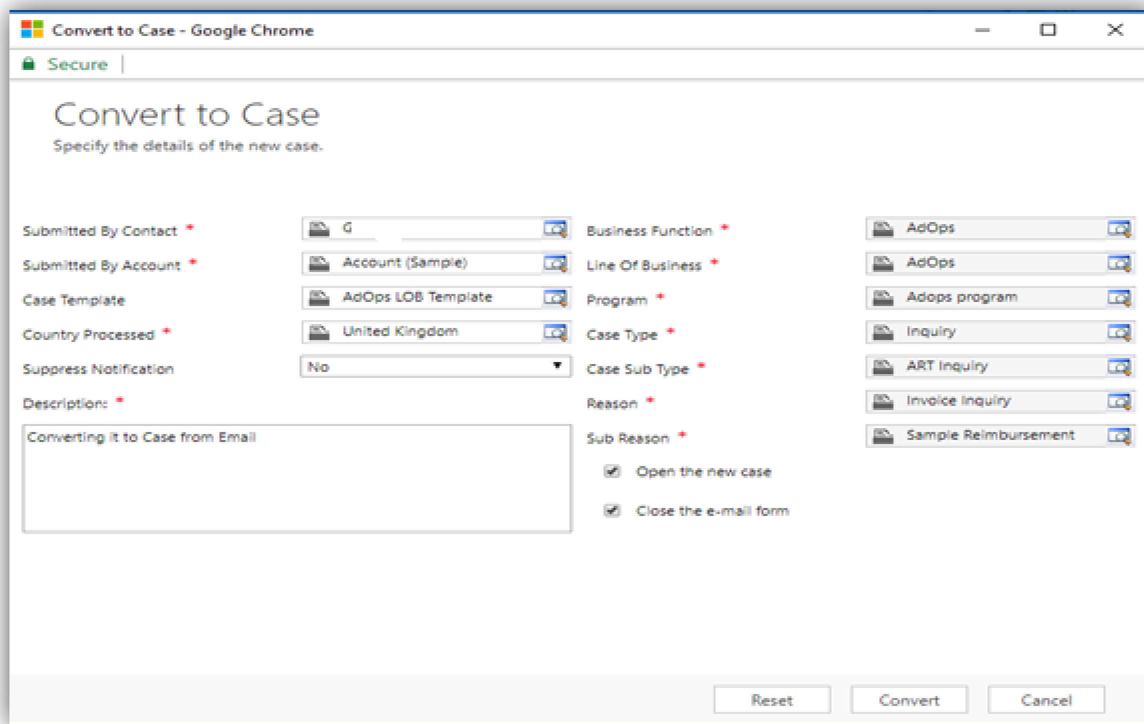
Click on Convert To Case in the Email Record ribbon as shown in the above screenshot



a. Once user fills From field information, automatically if it's a System User Record, and the same User record information with email address is present in the Contact record, when the Convert To Case window pops-up Submitted By Contact and Submitted By Account.

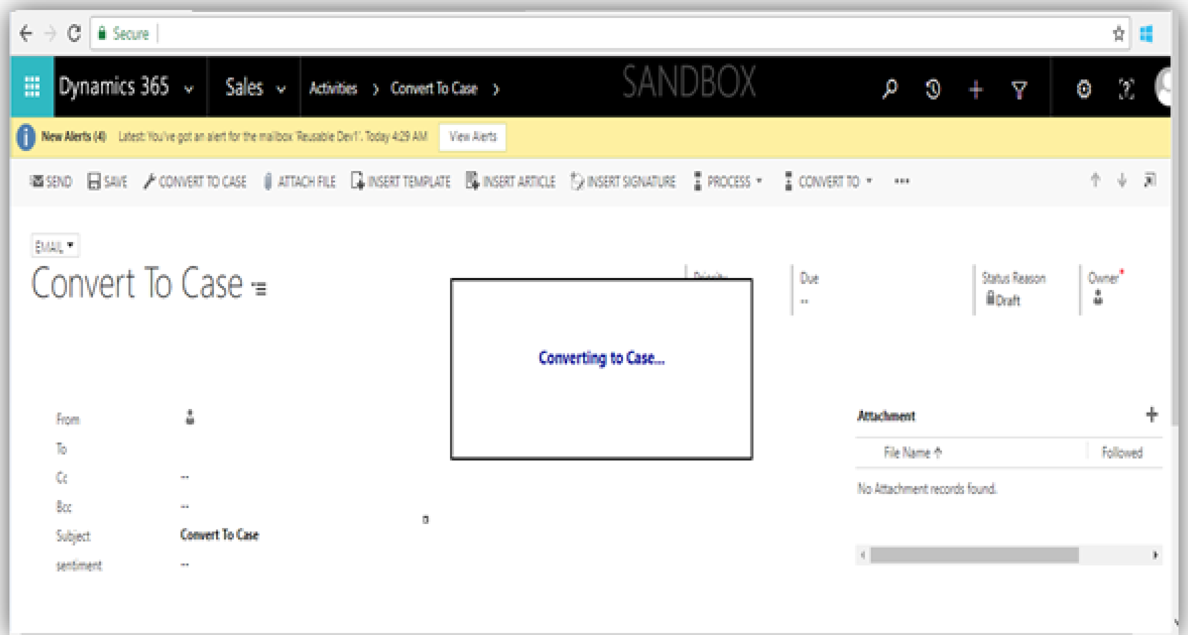
b. Select a record from Case Template lookup, to auto-populate all the other fields.

c. Subject of the Email would be taken as Case title.

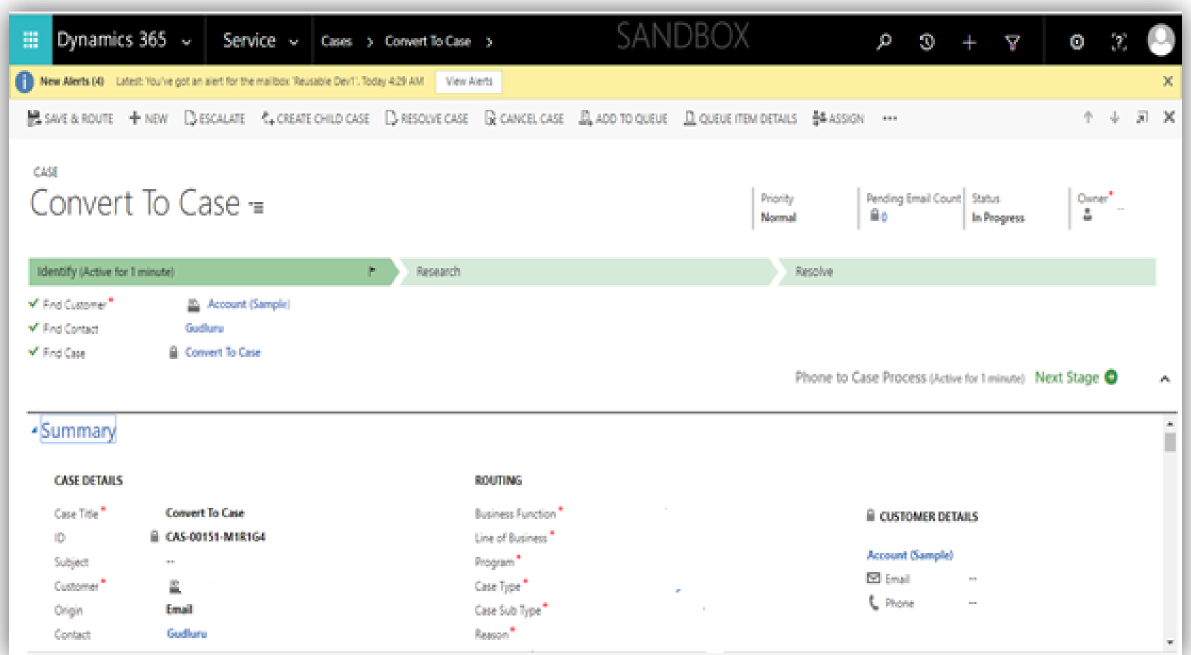


Even without selecting record from **Case Template**, we can populate another fields information manually.

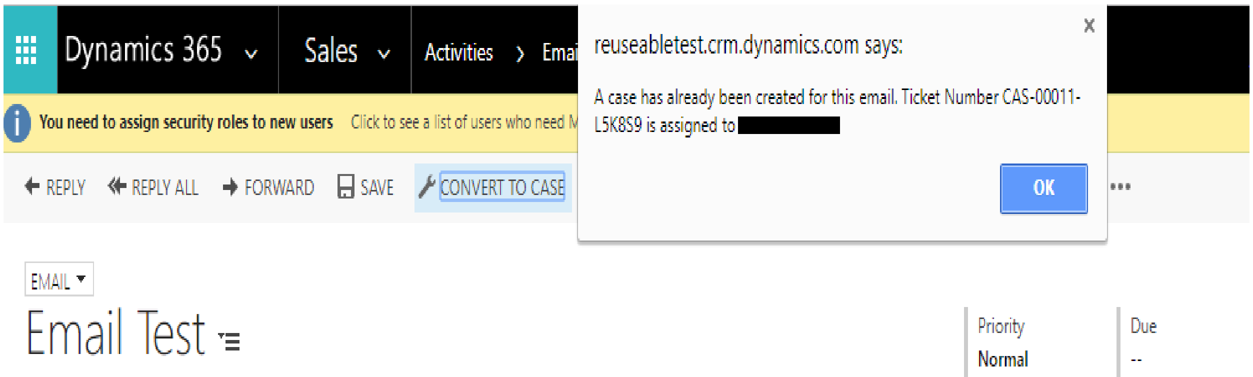
Click on Convert and Converting to Case… progress can be seen as below



A case would get created as shown below, with the information user has provided while converting email to case.



After the case has been created from the email, if user clicks on Convert To Case once again, it will provide information that a case has been created and to whom its assigned.



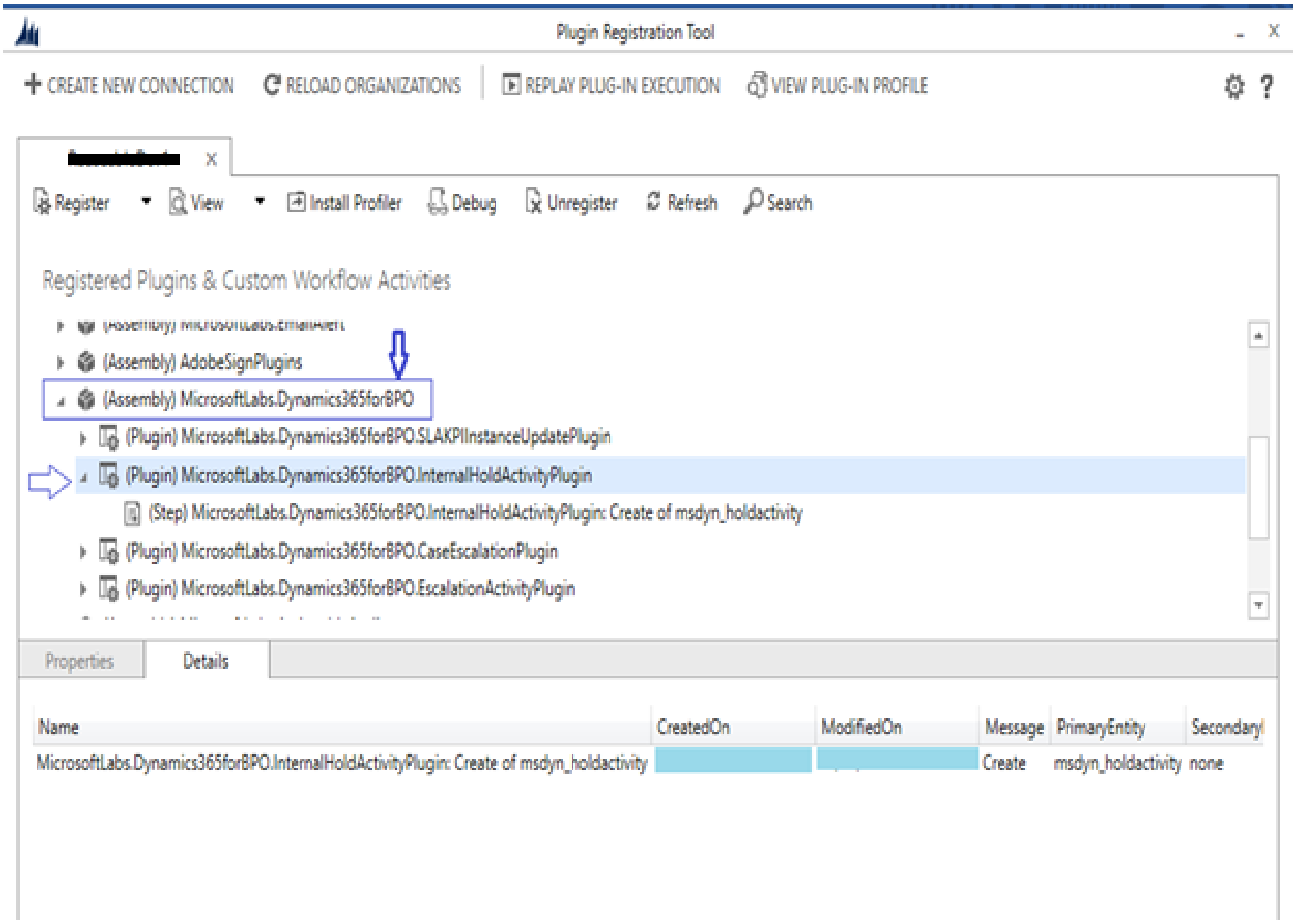
9. Child Case creation for custom Hold status

9.1 Configuration

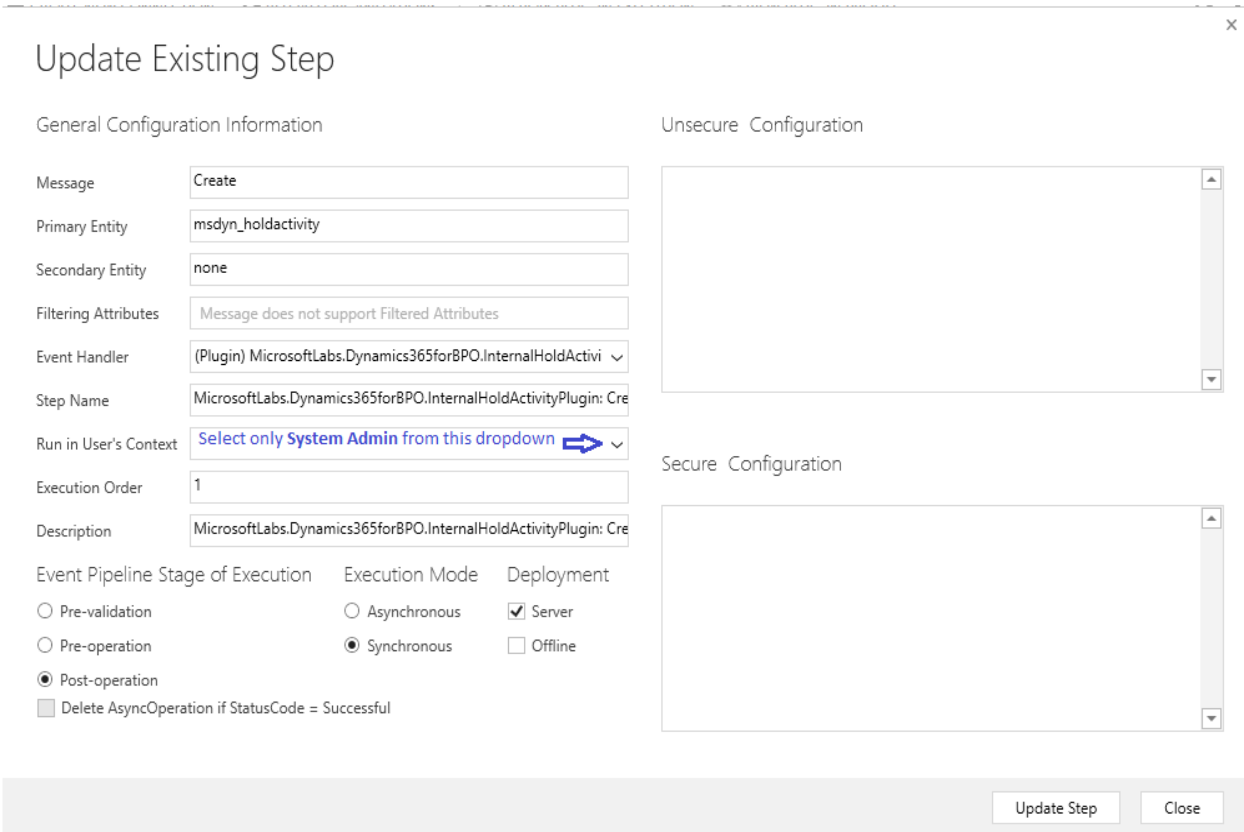
Plugin Configuration – Child Case Create

This section helps in, configuring Plugin Step running context to create a Child Case. As the child case is going to get created in another LOB, to which the current user is not part of. So, to create the Child Case by the current user, in another LOB, we are running the Plugin with System Admin context.

Open plugin Registration tool and Login to your D365 organization and Select the step in InternalHoldActivityPlugin under MicrosoftLabs.WorkBench assembly as shown below



Open the step and choose System Admin (in the Drop Down available) user in “Run in User’s Context” as shown below.

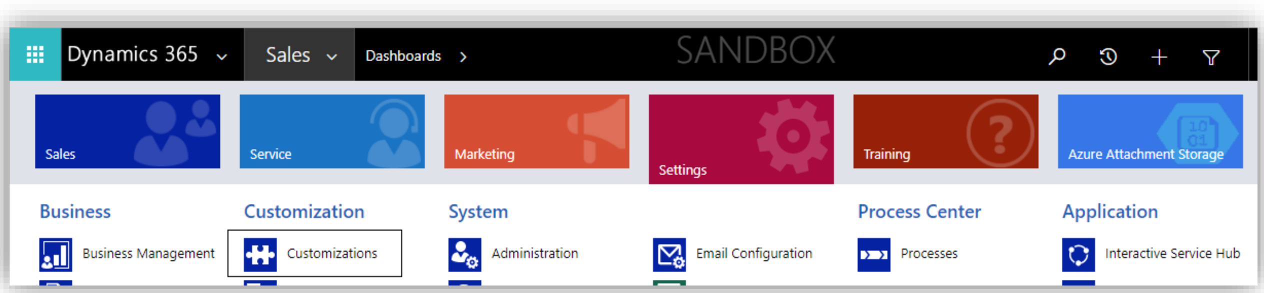


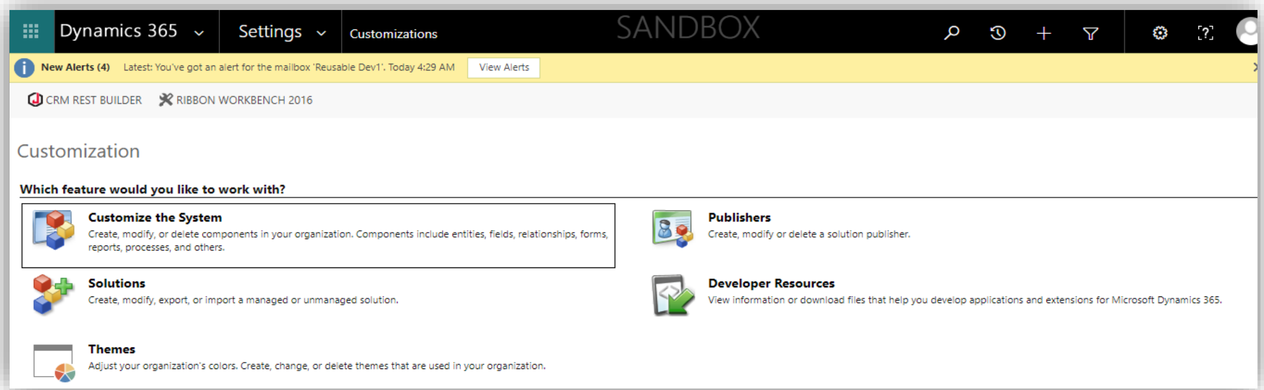
Create Access Team Template

This section helps in create /in setting up the Access Team Template. Access Team Template helps, to read the created child case by the current user, who is not part of another LOB, in which the child case gets created. So, using Access Team Templates, we are allowing current user (who is not part of the child case LOB) to read the Created Child Case record.

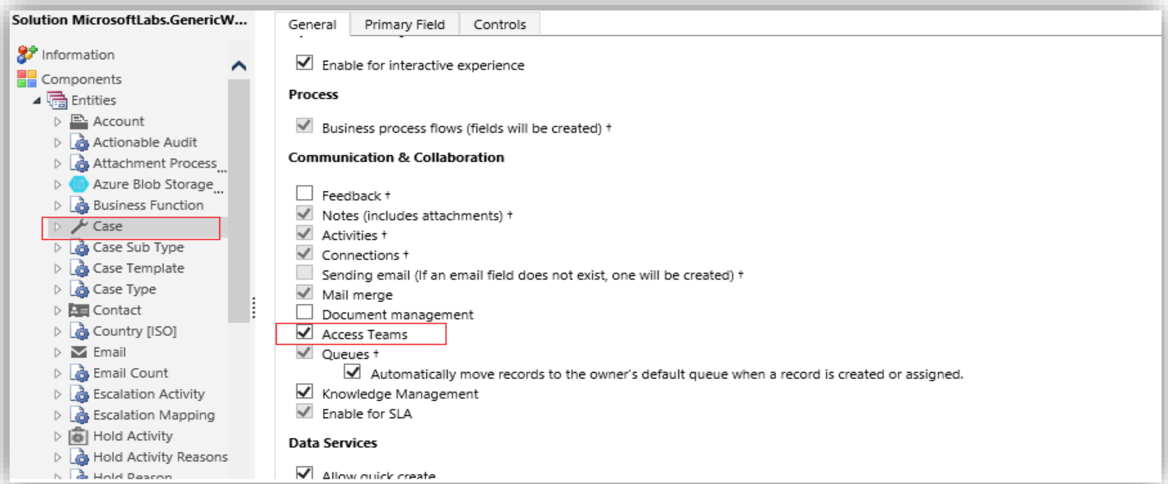
Access Team Template Configuration Steps:

Navigate to Settings -> Customizations -> Customize the System

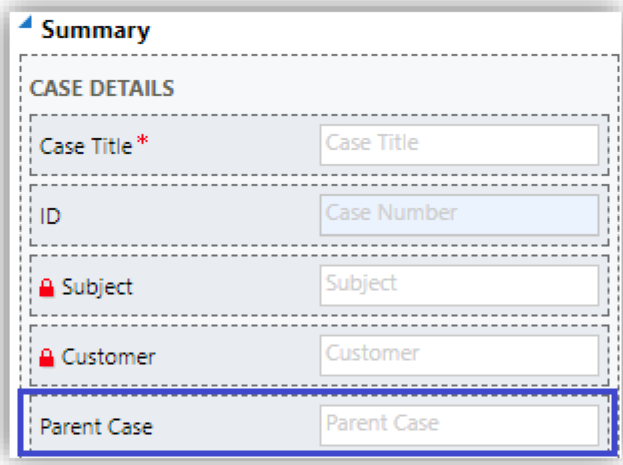




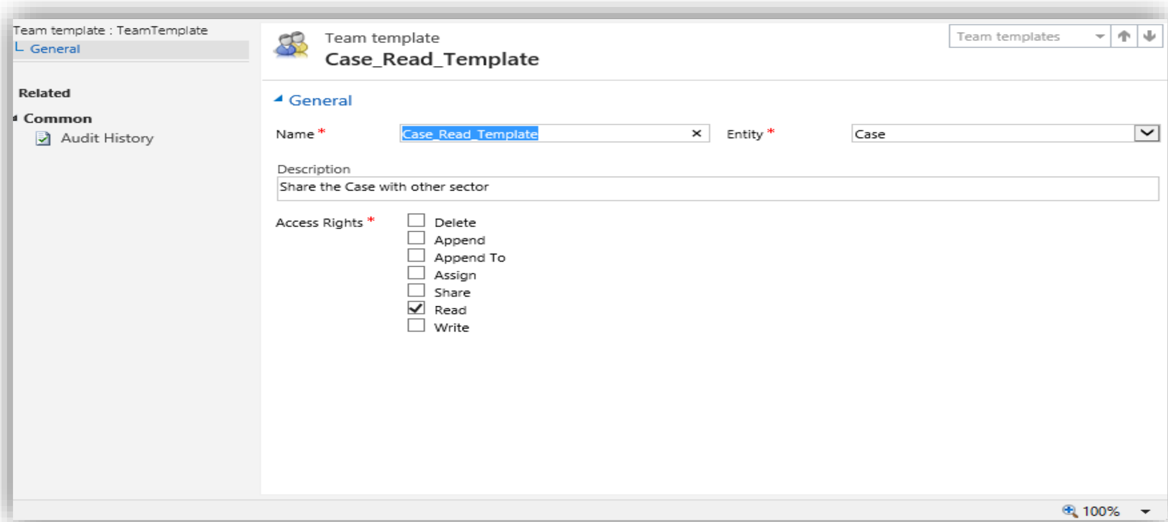
From the entity list in the customize system window chose Case entity and select Access Teams in Communication & Collaboration section and save the record as shown below…



Open Case main form and add “Parent Case” field as shown below.

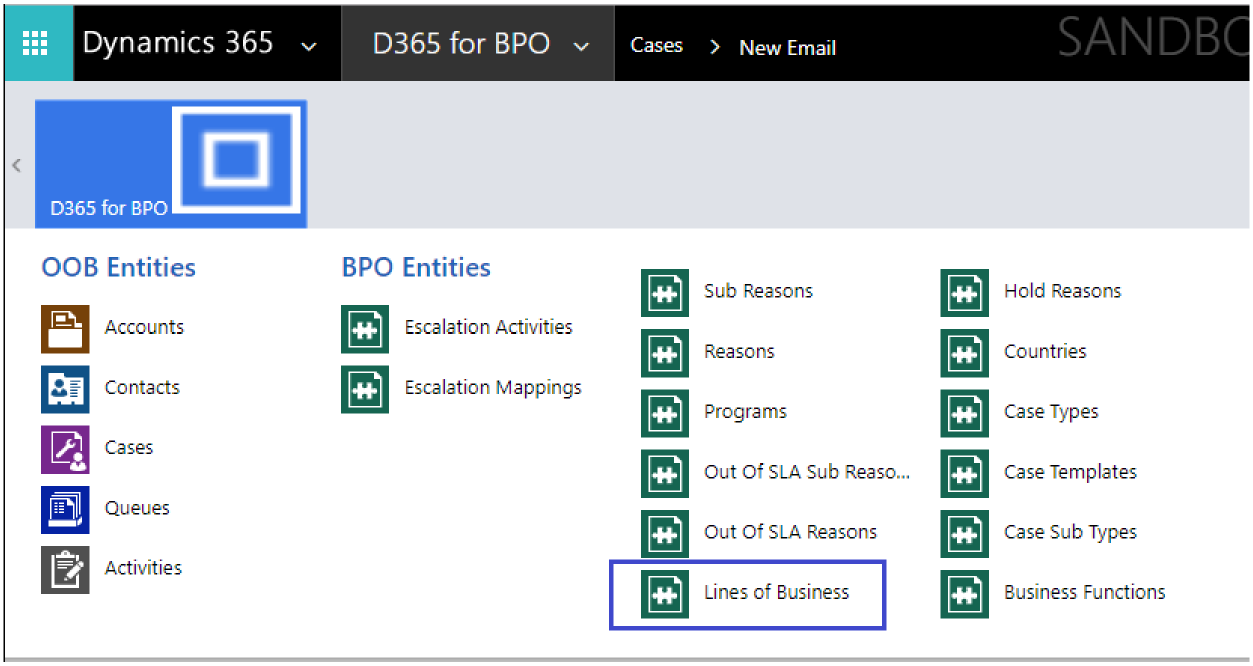


Go to "Settings" > "Security" > "Access Team Template"
Click 'New' and create below record with exact name "**Case_Read_Template**", select Read in Access Rights section and save the record.

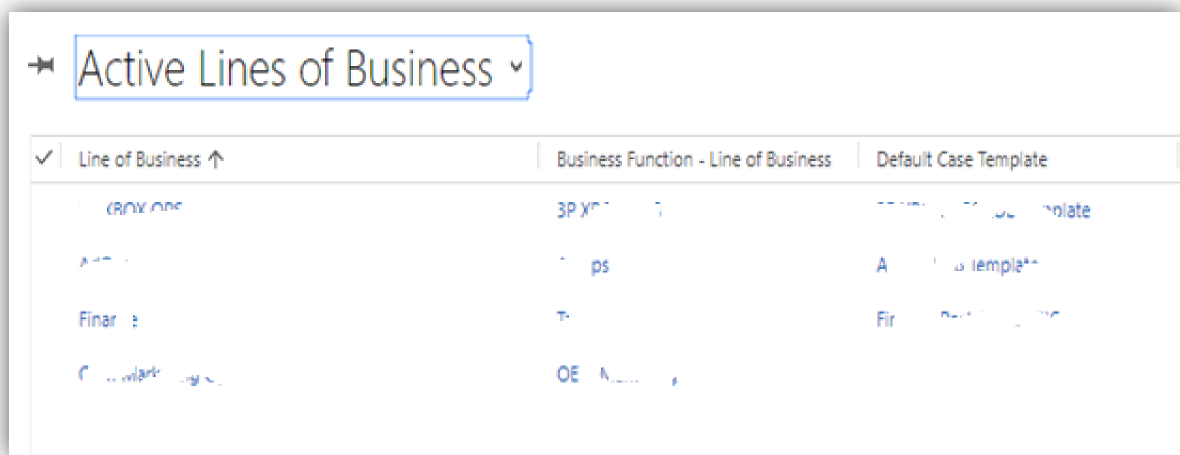


Line of Business Configuration for Child Case Creation

Open Microsoft Dynamics 365
Navigate to BPO Solution -> Lines Of Business

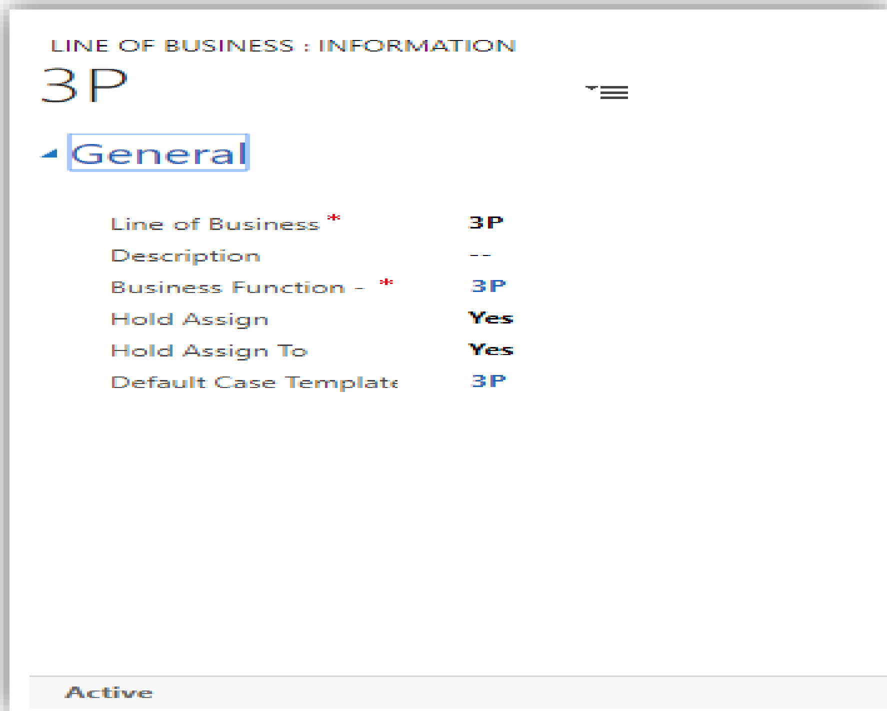


Select the appropriate Line of Business in the Active Lines of Business results that shows



Enabling Hold Assign & Hold Assign To

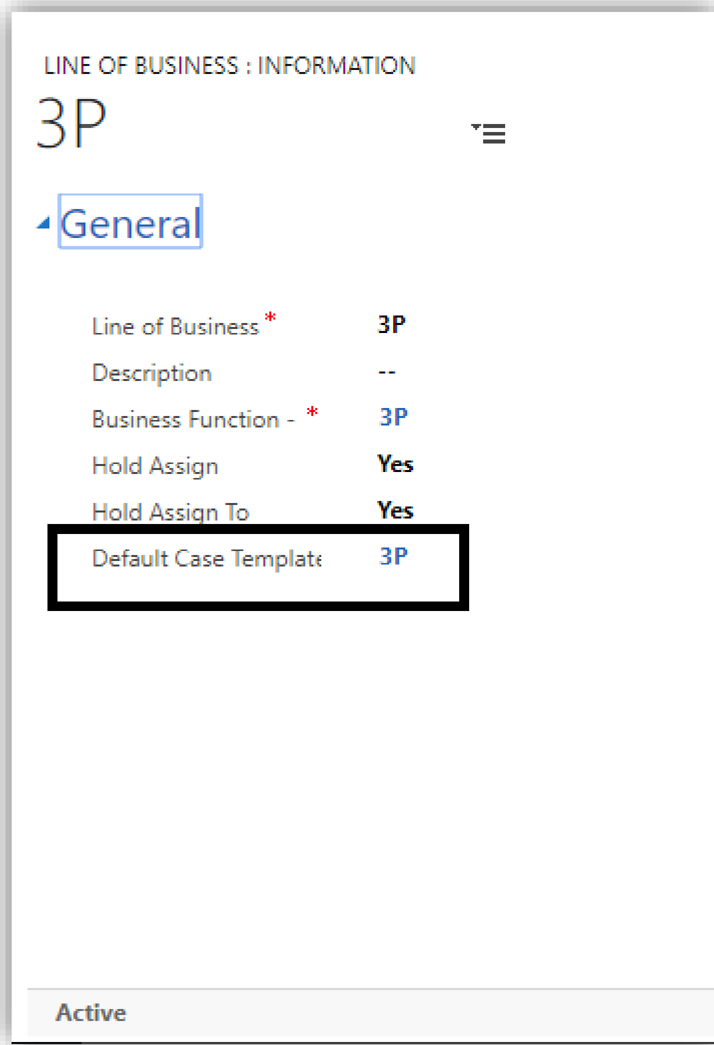
Once Line of Business record is opened, navigate to the “Hold Assign” and “Hold Assign To” fields and change those to Yes and Save the record.



Note: Selecting ‘Yes’ implies that you are allowing your current Line of Business to assign as well as receive child cases from other LOBs.

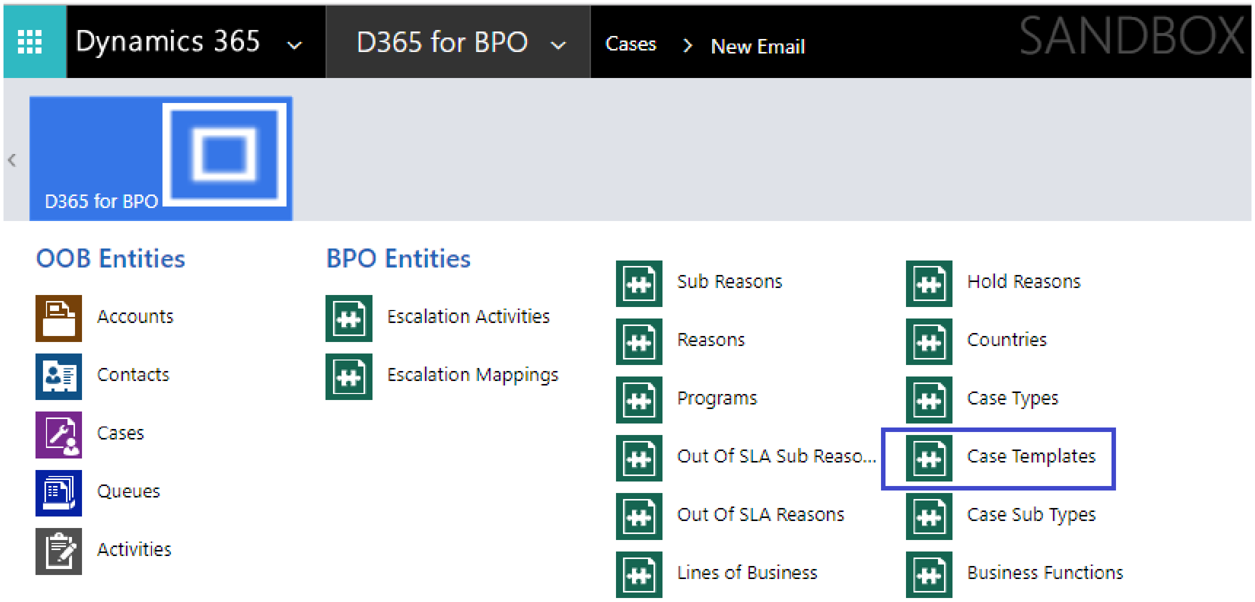
Default Case Template

The Default Case Template field will determine the Child Case taxonomy when another LOB assigns a child case to your LOB.
Note: There will be only one Default Case Template allowed per LOB.



Default Case Template Configuration

To ensure that your Child Cases will be received in the appropriate queue, you must ensure that you have the Taxonomy Metric set up correctly.
Open Microsoft Dynamics 365
Navigate to BPO Solution -> Case Templates



Create a new Case Template for your Child Case creation

Ensure that the Business Function, Line of Business, Case Type, Case Sub Type, Queue, and any other available criteria are selected to match the taxonomy of your Default Case Template.

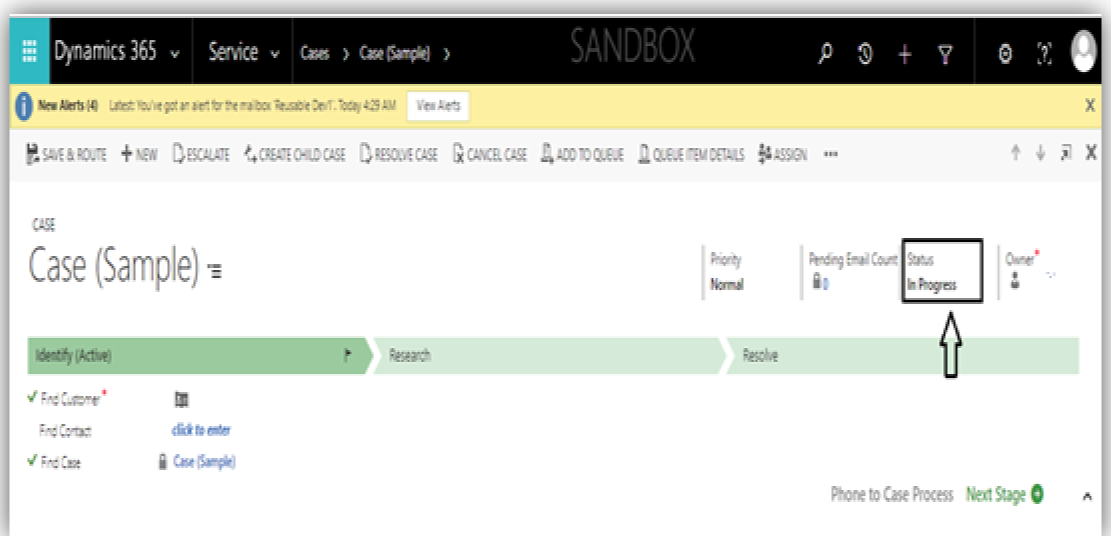
Note: This will ensure that when the Child Case is created using the Default Case Template.

9.2 End user Experience

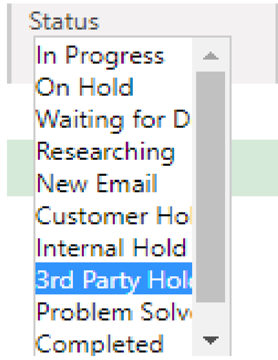
Once the configuration is complete, and you wish to place a case on 3rd Party Hold and assign it to a specific Line of Business, complete the following steps.

Login to Dynamics 365.
Navigate to Service -> Cases

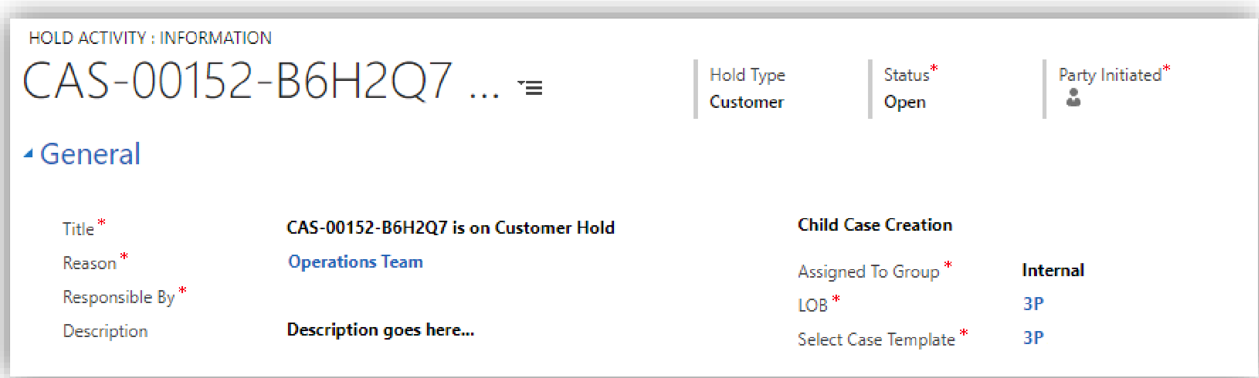
Click on NEW CASE, to create a new Case Record and provide required information.



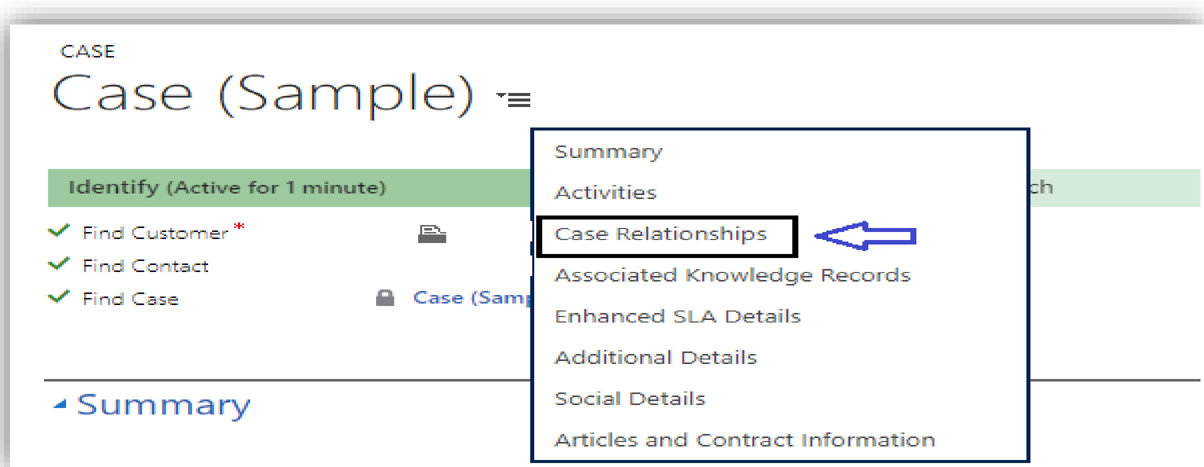
Now change the Status to “3rd Party Hold”. Then we give get a confirmation alert, whether user wants to open a new hold activity or not. If user clicks on Cancel, simply confirmation dialog closes.



If user clicks on OK, a Hold Activity form gets opened in pop up as shown below… with case ticket number appended with Case Status Reason, as shown below…
Select the appropriate Reason and Responsible By, change the Assigned To Group to Internal.
When Internal is selected, the LOB field will appear. Select the LOB you wish to have the Child Case created for. (On Create on Hold Activity, only Child Case create plugin triggers).

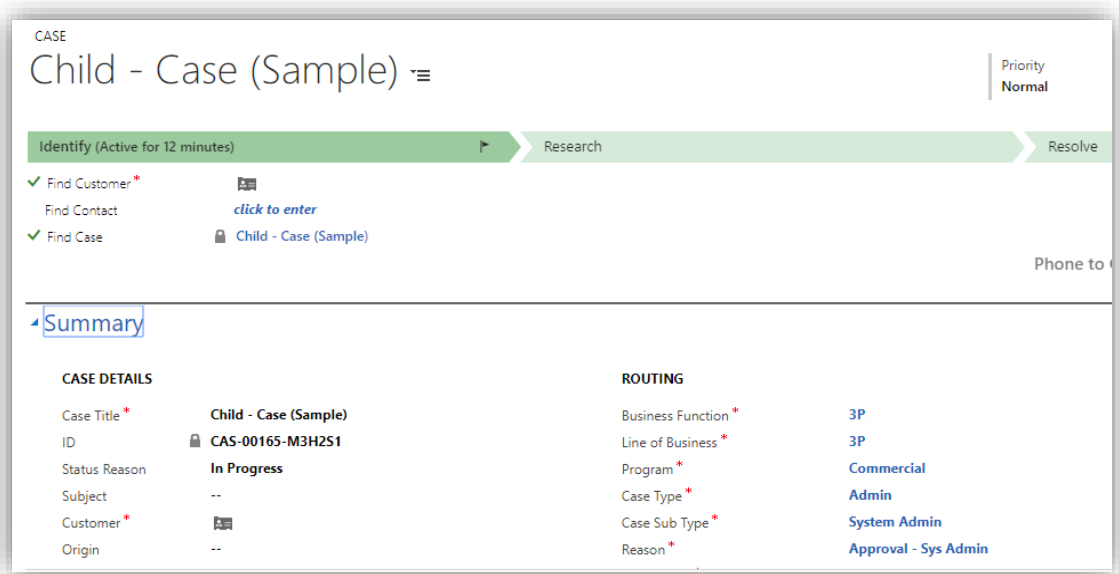


Click Save at the bottom of the Hold Activity form
The Child Case should appear in the Case Relationships tab of the parent case.



Once, we are on the Case Relationships tab, we can see the Child Case created as shown below

Click on the Child Case record and it redirects to a created child case and the Child Case's taxonomy should match what is in the Default Case Template.



Trouble Shoot Tips

a. Please make sure that the Name field in the Access Team Template record is correctly updated as Case_Read_Template (which is case sensitive).
b. Please make sure that the Run in User's Context of InternalHoldActivityPlugin is CRM System Admin in plugin Registration tool.
c. If Child Case is not getting created, please make sure that you are choosing Assigned To Group field to Internal and LOB and Select Case Template at the time of Hold Activity creation.

10. Additional Solution references

10.1 Attachment Management Solution

Attachment Management solution is an add-on feature to dynamics 365 CRM Online to manage notes and email attachments using Azure blob storage. Enables business users to optimize use of CRM Online storage and retrieve files on-demand through Dynamics CRM. It also offers additional optional feature of multiple files upload and download with a preview of the attachment. This solution is built on Dynamics 365 and seamlessly works on Dynamics CRM 2016 and above. Any suggestions/feedback from your end using Attachment Management would help us at Microsoft Labs to define the roadmap of this solution to its future. Microsoft Labs does not offer an ongoing customer support for this solution. It would be ideal to test run the solution in your pre - production environments before installing in your production environment.

Click here for [Configuration and Functionality]()

10.2 Actionable Audit

Microsoft Dynamics 365 comes with several tools to help you manage data. One of these is the auditing feature, which allows you to track changes made to data in Dynamics 365. It also tracks each time a user logs into your system. If auditing is enabled, CRM automatically creates logs for the changes that are tracked. But, we cannot access the System Auditing Entity. This Actionable Audit solution will provide the user to track the audit history of the configured entities and will be able to generate the reports on the Audited data. Also, provides user friendly web resource for Case entity with the Search, Export to CSV options

Click here for [Configuration and Functionality]()

10.3 Email Alert

The Email Alert Solution is an add-on feature to dynamics 365 CRM to get an overview of received unread CRM emails on a Case. It enables users to get the unread mails count which were received on a case. Feature Benefits: No need to navigate to Emails section of a case to see the received emails

• Pending Email Count field on a case form will get updated with number of unread received emails. Option to make Unread/Read on Email form

• Users can mark as Read/Unread the email after opening. Accordingly, the Pending email count would be updated. This solution is built on Dynamics 365 and seamlessly works on Dynamics CRM 2016 and above

Click here for [Configuration and Functionality]()

10.4 Email Machine Learning

Email Machine Learning solution is an add-on feature to dynamics 365 CRM(Online) to translate email text messages into English and analyze its sentiments using Azure cognitive services. This feature enables organizations in understanding customer's likes and dislikes. It also helps business users to make sure it gives the reader intended impression.

Email Machine Learning offers

- Language translation email text message -
- Translate text message into English by using Azure Cognitive Text translation API.
- Sentiment analysis score for email text message -
- Azure Cognitive Text analytics API returns a numeric score between 0 and 1. Scores close to 1 indicate positive sentiment, while scores close to 0 indicate negative sentiment. Sentiment score is generated using classification techniques.

This solution is built on Dynamics 365 and seamlessly works on Dynamics CRM 2016 and above Any suggestions/feedback from your end using Email Analytics would help us at Microsoft Labs to define the roadmap of this solution to its future. Microsoft Labs does not offer an ongoing customer support for this solution. It would be ideal to test run the solution in your pre-production environments before installing in your production environment.

Click here for Configuration and Functionality

10.5 Speech To Text

The Speech-to-Text solution will help users to convert the audio into text in given entity using Azure Cognitive Services (Bing Speech API). The solution enables users to transcribe audio into text in real time and supports to receive the intermediate results of the words that have been recognized so far. The solution also supports end-of-speech detection. In addition, users can choose additional formatting capabilities, like capitalization and punctuation, masking profanity, and text normalization. It supports multiple local languages also.

Click here for Configuration and Functionality