



DYNAMICS 365 FOR BPO

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

Contents

Overview.....	3
How to Verify the Solution after Installation	3
Custom Entities	5
Business Function	5
Line of Business.....	5
Program.....	6
Case Type	6
Case Sub Type	6
Reason	6
Sub Reason	6
Country.....	6
Escalation Mapping	7
Out of SLA Reason	7
Out of SLA Sub Reason	7
Hold Reason	7
Root Cause.....	7
Case Templates	8
Sample case creation with custom values	8
General Customization.....	9
Customizing the System	9
Case Main form.....	9
Escalation	10
Configuration.....	10

End User Experience	11
Resolve case escalation	11
Hold activities	13
Customizing Settings	13
Auto Activity Close - Configuration	14
End-User Experience	15
Email expand and validation	17
Configuration	17
End-User Experience	18
SLA	18
Configuration	18
End User Experience	22
Convert to Case	23
Configuration	23
UI Configuration – Case Form	23
Optional Configuration	25
End User Experience	25
Child Case creation for custom Hold status	28
Configuration	28
Plugin Configuration – Child Case Create	28
Create Access Team Template	28
Line of Business Configuration for Child Case Creation	30
Enabling Hold Assign & Hold Assign To	30
Default Case Template	31
Default Case Template Configuration	31
End user Experience	32
Additional Solution references	34
Attachment Management Solution	34
Actionable Audit	35
Email Alert	35
Email Machine Learning	35
Speech-To-Text	36

Overview

The Dynamics 365 for BPO Solution offers more capabilities to existing case management, in addition to providing additional functionalities, such as:

- Case Escalation
- Placing a case on custom hold status, example: Internal, 3rd Party, and Customer
- Automatically create child cases on 3rd Party Hold status
- Redefine the SLA of a case
- Convert to Case from an incoming email
- Email validations in Case management

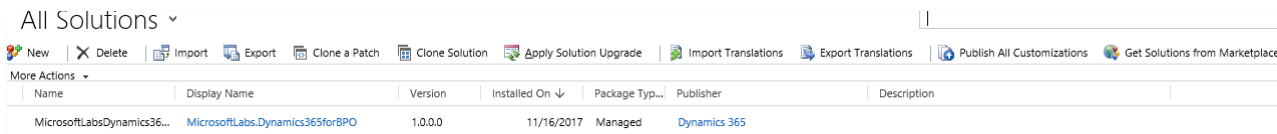
All these functionalities are described through this guide with configuration and user experience.

This offering also includes Attachment Management, Actionable Audit, Email Alert, Email Machine Learning and Speech-To-Text. Brief details and links to these solutions are provided at the end of this document.

How to Verify the Solution after Installation

Download the solution from <https://appsource.microsoft.com/en-us> . The structure should look like below...

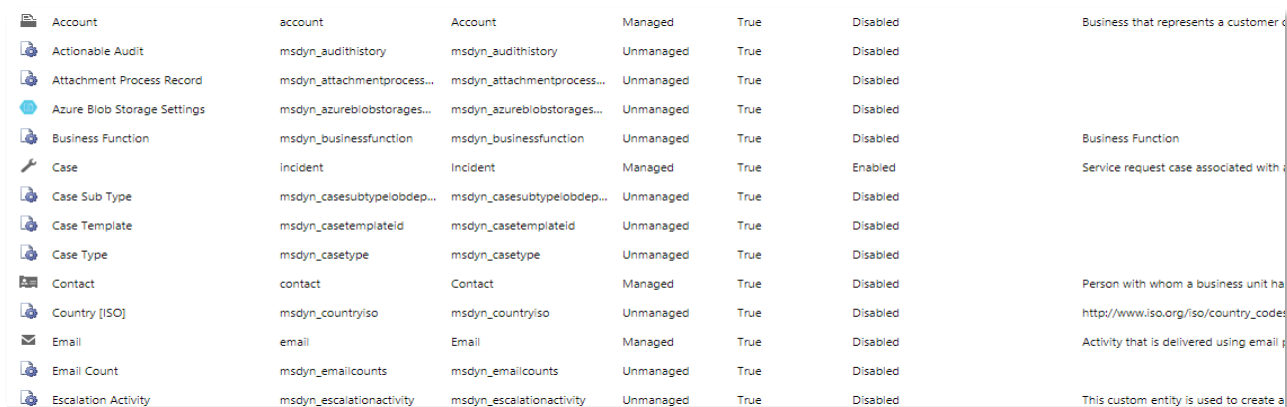
Solution:



The screenshot shows the 'All Solutions' page in Microsoft AppSource. The 'MicrosoftLabs.Dynamics365forBPO' solution is highlighted. The table below represents the data visible in the screenshot.

















Name	Display Name	Version	Installed On	Package Type	Publisher	Description
MicrosoftLabsDynamics36...	MicrosoftLabs.Dynamics365forBPO	1.0.0.0	11/16/2017	Managed	Dynamics 365	

List of custom entities:



The screenshot shows a table listing custom entities in Dynamics 365. The table has 7 columns: Name, Display Name, Version, Installed On, Package Type, Publisher, and Description. The data is as follows:

Name	Display Name	Version	Installed On	Package Type	Publisher	Description
Account	account	Account	Managed	True	Disabled	Business that represents a customer
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
Case Sub Type	msdyn_casesubtypeobdep...	msdyn_casesubtypeobdep...	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_country/iso	msdyn_country/iso	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_notesattachmen...	msdyn_notesattachmen...	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.

List of 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...

List of 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_notesattachmen...	Webpage (HTML)	Unmanaged	True		English(1033)

NotesAttachmentEntitySettings_Logo	msdyn_notesattachmen...	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		English(1033)

Custom Entities

There are 14 custom entities that are required if we want to use the advanced features, therefore they need to be configured properly before deployment.

Business Function

is the parent value for all the routing information of a Case.

BUSINESS FUNCTION : INFORMATION

New Business Function

General

Business Function *

You must provide a value for Business Function.

ACTIVITIES NOTES

No records found.

Line of Business

is having a 1:N relationship with a Business Function.

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

LINE OF BUSINESS : INFORMATION

New Line of Business

General

Line of Business *

Description

Business Function - *

Hold Assign

Hold Assign To

Default Case Template

ACTIVITIES NOTES

No records found.

Program

is an independent value used for Case creation.

PROGRAM : INFORMATION

New Program

General

Program *

Description

Line Of Business *

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**, and **Sub Reason**.

CASE TYPE : INFORMATION

New Case Type

General

Case Type *

Description

ACTIVITIES NOTES

No records found.

Case Sub Type

values are loaded onto the form based on **Case Type** and **Line of Business**.

CASE SUB TYPE : INFORMATION

New Case Sub Type

General

Case Sub Type *

Description

Case Type *

Line Of Business *

ACTIVITIES NOTES

No records found.

Reason

values are loaded based on **Case Sub Type**.

REASON : INFORMATION

New Reason

General

Reason *

Case Sub Type *

Description

ACTIVITIES NOT

No records found.

Sub Reason

values are loaded based on the **Reason** selected.

SUB REASON : INFORMATION

New Sub Reason

General

Sub Reason *

Reason *

Description

ACTIVITIES NOT

No records found.

Country

is an ISO value assigned to every country and must be mapped to a **Processing Center**. Example: United States is mapped to AOC (American Operations Center) processing center.

COUNTRY [ISO] : INFORMATION

New Country [ISO]

General

Country *

Country Code(3) *

Case Processing Center

Escalation Mapping

is linked with **Business Function** and **Line Of Business**. User has to set **Escalation Queue** and **Owner** details for escalation to work properly.

ESCALATION MAPPING : INFORMATION

New Escalation Mapping

General

Name *

Business Function *

Line of Business *

Processing Center

Product

Tier

Root Cause

Escalation Queue Nan

Queue Owner

Notification Time Peri

Line of Business Mana

Email Template Name

ACTIVITIES

NOTES

No records found.

Out of SLA Reason

value will be displayed when the SLA of the case has expired. The System will not allow the user to resolve the case unless the value is provided.

OUT OF SLA REASON : INFORMATION

New Out Of SLA Reason

General

Name *

Owner *

Out of SLA Sub Reason

value is based on the **Out of SLA** reason selected.

OUT OF SLA SUB REASON : INFORMATION

New Out Of SLA Sub Reason

General

Name *

Out Of SLA Reason *

Owner *

Hold Reason

is set while case is put on hold. This value is linked with **Hold Type** (Customer Hold, 3rd Party Hold, and Internal Hold).

HOLD REASON : INFORMATION

New Hold Reason

General

Name *

Hold Type *

Line Of Business *

ACTIVITIES

NOTES

No records found.

Root Cause

values are set by Case subtype. This helps to detect cause of the problem.

ROOT CAUSE : INFORMATION

New Root Cause

General

Root Cause *

Case Sub Type *

Description

IsPartnerFacing

IsOrderCentralFacing

NOTES

No records found.

Case Templates

are used to quickly create cases with pre-defined values. Customization can be tailored to suit a number of needs. Values will be auto-populated when the user selects the template from Case Template drop down list on the Case form.

CASE TEMPLATE : INFORMATION

New Case Template

Case Template Name *	--	ACTIVITIES	NOTES
Owner *	Suresh Guduru	No records found.	
Case Status	Active		
Suppress Notification:	No		
Business Function *	--		
Line of Business *	--		
Program *	--		
Case Type *	--		
Case Sub Type *	--		
Reason *	--		
Sub Reason	--		
Country [Processed]	--		
Processing Center	--		
Product	--		
Root Cause	--		

Sample case creation with custom values

Path: Dynamics 365 for BPO|Cases

Click on New Case. Enter all the mandatory information and Save the case. The Case will be created based on above configuration values. Example is given below.

CASE

Sample Test Case

Priority: Normal | Created On: 11/16/2017 1:54 PM | Status: In Progress | Owner: Suresh

Identify (Active) → Research → Resolve

Summary

CASE DETAILS	ROUTING DETAILS	CUSTOMER DETAILS
Case Title * Sample Test Case	Business Function * Ad. Inq.	Suresh Guduru
ID CAS-00013-C4B3N8	Line of Business * Ad. Inq.	Company Account for Entitlements
Subject --	Program * Display	Email v-sgudur@microsoft.com
Parent Case --	Case Type * Transaction	Mobile --
Customer * Suresh Guduru	Case Sub Type * Assessment Management	Business --
Origin --	Reason * Ad Location Inquiry	
Contact --	Sub Reason * 280V Approval	
Entitlement --		
Product --		

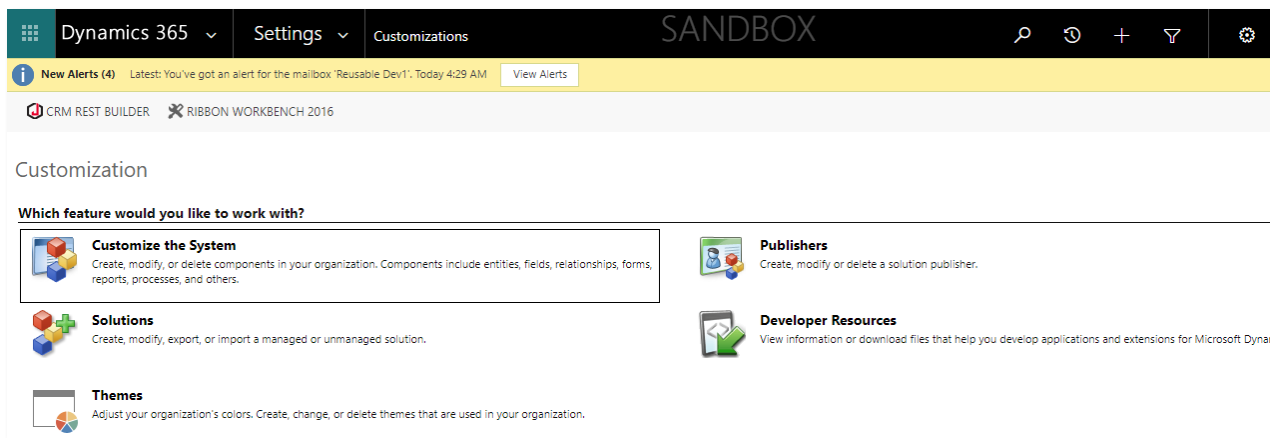
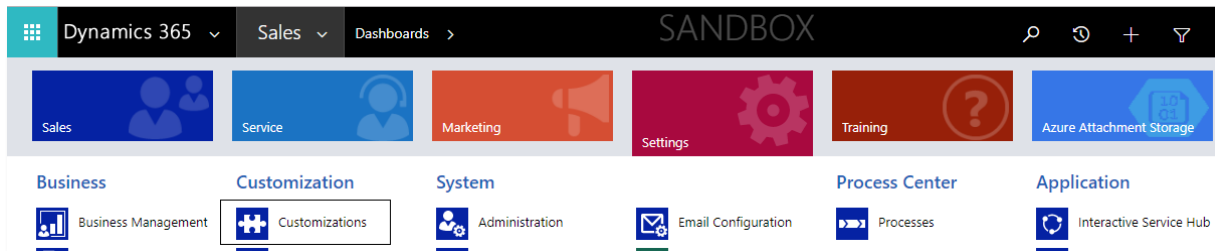
PROCESSING DETAILS

General Customization

This document describes several areas of customization, many often in the same common area. This section describes how to find those sections.

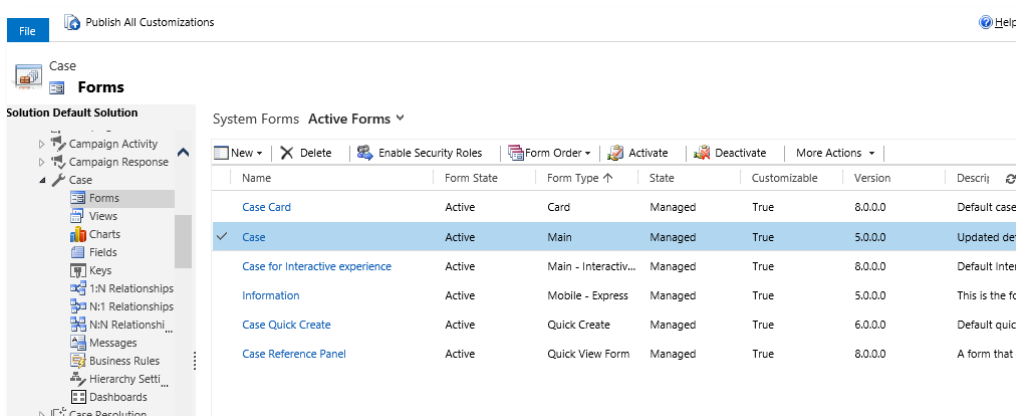
Customizing the System

Select **Settings|Customizations|Customize the System**



Case Main form

Select **Customize the System**. When the form loads, the go to the left-side TreeView: Open **Components|Entities|Case|Forms**, and in the right-side **System Forms** list, select **Case** where the form type equals **Main**.



Escalation

Cases will be escalated at any time based on the severity established by the employee or vendor, and set to Tier 1 through 4 as necessary. Ensure that all the configurations are mandatory.

Configuration

Prerequisite: Refer to the **Escalation Mapping** section for detailed configuration.

In this section we will modify the **Case Main** form. Select the form as previously described.

Add "Escalation details" to the form along with mandatory fields as well, and make those fields read-only so that end user cannot change it.

Escalation Details	
Escalated	IsEscalated
Escalation Level	Escalation Level
Escalated By	Escalated By
Case Escalated Since	Case Escalated Since
Escalated On	Escalated On

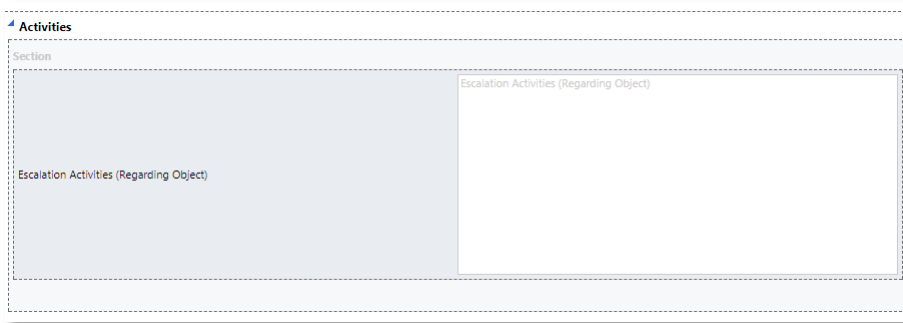
Click on **Form Properties**, and add JavaScript web resources to the Case form libraries. Example given below.

The screenshot shows the Microsoft Dynamics CRM Form Designer interface. The 'Form Properties' tab is selected and highlighted with a red box. The main workspace shows the 'Case' form with sections for CASE DETAILS, ROUTING, and CUSTOMER DETAILS. The CASE DETAILS section includes fields for Case Title, ID, Subject, and Customer. The ROUTING section includes Business Function, Line of Business, Program, and Case Type. The CUSTOMER DETAILS section includes a Customer field and a link to msdyn_caseTimeLine.html.

Select "+ Add" to append more files.

Escalation Details	
Escalated	IsEscalated
Escalation Level	Escalation Level
Escalated By	Escalated By
Case Escalated Since	Case Escalated Since
Escalated On	Escalated On

Add escalation activity **Sub-Grid** to track the escalation activity record for the respective Case.



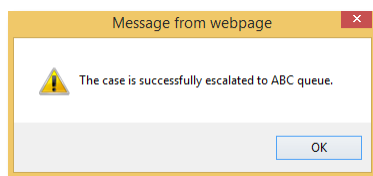
End User Experience

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

Click on the **Escalate** button

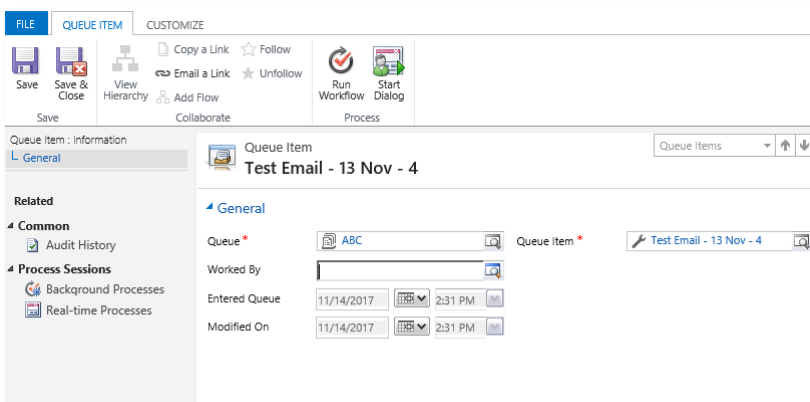


User is prompted with this message.



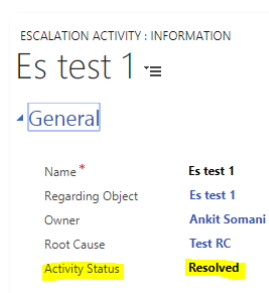
The Case will be escalated to the queue based on the **Escalation Mappings** details. Check the queue status and details by selecting the **Queue Items Details** button.

Below is an example of escalated queue details.



Resolve case escalation

Once escalated, the corresponding activity will be created.



Once the activity status is changed to "Resolved", all the other parameters will be reset to normal values.

Escalation Details

Escalated

No

Escalation Level

--

Notes:

- CRM will allow a case to be escalated even if the queue doesn't exist: The system will display escalation success, however the case will not be routed.
- Cases can only escalate to the appropriate level if the Product and Processing Center properties are properly set in the Escalation Mapping. In the example below, we've set **Product** to "Product 1" and **Processing Center** to "AOC" before escalating the case.

CASE DETAILS

Case Title *

Es test 1

ID

CAS-00181-L8X6K7

Subject

--

Customer *

Suresh

Parent Case

--

Origin

--

Contact

--

Entitlement

--

Product

Product1

Root Cause

--

Received Date

--

ROUTING

Business Function *

Line of Business *

Program *

Case Type *

Case Sub Type *

Reason *

Sub Reason *

PROCESSING DETAILS

Country [Processed] *

All

Processing Center

AOC

In the example to the right, the Escalation Mapping entity record has the same values for **Product** and **Processing Center**, and therefore can be escalated to Tier 1.

ESCALATION MAPPING : INFORMATION

3P XBOX Tier 1

General

Name *

Business Function *

Line of Business *

Processing Center

Product

Tier

Root Cause

Escalation Queue Nan

Queue Owner

Notification Time Peri

Line of Business Manz

Email Template Name

Hold activities

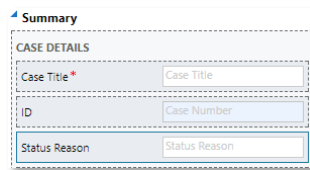
There are three different custom Holds available in this solution: Customer Hold, 3rd-Party Hold, and Internal Hold. They are defined as:

- **Customer Hold** can be assigned when user is waiting for additional information from request Submitter. For example, documents are missing, or perhaps missing mandatory information.
- **3rd Party Hold** is assigned when we need additional external information.
- **Internal Hold** is assigned when the user goes on lunch break, or is attending any other scheduled meeting, etc.

Customizing Settings

In this section we will modify the **Case Main** form. Select the form as previously described.

After the Form Case window opens, go to the right-side Field Explorer. Scroll to the Status Reason property label, then drag and drop it onto the form Header. Save the Form.

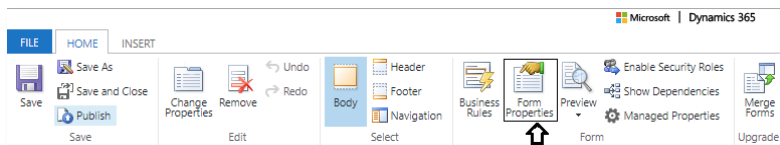


Summary

CASE DETAILS

Case Title *	Case Title
ID	Case Number
Status Reason	Status Reason

Then select Form Properties, as shown below...

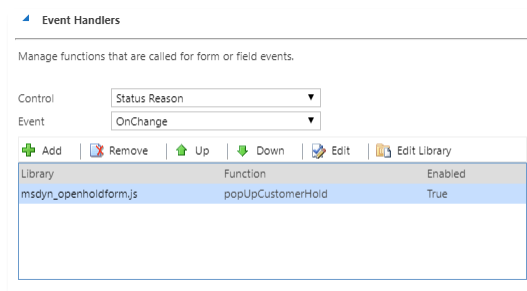


Click on "+ **Add**" in Form Libraries section, and in the next popup, chose **msdyn_openholdform.js** web resource. Click the **ADD** button; this dismisses the popup.

While still in the Form Properties, scroll to Event Handlers section.

Select the Control Dropdown List, scroll to Fields|Status Reason. Then set the Event to OnChange.

Click on "+ **Add**", and in the Handler Properties popup, type in the **Function** Textbox "popupCustomHold", then click on the **OK** button to accept and dismiss.



Event Handlers

Manage functions that are called for form or field events.

Control: Status Reason

Event: OnChange

Library Function Enabled

msdyn_openholdform.js	popupCustomHold	True
-----------------------	-----------------	------

Click the **OK** button to finish.

Note: Once the even handler is added, remove the **Status Reason** field that we had previously added in the Summary Section. And although removed, Status Reason will still trigger the OnChange event.

Back at the Case Main Form, go to the **File** tab, select **Section** from the ribbon, and add **One Column**. Name the column "Hold Activities". From the same ribbon, add **Sub-Grid**, and use the **Set Properties** popup and the details as shown to the right.

?

×

Set Properties

Set the List or Chart properties.

Display

Formatting

Controls

Name

Specify a unique name.

Name *holdactivities

Name

Label *Hold Activities (Regarding)

☒ Display label on the Form

Data Source

Specify the primary data source for this list or chart.

RecordsOnly Related Records

EntityHold Activities (Regarding)

Default ViewMy Open Hold Activities

Edit

New

Auto Activity Close - Configuration

Close the Hold Activity based on the close date provided. From the entity list in the customize system window chose the **Hold Activity** entity, open Main form, and then go to **Form Properties** as shown below...

Microsoft | Dynamics 365

FILE

HOME

INSERT

Save

Save As

Save and Close

Publish

Save

Change Properties

Remove

Undo

Redo

Body

Header

Footer

Navigation

Select

Business Rules

Form Properties

Preview

Form

Enable Security Roles

Show Dependencies

Managed Properties

Merge Forms

Upgrade

Click on “+ **Add**” in Form Libraries, select **msdyn_openholdform.js** web resource, and add it.

Form Libraries

Manage libraries that will be available in the form.

+

+

+

+

+

+

Add

Remove

Up

Down

Edit

Name	Display Name	Description
msdyn_autoactivityclose.js	msdyn_autoactivityclose.js	Auto Close the Act...

Next, with Event Handlers, set OnLoad, Close After Date Time and Auto Activity Closure (Yes/No) change events. In the Function Textbox, type “**setAutoActivityCloseAfter**” as shown.

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

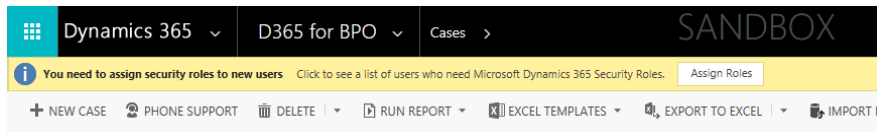
Edit Library

Library	Function	Enabled
msdyn_autoactivityclose.js	setAutoActivityCloseAfter	True

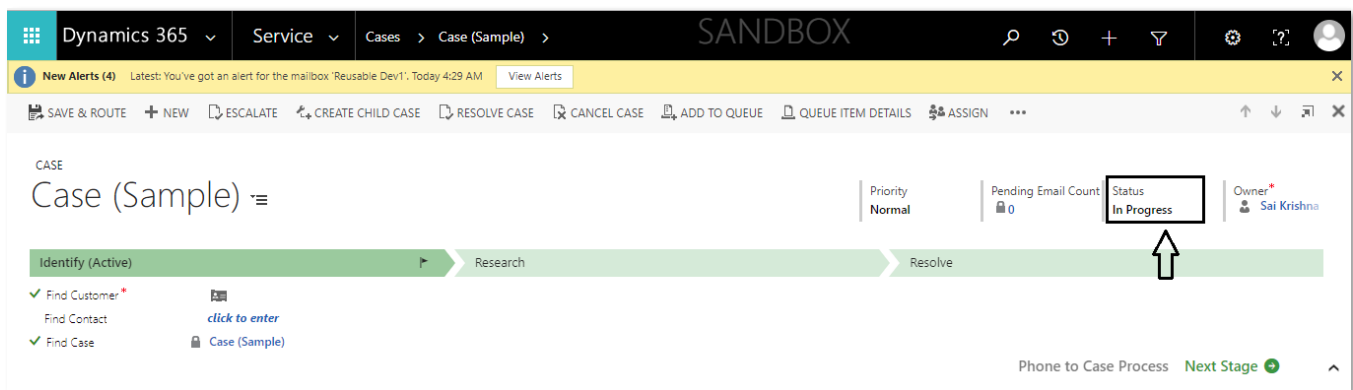
End-User Experience

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.

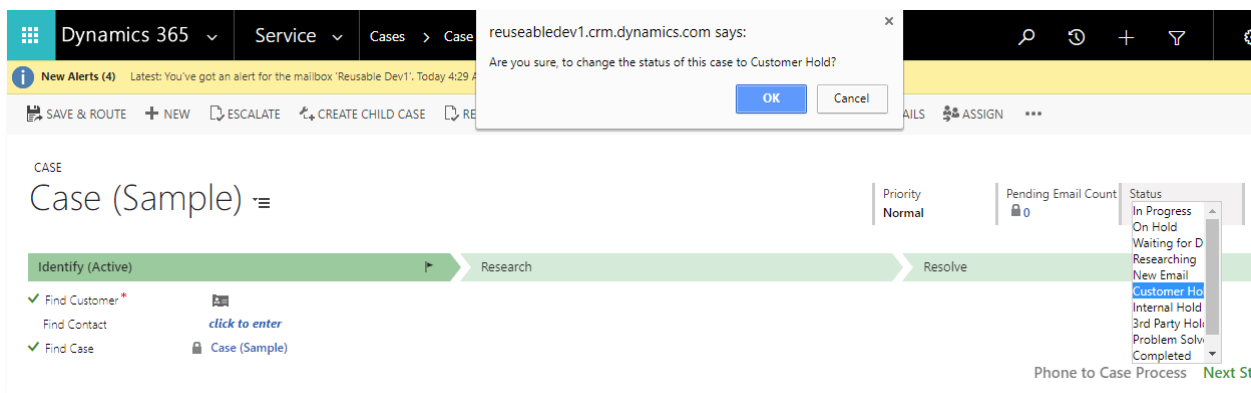
Go to **D365 for BPO|Cases**



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



Change the Status to Customer Hold; CRM will display a confirmation alert whether user wants to open a new hold activity or not. Click **Cancel** to exit without changes.



Click **OK** to create a **Hold Activity** form as shown below with case ticket number appended with Case Status Reason.

Hold Activity: INFORMATION

CAS-00152-B6H2Q7 ...

Hold Type: Customer | Status: Open | Party Initiated: [User Icon]

General

Title: CAS-00152-B6H2Q7 is on Customer Hold

Reason: [Red X] --

Responsible By: [Red X] --

Description: --

Assigned To Group: --

Auto Activity Closure (Yes/No): No

Close After Date Time: --

Start: --

Submitter (Contact): --

NOTES

No records found.

Open

You must provide a value for Reason.

Fill the required field values: **Reason**, and **Responsible By**.

This activity is now mapped with the case.

Hold Type ↑	Actual Start	Actual End	Ho
Customer	11/14/2017 5:24...		Authc

Select **Auto Activity Closure** (Yes/No) to Yes. Then set the Close After Date Time field.

Hold Activity: INFORMATION

CAS-00152-B6H2Q7 ...

Hold Type: Customer | Status: Open | Party Initiated: Sai Krishna

General

Title: CAS-00152-B6H2Q7 is on Customer Hold

Reason: [Red X] --

Responsible By: [Red X] --

Description: --

Assigned To Group: --

Auto Activity Closure (Yes/No): Yes

Close After Date Time: 11/15/2017 5:30 PM

Start: 11/14/2017 5:24 PM

Submitter (Contact): Sai Krishna

The Hold Activity form will close automatically at the specified **Close After Date Time**.

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.

Configuration

Path: 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.

Form Properties

Modify this form's properties.

Events | Display | Parameters | Non-Event Dependencies

msdyn_unreadEmail.js UnreadEmail
msdyn_convertToCase.js msdyn_convertToCase.js convert to Case
msdyn_workbenchWebapiHelper.js msdyn_workbenchWebapiHelper.js
msdyn_fromfieldscript
msdyn_expandemailaddress.js

Event Handlers

Manage functions that are called for form or field events.

Control: Form
Event: OnLoad

Library	Function	Enabled
msdyn_unreadEmail.js	onReadOfEmail	True
msdyn_fromfieldscript	populateQueueDetails	True
msdyn_expandemailaddress.js	expandemailaddress	True

OK Cancel

Event Handlers

Manage functions that are called for form or field events.

Control: To
Event: OnChange

Library	Function	Enabled
msdyn_expandemailaddress.js	expandemailaddress	True

Event Handlers

Manage functions that are called for form or field events.

Control: Form
Event: OnSave

Library	Function	Enabled
msdyn_expandemailaddress.js	expandemailaddress	True

Event Handlers

Manage functions that are called for form or field events.

Control: Cc
Event: OnChange

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.

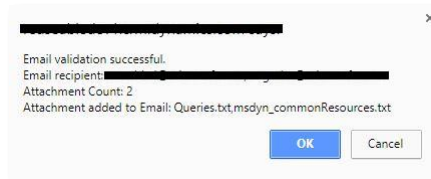
If, still user wants to add Account record, user must remove this web resource (msdyn_expandemailaddress.js) from Email Form Properties, as mentioned in above screenshot.

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.



SLA

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

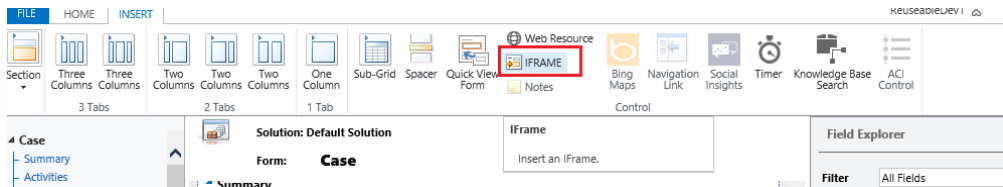
SLA is the OOB functionality

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.

Solution: Default Solution
Form: Case

Summary

CASE DETAILS

Case Title * Case Title

ID Case Number

Subject Subject

Customer Customer

Origin Origin

Contact Contact

Entitlement Entitlement

Product Product

Root Cause Root Cause

Received Date Received Date

ROUTING

Business Function * Business Function

Line of Business * Line of Business

Program * Program

Case Type * Case Type

Case Sub Type * Case Sub Type

Reason * Case Reason

Sub Reason * Case Sub Reason

CUSTOMER DETAILS

Customer * msdyn_caseTimeline.html

PROCESSING DETAILS

Country (Processed) * Country (Processed)

Processing Center Processing Center

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

Web Resource Properties
Modify this Web resource's properties.

General Formatting Dependencies

Layout

Select the number of columns the control occupies:

☐ One column

☒ Two columns

☐ Three columns

☐ Four columns

Row Layout

Select the number of rows the control occupies.

Number of Rows 10

☐ Automatically expand to use available space.

Scrolling

Select the scrolling type for the IFRAME.

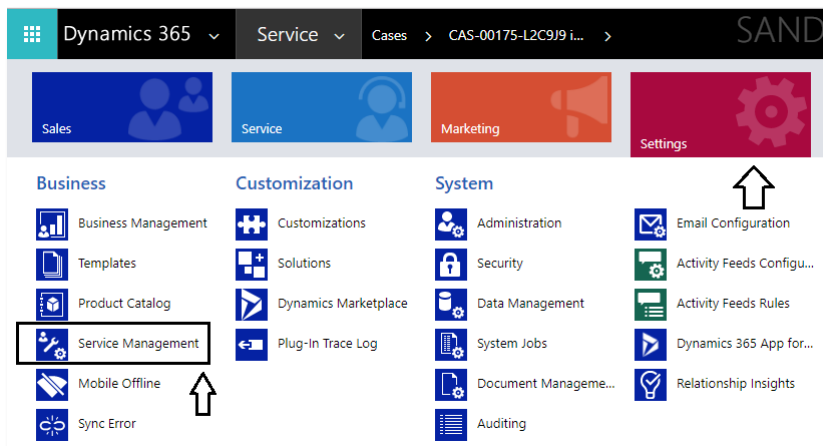
Scrolling As Necessary

OK Cancel

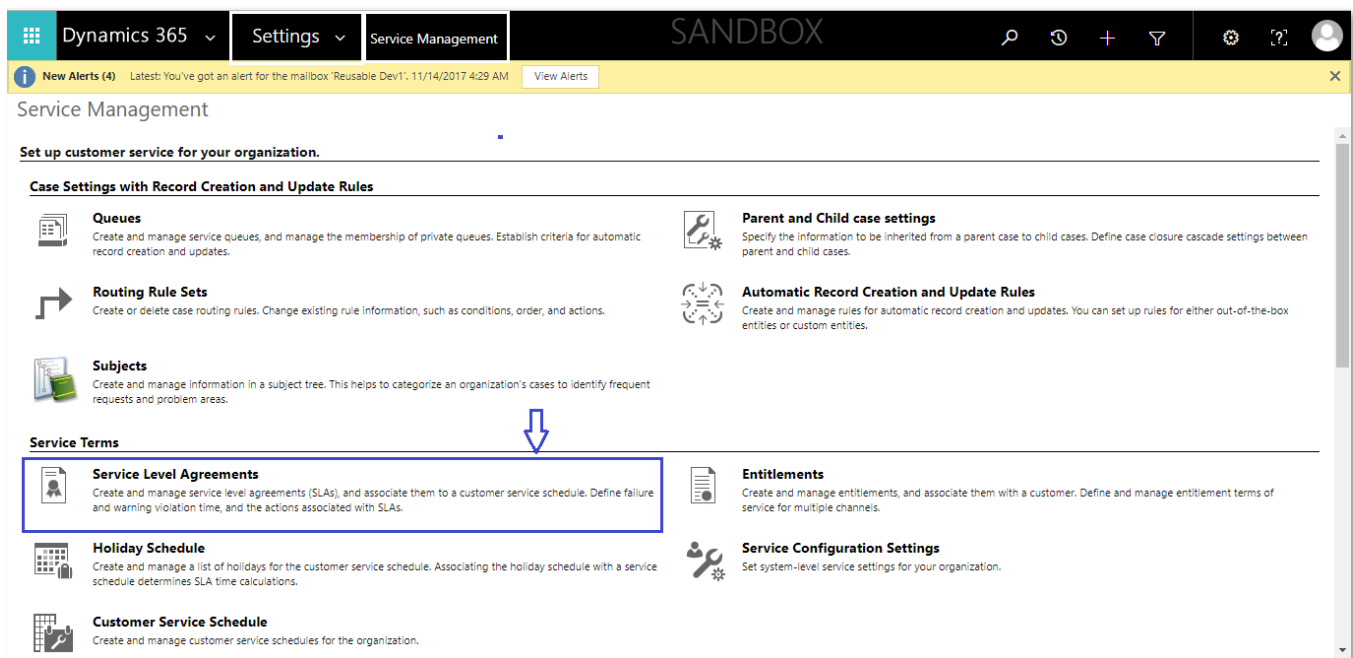
Configure the SLA with the proper condition such that it will trigger on the case creation. Once SLA is triggered SLA Left and actual SLA fields will be visible. Based on hold activities other fields will be populated respectively.

Below is an example on configuration of SLA

Path: 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.

Create SLA

Create a new SLA record

Name

Entity *

OK Cancel

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

+ NEW DELETE ACTIVATE SET AS DEFAULT ASSIGN EMAIL A LINK WORD TEMPLATES RUN REPORT

SLA

SLA (Sample)

General

Name * **SLA (Sample)**
 Entity * **Case**
 Applicable From * **Created On**
 Business Hours --
 SLA Type * **Enhanced**
 Allow Pause and Resume * **Allow**
 Description --

SLA Details

Name	Warn After	Failure After	SLA KPI Field	Created On	Mod
No SLA Item records found.					

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)

FILE SLA ITEM

Save Save & Close Delete Speech to Text Start Speech to Text Stop View Hierarchy Copy a Link Email a Link Follow Unfollow Run Workflow Start Dialog Word Templates Run Report

Save Records Collaborate Process Data

SLA Item Information SLA Items

General

Name * SLA KPI

Applicable When

Clear Group AND Group OR

Case	Case Reason	Contains Data
Case	Countrn (Processed)	Contains Data
Select		

Success Criteria

Clear Group AND Group OR

Case	Status Reason	Equals	Completed
Select			

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>

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.

SLA Left	0h 4m	Actual SLA	0h 0m
Total Hold Time	0h 0m	3rd Party Hold	0h 0m
		Customer Hold	0h 0m
		Internal Hold	0h 0m
Total Case Duration			0h 1m

Case Duration 1

Convert to Case

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

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

In this section we will modify the **Case Main** form. Select the form as previously described.

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.

The screenshot shows a section titled "ROUTING" with a dashed border. Inside, there are seven rows, each with a label followed by an asterisk and a text input field. The labels are: Business Function, Line of Business, Program, Case Type, Case Sub Type, Reason, and Sub Reason. The input fields are currently empty.

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.

The screenshot shows the "Related Records Filtering" dialog box. The "Only show records where:" checkbox is checked. Below it, the first dropdown menu is set to "Business Function (Cases)". The "Contains" checkbox is also checked. The second dropdown menu is set to "Business Function - Line of Business (Lines of Business)". The "Users can turn off filter" checkbox is checked.

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

The screenshot shows the "Related Records Filtering" dialog box for the Program field. The "Only show records where:" checkbox is checked. The dropdown menu is set to "Line of Business (Cases)". The "Contains" checkbox is checked. The second dropdown menu is set to "Line Of Business (Programs)". The "Users can turn off filter" checkbox is checked.

B. Case Sub Type

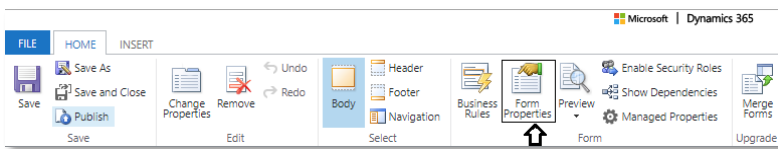
The screenshot shows the "Related Records Filtering" dialog box for the Case Sub Type field. The "Only show records where:" checkbox is checked. The dropdown menu is set to "Line of Business (Cases)". The "Contains" checkbox is checked. The second dropdown menu is set to "Line Of Business (Case Sub Types)". The "Allow users to turn off filter" checkbox is checked.

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.

Library	Function	Enabled
msdyn_processingcenterbasedoncountry...	onLoadReadCountry	True

Library	Function	Enabled
msdyn_processingcenterbasedoncountry...	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.

- msdyn_constants.js
- msdyn_commonResources.js
- jquery_1.9.1.min
- msdyn_json2

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.

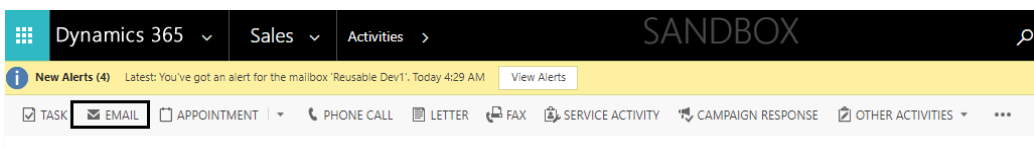
Below are the required entities list to create Case Template.

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

End User Experience

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.

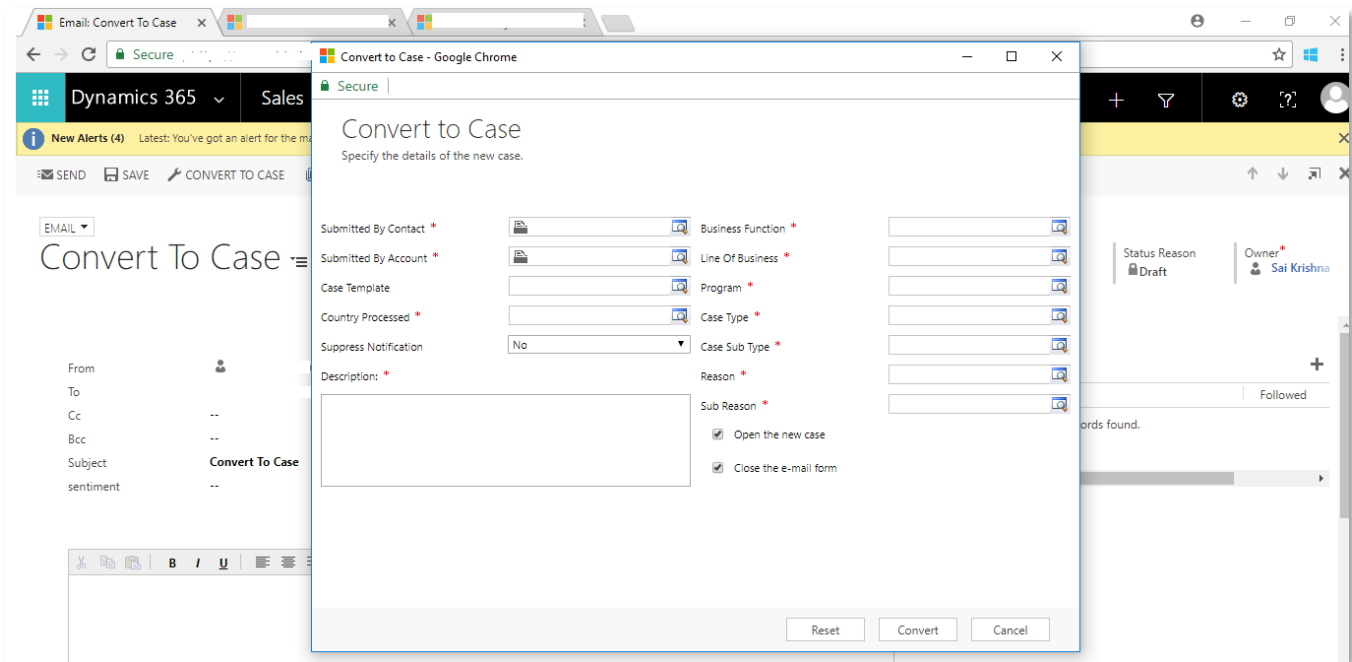
Path: D365 for BPO|Activities|Email



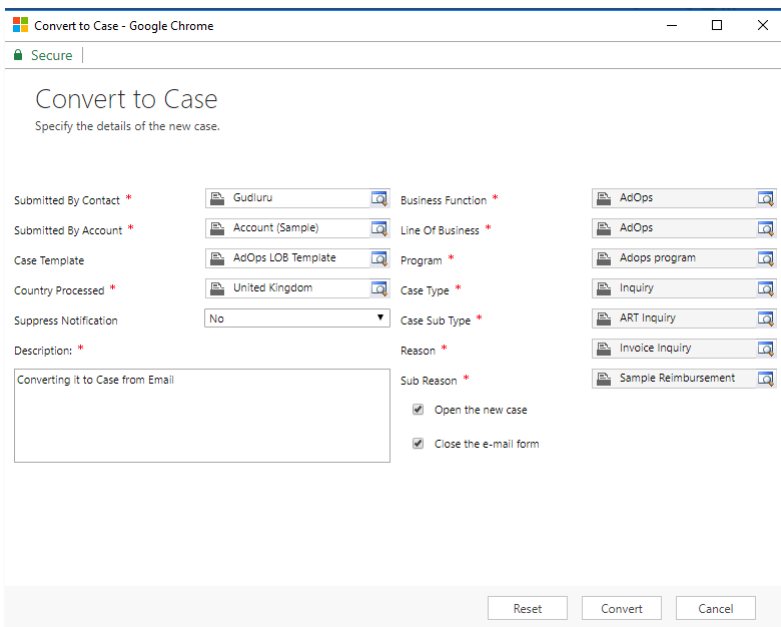
Click on Email, to create a new Email Record. Provide From, To and Subject fields with required information.



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



- 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.
- Select a record from Case Template lookup, to auto-populate all the other fields.
- Subject of the Email would be taken as Case title.

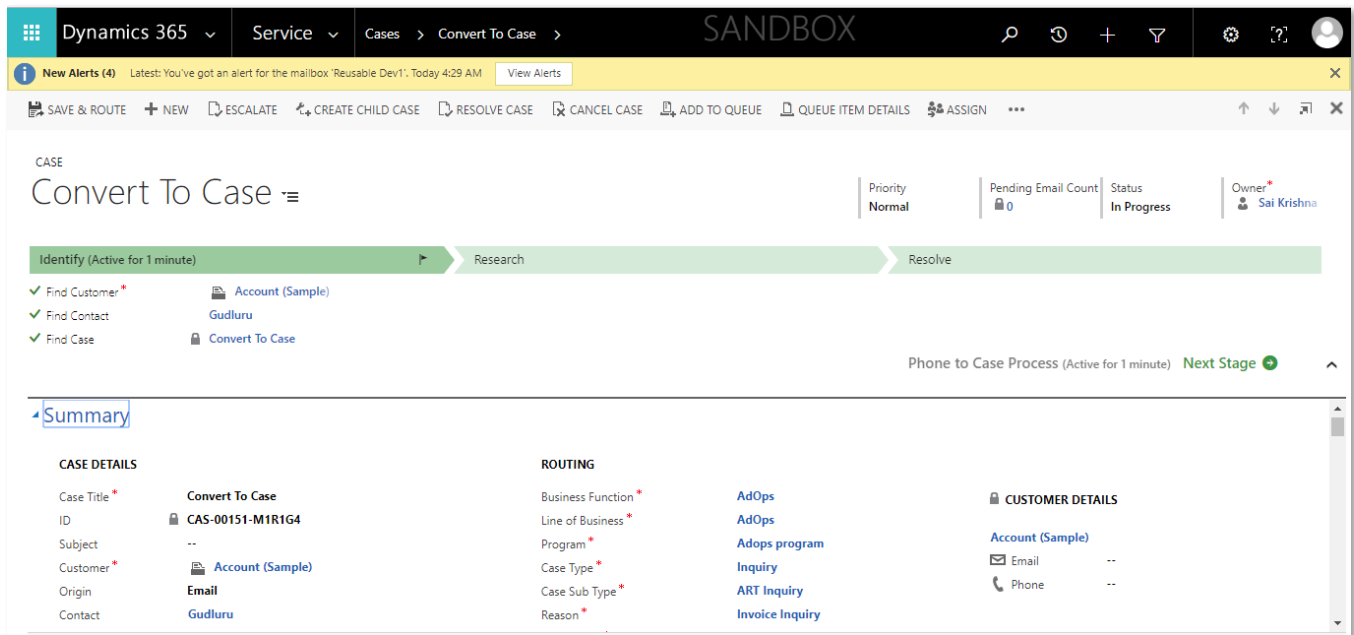


Even without selecting record from Case Template, we can populate another fields information manually.

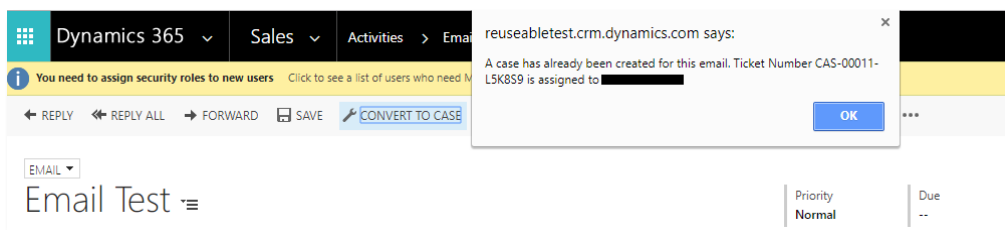
Click on Convert and Converting to Case... progress can be seen as below



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.



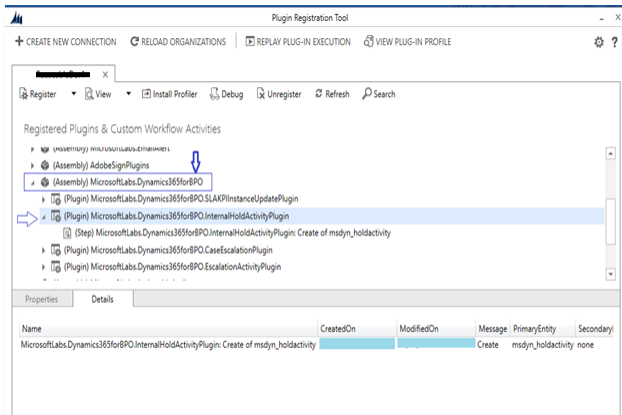
Child Case creation for custom Hold status

Configuration

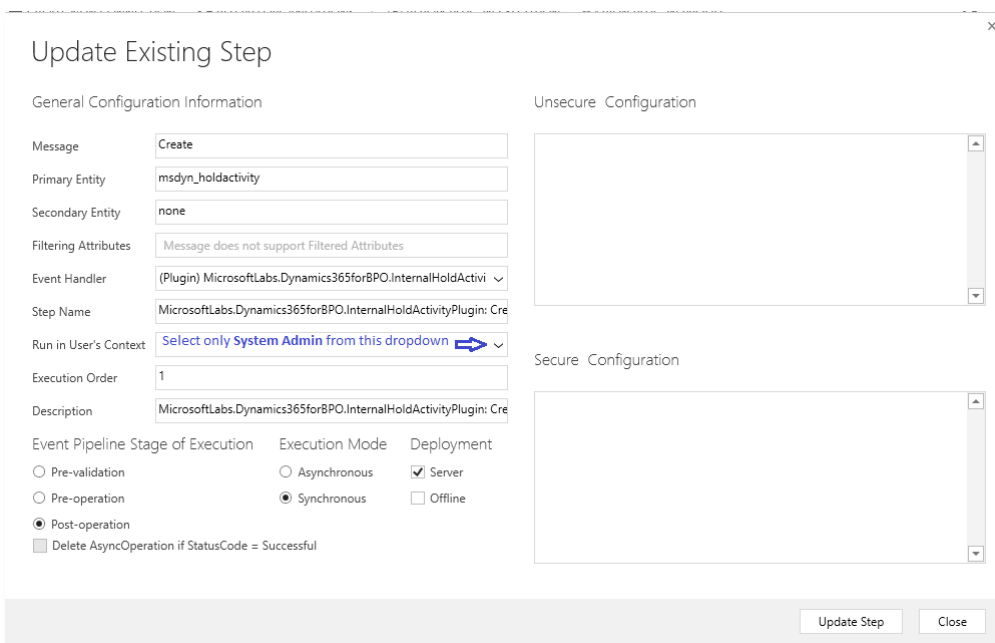
Plugin Configuration – Child Case Create

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

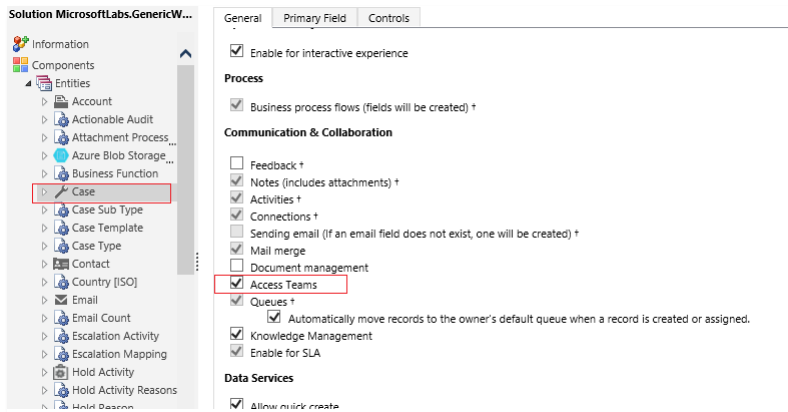
This section helps in create /in setting up the Access Team Template. Access Team Template helps, to read the created child case by the current user, who is not part of another LOB, in which the child case

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.

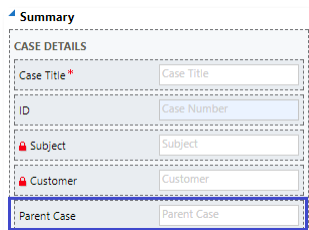
Access Team Template Configuration Steps:

In this section we will modify the **Case Main** form. Select the form as previously described.

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...

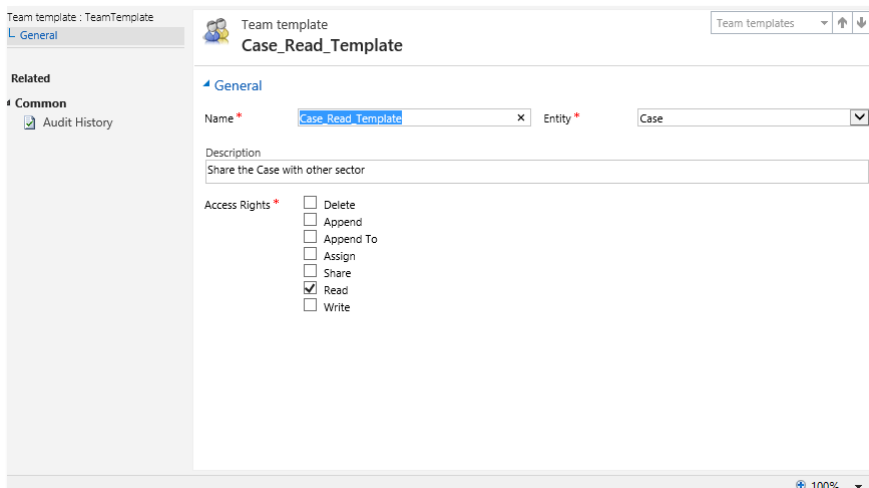


Open Case main form and add "Parent Case" field as shown below.



Go to "Settings" > "Security" > "Access Team Template"

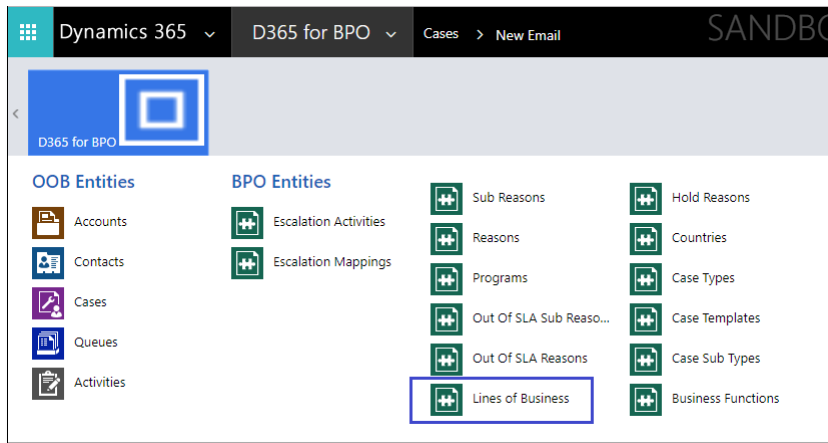
Click 'New' and create below record with exact name "Case_Read_Template", select Read in Access Rights section and save the record.



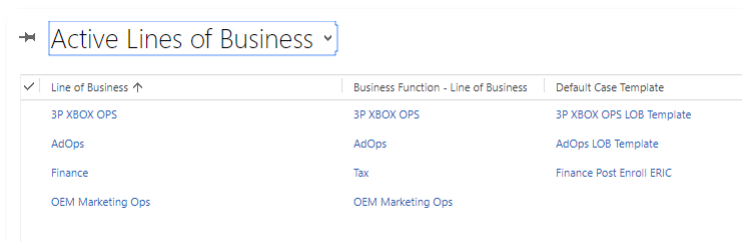
Line of Business Configuration for Child Case Creation

Open Microsoft Dynamics 365

Navigate to BPO Solution -> Lines Of Business

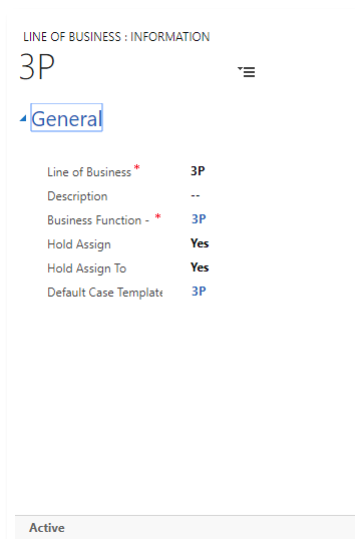


Select the appropriate Line of Business in the Active Lines of Business results that shows



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.

LINE OF BUSINESS : INFORMATION

3P

General

Line of Business *	3P
Description	--
Business Function *	3P
Hold Assign	Yes
Hold Assign To	Yes
Default Case Template	3P

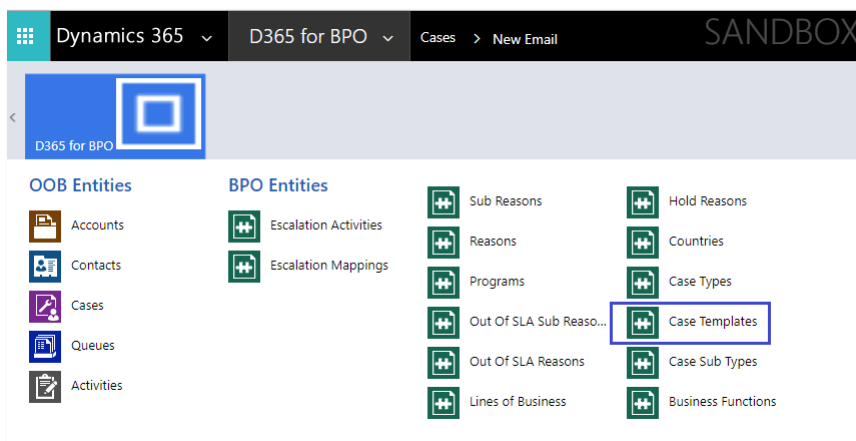
Active

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.

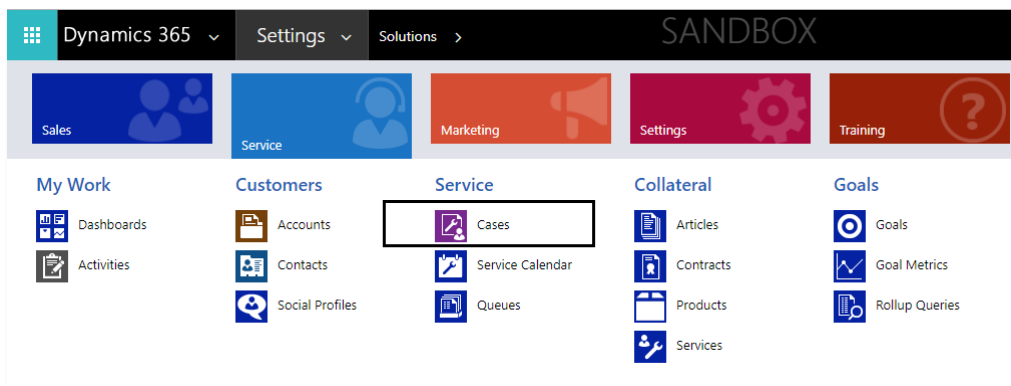
Note: This will ensure that when the Child Case is created using the Default Case Template.

End user Experience

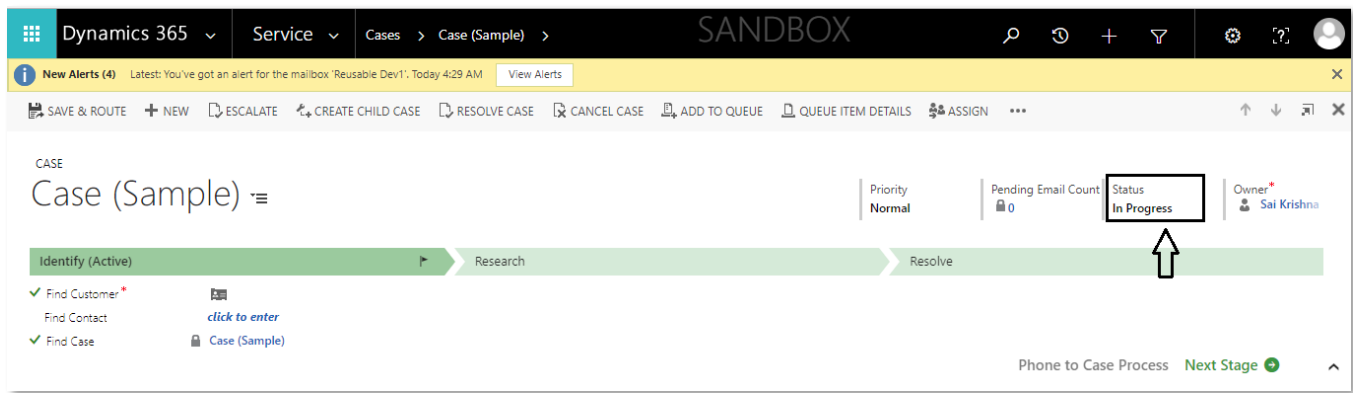
Once the configuration is complete, and you wish to place a case on 3rd Party Hold and assign it to a specific Line of Business, complete the following steps.

Login to Dynamics 365.

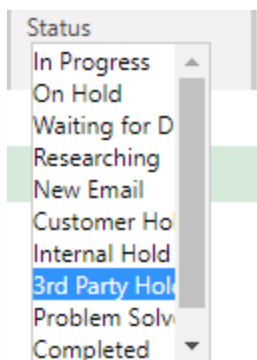
Navigate to Service -> Cases



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).

HOLD ACTIVITY : INFORMATION

CAS-00152-B6H2Q7 ...

Hold Type: Customer | Status: Open | Party Initiated: *

General

Title: CAS-00152-B6H2Q7 is on Customer Hold

Reason: Operations Team

Responsible By: *

Description: Description goes here...

Child Case Creation

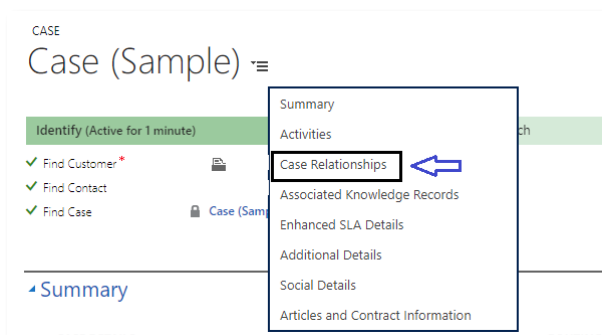
Assigned To Group: Internal

LOB: 3P

Select Case Template: 3P

Click Save at the bottom of the Hold Activity form

The Child Case should appear in the Case Relationships tab of the parent case.



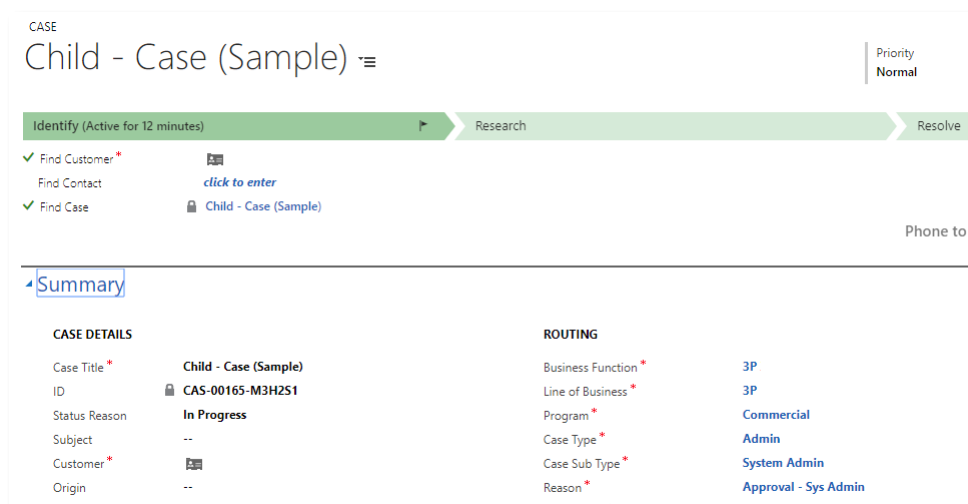
Once, we are on the Case Relationships tab, we can see the Child Case created as shown below



The screenshot shows a 'Case Relationships' window with a table titled 'CHILD CASES'. The table has columns for Status, Case Title, Owner, and Modified. One row is visible with the status 'Active', Case Title 'Child - Case (Sample)', and a modified date of '11/7'. There is a '+' icon in the top right corner of the table area.

Status	Case Title	Owner	Modified
Active	Child - Case (Sample)		11/7

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.



The screenshot shows the 'Child - Case (Sample)' case details page. At the top, there's a 'CASE' header and a 'Priority Normal' indicator. Below this is a progress bar with three stages: 'Identify (Active for 12 minutes)', 'Research', and 'Resolve'. Under the 'Identify' stage, there are three tasks: 'Find Customer*' (with a 'click to enter' link), 'Find Contact' (with a 'Child - Case (Sample)' link), and 'Find Case' (with a 'Child - Case (Sample)' link). Below the progress bar is a 'Summary' section. It is divided into two columns: 'CASE DETAILS' and 'ROUTING'. The 'CASE DETAILS' column lists fields like Case Title, ID, Status Reason, Subject, Customer, and Origin. The 'ROUTING' column lists fields like Business Function, Line of Business, Program, Case Type, Case Sub Type, and Reason. Each field has a value and a red asterisk indicating a required field.

CASE DETAILS		ROUTING	
Case Title *	Child - Case (Sample)	Business Function *	3P
ID	CAS-00165-M3H2S1	Line of Business *	3P
Status Reason	In Progress	Program *	Commercial
Subject	--	Case Type *	Admin
Customer *	--	Case Sub Type *	System Admin
Origin	--	Reason *	Approval - Sys Admin

Trouble Shoot Tips

- Please make sure that the Name field in the Access Team Template record is correctly updated as Case_Read_Template (which is case sensitive).
- Please make sure that the Run in User's Context of InternalHoldActivityPlugin is CRM System Admin in plugin Registration tool.
- 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.

Additional Solution references

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](#)

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](#)

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](#)

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](#)

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](#)