# User Adoption Monitor

inogic

## User Manual

# Contents

# Introduction

User Adoption Monitor is a productivity tool for Microsoft Dynamics CRM. It enables Managers to monitor the actions of team members associated with Dynamics CRM for their day-to-day operations.

## Salient Features

- Monitor Dynamics CRM Users Actions
- Track OOB and Custom Entities Records
- Define Monitoring Period for Entities
- Define Users to be Monitored
- Define Entities and Associated Actions
- Track Usage: Daily, Weekly or Monthly
- Dashboard Reporting per Entity/ Action/ Period
- Dashboard Reporting per User/ Period
- User Adoption Report Creation
- Monitor Usage Without Disrupting On-going Activity
- Track user Log-in & Log-out details
- Track amount of time spent by the user on particular Entity records
- Track and monitor CRM access of users
- Track and monitor aggregate value of user actions related to particular entity
- Track and monitor target value allotted to users
- Track and ensure the completeness of an entity record

***Note****: It helps in monitoring the actions performed on the records but does not give information about the exact field values entered or modified.*

# Prerequisites

You need a license for all the active users of Dynamics CRM, i.e., if there are 20 active users in CRM; you need a license for all 20 users.

You need to have the ***User Adoption Monitor Administrator*** or ***User Adoption Monitor User*** role to access the features of User Adoption Monitor solution.

For further installation instructions, refer the *Installation Guide*, if you don`t have one, ask your vendor for it.

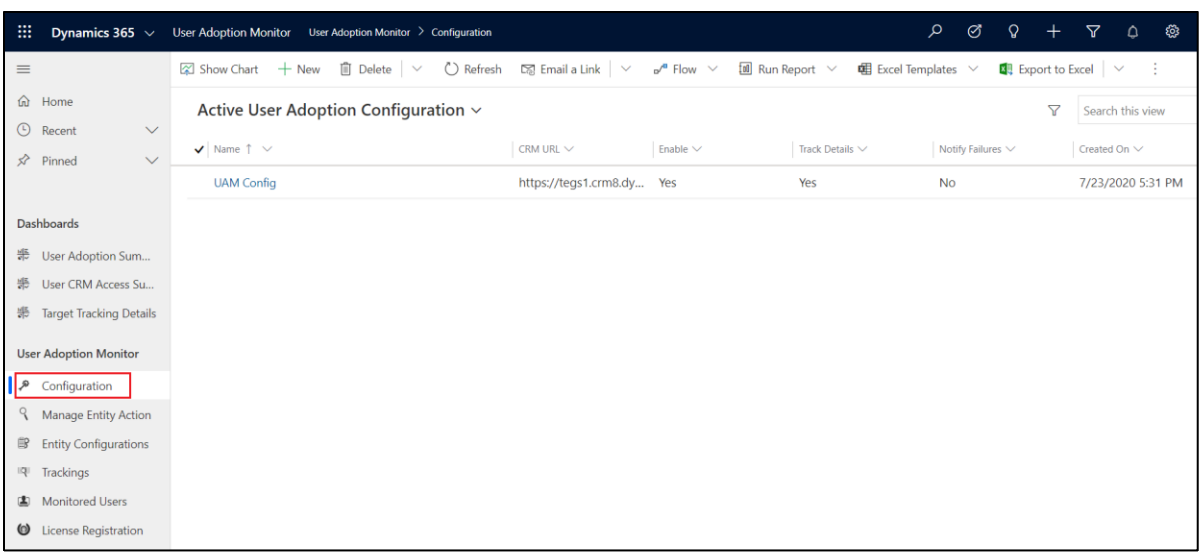
# Getting Started

This section gives a general overview of the User Adoption Monitor for Dynamics CRM. The first step would be to set up the configuration if it is not created already after activating the User Adoption Monitor License.

## Setting up the Global defaults for User Adoption Monitor

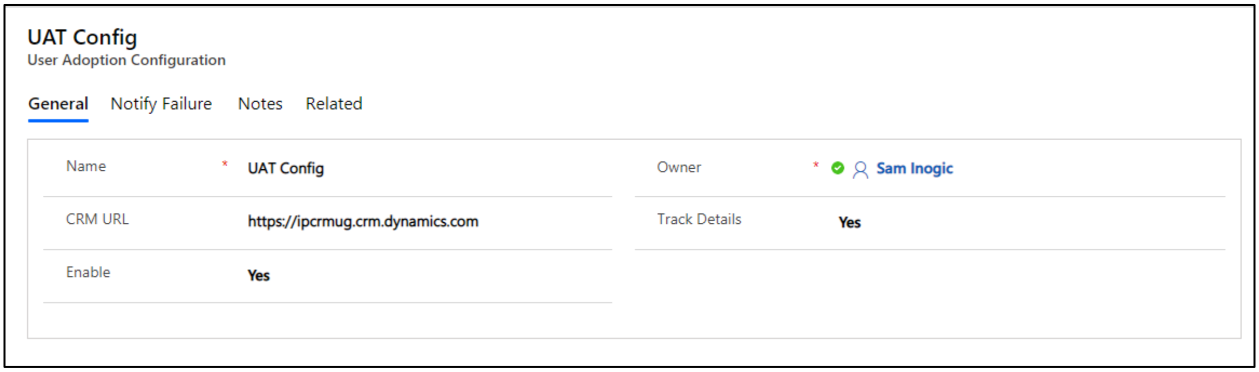
Once the User Adoption Monitor solution is installed and activated, there is already a User Adoption Configuration record created for you. In case if the record is not created or you wish to update the existing record please follow the below-mentioned steps.

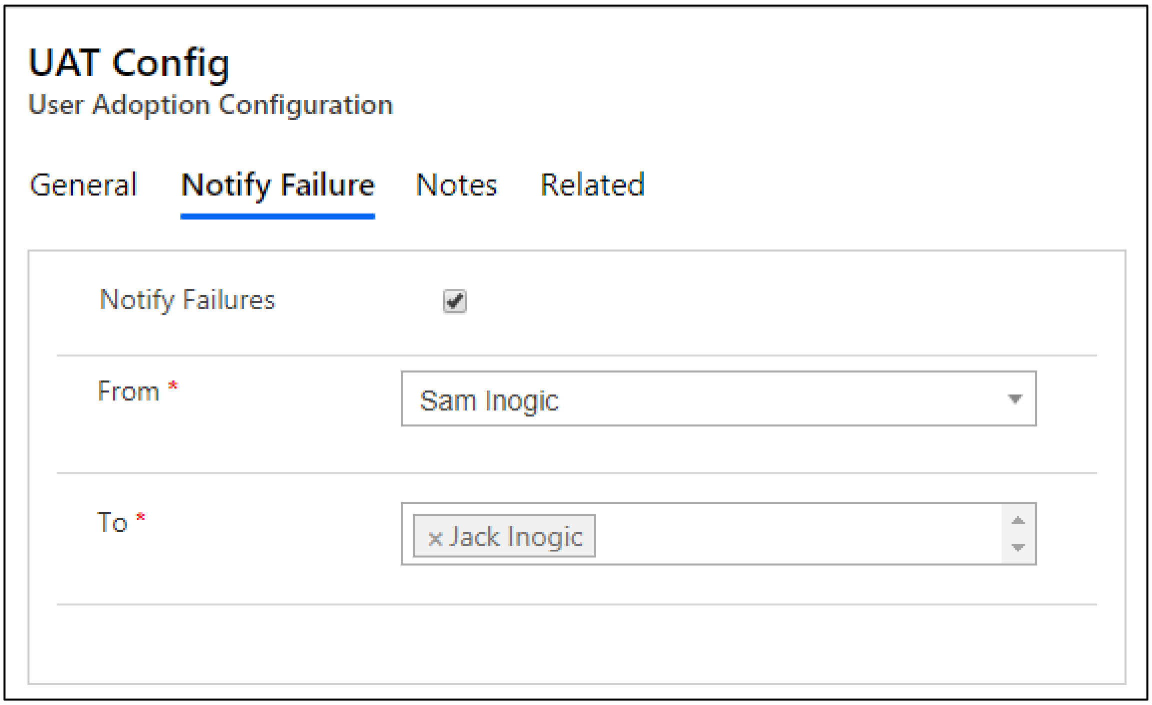
- Navigate to *User Adoption Monitor App -> Configuration*




- Click on (+ New) to create a new User Adoption Configuration record (*If no record is already created*).

## Fill Values in this Entity




| FIELD | DESCRIPTION |
|---|---|
| Enable | Choose Yes, to enable system-wide flag for monitoring user actions. To disable system-wide monitoring set this flag as No. |
| Track Details | You can select either Yes or No. If you choose yes, it creates Tracking Details record otherwise, it won`t create Tracking Details record. Know More. |
| CRM URL | CRM URL to be used to generate record links in tracking information |
| Notify Failures | Click on the checkbox and fill email details which will appear below. Enabling this feature will send the user a daily email at 12:05 AM consisting the error logs if there are any failures at any point of time while using User Adoption Monitor. |

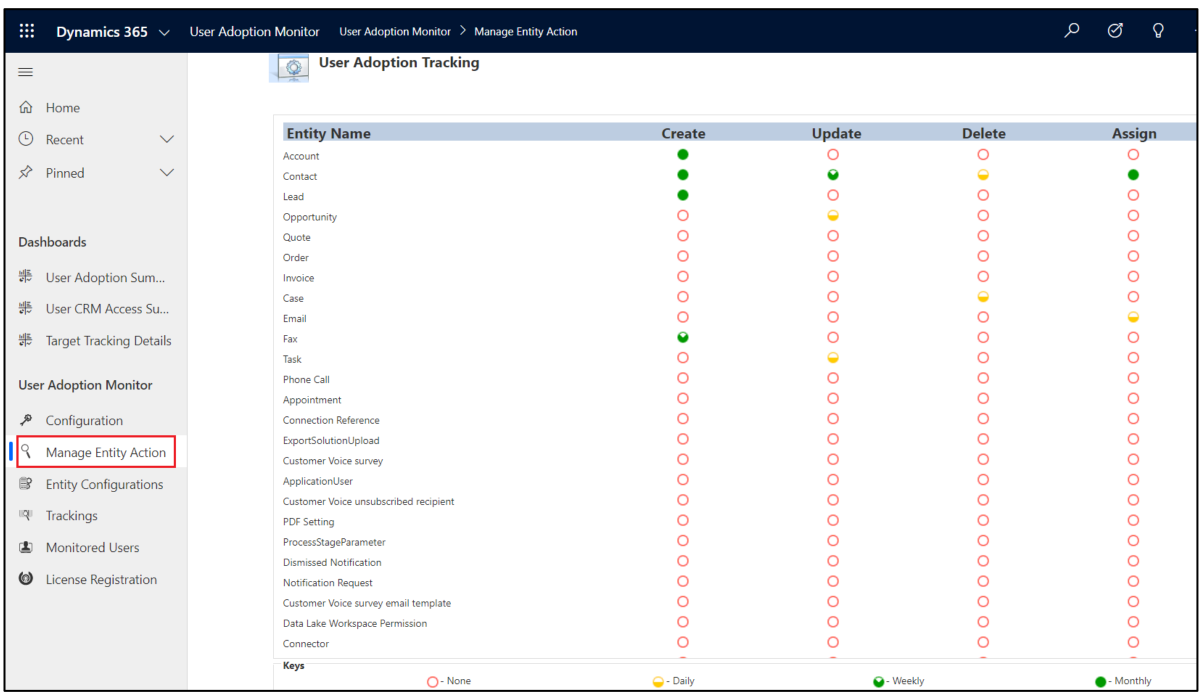
### Importance of Tracking Details

If you enable Track Details in the User Adoption Configuration entity, then the tool will also store a link to the record on which the action was performed by the user.

## Entity Configurations for CRUD Operations

- Navigate to *User Adoption Monitor App > Manage Entity Action.*
- Once you click the *Manage Entity Action* button, a screen opens listing the most commonly used OOB Entities and Actions. It also lists all the available custom entities and actions. Apart from that, it allows you to enable tracking of the most commonly performed Actions on any entity like Create, Update, Delete and Assign.

***Note:*** *Sample entity tracking configurations are shipped and installed along with the product.*




Here, you can specify, which actions need to be tracked per entity in a customized manner. To specify it, just click on the red circle (O) for the period you would like it to be tracking information to be summarized by.

Let us understand what these terms *None*, *Daily*, *Weekly,* and *Monthly* specifies;

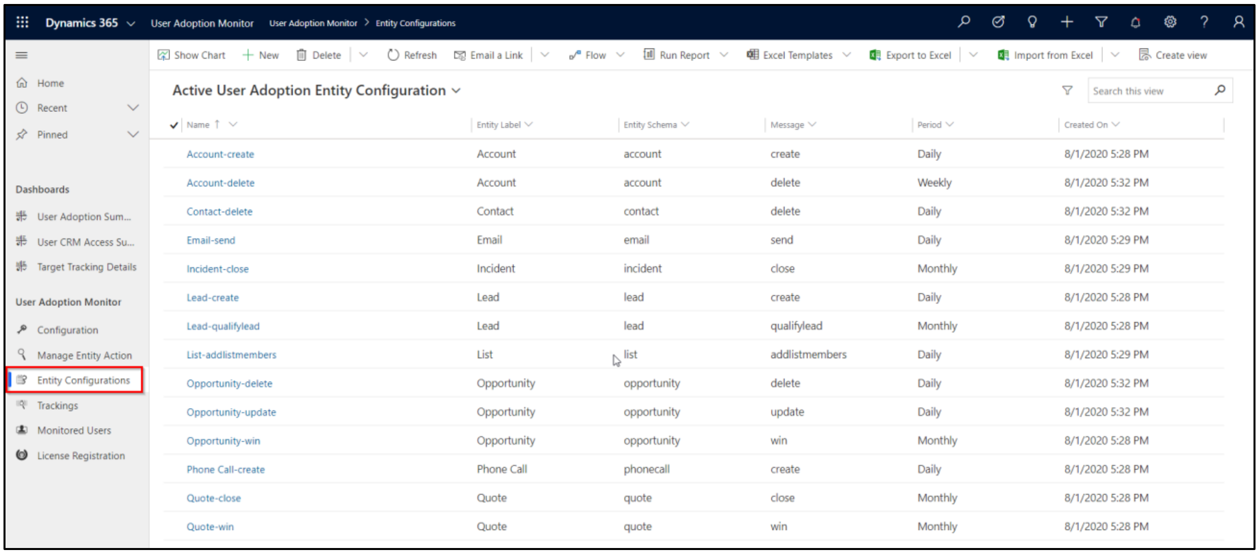
| | |
|---|---|
| - None | Represents tracking is not enabled at all. |
| - Daily | Represents changes that will be tracked and summarized on a daily basis. |
| - Weekly | Represents changes that will be tracked and summarized on a weekly basis. |
| - Monthly | Represents changes that will be tracked and summarized on a monthly basis. |

## Entity Configuration for special messages

We support the following special messages apart from the CRUD operations. You will find sample entity configurations created for these when you install the sample data.

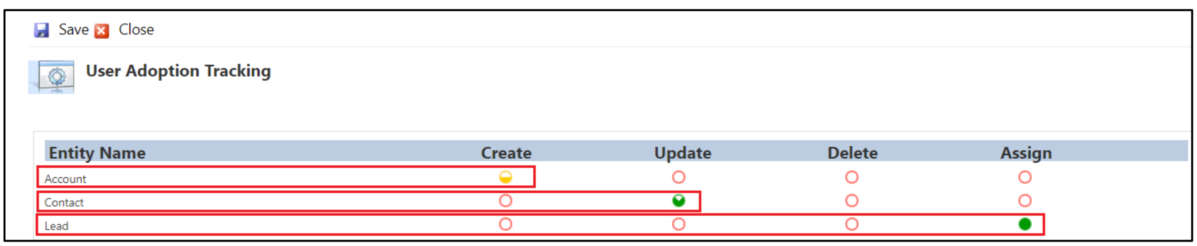
| Entity Name | Message | Description |
|---|---|---|
| Lead | Qualifylead | This message is triggered when a lead is qualified. |
| Opportunity | Win | It is triggered when an opportunity is closed as Won. |
| Quote | Close | Triggered when the quote is closed. |
| Quote | Win | It is triggered when the quote is won (Post clicking 'Create Order'). |
| Incident | Close | This is triggered when an Incident is closed as Resolved |
| List | AddListMembers | This is triggered when a new member is added to a Static Marketing List |
| Email | Send | This is triggered once an email is sent |
| Application | loginlogout | To track user log-in & log-out details |
| Case | * checkincheckout | To keep track of user Check-in & Check-out activities details in particular Entity records |

(* checkincheckout is applicable for OOB and custom entities – Lead, Opportunity, Quote, etc.)

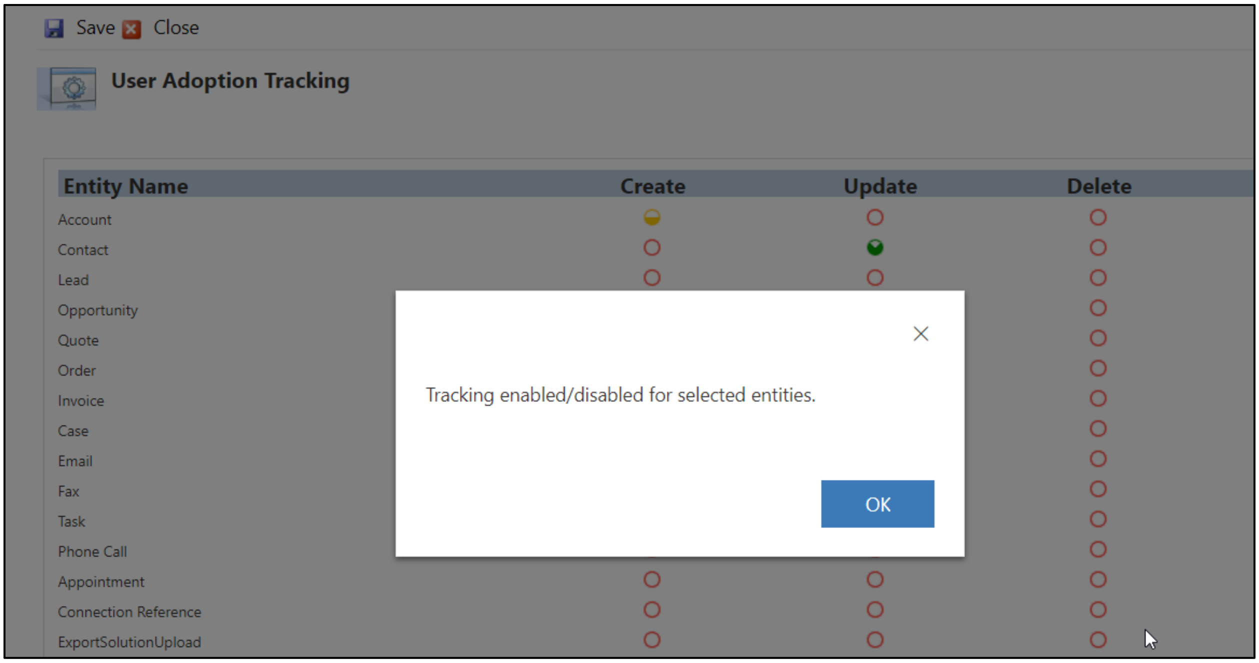



## Example for Entity Tracking

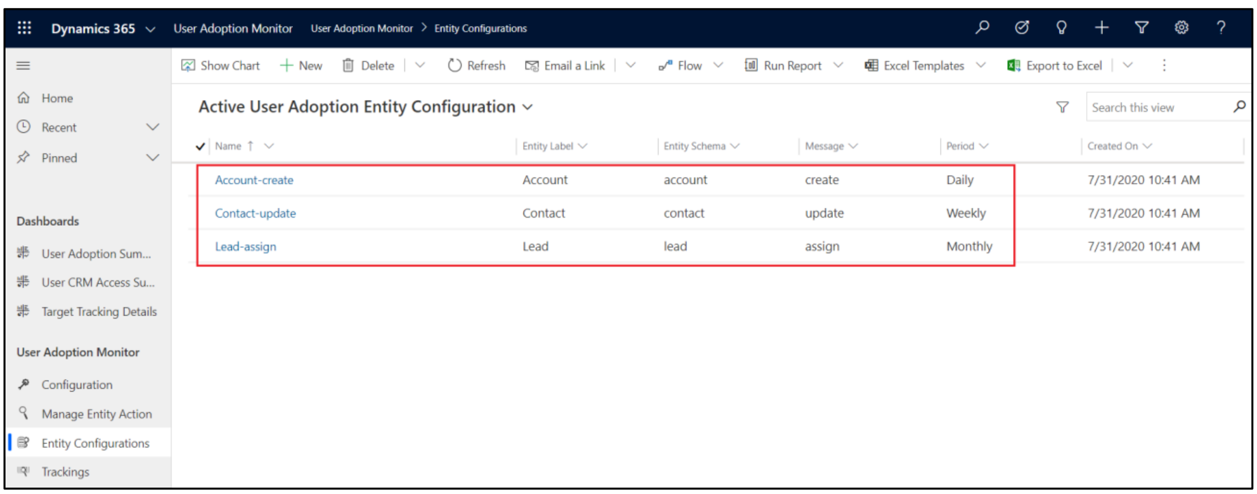
- Here we have enabled tracking for the following entities:
    - **For Account**: Set '**Create**' to period '**Daily**'
    - **For Contact**: Set '**Update**' to '**Weekly**'
    - **For Lead**: Set '**Assign**' to '**Monthly**'




- Upon Save, you will be notified that the Tracking has been enabled/disabled for selected entities.




- You can verify the configurations by navigating to the **Entity Configuration** section of User Adoption Monitor.



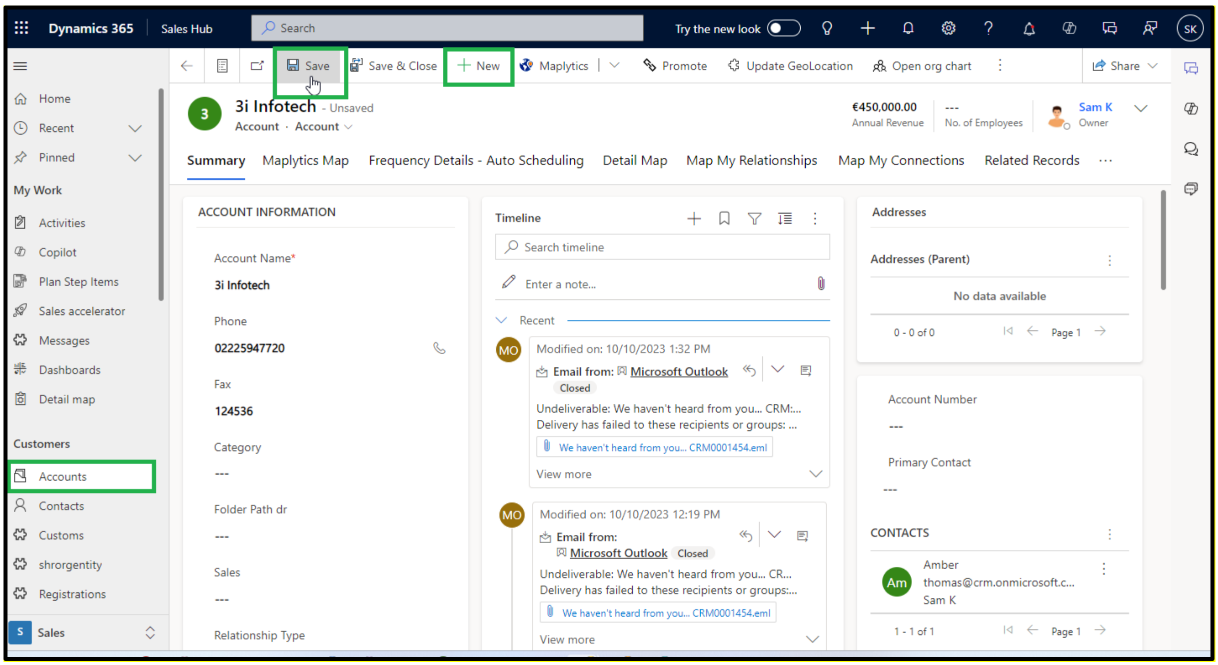

- With these entity configurations, the respective entity actions will be tracked as shown below:

**For Account – Create (Daily)**

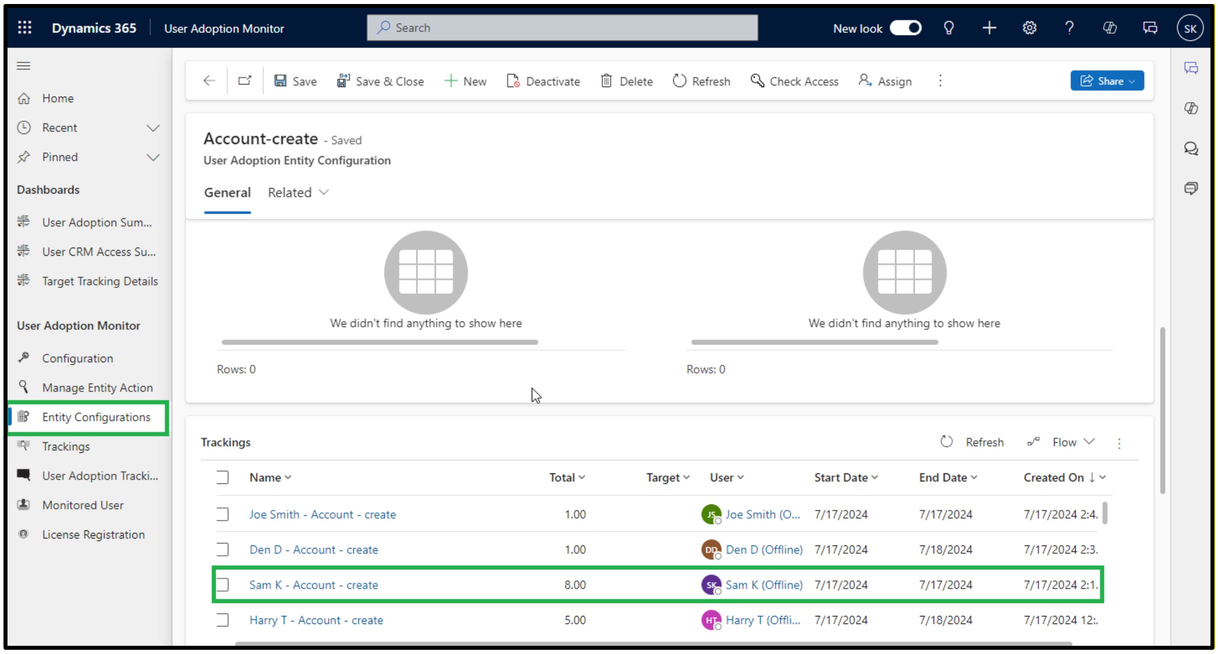
For example, Mark, the sales manager at Cortana Company, wants to track daily actions related to the Account Entity.

Sam, a CRM user, wants to create a new account.

To do this, he will click the "**New**" button, enter the account details as required by the form (ensuring all mandatory fields are completed), and then click the "**Save**" button.




Once the user (Sam) creates a new Account, the tracking details will be shown under the Entity Configuration tab of the User Adoption Monitor as follows.




In this way, all accounts created will be monitored easily.

Note: The same steps apply to Delete and Assign actions.

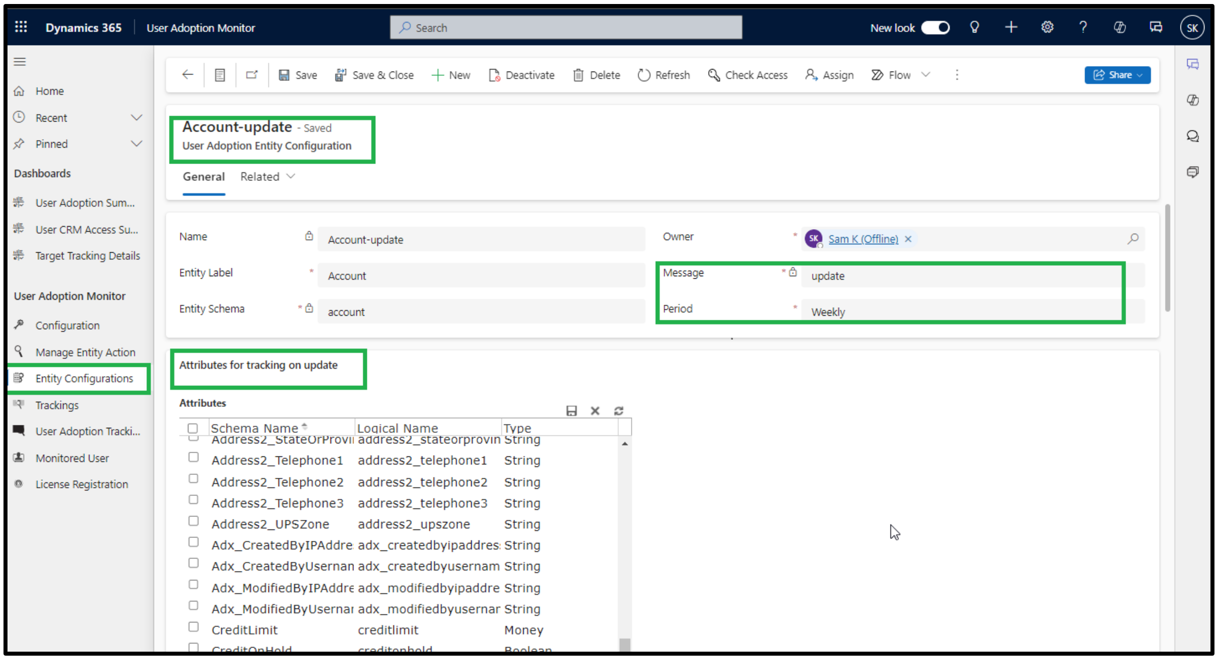
**For Fax – Update (Weekly)**

Let's say Mark also wants to track "**Weekly Updates**" under the Account Entity.

Mark will click on **“Account-update”** listed in **“Entity Configuration”** under **“Active User Adoption Entity Configuration”.**

The following window will appear on the screen.

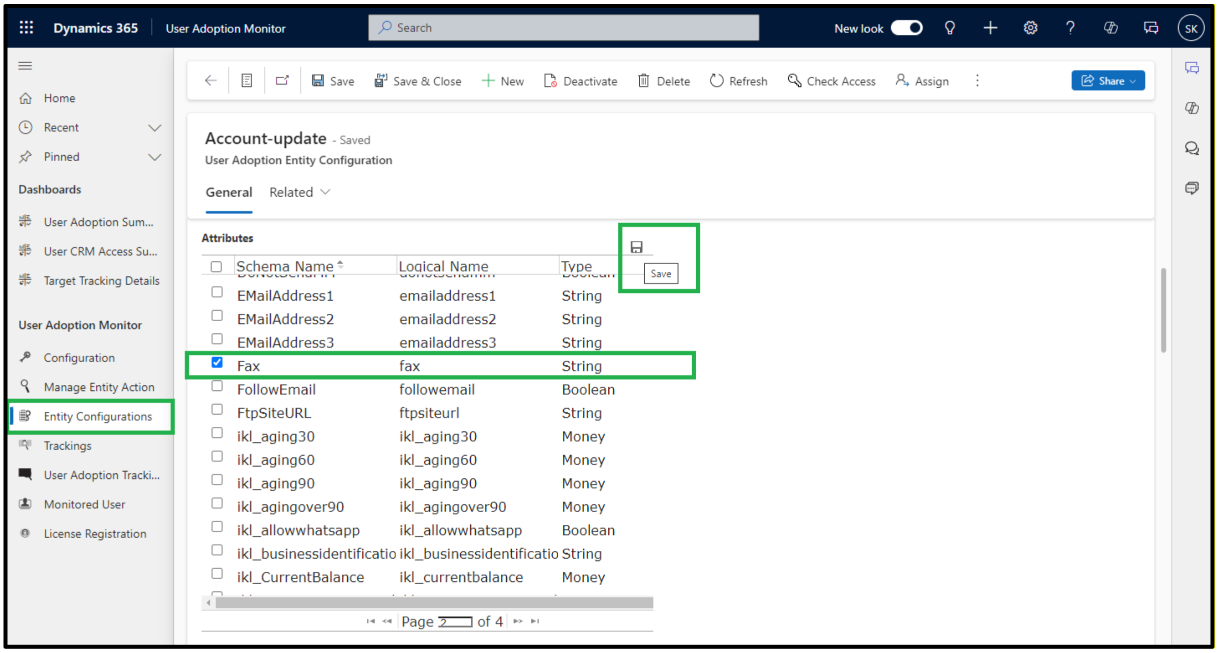
Mark will select the **"Weekly"** option for the **Period** field to track account updates every week.



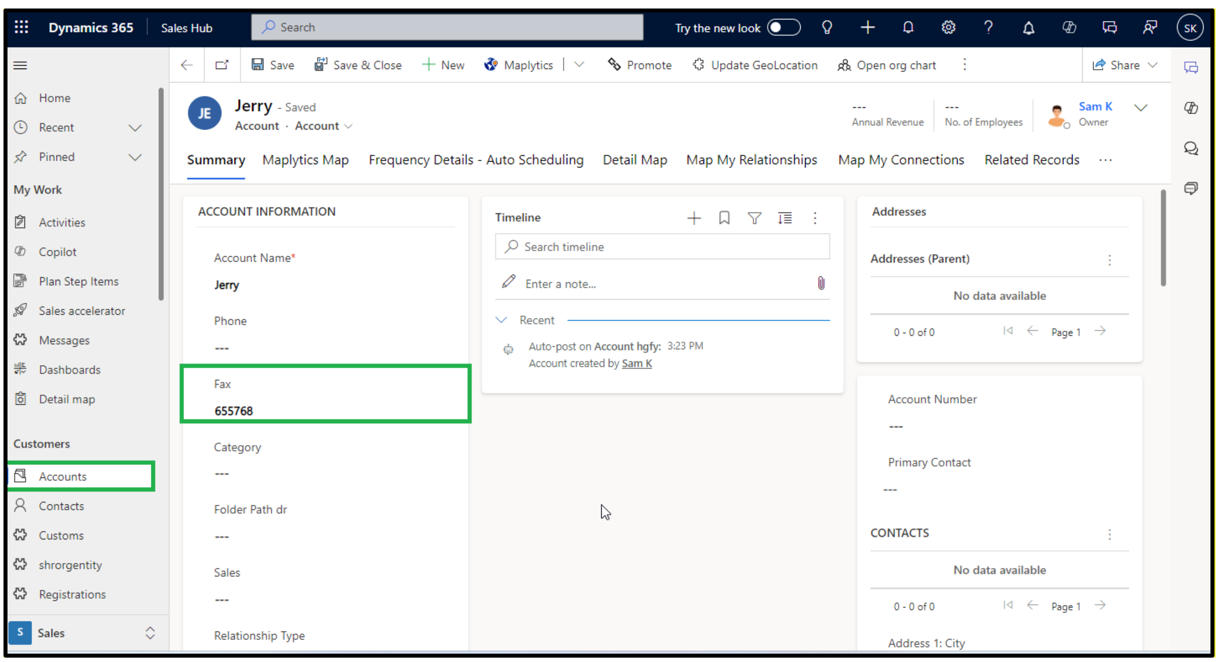

Additionally, Mark can choose specific attributes from the grid to track. If he selects certain attributes and saves the settings, only those attributes will be monitored.

**Note:** If user doesn't select at least one attribute, updates will be tracked for all attributes in the schema.

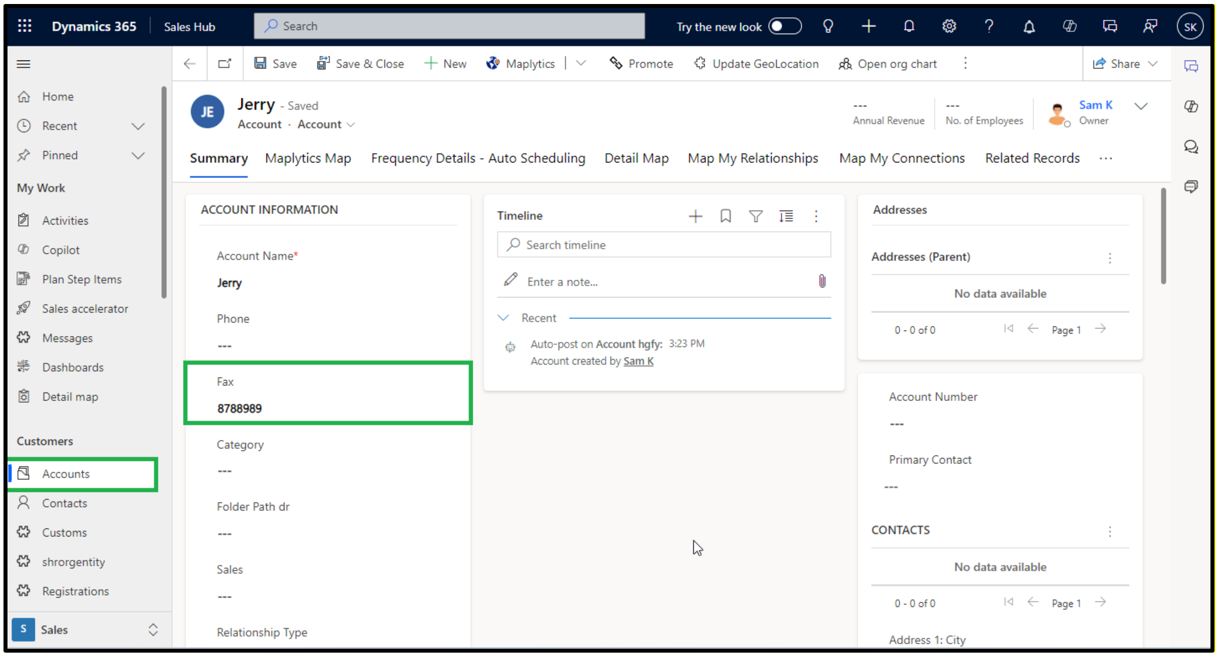
For this instance, Mark is tracking updates for the **"Fax"** attribute.



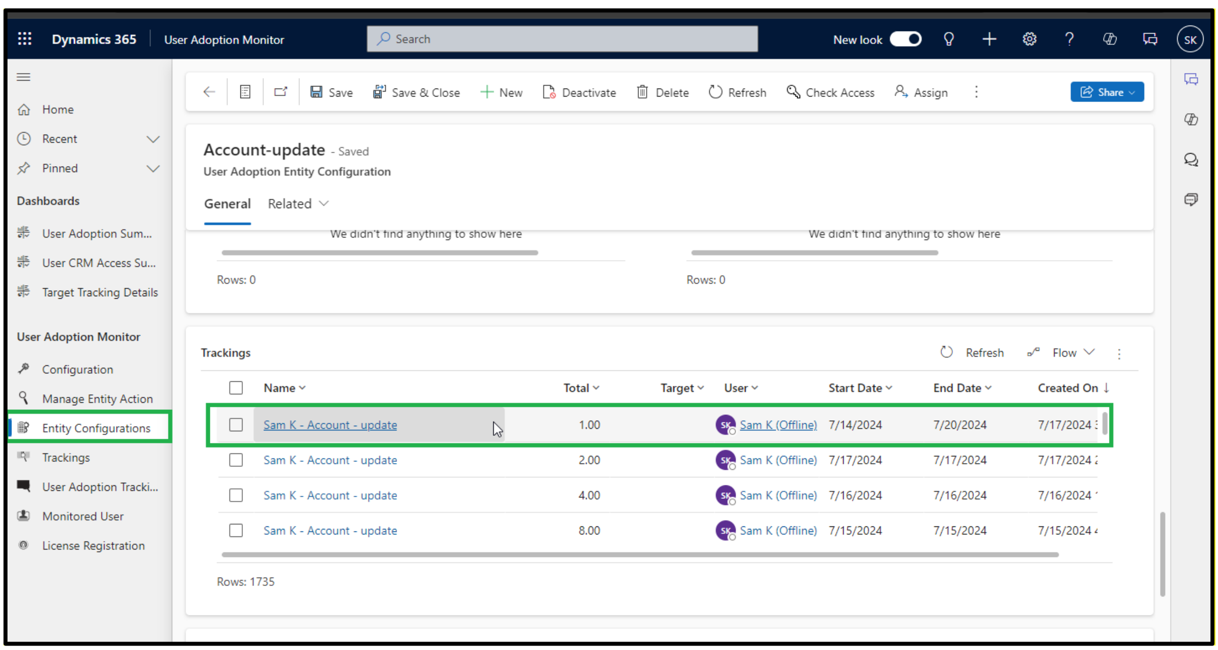

Let's say Sam, a CRM user, is working on the "Jerry" account. The current **fax** number for Jerry's account is "**655768**."



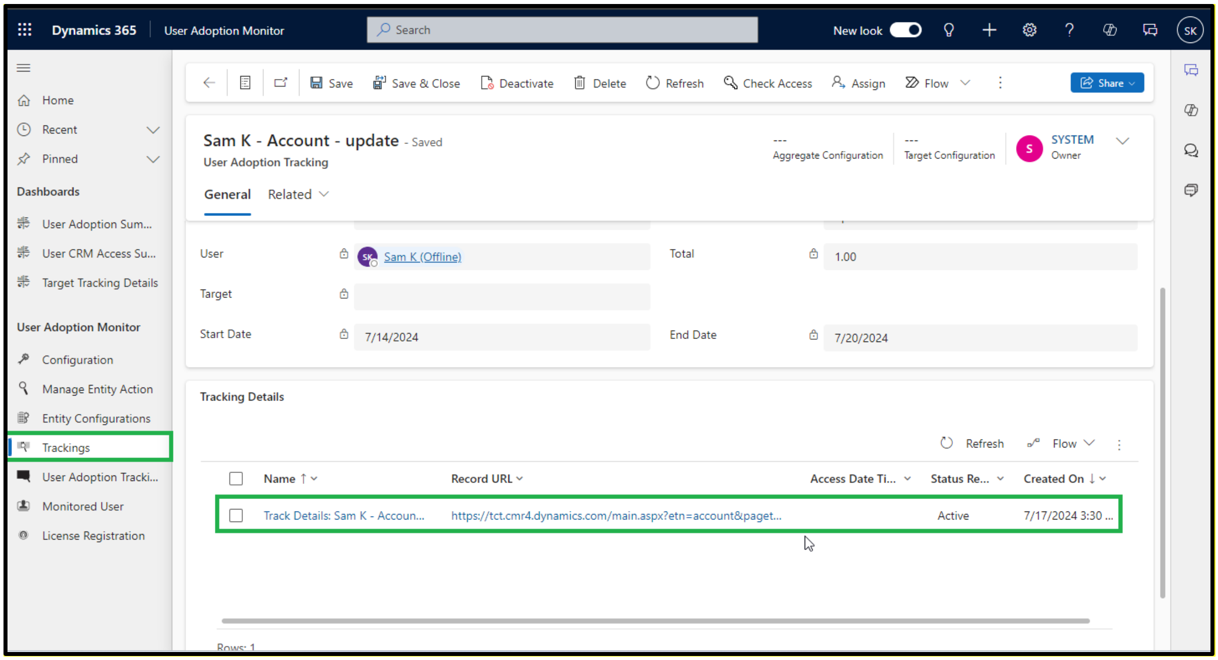

Now, Sam has **updated** the **fax** number to "**8788989**" for the account "Jerry."



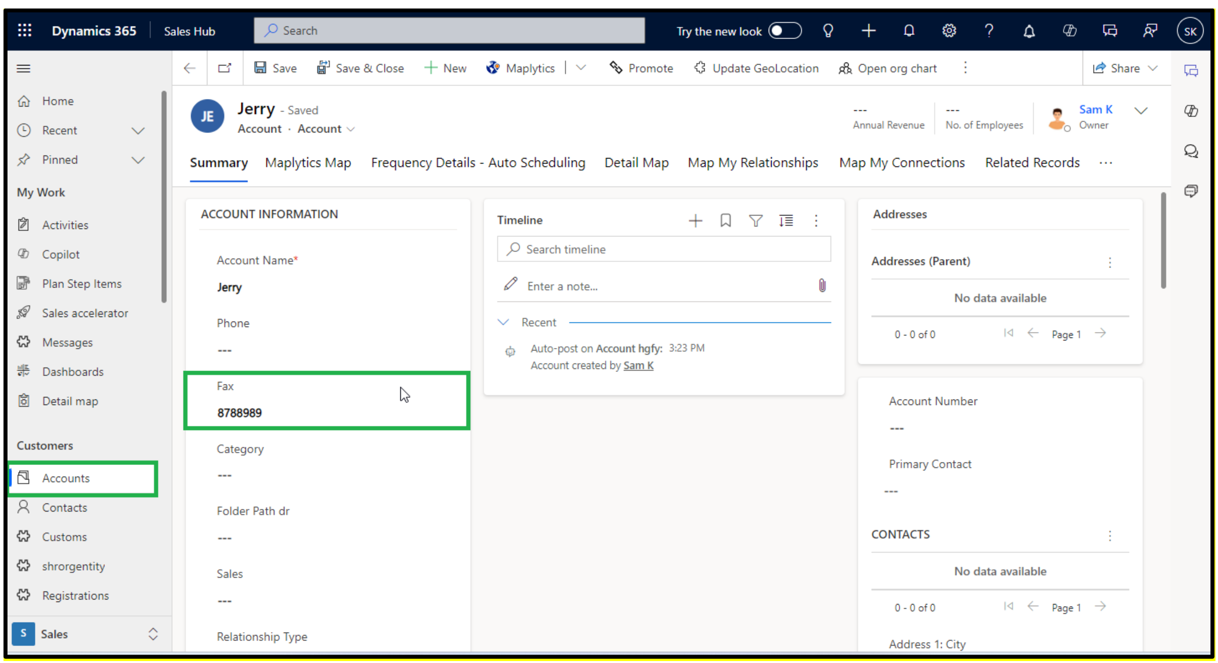

Once the updated Fax is saved by the Sam, it will be get tracked and details will be shown under the Entity Configuration tab of the User Adoption Monitor as follows.




If Mark clicks on track record, the link will be displayed that contains the updates done by Sam.



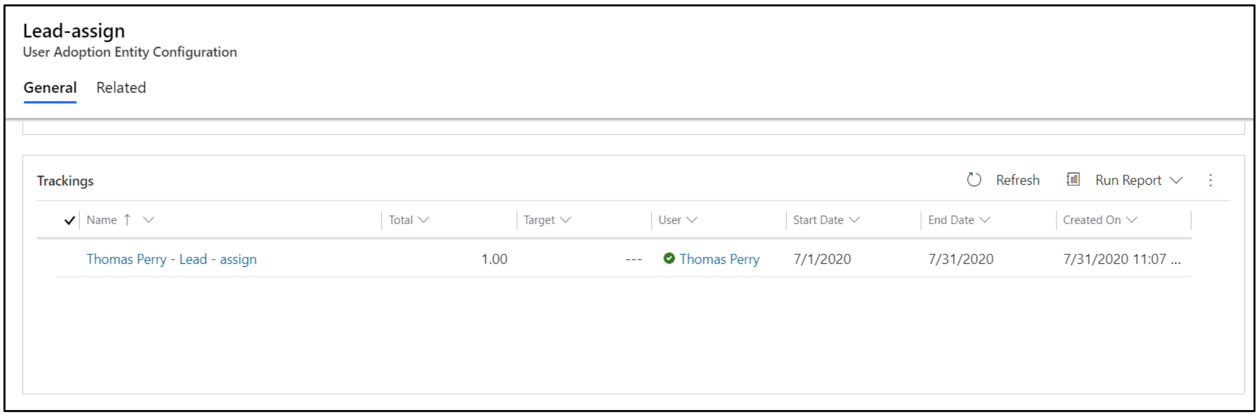

Once Mark clicks the link, he will be redirected to the record form and the changes made by Sam will be displayed.



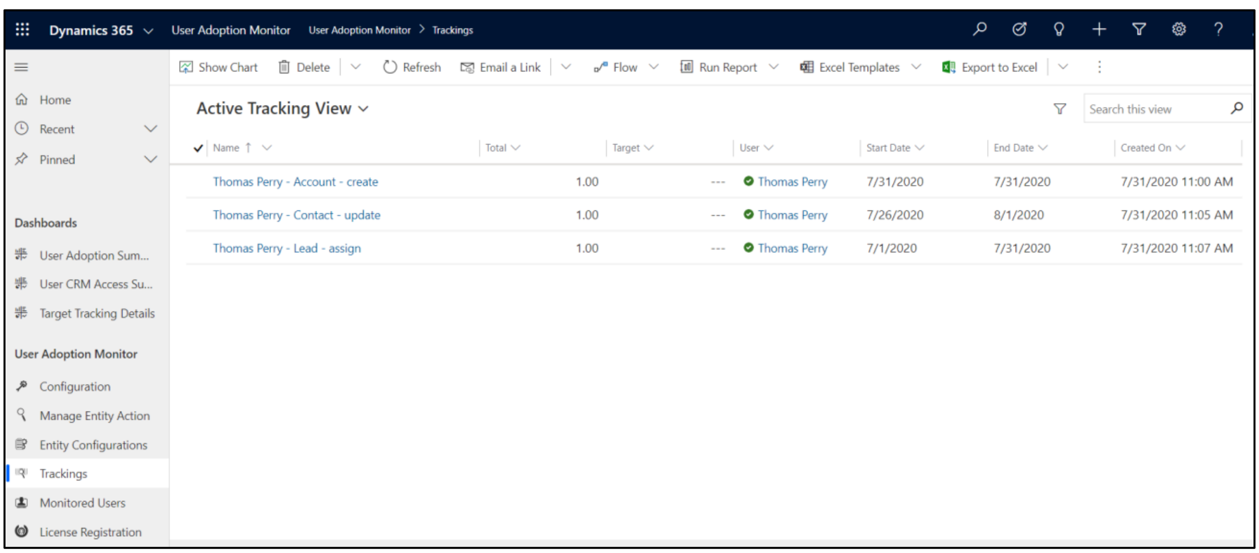

In this way, all updates made to any or all attributes will be monitored based on the changes. This ensures consistency in updates and facilitates easy retrieval of past updates.

**For Lead – Assign (Monthly)**

Note: Apply the same steps to Delete and Assign actions.




**The above tracking actions would also appear under 'Trackings' all together:**




***Note:*** *Through the User Adoption Tracking screen, you can only configure to monitor CRUD operations performed on entities. To monitor other actions performed by the user on the entities you need to create the User Adoption Entity Configuration Record manually.*

## CRM Access Tracking

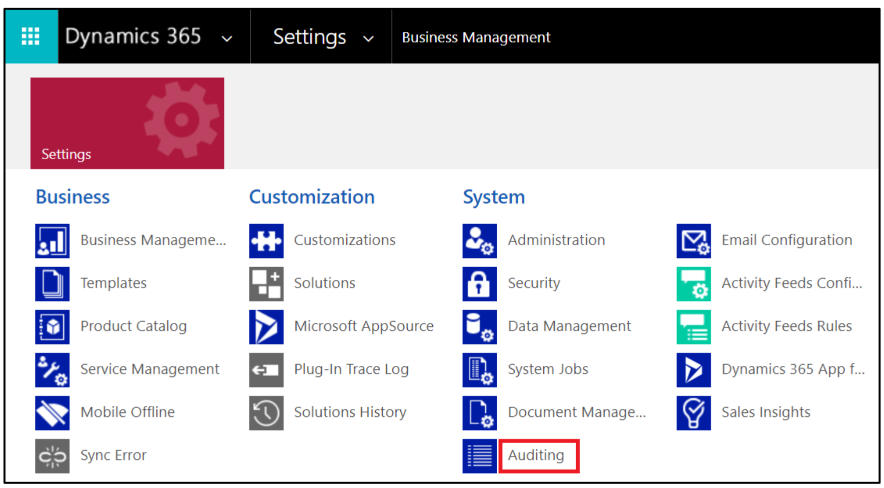
CRM Access Tracking is a feature to track access of the Dynamics CRM users. It enables the managers to monitor the CRM access of their team members by tracking various web activities performed by them in the CRM manually.

***Note:** This feature doesn't give the actual daily login count of a CRM user. It instead provides brief detail on the number of times a user accesses a CRM.*

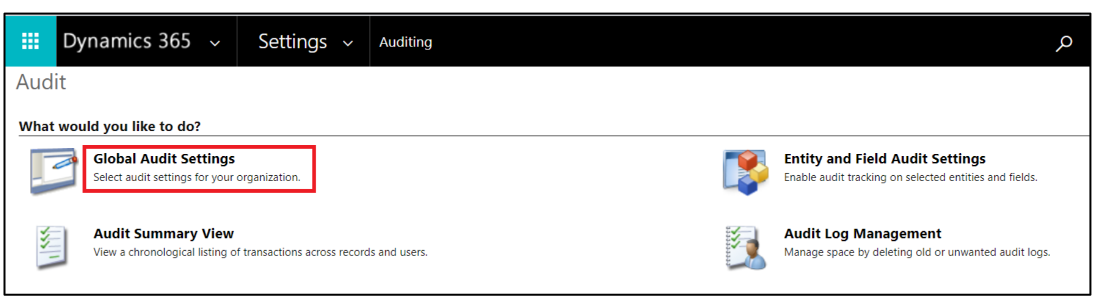
**STEPS TO TRACK USER'S CRM ACCESS**

1) The first step to track user's CRM Access is to **Enable Auditing**. For this, follow the below steps given below:

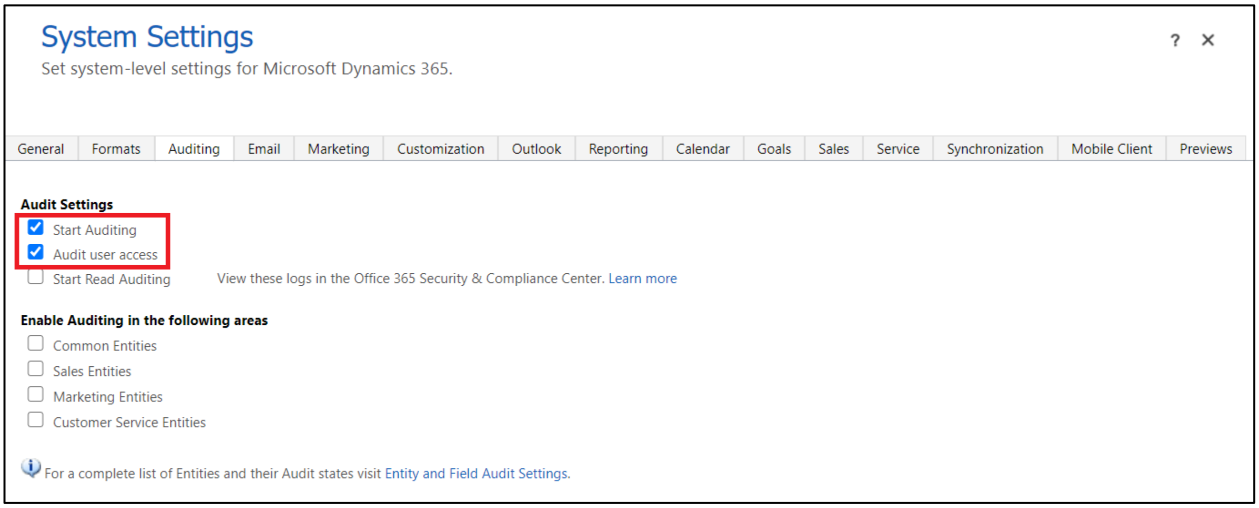
- Navigate to Settings -> Auditing (under **'System'** group)




- It opens Audit window as shown below. Click on **'Global Audit Settings'.**



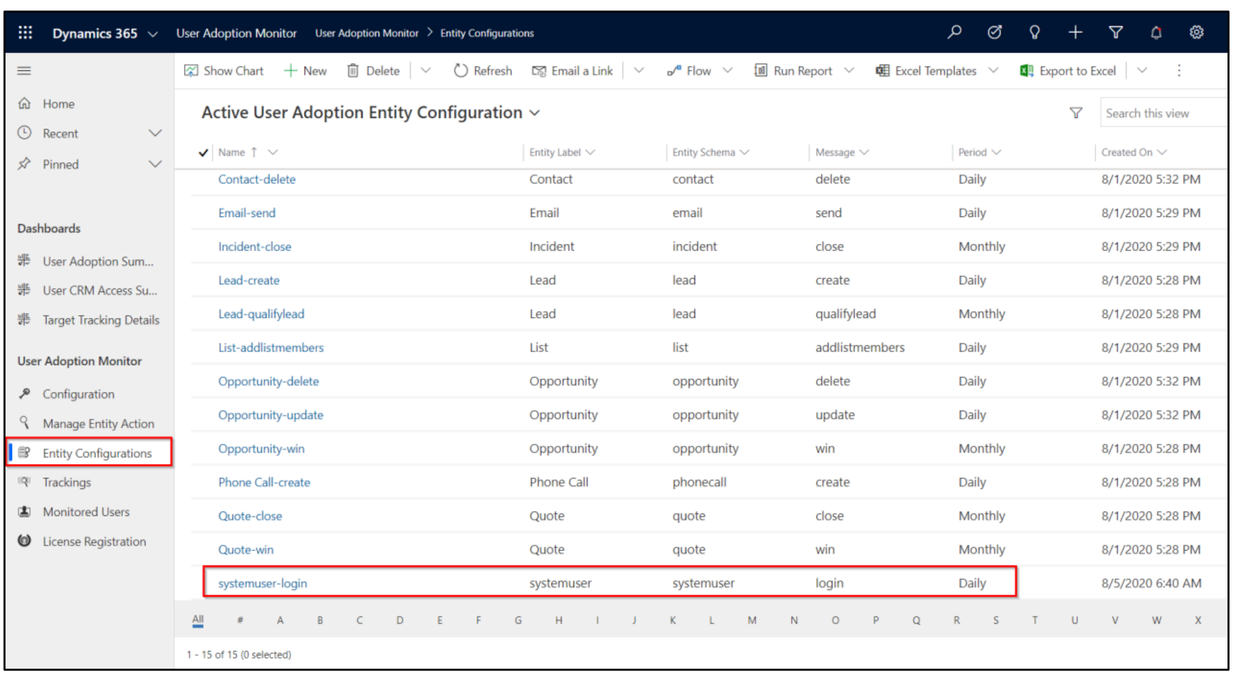

- Click on **'Auditing'** tab. Check **'Start Auditing'** and **'Audit user Access'** settings as shown below.




2) Create a **'User Adoption Entity Configuration'** record for user login as follows:

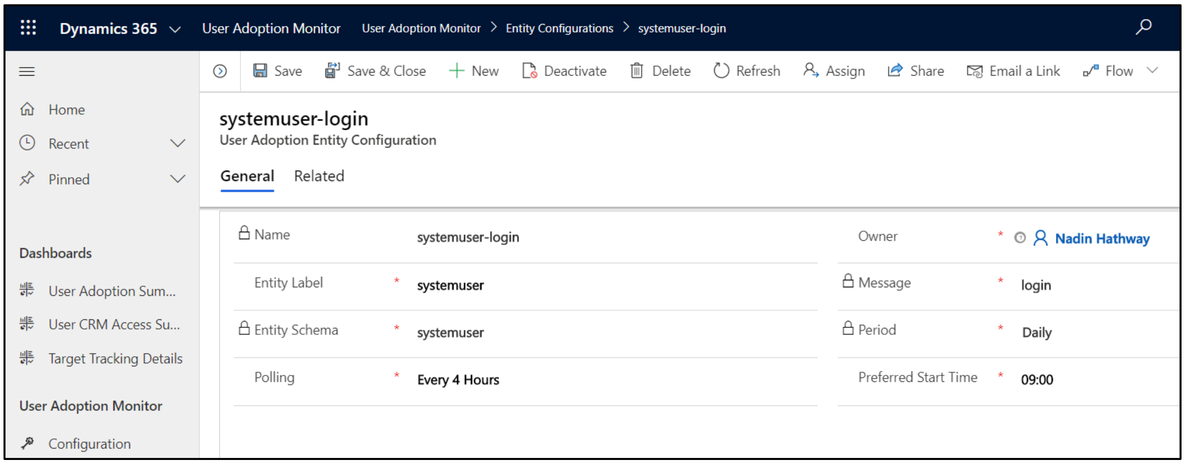
- Navigate to User Adoption Monitor App -> Entity Configurations (under 'User Adoption Monitor' group)
- Click on **(+ New)** to create a new User Adoption Entity Configuration record for login (*If no record is already created*).

> ***Note:*** *Whether the entity configuration record has already been created or not can be verified from the Entity Configurations home view.*



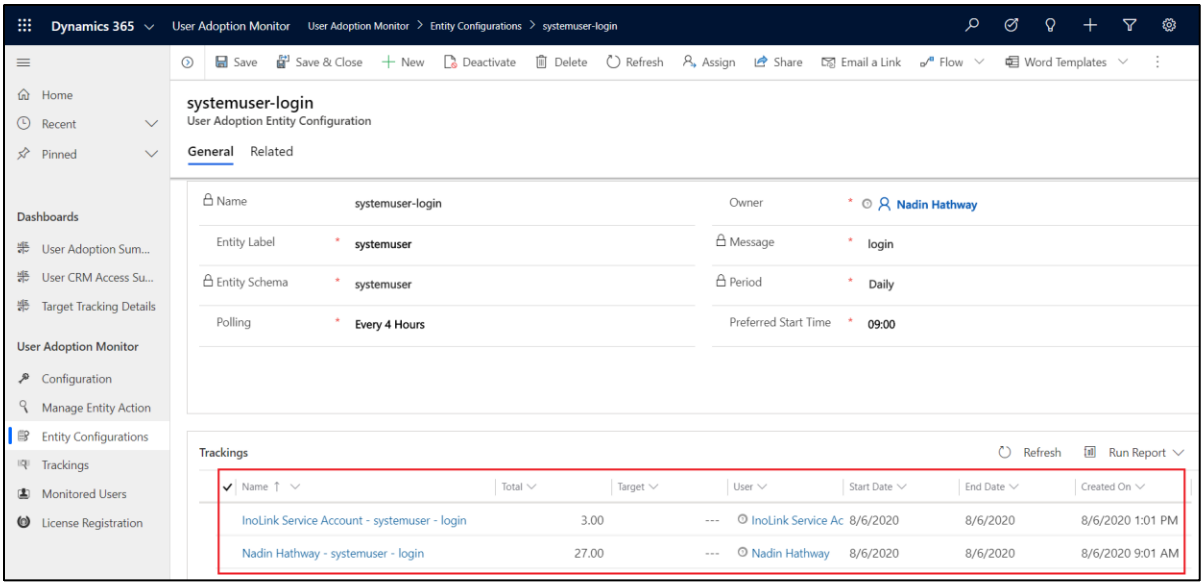
The User Adoption Entity Configuration record should always be created with the following attributes as shown in the screenshot below.

- **Entity Label:** “systemuser”
- **Entity Schema:** “systemuser”
- **Message:** “login”
- **Period:** “Daily”
- **Polling:** Select the interval period after which tracking will be conducted.
- **Preferred Start Time:** Select the time to start the tracking.



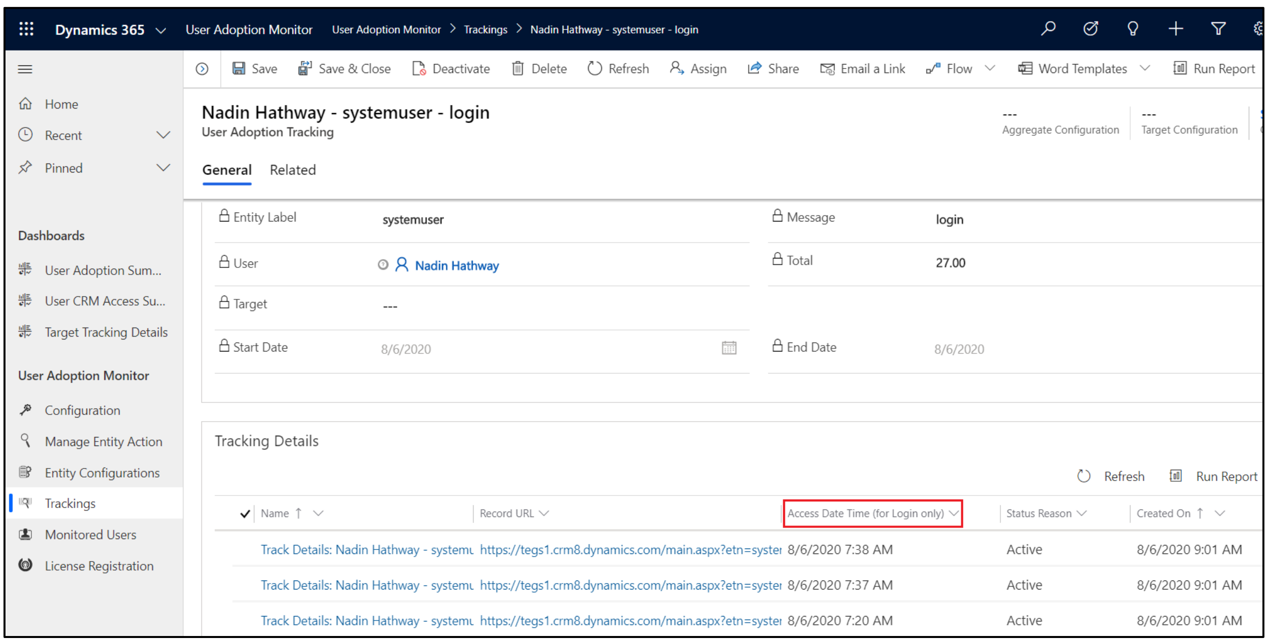

***Note:*** *The period should always be selected as ‘Daily’ as this feature only works for daily tracking.*

- Once the Entity Configuration record is created, the User Adoption Monitor will track the CRM Access of each logged in user. The tracking details can be reviewed either from the **‘systemuser-login’** entity configuration record as below or by navigating to the **Settings -> User Adoption Monitor -> Trackings**.



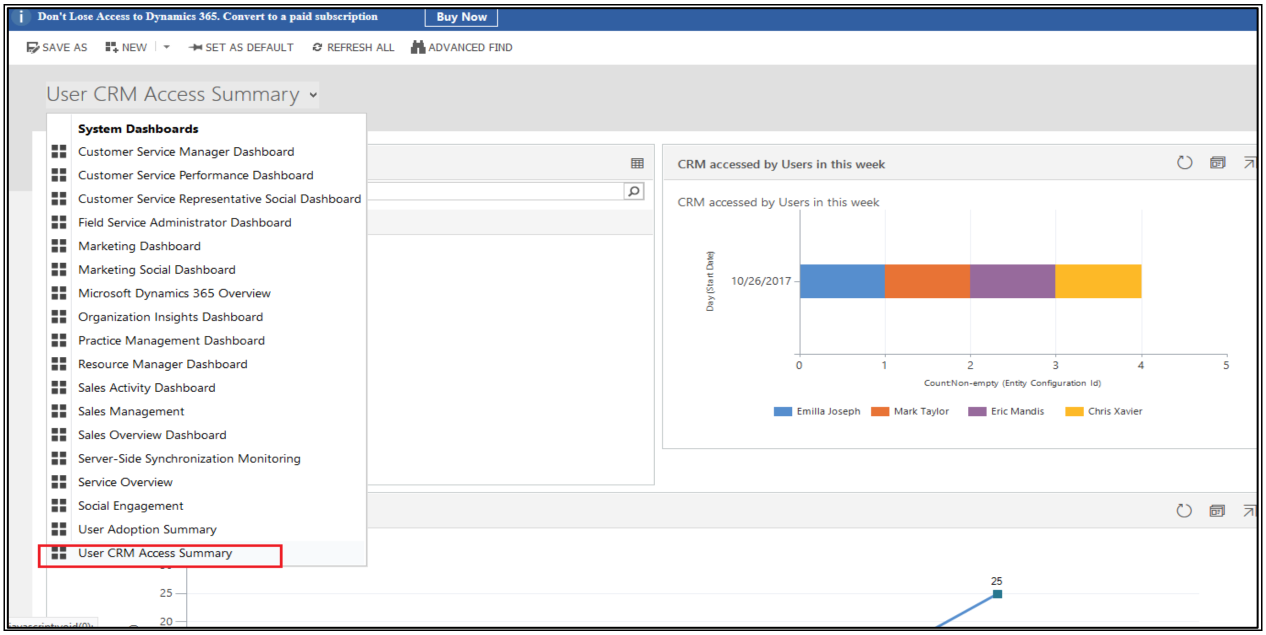
From this **'Trackings'** view we can find the number of times a respective user has accessed the CRM by date.

- We can see exact time at which CRM users have accessed the CRM by opening the 'Trackings' record as shown below:



- User Adoption Monitor gets shipped with the **'User CRM Access Summary'** dashboard to view the CRM user's access summary at a glance.

  The 'User CRM Access Summary' dashboard can be viewed under the System dashboards area.



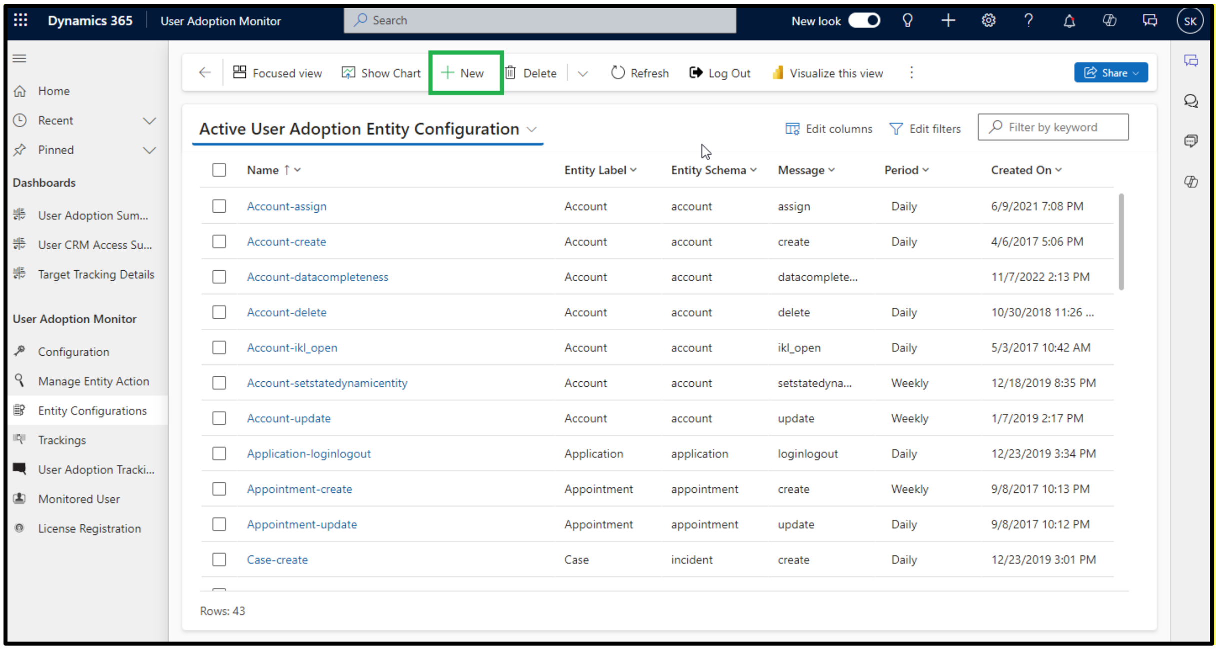

> ***Note:*** *This dashboard is visible to only user who has any one of the following security roles - System Administrator, System Customizer or User Adoption Monitor Administrator.*

## Log In & Log Out Entity Configuration

> ***Note:*** *Either User Adoption Monitor Administrator or User Adoption Monitor User role is necessary to access Log In/Log Out button.*

User Adoption Monitor in Dynamics 365 lets you watch when users log in and log out of the CRM system. This tool can track these activities daily, weekly, or monthly.

Navigate to **Entity Configurations (User Adoption Monitor App) --> Click on “New”**




Fill in the following details:

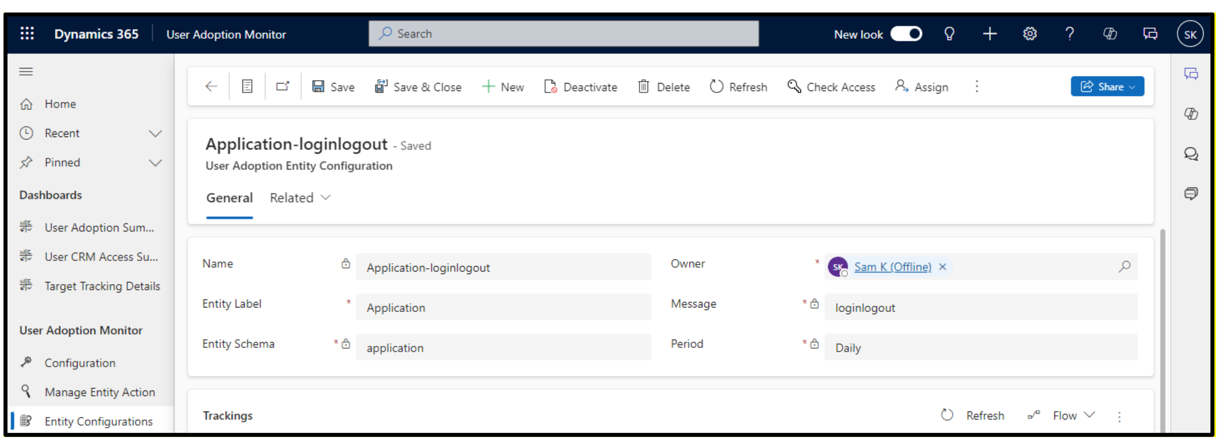
**Entity Label:** Select the display name of the entity i.e. Application

**Entity Schema:** Select the CRM schema name of the entity i.e. Application

**Owner:** Insert the Owner name of the application

**Message:** Enter the message that is supported by the CRM entity. In the current case, the message will be **loginlogout**

**Period:** Select the tracking period based on which monitoring will be performed.



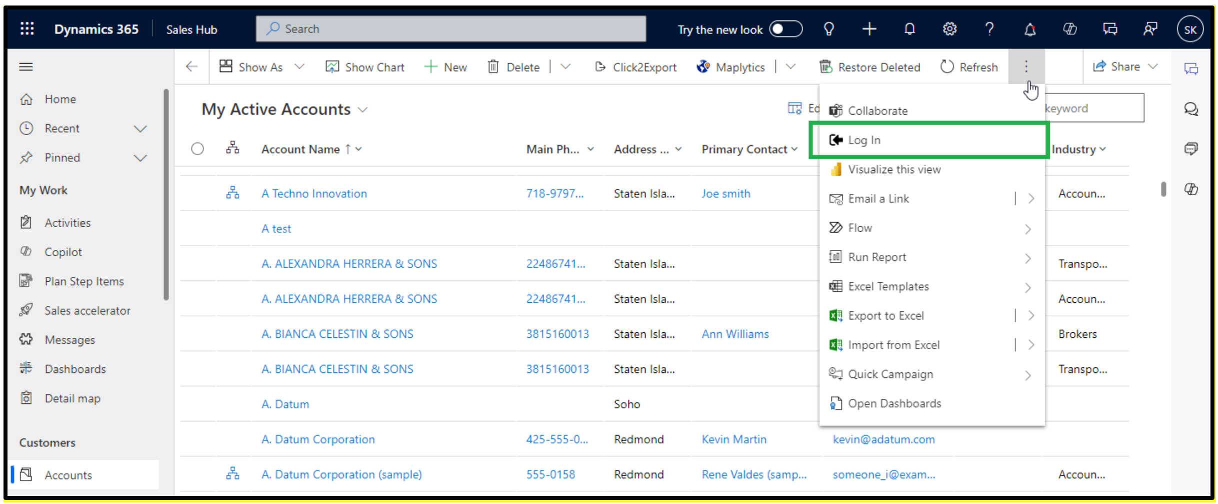

Click here to do the configuration settings.

For example, Mark is the Sales Manager at Cortana Company, and they use Dynamics 365 CRM to manage their sales team. Mark wants to monitor his team's activities. The log-in and log-out tracking will help him do just that.

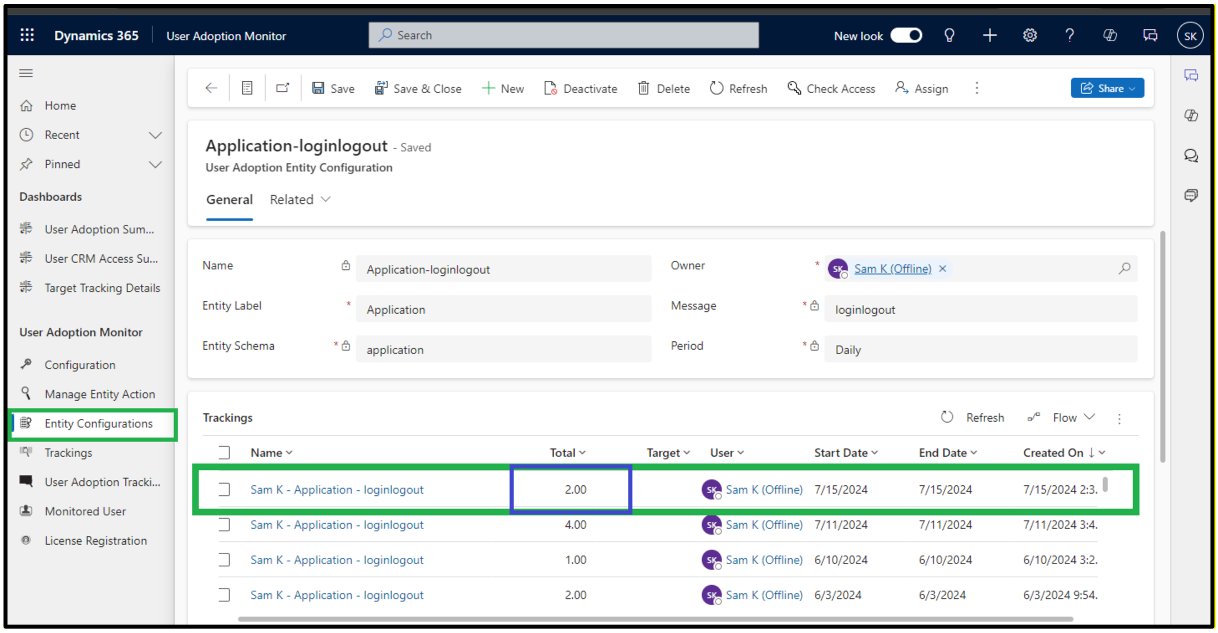
In the above case, Mark will set up this tracking for the user who is going to work on any entities under the Application.

When Dynamics 365 CRM users start their work under the Activity entity, the tracker will monitor their activities.

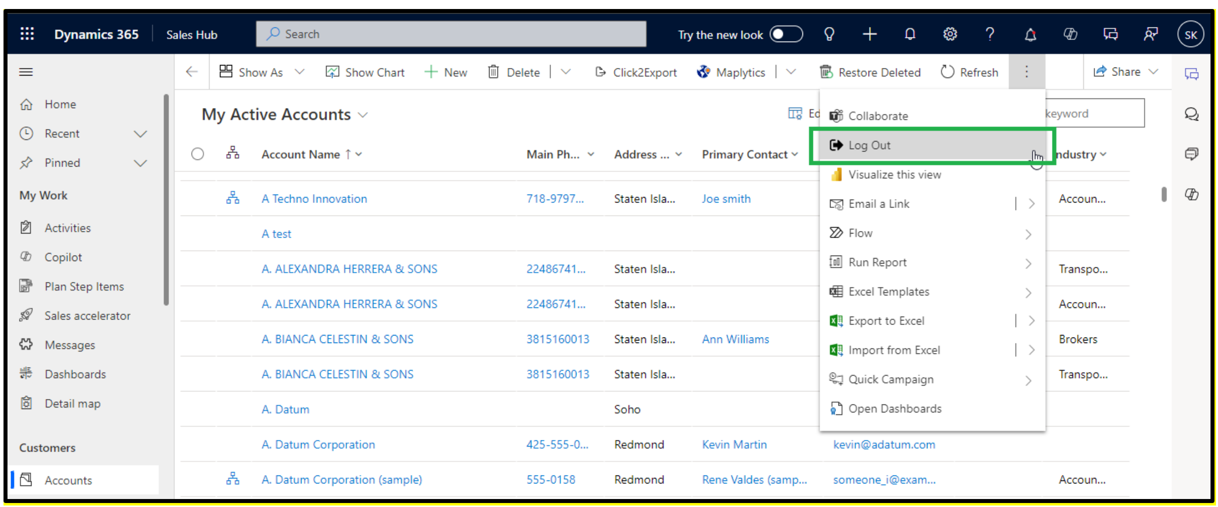
For example, Sam, a Dynamics 365 CRM user, wants to work on the Account entity. To do this Sam will Click on the ellipsis (three dots) in the ribbon bar and then click on **Log In** button.



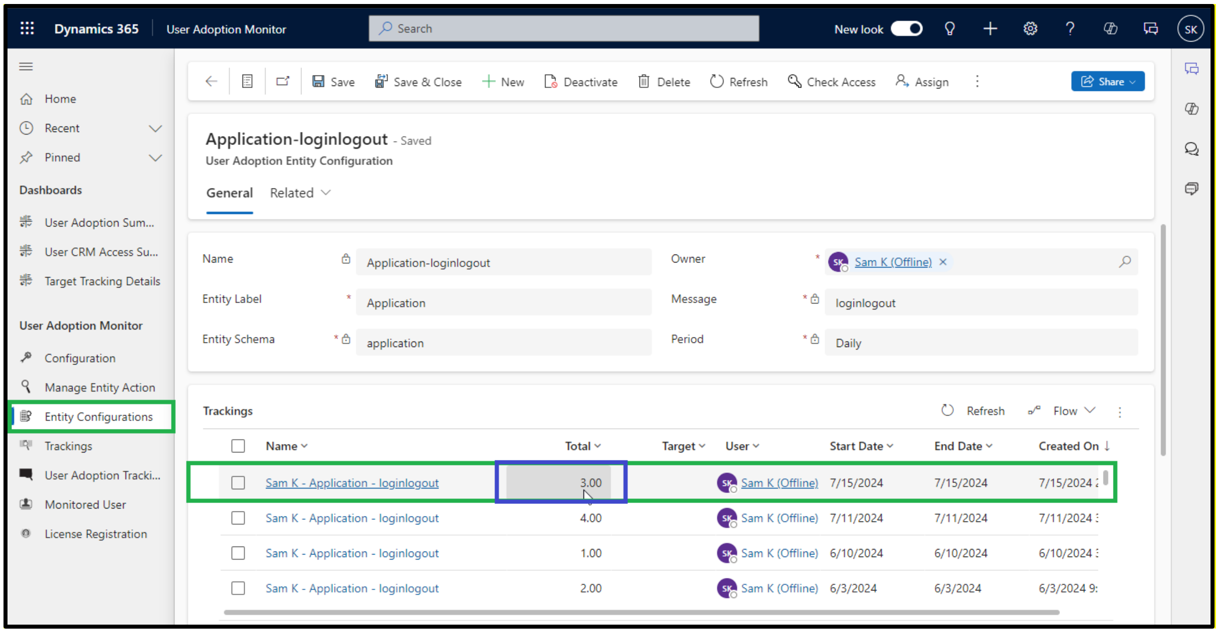

Once the user (Sam) logs into the CRM, the tracking details will be shown under the **Entity Configuration tab** under the **User Adoption Monitor** app as follows.




Once the Dynamics 365 CRM user finishes the task, they will log out of the Account entity. To do this, Sam will click on an ellipsis from the ribbon bar and then Click on the **Log Out** button.




Once the user (Sam) logs out of the CRM, the tracking details will be shown under the **Entity Configuration tab** of the **User Adoption Monitor** as follows.




Here, under the "**Total**" tab, you can see that the value increases with each action performed by Sam. Each time a user logs in or out of the application, the action count will go up.

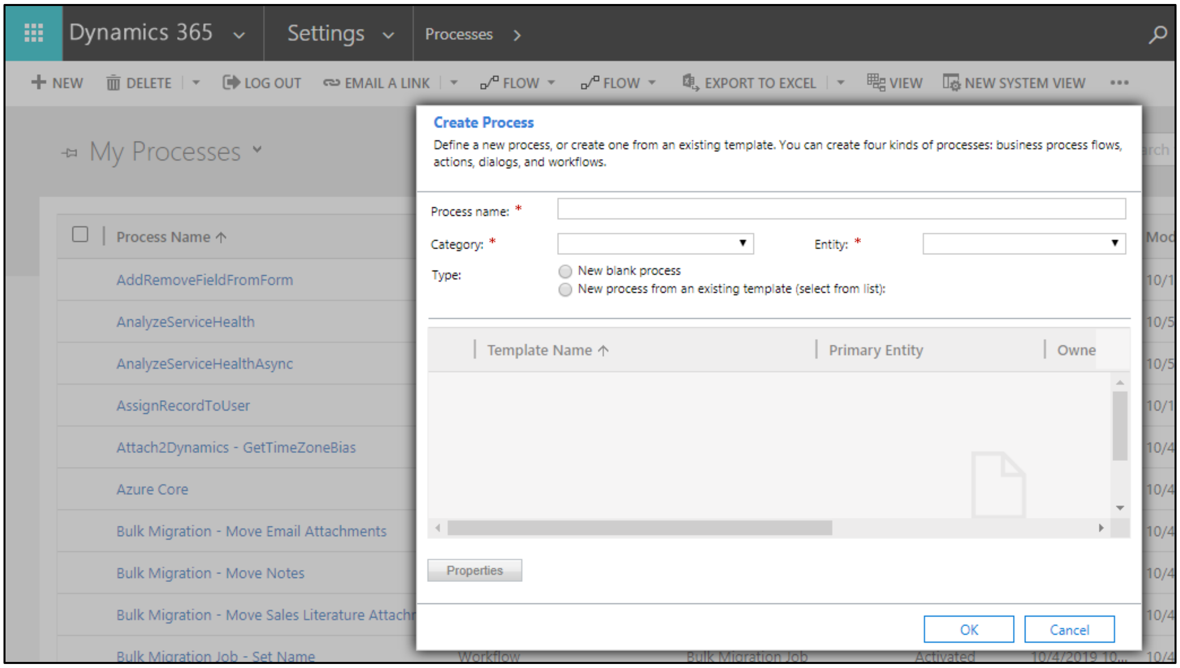
## Check-in & Check-out Entity Configuration

***Note:*** *User Adoption Monitor Administrator or User Adoption Monitor User role is necessary to access Check-in/Check-out button.*

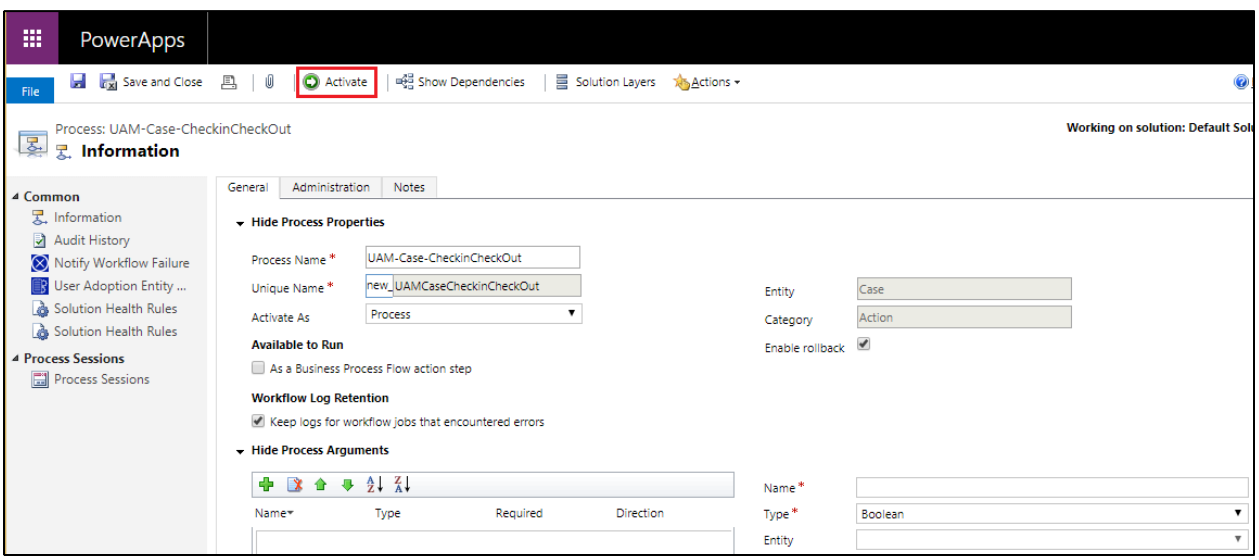
User Adoption Monitor in Dynamics 365 lets you keep track of records that each user worked on. It will specify the time spent by a user on records in a particular Entity. This tool can track activities on a daily, weekly, or monthly basis.

With this feature you can keep track of records that each user worked on. It will specify the time spent by user on records in a particular Entity. In order to enable Check-in & Check-out feature for a particular entity, follow the steps given below:

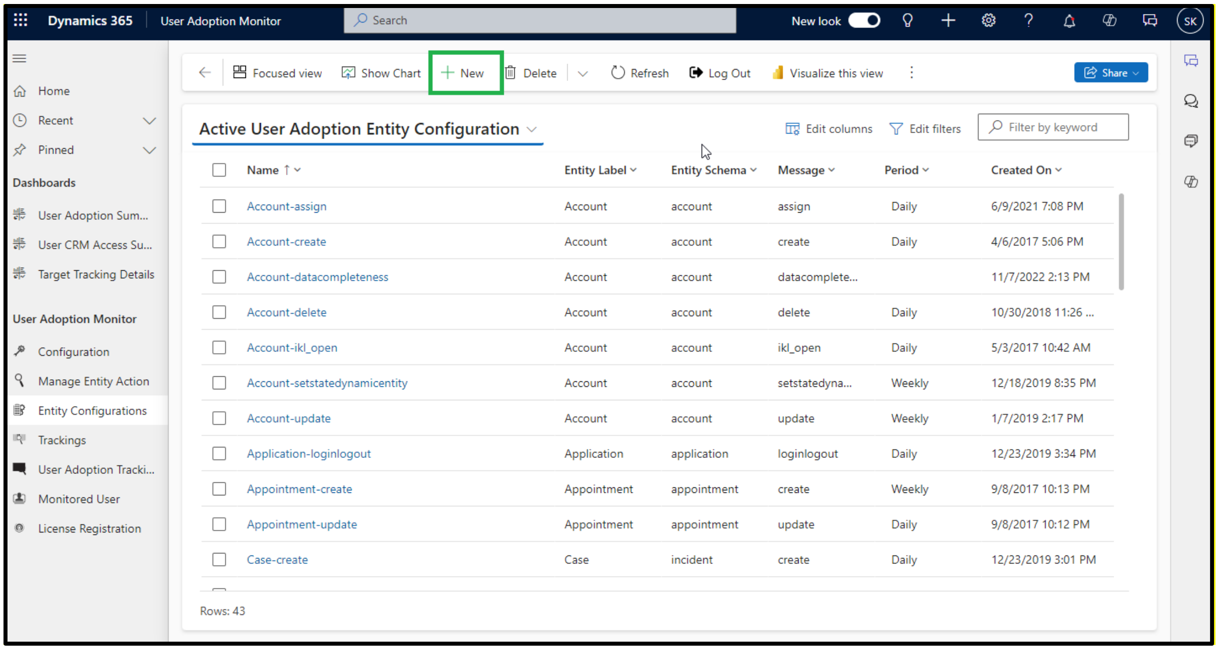
- First, you have to create action for the required entity. For each entity, you have to create separate actions. Go to Advanced Settings→ Settings→Processes. Click on New.




- Next, fill the required fields as follows:
    - **Process name:** Name the process, for e.g. UAM-Case-CheckInCheckOut
    - **Category:** Select 'Action'
    - **Entity:** Select the required entity. Here 'Case' entity is selected
- Once the details are filled, click on Ok. Then 'Activate' the action as shown below:




Navigate to **Entity Configurations --> Click on the "New" button under User Adoption Monitor**




**Fill the following details:**

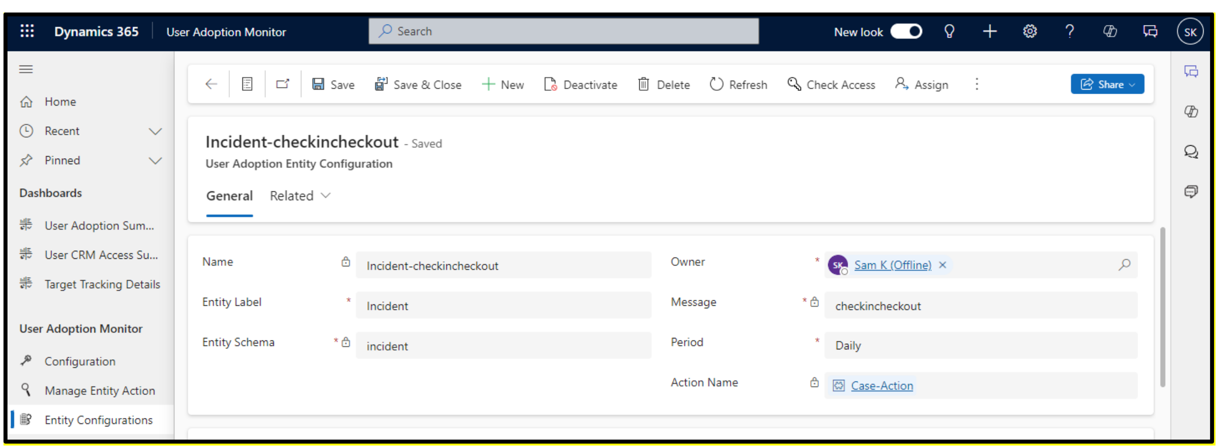
**Entity Label:** Select the display name of the entity i.e. Incident

**Entity Schema:** Select the CRM schema name of the entity i.e. Incident

**Owner:** Insert the Owner name of the application

**Message:** Enter the message that is supported by the CRM entity. In the current case, the message will be **checkincheckout.**

**Period:** Select the tracking period based on which monitoring will be performed.




Click here to do the Configuration Setting

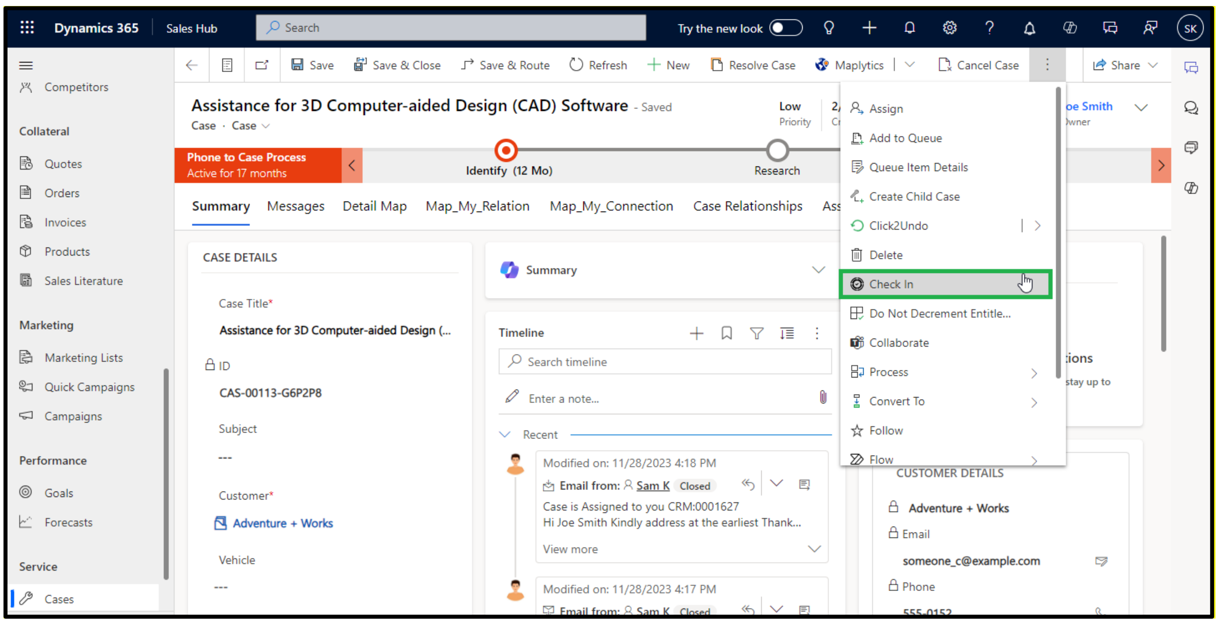
For example, Mark is the Sales Manager at Cortana Company, and they use Dynamics 365 CRM to manage their sales team. Mark wants to monitor his team's activities. The check-in and check-out tracking will help him do just that.

In the above case, Mark will set up this tracking for the "**Case**" entity.

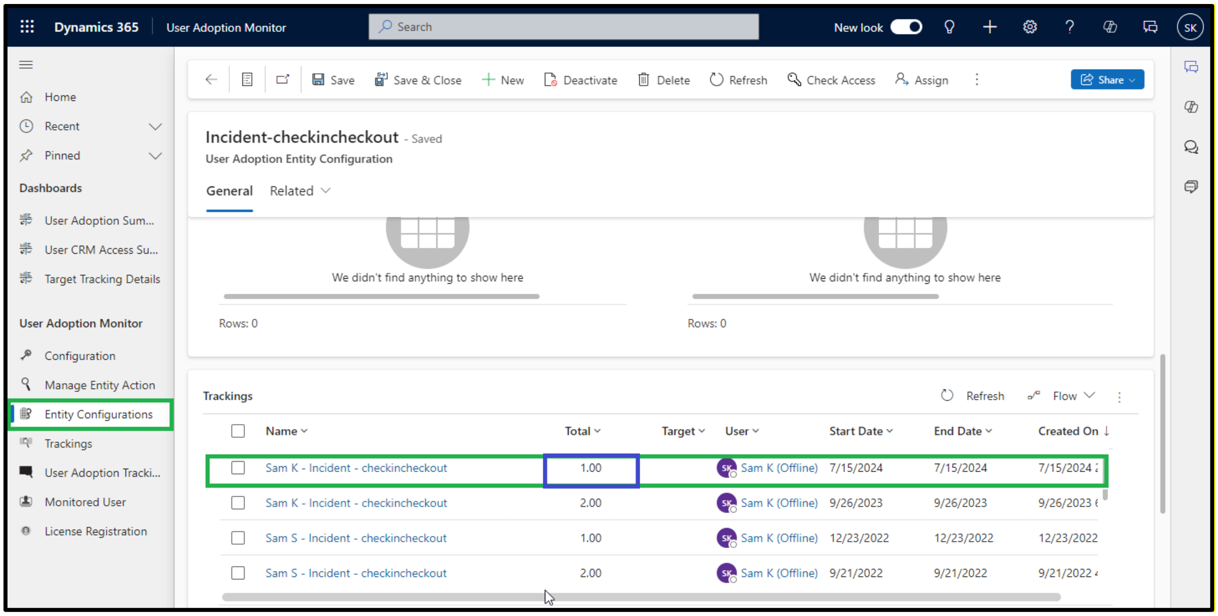
When Dynamics 365 CRM users start their work, the tracker will start keeping track of records of users they working on.

For example, Sam, a Dynamics 365 CRM user, wants to work on the Case entity record.

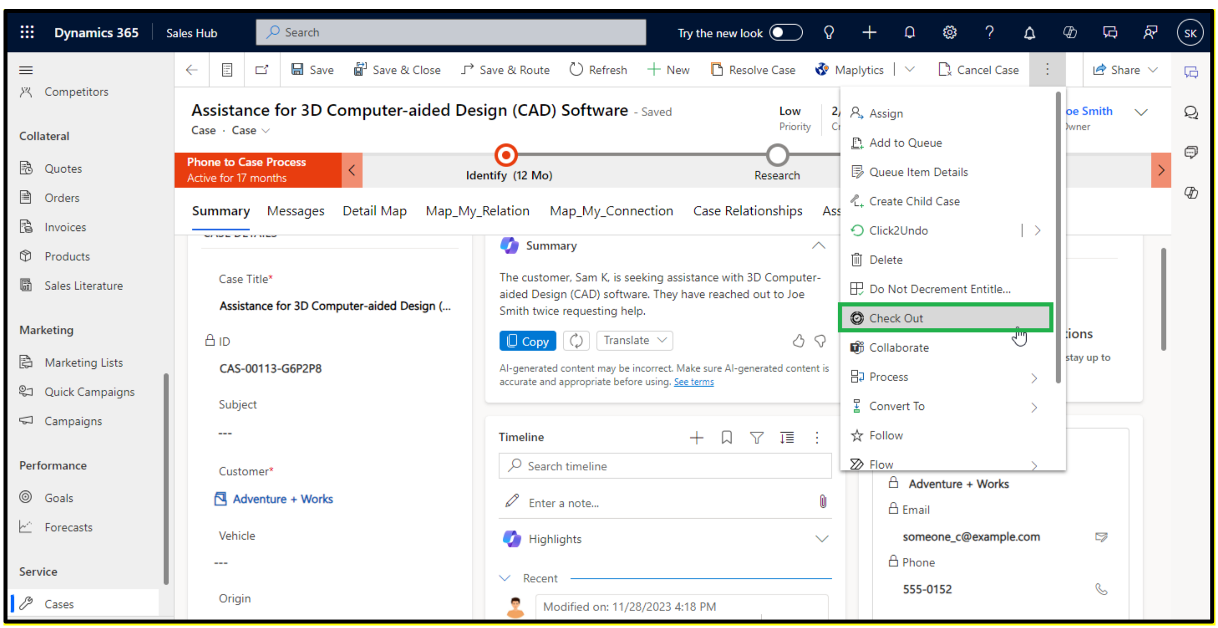
To do this, Sam will click on an ellipsis from the ribbon bar and then he will click on **Check-In** button.



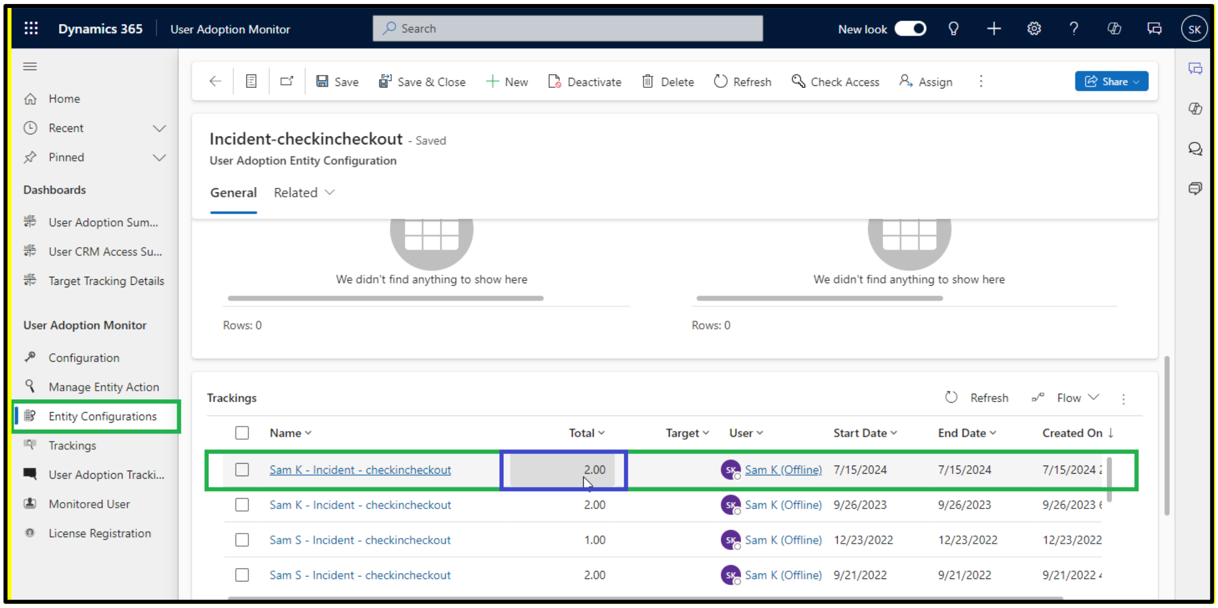

Once the user Checks into the CRM, the tracking details will be shown under the Entity Configuration tab of the User Adoption Monitor as follows.




Once the Dynamics 365 CRM user (Sam) finishes the task, they will check out from the record. To do this, Sam will click on an ellipsis from the ribbon bar and then he will click on the **Check Out** button.




Once the user (Sam) Checks out of the CRM, the tracking details will be shown under the Entity Configuration column of the User Adoption Monitor as follows.



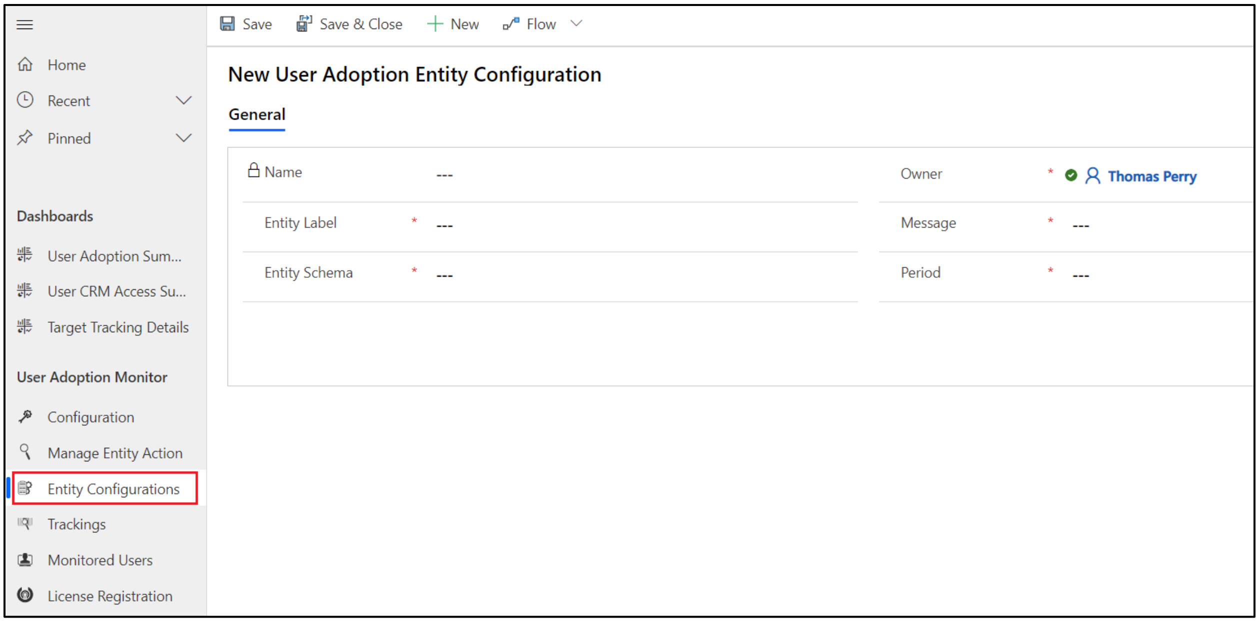
Here, under the "**Total**" column, you can see that the value increases with each action performed. Each time a user checks in or out of the application, the action count will go up.

## Aggregate Tracking Configuration

Using **'Aggregate Tracking'**, one can track the aggregations of respective numeric field(s) of the entity on which the specific user action has been defined. To understand better, let's take an example of **'Opportunity-win'** action.

In order to configure **'Aggregate Tracking'** follow the steps given below:

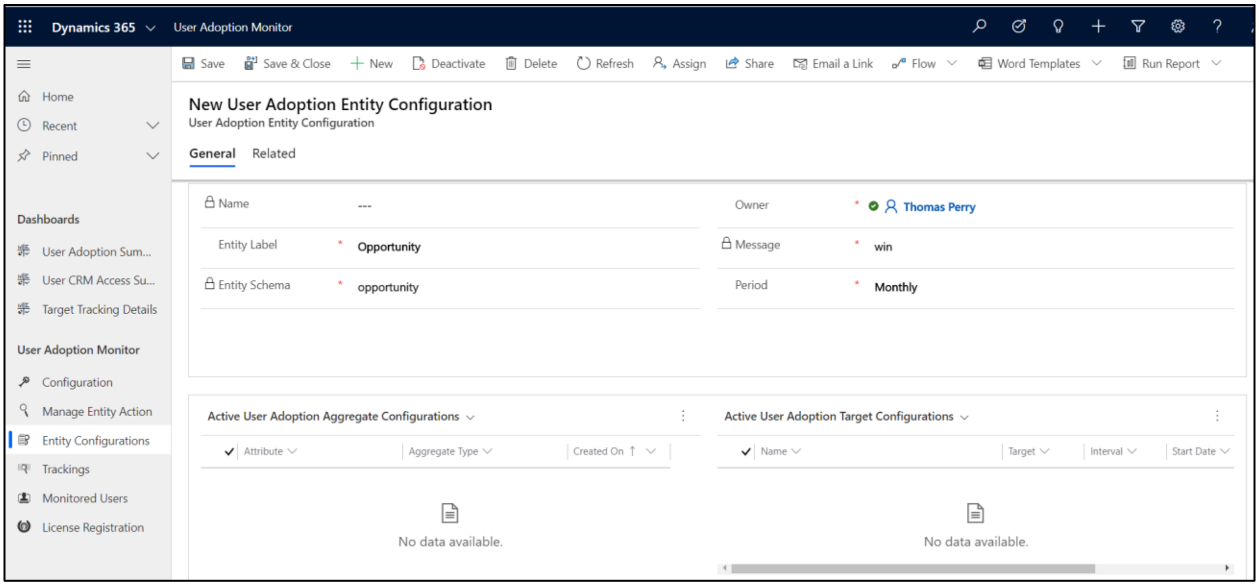
- Navigate to User Adoption Monitor App → Entity Configuration → Click on New.



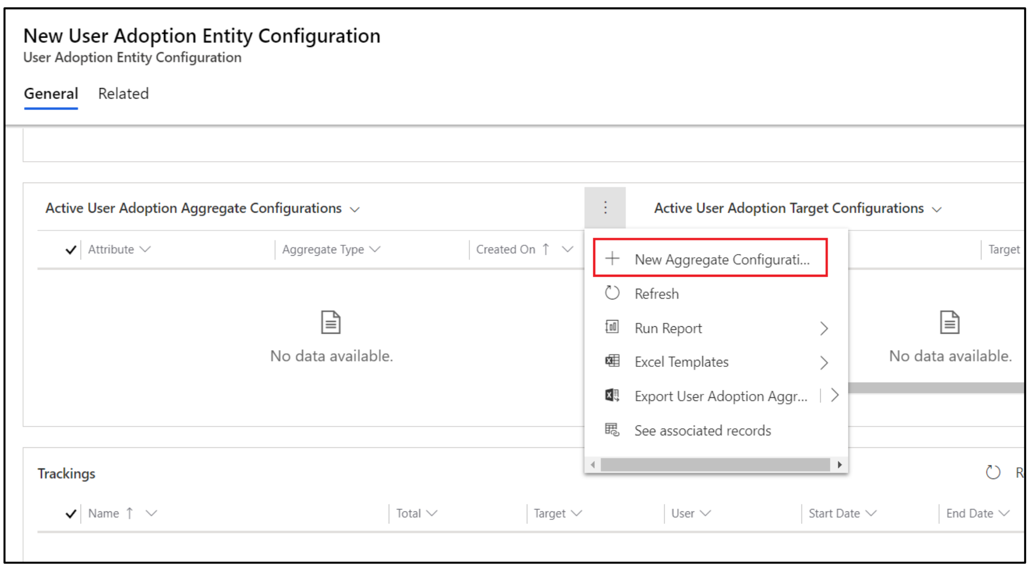

- Fill the given fields → Click on Save.
    a. **Entity label:** Opportunity
    b. **Entity Schema:** opportunity
    c. **Message:** win
    d. **Period:** Select either Daily, Weekly or Monthly.

> **Note:** *If the respective entity configuration is already present, then no need to follow the above steps to recreate the same entity configuration. One can directly open the entity configuration record and follow the below procedure to define the Aggregate Configuration.*

Once it is saved, the sub-grids to define the **Aggregate Configurations** and **Target Configurations** will be displayed.



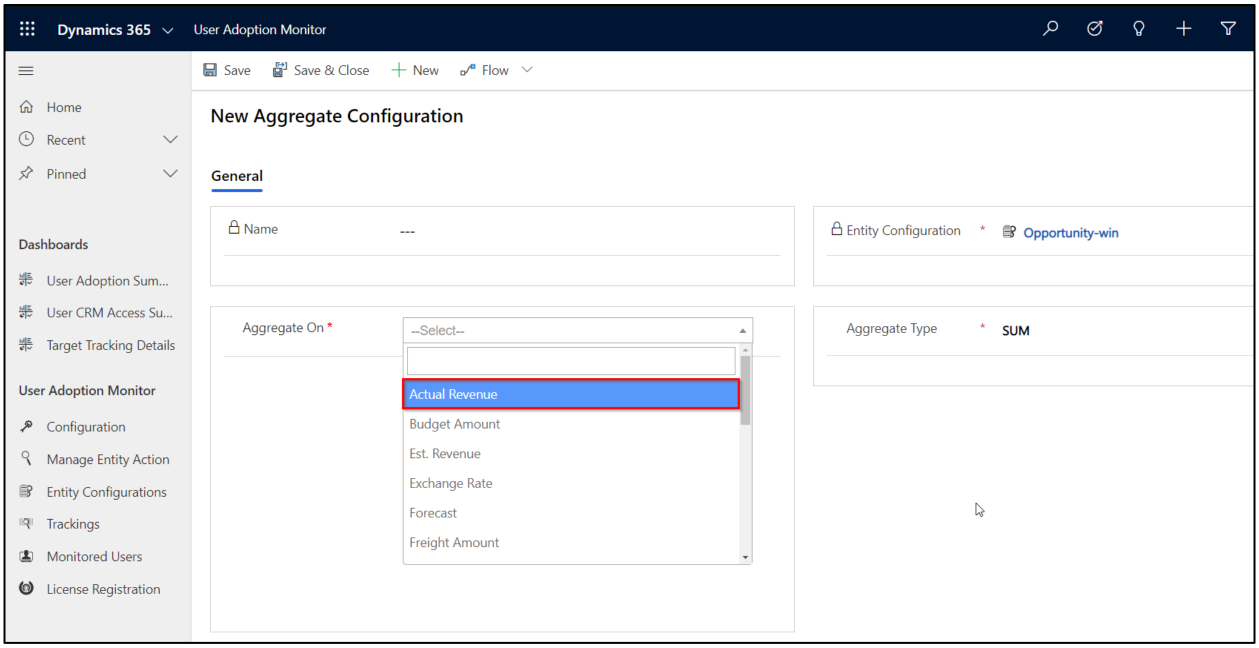

- Create a new **Aggregate Configuration** as shown below.



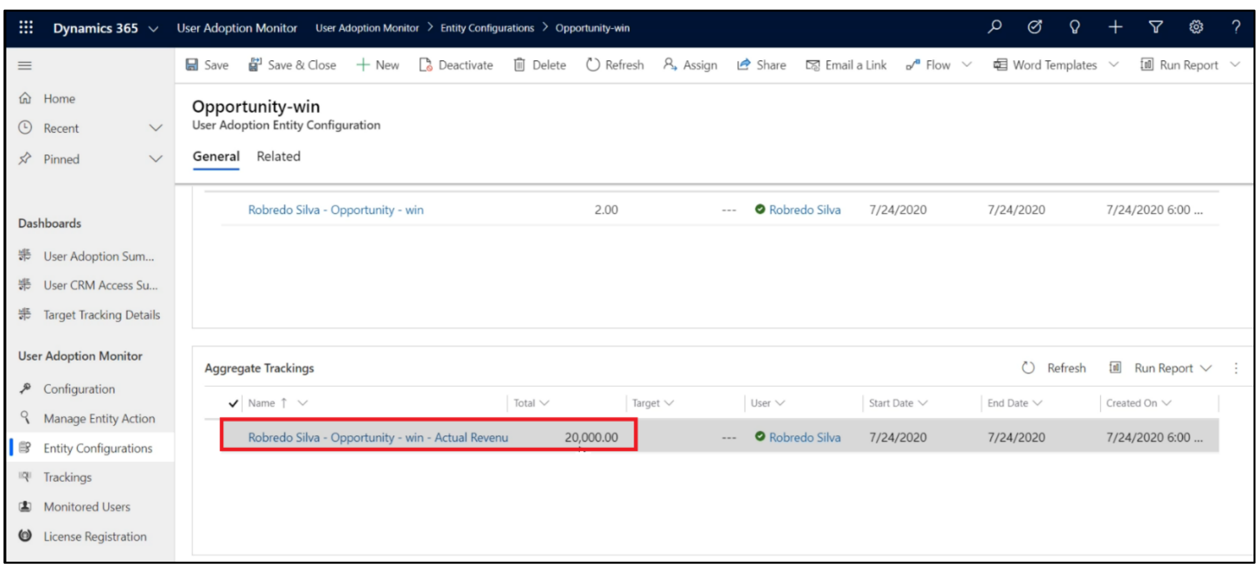

- Fill the following fields → Click on Save.
  a. **Aggregate On:** Select any attribute from the dropdown on which you want to calculate the aggregation.
  b. **Aggregate Type:** Select **'SUM'** or **'AVG'**. This field will calculate the aggregation as Sum or Average of the chosen field.

  Let's take the following example:

  - **Aggregate On** = Actual Revenue
  - **Aggregate Type** = SUM




- Once this is configured, every time a user wins an opportunity, User Adoption Monitor will calculate and show the sum of the actual revenue of Opportunities won by the respective users on daily, weekly or monthly basis.



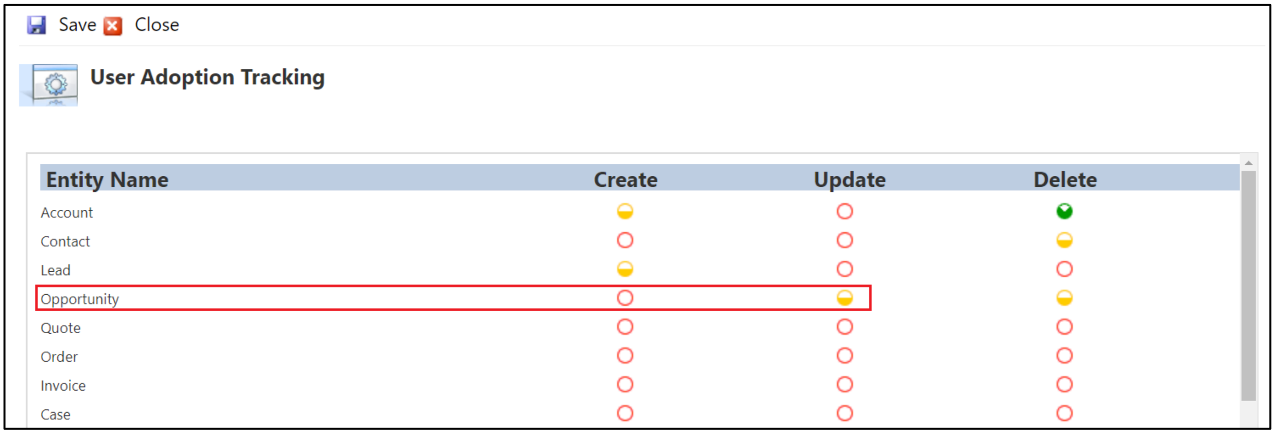

In addition to this, there is another functionality incorporated in User Adoption Monitor that gives the provision to calculate the aggregation for specific statuses of the entity record on ‘**Update**’ entity action.

For better understanding, let’s consider the following business scenario:

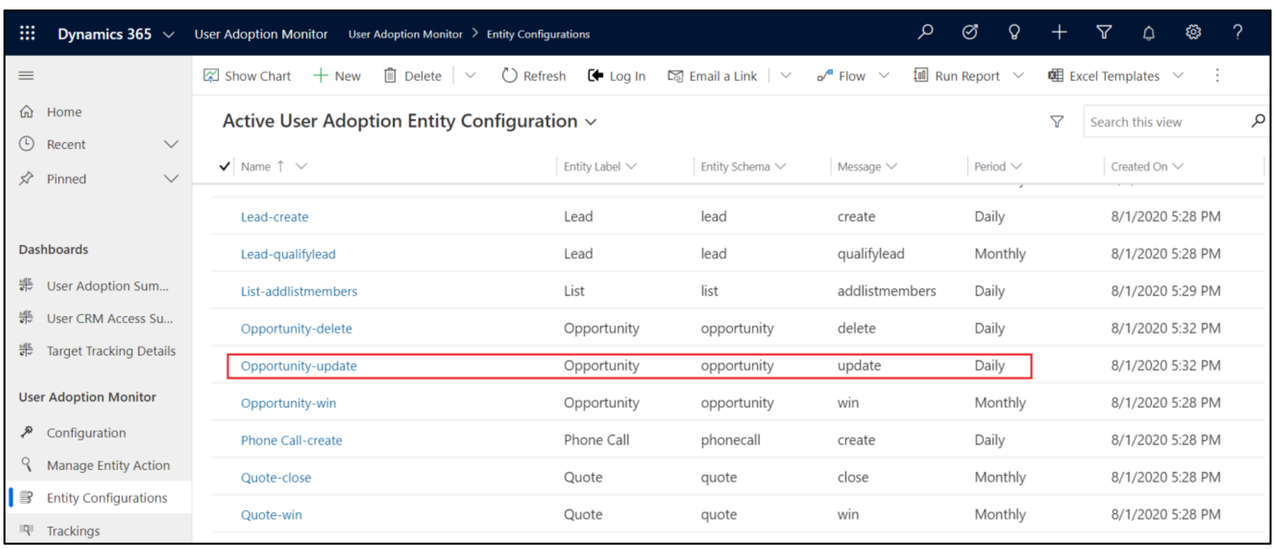
Admin/user having ‘User Adoption Monitor Administrator’ privileges wants User Adoption Monitor to track the aggregation on updating the opportunity record only when the status of an opportunity is ‘In progress’.

Let’s follow the below steps to accomplish the above requirement.

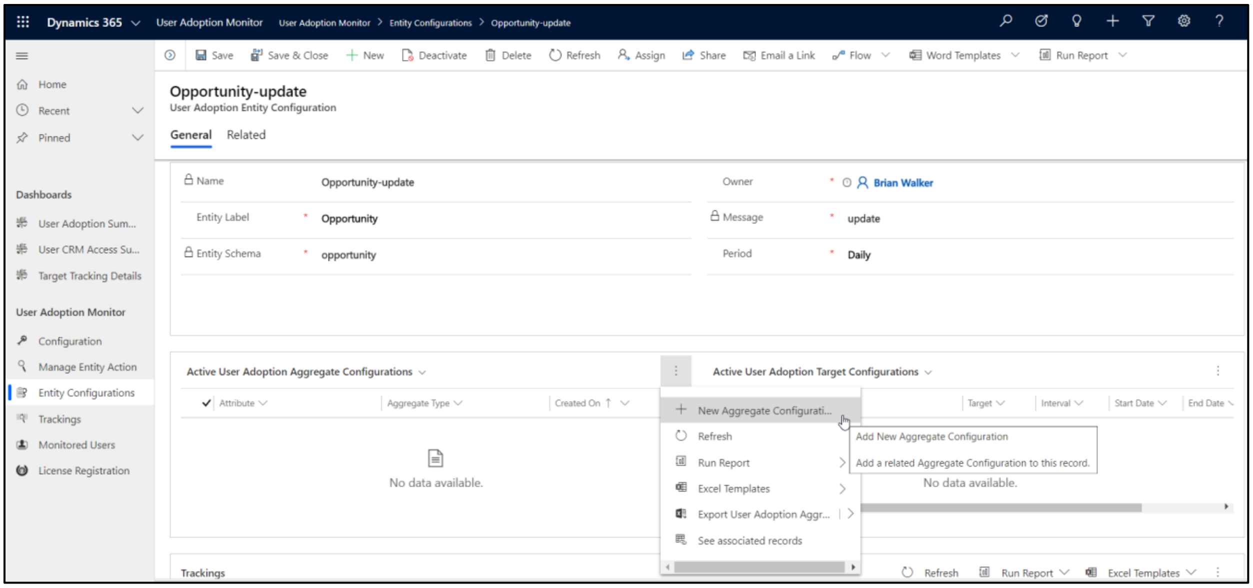
- Navigate to Manage Entity Action → Set the period as required for **opportunity-update** action (It is set to ‘Daily’ in this example).



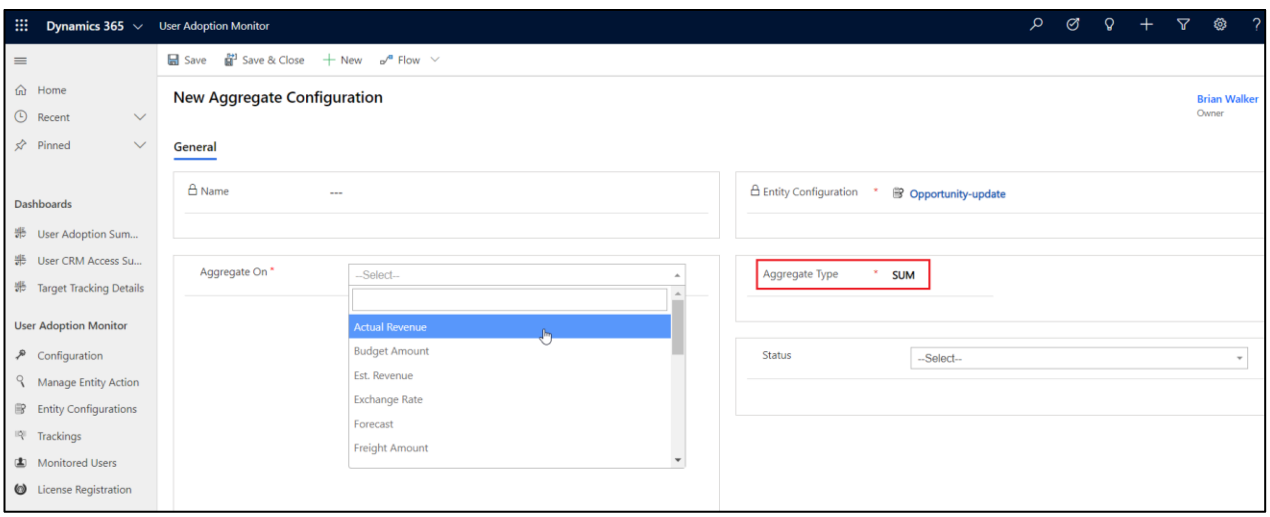

- Click on Save.
- Once the above entity action is saved successfully, you will see the **‘Opportunity-update’** entity configuration created under ‘Active User Adoption Entity Configuration’.



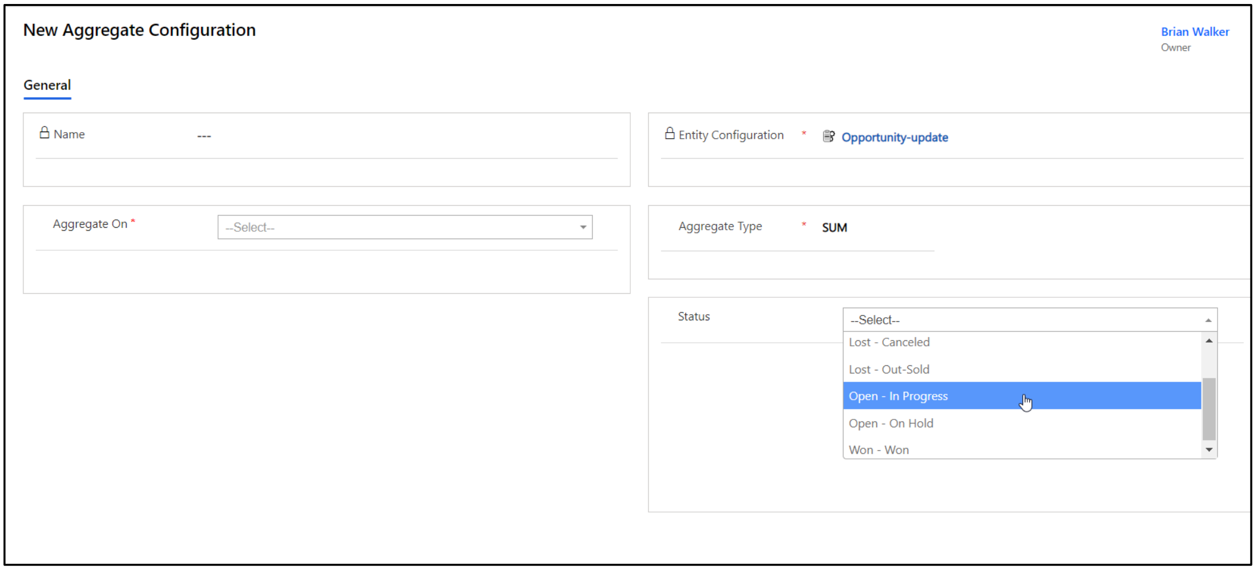

- Open this **‘Opportunity-update’** configuration and create a new **‘Aggregate Configuration’** as shown below:



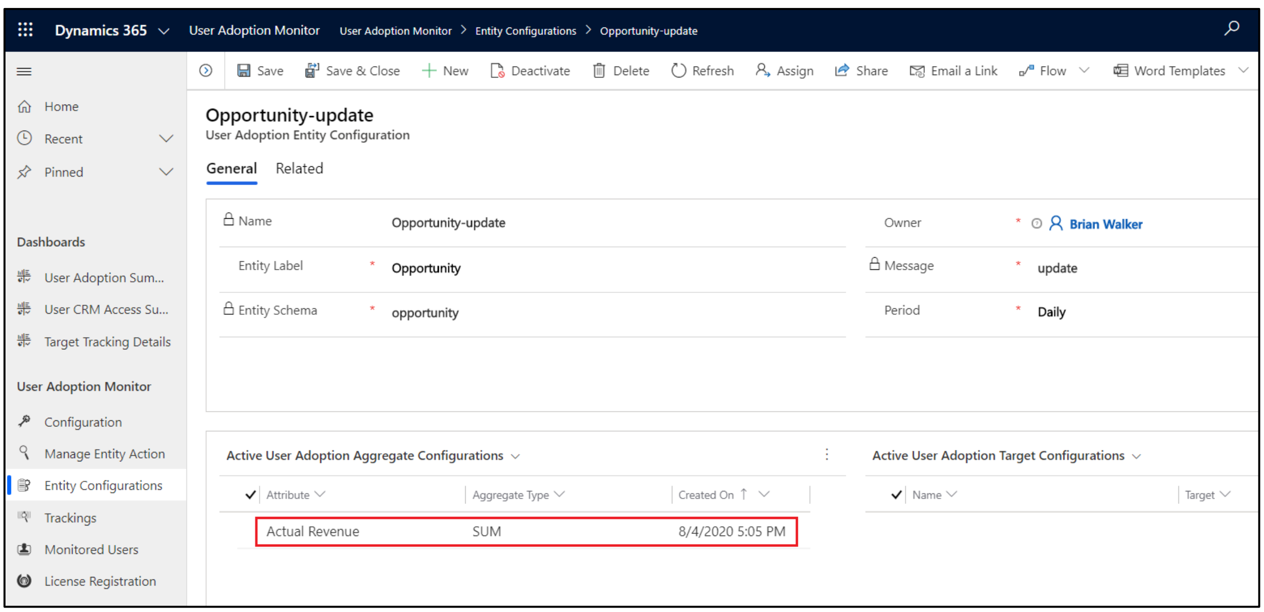

- Select the required attribute from the list. Here, user can pick any attribute based on the business requirement. 'Actual Revenue' attribute is selected in this example as we want User Adoption Monitor to calculate and track the aggregate value of this field upon updating the opportunity record.
- We are keeping the 'Aggregate Type' as 'SUM' since we want to calculate the sum of actual revenue of total number of opportunities that are won.



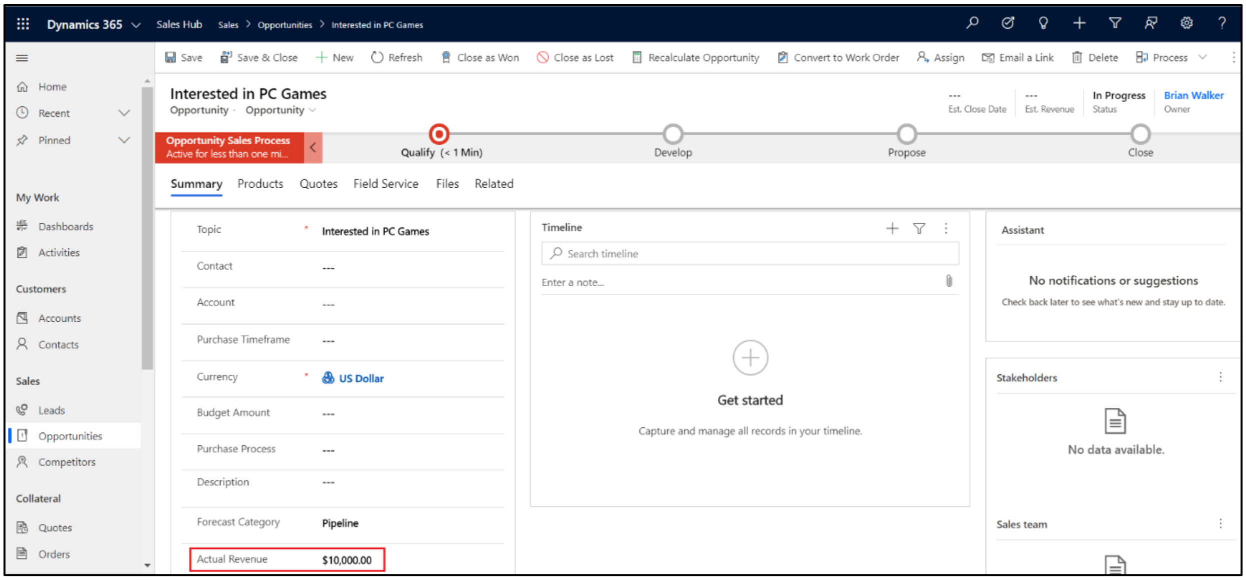

- Select the status as **'Open – In Progress'**. Now, it would track the aggregation of the **Actual Revenue** field post updating the opportunity only if the status of an opportunity is **'In Progress'.**



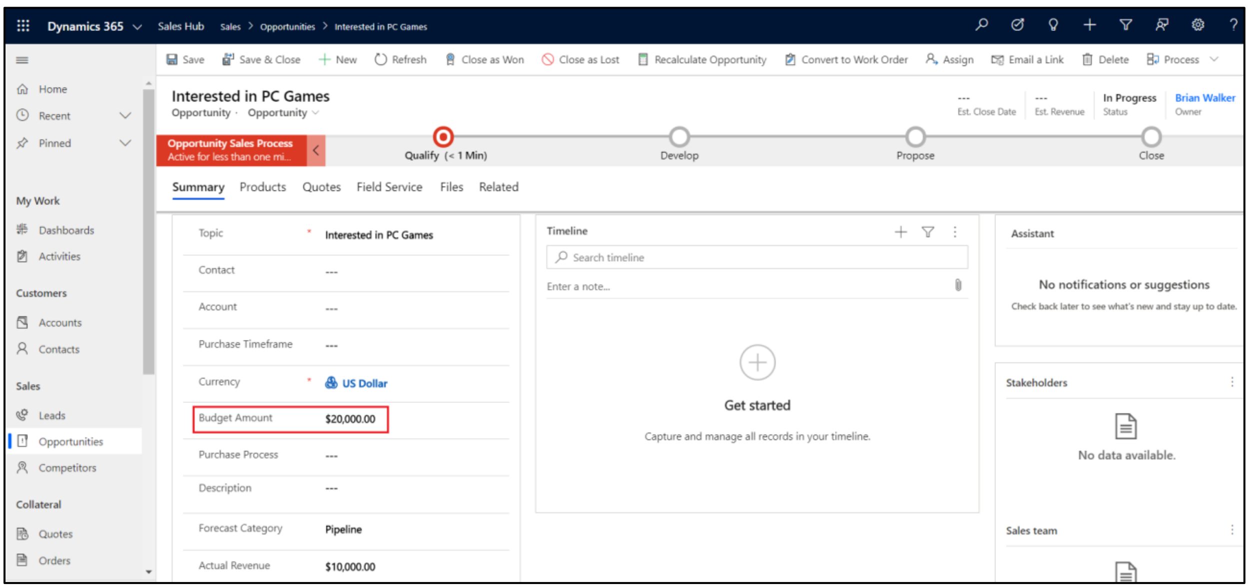

- Now, let's save this aggregate configuration with the below values:
  - **Aggregate On**: Actual Revenue
  - **Aggregate Type**: Sum
  - **Status**: Open – In Progress
- Once saved, this configuration will appear under 'Active User Adoption Aggregate Configurations' as shown below:



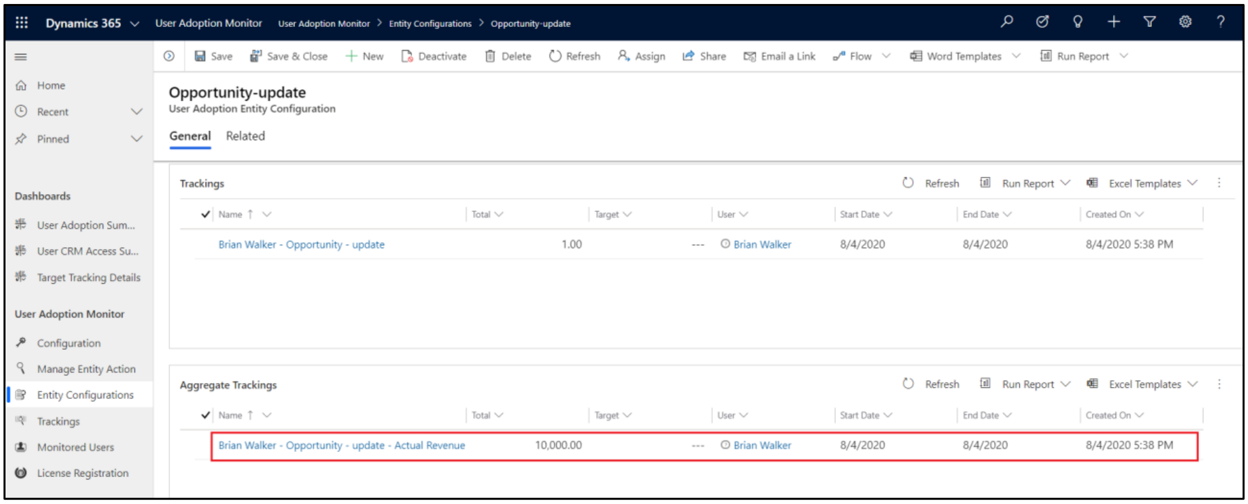

- Next, let's update the below opportunity. This opportunity has the actual revenue of $10,000.



- Any of the fields from this opportunity record can be modified. Here, **'Budget Amount'** field is updated to $20,000.



- We have set the status as **'Open – In Progress'** in aggregate configuration earlier. Since the status of the opportunity remains **'In Progress'** when the opportunity was updated with **'Budget Amount'**, this will be tracked and aggregate value of the field 'Actual Revenue' will be calculated.
- To check the track entry, navigate to User Adoption Monitor→Entity Configuration→Open **'Opportunity-update'** entity configuration.




**Note**: *The way the User Adoption Monitor works in this is, it compares the status of the opportunity against the status that we have set in the aggregate configuration and tracks the aggregation only if these statuses match with each other.*

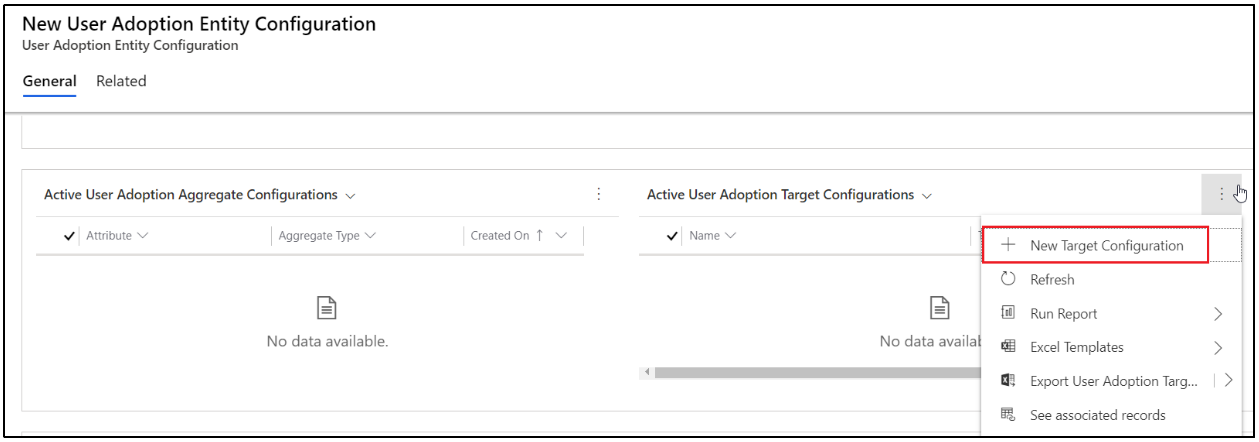
## Target Tracking Configuration

By **'Target Tracking'** one can allot and keep track of targets assigned to respective users in Dynamics 365 CRM. The targets can either be assigned against the count of the actions performed or against the aggregate value. Let's take the above example of **'Opportunity-win'** action.

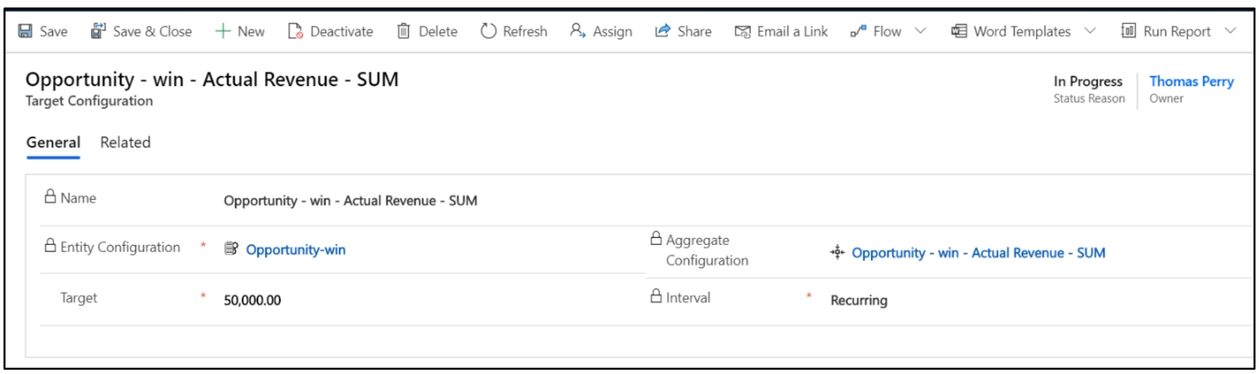
Follow the steps given below for **'Target Configurations'**.

**Target based on Aggregation Value**

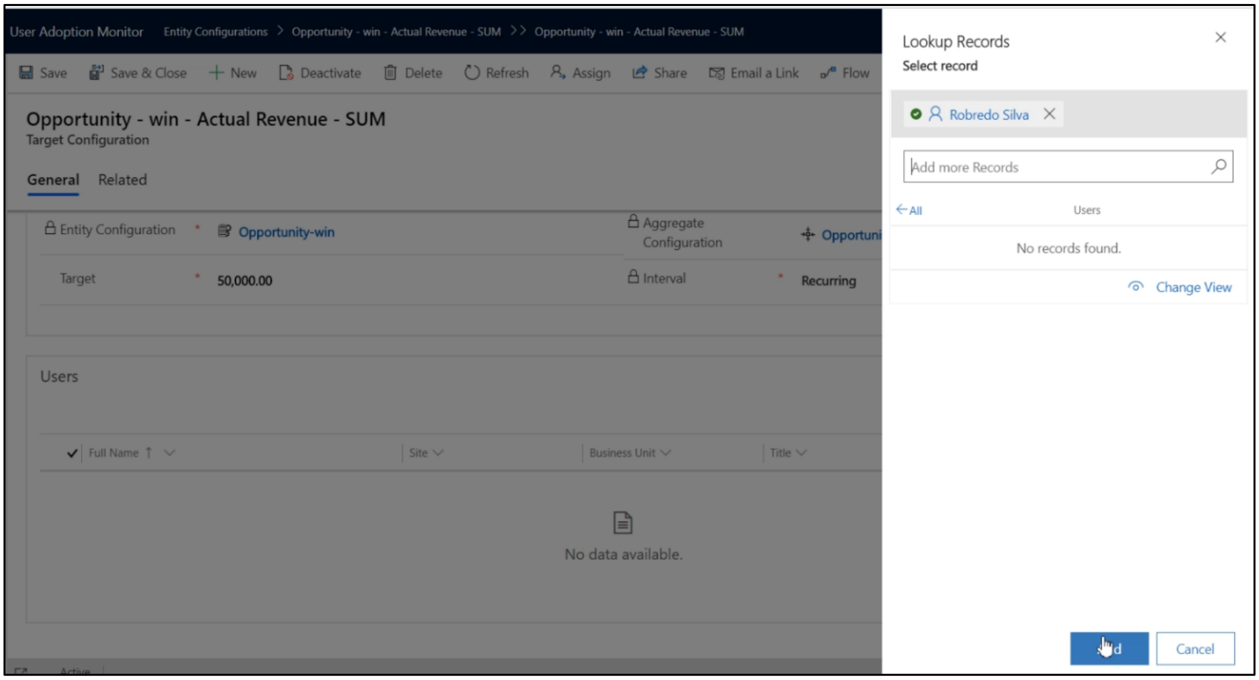
- As per the above example, create entity configuration for **'Opportunity-win'** → Configure 'Aggregate Tracking' → Go to 'Active User Adoption Target Configurations' → Click on 'New Target Configuration'.



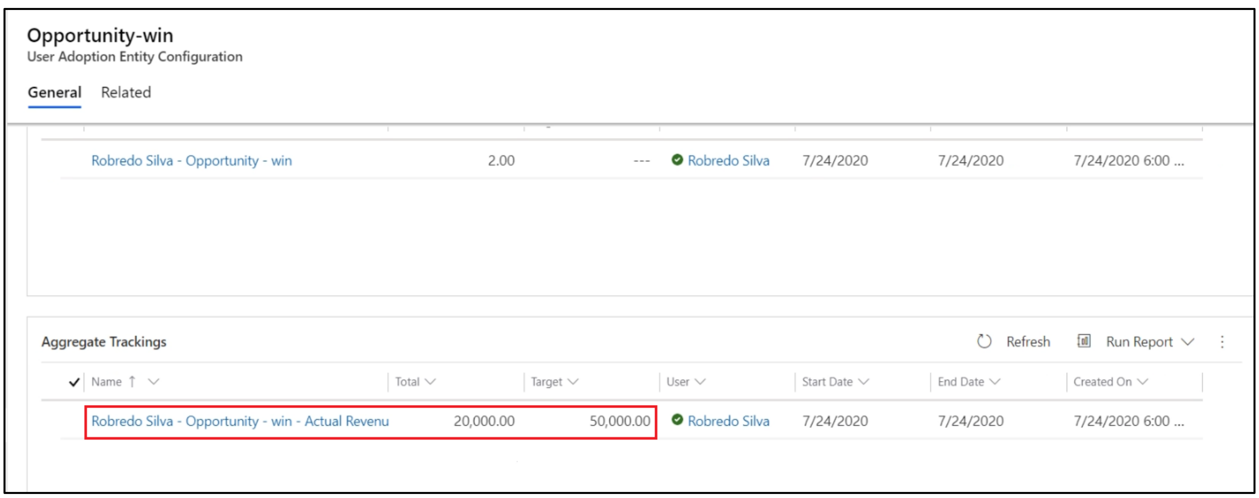

- Fill the following fields → Click on Save.
  a. **Aggregate Configuration:** Select an ‘Aggregate Configuration’ associated to the same Entity Configuration as that on the Target Configuration form.
  b. **Target:** Set a value.
  c. **Interval:** Select either **‘Recurring’** or **‘Fixed’**.




- Next, add the user for whom the target is set → Click on Save & Close. With this target for ‘Actual Revenue’ to be achieved has been set for the respective user.



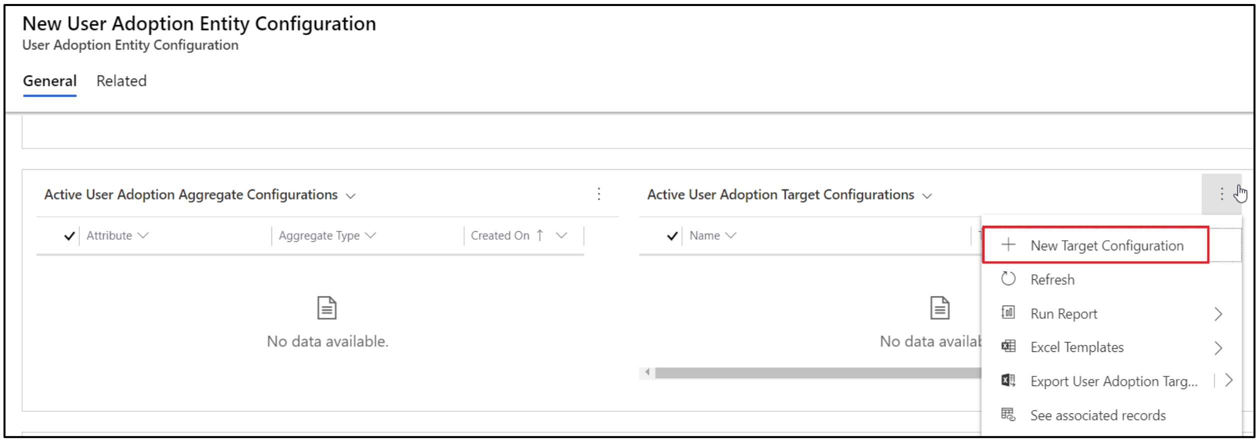
- Now, one can monitor the performance of the users by comparing the target set and the total target achieved by them over a given period of time.



## Target based on Count

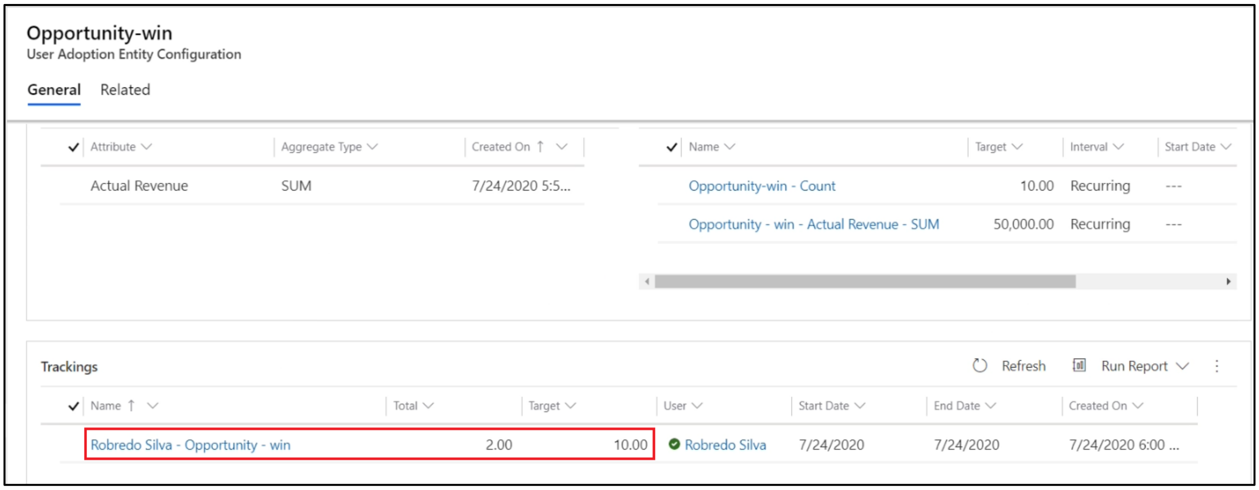
In the same way one can set target based on **count** for users. Taking basis of above example, follow the steps given below:

- Create entity configuration for 'Opportunity-win' → Configure 'Aggregate Tracking' → Go to 'Active User Adoption Target Configurations' → Click on 'New Target Configuration'.




- Fill the following fields → Click on Save.
    - **Aggregate Configuration:** Keep this field empty.
    - **Target:** Set a value.
    - **Interval:** Select either **'Recurring'** or **'Fixed'**.


- Next, add the user for whom the target is set → Click on Save & Close. With this the number of targets to be achieved for a given period has been set for the respective user.
- Now, one can monitor and compare the target set and the total target achieved by users for a given period of time.




**<u>Target defined for Fixed Interval</u>**

In the above two scenarios, we defined Targets with the Interval set as 'Recurring'. However, we do have another option i.e., to define the Target for a fixed period of time by setting the Interval as Fixed.

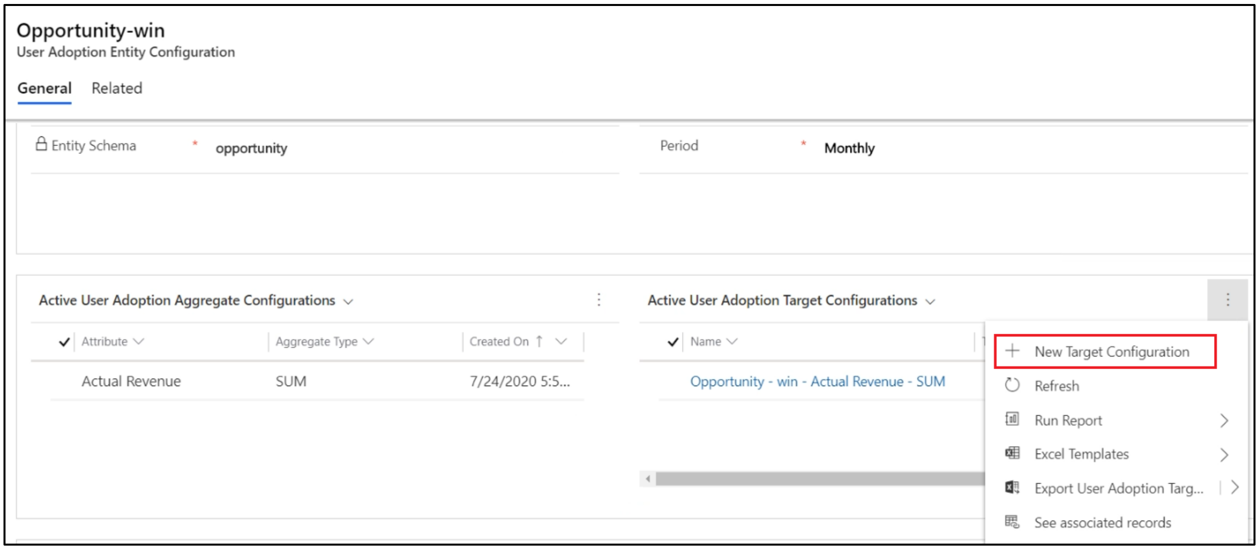
On setting the interval of the Target Configuration as fixed, two datetime fields i.e. the **Start Date** and **End Date** shows up using which one can define the period for which they want to set the target against tracking.

**Note:** *The Start Date and End Date must be within the period of the associated Entity Configuration. For example, if the Period of the associated Entity Configuration is.*

- ***Daily**: The Start and End date must be the same date, i.e. 8th August 2020 – 8th August 2020.*
- ***Weekly**: The Start and End date must be within the same week i.e. Sunday to Saturday.*
- ***Monthly**: The Start and End date must be within the same month, i.e. 1st August 2020 – 31st August 2020.*

Similar steps needed to be followed for the creation of the Target configuration for fixed interval:

- Create the respective entity configuration record if not already created. Then open that record and from the sub-grid for Target Configuration create a new Target Configuration.

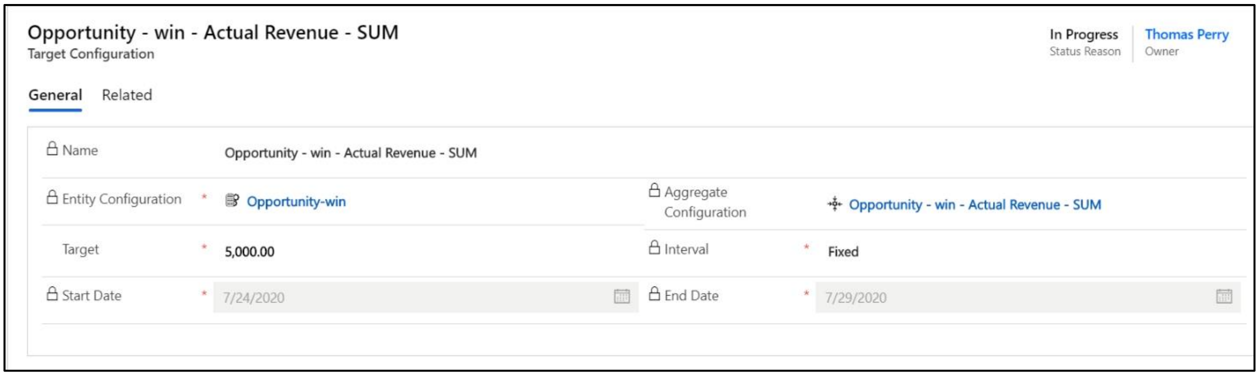



- Fill the following fields → Click on Save.
    - **Aggregate Configuration:** You may or may not select the aggregate configuration associated to the entity configuration.
    - **Target:** Set a value
    - **Interval:** Select '**Fixed**'. On selecting the Interval as fixed, the below two Datetime fields show up to define the period.
        - **Start Date:** Set the date from when the tracking will be captured against this defined target for respective users.

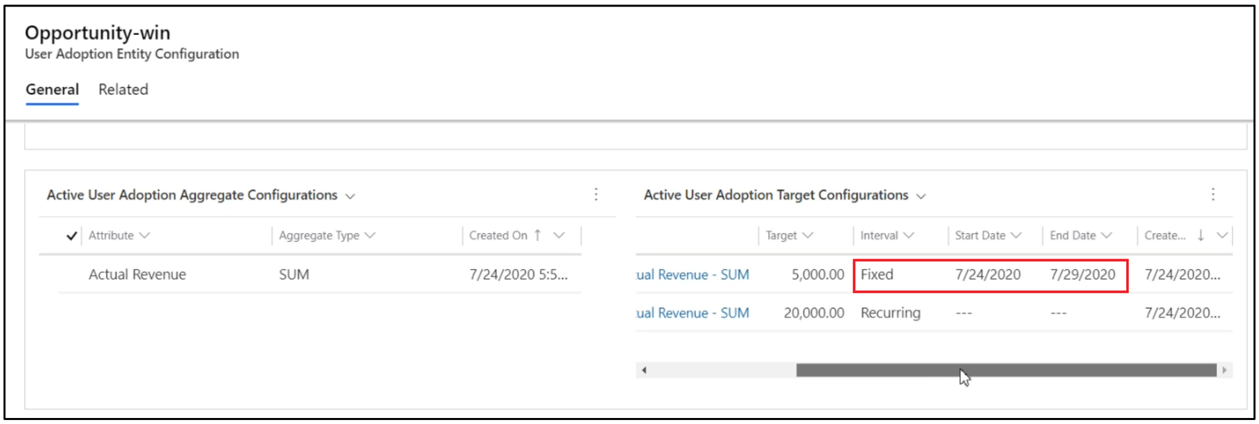
> **Note:** *Once the start date is entered, the status reason of the target configuration record gets updated to **'In Progress'**. And only the **In Progress** target configurations are considered for target tracking.*

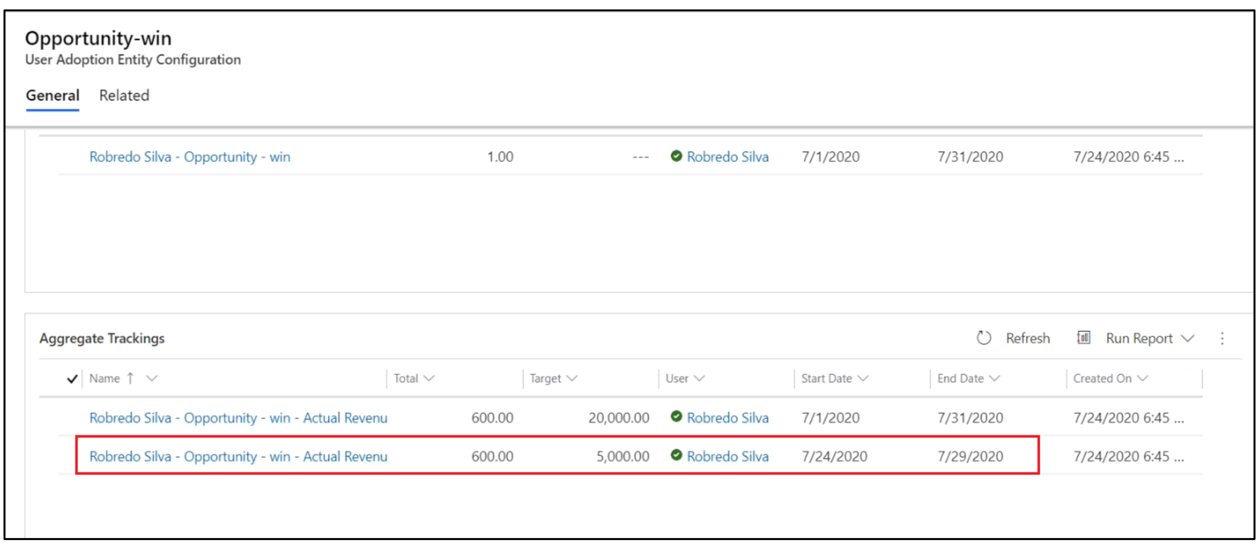
- **End Date:** Set the date till when the target tracking shall take place.

> **Note:** *On the date next to the end date the status reason of the target configuration shall get updated to **Complete** and once the status reason gets updated to complete, no further target tracking shall happen for this specific target configuration.*




- Next, add the user for whom the target is set → Click on Save & Close.
- With this, one can monitor and compare the target set and the total target achieved by users for a given fixed period of time.



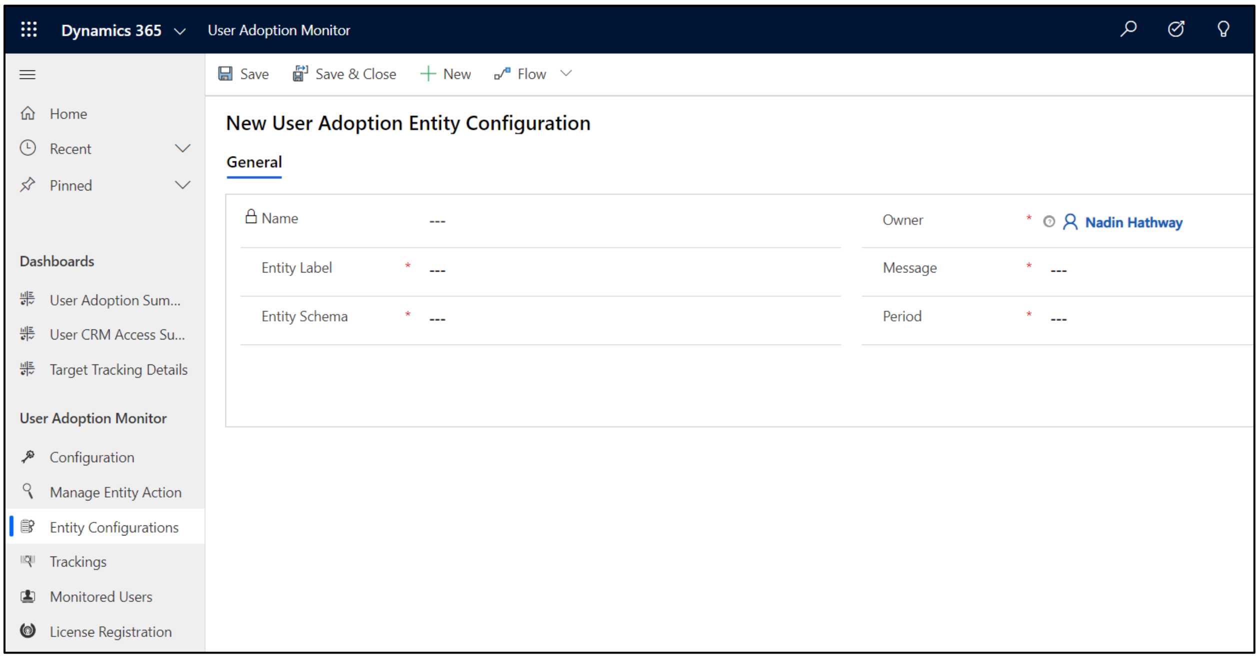



## Data Completeness Configuration

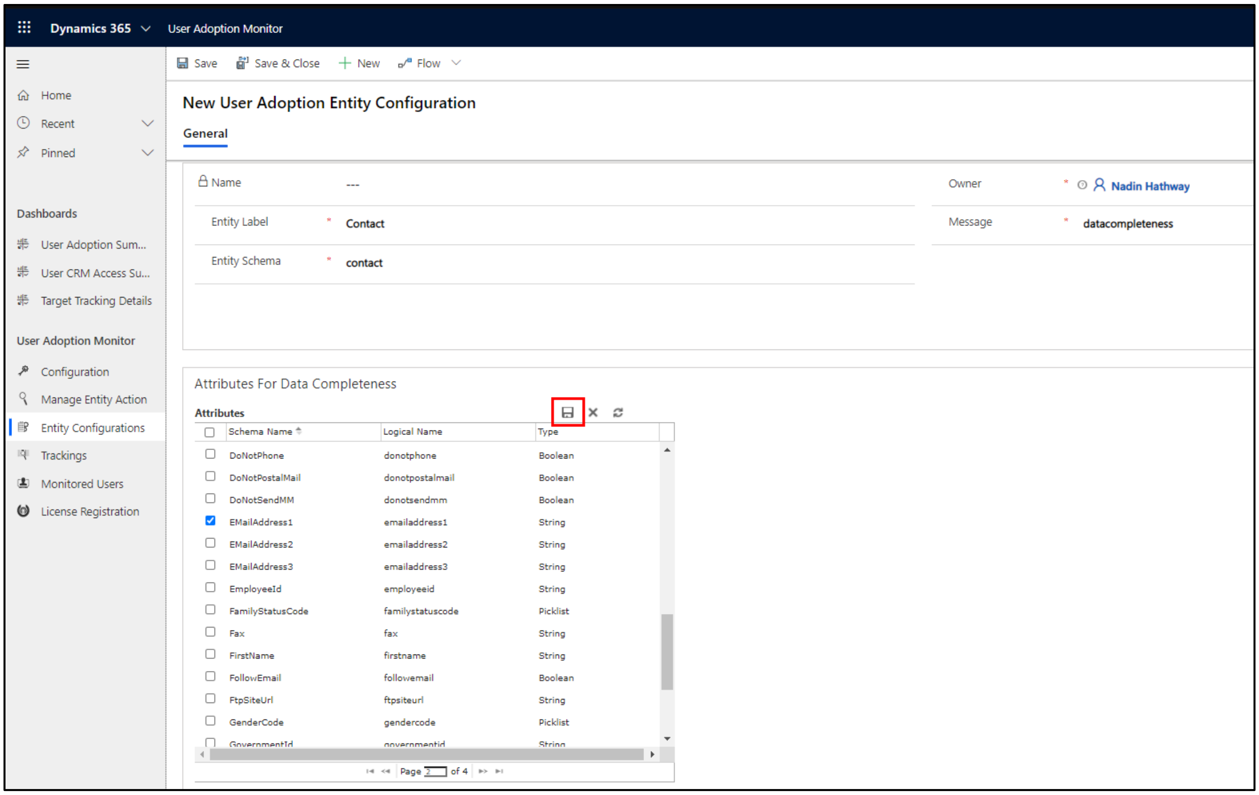
By **'Data Completeness'** one can ensure that the necessary data has been captured for an entity record in Dynamics 365 CRM as per the business requirement. Here, one shall choose the field(s) that are essential for an organization to be captured and ensure that data is within CRM. If it is not captured, then the status of that record will be shown as **'Incomplete'**.

Follow the steps given below to configure **'Data Completeness'**:

- Navigate to Entity Configuration → Click on New.



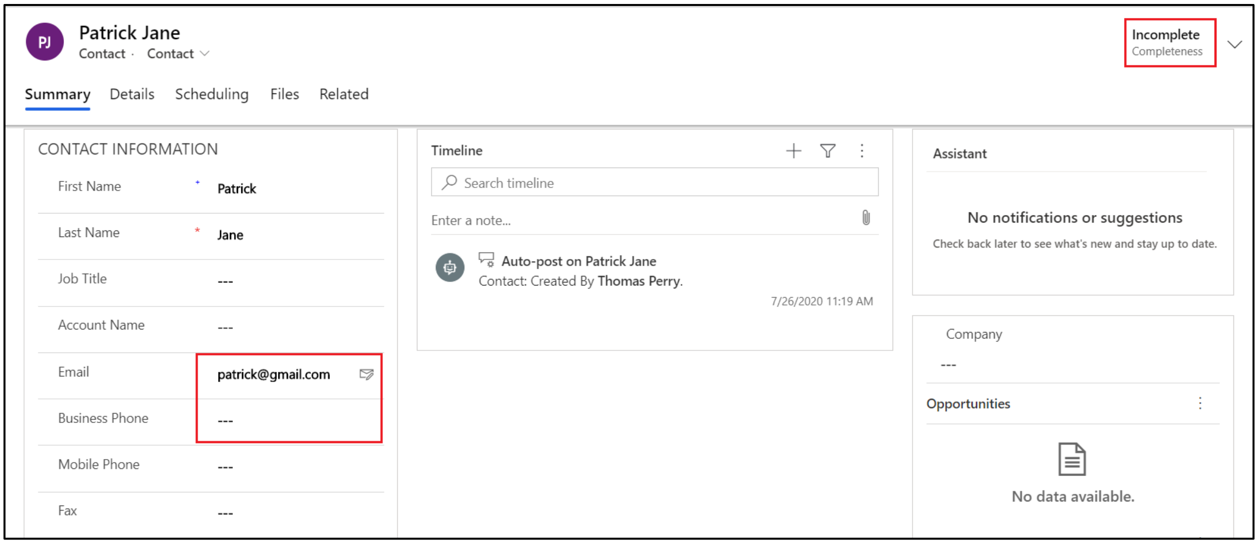

- Fill the following fields.
  - **Entity Label:** Set the display name of the entity for which you want to configure datacompleteness. For example: Contact.
  - **Entity Schema:** Set the logical name of the entity for which you want to configure datacompleteness. For example: contact.
  - **Message:** datacompleteness (Once this field is set the 'Period' field will hide and the Attribute grid shows up).
  - Select the attributes needed for completeness of data from the Attributes grid.
- Click on Save button over the Attribute grid as shown in the screenshot below:




- Once this entity configuration is saved, an Optionset type of field with the below details gets created for the entity for which datacompleteness has been configured.
  **Display Name:** Completeness
  **Logical Name:** ikl_completeness
  **Data Type:** Optionset
  **Options:** Complete & Incomplete
- Now every time the record of the entity (for which datacompleteness has been configured) gets created or updated, the process shall check the existence of value in the fields which have been selected for completeness. If the value is present in all those fields then the value of the custom option set field i.e. the **ikl_completeness** gets set as **Complete** or else it will be set as **Incomplete**.

**Note:** *Whether to add this custom field on the form or view is totally up to the administrators of the respective organizations, and will have to be done manually. Also, it is imperative to remove this field from the forms or views before deleting the datacompleteness entity configuration.*

- The below screenshots give an idea on the Completeness fields when placed on the header of the form.



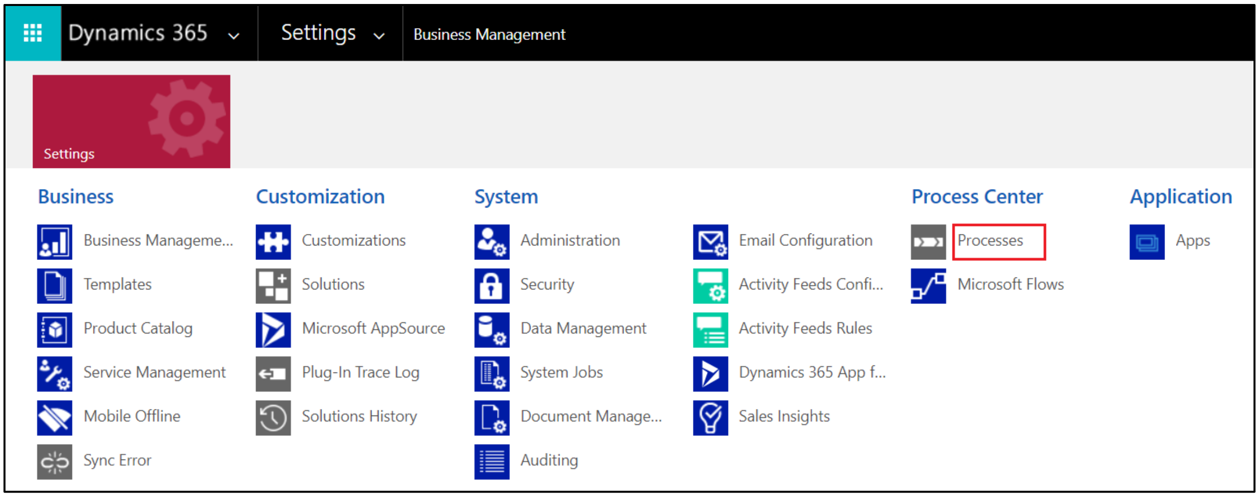


## Data Completeness for History Records

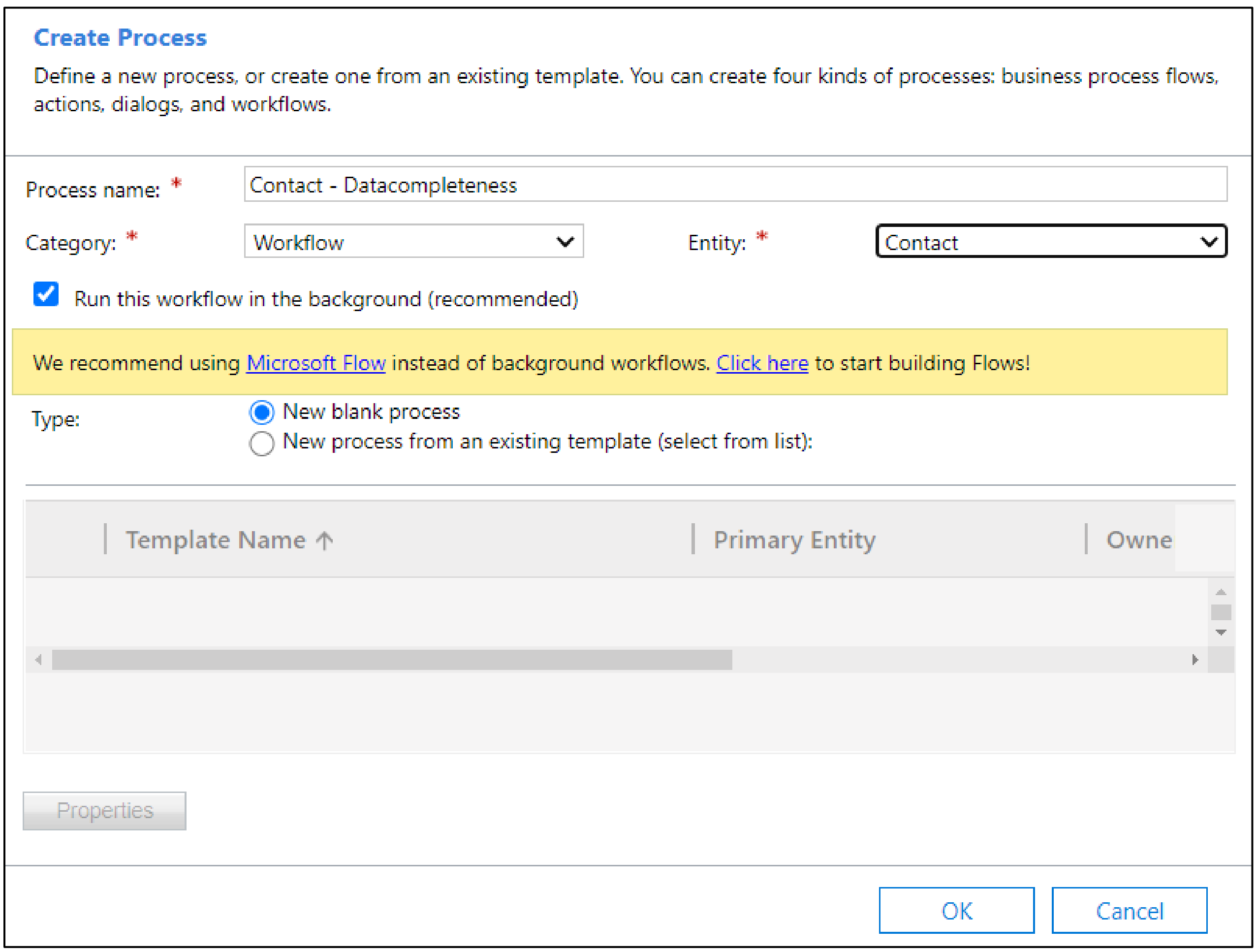
The records created after the configuration of Data Completeness entity can be tracked and monitored to ensure that all the defined fields in the records are duly filled. But this is not applicable for the already existing records in CRM. In order to check the completeness of the history records one has to create a separate on-demand workflow and run the same for these history records.

Follow the steps given below to create workflow to monitor the completeness of History records:

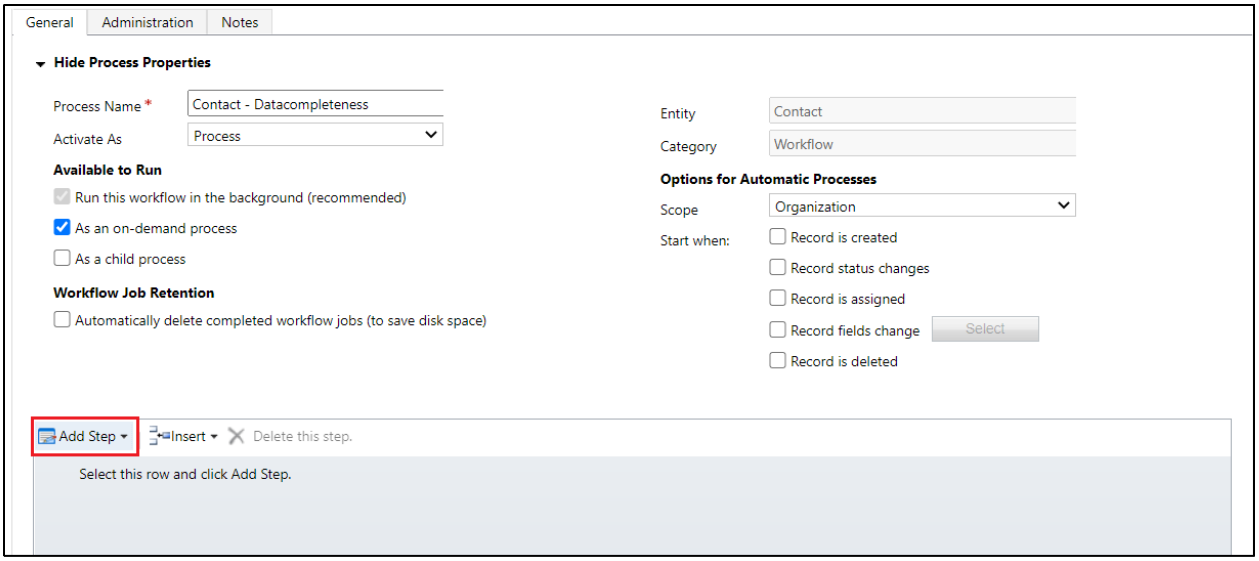
- Navigate to Advanced Settings → Settings→ Processes.



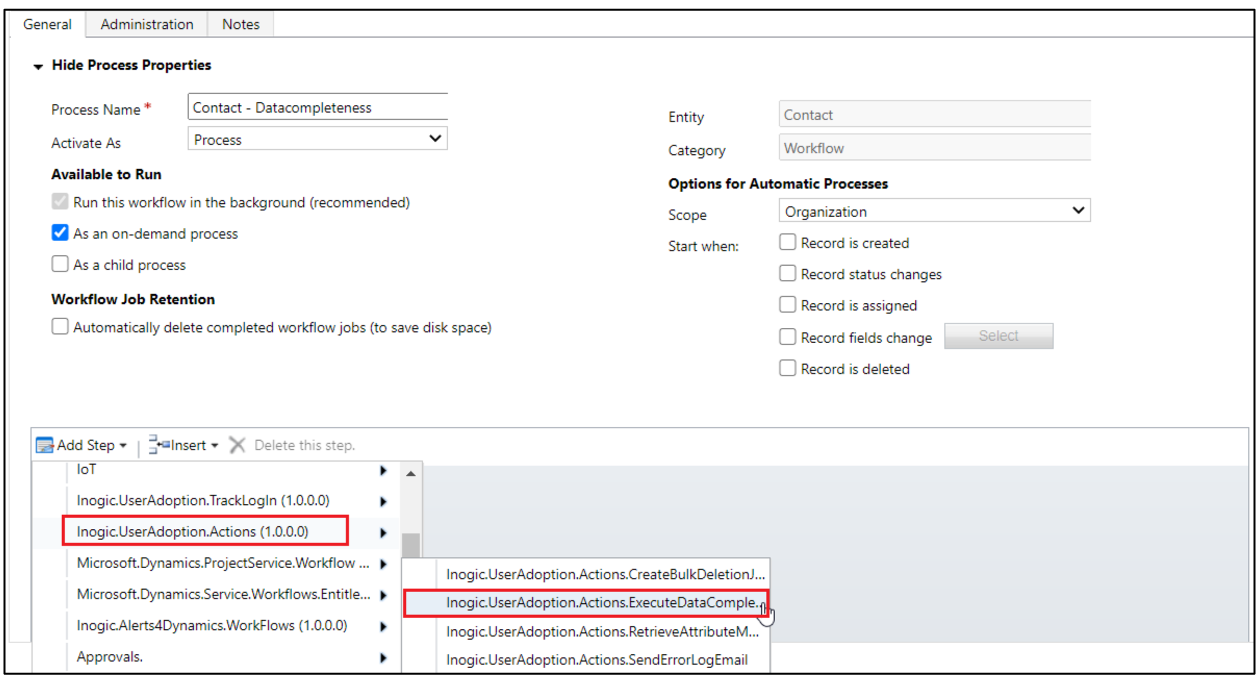

- Select New → Set the following fields → Click on OK.
    - **Category:** Workflow.
    - **Entity:** Select the entity for which the datacompleteness has been configured and the completeness of the history records that needs to be monitored.



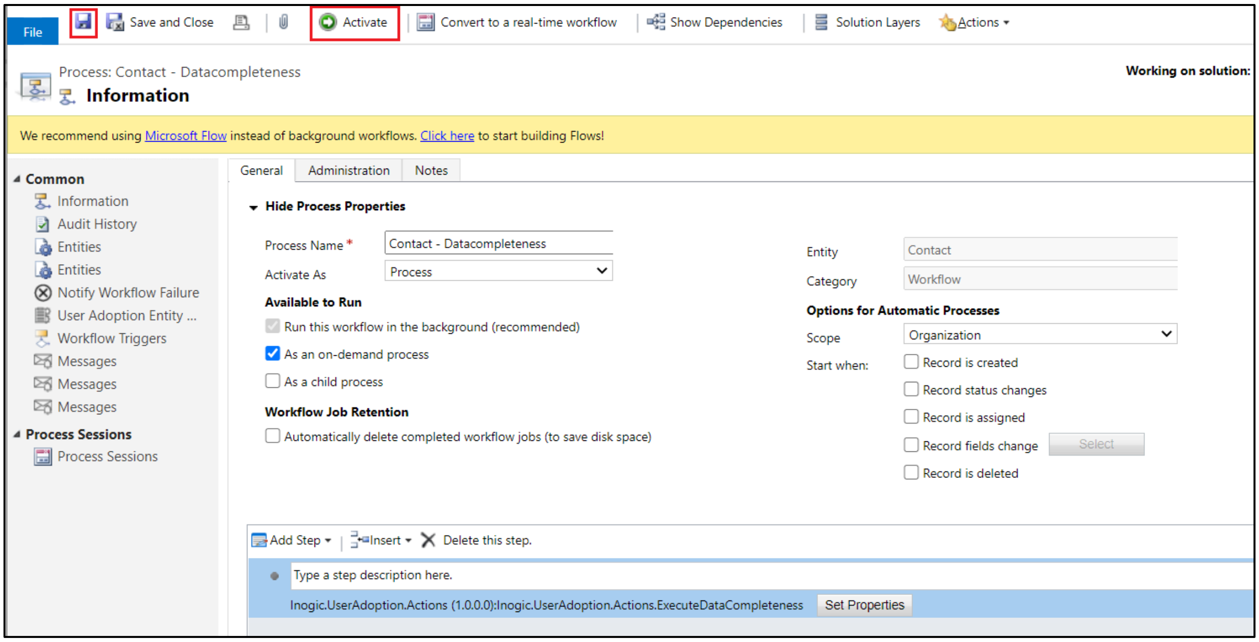
- Select **'As an on demand process'** → Select scope as **Organization** → Click on **'Add Step'** to call User Adoption Monitor assembly.



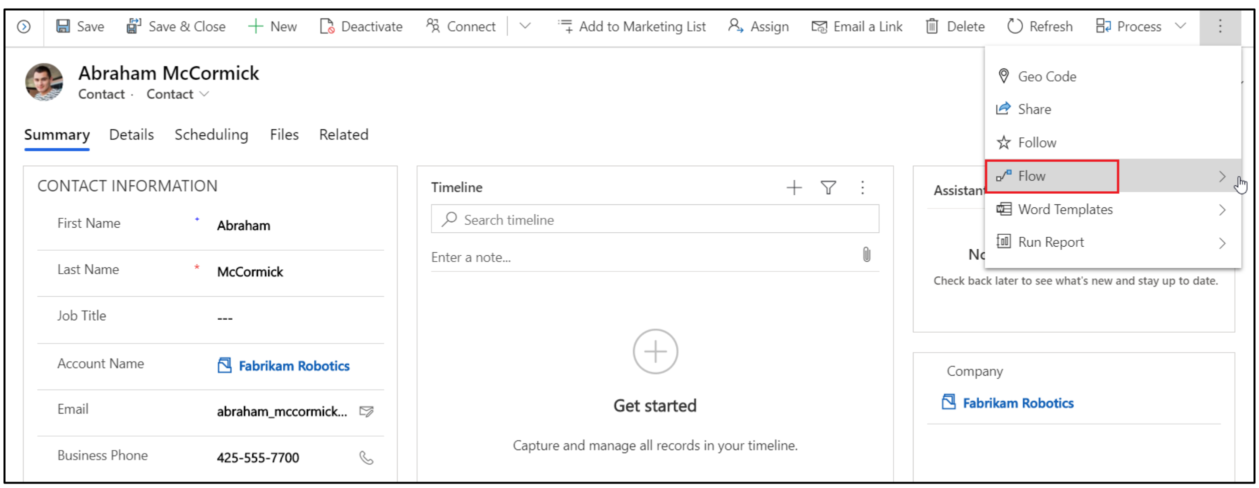

- Select **'Inogic.User.Adoption.Actions (1.0.0.0.)'** → Select **'Inogic.User.Adoption.Actions.Execute.DataCompleteness**'.

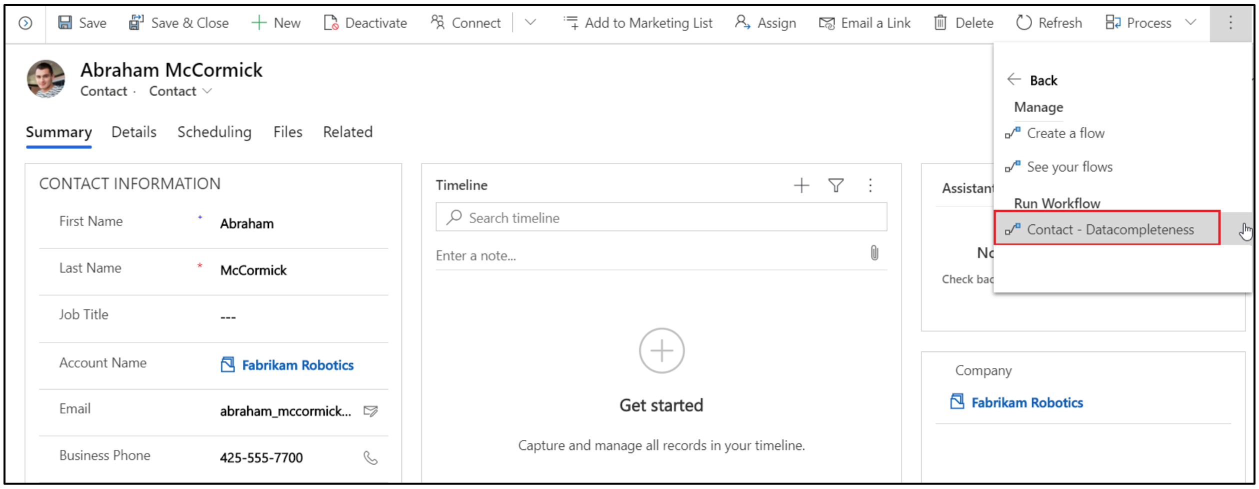



- Click on Save and then activate the process.

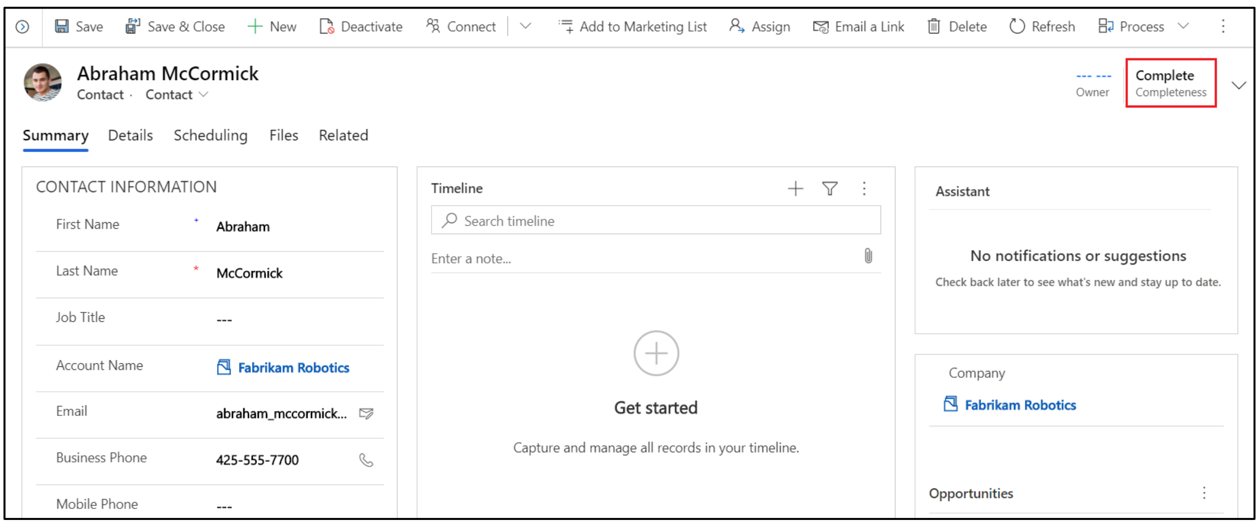



- Navigate to any of the records of the configured entity → Go to Flow → Click on newly created workflow.





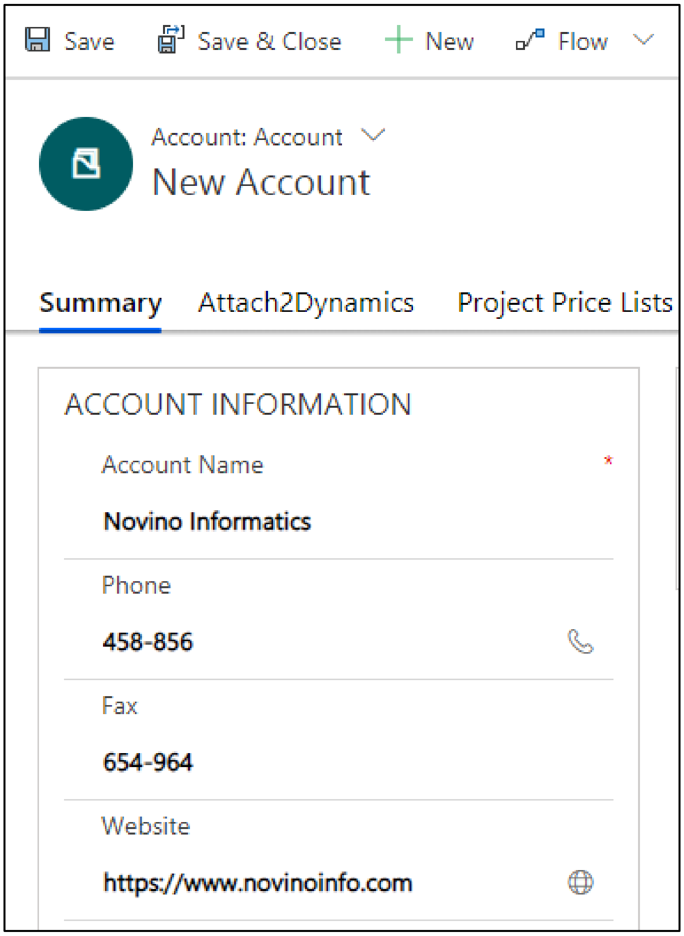

- Once the workflow has run the value of the Completeness field shall get set.



# Verify Tracking

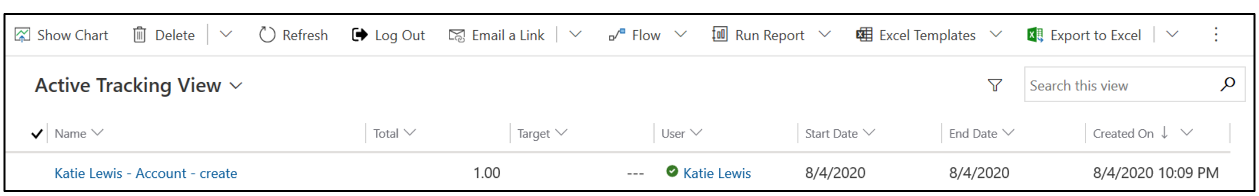
Let us go ahead and verify our entity configurations.

## Add a new account

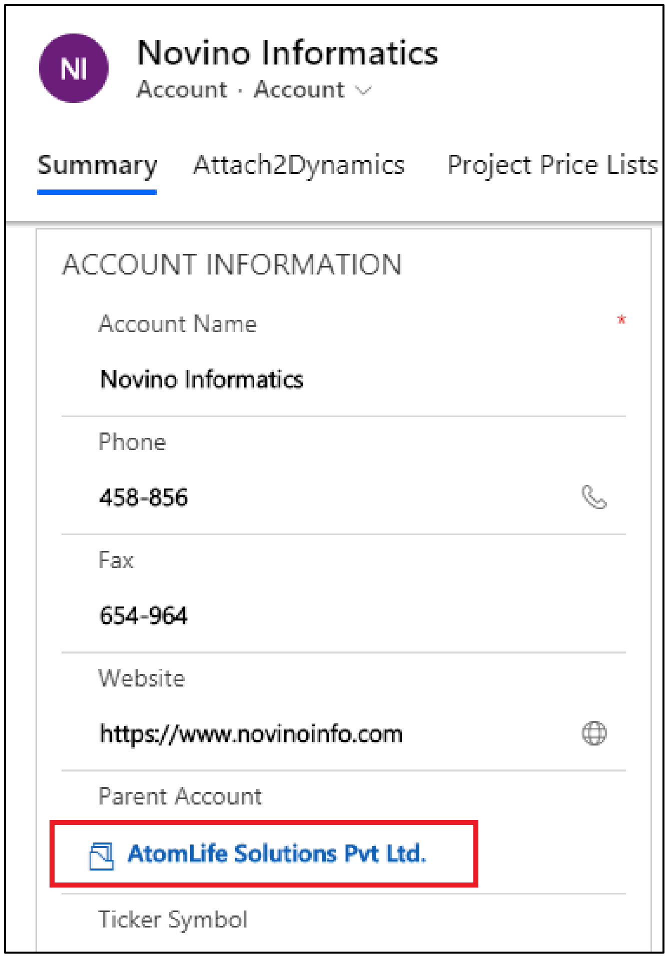



Upon save, navigate to the Tracking area of User Adoption to see the updates reflected there.

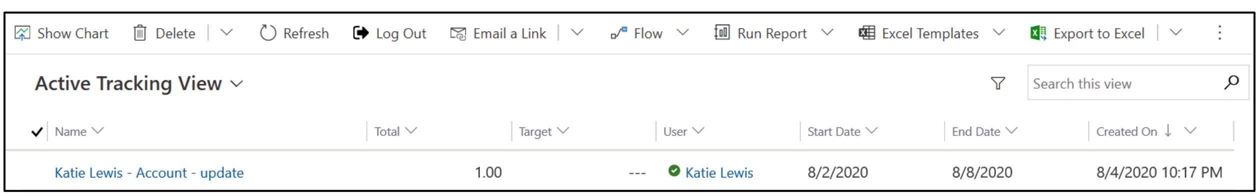
It would create a new tracking record per entity/message/period combination. Since we had selected to monitor Account creates daily, you will find one record each day per user for tracking creates by that user for that day.



## Update an account




It would create a new tracking record per entity/message/period combination. Since we had selected to monitor Account updates weekly, you will find one record per week per user for tracking the updates by that user for that week.

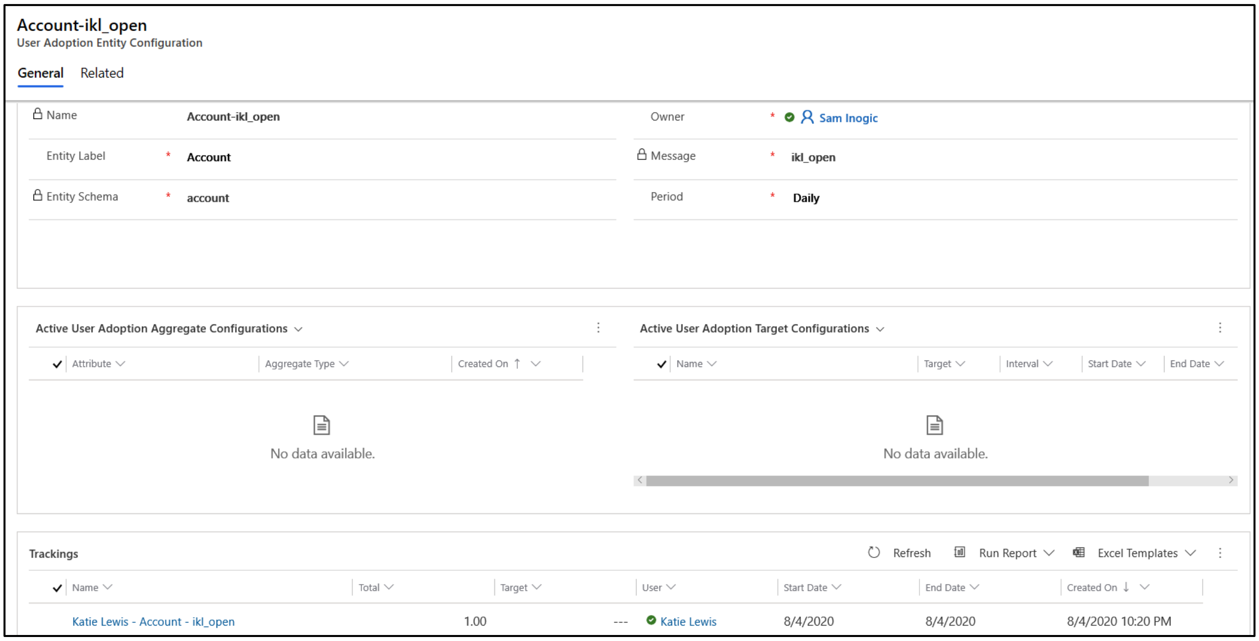


# Track Opening of the Records

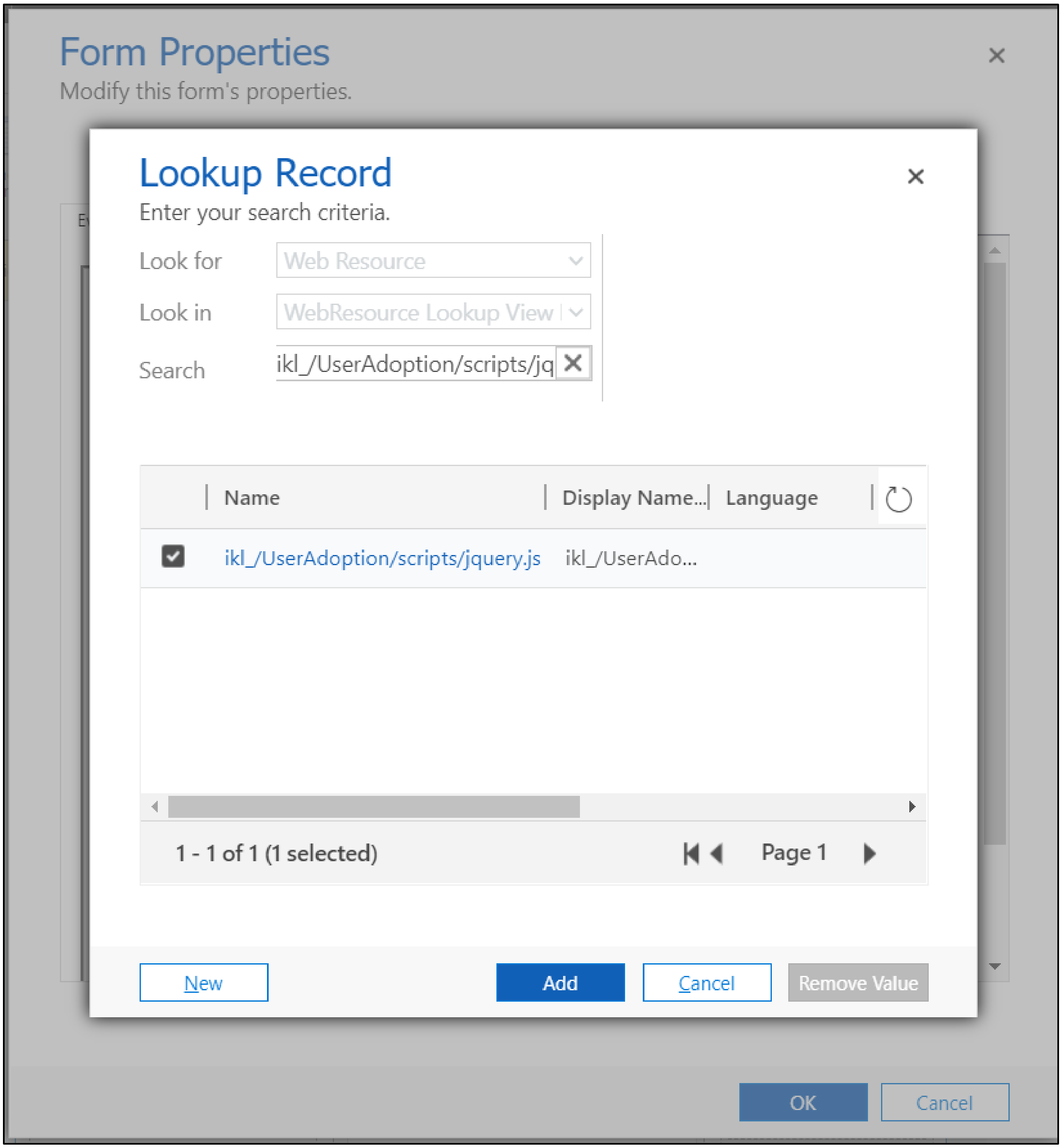
You can also track the touch of the records by tracking the opening of the records.

To track the opening of the records, certain customization is required. For example, consider a scenario where you want to track the touch/opening of the account records.

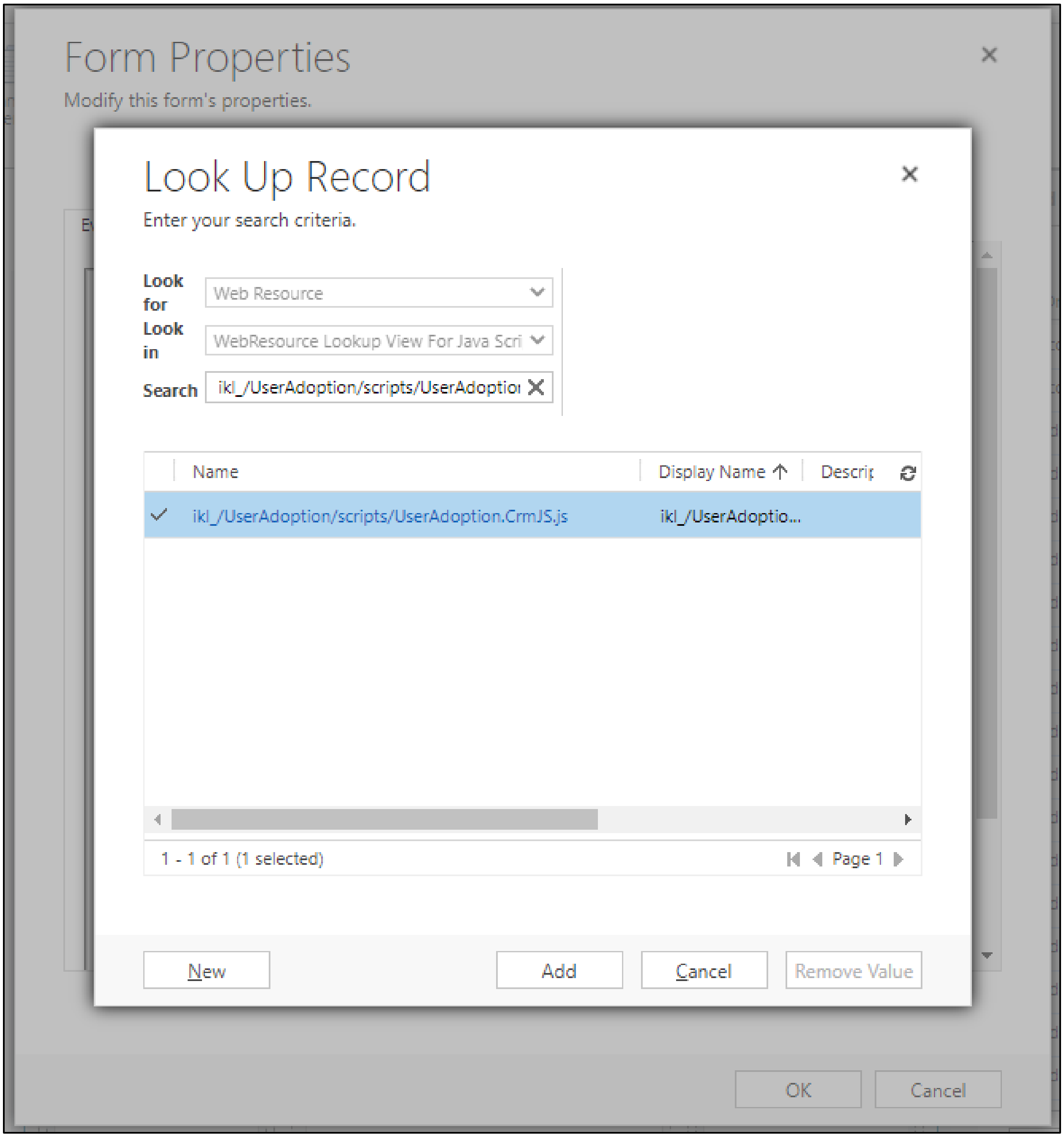
- Create a record of the User Adoption Entity Configuration Entity with the following details;
  - Entity Label: **Account (entity on which you need track open/read)**
  - Entity Schema: **account (schema name of the entity)**
  - Message: **ikl_open**
  - Period: **Daily (period you want to track)**



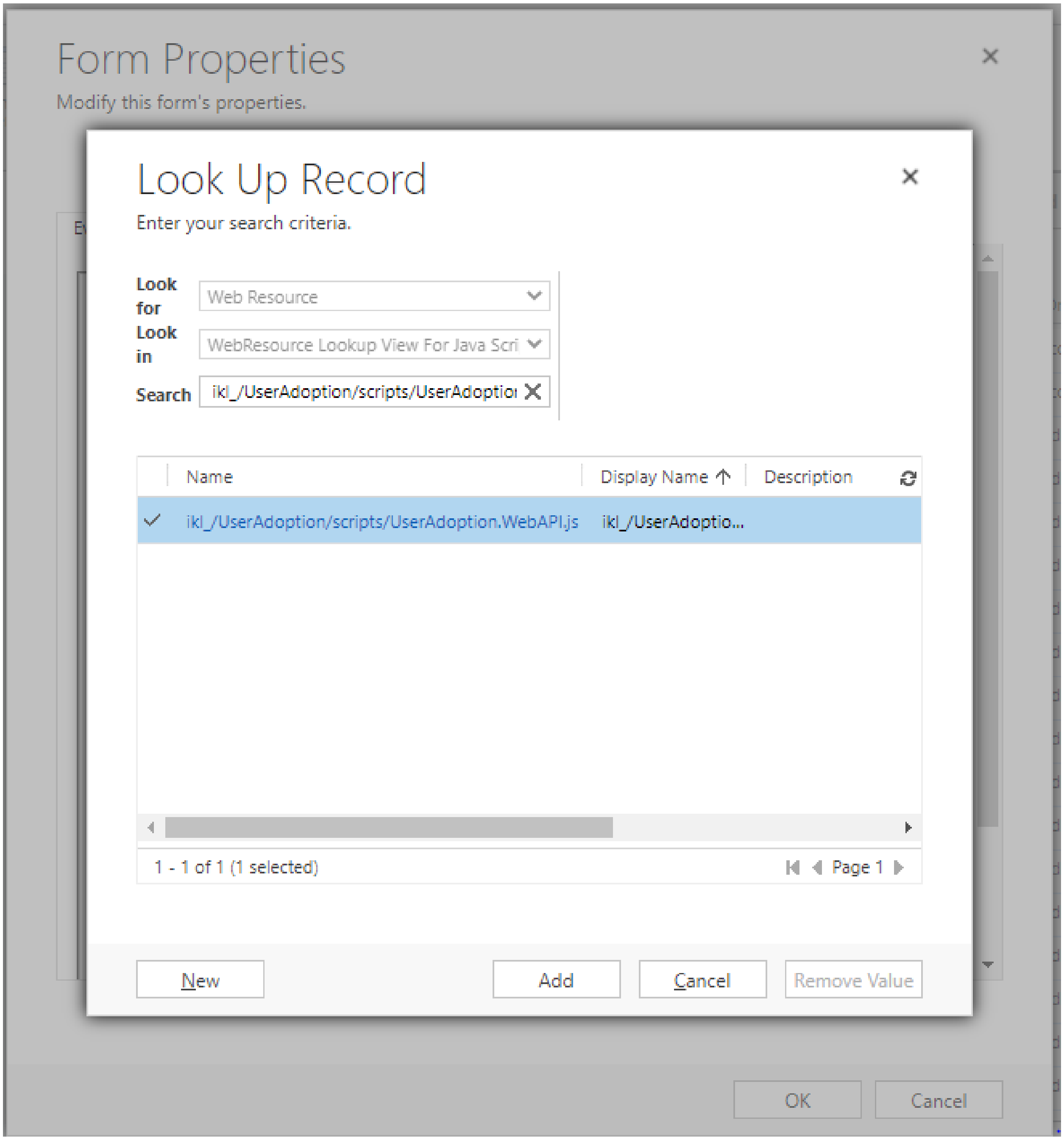

- Add the following User Adoption Monitor JavaScript libraries which are shipped along with the product to the 'Account' form in the same order as mentioned below;
  - **ikl_/UserAdoption/scripts/jquery.js**



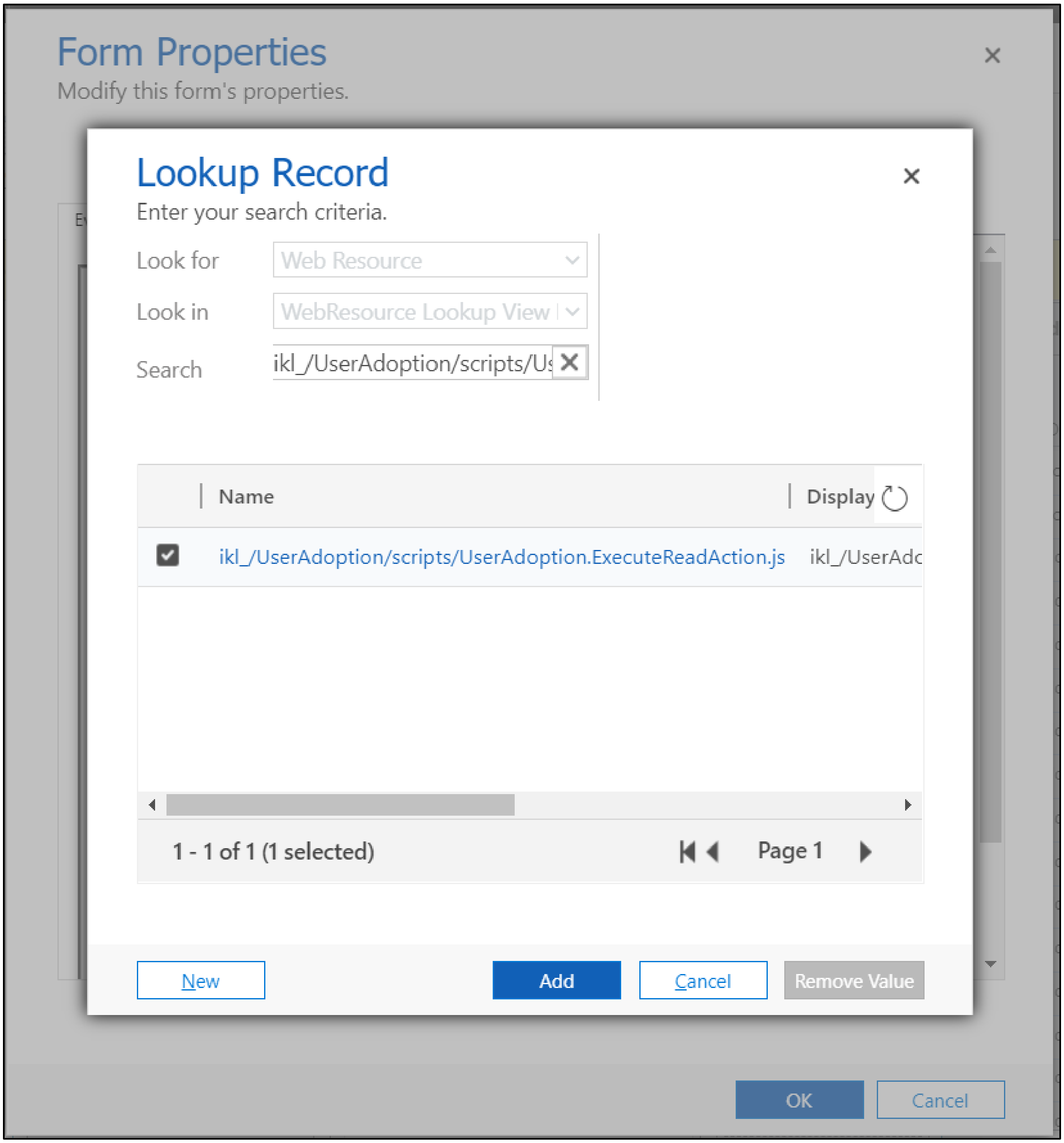

- **ikl_/UserAdoption/scripts/UserAdoption.CrmJS.js**

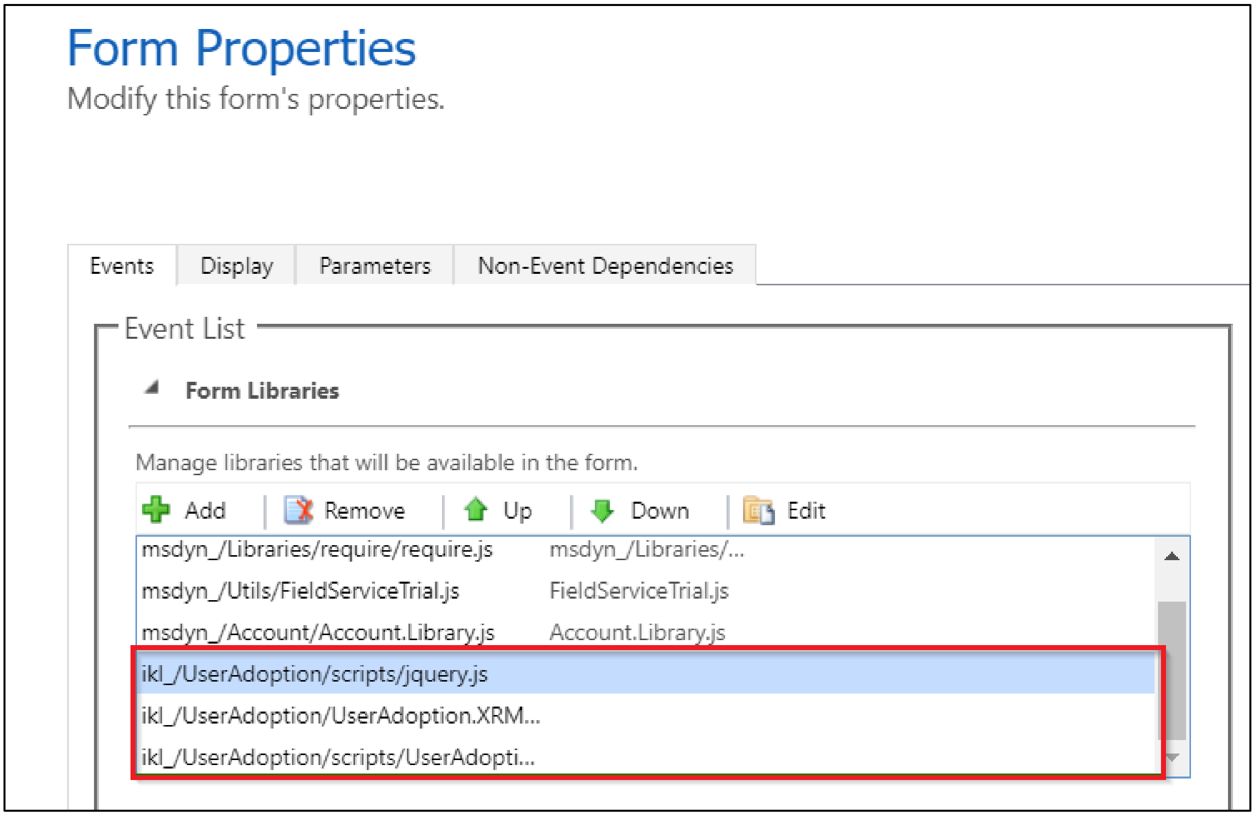



- **ikl_/UserAdoption/scripts/UserAdoption.WebAPI.js**

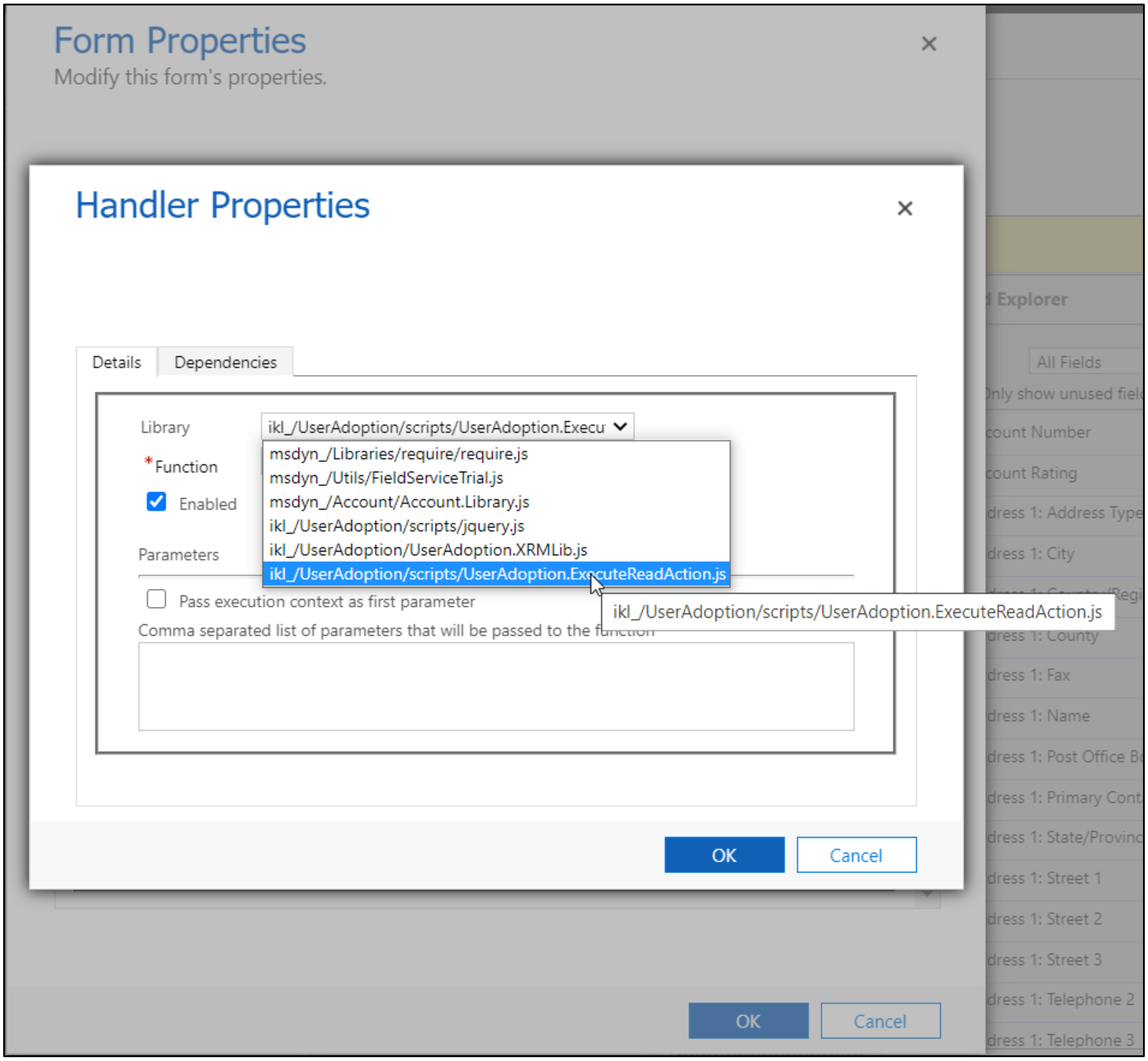


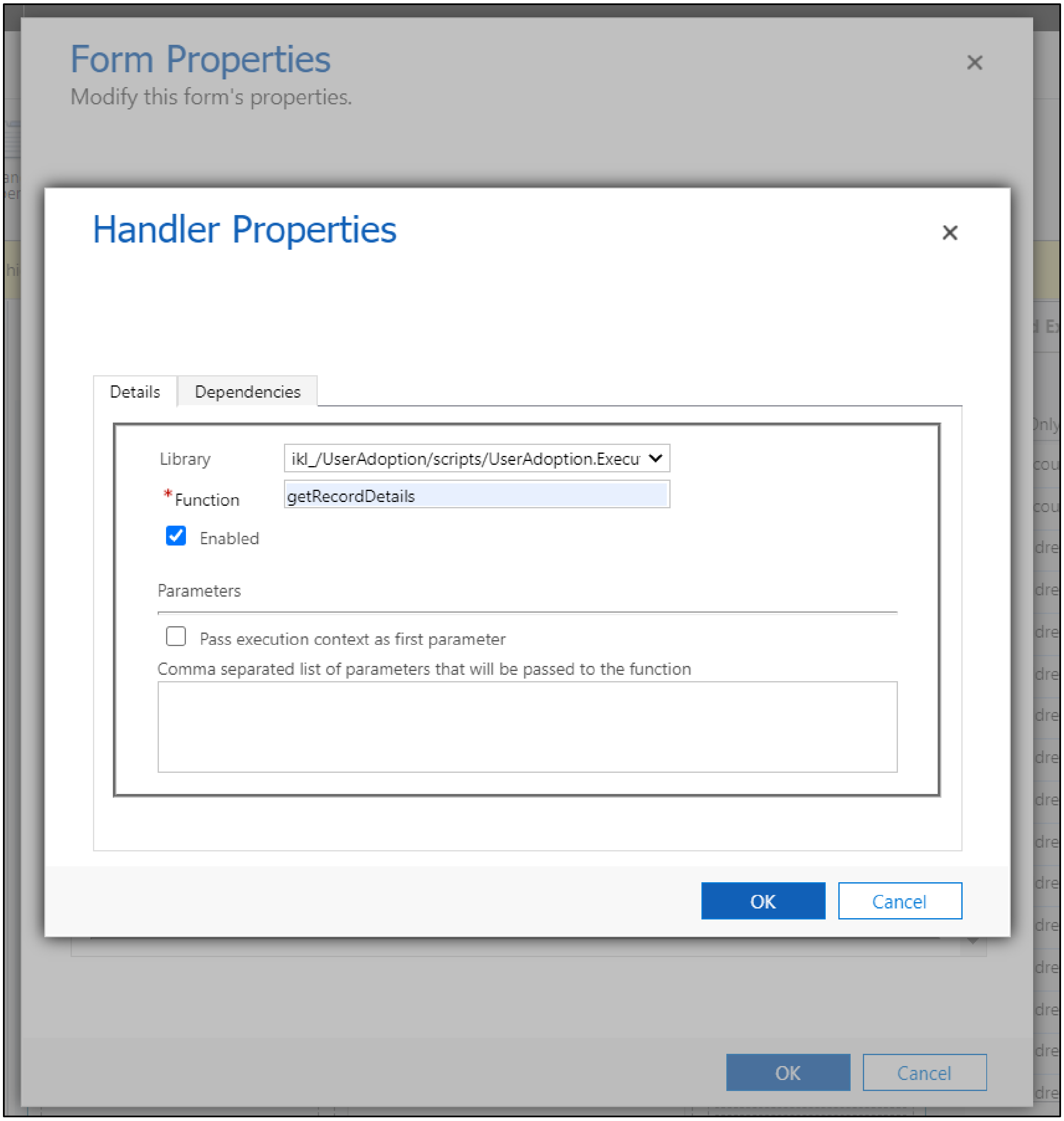

➢ **ikl_/UserAdoption/scripts/UserAdoption.ExecuteReadAction.js**

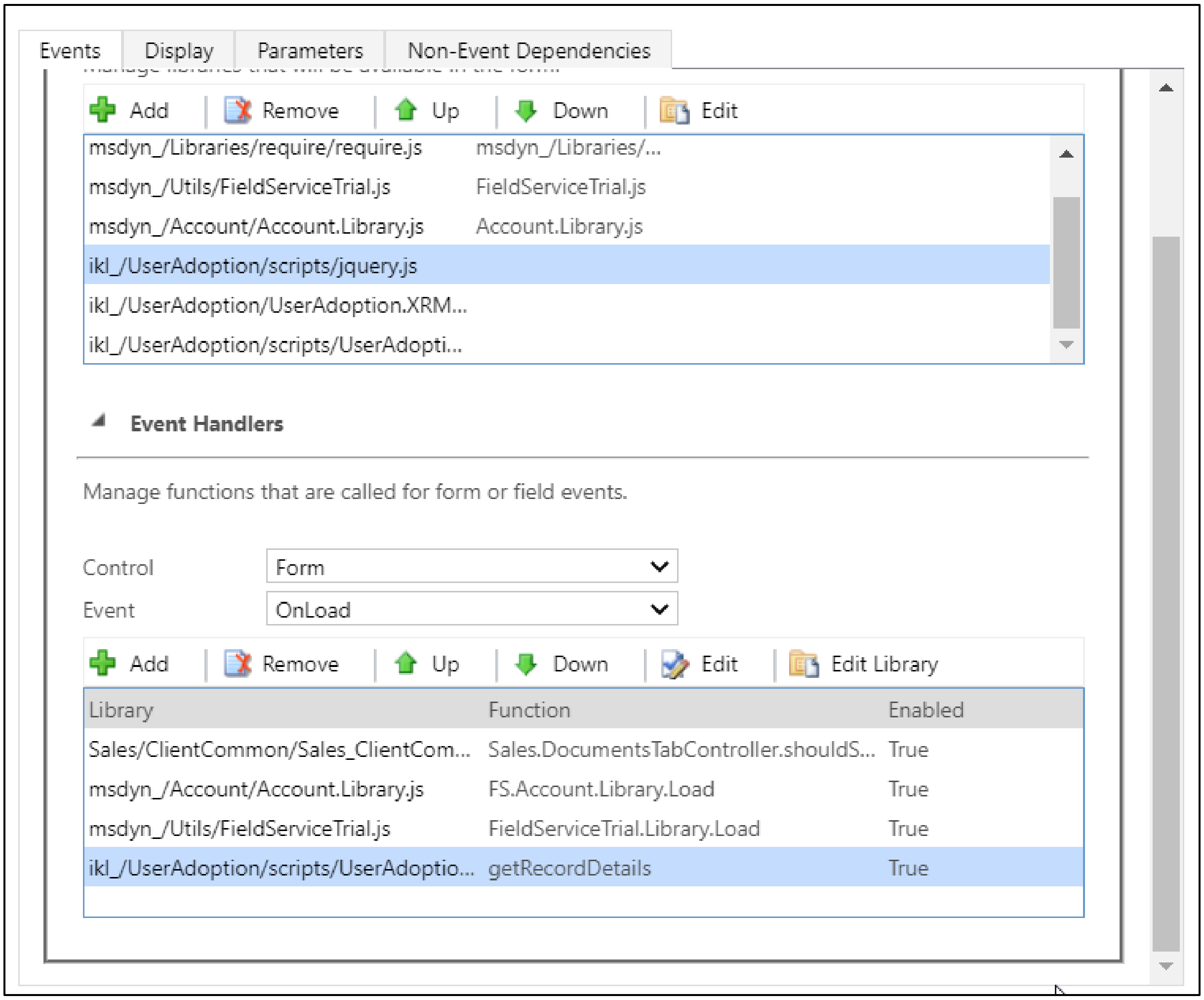

Form Properties
Modify this form's properties.
Lookup Record
Enter your search criteria.
Look for
Web Resource
Look in
WebResource Lookup View
Search
ikl_/UserAdoption/scripts/U
Name
Display
ikl_/UserAdoption/scripts/UserAdoption.ExecuteReadAction.js
ikl_/UserAdc
1 - 1 of 1 (1 selected)
Page 1
New
Add
Cancel
Remove Value
OK
Cancel




- Then finally call the *'getRecordDetails'* function on the Form OnLoad event as shown in the below screenshot from the Java Script Library *ikl_/UserAdoption/scripts/UserAdoption.ExecuteReadAction.js* (which has already been included in the form) onload of the form and then save and publish the customizations.


Form Properties
Modify this form's properties.
Handler Properties
Details
Dependencies
Library
ikl_/UserAdoption/scripts/UserAdoption.Execu
msdyn_/Libraries/require/require.js
msdyn_/Utils/FieldServiceTrial.js
msdyn_/Account/Account.Library.js
ikl_/UserAdoption/scripts/jquery.js
ikl_/UserAdoption/UserAdoption.XRMLib.js
ikl_/UserAdoption/scripts/UserAdoption.ExecuteReadAction.js
*Function
Enabled
Parameters
Pass execution context as first parameter
Comma separated list of parameters that will be passed to the function
ikl_/UserAdoption/scripts/UserAdoption.ExecuteReadAction.js
OK
Cancel
OK
Cancel


Form Properties
Modify this form's properties.
Handler Properties
Details
Dependencies
Library
ikl_/UserAdoption/scripts/UserAdoption.Execu
*Function
getRecordDetails
Enabled
Parameters
Pass execution context as first parameter
Comma separated list of parameters that will be passed to the function
OK
Cancel
OK
Cancel

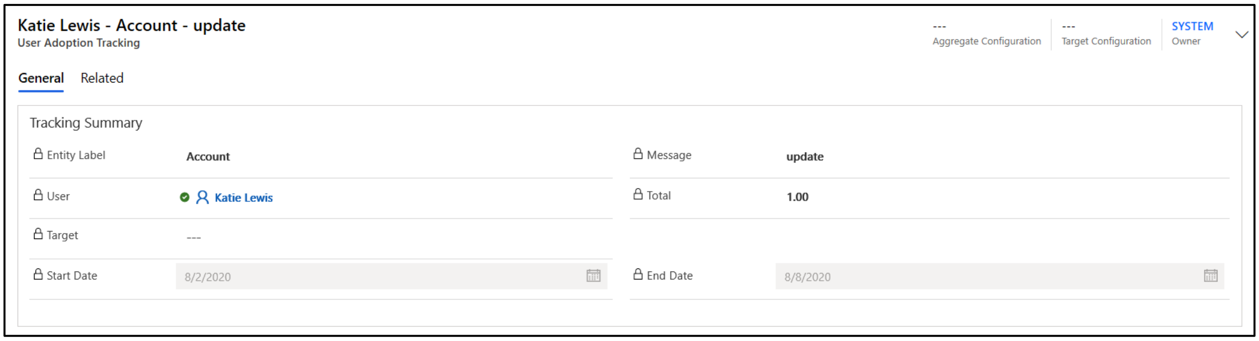



***Note:***

- *You need to make the above mentioned changes on each of the form being used in case you have multiple forms configured for role-based access.*
- *To make the above mentioned changes one need to have the System Administrator privilege.*

## Reviewing Tracking Results

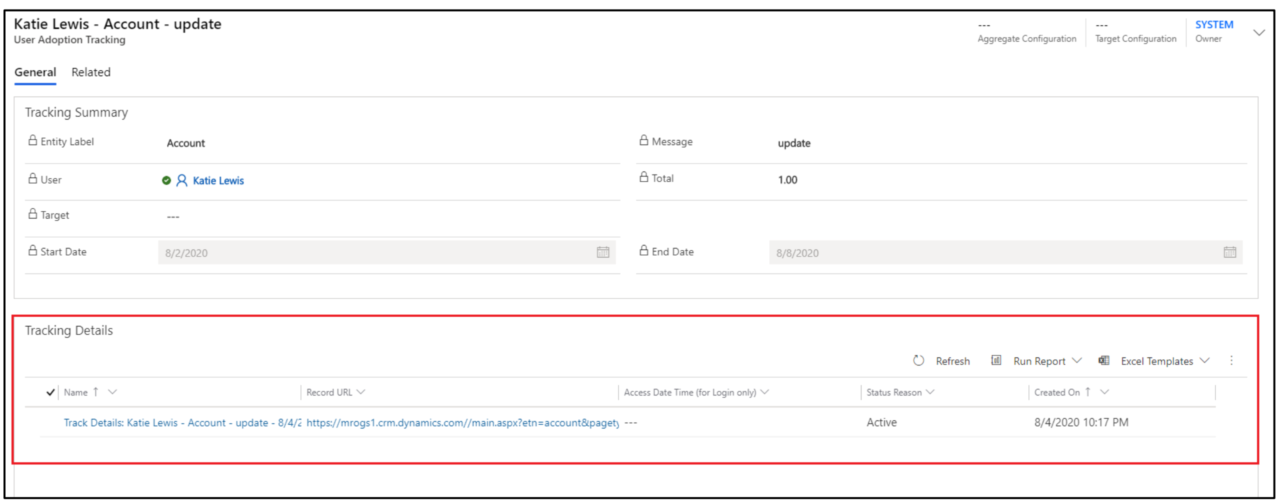
This is what a tracking record looks like;



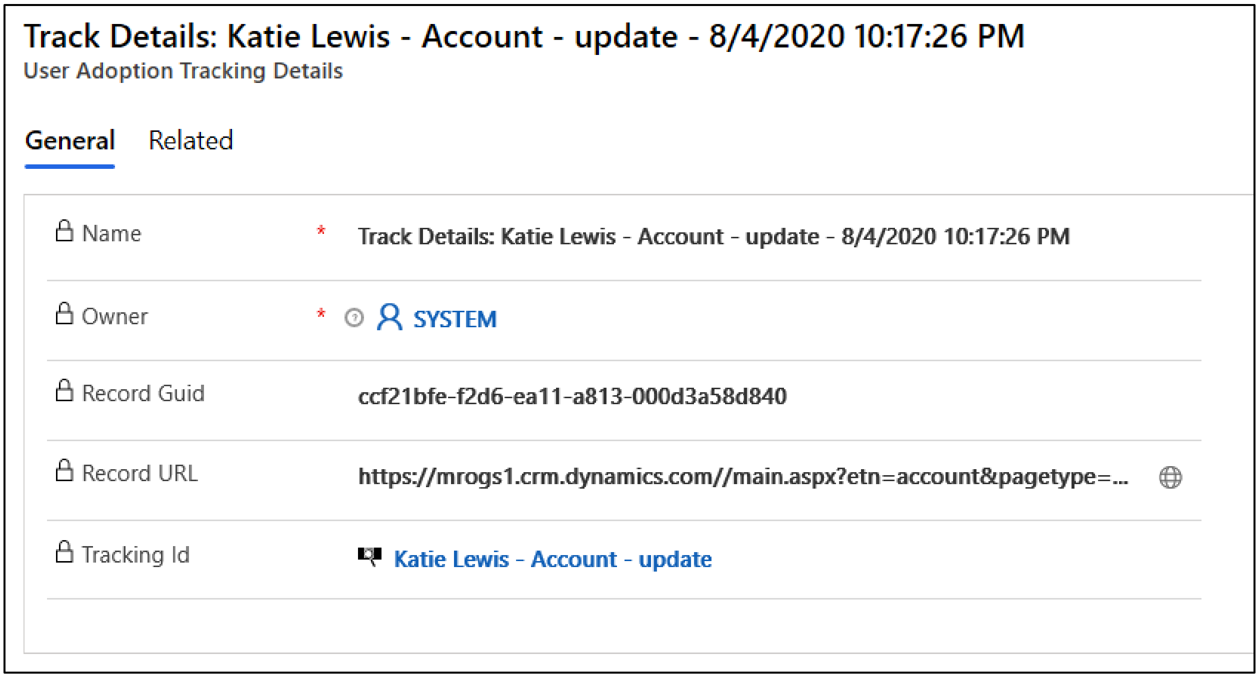

The tracking record will report on the following details of the action;

- **Entity Label**: Name of the entity on which action was performed.
- **Start/End Date**: This is the period for which the tracking was recorded on this record.
- **Message**: The operation being tracked.
- **Total**: The total count of action being performed during this period.
- **User**: The user for whom the tracking is being maintained

If you had enabled Tracking Details as well, you should find the following details along with the tracking record.



A tracking detail record provides you with the following information;

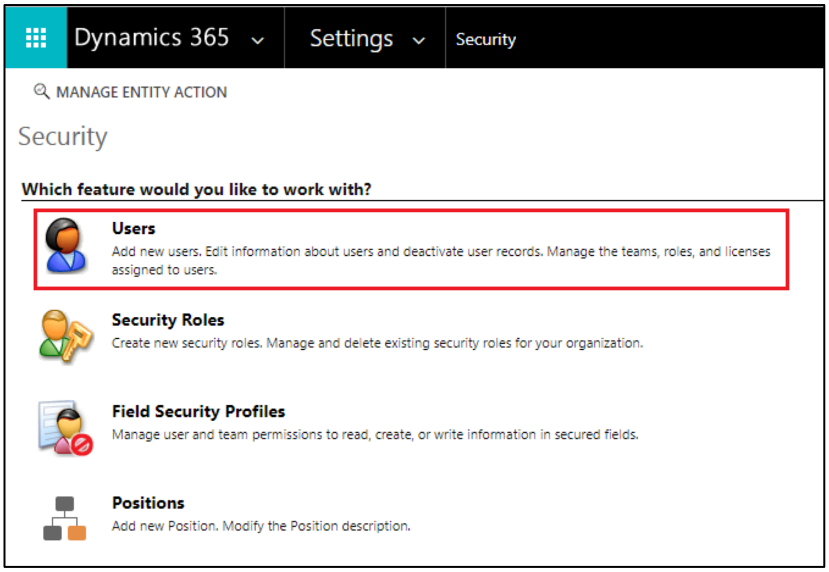



- **Record Guid**: Unique Id of the record on which the operation was performed.
- **Record URL:** Link to the record on which the operation was performed. You can click on the link to navigate to the record that is being tracked.

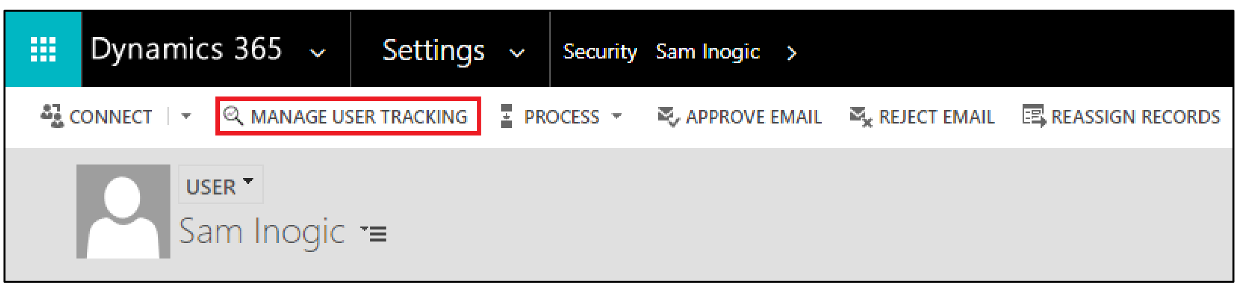
# Control User Level Tracking

We have the flexibility to control actions being tracked at the individual user level as well.

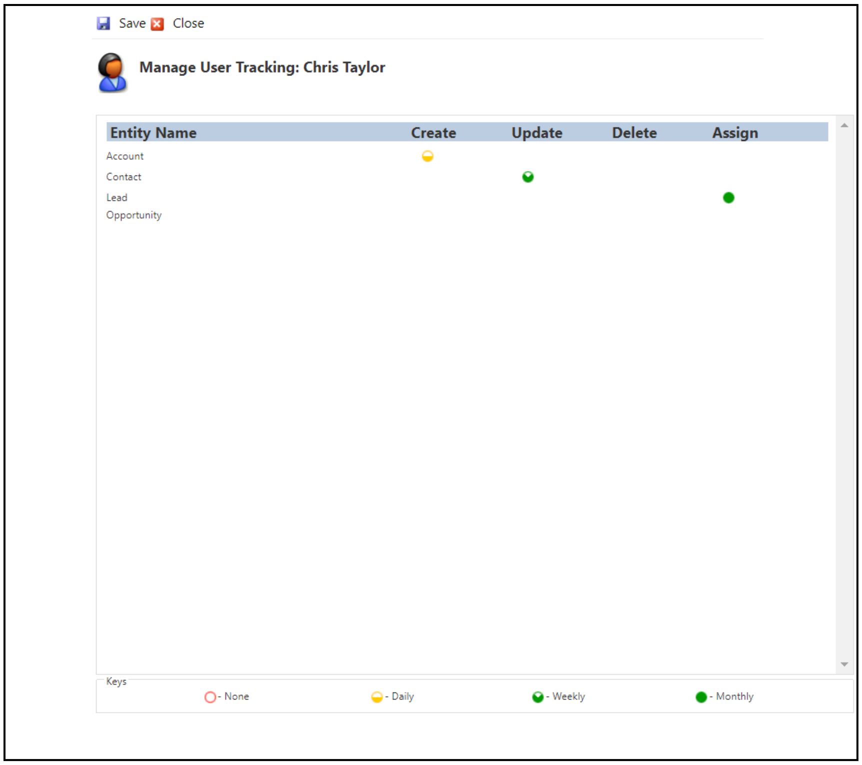
- Navigate to *Advanced Settings > Settings > Security > Users*.




- Open a User's record, and then click *MANAGE USER TRACKING*.




- It will open a pop-up as shown below.




- The configuration UI at User Level would only list down those entities and actions, which are enabled at System Level.

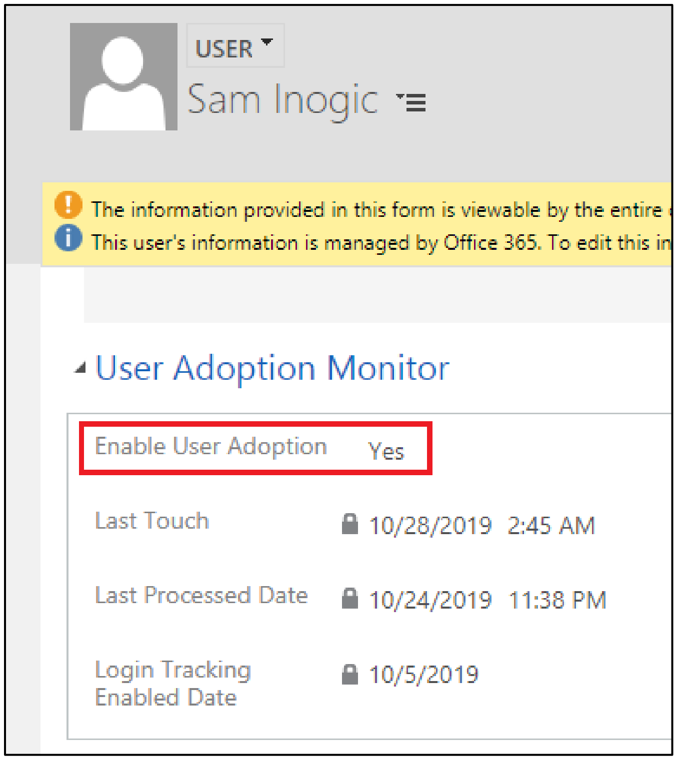
> ***Note:*** *For opportunity, we have enabled Win message/action, and since it is not available as a message/action in the UI, Opportunity will be listed here, but no options against it will be available.*

- In the UI, you are just allowed to select between two values for any action, the one which is selected at the System Level and the other as None
- For this scenario, you can just select between - Daily or - None .

> ***Note:*** *Customizing tracking capability of a particular user will end the synchronization with the System Level configurations. This means if you customize a user's tracking capability, and later on, you enable tracking for an entity under Create action at System Level, then it will not take effect for that user. For a user to Sync with System-Level configurations again, you need to delete all of the modifications done for that user or you would need to customize the user's tracking for the newly created action as well.*

## Control Tracking for a User Globally

On the System Users form, we have a section called User Adoption Monitor where you can define whether to enable or disable User Adoption Monitor tracking for the selected user.

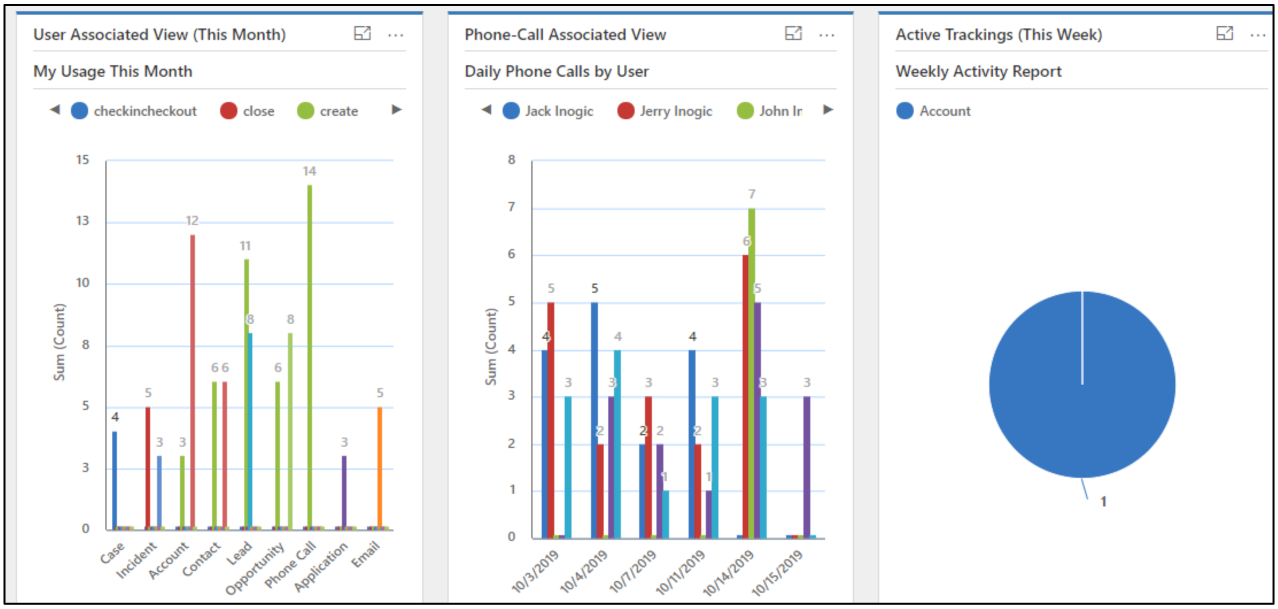



Set the *Enable User Adoption* to *No* to not track any actions of this user.

*Last Touch* would show the last date of any action for this user was tracked.

## User Adoption Monitor Benefits

- User Adoption Monitor can be very helpful for managers to track the activities of users in their team.
- Dashboards with charts can be used to show the actions performed by all users in one place. For a reference, we have created a dashboard named ‘User Adoption Summary’ with multiple charts showing how powerful tracking can be using User Adoption.




- Reports can be generated defining the work done by users based on tracking done for actions performed for respective entities.

# Contact Us

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