Oracle Fusion Cloud Sales Automation

How do I configure and use Rollups?

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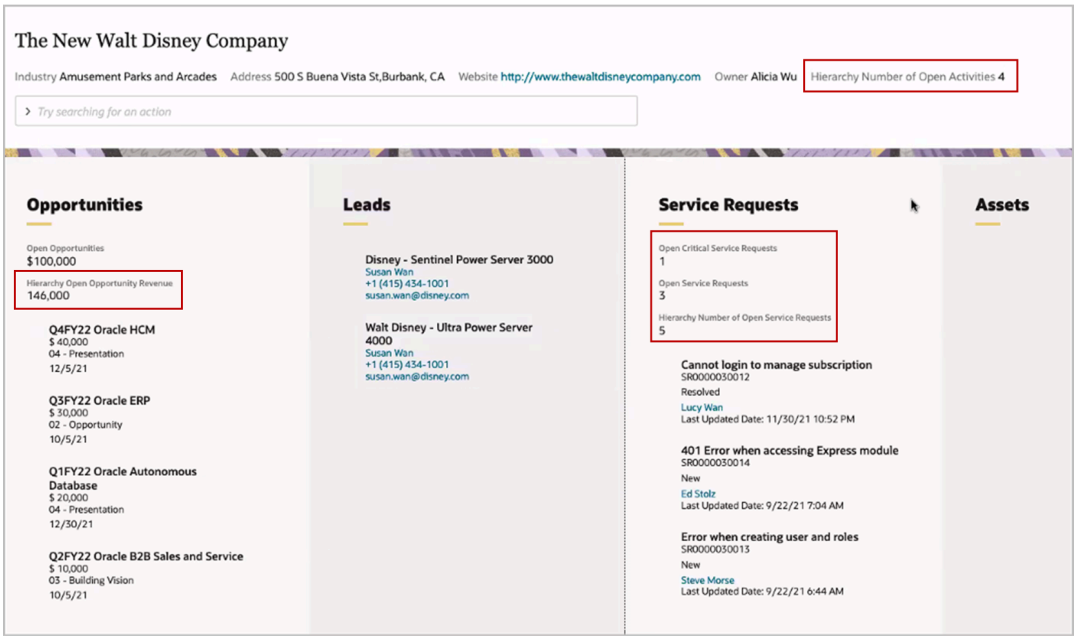
1 How do I configure and use Rollups?

Overview of Rollups

Rollups summarize data. For example, a rollup can calculate the sum of the potential revenue from the opportunities for an account hierarchy.

Rollup calculations appear on above the panels. This screenshot shows Opportunities and Service Requests rollups:



In Sales, the calculated value of a rollup appears in the object detail page.

> **Note:** The Rollups feature replaces the predefined aggregated fields that were available in previous releases for search criteria for your Workspace summarized data.

You can view this video *Rollups Explained* on Oracle Cloud Customer Connect to learn how to create and enable a profile option that will expose rollup details in the UI and from where you can drill down to view an explanation of the rollup metrics.

For more information about viewing summaries of rollup metrics by aggregating key account information, including rolling the information up through an account hierarchy, see *Sales Rollups Video Series* on Oracle Cloud Customer Connect.

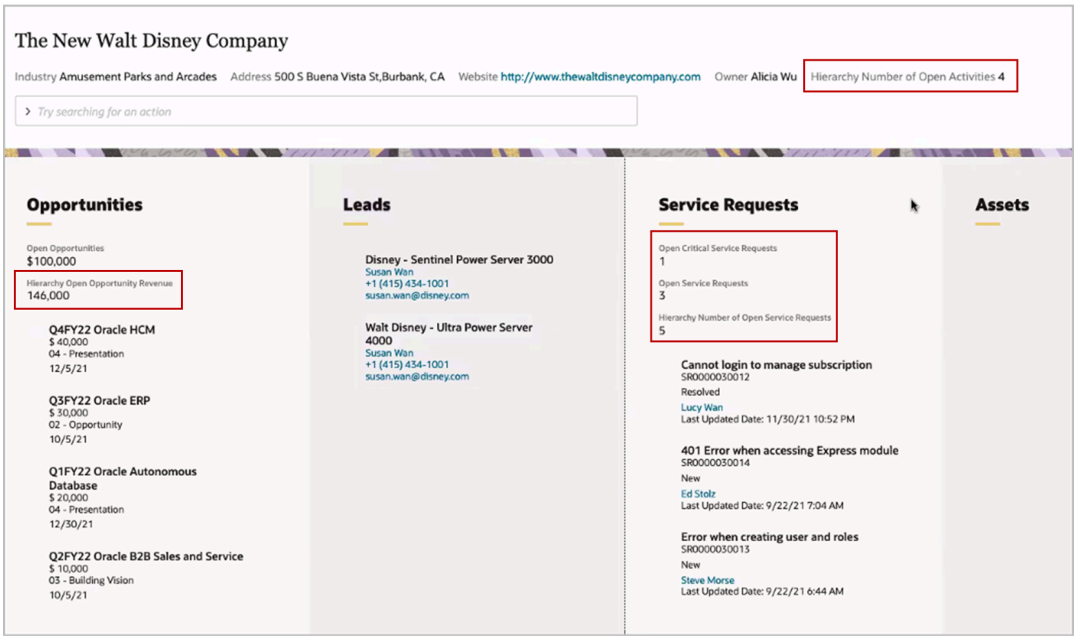
Where Salespeople See Rollups

Salespeople can see rollups in three different ways:

- On panels in work areas
- As search criteria
- As group-by options

Rollups on Panels

Rollups display on panels in Sales in the Redwood UX work areas, such as Accounts, so that your sales team gets quick insights. The screenshot shows the Rollups tab on the left pane and the rollup attributes shown in a table.

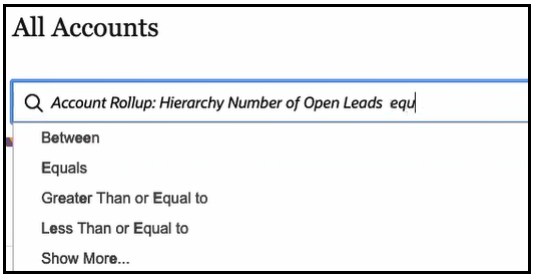


In classic Sales, salespeople can see rollups in the Rollups subtab on the object pages you enable. This screenshot shows the Rollups tab on the left pane and the rollup attributes shown in a table:

Rollups as Search Criteria

You can enable using rollups as search criteria on the landing pages. This helps salespeople search for accounts and contacts based on a rollup value.

Here's a screenshot of the Accounts landing page that shows an example of searching for accounts based on the hierarchy number of open leads:

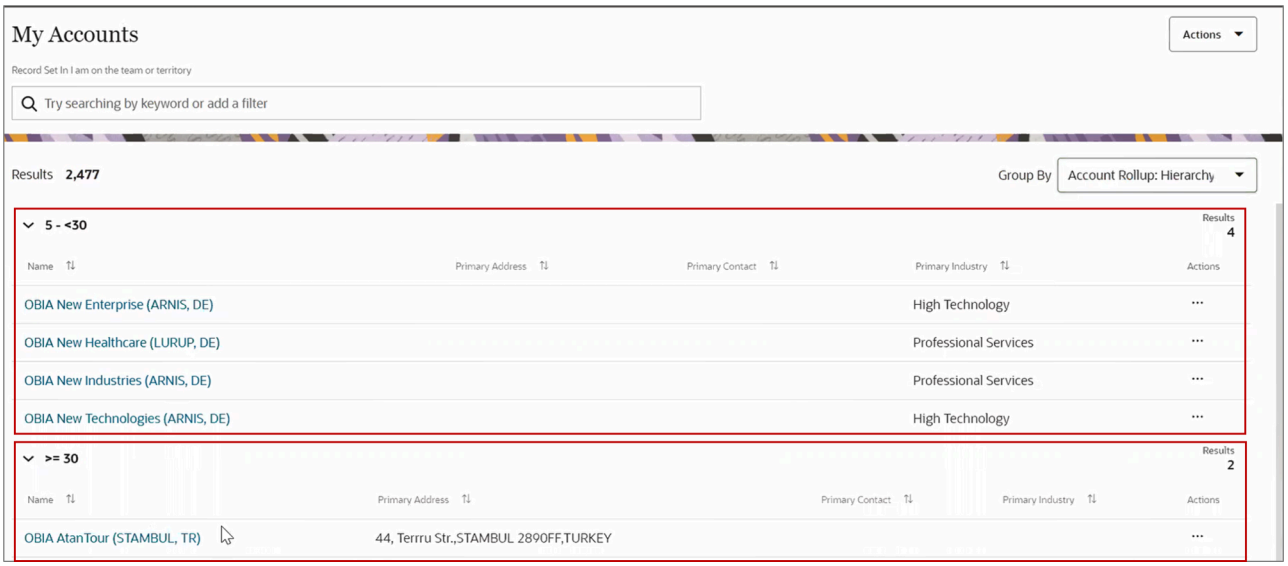


In CX Sales, salespeople can use rollups as search criteria in Workspace.

Rollups as Group By Options

You can help sales team find accounts and contacts that belong to a similar grouping based on rollups.

Here's a screenshot that shows four account hierarchies with 5 to 30 open opportunities and two accounts that have more than 30 opportunities:



Setup Tasks

Setup Steps for Rollups

Here's a summary of how to define rollups for Sales. All the privileges, setups, and tasks involved in setting up rollups for both the classic and Oracle Sales in the Redwood User Experience is provided.

This table provides the initial setup steps for rollups, navigation, brief description, and where to get more details.

Step	Applies To	Description	Navigation	Where to Get the Details
1	Both classic and Sales in Redwood UX	Add the Manage Rollup Metrics privilege 9ZCA_MANAGE_ROLLUPS_PRIV) to a copy of the Sales Administrator job role (ORA_ZBS_SALES_ADMINISTRATOR_JOB). To the role, add users responsible for configuring and setting up rollups.	**Navigator** > **Tools** > **Security Console** > **Roles**	See the *Edit Your Custom Job or Abstract Roles* topic in the How do I create and manage users? playbook for more information.
2	Both classic and Sales in Redwood UX	Verify that these scheduled processes appear on the Scheduled Process page: • Rollup Full Refresh • Rollup Account Hierarchy and Linked Records Refresh • Rollup Incremental Refresh	**Navigator** > **Tools** > **Scheduled Processes**	See the *Run Scheduled Processes for Rollups* topic for more information. See also the Scheduled Processes chapter of the Understanding Scheduled Processes guide.

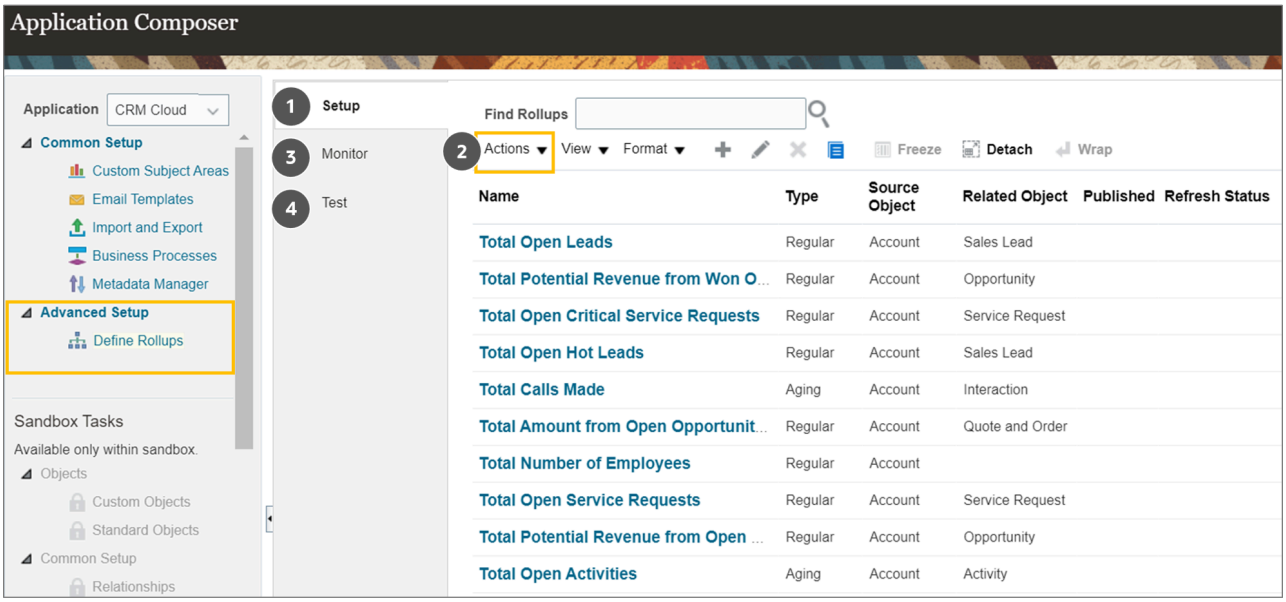
Step	Applies To	Description	Navigation	Where to Get the Details
		When you unpublish or delete a rollup, the Data Cleanup scheduled process prompts you to clear the data.		
2	Both classic and Sales in Redwood UX	After adding the privileges for the users, they get access to the Rollups setup page. Enable the **Rollup Test Enabled** profile option (ORA_ZCA_TEST_ROLLUPS), to display the Test tab on the Rollups setup page.	**Setup and Maintenance** > **Sales** > **Sales Foundation** > **Manage Administrator Profile Values**	See the *Test and Publish the Rollups* topic for more information.
3	Both classic and Sales in Redwood UX (optional)	When creating new rollups, you can reuse the rollup attributes of unpublished rollups or create custom attributes and publish them. The custom attributes will be available on the Rollups setup page.	**Application Composer** > **Standard Objects** > **Account** > **Account Rollups** > **Fields** Navigation is similar for contact rollups and other object rollups.	See the information on defining fields in the *Configuring Applications Using the Application Composer* guide.
4	Classic user experience (Preferred)	Use the formula fields instead of a regular field to create a custom attribute for rollups. Unlike regular fields, formula fields let you build a script with rules related to calculations.	Application Composer	See the *Configure Custom Rollups Using the Formula Fields* topic for more information.
5	Classic user experience (Optional)	When creating rollups that depend on fiscal year periods, such as current quarter, use the accounting calendar periods. The accounting calendar defines the fiscal year and the time periods within it.	Related Object Filter on the Define Rollups setup page.	See the *Use the Accounting Calendar Time Periods for Your Rollups* topic for more information.
6	Sales in Redwood UX	Use the Visual Builder Studio to add custom rollups to Sales in Redwood UX pages. You can also show the rollups on the panels in Sales in Redwood UX.	**Settings and Actions** > **Edit Page in Visual Builder**	See the *Add a Rollups Region to a Panel* topic for more information
7	Classic user experience	Enable the Rollups subtab on object pages in the Classic user experience.	Application Composer	See the *Show Rollup Attributes on the Object Pages* topic for more information.
8	Both classic and Sales in Redwood UX (Optional)	Enable rollups for Adaptive Search. Let salespeople search accounts or contacts using rollups as search criteria.	**Setup and Maintenance** > **Sales** > **Sales Foundation** > **Configure Adaptive Search**	See the *Enable Searching for Accounts and Contacts Using Rollups* topic for more information.
9	Sales in Redwood UX (Optional)	Enable Rollups as group by options so that salespeople can use them to group accounts and contacts by common attributes.	**Setup and Maintenance** > **Sales** > **Sales Foundation** > **Configure Adaptive Search**	See the *Enable Grouping by Rollups* topic for more information.

Here's the navigation to the Rollups setup page:

1. Go to **Navigator** > **Configuration** > **Application Composer**.
2. Under **Advanced Setup**, click **Define Rollups**.

> **Note:** You don't need to be in a sandbox to access the Define Rollups page.

Here's a sample screenshot of the Define Rollups page:



The table below describes the components of the Define Rollups page.

Callout	Name	Description
1	Setup	Shows the entire list of rollups. The list includes all published and unpublished rollups, both predefined and custom You can sort the columns by name, type (Regular or Aging), source object (Account), related object of the rollup, published status, and the last refresh status of the rollup.
2	Actions	• **Create**: Use this option to create a new rollup from scratch. • **Duplicate**: Use this option to create a working copy of a predefined rollup. • **Edit**: Use this option to change the parameters of a custom rollup. For predefined rollups, you can change two parameters: the hierarchy for, account rollups, and calculation frequency. • **Delete**: Use this option to delete custom rollups. You can't delete predefined rollups; you can only unpublish them.
3	Monitor	• **Full Refresh**: Run a full refresh every time you publish a rollup. • **Incremental Refresh**: Schedule an incremental refresh so that published rollups are regularly updated with the latest values. You can set this process to run once hourly. **Note:** Full refresh is used only after the rollups are published for the first time. After that, Incremental Refresh takes care of recalculating and publishing the rollups periodically. • **Hierarchy Refresh**: This process is applicable for account rollups only. Schedule or run a hierarchy refresh to recalculate account rollups if a hierarchy changes. • **Data Cleanup**: Schedule a data cleanup so that whenever you delete or unpublish a rollup, the rollup engine runs this process and clears the calculations.
4	Test	Test the unpublished rollups to ensure that they're producing correct calculations.

Callout	Name	Description

See these videos *Introduction and setup of rollups* and *Publish predefined rollups* on Oracle Cloud Customer Connect for an overview of how to enable privileges, verify that you access and publish predefined rollups, schedule rollup processes, and set up test options to enable you to test your rollups.

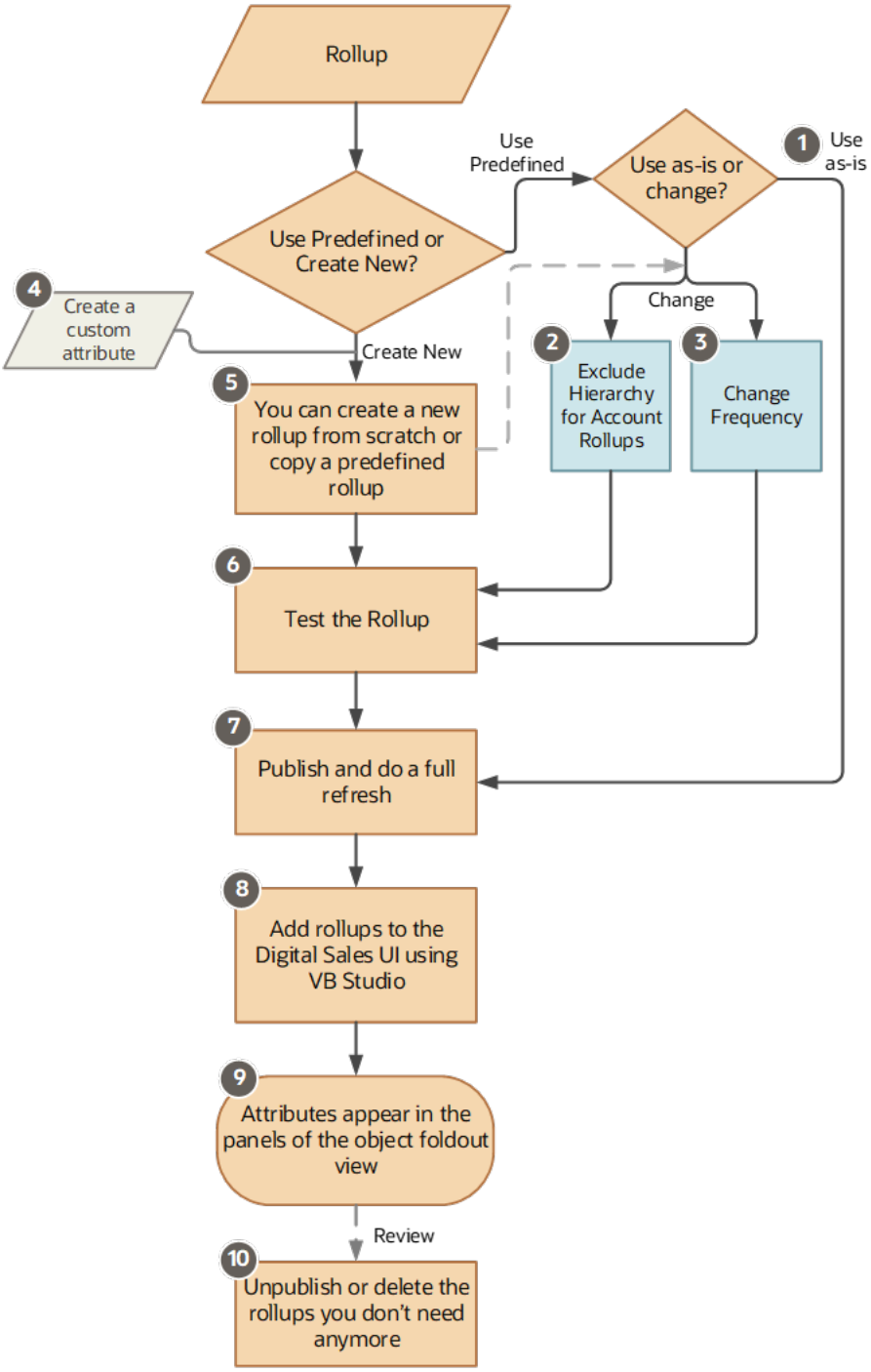
For more information about viewing summaries of rollup metrics by aggregating key account information, including rolling the information up through an account hierarchy, see:

- *Sales Rollups Video Series* on Oracle Cloud Customer Connect.

Work with Rollups

Here's an overview of how to work with rollups:

The graphic here gives an overall flow for rollups:



This table describes how to work with rollups and refers to the callouts in the graphic.

Things You Can Do	Description
Use the Predefined Rollups	You can use predefined rollups in three ways:

Things You Can Do	Description
	• Use them as they are (callout 1). • Tweak them slightly. • Make a working copy of them. **Note:** You can't delete a predefined rollup. **Use Them as They Are (callout 1)** Oracle provides the predefined rollups in the Define Rollups page. You can put them to immediate use just by publishing them and running a full refresh (callout 7). **Tweak Them Slightly** The parameters in the predefined rollups are read-only. You can tweak two things for a predefined rollup: • Exclude the hierarchy calculations from an account rollup (callout 2). • Change the calculation frequency (callout 3). After that, you can test your changes (callout 6), publish, and run a full refresh (callout 7) on them. **Create a Working Copy of a Predefined Rollup** You can duplicate a predefined rollup (callout 5) to get a working copy that lets you change the parameters. After modifying, test the calculations (callout 6), publish the rollup, and run a full refresh (callout 7). Ensure that you add the rollup attributes to the Sales in the Redwood UX UI through Visual Basic Studio (callout 8), for the calculations to appear as metrics in Oracle Sales. For more information, see *Configure the Rollups Region in a Panel*. A periodic incremental refresh updates the attributes in Oracle Sales with the latest values.
Create a New Rollup (callout 5)	You can create an entirely new rollup (callout 5). Just be sure the rollup attribute you select is unique for each rollup. You can use a rollup attribute of an unpublished rollup or create a custom attribute (callout 4). After creating a rollup, you test the calculations (callout 6), publish the rollup, and run a full refresh (callout 7). A periodic incremental refresh updates the attributes in Digital Sales with the latest values. You need to add the rollup attribute to the Sales in the Redwood UX UI through Visual Basic Studio (callout 8) for the calculations to appear as a metric in Oracle Sales. For more information, see *Configure the Rollups Region in a Panel*. **Note:** The same as with predefined rollups, you can exclude hierarchy calculations or change the calculation frequency of new rollups.
Unpublish or Delete a Rollup	You can unpublish a predefined rollup and delete a custom rollup (callout 10). The Data Cleanup process clears all calculations and nullifies the attributes exposed in the Digital Sales UI. **Note:** Unpublished rollups continue to be available on the Rollups Setup page for future use, but the deleted custom rollups can't be restored.

Predefined Rollups

Enable Predefined Rollups

Predefined rollups are the Oracle-provided rollups.

They are prebuilt using data from a source object and its related object. That data is further simplified using filter criteria, thus getting meaningful metrics your team can use.

Setting up predefined rollups is easy. You just have to:

1. Test and publish the predefined rollups.
2. Run a full refresh on them.
3. Show them on panels.
4. Enable them for Adaptive Search.
5. Enable them as Group By options.

Predefined Rollups

The sales application provides these predefined rollups:

Predefined Rollup	Relationship	Rollup Value
Total Number of Employees	Account only	The total number of employees in an account and its hierarchy
Fiscal Year Total Potential Revenue	Account only	The current fiscal year potential revenue from an account and its hierarchy
Decision Maker Contacts	Account to Contact	The total number of decision maker contacts
Total Open Leads	Account to Sales Lead	The total count of the qualified and unqualified open leads of an account and its hierarchy
Total Open Hot Leads	Account to Sales Lead	The total count of the qualified and unqualified hot leads of an account and its hierarchy
Qualified Hot Leads	Account to Sales Lead	The count of leads that are qualified and hot
Qualified Leads	Account to Sales Lead	The count of leads that are qualified
Potential Revenue from Open Leads	Account to Sales Lead	The total potential revenue from open leads

Total Open Critical Service Requests	Account to Service Request	The total count of the open, critical service requests that are in the new, in-progress, or waiting status of an account and its hierarchy
Total Open Service Requests	Account to Service Request	The total count of service requests that are in the open, in-progress, and waiting statuses, associated with an account and its hierarchy
Service Requests Closed in the Past Week	Account to Service Request	The count of Service Requests with the close date failing in the past 7 days
Total Amount from Open Opportunity Quotes and Orders	Account to Quotes and Orders	The sum of amounts from the open and in-progress opportunity quotes and orders of an account and its hierarchy
Total Open Activities	Account to Activity	The total count of open tasks of an account and its hierarchy
Total Potential Revenue from Open Opportunities	Account to Opportunity	The sum of the potential revenue from the open opportunities of an account and its hierarchy
Total Potential Revenue from Won Opportunities	Account to Opportunity	The sum of the potential revenue from the won opportunities of an account and its hierarchy
Total Open Opportunities	Account to Opportunity	The total count of open opportunities of an account and its hierarchy
Total Amount from Closed Opportunity Quotes and Orders	Account to Opportunity	The sum of the amount from the closed and won opportunity quotes and orders of an account and its hierarchy
Next Opportunity Closing Date	Account to Opportunity	The date when the next opportunity is expected to close
Last Call Made	Account to Interaction	The date when your team made a phone call to any of the contacts associated with an account or its hierarchy
Total Calls Made	Account to Interaction	The total number of phone calls made to an account and its hierarchy
Last Email Sent	Account to Interaction	The date when the last email was sent to any of the contacts associated with an account or its hierarchy
Total Emails Sent	Account to Interaction	The total number of emails sent to an account and its hierarchy
Total Touches	Account to Interaction	The total number of calls made or emails sent to an account and its hierarchy
Last Touch	Account to Interaction	The date when an account and its hierarchy were last contacted, either by email or phone
Total Number of Open Leads Associated with a Contact	Contact to Sales Lead	The total number of qualified and unqualified open leads associated with a contact
Total Number of Open Hot Leads Associated with a Contact	Contact to Sales Lead	The total number of qualified and unqualified hot leads associated with a contact

Total Number of Open Opportunities Associated with a Contact	Contact to Opportunity	The total number of open opportunities associated with a contact
Sum of Open Opportunities Revenues Associated with a Contact	Contact to Opportunity	The cumulative total of revenue from the open opportunities associated with a contact
Total Number of Open Service Requests Associated with a Contact	Contact to Service Request	The total number of service requests that are in the open, in progress, or waiting statuses
Total Number of Critical Open Service Requests Associated with a Contact	Contact to Service Request	The total number of service requests in the open, in progress, or waiting statuses, marked as critical
Total Number of Touches with a Contact	Contact to Interaction	The total number of emails sent or calls made to a contact in the last 120 days
Date of Last Touch with a Contact	Contact to Interaction	The date when the last email was sent or call was made to a contact in the last 120 days
Total Number of Calls Made to a Contact	Contact to Interaction	The total number of phone calls made to a contact in the last 120 days
Total Number of Emails Sent to a Contact	Contact to Interaction	The total number of emails sent to a contact in the last 120 days
Last Call Made to a Contact	Contact to Interaction	The date when the last outbound phone call was made to a contact in the last 120 days
Last Email Sent to a Contact	Contact to Interaction	The date when the last email was sent to a contact in the last 120 days
Date of Last Response from a Contact	Contact to Interaction	The date when a last email or call was received from a contact in the last 120 days
Total Number of Responses Received from a Contact	Contact to Interaction	The total number of calls or emails received from a contact in the last 120 days
Total Number of Open Activities for a Contact	Contact to Activity	The cumulative total of: • Tasks that are open and not in completed or canceled status • Recurring or nonrecurring appointments with the current date as the start date • Call reports ending on the current date
Last Touch Date	Sales Lead to Interaction	The date when the last call or email was sent in the context of a lead
Last Call Made	Sales Lead to Interaction	The date when the last call was made in the context of a lead
Total Call Made	Sales Lead to Interaction	The total number of calls made in the context of a lead
Total Emails Sent	Sales Lead to Interaction	The total number of emails sent in the context of a lead
Total Touches	Sales Lead to Interaction	The total number of emails and calls made in the context of a lead
Last Email Sent	Sales Lead to Interaction	The date when the last email was sent in the context of a lead
Total Open Activities	Sales Lead to Interaction	The cumulative total of: • Tasks that are open and not in completed or canceled status

		• Recurring or nonrecurring appointments with the current date as the start date • Call reports ending on the current date
Total Open Opportunities	Campaign to Opportunity	The total number of open opportunities associated with a campaign
Total Won Opportunities	Campaign to Opportunity	The total number of won opportunities associated with a campaign
Total Revenue from Opportunities	Campaign to Opportunity	The total revenue from the open opportunities associated with a campaign
Total Opportunities	Campaign to Opportunity	The total number of opportunities associated with a campaign
Total Revenue from Open Opportunities	Campaign to Opportunity	The total revenue from the open opportunities associated with a campaign
Total Revenue from Won Opportunities	Campaign to Opportunity	The total revenue from the won opportunities associated with a campaign
Total Converted Leads	Campaign to Sales Lead	The total number of converted leads associated with a campaign
Total Leads	Campaign to Sales Lead	The total number of leads from a campaign
Total Hot Open Leads	Campaign to Sales Lead	The total number of unqualified or qualified leads ranked as hot that are associated with a campaign
Total Open Leads	Campaign to Sales Lead	The total number of unqualified or qualified open leads associated with a campaign
Total Revenue from Open Leads	Campaign to Sales Lead	The total amount from the unqualified and qualified leads associated with a campaign
Total Emails Sent	Opportunity to Interaction	The total number of emails sent in the context of an opportunity
Total Touches	Opportunity to Interaction	The total number of email and calls made in the context of an opportunity
Last Email Sent	Opportunity to Interaction	The date when the last email was sent in the context of an opportunity
Total Calls Made	Opportunity to Interaction	The total number of calls made in the context of an opportunity
Last Call Made	Opportunity to Interaction	The date when the last call was made in the context of an opportunity
Last Touch Date	Opportunity to Interaction	The date when the last call or email sent in the context of an opportunity
Total Open Activities	Opportunity to Activity	The cumulative total of: • Tasks that are open and not in completed or canceled status • Recurring or nonrecurring appointments with the current date as the start date • Call reports ending on the current date

Test and Publish Predefined Rollups

Test the rollups to ensure that they're producing the calculations you want. Here are the steps:

1. On the Define Rollups page, go to the **Test** tab.

   > **Note:** Ensure that you have enabled the **Rollup Test Enabled** (ORA_ZCA_TEST_ROLLUPS) profile option to see the Test tab on the Define Rollups page.

2. Select a rollup you want to test.
3. For **Object Instance**, select an account you want to calculate the rollup for.
4. Select the **Entire Hierarchy** check box if you have defined the hierarchy attribute for the rollup and want to include the hierarchy values, as well, in the test.
5. Click **Calculate**.
6. In the meanwhile, you can calculate the rollups manually or use this sample URL to run a REST call on the account rollup child:

   ```
   https://<hostname:port>/crmRestApi/resources/latest/accounts/<partynumber>/child/AccountRollup
   ```

7. Compare your calculations. If you're ok with the results, publish the rollup.

Publish the Rollup

After testing the rollups, publish them to the environment. Here are the steps:

1. Select an unpublished rollup.
2. On the Edit Rollup page, click **Actions** and select **Publish**.

Run a Full Refresh for Published Predefined Rollups

Run a full refresh every time you publish a rollup.

Here are the steps to run a full refresh:

1. On the Define Rollups page, go to the **Monitor** tab.
2. Select the **Full Refresh** subtab.
3. Click **Start Process**.

It's recommended that you schedule a full refresh once a day during the non-operational hours of your organization, to recalculate the aging rollups. Note that a full refresh job scheduled once a day still considers the calculation frequency set for the aging rollups before recalculating their values.

Show Predefined Rollups on Panels

You can display rollups on panels in Digital Sales work areas, such as Accounts, so that your sales team gets quick insights.

For more information, see the "Configure the Rollups Region in a Panel" topic in the Extending Digital Sales (Next Gen Sales) guide. To access this guide, contact your Oracle representative.

Enable Predefined Rollups for Adaptive Search

You can have your sales team use rollups to search for accounts and contacts.

See this topic to learn more:

- *Enable Searching for Accounts and Contacts Using Rollups*

You can view this video *Enable rollups for Adaptive Search* on Oracle Cloud Customer Connect to learn how to enable rollups for Adaptive Search, configure attributes, and publish and verify your changes. This lets you search accounts or contacts using rollups as search criteria.

For more information about viewing summaries of rollup metrics by aggregating key account information, including rolling the information up through an account hierarchy, see:

- *Sales Rollups Video Series* on Oracle Cloud Customer Connect.

Enable Predefined Rollups as Group By Options

Let your sales team group the accounts and contacts list based on rollup values.

See this topic to learn more:

- *Enable Grouping by Rollups*

Custom Rollups

Create Rollups

Here are the steps to create a new rollup:

1. Enter basic details and define the source object.
2. Define the related object.
3. Define the hierarchy rollup to include the account hierarchy calculations in the rollup.
4. Define calculation frequency in Advanced Settings.

You do these tasks in Application Composer from **Advanced Setup** > **Define Rollups**.

Enter Basic Details and Define the Source Object

1. Enter **Name** and **Description** for the new rollup.
2. **Rollup Type**:
    - **Aging**: Select Aging to calculate a rollup value for a specific period. For example, you want to create a rollup for the total open activities in the last 30 days.
    - **Regular**: Select Regular if the rollup you're creating doesn't have to be time-bound.
3. **Source Object**: Select a source object. For example, Account.

> **Note:** You can't use custom objects as source objects.

4. **Rollup Attribute**: This attribute stores the rollup value. For example, the Last Call Made and Open Opportunity Revenue attributes show the rollup values in the Accounts area of Digital Sales.

   If you're creating a custom rollup for CX Sales, you can use the formula fields to build a rollup attribute. See the *Configure Custom Rollups Using the Formula Fields* topic to learn more.
5. **Source Object Filter**: This field is enabled for source object rollups that don't need a related object, such as Total Number of Employees.

   Use this field to create rules. For example, you can create a rule to calculate the Total Number of Employees for only accounts or only prospects.

> **Note:** Source Object Filter isn't supported if the application needs to traverse the hierarchy, because it impacts performance.

Define the Related Object

The related object fields are available for selection only when the Rollup Attribute belongs to non-account objects, such as Opportunity, Activity, or Service Request.

1. **Related Object**: This field shows the objects related to the source object. For example, if the source object is Account, its related objects, such as Contact, Activity, Interaction, Sales Lead, Opportunity, Quotes and Orders, and Service Requests, show up in the list.

   > **Note:** You can't use custom objects as related objects.

   - The **Maximum Number of Days for Data Selection** field is enabled for interaction-based rollups, such as Total Calls Made and Total Open Activities. The maximum is 120 days and this is the default value. The rollup engine uses the data from the past 120 days until today to calculate the rollup.
2. **Relationship**: Select the relationship between the source object and the related object. For example, select Account-to-Opportunity if the related object is Opportunity.
3. **Aggregate Function**: Select the function you want the rollup to perform for the related rollup attribute. The functions shown in the drop-down list depend on the Rollup Attribute you selected from the Source Object. Here are the available options:
   - **Count**: Select Count if you want a total number. For example, calls made to an account or number of employees.
   - **Sum**: Select Sum to get a cumulative total. For example, revenue from all the open opportunities of an account.
   - **Maximum**: Maximum is used to identify the last call made or the last email sent when you're tracking the last Creation Date for an activity. Maximum doesn't work for the number of calls made.
   - **Minimum**: Minimum is used to identify the first call made or the first email sent when you're tracking the first Creation Date for an activity.
4. **Related Attribute**: This is the attribute of the Related Object used to calculate the rollup.
   - **Example 1**: Use Creation Date from the Interactions object to calculate the date of the most recent call made to an account.
   - **Example 2**: Use Amount from the Opportunity object to calculate the Total Potential Revenue from Open Opportunities.

5. **Related Object Filter**: Use this field to create rules around the related object. For example, write a query like this to aggregate Total Potential Revenue from only qualified and unqualified open leads: `StatusCode IN ('QUALIFIED', 'UNQUALIFIED') AND DEAL AMOUNT IS NULL.`
   To calculate a rollup based on the fiscal year periods of the accounting calendar for CX Sales, can use the period tokens when building the Related Object Filter criteria. See the *Use the Accounting Calendar Time Periods for Your Rollups* topic to learn more.

Include Hierarchy Changes

This section is relevant only for Account rollups.

1. **Hierarchy Rollup**: Select the checkbox to include hierarchies in the Account rollups.
2. **Hierarchy Rollup Attribute**: This field stores the aggregated value from the Account and its child accounts.
3. **Aggregation Function**: This field shows the same aggregation function you defined for the Related Object. You must select a value here if the rollup is a source object rollup, such as an Account rollup.

Define Advanced Settings

You define the calculation frequency of a rollup from the Advanced Settings. See the topic, *Change the Calculation Frequency of a Rollup*, to learn more.

After you're done, click **Save and Close** to save the rollup.

> **Note:** You can view these videos to get an overview of how to create custom rollups and custom rollup attributes for aggregating key account information to suit your specific requirements. See: *Create custom rollups* and *Create custom rollups attributes* on Oracle Cloud Customer Connect.

For more information about viewing summaries of rollup metrics by aggregating key account information, including rolling the information up through an account hierarchy, see:

- *Sales Rollups Video Series* on Oracle Cloud Customer Connect.

Test and Publish the Rollups

Test unpublished rollups to ensure that they're producing the calculations you want.

Here are the steps:

1. Go to the **Test** tab on the Rollups page.

   > **Note:** Ensure that you have enabled the **Rollup Test Enabled** (ORA_ZCA_TEST_ROLLUPS) profile option to see the Test tab on the Define Rollups page.

2. Select a rollup you want to test.
3. For **Object Instance**, select an account you want to calculate the rollup for.
4. Select the **Entire Hierarchy** check box if you have defined the hierarchy attribute for the rollup and want to include the hierarchy values, as well, in the test.
5. Click **Calculate**.
6. In the meanwhile, you can calculate manually or use this sample URL to run a REST call on an account rollup child:
   `https://<hostname:port>/crmRestApi/resources/latest/accounts/<partynumber>/child/AccountRollup.`

7. Compare your calculations. If you're ok with the results, publish the rollup.

Publish the Rollups

After testing the rollups, publish them:

1. Select an unpublished rollup.
2. On the Edit Rollup page, click **Actions** and select **Publish**.

Run a Full Refresh

Next, run a full refresh to get the latest data:

1. Go to the **Monitor** tab.
2. Select the **Full Refresh** sub-tab.
3. Click **Start Process**.

See the *Run Scheduled Processes for Rollups* topic to learn more about all the processes available for rollups.

Configure Custom Rollups Using the Formula Fields

Use the formula fields instead of a regular field to create a custom attribute for rollups. Unlike regular fields, formula fields let you build a script with rules related to calculations.

Another advantage with formula fields is that you can show multiple values on a single field, which is suitable for rollup attributes.

Below are the high-level steps for using formula fields to show custom rollups:

1. Create custom formula fields.
2. Add the formula fields to the object page.
3. Create custom rollups to populate the data of the formula fields.

Let's apply these steps and create a couple of example rollups for the Account and Contact object pages.

Example Account Rollups Created Using Formula Fields

In this example, we'll create two account rollups using formula fields, and then we'll show them on the Account Profile page. Our example rollups are:

- Total Open Opportunities
- Total Revenue from Open Opportunities of an account and the child accounts in its hierarchy

Step 1: Create Custom Formula Fields

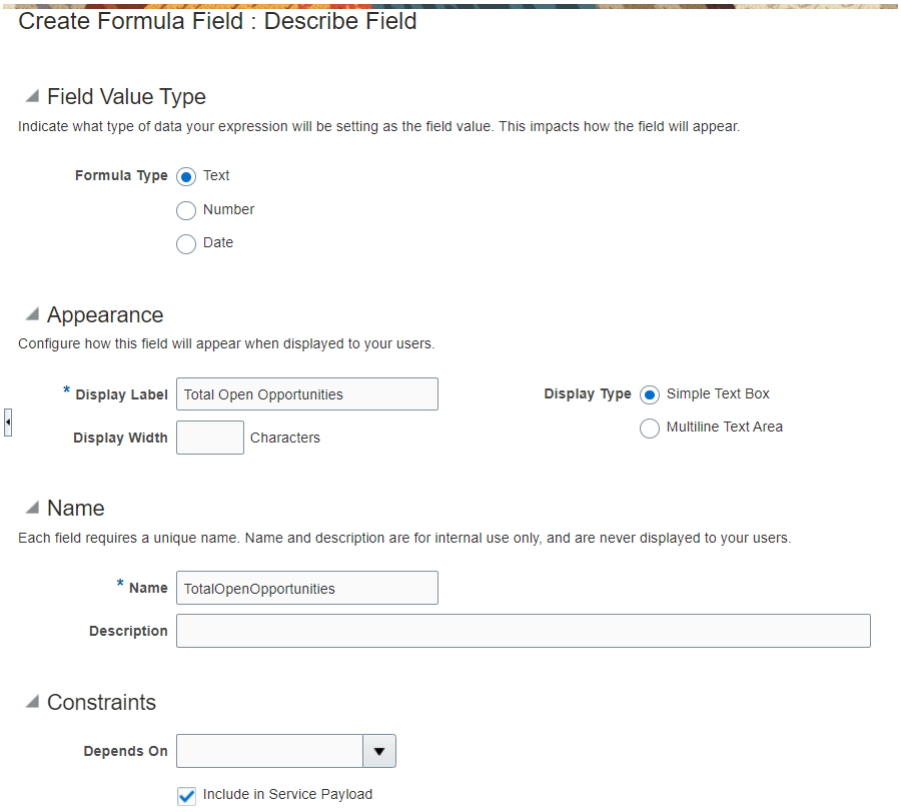
Create two new formula fields for Total Open Opportunities and Total Revenue from Open Opportunities. Here's how you do it:

1. Enter an active sandbox. From the Navigator, go to **Configuration** > **Application Composer** > **Standard Objects** > **Account** > **Fields**.
2. On the Fields page, click **Actions** > **Create**.
3. Select **Formula** and click **OK**.

   To learn more about the formula fields, read the *Formula Fields* topic in the *Configuring Applications Using Application Composer* guide.

4. Create a formula field for Total Open Opportunities:
    a. On the Create Formula Field page, enter `Total Open Opportunities` for **Display Label**, and enter the same name, but without spaces, in the **Name** field.

Here's a sample image of the Create Formula Field page:

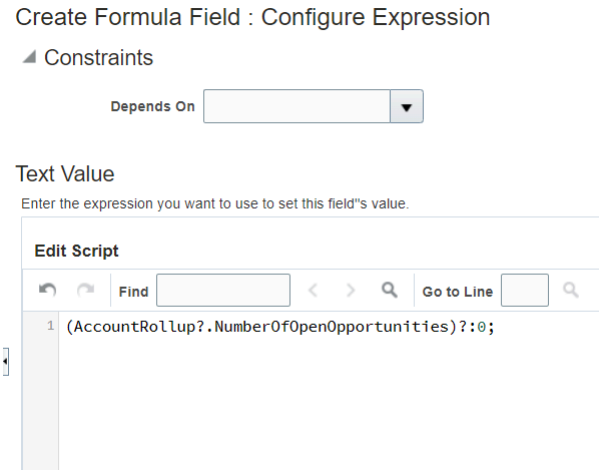


5. Click **Next**.

6. On the Configure Expression page, enter an expression the engine should consider when calculating the field value. For example, use this expression to indicate that the engine must not calculate when the number of opportunities for an account is zero:

```
(AccountRollup?.NumberOfOpenOpportunities)?:0;
```

Here's a sample image of the example expression:

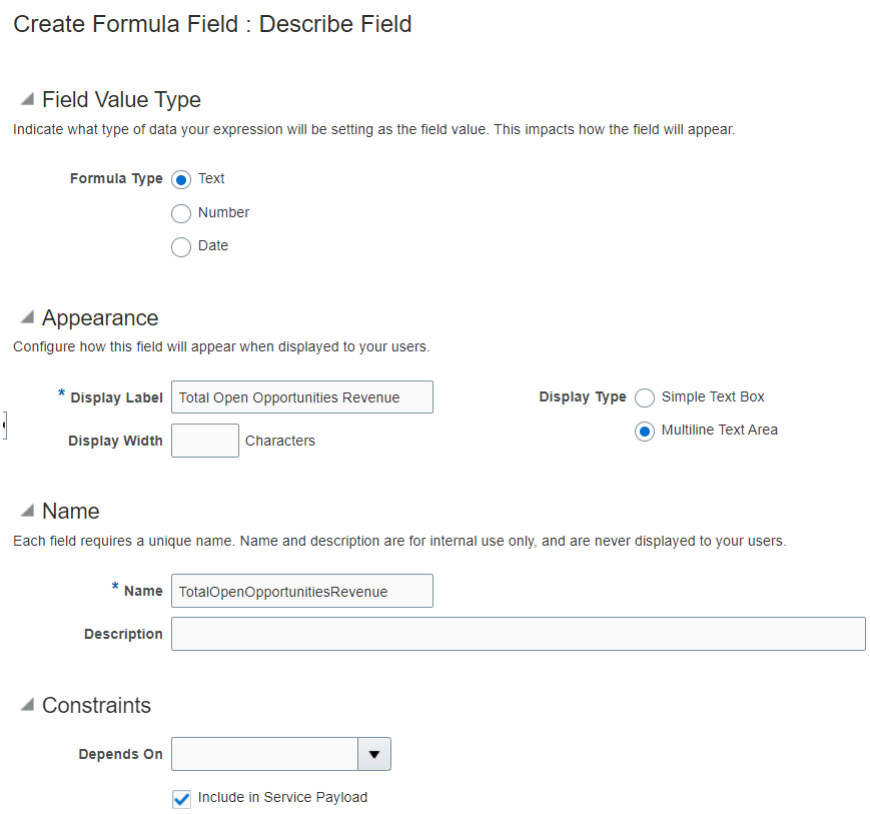


7. Click **Submit**.

8. Create a formula field for the Total Open Opportunities Revenue rollup:
    a. Follow the procedures given in steps 2 and 3.
    b. On the Create Formula Field page, enter `Total Open Opportunities Revenue` for **Display Label**, and enter the same name, without spaces, in the **Name** field.
    c. For Display Type, select **Multiline Text Area**.

    The formula field appears as a multiline text area to display two rollup fields. In this example, the two rollup fields are `SumOfOpenOpportunitiesRevenue` and `HierSumOfOpenOpportunitiesRevenue` -- one for the account and another for its hierarchy.

    Here's a sample image of the Create Formula Field: Describe Field page:



9. Click **Next**.
10. On the Configure Expression page, do this:
    a. In the expression for the formula field, create a variable to store the sum of opportunity revenues for an account. Create another variable to store the sum of opportunity revenues from an account hierarchy. In this example, the variables are `thisAccountOptyRevn` and `hierAccountOptyRevn`.
    b. Ensure that the expression evaluates whether the value of the opportunity revenue is zero. If it is zero, set the variable to null. Also, evaluate whether the value of the opportunity revenue from an account hierarchy is zero. If it's zero, don't display the account hierarchy rollup.
    c. To write the expression, select the field from the list corresponding to the Rollup object. In this case, Account Rollups is a child of Account, and it has a 1:1 relationship with the Account object. Once you select the Account Rollup, the Rollup fields appear on the list. You can reference the fields easily and insert them to the script palette to write the expression. In this case, use the fields

`AccountRollup?.SumOfOpenOpportunitiesRevenue` and `AccountRollup?.HierSumOfOpenOpportunitiesRevenue` in your expression. These are the custom rollups you created in the previous step.

11. Build an expression like the sample here:

```
def thisAccountOptyRevn = (AccountRollup?.SumOfOpenOpportunitiesRevenue)?:0;
def hierAccountOptyRevn = (AccountRollup?.HierSumOfOpenOpportunitiesRevenue)?:0;
def str = "";
if( hierAccountOptyRevn == 0 )
{
 str = sprintf("\$%,.2f",thisAccountOptyRevn);
}
else
{
 str = sprintf("For this Account: \$%,.2f\nFor the Account Hierarchy: \$%,.2f", thisAccountOptyRevn,
 hierAccountOptyRevn);
}
return str;
```

Here's a sample image of the Create Formula Field: Configure Expression page:

12. Click **Submit**.

Step 2: Add the Formula Fields to the Account Profile Page

1. Enter an active sandbox.
2. From the Navigator, go to **Configuration** > **Application Composer** > **Standard Objects** > **Account** > **Pages** > **Application Pages** > **Details Page Layouts**.
3. Create a copy of the Details Layout and add the two custom fields you created in step 1: `Total Open Opportunities` and `Hierarchy Total Open Opportunities Revenue`.
4. Save your changes.

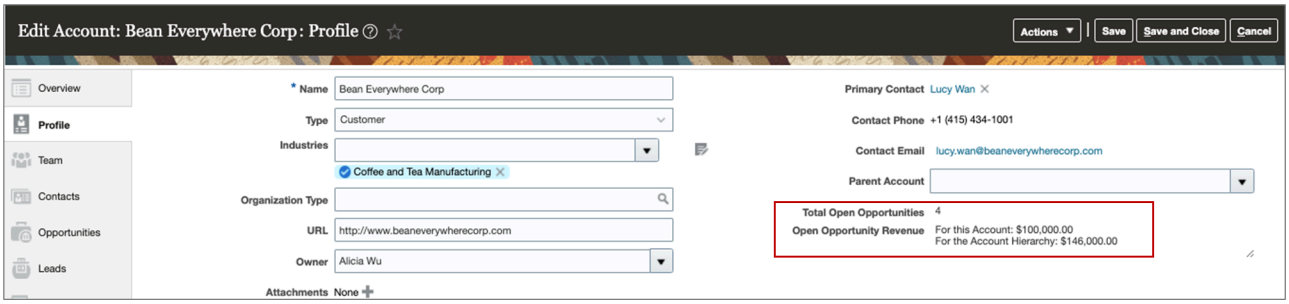
Step 3: Create Custom Rollups to Populate the Data of the Formula Fields

1. Exit the sandbox and navigate to **Application Composer** > **Define Rollups**.
2. Create rollups for Total Open Opportunities and Hierarchy Total Open Opportunity Revenue.

3. When creating the rollups, assign the formula fields you created as a Rollup Attribute and a Hierarchy Rollup Attribute, respectively.
4. Test your rollup.
5. Run a full refresh on the rollup.
6. Publish the rollup.

For detailed steps, see the *What are the steps to set up rollups?* topic.

At the end of the configuration, the two rollups you created appear on the Edit Account: Profile page. Here's a sample image:



Example Contact Rollups Created Using the Formula Fields

In this example, we will create four contact rollups using only one formula field, and then we'll show the rollups on the Contact Profile page. Our example rollups are:

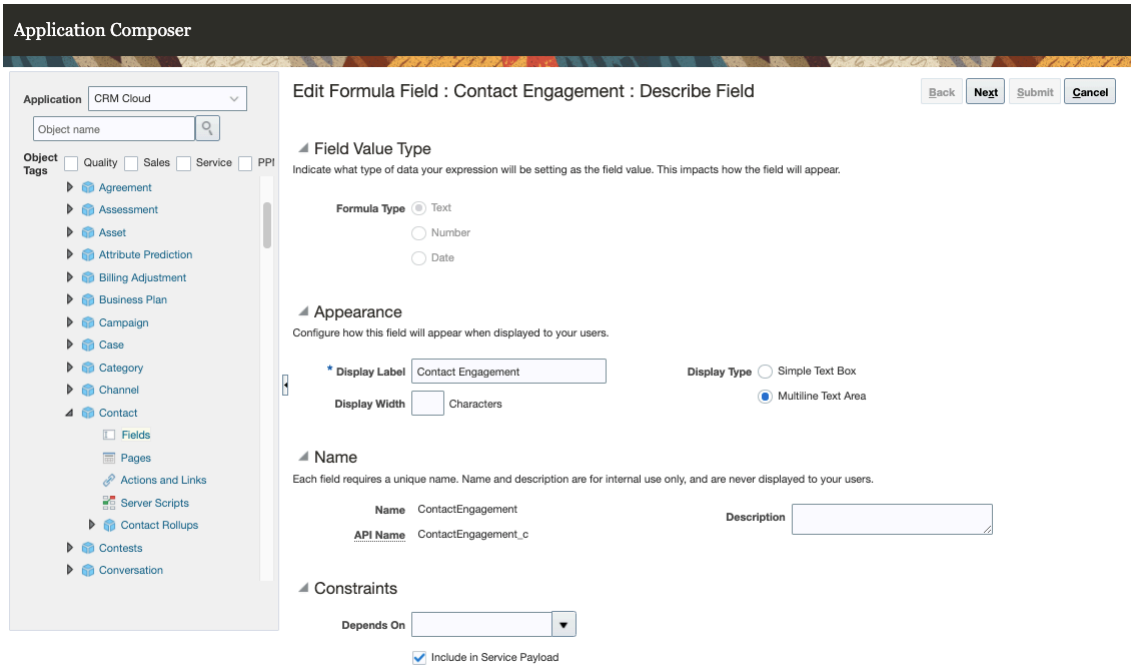
- Total Touches with a Contact
- Last Touch with a Contact
- Number of Open Service Requests Created by a Contact
- Number of Critical Open Service Requests Created by a Contact

Step 1: Create Custom Formula Fields

1. Enter an active sandbox. From the Navigator, go to **Configuration** > **Application Composer** > **Standard Objects** > **Contact** > **Fields**.
2. On the Fields page, click **Actions** > **Create**.
3. Select **Formula** and click **OK**.

   To learn more about the formula fields, read the *Formula Fields* topic in the *Configuring Applications Using Application Composer* guide.
4. On the Create Formula Field page, enter `Contact Engagement` for **Display Label**, and enter the same name, but without spaces, in the **Name** field.

5. For **Display Type**, select Multiline Text Area.



6. Click **Next**.
7. On the Configure Expression page, build an expression that can show the following attributes in a single field:
   - Number of touches.
   - The last touch with the contact.
   - The number or open service requests.
   - Critical open service requests associated with the contact.

   Touches refer to the total Emails sent, or calls made to a contact. The expression evaluates the number of open or critical service requests. You can add a string to the expression to display a friendly message if there are no SRs associated with a contact. Here's a sample expression you can build for the field:

```
Display name: Contact Engagement (Custom field: ContactEngagement_c):
/*
Total Touches with Contact:
Last touch being: ?
Note that the contact has x Service request of which x are critical
No outstanding SRs
*/
def contactLastTouchDate = ContactRollup?.LastTouchDate
def contactNumTouches = (ContactRollup?.NumberOfTouches)?:0;
def contactCriticalSrs = (ContactRollup?.NumberOfOpenCriticalServiceRequests)?:0;
def contactSrs = (ContactRollup?.NumberOfOpenServiceRequests)?: 0;
def str = "";
if( contactNumTouches > (BigDecimal)0 )
 str = "Total touches with contact: " + contactNumTouches + "\n";
if( contactLastTouchDate )
 str = str + "Last touch being: " + contactLastTouchDate.format("M/d/yyyy") + "\n";
if( contactSrs )
{
 str = str + "This contact has " + contactSrs + " open service request";
```

```
 if( contactSrs > (BigDecimal) 1 ) // plural for service request?
 str = str+ "s";
 if( contactCriticalSrs )
 {
 str = str + ", " +contactCriticalSrs+ " critical!";
 }
}
else
{
 str = str + "There are no outstanding Service Requests for this contact";
}
return str;
```

8. Click **Submit**.

Step 2: Add the Formula Field to the Contact Profile Page

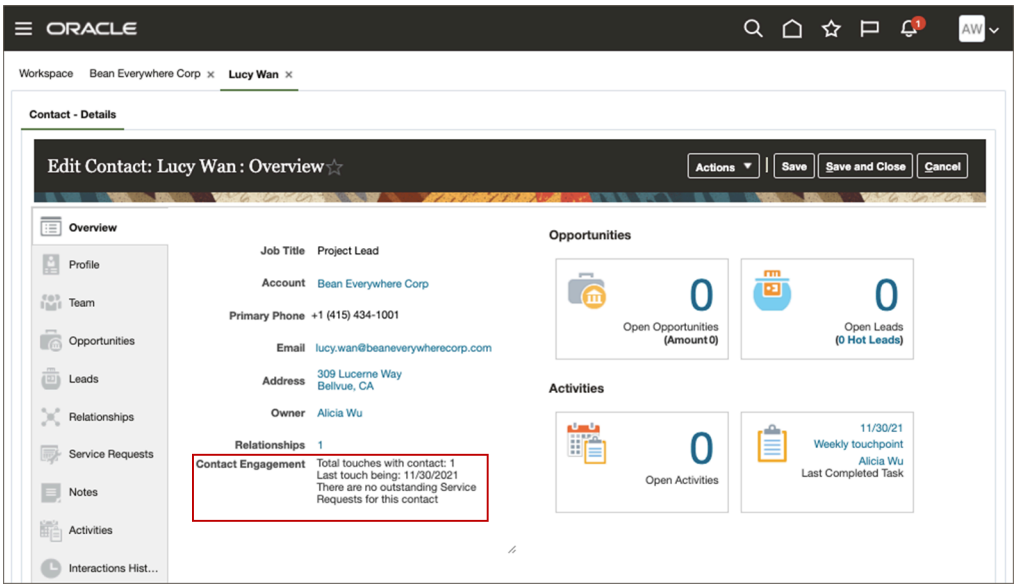
1. Enter an active sandbox. From the navigator, go to **Configuration** > **Application Composer** > **Standard Objects** > **Contact** > **Pages** > **Application Pages** > **Details Page Layouts**.
2. Create a copy of the Details layout and add the **Customer Engagement** field you created in the step 1.
3. Save your changes.

Step 3: Create a Custom Rollup to Populate the Data of the Formula Field

1. Come out of the sandbox and navigate to **Application Composer** > **Define Rollups**.
2. Create a custom rollup and assign the Contact Engagement formula field as a rollup attribute.
3. Test your rollup.
4. Run a full refresh on the rollup.
5. Publish the rollup.

For detailed steps, see the *What are the steps to set up rollups?* topic.

At the end of the configuration, you can see the rollup showing all four attributes in a single field on the Edit Contact: Profile page. Here's a sample image:



Additional Configurations

Support for Hard Delete Refresh for Rollups

A hard delete means physically deleting rows from rollup tables in the source database, instead of soft deleting them which means marking them as deleted but not removing them. A refresh then follows which updates the rollup tables to reflect changes (inserts, updates, deletes) in the source data and maintains rollup data consistency.

To enable this feature, you must create the ZCA_ENABLE_ROLLUP_HARD_DELETE_REFRESH profile option and set the value to Y. Navigate to **Setup and Maintenance** > **Sales** > **Sales Foundation** > **Manage Administrator Profile Values** to create this profile option.

Once enabled, there are certain limitations for supporting a hard delete refresh for rollups. For example:

- If a rollup that you want delete from the rollup table is already published, you must first unpublish it and then publish it again to use this feature. See the Remove Rollups section in this playbook for more information.
- If you're running a **Rollup Full Refresh** scheduled process for your rollups you must include the **Refresh for Deleted Records** parameter and set the value to Y.
- If rollup hard deletes are imported, then they won't get refreshed by running the **Rollup Incremental Refresh** job because this job is associated with the Signals feature. For example, if the Rollup Incremental Refresh job is run more than 7 days from the last successful run, or if it has failed for more than 7 days, then a hard delete refresh won't be possible because Signals data is purged after 7 days.

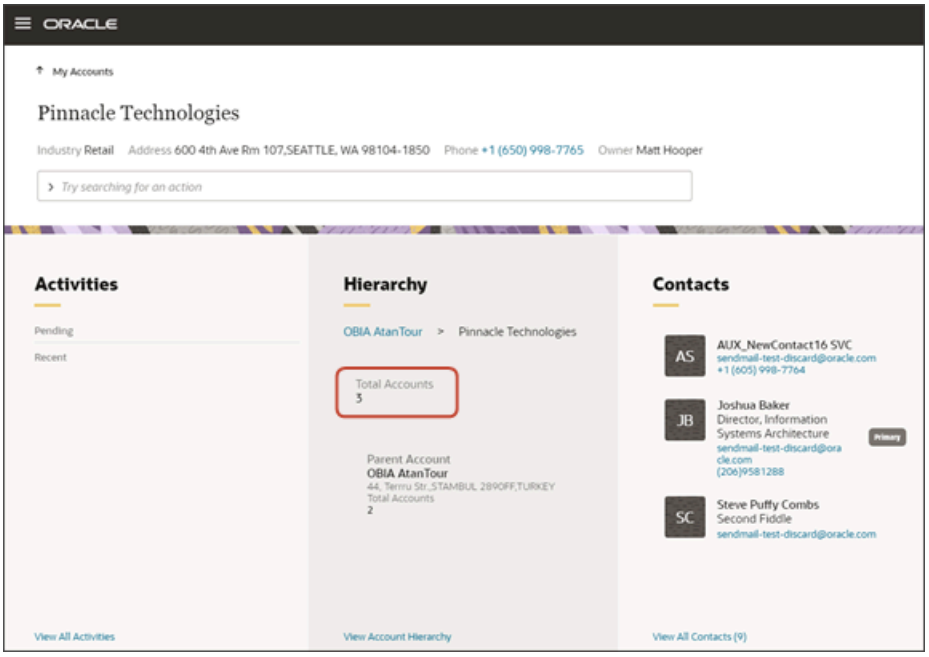
Configure the Rollups Region in a Panel

Rollups summarize data for an attribute of a business object and its related objects. In Sales in the Redwood UX, the calculated value of a rollup appears as a business metric inside a panel on an account record's page. You can add new rollups to a panel using Oracle Visual Builder Studio.

Where Do Rollups Appear?

Rollups appear inside specific panels on an account record page in Sales in the Redwood UX.

Here's a screenshot of a rollup that displays in the Hierarchy panel for an account.



Only certain panels include a region for rollups. You can modify these regions, as needed.

This table lists which panels include rollups, as well as the predefined rollups that are automatically included in each panel. For example, a rollup can calculate the sum of the potential revenue from the opportunities for an account.

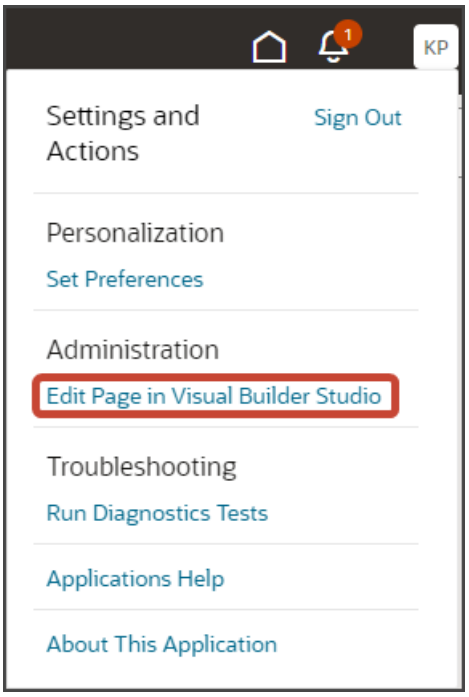
For a complete list of all the predefined rollups that are available with Sales in the Redwood UX, see *Predefined Rollups*.

Panel	Predefined Rollups
Hierarchy	• **TotalAccountsInHierarchy** • **AccountRollup.items.SumOfWonOpportunitiesRevenue** • **AccountRollup.items.HierSumOfWonOpportunitiesRevenue**
Opportunities	• **Total Potential Revenue from Open Opportunities** (SumOfOpenOpportunitiesRevenue) The sum of the potential revenue from the open opportunities of an account and its hierarchy.
Leads	• **Total Potential Revenue from Open Leads** (SumOfOpenLeadAmount) The sum of the potential revenues from qualified and unqualified open leads of an account.
Service Requests	• **Total Open Critical Service Requests** (NumberOfOpenCriticalServiceRequests) The total count of the open critical service requests that are in the new, in-progress, or waiting status of an account and its hierarchy. • **Total Open Service Requests** (NumberOfOpenServiceRequests) The total count of service requests that are in the open, in-progress, and waiting statuses, associated with an account and its hierarchy.

Configure the Rollups Region

In this example, we'll add a predefined rollup to the Hierarchy panel. (Note that you can also create custom rollups, if required. For more information about how to create custom rollups, see *Create Rollups*.)

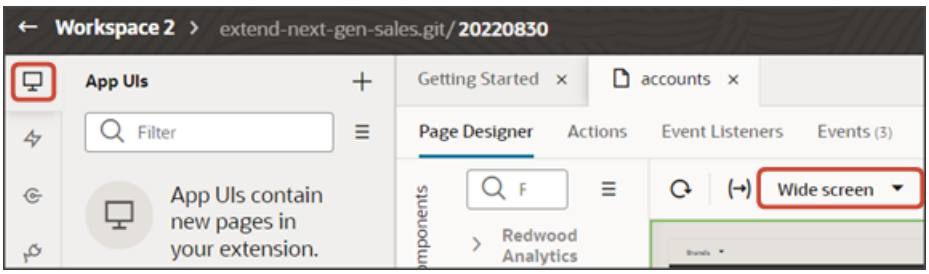
1. In Sales in the Redwood UX, navigate to the My Accounts page and drill down to any account record.
2. In the Settings and Actions menu, select **Edit Page in Visual Builder Studio**.



3. Select the project that's already set up for you. If only one project exists, then you'll automatically land in that project.
4. If you're working in an active sandbox when you launch VB Studio from Sales in the Redwood UX, then VB Studio looks for a workspace that's associated with your sandbox. If you're not working in a sandbox when you launch VB Studio, then VB Studio looks for a workspace without a sandbox. You might need to select a workspace if more than one workspace exists. If no workspace exists, then VB Studio automatically creates one for you.
5. When you enter into your workspace in VB Studio, you land on the Page Designer. This is where you create your application extension.

   The account record page is displayed in the "design area."

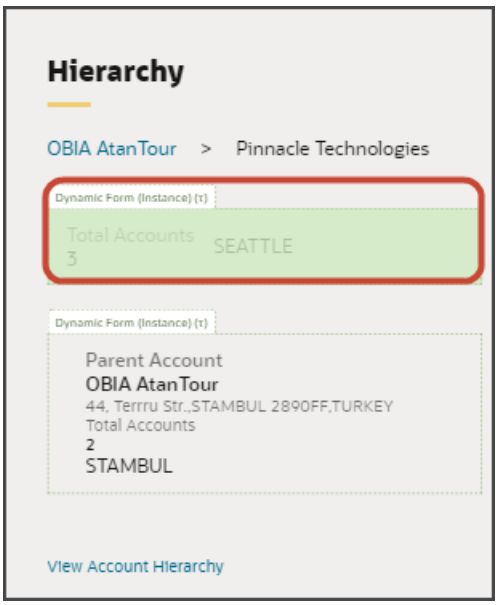
   > **Tip:** To display more of the page in the design area, collapse the navigation pane by clicking the Applications Extensions tab on the left. Then, select **Wide screen** from the list at the top of the Page Designer.



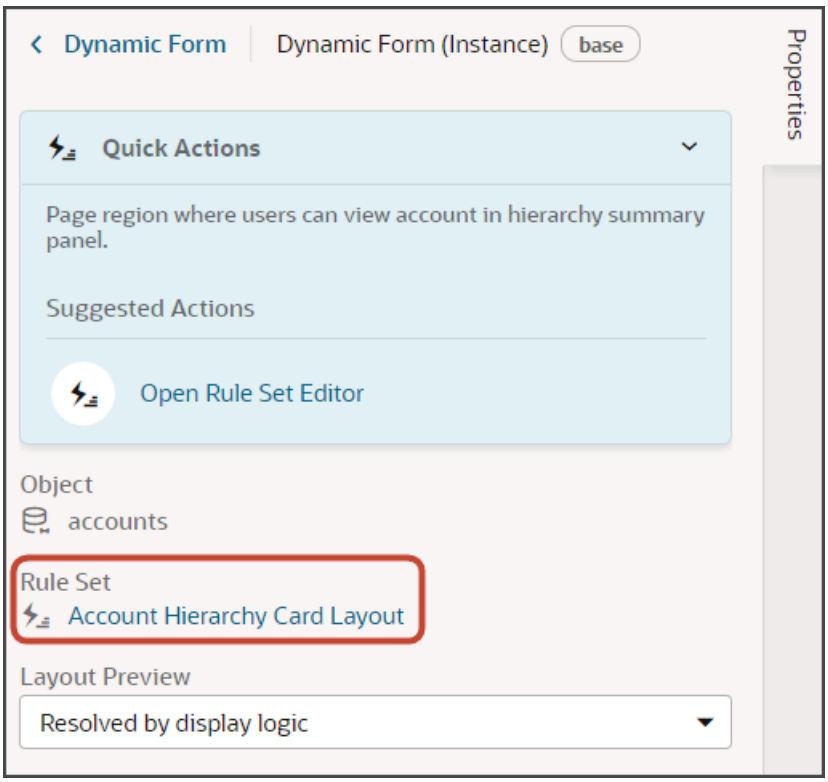
6. Click the Design button.

7. In the design area, click the dynamic form region inside the Hierarchy panel.

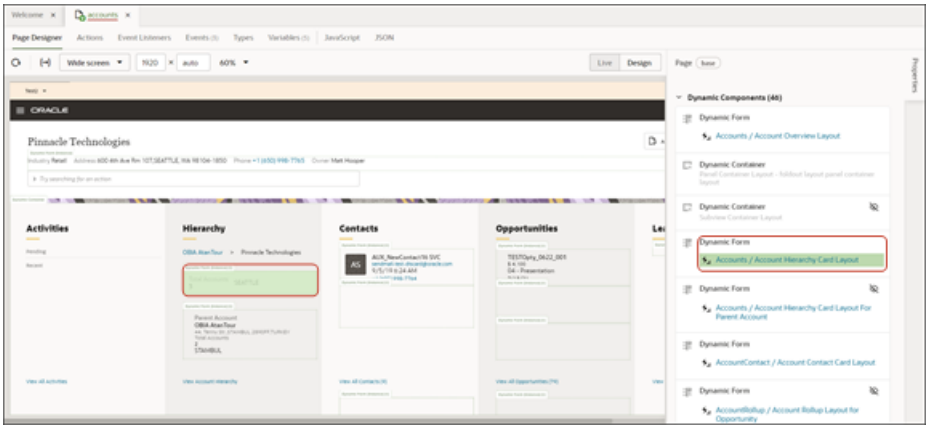
   Note that the region now displays with a Dynamic Form handle.



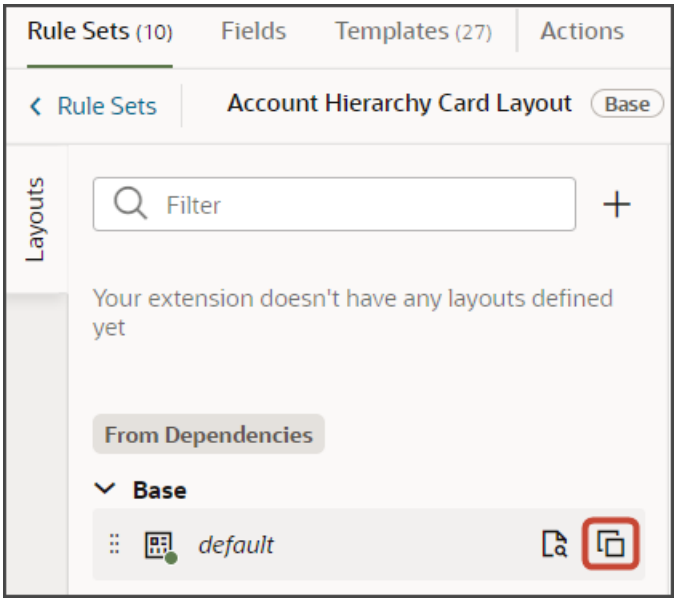
   In the Properties pane, the rule set is also displayed.



Tip: Instead of clicking, you can also hover over the list region in the design area. When you hover, both the region and its associated dynamic form are highlighted in green.

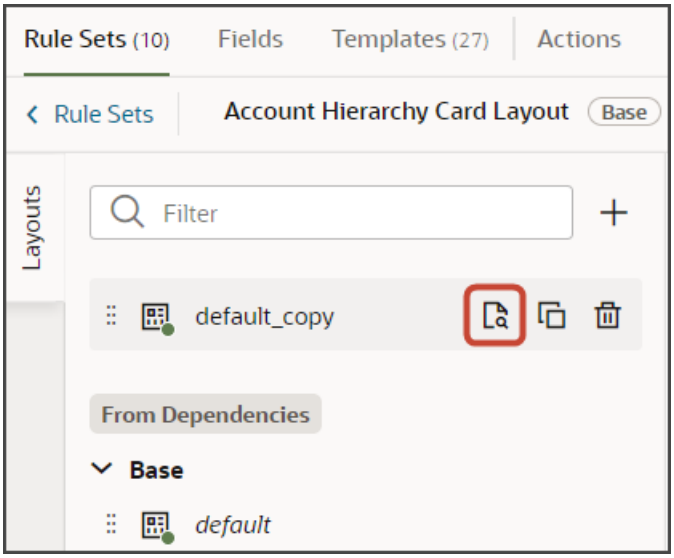


8. In the Properties pane, click **Account Hierarchy Card Layout**.
9. On the Layouts tab, click the Duplicate icon to duplicate the default base layout.



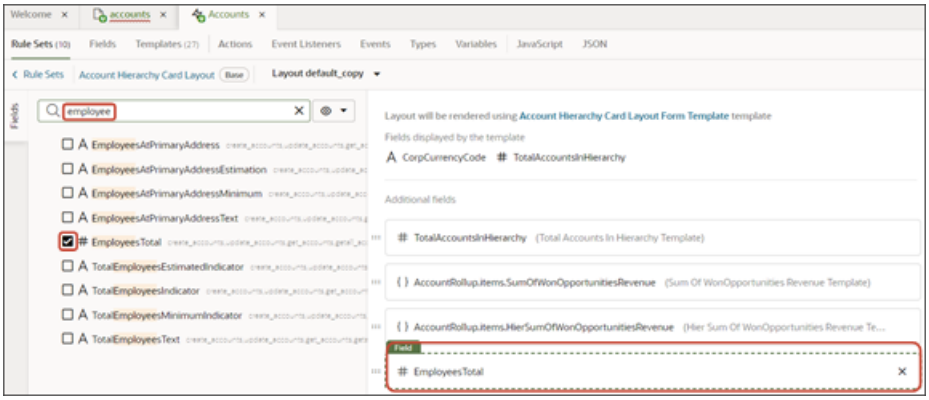
10. Enter a name for the layout and click **Duplicate**.

11. Click the Open icon to edit the duplicate layout.

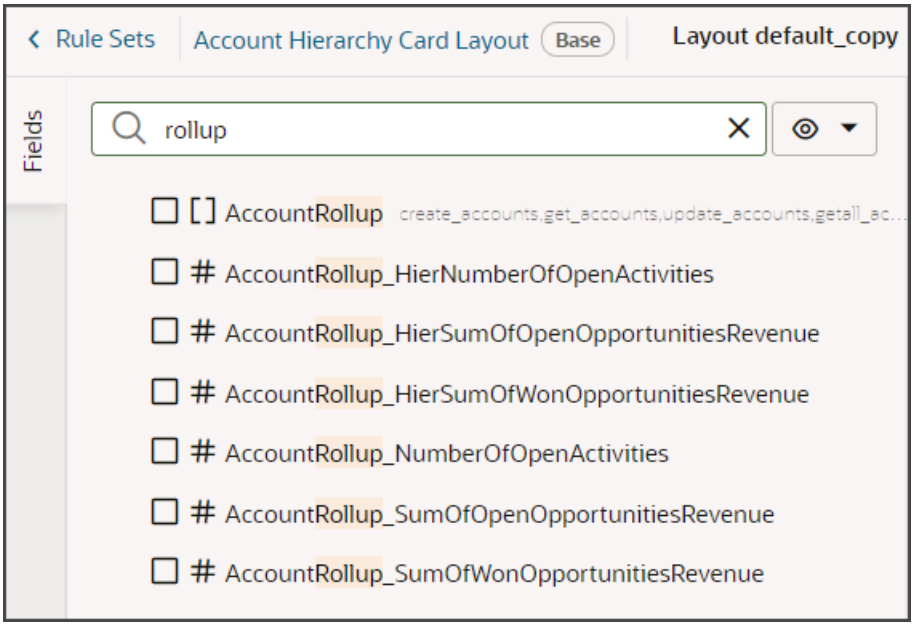


12. On the Fields tab, search for the field that you want to add as a new rollup to the Hierarchy panel.

    In this example, we want to add the total number of employees to the Hierarchy panel. Enter `employee` in the Filter field, then click the **EmployeesTotal** field to add it to the list of rollups.

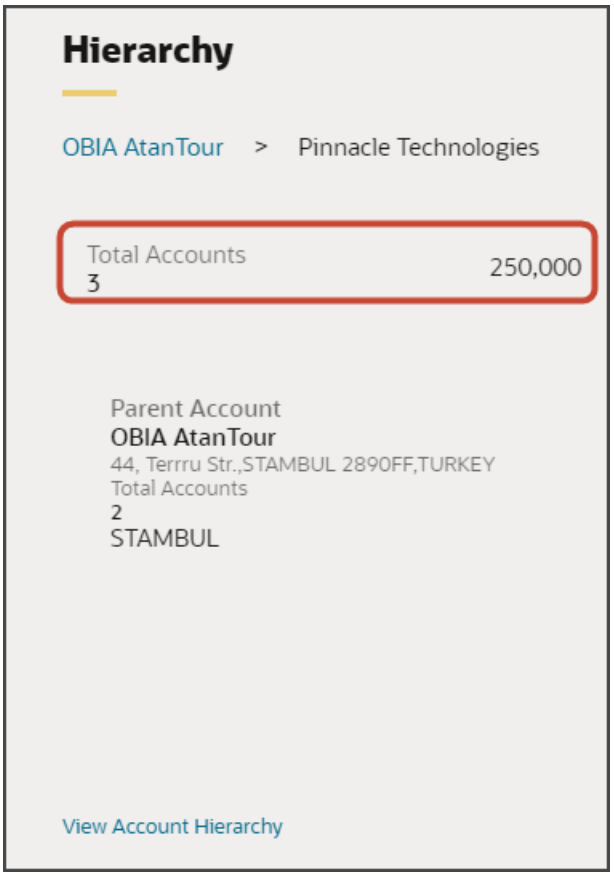


> **Note:** Use the Filter field to filter on a set of fields that you can add. For example, enter `rollup` to find rollup fields that you can add. Other rollup-related terms that you can filter on include `total` or `sum`.



13. Click the Preview button to see your changes in your runtime test environment.

The total number of employees is now displayed in the Hierarchy panel next to the total number of accounts in the hierarchy. If the accounts don't have employee counts specified, then nothing displays in the panel at runtime.

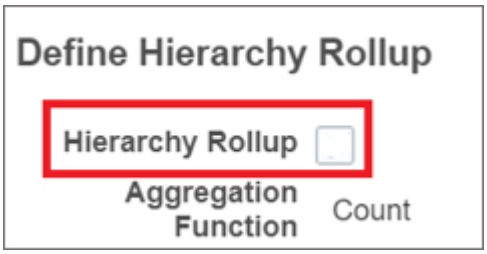


Exclude Hierarchy for the Account Rollups

Here's how to exclude the hierarchy from an account rollup calculation:

1. Select an account rollup.
2. Scroll down to the **Define Hierarchy Rollup** section.

3. Deselect the **Hierarchy Rollup** check box.



4. Click **Save and Close**.

   The rollup engine excludes the hierarchy from the rollup calculations in its next run.

Change the Calculation Frequency of a Rollup

Calculation frequency indicates how often the rollup engine should recalculate the rollup values. By default, the frequency for Aging rollups is once a day, and for Regular rollups, it's once an hour.

Here's how you change the frequency:

1. Open a rollup.
2. Under **Advanced Settings** in the edit page, change the **Calculation Frequency** of the rollup.
3. **Maximum Number of Days for Data Selection**: This field appears only for Interaction and Activity-based aging rollups, such as Total Calls Made and Total Open Activities. The maximum is 120 days, and this is the default value. The rollup engine uses the data from the past 120 days until today to calculate the rollup.

   > **Note:** Ensure that the number of days is within 120 to avoid performance slowdown during a full refresh.

4. Click **Save and Close**.

   The rollup engine uses the new frequency in its next run.

Refer to *Create Rollups* to learn more about Aging and Regular rollups.

Run Scheduled Processes for Rollups

The Monitor tab on the Define Rollups page contains these scheduled processes that you can run for rollups:

- Rollup Full Refresh
- Rollup Account Hierarchy and Linked Records Refresh
- Rollup Incremental Refresh
- Data Cleanup

Full Refresh Process

Run a full refresh every time you publish a rollup. Here are the steps to trigger a full refresh:

1. Publish a rollup.
2. Go to **Monitor** > **Full Refresh**.
3. Click **Start Process** to run the **Rollup Full Refresh** scheduled process.

After the full refresh completes, your users can see the rollup value as a metric in the Digital Sales UI.

Also, it's recommended that you schedule a full refresh once in a day during the non-operational hours of your organization.

> **Note:** The full refresh job, when scheduled once a day, considers the calculation frequency set for aging rollups before recalculating their values.

Enforce Recalculation

A full refresh doesn't run any previously published rollups. This is because the volume of records that the rollup engine must process is too high, affecting the performance. To recalculate a previously published rollup, use the **Enforce Recalculation** option to include it in the full refresh.

Here's how you can use the Enforce Recalculation option:

1. Open a previously published rollup.
2. On the Edit Rollups page, click **Actions** and select **Enforce Recalculation**.
3. Go to **Monitor** > **Full Refresh**.
4. Click **Start Process**.

   After the full refresh completes, your users can see the latest rollup value in the Digital Sales UI.

Incremental Refresh Process

The **Rollup Incremental Refresh** scheduled process runs automatically at scheduled intervals to update published rollups with the latest calculations. This process is necessary because changes made to contacts, opportunities, leads, activities, or other related objects, affect the rollup values. The Rollup Incremental Refresh scheduled process is based on the Calculation Frequency set for the rollups.

> **Note:** Set the frequency to schedule the Rollup Incremental Refresh process. On the Monitor tab, you can see the status of the process, but you can't run it manually.

Rollup Account Hierarchy and Linked Records Refresh

The Rollup Account Hierarchy and Linked Records Refresh is only for accounts.

The rollup engine doesn't register changes you make to the account hierarchy. So, run the Hierarchy Refresh process whenever you change or delete an account node. The recommended frequency is to run this job every 24 hours.

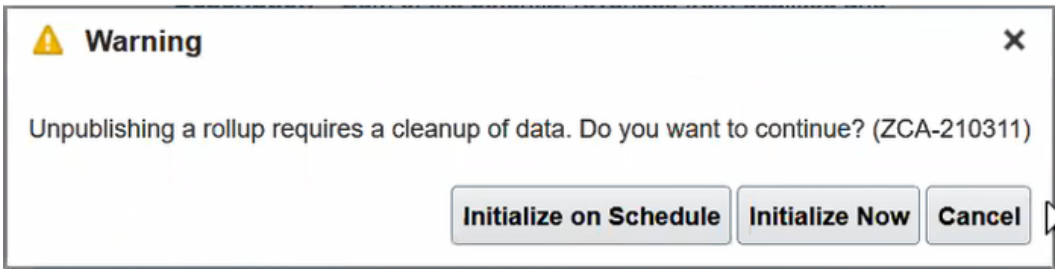
1. Go to the **Monitor** > **Hierarchy Refresh**.
2. Click **Start Process** to run the **Rollup Account Hierarchy and Linked Records Refresh** scheduled process.

> **Note:** Instead of running the Rollup Account Hierarchy and Linked Records Refresh process manually every time, you can schedule a daily refresh.

Data Cleanup Process

When you unpublish or delete a rollup, the application prompts you to clear up the data.

- Select **Initialize on Schedule** to let the **Data Cleanup** scheduled process clear the data.
- Select **Initialize Now** to initiate the data cleanup immediately.



Rollup and Adaptive Search Scheduled Process Considerations

You must run a rollup Full Refresh each time there's a change to a rollup configuration. A change to the configuration results whenever a rollup object is created, deleted, published, or unpublished. Once the full refresh process is completed for the rollup, run the Adaptive Search Partial Publish indexing process to publish only those objects that have changed their configuration.

For example, if you create a rollup called `Num of Open Opty` to calculate the number of open opportunities for the Account object, then after running a **Full Refresh**, you perform the one time activity of running an Adaptive Search **Partial Publish** for the Account object as follows:

1. Run the Partial Process from the **Actions** menu in the Advanced tab of the **Configure Adaptive Search** setup task.
2. Once the `Num of Open Opty` rollup is available in your Workspace for Account, run the **Rollup Incremental Refresh** scheduled process job to create an indexing request after an hour (default configuration) and the following Adaptive Search **Periodic Refresh** will index the new rollup.

   > **Note:** This is applicable only for regular (non aging) rollups. The **Rollup Incremental Refresh** scheduled process runs automatically at scheduled intervals to update published rollups with the latest calculations.

3. You can schedule a Full Refresh for any existing aging rollups that are available in Workspace. The recommended schedule for the rollup **Full Refresh** is once a day but you can schedule it to run more often depending on your requirements.

   The Adaptive Search **Periodic Refresh** scheduled process must be completed before the latest rollup data will be available in Workspace. The Periodic Refresh process enables you to search for imported records or records updated by background processes and will be available for search after the indexing process completes.

   > **Note:** This is applicable only for aging rollups.

4. You can choose to recalculate a previously published rollup by selecting the **Enforce Recalculation** option to include it in the full refresh of the rollup. So, at any point, if your rollup data is available in Workspace and you select the Enforce Recalculation option, the subsequent Adaptive Search **Periodic Refresh** will sync the latest data in Workspace.

Use the Accounting Calendar Time Periods for Your Rollups

When creating rollups that depend on fiscal year periods, such as current quarter, use the accounting calendar periods. The accounting calendar defines the fiscal year and the time periods within it.

Therefore, the periods that are set based on the accounting calendar are useful when calculating rollups like Revenue from the last fiscal quarter.

In the sales application, predefined period tokens are available that are created based on the accounting calendar time periods.

Accounting Calendar Period Tokens for Rollups

This table lists the period tokens based on the accounting calendar. You use the tokens given in the Token column to define the periods for your rollups.

> **Note:** Ensure that your accounting calendar supports weekly periods before using the week-related tokens for rollups. The week-related tokens are: GL_WTD, GL_PWTD, and GL_PW.

Accounting Calendar Period Tokens

#	Token	Meaning	Attribute	Description
1	GL_WTD	Week-to-date	glweekToDate()	The period from the beginning of the current week until today. For example, the current date is Thursday, March 10, and the first day of the week is set in the accounting calendar as Monday. The week-to-date period will be from Monday, March 7, to Thursday, March 10.
2	GL_MTD	Month-to-date	glmonthToDate()	The period from the first day of the current month until today. For example, the current date is March 10. The month-to-date period will be March 1 to 10.
3	GL_QTD	Quarter-to-date	glquarterToDate()	The period from the first day of the current quarter until today. For example, if the first day of the current quarter is January 1 and the current date is March 10, the quarter-to-date period will be January 1 to March 10.
4	GL_YTD	Year-to-date	glyearToDate()	The period from the first day of the current fiscal year until today. For example, if the first day of your current fiscal year is January 1, the year-to-date period will be January 1 to March 10.
5	GL_PWTD	Previous Week-to-date	glpreviousWeekToDate()	The period from the first day of the previous week until today. For example, if the week begins on Monday, the previous week-to-date period will be from Monday of the last week until today.
6	GL_PMTD	Previous Month-to-date	glpreviousMonthToDate()	The period from the first day of the previous month until today. For example, if the current date is March 10, the previous month-to-date period will be February 1 to March 10.
7	GL_PQTD	Previous Quarter-to-date	glpreviousQuarterToDate()	The period from the first day of the previous quarter until today. For example, if the first day of the previous quarter was October 1, 2021, and the current date is March 10, 2022, the previous quarter-to-date period will be October 1, 2021, of the previous year, to March 10, 2022.
8	GL_PYTD	Previous Year-to-date	glpreviousYearToDate()	The period from the first day of the previous fiscal year until today. For example, if the first day of your previous fiscal year was January 1, 2021, the year-to-date period will be January 1, 2021, to March 10, 2022.
9	GL_PW	Previous Week	glpreviousWeek()	The period from the first day of the previous week until the end of the week.

#	Token	Meaning	Attribute	Description
10	GL_PM	Previous Month	glpreviousMonth()	The period from the first day of the previous month until the end of the month.
11	GL_PQ	Previous Quarter	glpreviousQuarter()	The period from the first day of the previous quarter until the end of the quarter.
12	GL_PY	Previous Year	glpreviousYear()	The period from the first day of the previous fiscal year until the end of the fiscal year.

How to Use an Accounting Calendar Token in a Rollup

When creating a rollup, you write a query into the Related Object Filter field, defining all the conditions that a rollup needs to consider while calculating the aggregated value. For example, you want to create a rollup that calculates revenue from qualified and unqualified leads. In this case, your Source Object is Account, the Related Object is Lead, and the Related Object Filter query is:

```
StatusCode IN ('QUALIFIED', 'UNQUALIFIED') AND DEAL AMOUNT IS NOT NULL
```

This query adds up the revenue or deal amount associated with the qualified and unqualified leads and shows the aggregated value for the rollup.

Now, let's say you want to calculate the revenue from the previous quarter of the accounting calendar. You need to add the period token, GL_PQ, to the query, as shown below:

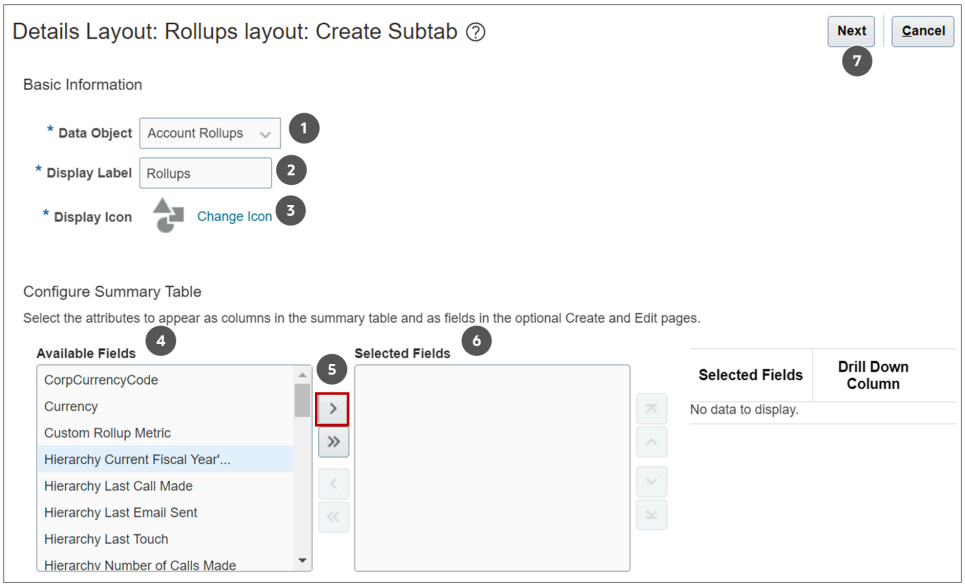
```
StatusCode IN ('QUALIFIED', 'UNQUALIFIED') AND DEAL AMOUNT IS NOT NULL AND LastAssignmentDate=:GL_PQ
```

Show Rollups

Show Rollup Attributes on the Object Pages

To show the rollup attributes on the object pages of the sales application, you need to create a custom subtab of type, child object.

To learn more about subtabs, see the information on custom subtabs in the *Configuring Applications Using the Application Composer* guide.



In the Create Subtab layout, do this:

1. Select the **Data Object** (callout 1). For example, select `Account Rollups` if you're adding a Rollups subtab for the Account object.
    - The Data Object name you selected is copied into the Display Label field (callout 2). You can change the label. A display icon (callout 3) is auto-assigned to the subtab. You can change the icon, too.
    - Based on the data object you selected, the **Available Fields** area (callout 4) in the Configure Summary Table region shows the rollups relevant for that object. For example, if your data object is Account Rollups, the Available Fields shows the entire list of account rollups.
2. From the Available Fields area (callout 4), select the rollups you want to add to the subtab and click the right-arrow (callout 5) to move them to the Selected Fields area (callout 6).
3. Click **Next** (callout 7).
4. Click **Save and Close**.

    The Rollups subtab displays on the object details page.

Add a Rollups Region to a Panel

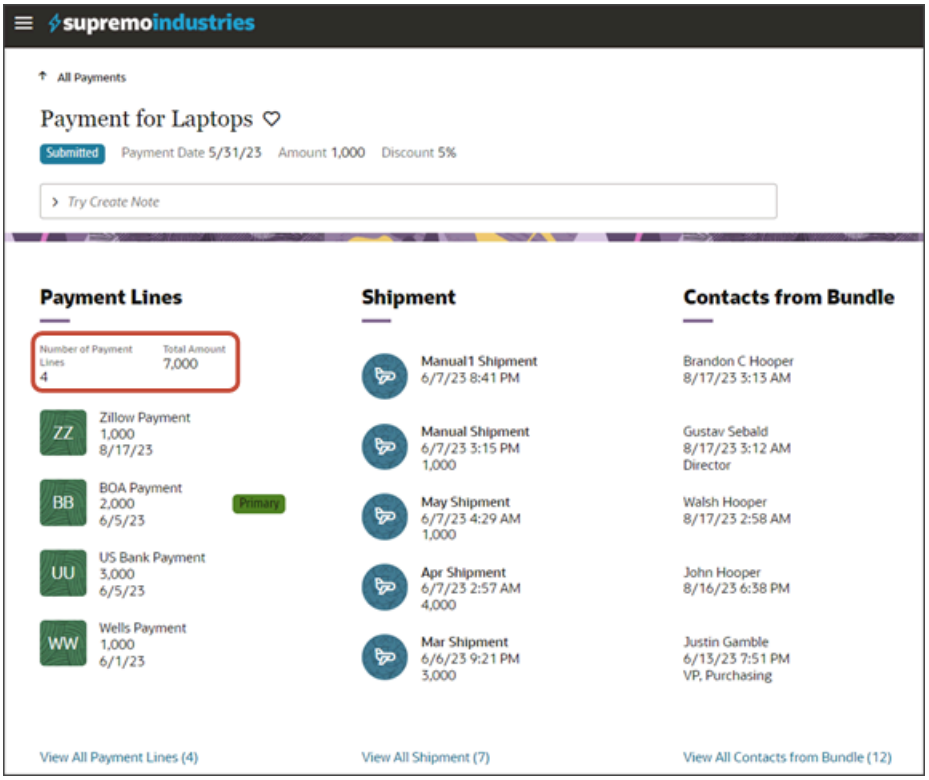
Rollups summarize data across records, for an attribute of a business object and its related objects. The summarized value of a rollup appears as a business metric inside a panel on an object's detail page. You can add new rollups to a panel using Oracle Visual Builder Studio.

Where Do Rollups Appear?

Rollups appear inside panels on an object's detail page.

You can add rollups, either predefined or custom, to panels for both custom and standard objects. Some panels for standard objects are already delivered with a rollups region.

Here's a screenshot of a rollup that displays in a panel for a payment.



Prerequisites

You can add a predefined or custom rollup to a panel.

Before adding a custom rollup, you must first create the custom rollup.

1. In Application Composer:
    - For the desired object, create a rollup object and fields.
    - Then, create and publish the fields as rollups.
2. In the Sales Setup and Maintenance work area, in the Configure Adaptive Search task, enable the rollup object and attributes.

In the following example, we'll use a rollup object, called RollupObject, created for the Payment object. The RollupObject object has these fields:

- Number of Payment Lines (number field)
- Total Amount (currency field)

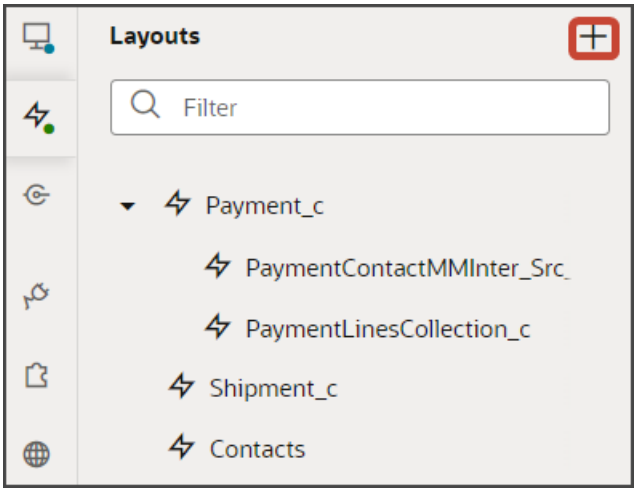
Create the Rollup Layout and Rule Set

To add a rollup to a panel, you must first create a layout for the rollup. You can then add the rollup layout to the panel.

Let's look at an example of adding a rollup to the Payment Lines panel on a payment's detail page.

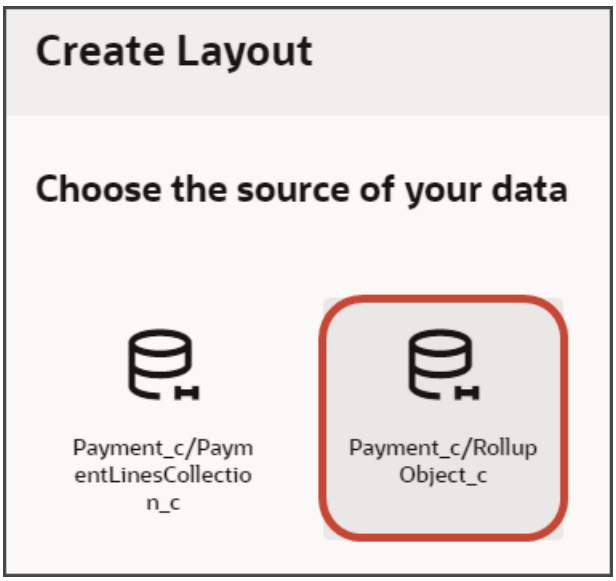
First, create the rollup layout:

1. In Visual Builder Studio, click the Layouts tab, then click the Create Layout icon.



2. In the Create Layout dialog, click the REST resource for your child object.

   In our example, the rollup object is called **RollupObject**. So, expand cx-custom and click **Payment_c/RollupObject_c**.

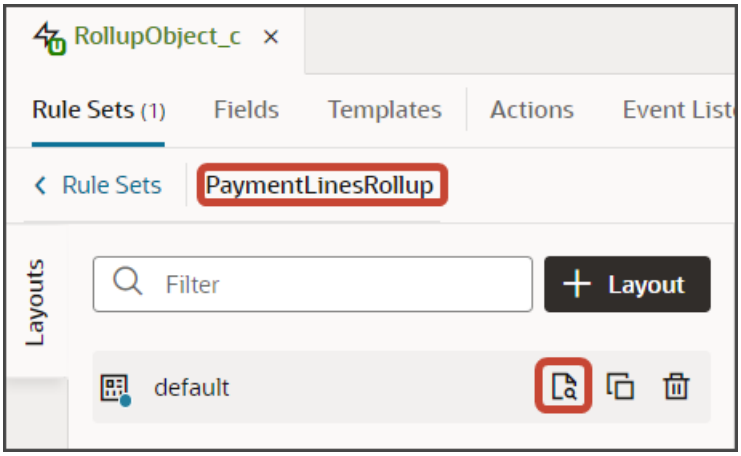


3. Click **Create**.

Next, create the associated rule set.

1. On the RollupObject_c layout tab, click **+ Rule Set** to create a new rule set for the layout.
   a. In the Create Rule Set dialog, in the Component field, select **Dynamic Form**.
   b. In the Label field, enter **PaymentLinesRollup**.
   c. In the ID field, change the value to **PaymentLinesRollup**.
   d. Click **Create**.
2. Add the rollup fields to the layout.

a. Click the Open icon next to the **default** layout.

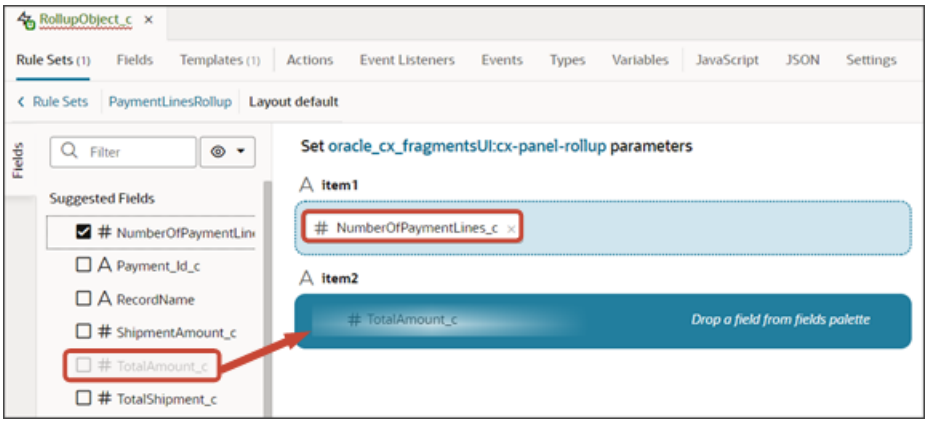


b. Click the **cx-panel-rollup** fragment.

This fragment provides the format for the rollup region.

c. The rollup layout includes two slots. From the list of fields, drag a rollup field to the desired slot.

For example, drag the TotalAmount_c field to the item2 slot.



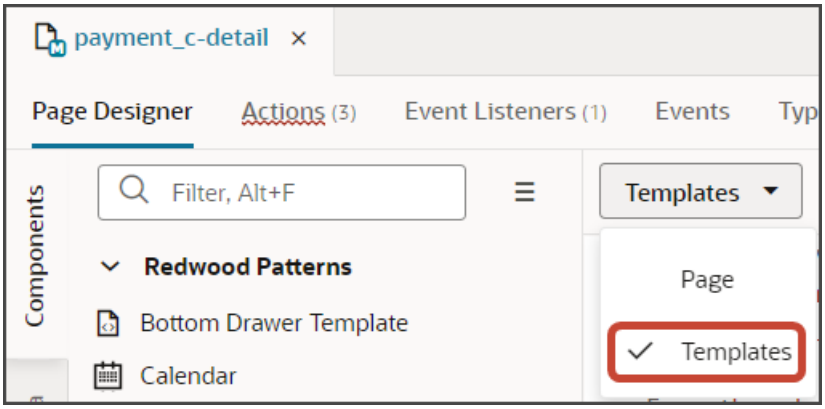
Add the Rollups Region to the Panel

In the previous section, you configured the rollups region using a layout and rule set.

Next, add the rollups region to a panel by adding a parameter to the panel's page and template. Here's how:

1. In Visual Builder Studio, click the App UIs tab.
2. Expand cx-custom > payment_c, then click the payment_c-detail node.
3. Click the payment_c-detail tab, then click the Page Designer subtab.
4. Click the **Code** button.

5. Select **Templates** from the drop-down list.



6. Add the following parameter to the fragment code.

```
<oj-vb-fragment-param name="rollupLayoutId" value="PaymentLinesRollup"></oj-vb-fragment-param>
```

Be sure to replace the `rollupLayoutId` parameter's value with the appropriate value.

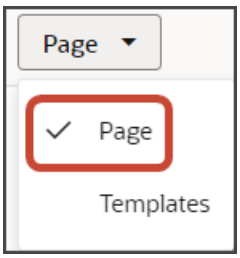
The resulting template code should look something like this:

```
<template id="paymentLines">
 <oj-vb-fragment bridge="[[vbBridge]]" name="oracle_cx_fragmentsUI:cx-panel">
 <oj-vb-fragment-param name="resource"
 value='[[ {"name": $flow.constants.objectName, "primaryKey": "Id", "endpoint":
 $application.constants.serviceConnection } ]]'>
 </oj-vb-fragment-param>
 <oj-vb-fragment-param name="sortCriteria" value='[[ [{"attribute": "LastUpdateDate","direction":
 "desc" }] ]]'>
 </oj-vb-fragment-param>
 <oj-vb-fragment-param name="query"
 value='[[ [{"type": "selfLink", "params": [{"key": "Payment__c_Id", "value": $variables.id }]}] ]]'></
oj-vb-fragment-param>
 <oj-vb-fragment-param name="child" value='[[ {"name": "PaymentLinesCollection_c", "primaryKey": "Id",
 "relationship": "Child"} ]]'></oj-vb-fragment-param>
 <oj-vb-fragment-param name="context" value="[[ {} ]]"></oj-vb-fragment-param>
 <oj-vb-fragment-param name="extensionId" value="{{ $application.constants.extensionId }}"></oj-vb-
fragment-param>
 <oj-vb-fragment-param name="rollupLayoutId" value="PaymentLinesRollup"></oj-vb-fragment-param>
</oj-vb-fragment>
```

```
</template>
```

```
<template id="paymentLines">
  <oj-vb-fragment bridge="[[vbBridge]]" name="oracle_cx_fragmentsUI:cx-panel">
    <oj-vb-fragment-param name="resource"
      value='[[ {"name": $flow.constants.objectName, "primaryKey": "Id", "endpoint": $applic
    </oj-vb-fragment-param>
    <oj-vb-fragment-param name="sortCriteria" value='[[ [{"attribute": "LastUpdateDate","dir
    </oj-vb-fragment-param>
    <oj-vb-fragment-param name="query"
      value='[[ [{"type": "selfLink", "params": [{"key": "Payment__c_Id", "value": $variable
    <oj-vb-fragment-param name="child" value='[[ {"name": "PaymentLinesCollection_c", "prima
    <oj-vb-fragment-param name="context" value="[[ {} ]]"></oj-vb-fragment-param>
    <oj-vb-fragment-param name="extensionId" value="[[ $application.constants.extensionId ]]
    <oj-vb-fragment-param name="rollupLayoutId" value="PaymentLinesRollup"></oj-vb-fragment-
  </oj-vb-fragment>
</template>
```

7. Select **Page** from the drop-down list.



8. Replace the existing `resource` parameter with the following code:

```
<oj-vb-fragment-param name="resource"
 value="[[ {'name':'Payment_c', 'puid': $variables.puid, 'id': $variables.id, 'endpoint':
 $application.constants.serviceConnection ,'extensionId': $application.constants.extensionId, 'rollup':
 'RollupObject_c'} ]]">
```

Be sure to replace all attribute values with the appropriate values for your scenario.

The resulting code should look something like this:

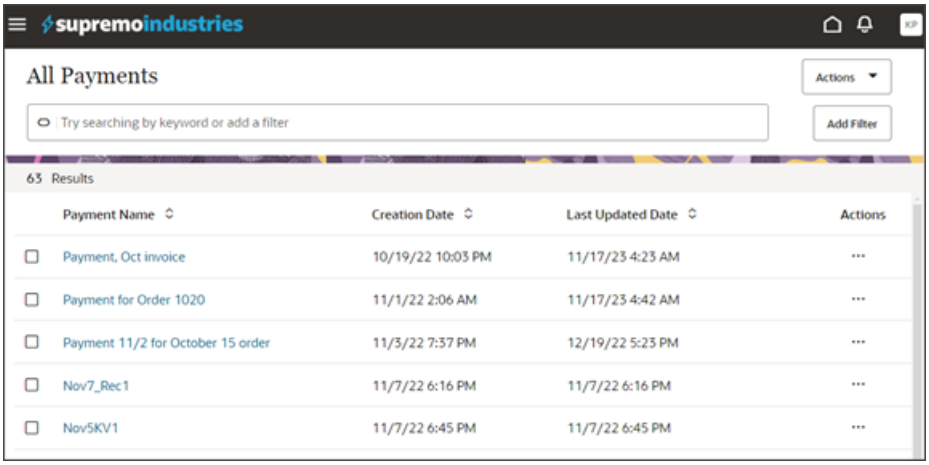
```
<oj-vb-fragment bridge="[[vbBridge]]" name="oracle_cx_fragmentsUI:cx-detail" class="oj-flex-item oj-
sm-12 oj-md-11"
 on-view-change-event="[[$listeners.fragmentViewChangeEvent]]">
 <oj-vb-fragment-param name="resource"
 value="[[ {'name':'Payment_c', 'puid': $variables.puid, 'id': $variables.id, 'endpoint':
 $application.constants.serviceConnection ,'extensionId': $application.constants.extensionId, 'rollup':
 'RollupObject_c'} ]]">
 <oj-vb-fragment-param name="header" value="[[ {'resource': $flow.constants.objectName, 'extensionId':
 $application.constants.extensionId } ]]"></oj-vb-fragment-param>
 <oj-vb-fragment-param name="actionBar" value='[[ { "applicationId": "ORACLE-ISS-APP",
 "subviewLabel": {"PaymentContactMMInter_Src_Payment_cToPaymentContactMMInter_c_Tgt":
 $translations.CustomBundle.Contacts()}, "resource": {"name": $flow.constants.objectName, "primaryKey":
 "Id", "puid": "Id", "value": $variables.puid }} ]]'></oj-vb-fragment-param>
 <oj-vb-fragment-param name="panels" value='[[ { "panelsMetadata": $metadata.dynamicContainerMetadata,
 "view": $page.variables.view } ]]'></oj-vb-fragment-param>
 <oj-vb-fragment-param name="context" value="[[ {'flowContext': $flow.variables.context} ]]"></oj-vb-
fragment-param>
 <oj-vb-fragment-param name="row" value="{{ $variables.row }}"></oj-vb-fragment-param>
</oj-vb-fragment>
```

Test Your Panel

Test the rollups by previewing your application extension from the payment_c-list page.

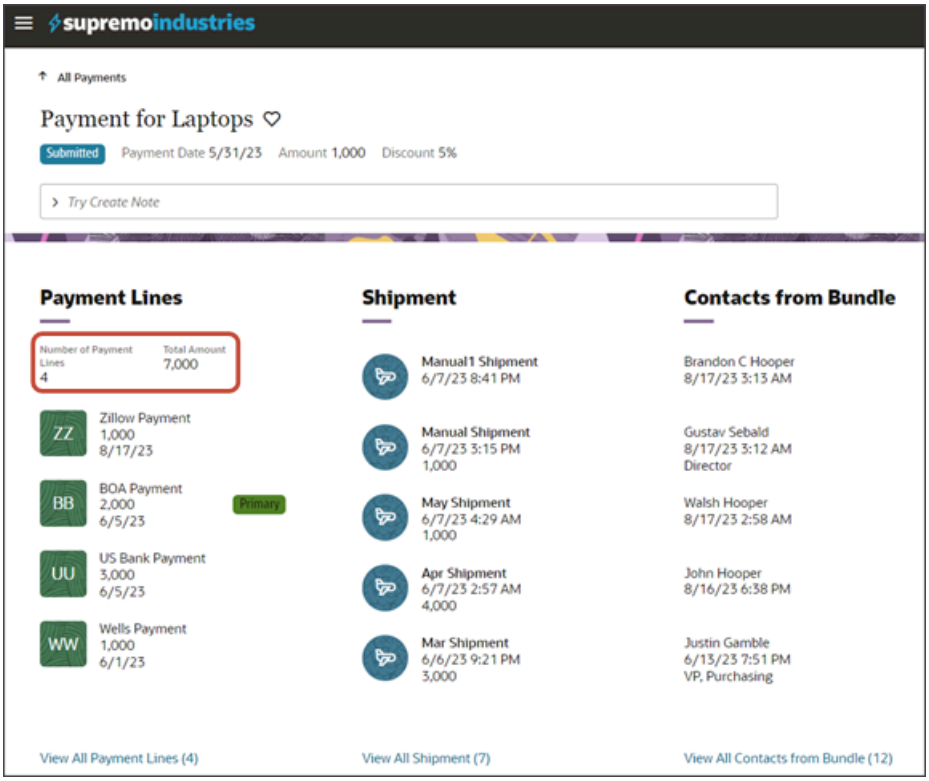
1. From the payment_c-list page, click the **Preview** button to see your changes in your runtime test environment.

The screenshot below illustrates what the list page looks like with data.



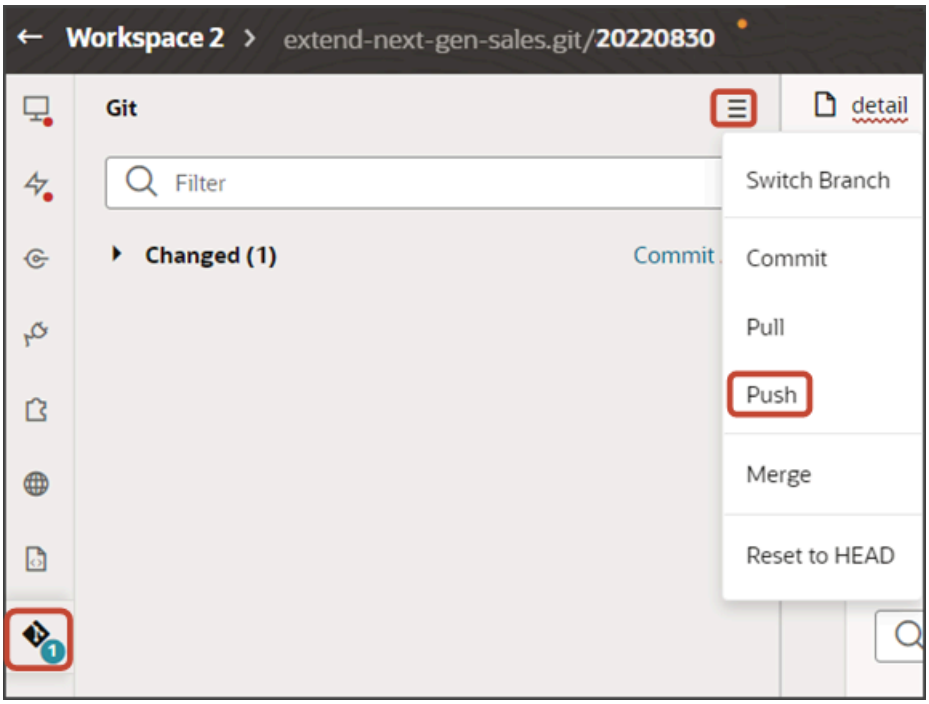
2. If data exists, you can click any record on the list page to drill down to the detail page. The detail page, including header region and panels, should display.

   You should now see the Payment Lines panel on the detail page, with a region for rollups.



3. Save your work by using the Push Git command.

   Navigate to the Git tab, review your changes, and do a Git push (which does both a commit and a push to the Git repository).



Add a Custom Field to the Edit Contact Page

In this next example, we're going to use Oracle Visual Builder Studio to add a field to a region on a Contact page. This example includes working with a custom field created in Application Composer.

You will also see why duplicating display logic rules instead of layouts can be more efficient. And you will add fields to a group.

Task Summary

To add a custom field to a page in Digital Sales, complete the following tasks:

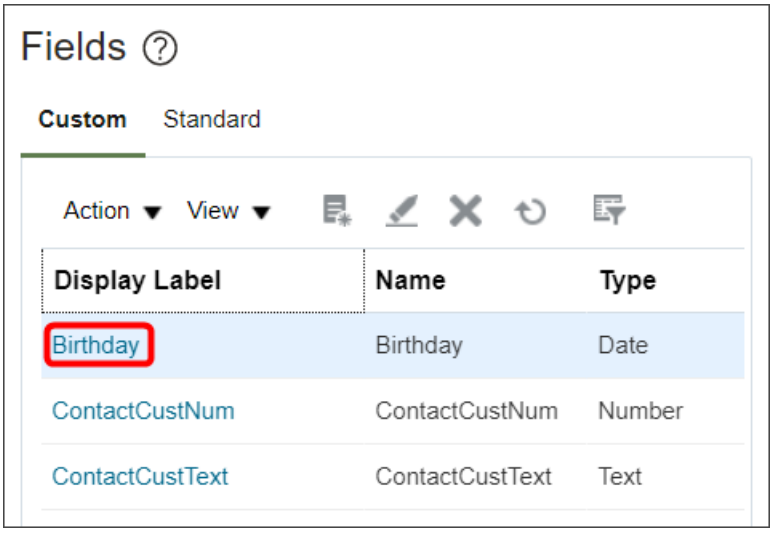
1. Create the custom field in Application Composer.
2. Add your custom field to the Contact page.
3. Optionally add fields to a field group.
4. Preview the modified page with the new custom field for testing.

Create the Custom Field

In this example, you're adding a custom field to a Contact page. The custom field on the Contact object is a data model change. Before creating application extensions in VB Studio, you must first create all data model changes in Application Composer.

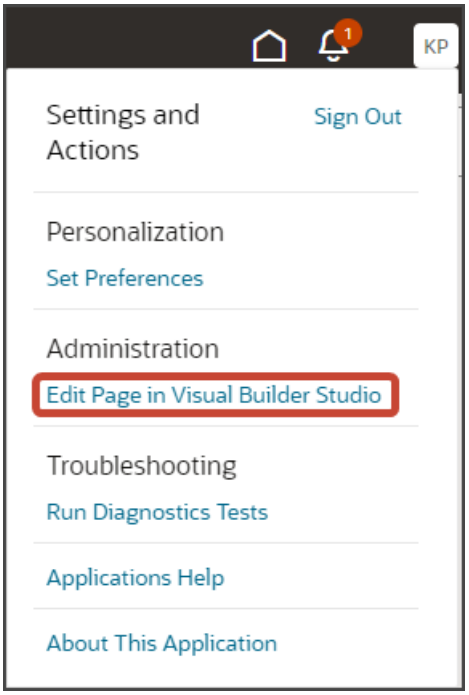
1. In your Oracle Cloud application instance, make sure you're working in an active sandbox.
2. Navigate to Application Composer by clicking **Tools** > **Application Composer**.

3. Open the Contact node under the Standard Objects node, and click **Fields**.
4. Click the **Create a custom field** icon.
5. Click the Date option, then click **OK**.
6. In the Display Label field, enter **Birthday**.
7. Click **Save and Close**.



Add Your Custom Field

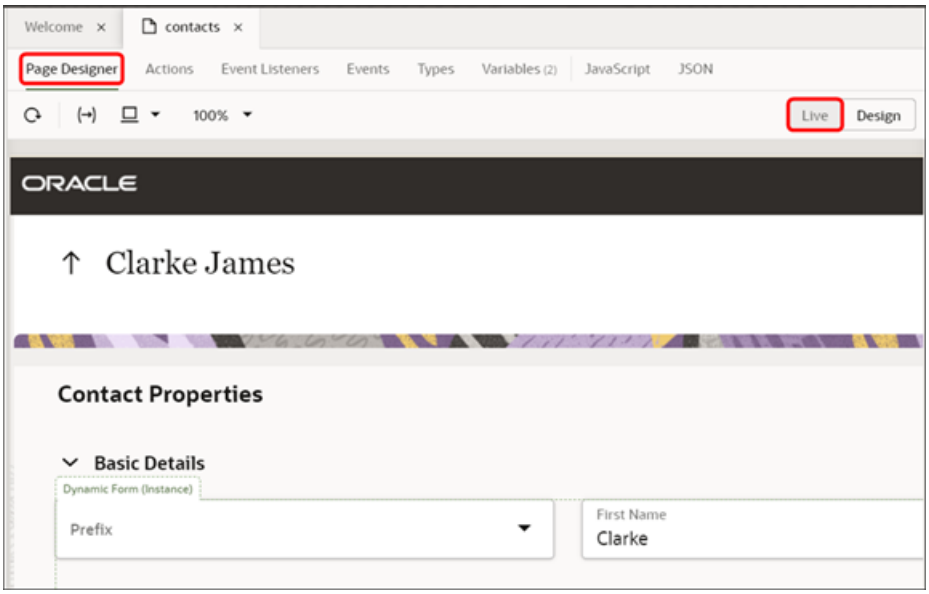
1. In Digital Sales, navigate to the page that displays the area you want to extend. In this example, navigate to the My Contacts page, click a contact record, then click **Contact Details**.
2. Under the Settings and Actions menu, select **Edit Page in Visual Builder Studio**.



3. Select the project that's already set up for you. If only one project exists, then you will automatically land in that project.

4. VB Studio opens a workspace for you. You might have to select a workspace if more than one exists.

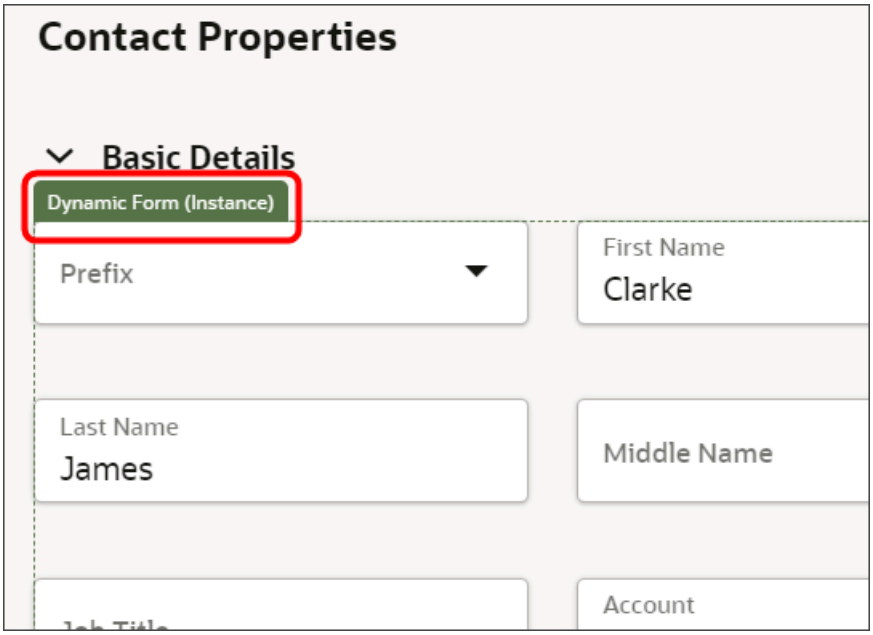
   When you enter into your workspace in VB Studio, you should land on the Page Designer. This is where you can create your application extension.
5. Since you launched VB Studio from a Contact page, you should see the Contacts page in the design area. You might have to navigate to get to the desired region that you want to modify. Click the Live button.



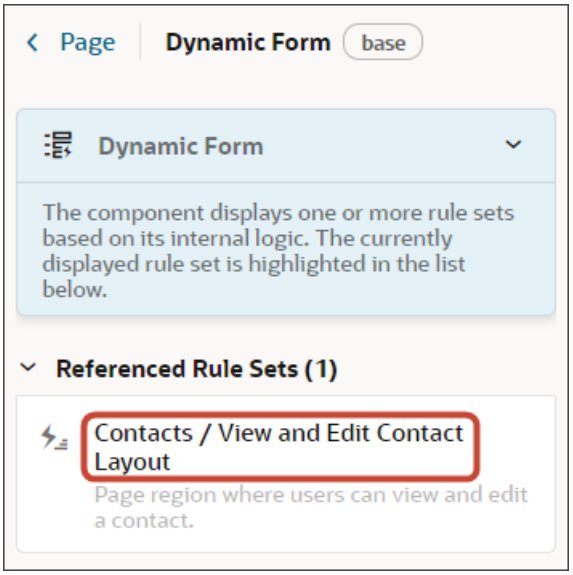
6. Click through the design area until you reach the region that you want to modify. In this case, we want to modify the Basic Details region, so navigate to a contact record, then click **Contact Details**.
7. Click the Design button to enter into Page Designer's Design mode.

8. Then in the design area, click the Basic Details region.

   Note that the region now displays with a Dynamic Form handle.

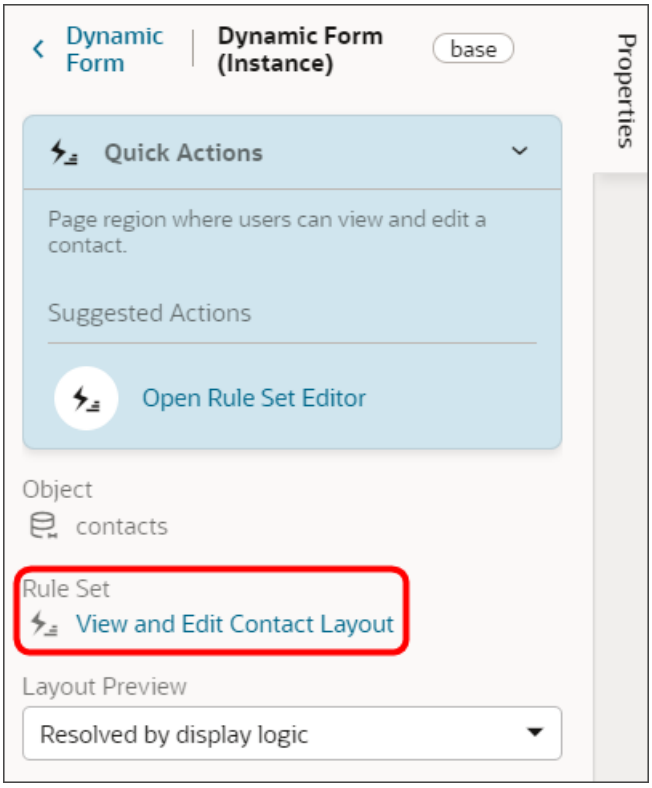


   Additionally, the associated dynamic form's rule set displays in the Properties pane.

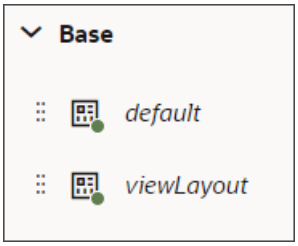


9. In the Properties pane, click the **Contacts / View and Edit Contact Layout** rule set.

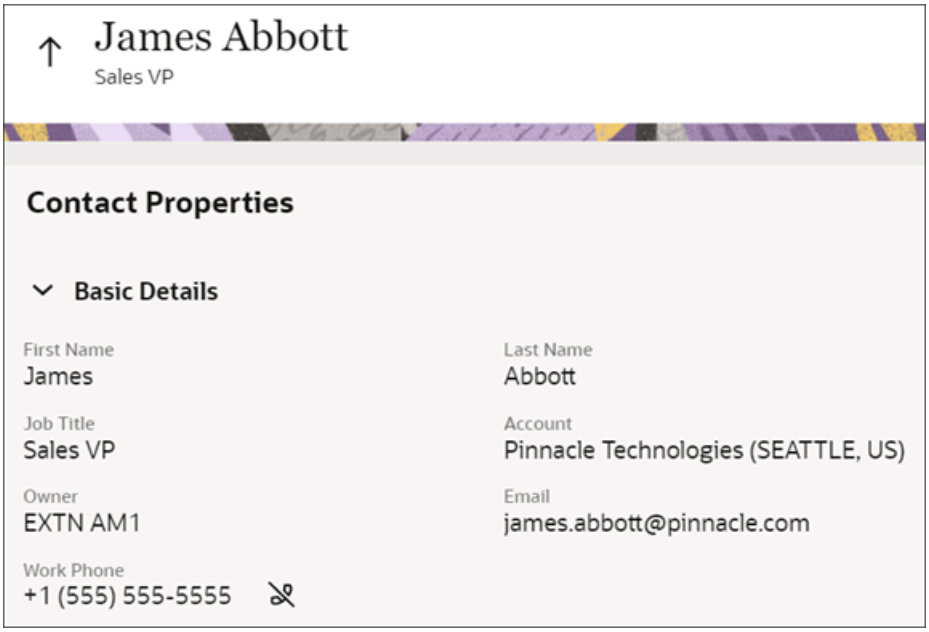
10. Then click the **View and Edit Contact Layout** link.



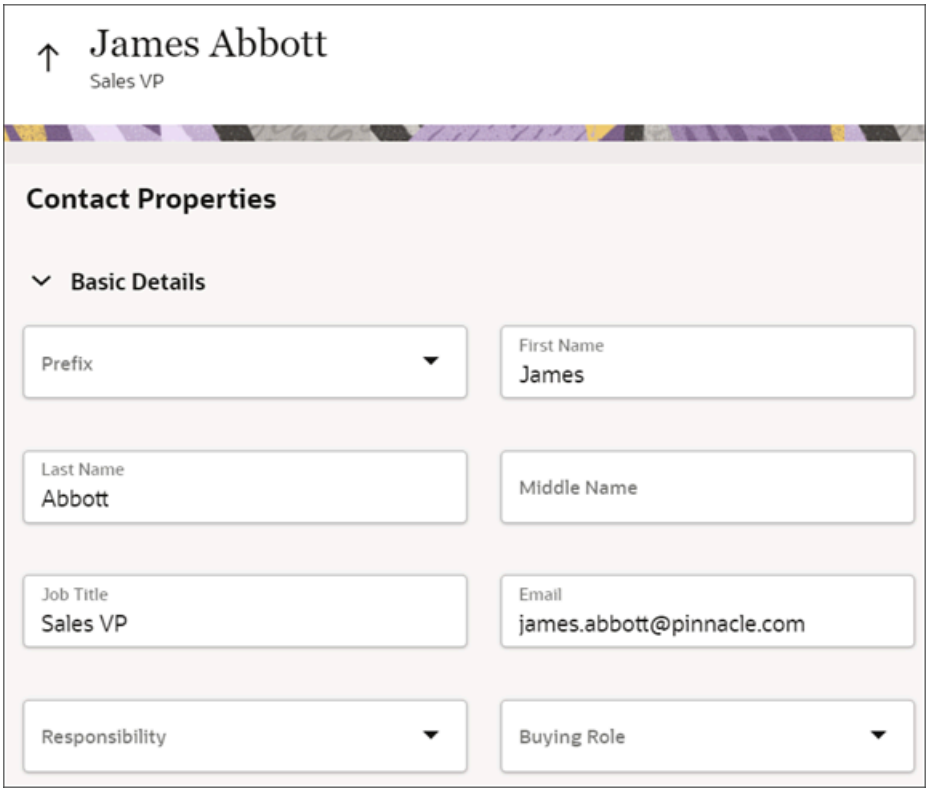
11. The Layouts region displays two base layouts. There is one **viewLayout** layout for the read-only version of the region that users see when they first click **Contact Details**. There is another **default** layout for the editable version of the region that users see when they click **Edit**.



Here's an example of the read-only version of the Basic Details region.



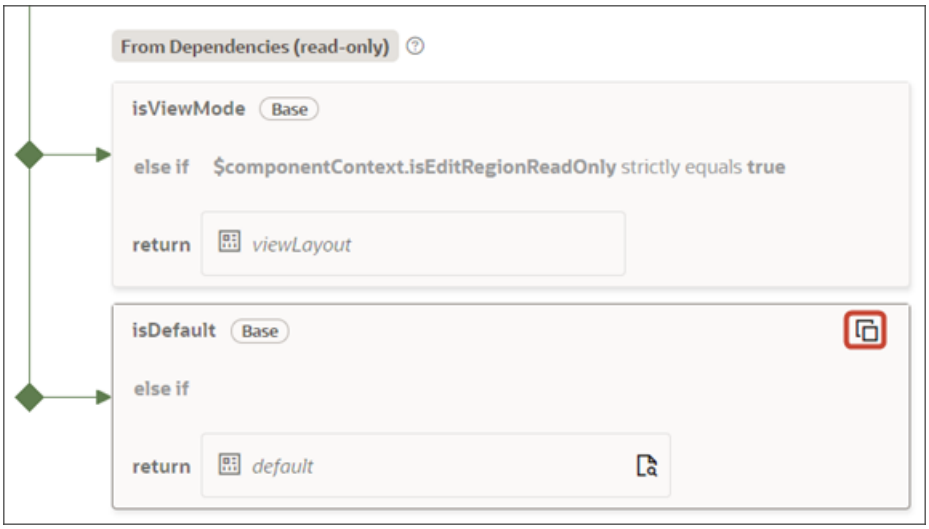
In contrast, here's an example of the editable version of the Basic Details region.



We need to modify both layouts.

> **Note:** These layouts don't include the Address Details region that displays under the Basic Details region. To modify the Address Details region, navigate to Setup and Maintenance in your Oracle Cloud application and search for the **Manage Address Formats** task. See "Update Address Formats" in the Related Topics section below.

12. But first, notice the display logic that's already set on the two base layouts. VB Studio evaluates each rule from top to bottom.

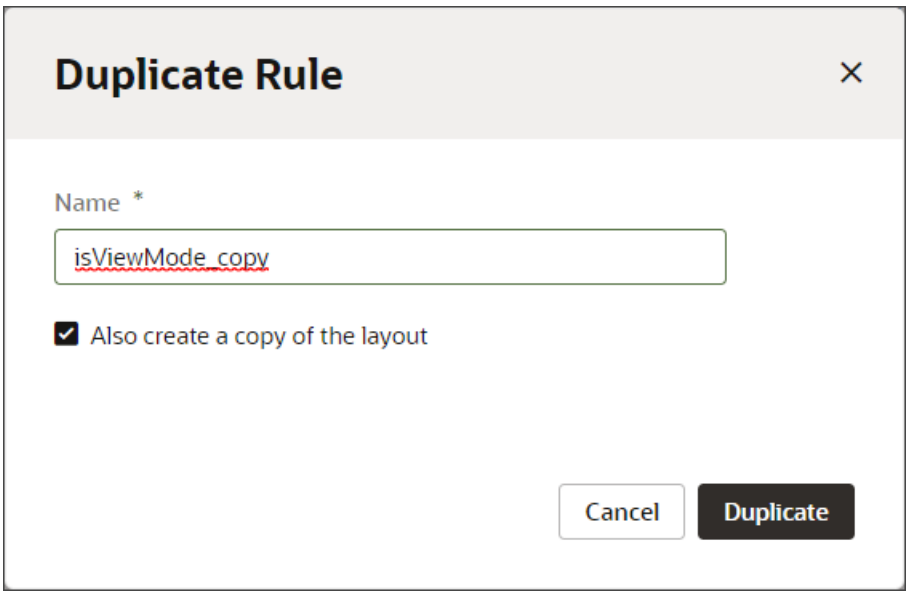


Let's look at each rule. The first rule (`$componentContext.isEditRegionReadOnly strictly equals true`) says that if the page is read only, then VB Studio displays the **viewLayout** layout. Otherwise, VB Studio moves on to the second rule and displays the **default** layout.

Remember our goal: we want to add a custom field, Birthday, to the contact's Basic Details region. To do this, we'll need to duplicate the two layouts because we can't modify base layouts. We can then add the custom field to the duplicated layouts.Instead of duplicating the layouts, however, let's duplicate the rules so that the rules are copied for us along with the layouts. This method is more efficient because it saves you from having to re-create the rule on the duplicated layout.To duplicate a rule, click the Duplicate Rule icon that displays when you hover over a rule.

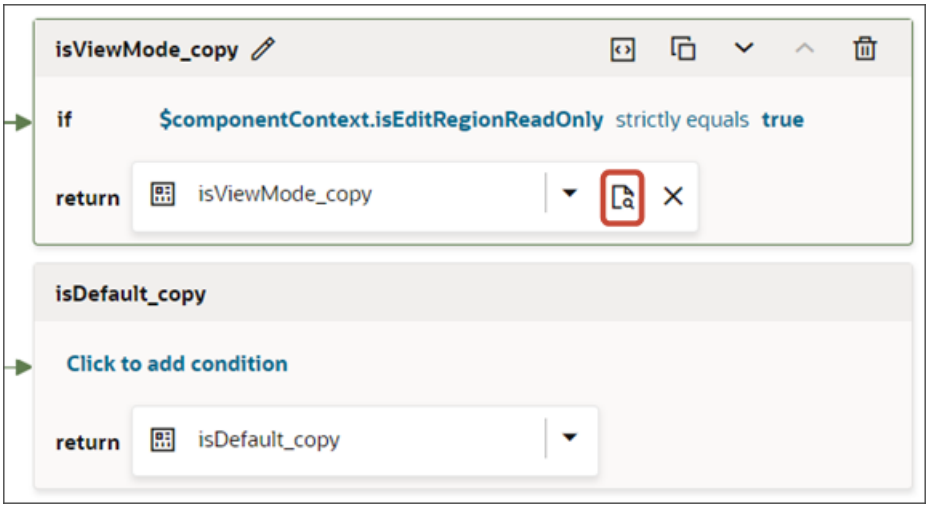
13. In the Duplicate Rule dialog, accept the default rule name or enter a new name. The name you enter here is both the rule name and also the layout name, so enter a layout name that makes sense for you. Also, make sure the **Also create a copy of the layout** check box is selected.

    Do this for the two rules that return the two base layouts.

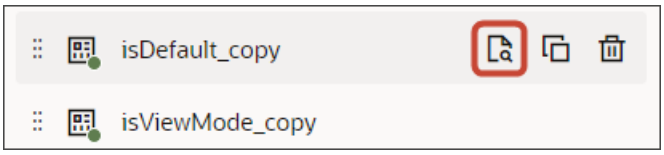


14. After duplicating both rules, you will see two new rules that return two new custom layouts. Make sure that the sequence of the two rules is in the right order, with the view-only rule listed before the default rule. You are now ready to add the custom Birthday field to each layout. Click the Open icon to edit each layout.

    You can click the Open icon in the rules themselves:



    Or, click the Open icon that displays next to each layout name on the left side of the rules.

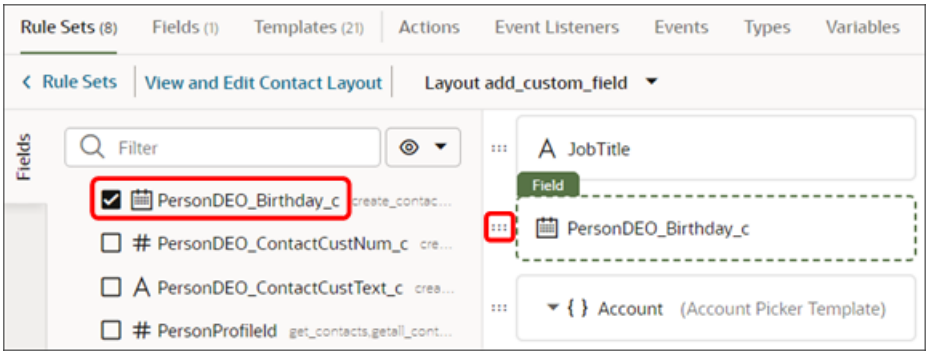


15. For each layout, scroll through the list of fields to find your custom field.

    Tip: To find your custom field more quickly, use the Filter field. Enter either the field name or type `_c` to display only custom fields in the list. For custom fields, VB Studio shows the internal API name (`name_c`), not the display name. Moreover, custom fields that you add to the Account or Contact object are prefixed with the entity names, `OrganizationDEO_` and `PersonDEO_`, respectively.

16. Select the custom field, Birthday, from the field list.

    When you select a field, it displays in the list of fields to the right, at the bottom of the list. Use the field's handle to drag the field to the desired location.



17. Once you add the Birthday field to one custom layout, then add the field to the other layout.

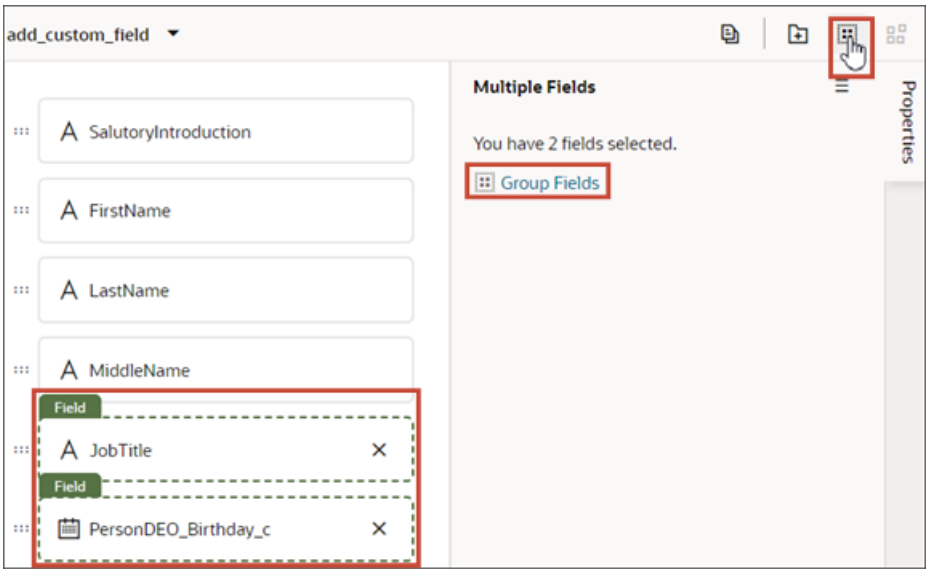
    Use the layout toggle in the menu bar to quickly and easily switch layouts.

> **Note:** The view-only Basic Details region displays a field only if the field has a value. For example, if a contact doesn't have a birthday specified, then the Birthday field won't display in the view-only Basic Details region at runtime. The Birthday field always displays in the editable version of the region, however.

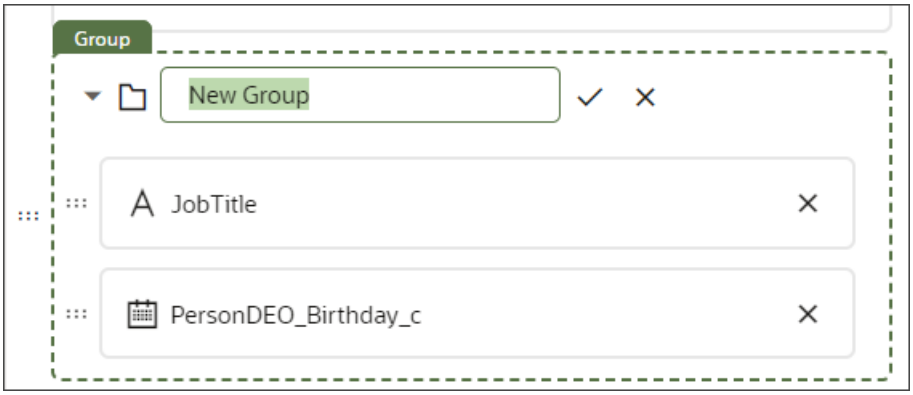
Add Fields to a Group

When creating a layout for a dynamic form on the Rule Sets tab, you can optionally group fields so that they're displayed together in a layout, and so you can treat them as a single entity. For example, a group makes it easy to add several fields to a different layout in one step, rather than adding them individually. In this example, let's add the Job Title and Birthday fields to a group.

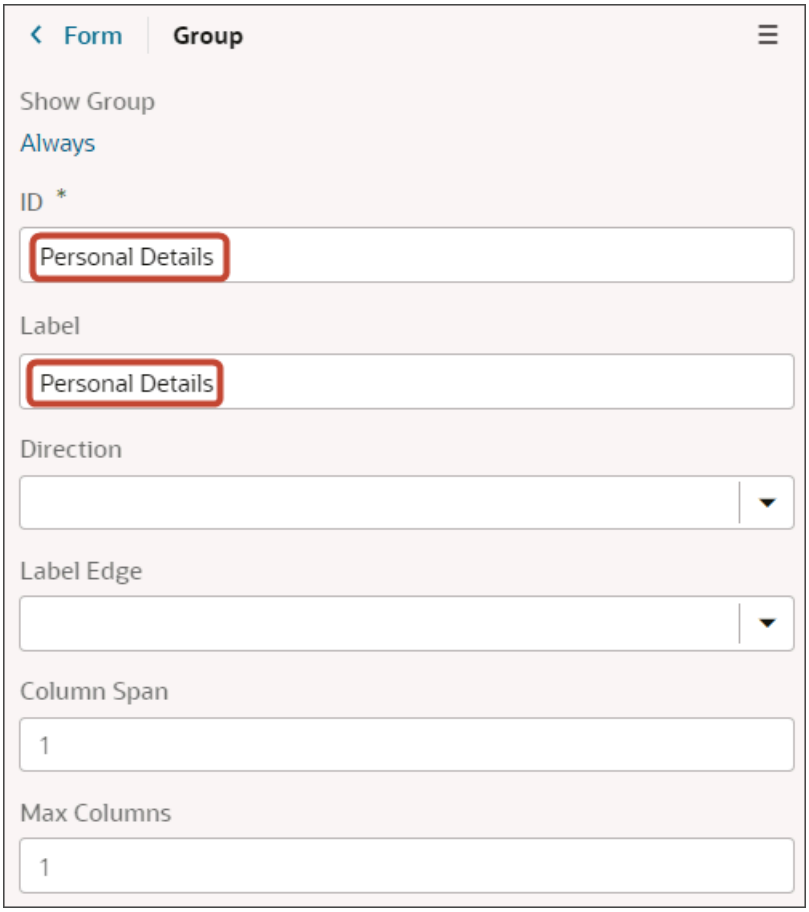
1. In the layout diagram, select the fields that you want to group together, either by holding down the CMD key (on macOS) or the Ctrl key (on Windows).
2. Click Group Fields in the Properties pane, or Group Fields in the toolbar.



3. The selected fields are grouped under a new folder in the layout diagram.

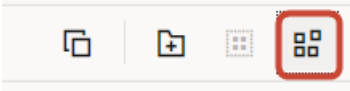


4. Replace **New Group** in the layout diagram with an ID for the new group, such as **Personal Details**. Click the check (Save) icon to save the ID.
5. In addition, enter a display label for the new group.



6. Optionally, use the Properties pane to set properties for the group.

   After a group is created, you can still use the handles for fields to drag them into and out of a group. You can also click the Ungroup icon to ungroup the fields in a group.

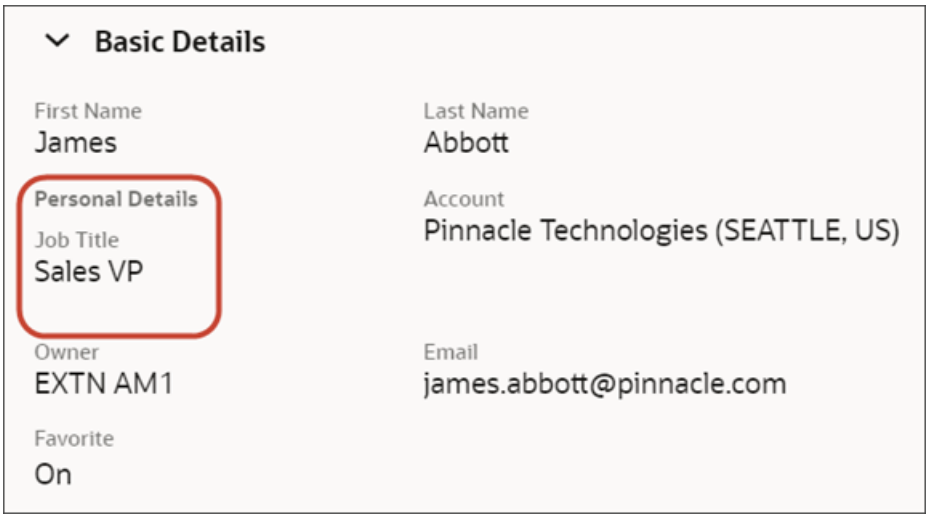


   For more information about groups, see "Add and Group Fields in Dynamic Form Layouts" in the Related Topics section below.

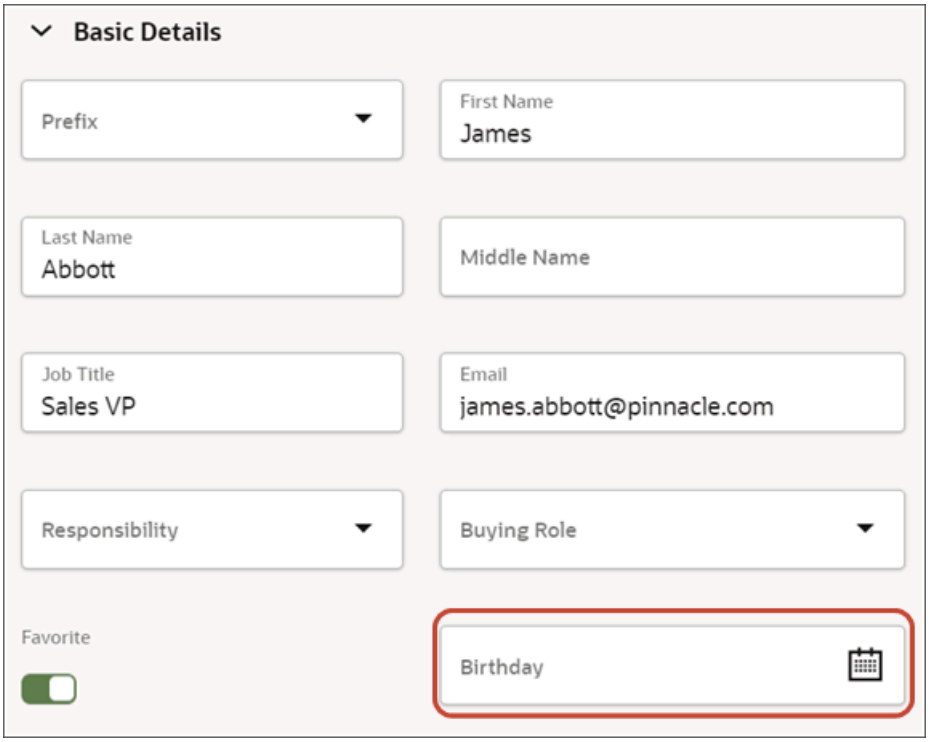
View the Custom Field

1. Click the Preview button to see your changes in your runtime test environment.

Here's an example where the Birthday field is grouped with the Job Title field under the Personal Details heading. But remember that in the view-only version of the Basic Details region, fields don't display if they have no values. In the below example, the field doesn't display because the contact doesn't have a birthday recorded.



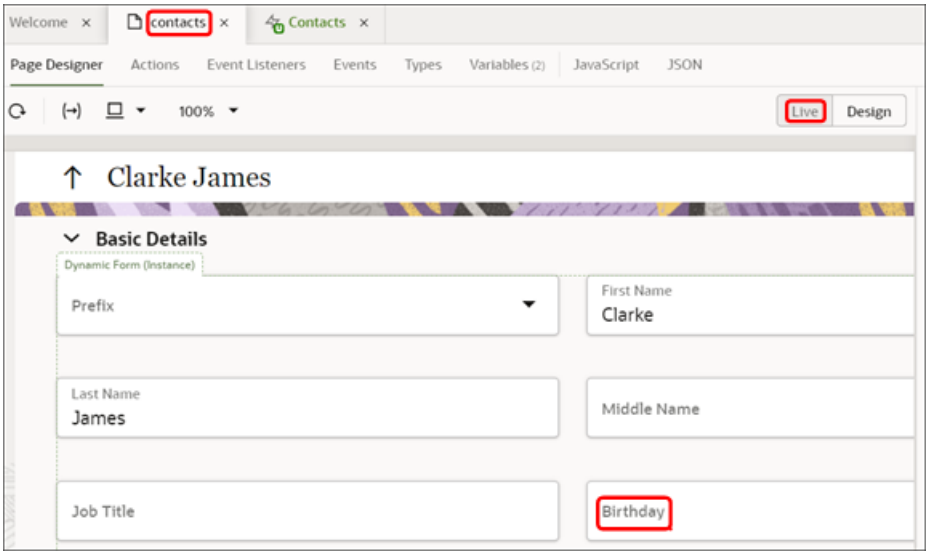
But, you can see the Birthday field in the editable version of the Basic Details region.



Let's add a birthday to this contact. After you save the record, notice that the view-only version of the Basic Details region now displays the Birthday field.

2. Alternatively, you can also view your changes directly in Page Designer. To do this, click the contacts tab to return to the Page Designer.
3. Click the Live button and navigate to the Edit Contact page.

4. Scroll down to view your custom field.



Related Topics

- Update Address Formats

Search Using Rollups

Enable Searching for Accounts and Contacts Using Rollups

Enable rollups for Adaptive Search to let your salespeople search accounts and contacts using rollups in Digital Sales.

1. In the Setup and Maintenance work area, use the **Configure Adaptive Search** task:
   - Offering: Sales
   - Functional Area: Sales Foundation
   - Task: Configure Adaptive Search
2. On the Configure Adaptive Search page, click **Setup** in the left navigation pane and click the **Advanced** tab.
3. Under Advanced, expand **Account** > **Account Rollup**, and select **Account Rollup**.

   You can see all the account and hierarchy rollups.

   - Select the **Enable** check box for the account and hierarchy rollups you want to use as the search criteria and save.
4. To enable the contact rollups, expand **Contact** > **Contact Rollup** and select **Contact Rollup**.
   - Select the **Enable** check box for the contact rollups you want to use as the search criteria and save.

5. Click **Actions** and select **Partial Publish**.
    a. On the Partial Publish window, select **Account** and **Contact**.
    b. Click **Proceed with Partial Publish**.

        On the Partial Publish window, the Account and Contact objects are shown as selected under the Existing objects to republish header.
    c. Click **Publish**.

        The publishing process begins. To monitor the progress, go to **Monitor** > **Publish**.
6. Next, go to **Configure UI**.
7. On the Configure UI page, select **Display in UI** for the rollups you just enabled and save your changes.
8. Next, publish the objects again.
    a. Click **Actions** and select **Partial Publish**.
    b. On the Partial Publish window, select **Account** and **Contact**.
    c. Click **Proceed with Partial Publish**.

        On the Partial Publish window, the Account and Contact objects are shown as selected under the Existing objects to republish header.
    d. Click **Publish**.

        The publishing process begins. To monitor the progress, go to **Monitor** > **Publish**.

Your sales team can use the rollups you enabled as search criteria in accounts and contacts.

Scenarios When Enabling Rollups for Adaptive Search

You may need to consider the scenarios shown in the table and then take required action before and after enabling your rollups for Adaptive Search.

Scenario#	Scenario	Required Action
1	You want to publish a rollup that uses existing attributes.	1. If it's a custom rollup, create the rollup. If it's a predefined rollup, review the settings before publishing. 2. Publish the rollup. 3. Run a full refresh on your published rollup. 4. Enable the rollup attribute for Adaptive Search. 5. Select the object and publish it.
2	You want to create a new rollup that uses custom attributes.	1. Add the custom attribute to Application Composer and publish the sandbox. 2. Create the rollup and publish it. 3. Run a full refresh on your published rollup. 4. Enable the rollup attribute for Adaptive Search. 5. Select the object and publish it.
3	• You have rollups of type, Aging, that are already published. • You have done a mass recalculation on all the published rollups.	1. Skip the rollups publish and enable the rollup attribute for Adaptive Search directly. 2. Select the object and publish it.

Related Topics

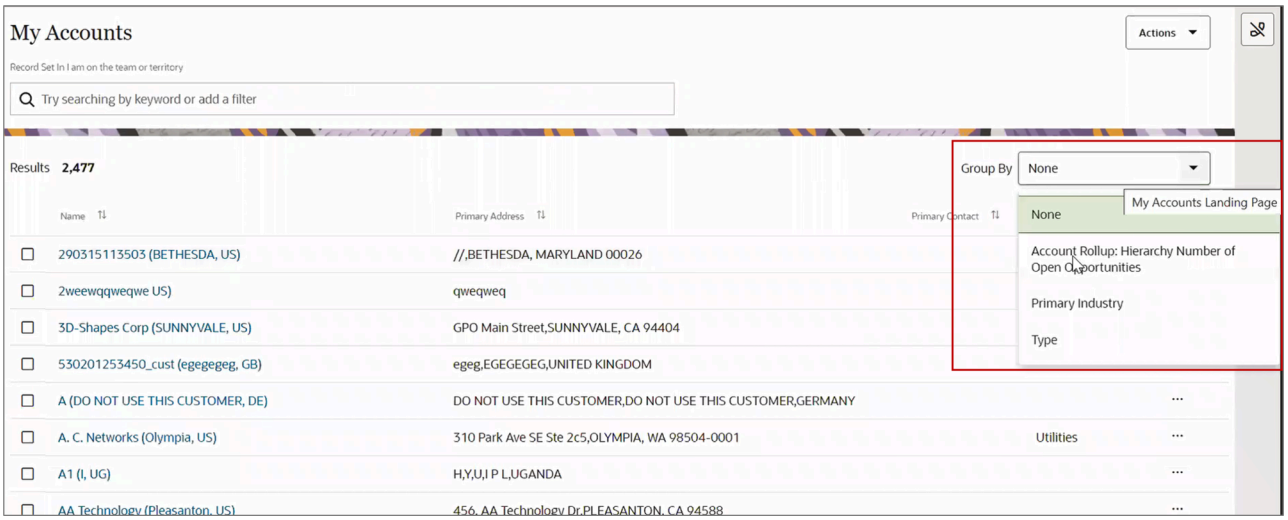
- Search Using Hierarchy Rollups
- Search for Contacts Using Rollups

Enable Grouping by Rollups

Let your salespeople use rollups as criteria to group accounts and contacts.

When you enable rollups to be the group by criteria, they appear in the Group By drop-down list in the Accounts or Contacts list view pages.

The screenshot below highlights a rollup appearing as a Group By option:



Here's how you configure rollups as the Group By criteria:

1. In the Setup and Maintenance work area, use the **Configure Adaptive Search** task:
    - Offering: Sales
    - Functional Area: Sales Foundation
    - Task: Configure Adaptive Search
2. On the Configure Adaptive Search page, click **Setup** in the navigation pane and click the **Advanced** tab.
3. In Advanced, expand **Account** > **Account Rollup** and select **Account Rollup**.

    You can see all the account and hierarchy rollups.
    - Select the **Enable** checkbox for the account and hierarchy rollups and save.
4. To enable the contact rollups, expand **Contact** > **Contact Rollup** and select **Contact Rollup**.
    - Select the **Enable** checkbox for the contact rollups you want to use as the search criteria and save.
5. Click **Actions** and select **Partial Publish**.
    a. On the Partial Publish window, select **Account** and **Contact**.
    b. Click **Proceed with Partial Publish**.

On the Partial Publish window, the Account and Contact objects are shown as selected in the Existing objects to republish header.

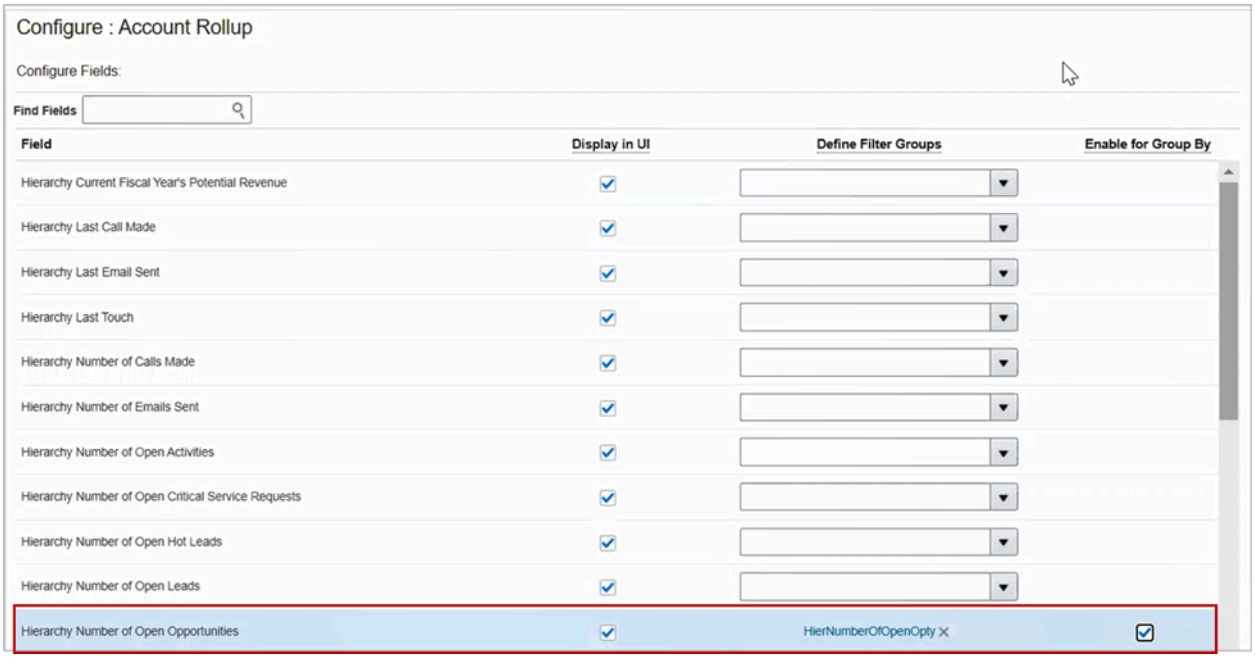
c. Click **Publish**.

The publishing process begins. To monitor the progress, go to **Monitor** > **Publish**.

6. Next, click **Configure UI** in the navigation pane.
7. Expand **Account** > **Account Rollups**.
   a. Search for the rollups you want to enable as the Group By criteria.
   b. Select **Display in UI**.
   c. Assign a filter group for the rollup.

      To learn more about the filter groups, see the *Create Groupings of Values for Display in Search Filters* topic in *Advanced Setup in the Adaptive Search and Workspace* chapter of the *Implementation Reference* guide.

      The **Enable for Group By** checkbox is enabled only after you assign the filter group.
   d. Select the **Enable for Group By** checkbox. Here's a screenshot of the Configure page that highlights enabling the group by option for a sample account rollup:



   e. Click **Save**.

8. Next, go to **Contacts** > **Contact Rollups** from Configure UI.
    a. Search for the rollups you want to enable as the Group By criteria.
    b. Select **Display in UI**.
    c. Assign a filter group for the rollup.

        To learn more about the filter groups, see the *Create Groupings of Values for Display in Search Filters* topic in *Advanced Setup in the Adaptive Search and Workspace* chapter of the *Implementation Reference* guide.

        The **Enable for Group By** checkbox is enabled only after you assign the filter group.
    d. Select the **Enable for Group By** checkbox.
    e. Click **Save and Close**.
9. Next, publish the objects.
    a. Click **Actions** and select **Partial Publish**.
    b. On the Partial Publish window, select **Account** and **Contact**.
    c. Click **Proceed with Partial Publish**.

        On the Partial Publish window, the Account and Contact objects are shown as selected in the Existing objects to republish header.
    d. Click **Publish**.

        The publishing process begins. To monitor the progress, go to **Monitor** > **Publish**.

    The Account and Contact rollups you enabled appear in the Group By drop-down list.

Related Topics

- Group Your Accounts and Contacts List by Rollup Values

Remove Rollups

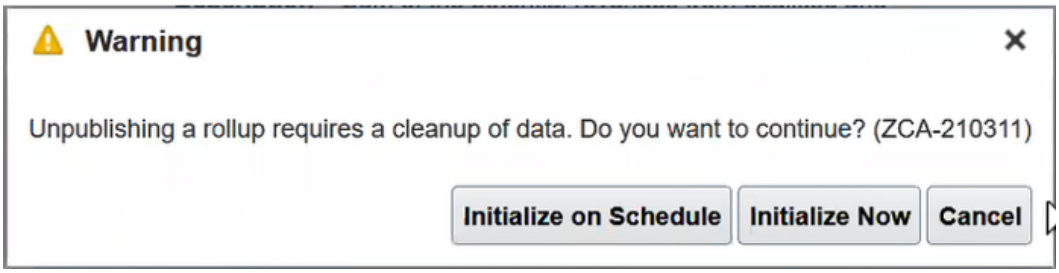
Unpublish a Predefined Rollup

Here are the steps to unpublish a predefined rollup:

1. Select the predefined rollup that you want to unpublish.

2. On the Edit Rollup page, click **Actions** and select **Unpublish**.

   A warning message appears showing two options: **Initialize on Schedule** or **Initialize Now**:



   - **Initialize on Schedule**: Select this option to clean up the data whenever the next scheduled Data Cleanup process for initialization runs.
   - **Initialize Now**: Select this option to trigger the Data Cleanup scheduled process immediately.

   The data calculated for the rollups is deleted, and the corresponding attributes in the Digital Sales UI are nullified and automatically hidden from the UI. The unpublished rollups are still available on the Rollups Setup page for future use.

Delete a Custom Rollup

Here are the steps to delete a custom rollup:

Note: You can't restore custom rollups after you delete them.

1. Select the custom rollup that you want to delete.
2. On the Edit Rollup page, click **Actions**, and then select **Unpublish**.

   A warning message appears showing two options: **Initialize on Schedule** or **Initialize Now**:

   - **Initialize on Schedule**: Select this option to trigger a data cleanup whenever a scheduled Data Cleanup process runs.
   - **Initialize Now**: Select this option to trigger the data cleanup immediately.

   The data calculated for the rollups is deleted and the corresponding attributes in the Digital Sales UI are nullified and automatically hidden from the UI. Remove the rollup attribute from the Digital Sales UI and also from Adaptive Search so that it's not available in search any more.

Remove a Rollup from Adaptive Search

To remove a rollup from being a search criterion in Digital Sales, you must remove the rollup attribute from Adaptive Search.

This table covers the scenarios and the course of action you must take for removing the rollups as search options:

Scenario#	Scenario	Required Action
1	You want to unpublish or delete a rollup and abandon the corresponding rollup attribute.	1. Unpublish or delete the rollup. 2. Run a data cleanup job or wait for a scheduled full refresh job to complete. 3. Follow the steps given in this topic to enable the rollup attribute for Adaptive Search. 4. Select the object and publish it.
2	You want to change the attribute in a published rollup and abandon the previously used rollup attribute.	1. Edit the rollup and change the attribute you used. Save your changes. 2. Publish the rollup and run a full refresh. 3. If it's a custom attribute, remove the attribute from the object in Application Composer and publish the sandbox. 4. Follow the steps given in this topic to enable the rollup attribute for Adaptive Search. 5. Select the object and publish it.

Here's how you remove the rollup attributes from Adaptive Search:

1. In the Setup and Maintenance work area, use the **Configure Adaptive Search** task:
    - Offering: Sales
    - Functional Area: Sales Foundation
    - Task: Configure Adaptive Search
2. On the Configure Adaptive Search page, click **Setup** in the left navigation pane and click the **Advanced** tab.
3. Under Advanced, expand **Account** > **Account Rollup** and select **Account Rollup**.

    You can see all the account and hierarchy rollups.

    - Unselect the **Enable** check box for the account and hierarchy rollups you want to disable and save.
4. To disable contact rollups, expand **Contact** > **Contact Rollup** and select **Contact Rollup**.
    - Unselect the **Enable** check box for the contact rollups you want to disable and save.
5. Click **Actions** and select **Partial Publish**.
    a. On the Partial Publish window, select **Account** and **Contact**.
    b. Click **Proceed with Partial Publish**.

    On the Partial Publish window, the Account and Contact objects are shown as selected under the Existing objects to republish header.
    c. Click **Publish**.

    The publishing process begins. To monitor the progress, go to **Monitor** > **Publish**.
6. Next, go to **Configure UI**.
7. On the configure UI page, unselect **Display in UI** for the rollups you just enabled and save your changes.
8. Next, publish the objects again.
    a. Click **Actions** and select **Partial Publish**.
    b. On the Partial Publish window, select **Account** and **Contact**.
    c. Click **Proceed with Partial Publish**.

    On the Partial Publish window, the Account and Contact objects are shown as selected under the Existing objects to republish header.
    d. Click **Publish**.

    The publishing process begins. To monitor the progress, go to **Monitor** > **Publish**.

Rollups are disabled from Adaptive Search.