

# Using Oracle CX Commerce Experiments



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# 1

## Understand Experiments

Oracle Commerce Experiments is an A/B testing tool available through Oracle CX Commerce that enables an organization to configure and conduct experiments to provide them with information that they can use to optimize their website.

You can create experiments to generate statistics that show whether changing elements on a webpage affects visitor's behavior when they view the webpage. Oracle Experiments tracks the visitor's behavior and produces results showing how the webpage design and content affected their behavior based on goals that you configure.

Layouts are the design tools in Oracle CX Commerce that enable you to configure the look of your webpages. They are also used by Oracle Experiments as the starting point for your experiments.

You can run experiments to generate statistics on questions such as:

- Which promotional banner works best for each department?
- If the product page highlights free delivery, are customers more likely to add the product to their basket?
- Will customers use search more frequently if the search box is bigger?
- Does displaying a permanent "Chat" button result in more customer contact than displaying an invitation to open a chat after a set period of inactivity?

## Understand the advantages of using experiments

Using A/B testing can prove advantageous for your store as it provides an effective method for site and market optimization.

Some of the advantages are outlined below:

- Oracle Experiments allows you to compare variations of almost anything that can be changed on your webpages and use statistical methods to determine which versions perform better, without the need for specialist technical assistance from Developers.
- You can use A/B testing for different layouts and viewports.
- Tests can be scheduled in advance, and drafts can be saved for use at another time.
- Targeting of both URL and parameter matching provides flexibility – this includes the ability to create links and run custom JavaScript.
- The integration with Design page layouts makes creating experiments a simple task, and viewing the results of any test does not require any additional sign on.

## Plan experiments

You can use Oracle Commerce Experiments to enable many different kinds of tests. A vital part of performing these tests is to ensure you plan the experiment before you actually run it.

You should keep the following points in mind when carrying out A/B testing on your store::

1. Include A/B testing into your everyday workflow process, especially when planning new promotions and landing pages, and optimizing your site and marketing channels, such as email. A/B testing gives you the opportunity to learn more about what does and does not work with every campaign.
2. In addition to analyzing individual A/B tests, make sure to do a regular review of A/B tests overall, so that you can identify patterns in the results. Over time, you will gain a better understanding of the kinds of tests that work best for different circumstances, and be able to apply learnings from one channel to another.
3. As A/B testing is unbiased and provides data-driven results, it is a great way of resolving internal disputes. Utilize it as a way of aligning multiple stakeholders around common goals and data points to drive improved performance and priorities.
4. A/B testing is iterative and will sometimes require multiple tests to be taken in order to get useful results. Therefore, you may need to rerun tests as your business, customers, and market evolve.
5. You should run one experiment at a time to avoid uncertainty around identifying which changes led to a change in results.
6. You should use A/B testing in tandem with other tools and methods, for example, web analytics, heat map analysis, and user testings to better understand the 'why' along with the 'how'.

In order to run an effective experiment, it is important that you choose the right success goals and have a hypothesis in advance. For instance, you may wish to run an experiment to test what the impact of using a video on the product details page has on clicks/add to cart, or on the conversion rate. Or you may run an experiment to test whether the placement of a promotional message on the cart page increases the average order value, revenue per visitor, or conversion rate.

## Access experiments

You can access Oracle Experiments from either the **Marketing** or **Design** page within Commerce, depending on your access permissions.

To access Oracle Experiments directly from the **Marketing** page, select the **Experiments** option and the Experiments dashboard displays.

Accessing Oracle Experiments via the Marketing page provides access for non-technical users who may not be able to access the Design page. This affords business users the ability to view the dashboard, start/stop/extend experiments, and create new client side experiments. Using the Marketing page to access Oracle Experiments may provide a more direct route than navigating through the Design page layouts.

To access Oracle Experiments from the **Design** page you must select a layout, open it in **Grid View** then click on the **Experiments flask** icon. Choose whether you wish to view experiments previously created, or add a new experiment. The Design page within Commerce also affords you the option of adding an experiments slot to a layout and using that slot to create an experiment.

## Understand the experiments dashboard

When you open Oracle Experiments you are presented with the Experiments dashboard. It displays four panels that provide an overview of current and upcoming activities.

From here you can choose to open an experiment that has been previously created, or you can create a new experiment by clicking the **New Experiment** button and providing an associated name and URL. For detailed information on using these panels, refer to [View Existing Experiments](#).

**Note:** If a filter is in place, you can remove the filter by clicking on the **X** in the filter box. You can also refresh the information displayed on the Experiments dashboard by clicking on the **Refresh** icon at the top of the page.

The dashboard panels are summarized in the following sections:

### In Progress

This dashboard panel displays a summary of the most recently started experiment with In Progress status, the number of In Progress experiments, and the following information about the most recently started In Progress experiment:

- **Experiment Name:** The name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **End Date:** This is the currently scheduled end date for the experiment.
- **Winning Goal Tile:** This tile displays the name of the primary goal for the experiment, and the name of the variant that is currently winning. The winning variant is the one which shows the greatest percentage improvement for the primary goal among the variants which have a confidence level greater than 95%. If there are no variants with a confidence level greater than 95% that show an improvement on the control for the primary goal, then “No Winner” is displayed in this tile.
- **High Level Goal Tile:** This tile displays the name of the primary goal for the experiment and a chart showing the performance as measured against the primary goal of the control and each variant.
- **Visitor & Days Run Tile:** This tile displays the current count of visitors who have so far participated in the experiment and how many days the experiment has been running for.

You can view all the experiments with In Progress status by clicking on the [View All In Progress](#) link in this panel. See [View the In Progress experiment page](#) for further details.

### Completed

This dashboard panel displays a summary of the most recently completed experiments, details on the number of completed experiments, and a table with the following fields:

- **Experiment Name:** This is the name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Winner:** This is the name of the variant which shows the greatest percentage improvement for the primary goal among the variants which have a confidence level greater than 95%. If there are no variants with a confidence level greater than 95% that show an improvement on the control for the primary goal, then "No Winner" is displayed.

You can view all the completed experiments by clicking on the **View All Completed** link in this panel. See [View the Completed experiments page](#) for further details.

### Scheduled

This dashboard panel displays a summary of the next experiments scheduled to start, details on the number of scheduled experiments, and a table with the following fields:

- **Experiment Name:** The name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Start Date:** The date and time, including time zone, at which the experiment is scheduled to start.

You can view all the scheduled experiments by clicking on the **View All Scheduled** link in this panel. See [View the Scheduled experiments page](#) for further details.

### Draft

This dashboard panel displays a summary of the most recently modified experiments with Draft status which are currently unscheduled, details on the number of experiments with draft status, and a table with the following fields:

- **Experiment Name:** The name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Targeting Method:** Once the experiment is created, this indicates whether layout targeting, widget targeting, or URL targeting was used.

You can view all the draft experiments by clicking on the **View All Draft** link in this panel. See [View the Draft experiments page](#) for further details.

## Create New Experiments

In order to create an experiment, you can choose from three different methods that include using either Design page layouts, direct links to URLs, or widget slots.

The first two methods are known as client side experiments and are essentially two facets of the one overall method. A client side experiment runs from a layout or URL based experiment and can load the control content very briefly before the Experiments rules run, whilst a widget based experiment is determined before a results page is loaded and runs from within the Design page slots.

**Note:** If you are switching between the testing and production environments, you should use a separate browser per environment, or close the browser before switching. You can also use browser privacy features, such as, incognito or private browsing.

This section details the three methods of creating an experiment. See [Configure Experiments](#) for further information on the next steps once an experiment has been created.

### Create a layout based experiment

Layouts are the design tools in Commerce that enable you to configure the look of your web store. Within Oracle Experiments they are used as the starting point when you want to add a new experiment, or to view one that already exists.

Available via the Design page, this type of experiment runs only for your chosen layout. Once chosen, you then click the **Experiments** icon to view or add experiments and from here, you can make configuration changes.

To create a new layout based experiment:

1. Open the **Design** page in Commerce, select any layout and click the **Grid View** icon, then click the **Experiments flask**.

**Note:** A red lightning bolt next to the flask icon indicates there are currently experiments in progress using this layout.

2. Select **Add experiment**.

You are redirected to Oracle Commerce Experiments with the Experiment Configuration screen displayed for the chosen layout.

**Note:** You can select **Return to Admin** from the Experiments navigation bar to return to the location from where the current experiment was launched, such as, the Design page layout, or the Marketing page.

You will see the **View experiments** option available when you click the **Experiments flask** when experiments already exist for the chosen layout. In this case you are redirected to the Oracle Commerce Experiments dashboard which is filtered to only display experiments that use the layout you had selected as their control. If you remove the filter, Oracle Experiments displays all experiments associated with your account.

3. Configure the experiment as detailed in [Configure Experiments](#).

An example of the configurations you can make in the final step of creating a layout based experiment could be to test how changing the existing Add to Cart button on the product detail page impacts site traffic. You can select and highlight any part of the page to make changes. So for the purposes of this example, if you were to click the Add to Cart button you will see the `<div>` tag highlighted. From here you can click Select Child to open the `<button>` tag and the Element Configuration panel displays, providing a number of configuration options. You could edit the button to make it all capital letters, change the color or style, and so on. You can also use the Target and Goals options from here to allow you to target a specific audience who would use the new Add to Cart button, and select or customize an experiment goal. See [Configure the target](#) and [Configure the goals](#) for more details.

For more information on creating this type of experiment, you can filter for Experiments topics on Cloud Customer Connect where there are several How-To examples explaining step-by-step configurations, such as, Use Case #3: Testing a Different Add to Cart Button on Product Detail Page.

## Create a URL based experiment

Within a layout based experiment you have the option to input a URL. Changing from a layout based experiment to a URL based experiment enables you to refine the included URL. Specifically, when configuring the target definition to define which visitors should be included as participants in an experiment, you can change the URL target from layout to URL. You can define a URL target and match the visitors URL.

If you would like to run an experiment on a specific product you would input that product's specific URL. However, you may prefer to create this type of experiment if you plan to run a site-wide experiment that includes every page of your site.

You can access a URL based experiment via the Experiments application, or within the Design layout configuration settings. .

To create a URL based experiment:

1. Open the **Design** page in Commerce, select any layout and click the **Grid View**, then click the **Experiments** flask.
2. Select **Add experiment**.  
You are redirected to Oracle Experiments with the Experiment Configuration screen displayed and the selected layout as the control for the experiment.
3. Select the elements of the layout you wish to include in the experiment and make your edits. Upon selecting your preferred element, the Element Configuration window displays providing you with several configuration options including Make Hyperlink:
  - Enter a name for the experiment, a URL to be used as the control for the experiment, and select a Target.
  - The URL you provide must be enabled for Oracle Experiments. If the page is not enabled for Oracle Experiments, a message indicating that the experiment URL cannot be loaded is displayed.
  - If you do not specify whether the Experiment URL uses HTTP or HTTPS protocol, HTTPS is assumed as the default protocol.
4. Click the **Save** button, or **Cancel**.  
You can use the Target and Goals tabs to configure the experiment, specifically, you can open the **Target** tab and choose **URL** from the Targeting Method.

See [Configure Experiments](#) for further information.

An example of creating a URL based experiment could be to test how using a specific image, say a promotional image at the top of your page, might impact site traffic. You can select and highlight any part of the page to make changes. So for the purposes of this example, if you were to click the image at the top of your page you will see the `<img>` tag highlighted. From here you can use the configuration options provided to change the image URL, alt text, title, and size. You can also use the Target and Goals options to target a specific audience who would use the changed image, and select or customize an experiment goal. See [Configure the target](#) and [Configure the goals](#) for more details.

For more information on creating this type of experiment, you can filter for Experiments topics on Cloud Customer Connect where there are several How-To examples explaining step-by-step configurations, such as, Use Case #5: Showing Default Promo Image vs. Different Promo Image.

## Create a widget based experiment

This type of experiment allows you to add an experiment slot to any given layout on the Design page and configure it to run experiments at a region/widget level.

Experiments created using an experiments slot have Widget as the Targeting Method associated with the experiment, and may be the most suitable experiment type if you are running experiments for specific widget/multiple widgets on the specified layout. It is advisable to use only one experiment slot per layout.

**Note:** If an experiment status is 'In Progress', the system prevents the user from adding or removing variants, or changing the variant name. Avoid making changes to layouts or widget instances being used by an experiment as this may impact the results.

To create a widget based experiment using slots:

1. Open the **Design** page, and click the **Layout** tab.
2. Navigate to any layout by using the filter options.
3. Select your preferred layout and click the **Grid View** icon.
4. Locate the relevant section where you would like to create an experiment and highlight an existing region.
5. Either:  
Select an existing region and ensure all widgets are removed so that just the region itself remains.

OR

Add a new row (which contains regions) using the arrows on the row menu bar.

6. Open the **Components** menu, select **Experiment Slot** and drag to the empty region. You will see a default experiment slot containing a control (or default) variant and an unnamed variant.
7. Click the **Create Experiment** flask icon to display the configuration options with the **Details** tab open as default.
8. Enter your experiment name and description details in the **Details** tab. You can click on the **View Experiment** button in the **Details** tab to open the selected experiment in Oracle Commerce Experiments directly.

9. Select an audience and set your traffic allocation for the Control and Variant targets in the **Target** tab.
10. Select from a set of default goals in the **Goals** tab, or create custom goals by selecting **Add Goal** and providing the required information, such as, Goal Name, Goal Type, Commerce Event Goals, and URL. **Note:** The URL is required only when the goal type is Page View.
11. Start the experiment immediately by selecting the **Start Now** option from the **Start** drop down menu. You also have an option to **Start on Schedule** which, when selected, prompts you to enter start and end dates.
12. Once the experiment is created you can see the dashboard with the **Results** tab displayed. You have options to refresh, export, stop, and schedule the experiment. You can also click the **View Detailed Results** link to open the full details of the experiment in Oracle Commerce Experiments.  
**Note:** You can click **Delete Experiment** in all configuration tabs to delete the selected experiment.
13. You can now perform one of several options within the slot if required, as described below:  
To customize the experiment slot, click the:
  - Add variant '+' button on the far right to add up to a maximum 5 variants, these can be easily re-ordered via drag and drop.
  - Remove variant 'x' button to the right of each variant name to remove it. You must have at least one variant to create an experiment.  
**Note:** You should not remove a variant if an experiment is scheduled, or in progress.
  - Variant name to open the **Variant Label** box where you can rename each one as required.To configure your experiment slot settings:
  - Click the **Settings** icon to display the configuration options.
  - Choose your slot name and description details.
  - Click **Save** to confirm your settings.
14. Save your options.
15. Drag and drop widgets from the **Components** menu to the control variant or renamed variant(s) as required.
16. Preview your changes before publishing.

An example of creating a widget based experiment could be to test how using two different designs on a mobile view can impact site traffic. When creating the experiment slot you can add a banner and a number of collection carousels for the control group, and add a banner and a single collection carousel for a the variant group. You could choose to target all visitors, or a specific audience. If you choose a specific audience, the whole experiment will be targeted to it. You can choose to redirect traffic equally or differently across the different groups. By default, traffic will be split equally between the different groups. Finally, you need to configure your goals and run the experiment. See [Configure the target](#) and [Configure the goals](#) for more details.

For more information on creating this type of experiment, you can filter for Experiments topics on Cloud Customer Connect where there are several How-To examples explaining step-by-step configurations, such as, Use Case #8 - Mobile Experiments.

# 3

## Configure Experiments

In order for you to run experiments, you must perform a number of essential configurations once the experiment has been created.

The following summary describes the configuration steps you must complete once an experiment has been created:

1. **Designate a control page:** Select a layout or webpage to serve as a control for the experiment.
2. **Create the variant content:** Alter elements of the control page and save these changes to create a variant for the experiment. You can save up to five variants for each experiment. See [Configure the variant content](#) for more information.
3. **Define the target participants:** Decide what percentage of the experiment participants are shown the control content and the variant content, and whether to include visitors in the experiment based either on what layout is currently applied or on information held in their URL. See [Configure the target](#) for more information.
4. **Configure the goals:** Define the events that are tracked by the experiment. For example, you may wish to track how many people click on a particular button or link, or how many navigate to a particular page after viewing the content displayed by the experiment. See [Configure the goals](#) for more information.
5. **Create the schedule:** Provide instructions for when the experiment should start and end. See [Configure the schedule](#) for more information.
6. **View the results:** Review the results of an experiment as it is in progress or when it has completed. See [View the Results of an Experiment](#) for more information.

### Configure the variant content

Initially, the experiment configuration screen loads with one variant tab. The content of this tab is identical to the control version.

You can select whether to view the variant or control version of the web page by clicking on the appropriate tab in the experiment configuration header panel.

You can have up to five variants defined for the experiment. To create an additional variant, click on the large plus sign beside the available tabs. This creates a new tab with content identical to the control tab.

You can rename a variant tab by clicking on the down arrow beside the name of the tab and selecting **Rename** from the menu displayed.

When a variant version is displayed, you can select the element you wish to change by clicking on it. When the cursor moves over an element that you can select, the element is highlighted in red and the border displays the kind of element it is.

**Note:** Disabled or inactive elements cannot be selected directly. If you cannot directly select an element you can select the parent element and then either edit the parent element or use the **Select Child** option on the Element Configuration menu for the parent.

Once you click on the element, the Element Configuration panel is displayed.

The Element Configuration panel only displays the configuration options that are available to the currently selected element. For example, if there are no child elements then the **Select Child** option is not displayed.

The configuration options available are:

- **Edit:** This option is available to all element types and you can use it to edit the properties of the selected element. If you click on it, the element configuration panel displays a set of tabs containing whichever of the following are appropriate for the element you selected:
  - **Editor:** This opens a rich text editor that allows you to directly edit the text and the formatting of the text associated with the selected element.

**Note:** When using the rich text editor, you can open a window providing accessibility instructions for the rich text editor by pressing Alt+0.

The rich text editor also allows you to access the HTML source code by clicking on the Source button. This allows you to directly edit the HTML source code or to view the HTML for changes you have made to the element using the rich text editor.

**Note:** If the Source mode is not enabled, pressing ENTER while editing creates a new element within `<p> </p>` tags while pressing SHIFT + ENTER adds a `<br />` tag within the current element.

- **Style:** This allows you to configure all of the style properties associated with the selected element. The properties are grouped together by category. Some of the properties included here are only available on specific browsers, and the values for the properties may also be restricted by specific browsers.
- **Classes:** This allows you to assign a defined CSS class to the specified element.
- **Edit Image:** If the selected element is an image element you can define the image properties using this option. The configuration options available here are:
  - **Image URL:** This is the source URL for the image.
  - **Alt Text:** This is the alternative text for the image.
  - **Title:** This is the text displayed in the tooltip for the image.
  - **Image Size:** This is the size at which the image should be displayed. You can select Default, Maintain Original Size, or Manual Resize. If you select Manual Resize then you must enter a value for the height and width of the image in pixels.
- **Make/Edit Hyperlink:** This option is available to all elements which are a container with content. It is displayed as Make Hyperlink, unless the element is already a hyperlink, in which case it is displayed as Edit Hyperlink. The configuration options available here are:
  - **URL:** This is the URL to which the visitor is directed if they click on the hyperlink.
  - **Title:** This is the text displayed as the tooltip for the hyperlink.
  - **Target:** This specifies how to open the hyperlink once the user clicks it.
- **Custom JavaScript:** This option is available to all element types. It is used to execute custom JavaScript at runtime.

**Note:** There are limits to the JavaScript that can be entered here. The eval function is not permitted and Experiments does not permit you to save any experiment with an eval command in the JavaScript entered here. Please refer to [Understand how custom JS is used](#) for more information.

- **Remove/Undo Remove:** This option is available to all elements. It is used to remove, or undo a previous decision to remove, the selected element from the variant page.

**Note:** In the experiment configuration screen the element is removed, but the space where it was is preserved so that the removed element can be tracked. When the variant is displayed to a visitor, the element is still loaded as part of the web page, but it is not visible on screen.

- **Select Parent:** This is used to switch focus to the parent element of the currently selected element. The element type of the parent element is shown in brackets.
- **Select Child:** This is used to switch focus to the child element of the currently selected element. The element type of the child element is shown in brackets.
- **Track Click Goal:** This is displayed for any type of element selected, except a page body, or HTML tag. It assigns the selected element as one of the goals for the experiment and opens the Goal Configuration slide panel so that you can configure the goal. For more information on configuring an element as a goal, please refer to the [Configure the goals](#) section of this document.

When you make a change to a variant page, the content in that variant's tab is immediately updated to reflect the changes made. This means you can switch between the Control tab and the variant tabs to see how the changes impact on the variant pages.

You can make as many changes as you wish to the variant page.

Any changes made to elements on the variant page since the experiment configuration screen loaded can be undone by clicking on the **Undo** button. This undoes the most recently made change, and you can keep undoing changes as long as the **Undo** button is enabled. Changes that have been undone can be re-applied by clicking the **Redo** button, and these changes are re-applied in the order they were originally applied.

Elements that have been changed on the variant tab are shown with a green border that includes a number in the top left to show how many times the element has been changed.

If there is more than one variant tab defined for the experiment you can delete a variant tab by clicking on the down arrow beside the variant name and selecting **Delete** from the menu displayed. If you delete a variant, any changes you have made are lost and the deleted variant cannot be reinstated.

### Prevent element flicker

If a visitor is assigned to a variant path, there may be occasions when Commerce loads the control content very briefly before the Experiments rules run and the correct content is shown to the visitor. This only applies to experiments created using the Experiments UI, and not to experiments created using the Experiments slot on the Design page.

In order to prevent this, you can create an extension that uploads an application-level JavaScript module. This module should initially hide content and then only display it after the Experiments rules have run.

The following code sample shows what the JavaScript module could contain. For general information on creating an application-level JavaScript module, see Application-level JavaScript examples.

```
define(
    //-----
    //-----  

    // DEPENDENCIES
    //-----  

    //-----  

    [ 'pubsub',
'ccConstants'], //-----  

//-----  

// MODULE DEFINITION
//-----  

//-----  

    function(pubsub, CCConstants)
{
    "use strict";
return {      // code triggered by the experiment.rules.ran
    event - use to show elements      experimentsRan:
function(data) {
    // if needed, this code can be made more specific, eg.
Only run for a
    // specific URL      $  

('myElement').show();      },      // code to be run to prepare for
Experiments - use to hide elements
    to      // reduce flicker      pageReady: function(data) {
    // if needed, this code can be made more specific, eg.
Only run for a
    // specific URL      $  

('myElement').hide();      },      onLoad: function(widget)
{
    // subscribe to the
    PAGE_READY event to know when loading a new
page      $.Topic(pubsub.topicNames.PAGE_READY).subscribe(widget.page
Ready.bind(widget));      // subscribe to the experiment.rules.ran
event to know when
    experiments      // have loaded
    $.Topic('experiment.rules.ran').subscribe(widget.experim
entsRan.bind(widget));
    }  };  } };
```

In this example:

- `pageReady` runs when the shopper moves to a new page. This function can be used to hide any elements which might be changed by the Experiment.
- `experimentsRan` runs when the experiment rules have run. This function can be used to show the elements which were previously hidden. The data object passed to this function contains a `for` property, which is either the URL against which the experiment ran, or a `-1` value if the call to load the experiment rules timed out.

You can choose to have one application-level JavaScript module that includes hide and show commands for all elements affected by active experiments, or you can have a separate application-level JavaScript module for each active experiment. The recommended approach is for to use one module, but either approach will work.

Whichever approach you take, the hide and show commands are not needed once your experiment is complete, so you should update your module(s) as appropriate when an experiment finishes.

### Understand how custom JavaScript is used

When you are configuring the variant content you can specify some custom JavaScript that is executed at runtime. There are some limitations to the JavaScript that is accepted by Experiments.

- The `eval` function is not supported, Javascript using the function is ignored. Experiments does not allow you to save any Experiment with an `eval` command in the JavaScript field.
- You can make simple calls to functions or methods that are defined on the customer page or built into the browser. Method chaining is not supported.
- Parameters may be passed to function or method calls. Permitted parameters are numbers, strings, null and global variables.
- The only validation of the JavaScript entered in the Custom JavaScript field is to ensure the syntax is correct and that the `eval` command is not used. It is your responsibility to ensure that any JavaScript code entered performs the tasks you expect.

## Configure the target

You can configure an experiment that targets a particular segment of visitors to your site.

You can define which visitors are eligible for participation by clicking on the **Target** button in the experiment configuration header panel and then selecting your preferences from the target configuration panel. This panel displays the Experiment URL along with the configurable target definition fields, and the traffic allocation.

**Note:** Clicking outside the target configuration panel will close the panel without saving any changes you have made.

### Configure the target definition

You can use the target definition section to refine which visitors should be included as participants in the experiment. The following options are available to configure the target definition:

- **Targeting Method:** This allows you to decide whether to use layout targeting or URL targeting.
- **Layout Name:** If you select layout from the Targeting Method box, this field displays the layout name used for layout targeting.
- **URL Targeting:** If you select URL from the Targeting Method box, this area displays two further options that you can use to configure the target for the experiment:
  - **Included URL:** This is a text box where you can enter a string to use to perform a match against the visitor's URL. **Note** Using commas within this string may affect how your exported data is displayed.

- **Match Type:** This lets you decide what kind of match you wish to perform. If you select Regular Expression from the Match Type dropdown, then you can use the Included URL textbox to provide the RegEx query you wish to run.  
**Note:** When Regular Expression is used to match URLs, the regular expressions are evaluated on the server and so follow the Java Regular Expression syntax (which is slightly different from the JavaScript syntax). As we follow the Java syntax positive and negative lookahead work. When you save a Regular Expression in the editor, it is validated to ensure that the syntax is correct. It is worth noting that just because the syntax is correct, does not mean it will match the URLs you want. A basic example of Regular Expression for the cart/checkout pages is: `.\.com\/(cart|checkout)(\/?.|?.)` Any opening and closing '/' will be included in the string being matched. The Regular Expression will match any or all of the URL, therefore, the example `'\.com\/(cart|checkout)'` would match both <https://www.anyexamplestore.com/cart> and <https://www.anyexamplestore.com/checkout>.

By default, URL Targeting is defined as an exact match against the experiment URL. You can change this and the visitor is considered a participant in the experiment when their URL meets all the defined URL targeting matches.

You can add additional URL Targeting conditions by clicking on the green + icon below the existing conditions.

You can remove a URL Targeting condition by clicking on the red – icon to the right of the condition you wish to remove.

You may have up to five URL Targeting conditions defined. If you have multiple URL Targeting conditions, the visitor's URL must match all of the included URLs.

- **Audience:** This allows you to limit an experiment to members of an audience group as defined in Commerce. You can select your desired audience from this dropdown to apply it to the experiment you are creating.

For more information on managing audiences within Commerce, see Define Audiences.

If you open the experiment configuration screen from Design or clicked on the **New Experiment** button in Experiments while a filter is in place, the Targeting Method is set to Layout by default with the relevant layout displayed in the Layout Name field.

If you open the experiment configuration screen by clicking on the **New Experiment** button in Experiments while no filter is in place, the Targeting Method is set to URL by default with the Experiment URL you provided in the Included URL field.

When you have finished configuring the target for the experiment you can save your changes by clicking on the Save button. If you click on the Cancel button, the target configuration panel retracts and changes are not saved.

### Configure the traffic allocation

Traffic allocation is used to define how the participants in the experiment are split between the control path and the variant path. The default values for the traffic allocation depend on how many variants are defined for the experiment. You can change the traffic allocation by manually entering different values.

# Configure the goals

You can configure the default metric goals for the experiment, and you can create custom goals. Oracle Experiments also enables you to create custom events as goals, and customize the Pageview track type goal.

You can configure goals by clicking on the **Goals** button in the experiment configuration header panel to display the goal configuration panel.

**Note:** Clicking outside the goals configuration panel will close the panel without saving any changes you have made.

By default, there are four commerce metrics that are tracked for each experiment. These are:

- **Add to Cart:** This tracks the impact of the experiment on the likelihood of a customer adding a product to their cart. It does this by dividing the number of unique visitors who add an item to their cart by the total number of unique visitors who participated in the experiment.
- **Conversion:** This tracks the impact of the experiment on the conversion rate. It does this by dividing the number of unique visitors who completed an order by the total number of unique visitors who participated in the experiment.
- **Average Order Value:** This tracks the impact of the experiment on the average order value of each visitor during their participation in the experiment. It does this by dividing the total revenue for all orders placed by participants on the control path by the number of orders placed by participants on the control path, and comparing that value to the total revenue for all orders placed by participants on the variant path divided by the number of orders placed by participants on the variant path. When displayed in the results of the experiment, this metric is segmented by the currency in which the transaction occurred to ensure equivalence.
- **Revenue per Visitor:** This tracks the impact of the experiment on the revenue per visitor participating in the experiment. It does this by dividing the total revenue for all orders placed by participants on the control path by the number of participants on the control path, and comparing that value to the total revenue for all orders placed by participants on the variant path by the number of participants on the variant path. When displayed in the results of the experiment, this metric is segmented by the currency in which the transaction occurred to ensure equivalence.

## Configure custom goals

Click on the New Custom Goal to configure a custom goal. You can also open this part of the goal configuration panel by clicking on an element and selecting **Track Click Goal** from the element configuration panel.

The configurable options include:

- **Goal Name:** This is the name of the goal. It can be up to 100 characters long and must not be the same as any other goals configured for this experiment.
- **Track Type:** This allows you to define how the goal is tracked. There are two options available from this dropdown. These options are:
  - **Click:** This tracks whether the visitor clicked on a specified element.

- **Pageview:** This tracks whether the customer visited a specified URL.
- **Commerce Event:** This allows you to track events as custom goals and is available for all experiments. You can select events from a default list that is refined and maintained within the Experiments application. You can also define custom events from within the goal configuration panel.

**Note** for those non-default custom events specified as a goal, for example, if you would like an event for loyalty card sign-up, you are required to create the code that will trigger the event. For more information, see [Customize the Commerce Events track type goal](#) below, and/or [Create new topics in Developing Widgets](#).

The other elements displayed in the goal configuration panel depend on whether you selected **Click** or **Pageview** from the **Track Type** dropdown.

When you have finished configuring the custom goal, click on the **Create** button to return to the main goal configuration panel. If there is more than one goal in the goal list, you can define which goal is the primary goal by clicking the star for the appropriate goal. The primary goal is the one for which results are displayed in the results summary on the Experiments dashboard. By default, the Add to Cart commerce metric is set as the primary goal.

If no schedule has yet been defined for the experiment, you can also edit or delete a custom goal by selecting the appropriate option from the action cog beside the custom goal. For more information on editing a goal, please refer to the [Edit an experiment](#) section of this document.

### Customize the Commerce Events track type goal

You are required to create and manually add custom events as goals. Once added, Oracle Experiments will store the event name and use it in the list of default custom events within the Commerce Events drop down.

Custom events can be created for use in Oracle Experiments, as shown in the following example:  
this:\$ .Topic(<EVENT-NAME>).publish(<DATA-AS-OBJ>) ;

Note that you are not required to pass anything through as part of the publish event. For instance, when both the inline and modal methods access the code that is used to apply a coupon to the cart, then it is within that particular code that the custom event is published. The following example illustrates this:  
this:\$ .Topic("CheckoutCouponApplied").publish() ;

Similarly, if you were to run an experiment for removing an item from a basket at checkout as another example. Again, when both the link and the button methods access the code that is used to remove an item from the cart, then it is within that particular code that the custom event is published. The following example illustrates this:  
this:\$ .Topic("ItemRemovedAtCheckout").publish() ;

For both examples, you can track the custom event `CheckoutCouponApplied`, or `ItemRemovedAtCheckout`, within your experiment. Oracle Experiments will track each time the events occur.

The publish event does not need to occur on the actual page that is displayed as the control or variant of the experiment, it can occur on any page and is logged against any experiments entered before the event was fired. In many cases, you will be able to select from the list of default events. You should continue to check which events are fired for the particular actions of interest.

### Customize the Click track type goal

If you select **Click** from the **Track Type** dropdown, you can click on the **Make Selection** button to define which element you want the goal to track.

When you click the **Make Selection** button, the goal configuration panel retracts and the experiment control page is displayed. You can select any type of element selected, except a page body, or HTML tag, on the variant page to make that the tracked element for this goal.

If the element you wish to track is on another web page, you can navigate to that page by clicking the **Interactive** button



and navigating to the webpage containing the element you wish to track. You can do this by entering a URL in the Goal URL field in the experiment configuration header panel and then clicking the **Reload** button.

You can also navigate to the webpage containing the element you wish to track by clicking on hyperlinks displayed in the variant window.

Once you are on the webpage that contains the element you wish to track, you must click the **Edit** button.

You can now select the element you wish to track for this goal. You can select any hyperlink, anchor tag, input element, image or button. Once you have made your selection, click on the **Selection Complete** button to return to the goal panel.

**Note:** If you choose to track an element on another page, the URL for the page containing that element is displayed in the Goal URL field on the goal configuration panel.

When you have finished configuring a goal you can save your changes by clicking on the **Create** button. If you click on the **Cancel** button, the goal you configured is discarded and you are returned to the goal list.

### Customize the Pageview track type goal

If you select **Pageview** from the **Track Type** dropdown, there are two further fields displayed in the goal configuration panel. These fields are:

- **URL to Track:** This is used to define the URL for which Pageview is tracked by the goal.
- **Match Type:** This is used to define which type of match will be performed against the URL specified in the URL field. The options available are:
  - **Exact Match:** This checks whether the visitor goes to a page where the URL matches exactly with the URL entered here.
  - **Starts With:** This checks whether the visitor goes to a page where the URL starts with the value entered here.
  - **Contains:** This checks whether the visitor goes to a page where the URL contains the string specified in the URL field.
  - **Regular Expression:** This checks whether the visitor goes to a page where the URL matches the RegEx specified in the URL field.

When you have finished configuring a goal, you can save your changes by clicking on the **Create** button. If you click on the **Cancel** button, the goal you configured is discarded and you are returned to the goal list.

## Configure the schedule

Once the variant, target, and goal settings for the experiment have been configured, you can configure the schedule in order to define when the experiment will run.

You configure the schedule for the experiment by clicking on the **Start** button in the experiment configuration header panel. This provides you with two options:

- **Start Now:** This starts the experiment immediately with an end date set 28 days from when you click the button.
- **Start on schedule:** This opens the schedule configuration panel which allows you to specify a start and end date for the experiment.

**Note:** Clicking outside the schedule configuration panel will close the panel without saving any changes you have made.

You can enter a date and time manually in the **Start Date** and **End Date** boxes, or you can click on the calendar and clock icons in the boxes to select a date and time from the pickers displayed.

The schedule configuration panel also displays the time zone associated with your account so you can see what time zone is used for the schedule.

When you have finished configuring the schedule for the experiment you can save your changes by clicking on the **Save** button. If you click on the **Cancel** button, the schedule configuration panel retracts and changes are not saved. If you click on the **Delete Schedule** button, which is only displayed for scheduled experiments, the schedule for that experiment is deleted and the schedule configuration panel retracts.

# View Existing Experiments

You can view an overview of each of the Experiments pages containing information that is grouped according to the status of an experiment. This can be either In Progress, Completed, Scheduled, or Draft.

The Experiments dashboard displays a panel for each status state along with some high level overview information. You can click on the View All links in each one of the panels to view the detailed analyses, as described in the following sections.

**Note:** You can return to the Experiments dashboard at any time by clicking on **Oracle CX Commerce** in the header bar. Similarly, you can return to the main Commerce page by clicking on **Return to Admin** at any time.

## View the in progress experiments page

This page displays information about all experiments with a status of In Progress. They are listed in chronological order, with the most recently started experiments displayed first.

You can use the In Progress panel of the Experiments dashboard to gain insights into active experiments in a number of ways.

Clicking on the **View All In Progress** link provides you with information on all experiments currently running by redirecting you to the Experiment Summary page. Opening the Experiment Summary displays the following information:

- **Experiment Name:** This is the name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Winner Details:** This strip shows the name of the primary goal for the experiment and the variant that is currently winning. The winning variant is the one which shows the greatest percentage improvement for the primary goal among the variants which have a confidence level greater than 95%. If there are no variants with a confidence level greater than 95% that show an improvement on the control for the primary goal, then "No Winner" is displayed in this strip.
- **Visitors & Days Run Details:** This strip shows current count of visitors who have so far participated in the experiment and how many days the experiment has been running for.
- **Schedule Details:** This strip shows the currently scheduled end date for the experiment.
- **Targeting Method Details:** This strip shows the targeting method used for the experiment as well as the name of the layout or widget used, or the first included URL if URL targeting is used.
- **Modified:** This is the date and time of the last time the experiment was modified, along with the username of the person who made the modification.

You can click the **Stop Experiment** button at any time when viewing the Experiments Summary.

Another way to gain insight into active experiments from the In Progress panel of the Experiments dashboard is to click on the experiment title, this opens the **Results** data for that experiment. From here, you have several options:

- View all metric data.
- Export the results. See [Export the results of an Experiment](#) for more information.
- Stop any of the experiments by clicking on the **Stop** button for that experiment. This stops the experiment with immediate effect and changes its status from In Progress to Completed.
- Edit the schedule of the experiment that is currently In Progress.
- Refresh the information displayed on this screen by clicking on the **Refresh** icon at the top of the page.
- Edit the Goals and Target. See [Configure the goals](#) and [Configure the target](#) for more information.

## View the completed experiments page

This page displays information on all completed experiments. Experiments are considered completed when they have gone past their scheduled stop date and time, or when they have been manually stopped by a user.

The experiments displayed on this page are sorted by the date and time they completed, with the most recently completed experiments displayed first.

**Note:** Completed experiments that have been deleted are not displayed on this screen.

You can use the Completed panel of the Experiments dashboard to gain insights into completed experiments in a number of ways.

Clicking on the **View All In Progress** link provides you with information on all completed experiments by redirecting you to the Experiment Summary page. Opening the Experiment Summary displays the following information:

- **Experiment Name:** This is the name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Winner Details:** This strip shows the name of the primary goal for the experiment and the variant that is currently winning. The winning variant is the one which shows the greatest percentage improvement for the primary goal among the variants which have a confidence level greater than 95%. If there are no variants with a confidence level greater than 95% that show an improvement on the control for the primary goal, then "No Winner" is displayed in this strip.
- **Visitors & Days Run Details:** This strip shows current count of visitors who have so far participated in the experiment and how many days the experiment has been running for.
- **Targeting Method Details:** This strip shows the targeting method used for the experiment as well as the name of the layout or widget used, or the first included URL if URL targeting is used.
- **Modified:** This is the date and time of the last time the experiment was modified, along with the username of the person who made the modification.

You can refresh the information displayed on this screen by clicking on the **Refresh** icon at the top of the page.

You can delete a completed experiment by clicking on the **Delete** icon for the experiment you wish to delete.

Another way to gain insight into completed experiments from the **Completed** panel of the Experiments dashboard is to click on the experiment title, this opens the **Results** data for that experiment. From here, you have several options:

- View all metric data
- Export the results. See [Export the results of an Experiment](#) for more information.
- Edit the Goals and Target. See [Configure the goals](#) and [Configure the target](#) for more information.

## View the scheduled experiments page

This page displays information about all of the experiments which have a schedule defined, but which have not yet started.

The experiments displayed are sorted by their scheduled start date.

From the Scheduled panel in the Experiments dashboard, you can click on a scheduled experiment name to open the Configuration screen for that experiment. You can also click on the **View All Scheduled** link which redirects you to the Experiment Summary page where you can view information on all scheduled experiments. Opening the Experiment Summary displays the following information:

- **Experiment Name:** This is the name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Schedule Details:** This strip shows the currently scheduled start and end date for the experiment.
- **Targeting Method Details:** This strip shows the targeting method used for the experiment as well as the name of the layout or widget used, or the first included URL if URL targeting is used.
- **Traffic Allocation Details:** This strip shows the percentage breakdown of how visitors are assigned to the control and the variants for the experiment.
- **Modified:** This is the date and time of the last time the experiment was modified, along with the username of the person who made the modification.

You can refresh the information displayed on this screen by clicking on the **Refresh** icon at the top of the page.

You can delete a scheduled experiment by clicking on the **Delete** icon for the experiment you wish to delete.

## View the draft experiments page

This page displays information about all the experiments which have been created but which have never been run and do not currently have a schedule assigned.

The experiments displayed are sorted by the date on which they were last modified.

From the Draft panel in the Experiments dashboard, you can click on a draft experiment name to open the Configuration screen for that experiment. You can also click on the **View All Draft** link which redirects you to the Experiment Summary page where you can view information on all draft experiments. Opening the Experiment Summary displays the following information:

- **Experiment Name:** This is the name of the experiment. Clicking on the name brings you to the Configuration screen for that experiment.
- **Traffic Allocation Details:** This strip shows the percentage breakdown of how visitors are assigned to the control and the variants for the experiment.
- **Targeting Method Details:** This strip shows the targeting method used for the experiment as well as the name of the layout or widget used, or the first included URL if URL targeting is used.
- **Custom Goals Details:** This strip shows the number of custom goals that have been defined for the experiment. This value does not include any of the commerce metrics that are included for the experiment.
- **Modified:** This is the date and time of the last time the experiment was modified, along with the username of the person who made the modification.

You can refresh the information displayed on this screen by clicking on the **Refresh** icon at the top of the page.

You can delete a draft experiment by clicking on the **Delete** icon for the experiment you wish to delete.

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## Manage Experiments

Oracle Experiments contains functionality that can help you manage experiments when the experiments have already been created, or are currently running.

### Edit an experiment

You can use the Experiments dashboard to edit a draft experiment. Click on the name of the experiment and the experiment configuration screen displays with the focus on the variant page.

You can edit the scheduled end date of an experiment that is in progress by clicking on the name of the experiment to open the experiment configuration screen, then clicking on the **Schedule** button and selecting **Edit Schedule**. You can save the new scheduled end date by clicking **Save** on the schedule configuration panel, or you can cancel the change by clicking **Cancel**.

From the experiment configuration screen, you can change any of the details associated with the experiment. The process for editing an experiment is the same as the process for creating an experiment. You can edit the variant content, target, goals, and schedule for the experiment using the process described in the [Create a layout based experiment](#) section of this document.

#### Start or stop an experiment

If the variant, target, and goals for an experiment are defined you can start an experiment ahead of its scheduled start date and time by clicking the **Start** button in the header panel on the experiment configuration screen. This gives you the option to either start the experiment immediately and sets the end date 28 days from the time that the experiment started, or to define a schedule for the experiment. Please refer to the [Configure the schedule](#) section of this document for more information.

To stop an experiment that is currently in progress, click on the **Stop** button for the experiment on the In Progress Experiments page or on the experiment configuration screen. This stops the experiment with immediate effect, updates the end date and time for the experiment and moves the experiment to the Completed panel on the Experiments dashboard.

You can also stop an experiment that is currently in progress by clicking on the **Stop** button in the experiment configuration panel Detailed Results screen for the experiment.

#### Edit the End Date of an In Progress Experiment

You can change the duration of an experiment that is currently in progress. To do this, click on the name of the experiment you want to edit from either the Experiments dashboard or the In Progress page to display the Experiment Configuration screen. Then click on the **Schedule** button, and select **Edit Schedule**. Enter the new End Date and click the **Save** button.

## Repeat an experiment

Once an experiment has completed, you can repeat the experiment from within the experiment configuration screen for the completed experiment.

You can change some details of the experiment. You can select a new audience or adjust the traffic allocation for the experiment, or you can select a new primary goal for the experiment.

There are also some details that you cannot change. You cannot change the targeting method or targeting name for the experiment. You cannot change the content of any of the variants defined for the experiment and you cannot create any new custom goals for the experiment. If you need to change any of these details you must create a new experiment.

You can then specify when to repeat the experiment by clicking on the **Start** button and either selecting **Start Now** from the menu displayed to start the experiment immediately, or by selecting **Start on Schedule** and specifying a start and end time for the experiment.

## Delete an experiment

You can delete an experiment from the Completed Experiments, Scheduled Experiments or Draft Experiments page by clicking on the **Delete** button for the experiment you wish to delete from the relevant page.

You cannot delete an experiment that is currently in progress. You must first stop the experiment and then you can delete it as described above.

Once an experiment has been deleted it cannot be restored and you cannot view details of, or results from, deleted experiments.

## Use experiments on multiple sites

It is possible to have multiple sites associated with your Oracle CX Commerce account.

In this case, any experiments you create using a layout as the control are active on each site that uses that layout. If a shopper visits more than one of the sites associated with your Commerce account and accesses the layout associated with the experiment on each site, they are counted as a unique visitor on each site they visit.

For example, suppose you have two sites, [www.example1.com](http://www.example1.com) and [www.example2.com](http://www.example2.com), and each of those sites use the same Home layout as the home page for the site. If a shopper visits both sites and the Home layout is displayed to the shopper on each site, the experiment counts that shopper as a unique visitor on both sites, and the tracking of their behavior on each site is considered separately by the experiment using the Home layout.

Similarly, if you create an experiment from the Design page using an experiment slot widget on a layout, the experiment is active on any site that uses the layout which hosts the experiment slot widget.

The results generated by an experiment are displayed as one result set regardless of whether the information has been gathered across multiple sites.

If you wish to run an experiment on one site which uses a layout that is associated with multiple sites you should clone the layout and assign the cloned layout to the site you wish to run the experiment on. For more information on cloning a layout, please refer to Design Your Store Layout.

# Understand the Results of an Experiment

You can view the results of an experiment by clicking on the experiment name either in the Completed Experiments or In Progress Experiments pages, or by clicking on the **Results** button on the Experiment Configuration page.

This opens the Experiment Configuration screen with the Results panel for the most recent execution of the experiment on display.

## View the results of an experiment

A result set is created each time an experiment runs. You can select which result set to display by clicking on the **expand arrow** for the relevant result set.

**Important:** The Results panel was upgraded for the version of Commerce released in April 2017. Experiments executed using a previous version of Commerce will display the results in the format used by the relevant version of Commerce. For more information on the results displayed by previous versions of Commerce, please contact Oracle support and ask for the relevant documentation.

As you scroll through the result set you can return to the top of the result set by clicking on the **Back to Top** arrow at the bottom of the Results panel.

If the experiment is currently in progress you can refresh the data displayed in the **Results** panel by clicking on the refresh button in the top right of the **Results** panel.

The results panel displays the following information:

- **Winning Goal Tile:** This tile displays the name of the primary goal for the experiment, and the name of the variant that won in the result set. The winning variant is the one which showed the greatest percentage improvement for the primary goal among the variants which have a confidence level greater than 95%. If there were no variants with a confidence level greater than 95% that showed an improvement on the control for the primary goal, then “No Winner” is displayed in this tile.
- **Visitor & Days Run Tile:** This tile displays the total number of visitors who participated in the experiment and how many days the experiment ran for.
- **Targeting Tile:** This tile displays traffic allocation and the audience that was defined for the experiment.
- **High Level Goal Tiles:** There is a separate high level goal tile displayed for each custom goal defined for the experiment and for each of the commerce metrics for the experiment. The high level goal tile for the primary goal is indicated with a gold star beside the goal name.

For any custom goals and for the Add to Cart and Conversion commerce metric this tile displays the Engagement Percentage value. The Engagement Percentage is how many visitors met the criteria for the goal.

For the Average Order Value commerce metric this tile displays the average order value for the control and each variation. This is calculated by dividing the total revenue

of all completed orders for the specified currency for the experiment variation by the number of completed orders in the specified currency for the experiment variation.

For the Revenue per Visitor commerce metric this tile displays the revenue per visitor for the control and each variation. This is calculated by dividing the total revenue for the specified currency for the experiment variation by the number of visitors who participated in that experiment variation.

The Average Order Value and Revenue per Visitor commerce metrics are calculated separately for each currency used for completed orders. A separate tile is displayed for these metrics for each currency used.

- **Goal Detail Tiles:** There is a separate goal detail tile displayed for each custom goal defined for the experiment and for each of the commerce metrics for the experiment. The goal detail tile for the primary goal is indicated with a gold star beside the goal name.

Each of the goal detail tiles includes the chart shown in the high level goal tile for that goal. You can choose whether to show or hide these charts by clicking on the arrows to toggle between show and hide.

Each goal detail tile also displays a table showing the results gathered for that goal during the execution of the experiment.

For any custom goals and for the Add to Cart and Conversion commerce metric this table displays the following fields:

- **Engagement Percentage:** This is the percentage of visitors who met the criteria for this goal in the control and each variation.
- **Differential:** This is the difference between the engagement percentage for the relevant variation and the engagement percentage for the control. A positive value means the engagement percentage was higher for the variation and a negative value means the engagement percentage was higher for the control.
- **Percentage Improvement:** This compares how the frequency with which the goal occurs in the variation against the frequency with which it occurs in the control for the experiment. If the goal occurred more frequently in the variation than in the control, this figure is green. If the goal occurred an equal number of times in the variation and the control, the figure is black. If the goal occurred less frequently in the variant than in the control, the figure is red.
- **Confidence Level:** This is a rounded percentage figure which shows the statistical significance level for each goal. It is measured against a set statistical significance level of 95%. A value of 94% or lower is displayed in red and 95% or above is displayed in green.
- **Engagement:** This is the number of visitors who met the criteria for the goal in the control and each variation.
- **Visitors:** This is the number of visitors who participated in the experiment in the control and each variation.
- **Traffic Allocation:** This is the traffic allocation defined in the experiment for the control and each variation.

For the Average Order Value metric, the table in the goal detail tile displays the following fields:

- **Average Order Value:** This is calculated by dividing the total revenue of all completed orders for the specific currency for the experiment variation by the number of completed orders for the specific currency for the experiment variation.
- **Differential:** This is the difference between the average order value for the control and the average order value for each of the variations. A positive value means the average order value for the variation was higher and a negative value means the average order value for the control was higher.
- **Percentage Improvement:** This is a percentage figure comparing the performance in the Average Order Value metric for the control and each variation. A positive value means the variation performed better and a negative value means the control performed better.
- **Total Revenue:** This is the total revenue for all completed orders in the specified currency for the control and each variation.
- **Number of Orders:** This is the number of completed orders in the specified currency for the control and each variation.
- **Traffic Allocation:** This is the traffic allocation defined in the experiment for the control and each variation.

For the Revenue per Visitor metric, the table in the goal detail tile displays the following fields:

- **Revenue Per Visitor:** This is calculated by dividing the total revenue in the specified currency by the number of visitors who participated for the control and each variation.
- **Differential:** This is the difference between the revenue per visitor for the control and the revenue per visitor for each of the variations. A positive value means the revenue per visitor for the variation was higher and a negative value means the revenue per visitor for the control was higher.
- **Percentage Improvement:** This is a percentage figure comparing the performance in the Revenue per Visitor metric for the control and each variation. A positive value means the variation performed better and a negative value means the control performed better.
- **Total Revenue:** This is the total revenue for all completed orders in the specified currency for the control and each variation.
- **Visitors:** This is the number of visitors who participated in the control and each of the variants.
- **Traffic Allocation:** This is the traffic allocation defined in the experiment for the control and each variation.

The results sets for any previous executions of the experiment are displayed as an accordion view ordered by End Date with the most recent result set at the top of the list. You can expand or collapse these result sets by clicking on the chevron beside the start and end dates for the result set. Expanding a result set will display the result data for that execution of the experiment.

## Export the results of an experiment

You can export the results of an experiment in .csv format to an Excel file.

The export option is available within the **Results** panel for any experiment that has current, or previous, results for the In Progress, Completed, and Scheduled Completed status states.

To export the results of an experiment:

1. Create and run a new experiment.
2. Open the **Results** tab on either the configuration screen, or modal screen. This is dependent on whether you are running a client or server side experiment.
3. Click the **Export Results** button. A .csv file displays for client side experiments. You must continue with the following steps to export the results of a widget based experiment.
4. Navigate to the main Experiments application and open the configuration screen for the chosen experiment.
5. Click the **Export Results** button.

# Understand an Example Experiment

A walkthrough showing how to create a specific experiment that adds an offer of free postage and packing to all products that use the selected product layout is highlighted in this chapter as an example experiment.

The experiment then tracks how many participants click on the **Add to Cart** button when presented with the offer compared to how many click on the same button without the offer. It is intended to provide a quick insight into how to use Oracle Experiments. You should read chapters 3, 4 & 5 for more detail on the functionality and concepts described here.

## Step 1 – Designate a control page

For the purposes of this sample experiment, we shall use a product layout as the control page.

To do this, go to the **Design** page on Commerce and display a product layout. Display the **Grid View** for that layout and then click on the **Experiments** flask and select **Add Experiment** from the dropdown menu.

## Step 2 – Create the variant content

Once you click on **Add experiment**, the experiment editor opens with the selected layout displayed and the Variant tab selected. This means that you can begin making your desired changes right away.

You can create up to five variants for your experiment, but in order to keep this experiment simple we shall just create one variant which adds some red text highlighting that this product is offered with free postage and packing.

In order to add the offer to the layout, we must edit an element. In this case, we select the `<div>` element that contains the price. This opens the Element Configuration panel.

We want to edit the text displayed, so select **Edit** from the menu displayed. From here you can edit the text displayed in the element using the HTML editor, text editor, style editor, or class editor, or a combination of these.

For this experiment we shall add the following code directly after the price in the HTML editor:

```
<p style="color:red">SPECIAL OFFER: Free P&P with this product.</p>
```

This code displays “Free P&P with this product” in red text directly below the price of the product.

Once we have made the desired changes, click on the **Save** button to save the changes to the variant.

The Element Configuration panel closes displaying the variant page with a green border highlighting any elements that have been changed for the variant with a number indicating how many changes have been made.

## Step 3 – Define the target participants

Having made our changes to the variant, we now want to define how we decide who the participants in the experiment are.

Click on the **Target** button to open the Target Configuration panel. Here we can define the percentage of participants to direct to the control page and the variant page for the experiment.

You can also decide whether to include a visitor as a participant in the experiment based on the layout used to display the product, or on information held in their URL by choosing **Layout Name** or **URL** from the Targeting Method dropdown.

It is important to understand that any changes we make to the variant page are displayed by all products that use the product layout we selected as the control. In this case, this means that all products that use this layout will display red text offering free postage and packing if the visitor has been selected for the variant path for the experiment. You could limit the experiment to a specific product by using a specific URL as the control page instead of a layout. See [Create a layout based experiment](#) for more detail on how to create an experiment using a URL as the control page.

For this experiment, we can accept the default values provided for traffic allocation and target definition. Click on the **Save** button to accept these values.

## Step 4 – Configure the goals

This is the step where we configure the metrics that Experiments tracks to identify how the visitor's behavior has been affected by the variant content displayed to them. For this experiment we want to track how many people add the product to their cart.

To do this, click on the **Goal** button to open the Goal Configuration panel. This displays the goal configuration panel. From here you can define a custom goal that you want the experiment to track. If you do not define a custom goal the pre-defined Commerce Metrics are automatically tracked for each experiment. For this experiment, we shall track the commerce metrics.

You can choose either Add to Cart or Conversion from the commerce metrics or one of your custom goals as your primary goal. For this experiment, we shall select Add to Cart as the primary goal.

Click **Save** to save these goals and close the panel.

## Step 5 – Create the schedule

The next step is to create a schedule for the experiment so that Experiments knows when the experiment should start and stop. You do this by clicking on the **Start** button in the experiment configuration window. This allows you to choose **Start Now** or **Start on Schedule**.

**Start Now** starts the experiment with immediate effect and instructs it to run for 28 days. **Start on Schedule** allows you to define a date and time for the experiment to start and for it to end.

For the purposes of this experiment, we can select the **Start Now** option.

This returns you to the experiments dashboard and the experiment you have just defined is included in the In Progress panel.

## Step 6 – View the results

If the experiment has not yet completed, you can view the current results by clicking on the experiment name on the Experiments dashboard and then clicking on the **Results** button in the experiment configuration window.

Once the experiment has completed it is moved to the Completed panel on the Experiments dashboard, and you can view the results by clicking on the experiment name and then clicking on the **Results** button in the experiment configuration window.

This displays a Results panel with all of the collected metrics for the experiment. For more information about what each of these metrics means, please refer to the [View the Results of an Experiment](#) section of this document.

You have now created an experiment, allowed it to complete and viewed the results. You can now use the information provided to make an informed decision about how to maximize return from your website.

This walkthrough was designed to provide an insight to creating an experiment. All of the concepts covered here are covered in more detail throughout the other chapters of this document. Please read these to ensure you get the best out of the functionality offered by Experiments.

For more information on following an experiment from start to finish, you can filter for Experiments topics on Cloud Customer Connect where there are several How-To examples explaining step-by-step configurations.