# Exercise 4-3: Pricing Products in Bundles

A product may be designed to contain child products, which is useful when you want to create product bundles. Examples of product bundles include:

- **Communications** Quad-Play Offers, which bundle internet, mobile, streaming, and voice services into one product
- **Energy and Utility** bundles which may include electricity and gas supplies, smart meters and smart thermostats in one bundle
- **Media** bundles which include subscription and pay-per-view services

The price of child products always roll-up into the total price for the bundle. However, the overall pricing of the bundle can be accomplished in different ways:

- The parent product has a price other than zero. The price of the parent product is added to the prices of the child product.
- The parent product has a price of zero and is marked as a virtual price. The final bundle price is the total of the price of the child products.

Let's see an example of each approach. In the example below, the parent product of the bundle is priced at $49.99. It is combined with the child products to make up the total price.
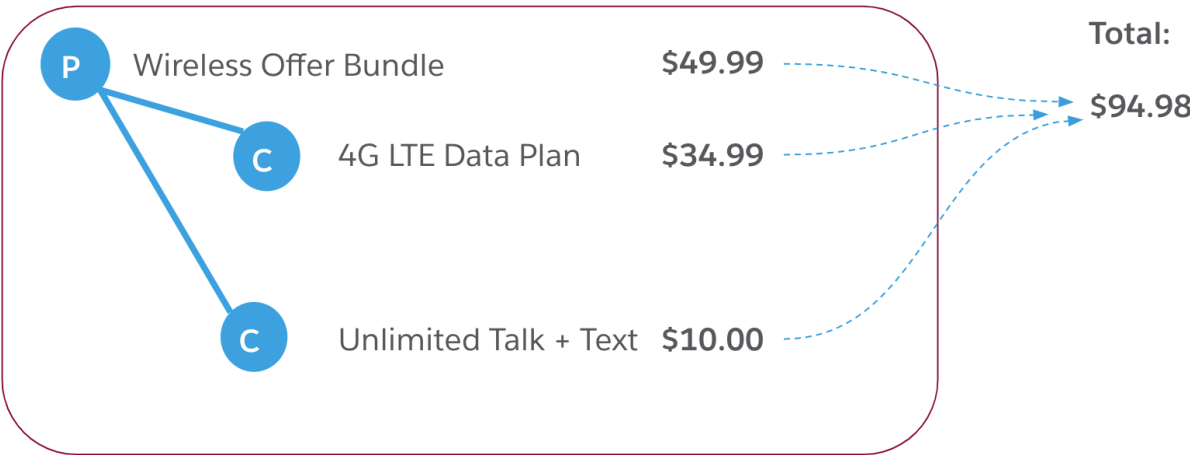
In the example below, the parent product of the bundle is priced at $0 and marked as a virtual price. A virtual price acts as a placeholder, with the price determined by what is inside the bundle or offer. When you mark the price list entry of the bundle as virtual, processing is more efficient because the price list entries are filtered out of the tightest match evaluation and are not tracked as a price tagged to the bundle in the pricing log or generated as a base price in the price adjustment records.
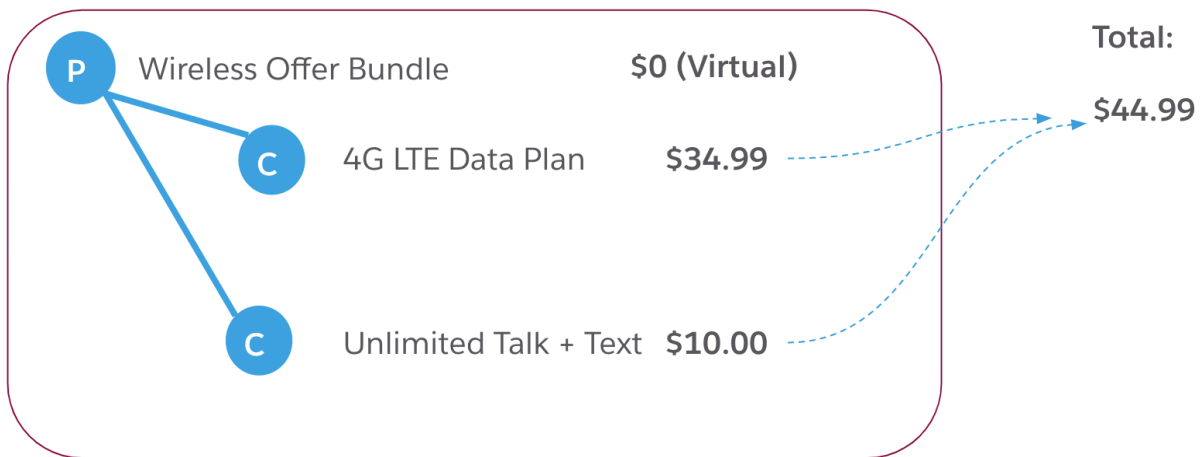
When bundles contain optional products, the display text might show the total price if all the products are purchased. However, unless all products are added to the cart, the price in the Catalog and Products List won't match what you see in the cart. You can change the display text to indicate a range or a starting price for these types of bundles.
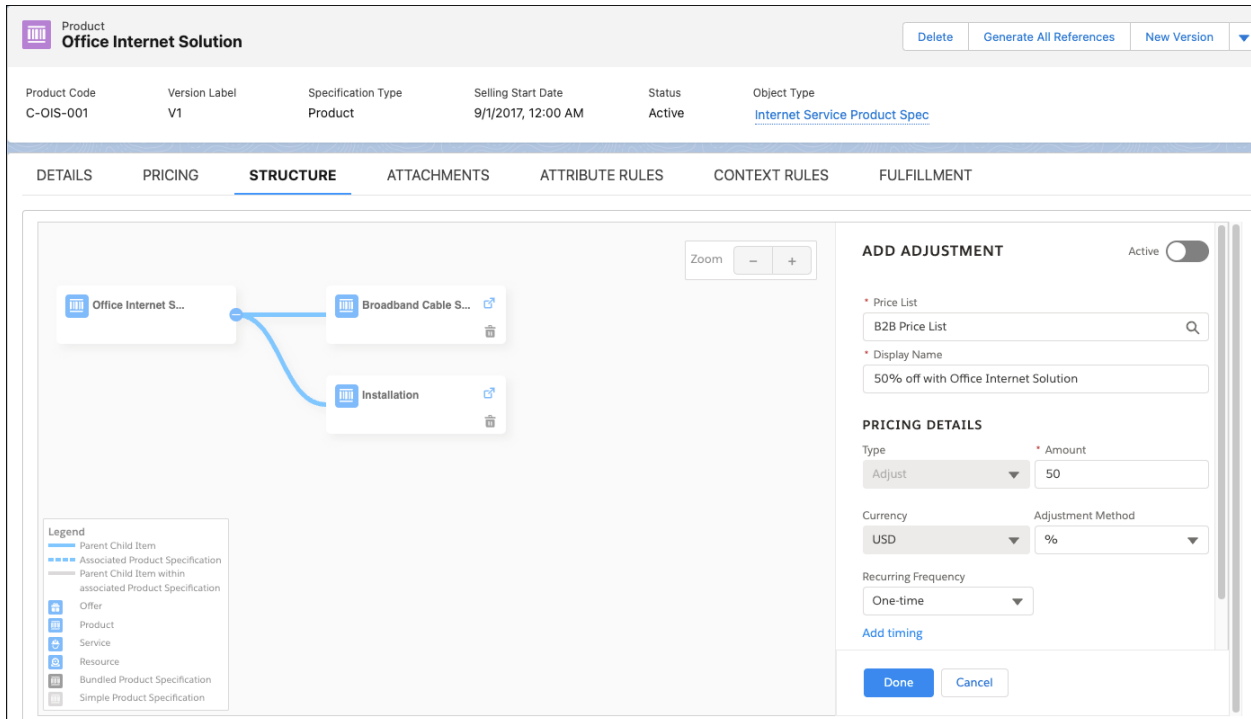
Changing Child Product Prices

If you use a charge for a base price, how do you change the price of a child product in a bundle without changing the base price? You open the parent product and in the STRUCTURE workspace, select the child product that has the price you want to change, then create one or more of the following:

- **Adjustment**: a percentage or amount that reduces or increases the base price of the child product; or
- **Override**: an amount that replaces the base price of the child product in the context of this bundle.

Here's an example of how this looks in the STRUCTURE workspace of a product:

Adjustments use the base price to calculate the new price. Overrides do not use any calculations – they simply replace the base price.

Once you've created your pricing adjustments or amendments in the parent product, they are displayed in the PRICING workspace of the child product, under the PROMOTIONS & OFFERS section. Here's an example:

Notice that the overrides and adjustments can be edited from the PRICING workspace of the child product or from the STRUCTURE workspace of the parent product.

Scenario

Ada wants to update the pricing on the Family Simple Choice Plan and the Mobile Streaming Bundle. The Family Simple Choice Plan currently has flexible pricing, but Ada wants to change it so there is just one standard monthly charge for the whole bundle. For the Mobile Streaming Bundle, she wants to clarify the pricing for customers and salespeople, and make sure they understand that optional add-ons are available.

Goals

- Decide when to use bundles or single products
- Explain how the price of a bundle is totaled
- Implement a virtual price on a parent product and explain the implications
- Choose display text to be used with a bundle containing optional products
- Assign a flat rate to a bundle

Tasks

1. Indicate the starting price for a bundle which contains optional products
2. Change a bundle's price to be a flat monthly rate
3. Review the virtual price for a bundle

Time: 15 mins

Task 1: Indicate the starting price for a bundle which contains optional products

The first product Ada would like to review is the **Mobile Streaming Bundle**. She's been getting a few complaints about the pricing on this bundle being confusing, and that it's not clear there are optional add-ons available. She creates a test order, adds the Mobile Streaming Bundle to the order and immediately agrees with the sales team - the pricing is confusing! She decides to make a note in the product description regarding the additional features available in this offer, and set the recurring price to display **From $9.99** in the Shared Catalog.

Instructions

1. Each change you make in this exercise you're going to test in the cart - so the first step is to create a new order to test the bundles.
   a. Use **App Launcher** to locate and launch **Industries CPQ**.
   b. From the Industries CPQ navigation menu, select **Orders**.
   c. In the Orders list view, click **New**.
   d. Complete the order record details with the following information:

Field	Value
Order Name	`Carole White - Test Bundles`
Account Name	**White, Carole**
Order Start Date	**[Today]**
Price List	**B2C Price List**

   e. Click **Save** to save your order and move to the **Cart** workspace of the order.

2. Add the **Mobile Streaming Bundle** to the cart and review the bundle configuration.
   a. In the **Cart** workspace of your order, click **+ Add Products** to open the **Catalog Preview** pane.
   b. Search for and locate the **Mobile Streaming Bundle.**
   c. In the **Catalog Preview** pane **All Products** results list, notice the price of the bundle, which has a recurring charge of **$29.97**.
   d. Click **Add to Cart** to add the **Mobile Streaming Bundle** to the order cart.

e. Notice that in the cart the bundle has one-time and recurring charges of **$0.00**, yet the recurring total for the entire cart is **$9.99**.

f. Expand the **Mobile Streaming Bundle** in the cart and you see that the **$9.99** recurring charge is coming from the I**nfiStream OnDemand** child product.

g. From the **Mobile Streaming Bundle** action menu, select **Configure** to configure the bundle.

h. On the optional **InfiStream News** product, click **Add** and close the configuration dialog. What's happened to the price of the bundle? - and the cart total charges?

i. It's no wonder the Infiwave salespeople are confused! Let's try to make this pricing a bit clearer. First, from the action menu for **Mobile Streaming Bundle** select **Delete**. The cart should now be empty. This will give you a clean slate for testing once you make the pricing changes.

3. Use the Vlocity Product Designer to open the **Mobile Streaming Bundle**, then add a description to prompt about optional add-ons.

a. You'll be returning to the cart later, so duplicate the current tab then use the **App Launcher** to locate and open the **Vlocity Product Designer**.

b. From the Vlocity Product Designer navigation menu, select **Products**.

c. In the **Products All Products** list view, locate and open the **Mobile Streaming Bundle**.

d. In the **DETAILS** workspace of the Mobile Streaming Bundle, add the following text to the **Product Description.**

Field	Value
Product Description	Stream all your favorites on demand, with optional InfiStream Sports and InfiStream News available at extra cost.

e. Scroll to the bottom of the **DETAILS** workspace and click **Done** to save your changes.

4. Now change the price display name to show the starting monthly price of the bundle.

   a. Select the **PRICING** workspace of the **Mobile Streaming Bundle.**

   b. In the **PRICES** section, click the **edit** icon beside the $29.97 price list entry.

   c. In the **EDIT PRICE** pane, change the **Display Name**:

Field	Value
Display Name	`From $9.99`

   d. Scroll to the bottom of the **EDIT PRICE** pane and click **Done**.

5. View the product in the **Products** list of the Cart.

   a. Go to the browser tab where the Cart is open.

   b. Refresh the browser to refresh the **Product** list, then click **+ Add Products** to open the **Catalog Preview** pane.

   c. In the **Catalog Preview** pane, enter `stream` in the **Search** field, then locate the **Mobile Streaming Bundle**.

   d. Notice the **Recurring** price displayed for the **Mobile Streaming Bundle** in the Product list is the display name you entered, and the description has been updated.

Task 2: Change a bundle's price to be a flat monthly rate

The next product on Ada's To Do list is the **Family Simple Choice Plan**. This product bundle currently has flexible pricing, depending on the options chosen by the customer. However, Ada would like to change this so there is just one recurring charge of $89.99 for the bundle.

Instructions

1. Edit the price of the **Family Simple Choice Plan** bundle to $89.99.

    a. Navigate to the browser tab where the **Vlocity Product Designer** is open.
    b. From the **Products** list, use the search in the **All Products** list view to locate and open the **Family Simple Choice Plan**.
    c. Click the **PRICING** workspace of the Family Simple Choice Plan.
    d. In the **PRICES** section of the PRICING workspace, click the **edit** icon next to the price list entry.
    e. In the **EDIT PRICE** pane, edit the pricing details for the bundle as shown here.

Field	Value
Display Name	`$89.99`
Amount	`89.99`

    f. Scroll to the bottom of the EDIT PRICE pane and click **Done** to save your changes.

2. Child product prices are automatically rolled up into the total price, so the next step is to override the bundle child product prices and set them to $0.

    Click on the **STRUCTURE** workspace of the Family Simple Choice Plan to create the child product overrides and adjustments. There are four child products, but only two you'll need to amend as the **Mobile Hotspot** and **InfiStream TV** are both priced at $0.00 already. The two you need to change are the **Unlimited Talk + Text** and the **4G LTE Data Plan**.

3. Start by overriding the price of **Unlimited Talk + Text** to $0.00.
    a. Click on the white space of the **Unlimited Talk + Text** child product.

> When amending child products within a parent product structure, always click on the white space of the child product. Clicking on the name of the child product will take you directly to the product, and you'll amend the product itself, rather than its relationship with the parent product.

b. In the **EDIT RELATIONSHIP** pane, click the **+** beside the **PRICING ADJUSTMENTS/OVERRIDES (0)** section.

c. In the **NEW ADJUSTMENT OR OVERRIDE** pane, select the **Type of Adjustment or Override**. You're overriding the price of the child product within an offer to set it to $0, so select **Override on an Offer**.

d. Check the Override is **Active** (the **Active** slider is blue and displays a checkmark) then complete the pricing details for the override using the details shown below.

Field	Value
Price List	**B2C Price List**
Display Name	`$0.00 when purchased with Family Simple Choice Plan`
Amount	`0.00`
Frequency	**Monthly**

e. Click **Done** to save your changes. You're taken to the **CONTEXT RULES** section. There are no relevant context rules to apply, so click **Done** to continue.

f. Notice the new pricing override is now displayed in the **PRICING ADJUSTMENTS / OVERRIDES** section, and the number of adjustments and overrides has increased from (0) to (1). Click **Done** again to save the changes to the **Unlimited Talk + Text** relationship.

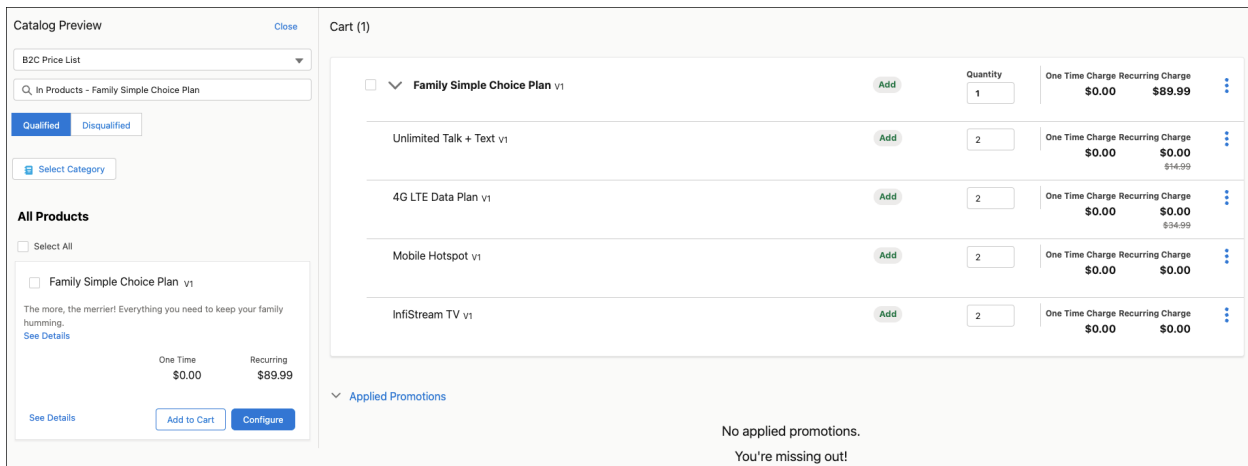g. Answer this question: Does this change need the base price of the child product to calculate the override price?

4. Try a different approach for the **4G LTE Data Plan** and apply an adjustment, reducing the price 100%.

   a. In the **STRUCTURE** workspace, click on the white space of the **4G LTE Data Plan** child product.

   b. In the **EDIT RELATIONSHIP** pane, click the **+** beside the **PRICING ADJUSTMENTS/OVERRIDES (0)** section.

   c. In the **NEW ADJUSTMENT OR OVERRIDE** pane, select the **Type of Adjustment or Override**. You're adjusting the price of the child product within an offer to set it to -100%, so select **Adjustment on an Offer**.

   d. In the **ADD ADJUSTMENT** pane, check the Adjustment is **Active** then complete the adjustment using the details shown below.

Field	Value
Price List	**B2C Price List**
Display Name	`$0.00 when purchased with Family Simple Choice Plan`
Amount	`-100`
Adjustment Method	`%`
Frequency	**Monthly**

   e. Click **Done** to save your changes. You're taken to the **CONTEXT RULES** section. There are no relevant context rules to apply, so click **Done** to continue.

   f. Notice the new pricing adjustment is now displayed in the PRICING ADJUSTMENTS / OVERRIDES section, and the number of adjustments and overrides has increased from (0) to (1).

   g. Click **Done** on the **EDIT RELATIONSHIP** pane to save the changes to the **4G LTE Data Plan** relationship.

   h. Answer this question: Does this change need the base price of the child product to calculate the adjusted price?

5. View the product in the Cart.

    a. Navigate to the browser tab where the Cart is open and refresh your browser.
    b. Find and add the **Family Simple Choice Plan** to the Cart.
    c. An alert is displayed, so configure the **Family Simple Choice Plan** and select a **16 GB Data Plan** for the **4G LTE Data Plan** product. Notice in the **Configuration** dialog that all the prices except for the parent product are set to $0.00.
    d. Close the **Configuration** dialog to return to the cart.
    e. Notice the **Recurring Total** in the cart is the $89.99 you set for the parent product.
    f. Expand the **Family Simple Choice Plan** in the cart. Notice the **Unlimited Talk + Text** and the **4G LTE Data Plan** products have their original prices struck out and displayed beneath their new price of $0.00.

6. Identify the source of the price changes in the cart.

    a. From the action menu for the **4G LTE Data Plan**, select **Adjust Price** to view the price change details.
    b. In the **Price Adjustment** dialog header, select **Recurring** to see the recurring charge adjustments and overrides.
    c. In the **Price Waterfall** the adjustment to the 4G LTE Data Plan base price of $34.99 is shown as reduced by 100% to $0.00 when purchased with the Family Simple Choice Plan, as shown here.

d. Close the dialog and follow the same process to review the price override for the **Unlimited Talk + Text** product.

e. Close the Details popup window.

7. Delete the **Family Simple Choice Plan** bundle from the cart, so you're ready to test the next task.
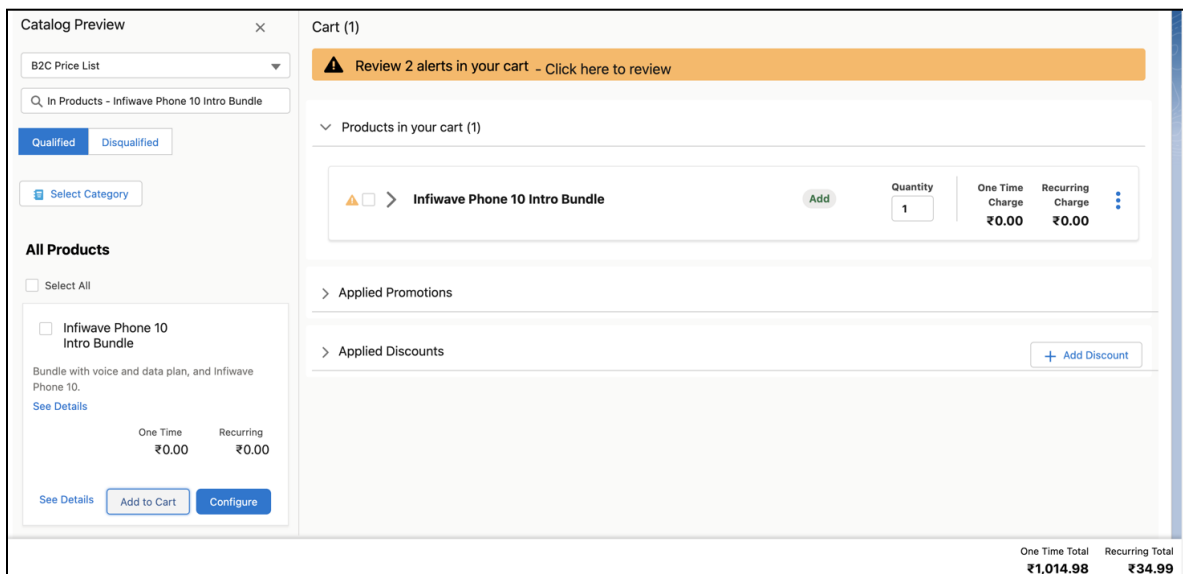
> If you've completed exercises for other modules in this course, your base prices may be different to those shown here. Don't worry! - so long as your adjustments are calculated correctly, this shouldn't affect the completion of your tasks.

Task 3: Review the virtual price for a bundle

Ada adds the Infiwave Phone 10 Intro Bundle to the cart and is alarmed to see that the bundle price is $0.00. You quickly point out the correct price is displayed in the One-Time Total and Recurring Total of the Cart. Ada is relieved, but does a bit more research to discover how this setting is achieved.

Instructions

1. Test the Infiwave Phone 10 Intro Bundle in the cart.

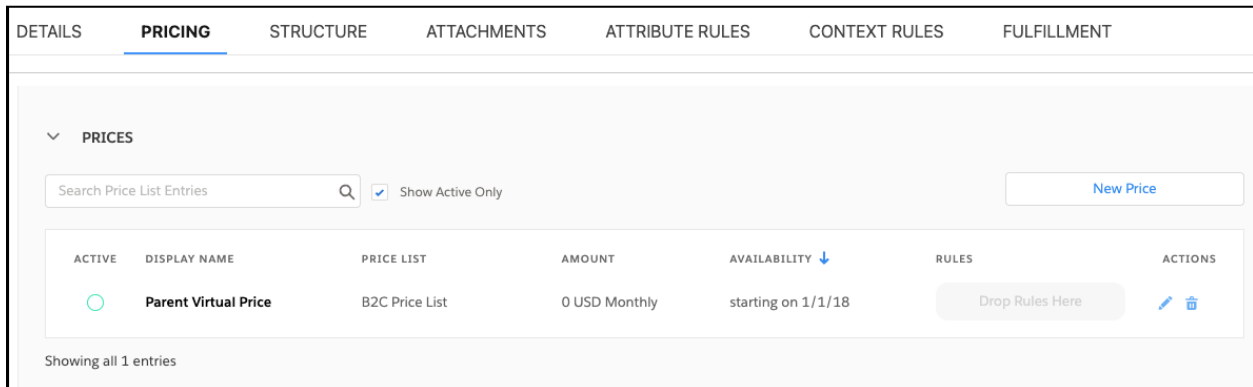   a. In Carole White's order, add the **Infiwave Phone 10 Intro Bundle** to the cart.

    b. Notice the parent product price is set at $0.00, but each of the child product prices is rolled up to create the bundle price in the cart, as shown in the cart totals. How is this achieved? Let's look at the product in the **Vlocity Product Designer** - but first, **delete** the **Infiwave Phone 10 Intro Bundle** from the cart.

2. Review the **Infiwave Phone 10 Intro Bundle** pricing in the **Vlocity Product Designer**.

    a. If you don't already have the **Vlocity Product Designer** open, use the A**pp Launcher** to locate and launch it.

  b. From the Vlocity Product Designer navigation menu, select **Products** and check you're viewing the **All Products** list view.

  c. From the **All Products** list view, locate and open the **Infiwave Phone 10 Intro Bundle** and select the **PRICING** workspace.

  d. In the **PRICES** section, click the **edit** icon ✏ next to the price list entry.

  e. In the **EDIT PRICE** pane to the right, change the **Display Name** as shown, and ensure the **Virtual Price** is checked.

Field	Value
Display Name	Parent Virtual Price
Virtual Price	✔
Amount	0.00

  f. Scroll to the bottom of the **EDIT PRICE** pane and click **Done** to save your changes. Note the virtual price of the parent is now clearly identified in the price list for the product, as shown here.

3. Check the changes in the cart.

  a. Navigate to the browser tab where you have the **Cart** open.

  b. Locate the **Infiwave Phone 10 Intro Bundle** in the **All Products** list and add it to the cart.

  c. There are no obvious changes to the product as it was last time you checked it in the cart. The price of the child products have rolled up into the total columns while the parent product has a recurring and one-time charge of $0.00.

4. Delete the **Infiwave Phone 10 Intro Bundle** from the cart.

Yay! All done!