Red Hat Process Automation Manager 7.2

Executing a business process in Business Central

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Abstract

This document describes how to use Business Central to create a user interface for a pizza ordering process.

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PREFACE

As a business analyst or business rules developer, you can use Business Central to create forms for human tasks, providing a rich interface for collecting data. In this example, you will create a simple pizza order form that a customer (Bill) will complete and send to the pizza place. The pizza place employee (Katy) will process the order and send an order confirmation message containing the total cost for the order.

Prerequisites

- Red Hat JBoss Enterprise Application Platform 7.2.0 is installed.For details,see *Red Hat JBoss EAP 7.2.0 Installation Guide*.
- Red Hat Process Automation Manager is installed and the Process Server is configured. For more information, see *Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP*.
- Red Hat Process Automation Manager is running and you can log in to Business Central with the **developer** role.

CHAPTER 1. CREATING THE PIZZA PLACE PROJECT

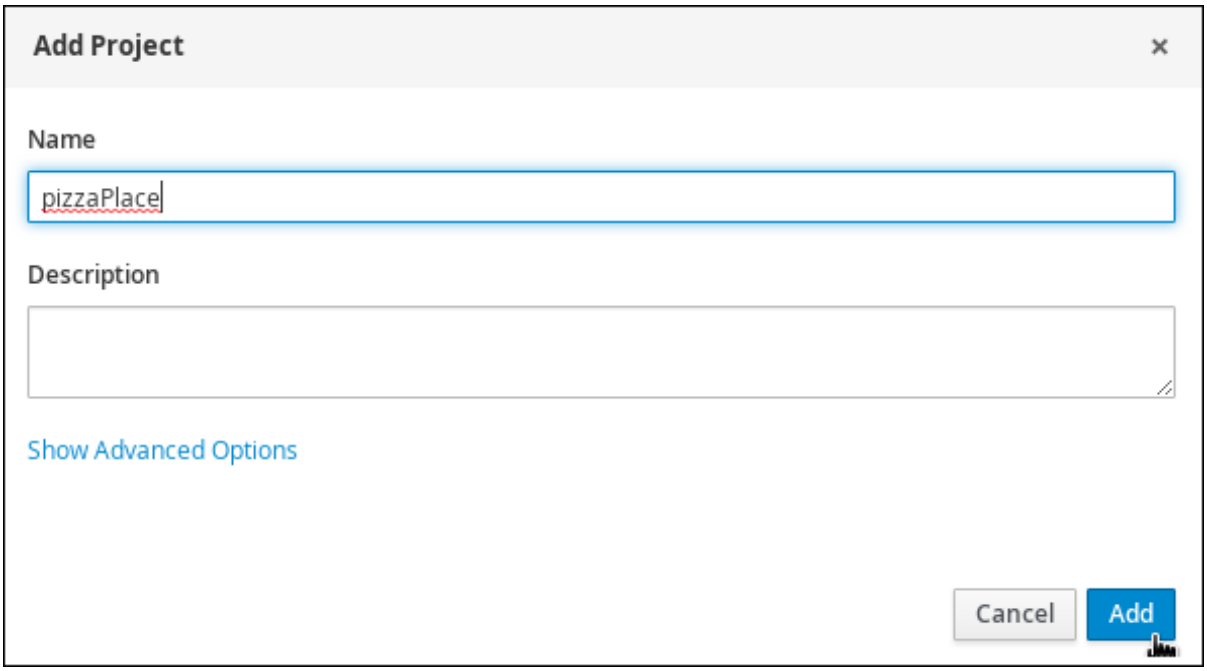
A project can contain data models, business processes, business rules, and forms that are specific to your project's requirements. When you create a project in Business Central it is added to the Git repository connected to Business Central.

For this project, you will create a simple business process and create and modify forms.

Procedure

1. Log in to Business Central and click **Menu → Design → Projects**.
2. Click **Add Project**.
3. Type **pizzaPlace** in the **Name** field of the **Add Project** window and click **Add**.

Figure 1.1. Add the pizzaPlace project



The **Assets** view of the project opens when you successfully create the project.

CHAPTER 2. CREATING USERS

You can create as many Business Central users as you require. User privileges and settings are controlled by the roles assigned to a user and the groups that a user belongs to. For this example, you must create two new users: **Katy** who will act as the pizza place employee, and **Bill** who will act as the customer placing the order. For more information on creating users, see the **Creating users** chapter of *Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP* .

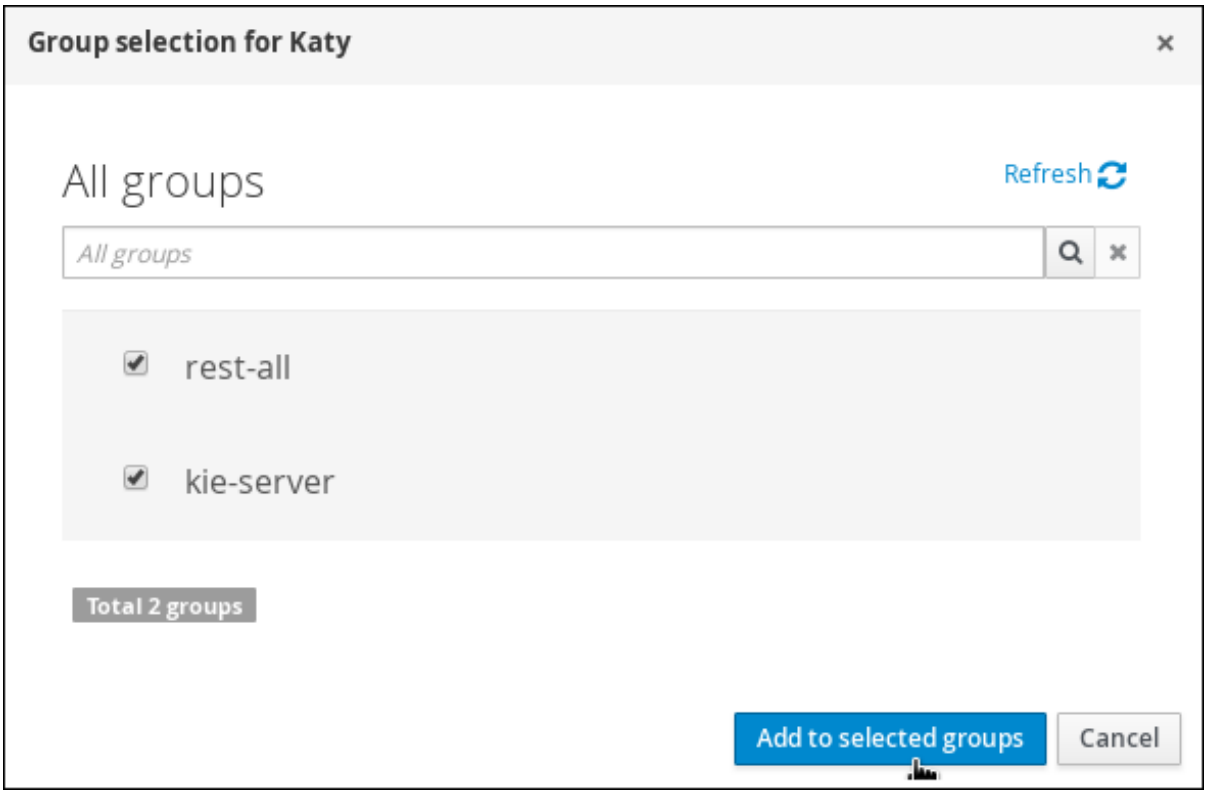
Procedure

1. Click the gear icon  in the upper-right corner, and click **Users**.
2. Click 

, enter **Katy**, and click **Next**.
3. Click the **Groups** tab and click 

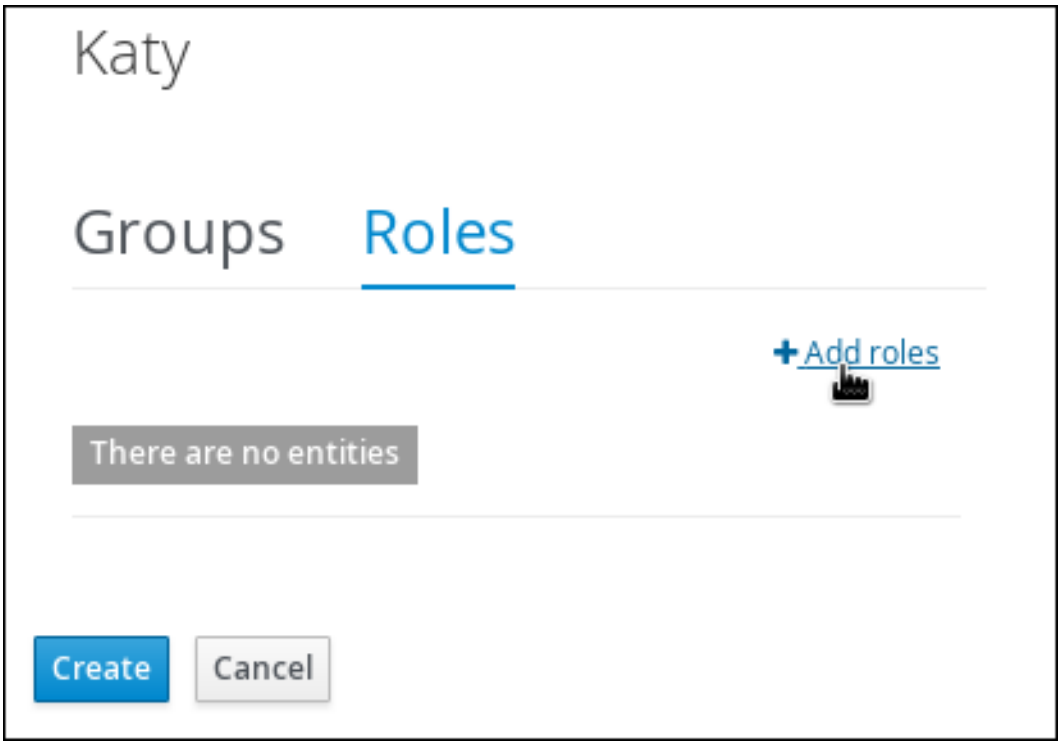
.
4. Select **rest-all** and **kie-server** in the **Group selection for Katy** window and click **Add to selected groups**.

   Figure 2.1. Group selection for Katy



5. Click the **Roles** tab and click **Add roles**.

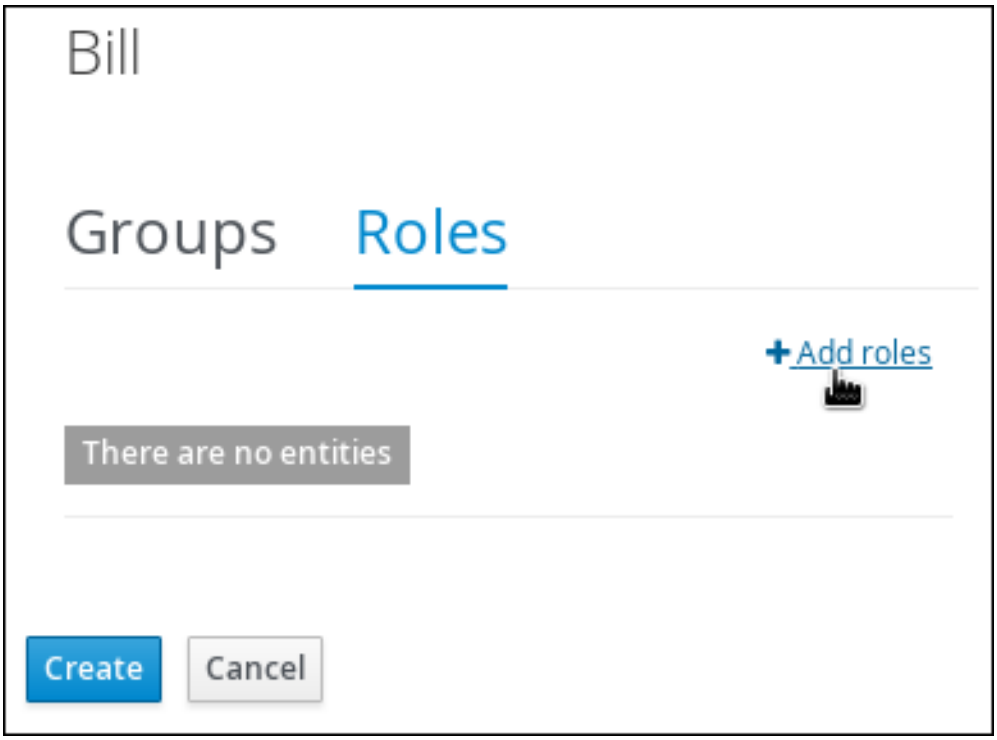
Figure 2.2. Add roles forKaty



6. Select **admin** and **user** and click **Add to selected roles**.
7. Click **Create** to assign **Katy** to the **admin** and **user** roles.
8. Click **Yes** to set the password to **katy** and click **Change**.
9. Create another **New user**, enter **Bill**, and click **Next**.
10. Click the **Groups** tab and click 

.
11. Select **rest-all** and **kie-server** and click **Add to selected groups**.
12. Click the **Roles** tab and click **Add roles**.

Figure 2.3. Add roles for Bill



13. Select **admin** and **user** and click **Add to selected roles**.
14. Click **Create** to assign **Bill** to the **admin** and **user** roles.
15. Click **Yes** to set the password to **bill** and click **Change**.

NOTE

Each user must be assigned to at least one role to access Business Central.

CHAPTER 3. CREATING A BUSINESS PROCESS

A business process is a graph that describes the order in which a series of steps must be executed using a flow chart. A business process consists of a collection of nodes that are linked to each other using connections. Each of the nodes represents one step in the overall process while the connections specify how to transition from one node to the other. Red Hat Process Automation Manager contains a predefined selection of node types to simplify business process creation.

Prerequisites

- Created the **pizzaPlace** project. For more information, see Chapter 1, *Creating the Pizza Place project*.
- Created the required users. For more information, see Chapter 2, *Creating users*.

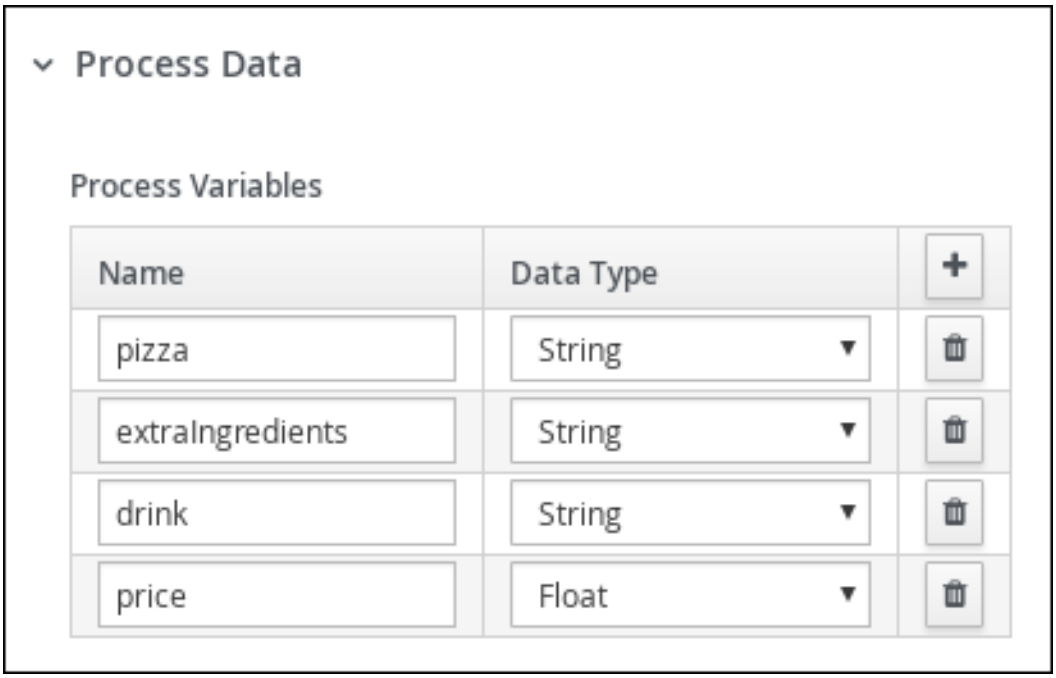
3.1. CREATING THE PIZZA ORDERS BUSINESS PROCESS

The pizza orders business process determines whether or not the new order contains the required data before proceeding. If all of the specified data requirements are met, the order will be processed.

Procedure

1. Log in to Business Central and click **Menu → Design → Projects → pizzaPlace**.
2. Click **Add Asset → Business Process**.
3. In the **Create new Business Process** wizard, enter the following values:
   a. **Business Process**: **pizzaOrders**.
   b. **Package**: select **com.myspace.pizzaplace**.
4. Click **Ok**. The process designer opens.
5. In the upper-right corner, click the **Diagram properties** icon.
6. Scroll down and expand **Process Data**.
7. Click  four times next to **Process Variables**, and define the following variables:

Figure 3.1. Defining variables in the Process Data window



8. In the process designer, click **Save**, then **Save**, to confirm your changes.

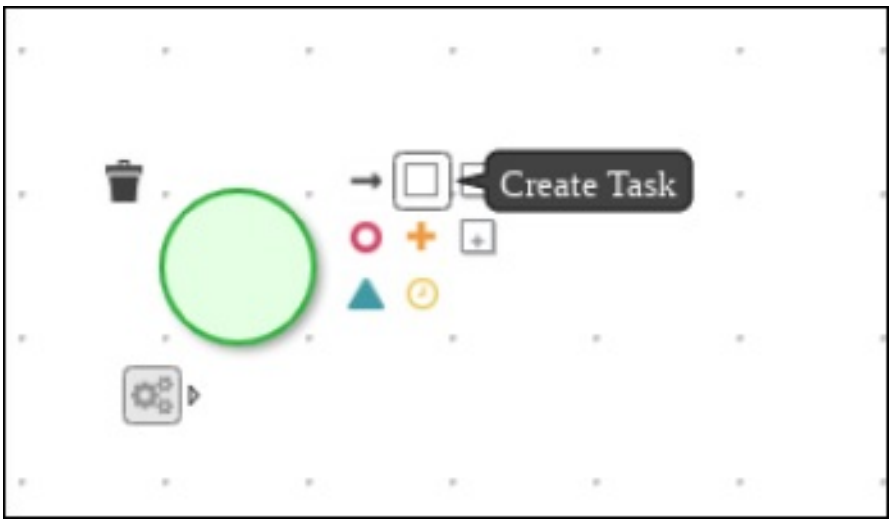
3.2. CREATING THE PROCESS ORDER USER TASK

Create a process order and add variables, such as the pizza ingredients and drink selection.

Procedure

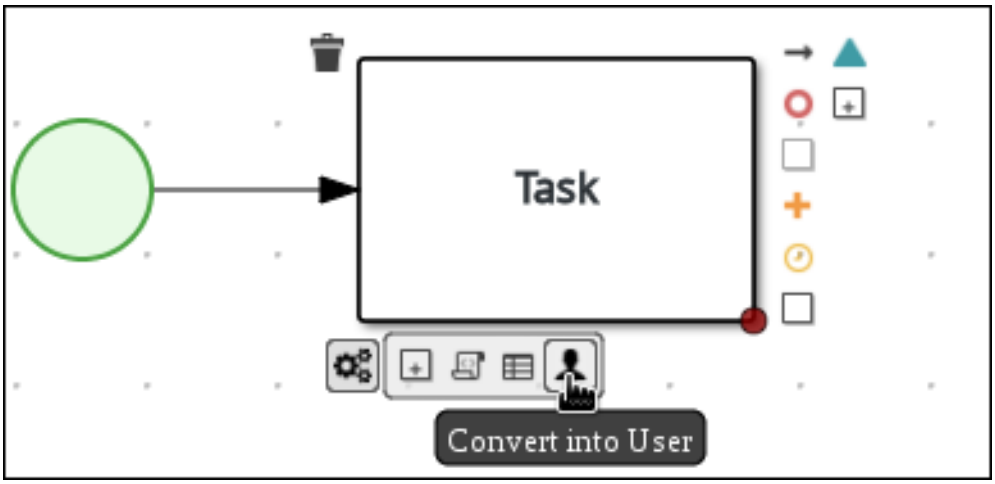
1. Click the start event to create an outgoing connection to a new task.

Figure 3.2. Outgoing connection from the start event to a user task



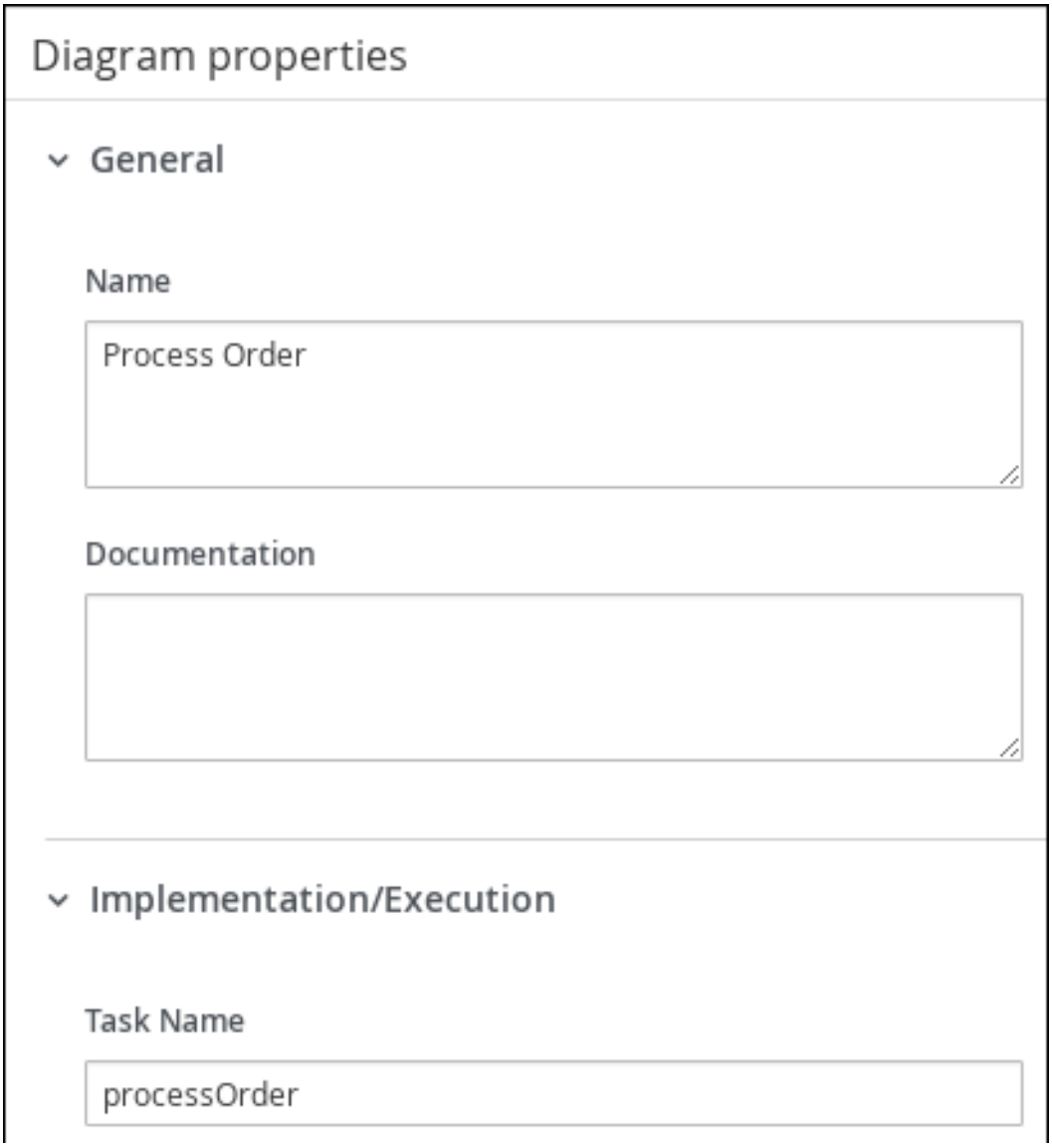
2. Convert the new task to a user task.

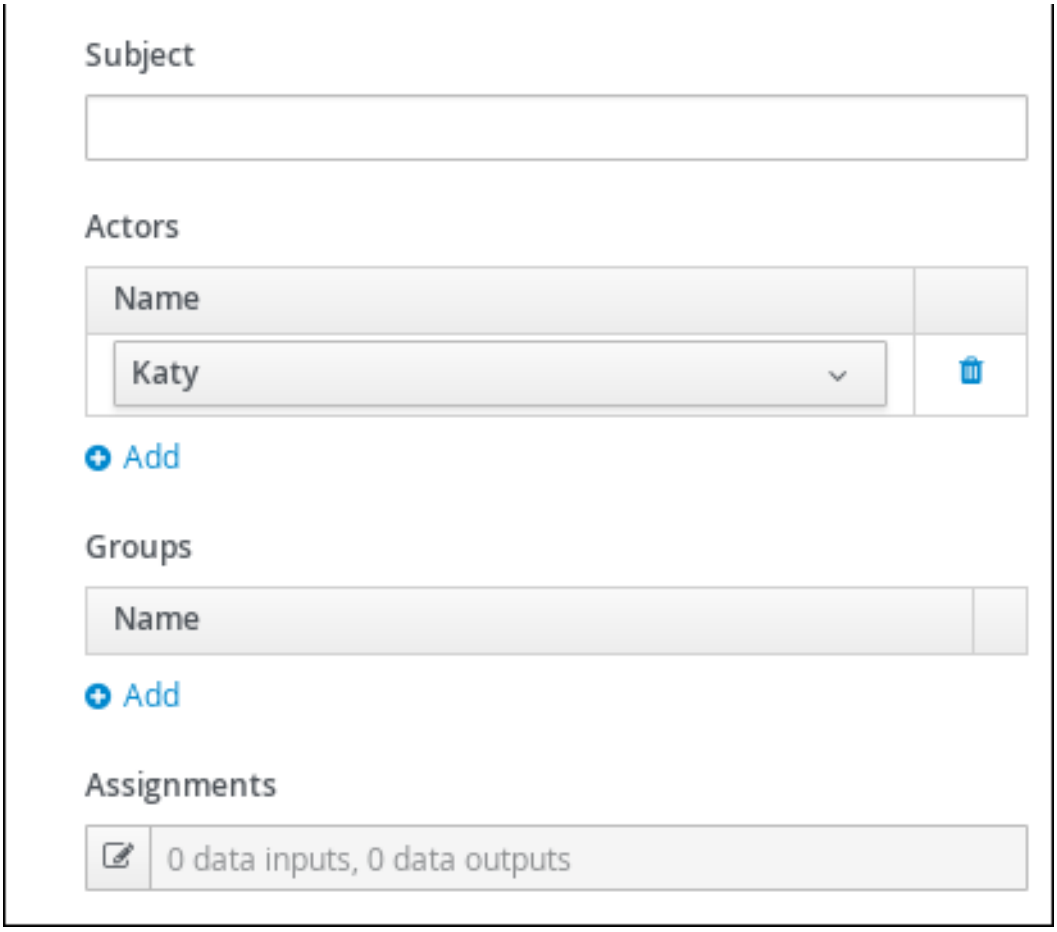
Figure 3.3. Convert into a User task



3. Click the user task and enter **Process Order** in the **Name** field.
4. Expand **Implementation/Execution** and enter the following values:
   - Task Name: **processOrder**
   - Actor: **Katy**

Figure 3.4. The Diagram properties window

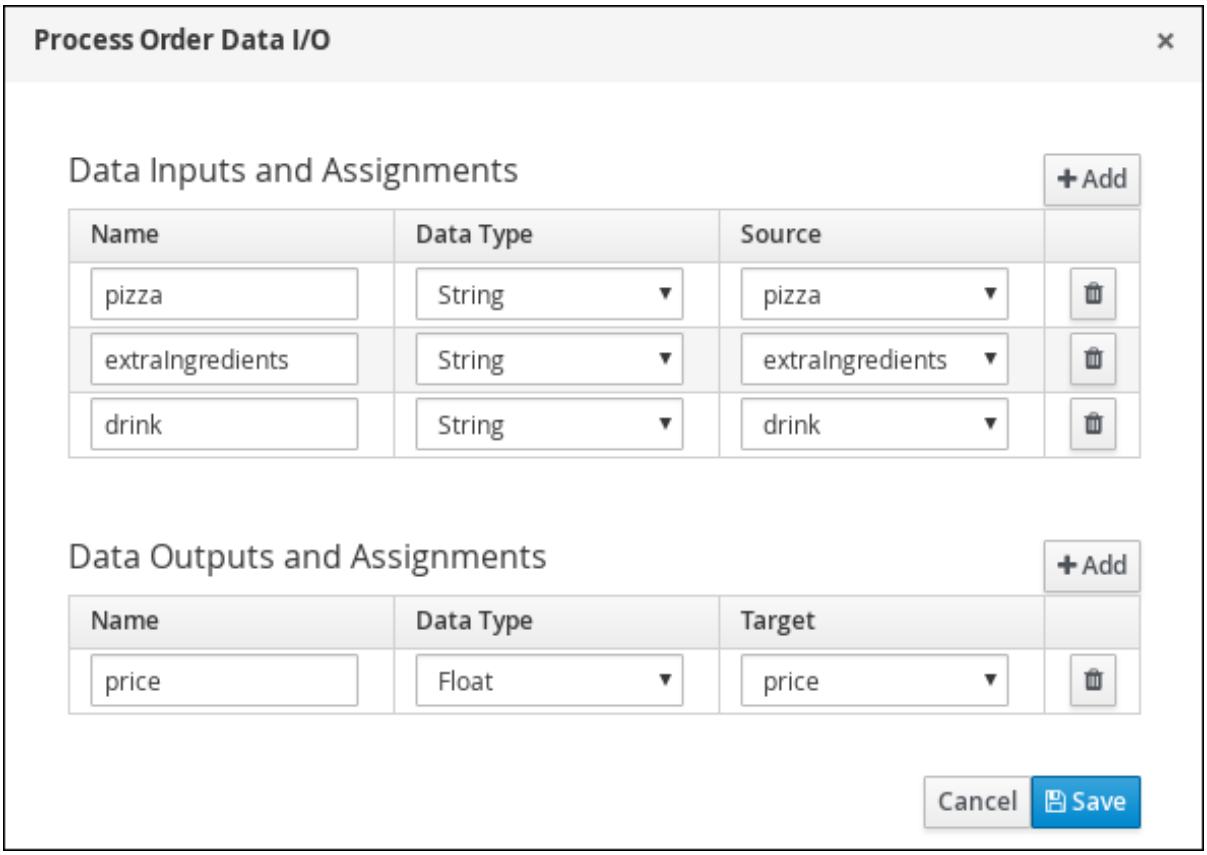




5. Click  next to **Assignments**.

6. In the **Process Order Data I/O** window, create the following input assignments:

Figure 3.5. The Process Order Data input and output assignments



7. Click **Save**.
8. In the process designer, click **Save**, then **Save**, to confirm your changes.

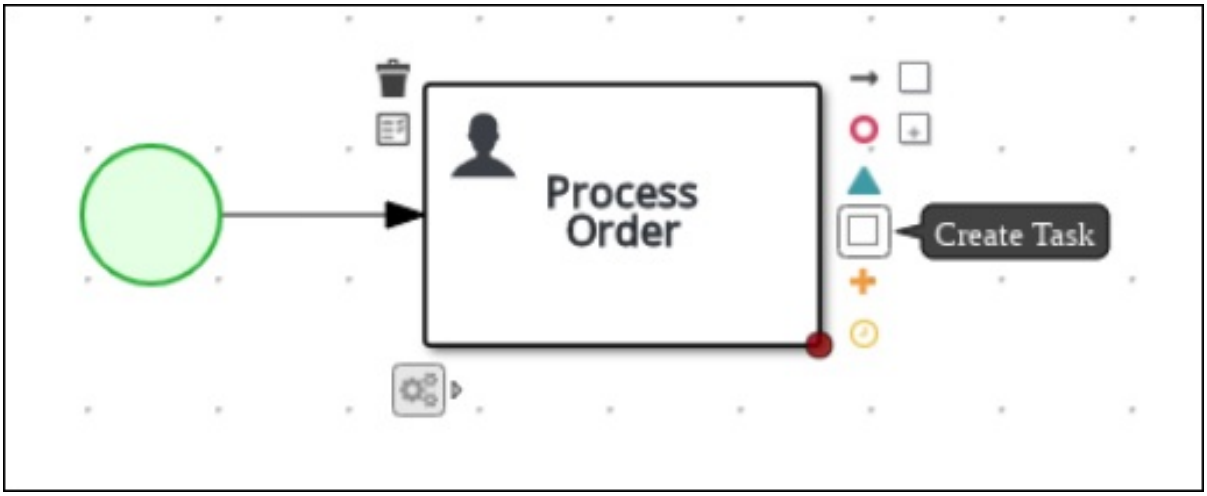
3.3. CREATING THE CONFIRMATION USER TASK

Create an order confirmation user task, which will return the order details to the customer for confirmation before the final order is placed.

Procedure

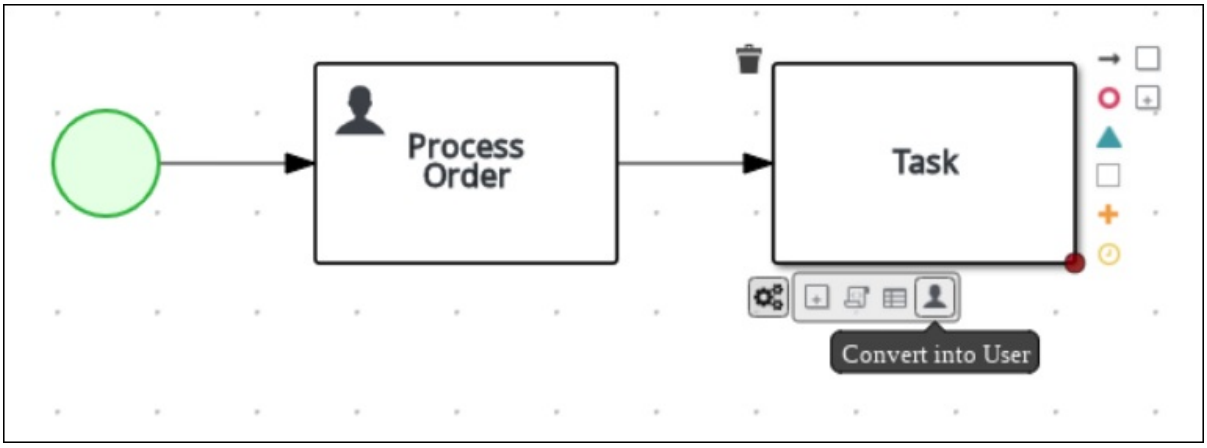
1. Click the Process Order task to create an outgoing connection to a new task.

Figure 3.6. Outgoing connection from the Process Order task to a user task



2. Convert the new task to a user task.

Figure 3.7. Convert into a User task

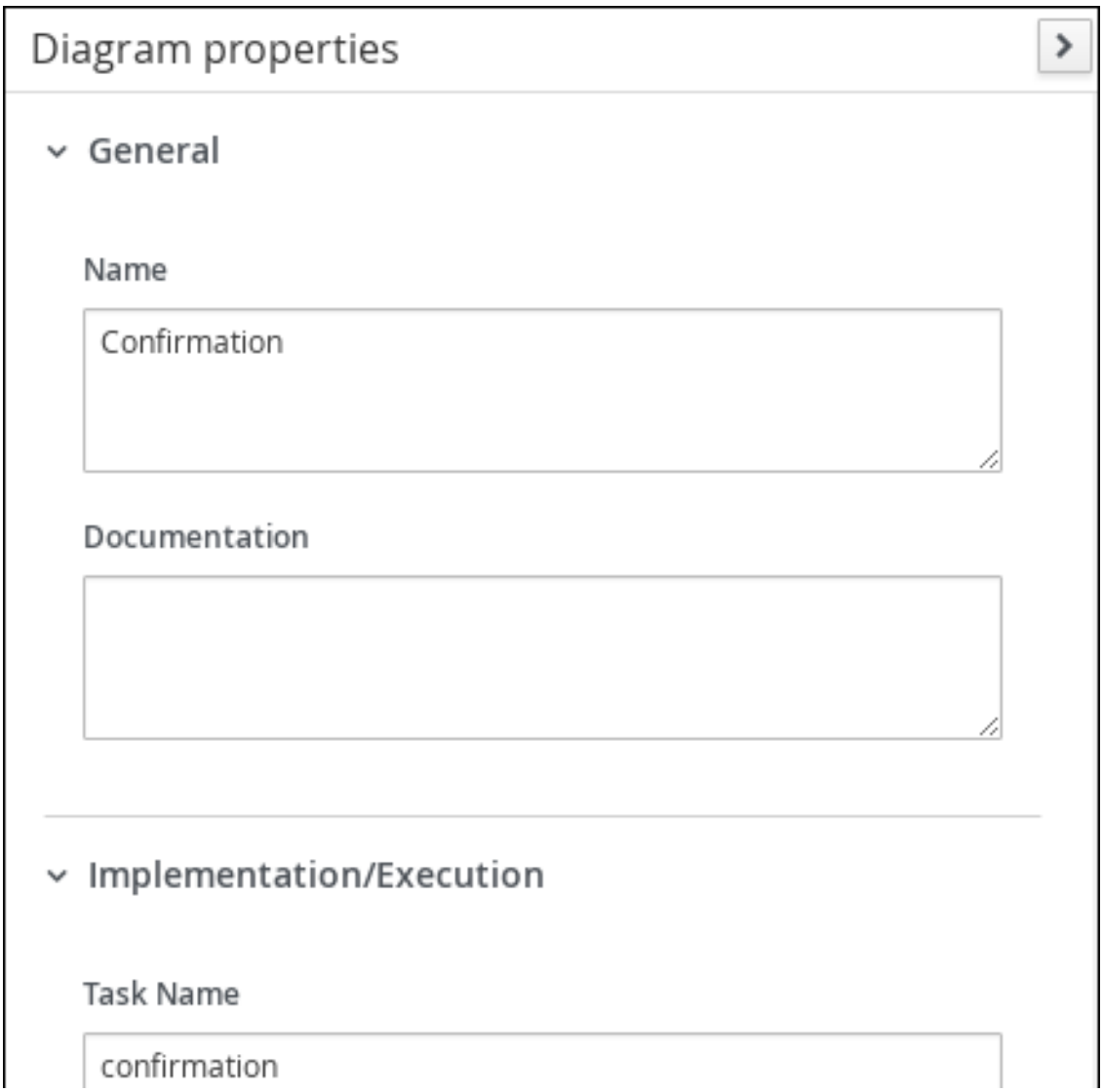


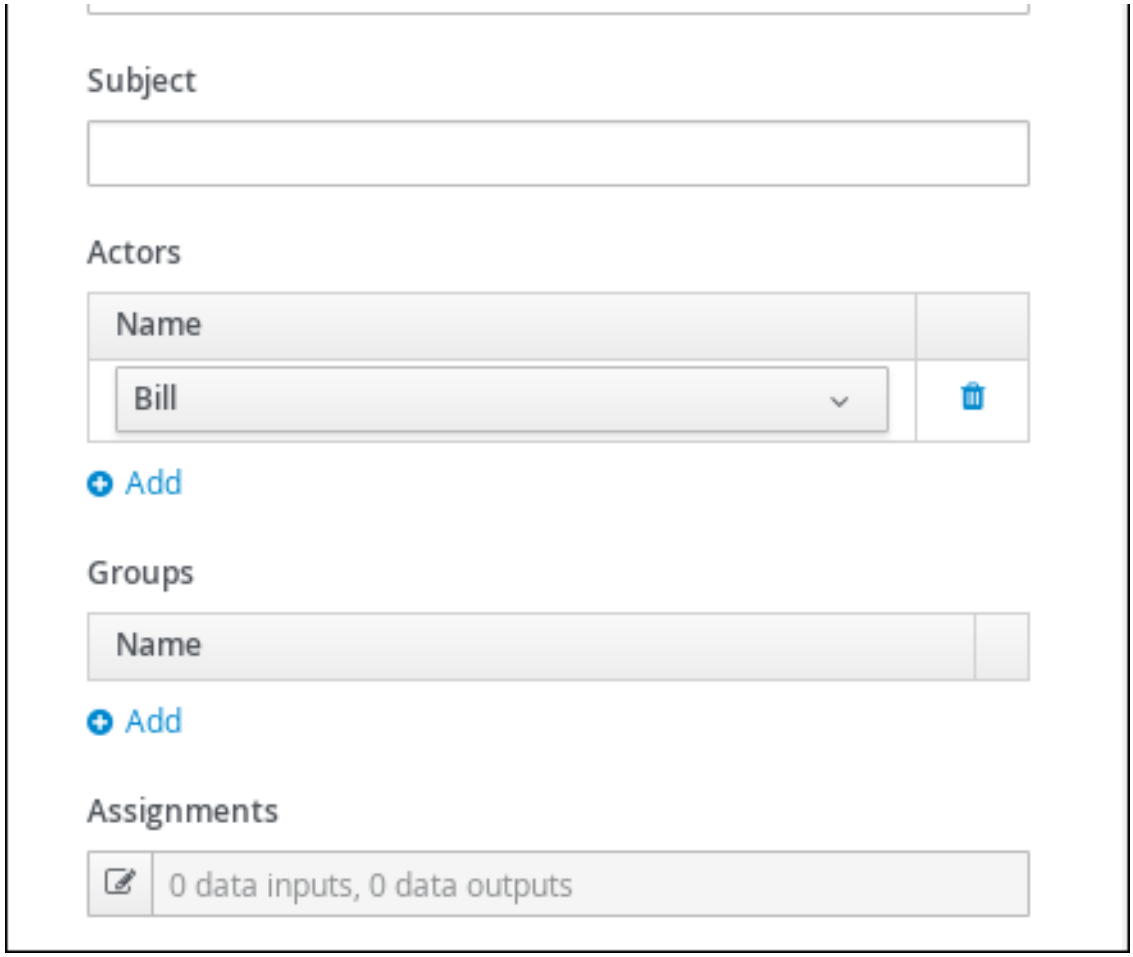
3. Click the user task and enter **Confirmation** in the **Name** field.

4. Expand **Implementation/Execution** and enter the following values:

- Task Name: **confirmation**
- Actor: **Bill**

Figure 3.8. The Diagram properties window

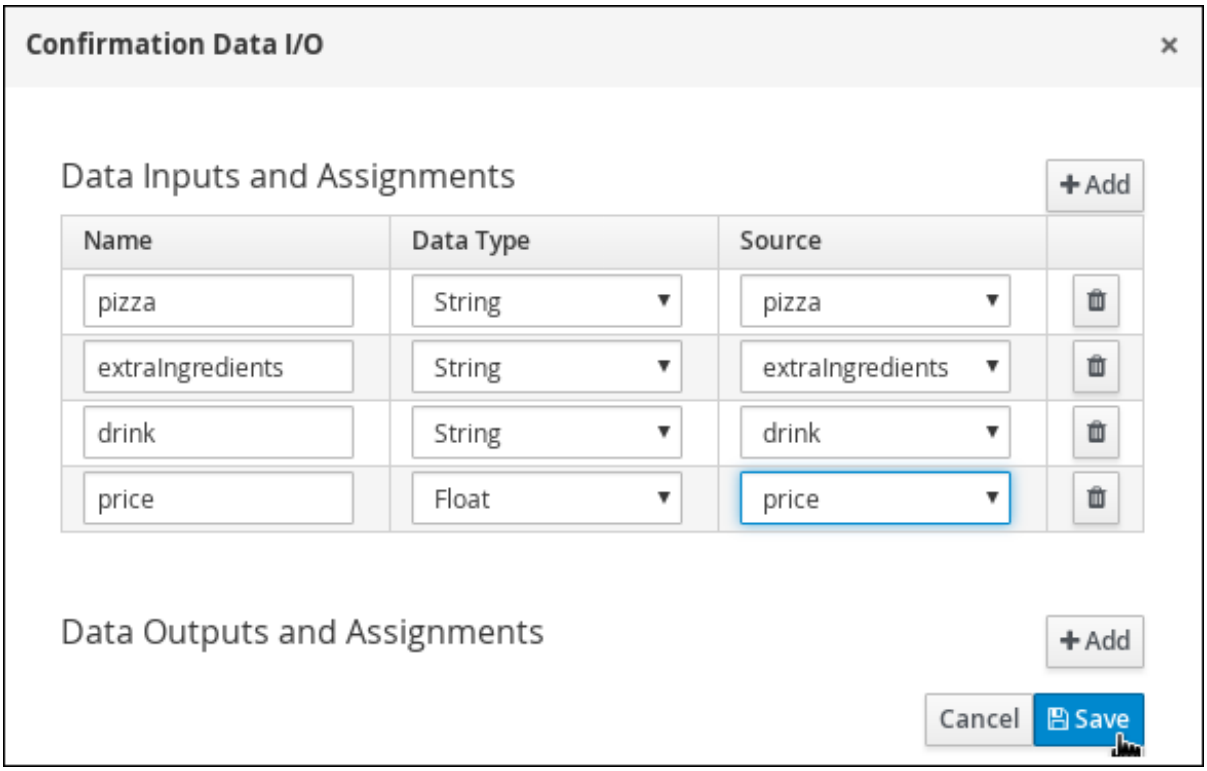




5. Click  next to **Assignments**.

6. In the **Confirmation Data I/O** window, create the following input assignments:

Figure 3.9. The Confirmation Data input and output assignments



7. Click **Save**.
8. In the process designer, click **Save**, then **Save**, to confirm your changes.

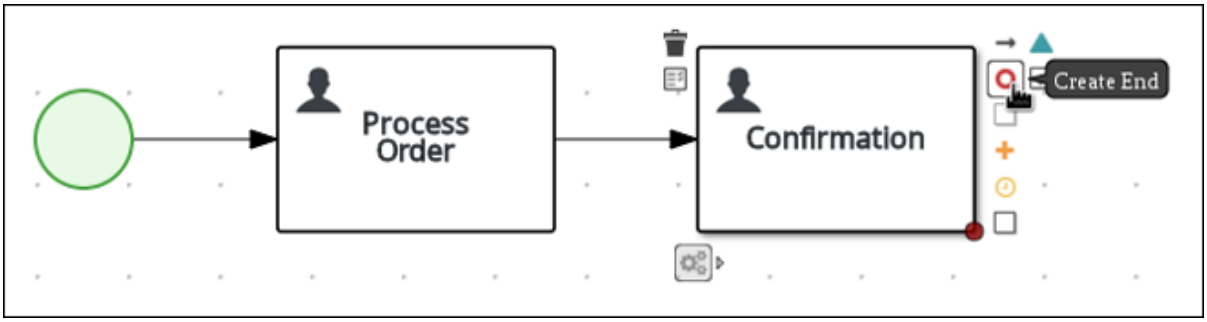
3.4. ADDING AN END NODE

Add an end node to signify the end of the pizza order process.

Procedure

1. Click the **Confirmation** user task and connect it to an end event.

   Figure 3.10. Outgoing connection from the Confirmation user task

2. In the process designer, click **Save**, then **Save**, to confirm your changes.

CHAPTER 4. GENERATING FORMS

Red Hat Process Automation Manager enables you to automatically generate all forms. For this business process you will generate the **Process**, **Process Order**, and **Confirmation** forms.

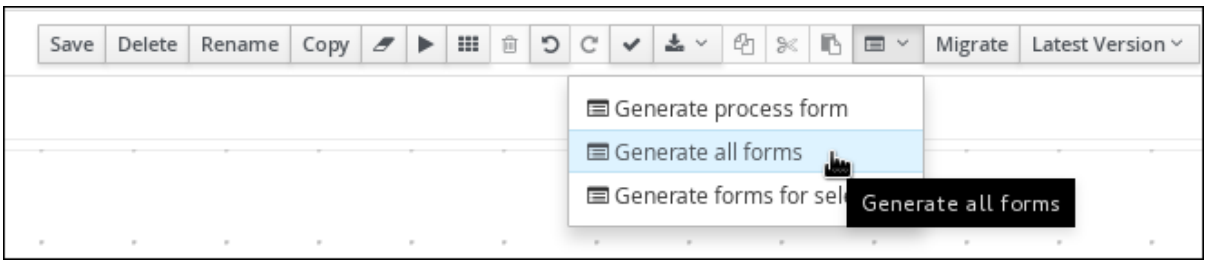
Prerequisites

You have created the pizza orders business process. For more information, see Chapter 3, *Creating a Business Process*.

Procedure

1. Log in to Business Central and click **Menu → Design → Projects → pizzaPlace → pizzaOrders**.
2. Select **Generate all forms** from the **Form Generation** menu.

Figure 4.1. Generate all forms menu



CHAPTER 5. CUSTOMIZING FORMS

Automatically generating forms saves time for basic form creation, but for most business processes, you will customize the forms to reflect exactly what you intend for the user to view and interact with.

Prerequisites

You have automatically generated the forms. For more information, see Chapter 4, *Generating forms*.

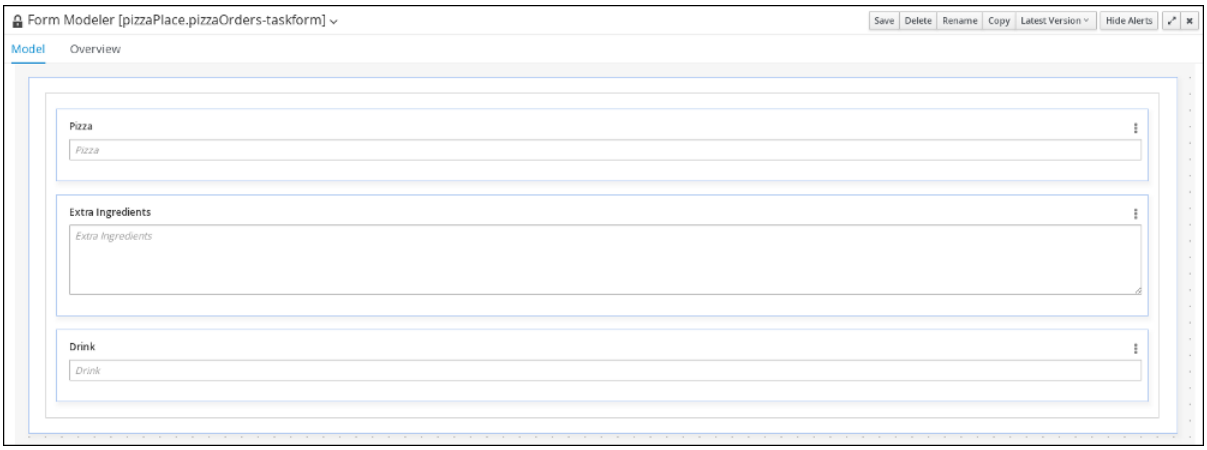
5.1. CUSTOMIZING THE PIZZA ORDER FORM

Customize the pizza order form to ensure ease of use by defining the field types and locations.

Procedure

1. Log in to Business Central and click **Menu → Design → Projects → pizzaPlace**.
2. Click the **pizzaPlace.pizzaOrders-taskform** form.
3. Click  in the upper-right corner of the **Price** row and click **Remove**.
4. Click  in the upper-right corner of the **ExtraIngredients** row and click **Edit**.
5. Select **TextArea** from the **Field Type** menu.
6. Change both the **Label** and **PlaceHolder** fields to **Extra Ingredients**.
7. Click **Ok**.
8. Sort the remaining rows by dragging them to reflect the following order:

   Figure 5.1. Sort the form rows

9. Click **Save**, then **Save**, to confirm your changes.

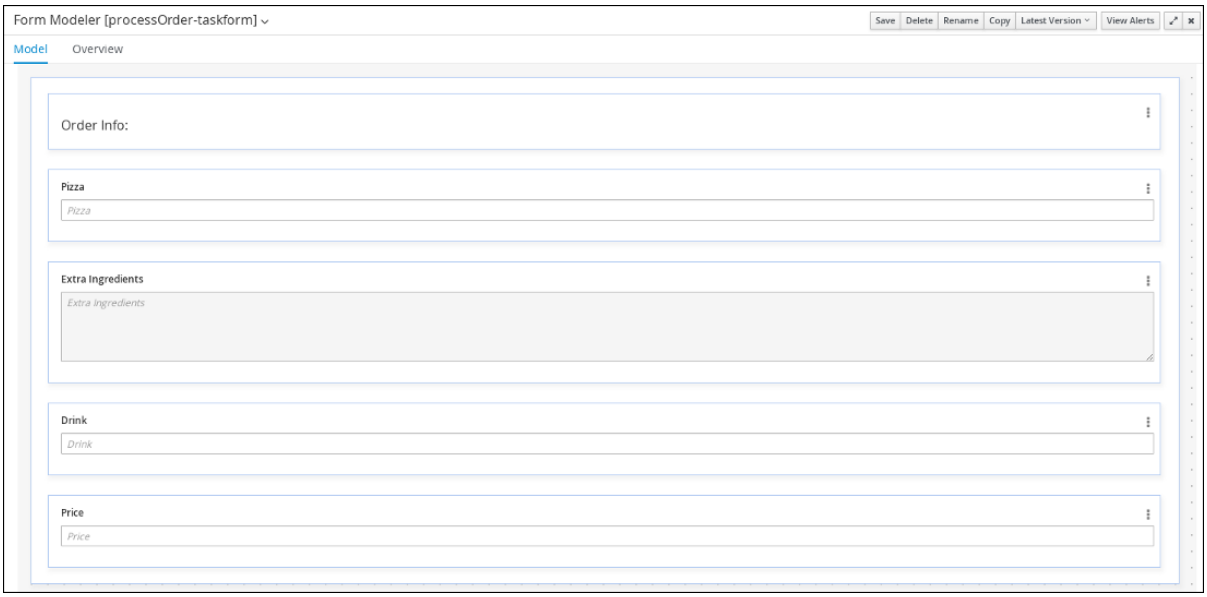
5.2. CUSTOMIZING THE PROCESS ORDER FORM

Customize the process order form to ensure ease of use by defining the field types and locations.

Procedure

1. Click **Menu → Design → Projects → pizzaPlace**.
2. Click the **processOrder-taskform** form.
3. Click  in the upper-right corner of the **Inputs** row, select **Edit**, and change **Inputs:** to **Order Info:**. Click **Ok**.
4. Click  in the upper-right corner of the **Outputs:** row and click **Remove**.
5. Click  in the upper-right corner of the **ExtraIngredients** row and select **Edit**.
6. From the **Field Type** menu, select **TextArea**.
7. Change both the **Label** and **PlaceHolder** fields to **Extra Ingredients**.
8. Click **Ok**.
9. Sort the remaining rows by dragging them to reflect the following order:

   Figure 5.2. Sort the form rows



10. Click **Save**, then **Save**, to confirm your changes.

5.3. CUSTOMIZING THE ORDER CONFIRMATION FORM

Customize the order confirmation form to ensure ease of use by defining the field types and locations.

Procedure

1. Click **Menu → Design → Projects → pizzaPlace**.
2. Click the **confirmation-taskform** form.

3. Click  in the upper-right corner of the **Inputs** row, select **Edit**, and change **Inputs:** to **Your Order Info:**.

4. Click  in the upper-right corner of the **ExtraIngredients** row and select **Edit**.

5. From the **Field Type** menu, select **TextArea**.

6. Change both the **Label** and **PlaceHolder** fields to **Extra Ingredients**.

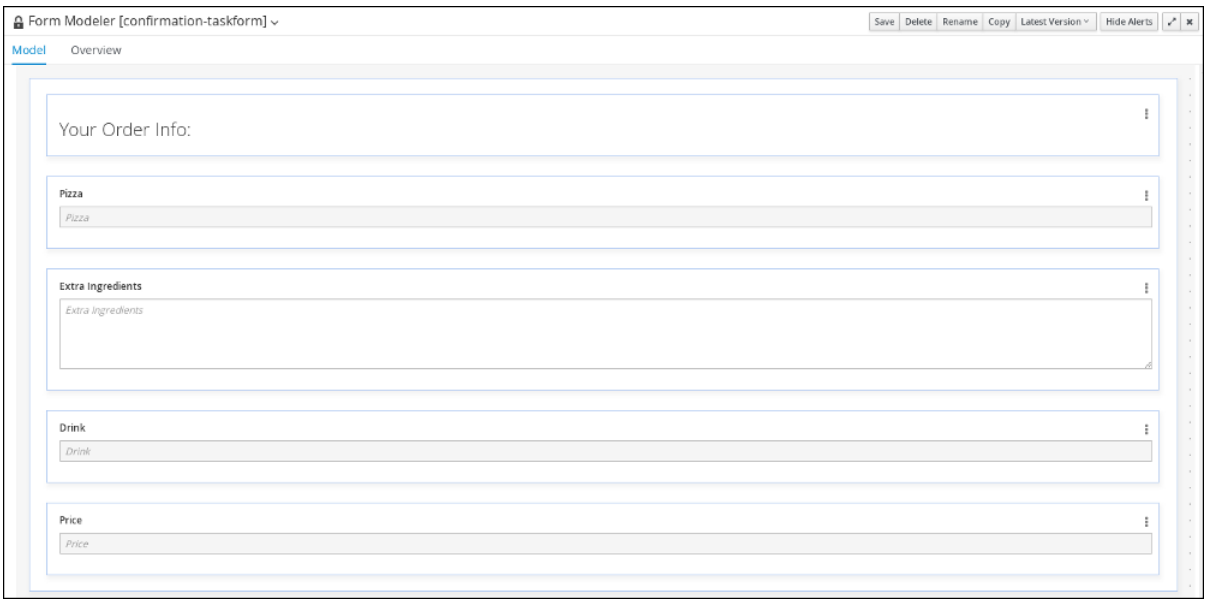
7. Click **Ok**.

NOTE

Confirm that the **Pizza**, **Extra Ingredients**, **Drink**, and **Price** rows are marked as **Read Only** by clicking  in the upper-right corner of each and selecting **Edit**. The **Read Only** box should be selected. If not, select it and click **Ok**.

8. Sort the remaining rows by dragging them to reflect the following order:

Figure 5.3. Sort the form rows



9. Click **Save**, then **Save**, to confirm your changes.

CHAPTER 6. DEPLOYING THE PIZZAPLACE PROJECT

The following chapter instructs you how to build and deploy a new instance of the **pizzaPlace** order business process in Red Hat Process Automation Manager.

Prerequisites

The Process Server is deployed and connected to the Business Central. For more information, see *Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP* .

Procedure

1. Log in to Business Central and click **Menu → Design → Projects**.
2. Click the project you want to deploy, for example **pizzaPlace**.
3. Click **Deploy**.

NOTE

If you deploy the project more than once, the **Build & Deploy**window opens prompting you to create a new deployment unit ID (container ID). Make changes or keep the default values, and click **OK**.

CHAPTER 7. EXECUTING THE PIZZAPLACE ORDER PROCESS

Now that you have deployed the project, you can execute the project's defined functionality. For this example, you will be acting as the customer (Bill) and fill out the pizza order form. The pizza place employee (Katy) will add the order price and send the order confirmation to your task inbox.

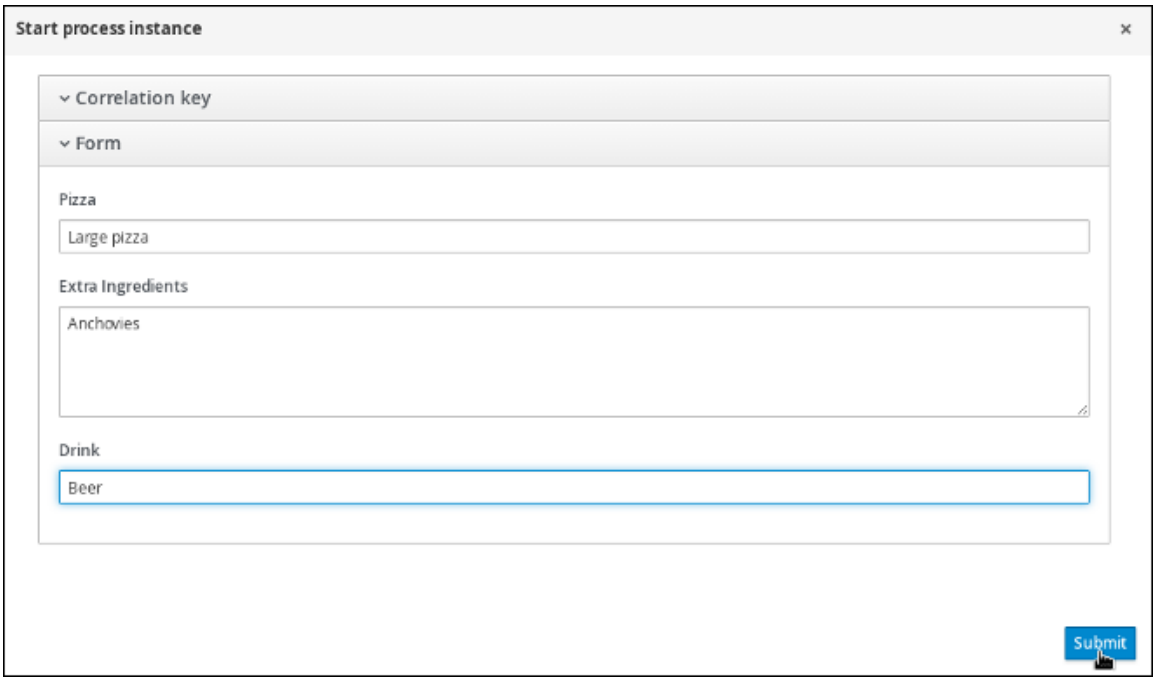
Prerequisites

- The Process Server is deployed and connected to the Red Hat Process Automation Manager. For more information, see *Installing and configuring Red Hat Process Automation Manager on Red Hat JBoss EAP*.
- You have deployed the **pizzaPlace** process. For more information, see Chapter 6, *Deploying the pizzaPlace project*.

Procedure

1. Log in to Business Central as the customer:
   - **Username**: **Bill**
   - **Password**: **bill**
2. Click **Menu → Manage → Process Instances**.
3. Click **New Process Instance**, select **pizzaPlace.pizzaOrders** from the **Process definition** menu, and click **Start**.
4. Type the following values:
   - **Pizza**: **Large pizza**
   - **Extra Ingredients**: **Anchovies**
   - **Drink**: **Beer**

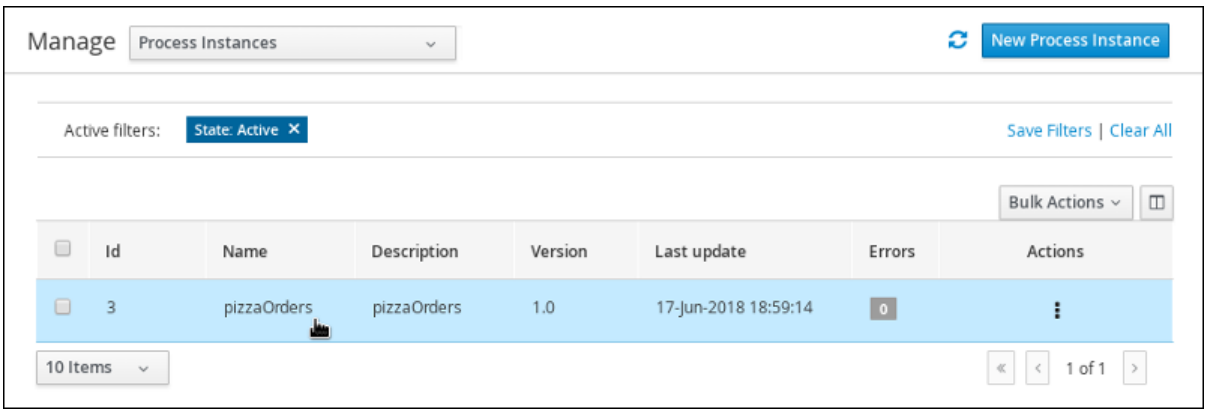
Figure 7.1. Input the order information



5. Click **Submit** to start the process instance. After starting the process instance, the **Manage Process Instances** view opens.

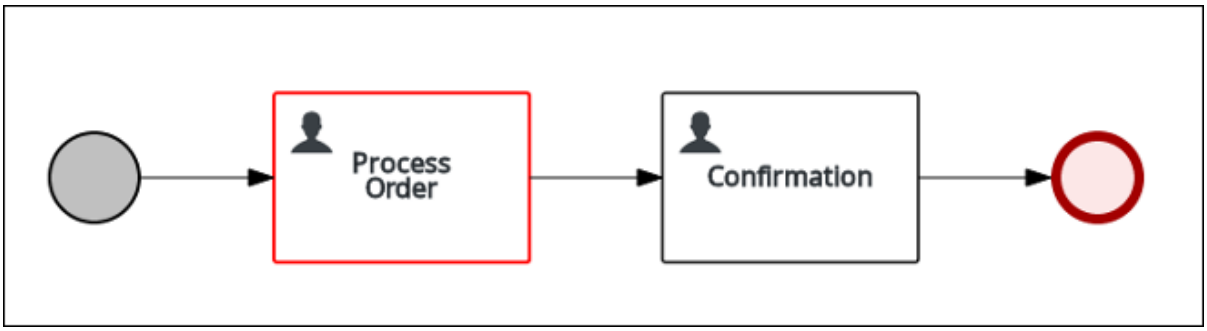
6. Click anywhere in the **pizzaOrders** row to view the process details.

Figure 7.2. View the process details



7. Click the **Diagram** tab to view the process flow within the process diagram. The state of the process will be highlighted as it moves through each task.

Figure 7.3. View the process flow



8. Log out and log back in again to Business Central as the employee:

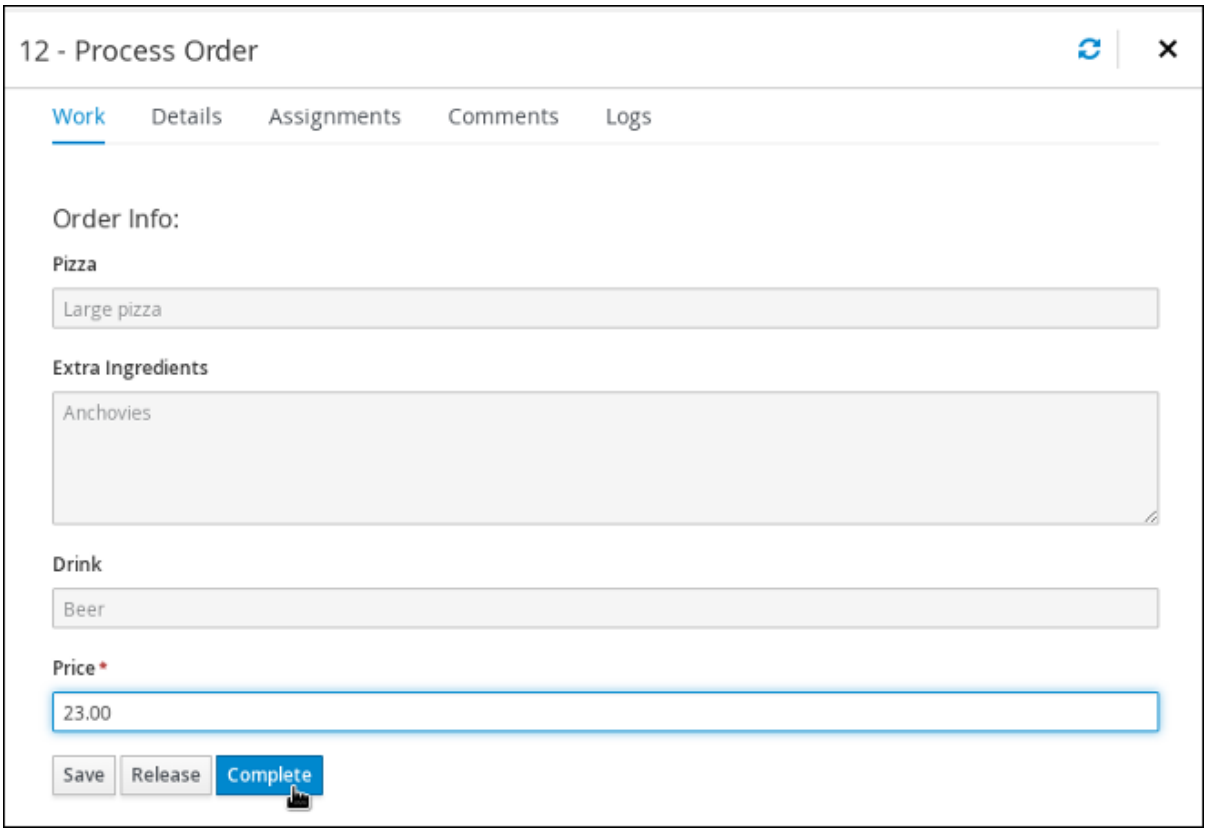
   - Username: **Katy**
   - Password: **katy**

9. Click **Menu → Track → Task Inbox**. This will take you to the order form. This is the form that the pizza place employee (Katy) will take ownership of and return an order confirmation containing the order price.

10. Click anywhere in the **Task** row to open the order form.

11. Click **Start**, type the order total in the **Price** field, and click **Complete**.

Figure 7.4. Adding the order total price



12. Log out and log back in again to Business Central as the customer:
    - **Username**: **Bill**
    - **Password**: **bill**
13. Click **Menu → Track → Task Inbox**. This will take you to the order confirmation form containing the order's total price.

APPENDIX A. VERSIONING INFORMATION

Documentation last updated on Friday, May 22, 2020.