# Business Agility in 1:1 Customer Engagement

STUDENT GUIDE

PEGA Academy

This document is the property of:
Pegasystems Inc.
1 Rogers Street
Cambridge, MA 02142
Phone: (617) 374-9600
Fax: (617) 374-9620
www.pega.com

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# Agility in a customer engagement project

## What is agility?

Agility means that your organization is able to react quickly to changes in the marketplace, an important capability in marketing. In the digital age, things change constantly, and taking weeks or even months to translate a good idea into an actionable plan is bad for business.

Pega 1:1 Operations Manager increases your agility in the digital channels, giving business users everything they need to quickly transition to new content or messaging as needs change or trends emerge.

## Business value of agility

Generally, changes in an enterprise application require IT involvement and a full IT development cycle. But business users often want to change things like the description of a product, or its expiration date, or make slight amendments to the risk score computation. In most enterprise applications, even these kinds of changes can be costly.

Pega 1:1 Operations Manager empowers business users to make these sorts of 'business-as-usual' changes themselves. This not only preserves resources, it enables business teams to be more responsive to changing business needs and trends in the marketplace.

## Business changes versus enterprise-level changes

Business-as-usual changes are small, day-to-day updates that result from normal business operations in digital touchpoints. It typically falls to the business operations team to satisfy ad-hoc requests from business teams to make these types of incremental changes to optimize existing artifacts. These are usually smaller pieces of work that need fast turnaround, such as:

- Adding a new Action (such as offer or message) with treatments to production
- Removing or disabling an Action in production
- Modifying a group-level Engagement Policy
- Enabling an integrated channel
- Fixing a typo in a call center message provided by Pega Customer Decision Hub™

Enterprise changes tend to require larger pieces of strategic development work and usually disrupt normal operations. These tasks may introduce something new or implement a change in the way something existing is presented or works.

- Adding new data attributes to the customer profile
- Integrating a new channel
- Implementing an approval flow for change requests

## Pega 1:1 Operations Manager delivers business agility

Pega 1:1 Operations Manager provides a guided process for managing changes to decisioning artifacts. Business users determine what must change in a collaborative and unified way, and the system helps the user implement the changes by:

- Simplifying change processes and reducing administrative tasks
- Providing an intuitive, task-driven interface that guides the user from task to task
- Facilitating collaboration between operations, business, and technical teams

# Change management process

## Introduction

When business requirements change rapidly, the software development process needs to be more agile, while still producing high quality, reliable software. This topic covers the importance of the change management process, and how it works in a one-to-one customer engagement project for Pega Cloud® customers.

## Video

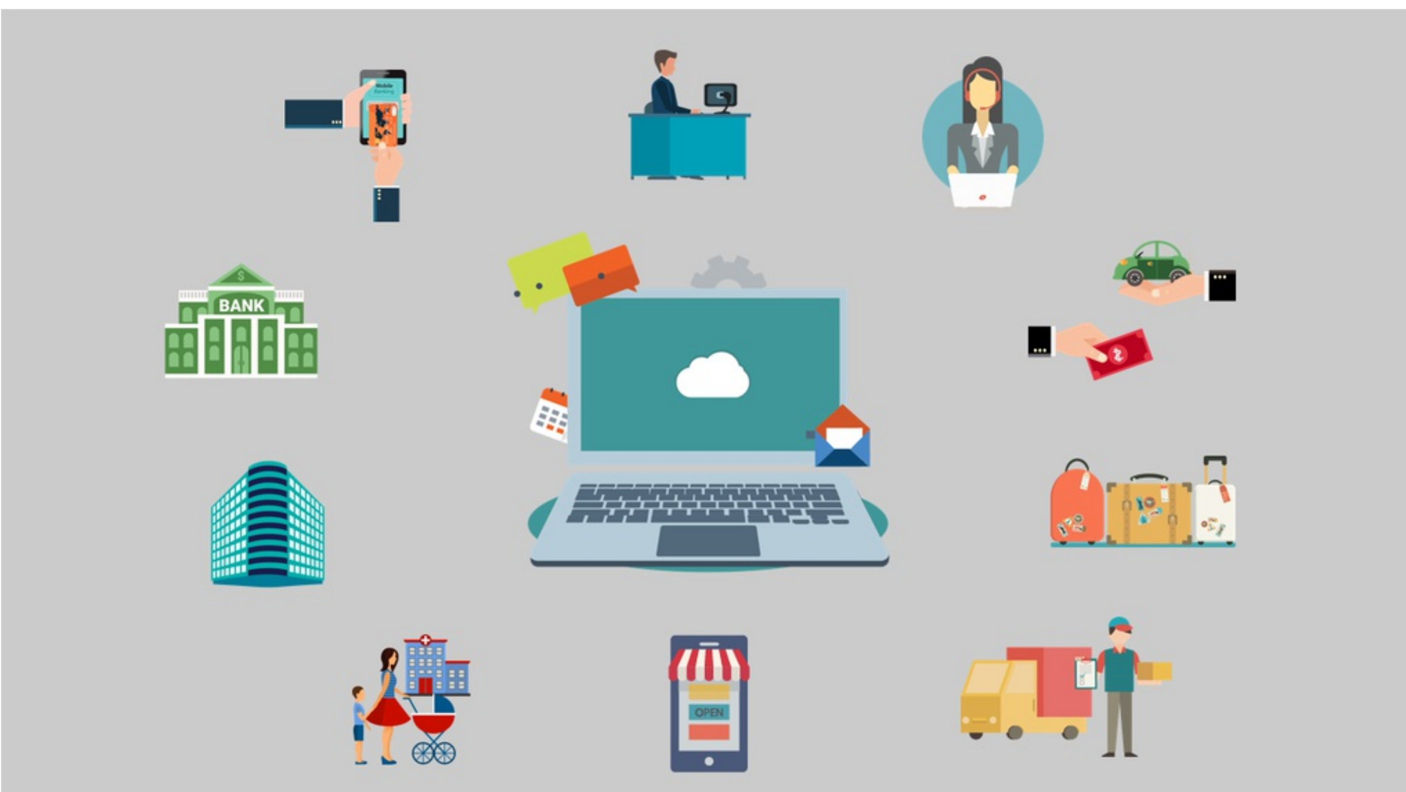

A transcript for this video is not available. Please visit [https://academy.pega.com](https://academy.pega.com) to watch.

## Transcript

This video describes the change management process in a one-to-one customer engagement project, and the cloud environments provided by Pega to support that process.

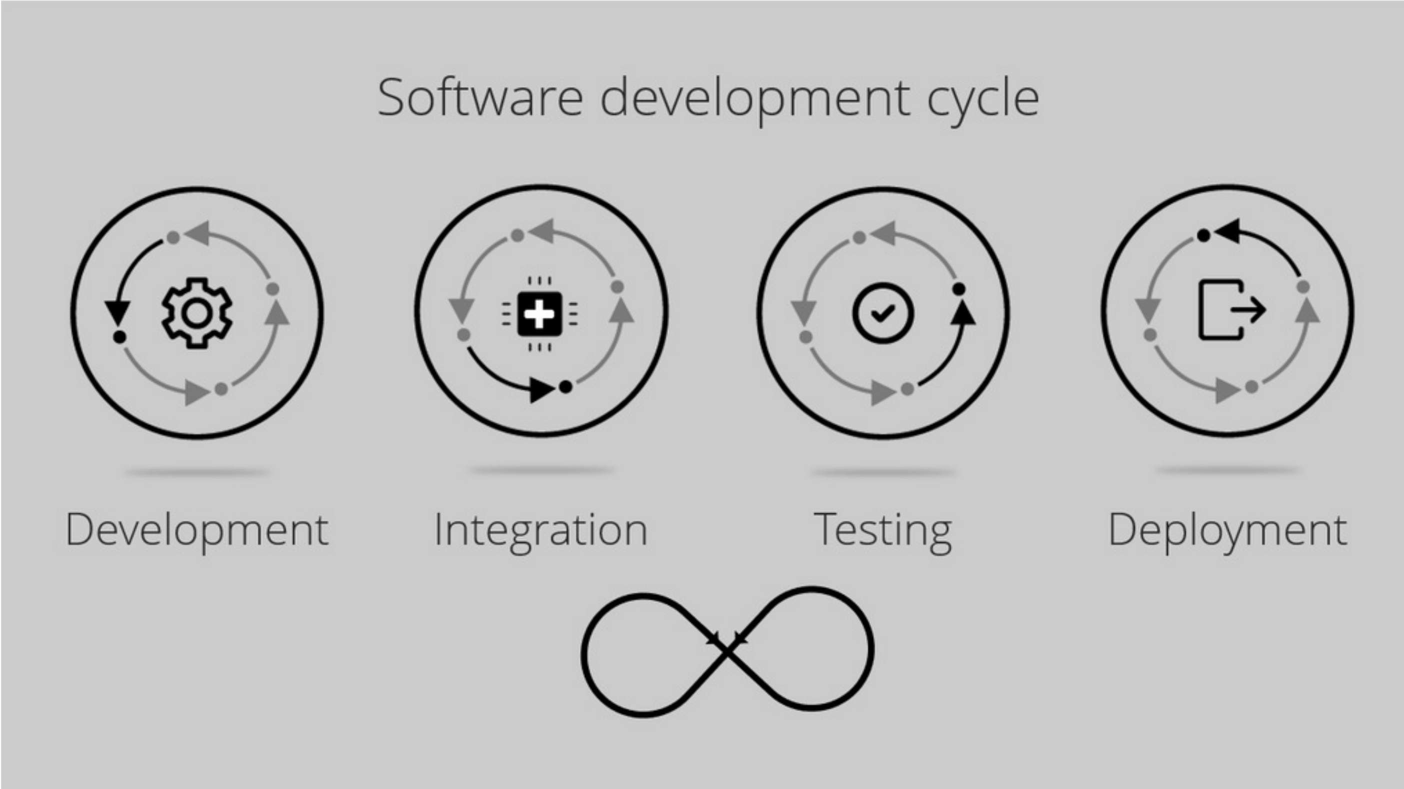
Let’s start by understanding some background on change management in enterprise software development projects.

In recent decades, organizations have been using computer software to automate many traditionally manual tasks.




Business processes need to constantly evolve as customer behavior and market conditions change. Naturally, the software that supports business practices needs to evolve as well. As the pace of change of business requirements increases, the software development process needs to be more agile, while still producing high-quality and reliable software.

Here’s a simplified view of an enterprise software development cycle. It consists of four high-level stages.



Developers develop new software or update existing software.

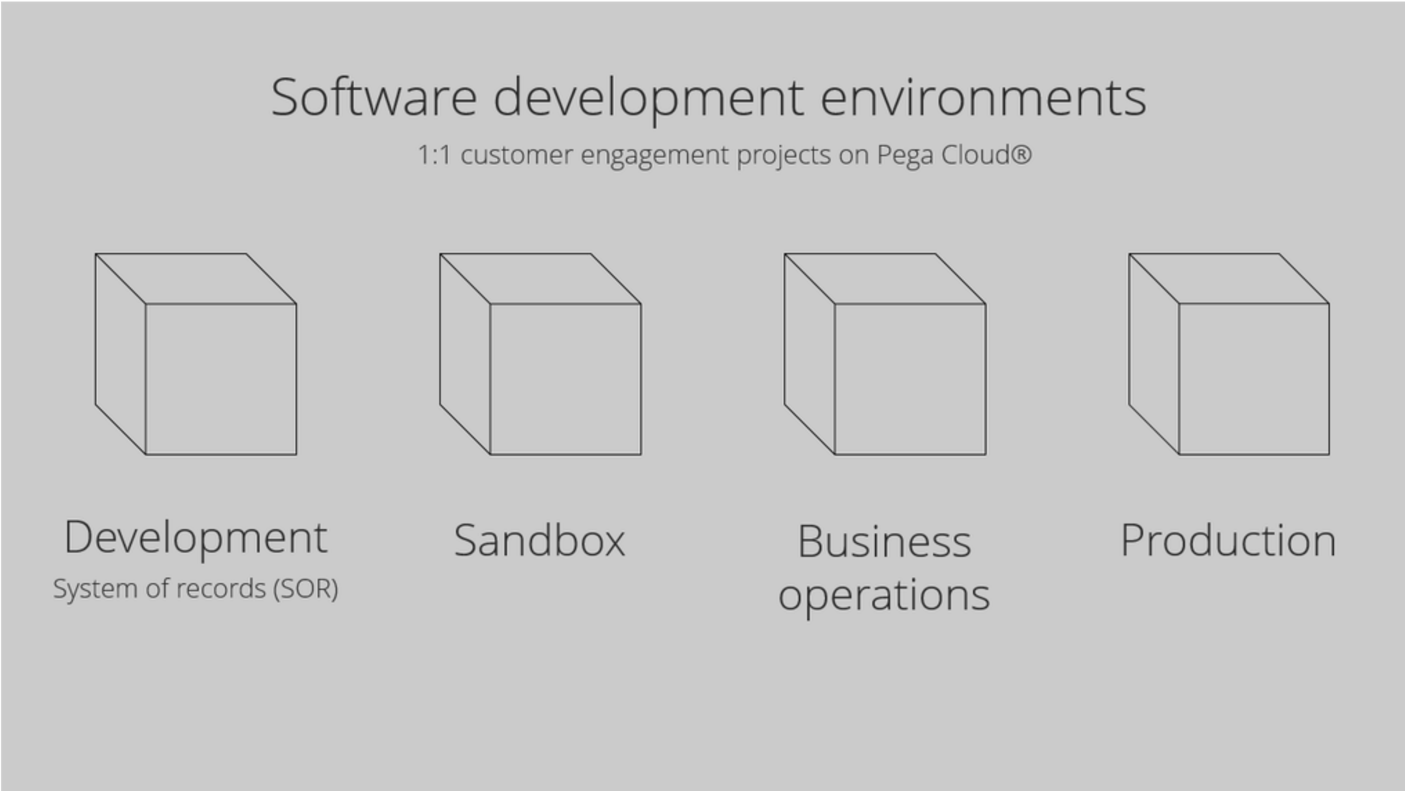
The work from several developers is merged into a single system in the integration phase.

The new software version goes through testing, and the final, approved software (or a software change) is deployed into production, which is the system that supports mission-critical business processes.

This cycle repeats for new as well as incremental updates to existing software.

A software development process is supported by different environments.

Let’s study the environments available to Pega Cloud® customers in support of a one-to-one customer engagement project using Pega Customer Decision Hub™.




A development environment is one in which developers create new versions of the application by adding enhancements or fixing issues. This system also doubles as a system of record for Pega applications.

A sandbox environment is used for various testing such as functional testing, unit testing and user acceptance testing.

The business operations environment is a replica of the production environment. However, it contains only a sample of the production data. This is where the business operations team creates and tests new business artifacts and conducts simulations.

The production environment is the main system that propagates next best actions to external channels, collects customer responses, and where the AI learning happens. It is also used for live monitoring of key performance indicators.

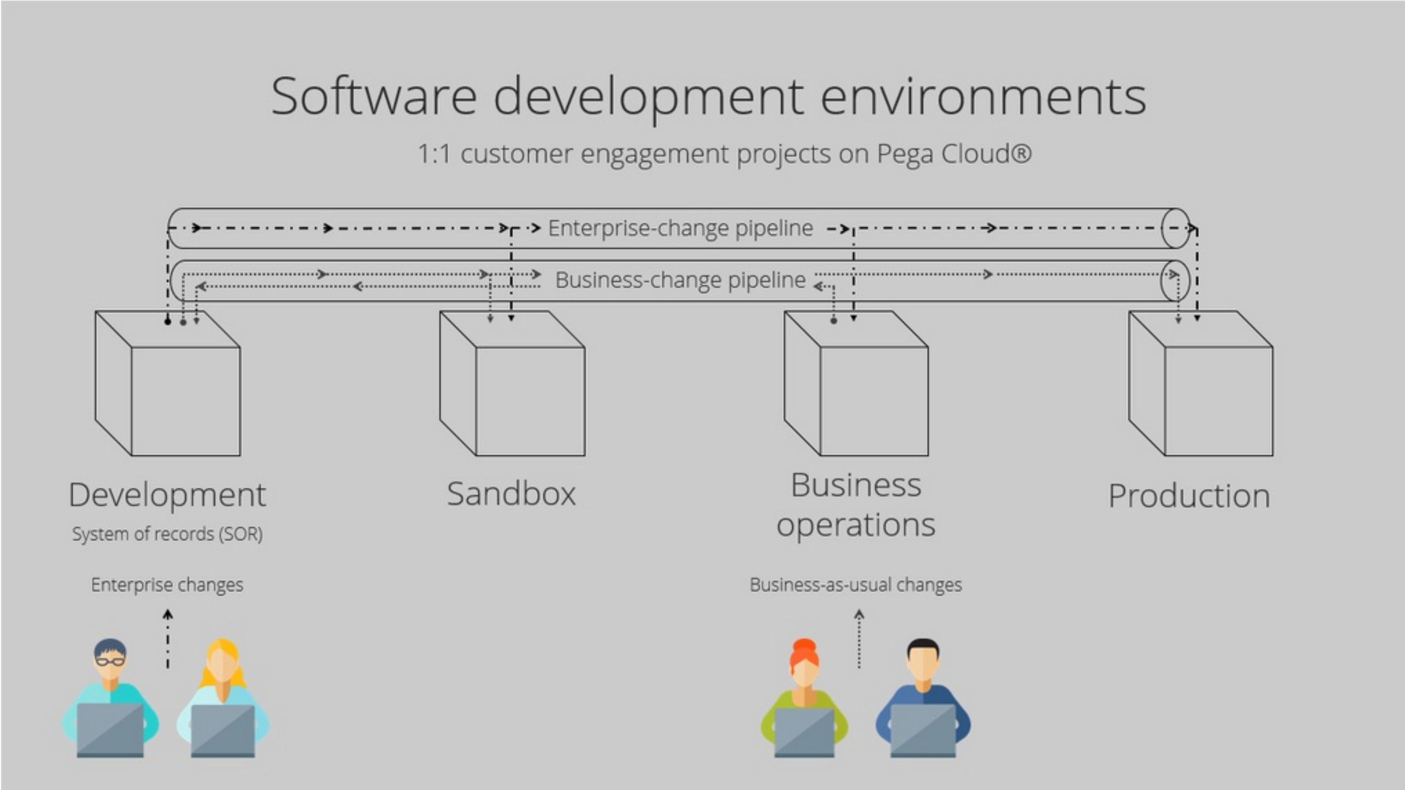
In a one-to-one customer engagement project, changes to the application can be classified into two categories: enterprise changes and business-as-usual changes.

Enterprise changes are the changes that developers make to the Pega application. An example of enterprise changes are extensions to the core Pega application and its integration points with external systems.

Developers make these changes in the development environment. Changes to the application are pushed to other environments through the enterprise-change pipeline managed by the Pega Deployment Manager™.

Business-as-usual changes are made by the business operations team in the business operations environment. Examples of business-as-usual tasks are: creating a new action or updating an existing action with new treatments or engagement policies. Also, this environment is used to carry out various simulations and analyses, for example, to test if there is an ethical bias in the decisions made by the next-best-action strategy framework.

Changes from the business operations environment are pushed to the development environment and from there to other environments through the business-change pipeline.




You have reached the end of this video which showed you:

- The importance of the change management process in an enterprise software development project.
- The high-level software development cycle.
- The cloud environments provided by Pega for a one-to-one customer engagement project using Pega Customer Decision Hub.
- The flow of enterprise and business changes through the enterprise- and business-change pipelines.

# Building your business operations team

## Business operations team

The goal of the business operations team is to bring agility to your change management so your organization can achieve excellence in one-to-one customer engagement.

It is best practice to have a single team for managing business changes at the organization level, typically known as the business operations team. This team includes three types of users.

## Business users

Business users create or submit a new business change requirement, known as a change request in the Pega 1:1 Operations Manager application.

**Responsible for:**

- Planning new offers and messages as next best actions for customers.
- Leveraging next best action to drive performance and meet company goals.

**Top activities:**

- Planning customer engagement activities.
- Reviewing and approving content and offer distribution.

**Examples:**

- At a bank, the following job profiles represent business users:
- 


## Team lead

The team lead reviews and manages priorities for business change requests.

**Responsible for:**

- Conducting the agile ceremonies, unblocking issues, and managing the day-to-day activities required to support the scrum team. The team lead works with IT to deploy revisions.

**Top activities:**

- Run daily stand up, show and tell, and sprint retrospective meetings
- Remove blockers impeding team progress
- Ensure compliance with change management best practices and policies
- Work with IT on deployments

**Example:**

- Team leads are often scrum masters on a business operations team.
- 


It is a best practice to include one team lead for managing your business operations team.

## Next-best-action specialists

Next-best-action specialists work on tasks to implement the business changes requested by business users.

**Responsible for:**

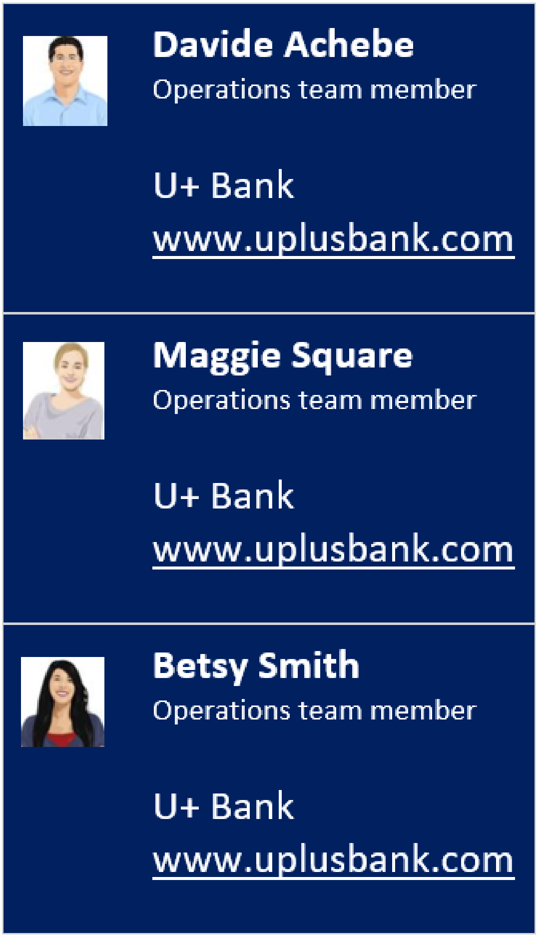
- Implementing and testing offers or messages in the business operations environment.

**Top activities:**

- Supporting the definition and assessment of business requirements.
- Translating business needs into next-best-action artifacts and strategies.
- Building and testing artifacts to understand their impact.

**Examples:**

- Next-best-action specialists are often known as the marketing operations team. They have hands-on experience with marketing automation and related software. Next-best-action specialists understand the functions of various marketing artifacts such as actions, treatments, engagement policy, and decision strategies. Next-best-action specialists also have good working knowledge of how next-best-action decisioning works in Pega Customer Decision Hub™.



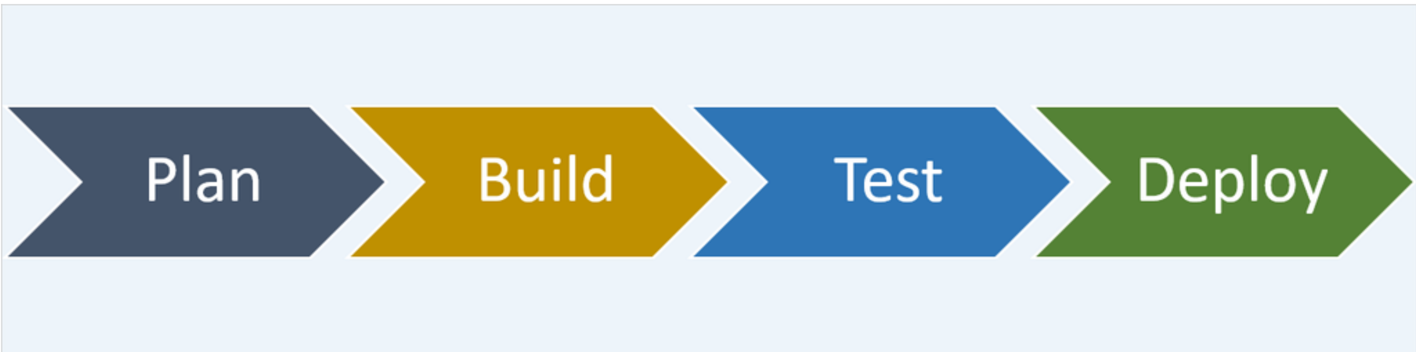

You can scale up operations by adding more team members to this group.

# Lifecycle of a change request

## Change request stages

In Pega 1:1 Operations Manager, a change request represents a change to one or more next-best-action artifacts in Pega Customer Decision Hub™. Together, business users determine and agree upon what needs to change, and the system guides the next-best-action specialist to make those changes.

A change request goes through four stages in its lifecycle. Each stage encapsulates the various tasks required to carry out the change effectively. In each stage, a designated user or set of users carries out the required tasks. Once the necessary tasks are complete, the system automatically manages the movement of the change request from one stage to another.




The lifecycle of a change request contains the following four stages:

- Plan
  - A business user creates the change request.
  - **Key** information about the change is captured from the business user directly into Pega 1:1 Operations Manager.
  - The team lead quickly **plans** and prioritizes the request so that the operational team can focus on more high-value work.
- Build
  - The operations team **builds** the next-best-action artifacts using a simple, guided process.
  - Next-best-action specialists translate the change request details into corresponding next-best-action artifacts in Pega Customer Decision Hub.
  - The system automatically creates or updates the corresponding artifacts.
- Test
  - The system recommends that the next-best-action specialists verify and test the generated or modified artifacts to ensure that the change meets the business' expectations.
  - Changes can be tested in-context to reduce QA cycles.
- Deploy
  - The team lead approves the change request and transfers it to the team responsible for deploying the changes to the production environment.
  - Pega Deployment Manager enables the deployment team to safely**deploy** the changes to a production pipeline

# Change request types

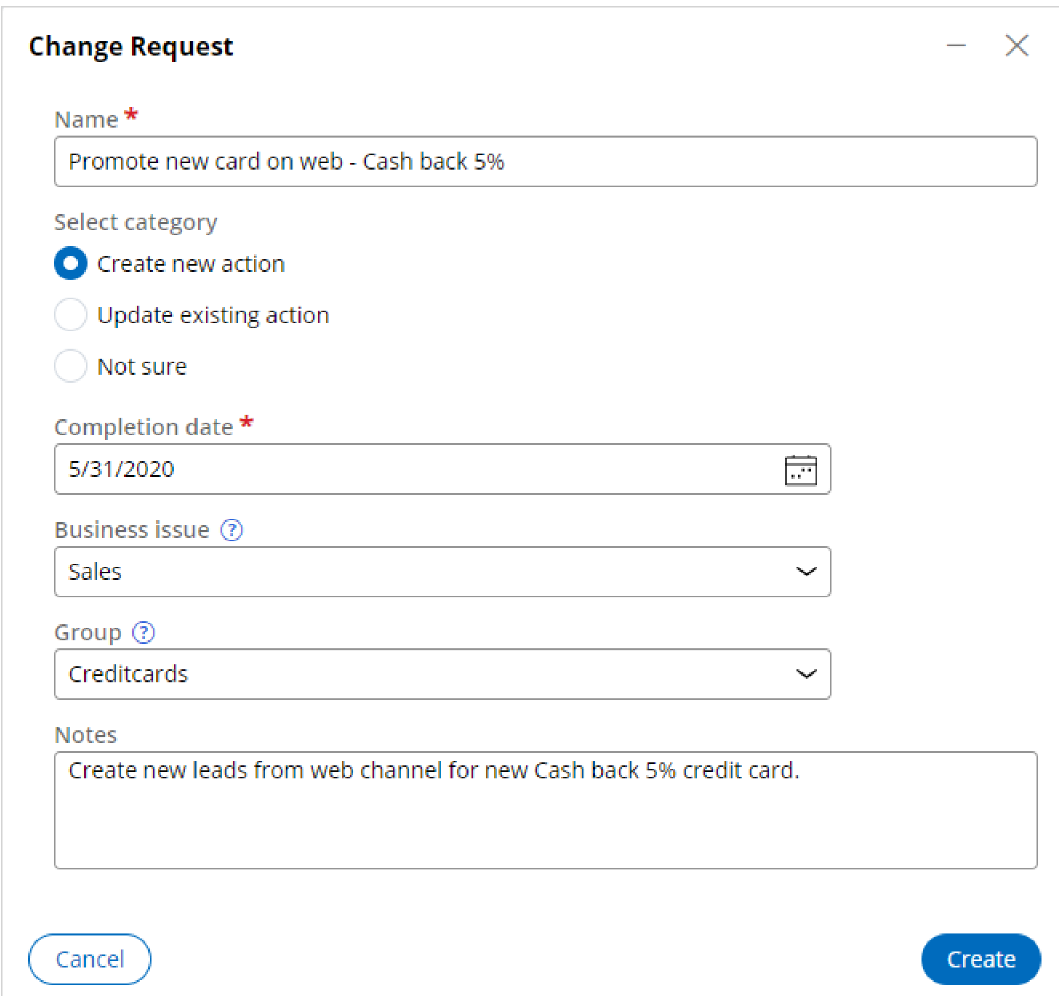
## Introduction

As a business user, you create a change request to initiate the change management process to make business-as-usual changes to the Pega Customer Decision Hub.

There are three types of change requests currently supported. Selecting the right change request category initiates the appropriate change management process flow.

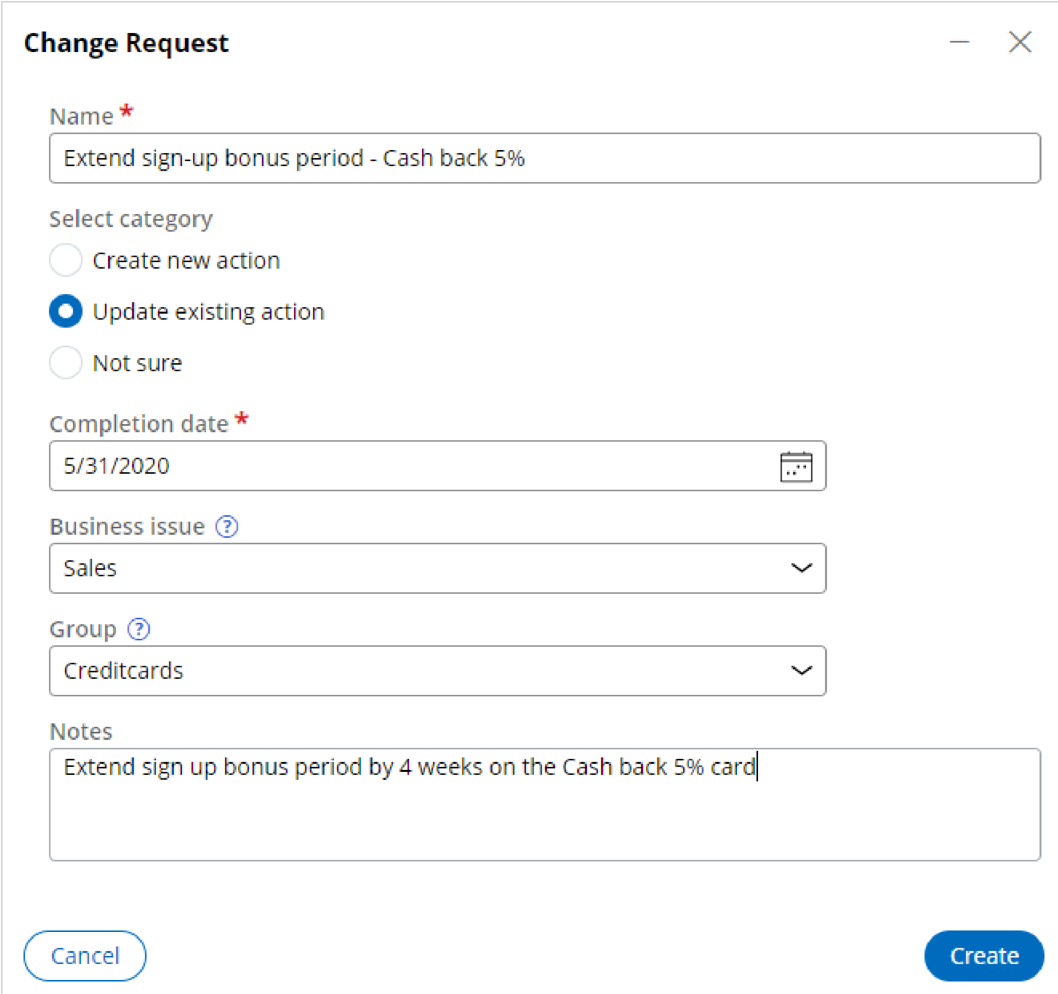
## Create new action

Use the **Create new action** category when submitting a request to create a new action

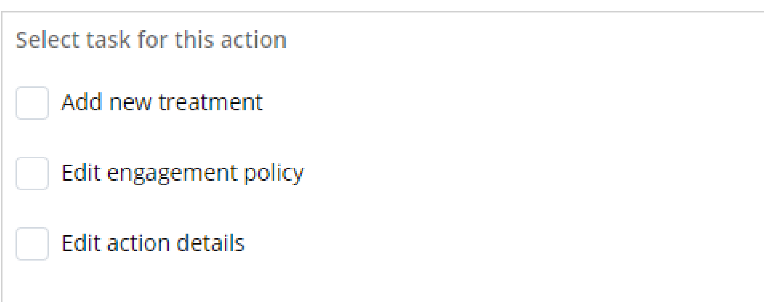



## Update existing action

Use the **Update existing action** category when submitting a request to update an existing action



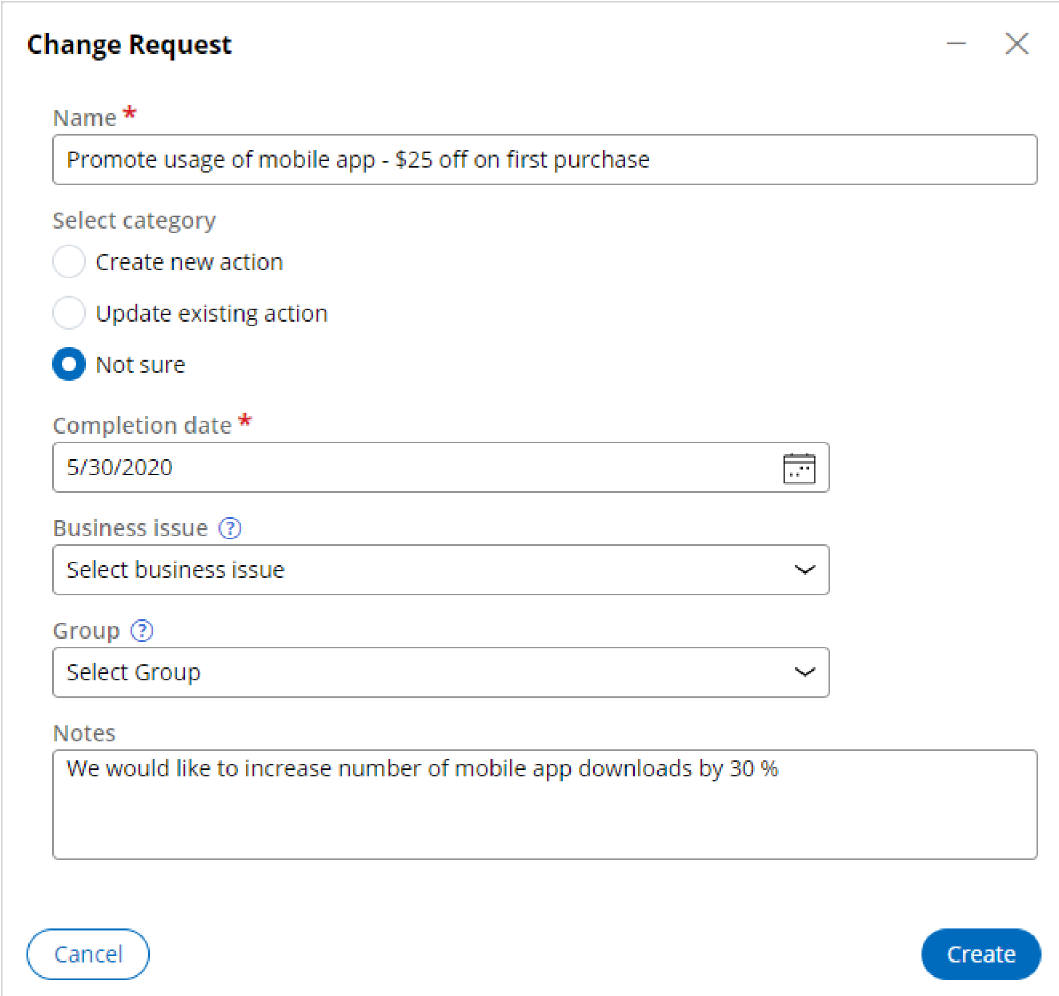

As part of updating an existing action, you can request one or more changes at the action level. The available tasks enable you to add a new treatment, modify the action-level engagement policy and modify the action details.




## Request type not sure

If you are not sure which change request category to choose, or you cannot find the right business issue and group value and need help creating the request, you can select the **Not sure** category.

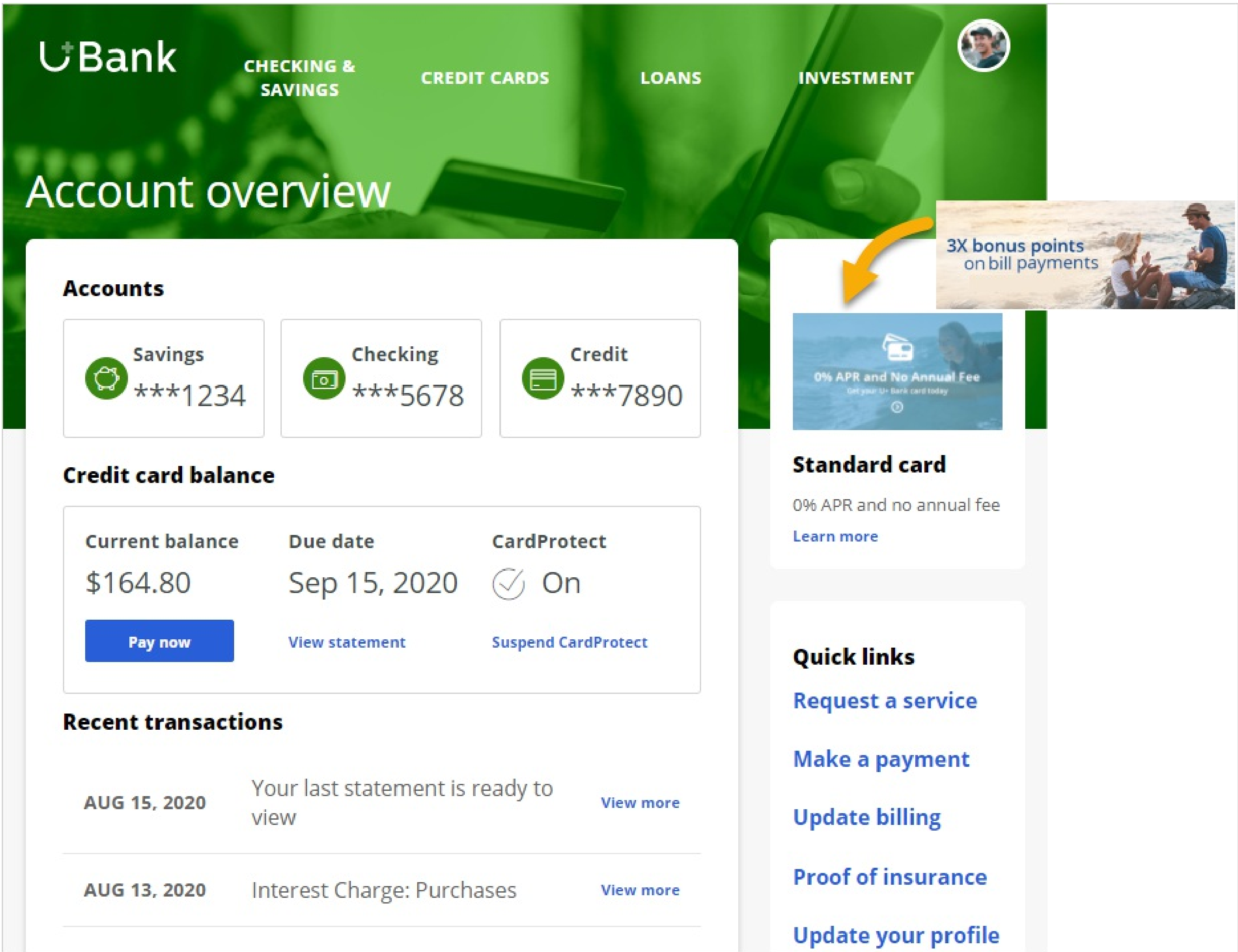
A change request with **Not sure** as its category is assigned to a team lead, who then works with the business user to help them select the appropriate change request category.


Change Request
Name *
Promote usage of mobile app - $25 off on first purchase
Select category
Create new action
Update existing action
Not sure
Completion date *
5/30/2020
Business issue
Select business issue
Group
Select Group
Notes
We would like to increase number of mobile app downloads by 30 %
Cancel
Create

# Submitting a request for a new action

## Business scenario

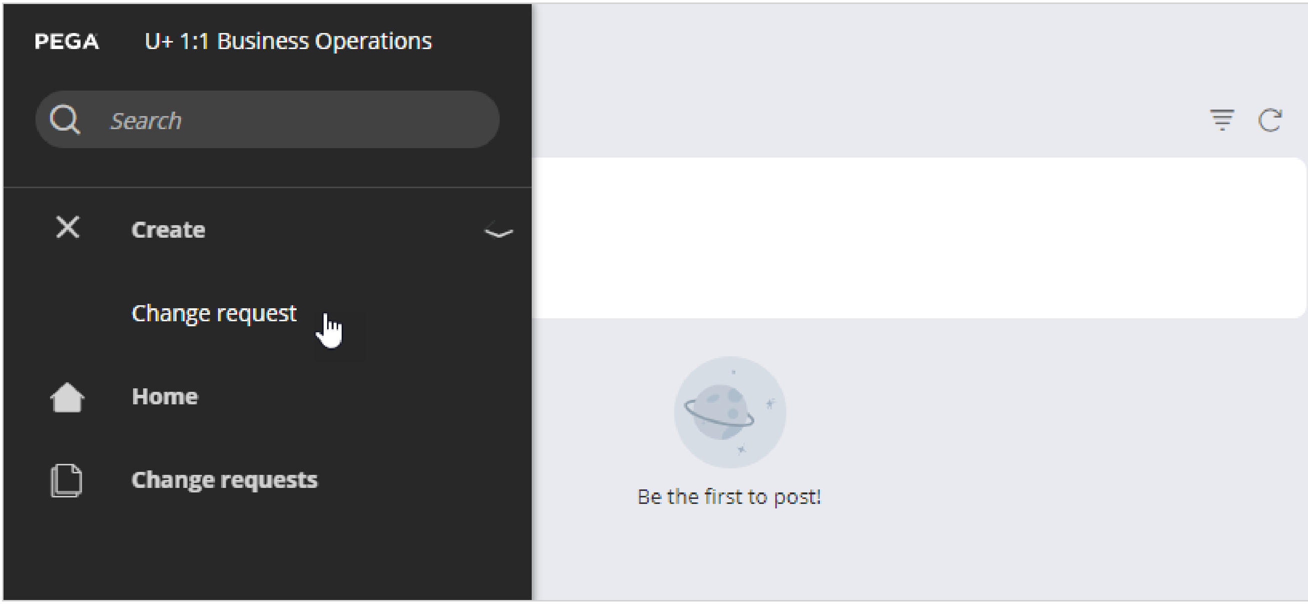
The marketing team at U+ Bank, a retail bank, uses the web self-service portal as a marketing channel. The bank wants to promote the use of credit cards for utility bill payments to all customers who log in to the self-service portal.



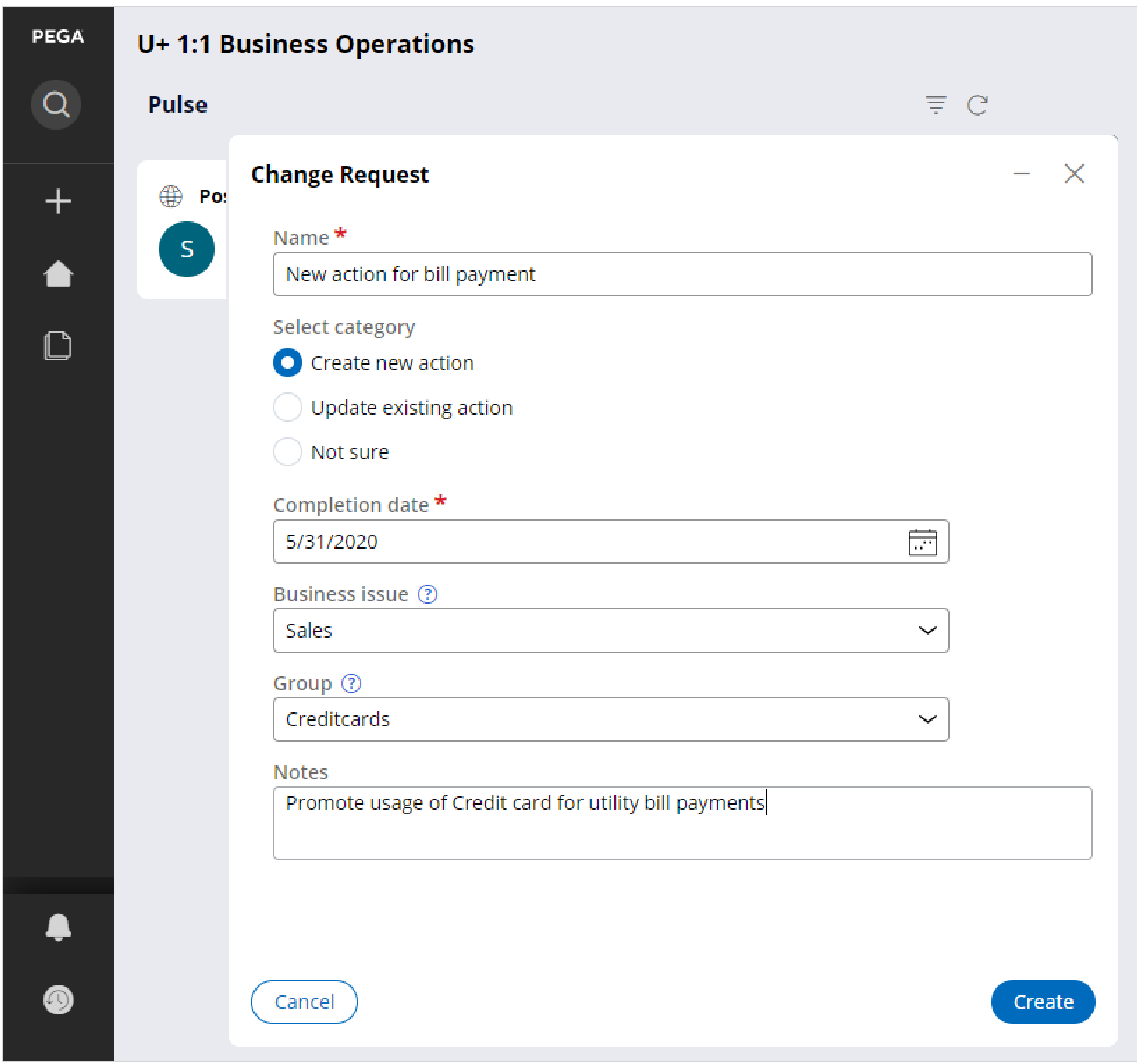

Business users and next-best-action specialists use Pega 1:1 Operations Manager to work collaboratively in a business operations environment. Pega 1:1 Operations Manager streamlines the business change management process. With the Pega 1:1 Operations Manager, users introduce changes to Pega Customer Decision Hub using a safe and guided process, test the changes, and conduct simulations before pushing the changes to the production environment.

## Creating a new change request

In Pega 1:1 Operations Manager, a change request represents a change to one or more next-best-action artifacts. As a business user, you create a change request to capture the business context of the required change.




In the change request form, enter a name that describes the purpose for submitting the request




The change request category indicates the type of change. In this case you want to introduce a new offer, so selec**Create new action**.

Select a completion date. As a business user, you provide this as the expected timeframe in which the next-best-action specialists will complete the request.

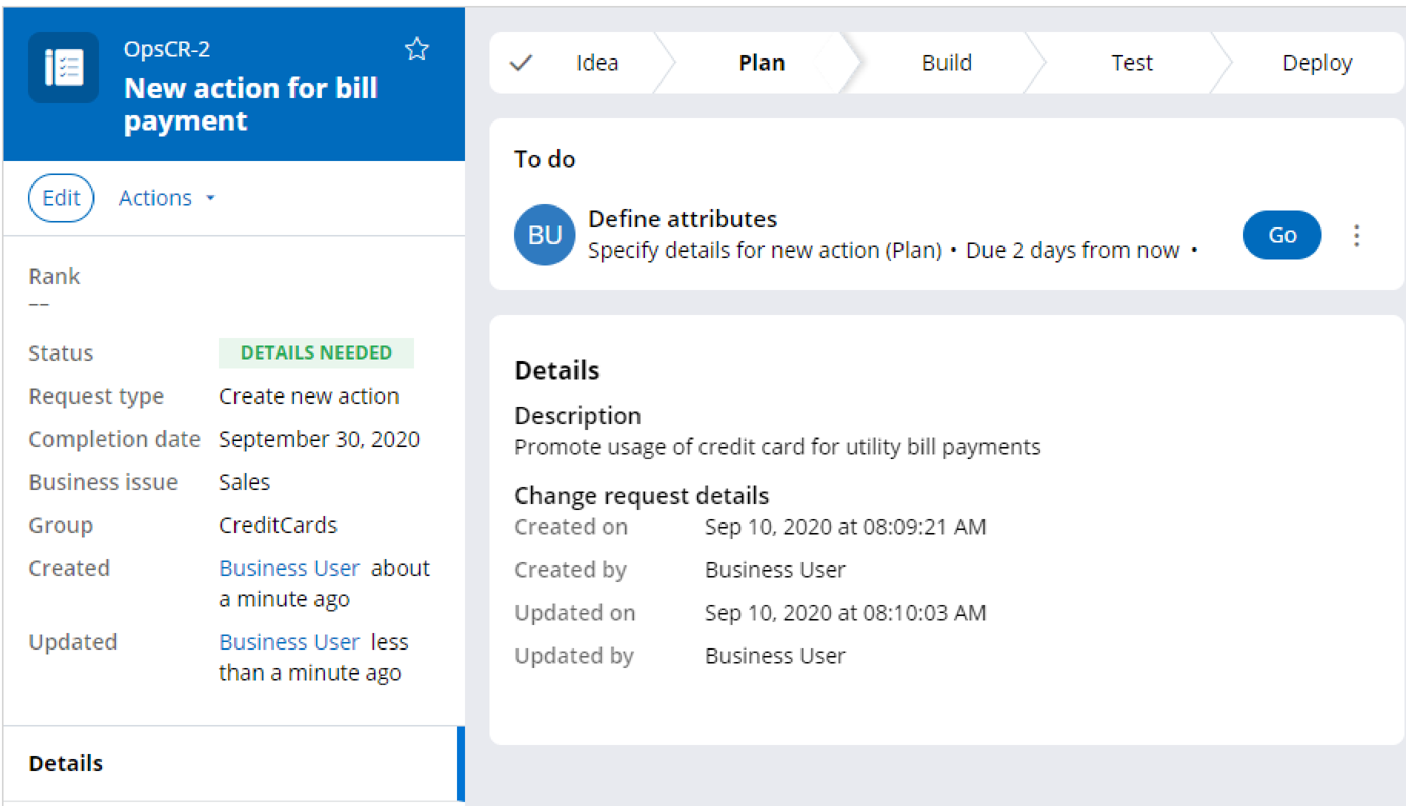
Select the appropriate **Business issue** and **Group** if you know it. For example, Sales and Credit cards. You can also provide this later.

You can use the **Notes** section to provide any additional business details that will be useful for the next-best-action specialists.

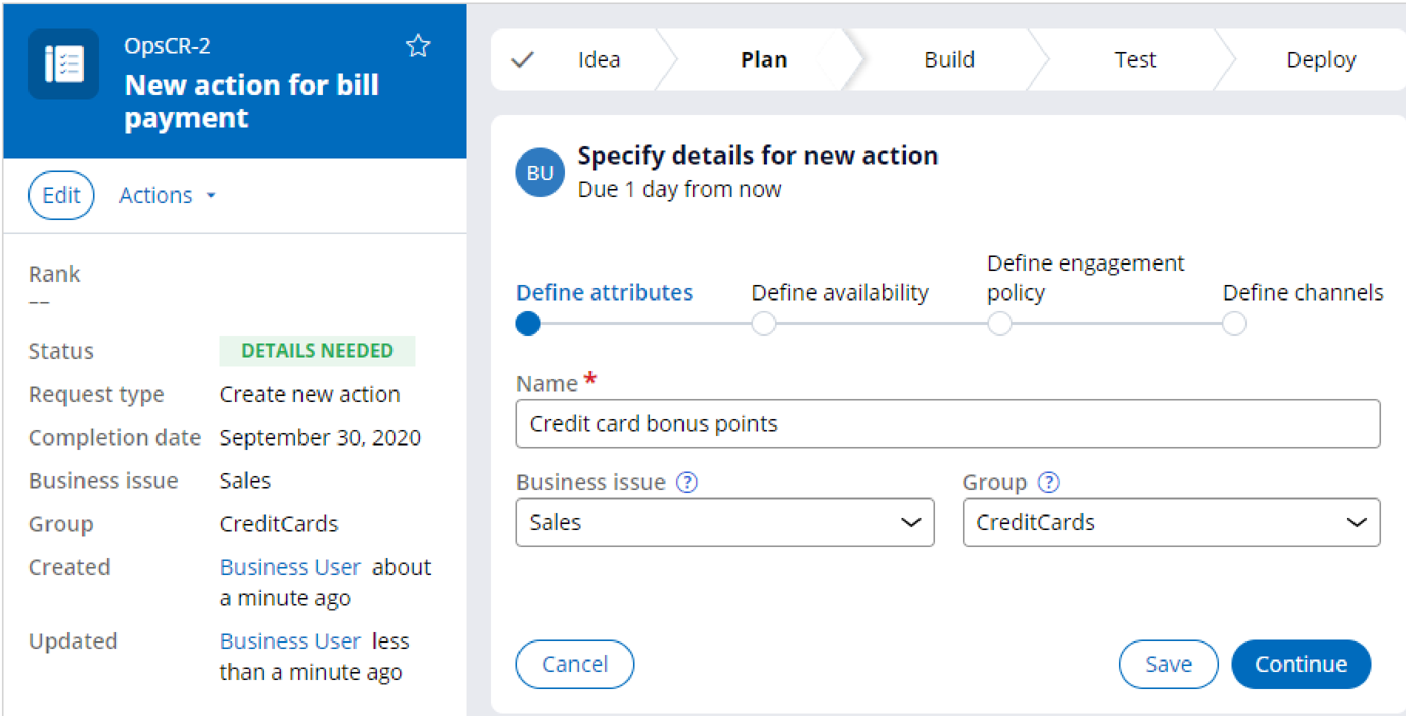
Click **Create** to create the new change request. A new change request is created with a unique ID.

The change request is currently in the **Plan** stage. Notice the task listed under the **To do** section of the change request: **Define attributes**. The purpose of this task is to capture additional details from the business user about the new action to help the next-best-action specialists who will work on it later.

Click **Go** to initiate the task.

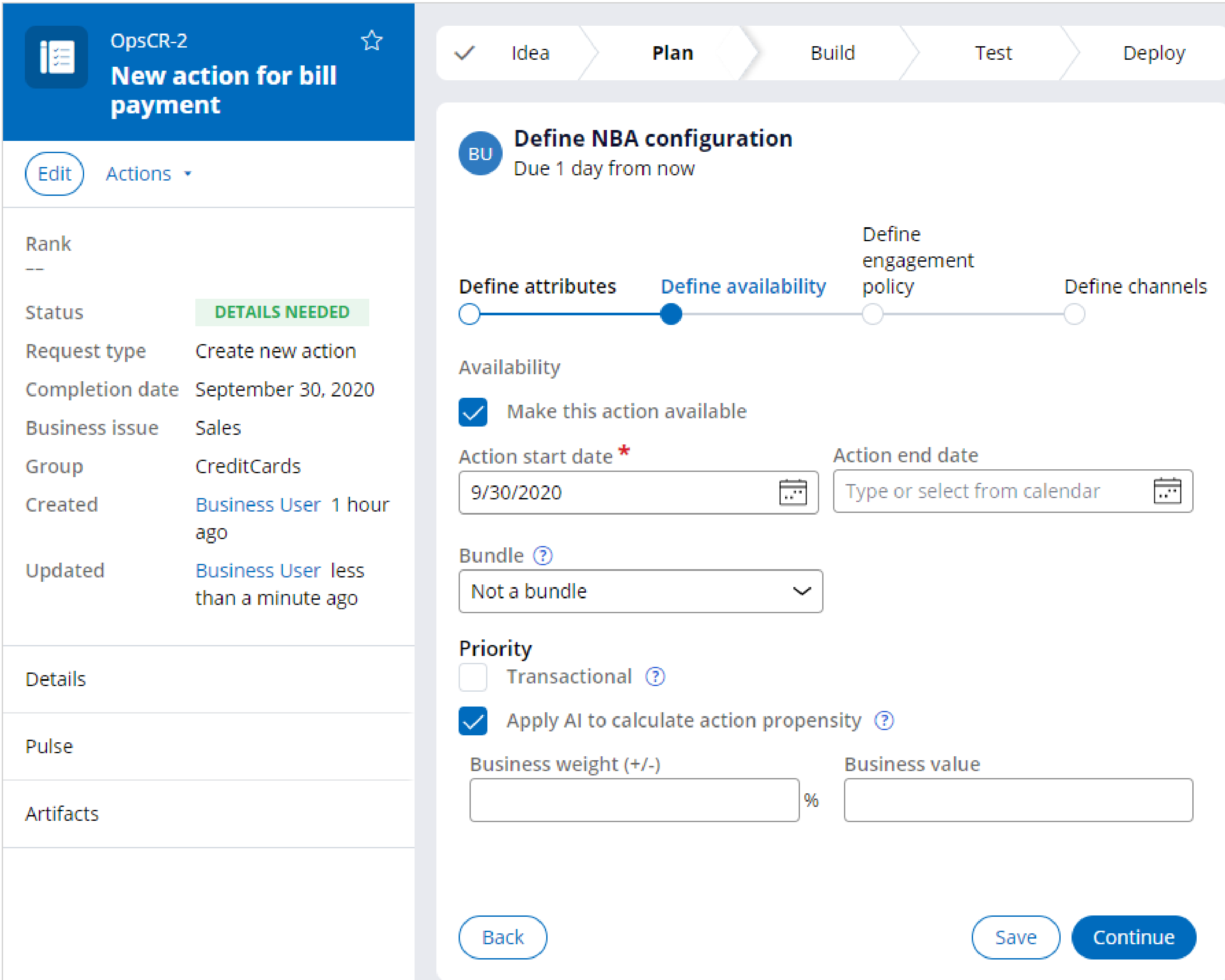



In the **Define attributes** section, provide a name for the new action, for example, **Bonus points on utility payments,** and select the **Business Issue** and **Group**. These details can be changed later in collaboration with the next-best-action specialist.




In the **Define availability** section, you can provide details on action availability. The **Completion date** entered while creating the change request is mapped to the **Action start date**.

You can also set values for options that affect action selection during next-best-action arbitration



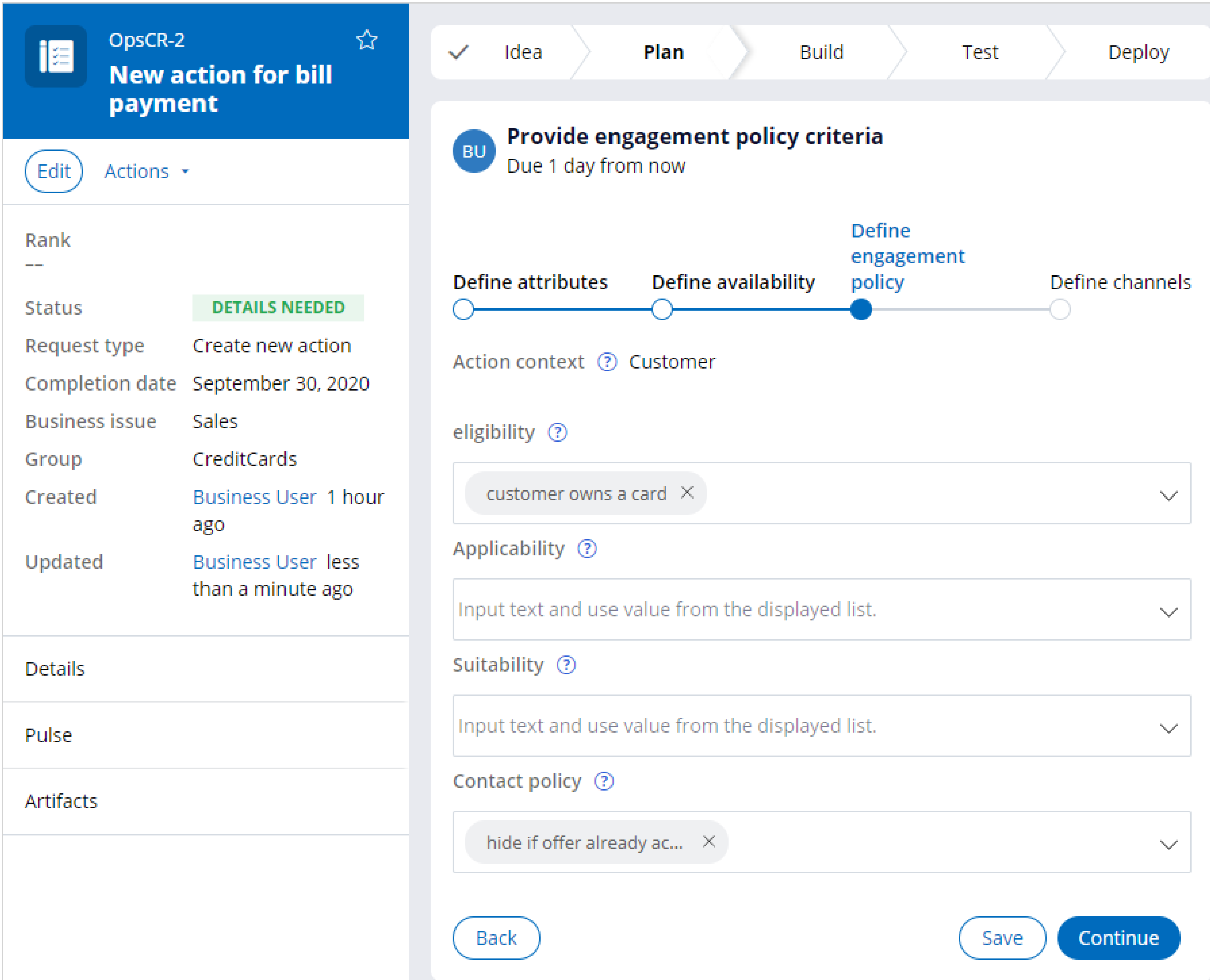

In the **Define engagement policy** section, you can define engagement policy criteria for the following categories:

- **Eligibility** – These are rules that qualify a customer for an action. For example, the**Bonus points** offer can require that the customer to own a card.
- **Applicability** – These are factors that determine if an action is appropriate at this point in time for this customer. For example, the customer used to pay utilities but no longer does.

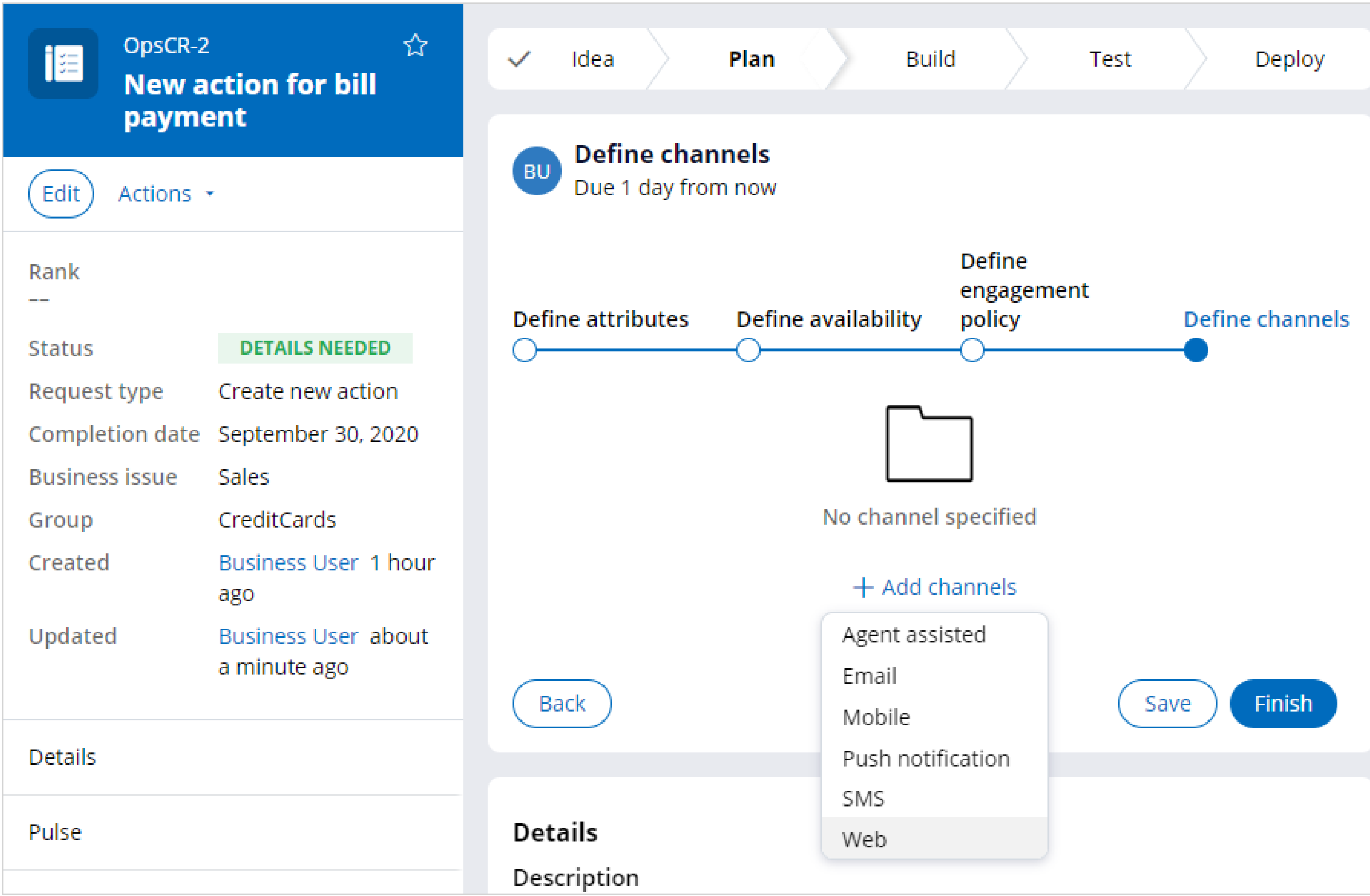
This will need to be an account-level property that is aggregated by the ETL process. It is not recommended that customers include transaction data in their xCAR due to performance issues in Retail Banking.

- **Suitability** – These are conditions that determine if an action is deemed appropriate and is in the best interest of the customer. For example, the customer is not in collections.

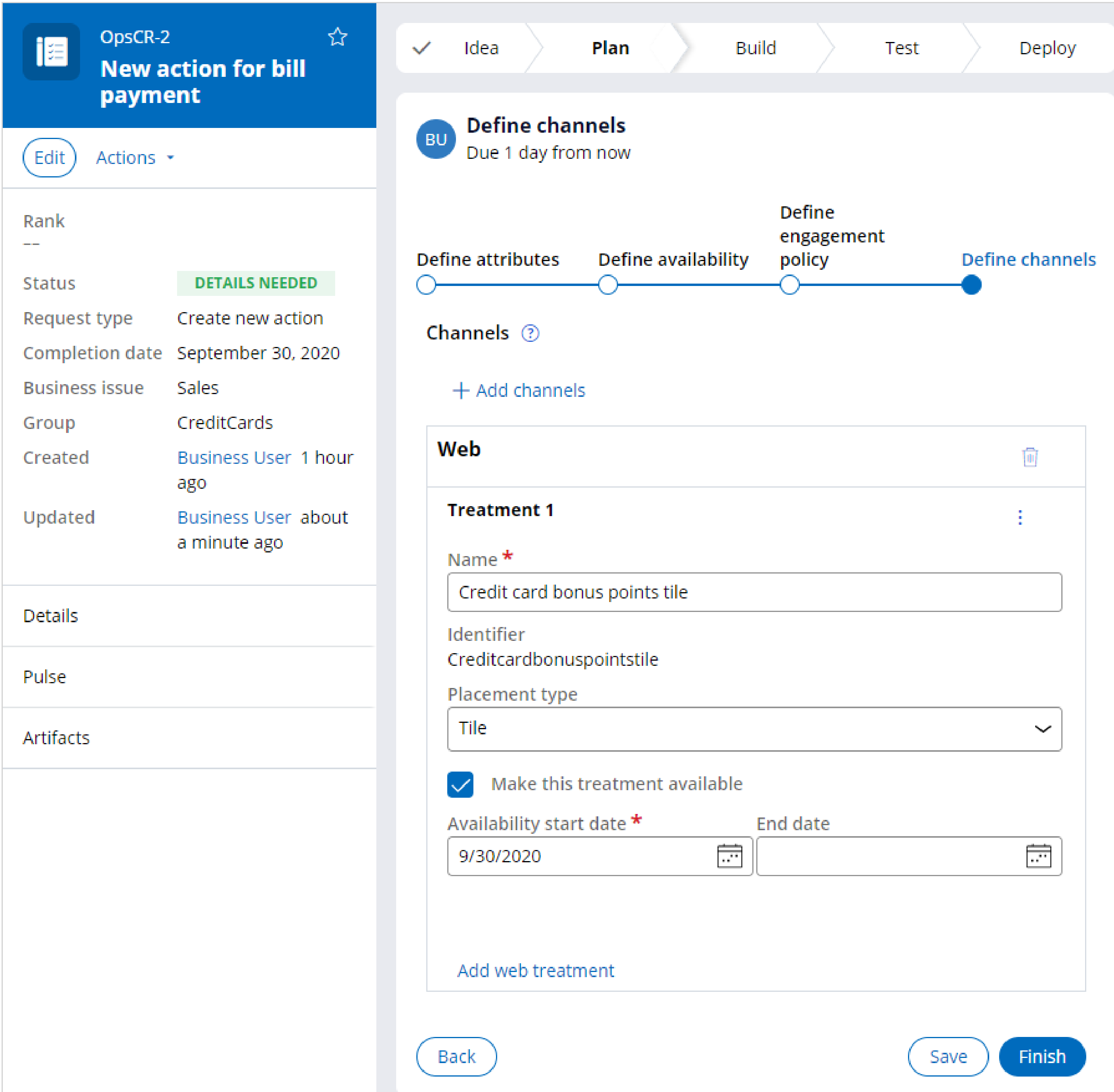
- **Contact policy** – These are conditions that help avoid customer fatigue through over communication. For example, hide if offer already accepted.




Finally, in the In **Define channels** section, you can add details about the channel in which the action will be presented. In this case, the bank wants to display this offer on the web channel.

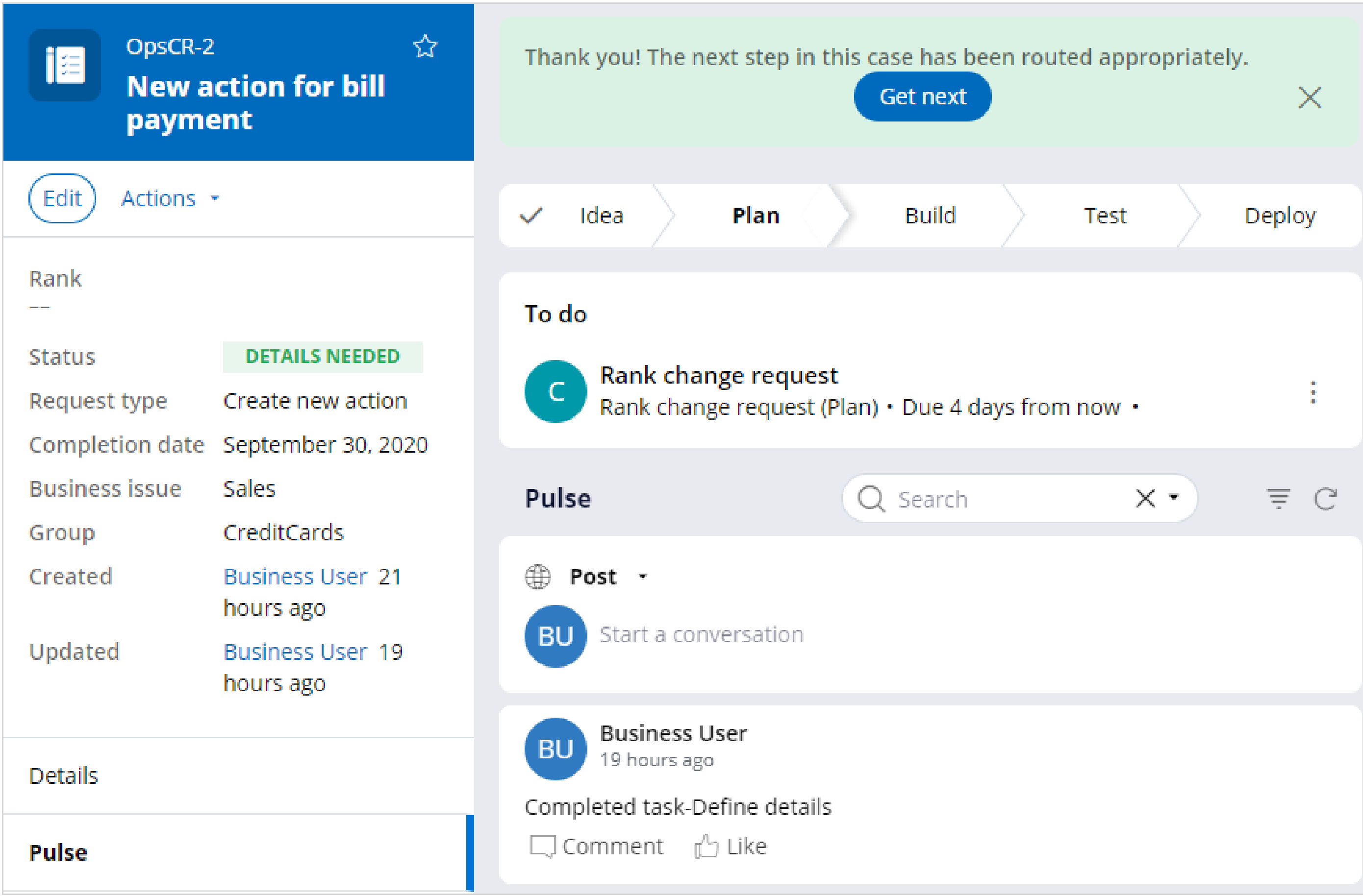



Once you add the web channel, you can provide details for one or more web treatments (for example, placement type such as hero or tile, and the availability date).




To change any of the values in any of the previous sections, click **Back** and change the values. Click **Save** to save the values, and then come back and edit later.

Click **Finish** to complete the task.




You will notice that:

- A new **Pulse** comment is added to reflect the status of the **Define attributes** task.
- In the **To do** section, there is a new task, **Rank change request**. As a business user, you will not see the **Start** button, as this task is intended for a team lead.

# Prioritizing a change request

## Business scenario

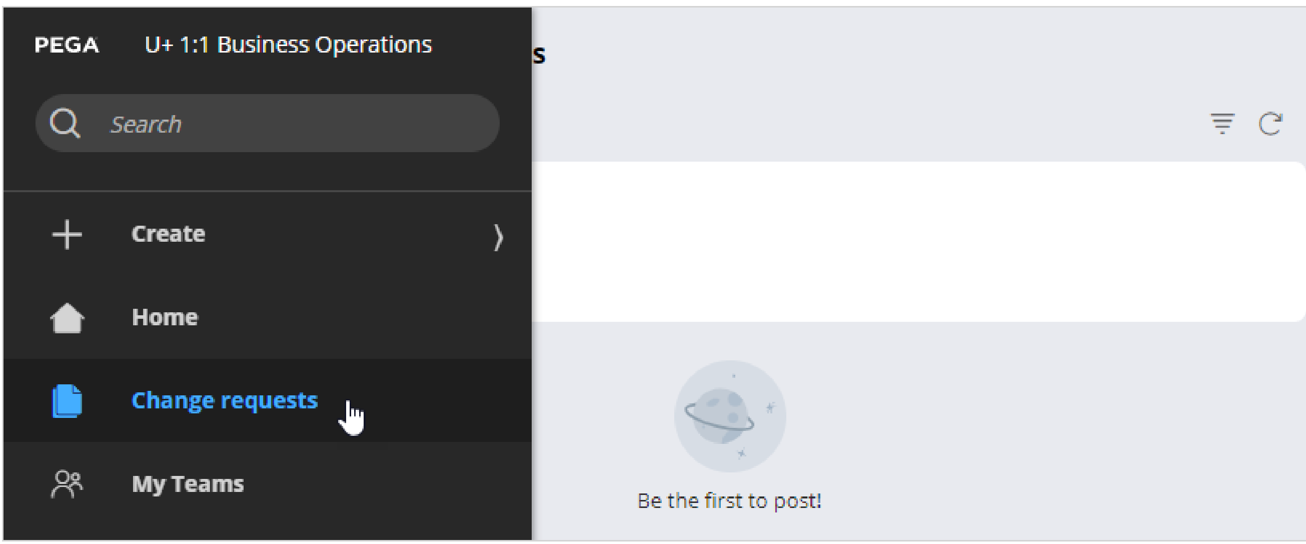
A business user submits a change request to create a new action intended to promote the use of credit cards for utility bill payments. A promotional message is displayed to all customers who log in to the self-service portal on the U+ Bank website. The business user has provided details for the action attributes by completing the **Define attributes** task.

The next task, **Rank change request** is ready to be worked on by the team lead. As a team lead, your responsibility is to prioritize the available change requests and to complete this task so that the next-best-action specialists can plan their day and work on the most important tasks first.

As a team lead, you can access the **Rank change request** tasks from the **Pending approval** work queue from your homepage or from the list of change requests, or from within the change request itself.

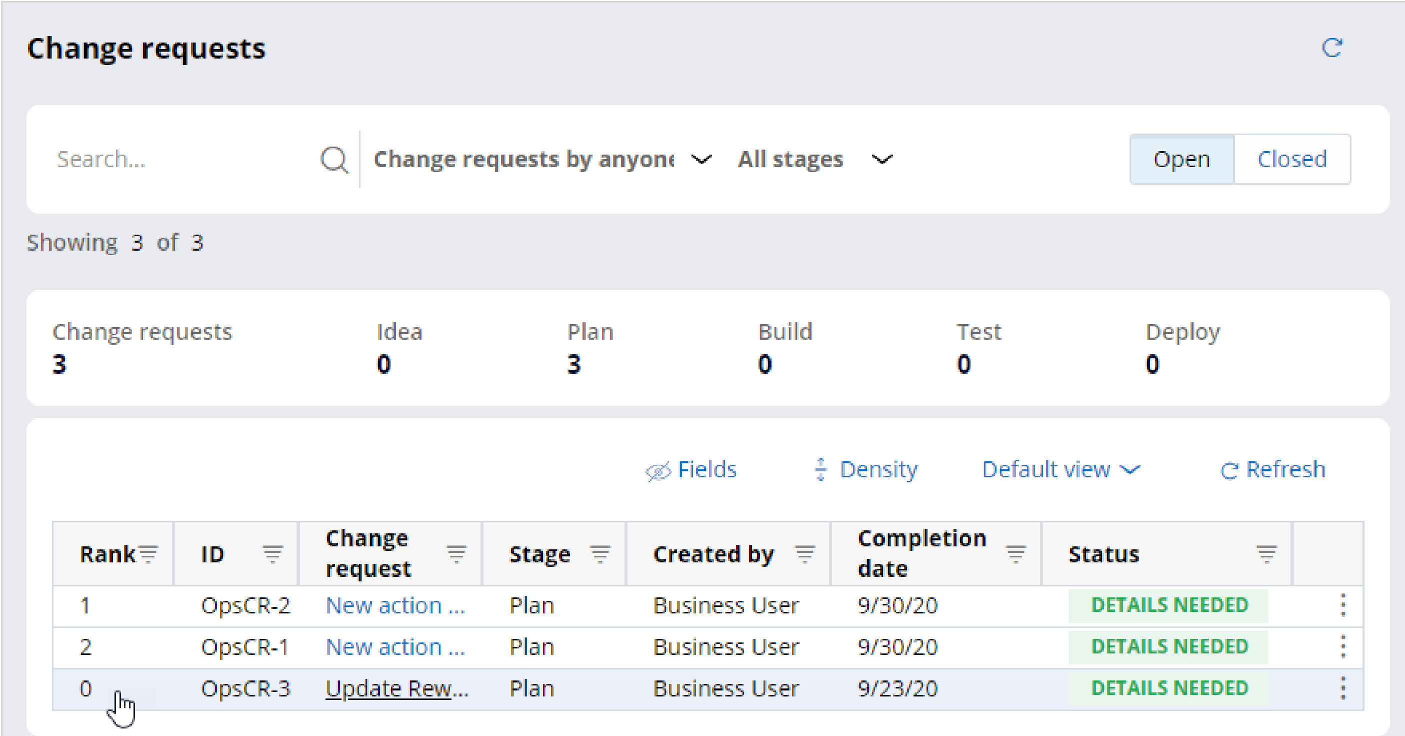
## Ranking change requests

In the **Change requests** landing page, you can assign or change the rank of change requests

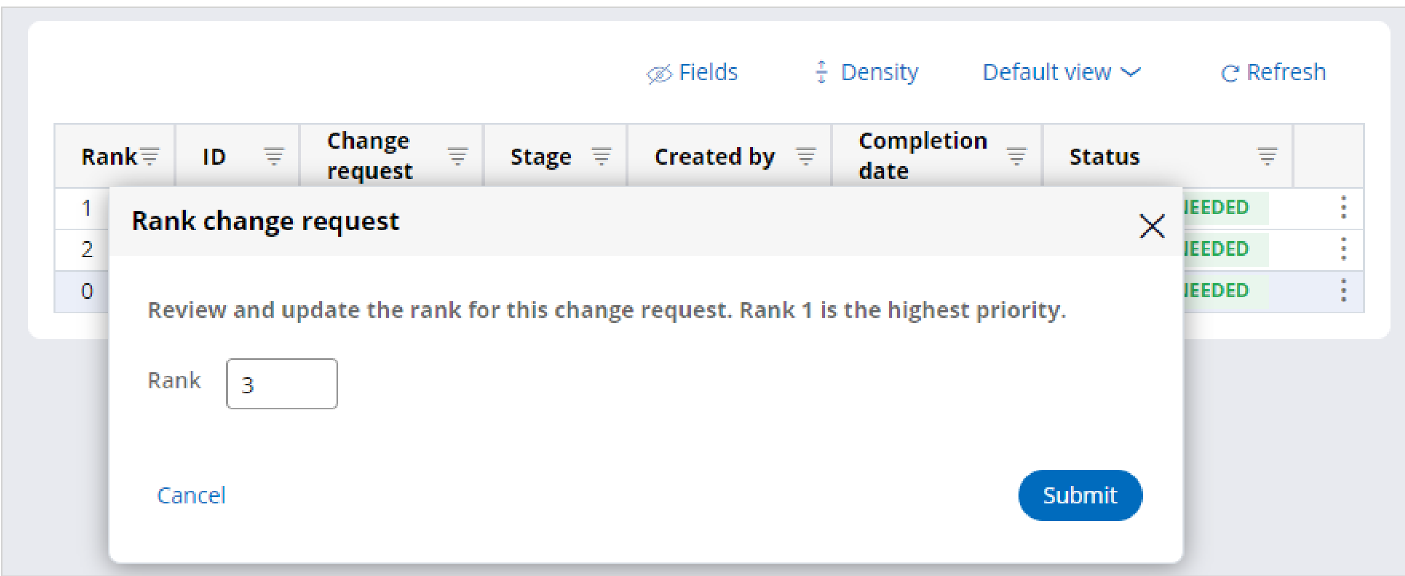



By default, the rank of a new change request is**0**.

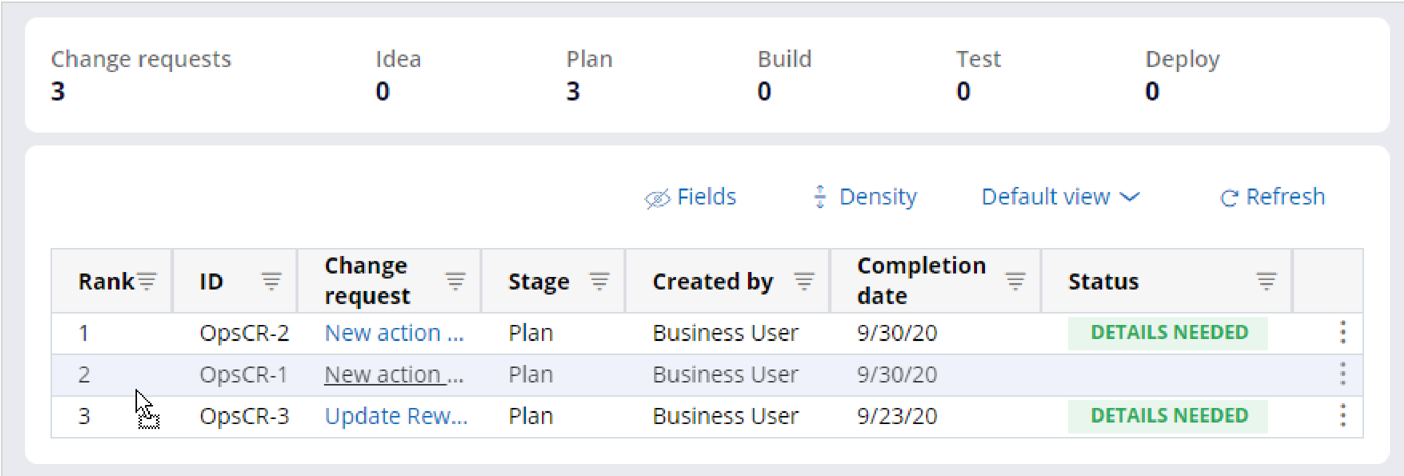
On the **Change requests** page, you can access the rank of a change request by clicking the row



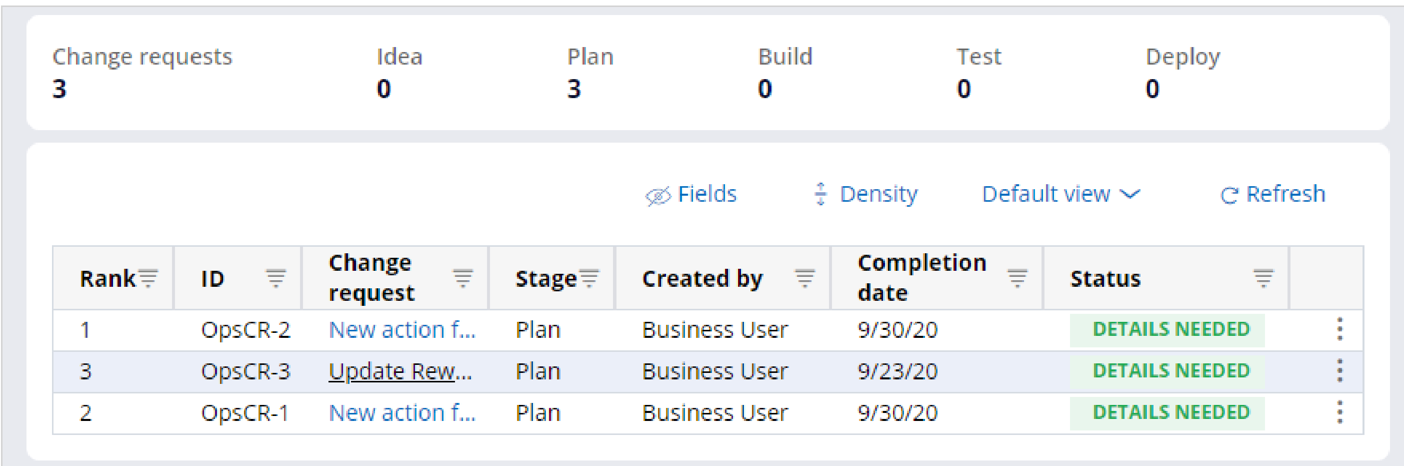

In the **Rank** field, provide a numerical value that represents the relative priority of the change request compared to others in the work pool.



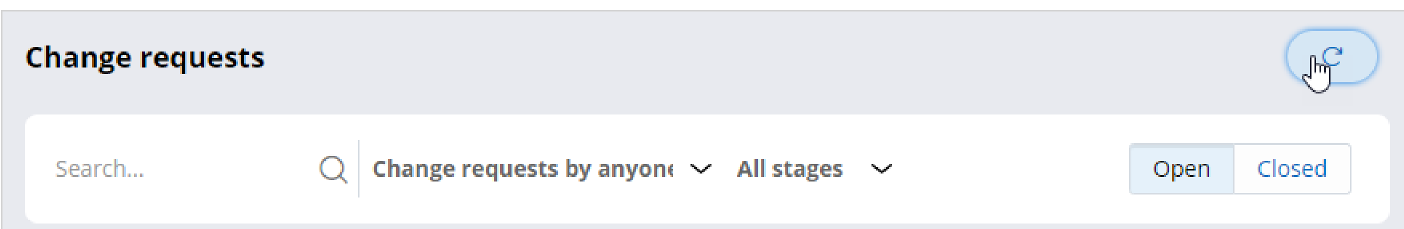

You can also use the drag and drop feature to rank the change requests. For this, left-click in a row and hold the point button while dragging the row up or down.



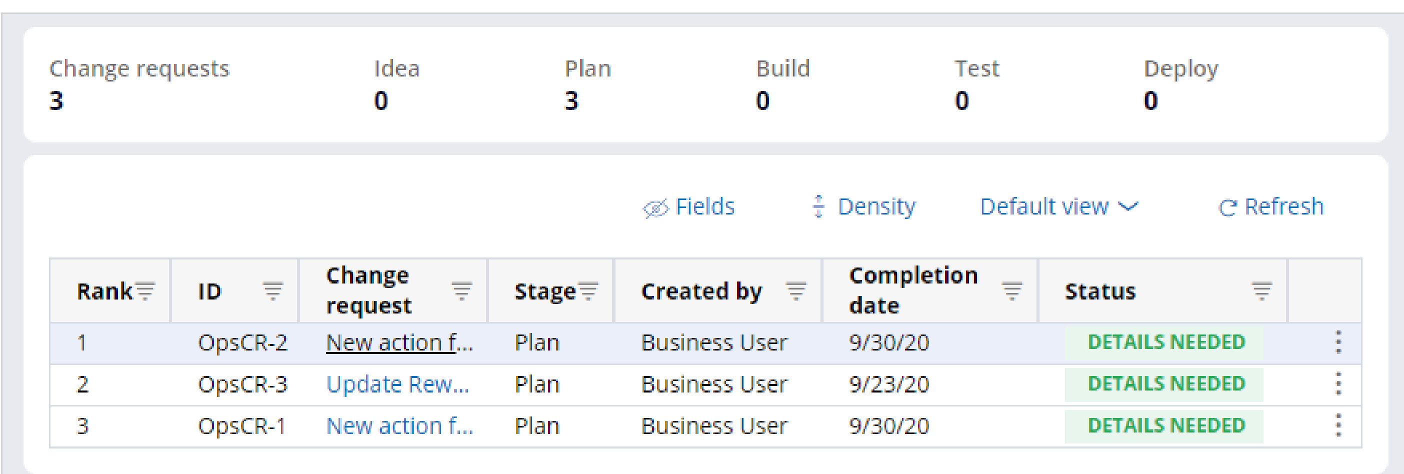

Release the pointer once you place the row in the desired position




At the top of the page, click the **Refresh** icon to refresh the page to see the new rankings



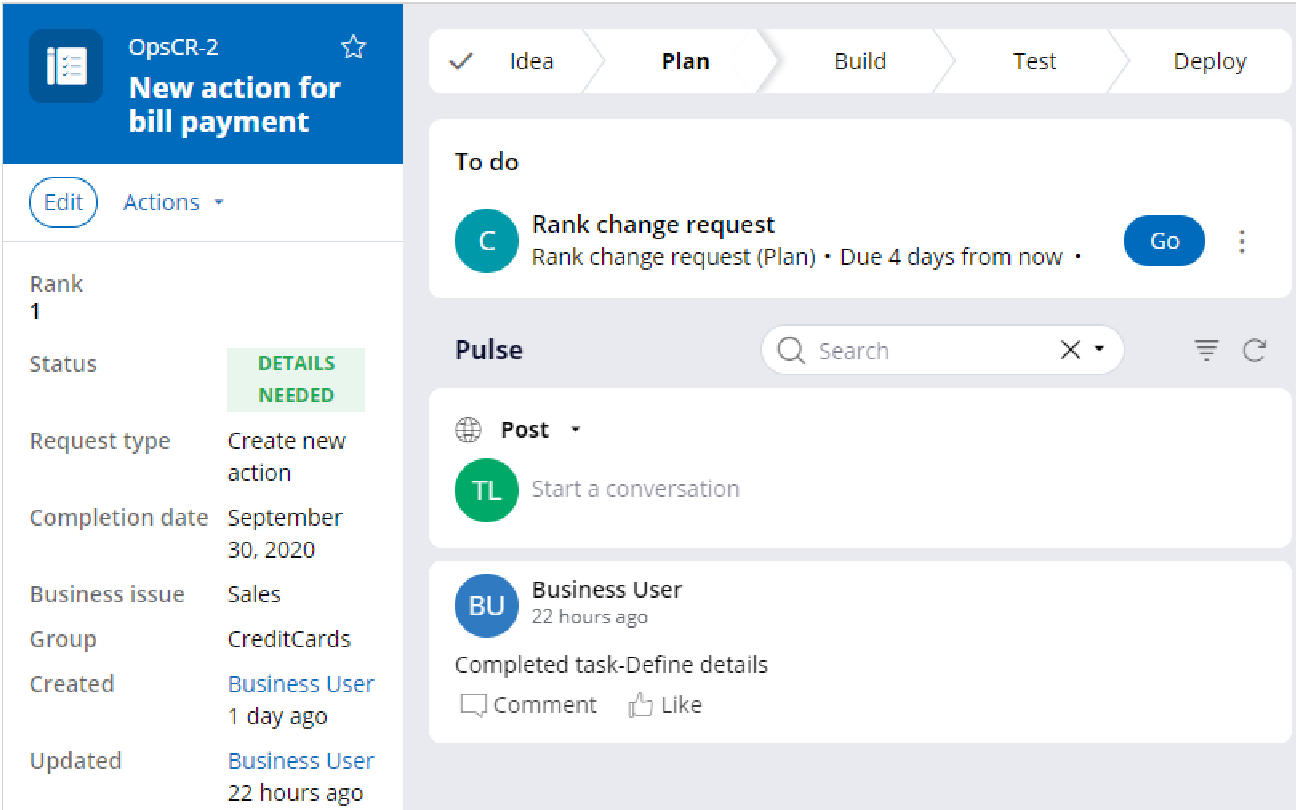

When the page refreshes, the **Rank** field reflects the new rankings.




## Completing the ranking task

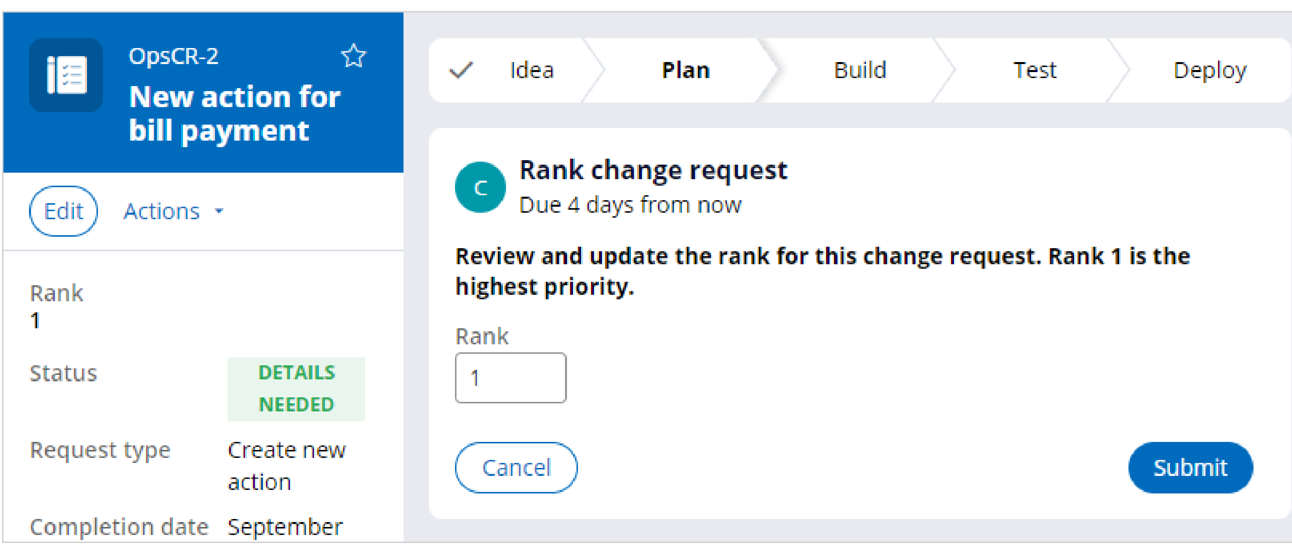
It is important that you also open the change request and complete the **Rank change request** task for the change request to proceed to the next stage.

Click **Go** to work on the **Rank change request** task.




In the **Rank** field, provide a numerical value that represents the relative priority of the change request compared to others in the work pool. You may have already assigned a rank.

Click **Submit** to complete the task.




You will notice that:

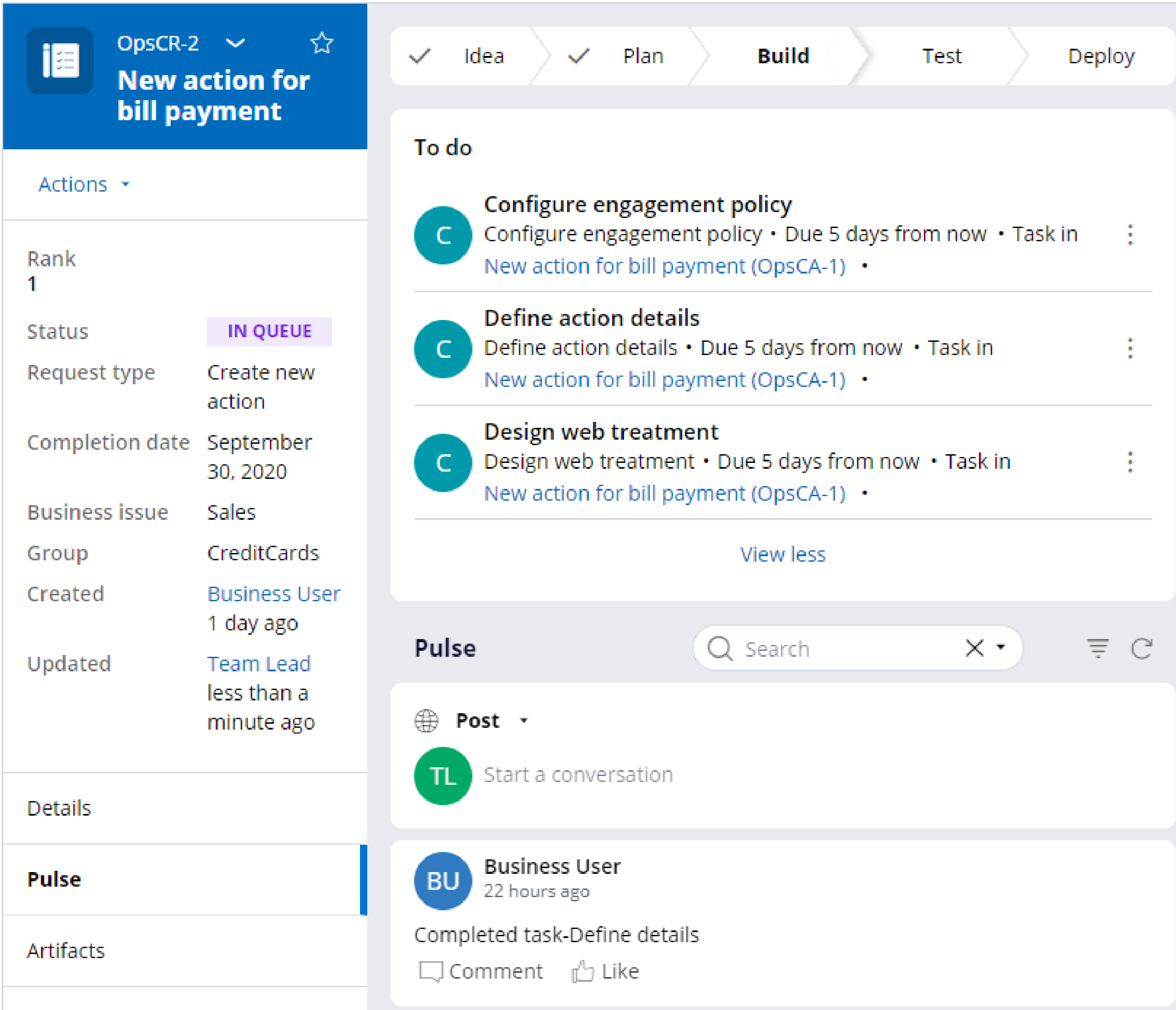
In the **To do** section, there are new tasks corresponding to the **Build** stage of the change request.

In this case, as this change request is of type **Create new action**, the following tasks are created:

- Configure engagement policy

- Define action details
- Define web treatment

These tasks are intended for next-best-action specialists.



# Completing the action build tasks

## Business scenario

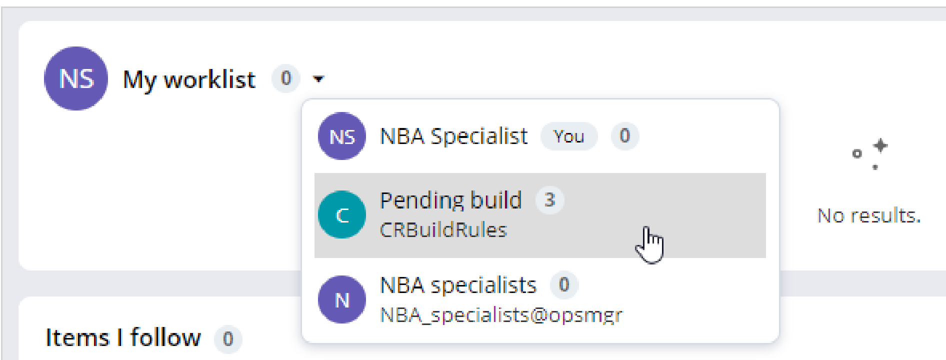
A business user has recently submitted a change request to create a new action to promote the use of credit cards for utility payments. The team lead has assigned a high priority to the change request so you, as a next-best-action specialist, can work on it.

The change request is now in the **Build** stage in its lifecycle. In this stage, as an NBA Specialist, you complete the various build tasks generated by the system. This is the step in which you map the business requirements to specific settings in Pega Customer Decision Hub™ so that the system can auto-generate the relevant artifacts.

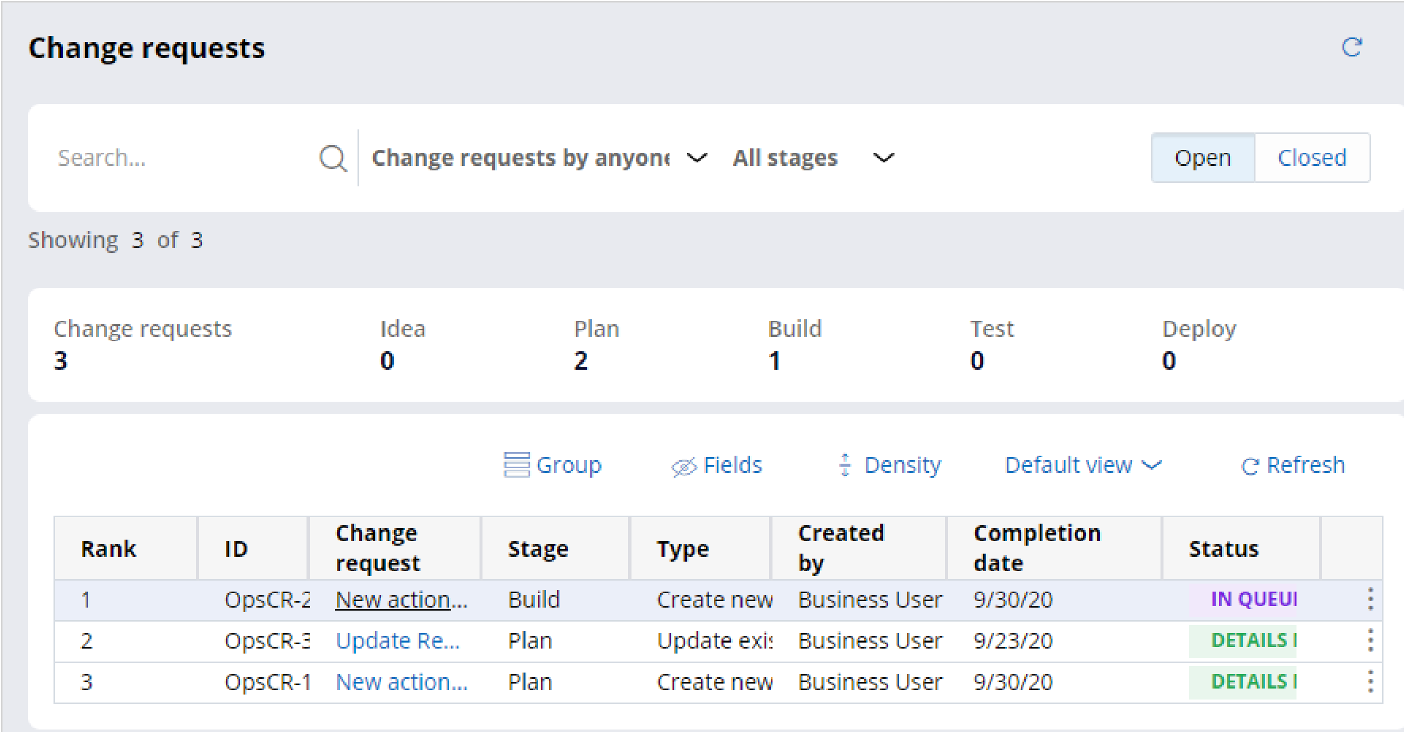
## Accessing the build tasks

The system generates one or more build tasks depending on the change request type. In this case, the change request is of type **Create a new action**. The business user has defined some engagement policies and requested a new web treatment. So, there are three corresponding tasks to be completed.

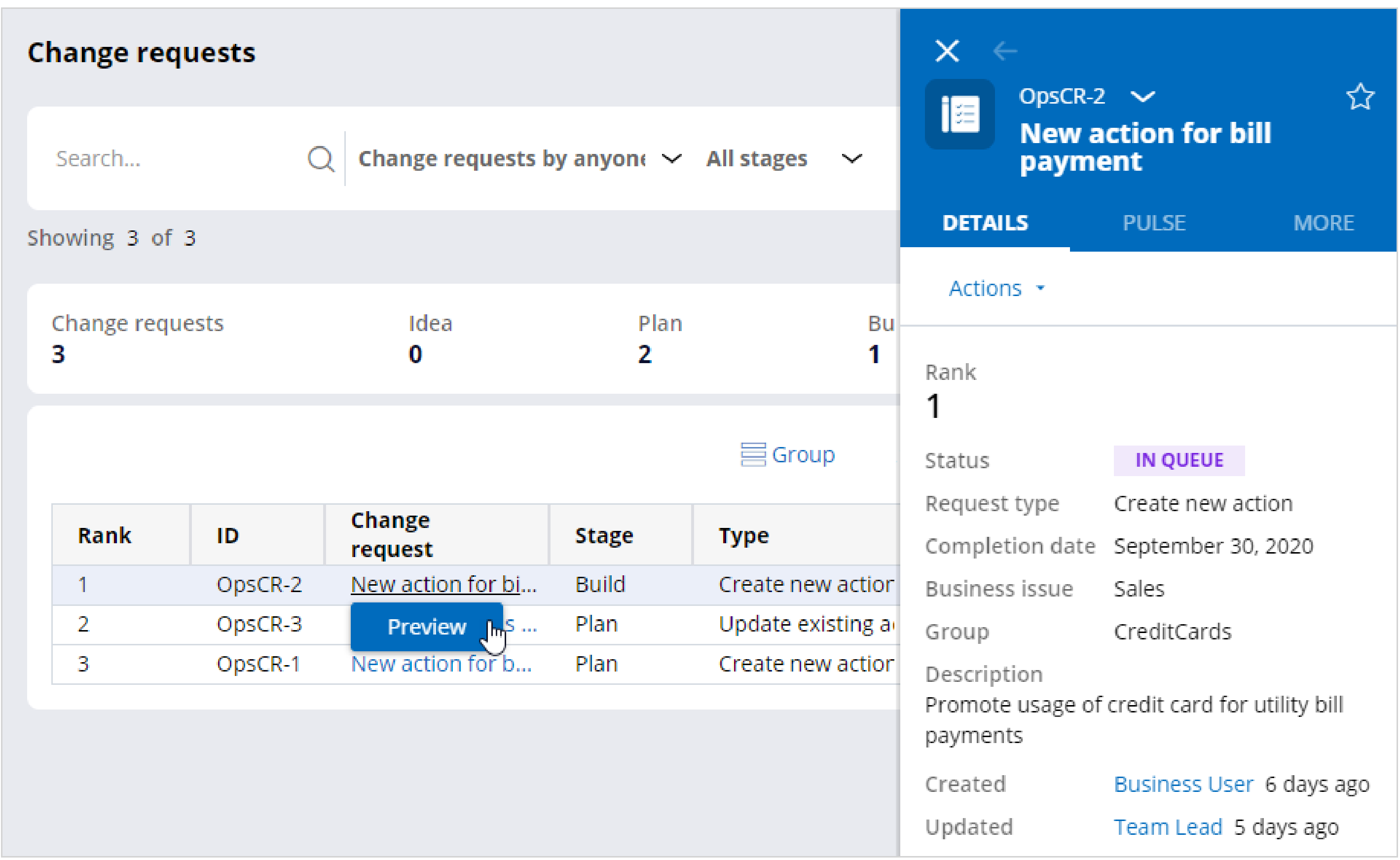
As a next-best-action specialist, you can access the build tasks from the **Pending build** work queue on the homepage.



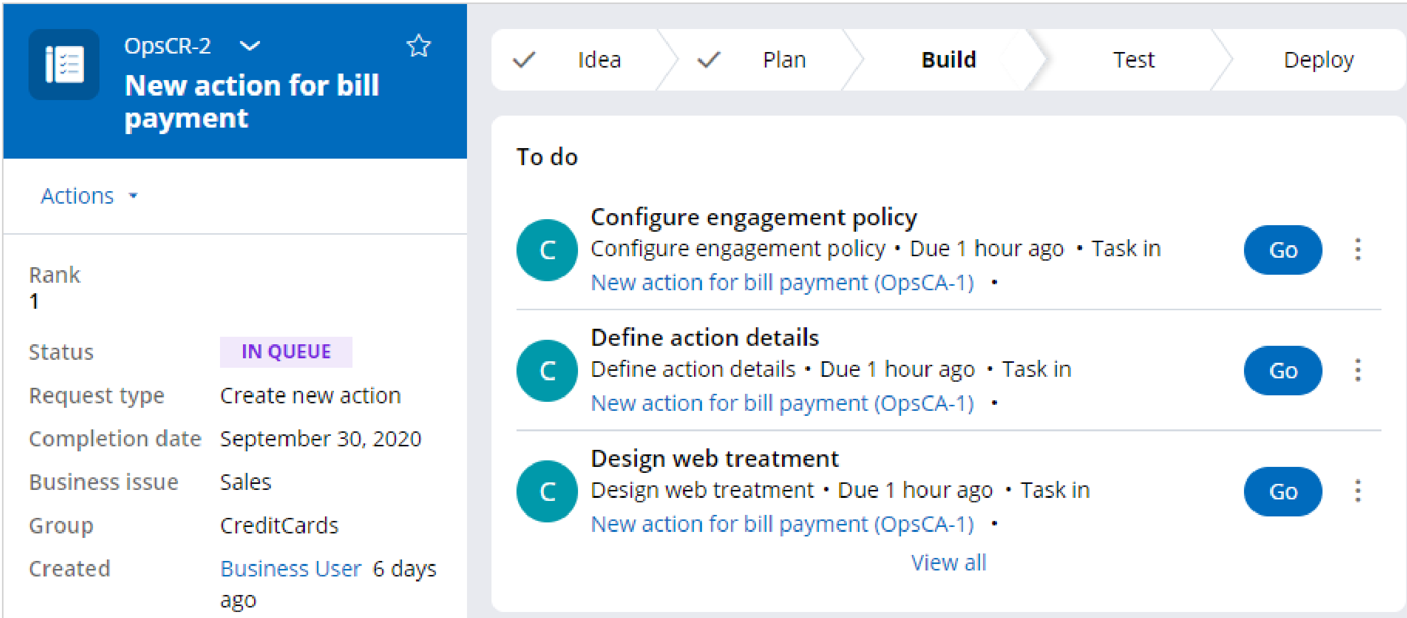

You can also visit the **Change requests** landing page and open the change requests in the **Build** stage that are in the **In queue** status.




You can also preview a change request without opening it. This feature is helpful for when you have multiple change requests in the queue, and you want to quickly check the details of the change requests without opening them.



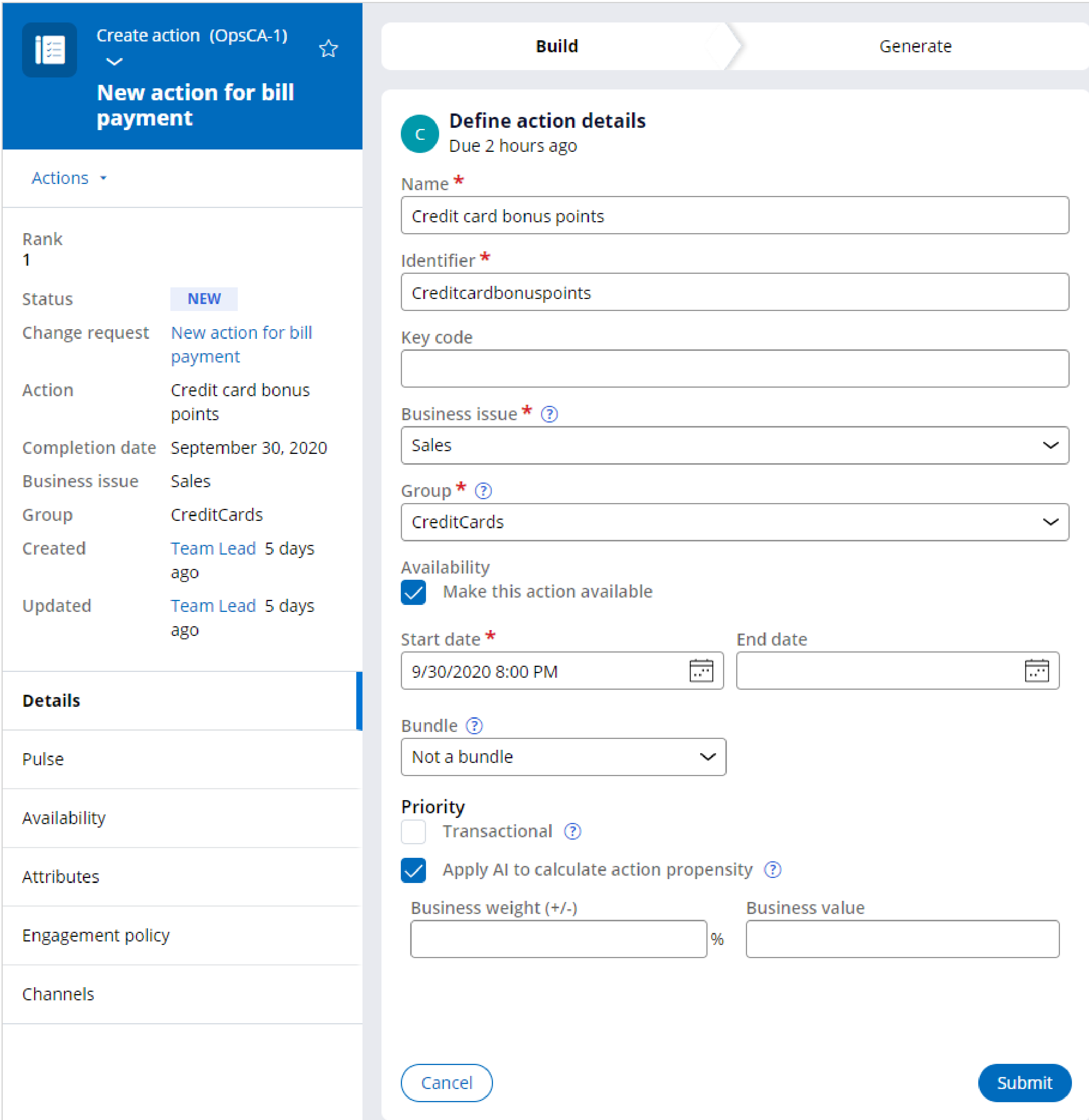

Within a change request, the pending **Build** tasks appear under the **To do** section. Click on the **Go** button to work on a build task. If two next-best-action specialists try to work on the same task, then the system prevents the second person from picking up the task.




## Defining action details

The **Define action details** task corresponds to defining the basic action attributes.

The fields are prepopulated with values based on the information provided by the business user when creating the change request. However, you can change these values in this build task.



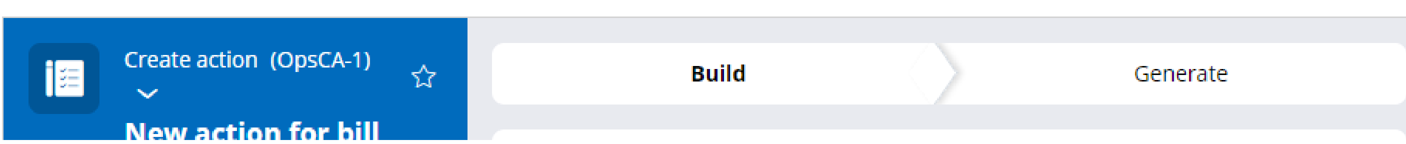

The fields correspond to the action attributes in Pega Customer Decision Hub. For example,**Name** is the action name, and **Business issue** and **Group** decide the categorization of the action in the business hierarchy.

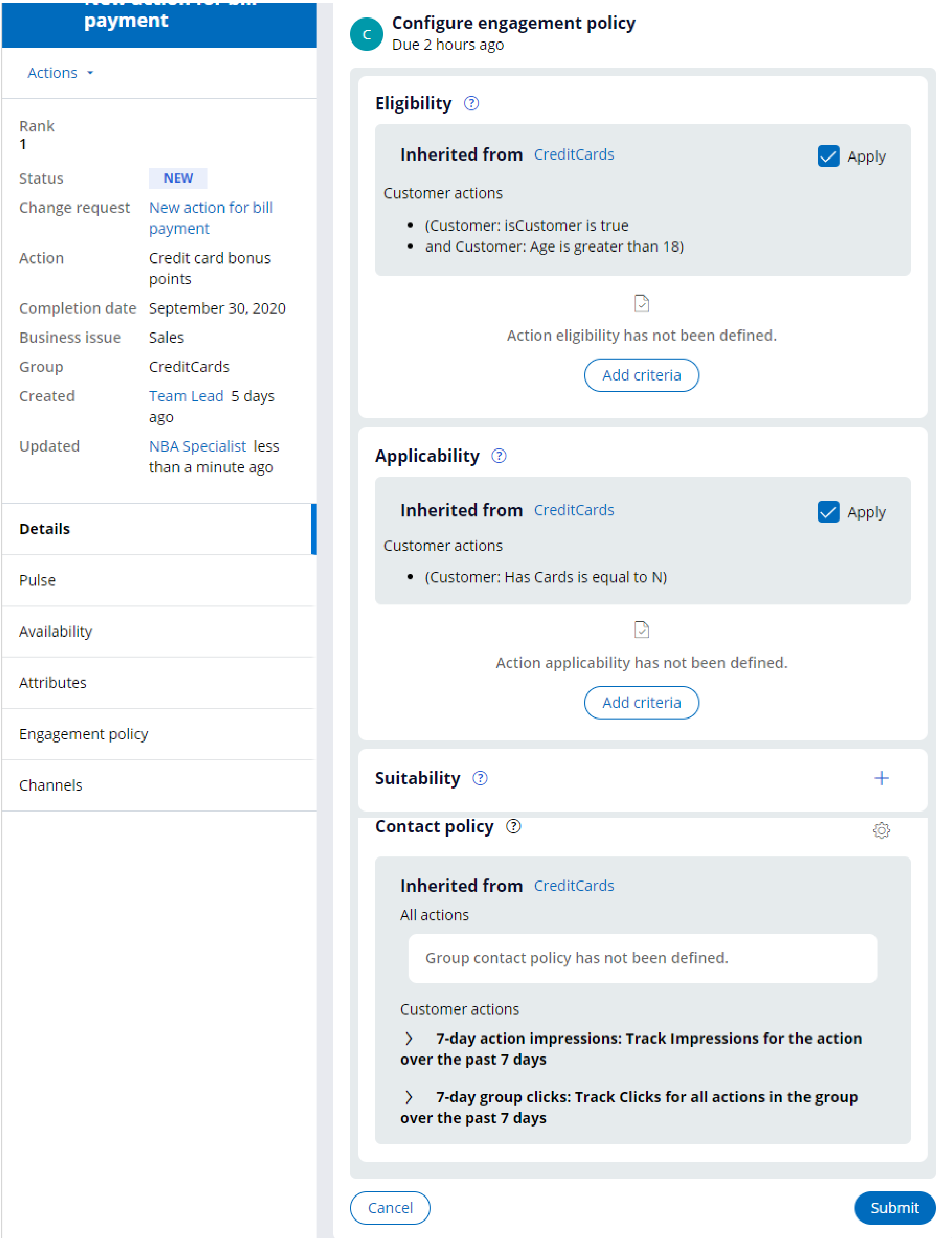
Click **Submit** to confirm the values and complete the task

## Configuring engagement policy

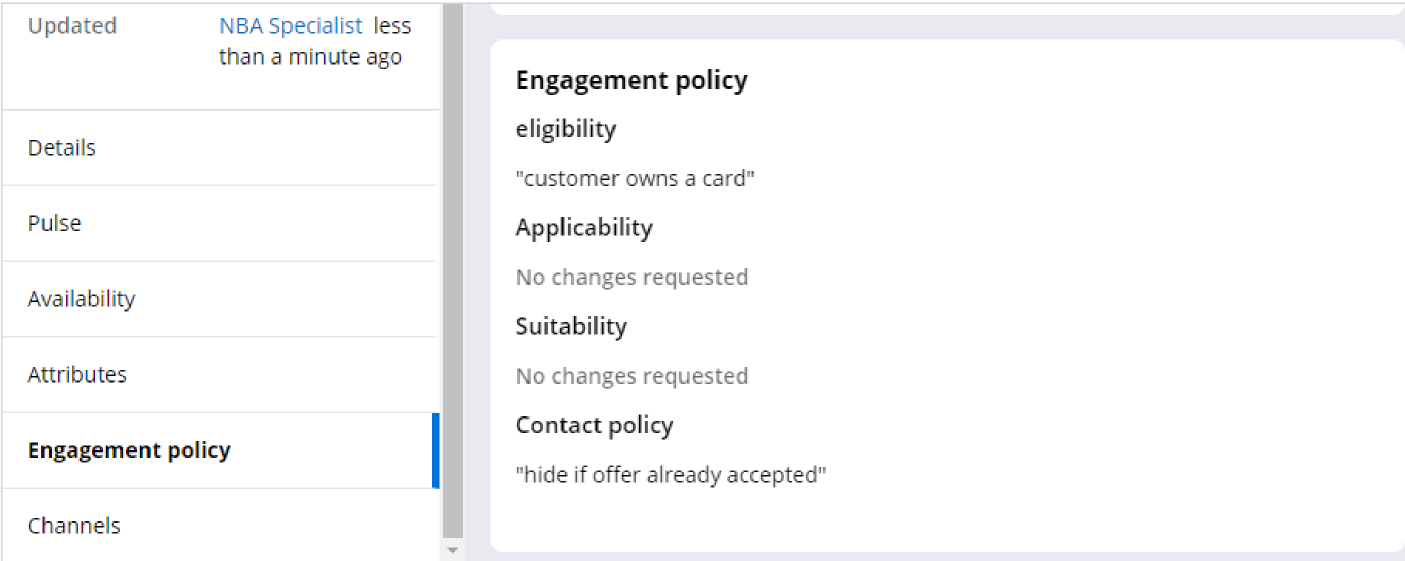
The **Configure engagement policy** task corresponds to defining an action's engagement policy.

When you open the task, you can also view the existing group-level engagement policy



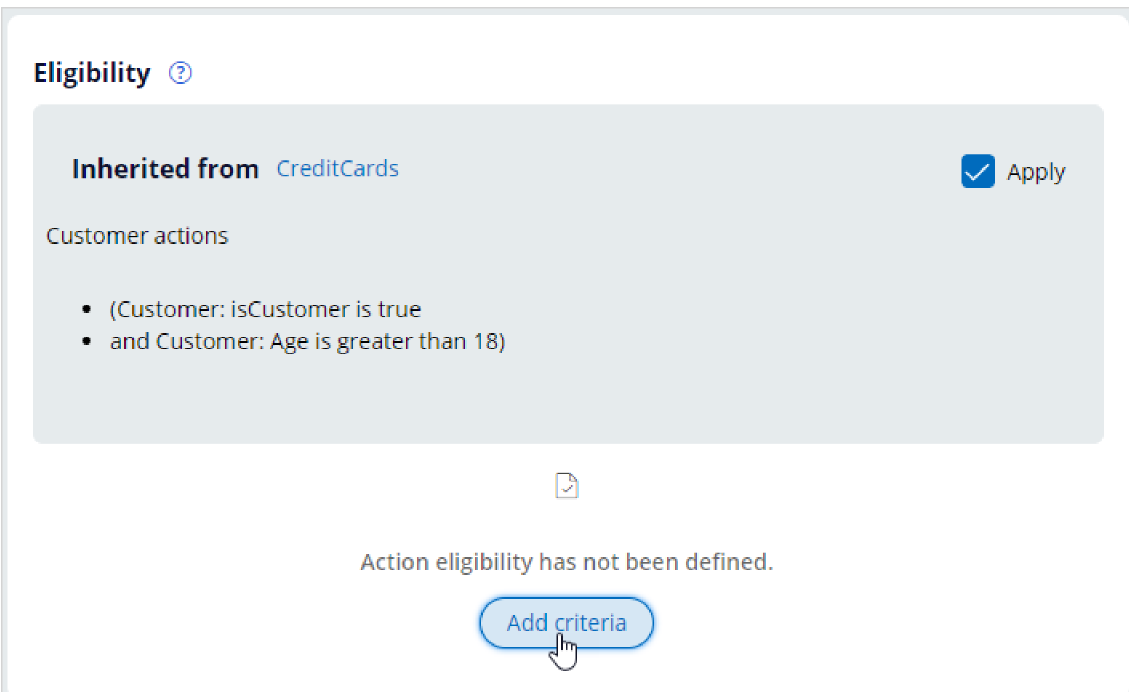



Define the appropriate engagement policy requested by the business user. On the left, click on**Engagement policy** to view the details provided by the business user.

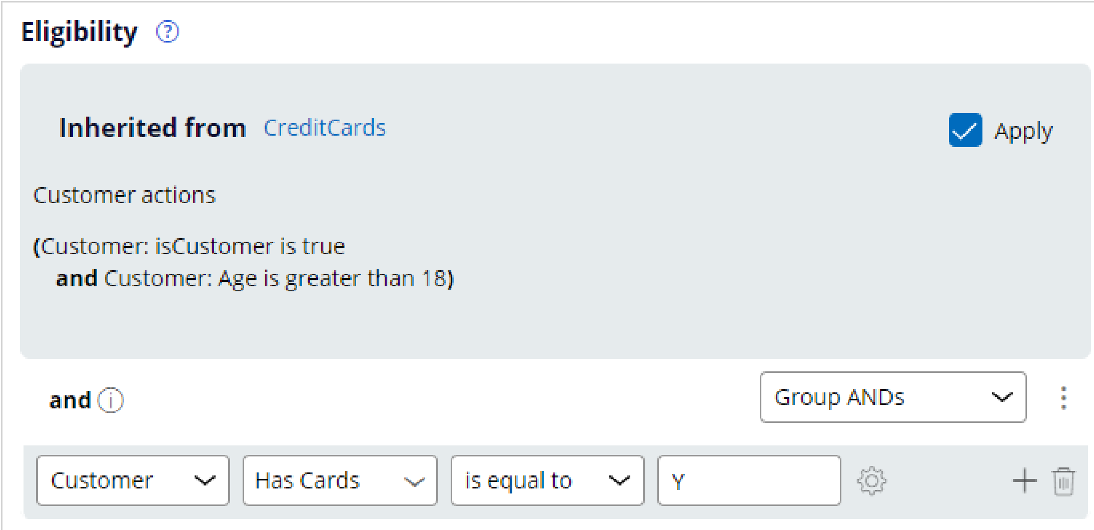



In this case, you need to add an eligibility rule and a contact policy.

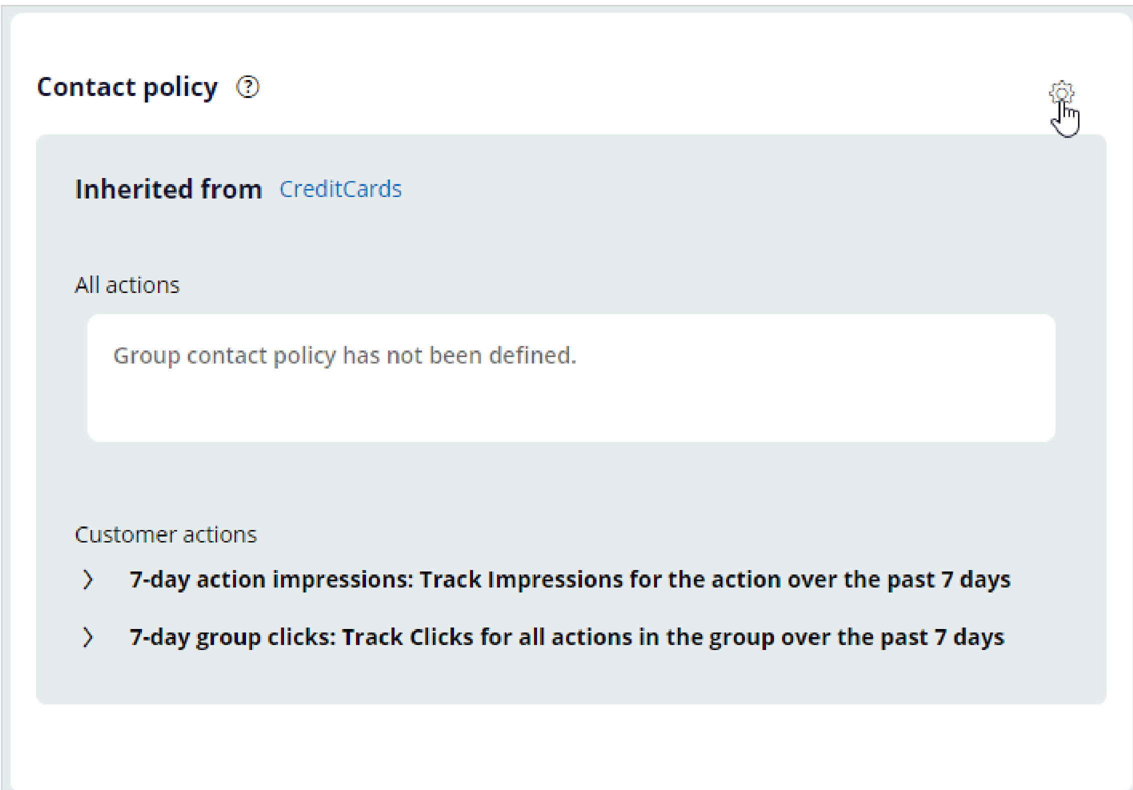
Click **Add criteria** to add action-level eligibility criteria.



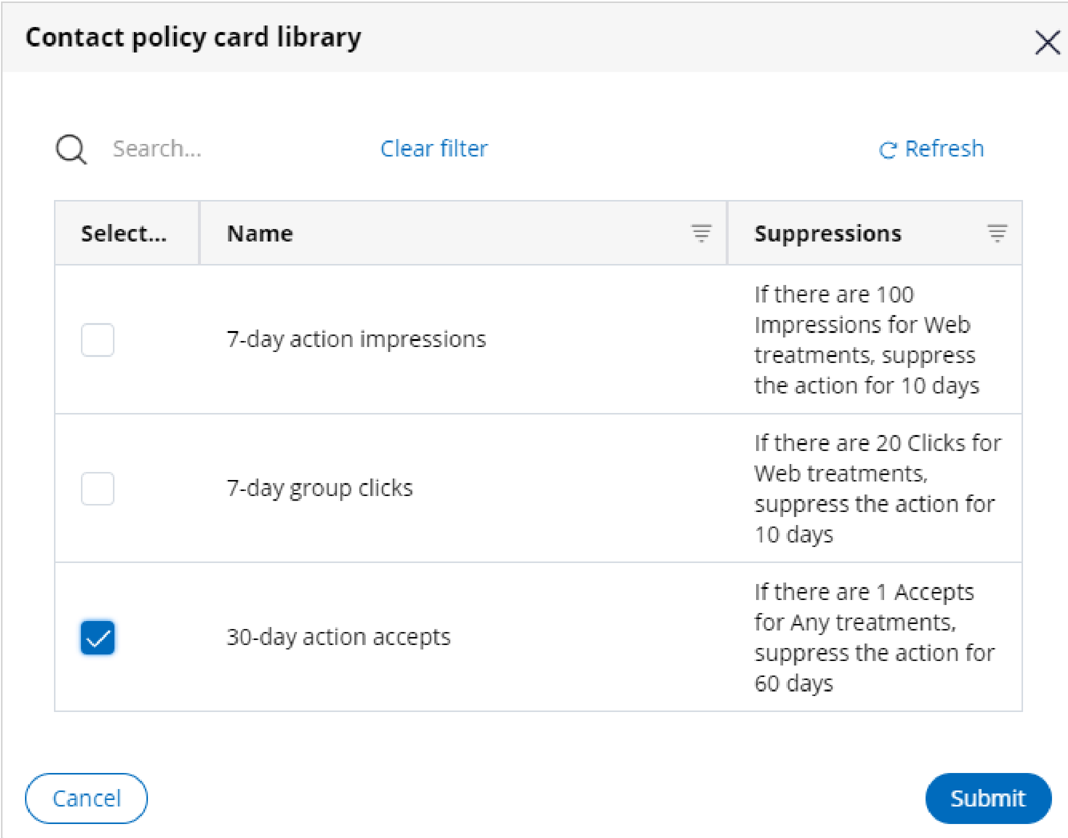

Use the condition builder to define the criteria



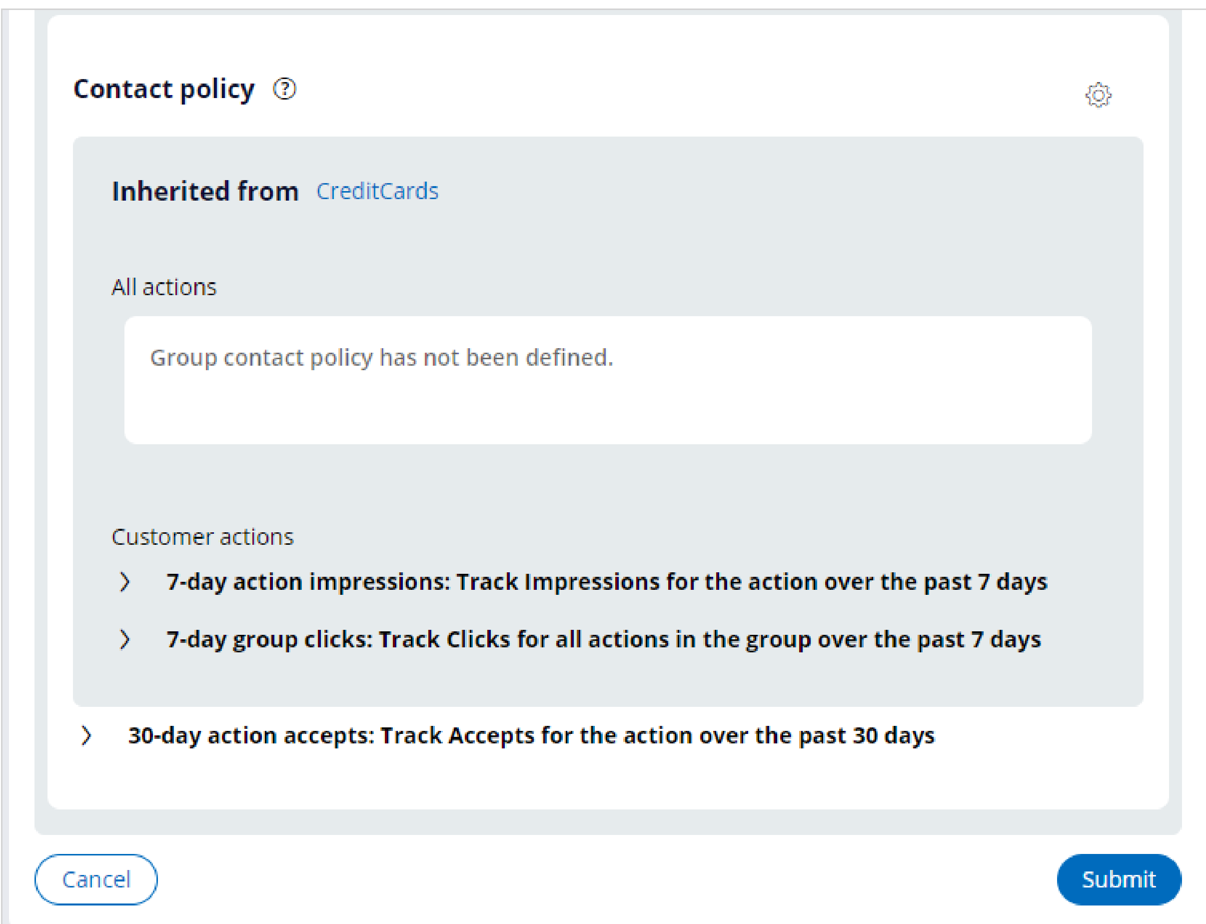

To add a contact policy, in the **Contact policy** section, click the **Gear** icon to access the contact policy library.




Select the appropriate policy, then click **Submit**.




The policy is added to the action.

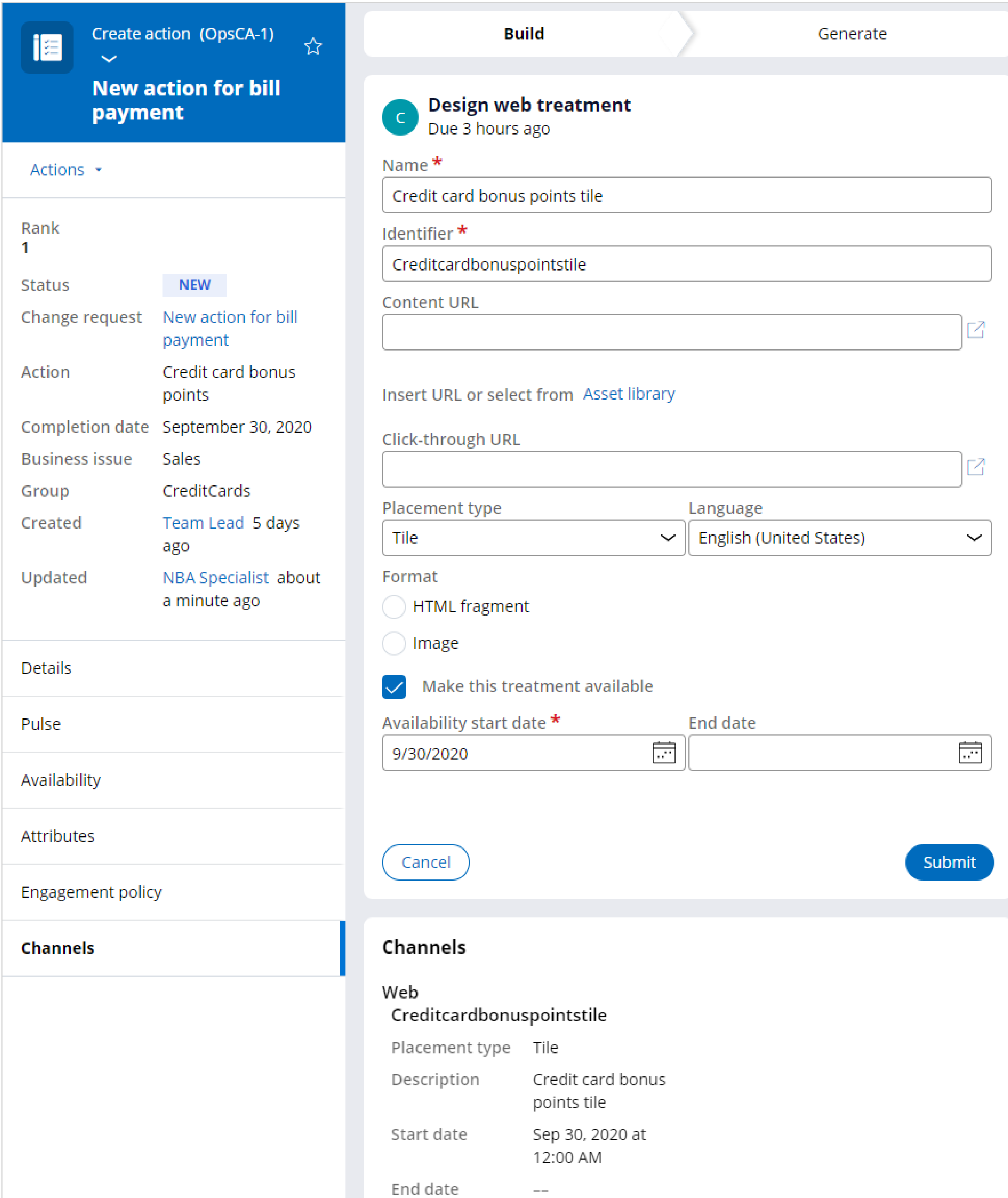



Finally, click **Submit** to complete the task.

## Designing a web treatment

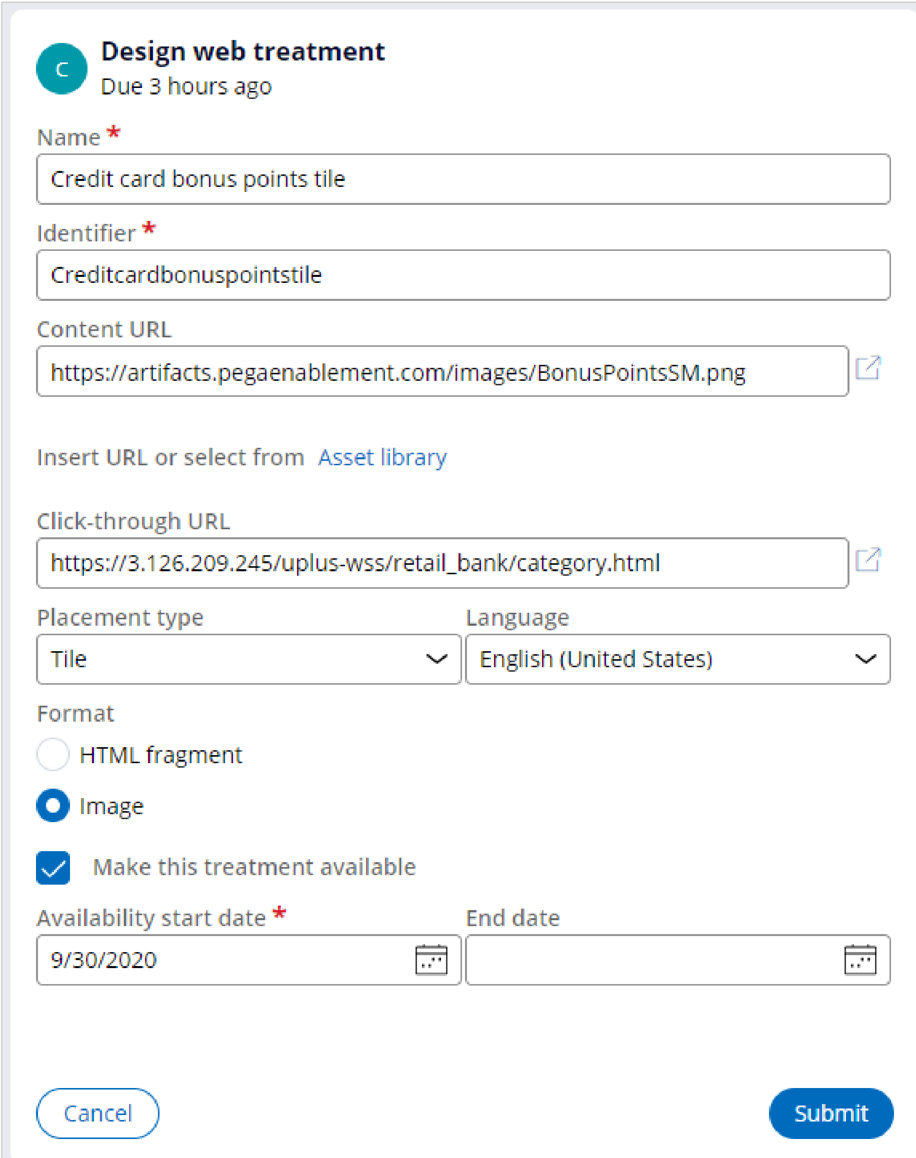
The **Design web treatment** task corresponds to designing a new web treatment for the action.

The displayed attributes correspond to the web treatment attributes in Pega Customer Decision Hub



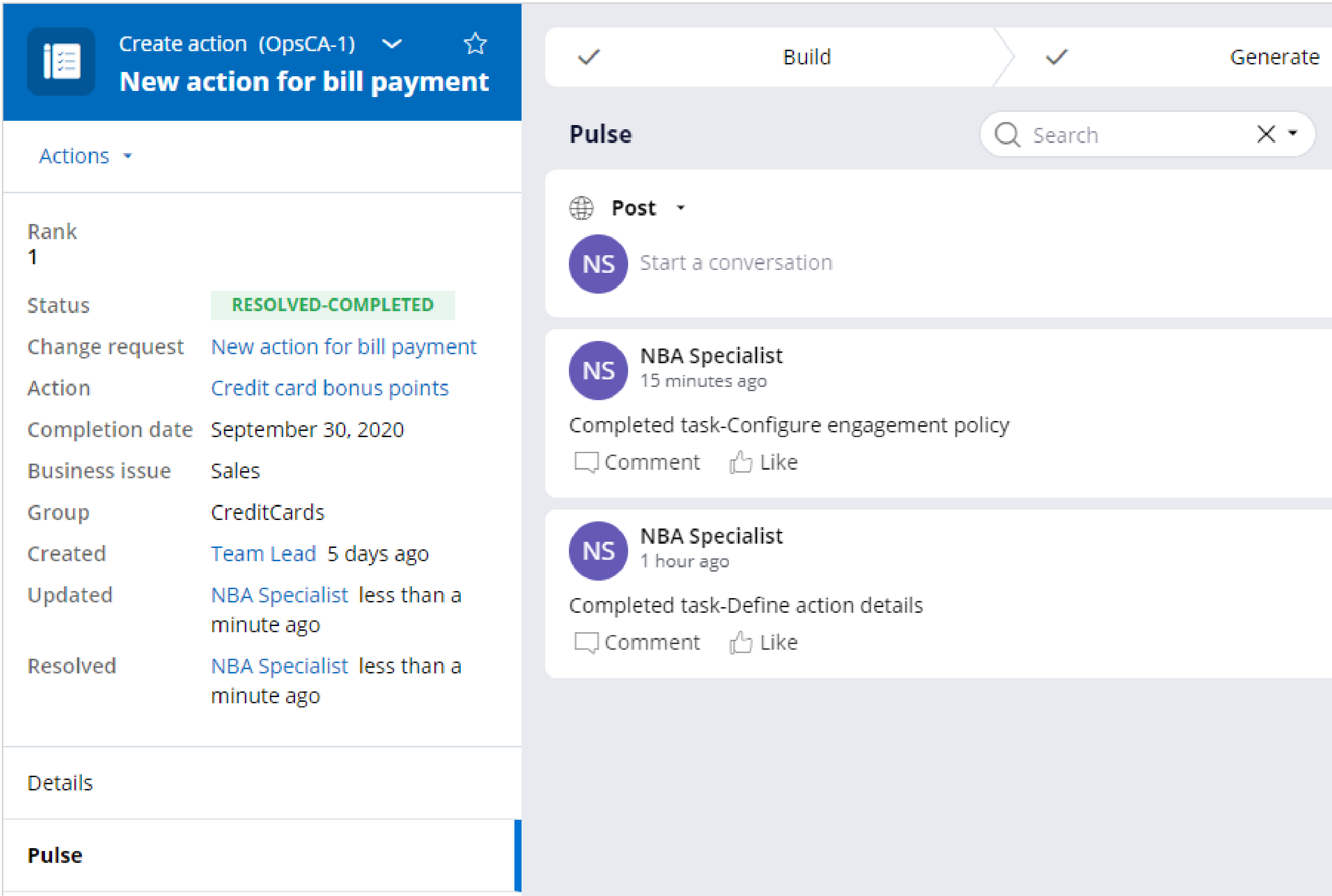

Enter the values as requested by the business user. On the left, click**Channels** to view the channel-related details provided by the business user.

Click **Submit** to complete the task.

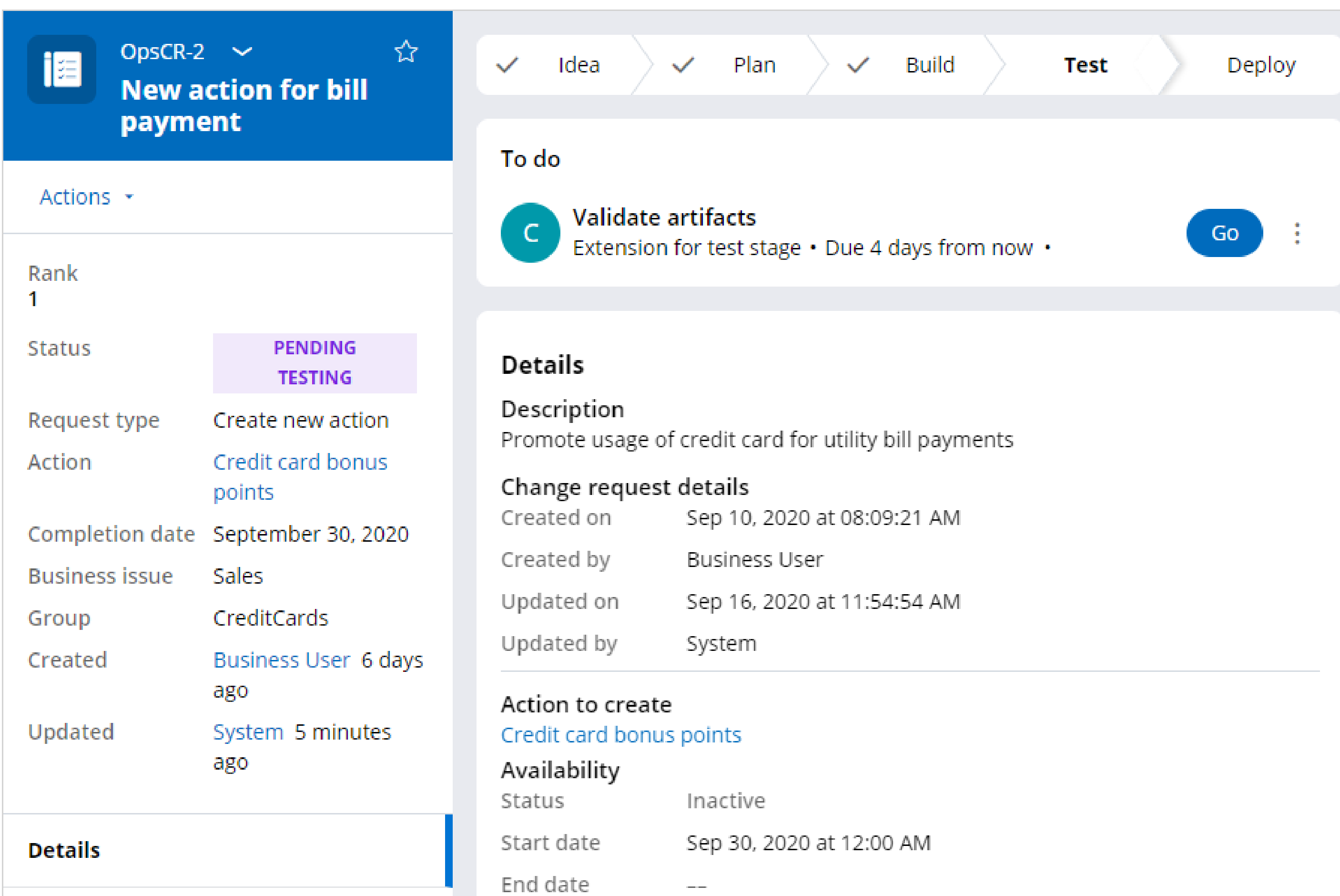



When all build tasks are completed, the status of the change request changes to **Resolved-Completed**, and the **Pulse** is updated with the appropriate status.

The system automatically generates the corresponding artifacts such as actions and treatments in Pega Customer Decision Hub.




The next step for you, as a next-best-action specialist, is to verify these artifacts



# Validating the next-best-action artifacts

## Business scenario

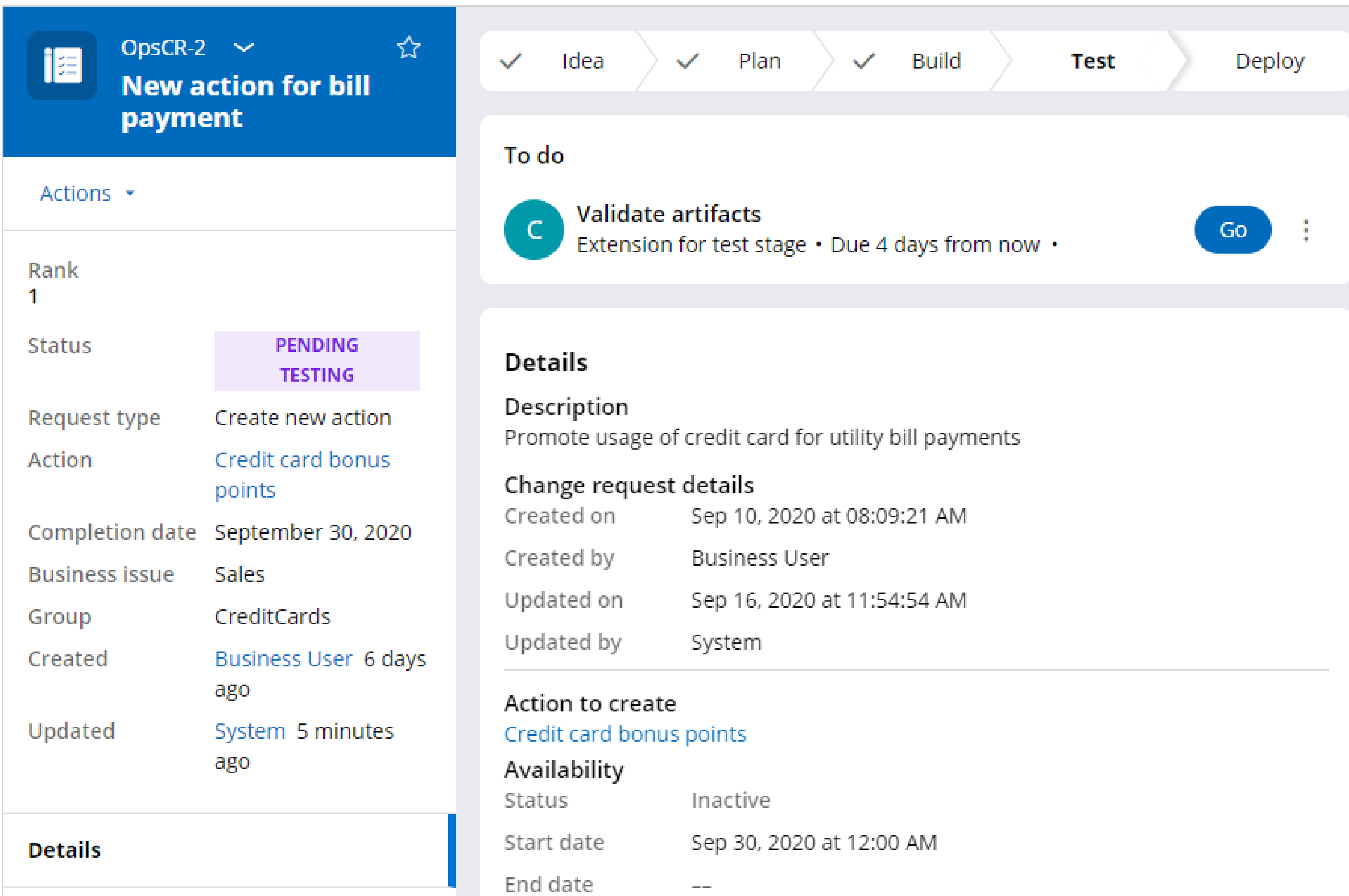
A business user requests a new action to promote the usage of credit cards for making utility payments. As an NBA Specialist, you have just completed the build tasks associated with that change request.

When you completed the build tasks, the system automatically generated the corresponding artifacts such as actions and treatments in Pega Customer Decision Hub. However, these artifacts are still in the business operations environment, in an area that is accessible only to you and your business operations team. They are not in a production environment yet.

The next step is for you, as an NBA Specialist, to verify these artifacts to ensure that they match the business requirements.

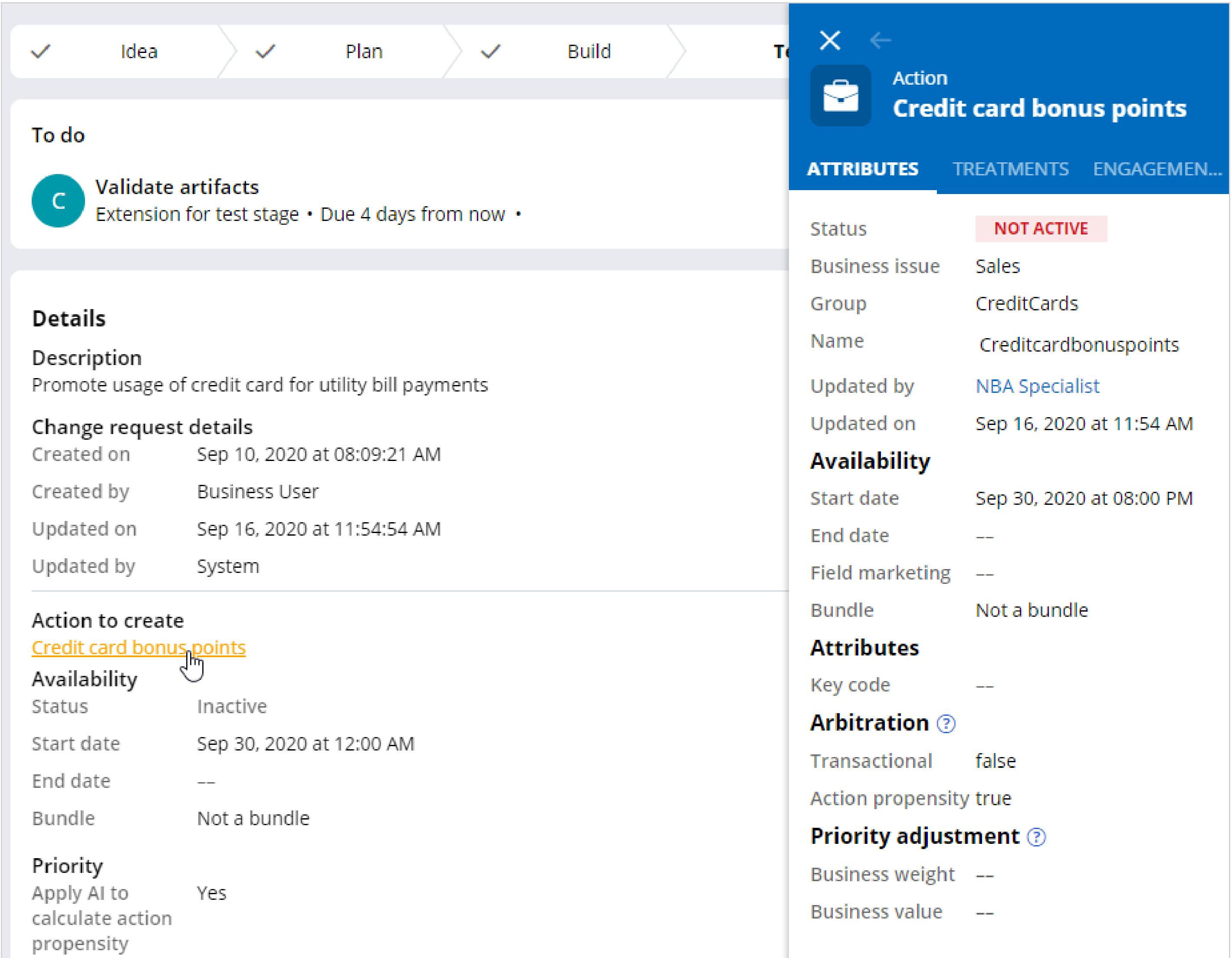
## Validating the artefacts

When you open the change request, in the **To do** section, the task **Validate artifacts** is available for you to work on.

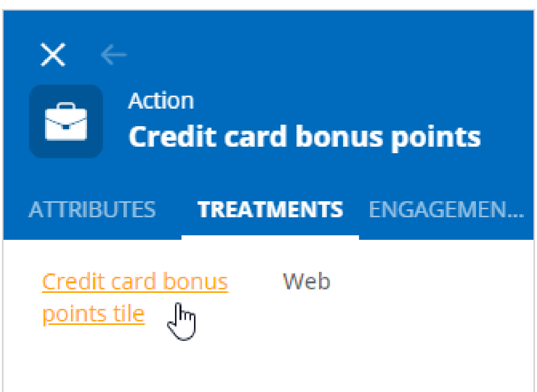



To validate the generated artifacts, click the link under **Action to create** (in this case **Credit card bonus points**). The details of the generated action and its related artifacts are displayed on the right.

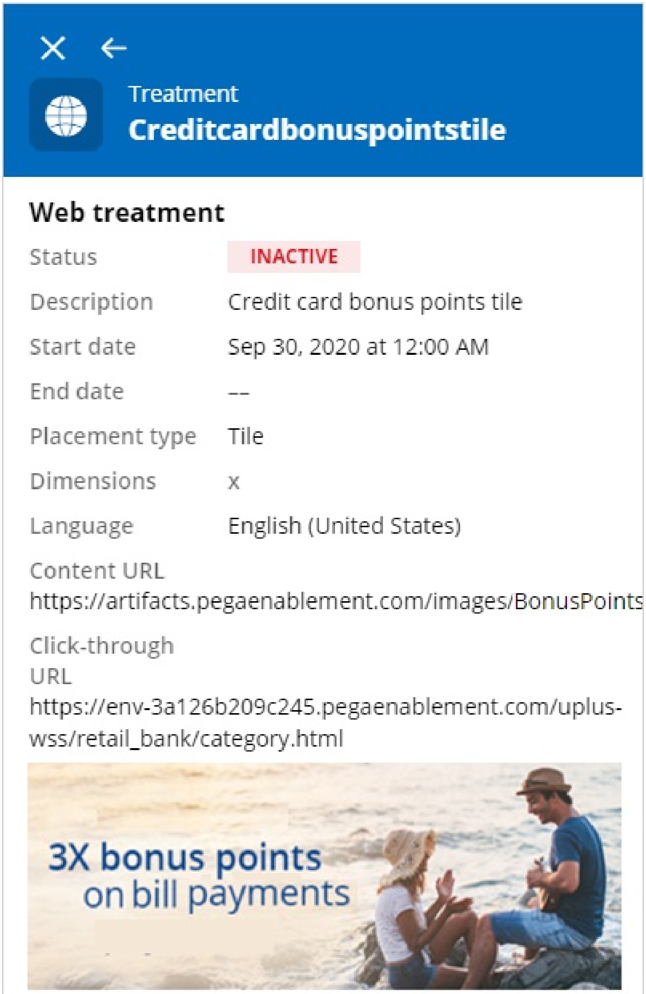
You can validate the action attributes.



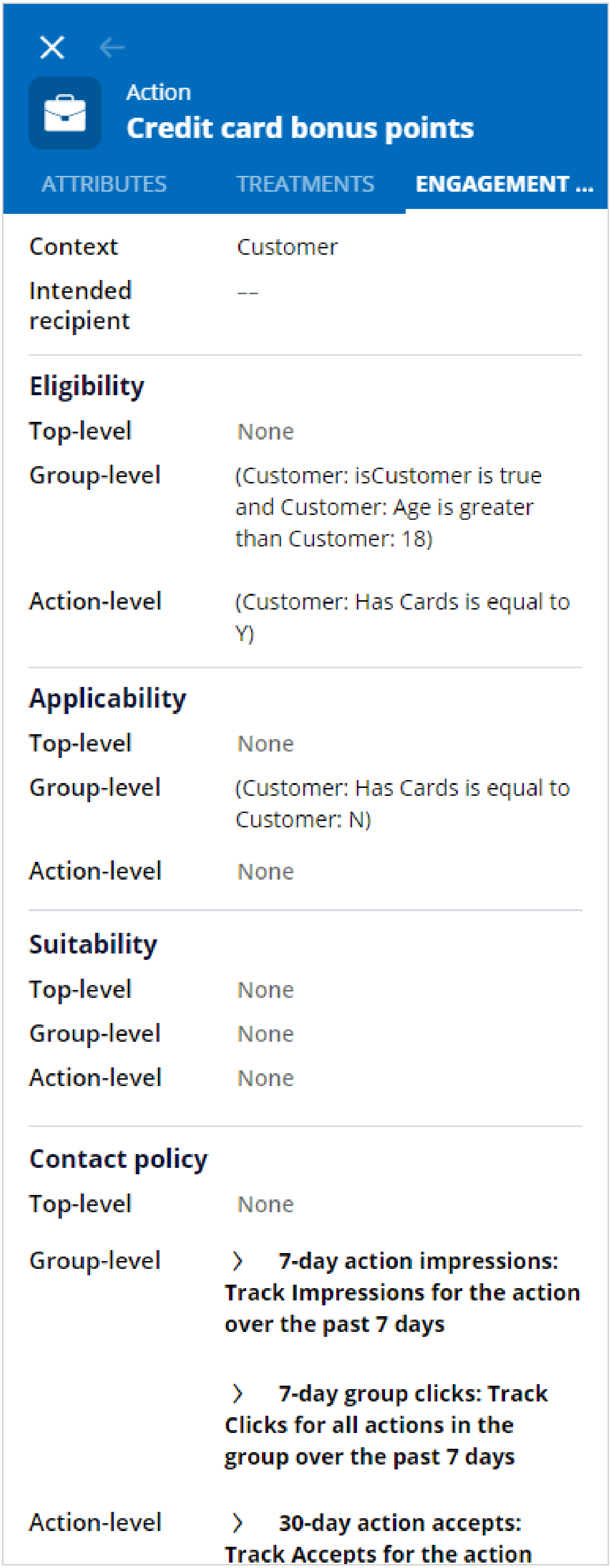

Click **Treatments** to access the generated treatments.




Validate the web treatment.

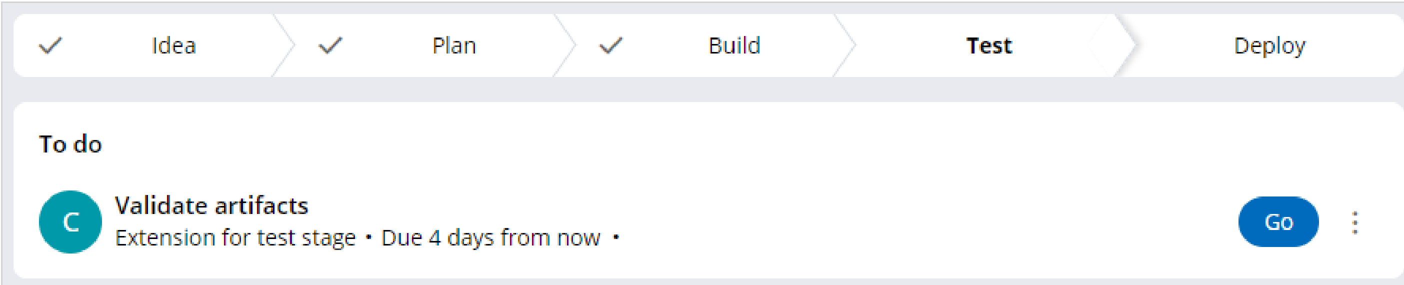



Validate the action-level engagement policy.



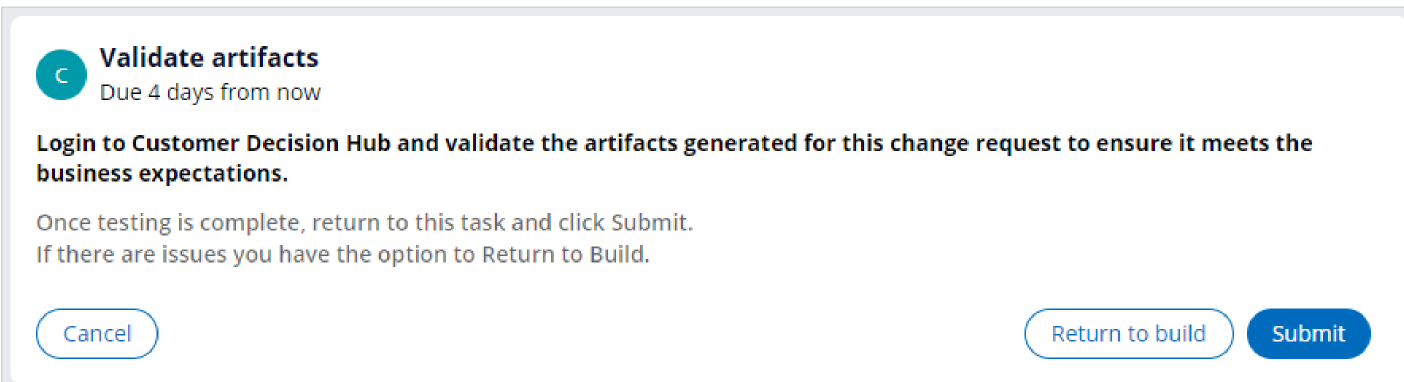

## Completing the validation task

After validating the artifacts, you can complete the **Validate artifacts** task. Click **Go** to proceed.

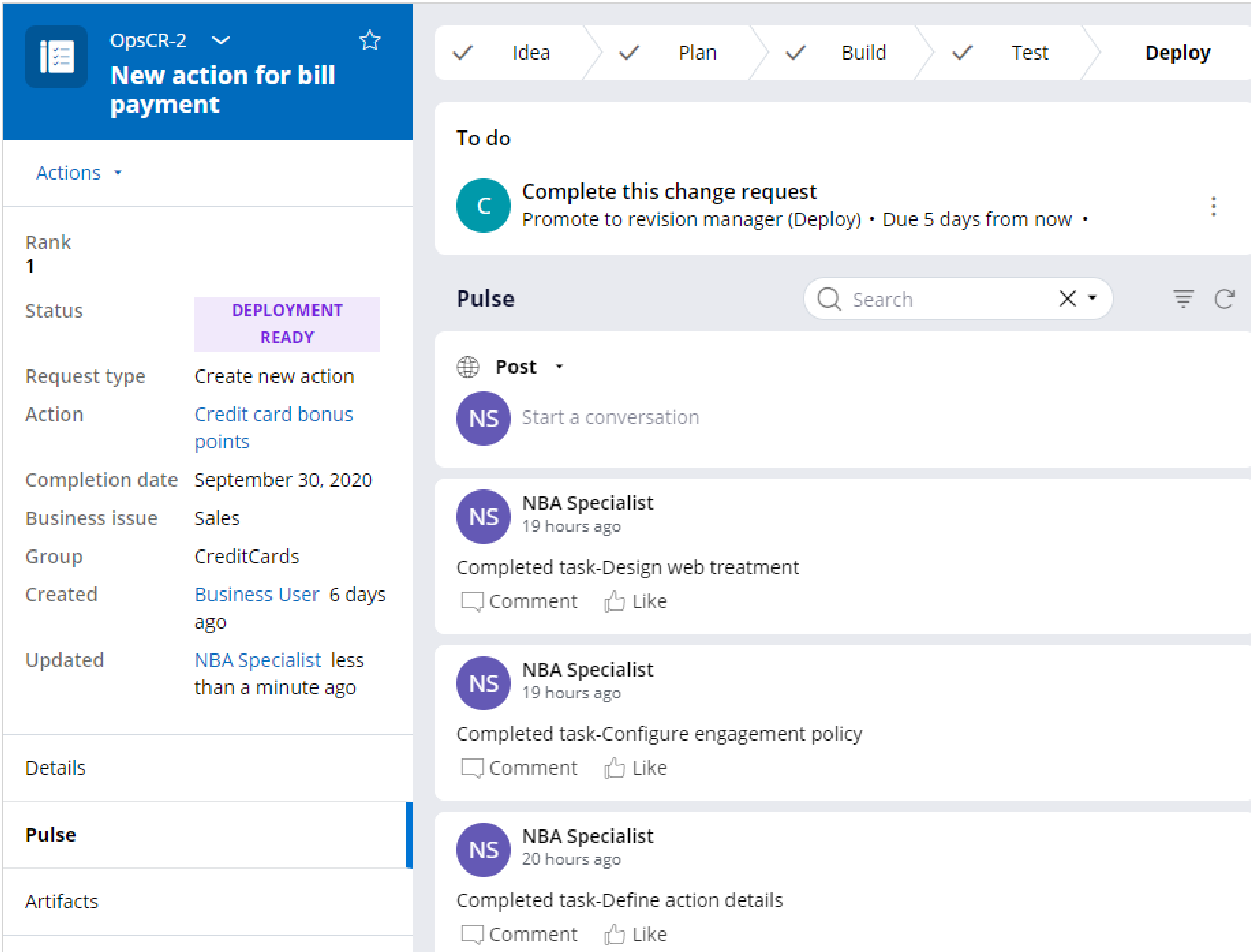



The message advises you to log in to the Pega Customer Decision Hub portal and validate the artifacts, but you have already done that from within the Pega 1:1 Operations Manager, so you can ignore the message. Click **Submit** to complete the task.

Alternatively, if you would like to change any attributes of the newly created artifacts, you can click**Return to build** to change the values, and then regenerate the artifacts.




The change request now moves to the Deploy stage. The next task is for the team lead to promote this change request to the revision manager, who can then deploy the business changes to the production environment.


OpsCR-2
New action for bill payment
Actions
Rank
1
Status
DEPLOYMENT READY
Request type
Create new action
Action
Credit card bonus points
Completion date
September 30, 2020
Business issue
Sales
Group
CreditCards
Created
Business User 6 days ago
Updated
NBA Specialist less than a minute ago
Details
Pulse
Artifacts
Idea
Plan
Build
Test
Deploy
To do
Complete this change request
Promote to revision manager (Deploy) • Due 5 days from now •
Pulse
Search
Post
Start a conversation
NBA Specialist
19 hours ago
Completed task-Design web treatment
Comment
Like
NBA Specialist
19 hours ago
Completed task-Configure engagement policy
Comment
Like
NBA Specialist
20 hours ago
Completed task-Define action details
Comment
Like

# Deploying changes to production

## Business scenario

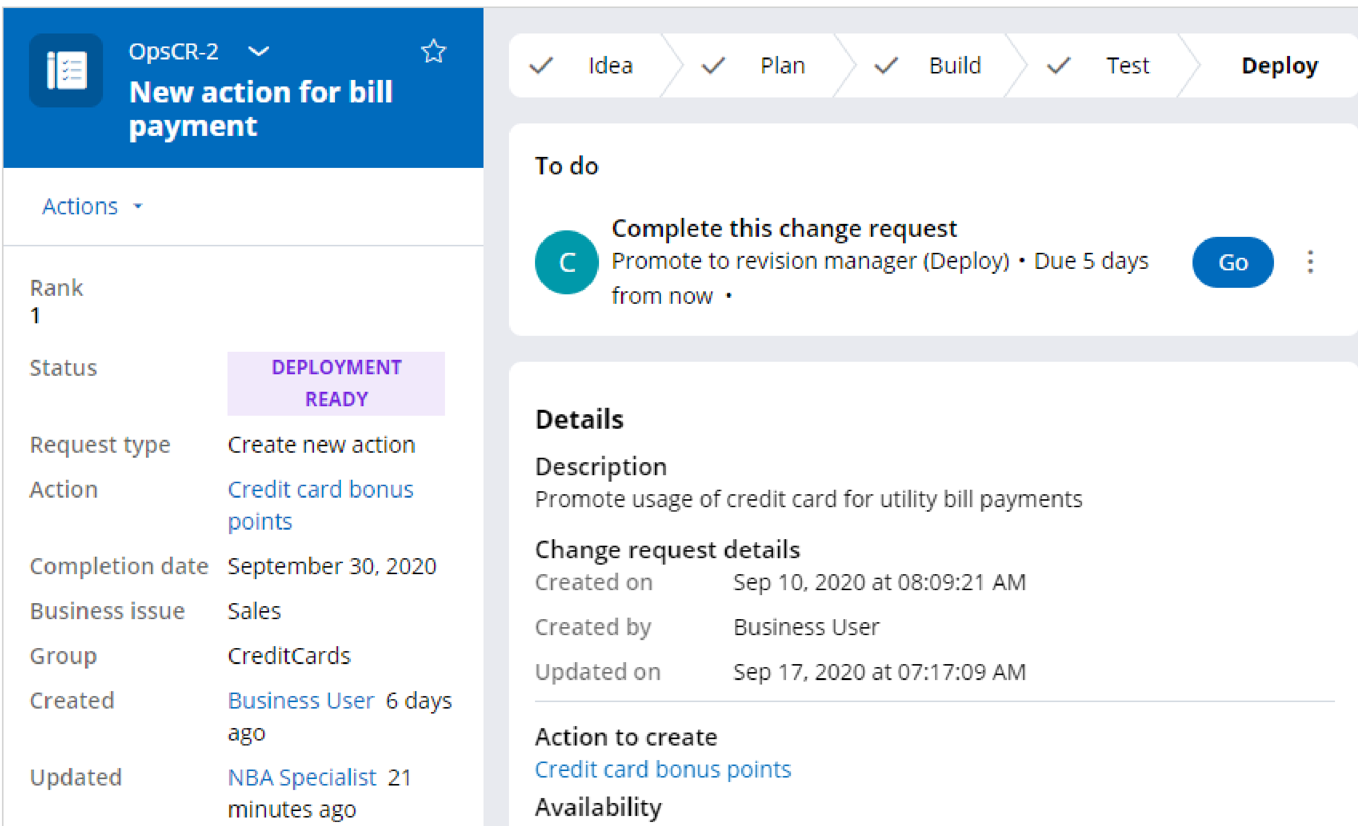
A business user requests a new action to promote the usage of credit cards for utility payments. A next-best-action specialist has completed all the build tasks and validated the generated artifacts, such as actions and treatments. Right now, the artifacts are present in the business operations environment.

The next step is for you, as a team lead, to promote the change request to the revision manager, who then deploys the business changes to the production environment.

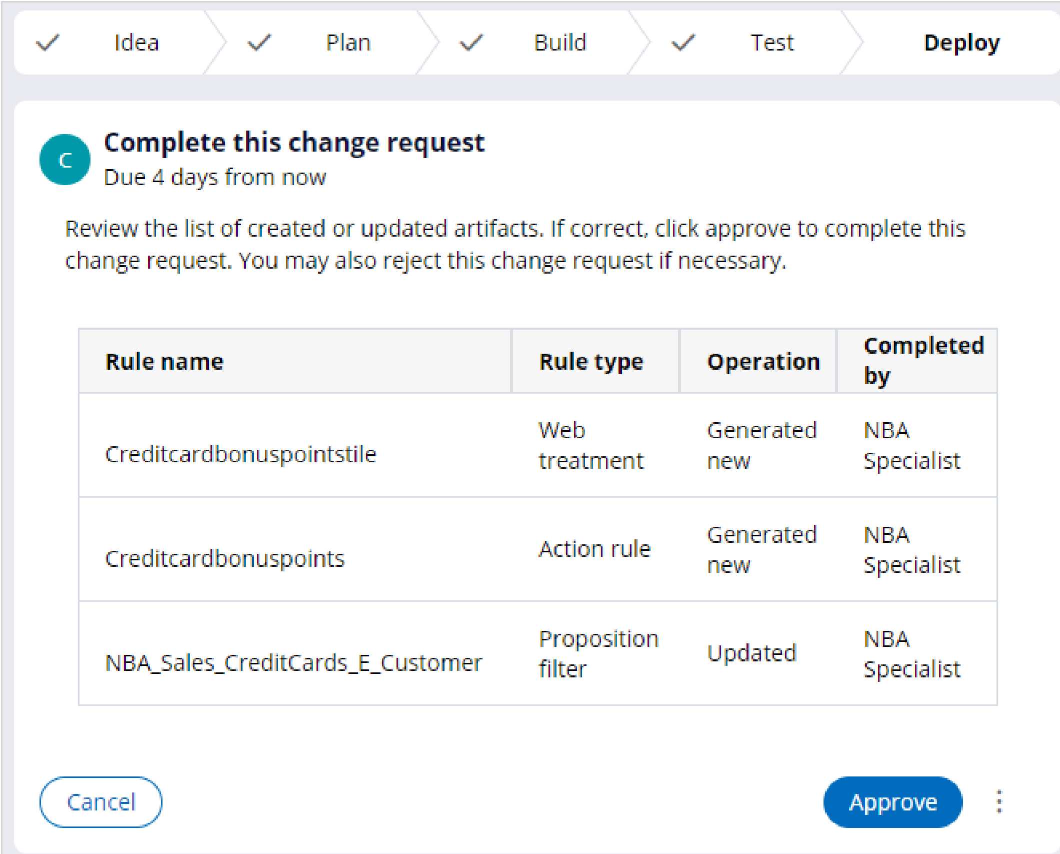
## Promoting changes for deployment

As a team lead, when you open the change request, in the **To do** section, the task **Complete this change request** is available for you to work on.

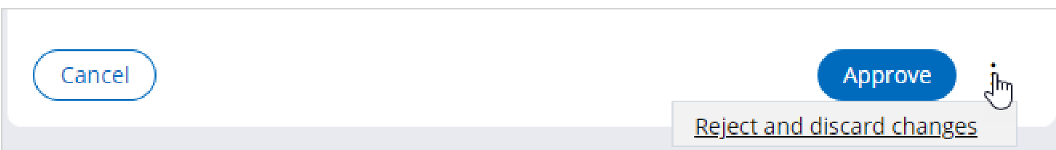
Click **Go** to proceed.




The list of artifacts generated by the system is displayed. Review the list and click **Approve** to complete the task and the change request.

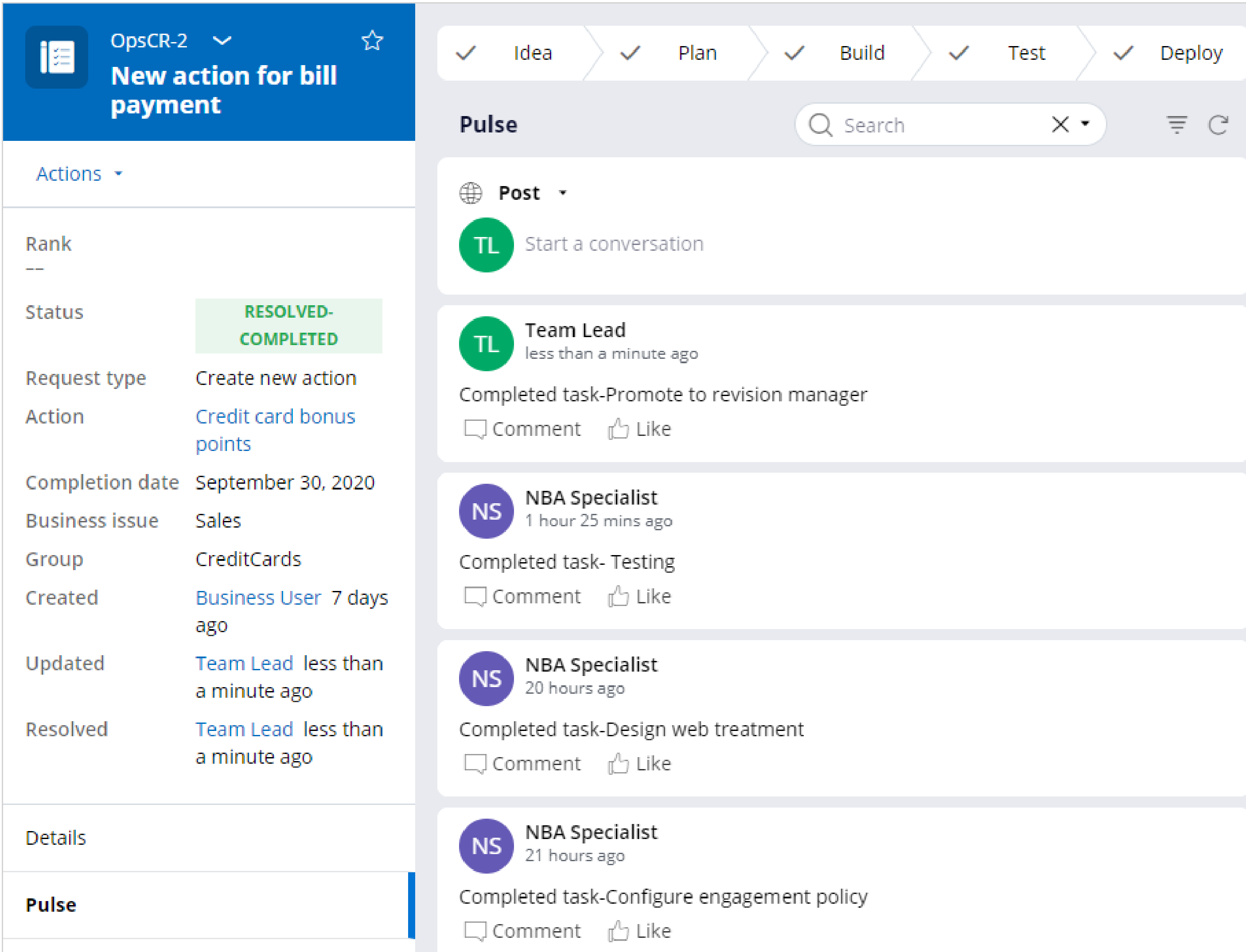



You may also reject the change request so the NBA Specialist can make changes and re-generate the artifacts




Once you approve the change request, it moves to the**Resolved-Completed** state.

All the tasks necessary to make the business change, from the perspective of the business operations team, is complete. The change request is now promoted to the revision manager, who deploys the changes to the production environment.


OpsCR-2
New action for bill payment
Actions
Rank
--
Status
RESOLVED-COMPLETED
Request type
Create new action
Action
Credit card bonus points
Completion date
September 30, 2020
Business issue
Sales
Group
CreditCards
Created
Business User 7 days ago
Updated
Team Lead less than a minute ago
Resolved
Team Lead less than a minute ago
Details
Pulse
Idea
Plan
Build
Test
Deploy
Pulse
Search
Post
TL
Start a conversation
TL
Team Lead
less than a minute ago
Completed task-Promote to revision manager
Comment
Like
NS
NBA Specialist
1 hour 25 mins ago
Completed task- Testing
Comment
Like
NS
NBA Specialist
20 hours ago
Completed task-Design web treatment
Comment
Like
NS
NBA Specialist
21 hours ago
Completed task-Configure engagement policy
Comment
Like