

Use Case Overview

Departments frequently use email, spreadsheets and manual processes to manage requests for services that they might provide. When consumers of the department's services have questions or run into problems, they frequently utilize ad-hoc communication to engage the department. This lab will focus on these three facets of service delivery.



Personas

In our lab, we will utlize a couple different personas outlined below. We will also assume the LOB Creator has already submitted a request for a new application using the Apply for Citizen Development catalog item and roles have already been assigned.

Employee Center Admin

Responsibilities

- Maintain content availble on Employee Center
- Create any new Topics and Service Catalog categories requested by departments
- Collaborate with the departments to ensure proper placement of services

Role required

• sn_hr_sp.esc_admin

LOB (Line of Business)/Department Low Code Creator

Responsibilities

- Submit requests for new custom applications to build in App Engine Studio
- Understand ServiceNow and application development best practices
- Build and test applications in App Engine Studio
- · Submit developed App Engine Studio applications for IT review
- Maintain and modify the application during its lifecycle if determined during the intake process

Role required

• sn_app_eng_studio.user

Create an app in App Engine Studio

App Engine Studio gives citizen developers a single, collaborative place for workflows and integrations. App Engine Studio provides for fast innovation and the creation of business- critical workflow apps in a complete low-code experience.

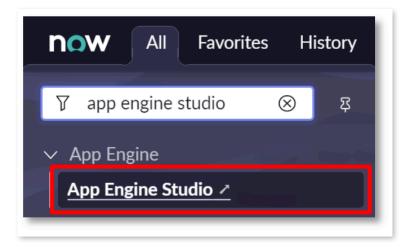
Departmental apps of this type have traditionally been built by an pro-dev experienced on the platform, but the simpler, low- code building tools make it possible for a citizen developer that is a member of the department to build-expanding the resource pool of developers that can build digital workflows throughout the enterprise.

Create Application in App Engine

Studio

Let's start

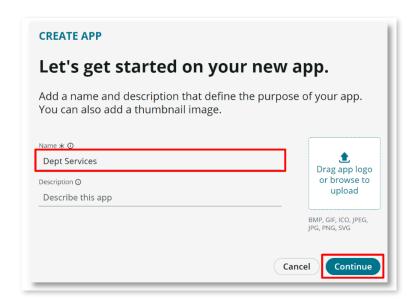
1. Type app engine studio in the Filter Navigator and then click on the App Engine Studio link. App Engine Studio will open in a new browser tab



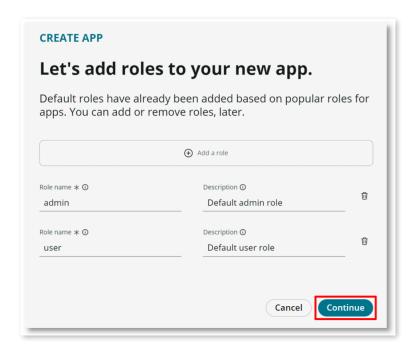
2. Once App Engine Studio opens click the Create app button in the upper right of the screen



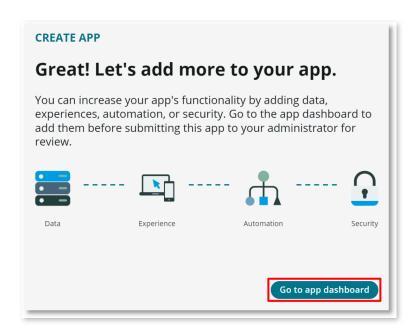
3. Enter Dept Services in the Name field and select Continue. One final reminder to replace Dept!



4. App Engine Studio will create default roles for admins and users of the Dept Services application. Users assigned these roles will be members of the department and will play a role in service fulfillment as fulfillers. Accept the default admin and user roles and select Continue.



5. Select the Go to app dashboard option once the app is created.



Nice work.. you've just created the foundation of your Departmental Services app. Now let's move on to the next exercise, creating the base department task table.

Departmental Services Data Model

The first step in creating an application is defining the data. This lab will utilize the table inheritance feature of the platform.

We will be creating a Dept Task table that will be the basis of all other tables. The Dept Task table will extend the system Task table. This will allow the Dept Services application to access base fields and capabilities of the platform such as assigning requests to users and asking for approvals.

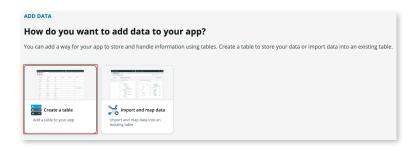
Base Dept Task Table

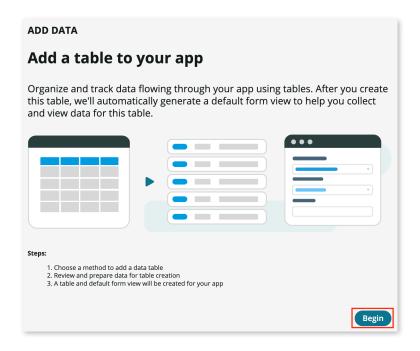
Let's start

1. Once the App Home tab opens, select Add a table or upload a spreadsheet

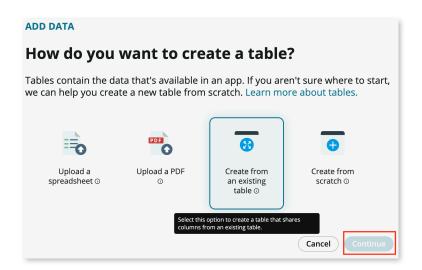


2. Select Create a table and then the Begin on the next screen

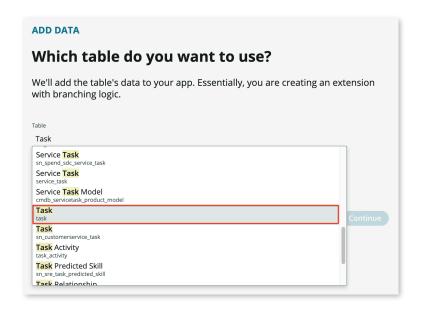


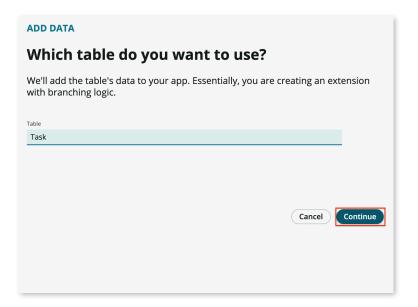


3. Select the Create from an existing table option and then Continue

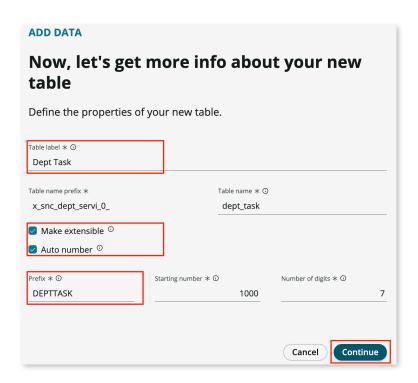


4. Set the Table field to Task and select Continue

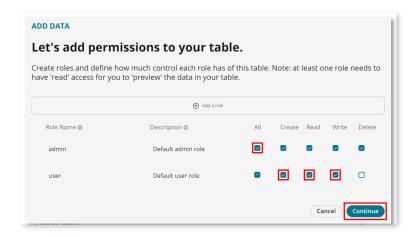




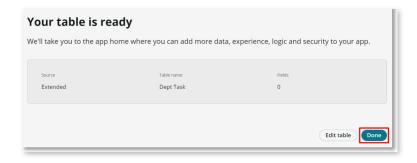
5. Set the Table label field to Dept Task\ Select Make extensible\ Select Auto number\ Set the Prefix field to DEPTTASK



6. The next step is to setup permission for the Dept Task table. Assign full permissions to the admin role by selecting All. Select the Create, Read and Write permissions for the user role



7. Select Done once the table is created to return to App Home



Excellent! In our next exercise we'll create our Request tables and add some department specific fields.

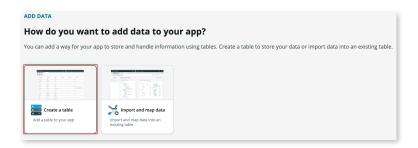
Department Request Table

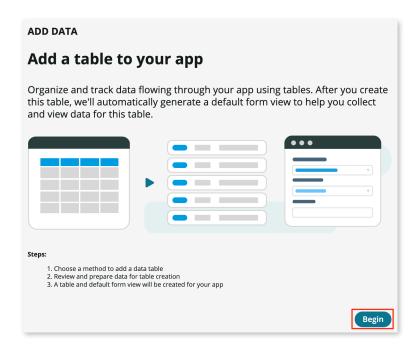
The Dept Request table will be used to store the service requests that the Dept provides. We'll follow the same steps we did from our last exercise exception this time we'll extend from our Dept Task table.

1. Choose the (+) Add option to add the Dept Request table

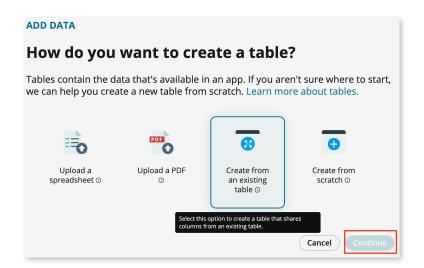


2. Select Create a table and then the Begin on the next screen

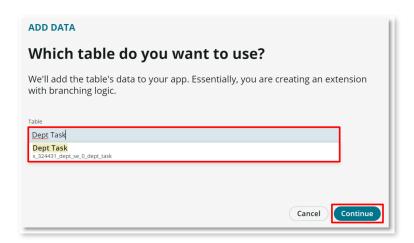




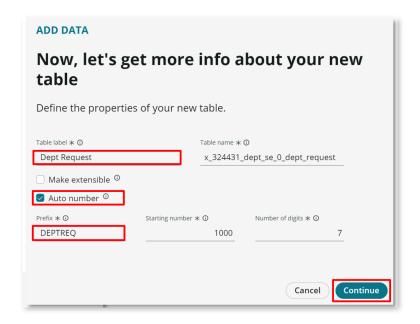
3. Select the Create from an existing table option and then Continue



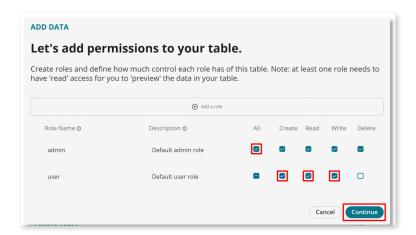
3. This time choose the Dept Task table to extend rather than the Task table. By extending the Dept Task table we can create reports Select Continue



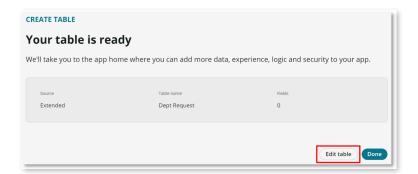
4. Set the Table label field to Dept Request Select Auto number Set the Prefix field to DEPTREQ



5. Set the same permissions for the admin and user roles as last time



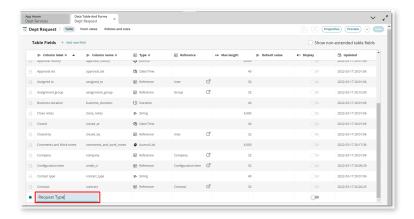
6. Select the Edit Table option once the Dept Request table is created



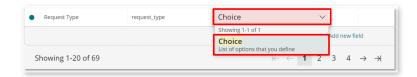
7. Select the + Add new field option to add a field to the Dept Request table



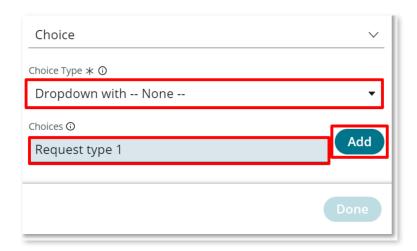
8. Enter Request Type in the Column label cell



9. Enter Choice in the Type cell and select Choice option



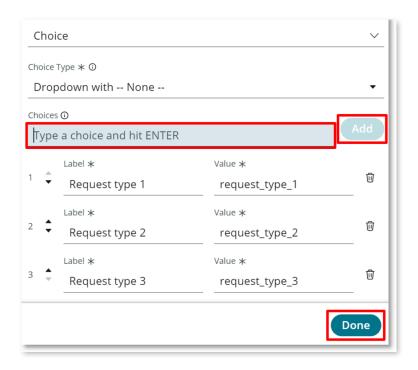
10. Choose Dropdown with -None-- for the Choice Type. For the Choices, you should enter different types of services that the department you chose might provide



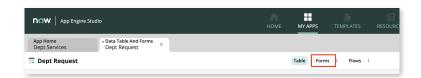
For example, a badging department might use the choices:

- New Badge Request
- Replacement Badge Request
- Add Building Access
- Remove Building Access

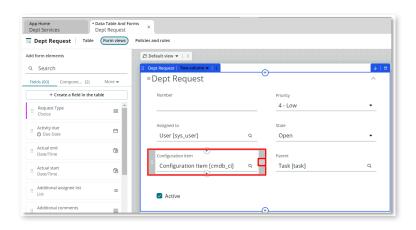
Select **Done** when finished adding your choices and save your work.



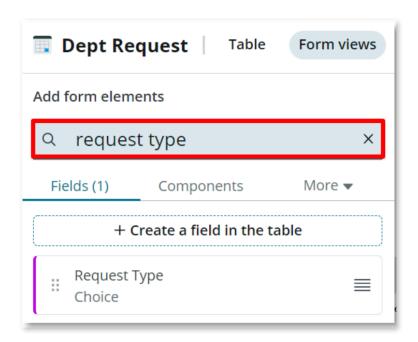
11. Select the Forms link to edit the Dept Request form



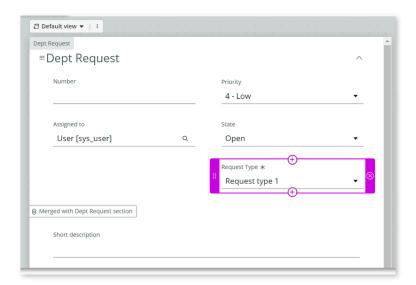
12. The default form view contains fields from the Task table that will not be used in in this application. Hover over the Configuration item field in the form view. Select the (X) on the right of the field to remove it\
Repeat for the Active checkbox\ Repeat for the Parent field



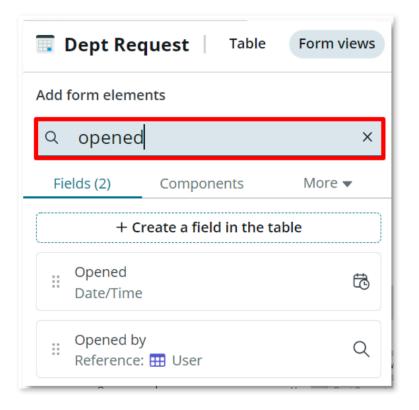
13. Enter request type in the Search field located towards the upper left of the screen to find the Request Type Choice field you added earlier



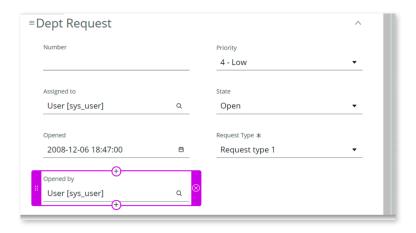
14. Drag the Request Type field on the left to the form view underneath the State field



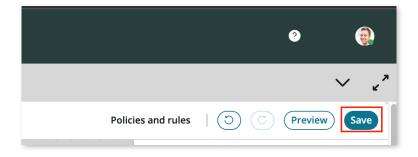
15. Enter opened in the Search field located towards the upper left of the. The Opened and Opened by fields will automatically be populated when a user submits a request. These are helpful to track who is submitting a request and when it was submitted



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17. To finish editing our form, click Save in the top right of the screen

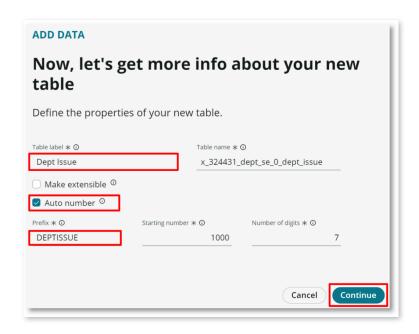


We're all done with the request table.. now we move on to the issue table!

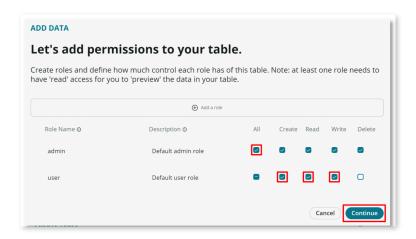
Department Issue Table

The Dept Issue table will be used to allow users to submit issues encountered in service delivery. Using a custom table for departmental issues rather than overutilizing a platform table allows for:

- Simplified routing, assignment and ACLs
- Better custom reporting capabilities
- Scoped application security
- App-specific views and workspaces
- Setup the Dept Issue table using the same initial steps as the Dept Request table. Make sure to extend Dept Task
 Set the Table label field to Dept Issue Select Auto number\ Set the Prefix field to DEPTISSUE



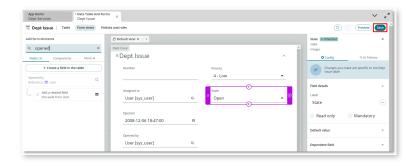
2. Set the permissions the same way as the previous table



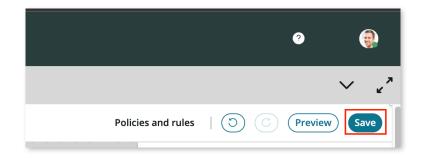
- 3. Select Edit table once the table has been created
- 4. Then select the Forms link to navigate to the form view for the Dept Issue Table



5. Remove the Configuration item, Active and Parent fields\ Add the Opened and Opened by fields\



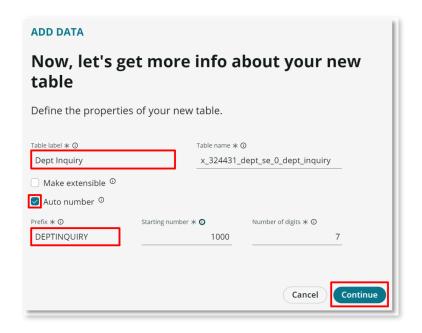
6. To finish up, click Save in the top right



Department Inquiry Table

You've probably gotten the hang of creating new tables at this point, so we'll skip all the screenshots and get right to the point.

 Repeat the process for Dept Issue. The setup will only differ in the Table label and Prefix values
 Set the Table label field to Dept Inquiry\ Select Auto number\ Set the Prefix field to DEPTINQUIRY



- 2. Configure the permissions to match the Dept Issue table where the admin role has full permissions and the user role does not have **Delete** rights
- 3. Modify the Dept Inquiry form view to match the Dept Issue form view Remove the Configuration item, Active and Parent fields

Add the Opened and Opened by fields

4. Don't forget to hit Save!

That's it! We're all done with tables so now we'll move on to creating our workspace in the next exercise.

Create meaningful experiences for your application users

Workers and requesters alike deserve a great user experience. In this exercise, we'll explore how to create a workspace for those folks intaking the work coming in from requests and how to create forms that we can publish on our Employee Center portal.

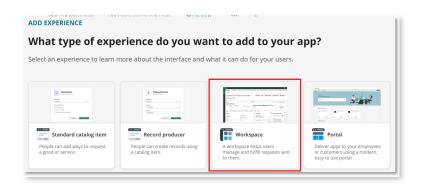
Configure Workspace Home Page

Workspaces are a great option for departments. Workspaces can be tailored specifically for department needs and can simplify interacting with the platform.

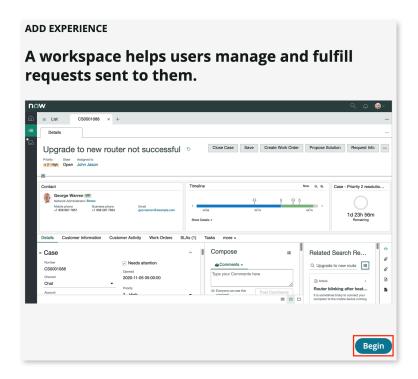
In this section, we will change the default homepage Data Visualizations to count the opened Requests, Issues, and Inquiries.

Let's start

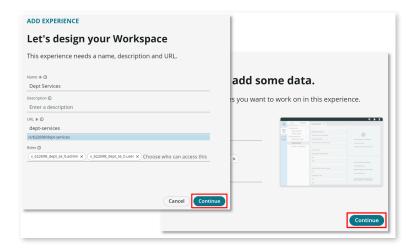
1. Select the (+) Add link by the Experience header Select Workspace for the type of experience on the next screen



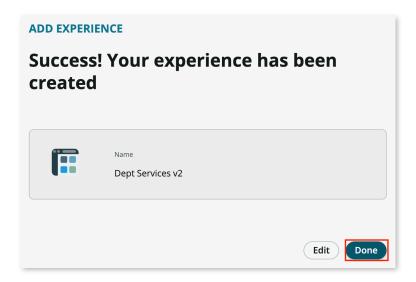
2. Select Begin



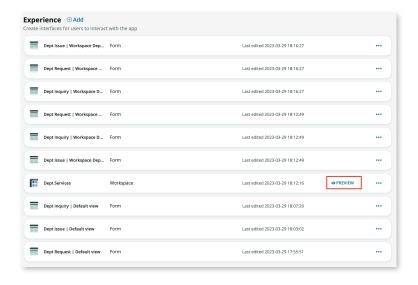
- 3. Accept the provided defaults for the workspace design and select Continue
- 4. Accept the data defaults for the workspace and select Continue



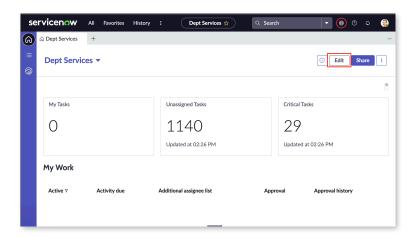
5. Select Done to configure the workspace



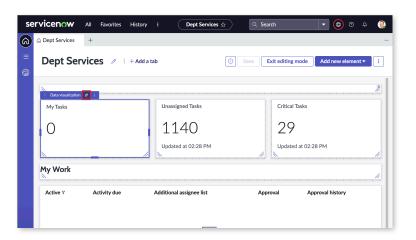
6. Find your newly created Workspace in the list of Experiences and click Preview



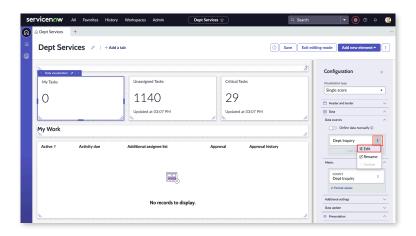
7. Once the workspace loads, click the Edit button in the top right



8. Click on the My Tasks data visulization and click the Configure icon



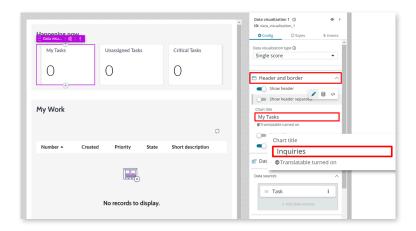
9. On the Configuration pane, find Data and Data Sources and click on the ... next to Dept Inquiry then click Edit



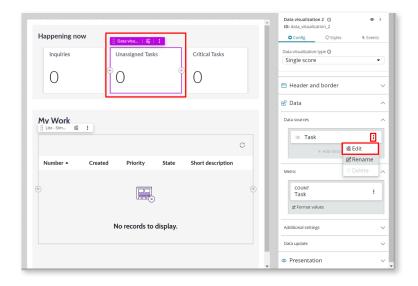
10. Select Edit in the upper right. Remove the Assigned to condition by selecting the [X] and select Apply to save changes



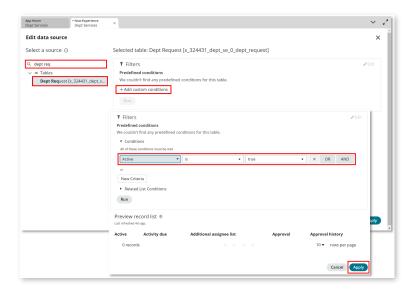
11. Now we will change the title from My Tasks to Inquiries. You may need expand the Header and border section on the right pane\ Change the Chart title field from My Tasks to Inquiries



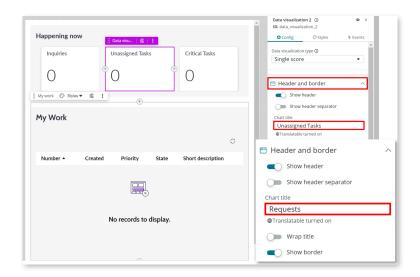
12. Select the Unassigned Tasks Data visualization and edit by selecting the ellipsis and Edit



13. Enter dept request in the upper left Select a source search box Select the Dept Request table\ Select + Add custom conditions and add the condition Active is true as shown below\ Select Apply

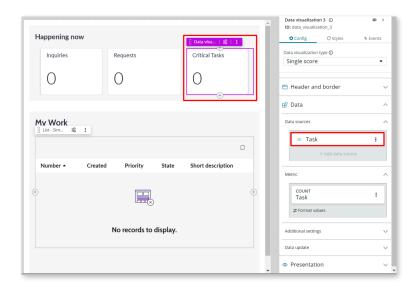


14. Change the Data visualization from Unassigned Tasks to Requests in the Chart title field using the same steps as last time

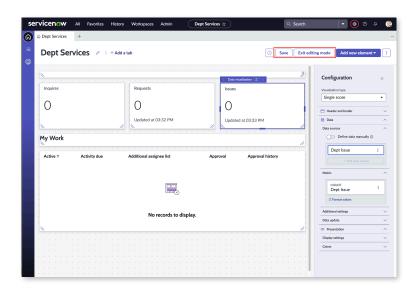


- 15. Finally, we will change the Critical Tasks Data visualization using the same steps
 - · Edit the Task Data source

- Change the table to Dept Issues
- · Add the condition Active is true
- Change the Chart title from Critical Tasks to Issues



16. Click Save then Exit editing mode to finish



Department Request Record

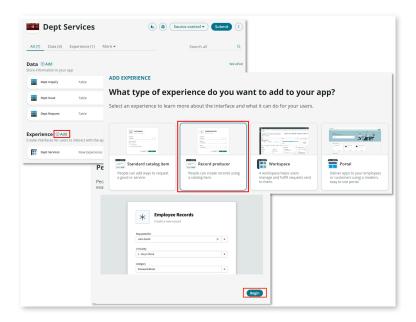
Producer

Introduction

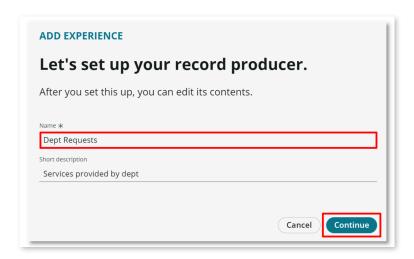
Now that we have a data model created and our workspace experience ready to go, let's create some record producers so we can start getting some data into those tables. You can think of a record producer as an end user facing form to collect all necessary data to complete a request, address an issue, or answer an inquiry.

Let's start

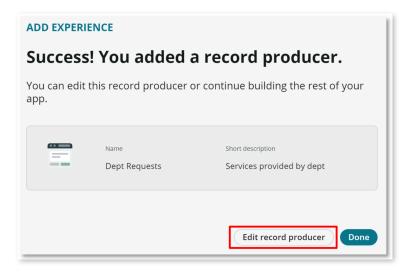
1. Select the (+) Add link in the Experience Section Select the Record Producer experience Then select Begin on the confirmation screen



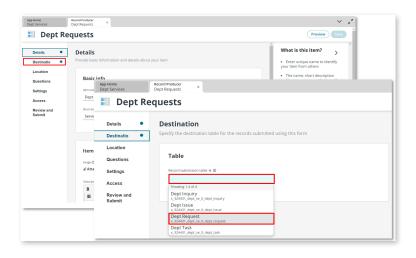
2. Enter Dept Requests in the name field and provide a Short Description Select Continue



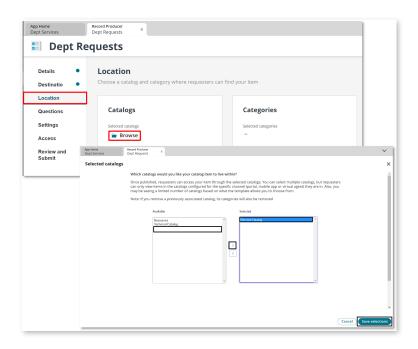
3. Select Edit record producer



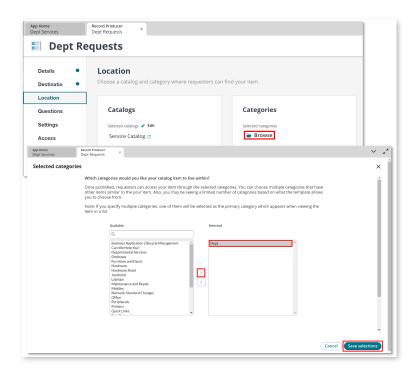
4. Select Destination on the left. Set the Record submission table field to Dept Request



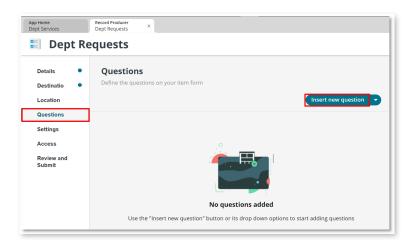
5. Select the Location link on the left and then the Browse link\ Move Service Catalog from Available to Selected\ Select Save selections



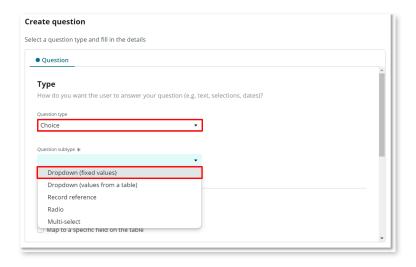
6. Select Browse in the Categories section\ Move Dept from Available to Selected\ Select Save selections



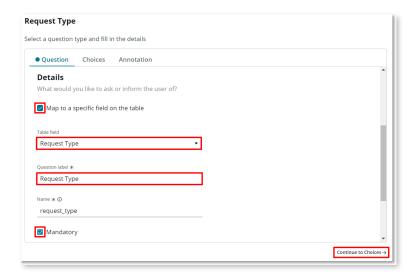
7. Select the Questions link on the left\ Select Insert new question



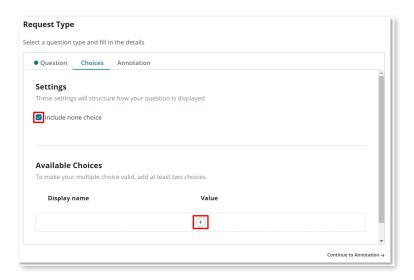
8. Set the Question type to Choice\ Set the Question subtype to Dropdown (fixed values)



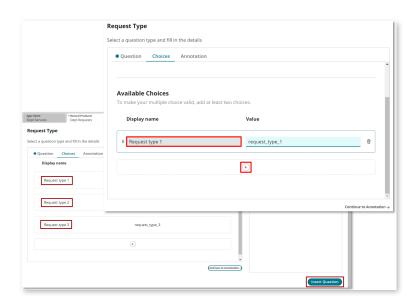
9. Check Map to a specific field on the table\ Choose Request type for the Table field\ Enter Request Type for the Question label\ Check Mandatory You may need to scroll down to see all fields Select Continue to Choices ->



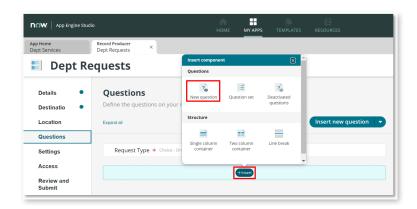
10. Check the Include none choice Check (+) to start adding Choices



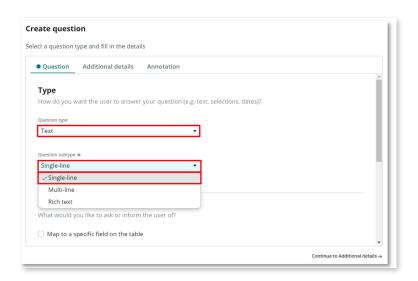
11. Enter the Display name for each of Request Type choice that you added to the Dept Request table earlier\ Select Insert Question when all choices have been added



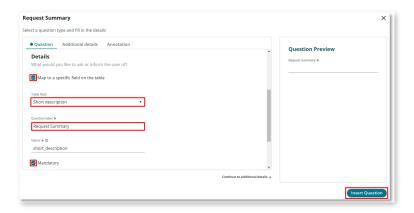
12. Select + Insert\ Select New Question



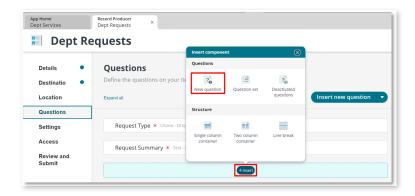
13. Set the Question type to Text\ Set the Question subtype to Single-line



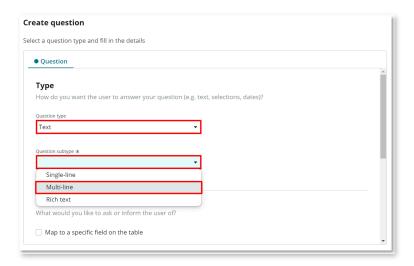
14. Check Map to a specific field on the table\ Choose Short Description for the Table field\ Enter Request Summary for the Question label\ Check Mandatory You may need to scroll down to see all fields Select Insert Question



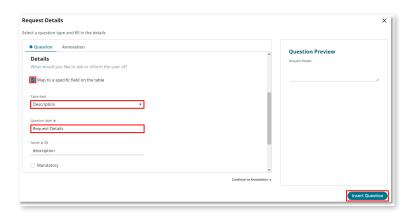
15. Select + Insert\ Select New question



16. Choose Text for the Question Type\ Choose Multi-line for the Question subtype

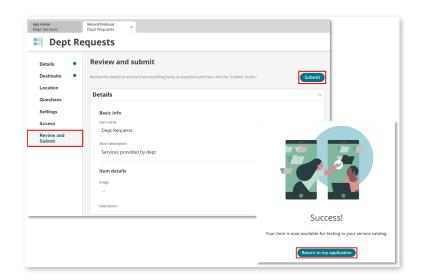


17. Check Map to a specific field on the table\ Set the Table field to Description\ Set the Question label to Request Details



Select **Insert Question**

18. Select the Review and Submit link on the left and then the Submit button on the right\ Select Return to my application

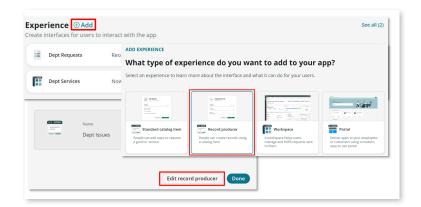


Department Issue Record Producer

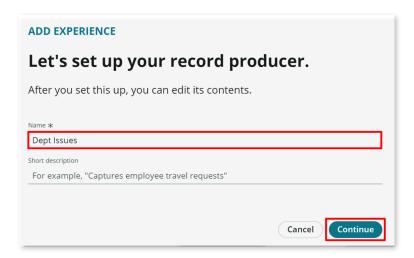
We'll repeat most of the same steps as before, but this time for our Issue task type.

Let's start

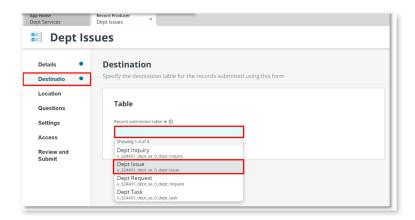
1. Select (+) Add and the choose the Record producer experience\ Select Edit record producer



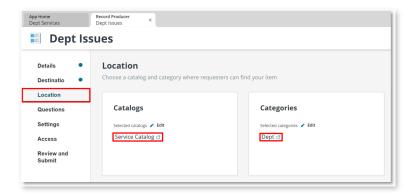
2. Enter Dept Issues in the Name field\ Provide a Short description\ Select Continue



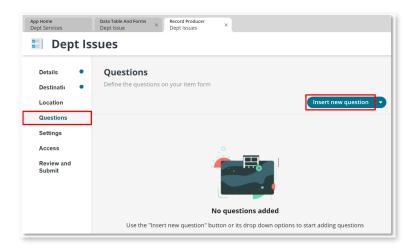
3. Select the Destination link on the left\ Set Record submission table to Dept Issue



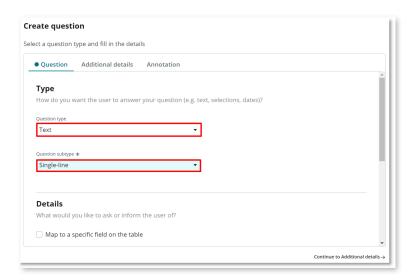
4. Set Service catalogs to Service Catalog and Selected categories to Dept as before



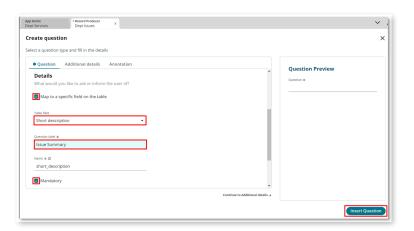
5. Select the Questions link on the left\ Select Insert new question



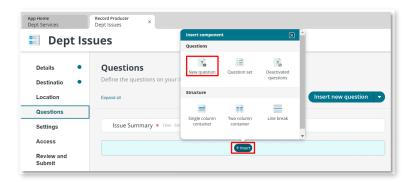
6. Set the Question type to Text\ Set the Question subtype to Single-line



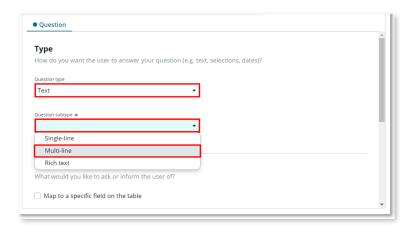
7. Check Map to a specific field on the table\ Set the Table field to Short Description\ Set the Question label to Issue Summary\ Select Insert Question

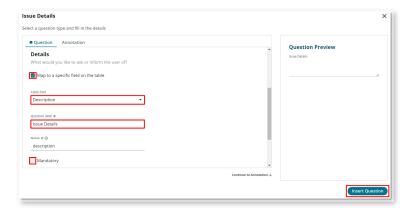


8. Select + Insert\ Select New question

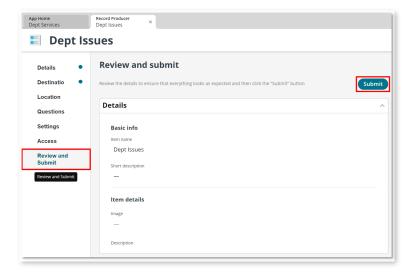


9. Set Question type to Text\ Set Question subtype to Multi-line\ Set the Question label to Issue Details\ Select Insert Question





10. Select the Review and Submit link on then left and then the Submit button on the right\ Select Return to my application



Department Inquiry Record

Producer

Introduction

Repeat the steps used to create the Dept Issue record producer. The only difference is that you will set the Destination Record submission table to Dept Inquiry.

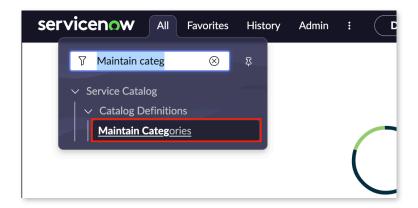
Create a Service Catalog category

Introduction

Before we can publish our services to the Employee Center, we need to create a category in our Service Catalog so our employees can easily find our newly created services.

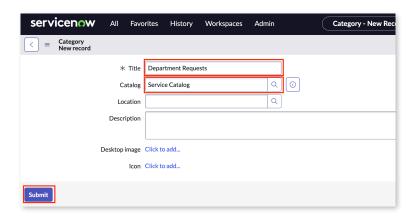
For this exercise, we'll briefly hop back over to our instance and create the needed category.

1. Navigate to All > Maintain Categories



- 2. Click New
- 3. Enter Department Requests for Title
- 4. Enter Service Catalog for Catalog

5. Click Submit



Employee Center Configuration

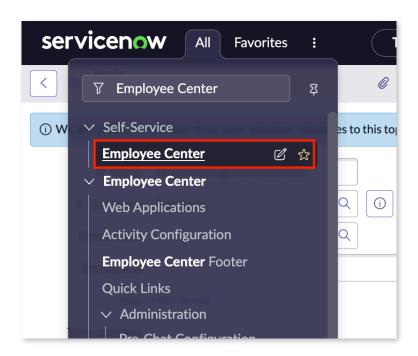
ServiceNow Employee Center portal is a standard multi-department, dynamic portal for service delivery and employee engagement.

Employee Center portal also enables customers to easily scale their service solutions across departments, such as IT, HR, Workplace, Legal, and Procurement with digital workflows. This unified portal goes beyond the basic service delivery to provide a platform for communications, engagement, and content experiences with Employee Center Pro subscription.

Submit a Dept Request from the

Employee Center Portal

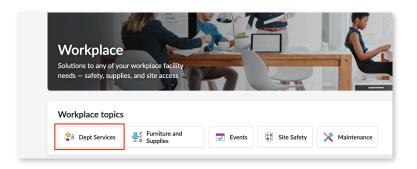
- 1. Return to the platform view probably open in another tab.
- 2. Enter Employee Center in the Filter Navigator and select Employee Center under Self-service



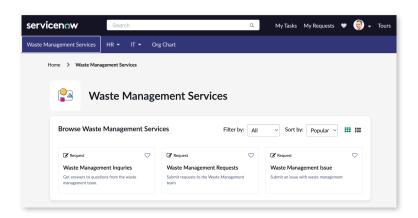
Employee Center will open in a new browser tab.

3. On the main EC portal page, click on Workplace then Browse all Workplace

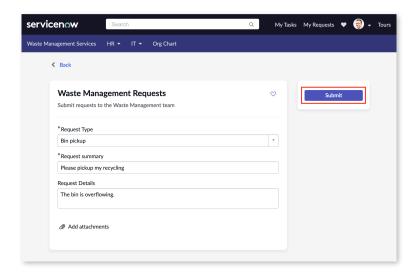
you will see your new Topic published similar to the screenshot below. YMMV based on your chosen Topic name and portal branding.



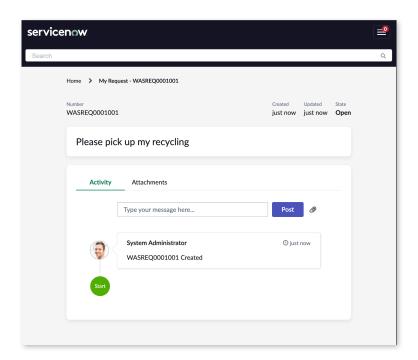
4. Click on your topic to view the record producers we creating in the last exercise.



5. Test the Dept Request item by clicking on the tile, completing the required fields and clicking **Submit**

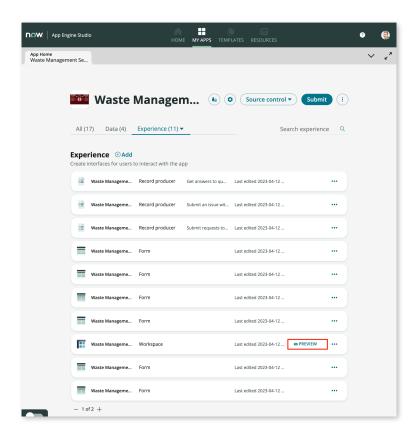


Portal view for the requester



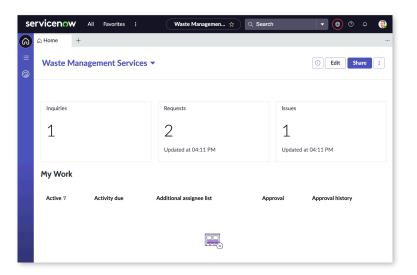
6. Repeat this process for the other items as many times as you'd like

7. Once you've finished with your form testing, navigate back to App Engine Studio (in another tab) and preview your Workspace again.

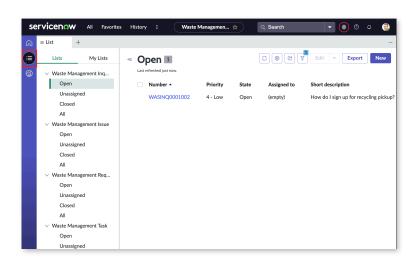


You may have to click See all to show the workspace in the list

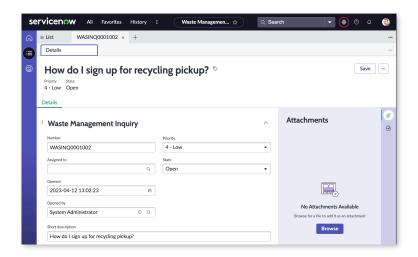
8. Notice the workspace now has data available in the data visualizations we edited in the beginning of the lab



9. Click on the List icon on the left of the workspace to view the list options available by default



10. Click on any record in a list to view the details



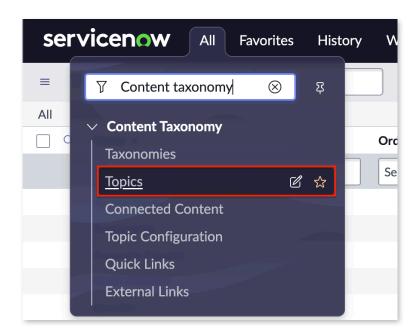
And that's a wrap! Feel free to continue to create new services, tables, and/or experiences for your app! The power is in your hands. And if you're feeling brave, try out our bonus exercises!

Create an Employee Center topic

Introduction

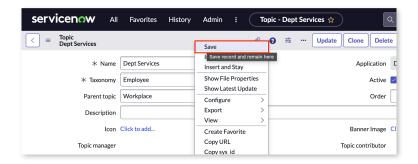
Now that we have our category and out entry forms, we can create our Employee Center Topic and relate that content to our topic.

1. Navigate to All > Content Taxonomy > Topics

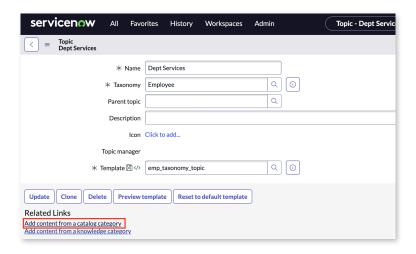


- 2. Click New
- 3. Enter Dept Services for Name

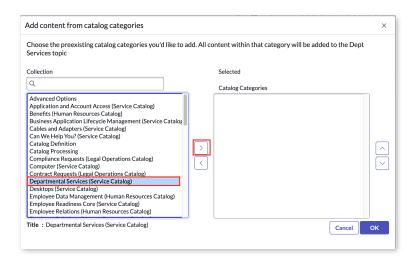
- 4. Enter Employee for Taxonomy
- 5. Enter Workplace for Parent topic
- 6. Right-click on the header and click **Save** to create the record and stay on the page.



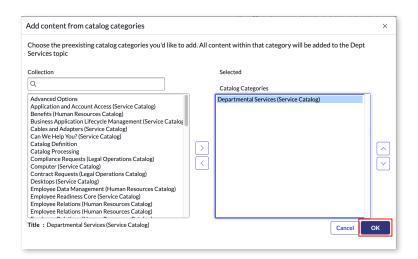
7. Under Related Links click Add content from catalog category



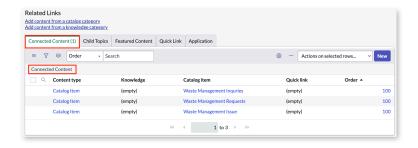
8. Find and select the category you created in the last exercise and move it to the Catalog Categories list on the right.



9. Click OK



10. Click on the Connected Content tab below Related Links and refresh the list by clicking the filter link. Once the list refreshes, you should see your record producers we created listed.



That's it! Now we test our newly created services in Employee Center!

Lab Bonus Exercises

So you made it this far and you wanna go a little further.. I don't blame you. Building apps is super fun afterall.

Try out the exercises below to get a feel for how we can add dynamic behaviors to forms and build a simple approval workflow for our services.

Add dynamic behavior to the Dept

Requests Record Producer

Dynamic behaviors allow you to control whether fields on a form are

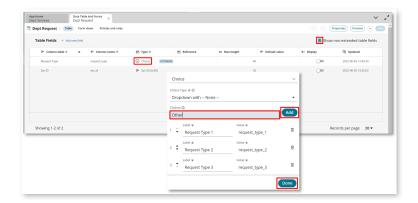
- mandatory
- visible
- · read-only

based on how the user has responded to other fields on the form. This is an important feature that can help your users understand how to complete a form and provide the information the Dept needs to fulfill services, respond to inquires and remediate issues.

1. Select the ellipses(...) on the Dept Request table and then Edit when the dropdown appears.\



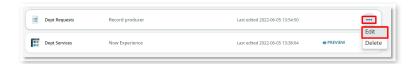
2. Select the Show non-extended table fields checkbox in the upper right.\
Select the Choice Type option on the Record Type field.\ Enter Other as a new Choice and then select Add.\ Select Done.



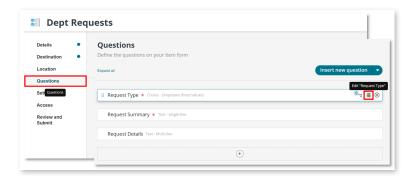
3. Return to the App Home tab and select the Experiences tab.



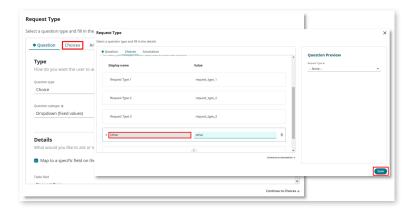
4. Select the ellipsis(...) for the Dept Requests Record Producer and the Edit option on the drop down.



5. Select the Questions option on the left side. Hover over the right side of the Request type question and select the middle Edit "Request ype" option.



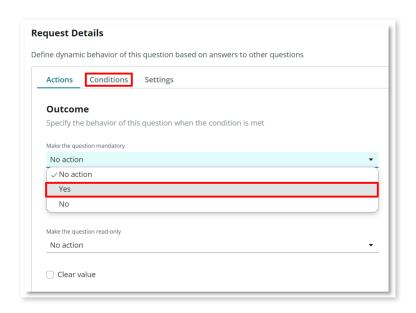
6. Select the Choices tab. Scroll down to the bottom of the Choices list and add a new option Other. Select Done in the lower right.



7. Hover over the right side of the Request Details question. Select the leftmost Dynamic Behavior button. Select Define new Behavior.



8. Select the Make the question mandatory dropdown. Select the Yes choice. Select the Conditions tab.

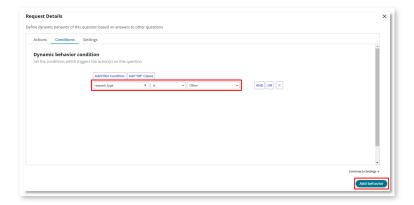


9. Set field to request_type.

Set operator to is.

Set value to Other.

Select Add behavior in the lower left.

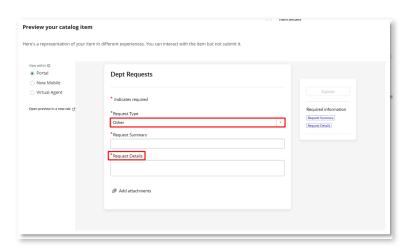


10. Select Preview in the upper right to view how the Dept Request will behave in

the Employee Center Portal.



11. Change the Request Type to Other Notice how the Request Details question is marked as mandatory Change the Request Type to another value Notice how the Request Details question is no longer mandatory



- 12. Exit the preview and select Review and Submit on the left
- 13. Select the Submit button on the upper right The changes from this exercise are now available on the Employee Center Portal

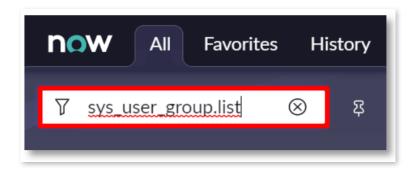
Add Flow and Approval

Utilizing Record Producers on an Employee Center Portal allows consumers (employees) to connect with a department and to access the services the department provides. Workspaces provide a Dept-specific view for service fulfillment for department users.

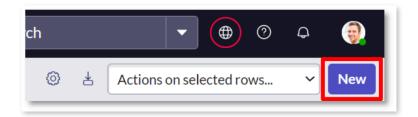
Now we will utilize Flow Designer to build a workflow to standardize the way that the department processes requests. We will configure the workflow to execute whenever a Dept Request is submitted. This workflow will request an approval from a Group of Users designated as Dept Request Approvers.

1. Exit App Engine Studio and return the platform. Select All.

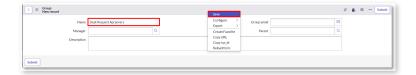
Type sys_user_group.list in the Filter Navigator textbox and press the Enter key.



2. The Groups list view will load displaying the existing Groups. Select the New option in the upper right.



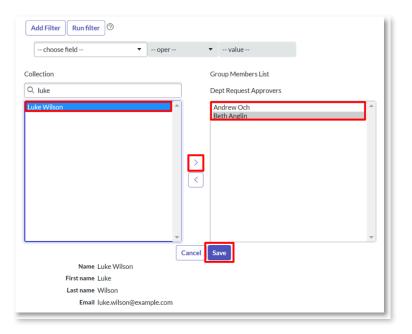
Enter Dept Request Approvers in the Name field.
 Right-click in the gray bar at the top of the form view and select Save.



4. Select the Group Members tab. Select the Edit button to add members.



- 5. Search for Users on the left side of the slush bucket. Use the [>] button to select add the User to the group. Add:
- Andrew Och
- Beth Anglin
- Luke Wilson
 Select Save



6. Repeat the steps to add a Role to the Group. This will grant access to the Dept Request Approvers members.

Select the Roles tab.

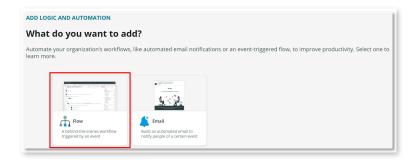
Add the user role for the Dept Services app. (Your role will have a slightly different prefix)



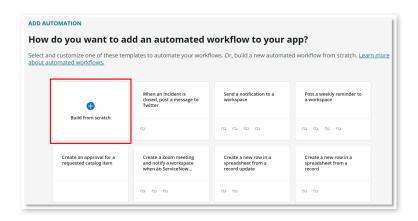
Return to the Dept Services app in App Engine Studio.
 Select the Logic and automation tab.
 Select the (+) Add option next to the Logic and Automation header.



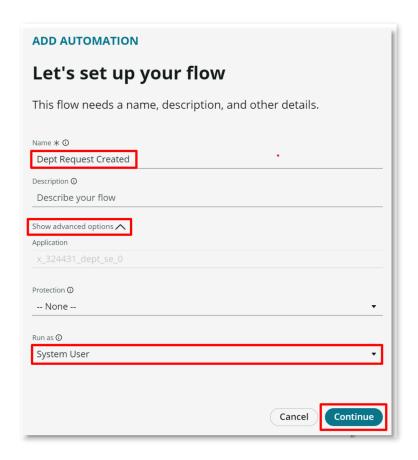
8. Select Flow when the next screen appears.



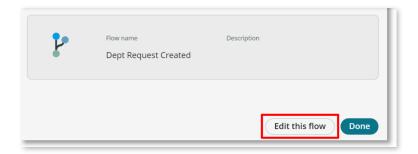
9. Select Build from scratch, you will not be using a flow template in the Dept Services app.



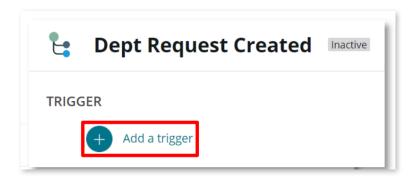
10. Enter Dept Request Created in the Name field Select Show advanced options Change Run as to System User Select Continue

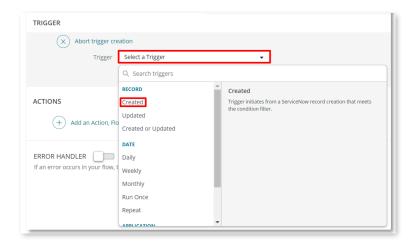


11. Select Edit this flow once the flow is ready



12. Select (+) Add a trigger. Set the Trigger to Created



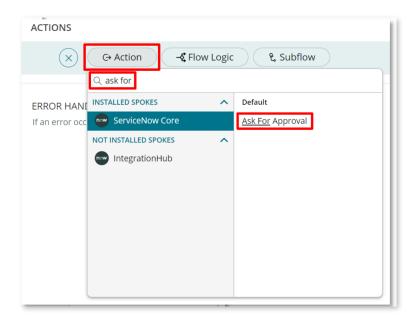


13. Set the Table to Dept Request.



14. Select (+) Add an Action, Flow Logic, or Subflow. Search for ask for Select Ask For Approval





15. Drag the Dept Request Record Data Pill from the right Data pane to the Record field.

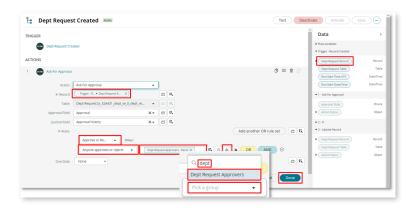
Set Approve to Approve or Reject

Set Choose approval rule to Anyone approves or rejects

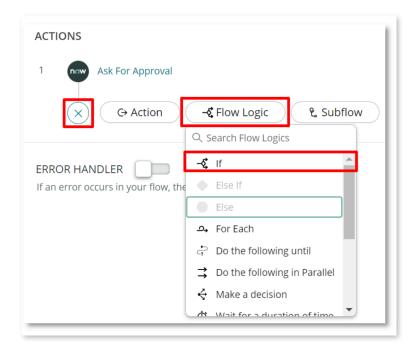
Select the middle Group button to assign the approval to open the group selector popup

Type dept and select Dept Request Approvers, the group created in a previous step

Select Done to save your changes



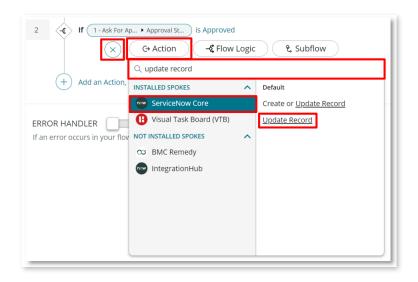
16. Select the (+) directly below the Ask for Approval action Select Flow Logic Select If when the popup appears



19. Drag the Approval State Data Pill from the right Data pane and drop on Drag and drop data pill in Accept the default is value Set the Select a choice to Approved Select Done

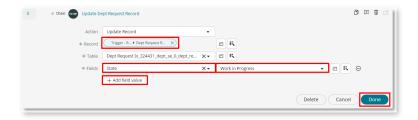


20. Select the (+) option below the If action that we just added. Make sure to select the (x) that is indented. This will ensure that it the action only will only run if the Dept Request is approved Select Action and search for update record in the popup Select the Update Record action



21. Drag the Dept Request record from the right Data pane and drag to the Record field

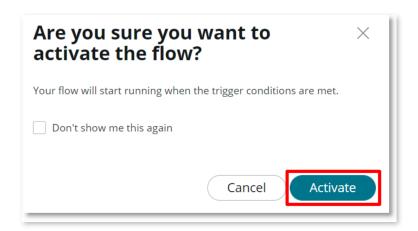
Select + Add field value. Set the field to **State** Set the value to **Work in Progress**



22. Select Activate in the upper right to set the flow as Active



Confirm by selecting Activate again when prompted



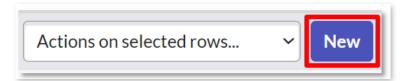
23. Return to the App Home tab
Select the ellipsis(...) for the Dept Request table
Select Edit



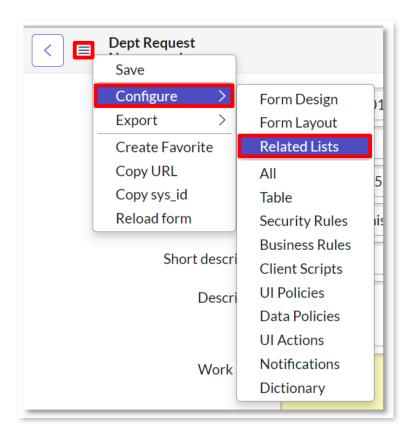
24. Select Preview in the upper right when the Dept Request tab opens



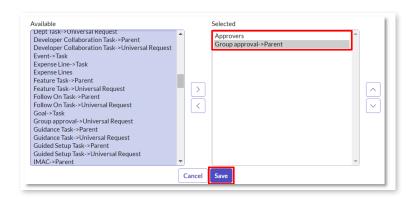
25. Select the New button in the upper right once the Preview opens



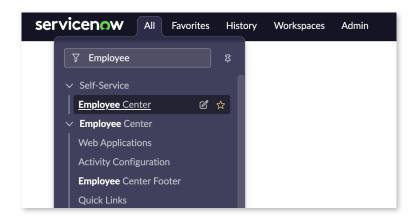
26. Select the hamburger (three stacked lines) button in the upper left Select Configure > Selected Related Lists



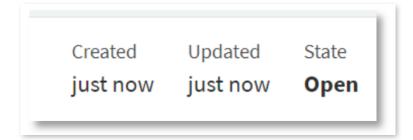
27. Select Approvers Select Group approval->Parent Select Save



28. Return to the platform tab
Search for and click Employee Center



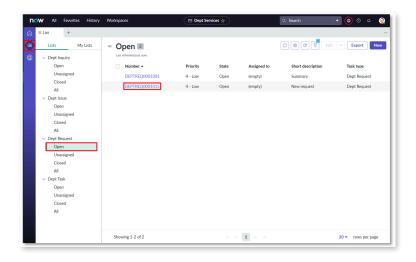
- 29. Search for Dept Requests
- 30. Fill out the required fields and click Submit
- 31. Notice how the **State** is **Open** when the confirmation screen opens. Leave this tab open.



32. Return to App Engine Studio and select PREVIEW to open up the Workspace in the Experience section.

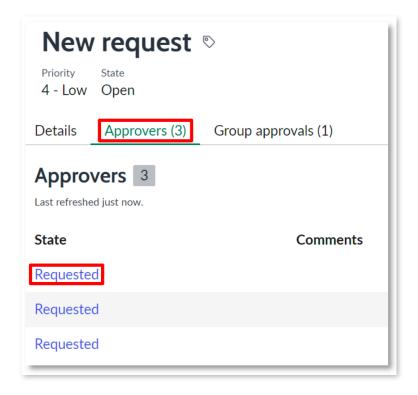


33. The Workspace will open in a new tab Select the List button in the upper left Select Open in the Dept Request section Select the newest Dept Request. It will have the largest number.

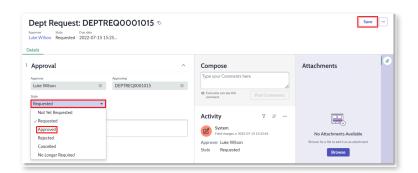


34. Select the Approvers (3) tab

Select Requested** to open the first approval request



35. Set the State field to Approved Select Save in the upper right



36. Return to the browser tab where the confirmation screen is displayed in Employee Center
Observe how the State has changed to Work in Progress.

Created Updated State

23m ago 23m ago **Work in Progress**

Lab Review

Thank for you completing this Employee + Creator Workflows lab!

In this lab you:

- Used App Engine Studio for low-code app development
- Extended the Task table to create multiple services
- · Configured a Topic and Category in Employee Center for a new department
- Created Record Producers and published to the Service Catalog
- Generated a Workspace for department specific service fulfillment

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