Lab Guide

Automating ITSM with Graphical Workflow

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Default Login / Password:

admin / Knowledge17

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Lab Goal

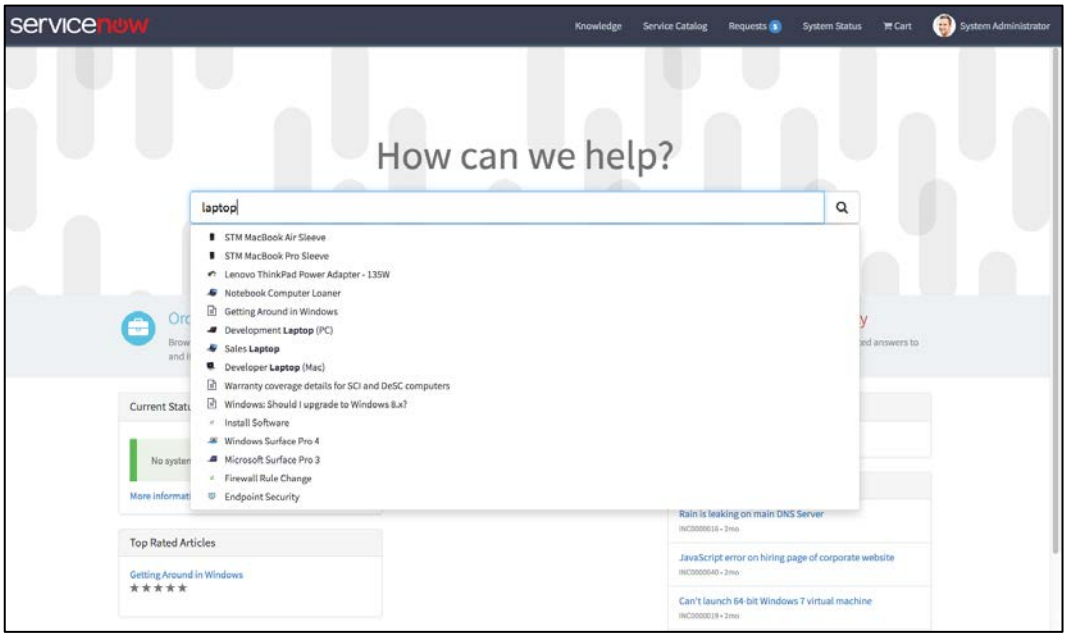
Lab 1.0 Trigger a Workflow

This lab reviews the use of workflow within ITSM. This lab explains how to:

- Submit a request from the Service Portal
- Observe the user view of workflow stages
- Open the request record, as an IT analyst
- Review the workflow context
- Observe the workflow in motion

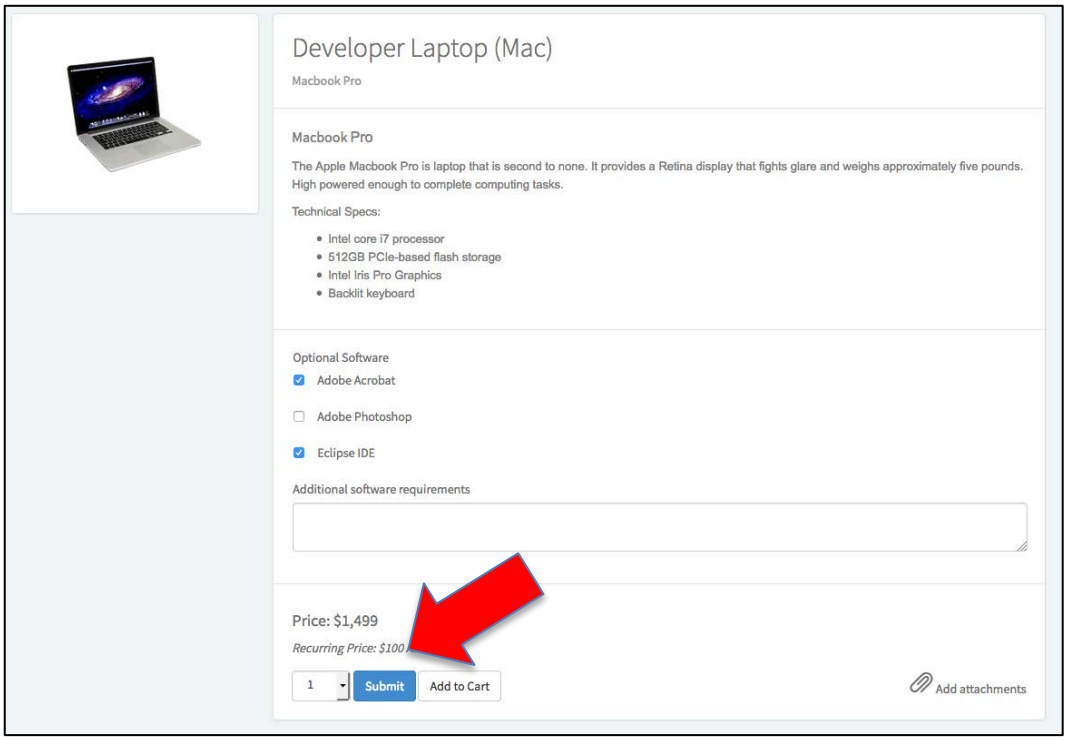
Submit a Request from the Service Portal

1. In a new browser tab, navigate to the Service Portal for your instance.
2. <instance name>**/sp**.
3. In the search bar, type **laptop**.



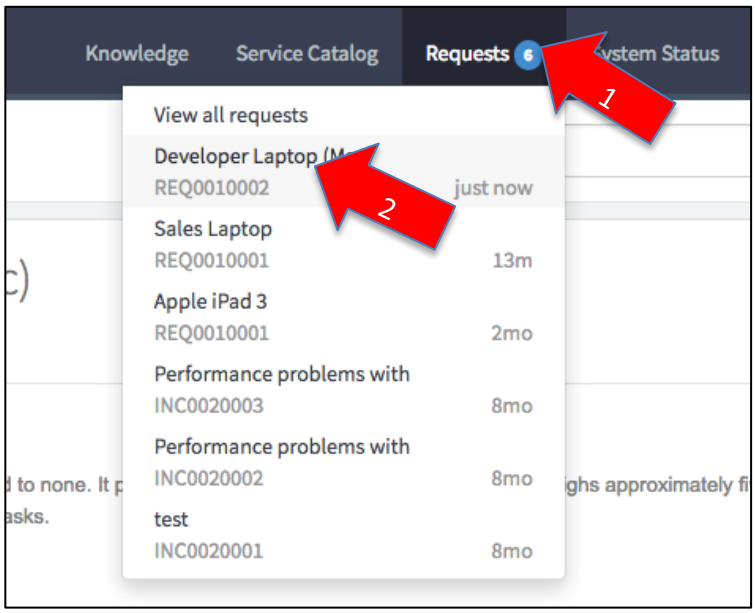
4. Select **Developer Laptop (Mac)** from the list.

5. Choose any options from the Catalog Item, and then click **Submit**.

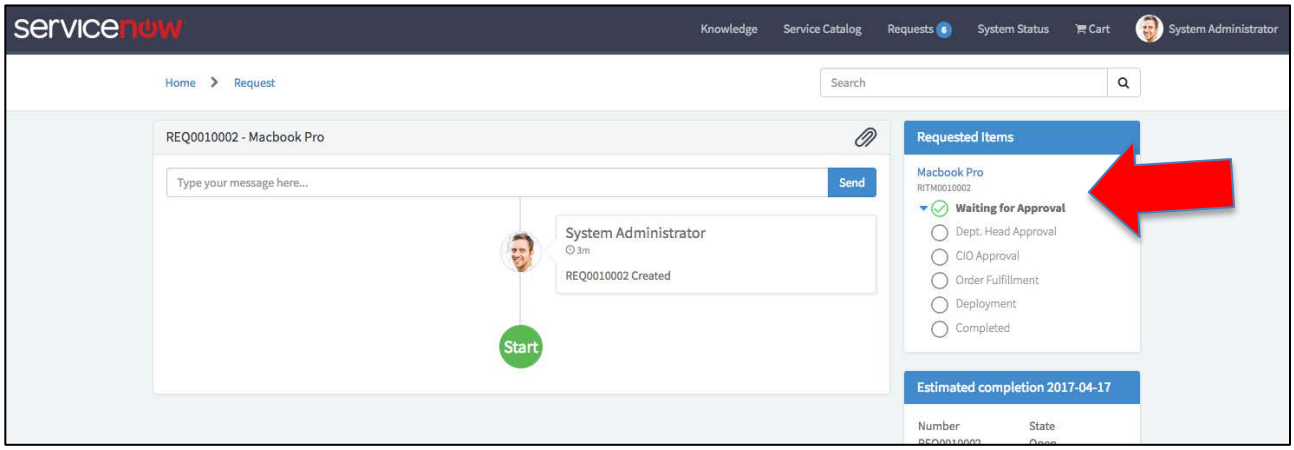


Observe the Workflow Stages, as a User

1. Click on **Requests** on the Service Portal header, and select the **Developer Laptop (Mac)** that you requested.



2. Notice that a workflow has started the process of managing the request on your behalf. Your request has been submitted, and is already awaiting your approval

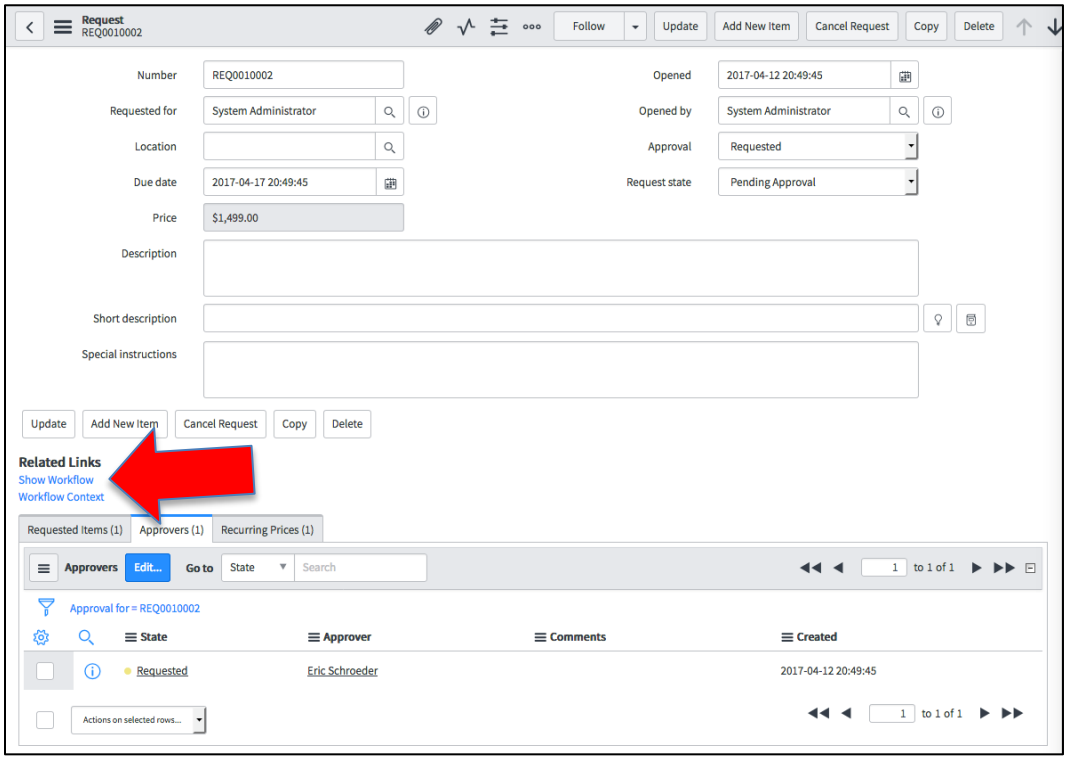


Open the Request, as an IT Analyst

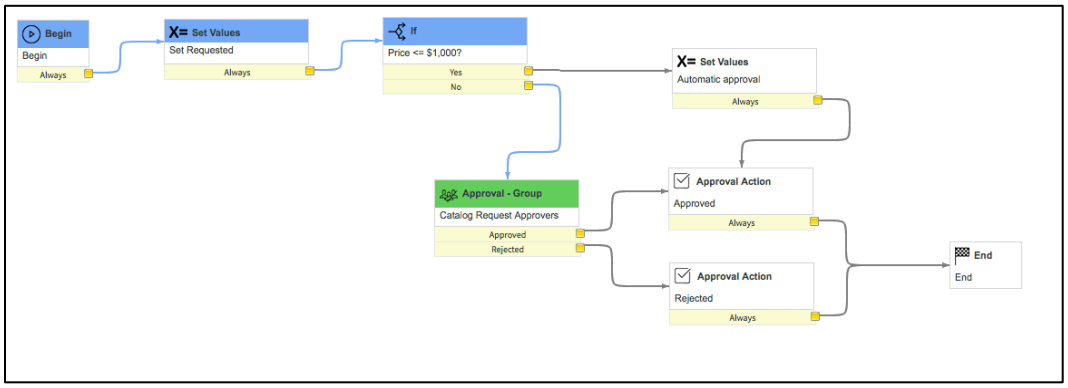
1. Make a note of the REQ number of the request that was opened in the above step.
2. In the role of an IT analyst, navigate to your initial browser tab that shows the native interface (instead of the Service Portal).
3. Navigate to **Service Catalog > Open Requests > Requests**.
4. Select the Request number that was created in the earlier step.

Review the Workflow Context

1. In the Related Links section of the form, select the **Show Workflow** link.



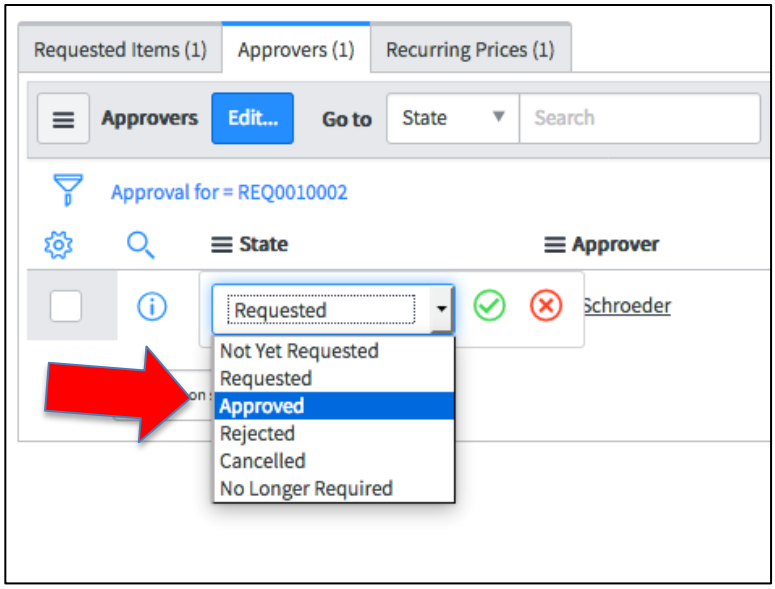
2. A new window opens, displaying the current status of the Workflow Context.



3. The workflow is currently awaiting approval, before it can proceed.

Observe the Workflow in Motion

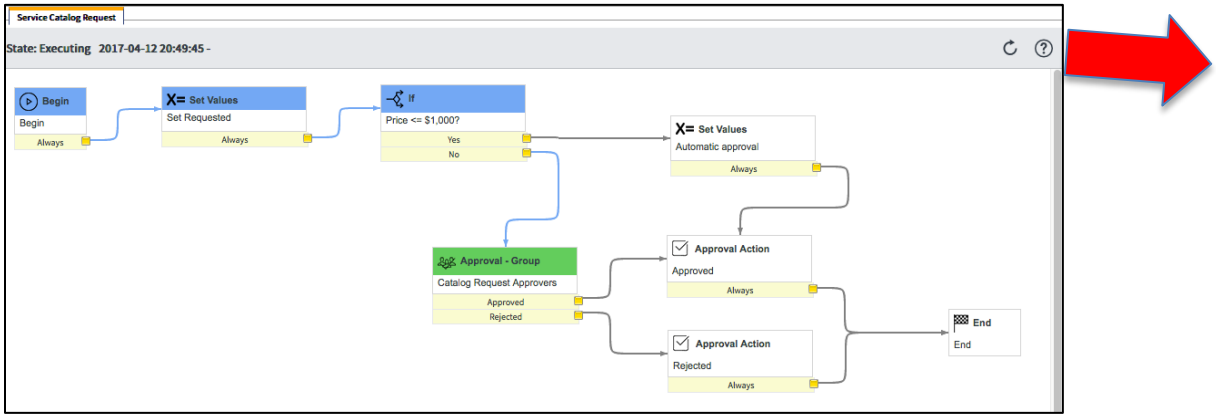
1. Navigate to the tab that has the Request record open.
2. Select the **Approvers** tab from the related list at the bottom of the form.
3. Double-click the **Requested** state, and change the state to **Approved**.



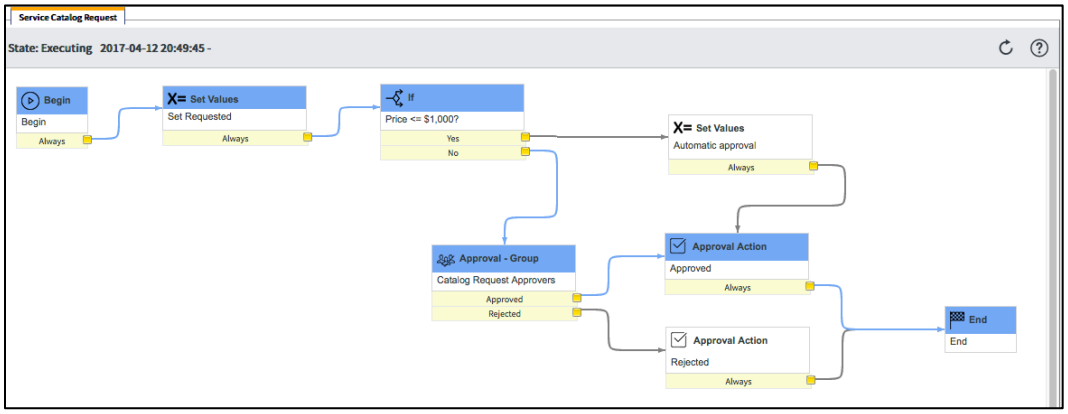
4. Click the green checkmark to the right of the field, to save the change to the State field.

5. Navigate to the tab with the Workflow open.

6. Click the **refresh** icon, in the top-right corner.



7. BOOM! The updated workflow context shows that this workflow has completed successfully!



Lab Goal

Lab 2.0 Workflow Refresher

This lab explains how to update an existing, out-of-the-box workflow. This lab includes the following tasks:

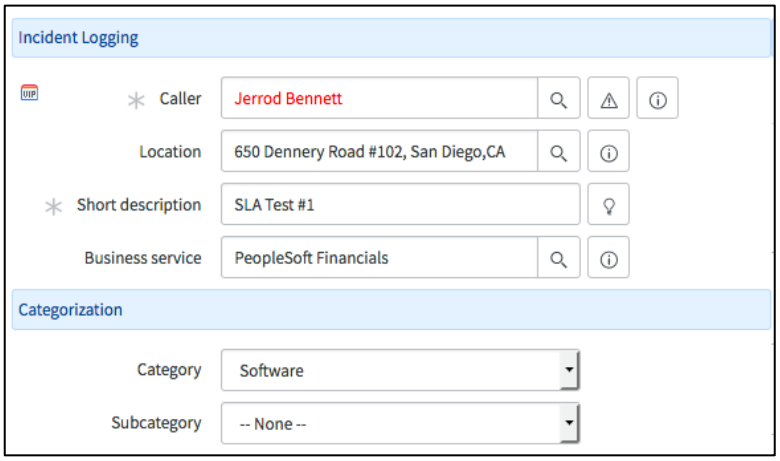
- Test the existing workflow
- Check out the **Default SLA workflow**
- Modify this workflow to include additional steps for **functional escalation**
- Publish the workflow

Test the Out-of-the-Box Workflow

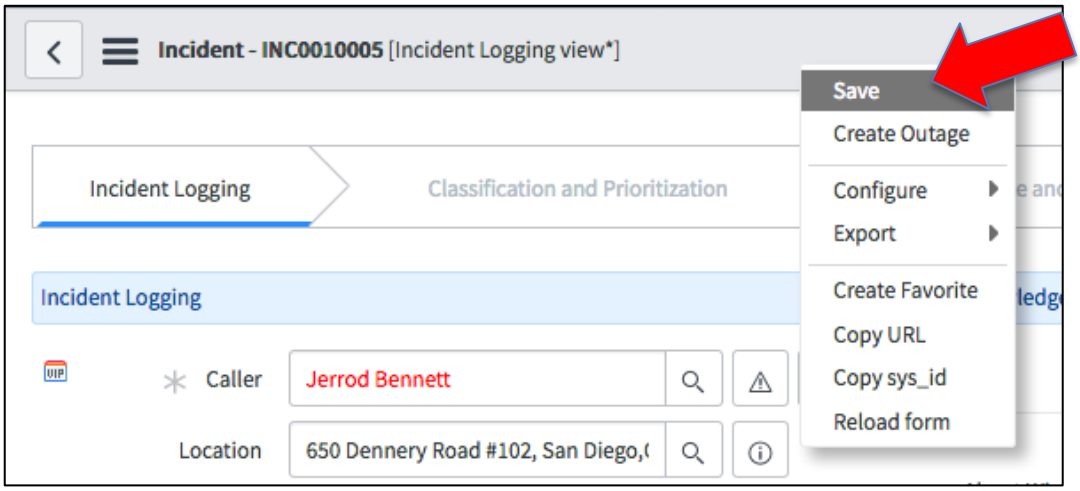
1. Navigate to **Incident > Create New**.

2. On the form, fill out the following information:

   Caller: **Jerrod Bennett**
   Short Description: **SLA Test #1**
   Business Service: **Peoplesoft Financials**
   Category: **Software**

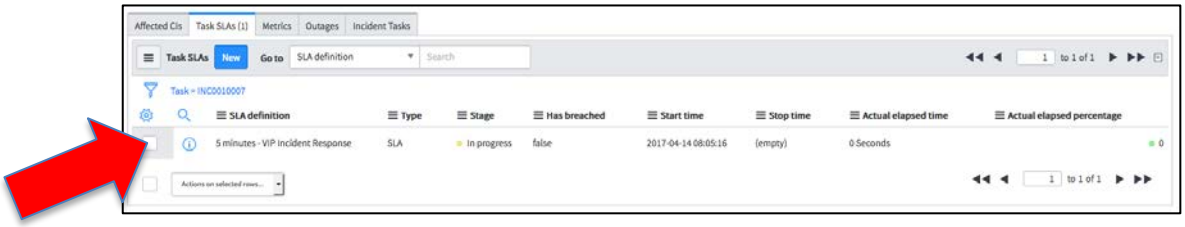


3. Right-click the header of the incident form, and select **Save**.

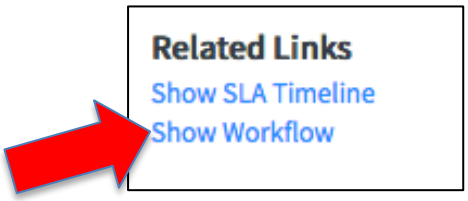


4. Navigate to the bottom of the Incident Form, and find the **Task SLAs** related list.

5. Click the **Information** icon next to the active SLA, to open the Task SLA form.

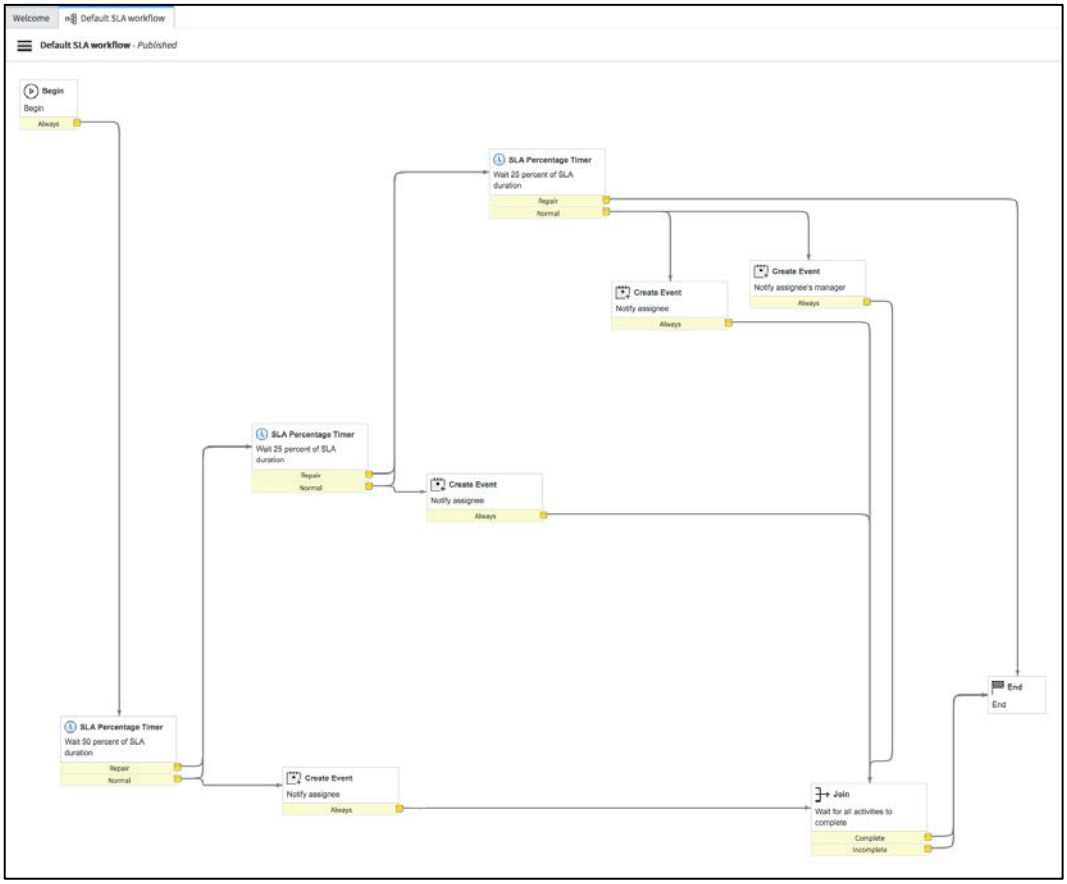


6. On the Task SLA form, click the **Show Workflow** link within the Related Links section, at the bottom of the form.



7. In the new browser tab that opens, review the Out-of-the-Box Default SLA workflow.

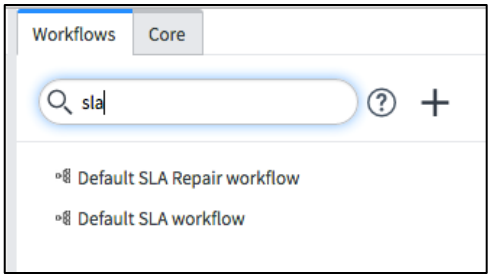
8. Notice that the workflow is simple in design and does not include Functional or Hierarchical escalation (beyond the manager of the assigned to resource).



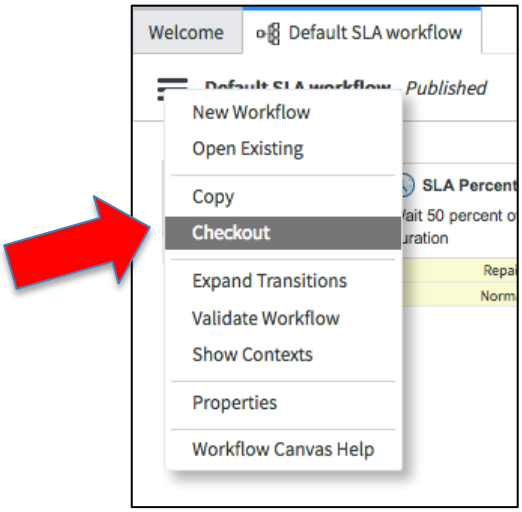
9. When finished reviewing, close this browser tab.

Modify Default SLA workflow

1. Navigate to **Workflow > Workflow Editor**.
2. In the new browser tab that opens, search for the **SLA workflow** within the **Filter Workflows** search box.

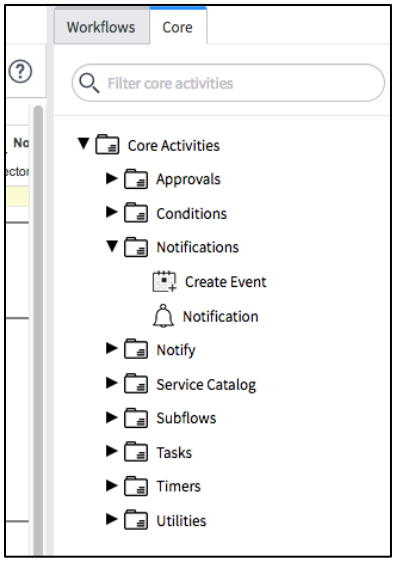


3. Select **Default SLA workflow** from the search results.
4. Click on the **hamburger** menu icon, and select **Checkout**.



Modify the Workflow with an Assignment Group-Based Functional Escalation

1. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

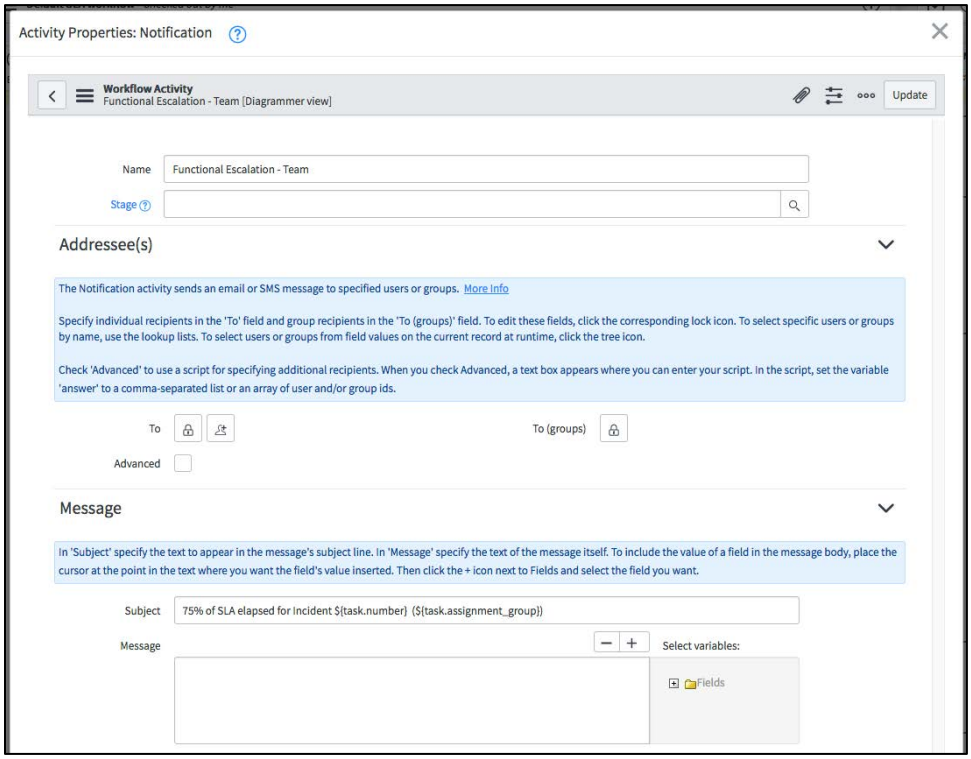


2. Expand the Notifications item from the list, and drag and drop the **Notifications** activity onto the Workflow Canvas.

3. Complete the Activity Properties, Notification form with the following information:

   Name: **Functional Escalation – Team**
   Subject: **75% of SLA elapsed for Incident ${task.number} (${task.assignment_group})**

   Note: The variable values indicated with **${task.x}** above, can be dynamically selected from Select Variables, instead of having to know the field names.

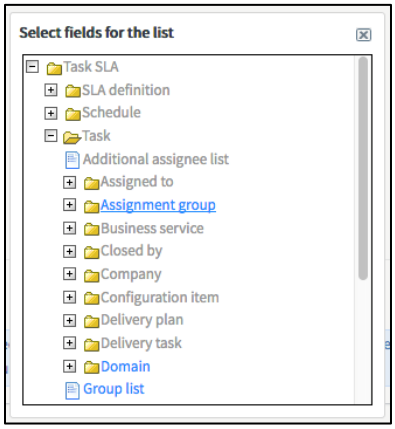


4. In the Addressee(s) section of the form, click the **lock** icon next to the **To (groups)** field.

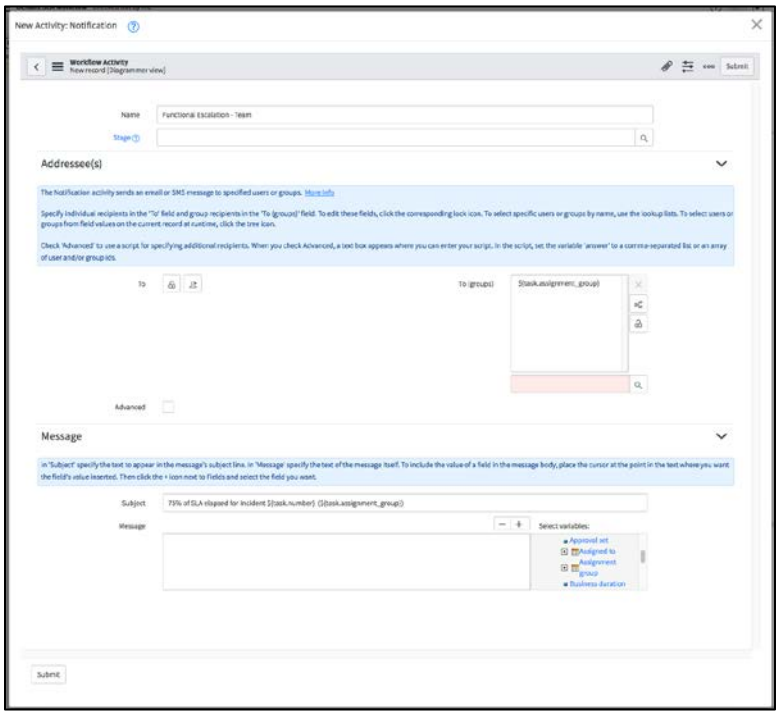
5. In the Addressee(s) section of the form, click on the **Select Fields** icon.



6. Navigate through the tree structure, and select the **Assignment Group** field within the **Task SLA>Task** folder.



7. Select **Submit** on the Activity Properties, Notification Form.



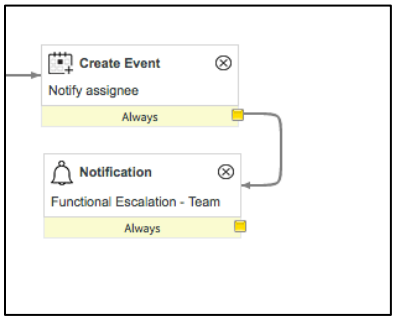
8. Drag and drop the **Functional Escalation – Team** activity close to the first SLA 25% timer.

9. Click and drag a connection line from the **Notify assignee** activity to the **Functional Escalation – Team** activity.



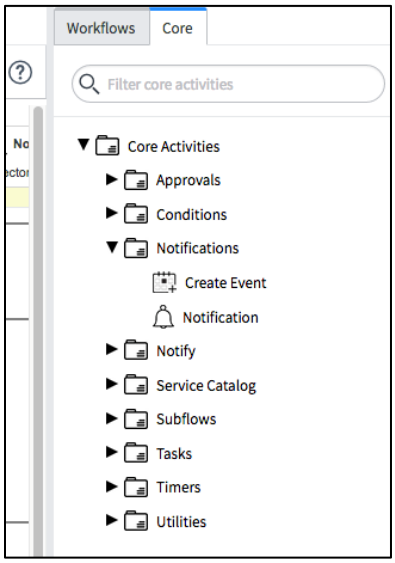
10. Click the connection from the **Notify assignee** activity that connects to the **Join** activity.

11. Once the connection is highlighted in blue, click **delete** on your keyboard to remove the connection.



Modify the Workflow with a CI Support Group-Based Functional Escalation

1. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

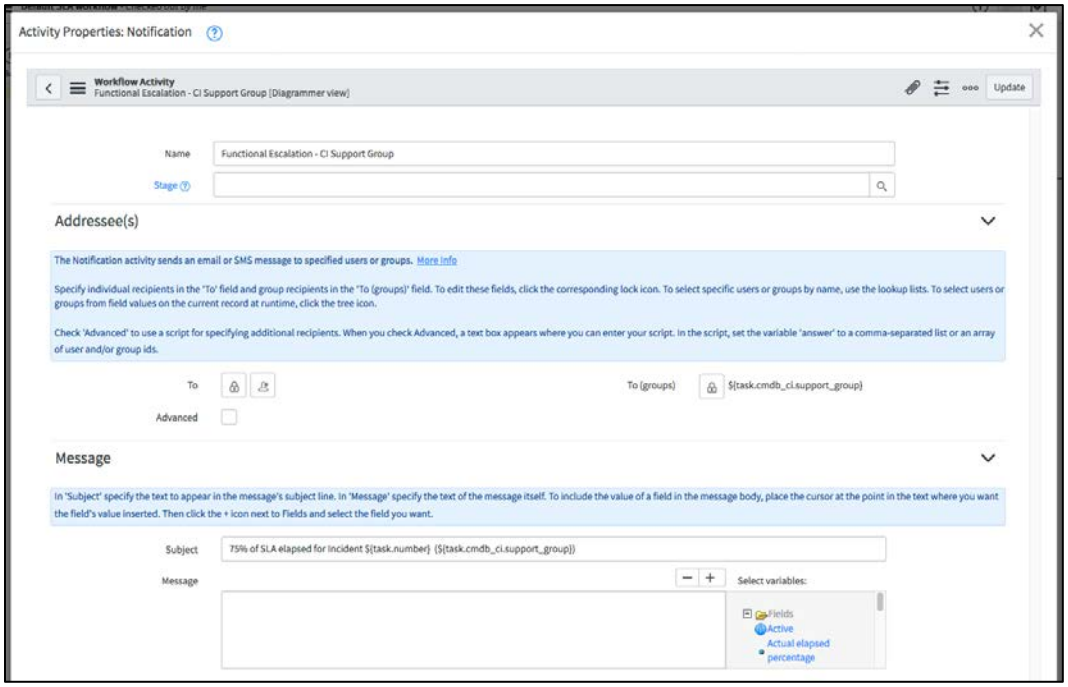


2. Expand the Notifications item from the list, and drag and drop the **Notifications** activity onto the Workflow Canvas, below the **Functional Escalation – Team** notification activity.

3. Complete the Activity Properties, Notification form with the following information:

   Name: **Functional Escalation – CI Support Group**
   Subject: **75% of SLA elapsed for Incident ${task.number} (${task.cmdb_ci.support_group})**

   Note: The variable values indicated with **${task.x}** above, can be dynamically selected from Select Variables, instead of having to know the field names.

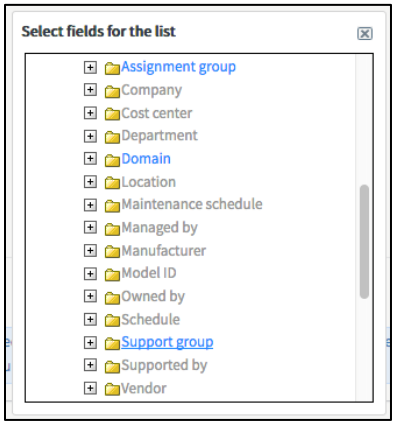


4. In the Addressee(s) section of the form, click the **lock** icon next to the **To (groups)** field.

5. In the Addressee(s) section of the form, click the **Select Fields** icon.



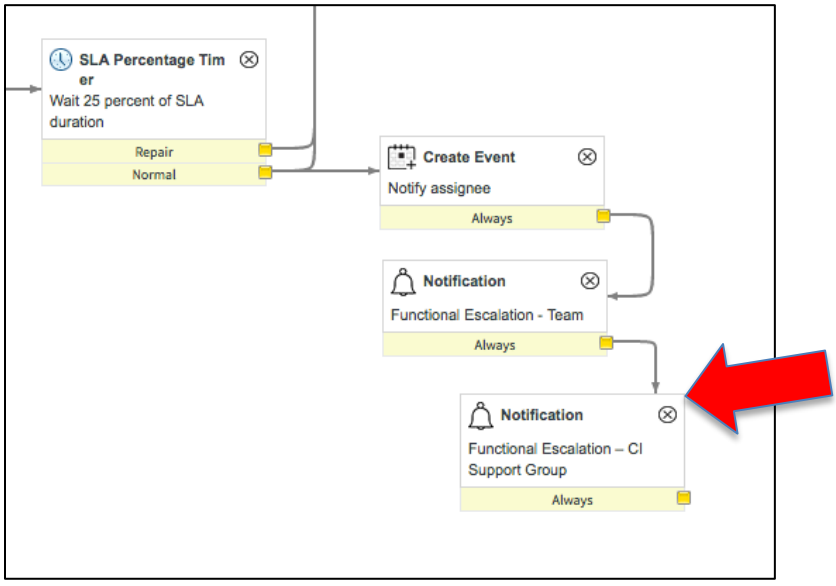
6. Navigate through the tree structure, and select the **Support Group** field within the **Task SLA>Task>Configuration Item** folder.



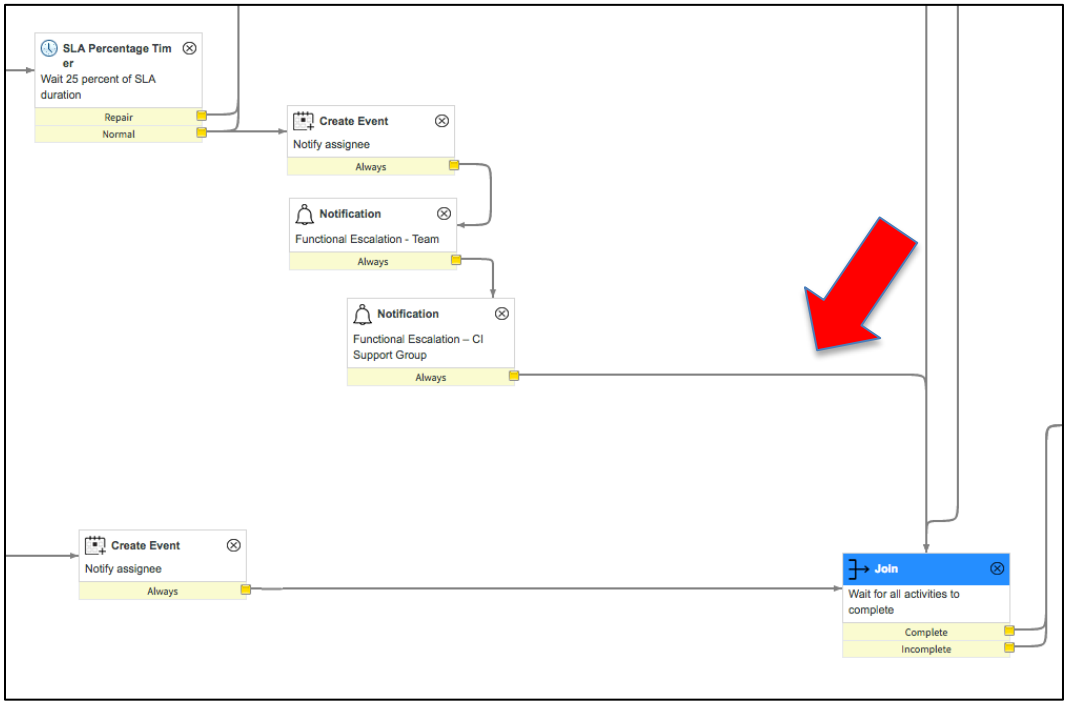
7. Select **Submit** on the Activity Properties, Notification Form.

8. Drag and drop the **Functional Escalation – CI Support Group** activity close to the **Functional Escalation – Team** activity.

9. Click and drag a connection line from **Always** on the **Functional Escalation - Team** Notification activity to the **CI Support Group** notification activity.

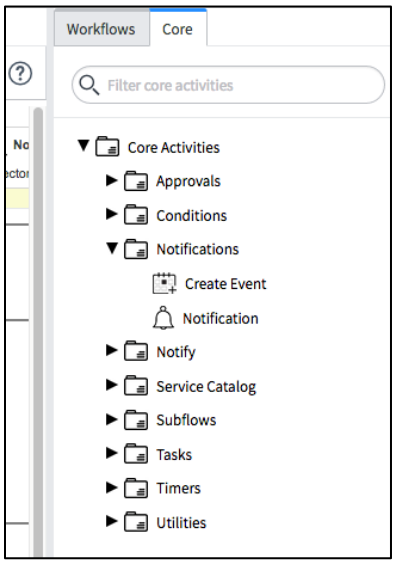


10. Click and drag a connection line from **Always** on the **Functional Escalation – CI Support Group** Notification activity to the **Join** activity.



Modify the Workflow with Additional Hierarchical Escalation

1. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



2. Expand the Notifications item from the list, and drag and drop the **Notifications** activity onto the Workflow Canvas.

3. Complete the Activity Properties, Notification form with the following information:

   Name: **Director Level Notification**
   Subject: **SLA Breached for ${task.number}**
   Message: Task Number: ${task.number}
   Task Short description: ${task.short_description}
   Task Assignment group: ${task.assignment_group}
   Task Assigned to: ${task.assigned_to}

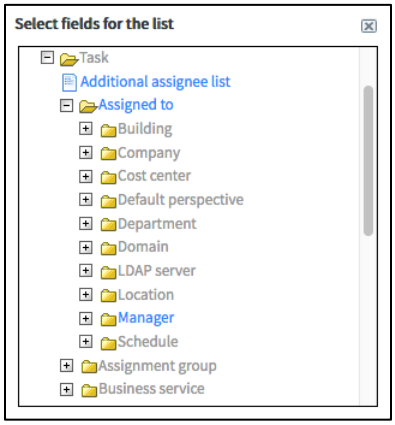
   Note: The variable values indicated with **${task.x}** above, can be dynamically selected from Select Variables, instead of having to know the field names

4. In the Addressee(s) section of the form, click the **lock** icon next to the **To** field.

5. In the Addressee(s) section of the form, click the **Select Fields** icon.



6. Navigate through the tree structure, and select the **Manager** field within the **Task SLA>Task>Assigned to** folder.



7. Select **Submit** on the Activity Properties, Notification Form.

8. Drag and drop the **Director Level Notification** activity to the top-right corner of the workflow canvas.

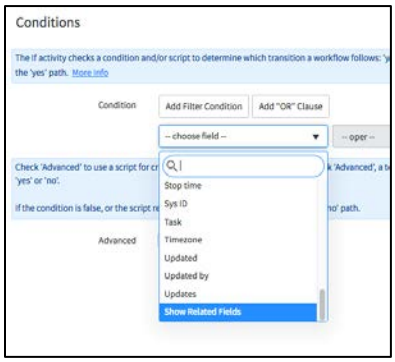
9. Click and drag a connection line from **Always** on the **Director Level Notification** activity to the **Join** workflow activity.

10. From the Core Workflow Activities list, expand the **Conditions** item from the list, and drag and drop the **IF** condition onto the Workflow Canvas.

11. Place the **IF** workflow activity to the left of the **Director Level Notification** activity.

12. Name the **IF** workflow activity **VIP Check**.

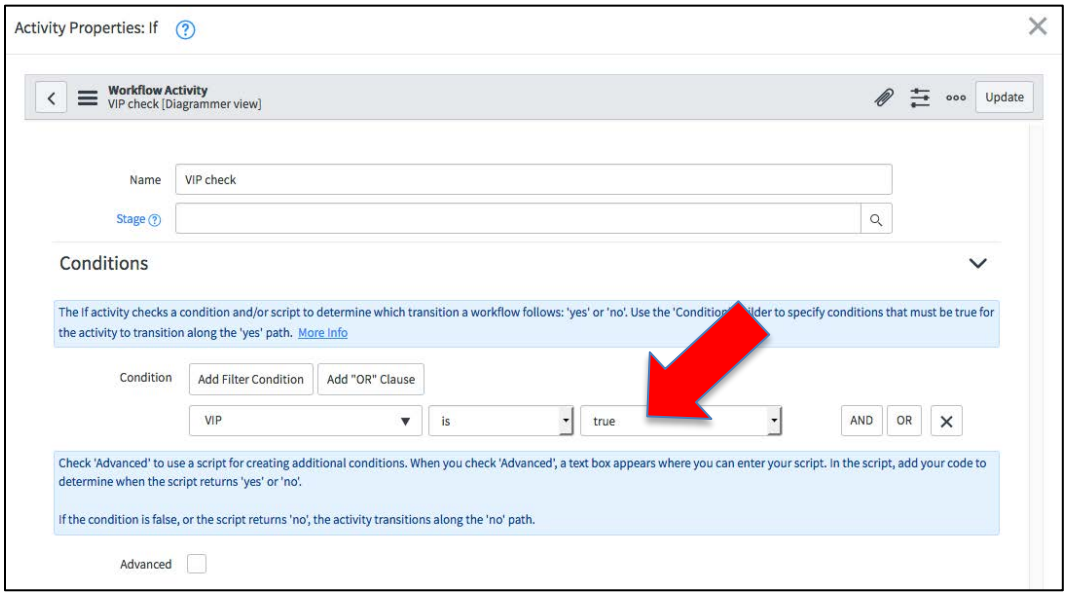
13. From the condition selection box, navigate to the bottom of the list and select **Show Related Fields**.



14. Choose the following conditions within the single condition:

    Task -> Task fields
    Incident (+)
    Caller -> User Fields
    VIP

15. With VIP selected as the condition, set the condition value to **true**.

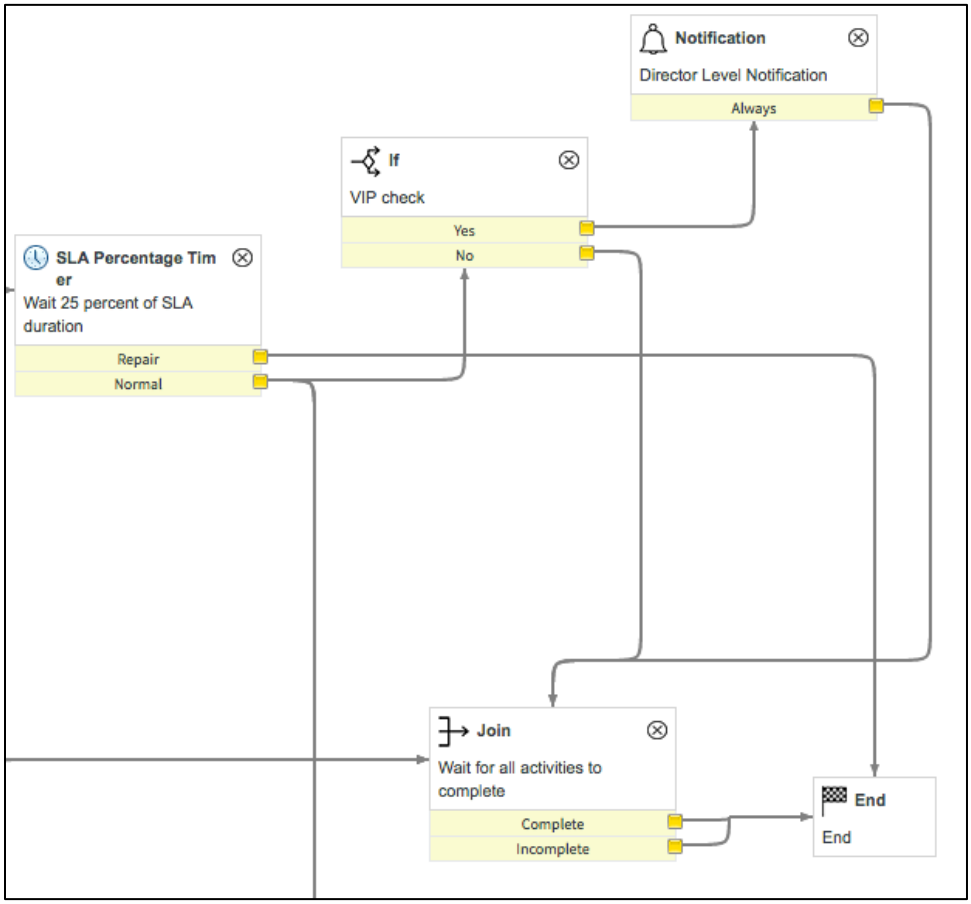


16. Select **Submit** on the Activity Properties, **IF** form.

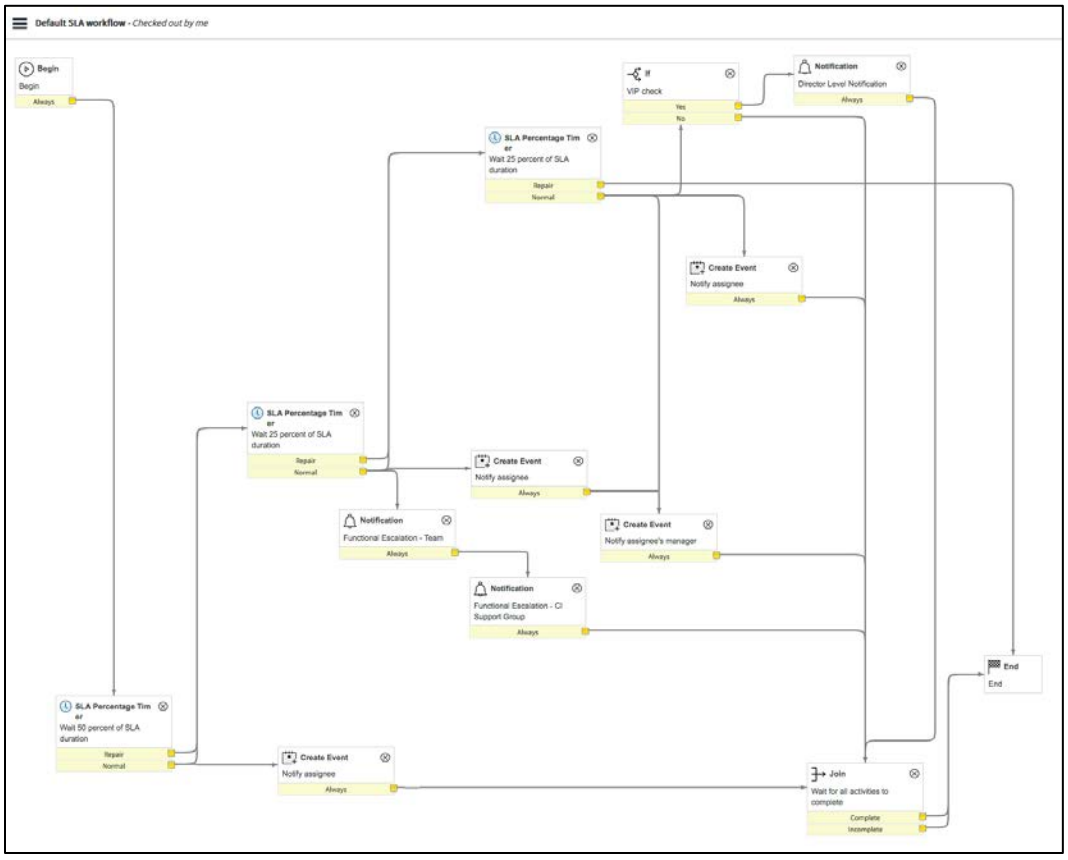
17. Click and drag a connection line from **Normal** on the **25% SLA Duration** timer activity to the **VIP Check** conditional activity.

18. Click and drag a connection line from **Yes** on the **VIP Check** conditional activity to the **Director Level Notification** activity.

19. Click and drag a connection line from **No** on the **VIP Check** conditional activity to the **Join** activity.



20. The complete workflow should look like the example.

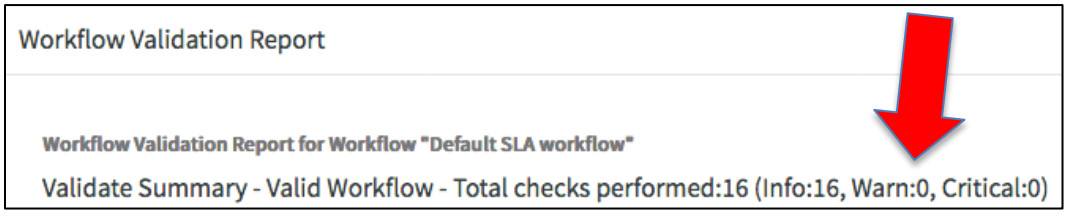


Publish the Workflow

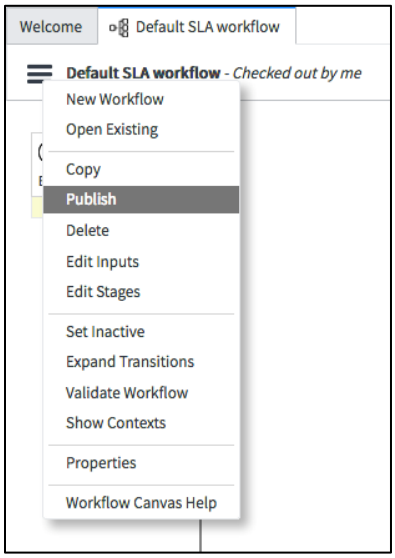
1. Click on the **Validate** icon, to confirm that there are no errors within the workflow.



2. Confirm that there are no warnings or critical issues.



3. Click the **hamburger** icon, and select **Publish**.



Lab Goal

Lab 2.1 SLA Workflow: Validate Your Work

This explains the steps of testing your SLA workflow modifications from Lab 2.0. This lab includes the following tasks:

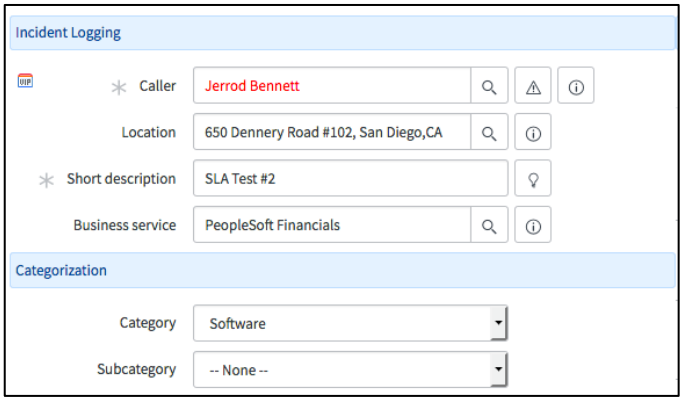
- Log an Incident
- Ensure the SLA was triggered
- Confirm the Functional escalation and notifications

Log an Incident

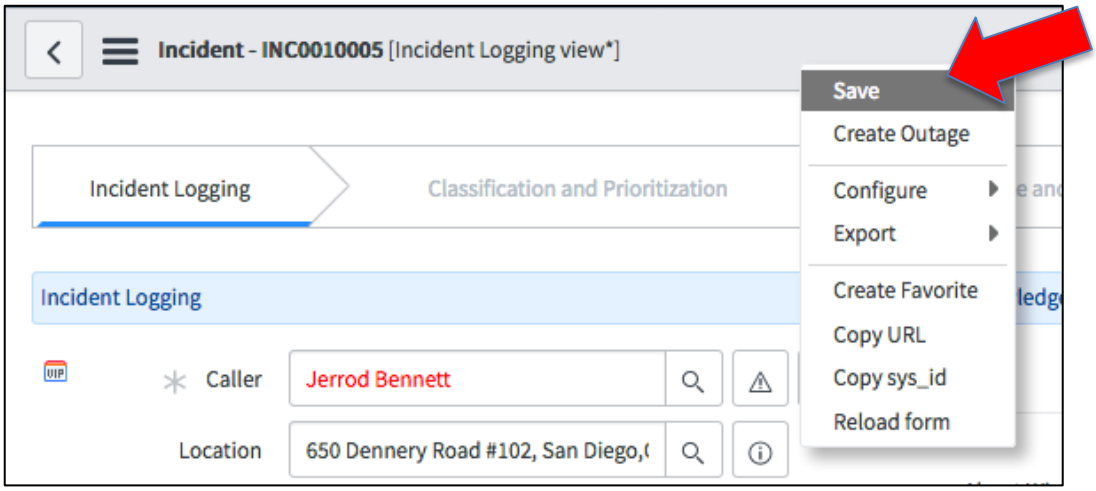
1. Navigate to **Incident > Create New**.

2. On the form, fill out the following information.

   Caller: **Jerrod Bennett**
   Short Description: **SLA Test #2**
   Business Service: **Peoplesoft Financials**
   Configuration Item: **PS ORA01**
   Category: **Software**
   Assignment Group**: Software**

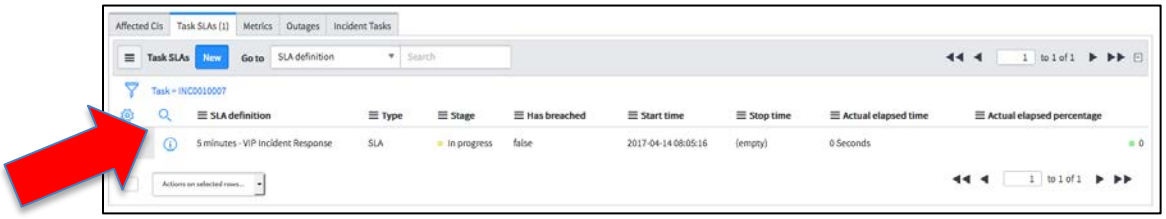


3. Right-click the header of the incident form, and select **Save**.

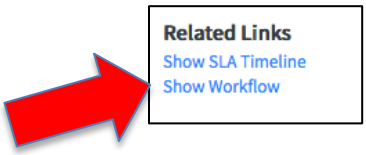


Verify the SLA Has Been Triggered

1. Navigate to the bottom of the Incident Form, and find the **Task SLAs** related list.
2. Click the **Information** Icon next to the active SLA, to open the Task SLA form.



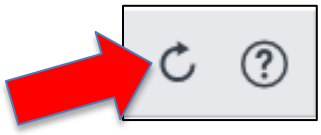
3. On the Task SLA form, click on the **Show Workflow** link within the Related Links section, at the bottom of the form.



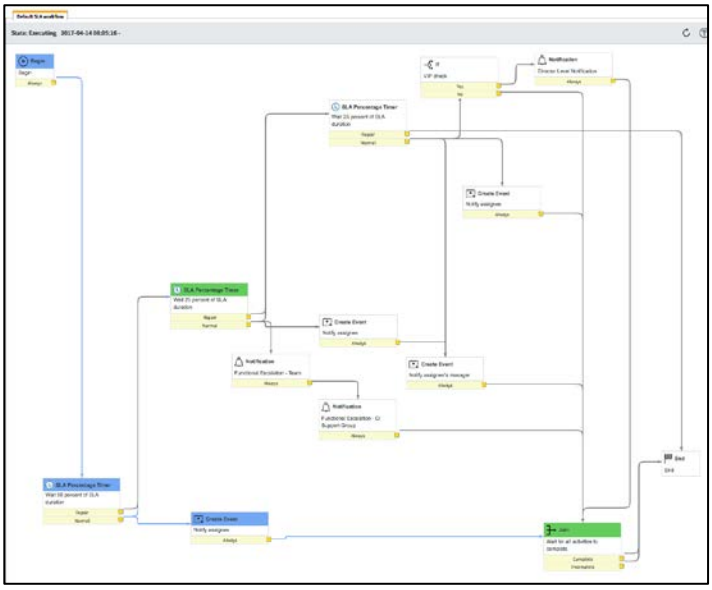
Confirm the Functional Escalation and Notification

1. As time progresses, the workflow should advance.

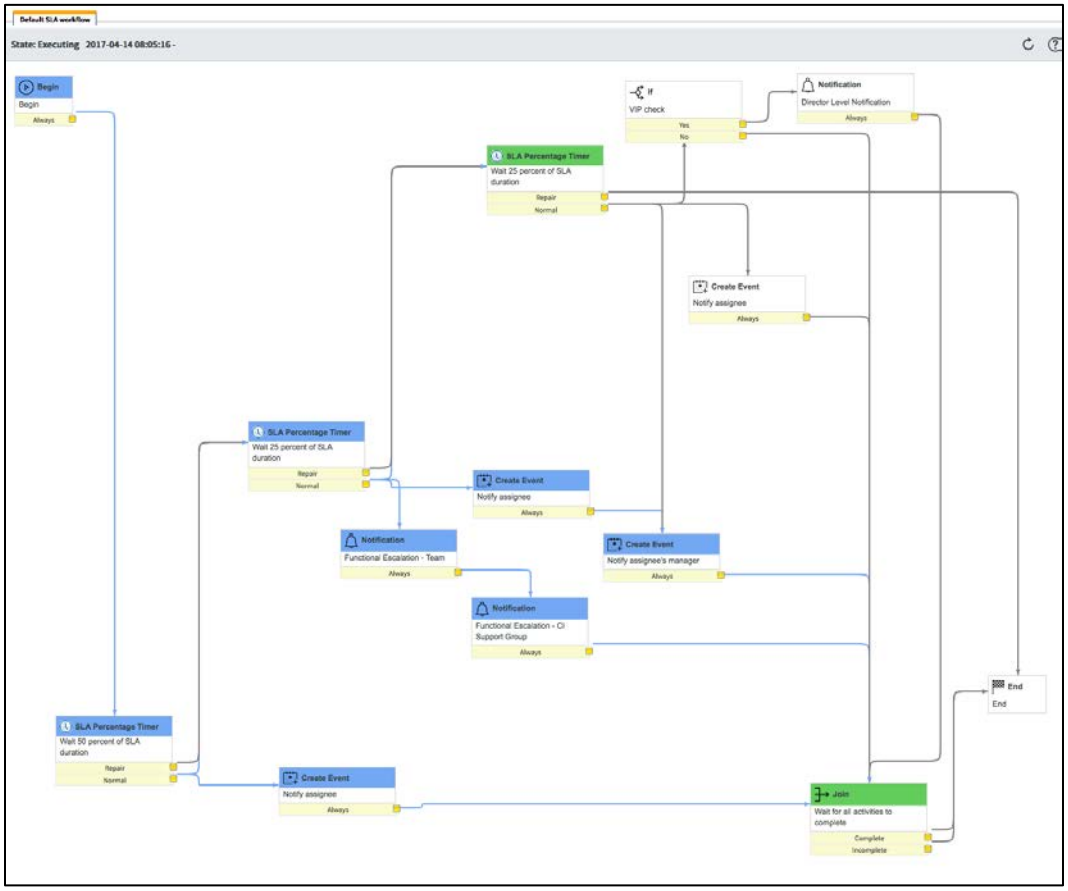
2. Click the **refresh** icon on the Workflow Canvas to see the updated progress of the workflow.



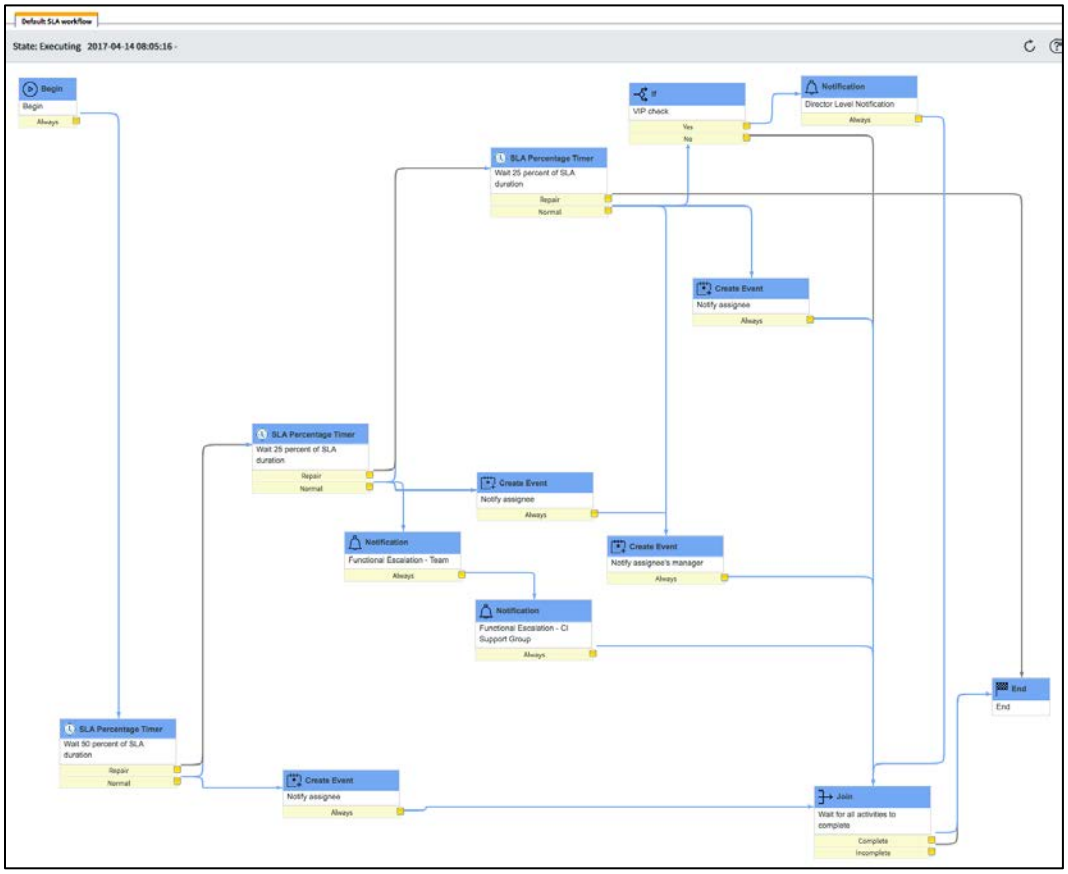
3. After 2minutes and 30 seconds, 50% of the SLA time will have elapsed. Click refresh to see the workflow in action



4. After 3 minutes and 45 seconds, 75% of the SLA time will have elapsed. Click refresh to see the workflow in action.



5. After 5 minutes, 100% of the SLA time will have elapsed. Click refresh to see the workflow in action.



Lab Goal

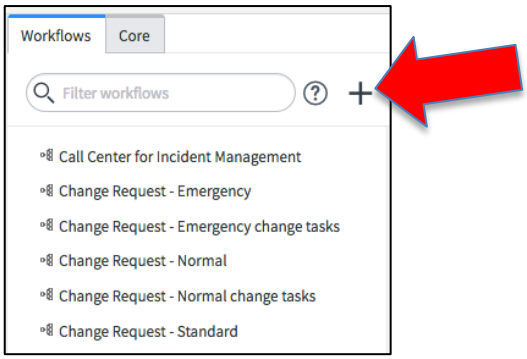
Lab 3.0 Managing Poor Quality Knowledge Articles

This will walk you through the steps of testing your SLA workflow modifications from Lab 2.0. This lab includes the following tasks:

- Replace multiple business rules with a single workflow
- Automate the un-publishing of a poor-quality KB article
- Send a notification to the KB author

Create a New Workflow

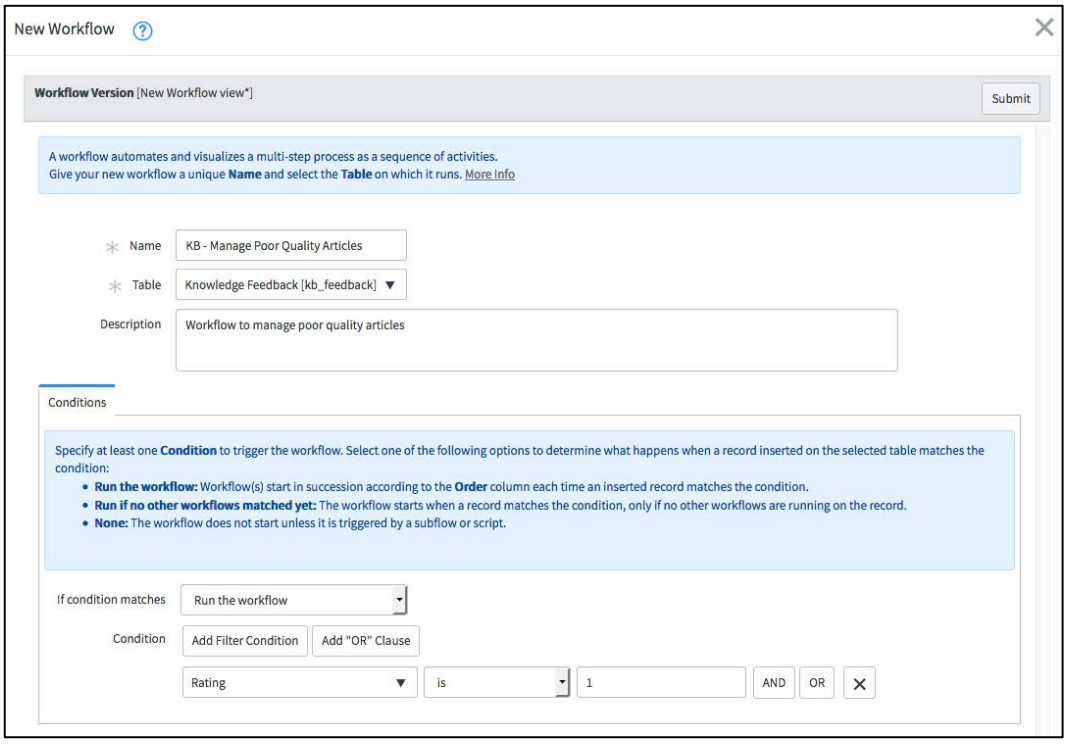
1. Navigate to **Workflow > Workflow Editor**.
2. Click the **+** sign, to create a new workflow.



3. In the New Workflow window that appears, complete the following fields:

   Name: **KB - Manage Poor Quality Articles**
   Table: **Knowledge Feedback [kb_feedback]**
   Description: **Workflow to manage poor quality articles**

4. In the **Conditions** section, add a condition for **Rating is 1**.



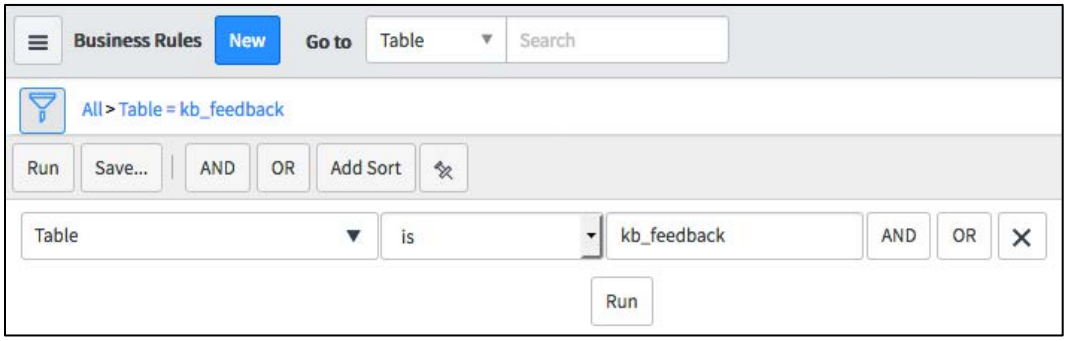
5. Click **Submit** on the Form to create new workflow and move to the new workflow canvas.

6. Click and drag the **End** activity to the bottom-right of the canvas to provide adequate room to build this new workflow.



Copy KB Feedback Business Rule (Low Rating)

1. Navigate to **System Definition > Business Rules**.
2. Search for records where **Table is kb_feedback**.

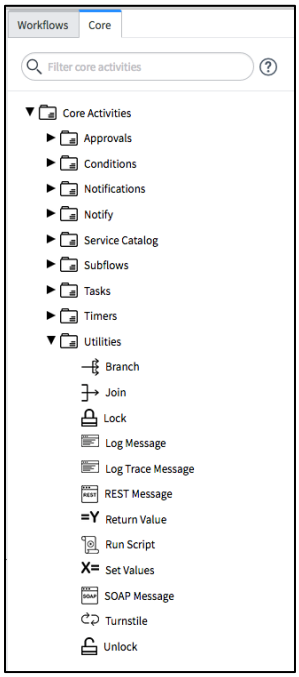


3. Open the Business Rule with the Name, **Flag Article with Low Rating**.
4. Click the **Advanced** tab.
5. Copy the **script** from within the Advanced Script window.
6. Deselect the **Active** check box on the form.
7. Click **Update** to exit the record.

Create a Workflow Activity with the Business Rule Script

1. Return to the workflow canvas that is open for building the KB workflow.

2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

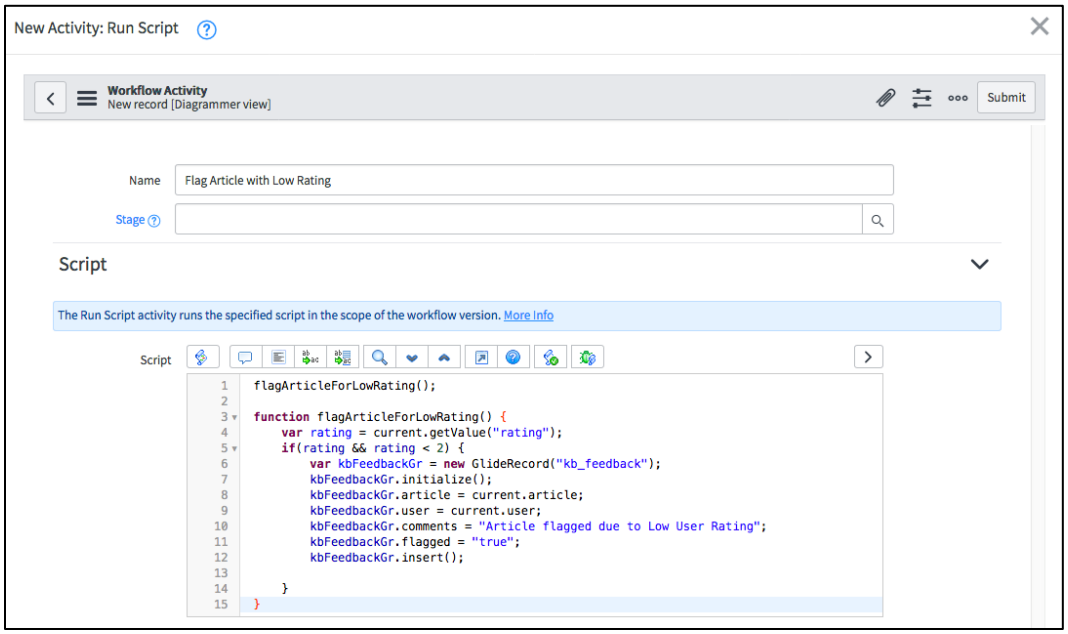


3. Expand the **Utilities** item from the list, and drag and drop the **Run Script** activity onto the Workflow Canvas.

4. Complete the Activity Properties, Notification form with the following information:

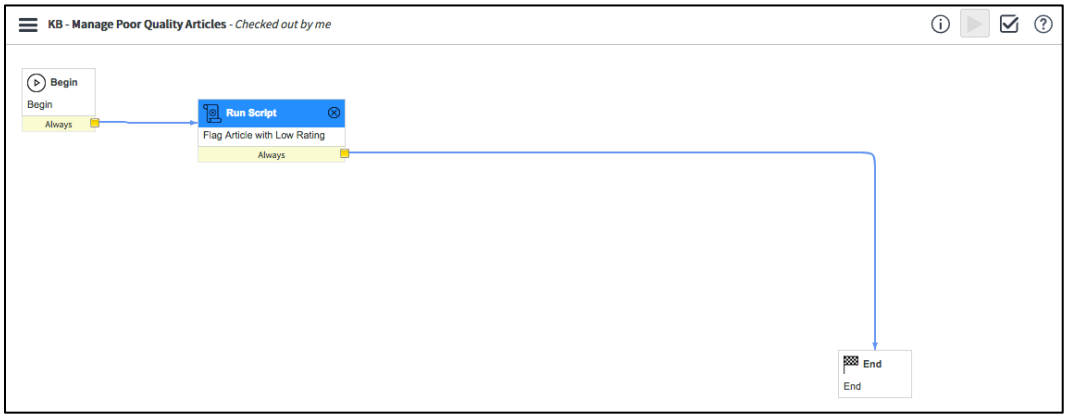
   Name: **Flag Article with Low Rating**

5. Paste the script from the Business Rule into the **Script** window.



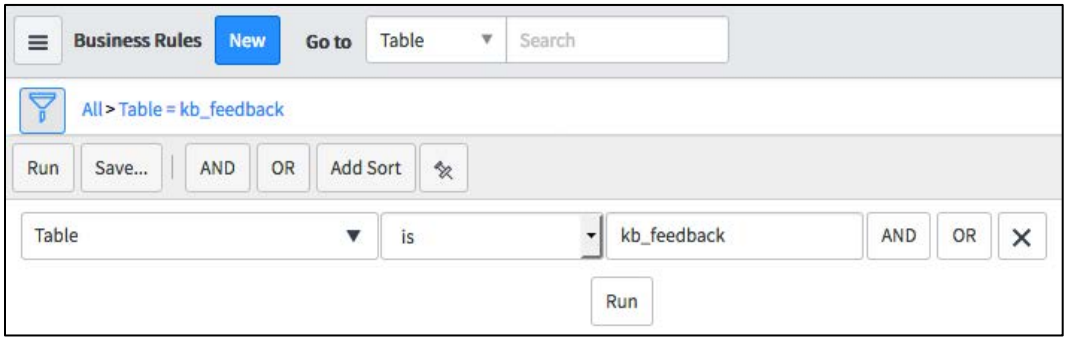
6. Click **Submit**.

7. The workflow should now look like the example.



Copy KB Feedback Business Rule

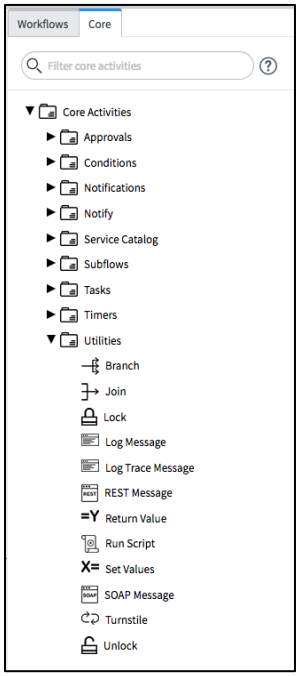
1. Navigate to **System Definition > Business Rules**.
2. Search for records where **Table is kb_feedback**.



3. Open the Business Rule with the Name: **Set Flagged Status**.
4. Click the **Advanced** tab.
5. Copy the **script** from within the Advanced Script window.
6. Deselect the **Active check box** on the form.
7. Click **Update** to exit the record.

Create a Workflow Activity with the Business Rule Script

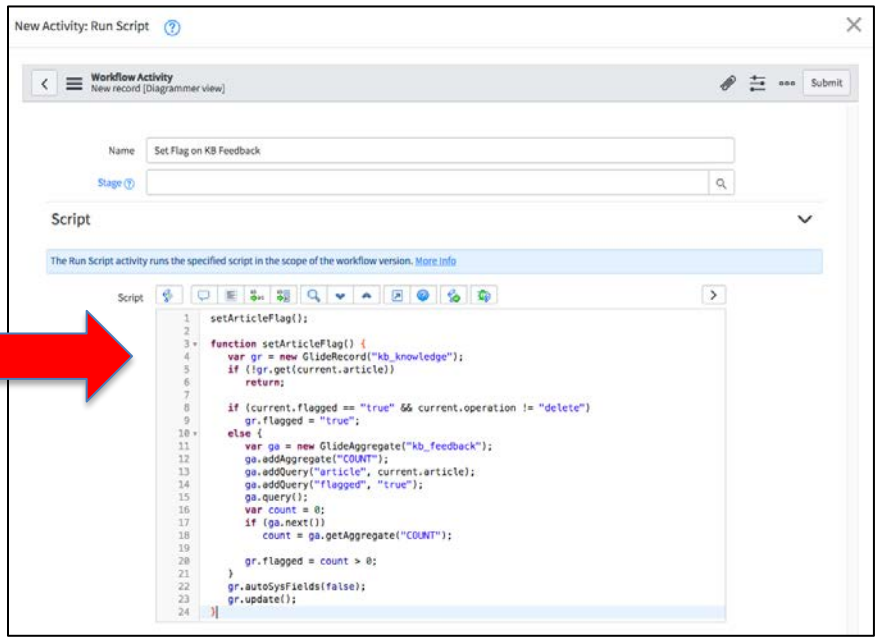
1. Return to the workflow canvas that is open, for building the KB workflow.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



3. Expand the **Utilities** item from the list, and drag and drop the **Run Script** activity onto the Workflow Canvas.

4. Complete the Activity Properties, Notification form with the following information:

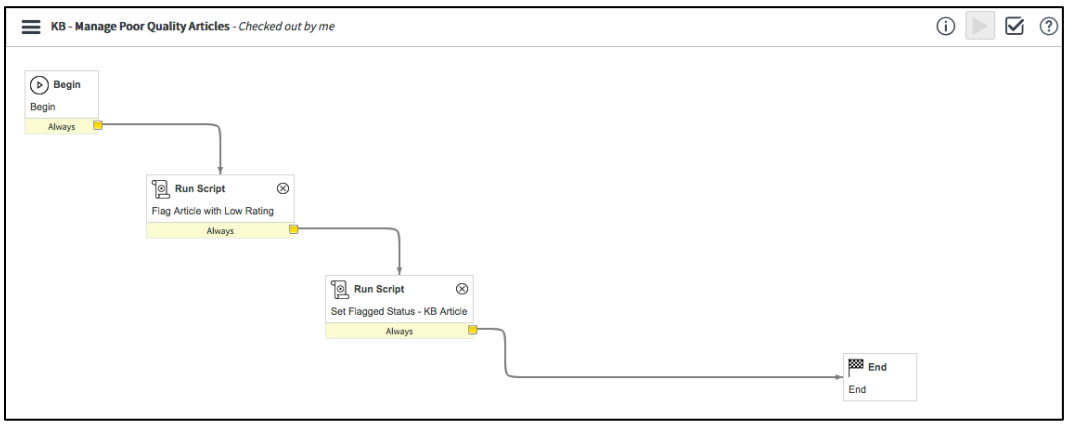
   Name: **Set Flagged Status - KB Article**
   Paste the script from the Business Rule into the **Script window**.



5. Click **Submit**.

6. Connect the workflow activities together, to create a process flow.

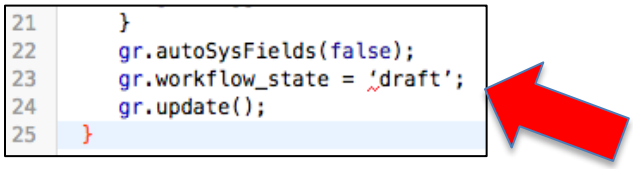
7. The workflow should now look like the example.



Add an Unpublish Step for KB Article

1. Double-click to open the Run Script activity **Set Flagged Status - KB Article**.
2. In the script section, add a blank line before the **gr.update();** on line 23.
3. Add the following line of script to the now blank line 23:

   gr.workflow_state = 'draft';



4. Click **Update**

Add Notification to the KB Article Owner

1. Expand the Notifications item on the list, and drag and drop the **Notifications** activity onto the Workflow Canvas and onto the line that connects the **Run Script** activity to the **End** activity.
2. Complete the Activity Properties, Notification form with the following information:

   Name: **Notify KB Owner**
   Subject: **${article} has been un-published due to low rating**
   Message: Article: ${article}
   Article Author: ${article.author}
   Rating: ${rating}Article: ${article}
   Comments: ${comments}
   User: ${user}
   Created: ${sys_created_on}

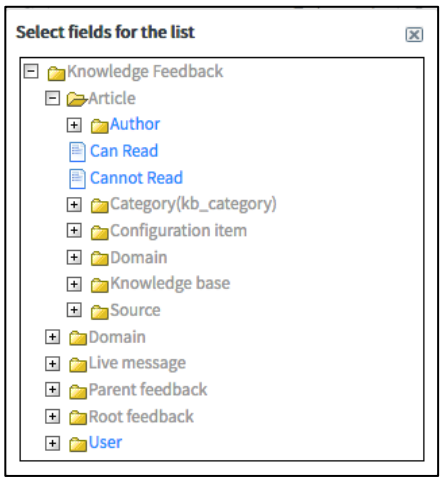
   Note: The variable values indicated with **${task.x}** above, can be dynamically selected from Select Variables, instead of having to know the field names.

3. In the Addressee(s) section of the form, click the **lock** icon next to the **To** field.

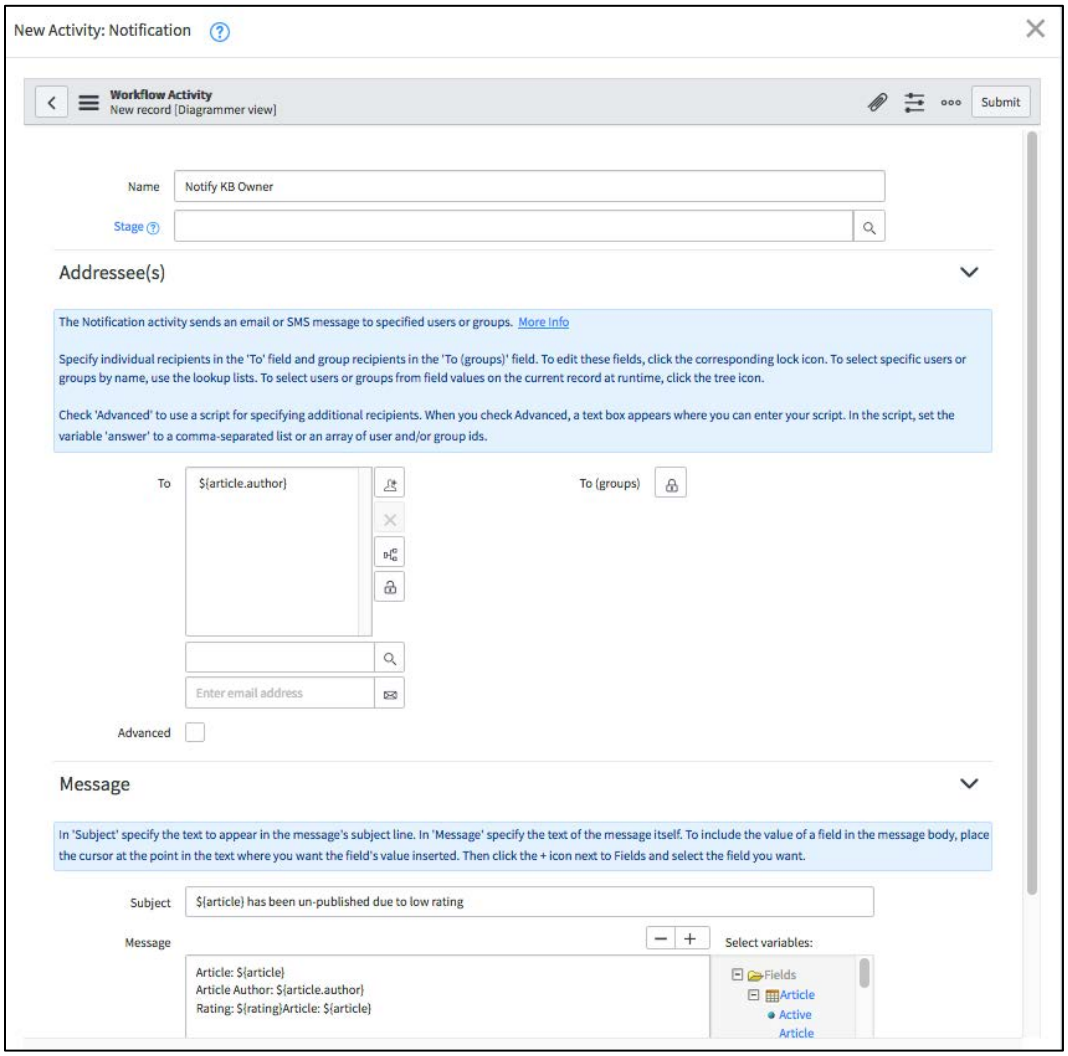
4. In the Addressee(s) section of the form, click the **Select Fields** icon.



5. Navigate through the tree structure, and select the **Author** field within the **Knowledge Feedback -> Article** folder.



6. Select **Submit** on the Activity Properties, Notification Form.



7. Ensure that the workflow activities are connected to each other, per the example.

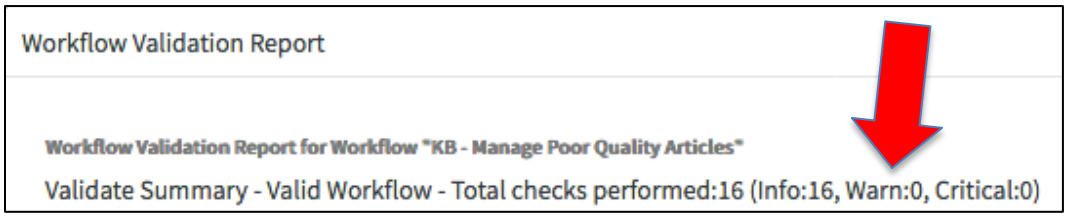


Publish the Workflow

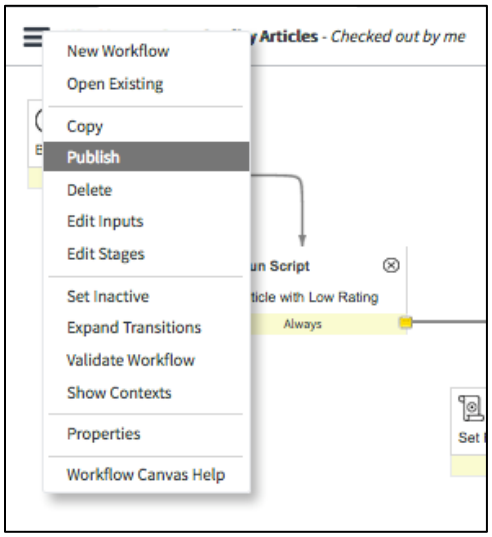
1. Click the **Validate** icon, to confirm that there are no errors within the workflow.



2. Confirm that there are no warnings or critical issues.



3. Click the **hamburger** icon, and select **Publish**.



Lab Goal

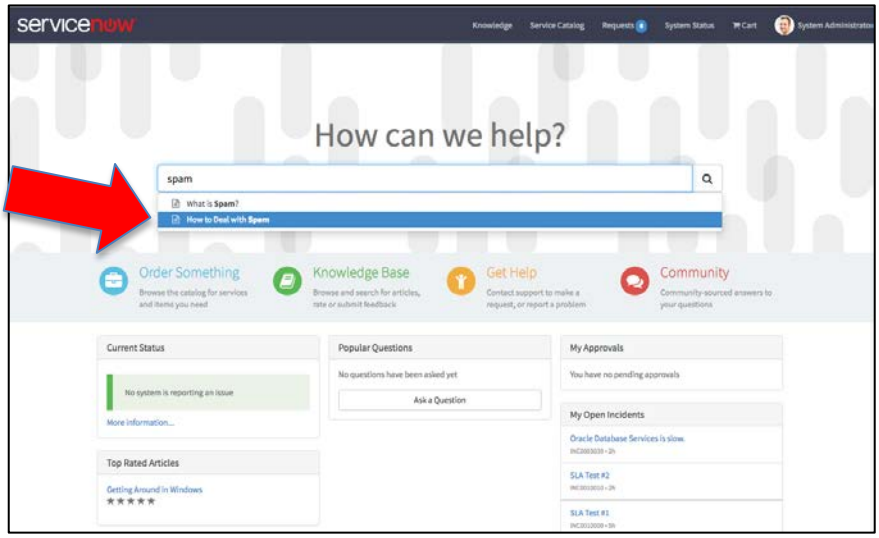
Lab 3.1
KB Quality: Validate Your Work

This lab explains the steps of testing your KB workflow modifications from the previous Lab. This lab includes the following tasks:

- Use the Service Portal
- Rate a KB article with 1 star
- Verify that the KB article was:
  Flagged
  Marked as Draft
  KB Feedback logged
  Notification sent to the KB article owner

Rate a KB Article

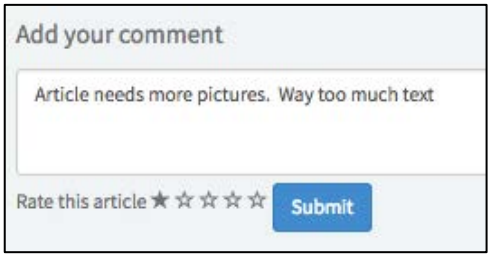
1. In a new browser tab, navigate to the Service Portal for your instance.
2. <instance name>**/sp**.
3. In the search box, enter **Spam**.
4. From the list of suggestions, select **How to Deal with Spam**.



5. Scroll to the bottom of the article.

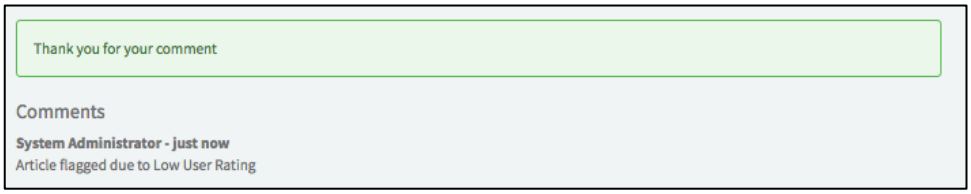
6. Add a comment: "**Article needs more pictures. Way too much text"**

7. Click the **single star** within the **Rate this Article** section.



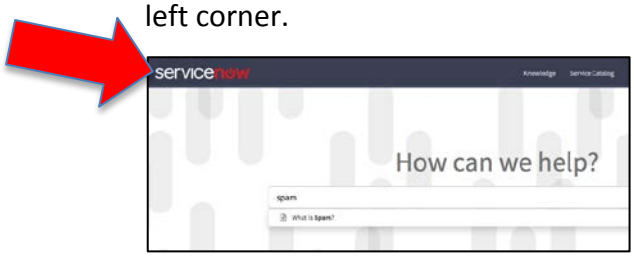
8. Click **Submit**.

9. Note the confirmation message, regarding the feedback that you submitted.



Verify the KB Article Changes

1. Navigate back to the main Service Portal page by clicking on the ServiceNow logo, in the top-left corner.



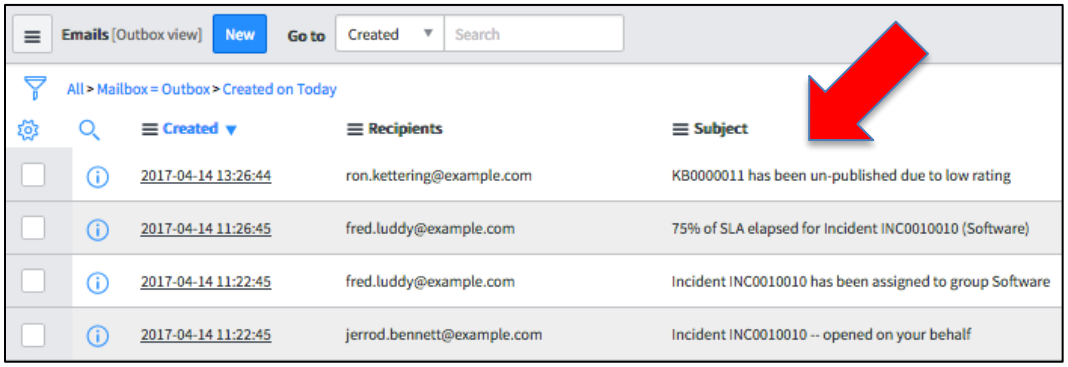
2. In the Search Box, type **Spam.**

3. Notice that only 1 published KB article is available with the term Spam in the title.

Verify the Notification

1. In your original browser tab, navigate to the native ServiceNow interface: **https://<instancename>.service-now.com**

2. Navigate to **System Mailboxes > Outbound > Outbox**.
3. Click the column header of **Created** to sort the list from newest to oldest.
4. Review the list of email notifications that are waiting to be sent.



Lab Goal

Lab 4.0 Managing Major Incidents

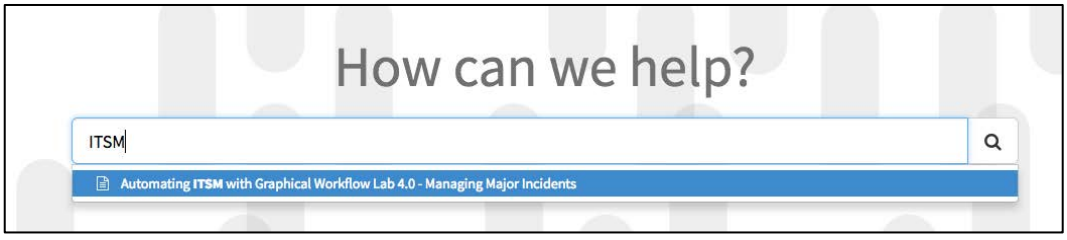
This lab explains how to create a new workflow, for managing P1 Incidents opened against a critical business service. This lab includes the following tasks:

- Create a new incident workflow
- Automatically assign the incident ticket to the group supporting the business service
- Create and clear an outage for the business service
- Send notifications of outage and subsequent service restoration
- Learn to work with workflow scratchpad
- Learn to "dot walk" within workflow activities

Open Reference KB Article Containing Scripts

Some of the activities in this workflow use scripts. To facilitate easy creation of these activities, a Knowledge Base article has been created and loaded to your instance with the short description of "**Automating ITSM with Graphical Workflow Lab 4.0 – Managing Major Incidents**". It is recommended that you copy/paste the scripts from the KB article in to the workflow activities at the appropriate steps to avoid typographical errors.

1. In a new browser tab, navigate to the Service Portal for your instance.
2. <instance name>**/sp**.
3. In the Search Box, type **ITSM**.
4. From the list of suggestions, select **Automating ITSM with Graphical Workflow Lab 4.0 – Managing Major Incidents**.

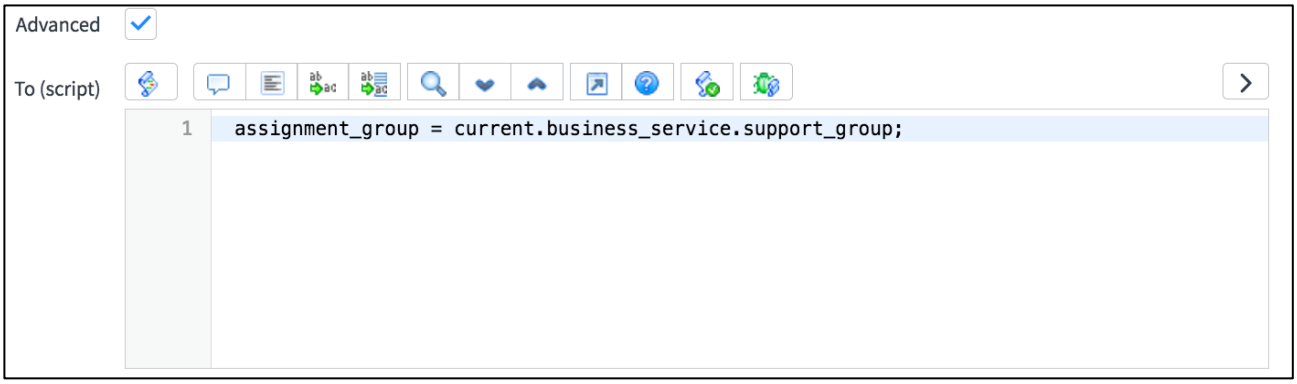


Dot-walking in ServiceNow Reference

https://docs.servicenow.com/bundle/istanbul-servicenow-platform/page/use/navigation/concept/c_DotWalkingInATreePicker.html

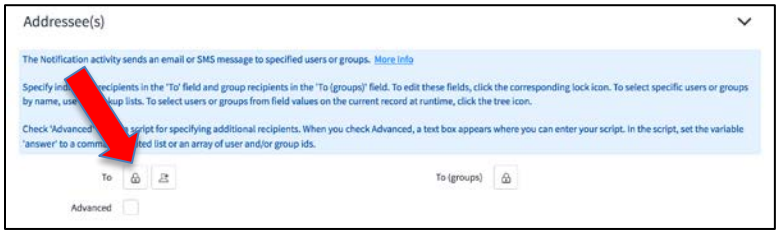
Dot-walking provides access to fields on related tables from a form, list, or script. If the current table contains a reference to another table, any field on the referenced table can be accessed using dot-walking. Dot-walking references a field by building a chain of field names separated by dots (periods). For instance, ***incident.business_service.support_group*** references the support group assigned to the business service on the incident record. This format is commonly seen in scripts.

There are a few examples of dot-walking in scripts in this lab. For reference, the incident **assignment_group** is set via a script that dot-walks to the business service to identify the business service support group. A reference for what dot-walking in scripts looks like the example.



Dot-walking is exposed in the workflow activities via both scripting and “tree pickers” in the workflow activity interface. For example, in a workflow **Notification Activity,** the **To** and **To(groups)** fields allow you to dot-walk to referenced fields. To accomplish this, follow the below steps:

1. Select the lock button in either the **To** or **To(groups)** fields.

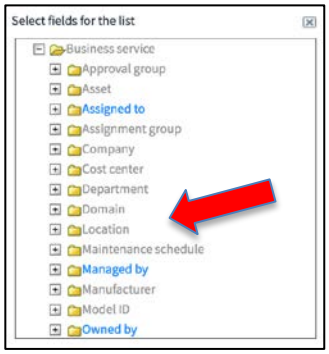


TIP: To fields only allow you to select a field that references a single person. To(groups) only allow you to select groups.

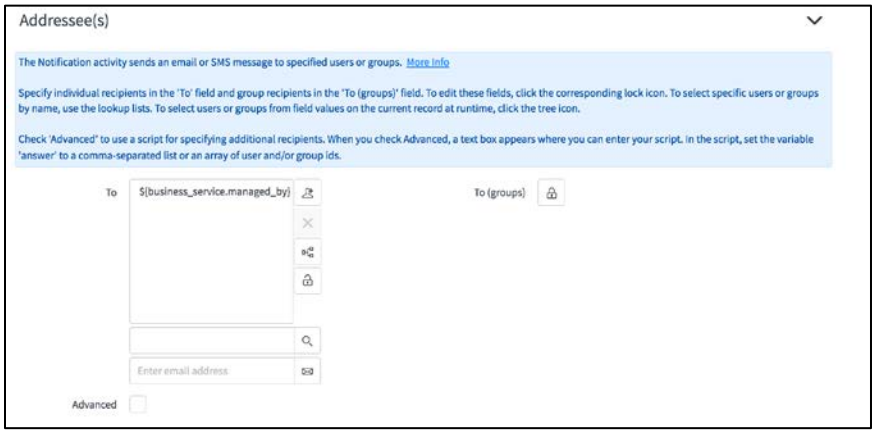
2. As the field expands, choose the **select fields** button.



3. In the **Select fields from list** dialog, navigate the path to the desired value from the current record. In this example, dot-walk from the incident record to the business service manager. **Incident > Business Service > Managed by**.

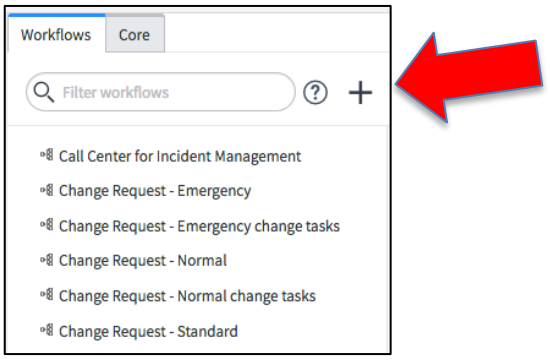


4. The **To** field is now populated with the business service manager via dot-walking.



Create the Workflow

1. Navigate to **Workflow > Workflow Editor**.
2. Click the **+** sign, to create a new workflow.

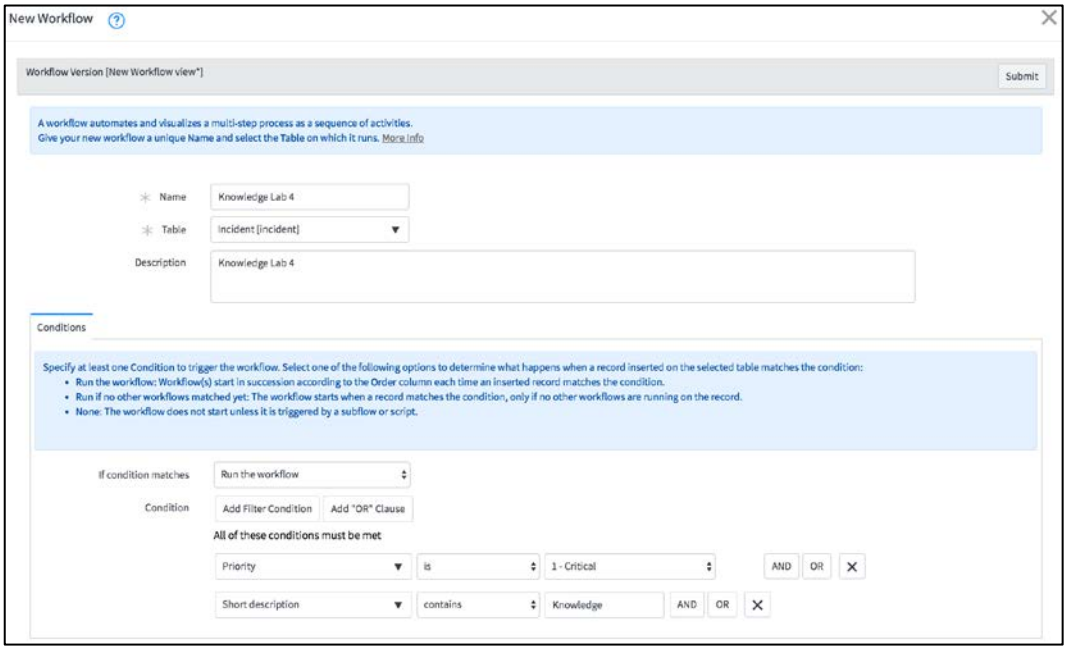


3. In the New Workflow window that appears, complete the following fields:

   Name: **Knowledge Lab 4**
   Table: **Incident [incident]**
   Description: **Knowledge Lab 4**

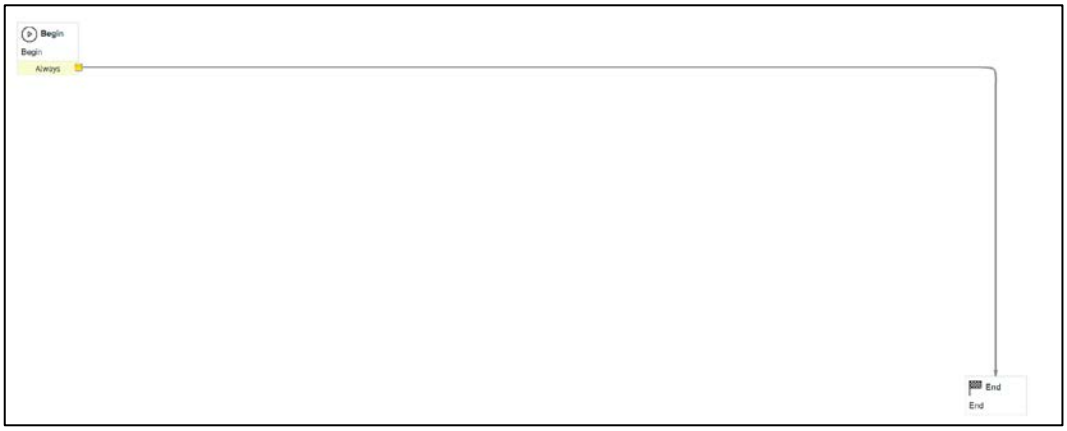
4. Add the following conditions to the workflow:

   Priority is 1 – Critical
   AND
   Short description contains Knowledge



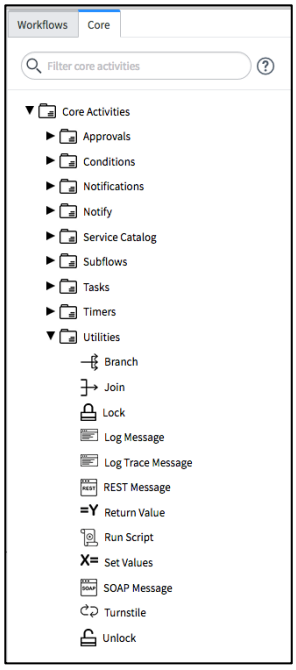
5. Click **Submit** on the Form to create new workflow, and be brought to the new workflow canvas.

6. Click and drag the **End** activity to the bottom-right of the canvas, to provide room to build this new workflow.



Create a Workflow Script Activity to Set the Incident Assignment Group to the Business Service Support Group

1. Return to the workflow canvas that is open for building the workflow for this lab.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

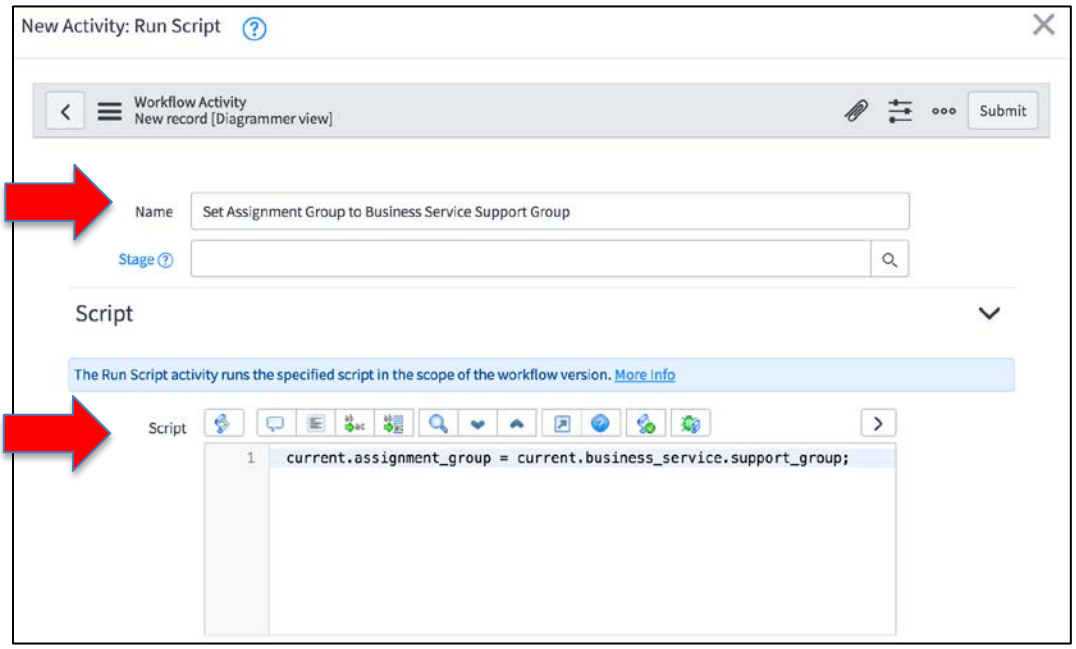


3. Expand the **Utilities** item from the list, and drag and drop the **Run Script** activity onto the Workflow Canvas, placing it on top of the line that connects **begin** with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

4. Complete the Activity Properties, Notification form with the following information:

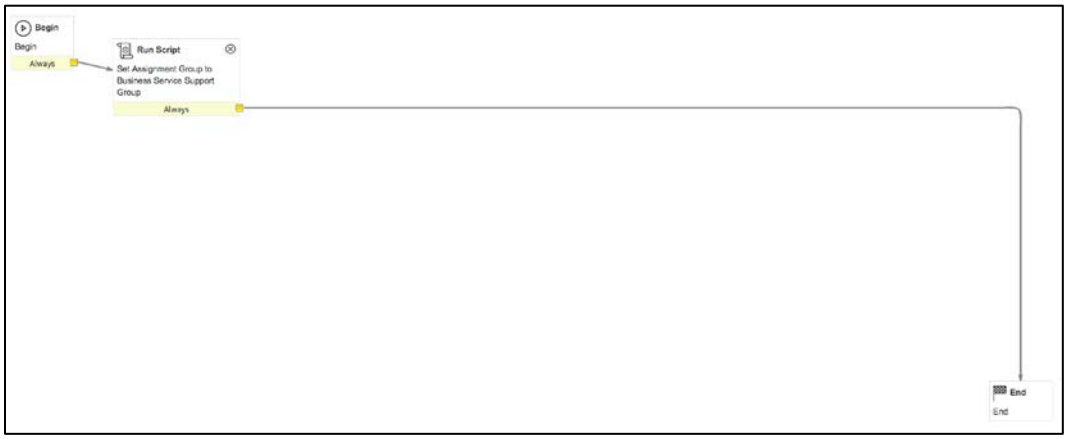
   Name: **Set Assignment Group to Business Service Support Group**
   Paste the script from the knowledge base article for **Activity 1** in to the **Script window**.



   TIP: This script uses dot-walking to set the incident assignment group.

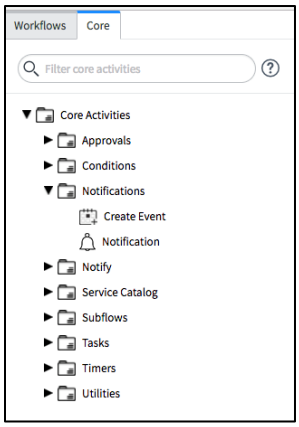
5. Click **Submit**.

6. The workflow should now look like the example.



Create Workflow Notification Activity to Email the Business Service Support Group and Manager

1. Return to the workflow canvas that is open for building the major incident workflow.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



3. Expand the **Notifications** item from the list, and drag and drop the **Notification** activity onto the Workflow Canvas, placing it on top of the line that connects **Set Assignment Group to Business Service Support Group** with **end**.

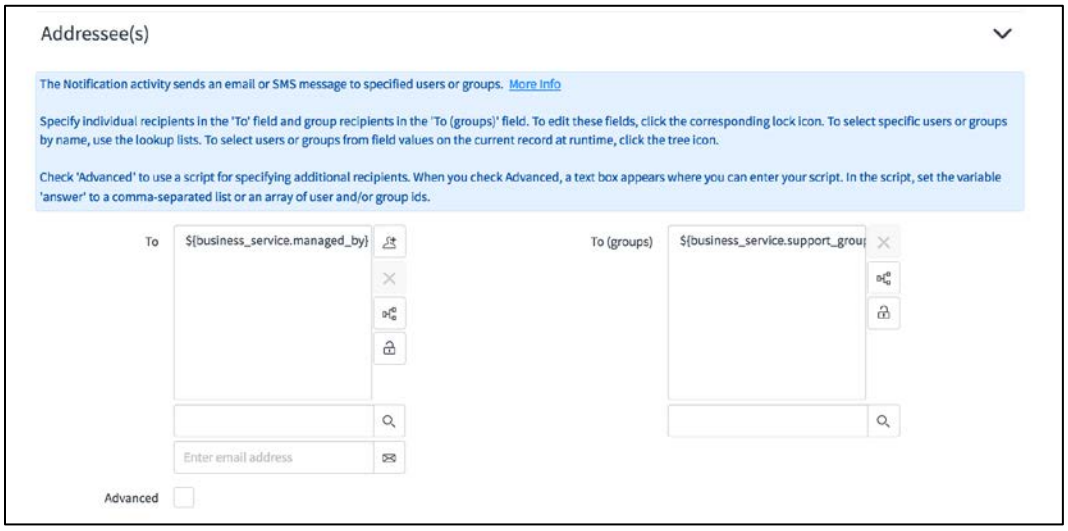
   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

4. Complete the Activity Properties, Notification form with the following information:

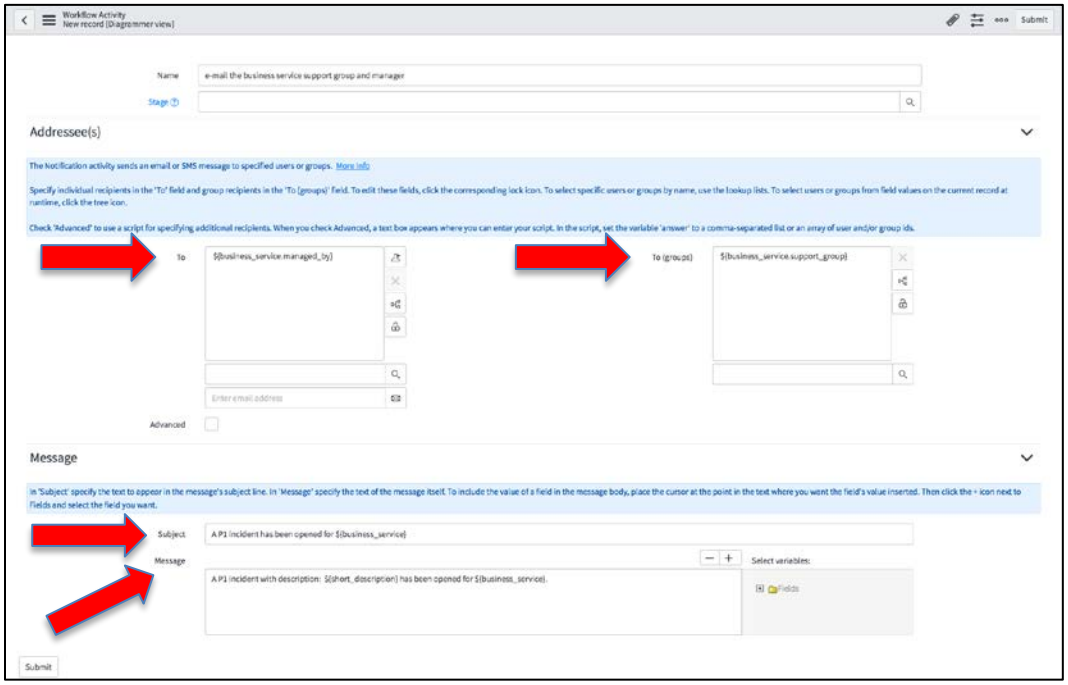
   Name: **e-mail the business service support group and manager**
   Complete the Addressee(s) section by selecting the business service manager in the **To** field and the business service support group in the **To(groups)** field.

   TIP: You need to dot-walk to the business service fields to locate the appropriate values

   To: **Incident > Business Service > Managed By**
   To(groups): **Incident > Business service > Support group**



5. Complete the **Message** area of the **New Activity Notification** form by pasting from **Activity 2** of the KB article, the **Subject** and **Message** fields.



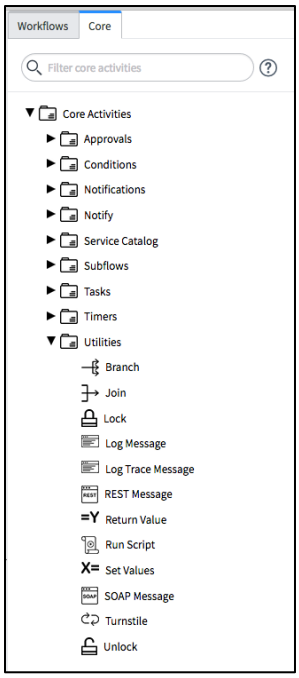
6. Click **Submit**.

7. The workflow should now look like the example.



Create a Workflow Script Activity to Generate an Outage for the Incident Business Service

1. Return to the workflow canvas that is open for building the major incident workflow.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

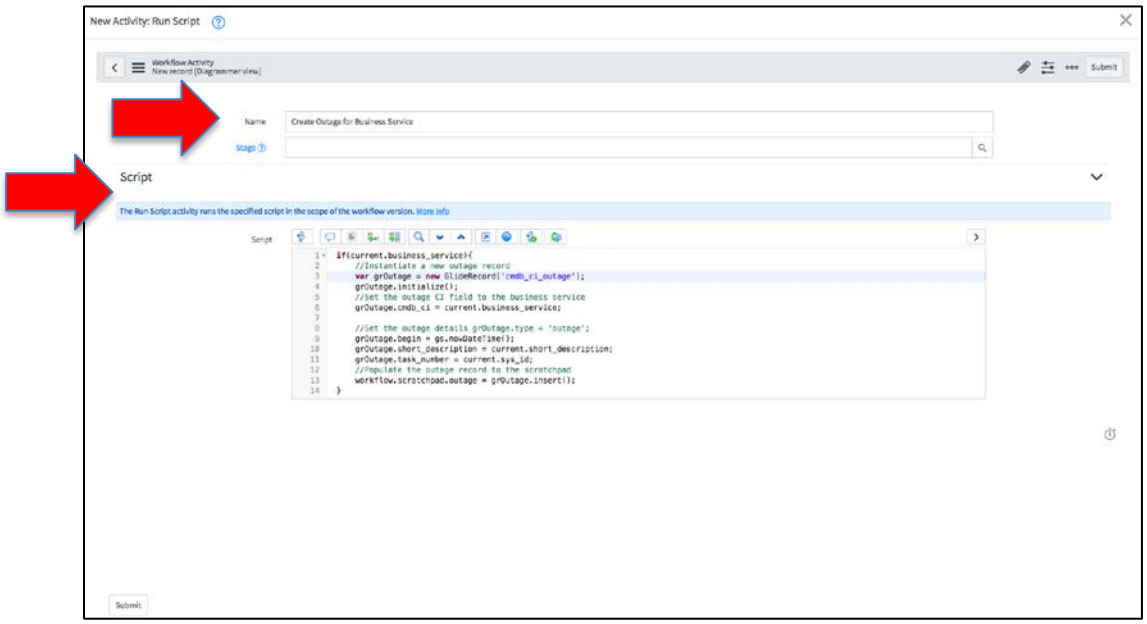


3. Expand the **Utilities** item from the list, and drag and drop the **Run Script** activity onto the Workflow Canvas, placing it on top of the line that connects **e-mail the business service support group and manager** with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

4. Complete the Activity Properties, Notification form with the following information:

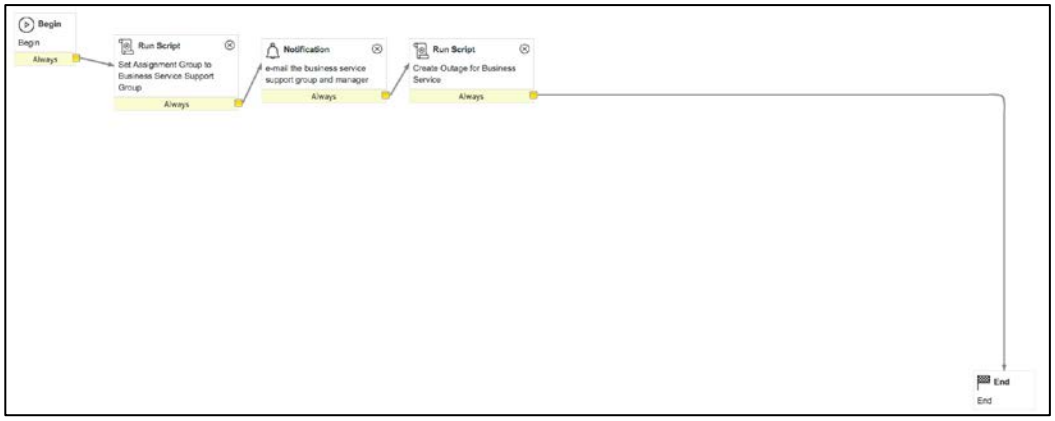
   Name: **Create Outage for Business Service**
   Paste the script from the knowledge base article for **Activity 3** in to the **Script window**.



TIP: This script uses the workflow scratchpad to store the outage record which will be referenced later to clear the outage record.

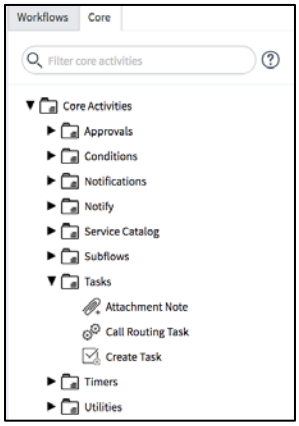
5. Click **Submit**.

6. The workflow should now look like the example.



Create a Workflow Task Activity to Generate an Incident Task

1. Return to the workflow canvas that is open for building the major incident workflow.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

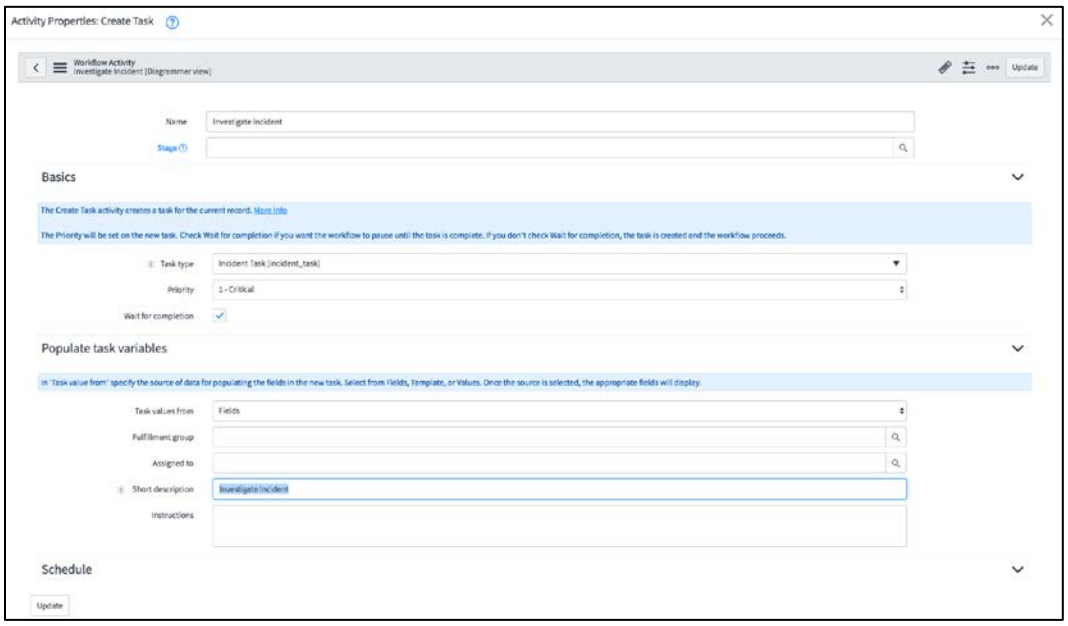


3. Expand the **Tasks** item from the list, and drag and drop the **Create Task** activity onto the Workflow Canvas, placing it on top of the line that connects **Create Outage for Business Service** with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

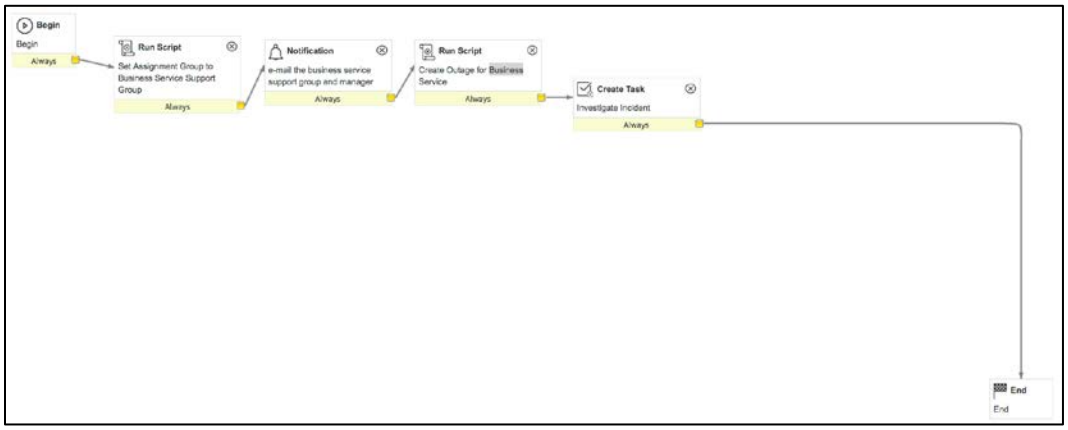
4. Complete the Activity Properties, Create Task form with the following information:

   Name: **Investigate Incident**
   Under Basics:
   Set **Task type** to **Incident Task [incident_task]**
   Set **Priority** to **1 – Critical**
   Make sure the **Wait for completion** check box is selected
   Under Populate task variables:
   Set **Task values from** to **Fields**
   Set **Short description** to **Investigate Incident**



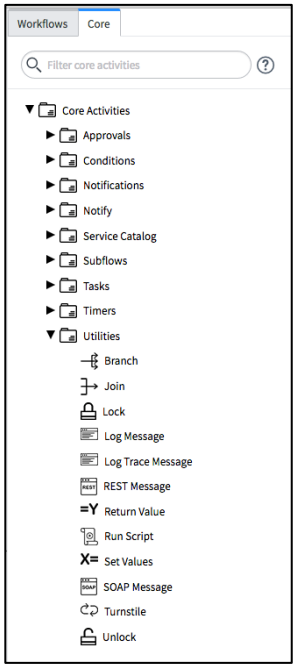
5. Click **Submit**.

6. The workflow should now look like the example.



Create a Workflow Script Activity to Clear the Business Service Outage

1. Return to the workflow canvas that is open for building the major incident workflow.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

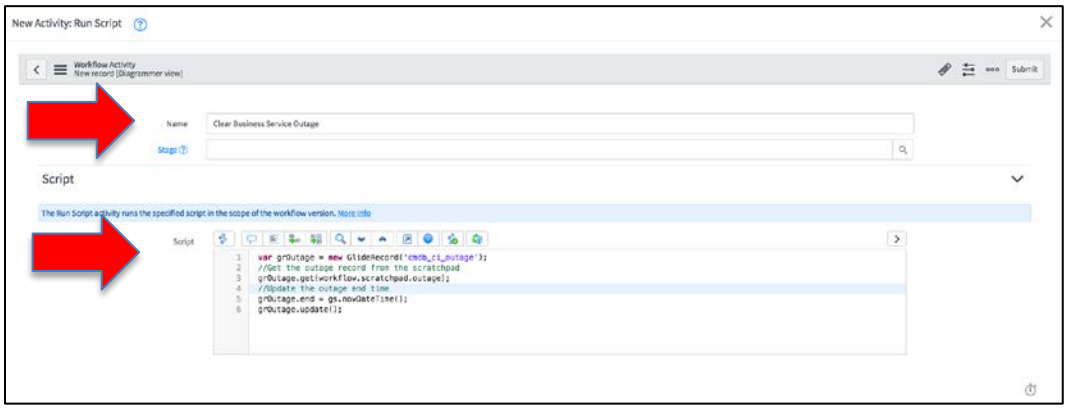


3. Expand the **Utilities** item from the list, and drag and drop the **Run Script** activity onto the Workflow Canvas, placing it on top of the line that connects **Investigate Incident** with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

4. Complete the Activity Properties, Notification form with the following information:

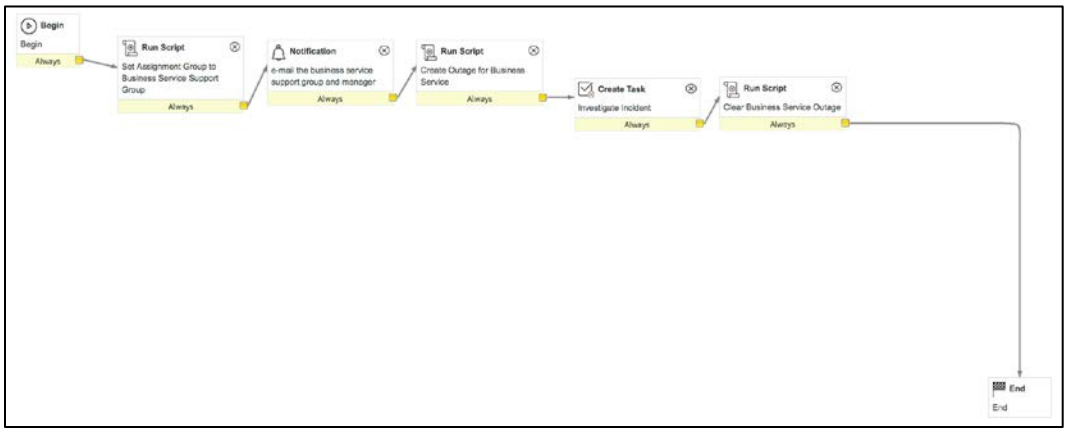
   Name: **Create Outage for Business Service**
   Paste the script from the knowledge base article for **Activity 5** in to the **Script window**.



   TIP: This script uses the workflow scratchpad to retrieve the outage record stored in Activity 3

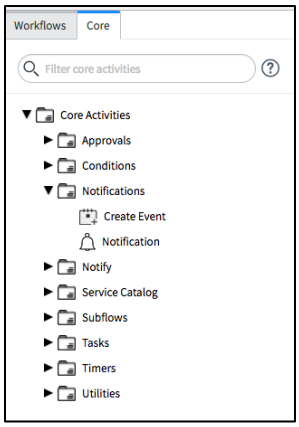
5. Click **Submit**.

6. The workflow should now look like the example.



Create Workflow Notification Activity to e-Mail the Business Service Support Group and Manager about Service Restoration

1. Return to the workflow canvas that is open for building the major incident workflow.
2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



3. Expand the **Notifications** item from the list, and drag and drop the **Notification** activity onto the Workflow Canvas, placing it on top of the line that connects **Clear Business Service Outage** with **end**.

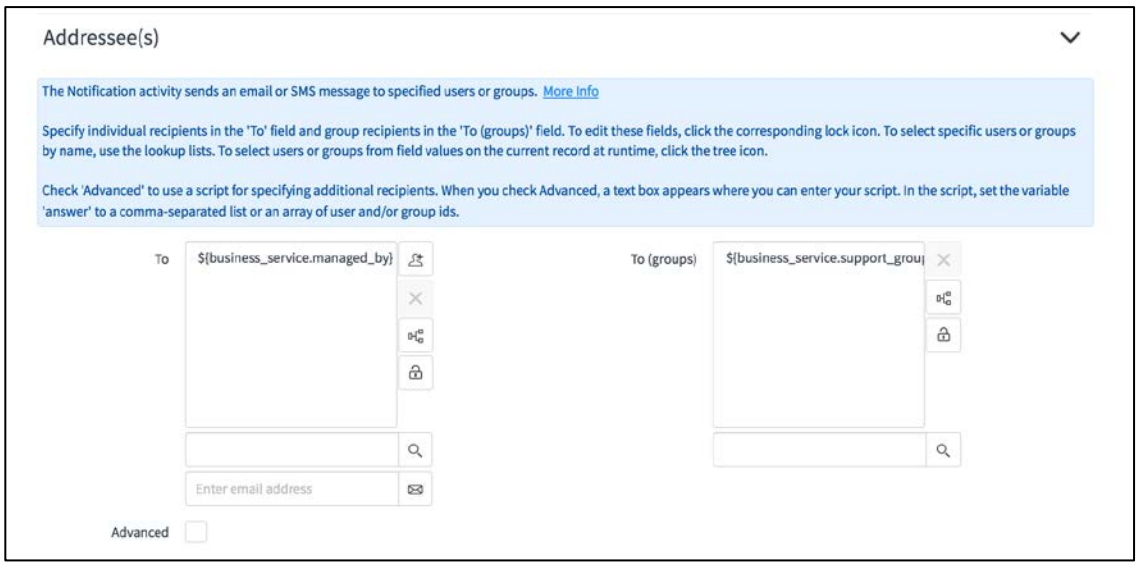
   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

4. Complete the Activity Properties, Notification form with the following information:

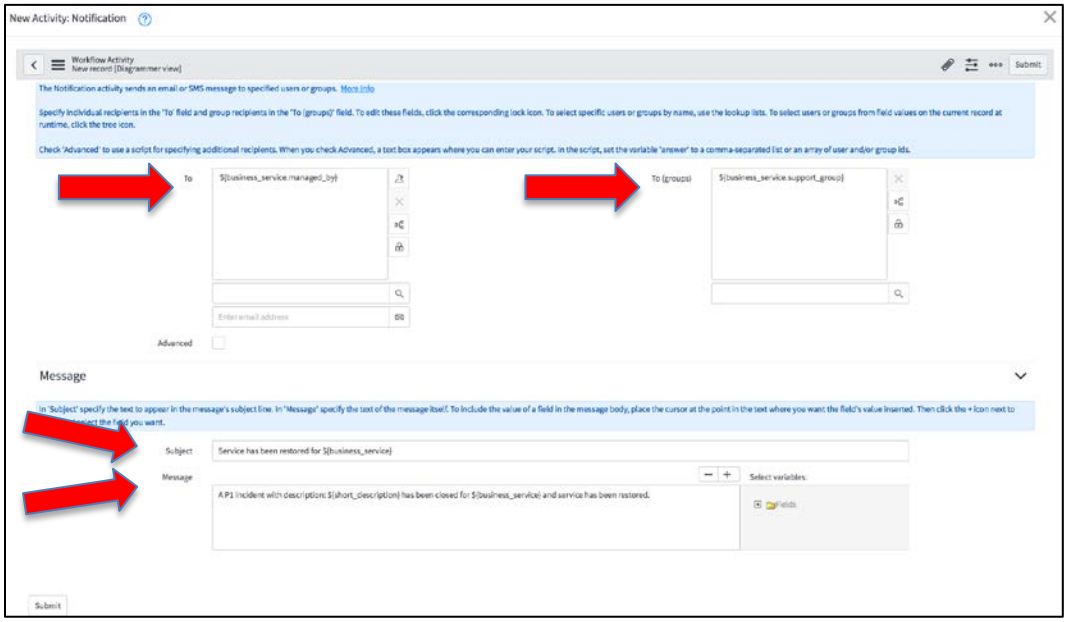
   Name: **e-mail the business service support group and manager**
   Complete the Addressee(s) section by selecting the business service manager in the **To** field and the business service support group in the **To(groups)** field.

   TIP: You will need to "dot walk" to the business service fields to locate the appropriate values

   To: **Incident > Business Service > Managed By**
   To(groups): **Incident > Business service > Support group**

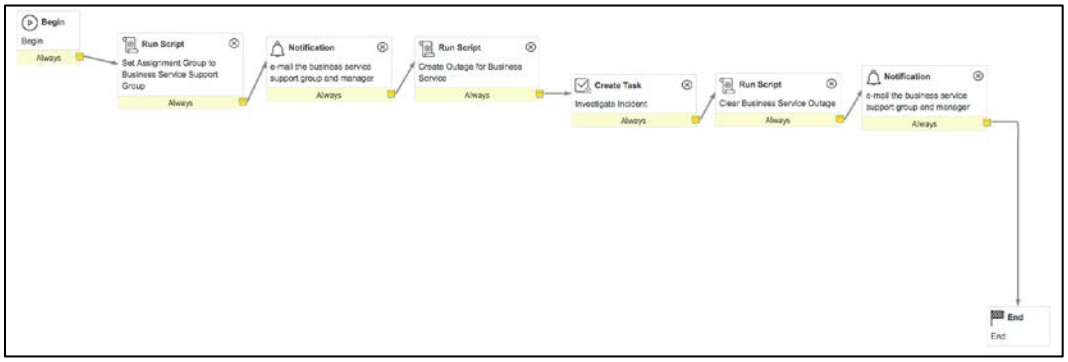


5. Complete the **Message** area of the New Activity, Notification form by pasting from **Activity 6** of the KB article, the **Subject** and **Message** fields.



6. Click **Submit**.

7. The workflow should now look like the example.

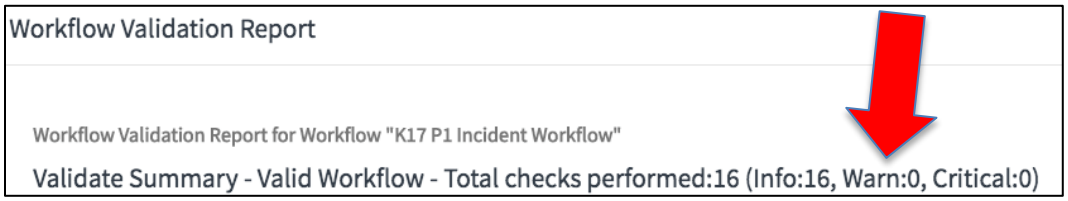


Publish the Workflow

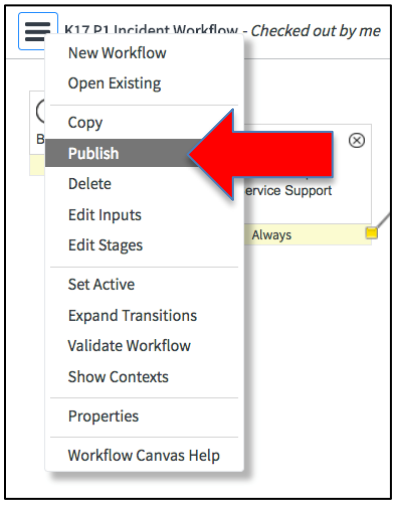
1. Click the **Validate** icon to confirm that there are no errors within the workflow.



2. Confirm that there are no warnings or critical issues.



3. Click the **hamburger** icon, and select **Publish**.



Lab Goal

Lab 4.1 Major Incidents: Validate Your Work

This lab explains how to test the P1 Incident Workflow created in Lab 4. To validate the workflow, you perform the following steps:

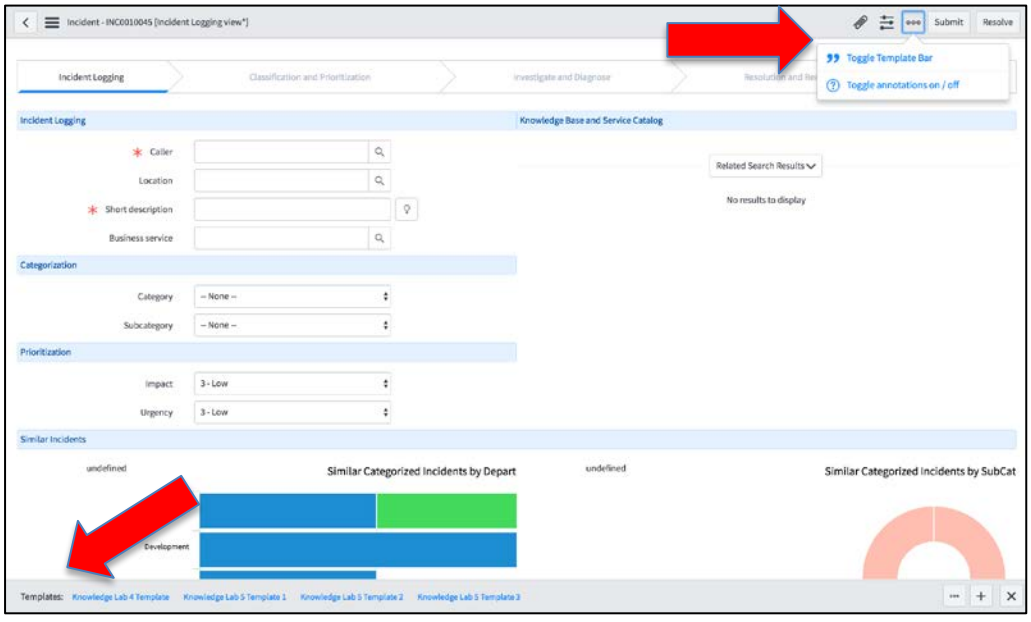
- Create a P1 Incident matching the conditions for the workflow
- Check to ensure that the workflow has started
- Validate that incident tasks are created
- Validate that the tasks are assigned to the correct groups
- Validate that the tasks are sequential

Trigger the Workflow

1. Navigate to **Incident > Create New**.

2. Open the incident leveraging the **Knowledge Lab 4 Template**.

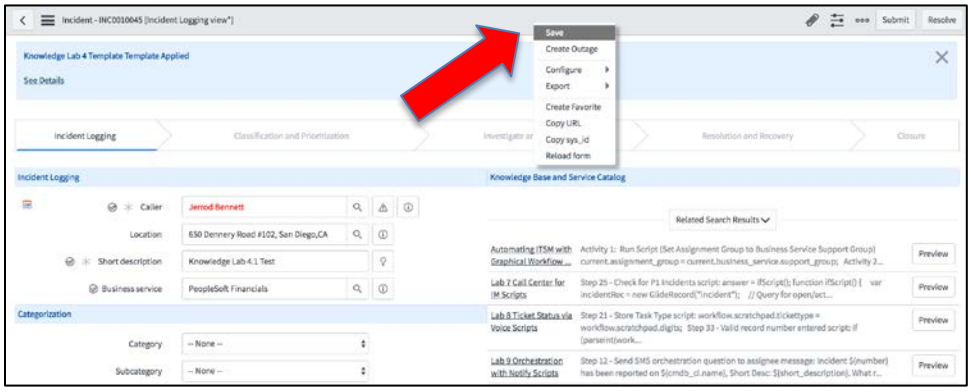
   Ensure the **Template Bar** is toggled on. If it is not, select the **three-dot** menu in the upper-right corner and select **Toggle Template Bar**



4. From the template bar, select the **K17 Template**. This fills the incident with enough criteria to trigger the workflow created in lab 4.



5. Right-click the record header, and choose **Save**.

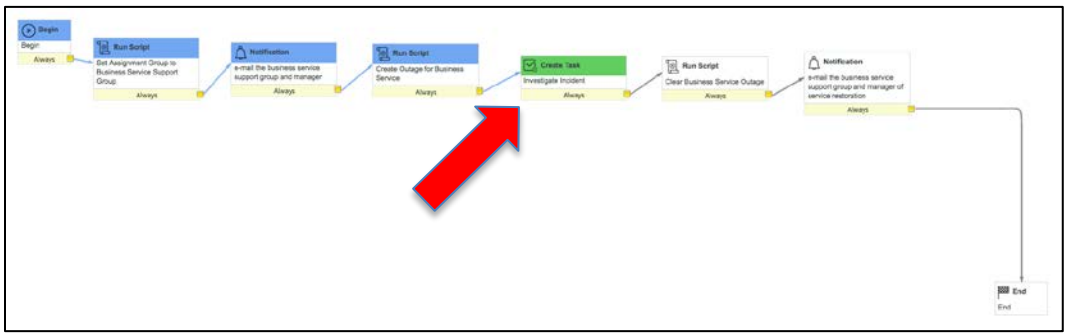


6. After saving the incident record, there are several items to validate that the workflow is executing properly as detailed in the next steps.

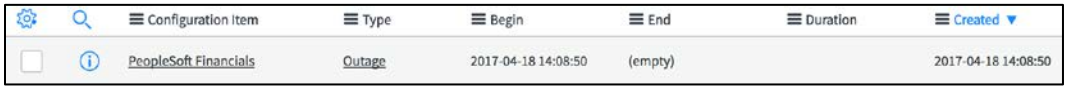
7. You should notice a message at the top of the incident indicating **Outage opened for PeopleSoft Financials**.



8. Under Related Links, choose Show Workflow, and validate that the workflow is executing and waiting at the **Create Task** activity.



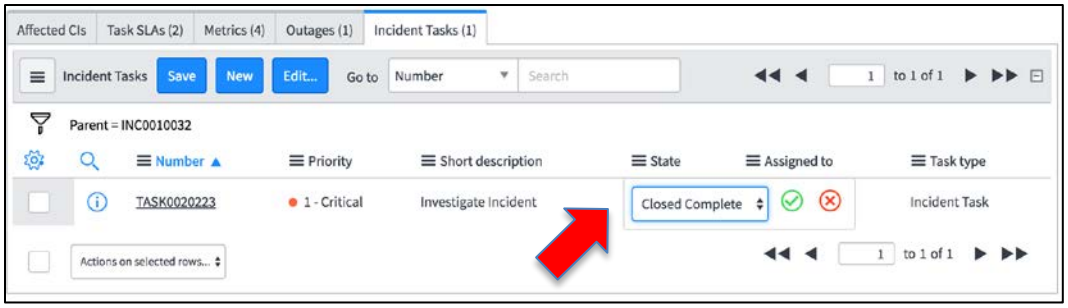
9. Navigate to **Business Services > Outages** and validate an outage record has been opened against the PeopleSoft Financials Business Service.



10. You can also view the outage in the service portal:

    - In a new browser tab, navigate to the Service Portal for your instance**. <instance name>/sp**.
    - From the portal header, choose **System Status**.
    - Under **Current Status**, note the outage for PeopleSoft Financials.
    - After closing the outage (upon completion of the workflow), Status History notes that an outage has been logged against PeopleSoft Financials. Select **PeopleSoft Financials** to see the service availability history as well as the option to self-subscribe to status updates on this service.

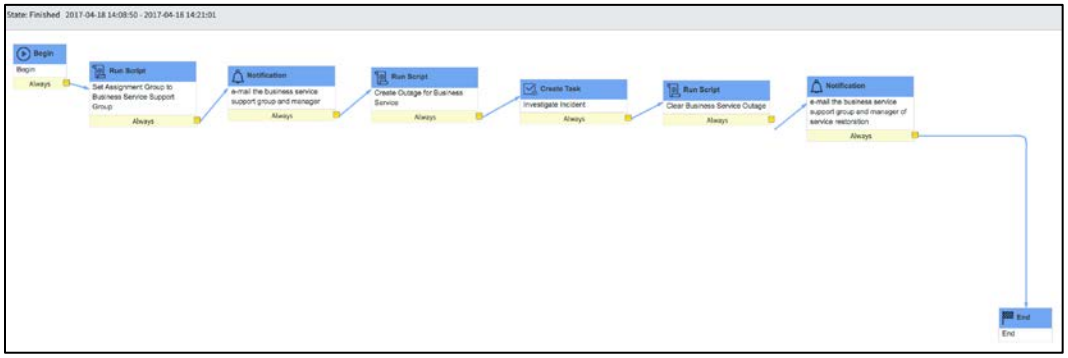
11. Return to the incident record created in step 1: **Incident > Open > <Select corresponding incident>**, and under the **Incident Tasks** related list, change the **State** of the Investigate Incident task, by double-clicking where it says **Open**. Choose the **Closed Complete** state and select the **green** check box to commit the change.



12. Closing this task allows the workflow to progress, as it was waiting for the task to complete before continuing. After committing the task state change to **Closed Complete**, a message appears at the top of the screen indicating that the Outage for PeopleSoft Financials has been closed.



13. Validate the workflow has finished executing by selecting **Show Workflow** under the **Related Links** on the incident.



14. Navigate to **System Mailboxes > Outbound > Outbox**.

15. Note that the appropriate notifications were added to the outbox as per the workflow,



Lab Goal

This lab expands the scope of the workflow built in lab 4 and leverages conditional logic for more complex routing and process flow activities. This lab includes the following tasks:

- Copy and modify an existing workflow
- Use conditional logic activities to make routing decisions for the workflow
- Use concurrent workflow activities

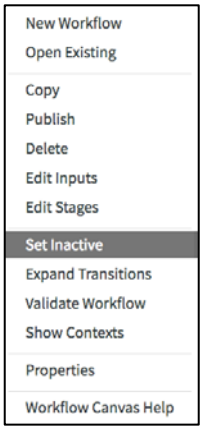
Lab 5.0 Using conditional logic for routing

Open and Copy the Workflow from Lab 4.0

1. Navigate to **Workflow > Workflow Editor**.

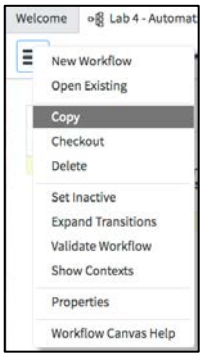
2. In the Workflow Editor, double-click the workflow created in lab 4.0 (**Knowledge P1 Incident Workflow**).

3. From the **hamburger** menu, choose **Set Inactive**.



TIP: This step prevents the existing workflow from conflicting with the copy that will be created in the next step. Inactive workflows will no longer be available in the Workflow Editor and must be accessed by navigating to Workflow > Administration > Workflow Versions.

4. From the **hamburger** menu, choose **Copy**.



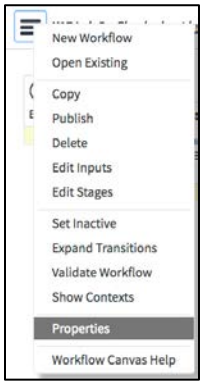
5. In the **Workflow Name** dialog, name the workflow **Knowledge Lab 5**.



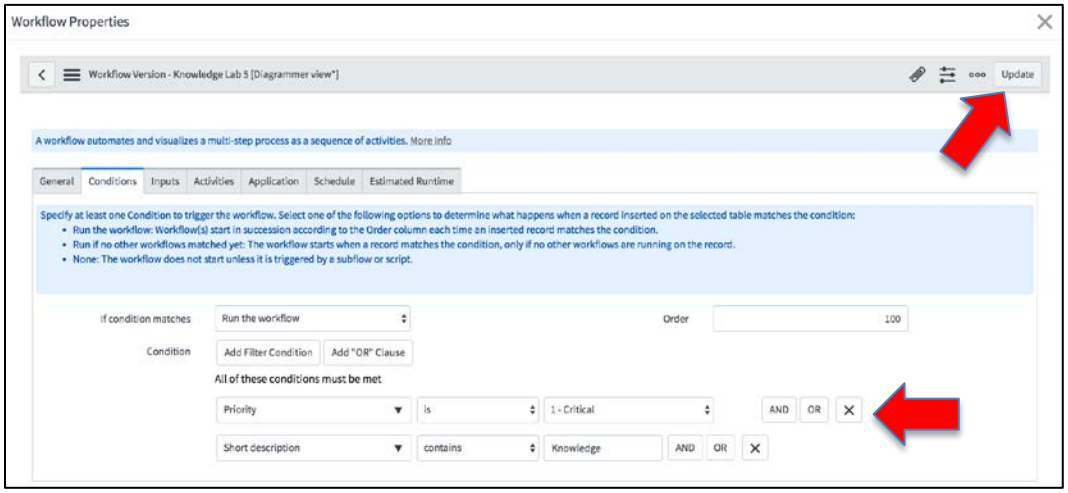
6. Choose **OK**.

Modify the Knowledge Lab 5 Workflow

1. In this lab, you use conditional logic to determine how to route an incident. To this end, you need to update the properties of the workflow definition. From the **hamburger** menu, choose **Properties**.



2. From the Workflow Properties Dialog, select the **Conditions** tab and remove the **Priority is 1-Critical** condition by selecting the **X** button to the right of the condition.



3. Select **Update**.

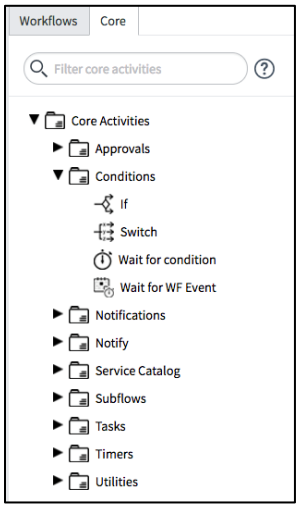
4. On the **Workflow Canvas**, attempt to maximize real estate by clicking and dragging across all the activities (except Begin and including End) to select them. With the activities highlighted, hover over any of them and look for your cursor to change in to a multidirectional arrow. Then click and drag to move all the activities at once.



Add the Switch Activity

1. Return to the workflow canvas that is open for the workflow for this lab.

2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



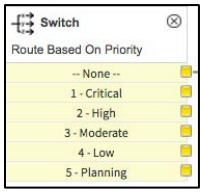
3. Expand the **Conditions** item from the list, and drag and drop the **Switch** activity onto the Workflow Canvas, placing it on top of the line that connects **begin** with **Set Assignment Group to Business Service Support Group**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

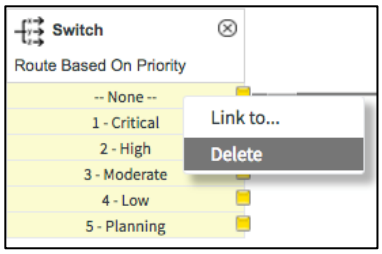
4. Complete the New Activity: Switch form with the following information:

   Name: **Route Based On Priority**
   Type: **Field**
   Field: **Priority**

5. Select **Submit**.
   The Switch activity has now been added to the workflow canvas, with outputs based on all available incident priorities.

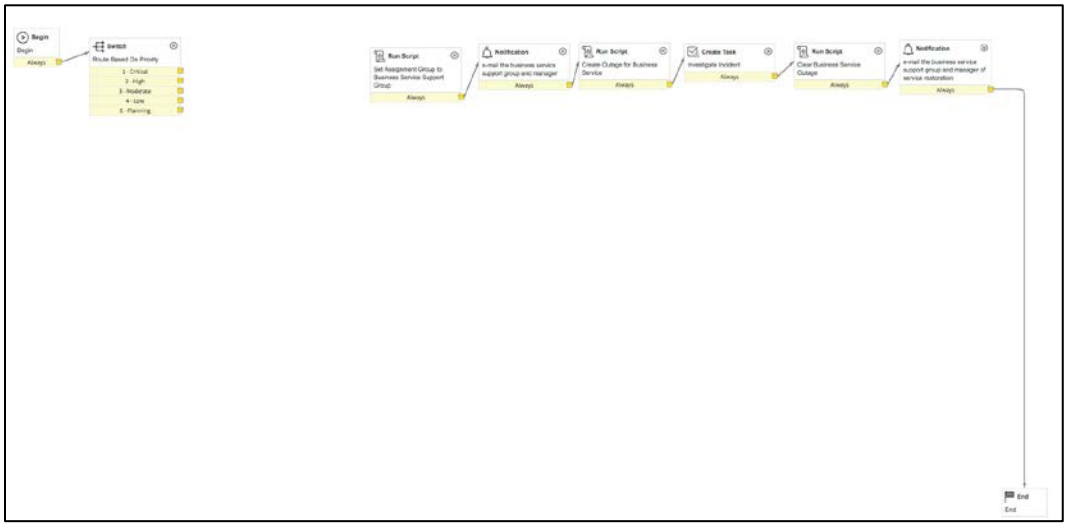


6. In this workflow example, there is an assumption that all incidents will be created with a priority, requiring the option for a **–None—** priority to be deleted. To delete this priority option, **right-click** the *Route Based on Priority* switch activity, **directly on the –None—option**, and choose **Delete**.



TIP: Deleting the –None—Priority will also delete the connection line to the next activity.

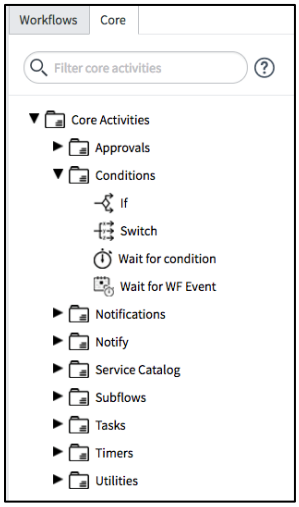
7. The workflow should now look like the example.



Add the If Activity

1. Return to the workflow canvas that is open for the workflow for this lab.

2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



3. Expand the **Conditions** item from the list. Drag and drop the **If** activity onto the Workflow Canvas, placing it between the **Route Based On Priority** switch activity created in the last step, and the **Set Assignment Group to Business Service Support Group** activity.

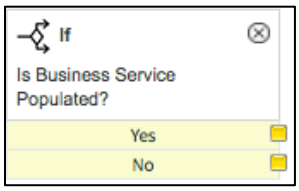
   TIP: There is no connection line to in this area of the workflow canvas at this point. Subsequent steps will have you connect the free-standing activities in to the workflow

4. Complete the New Activity: If form with the following information:

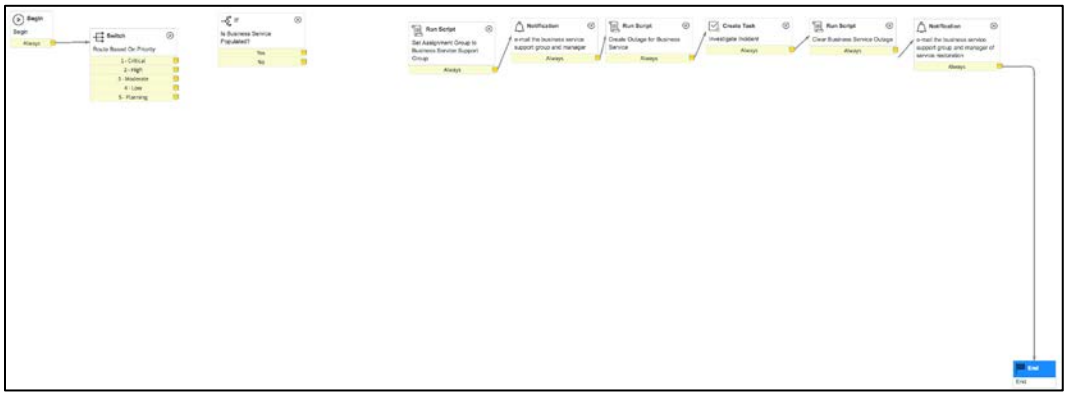
   Name: **Is Business Service Populated?**
   Condition: **Business Service is not empty**

5. Select **Submit**.

   The **If** activity has now been added to the workflow canvas, with Yes and No outputs.



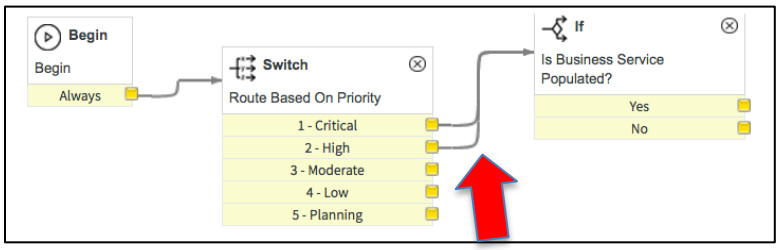
6. Your workflow should now look like the example.



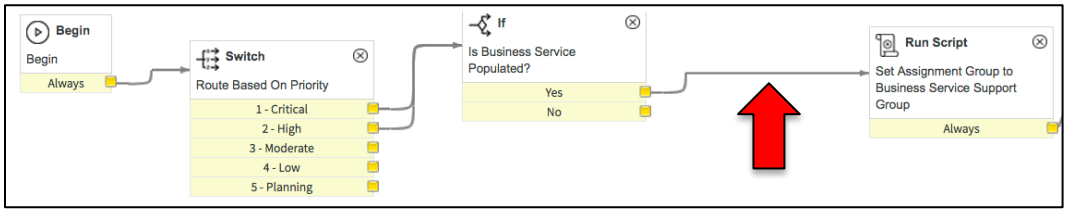
Connect the Switch and If Activities

It is now possible to connect the free-standing Switch and If activities.

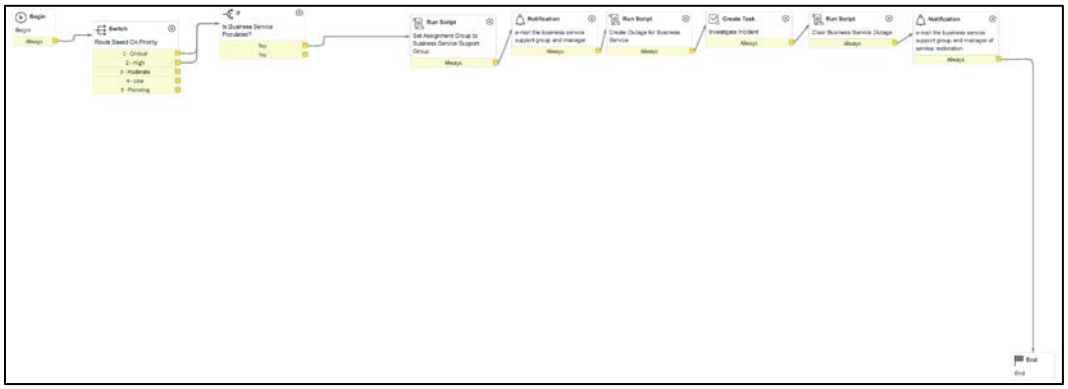
1. Connect the **1 – Critical** and **2 – High** outputs from the **Route Based on Priority** switch activity to the input of the **Is Business Service Populated**? if activity.



2. Connect the **Yes** output from the **Is Business Service Populated?** if activity to the input of the **Set Assignment Group to Business Service Support Group** activity.



3. Your workflow should look like the example.

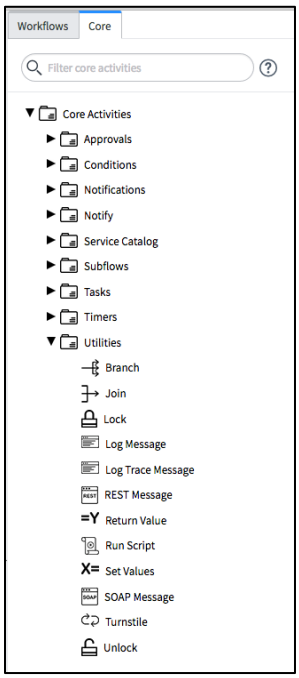


Add Activities for Low-Priority Incidents

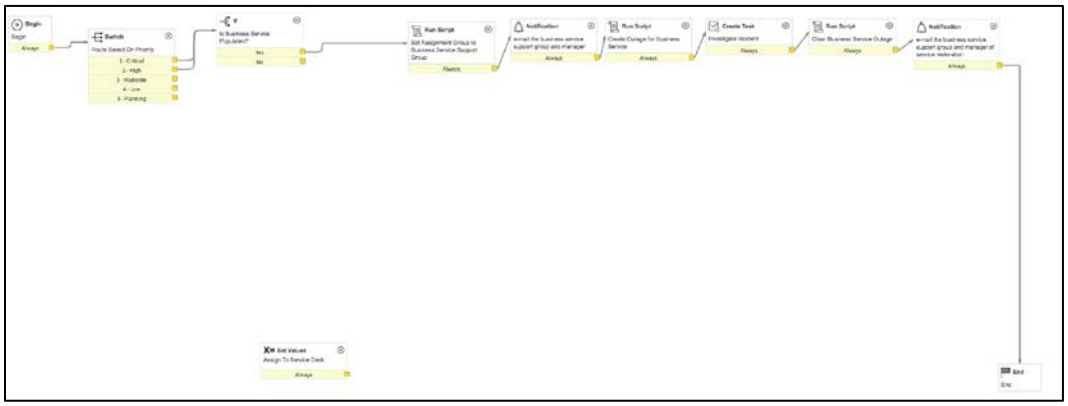
Now create a workflow path for lower-priority incidents to get routed. All incidents between and including the **5-Planning** and **3-Moderate** priorities route this path, which assigns the incident to the Service Desk and creates an **Investigate Incident** task. If a business service is not populated on the incident record, the workflow also routes this path.

1. Return to the workflow canvas that is open for building the workflow.

2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



3. Expand the **Utilities** item from the list, and drag and drop the **Set Values** activity onto the Workflow Canvas, placing it **below** the **Is Business Service Populated?** If activity, on the lower half of the canvas in line with the **End** activity.

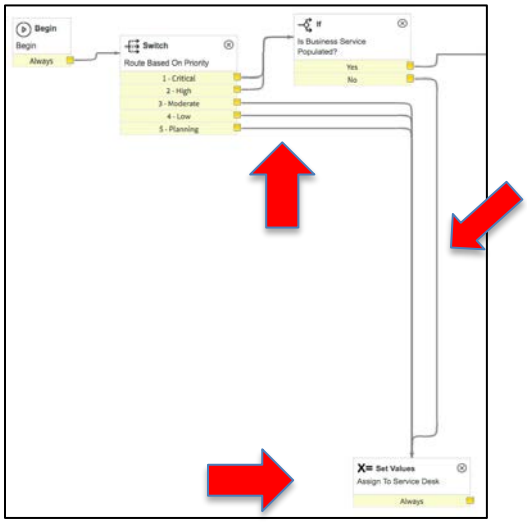


4. Complete the New Activity. Complete the **Values** form with the following information:

   Name: **Assign to Service Desk**
   Set these values:
   Assignment group | Service Desk

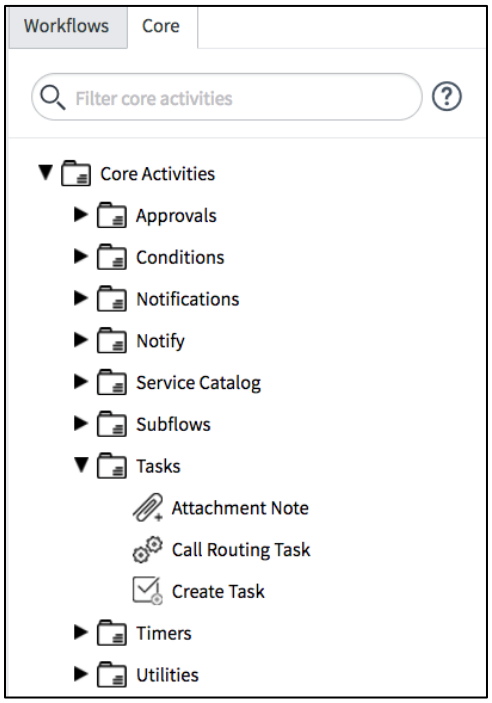
5. Click **Update**.

6. Connect the remaining outputs of the **Route Based On Priority** switch activity to the **Assign To Service Desk** activity.



7. Connect the **No** output on the **Is Business Service Populated**?" activity to the **Assign To Service Desk** activity.

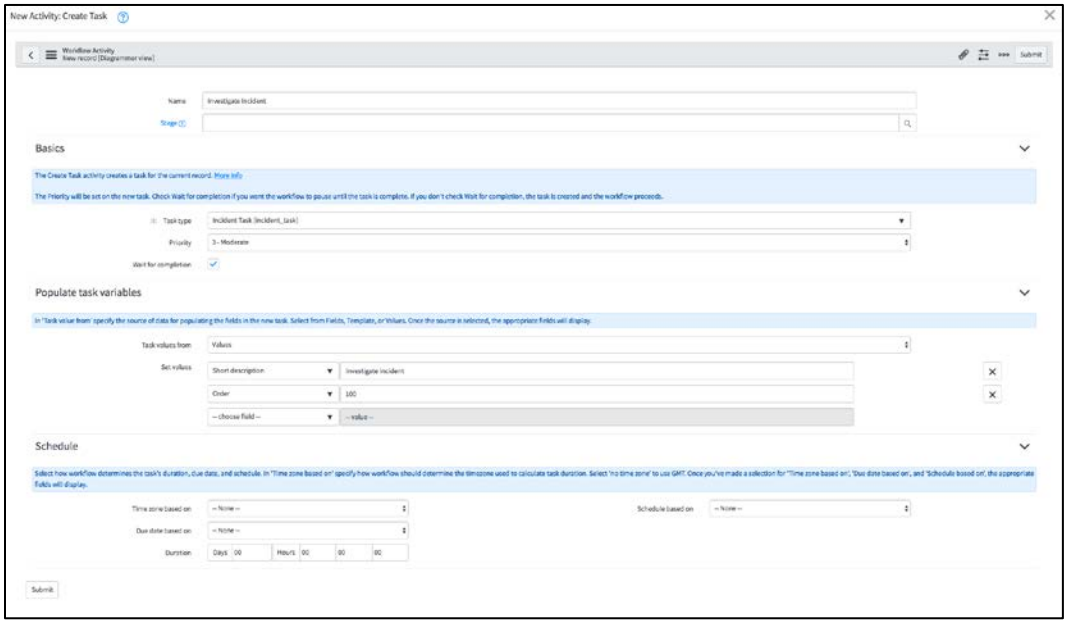
8. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.



9. Expand the **Tasks** item from the list, and drag and drop the **Create Task** activity onto the Workflow Canvas, placing it between the **Assign to Service Desk** and **End** activities.

10. Complete the Activity Properties, **Create Task** form with the following information:

    Name: **Investigate Incident**
    Under Basics
        Set **Task type** to **Incident Task [incident_task]**
        Set **Priority** to **3 – Moderate**
        Make sure the **Wait for completion** check box is selected
    Under Populate task variables:
        Set **Task values from** to **Values**
    In **Set Values**, set:
        Short description to **Investigate Incident**
        Order to **100**

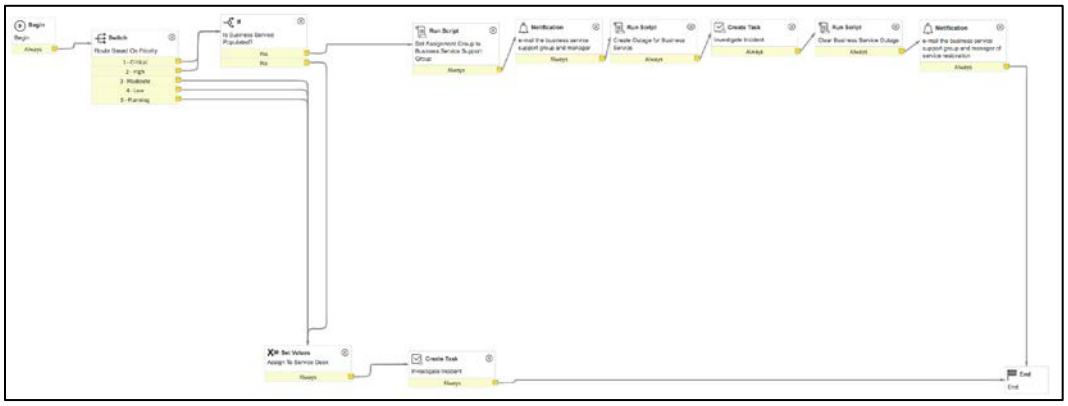


11. Click **Submit**.

12. Connect the output of the **Assign To Service Desk** activity to the **Investigate Incident** activity created in the previous step 10.

13. Connect the output of the **Investigate Incident** activity created in step 10 to the **End** activity.

14. The workflow should now look like the example.

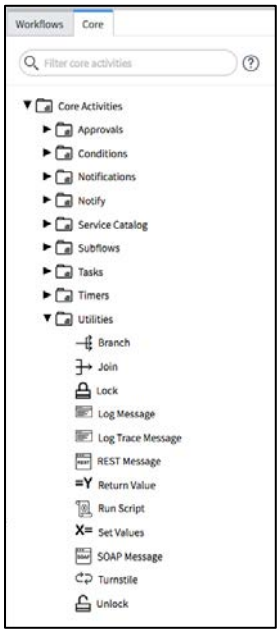


Add Branch and Join Activities to Support Parallel Task Processing

In the earlier iterations of this workflow, you addes a single task. To execute multiple concurrent tasks, leverage the **Branch** activity (to initiate multiple workflow paths), and the **Join** activity (to bring the disparate paths back together). In this workflow example, you leverage Branch and Join to execute concurrent processing of tasks.

1. Return to the workflow canvas that is open for building the workflow for this lab.

2. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

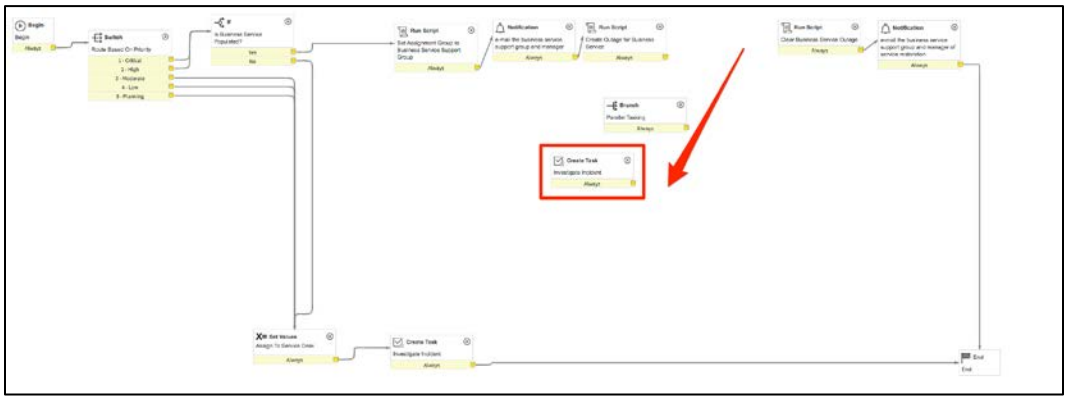


3. Expand the **Utilities** item from the list, and drag and drop the **Branch** activity onto the Workflow Canvas, placing it **below** the **Create Outage for Business Service** activity.

4. Enter Name: **Parallel Tasking** on the **New Activity: Branch** form.

5. Select **Submit**.

6. Delete the input and output connections to the top-level **Investigate Incident** activity, and drag it below the Parallel Tasking branch activity.



7. To support parallel task processing, the tasks are configured differently than before. Double-click the **Investigate Incident** activity to modify it. Update the **Activity Properties, Create Task** form with the following information:

   Name: **Investigate Incident**
   Under Basics:
   Task type: **Incident Task [incident_task]**
   Priority: 1 – Critical
   Wait for completion **unchecked**
   Under Populate task variables:
   Task values from: Values
   Set values:
   Short description | **Investigate Incident**
   Order | **100**

8. Select **Update**.

9. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

10. Expand the **Tasks** item from the list, and drag and drop the **Create Task** activity onto the Workflow Canvas, placing it to the **right** of the Investigate Incident activity worked on in step 7.

11. Enter the following information on the **New Activity: Create Task** form:

    Name: **Document Remediation**
    Under Basics:
        Task type: **Incident Task [incident_task]**
        Priority: 2 – High
        Wait for completion **unchecked**
    Under Populate task variables:
        Task values from: Values
        Set values:
            Short description | **Document Remediation**
            Order | **200**

12. Select **Submit**.

13. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

14. Expand the **Tasks** item from the list, and drag and drop the **Create Task** activity onto the Workflow Canvas, placing it to the **right** of the **Document Remediation** activity worked on in step 11.

15. Enter the following information on the **New Activity: Create Task** form:

    Create Task form with the following information:
        Name: **Post Remediation Activities**
    Under Basics:
        Task type: **Incident Task [incident_task]**
        Priority: 2 – High
        Wait for completion **checked**
    Under Populate task variables:
        Task values from: **Values**
    Set values:
        Short description | **Post Remediation Activities**
        Order | **300**

16. Select **Submit**.

17. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

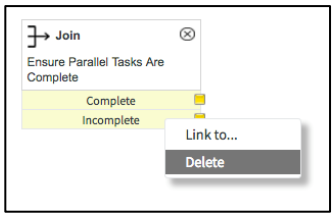
18. Expand the **Utilities** item from the list, and drag and drop the **Join** activity onto the Workflow Canvas, placing it below and to the **right** of the **Post Remediation Activities** activity worked on in step 15.

19. Enter the following information on the **New Activity: Join** form:

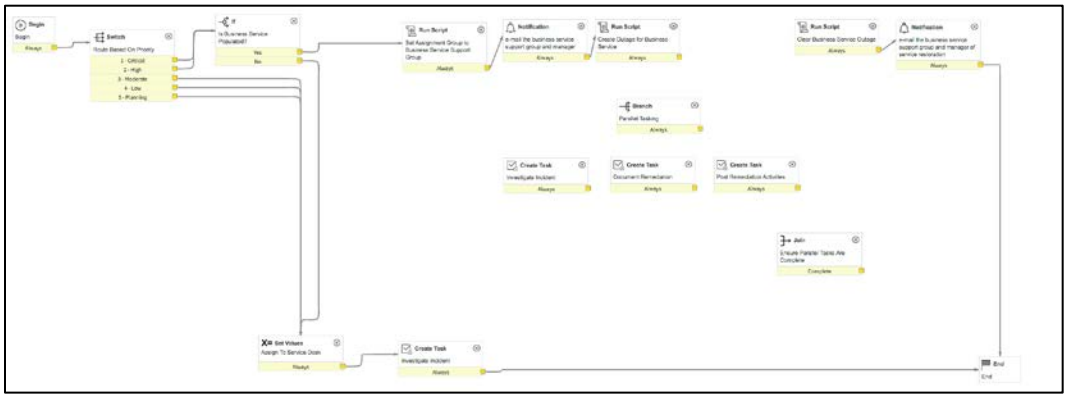
    Name: **Ensure Parallel Tasks Are Complete**

20. Select **Submit**.

21. Right-click the **Ensure Parallel Tasks Are Complete** join activity on the **Incomplete** output, and choose **Delete** to remove this output.



22. The workflow should look like the example:



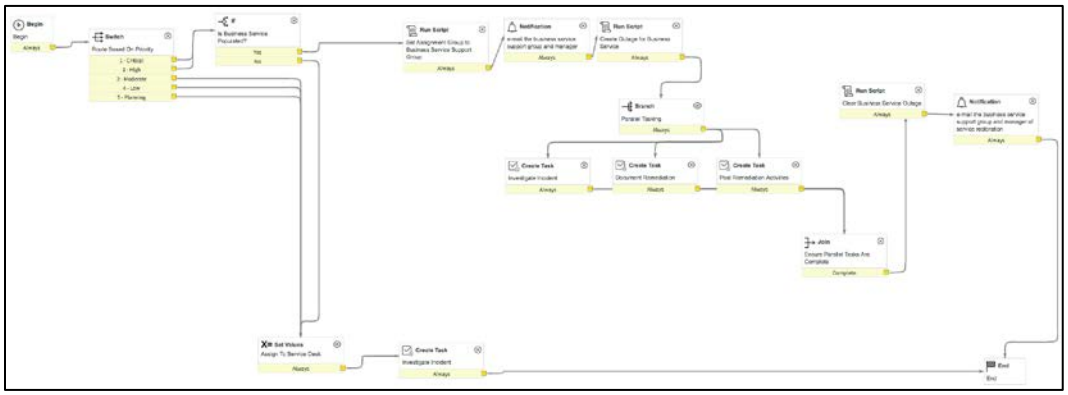
23. Connect the output of the **Create Outage for Business Service** Activity to the **Parallel Tasking** branch activity.

24. Connect the output of the **Parallel Tasking** branch activity to the input of the three Create Task activities below it: **Investigate Incident, Document Remediation, and Post Remediation Activities**.

25. Connect the output of the **three Create Task activities** in step 24 to the **Ensure Parallel Tasks are Complete** join activity.

26. Connect the output of the **Ensure Parallel Tasks Are Complete** join activity to the **Clear Business Service Outage** run script activity.

27. The workflow should look like the example.

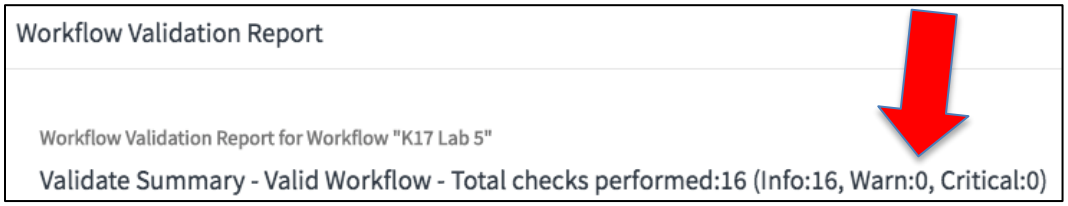


Publish the Workflow

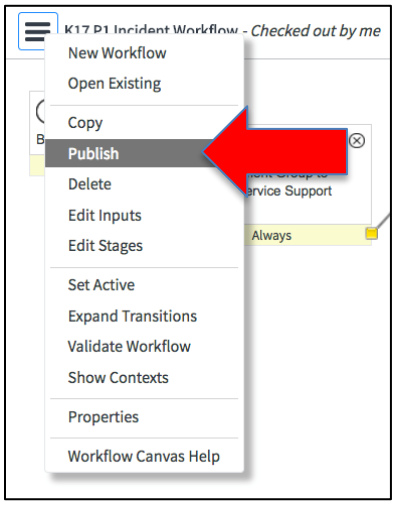
1. Click the **Validate** icon to confirm that there are no errors within the workflow.



2. Confirm that there are no warnings or critical issues.



3. Click the **hamburger** icon, and select **Publish**.



Lab Goal

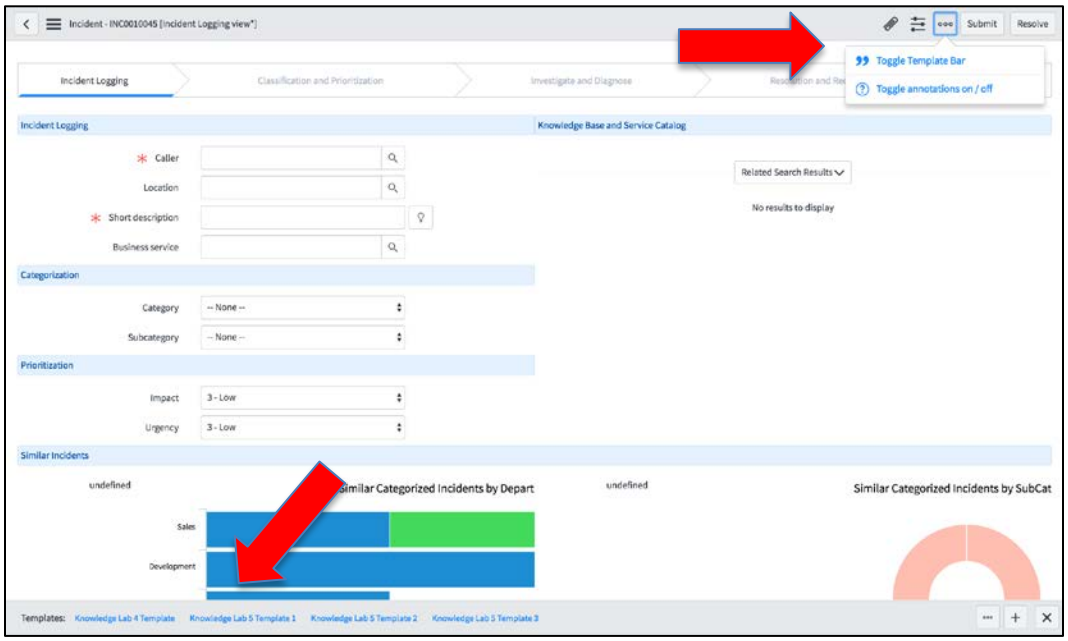
This lab explains the steps of testing the Conditional Logic updates from the previous Lab. The lab includes the following tasks:

- Create three Incidents matching the conditions for various paths in the workflow
- View how the workflow routes based on conditions
- View parallel processing of tasks

Lab 5.1 Conditional Logic: Validate the Lab

Trigger Use Case 1 in the Workflow (Critical Incident w/ Business Service)

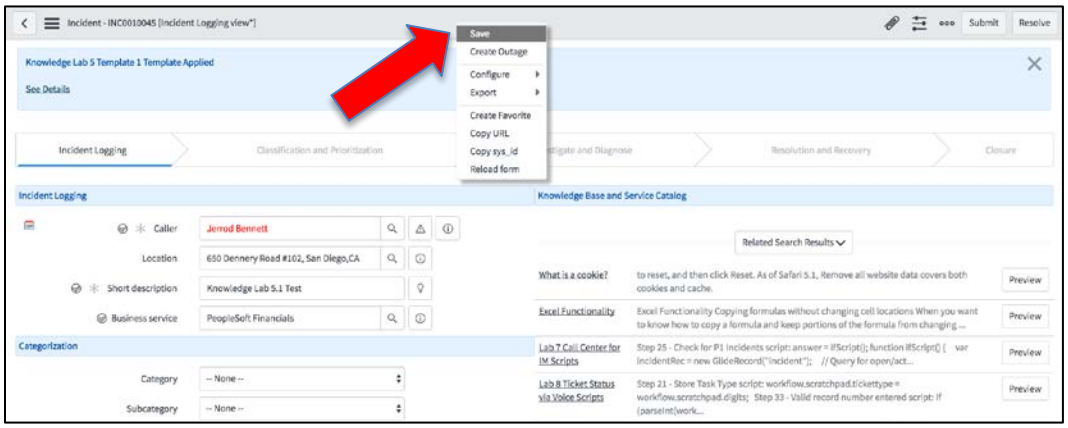
1. Navigate to **Incident > Create New**.
2. Open the incident leveraging the **Knowledge Lab 5 Template 1**.
3. Ensure the **Template Bar** is toggled on. If it is not, select the **three-dot** menu in the upper-right corner and select **Toggle Template Bar**.



4. From the template bar, select the **Knowledge Lab 5 Template 1**. This fills the incident with enough criteria to trigger the first use case for the workflow created in lab 5.



5. Right-click the record header, and choose **Save**.

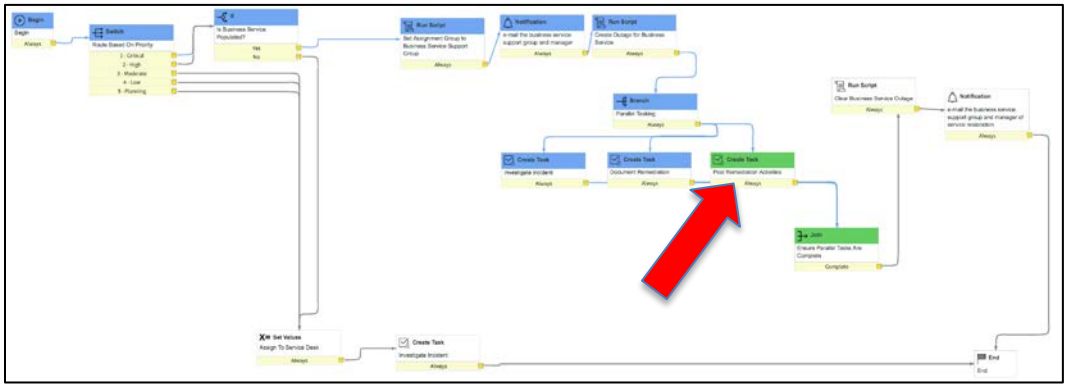


6. After saving the incident record, there are several items to validate that the workflow is executing properly:

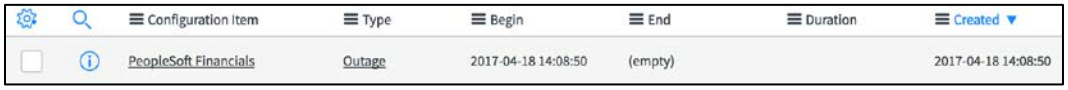
7. You should notice a message at the top of the incident indicating **Outage opened for PeopleSoft Financials**.



8. Under Related Links, choose **Show Workflow** and validate that the workflow is executing and waiting at the **Create Task** activity.



9. Navigate to **Business Services > Outages** and confirm that an outage record has been opened against the PeopleSoft Financials Business Service.

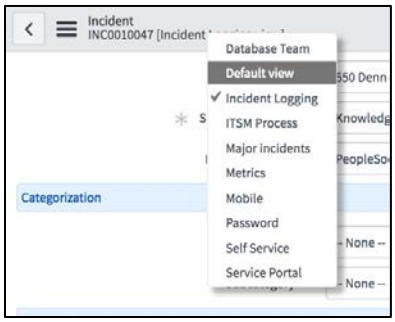


10. You can also view the outage in the service portal:

    - In a new browser tab, navigate to the Service Portal for your instance. <instance name>**/sp.**
    - From the portal **header**, choose **System Status.**
    - Under **Current Status**, note the outage for **PeopleSoft Financials**.
    - Under **Status History**, note that an outage has been logged against PeopleSoft Financials. Select **PeopleSoft Financials** to see the **service availability history** as well as have an option to self-subscribe to status updates on this service.

11. Return to the incident record created in step 1: **Incident > Open > <Select corresponding incident>**. To view incident tasks, you may need to change your **view** of the form. By default, you will likely be in the **Incident Logging View**. Change the view to the Default view.

12. In the incident record header, click the view name [**Incident Logging View**] in the header and select **Default view**.



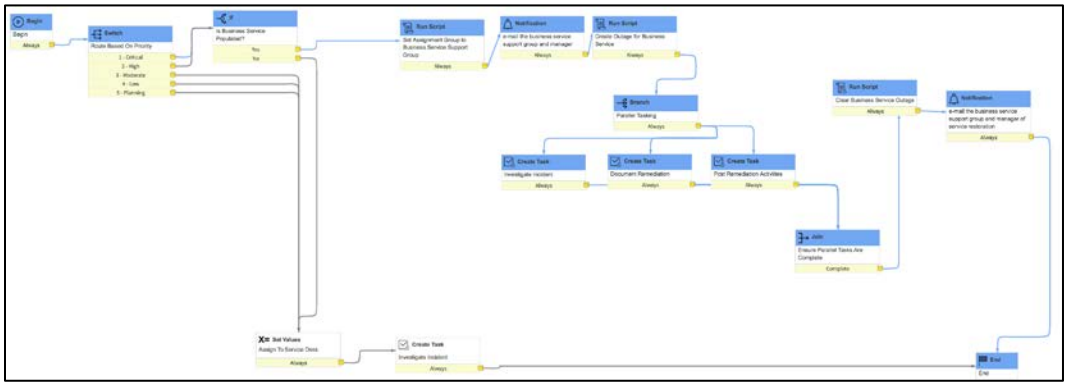
13. Under the **Incident Tasks** related list, note that three tasks were created in parallel as result of **branch** activity. Change the **State** of the **Investigate Incident**, **Document Remediation,** and **Post Remediation Activities** tasks by double-clicking where it says Open, Choosing the **Closed Complete** state, and selecting the **green** check box to commit the change.



14. Closing these tasks allows the workflow to progress, as it was waiting for the Post Remediation Activities task to complete before continuing. After committing the task state change to **Closed Complete**, notice a message at the top of the screen indicating that the Outage for PeopleSoft Financials has been closed.



15. Validate the workflow has finished executing by selecting **Show Workflow** under the **Related Links** on the incident.



16. Navigate to **System Mailboxes > Outbound > Outbox**.

17. Note that the appropriate notifications were added to the outbox as per the workflow.

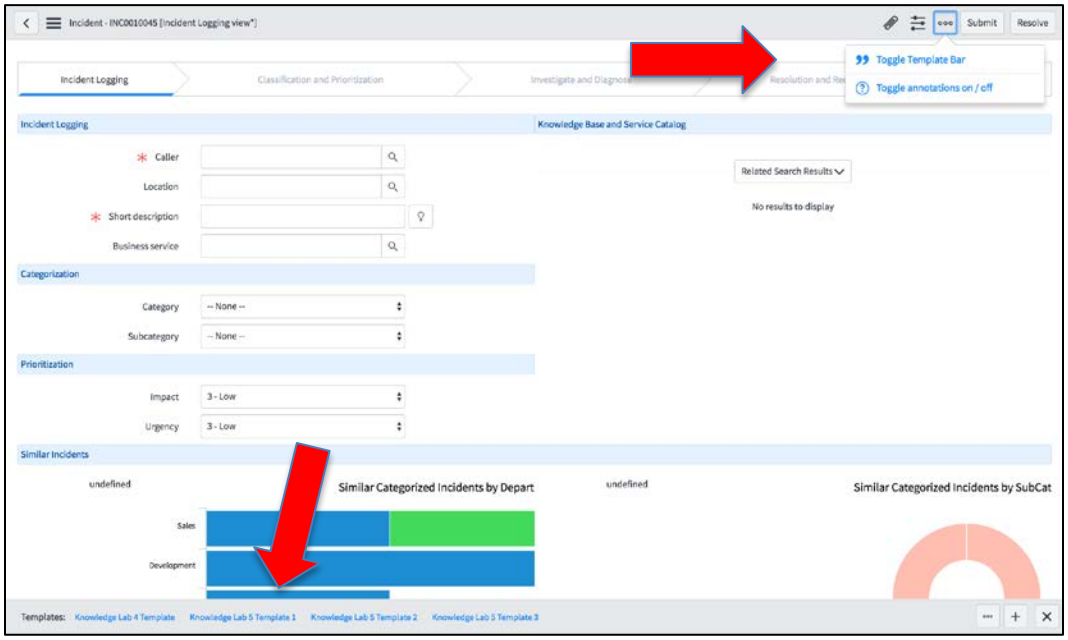


Trigger Use Case 2 in the Workflow (Critical Incident w/ No Business Service)

1. Navigate to **Incident > Create New**.

2. Open the incident leveraging the **Knowledge Lab 5 Template 2**:

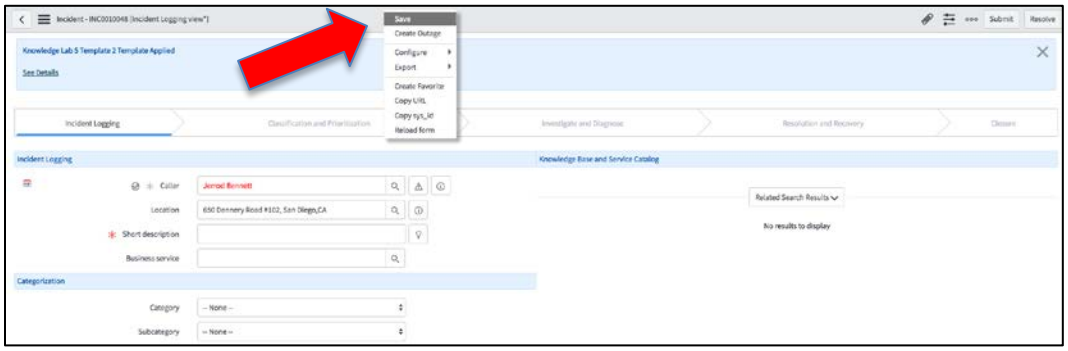
3. Ensure the **Template Bar** is toggled on. If it is not, select the **three-dot** menu in the upper-right corner and select **Toggle Template Bar**.



4. From the template bar, select the **Knowledge Lab 5 Template 2**. This fills the incident with enough criteria to trigger the second use case for the workflow created in lab 5.

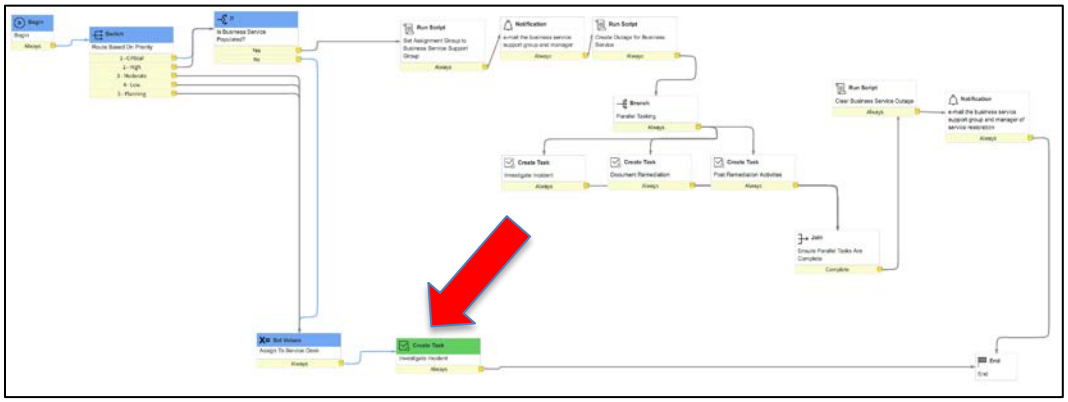


5. Right-click the record header, and choose **Save**.



6. This use case follows the priority 1 workflow path, but since it does not have a business service defined on the incident form, it is evaluated by the if activity **Is Business Service Populated?** and directed to the **Assign to Service Desk** activity.

7. Under Related Links, choose Show Workflow, and validate that the workflow is executing and waiting at the **Create Task** activity

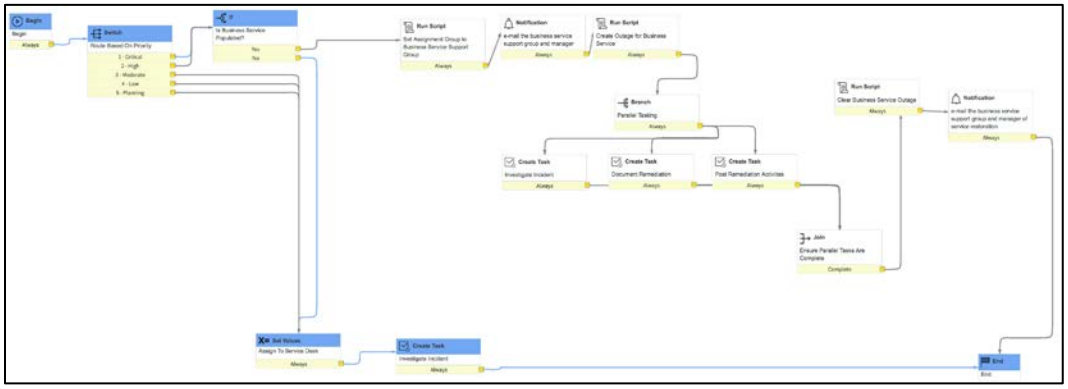


8. Under the **Incident Tasks** related list, close the **Investigate Incident** task, by double-clicking where it says Open, choosing the **Closed Complete** state, and selecting the **green** check box to commit the change.



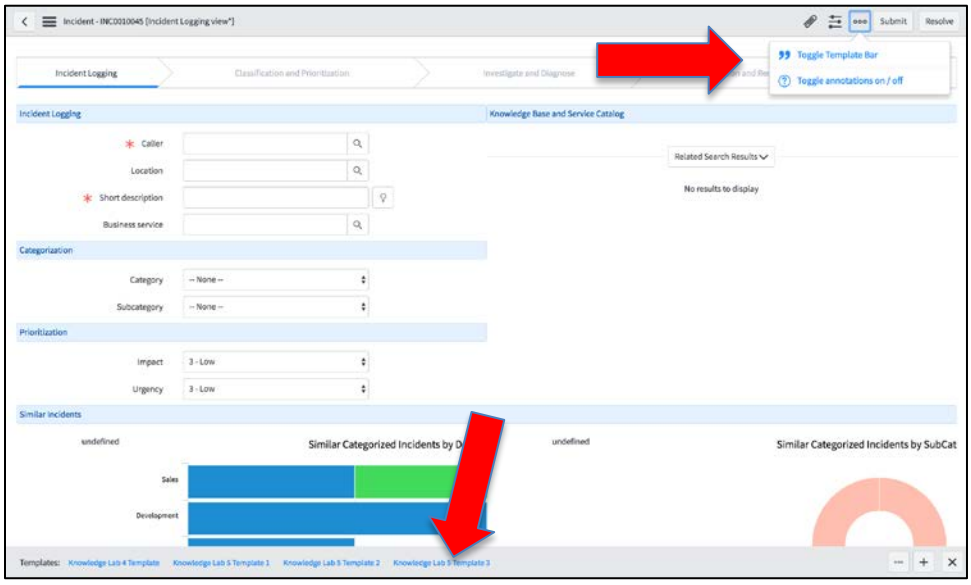
9. Closing this task allows the workflow to progress, as it was waiting for the **Investigate Incident** task to complete before continuing.

10. Validate the workflow has finished executing by selecting **Show Workflow** under the **Related Links** on the incident.



Trigger Use Case 3 in the Workflow (Low-Priority Incident)

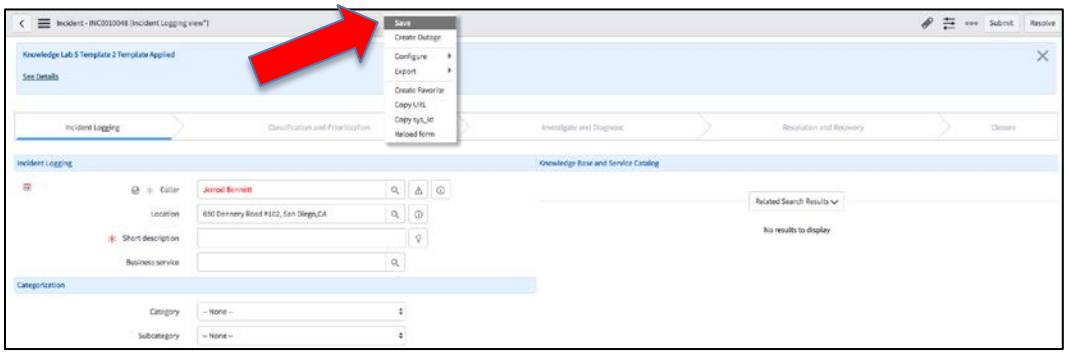
1. Navigate to **Incident > Create New**.
2. Open the incident leveraging the **Knowledge Lab 5 Template 3**:
3. Ensure the **Template Bar** is toggled on. If it is not, select the **three-dot** menu in the upper-right corner, and select **Toggle Template Bar**.



4. From the template bar, select the **Knowledge Lab 5 Template 3**. This fills the incident with enough criteria to trigger the third use case for the workflow created in lab 5.

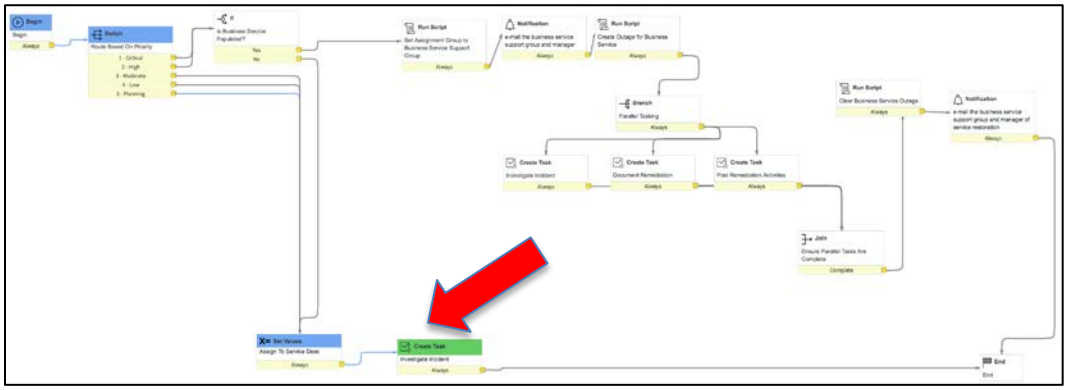


5. Right-click the record header, and choose **Save**.



6. This use case follows the low-priority workflow path exiting the switch activity, is directed to the **Assign to Service Desk** activity, and pauses at the **Investigate Incident** create task activity.

7. Under Related Links, choose **Show Workflow** and validate that the workflow is executing and waiting at the **Create Task** activity.

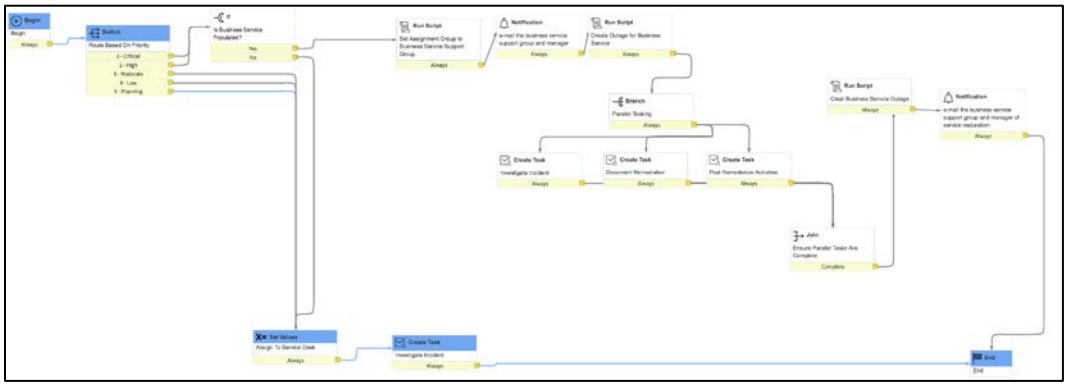


8. Under the **Incident Tasks** related list, close the **Investigate Incident** task by double-clicking where it says **Open**, choosing the **Closed Complete** state, and selecting the **green** check box to commit the change.



9. Closing this task allows the workflow to progress, as it was waiting for the **Investigate Incident** task to complete before continuing.

10. Validate the workflow has finished executing by selecting **Show Workflow** under the **Related Links** on the incident.



Lab Goal

Lab 6.0 Automate Problem Management

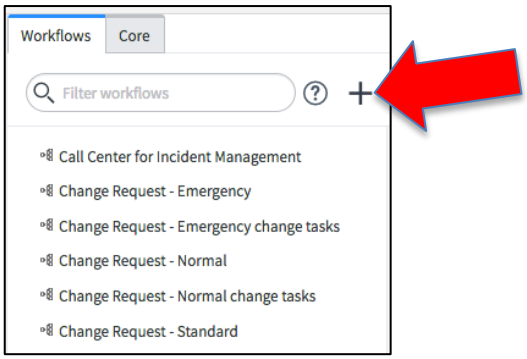
This lab explains how to create a new workflow, for automating the process of Problem Management. This lab includes the following tasks:

- Create a new workflow
- Use the Generate and Approval workflow activities
- Provide a process for Problem Management

Create a New Workflow

1. Navigate to **Workflow > Workflow Editor**

2. Click the **+** sign, to create a new workflow.

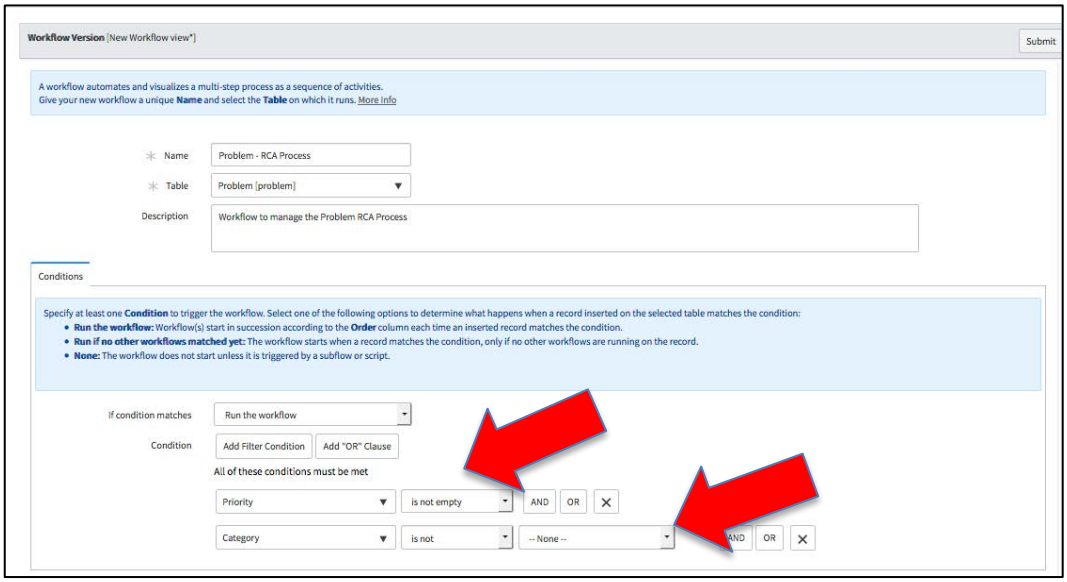


3. In the New Workflow window that appears, complete the following fields:

   Name: **Problem – RCA Process**
   Table: **Problem [problem]**
   Description: **Workflow to manage the Problem RCA Process**

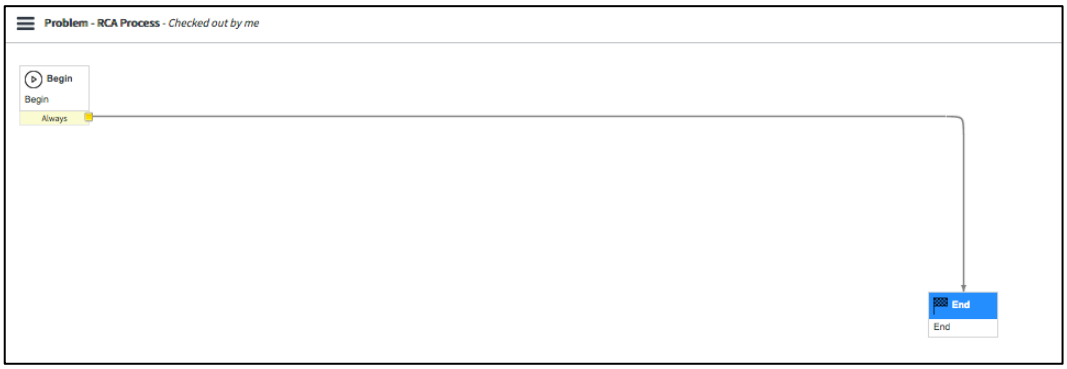
4. Add the following conditions to the workflow:

   Priority is not empty
   Category is not –None—



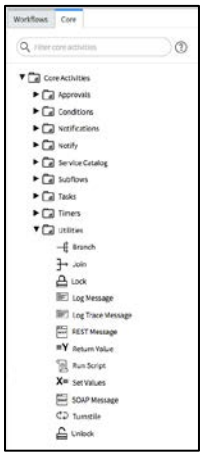
5. Click **Submit**.

6. Click and drag the **End** activity to the bottom-right of the canvas, to provide room to start building this new workflow.



Create Process Workflow

1. On the workflow canvas, select the **Core** tab to show the list of available workflow activities.

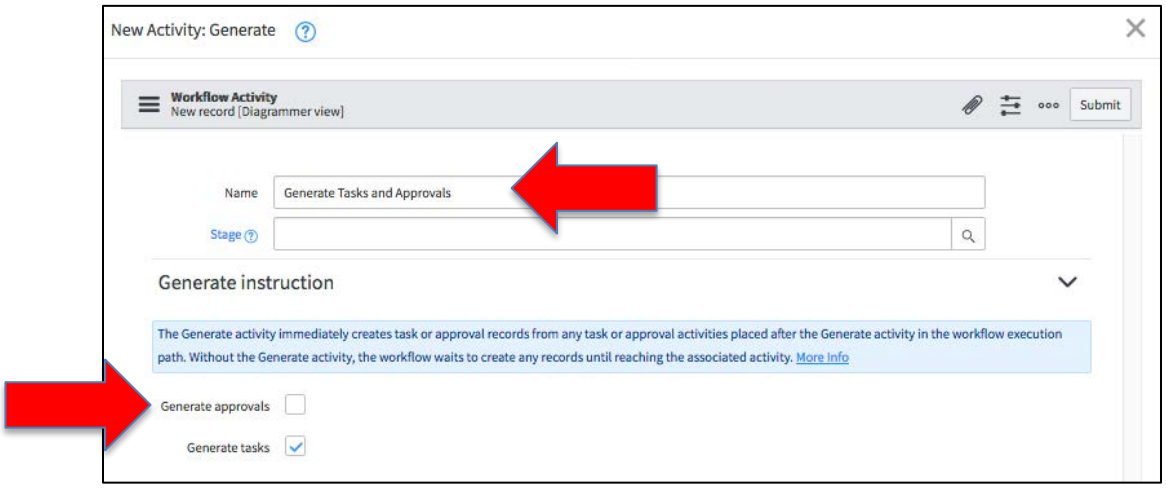


2. Expand the **Approvals** item from the list, and drag the **Generate** activity onto the Workflow Canvas, placing it on top of the line that connects **begin** with **end**.

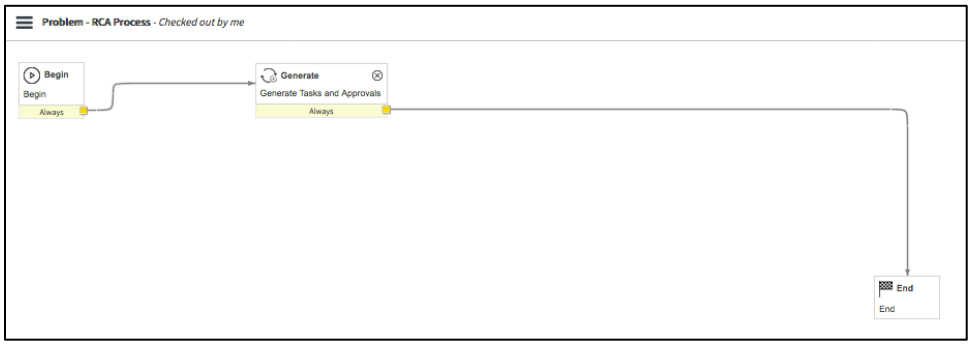
   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

3. On the new **Generate** activity, complete the following:

   Name: **Generate Tasks and Approval**
   Generate approvals: **DESELECT this box**



4. Click **Submit**.



Add Task 1.0 to the Workflow

1. Expand the **Tasks** item from the list and drag the **Create Task** activity onto the Workflow Canvas, placing it on top of the line that connects **Generate** with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

2. On the new **Create Task** activity, complete the following:

   Name: **1.0 Investigate and Document Root Cause**
   Task Type: **Problem Task [problem_task]**
   Priority: **2-High**
   Short Description: **Investigate and Document Root Cause**

3. Under the Script section of the form, click the **Advanced** check box.

4. On lines 6 and 7 of the Advanced Script window, add the following 2 lines of script:

   task.cmdb_ci = current.cmdb_ci;
   task.assignment_group = current.cmdb_ci.support_group;

5. Click **Submit**.

6. Drag and drop the activities so that the process flow resembles the example.



Add Task 2.0 to the Workflow

1. Expand the **Tasks** item from the list, and drag the **Create Task** activity onto the Workflow Canvas, placing it on top of the line that connects **Investigate and Document Root Cause** with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

2. On the new **Create Task** activity, complete the following:

   Name: **2.0 Document Workaround**
   Task Type: **Problem Task [problem_task]**
   Priority: **2-High**
   Short Description: **Document Workaround**

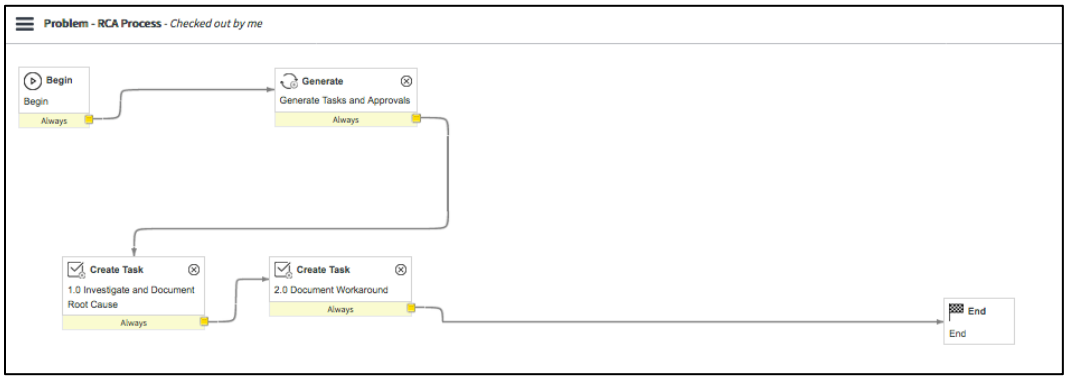
3. Under the **Script** section of the form, click the **Advanced** check box.

4. On lines 6 and 7 of the Advanced Script window, add the following 2 lines of script:

   task.cmdb_ci = current.cmdb_ci;
   task.assignment_group = current.cmdb_ci.support_group;

5. Click **Submit**.

6. Drag and drop the activities so that the process flow resembles the example.



Add Approval to the Workflow

1. Expand the **Approvals** item from the list, and drag the **Approval - User** activity onto the Workflow Canvas, placing it on top of the line that connects **2.0 Document Workaround** with **end**.

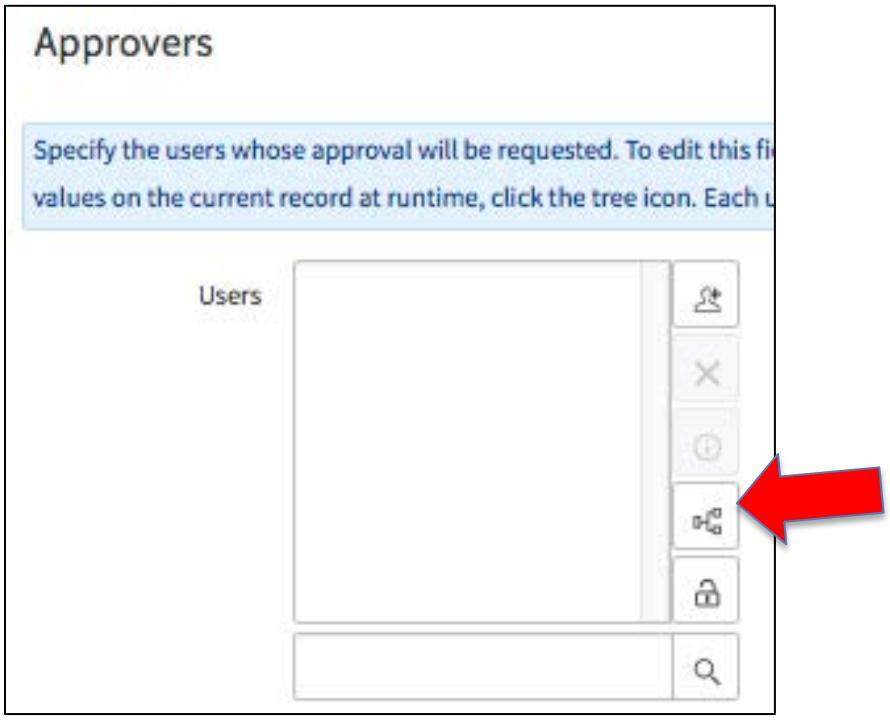
   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

2. On the new **Approval** activity, complete the following:

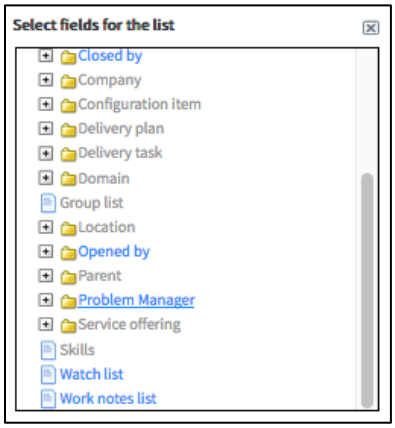
   Name: **Approve RCA and Workaround**

3. In the **Approvers** section of the form, click the **lock** icon next to the **Users** field.

4. Click the **Select Fields** icon.



5. Click the **Problem Manager** field from the provided list.



6. Under the **Approver** section of the form, click the **Advanced** check box.

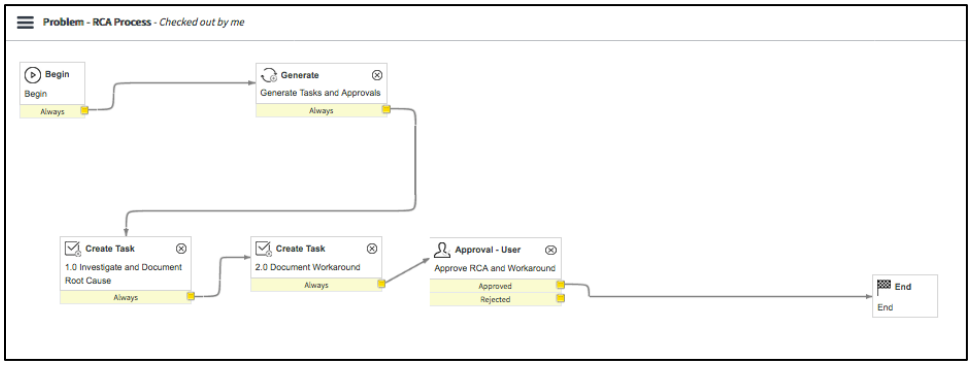
7. On lines 7 and 8 of the Advanced Script window, add the following 2 lines of script:

   task.cmdb_ci = current.cmdb_ci;
   task.assignment_group = current.cmdb_ci.support_group;



8. Click **Submit**.

9. Drag and drop the activities so that the process flow resembles the example.



Add Task 3.0 to the Workflow

1. Expand the **Tasks** item from the list, and drag the **Create Task** activity onto the Workflow Canvas, placing it on top of the line that connects the **Approved** output of the Approval-User activity with **end**.

   TIP: Drop the new activity onto the canvas when the activity line turns blue in color.

2. On the new **Create Task** activity, complete the following:

   Name: **3.0 Create Knowledge and Communicate Workaround**
   Task Type: **Problem Task [problem_task]**
   Priority: **2-High**
   Short Description: **Create Knowledge Article**

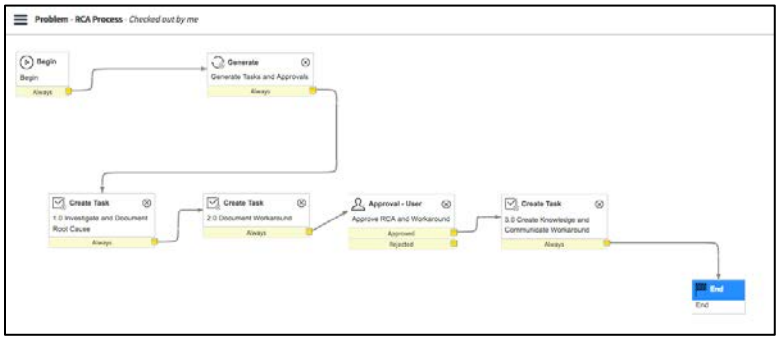
3. Under the **Script** section of the form, click the **Advanced** check box.

4. On lines 6 and 7 of the Advanced Script window, add the following 2 lines of script:

   task.cmdb_ci = current.cmdb_ci;
   task.assignment_group = current.cmdb_ci.support_group;

5. Click **Submit**.

6. Drag and drop the activities so that the process flow resembles the example.



Add a Notification to the Workflow

1. Expand the Notifications item from the list, and drag and drop the **Notifications** activity onto the Workflow Canvas, and below the **Approval-User** activity

2. Complete the Activity Properties, Notification form with the following information:

   Name: **Rejection Notification**
   Subject: **Root Cause for ${number} : ${description} has been rejected**
   Message: **Number: ${number}**
   Problem Description: ${description}
   Problem Manager: ${u_problem_manager}

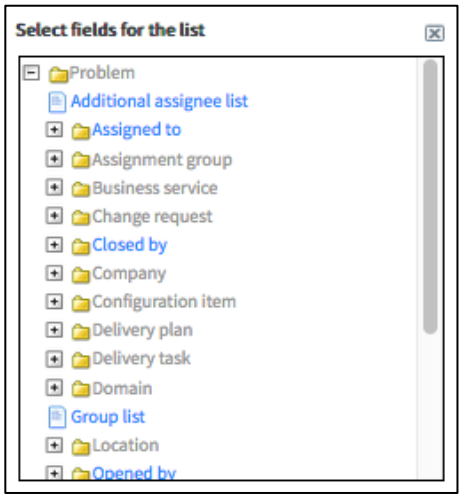
   Note: The variable values indicated with **${task.x}** above, can be dynamically selected from Select Variables, instead of having to know the field names

3. In the **Addressee**(s) section of the form, click the **lock** icon next to the **To** field.

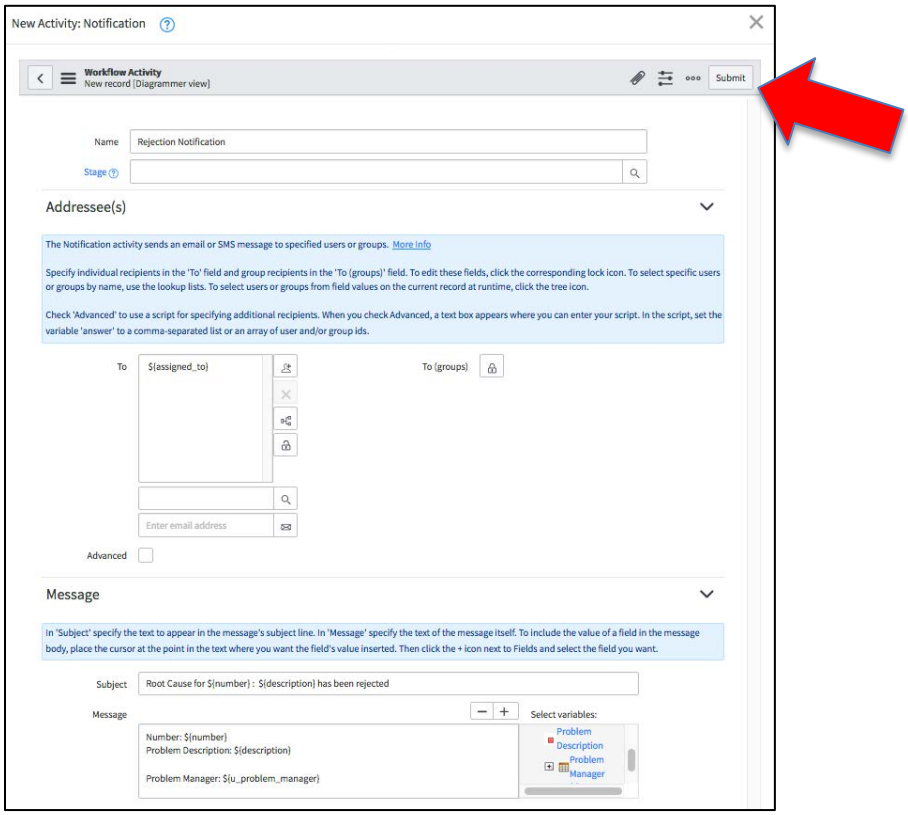
4. Click the **Select Fields** icon.



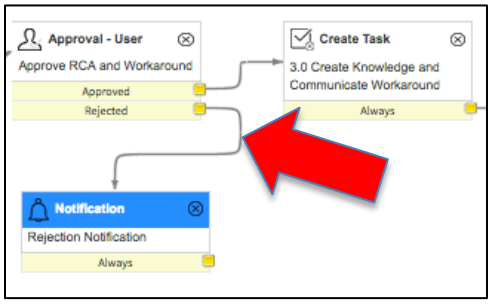
5. Navigate through the tree structure and select the **Assigned To** field within the **Problem** folder.



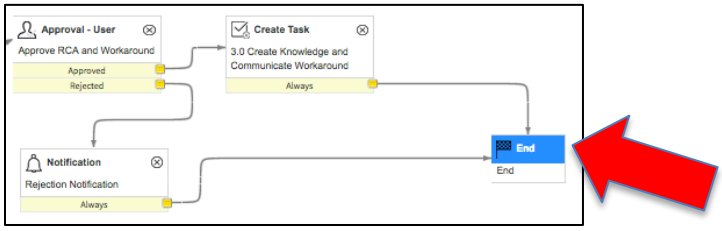
6. Select **Submit** on the Activity Properties, Notification form.



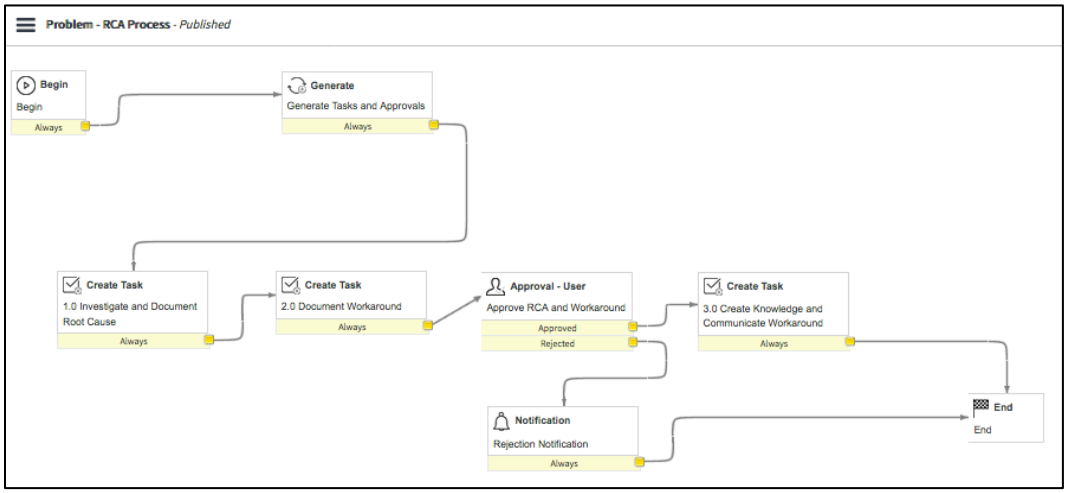
7. Click the **Rejected** output on the Approval-User activity and drag/connect the workflow to the Notification activity.



8. Click the **Always** output on the Notification activity and drag/connect the workflow to the **End** activity.



9. The completed workflow should now look like the example.

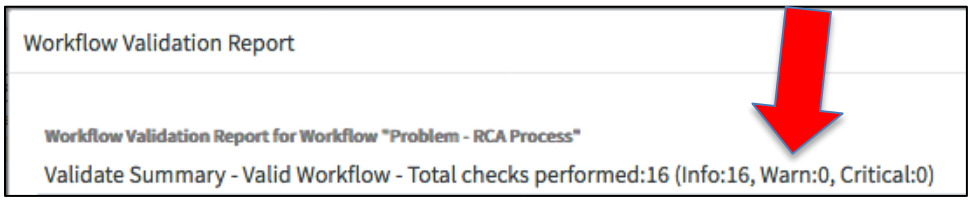


Publish the Workflow

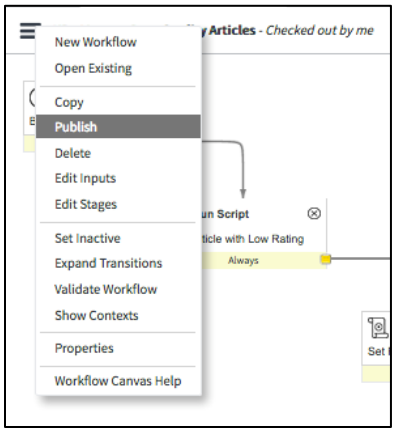
1. Click the **Validate** icon to confirm that there are no errors within the workflow.



2. Confirm that there are no warnings or critical issues.



3. Click the **hamburger** icon, and select **Publish**.



Lab Goal

Lab 6.1 Automating Problem Mgmt: Verify Lab Results

This lab explains the steps of testing your Problem Management process from the previous Lab. The lab includes the following tasks:

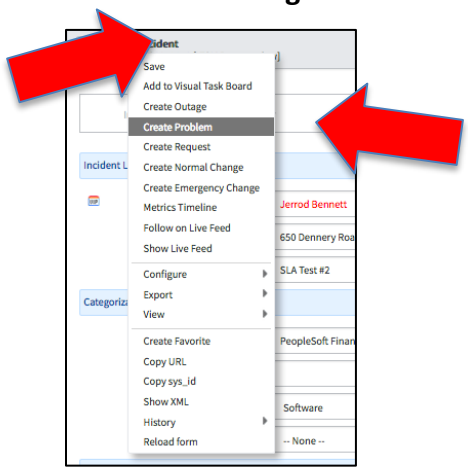
- Create a problem record from an Incident
- Assign a problem manager
- Manage the problem process

Trigger the Workflow

1. Navigate to **Incident > Open**
2. Open the incident with the following attributes:

   Caller: **Jerrod Bennett**
   Short Description: **SLA Test #2**
   Business Service: **Peoplesoft Financials**

3. Right-click the header and Choose **Save**.
4. Click the **hamburger** icon in the top-left corner of the form and select **Create Problem**.

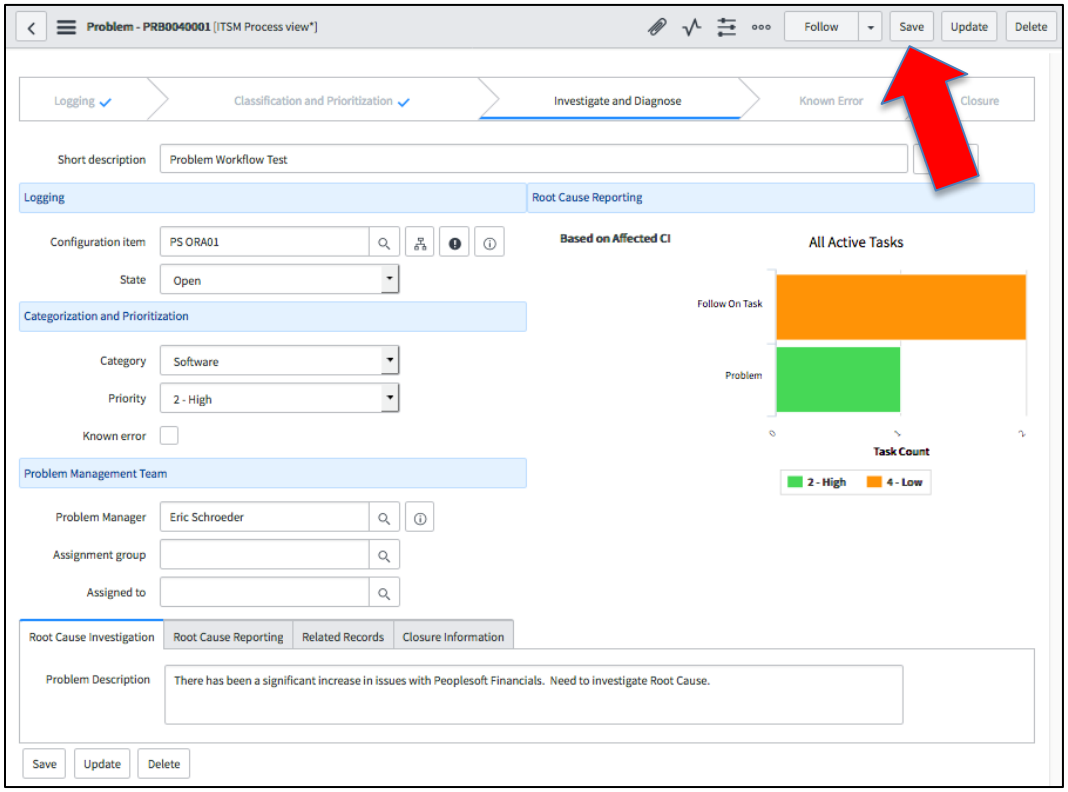


Manage the Problem Record

1. On the newly created problem record, complete the following fields:

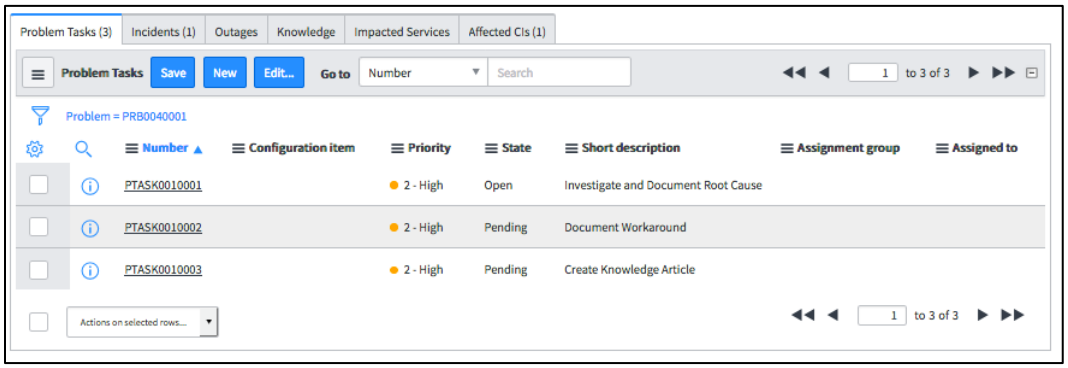
   Short Description: **Problem Workflow Test**
   Configuration Item: **PS ORA01**
   Category: **Software**
   Priority: **2 – High**
   Problem Manager: **Eric Schroeder**
   Problem Description: **There has been a significant increase in issues with Peoplesoft Financials. Need to investigate Root Cause.**

2. Click **Save**.

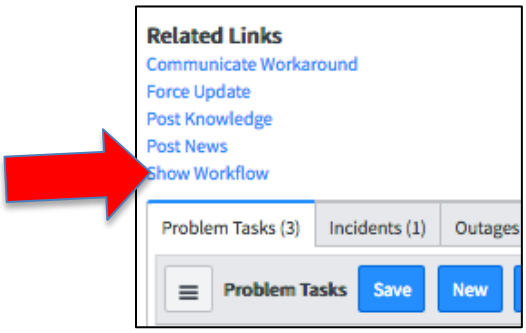


Check the Workflow Status

1. Navigate to the bottom of the form, and review the **Problem Tasks** related list.



2. Click the **Show Workflow** UI Action in the Related Links section of the Problem Form.



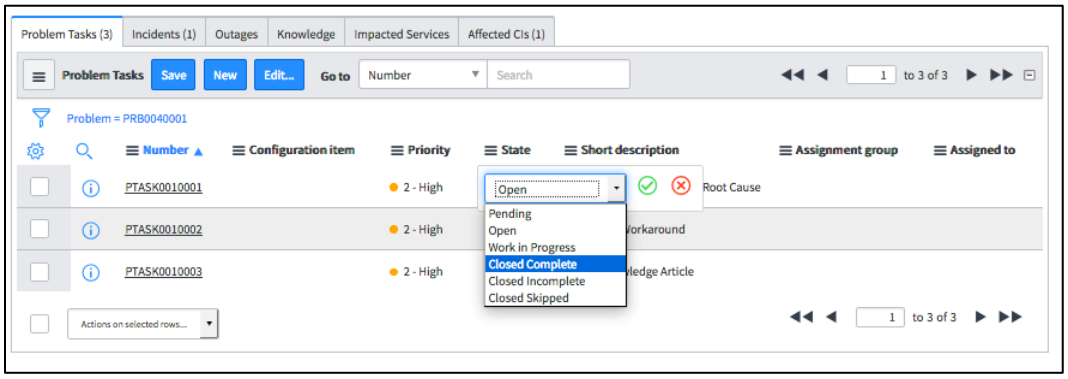
3. In the workflow window that opens, observe the workflow that is in progress. Note which activity is currently active.

Complete the Workflow

1. Navigate to the browser tab that has the problem form open.

2. Within the **Problem Tasks** related list, double-click the **State** field for the **Investigate and Document Root Cause** problem task.

3. From the list that appears, select the **Closed Complete** status and click the Check Mark to accept the record change.

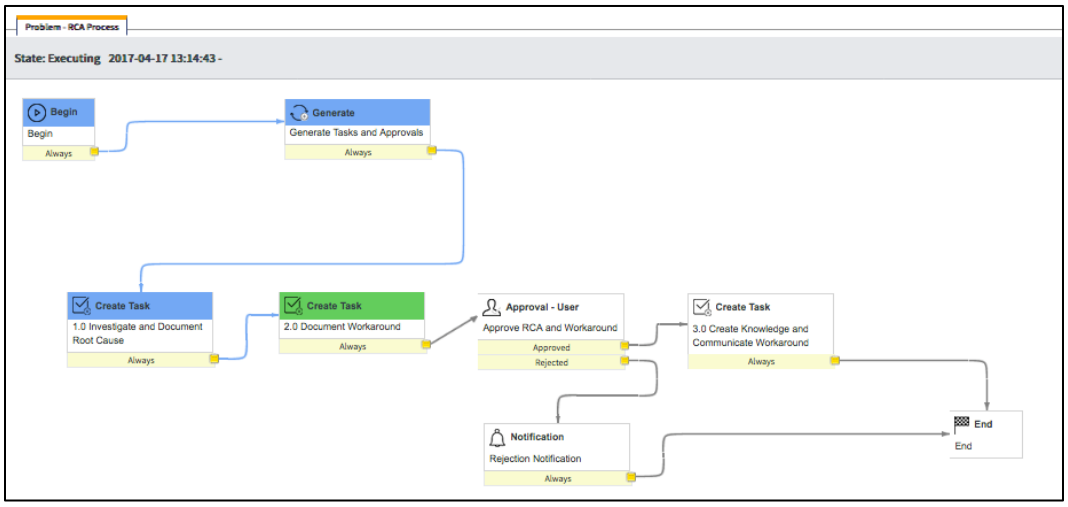


4. Navigate to the browser tab that has the workflow context open.

5. Click the **refresh** icon on the Workflow Canvas to see the updated progress of the workflow.



6. Observe that the workflow has progressed to the next task.



7. Repeat steps 2-5 for the **Document Workaround** problem task.

OPTIONAL STEPS

1. Navigate to the browser tab with the problem form open.
2. Right-click the form header, and select **Reload Form**.
3. Click the Approvers related list.
4. Double click the State field. A list appears. Select **Approved**, and click the check mark. 
5. Refresh the workflow on the browser tab that has the workflow context open.
6. Navigate to the browser tab with the problem form open.
7. Repeat steps 2-5 for the **Create Knowledge and Communicate Workaround** problem task.

Lab Goal

Lab 7.0
Verify Notify Properties

This lab explains how to verify that your instance is communicating properly with Twilio. This is a prerequisite for all other labs in this guide.

Twilio API credentials were automatically provisioned to your instance.

Log into the Training Instance

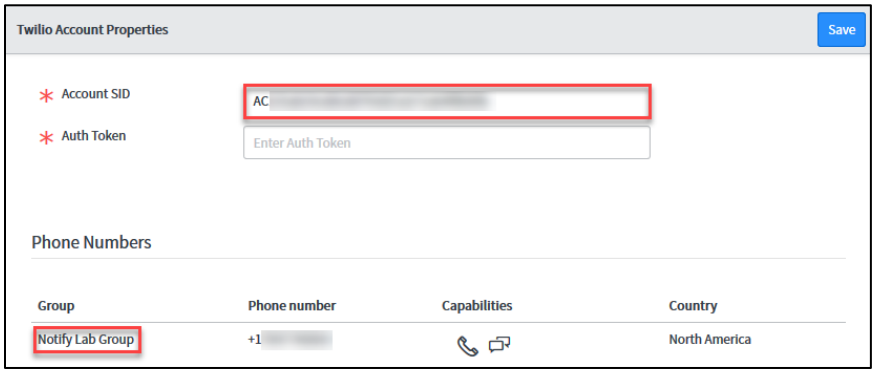
1. Navigate to the unique instance URL provided.
2. Log in with the provided administrator credentials.

View the Notify Application Properties Page

3. In the Filter navigator box, type **notify**.
4. Click **Twilio Configuration** in the Notify Application under Administration.
5. View the configuration details.

Lab Success Verification

1. Verify that the **Account SID** is populated and that you have a Phone Number listed at the bottom assigned to the Notify Lab Group.



2. If for some reason these fields are not populated or you do not have an assigned phone number, please raise your hand for assistance.

Lab Goal

This lab explains how to update an out-of-the-box user with your mobile phone for use in this lab.

Lab 7.1 Update Users

Update User Record Mobile Phone Field Type and Enter Mobile Phone

For ease of use and to demonstrate the capabilities of ServiceNow Notify, a workflow was set up in your instance to automatically update a few demonstration user records with your mobile phone by texting the word **phone** to your instance's **Notify** telephone number. Joe Employee and Beth Anglin's user records are updated with your mobile phone number.

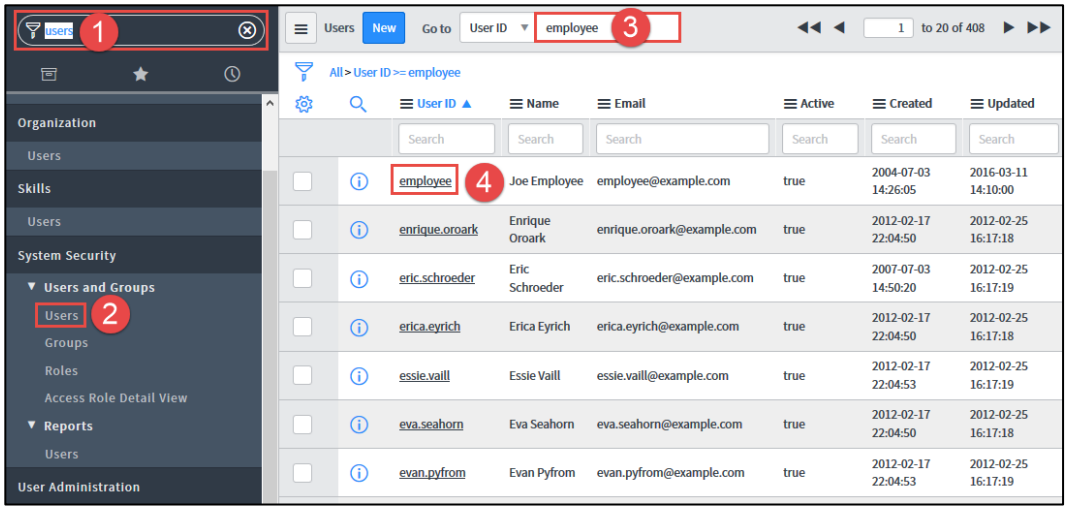
1. In the Filter navigator box, type **notify**.
2. Click **Numbers** under Notify Application.
3. Only one number has been provisioned to your instance; click the phone number to view the record.
4. This record contains the specific Twilio number assigned to your instance. Using your mobile phone, send the word **phone** via SMS to your assigned phone number.



5. Momentarily you should receive a SMS **stating All users in your instance have been successfully updated**. If you receive this SMS message you may skip the following section and proceed to reporting Lab Progress.

If you did not receive the success message above and but instead received the following message, please continue with the steps below: **There was a problem updating the users in your instance. Please follow steps to update manually**.

1. In the Filter navigator box, type **users**.



2. Select **Users** under the System Security application.

3. Using the list search at the top-middle of the screen, search for the Name **Joe**.

4. Click **employee** in the list.

5. Notify requires that phone numbers be in E.164 format. Notice that the mobile Phone field has been updated to a field type of **Phone Number (E.164)** and that you have a region field along with the phone number. Choose your personal region and **enter your personal mobile number** in the field below it. Format does not matter; ServiceNow automatically corrects it to the proper format with next step.

   Note: Out-of-the-box, only a few regions appear. For US and Canadian phones, choose North America. If you do not find your region in the drop-down list, please raise your hand for help enabling your region.

6. After you click out of the **mobile phone** field, ServiceNow converts it to the proper format.

7. Click **Update** to save Joe's user record.

8. Update one more user for later use in the Lab. Use the list search at the top middle of your screen to search for the name **Beth Anglin**.

9. Click **beth.anglin** in the list.

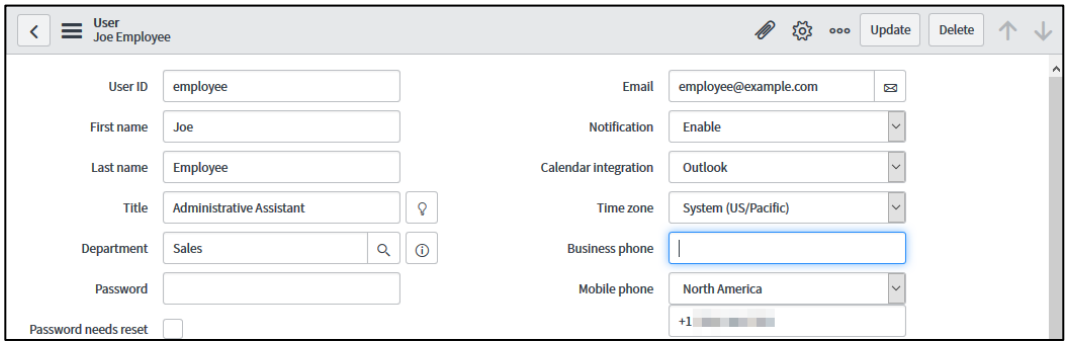
10. In the Mobile phone field, choose your personal region and enter your mobile number in the field beside it. After you click out of the mobile number field, ServiceNow converts it to the proper format.

    Note: For US and Canadian phone numbers, choose North America.

11. Click **Update** to save Beth's user record.

Lab Success Verification

1. Joe Employee's and Beth Anglin's user records have been updated with your mobile phone.



Lab Goal

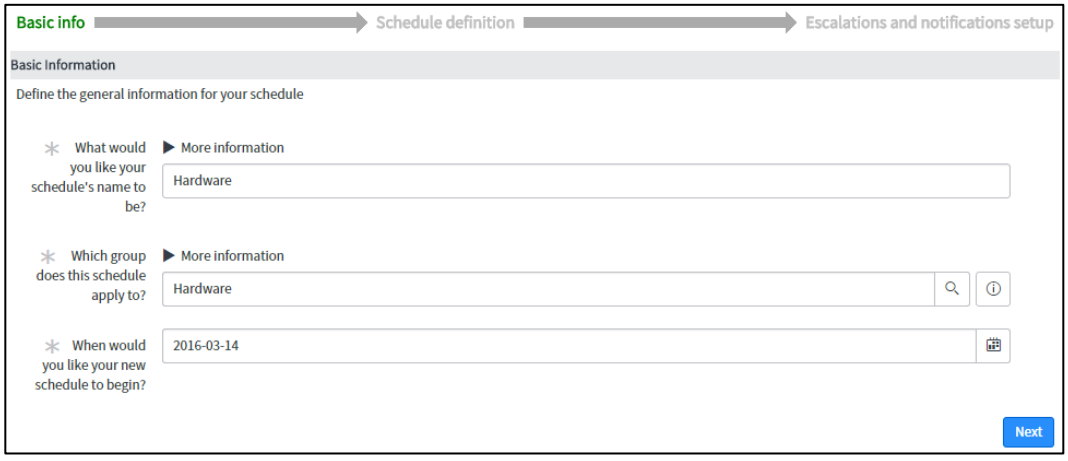
This lab explains how to create a new On-Call Rotation (Rota) and trigger rule with Notify using bidirectional SMS capabilities.

Lab 8.0 Create On-Call Rota

Create New On-Call Rota

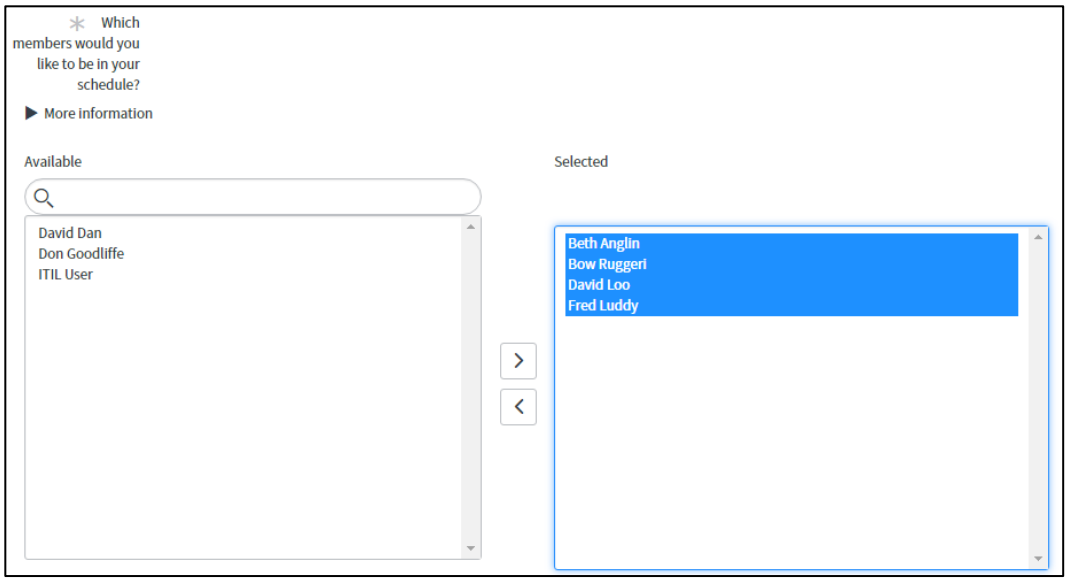
1. In the Filter navigator box, type **on-call**.
2. Click **Create New Schedule** under Administration.
3. Enter the following information:

   What would you like your schedule's name to be?: **Hardware**
   Which group does this schedule apply to?: **Hardware**



4. Click **Next**.
5. Choose **Yes** to use an existing schedule and choose **24 x 7** for the schedule; if not, set by default. Then click **Next**.
6. Choose **1** for the first question on the number of duty rotations.

7. Notice you can choose which members of the Hardware team are on the on-call rotation, versus the entire group. Select the following members for the schedule: Beth Anglin, Bow Ruggeri, David Loo, and Fred Luddy. Double-click each member to move them from **Collection** (left side) to **List** (right side).



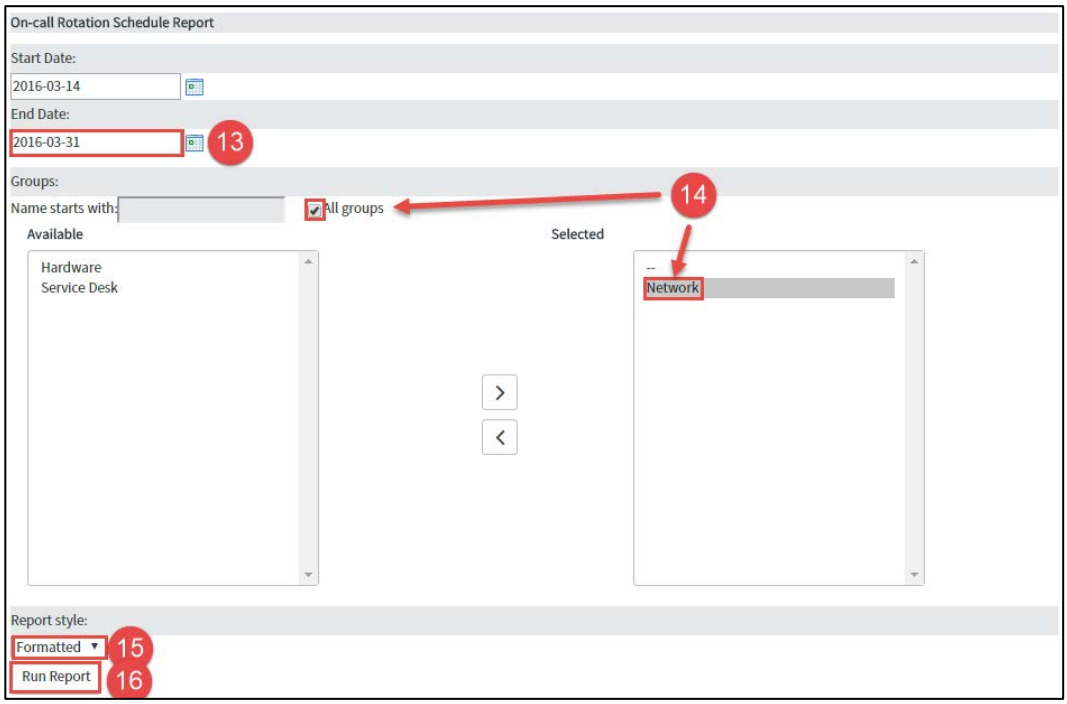
8. Choose **1** for the number of reminders.

9. Choose **15** minutes for the wait until sending the next reminder.

10. Click **Next**.

11. You should now see a calendar view of the Rota. Notice that Beth is on-call starting today for the next week. Bow Ruggeri is on-call after that.

12. There is also another view of the schedule. In the On-Call scheduling application, click **Schedule Report**.



13. Leave the **Start Date** the default of **Today's Date**, but change the **End Date** to the **end of the month.**

14. Click the **All groups** check box. Double-click on **Network** to move it to the **Selected** list.

15. There are a few options for report style. Choose **Formatted**.

16. Click **Run Report** at the bottom.

17. Feel free to repeat **Steps 12-16** to view the **Table** view of this report or look at another Rota.

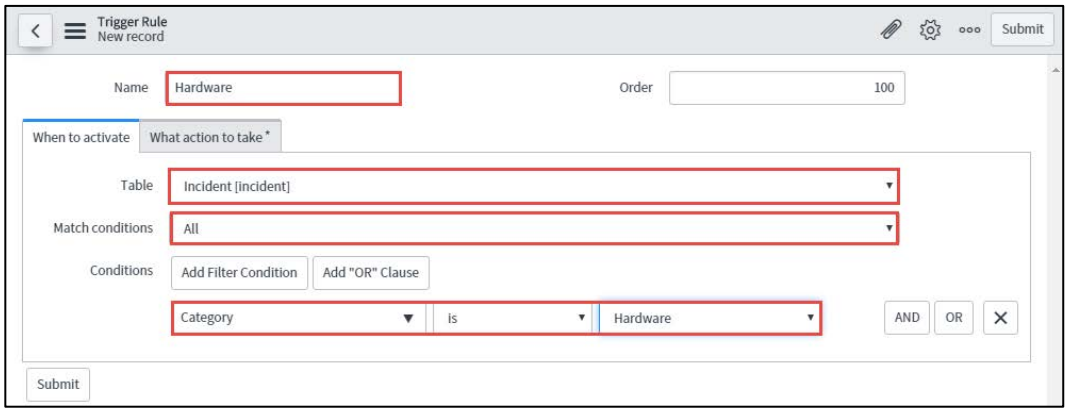
18. Create a trigger rule to assign the Hardware team to a task and start the On-Call workflow.

19. In the On-Call scheduling application, click **Trigger Rules**.

20. Click the **New** button at the top of the list to create a new rule.

21. Enter the following information:

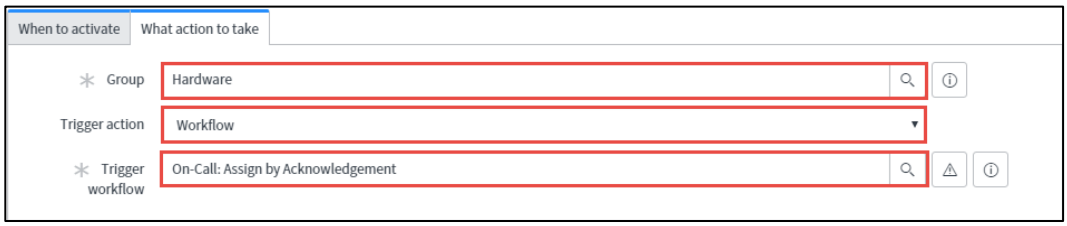
    Name: **Hardware**
    Table: **Incident**
    Match conditions: **All**
    Conditions: **Category is Hardware**



22. Go to the **What action to take** section or click the **What action to take** tab.

23. Enter the following information:

    Group: **Hardware**
    Trigger action: **Workflow**
    Trigger workflow: **On-Call: Assign by Acknowledgement**



24. Click **Submit**.

Lab Success Verification

1. A new Rota and Trigger Rule for the Hardware Team has been created.

Lab Goal

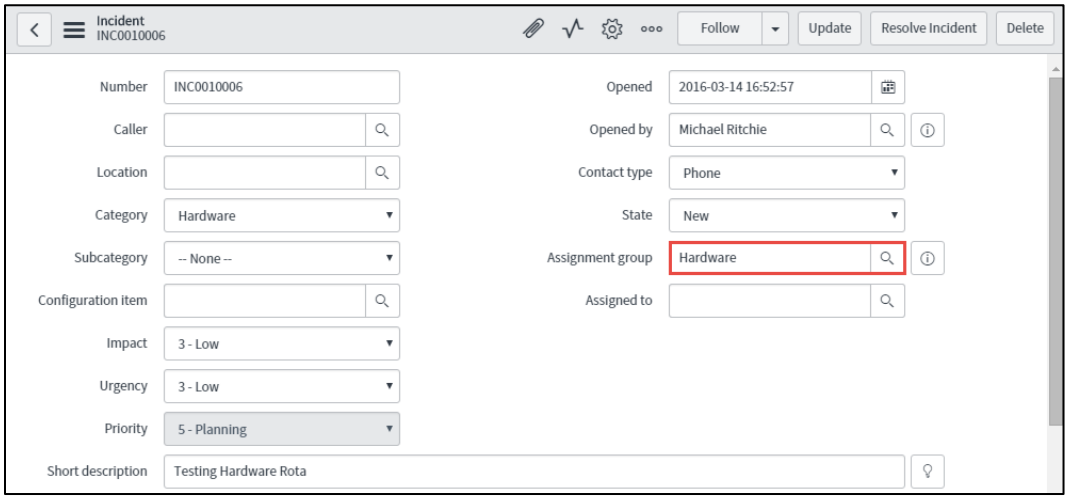
Lab 8.1 Test Hardware Rota

This lab explains how to test a Hardware Rota.

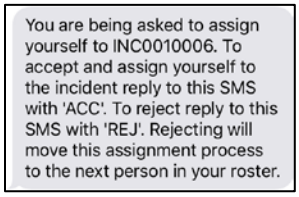
Now that we have created a Hardware Rota and Trigger Rule, any new incident in which the category is Hardware automatically is assigned to the Hardware team and a workflow starts to assign the On-Call person through a verification process.

Create Incident to Test Hardware Rota

1. In the Filter navigator box, type **incident**.
2. Click **Create New** under the Incident application.
3. Change the **Category** to **Hardware** and enter **Testing Hardware Rota** in the **Short Description** field. Note that the **Assignment** group is currently empty as well as the **Assigned to** person.
4. Click **Additional actions** and select **Save** to remain on this record.
5. Note the Incident number, which is used in later steps.
6. After the record has been saved, the Assignment group should automatically populate with **Hardware**. This is because of the trigger rule you created.



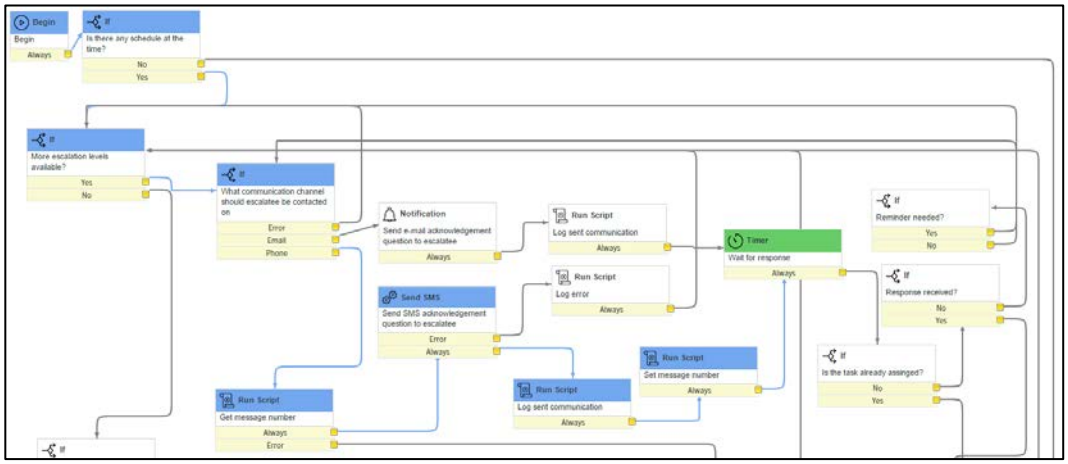
7. You should receive a Text on your Mobile Phone momentarily, asking you to accept or reject the assignment of this new incident.



8. Before you respond to this text, view the workflow. Click **Additional actions** and select **Reload form** to refresh the record. Scroll down to Related Links. Click **Show Workflow**.

   Note: Trigger rules are event-based. You may need to reload the page a few times before the Show Workflow related link shows up.

9. This is an out-of-the-box workflow that comes with the new version of On-Call Rotation. Notice that the workflow is waiting for a response from the SMS that was generated.



10. Respond back to the SMS that you received earlier. Reply with **ACC** to accept the assignment.

11. Return to the Incident. If you navigated away from the incident, in the filter navigator box, type **incident**. Click **Open** under the Incident application. In the list to the right, open the incident previously created. The number is in the SMS you received.

12. Notice that Beth Anglin is now assigned to the incident. If you recall, you added your phone number to her user record earlier.

Lab Success Verification

1. Incidents of category Hardware are automatically assigned to the Hardware Group.
2. The On-Call person receives an SMS message to accept or reject the assignment.
3. Replying to the SMS updates the Incident.

Lab Goal

Lab 9.0 Orchestration with Notify

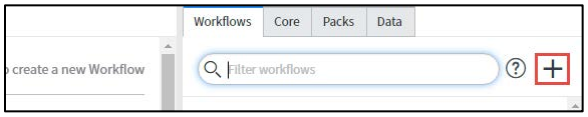
This lab explains how to create a workflow that reaches out to the assignee of an incident via SMS and allows him/her to act on the incident simply by responding to an SMS.

Notify paired with ServiceNow Orchestration is a powerful combination. Many incidents are resolved with the same script execution especially in batch process automation issues.

Note: These lab instances do not have Orchestration turned on; however, we mimic the capabilities in our workflow. Consider what actions to allow your users to take via automation. This lab walks you through the initial setup.

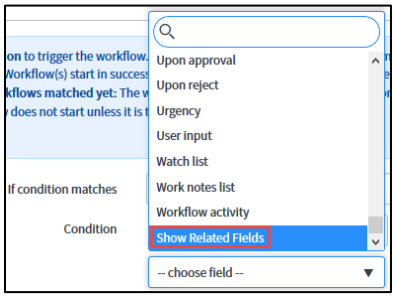
Create a New Workflow

1. In the Filter navigator box, type **workflow**.
2. Click **Workflow Editor** in the Workflow Application. Another browser tab should appear.
3. On the right, click the **+** icon on the Workflows tab to create a new workflow.



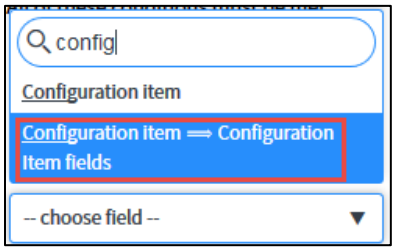
4. Enter the following information:

   Name: **Linux Server Troubleshooting**
   Table: **Incident [incident]**
   If condition matches: **Run the workflow**
   Under condition, click choose **field** and scroll to the bottom and select: **Show Related Fields**

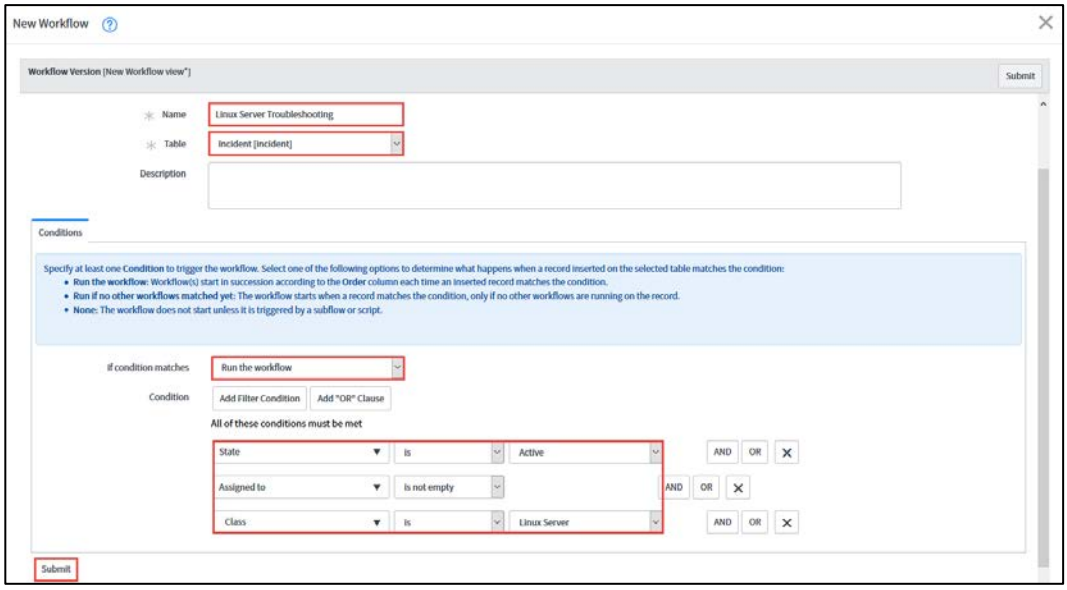


5. Set the following conditions:

   State is **Active** – click AND button
   Assigned To **is not empty** – click AND button
   Click Configuration Item ➔ Configuration Item fields



6. After the list refreshes, set Class is **Linux Server**.



7. Click **Submit**.

8. You move to a workflow with just a **Begin** and **End**.

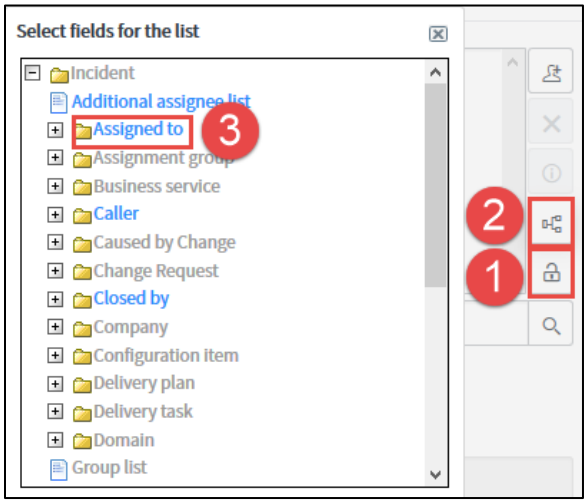
9. Move the **End** activity to the right side of the screen by left mouse clicking it.

10. On the right side of the screen, click the **Core** tab. This displays activities that can be leveraged in the workflow.

11. Under Core Activities\Notify, find **Send SMS**. Left-mouse click and drag it over the line between **Begin** and **End** until the line turns blue. Release the left-mouse button. After the line turns blue, the activity is inserted between those two activities.

12. Enter the following information:

Name: **Send SMS orchestration question to assignee**
From: **Click the Magnifying Glass and choose your Notify Number**
To: **Click the Lock button and then the Select Fields button and choose Assigned To**

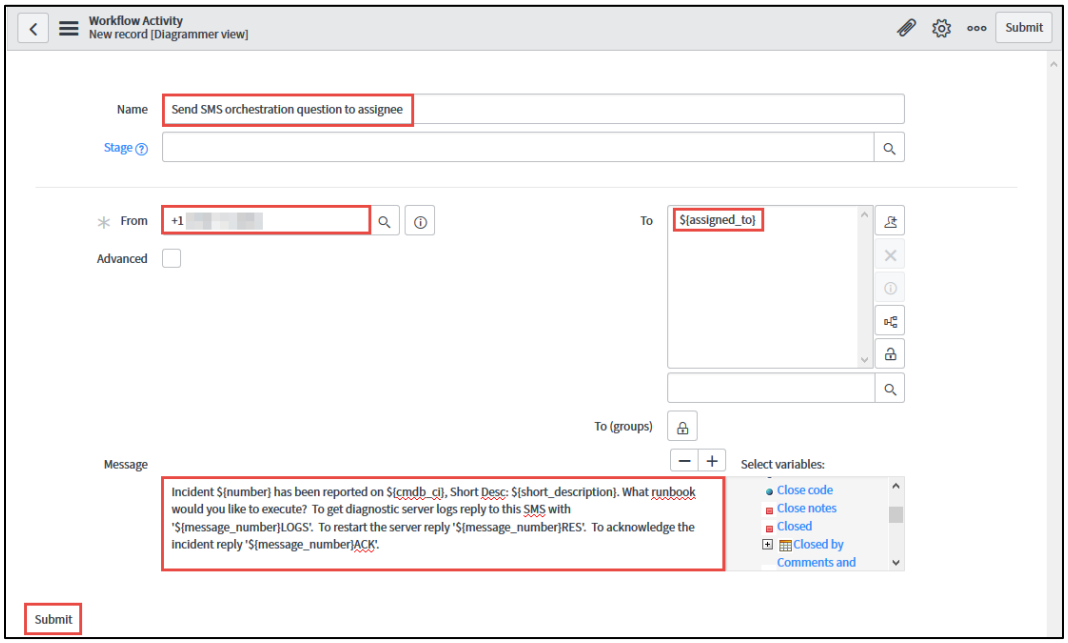


Message:

Incident ${number} has been reported on ${cmdb_ci.name}, Short Desc: ${short_description}. What runbook would you like to execute? To get diagnostic server logs reply to this SMS with 'LOGS'. To restart the server reply 'RES'. To acknowledge the incident reply 'ACK'.

Note: The message above can also be copied from the Lab Management application under the Lab Exercises section by clicking **Lab 8 Orchestration with Notify Scripts**.

13. Your activity should look like the example.

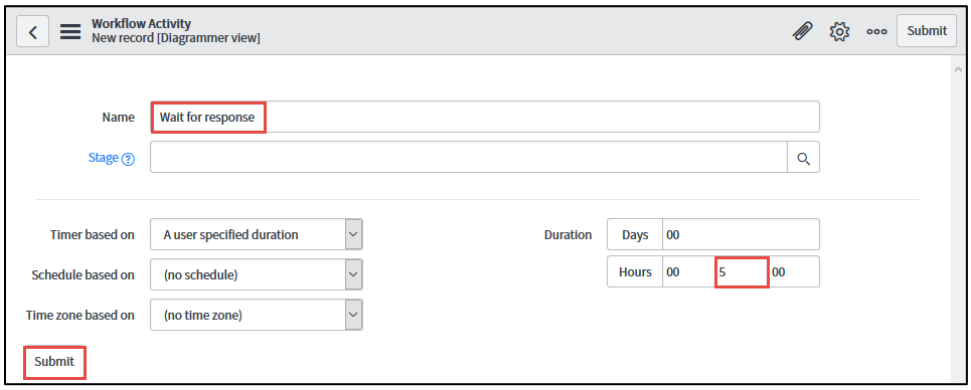


14. Click **Submit**.

15. Under Core Activities\Timers, left-mouse click **Timer** and drag it over the line between Send SMS and End until the line turns blue. Release the left-mouse button.

16. Enter the following information:

    Name: **Wait for response**
    Duration: **5 Minutes**



17. Click **Submit**.

18. Under Core Activities\Conditions, left-mouse click on **If** and drag it over the line between Timer and End until the line turns blue. Release the left-mouse button.

19. Enter the following information:

    Name: **Determine if answer received**
    Advanced: **checked**
    Script:

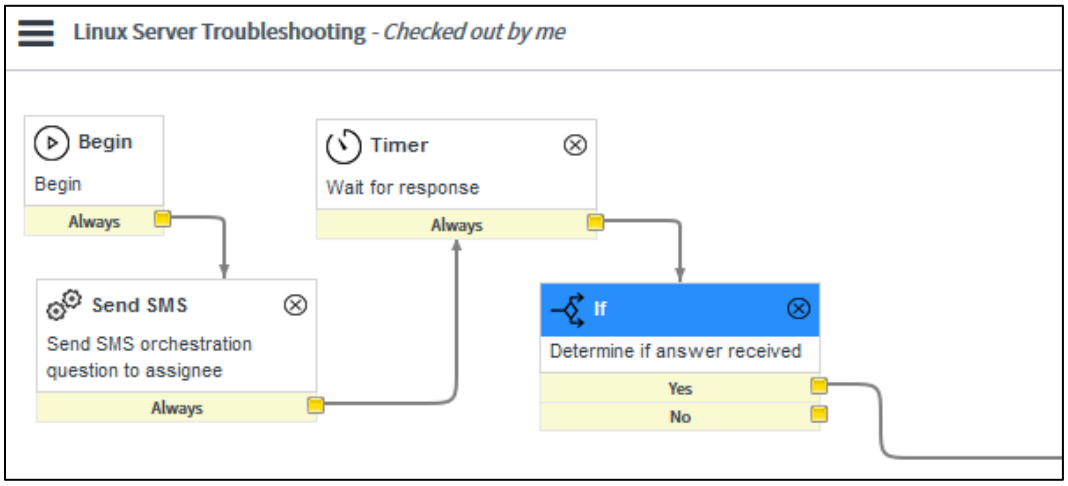
```
answer = ifScript();

function ifScript() {
	//Get Outbound phone number first so we can query for inbound
	var outboundMessage = new GlideRecord("notify_message");
	outboundMessage.addQuery("direction", "outbound");
	outboundMessage.addQuery("table", current.getTableName());
	outboundMessage.addQuery("source", current.sys_id);
	outboundMessage.orderByDesc('sys_created_on');
	outboundMessage.query();
	if (outboundMessage.next()) {
		//Now query for inbound message from same phone number and after the outbound was
created
		var inboundMessage = new GlideRecord("notify_message");
		inboundMessage.addQuery("direction", "inbound");
		inboundMessage.addQuery("phone_number", outboundMessage.phone_number);
		inboundMessage.addQuery("sys_created_on", ">", outboundMessage.sys_created_on);
		inboundMessage.orderByDesc('sys_created_on');
		inboundMessage.query();
		if (inboundMessage.next()) {
			var smsResponse = inboundMessage.body;
			//Use Regex to match response to the codes this workflow expects
			var pattern = new SNC.Regex('/^([0-9]*)(LOGS|RES|ACK)$/i');
			var matches = pattern.match(smsResponse);
			if (matches !== null) {
				//Set a scratchpad variable for use in next activity. Convert to lower case.
				workflow.scratchpad.response = matches[0].toLowerCase();
				return "yes";
			}
		}
	}
	//If no record is found, return No
	return "no";
}
```

    Note: This script can be copied from the Lab Management application under the Lab Exercises section by clicking **Lab 8 Orchestration with Notify Scripts**.

20. Click **Submit**.

21. Your workflow should look like the example.



22. Next, determine what action to take based on the code received.

23. Under **Core Activities\Utilities**, left-mouse click **Run Script** and drag it over the line between **If** and **End** until the line turns blue. Release the left-mouse button.

24. Enter the following information:

Name: **Determine Runbook Action**
Script:

```
//This script will update the Incident work notes with the action taken from the incident assignee.
//It will also use the Notify API to send a SMS back to the incident assignee confirming the action taken.
var workNotes = "";
var ackMessage = "";
switch (workflow.scratchpad.response.toLowerCase()) {
	case "logs":
		workNotes = current.assigned_to.name + ' requested diagnostic logs.';
		ackMessage = "Diagnostic logs have been requested.";
		updateInc(workNotes, ackMessage);
	break;
	case "res":
		workNotes = current.assigned_to.name + ' requested to restart the server.';
		ackMessage = "Server restart has been requested.";
		updateInc(workNotes, ackMessage);
	break;
	case "ack":
		workNotes = current.assigned_to.name + ' acknowledged, no action taken.';
		ackMessage = "Incident acknowledged no action taken.";
		updateInc(workNotes, ackMessage);
	break;
}

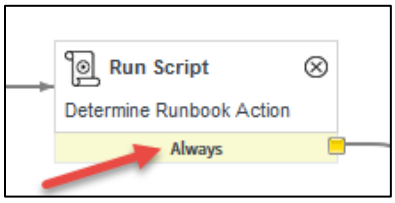
function updateInc(workNotes, ackMessage) {
	current.work_notes = workNotes;

	//The sendSMS function requires a Notify number, use the API to get the list of available numbers
and use the first one.
	var notify = new SNC.Notify();
	var notifyNumber = notify.getPhoneNumbers();
	notifyNumber = notifyNumber.get(0);
	notifyNumber = notifyNumber.getNumber();
	var toNumber = current.assigned_to.mobile_phone;
	notify.sendSMS(notifyNumber, toNumber, ackMessage, current);
}
```

Note: The script above can also be copied from the Lab Management application under the Lab Exercises section by clicking **Lab 8 Orchestration with Notify Scripts**.

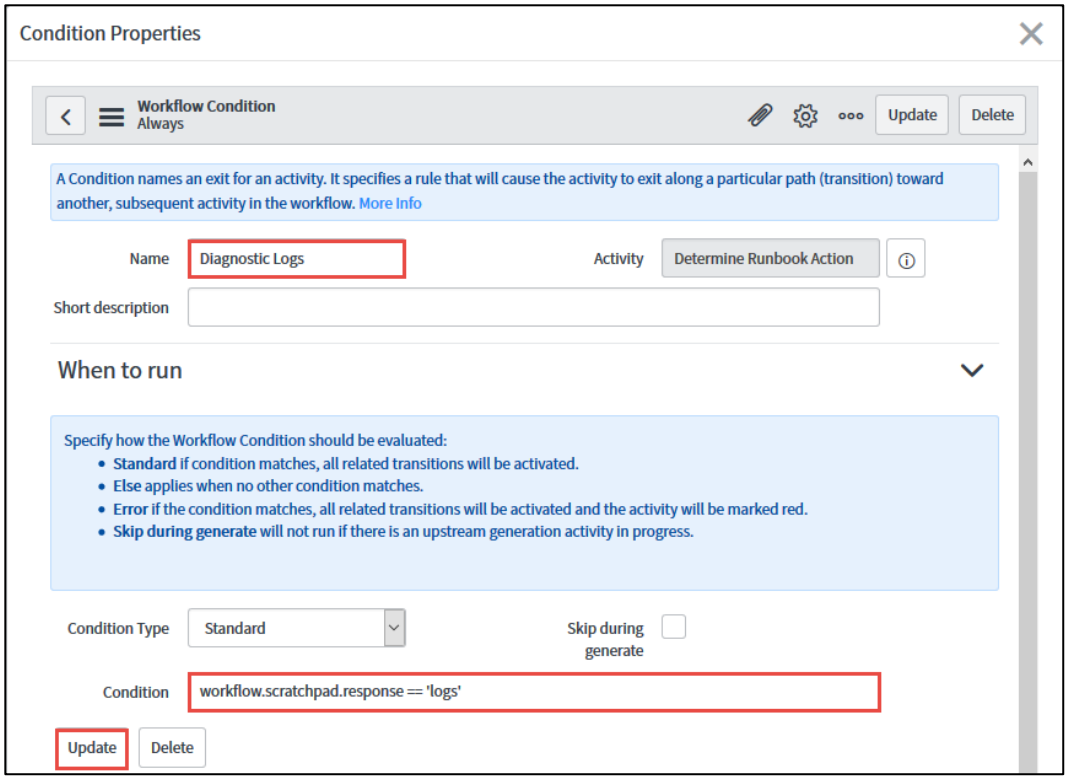
25. Click **Submit**.

26. Double-click **Always** in the yellow box at the bottom of the Run Script activity.



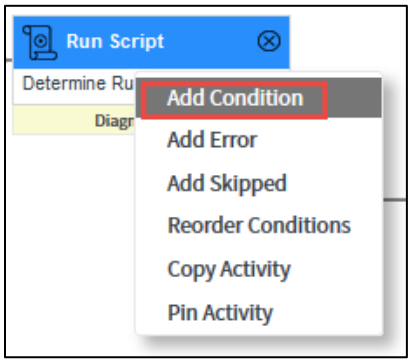
27. A Condition Properties dialog appears. Change the following values:

    Name: **Diagnostic Logs**
    Condition: **workflow.scratchpad.response == 'logs'**



28. Click **Update**.

29. Right-click the **Run Script** activity, above the yellow box, and choose **Add Condition**.



30. A New Workflow Condition dialog appears. Enter the following values:

    Name: **Restart Server**
    Condition: **workflow.scratchpad.response == res**

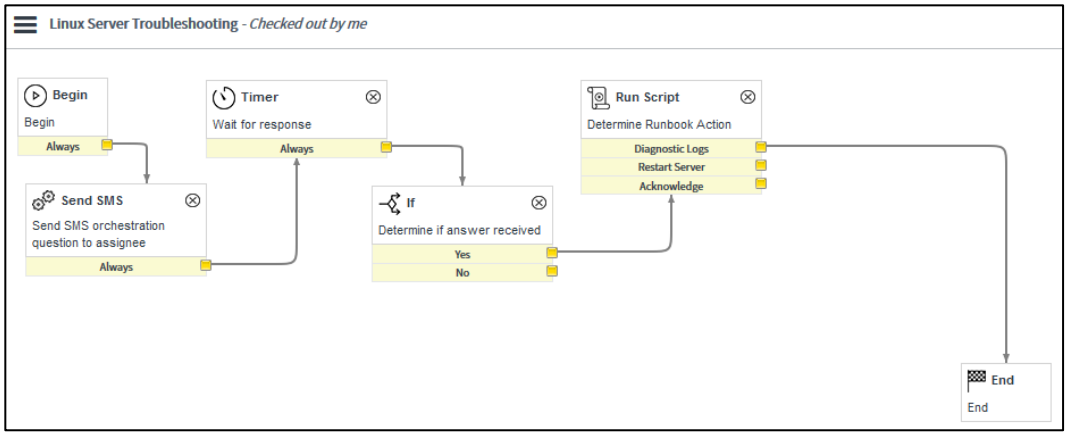
31. Click **Submit**.

32. Right-click the **Run Script** activity, above the yellow box, and choose **Add Condition**. Enter the following values:

    Name: **Acknowledge**
    Condition: **workflow.scratchpad.response == ack**

33. Click **Submit**.

34. Your workflow should look like the example.



35. ServiceNow Orchestration is basically custom workflows that integrate with external systems via workflow leveraging Web Services (SOAP and REST), Windows PowerShell, Shell Script, and several cloud providers. These workflows can be executed via Form Buttons, Conditions, Scheduled Jobs, and other workflows.

36. To expedite our lab since we are not focused on Orchestration, several Workflows were built in advance and loaded into your lab instances. Again, since Orchestration is not enabled in your instances, these example workflows mimic Orchestration activities.

37. On the right side, click the **Workflows** tab and enter **Lab 6** in the search box. Left-mouse click on **Lab 6 - Linux Diagnostics Logs** and drag it over the line between Run Script and End until the line turns blue. Release the left-mouse button.

38. Enter the following information:

    Workflow: **Leave Alone – Lab 6 - Linux Diagnostics Logs**
    Map return value to: **workflow.scratchpad.confirmMessage**

39. Click **Submit**.

40. On the right side, left-mouse click on **Lab 6 - Linux Restart Server** and drag it below/beside the Lab 6 - Linux Diagnostics Logs activity.

41. Enter the following information:

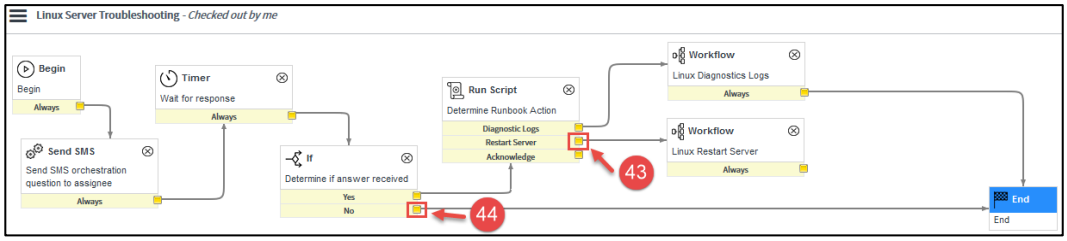
    Workflow: **Leave Alone – Lab 6 - Linux Restart Server**
    Map return value to: **workflow.scratchpad.confirmMessage**

42. Click **Submit**.

43. Left-mouse click the **yellow square** beside **Restart Server** and attach it to the **Linux Restart Server** activity to connect the Restart Server condition to the Linux Restart Server workflow activity.

44. Left-mouse click the **yellow square** beside **No** and attach it to the **End** activity to connect the No condition on the Determine if answer received activity to the End activity.

45. Your workflow should look like the example.

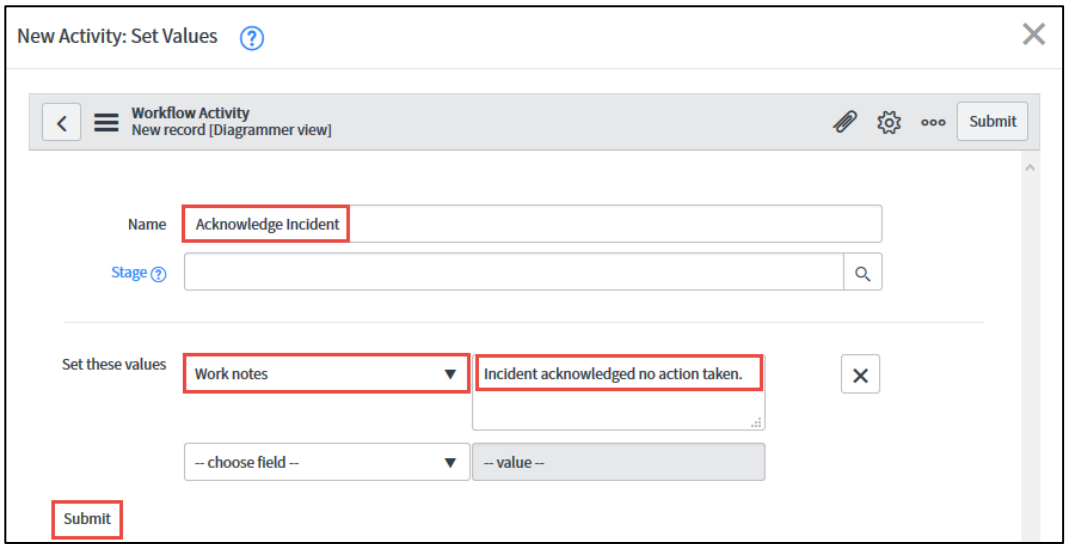


46. Log an update if the incident assignee **Acknowledges** the incident.

47. On the right side of the screen, click the **Core** tab. Under Core Activities\Utilities, left-mouse click on **Set Values** and drag it below the Linux Diagnostics Logs activity.

48. Enter the following information:

    Name: **Acknowledge Incident**
    Set these values: Choose **Work notes** and set the value to **Incident acknowledged no action taken**.



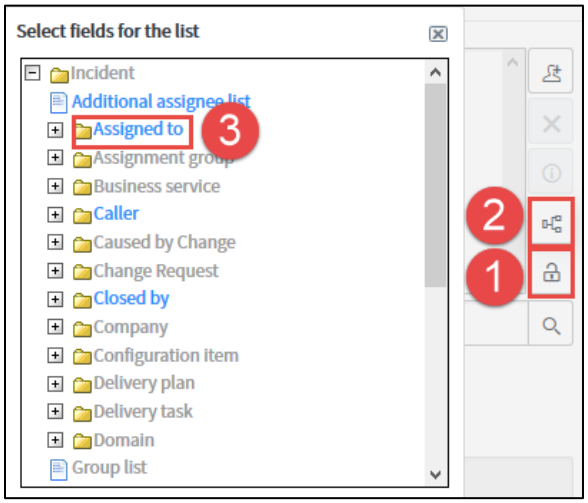
49. Click **Submit**.

50. Left-mouse click the **yellow square** beside **Acknowledge** and attach it to the **Acknowledge Incident** activity to connect the Acknowledge condition to the Acknowledge Incident workflow activity.

51. Under Core Activities\Notify, left-mouse click on **Send SMS** and drag it over the line between Linux Diagnostics Logs and End until the line turns blue. Release the left-mouse button.

52. Enter the following information:

    Name: **Send SMS orchestration question to assignee**
    From: **Click the Magnifying Glass and choose your Notify Number**
    To: **Click the Lock button and then the Select Fields button and choose Assigned To**



    Message: Send return value from sub workflows. With scratchpad variables, you do not need to use full name.

    ```
    ${confirmMessage}
    ```

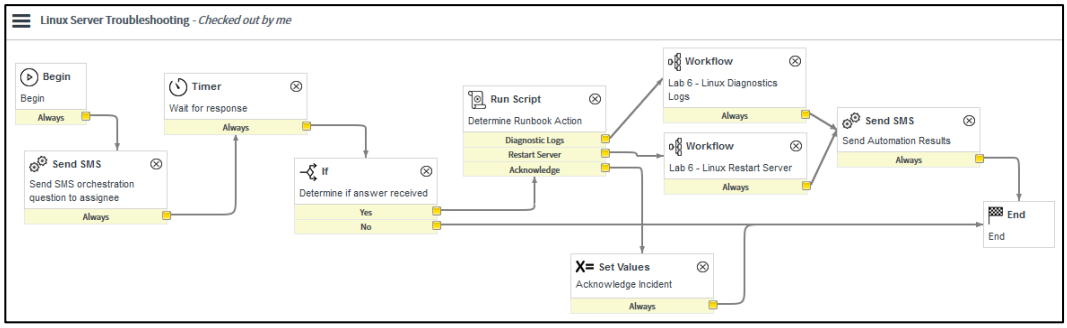
53. Click **Submit**.

54. Connect the **Linux Restart Server** activity to the **Send SMS** activity**.**

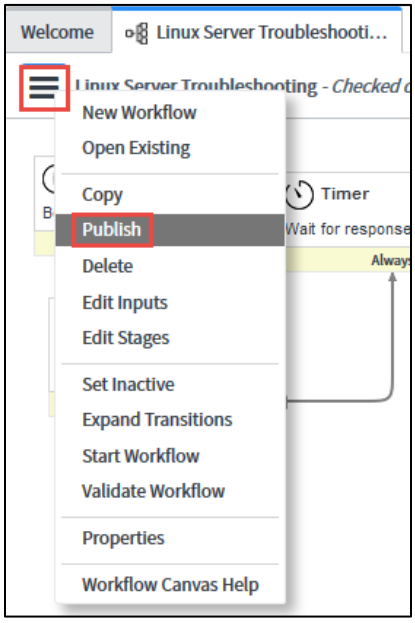
55. Connect the **Set Values** activity **t**o the **End** activity.

56. In this simple example, the workflow ends if a response is not received within 5 minutes. This can be changed to meet your business requirements. Connect the **If No** condition to the **End** activity.

57. Your workflow should look like the example.



58. Click **Workflow Actions** and select **Publish**.



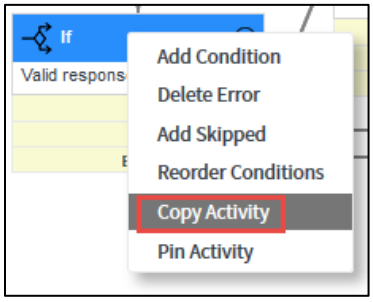
59. You should not receive any validation errors. If you do, you may not have connected all the activities to one another.

60. Inbound SMS messages from Twilio are processed via a workflow defined in the Notify Number Groups. Recall that your instance is using the **On-Call: Check Assignment Response** workflow. Out-of-the-box, it validates incoming SMS messages expecting only ACC and REJ. To make the new codes work, update the workflow to accept the codes.

61. On the right side, click the Workflows tab and enter **Call** in the search box. Click **On-Call: Check Assignment Response**. This opens the workflow in a new tab.

62. Click **Workflow Actions** and select **Checkout.**

63. Right-click the top portion of the **Valid Response If** activity and select **Copy Activity**.



64. Move the copy down below the existing If activity.

65. Double-click on it to edit it.

66. Change the name of this activity to **Valid Troubleshooting Response?**

67. In the Script, edit line 4 to include the new codes. This line should read:

```
var pattern = new SNC.Regex('/^([0-9]*)(LOGS|RES|ACK)$/i');
```

Note: The script can also be copied from the Lab Management application under the Lab Exercises section by clicking **Lab 6 Orchestration with Notify Scripts**.

68. Click **Update**.

69. Click the line coming from the **No** condition on the original **Valid** response activity so it turns blue. Press the **Delete** button on your keyboard to remove it.

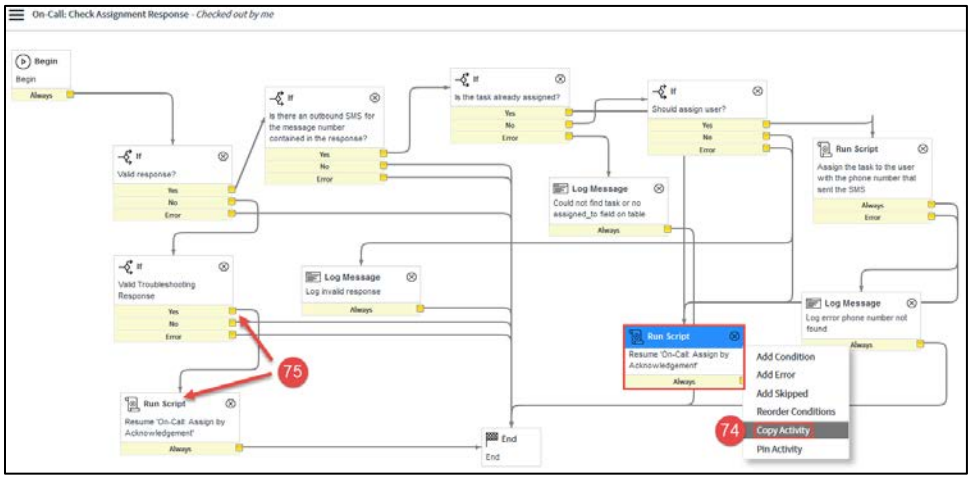
70. Connect the **No** condition to the new **Valid Troubleshooting Response** activity.

71. This makes the workflow perform one additional check on the SMS response to see if it matches the server troubleshooting codes.

72. Connect the **No** and **Error** on the new **Valid Troubleshooting Response** activity to the **End** Activity.

73. This workflow has a feature that resumes the On-Call workflow after the response is received. This way the other workflow does not have to wait for the timer to complete. You need this same feature for the Linux Server Troubleshooting workflow.

74. Right-click the top portion of the Run Script Resume **On-Call: Assign by Acknowledgement** activity and select **Copy Activity**. Then move this new activity under your Valid Troubleshooting Response activity.



75. Connect the Valid Troubleshooting Response activity **Yes** condition to the new Run Script you just moved.

76. Connect the new Run Script you just moved to the **End** activity.

77. Double-click the new **Run Script Resume On-Call: Assign by Acknowledgement** to edit it.

78. Set the following values:

    Name: **Resume Linux Server Troubleshooting**
    Script:

```
var message = new GlideRecord("notify_message");
message.addQuery("direction", "outbound");
message.addQuery("phone_number", current.phone_number);
message.orderByDesc('sys_created_on');
message.query();
if (message.next()) {
	var context = new GlideRecord("wf_context");
	context.addQuery("id", message.source);
	context.addQuery("workflow.name", "Linux Server Troubleshooting");
	context.addQuery("state", "executing");
	context.query();
	while (context.next()) {
		var wfScript = new SNC.WorkflowScriptAPI();
		wfScript.broadcastEvent(context.getUniqueValue(), "resume");
	}
}
```

Note: The script can also be copied from the Lab Management application under the Lab Exercises section by clicking **Lab 6 Orchestration with Notify Scripts**.

79. Click **Update**.

80. Click **Workflow Actions** and select **Publish**.

81. In the real world, there are better alternatives for what we just did, but for simplicity, we used an easy approach for this lab.

82. Now test it!

83. In the Filter navigator box, type **incident**.

84. Click **Create New** under the Incident application.

85. Enter the following information:

    Category: **Hardware**
    Configuration Item: **lnux100**
    Short description: **Linux Server Failure**

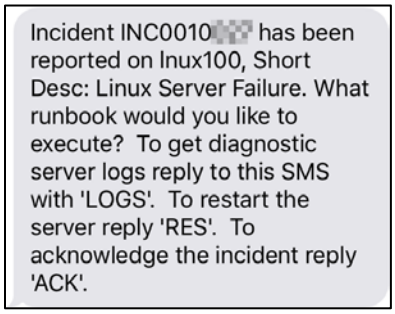
86. Click **Submit**.

87. Automatically the On-Call trigger rule should set the assignment group to **Hardware**. Shortly you should receive an SMS asking you to accept the incident.

88. **Reply** to the SMS with **ACC**.

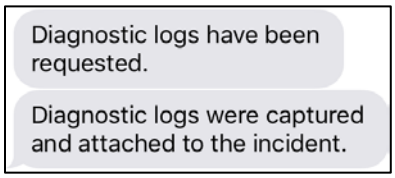
89. The incident is automatically assigned to Beth Anglin.

90. You should receive an SMS message momentarily, asking what runbook action you want to take on the incident.



91. **Reply** to the SMS with **LOGS**.

92. You should receive two SMS messages momentarily, one confirming that you requested diagnostic logs and another that the logs have been captured and attached to the incident.



93. Once you receive the SMS that the Diagnostic logs were captured and attached to the incident message, return to the incident and click **Additional Actions, Reload form**.

94. After the incident refreshes, you should see an attachment at the top and activity messages indicating that the file was attached.

95. Feel free to repeat **Steps 83-88**, choosing a different runbook.

Lab Success Verification

1. Verify that an incident with a Linux Server configuration item that is assigned to someone launches a workflow that allows the assignee to respond and take an automated action to resolve the incident.