

# Phase 4: Process Automation (Admin)

Phase 4 focuses on automating business processes in Salesforce to reduce manual work, improve accuracy, and ensure timely communication with customers, technicians, and managers. The project uses **Validation Rules**, **Flows**, **Approval Processes**, **Email Alerts**, and other automation tools.

## 1. Validation Rules

- **Vehicle must be linked to Service Request:** Ensures every service request has an associated vehicle.
  - **Object:** Service\_Request\_\_c
  - **Formula:** ISBLANK(Vehicle\_\_c)
  - **Error Message:** Vehicle must be selected for a service request.
- **Invoice Amount > 0:** Ensures invoices are not created with zero or negative amounts.
  - **Object:** Invoice\_\_c
  - **Formula:** Amount\_\_c <= 0
  - **Error Message:** Invoice amount must be greater than zero.

The screenshot shows the Salesforce Object Manager interface for the 'Invoice' object. On the left, a sidebar lists various setup options like Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, Restriction Rules, Scoping Rules, Object Access, Triggers, Flow Triggers, and Validation Rules. The 'Validation Rules' option is currently selected. The main content area displays the 'Invoice Validation Rule' details. The rule is named 'Amount\_Positive' and has the formula 'Amount\_\_c < 0'. The error message is 'Invoice amount must be greater than zero.' The rule is active and was created by Bipin Gundala on 9/16/2025 at 9:37 PM. A tooltip indicates the rule is for the 'Salesforce - Developer Edition'.

The screenshot shows the Salesforce Object Manager interface for a Service Request object. The left sidebar navigation bar is visible, with the 'Validation Rules' item currently selected. The main content area displays a 'Service Request Validation Rule' record. The rule details are as follows:

Validation Rule Detail	
Rule Name	Vehicle_Required
Error Condition Formula	ISBLANK(Vehicle__c)
Error Message	Vehicle must be selected for a service request
Description	
Created By	Bipin.Gundala, 9/16/2025, 9:17 PM
Modified By	Bipin.Gundala, 9/16/2025, 9:17 PM

The status is 'Active' with a checkmark. Buttons for 'Edit' and 'Clone' are present. A tooltip indicates the rule is for 'Service Request Validation Rule ~ Salesforce - Developer Edition'. The top right corner of the page has a 'Help for this Page' link.

## 2. Workflow Rules

No traditional workflow rules were implemented since Flows replaced them for most automation.

## 3. Process Builder

Process Builder was **not separately used**, as all automation (technician assignment, notifications, preventive maintenance reminders) is handled via **Record-Triggered or Scheduled Flows**.

# 4. Approval Process

## Approval Process for High-Value Invoices

- **Object:** Invoice\_\_c
- **Approval Process Name:** Invoice\_Approval\_Process
- **Entry Criteria:** Amount\_\_c > 10000

### Steps:

1. **Initial Submission** – Record enters the approval process automatically if the amount > ₹10,000.
2. **Approval Step 1:**
  - **Approver:** Role → Service Manager
  - **Approval Action:** Update Status\_\_c to Approved
  - **Rejection Action:** Update Status\_\_c to Draft
  - **Optional:** Email alerts notify approver of pending request

This ensures high-value invoices are reviewed before being processed.

The screenshot shows the Salesforce Setup interface for managing Approval Processes. The left sidebar is collapsed, and the main area displays the 'Approval Processes' page for the 'Invoice\_Approval\_Process'. The page title is 'Approval Processes' with the sub-title 'Invoice: Invoice\_Approval\_Process'. The 'Process Definition Detail' section includes fields for Process Name (Invoice\_Approval\_Process), Unique Name (Invoice\_Approval\_Process), Description (Invoice: Amount GREATER THAN 10000), and Active status (checked). It also shows the 'Next Automated Approver Determined By' field set to 'Administrator OR Current Approver'. The 'Approval Assignment Email Template' is set to 'Invoice Approval Request'. The 'Initial Submitters' field is set to 'Invoice Owner'. The 'Created By' field shows 'Bian Gundala' and the 'Modified By' field shows 'Bian Gundala' with a timestamp of '9/25/2025, 9:53 PM'. Below this, the 'Initial Submission Actions' section contains an action named 'Record Lock' with the description 'Lock the record from being edited'. The 'Approval Steps' section lists a single step named 'Service Manager Approval' with the description 'Approval step for invoices greater than ₹10,000'. The 'Criteria' for this step is 'Invoice: Amount GREATER THAN 10000, else Approve'. The 'Assigned Approver' is 'User:John.doe' and the 'Reject Behavior' is 'Final Rejection'. The 'Final Approval Actions' and 'Final Rejection Actions' sections are currently empty. At the bottom of the page, there is a note: 'javascript:srcUp(%27%2F04agL000000EdZN%3Fisdp1%27);'.

## 5. Flow Builder

Salesforce Flows were used extensively to automate tasks.

### 5.1 Record-Triggered Flows

#### 1. Auto-Assign Technician

- **Object:** Service\_Request\_\_c
- **Trigger:** Record created, Technician\_\_c is null
- **Get Records:** Technician\_\_c where Availability\_\_c = 'Available'
- **Update Record:** Assign the first available technician to the service request
- **Optional:** Email alert sent to customer

#### 2. Service Request Status Change Notification

- **Object:** Service\_Request\_\_c
- **Trigger:** Record updated, Status\_\_c changes
- **Action:** Send email alert to the customer

#### 3. Service Request Confirmation

- **Object:** Service\_Request\_\_c
  - **Trigger:** Record created
  - **Action:** Send email confirmation to customer
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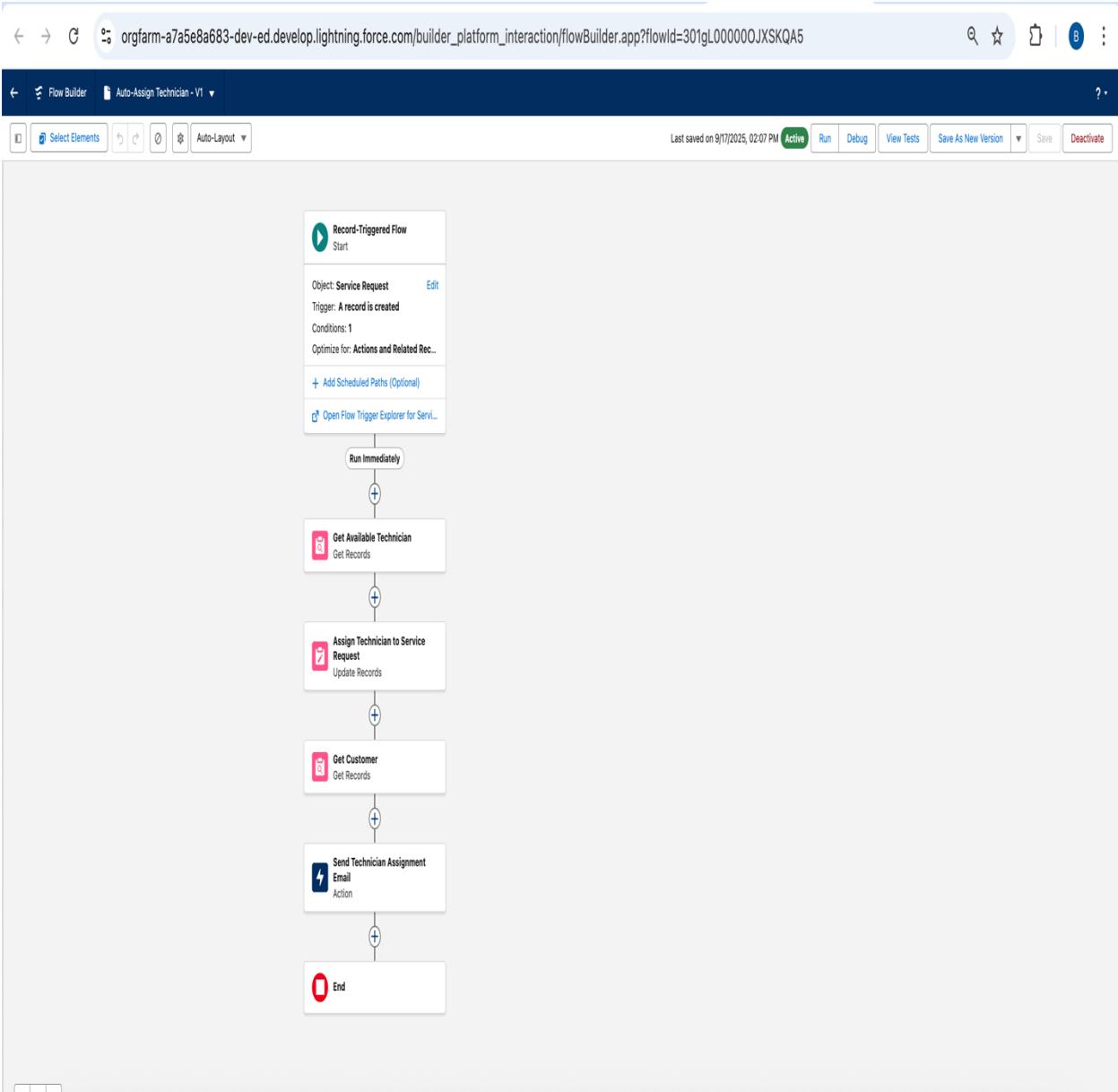
### 5.2 Scheduled Flows

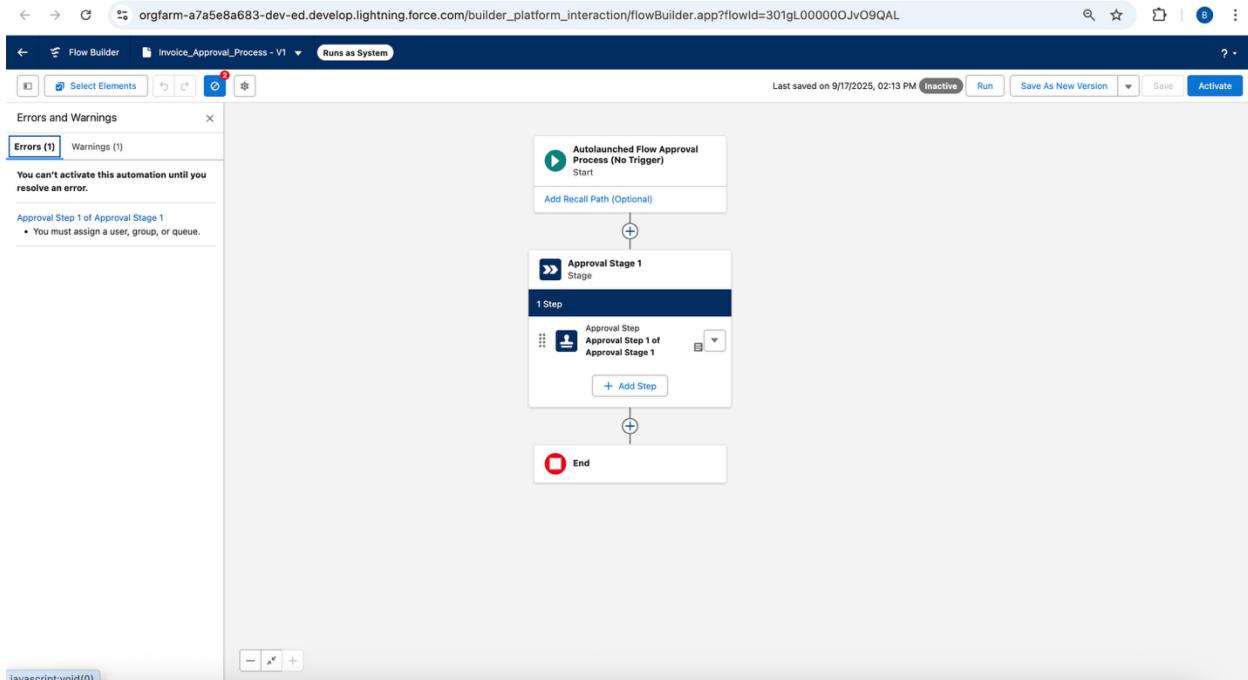
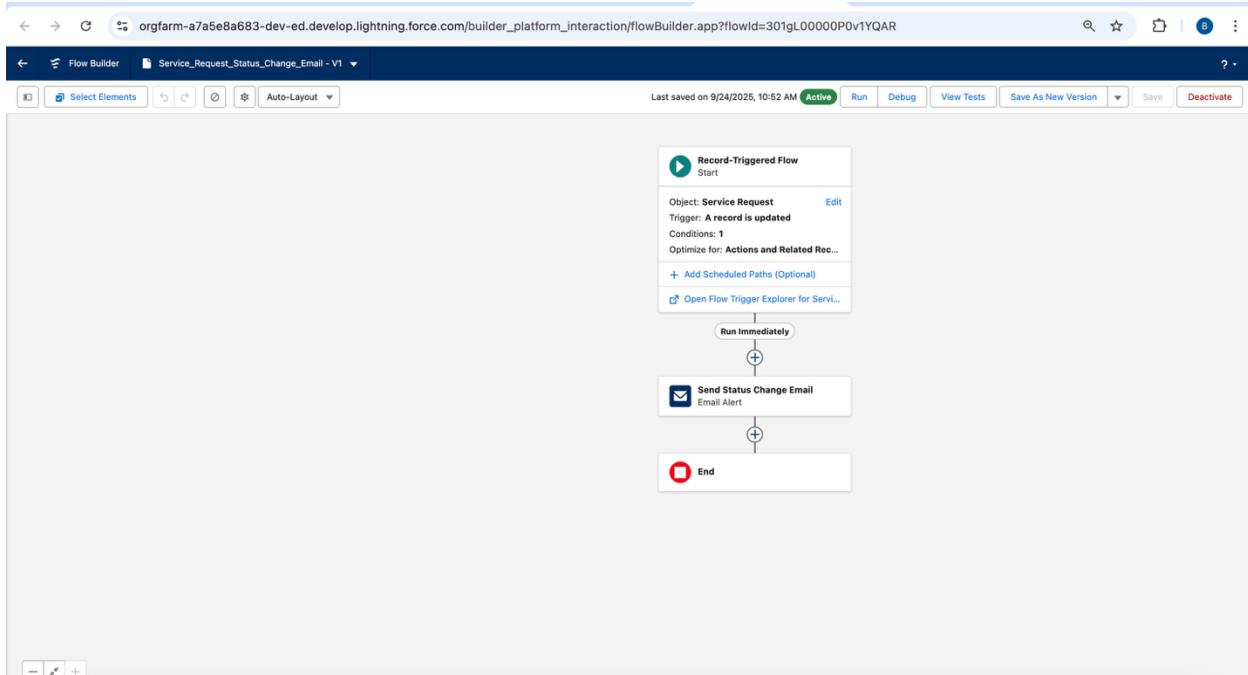
#### 1. Preventive Maintenance Reminder

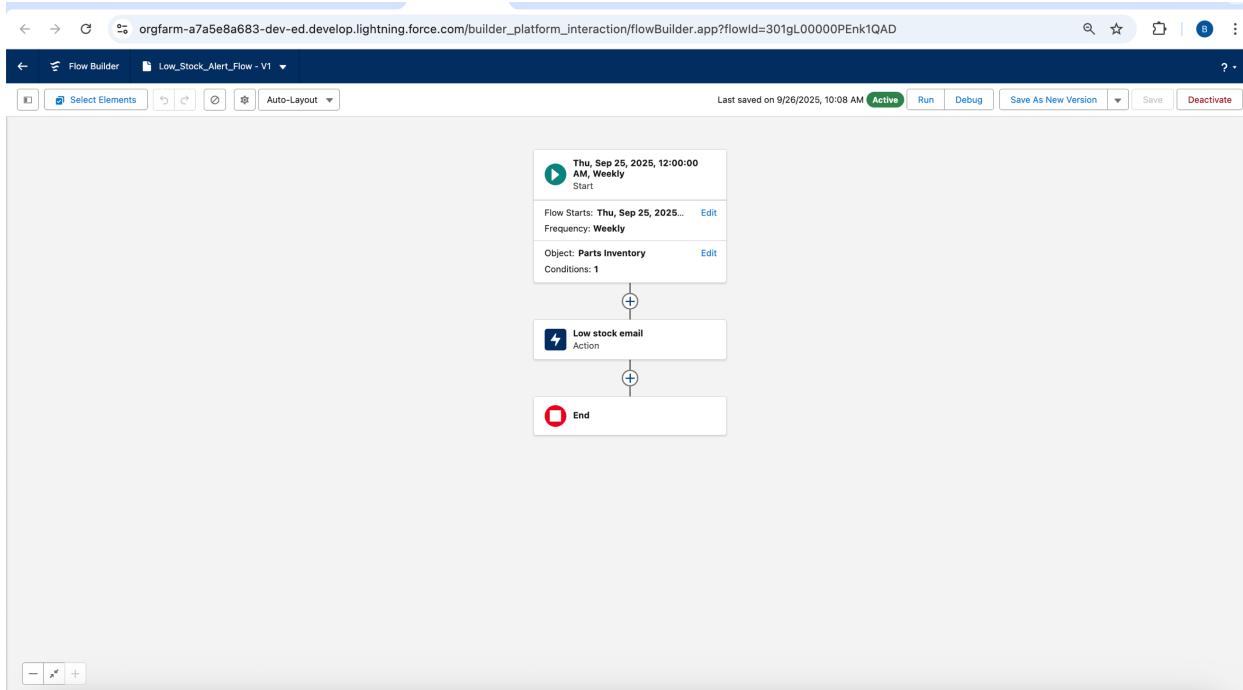
- **Object:** Service\_Request\_\_c
- **Schedule:** Monthly (using record filter conditions)
- **Action:** Send email to customers reminding them of preventive maintenance

#### 2. Low Inventory Stock Alert

- **Object:** Parts\_Inventory\_\_c
- **Trigger Condition:** Stock < Reorder Level
- **Action:** Email alert to inventory manager







## 6. Email Alerts

All email notifications are sent using **Email Alerts linked to Flows or Approval Processes**:

1. **Service\_Request\_Confirmation** – Confirmation email on new service request.
2. **Service\_Request\_Status\_Change** – Customer notified of status change.
3. **Invoice Approval Request** – Service Manager notified of invoices > ₹10,000.
4. **Preventive Maintenance Reminder Alert** – Monthly preventive maintenance reminders.
5. **Low Inventory Stock Alerts** – Notify inventory manager if stock falls below reorder level.

← → ⌂ orgfarm-a7a5e8a683-dev-ed.develop.lightning.force.com/lightning/setup/WorkflowEmails/page?address=%2F01WgL0000008yQP

**Email Alert** **Notify customer when Service Request status changes** Help for this Page

**Email Alert Detail**

Description	Notify customer when Service Request status changes
Unique Name	Notify_customer_when_Service_Request_Status_Changes
From Email Address	Current User's email address
Recipients	Related Contact: Customer
Additional Emails	
Created By	Bipin.Gundala, 9/23/2025, 9:59 PM

**Email Template** Service\_Request\_Status\_Change  
**Object** Service Request  
Modified By Bipin.Gundala, 9/23/2025, 10:00 PM

**Rules Using This Email Alert** Help for this Page

This alert is currently not used by any rules

**Approval Processes Using This Email Alert** Help for this Page

This alert is currently not used by any approval processes

**Entitlement Processes Using This Email Alert** Help for this Page

This alert is currently not used by any entitlement processes

**Flows Using This Email Alert**

Flow Name	Version	Description	Object	Active
Service_Request_Status_Change_Email	1		01lg.000002FH75	✓

Always show me more records per related list

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6.

← → ⌂ orgfarm-a7a5e8a683-dev-ed.develop.lightning.force.com/lightning/setup/WorkflowEmails/page?address=%2F01WgL00000094PN

**Email Alert** **Low\_Stock\_Alert** Help for this Page

**Email Alert Detail**

Description	Low_Stock_Alert
Unique Name	Low_Stock_Alert
From Email Address	Current User's email address
Recipients	User: John doe
Additional Emails	
Created By	Bipin.Gundala, 9/25/2025, 9:33 PM

**Email Template** Low\_Stock\_Alert  
**Object** Parts Inventory  
Modified By Bipin.Gundala, 9/25/2025, 9:33 PM

**Rules Using This Email Alert** Help for this Page

This alert is currently not used by any rules

**Approval Processes Using This Email Alert** Help for this Page

Email Alert : Low\_Stock\_Alert – Salesforce – Developer Edition

**Entitlement Processes Using This Email Alert** Help for this Page

This alert is currently not used by any entitlement processes

**Flows Using This Email Alert**

Flow Name	Version	Description	Object	Active

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orgfarm-a7a5e8a683-dev-ed.develop.lightning.force.com/lightning/setup/WorkflowEmails/page?address=%2F01WgL000000ByNB

Setup Home Object Manager

email alert

Process Automation Workflow Actions Email Alerts

Notify Service Manager for High-Value Invoice Approval

Help for this Page

Email Alert Detail

Description	Notify Service Manager for High-Value Invoice Approval
Unique Name	Notify_Service_Manager_for_High_Value_Invoice_Approval
From Email Address	Current User's email address
Recipients	Role: Service Manager
Additional Emails	
Created By	Bipin Gundala, 9/23/2025, 9:12 PM
Modified By	Bipin Gundala, 9/23/2025, 9:12 PM

Email Template: Invoice Approval Request  
Object: Invoice

Rules Using This Email Alert

This alert is currently not used by any rules

Approval Processes Using This Email Alert

Action	Approve Process Name	Description	Type	State
Edit	Invoice_Approval_Process		Invoice	Inactive

Entitlement Processes Using This Email Alert

This alert is currently not used by any entitlement processes

Flows Using This Email Alert

Flow Name	Version	Description	Object	Active
Always show me <a href="#">more records per related list</a>				

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javascript:srcUp(%27%2F01WgL000000ByNB%3FisdtP%3Dp1%27);

Chrome File Edit View History Bookmarks Profiles Tab Window Help Fri Sep 26 10:13 AM

orgfarm-a7a5e8a683-dev-ed.develop.lightning.force.com/lightning/setup/WorkflowEmails/page?address=%2F01WgL00000094KX

Setup Home Object Manager

email alert

Process Automation Workflow Actions Email Alerts

Preventive Maintenance Reminder Alert

Help for this Page

Email Alert Detail

Description	Preventive Maintenance Reminder Alert
Unique Name	Preventive_Maintenance_Reminder_Alert
From Email Address	Current User's email address
Recipients	Role: Customer Service Agent
Additional Emails	
Created By	Bipin Gundala, 9/25/2025, 8:53 PM
Modified By	Bipin Gundala, 9/25/2025, 8:53 PM

Email Template: Preventive Maintenance Reminder  
Object: Service Request

Rules Using This Email Alert

This alert is currently not used by any rules

Approval Processes Using This Email Alert

This alert is currently not used by any approval processes

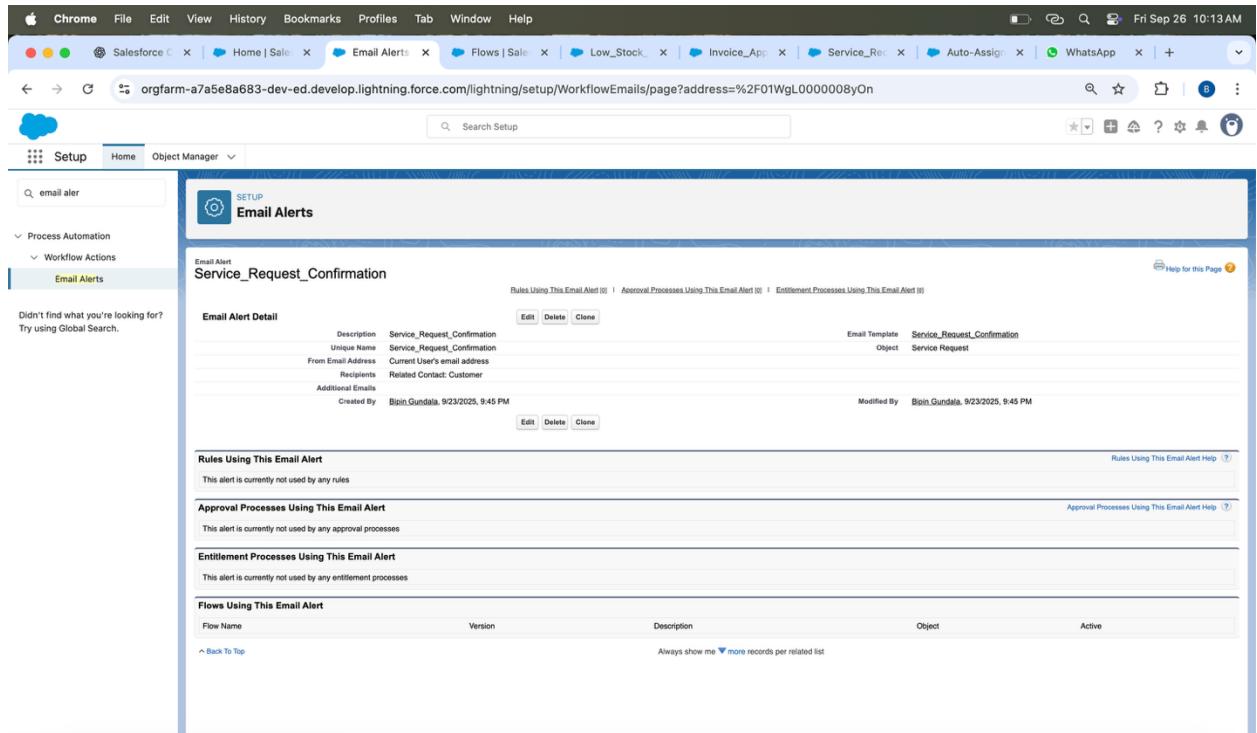
Entitlement Processes Using This Email Alert

This alert is currently not used by any entitlement processes

Flows Using This Email Alert

Flow Name	Version	Description	Object	Active
Always show me <a href="#">more records per related list</a>				

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## 7. Field Updates

- Field updates are included as part of flows and approval actions:
  - Technician\_\_c field updated automatically by the Auto-Assign Technician flow.
  - Status\_\_c updated by approval process actions.

## 8. Tasks

No explicit task creation was implemented in this phase; all notifications and approvals are handled through flows and email alerts.

## 9. Custom Notifications

- Custom notifications were **not implemented** in this phase. Future enhancements can include push notifications to technicians' Salesforce mobile app for new assignments or status changes.
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## Summary Table: Phase 4 Automation

Automation Type	Name / Flow	Object	Purpose
Validation Rule	Vehicle_Required	Service_Request_c	Ensure vehicle is selected
Validation Rule	Amount_Positive	Invoice__c	Ensure invoice amount > 0
Flow (Record-Triggered)	Auto_Assign_Technician_Flow	Service_Request_c	Assign technician automatically
Flow (Record-Triggered)	Service_Request_Confirmation	Service_Request_c	Send confirmation email
Flow (Record-Triggered)	Service_Request_Status_Change	Service_Request_c	Notify customer of status change
Flow (Schedule d)	Preventive_Maintenance_Reminder_Flow	Service_Request_c	Monthly maintenance reminders
Flow (Schedule d)	Low_Stock_Alert_Flow	Parts_Inventory_c	Notify inventory manager for low stock
Approval Process	Invoice_Approval_Process	Invoice__c	Manager approval for invoices > ₹10,000
Email Alert	Service_Request_Confirmation	Service_Request_c	Linked with Service_Request_Confirmation Flow
Email Alert	Service_Request_Status_Change	Service_Request_c	Linked with Service_Request_Status_Change Flow
Email Alert	Invoice Approval Request	Invoice__c	Notify Service Manager for approval
Email Alert	Preventive Maintenance Reminder Alert	Service_Request_c	Linked with scheduled preventive maintenance flow

<b>Automation Type</b>	<b>Name / Flow</b>	<b>Object</b>	<b>Purpose</b>
Email Alert	Low Inventory Stock Alerts	Parts_Inventory_c	Linked with scheduled stock alert flow