

Technical Blueprint

1 Overview

The Technical Blueprint provides a detailed view of the system's internal design and configuration. It explains how ServiceNow components such as Flow Designer, Service Catalog variables, custom tables, approvals, and SLAs are wired together to deliver a reliable and scalable Employee Onboarding & Offboarding solution.

This section serves as a reference for administrators, reviewers, and those involved in future enhancements.

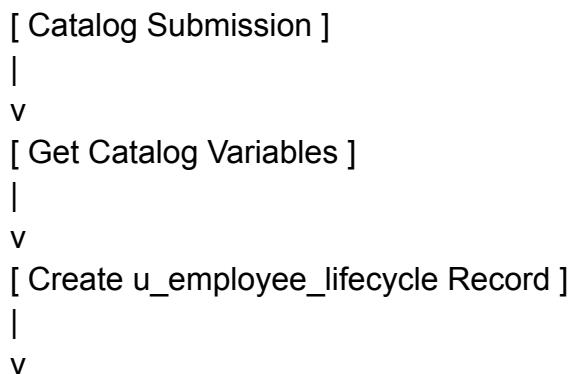
2 Flow Designer Workflow

The core automation is implemented using **Flow Designer**, eliminating the need for complex scripts and ensuring maintainability.

Workflow Stages:

1. Trigger on Service Catalog submission (Onboard / Offboard Employee)
2. Capture catalog variables
3. Create Employee Lifecycle record
4. Route request for manager approval
5. Auto-generate departmental tasks
6. Monitor task completion
7. Update lifecycle status and close the request

Logical Flow Diagram:



[Manager Approval]

|

Approved?

/ \

Yes No

| |

v v

[Create Department Tasks] [Close Request]

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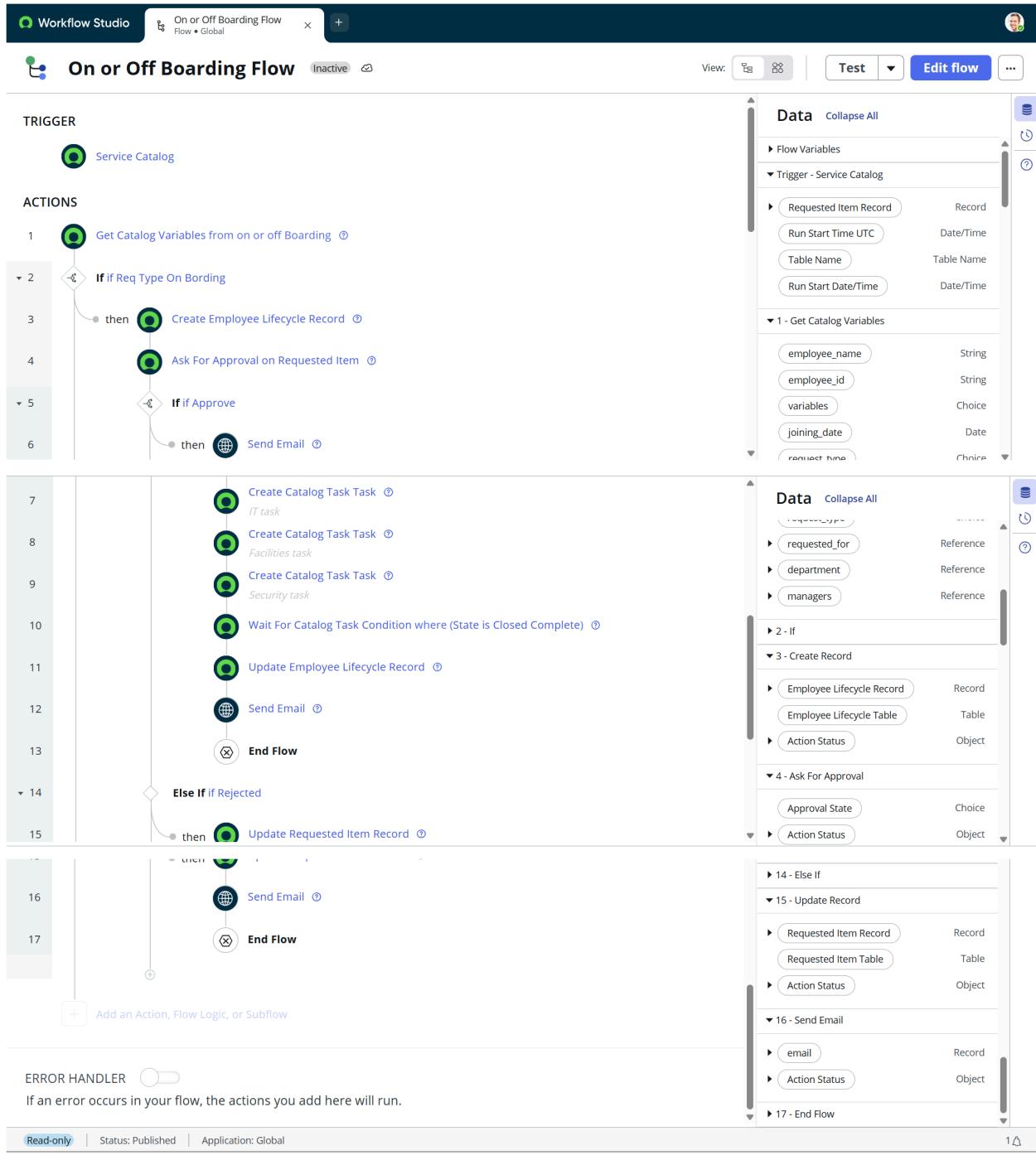
v

[Wait for Task Completion]

|

v

[Update Status & Close RITM]



3 Variable-to-Field Mapping Logic

Catalog variables are mapped directly to the **Employee Lifecycle** (`u_employee_lifecycle`) table to ensure structured data storage.

Catalog Variable	Target Table Field	Mapping Method
Employee ID	u_employee_id	Flow Designer – Create Record
Request Type	u_request_type	Flow Designer – Create Record
Department	u_department	Reference mapping
Joining Date	u_joining_date	Date mapping
Exit Date	u_exit_date	Date mapping
Manager	u_manager	Reference mapping
Assets	u_assets	Multi-select mapping
Access Details	u_access_details	Text mapping

The screenshot shows the ServiceNow Catalog Item - on or off Boarding page. The top navigation bar includes 'servicenow', 'All', 'Favorites', 'History', 'Catalog Item - on or off Boarding', 'Search', and user profile icons. Below the header, there are tabs for 'Variables (9)', 'Variable Sets', 'Catalog UI Policies (2)', 'Catalog Client Scripts', 'Available For', 'Not Available For', 'Categories (1)', 'Catalogs (1)', 'Catalog Data Lookup Definitions', and 'Related Articles'. Under the 'Variables' tab, there are two sub-tabs: 'Related Catalog Items' and 'Assigned Topics'. A search bar and a 'New' button are at the top of the variable list. The main table lists 9 variables with their types and questions:

Type	Question	Order
Single Line Text	Employee name	310
Single Line Text	Employee ID	320
Multiple Choice	Variables	330
Multiple Choice	Request Type	340
Reference	Requested For	350
Reference	Department	360
Reference	Managers	370
Date	Joining Date	400
Date	Exit Date	500

At the bottom of the table, there are navigation buttons for '1 to 9 of 9'.

All mappings are handled using **Get Catalog Variables** and **Create / Update Record** actions in Flow Designer.

4 Custom Table Schema

Table Name: u_employee_lifecycle

Purpose: Central repository for onboarding and offboarding lifecycle data

Field Name	Type	Description
u_employee_id	String	Employee unique identifier
u_employee_name	Reference (sys_user)	Employee reference
u_department	Reference (cmn_department)	Department
u_manager	Reference (sys_user)	Reporting manager
u_request_type	Choice	Onboarding / Offboarding
u_joining_date	Date	Onboarding date
u_exit_date	Date	Offboarding date
u_status	Choice	Lifecycle status
u_ritm	Reference (sc_req_item)	Linked request item

← → ⌂ dev319156.service-now.com/nav/ui/classic/params/target/sys_db_object.do?sys_id=3De7afdb354746f610228cbb30116d4370... ☆ School All Bookmarks

servicenow

All Favorites History Admin : Table - Employee Lifecycle ★

[Table](#) Employee Lifecycle

A table is a collection of records in the database. Each record corresponds to a row in a table, and each field on a record corresponds to a column on that table. Applications use tables and records to manage data and processes. [More Info](#)

* Label: Employee Lifecycle Application: Global (i)

* Name: u_employee_lifecycle

[Columns](#) [Controls](#) [Application Access](#)

[Table Columns](#) for text Search 1 to 15 of 15 New

Column label	Type	Reference	Max length	Default value	Display
Exit Date	Date	(empty)	40	false	
Created by	String	(empty)	40	false	
Department	Reference	Department	32	false	
RITM	Reference	Requested Item	32	false	
Created	Date/Time	(empty)	40	false	
Sys ID	Sys ID (GUID)	(empty)	32	false	
Updated by	String	(empty)	40	false	
Employee ID	String	(empty)	40	false	
Updates	Integer	(empty)	40	false	
Request type	Choice	(empty)	40	false	
Manager	Reference	User	32	false	
Joining date	Date	(empty)	40	false	
Updated	Date/Time	(empty)	40	false	
Requested for	Reference	User	32	false	
Status	Choice	(empty)	40	false	
+ Insert a new row...					

[Delete](#) [Update](#) [Delete All Records](#)

Related Links

- [Form Builder](#)
- [Design Form](#)
- [Layout Form](#)
- [Layout List](#)
- [Show Form](#)
- [Show List](#)
- [Show Schema Map](#)
- [Add to Service Catalog](#)
- [Run Point Scan](#)
- [Explore REST API](#)

[Access Controls \(4\)](#) [Security Data Filters](#) [Labels \(1\)](#) [Database Indexes \(5\)](#) [Table Subscription Configuration \(1\)](#)

Name Search Actions on selected rows...

Access Controls

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_employee_lifecycle	Allow If	read	record	true	admin	2025-12-26 21:54:19
u_employee_lifecycle	Allow If	delete	record	true	admin	2025-12-26 21:54:19
u_employee_lifecycle	Allow If	write	record	true	admin	2025-12-26 21:54:19
u_employee_lifecycle	Allow If	create	record	true	admin	2025-12-26 21:54:19

1 to 4 of 4

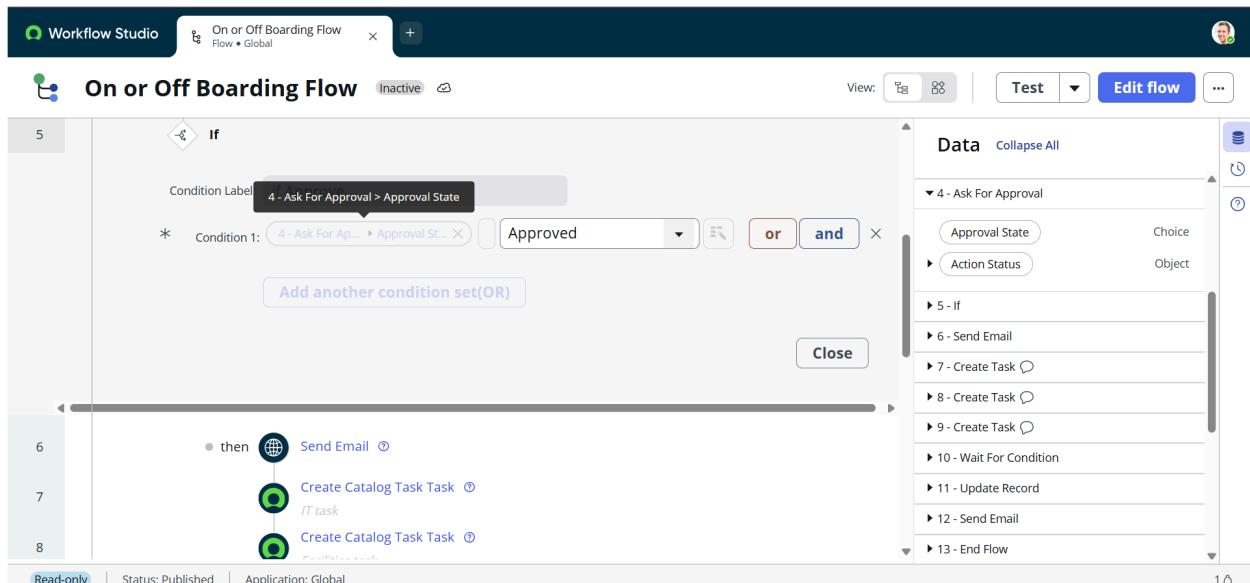
5 Approval Routing Conditions

Approval logic is implemented within Flow Designer using dynamic conditions:

- Approver is derived from the **Manager** catalog variable
- Approval is mandatory for both onboarding and offboarding
- Flow execution pauses until the approval outcome is received

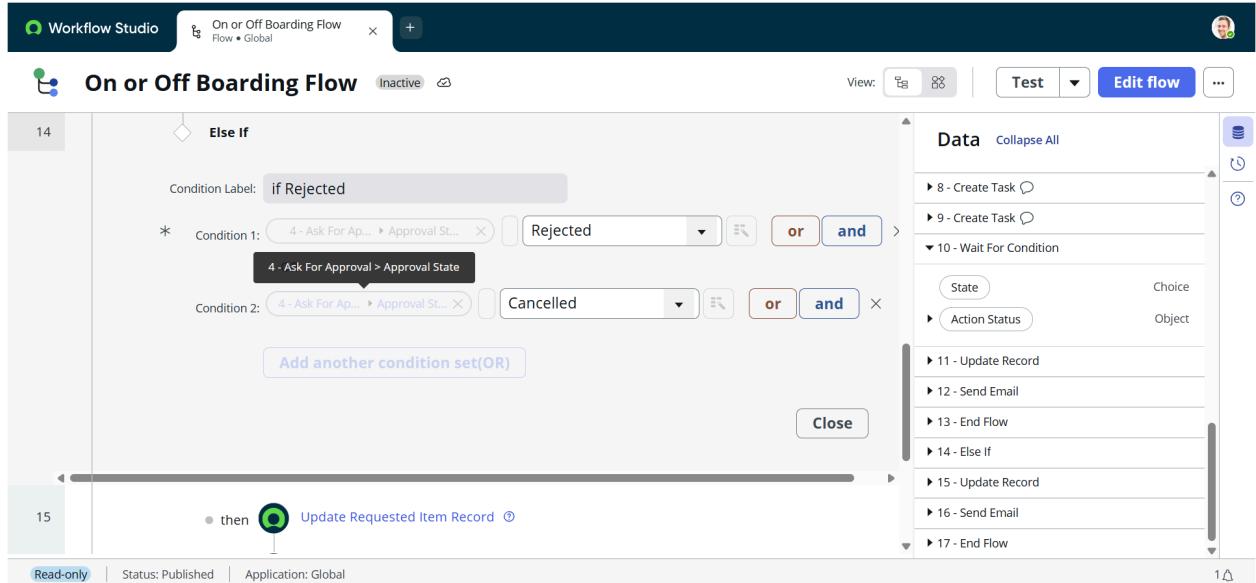
Approval Conditions:

- If Approved → Continue task creation



The screenshot shows the ServiceNow Catalog UI Policy Action configuration page for the "joining_date" variable. The "Catalog Item" is set to "on or off Boarding". The "Variable name" is "joining_date". The "Order" is 100. The "Application" is "Global". The "Mandatory" field is set to "Leave alone". The "Visible" field is checked ("True"). The "Read only" field is set to "Leave alone". The "Value action" is set to "Leave alone". The "Field message type" is set to "None". At the bottom, there are "Update" and "Delete" buttons.

- If Rejected → Update lifecycle status to Rejected and close the request



The screenshot shows the ServiceNow Catalog UI Policy configuration page. A policy named "Catalog UI Policy - Show exit Date f..." is being edited. It applies to "A Catalog Item" with a filter for "on or off Boarding". The policy is active. The "When to Apply" tab is selected, showing conditions for applying the policy based on catalog item type ("request_type is Offboarding"). The "Script" tab is also visible. A note indicates that catalog UI policy actions are applied only if all conditions are met: 1. Catalog UI policy is Active, 2. Conditions evaluate to true, 3. Field specified is present on the catalog item.

6 SLA Configuration

SLAs are configured on **sc_task** records to ensure timely execution by departments.

Department	SLA Target	Trigger Condition
IT	Before Joining / Exit Date	Task created

Facilities	Before Joining / Exit Date	Task created
Security	On Joining / Exit Date	Task created

SLAs are automatically monitored and reported to track performance and bottlenecks.

Catalog UI Policy - Show Joining Date for Onboarding

Catalog UI policies are similar to standard UI policies. Catalog UI policies dynamically change variables that are part of a catalog item or change how variable sets are handled. Policies can also be applied when the variables are present in a Requested Item or Catalog Task form. [More Info](#)

Applies to: A Catalog Item

* Catalog item: on or off Boarding

* Short description: Show Joining Date for Onboarding

Application: Global

Active:

When to Apply Script

Catalog UI policy actions are applied only if all the following conditions are met:

1. The catalog UI policy is Active
2. The items in the Conditions field evaluate to true
3. The field specified in the catalog UI policy is present on the specified catalog item

Catalog Conditions: request_type is Onboarding

Catalog UI Policy - Show exit Date for Offboarding

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Catalog Conditions: request_type is Offboarding

Applies on a Catalog Item view:

Applies on Catalog Tasks:

Apply the catalog UI policy actions when the form is loaded or when the user changes values on the form

On load:

7 Technical Outcomes

- Fully no-code automation using Flow Designer

- Clean separation between data, logic, and UI
 - Scalable table design for future enhancements
 - SLA-driven execution and accountability
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