

Technical Blueprint: Automated Employee Onboarding & Offboarding System

This technical blueprint details the architecture, data modeling, and automation logic required to implement the Automated Employee Onboarding and Offboarding solution in ServiceNow, following enterprise standards.

1. Data Architecture: Custom Table Schema

To ensure structured data management and audit-readiness, a central table is used to track the employee lifecycle.

Table Name: u_employee_lifecycle

Extends: None (or Task, if SLA tracking is required at the record level)

| Field Label | Name | Type | Reference / Details |
|------------------|------------------|-----------|--|
| Request Type | u_request_type | Choice | Onboarding, Offboarding |
| Employee ID | u_employee_id | String | Unique identifier |
| Department | u_department | Reference | cmn_department |
| Manager | u_manager | Reference | sys_user |
| Effective Date | u_effective_date | Date | Joining or Exit date |
| Lifecycle Status | u_status | Choice | Requested, Approved, Fulfillment, Closed |

| | | | |
|--------|----------|------|--|
| Assets | u_assets | List | Reference to alm_asset |
|--------|----------|------|--|

2. Variable-to-Field Mapping Logic

The Flow Designer retrieves values from the Service Catalog and maps them to the [u_employee_lifecycle](#) table to maintain a permanent record of the request.

- **Mapping Rule:** Upon submission, the "Create Record" action in Flow Designer populates the table fields as follows:
 - [u_request_type](#) = [fd_data.trigger.current.variables.request_type](#)
 - [u_manager](#) = [fd_data.trigger.current.variables.manager](#)
 - [u_effective_date](#) = [fd_data.trigger.current.variables.joining_exit_date](#)

3. Flow Designer Automation Logic

The automation is triggered by the catalog item submission and follows a structured decision path.

3.1 Process Flow Diagram

3.2 Workflow Stages:

1. **Trigger:** Catalog Item "Onboard / Offboard Employee" is submitted.
2. **Record Creation:** A new entry is created in [u_employee_lifecycle](#) with status "Requested".
3. **Approval Step:**
 - **Action:** Ask for Approval.
 - **Condition:** Routed to the User listed in the [Manager](#) variable.
4. **Decision Branch:**
 - **If Approved:** Proceed to parallel task generation.
 - **If Rejected:** Update [u_status](#) to "Rejected" and terminate the flow.
5. **Fulfillment (Parallel Tasks):**
 - **IT Task:** Provision access and hardware.
 - **Facilities Task:** Setup workspace/desk.
 - **Security Task:** Provision ID badges and physical access.
6. **Closure:** Once all tasks are "Closed Complete," the [u_status](#) on the lifecycle record is updated to "Closed".

Workflow Studio interface showing the "On or Off Boarding Flow" (Active). The flow is triggered by "Service Catalog".

TRIGGER

- Service Catalog

ACTIONS (Select multiple)

1. Get Catalog Variables from On or Off Boarding from On or Off Boarding
2. If If Req Type OnBoarding
 - then
 - 3. Create Employee Lifecycle Record
 - 4. Ask For Approval on Requested Item
 - 5. If If Approve
 - then
 - 6. Send Email

Data (Expand All)

- Flow Variables
- Trigger - Service Catalog
- 1 - Get Catalog Variables
- 2 - If
- 3 - Create Record
- 4 - Ask For Approval
- 5 - If
- 6 - Send Email
- 7 - Create Task
- 8 - Create Task
- 9 - Create Task
- 10 - Wait For Condition
- 11 - Update Record
- 12 - Send Email

Status: Published | Application: Global

Workflow Studio interface showing the "On or Off Boarding Flow" (Active). The flow continues from step 6.

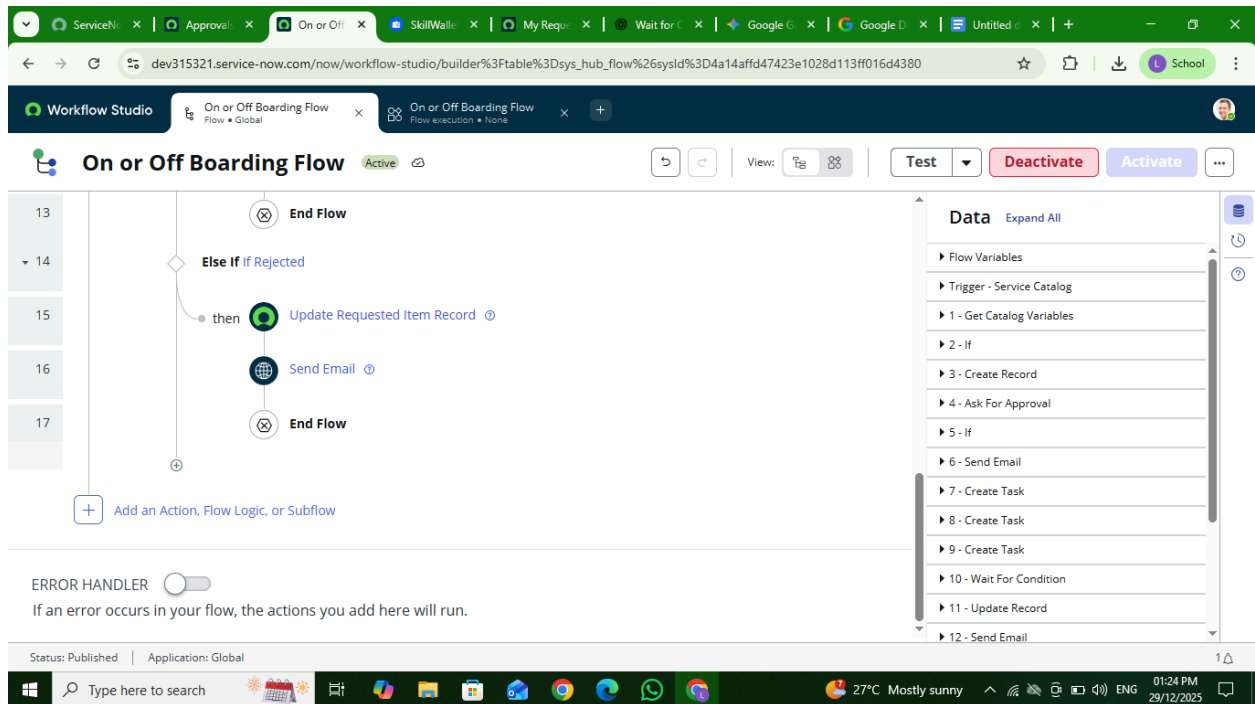
ACTIONS

7. Create Catalog Task Task
8. Create Catalog Task Task
9. Create Catalog Task Task
10. Wait For Catalog Task Condition where (State is Closed Complete)
11. Update Employee Lifecycle Record
12. Send Email
- End Flow
- Else If If Rejected
 - then
 - 15. Update Requested Item Record

Data (Expand All)

- Flow Variables
- Trigger - Service Catalog
- 1 - Get Catalog Variables
- 2 - If
- 3 - Create Record
- 4 - Ask For Approval
- 5 - If
- 6 - Send Email
- 7 - Create Task
- 8 - Create Task
- 9 - Create Task
- 10 - Wait For Condition
- 11 - Update Record
- 12 - Send Email

Status: Published | Application: Global



4. Approval Routing & Decision Tables

Approval routing is dynamic based on the request characteristics.

- **Standard Approval:** Always requires the reporting Manager's authorization to validate the business need.
- **Escalation Logic:** If the "Access Details" variable includes high-security systems, an additional "Security Group" approval step is injected into the flow.

5. SLA Configurations

To ensure timely delivery of services, Service Level Agreements (SLAs) are attached to the departmental tasks generated by the flow.

- **IT Hardware Provisioning SLA:** 3 Business Days (Triggered on IT Task creation).
- **Facilities Setup SLA:** 2 Business Days (Triggered on Facilities Task creation).
- **Access Management SLA:** 24 Hours (Triggered on Security Task creation).
- **Retroactive Start:** Set to the time the Manager approved the initial request to ensure accountability.

6. Security and Governance

Access is controlled through Role-Based Access Control (RBAC):

- **HR Admin:** Can view and edit all lifecycle records.
- **Departmental Fulfillers:** Granted "Read" access to lifecycle records and "Write" access to assigned tasks.
- **Audit Readiness:** The u_employee_lifecycle table provides a timestamped trail of approvals and task completions.