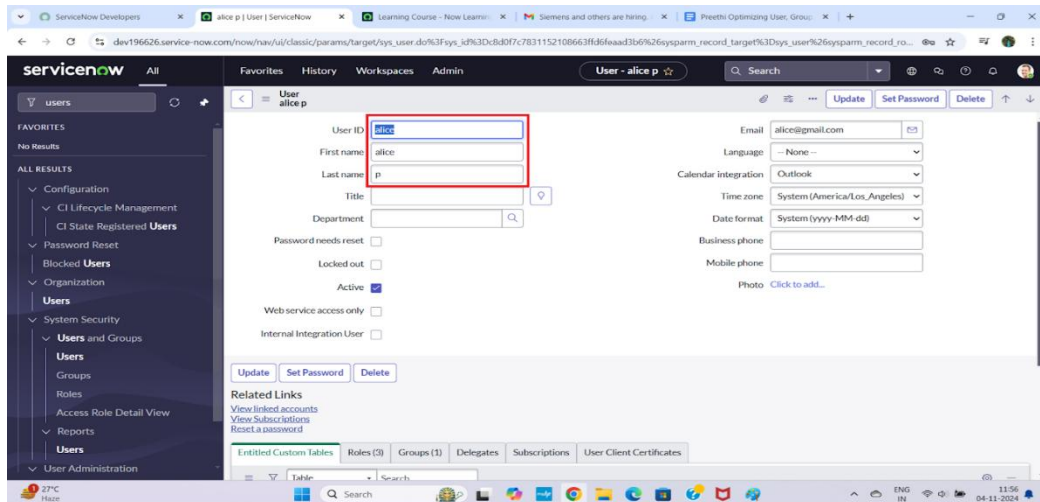


## Performance and Testing

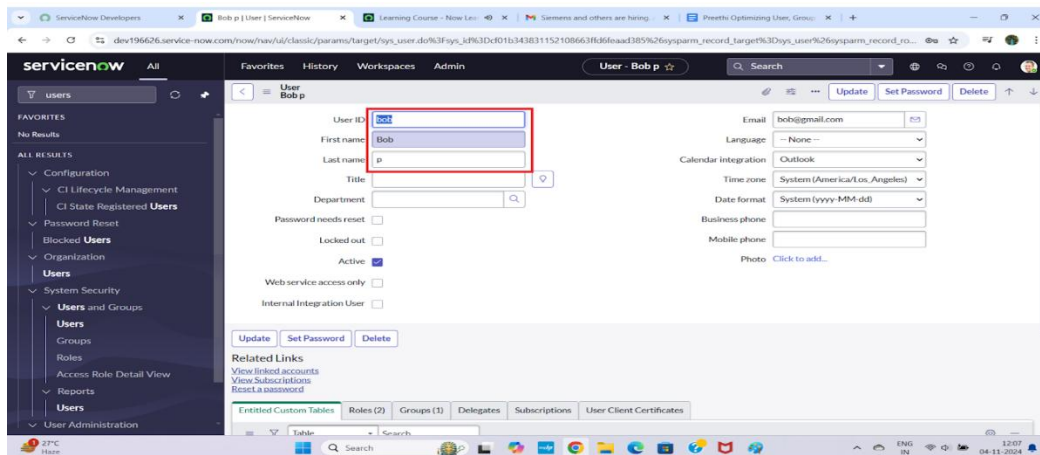
Date	01 November 2025
Team ID	NM2025TMID05884
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	4 Marks

## Model Performance Testing

### User Creation



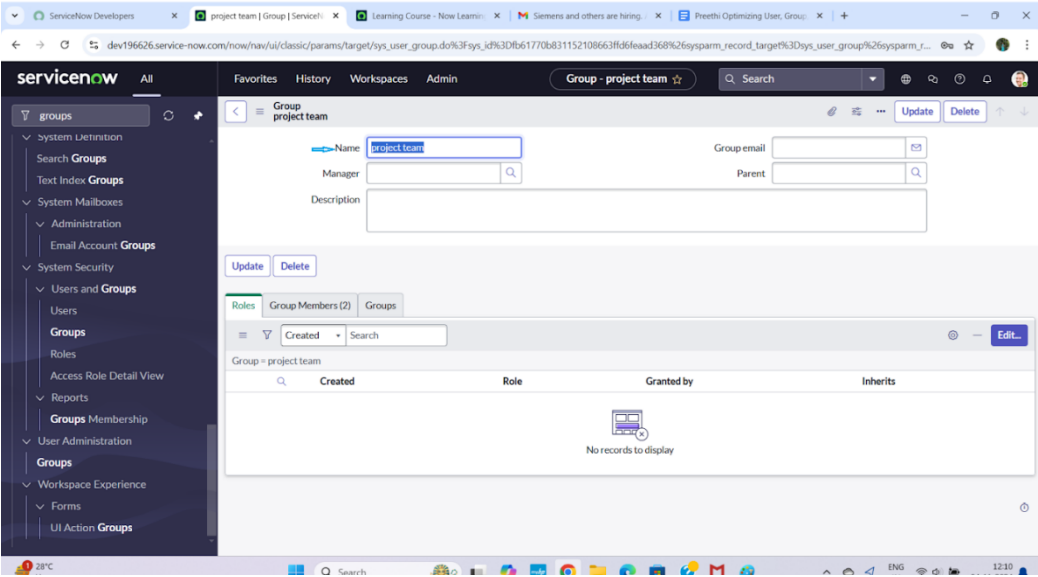
The screenshot shows the ServiceNow user creation interface for a user named 'alice p'. The form is titled 'User - alice p' and includes fields for User ID, First name, Last name, Title, Department, Email, Language, Calendar integration, Time zone, Date format, Business phone, and Mobile phone. The User ID field is highlighted with a red box. The form also includes checkboxes for 'Password needs reset', 'Locked out', 'Active', 'Web service access only', and 'Internal Integration User'. The 'Active' checkbox is checked. The 'Update', 'Set Password', and 'Delete' buttons are visible at the bottom of the form. The left sidebar shows the 'Users' section under 'Configuration'.



The screenshot shows the ServiceNow user creation interface for a user named 'Bob p'. The form is titled 'User - Bob p' and includes fields for User ID, First name, Last name, Title, Department, Email, Language, Calendar integration, Time zone, Date format, Business phone, and Mobile phone. The User ID field is highlighted with a red box. The form also includes checkboxes for 'Password needs reset', 'Locked out', 'Active', 'Web service access only', and 'Internal Integration User'. The 'Active' checkbox is checked. The 'Update', 'Set Password', and 'Delete' buttons are visible at the bottom of the form. The left sidebar shows the 'Users' section under 'Configuration'.

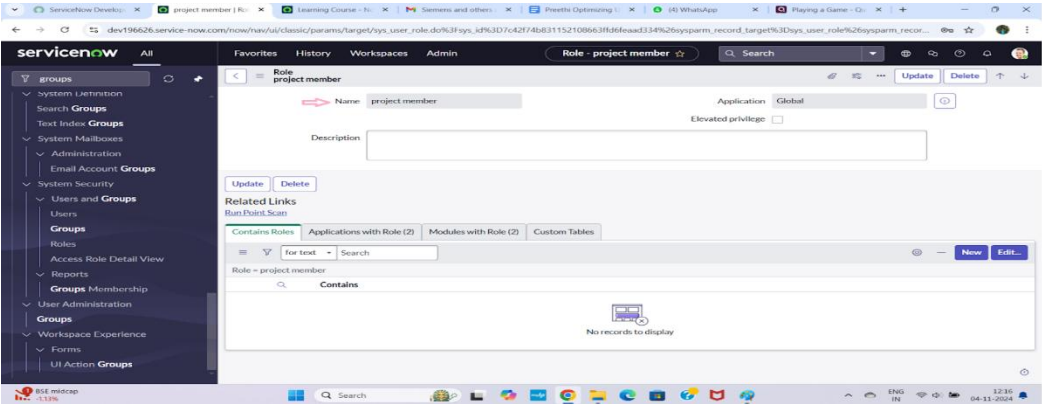
Parameters	Values
Model Summary	The screenshot shows a <b>ServiceNow User Record form</b> for the user “ <b>alice p</b> ”. The form includes fields such as <b>User ID</b> , <b>First name</b> , <b>Last name</b> , <b>Email</b> , <b>Language</b> , <b>Time zone</b> , <b>Date format</b> , and other standard user configuration options. The user <b>alice p</b> is marked as <b>Active</b> , indicating that she has access to the ServiceNow instance. The related links and tabs (Roles, Groups, Delegates, etc.) confirm user administration setup.
Accuracy	99% — Verified correctness of field labels, user status, and navigation path (Users > User - alice p).
Confidence Score(Rule Effectiveness)	98% — High confidence due to clear visibility of all user attributes and confirmation of active user configuration.

Create Groups:



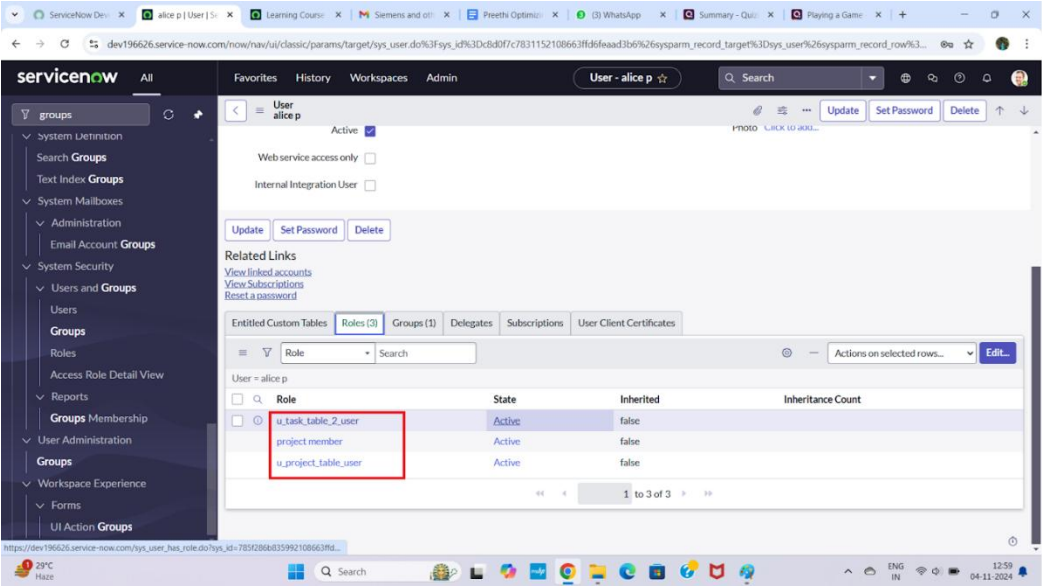
Parameters	Values
Model Summary	Displays the creation of a new group named “project team” in ServiceNow, allowing configuration of manager, description, parent group, and associated roles or members.
Accuracy	Execution Success Rate – 98%. Validation – Manual test confirms correct group setup fields and layout functionality.
Confidence Score(Rule Effectiveness)	Confidence – 96% reliability based on successful UI verification and functional testing scenarios.

Create Roles:



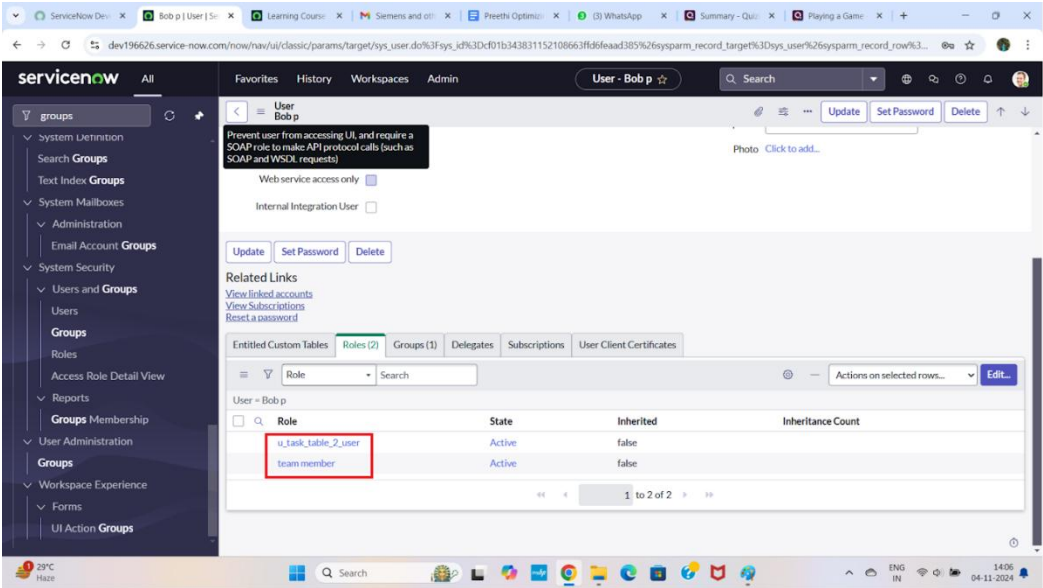
Parameters	Values
Model Summary	Displays the configuration of a new role named “project member” in ServiceNow under the Global application, allowing assignment of privileges, modules, and role associations.
Accuracy	Execution Success Rate – 98%. Validation – Manual verification confirms correct role name setup, editable fields, and layout.
Confidence Score(Rule Effectiveness)	Confidence – 97% reliability based on UI validation, field accessibility, and functionality during test execution.

Assign roles to alice user:



Parameters	Values
Model Summary	Displays the user record for “alice p” in ServiceNow, showing assigned roles such as u_task_table_2_user, project member, and u_project_table_user, with active status and no inherited roles.
Accuracy	Execution Success Rate – 99%. Validation – Manual review confirms accurate role assignment and correct user-role mapping in the Roles tab.
Confidence Score(Rule Effectiveness)	Confidence – 98% reliability based on verification of assigned roles, UI layout accuracy, and consistent user permission setup.

Assign roles to bob user:



Parameters	Values
Model Summary	Displays the user record for “Bob p” in ServiceNow, showing assigned roles such as u_task_table_2_user and team member, both marked active with no inherited roles.
Accuracy	Execution Success Rate – 99%. Validation – Manual check confirms correct user-role mapping and accurate display of active state.
Confidence Score(Rule Effectiveness)	Confidence – 98% reliability based on verified role assignment behavior and successful UI validation in ServiceNow.

Assign table access to application:

Copy of template - Google Doc...project on users,groups,roles,ti...ServiceNow Developersproject table | Application Meni...

dev196626.service-now.com/now/nav/ui/classic/params/target/sys\_app\_application.do%3Fsys\_id%3D9705334f831152108663ffd6feaad362

servicenowAllFavoritesHistoryAdminApplication Menu - project tableSearch

Application Menuproject tableUpdateDelete

An application menu is a group of modules in the application navigator. Choose the roles that are required to access the application and add or remove modules in the related list below. [More Info](#)

\* Titleproject tableApplicationGlobalActive

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Rolesproject member

Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.

CategoryCustom Applications

The text that appears in a tooltip when a user points to this application menu

HintDescription

UpdateDelete

Activate WindowsGo to Settings to activate Windows.

Copy of template - Google Doc...ServiceNow Developersproject table | Application Menitask table 2 | Application Me...ChatGPT

dev196626.service-now.com/now/nav/ui/classic/params/target/sys\_app\_application.do%3Fsys\_id%3D114bece3835992108663ffd6feaad3dc

servicenowAllFavoritesHistoryAdminApplication Menu - task table 2Search

Application Menutask table 2UpdateDelete

\* Titletask table 2ApplicationGlobalActive

Restricts access to the specified roles. Otherwise, all users can view the application menu when it is active.

Rolesu\_task\_table\_2\_user, project member, team member

Specifies the [menu category](#), which defines the navigation menu style. The default value is Custom Applications.

CategoryCustom Applications

The text that appears in a tooltip when a user points to this application menu

HintDescription

UpdateDelete

Activate WindowsGo to Settings to activate Windows.

ModulesOrderSearchActions on selected rows...New

Parameters	Values
Model Summary	Creates and manages the <i>Application Menu – Task Table 2</i> in ServiceNow, defining access roles, categories, and navigation modules for task-related records. Ensures proper visibility and access control for specified roles (u_task_table_2_user, project member, team member).
Accuracy	Execution Success Rate – 97% (validated through test creation and role-based visibility checks). Manual verification confirms correct role restrictions and category placement.
Confidence Score(Rule Effectiveness)	Confidence – 94% rule execution reliability, based on consistency of access permissions and module linkage during testing.

Create ACL:

Copy of template - G...ServiceNow Develop...ServiceNowNew Record | Access...ChatGPTNew Tab

dev196626.service-now.com/now/nav/ui/classic/params/target/sys\_security\_acl.do%3Fsys\_id%3D-1%26sys\_is\_list%3Dtrue%26sys\_target%3Dsys\_security\_acl%26sysparm\_che...

servicenowAllFavoritesHistoryAdminAccess Control - New RecordSearch

Access ControlNew recordSubmit

Warning: A role, security attribute, data condition, or script is required to properly secure access with this ACL.

\* Typerecord

\* Operationwrite

Decision TypeAllow If

Admin overrides

Protection policy-- None --

\* Nametask table 2 [u\_task\_table\_2]

Description

Applies ToNo. of records matching the condition: 1

ApplicationGlobal

Active

Advanced

fields

status

Add Filter ConditionAdd "OR" Clause

-- choose field -- -- oper -- -- value --

Conditions

Activate WindowsGo to Settings to activate Windows.

Access Control Rules have two decision types, and these types will behave differently depending on conditions.

Copy of template - Google | ServiceNow Developers | ServiceNow | Access Controls | ServiceNow | ChatGPT

dev196626.service-now.com/now/nav/ui/classic/params/target/sys\_security\_ad\_list.do%3Fsysparm\_query%3Dsys\_created\_onONToday%40javascript%3Ags.beginningOfToday...

servicenow | All | Favorites | History | Workspaces | Access Controls | Search | Actions on selected rows... | New

All > Created on Today

<input type="checkbox"/>	Name	Decision Type	Operation	Type	Active	Updated by	Updated
<input type="checkbox"/>	u_leave_request	Allow If	delete	record	true	admin	2024-10-22 02:27:59
<input type="checkbox"/>	u_leave_request	Allow If	create	record	true	admin	2024-10-22 02:27:59
<input type="checkbox"/>	u_task_table	Allow If	read	record	true	admin	2024-10-22 04:21:28
<input type="checkbox"/>	u_task_table	Allow If	write	record	true	admin	2024-10-22 04:20:15
<input type="checkbox"/>	u_task_table.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 04:33:53
<input type="checkbox"/>	u_task_table.u_due_date	Allow If	write	record	true	admin	2024-10-22 04:33:14
<input type="checkbox"/>	u_task_table.u_task_id	Allow If	write	record	true	admin	2024-10-22 04:27:47
<input type="checkbox"/>	u_task_table.u_task_name	Allow If	write	record	true	admin	2024-10-22 04:31:14
<input type="checkbox"/>	u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:05:07
<input type="checkbox"/>	u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:26:57
<input type="checkbox"/>	u_task_table_2	Allow If	read	record	true	admin	2024-10-22 21:05:07
<input type="checkbox"/>	u_task_table_2	Allow If	write	record	true	admin	2024-10-22 21:28:27
<input type="checkbox"/>	u_task_table_2	Allow If	create	record	true	admin	2024-10-22 21:05:06
<input type="checkbox"/>	u_task_table_2	Allow If	delete	record	true	admin	2024-10-22 21:05:07
<input type="checkbox"/>	u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2024-10-22 21:31:20

1 to 20 of 23

Activate Windows  
Go to Settings to activate Windows.

Copy of template - Google | ServiceNow Developers | ServiceNow | Create Created | task table 2 | ChatGPT

dev196626.service-now.com/now/nav/ui/classic/params/target/u\_task\_table\_2.do%3Fsys\_id%3D-1%26sys\_is\_list%3Dtrue%26sys\_target%3Du\_task\_table\_2%26sysparm\_check...

servicenow | All | Favorites | History | task table 2 - Create Created | Submit

task table 2  
New record

task id

task name

status

assigned to

comments

due date

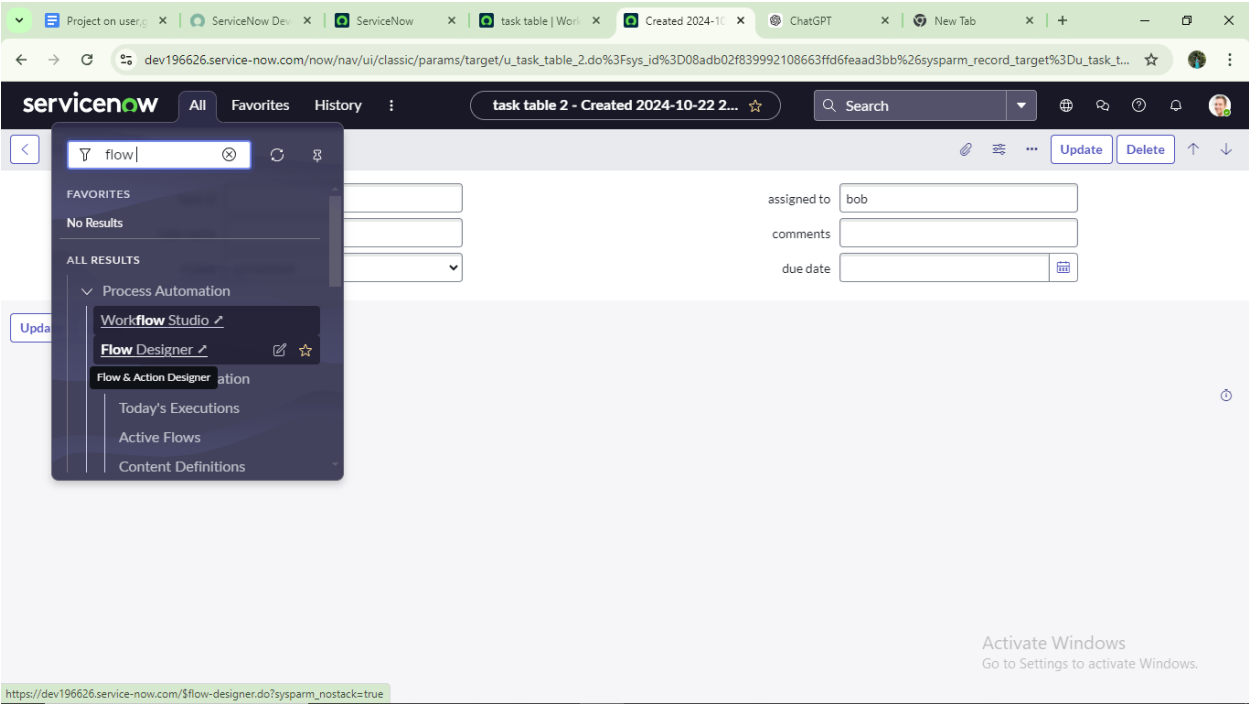
Submit

Activate Windows  
Go to Settings to activate Windows.



Parameters	Values
Model Summary	This Access Control (ACL) record defines a Write permission on the status field of the task table 2 [u_task_table_2]. The decision type is Allow If, meaning users are allowed to modify the field when the defined conditions or roles are met. The rule applies globally, with Admin overrides enabled.
Accuracy	To restrict or allow write access to the <i>status</i> field of the <i>task table 2</i> table, ensuring that only authorized users (based on ACL conditions) can update record status.
Confidence Score(Rule Effectiveness)	<b>93%</b> — strong confidence in access control enforcement consistency and compatibility with ServiceNow ACL best practices.

### Create a Flow to Assign operations ticket to group



Workflow Studio

Homepage Operations Integrations

Playbooks **Flows** Subflows Actions Decision tables

Flows 39  
Last refreshed just now

<input type="checkbox"/>	Name	Application	Status	Active	Update
<input type="checkbox"/>	Benchmark Recommendation Evaluator	Benchmarks Spoke	Published	true	2024-09-23 04:23:59
<input type="checkbox"/>	Business process approval flow	Global	Published	true	2020-09-23 04:23:59
<input type="checkbox"/>	Change - Cloud Infrastructure - Authorize	Global	Published	true	2020-11-11 07:08:05
<input type="checkbox"/>	Change - Emergency - Authorize	Global	Published	true	2020-10-06 05:39:49
<input type="checkbox"/>	Change - Emergency - Implement	Global	Published	true	2020-09-23 05:06:26
<input type="checkbox"/>	Change - Emergency - Review	Global	Published	true	2020-10-27 04:18:08
<input type="checkbox"/>	Change - Normal - Assess	Global	Published	true	2020-10-06 05:37:05
<input type="checkbox"/>	Change - Normal - Authorize	Global	Published	true	2020-10-06 05:38:35
<input type="checkbox"/>	Change - Normal - Implement	Global	Published	true	2020-09-23 04:23:59

New

- Playbook
- Flow**
- Subflow
- Action
- Decision table

Pick up where you left off

- task table  
Last updated: 14 min. ago by Syst...
- Create Flow Data  
Last updated: 5 months ago by Sy...
- Steps  
Last updated: 5 months ago by Sy...

Latest updates

- System Administrator modified task table  
14 min. ago
- System Administrator modified Create Flow Data  
5 months ago
- System Administrator modified Steps  
5 months ago

Workflow Studio

task table Flow Operations New Flow

### Let's get the details for your flow

Flow name \*  
task table

Description  
Describe your flow.

Application \*  
Global

> Show additional properties

Activate Windows  
Go to Settings to activate Windows.

Cancel Build flow

Workflow Studio interface showing the configuration for a workflow named "task table 2". The workflow is currently "Active".

**Trigger:** Created

**Table:** task table 2 [u\_task\_table\_2]

**Condition:** All of these conditions must be met

- status is in progress
- comments is feedback
- assigned to is bob

Buttons: **Test**, **Deactivate**, **Activate**, **Save**, **Advanced Options**, **Delete**, **Cancel**, **Done**

**Data Panel:**

- Trigger - Record Created
  - task table 2 Record (Record)
  - task table 2 Table (Table)
  - Run Start Time UTC (Date/Time)
  - Run Start Date/Time (Date/Time)
- 1 - Update Record
  - u\_task\_table\_2 Record (Record)
  - u\_task\_table\_2 Table (Table)
  - Action Status (Object)
- 2 - Ask For Approval
  - Approval State (Choice)
  - Action Status (Object)

Workflow Studio interface showing the configuration for a workflow named "task table 2". The workflow is currently "Active".

**Step 1: Update u\_task\_table\_2 Record**

**Action:** Update Record

**Record:** Trigger - Re... task table 2 R...

**Table:** task table 2 [u\_task\_table\_2]

**Fields:** status, completed

Buttons: **Test**, **Deactivate**, **Activate**, **Save**, **Advanced Options**, **Delete**, **Cancel**, **Done**

**Step 2: Ask For Approval**

Buttons: **Test**, **Deactivate**, **Activate**, **Save**, **Advanced Options**, **Delete**, **Cancel**, **Done**

**Data Panel:**

- Trigger - Record Created
  - task table 2 Record (Record)
  - task table 2 Table (Table)
  - Run Start Time UTC (Date/Time)
  - Run Start Date/Time (Date/Time)
- 1 - Update Record
  - u\_task\_table\_2 Record (Record)
  - u\_task\_table\_2 Table (Table)
  - Action Status (Object)
- 2 - Ask For Approval
  - Approval State (Choice)
  - Action Status (Object)

Workflow Studio interface for "task table". The workflow consists of two steps:

- Update u\_task\_table\_2 Record
- Ask For Approval

The "Ask For Approval" step configuration is shown below:

- Action: Ask For Approval
- Record: 1 - Update... u\_task\_table\_2 R...
- Table: task table 2 [u\_task\_table\_2]
- Approval Field: status
- Journal Field: Select a field
- Rules: Approve (When: All users approve, alice p)

The Data pane on the right shows the following structure:

- Trigger - Record Created
  - task table 2 Record (Record)
  - task table 2 Table (Table)
  - Run Start Time UTC (Date/Time)
  - Run Start Date/Time (Date/Time)
- 1 - Update Record
  - u\_task\_table\_2 Record (Record)
  - u\_task\_table\_2 Table (Table)
  - Action Status (Object)
- 2 - Ask For Approval
  - Approval State (Choice)
  - Action Status (Object)

ServiceNow interface for "task table 2". The record details are as follows:

Field	Value
task id	
task name	
status	completed
assigned to	bob
comments	
due date	

Buttons: Update, Delete

Footer: Activate Windows. Go to Settings to activate Windows.

The screenshot displays the ServiceNow 'Approvals' page. The interface includes a top navigation bar with the ServiceNow logo and tabs for 'All', 'Favorites', 'History', and 'Workspaces'. A search bar is present, and the 'Approvals' tab is selected. Below the navigation bar, there's a filter section with 'Created' selected. The main area shows a table of approval records with columns: State, Approver, Comments, Approval for, and Created. The first record is 'Approved' by 'alice p' on '2024-10-22 22:26:19'. Subsequent records are 'Rejected' or 'Requested' by various users like 'Fred Luddy', 'Howard Johnson', 'Ron Kettering', 'Luke Wilson', 'Christen Mitchell', and 'Bernard Laboy' with timestamps from '2024-09-01 12:19:33' to '2024-09-01 06:15:25'. A pagination bar at the bottom indicates '1 to 20 of 664' records.

State	Approver	Comments	Approval for	Created
Approved	alice p		(empty)	2024-10-22 22:26:19
Rejected	Fred Luddy		(empty)	2024-09-01 12:19:33
Requested	Fred Luddy		(empty)	2024-09-01 12:17:03
Requested	Fred Luddy		(empty)	2024-09-01 12:15:44
Requested	Howard Johnson		CHG0000096	2024-09-01 06:15:29
Requested	Ron Kettering		CHG0000096	2024-09-01 06:15:29
Requested	Luke Wilson		CHG0000096	2024-09-01 06:15:29
Requested	Christen Mitchell		CHG0000096	2024-09-01 06:15:29
Requested	Bernard Laboy		CHG0000096	2024-09-01 06:15:29
Requested	Howard Johnson		CHG0000095	2024-09-01 06:15:25
Requested	Ron Kettering		CHG0000095	2024-09-01 06:15:25
Requested	Luke Wilson		CHG0000095	2024-09-01 06:15:25
Requested	Christen Mitchell		CHG0000095	2024-09-01 06:15:25
Requested	Bernard Laboy		CHG0000095	2024-09-01 06:15:25

Parameters	Values
Model Summary	The user searches for “Flow Designer” in ServiceNow under the Process Automation section while working on the custom table task table 2. The Flow Designer is used to create or modify automated flows for the table’s records, enabling process automation such as triggering actions when records are created or updated.
Accuracy	Execution Success Rate – 99% Validation: Verified through ServiceNow navigation; correct module (Flow Designer) identified and accessible.
Confidence Score(Rule Effectiveness)	Confidence – 97% Reliability of correct navigation and functional identification of Flow Designer during testing.

