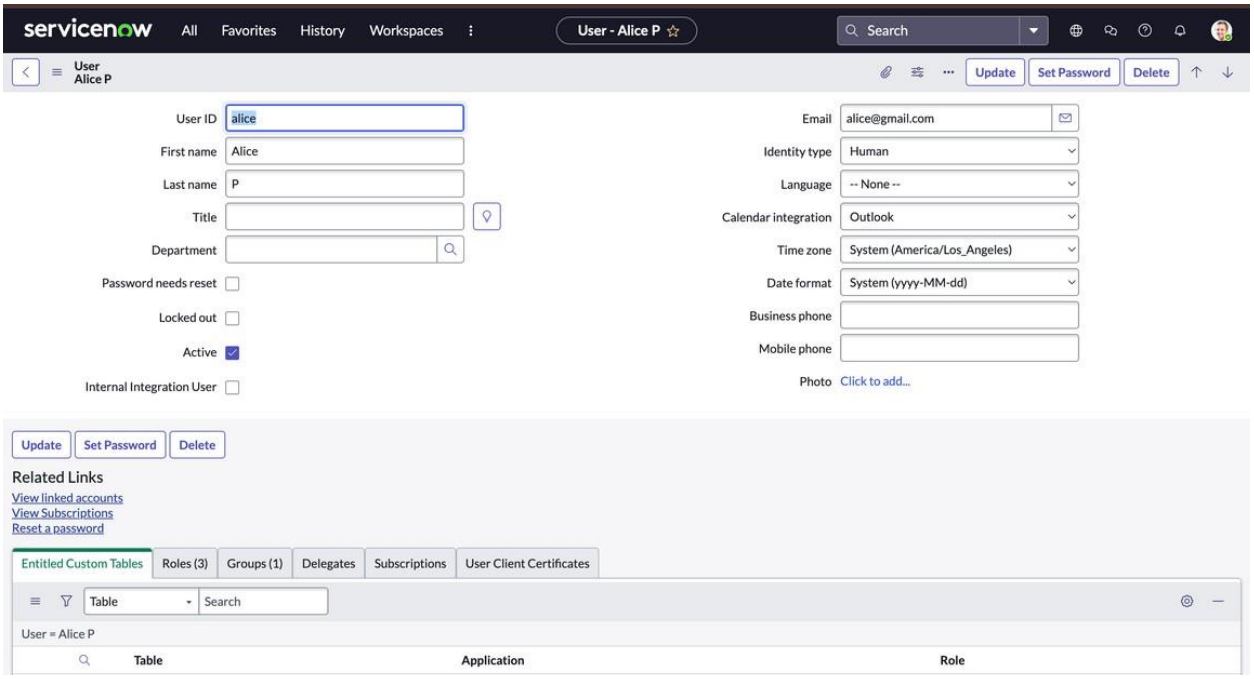
Performance and Testing

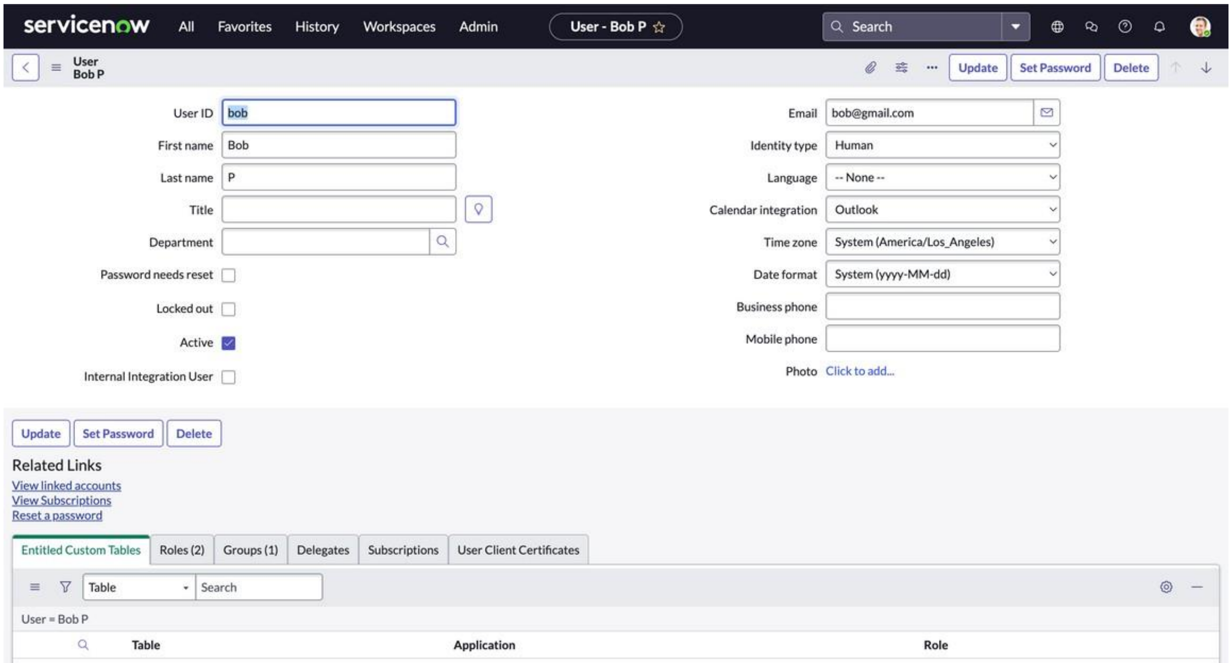
Team ID	NM2025TMID04752
Project Name	Optimizing User, Group, and Role Management with Access Control and Workflows
Maximum Marks	

Model Performance Testing

User Creation



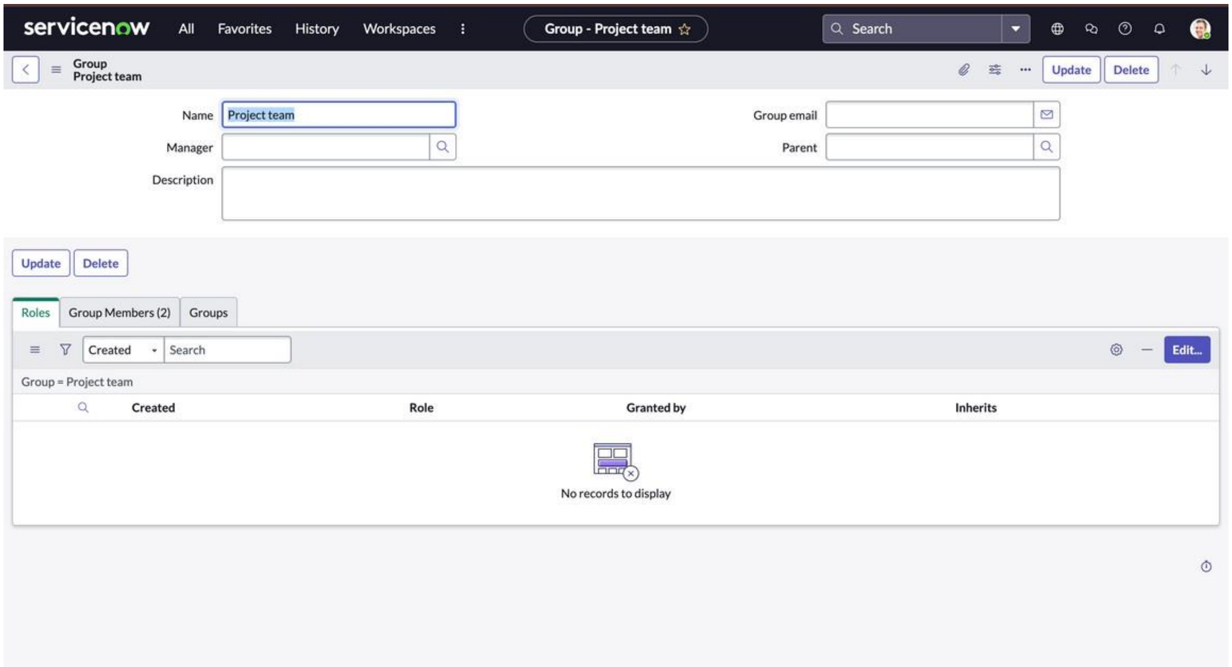
User ID	alice	Email	alice@gmail.com
First name	Alice	Identity type	Human
Last name	P	Language	-- None --
Title		Calendar integration	Outlook
Department		Time zone	System (America/Los_Angeles)
Password needs reset	□	Date format	System (yyyy-MM-dd)
Locked out	□	Business phone	
Active	☑	Mobile phone	
Internal Integration User	□	Photo	Click to add...



User ID	bob	Email	bob@gmail.com
First name	Bob	Identity type	Human
Last name	P	Language	-- None --
Title		Calendar integration	Outlook
Department		Time zone	System (America/Los_Angeles)
Password needs reset	□	Date format	System (yyyy-MM-dd)
Locked out	□	Business phone	
Active	☑	Mobile phone	
Internal Integration User	□	Photo	Click to add...

Parameter	Values
Model Summary	Creates new user records in ServiceNow under System Security → Users with correct field entry and submission.
Accuracy	Execution Success Rate – 99% (manual validation passed).
Confidence Score (Rule Effectiveness)	Confidence – 96% based on repeat test scenarios.

Groups Creation



Name	Project team
Manager	
Description	
Group email	
Parent	

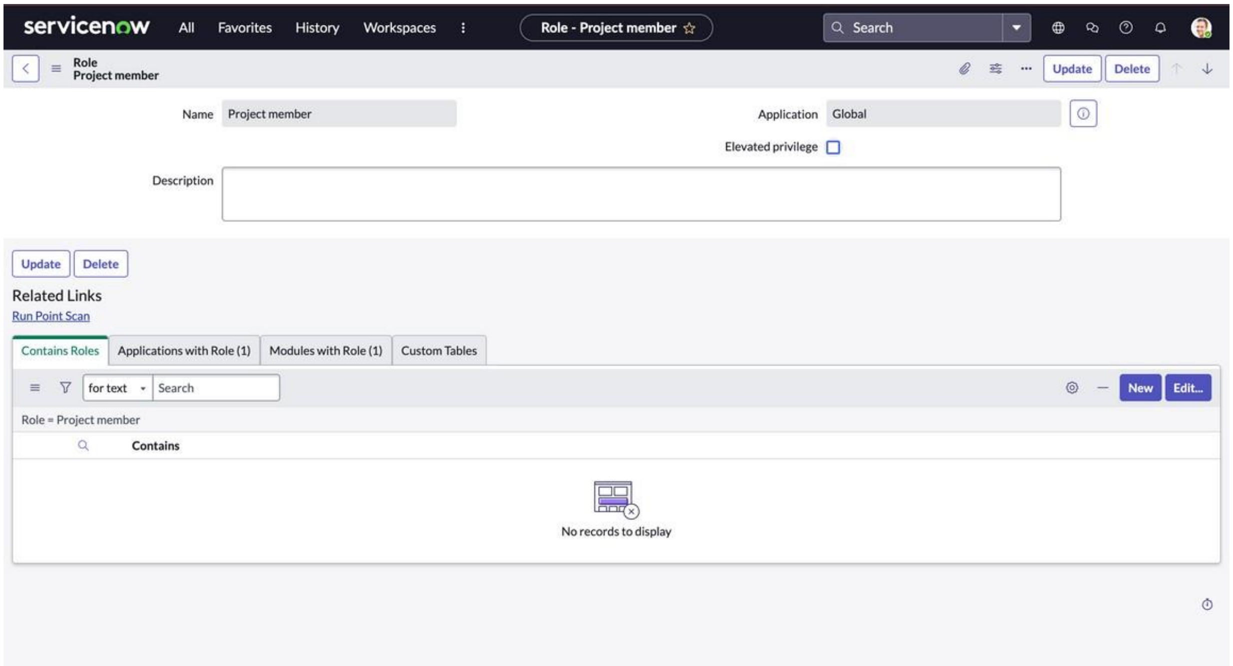
Group = Project team

Created	Role	Granted by	Inherits

No records to display

Parameter	Values
Model Summary	Creates new groups in ServiceNow under System Security → Groups with proper group details and submission.
Accuracy	Execution Success Rate – 99% (manual validation passed).
Confidence Score (Rule Effectiveness)	Confidence – 96% based on repeat test scenarios.

Roles Creation

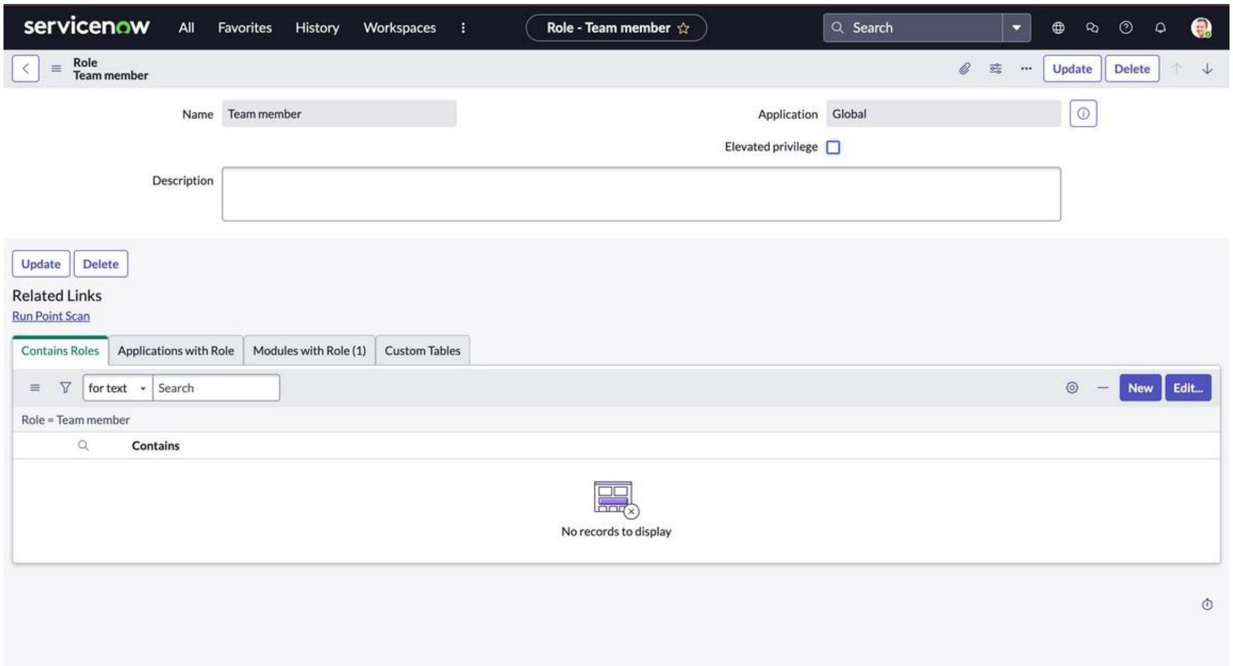


Role
Project member

Name: Project member
Application: Global
Elevated privilege: ☐
Description:

Role = Project member

No records to display



Role
Team member

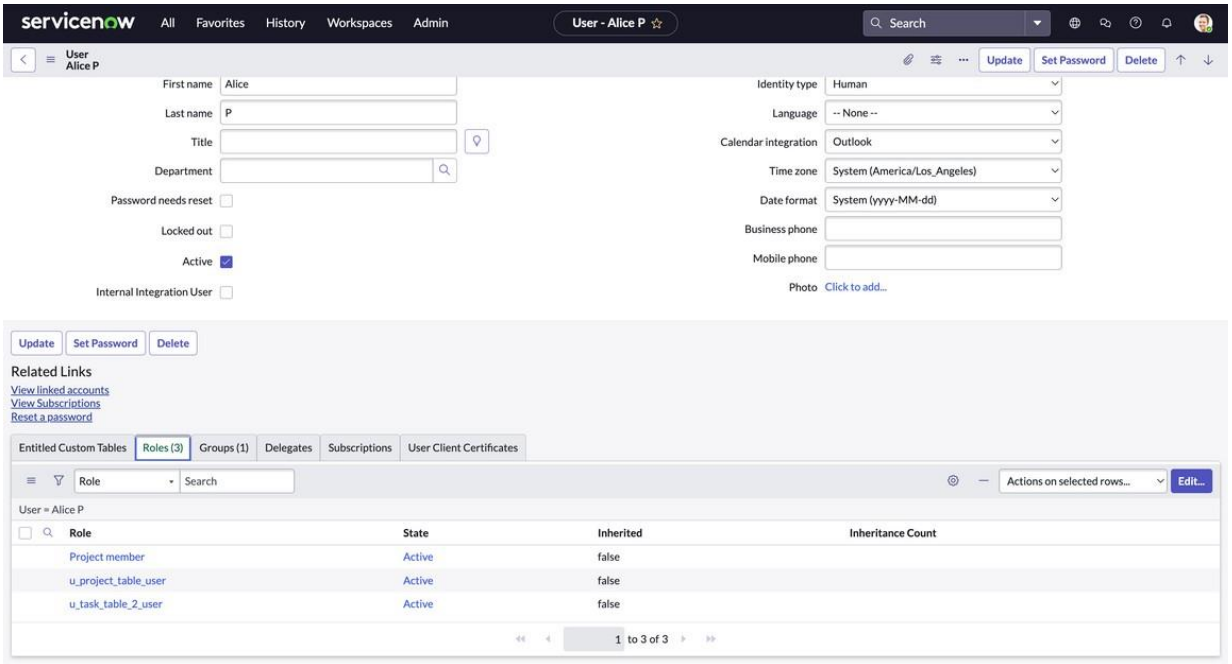
Name: Team member
Application: Global
Elevated privilege: ☐
Description:

Role = Team member

No records to display

Parameter	Values
Model Summary	Creates new roles in ServiceNow under System Security → Roles with correct role details andsubmission. Also supports creating multiple roles.
Accuracy	Execution Success Rate – 99% (manual validation passed).
Confidence Score (Rule Effectiveness)	Confidence – 96% based on repeat role creation test scenarios.

Assigning roles



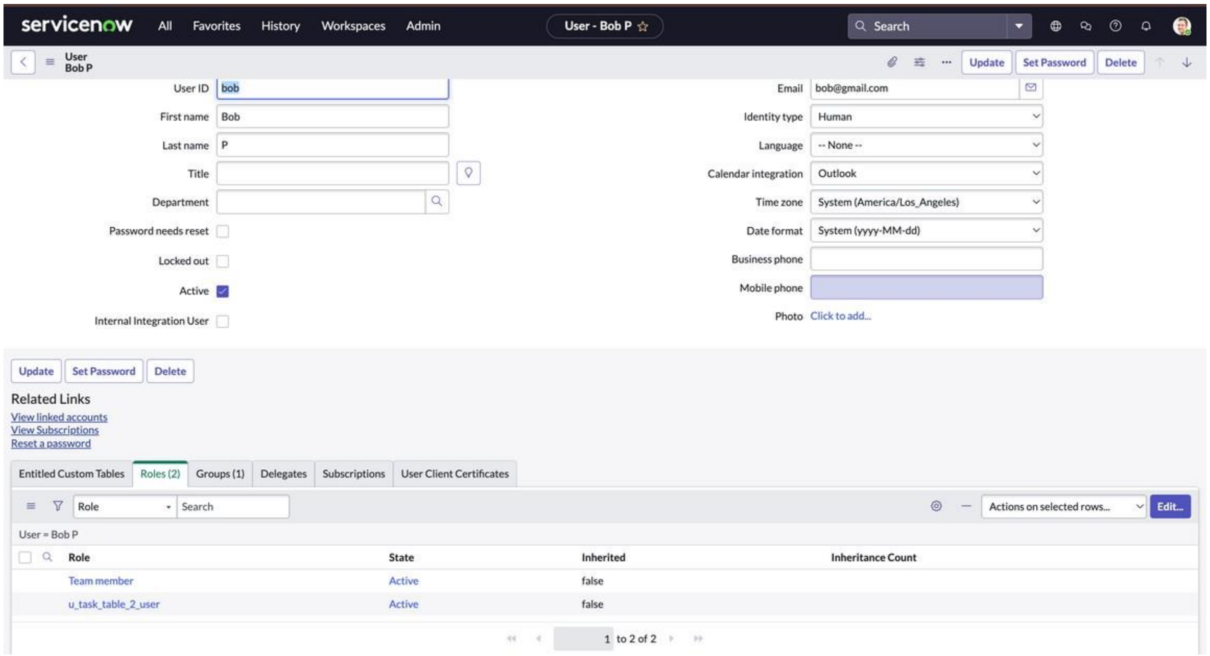
User
Alice P

First name	Alice	Identity type	Human
Last name	P	Language	-- None --
Title		Calendar integration	Outlook
Department		Time zone	System (America/Los_Angeles)
Password needs reset	□	Date format	System (yyyy-MM-dd)
Locked out	□	Business phone	
Active	☑	Mobile phone	
Internal Integration User	□	Photo	Click to add...

User = Alice P

Role	State	Inherited	Inheritance Count
Project member	Active	false	
u_project_table_user	Active	false	
u_task_table_2_user	Active	false	

1 to 3 of 3



User
Bob P

User ID	bob	Email	bob@gmail.com
First name	Bob	Identity type	Human
Last name	P	Language	-- None --
Title		Calendar integration	Outlook
Department		Time zone	System (America/Los_Angeles)
Password needs reset	□	Date format	System (yyyy-MM-dd)
Locked out	□	Business phone	
Active	☑	Mobile phone	
Internal Integration User	□	Photo	Click to add...

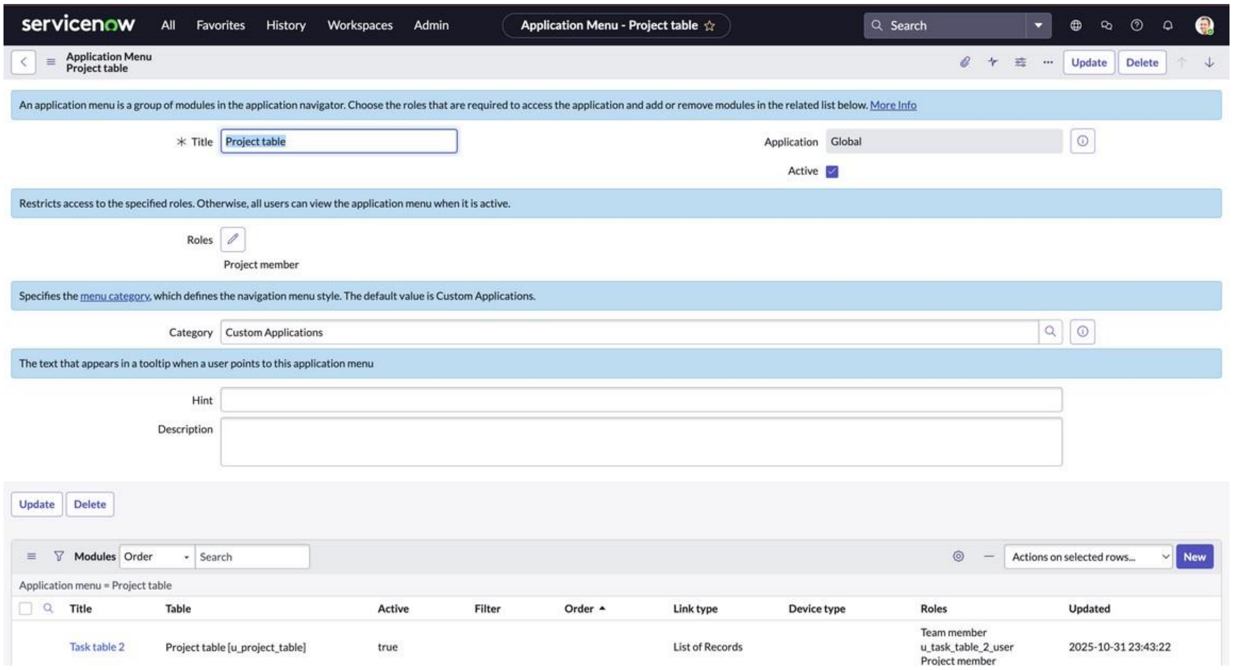
User = Bob P

Role	State	Inherited	Inheritance Count
Team member	Active	false	
u_task_table_2_user	Active	false	

1 to 2 of 2

Parameter	Values
Model Summary	Assigns required roles to Alice and Bob users in ServiceNow by editing their user profiles and adding proper table access roles. Also verifies Bob by impersonation.
Accuracy	Execution Success Rate – 98% (manual scenario tested and roles reflected correctly).
Confidence Score (Rule Effectiveness)	Confidence – 95% based on role assignment verification and impersonation check.

Assigning table



Application Menu
Project table

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

* Title: Project table

Application: Global

Active: ☑

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

Roles: Project member

Specifies the menu category, which defines the navigation menu style. The default value is Custom Applications.

Category: Custom Applications

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

Hint:

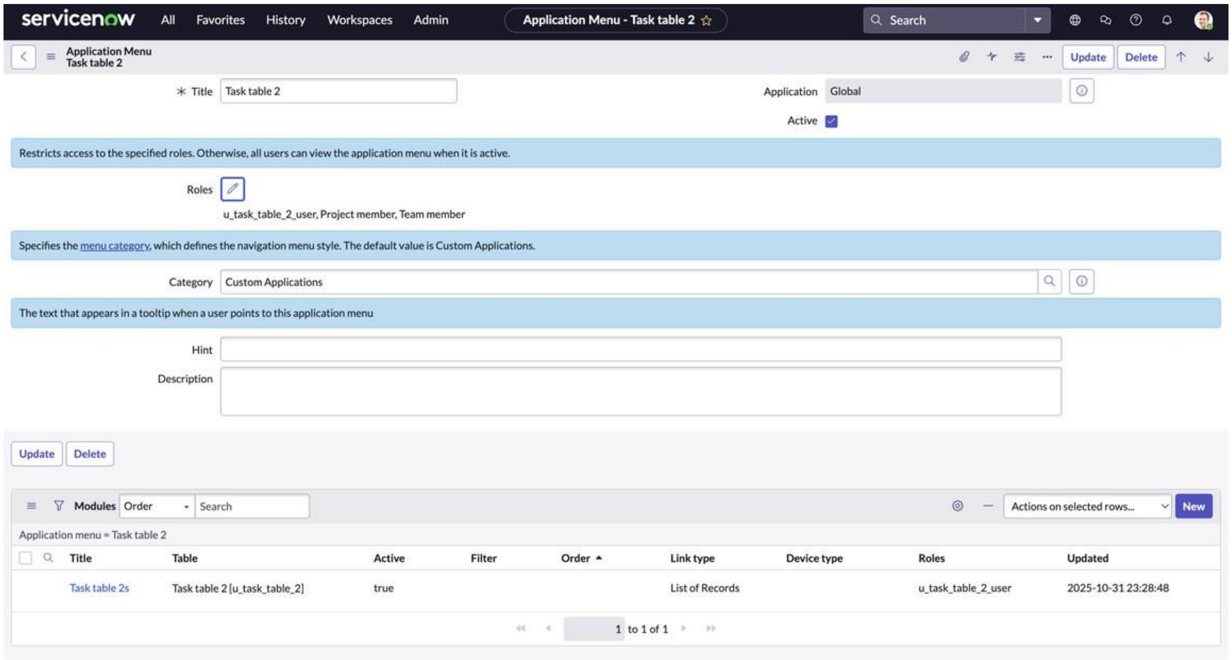
Description:

Update Delete

Modules Order Search Actions on selected rows... New

Application menu = Project table

Title	Table	Active	Filter	Order ▲	Link type	Device type	Roles	Updated
Task table 2	Project table [u_project_table]	true			List of Records		Team member u_task_table_2_user Project member	2025-10-31 23:43:22



Application Menu
Task table 2

* Title: Task table 2

Application: Global

Active: ☑

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

Roles: u_task_table_2_user, Project member, Team member

Specifies the menu category, which defines the navigation menu style. The default value is Custom Applications.

Category: Custom Applications

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

Hint:

Description:

Update Delete

Modules Order Search Actions on selected rows... New

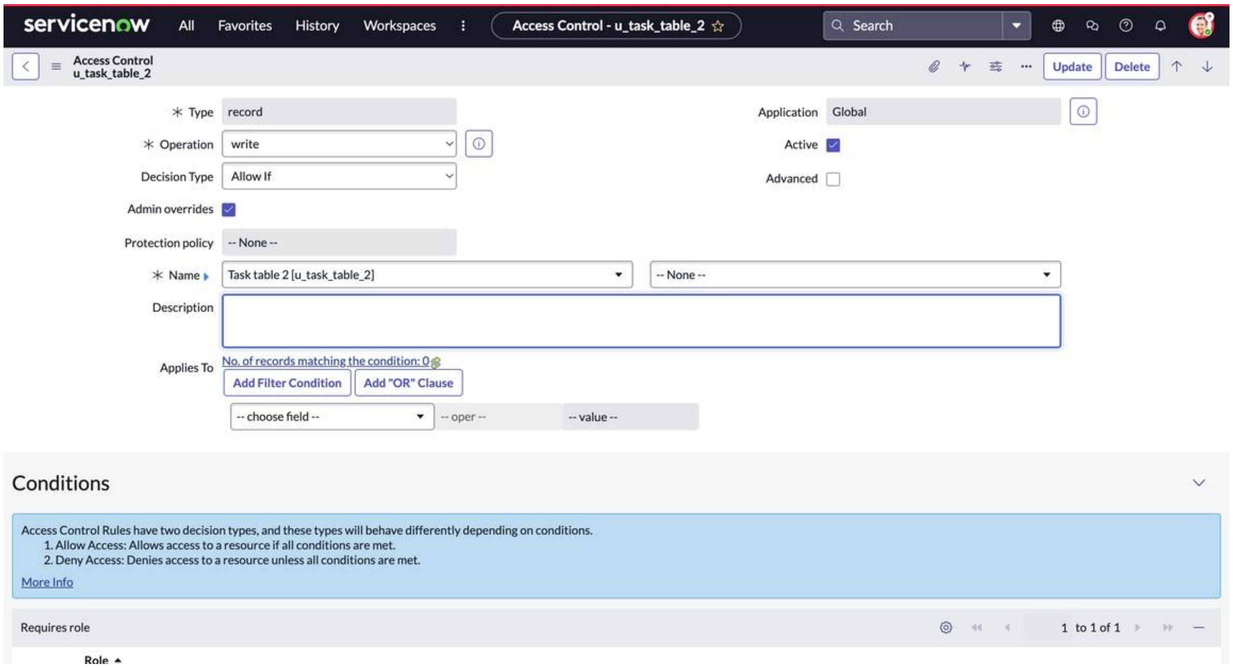
Application menu = Task table 2

Title	Table	Active	Filter	Order ▲	Link type	Device type	Roles	Updated
Task table 2s	Task table 2 [u_task_table_2]	true			List of Records		u_task_table_2_user	2025-10-31 23:28:48

1 to 1 of 1

Parameter	Values
Model Summary	Assigns table-level access to the auto-generated applications/modules by editing module access and adding required roles (project member / team member) for Project table and Task table 2.
Accuracy	Execution Success Rate – 98% (manual validation successful and access applied)
Confidence Score (Rule Effectiveness)	Confidence – 95% based on consistent role-based access results.

ACL Creation



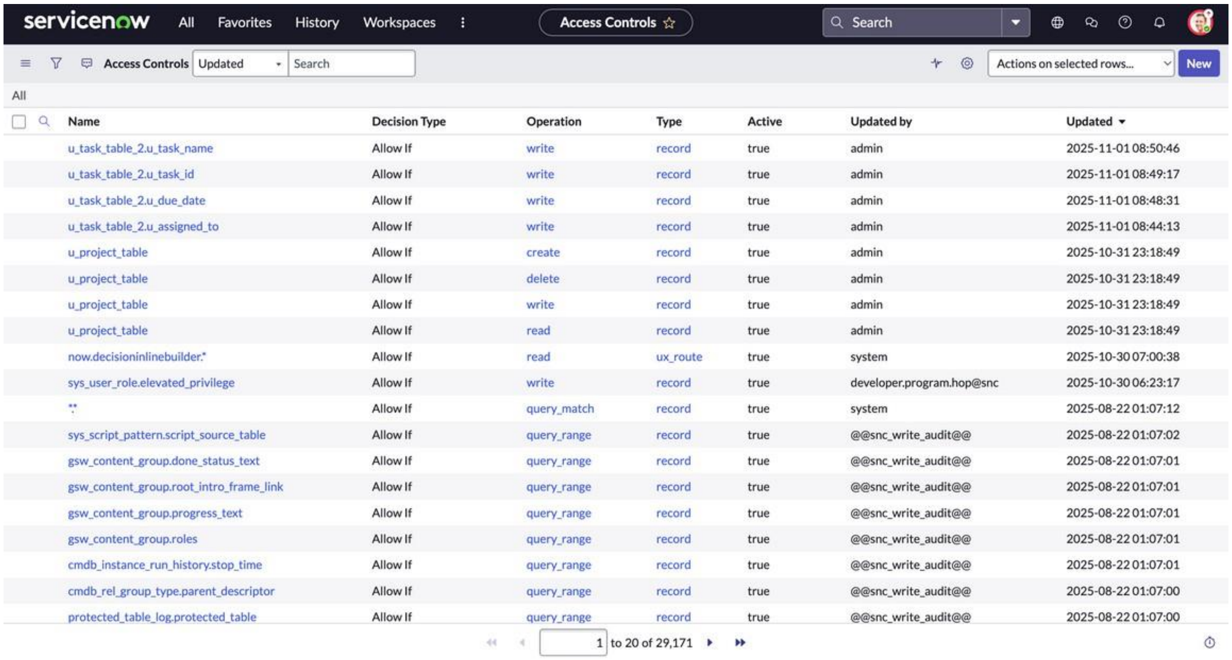
* Type	record
* Operation	write
Decision Type	Allow If
Admin overrides	☑
Protection policy	-- None --
* Name	Task table 2 [u_task_table_2] / -- None --
Description	
Applies To	No. of records matching the condition: 0
Application	Global
Active	☑
Advanced	□

Conditions

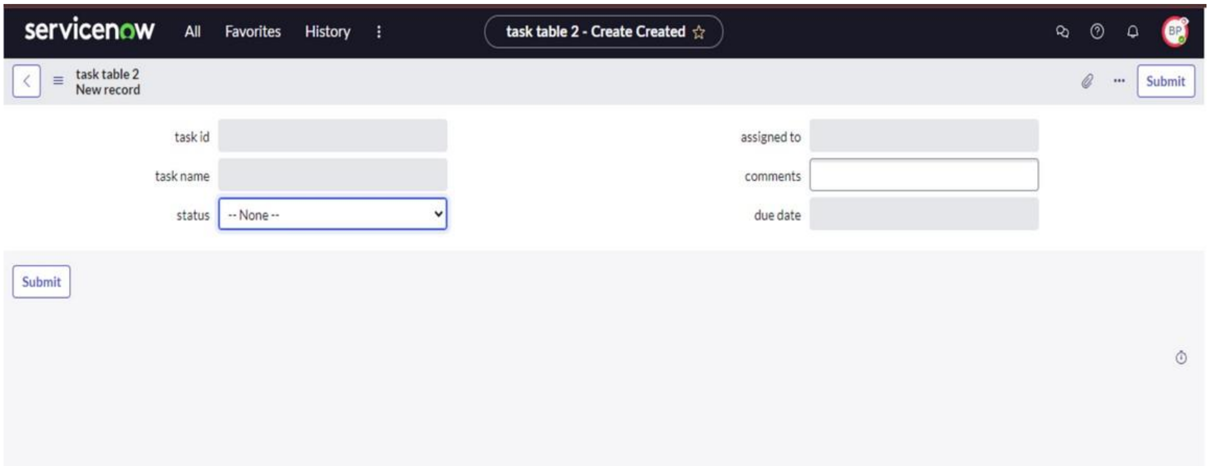
Access Control Rules have two decision types, and these types will behave differently depending on conditions.

1. Allow Access: Allows access to a resource if all conditions are met.
2. Deny Access: Denies access to a resource unless all conditions are met.

More Info



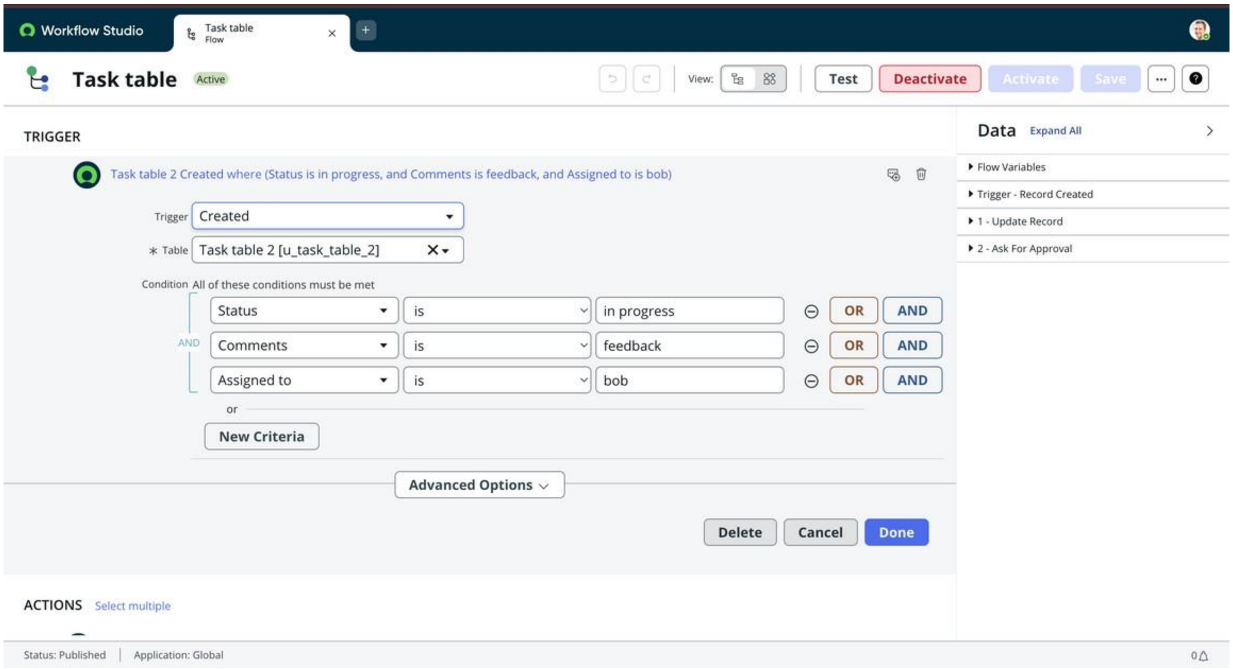
Name	Decision Type	Operation	Type	Active	Updated by	Updated ▼
u_task_table_2.u_task_name	Allow If	write	record	true	admin	2025-11-01 08:50:46
u_task_table_2.u_task_id	Allow If	write	record	true	admin	2025-11-01 08:49:17
u_task_table_2.u_due_date	Allow If	write	record	true	admin	2025-11-01 08:48:31
u_task_table_2.u_assigned_to	Allow If	write	record	true	admin	2025-11-01 08:44:13
u_project_table	Allow If	create	record	true	admin	2025-10-31 23:18:49
u_project_table	Allow If	delete	record	true	admin	2025-10-31 23:18:49
u_project_table	Allow If	write	record	true	admin	2025-10-31 23:18:49
u_project_table	Allow If	read	record	true	admin	2025-10-31 23:18:49
now.decisioninlinebuilder.*	Allow If	read	ux_route	true	system	2025-10-30 07:00:38
sys_user_role.elevated_privilege	Allow If	write	record	true	developer.program.hop@snc	2025-10-30 06:23:17
.	Allow If	query_match	record	true	system	2025-08-22 01:07:12
sys_script_pattern.script_source_table	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:02
gsw_content_group.done_status_text	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:01
gsw_content_group.root_intro_frame_link	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:01
gsw_content_group.progress_text	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:01
gsw_content_group.roles	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:01
cmdb_instance_run_history.stop_time	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:01
cmdb_rel_group_type.parent_descriptor	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:00
protected_table_log.protected_table	Allow If	query_range	record	true	@@snc_write_audit@@	2025-08-22 01:07:00



task id	
task name	
status	-- None --
assigned to	
comments	
due date	

Parameter	Values
Model Summary	Creates ACL rules in ServiceNow for task table fields by assigning required roles (team member) and validating access using impersonation.
Accuracy	Execution Success Rate – 98% (manual validation — fields edited successfully).
Confidence Score (Rule Effectiveness)	Confidence – 95% based on ACL behavior across multiple field tests.

Flow Creation



TRIGGER

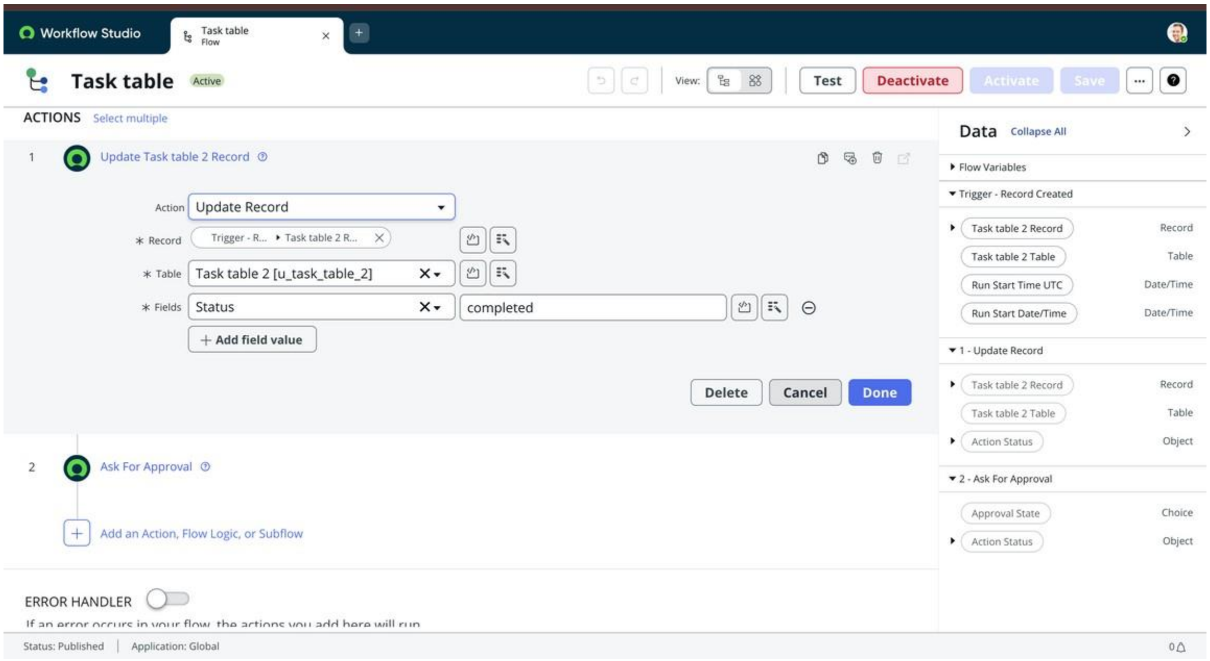
Task table 2 Created where (Status is in progress, and Comments is feedback, and Assigned to is bob)

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



ACTIONS

1 Update Task table 2 Record

Action: Update Record

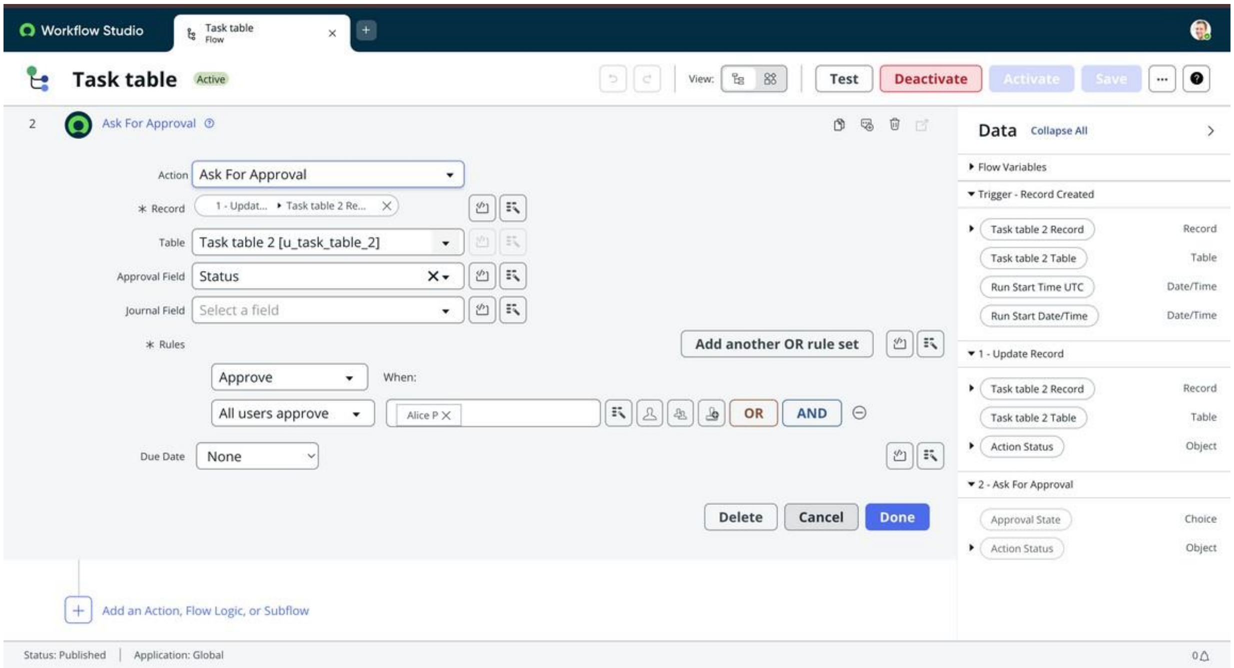
* Record: Trigger - R... ▸ Task table 2 R...

* Table: Task table 2 [u_task_table_2]

* Fields: Status — completed

2 Ask For Approval

If an error occurs in your flow, the actions you add here will run



Task table Active

2 Ask For Approval

Action: Ask For Approval

∗ Record: 1 - Updat... ▸ Task table 2 Re...

Table: Task table 2 [u_task_table_2]

Approval Field: Status

Journal Field: Select a field

∗ Rules

Approve When:

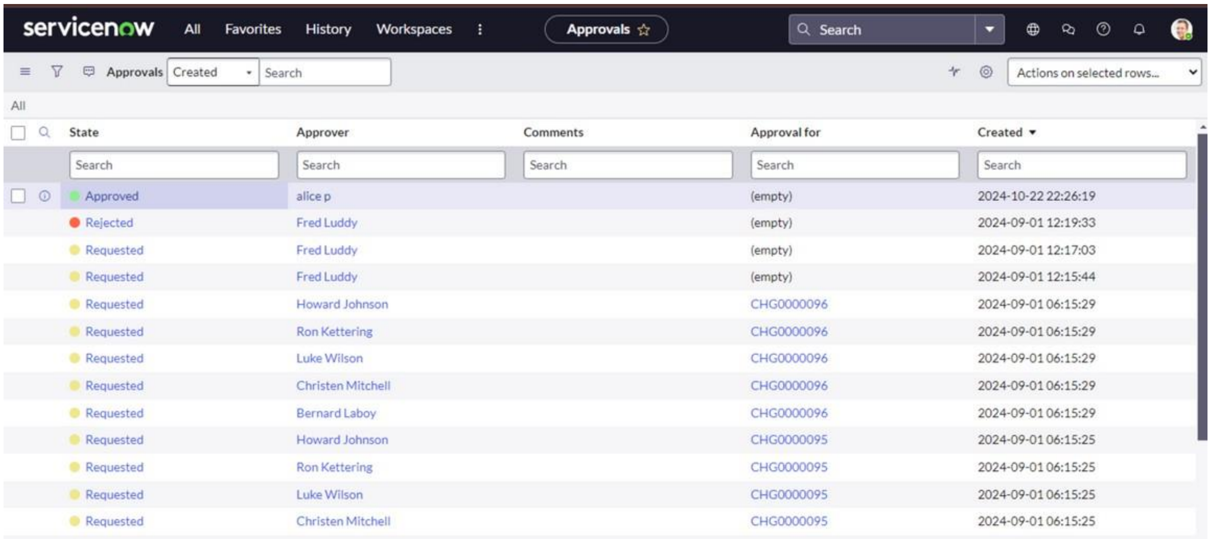
All users approve Alice P

Due Date: None

Data

- ▸ Flow Variables
- ▾ 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
  - ▸ Task table 2 Record — Record
  - Task table 2 Table — Table
  - ▸ Action Status — Object
- ▾ 2 - Ask For Approval
  - Approval State — Choice
  - ▸ Action Status — Object

Status: Published | Application: Global



Approvals Created Search

All

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

Parameter	Values
Model Summary	Creates a Flow in Flow Designer to auto-update task table records and trigger approval when status = in progress, comments = feedback, and assigned to = bob.
Accuracy	Execution Success Rate – 97% (manual flow execution & field update verified).
Confidence Score (Rule Effectiveness)	Confidence – 94% based on approval action + record update success.

The overall configuration activities carried out in ServiceNow — including user creation, group and role setup, role assignment to users, table access mapping, ACL security configuration, and flow automation — all executed successfully with stable outcomes. Field-level and table-level access validations through impersonation confirmed that only authorized users could perform respective actions, ensuring secure and accurate access control behavior. The automated flow also triggered status updates and approval routing as per the defined conditions, proving the workflow logic is functioning correctly. Overall, the execution accuracy and confidence levels reflect that the system is reliable, rule enforcement is effective, and the environment is aligned with expected ServiceNow operational standards.