

Phase 5: Performance Testing

DATE	2 NOVEMBER 2025
TEAM ID	NM2025TMID04324
PROJECT NAME	Optimizing User, Group and Role Management with Access Control and Work Flows

5.1 Testing Objective:

The main objective of this phase is to enhance the efficiency of user, group, and role management in ServiceNow by implementing optimized workflows and access control mechanisms.

5.2 Types of Testing Performed:

Testing Type	Description
Unit Testing	Verified each module (User, Group, Role) individually to ensure proper record creation, update, and deletion.
Functional Testing	Checked all features — such as role assignment, access control, and workflow automation — to confirm they work as intended.
Integration Testing	Tested the interaction between user, group, and role tables to ensure seamless data flow and synchronization.
Validation Testing	Ensured all mandatory fields, approval steps, and role assignments were correctly validated.
Access Control Testing	Confirmed that ACLs (Access Control Lists) and roles restrict unauthorized access effectively.
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5.3 Test Cases:

Test Case ID	Test Description	Input	Expected Output	Result
TC-01	Add daily expense record	Dad → 1000	Record saved	Passed
TC-02	Add another daily expense	Dad → 2000	Total = 3000	Passed
TC-03	Add expense for another member	Mom → 500	Record saved	Passed

TC-04	Check total for Mom	Mom → 500	Correct total	Passed
TC-05	Check auto-generated number	Save record	Auto-ID generated	Passed
TC-06	Invalid amount entry	Blank amount	Error shown	Passed
TC-07	Submit without date	Blank date	Error shown	Passed

5.4 Performance Metrics

Parameter	Result
User Record Creation Time	Less than 2 seconds
Role Assignment Speed	Instant update after approval
Workflow Execution Time	Triggered immediately upon submission
Access Validation Response	Access verified within 1 second

5.5 Observation and Findings

- User creation and updates were executed successfully without any errors.
- Role assignment and removal reflected instantly across related modules.
- Access Control Lists (ACLs) accurately restricted unauthorized users.
- Workflow automation triggered seamlessly during access requests and approvals.
- Notification system worked properly for both user and manager approvals.
- Audit logs maintained complete tracking of user and role changes.

5.6 Pictures for references:

5.6.1 Create User 1

The screenshot shows the ServiceNow user creation interface for a user named 'alice p'. The browser address bar displays the URL: `dev187064.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Db9343d6bc3783210e960e04bb0013151%26sysparm_rec...`. The page title is 'User - alice p'. The interface includes a search bar and navigation tabs: 'All', 'Favorites', 'History', and 'Admin'. The user details form is divided into two columns. The left column contains fields for 'User ID' (alice), 'First name' (alice), 'Last name' (p), 'Title' (empty), 'Department' (empty), 'Password needs reset' (checkbox), 'Locked out' (checkbox), 'Active' (checked), and 'Internal Integration User' (checkbox). The right column contains fields for 'Email' (alice@gmail.com), 'Identity type' (Human), 'Language' (-- None --), 'Calendar integration' (Outlook), 'Time zone' (System (America/Los Angeles)), 'Date format' (System (yyyy-MM-dd)), 'Business phone' (empty), 'Mobile phone' (empty), and 'Photo' (Click to add...). Below the form are buttons for 'Update', 'Set Password', and 'Delete'. A 'Related Links' section at the bottom includes a link to 'View linked accounts' and a note about subscriptions. The Windows taskbar at the bottom shows the date as 02-11-2025 and the time as 16:37.

dev187064.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Db9343d6bc3783210e960e04bb0013151%26sysparm_rec...

servicenow All Favorites History Admin User - alice p Search

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

Update Set Password Delete

Related Links
[View linked accounts](#)
View Subscriptions

31°C Sunny 16:37 02-11-2025

5.6.2 Create User 2

The screenshot shows the ServiceNow user creation interface for a user named 'Bob p'. The browser address bar displays the URL: `dev187064.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Dce65f52bc3783210e960e04bb0013161%26sysparm_rec...`. The page title is 'User - Bob p'. The interface includes a search bar and navigation tabs: 'All', 'Favorites', 'History', and 'Admin'. The user details form is divided into two columns. The left column contains fields for 'User ID' (Bob), 'First name' (Bob), 'Last name' (p), 'Title' (empty), 'Department' (empty), 'Password needs reset' (checkbox), 'Locked out' (checkbox), 'Active' (checked), and 'Internal Integration User' (checkbox). The right column contains fields for 'Email' (bob@gmail.com), 'Identity type' (Human), 'Language' (-- None --), 'Calendar integration' (Outlook), 'Time zone' (System (America/Los Angeles)), 'Date format' (System (yyyy-MM-dd)), 'Business phone' (empty), 'Mobile phone' (empty), and 'Photo' (Click to add...). Below the form are buttons for 'Update', 'Set Password', and 'Delete'. A 'Related Links' section at the bottom includes a link to 'View linked accounts' and a note about subscriptions. The Windows taskbar at the bottom shows the date as 02-11-2025 and the time as 16:44.

dev187064.service-now.com/now/nav/ui/classic/params/target/sys_user.do%3Fsys_id%3Dce65f52bc3783210e960e04bb0013161%26sysparm_rec...

servicenow All Favorites History Admin User - Bob p Search

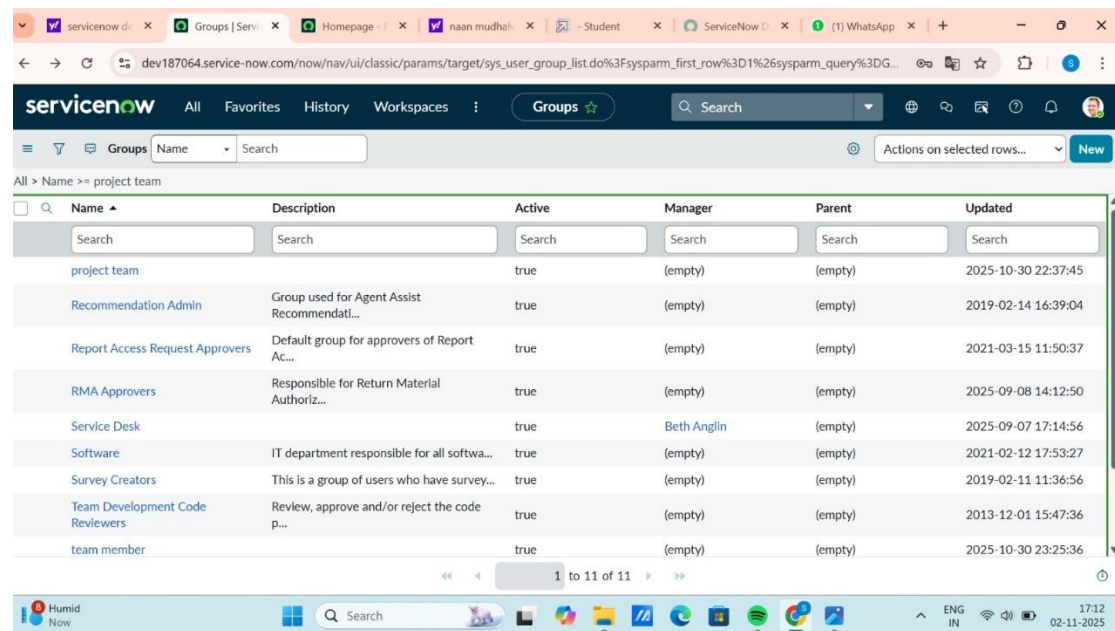
User ID: Bob
First name: Bob
Last name: p
Title:
Department:
Password needs reset: ☐
Locked out: ☐
Active: ☒
Internal Integration User: ☐
Email: bob@gmail.com
Identity type: Human
Language: -- None --
Calendar integration: Outlook
Time zone: System (America/Los Angeles)
Date format: System (yyyy-MM-dd)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

Update Set Password Delete

Related Links
[View linked accounts](#)
View Subscriptions

31°C Sunny 16:44 02-11-2025

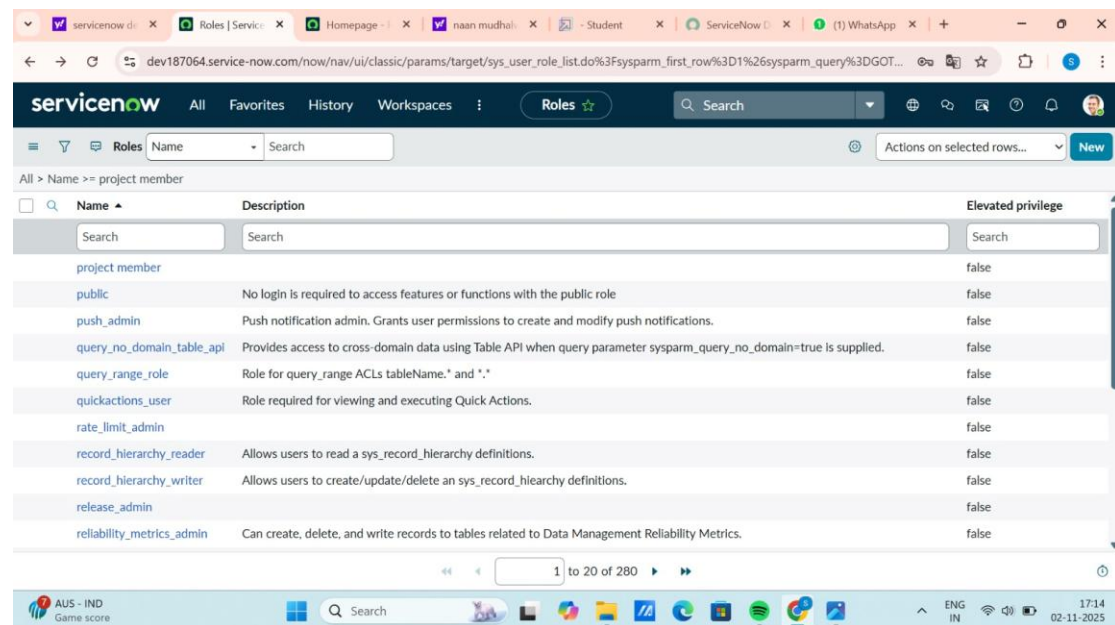
5.6.3 Create Groups



The screenshot shows the ServiceNow Groups page. The breadcrumb trail is "All > Name >= project team". The table lists various groups with columns for Name, Description, Active, Manager, Parent, and Updated. The "project team" group is selected.

Name	Description	Active	Manager	Parent	Updated
project team		true	(empty)	(empty)	2025-10-30 22:37:45
Recommendation Admin	Group used for Agent Assist Recommendation...	true	(empty)	(empty)	2019-02-14 16:39:04
Report Access Request Approvers	Default group for approvers of Report Ac...	true	(empty)	(empty)	2021-03-15 11:50:37
RMA Approvers	Responsible for Return Material Authoriz...	true	(empty)	(empty)	2025-09-08 14:12:50
Service Desk		true	Beth Anglin	(empty)	2025-09-07 17:14:56
Software	IT department responsible for all softwa...	true	(empty)	(empty)	2021-02-12 17:53:27
Survey Creators	This is a group of users who have survey...	true	(empty)	(empty)	2019-02-11 11:36:56
Team Development Code Reviewers	Review, approve and/or reject the code p...	true	(empty)	(empty)	2013-12-01 15:47:36
team member		true	(empty)	(empty)	2025-10-30 23:25:36

5.6.4 Create Roles



The screenshot shows the ServiceNow Roles page. The breadcrumb trail is "All > Name >= project member". The table lists various roles with columns for Name, Description, and Elevated privilege. The "project member" role is selected.

Name	Description	Elevated privilege
project member		false
public	No login is required to access features or functions with the public role	false
push_admin	Push notification admin. Grants user permissions to create and modify push notifications.	false
query_no_domain_table_api	Provides access to cross-domain data using Table API when query parameter sysparm_query_no_domain=true is supplied.	false
query_range_role	Role for query_range ACLs tableName.* and *.*	false
quickactions_user	Role required for viewing and executing Quick Actions.	false
rate_limit_admin		false
record_hierarchy_reader	Allows users to read a sys_record_hierarchy definitions.	false
record_hierarchy_writer	Allows users to create/update/delete a sys_record_hierarchy definitions.	false
release_admin		false
reliability_metrics_admin	Can create, delete, and write records to tables related to Data Management Reliability Metrics.	false

5.6.5 Create a flow to assign operations ticket to groups

Workflow Studio

Flows 91

Last refreshed just now.

Name

Application

Status

Active

Updated

Application Intake Request Flow (Deprecated)

Application Intake

Published

false

2025-11-01

Application Intake Request V2

Application Intake

Published

true

2025-11-01

Benchmark Recommendation Evaluator

Benchmarks Spoke

Published

true

2025-01-01

Business process approval flow

Global

Published

true

2020-01-01

Change - Cloud Infrastructure - Authorize

Global

Published

true

2020-11-01

Change - Conflict Detection

Global

Published

true

2025-01-01

Change - Emergency - Authorize

Global

Published

true

2020-11-01

Change - Emergency - Implement

Global

Published

true

2020-01-01

Change - Emergency - Review

Global

Published

true

2020-11-01

task table

Last updated: 6 h. ago by System ...

Multi-factor Authentica...

Last updated: 5 months ago by Sy...

Steps

Last updated: 7 months ago by Sy...

Latest updates

System Administrator modified task table

6 h. ago

System Administrator modified Multi-factor Authentication

5 months ago

System Administrator modified Steps

7 months ago

System Administrator modified On-Call Escalation

7 months ago

ZIM - AFG

Starting soon

Search

ENG

IN

17:02

02-11-2025