

1.INTRODUCTION

PROJECT TITLE: Optimizing User, Group, and Role Management with Access Control and Workflows

Optimizing user, group, and role management with access control and workflows is **crucial for enhancing security, streamlining operations, and improving overall system efficiency**. By carefully managing access rights through well-defined roles and permissions, organizations can ensure that users only access the resources they need, minimizing the risk of unauthorized access and data breaches. Furthermore, integrating workflows into this process automates tasks, reduces manual errors, and improves the speed and consistency of access provisioning and management.

1.1 Project Overview

Title:

Optimizing User, Group, and Role Management with Access Control and Workflows

Objective:

To design and implement an effective and secure management system in ServiceNow that:

- Organizes users, groups, and roles efficiently.
- Controls access to applications and data.
- Implements ACLs (Access Control Lists) and workflow automation to streamline IT processes.

Expected Outcomes:

- Streamlined user and access management.
- Improved security and compliance.
- Efficient handling of workflows through automated role and group assignments.
- Demonstrated understanding of ServiceNow's access control mechanisms.

1.2.Purpose

The purpose of this project is to design and implement secure and efficient user access management within the ServiceNow platform. It focuses on the creation and management of users, groups, roles, and the enforcement of access controls and workflows to ensure data integrity and system security.

Real-world Use:

- Prevent unauthorized access.
- Make sure users only see what they need.
- Automate user provisioning tasks.
- Maintain data security and compliance.

2. IDEATION PHASE

Date	
Team Id	
Project Name	
Maximum Marks	

2.1. Problem Statement

In a small project management team consisting of a Project Manager (Alice) and a Team Member (Bob), there is a need to efficiently manage project tasks and ensure accountability throughout the project lifecycle. The current system lacks clear role definitions, access controls, and a structured workflow, leading to confusion regarding task assignments and progress tracking.

3. REQUIREMENT ANALYSIS

Date	
Team Id	
Project Name	
Maximum Marks	

3.2. Solution Requirement

ServiceNow is a **cloud-based workflow automation platform** that enables digital transformation by helping organizations manage digital workflows for enterprise operations.

ServiceNow Platform

The primary platform used for this project. It provides all the modules required to manage users, roles, groups, access, and workflows.

Functional Requirement

FR NO	Functional Requirement	Sub Requirement
FR-1	User Management	Create new users in ServiceNow. Populate user details such as name, email, department, etc. Ensure users are active and ready for assignment.
FR-2	Group Management	Create different groups. Add users to appropriate groups. Groups should reflect department/team structures.
FR-3	Role Management	Create custom roles if needed. Assign out-of-the-box and custom roles to users or groups. Demonstrate role inheritance
FR-4	Table Configuration	Create custom tables. Provide relevant columns/fields. Configure the table for access control testing.
FR-5	Assign Users to Groups	Add individual users to

		the relevant groups using group membership. This should reflect in automatic role inheritance.
FR-6	Assign Roles to Users	Assign roles directly to users if group-level roles aren't suitable. Document which roles are assigned to which users.
FR-7	Application Access Configuration	Set up access for specific users/groups to particular applications. Configure access under "Application Access" tab or module.
FR-8	Access Control List (ACL)	Create ACL rules for the custom table or other tables. Define Read, Write, Create, Delete permissions. ACL conditions may include: <ul style="list-style-type: none"> - Role-based access - Field-level restrictions - Scripted ACLs
FR-9	Workflow Configuration	create a workflow to automate user/group approvals or access provisioning using Flow Designer.

Non-Functional Requirement

FR NO	Non-Functional Requirement	Description
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NFR-1	Usability	The interface must be user-friendly with clearly labeled modules (Users, Groups, Roles, ACL, etc.).
NFR-2	Security	Only authorized users should be able to: <ul style="list-style-type: none"> - Create users or roles - Assign roles to users - Modify access control rules (ACLs)
NFR-3	Reliability	It must recover from session or workflow errors gracefully with proper error messages.
NFR-4	Performance	The system should load user, group, role, and table data within 2 seconds under normal network conditions.
NFR-5	Availability	The system should ensure 99.9% uptime during working hours .It must recover from session or work flow errors gracefully with proper errors messages
NFR-6	Scalability	The solution should support managing at least 1000 users,100 groups and 500+ roles without

Data Flow Diagram:

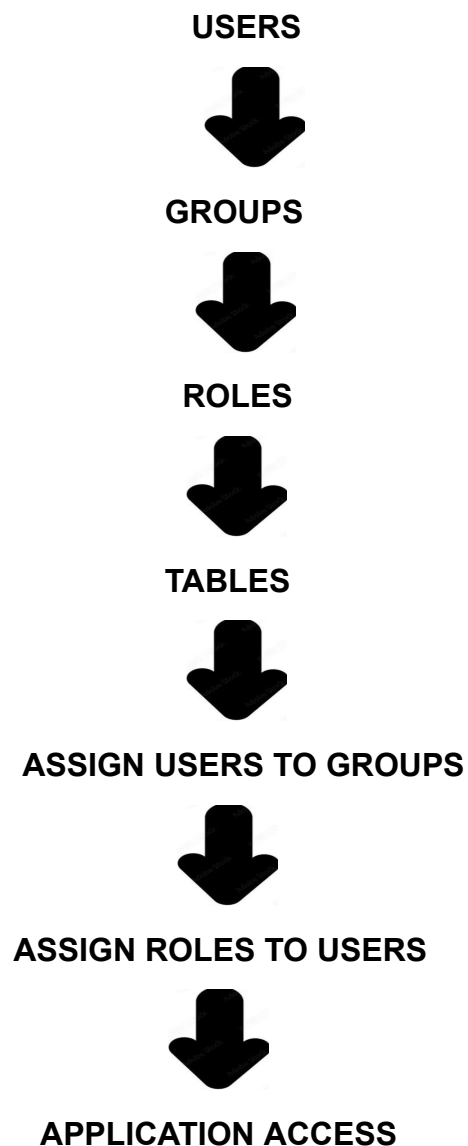
A Data Flow Diagram (DFD) is a graphical representation used to show how data moves through a system. It illustrates:

- Where data comes from,

- How it is processed,
- Where it is stored, and
- How it flows between these parts.

In the Optimizing User, Group, and Role Management with Access Control and Workflows project:

- User/Admin inputs user details, roles, and group information into the system.
- The ServiceNow System processes access control rules and workflows based on defined roles and groups





ACCESS CONTROL LIST



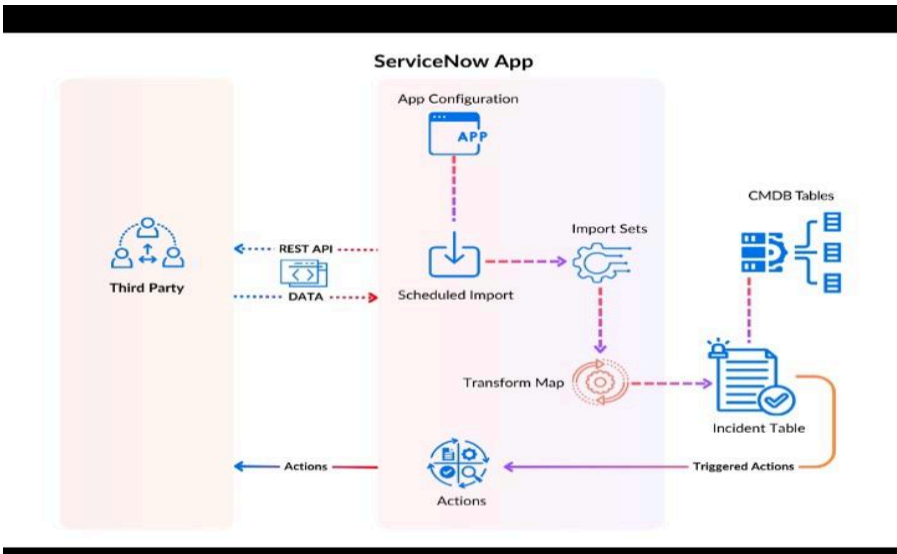
FLOW

Technology Stack:

Date	
Team Id	
Project Name	
Maximum Marks	

Architecture of ServiceNow:

The **architecture of ServiceNow** is designed as a scalable, **cloud-based** platform built to support enterprise-level IT service management and business process automation.



4.PROJECT DESIGN

Date	
Team Id	
Project Name	
Maximum Marks	

Proposed Solutions:

S.No	Parameter	Description
1	Problem Statement	In a small project management team consisting of a Project Manager (Alice) and a Team Member (Bob), there is a need to efficiently manage project tasks and ensure accountability throughout

		the project lifecycle. The current system lacks clear role definitions, access controls, and a structured workflow, leading to confusion regarding task assignments and progress tracking.
2	Idea/Solution Description	project involves designing and implementing a streamlined system within ServiceNow that automates and optimizes the management of users, groups, and roles, while enforcing access control and triggering appropriate workflows.
3	Novelty/Uniqueness	Uniqueness points: 1.Access ControlVisualization Too 2.IRole Expiry & Review Workflows 3.Custom Role Hierarchies 4.Dynamic Role Assignment Automation
4	Social Impact/Customer Satisfaction	Enhances both security and satisfaction, benefiting internal users (employees) and external customers by making systems faster, safer, and smarter.
5	Business Model	It supports scalable role-based access for enterprise systems, reducing manual effort and improving compliance.
6	Scalability of the	It highly scalable due to

	solution	ServiceNow's cloud-native, multi-instance architecture, allowing seamless handling of increasing users
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5.PROJECT PLANNING & SCHEDULING

Assigned tasks to the group members

Smart Internz

Dashboard
 Internship
 Support

Note: Request you to please click on "Tick mark " after assigning the activities for each milestone.

Assign Roles & Responsibilities to Team

Users	Create Users	* Tungana Madhulatha		
Groups	Create Groups	* Tungana Madhulatha		
Roles	Create Roles	* Undralia Madhavi		
Table	Create Table	* Undralia Madhavi		
Assign users to gr	Assign users to pi	* Teki Neeraja		
Assign roles to us	Assign roles to ali	* Teki Neeraja		
Assign roles to us	Assign roles to bc	* Teki Neeraja		
Application acces	Assign table acce:	* Ruppa Yamuna		
Access control list	Create ACL	* Ruppa Yamuna		
Flow	Create a Flow to /	* Ruppa Yamuna		

Functional	User Story	No.Of Activities	Team Members
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Requirement			
USERS	As an administrator, I want to create and manage user accounts in ServiceNow so that users can access the required applications and perform their tasks.	1	T.Madhu Latha
GROUPS	As a system administrator, I want to create and manage user groups in ServiceNow so that I can organize users and assign roles or responsibilities efficiently.	1	T.Madhu Latha
ROLES	As a system administrator, I want to create and assign roles in ServiceNow so that users have the appropriate access to perform their tasks	1	U.Madhavi
TABLES	As a ServiceNow developer or admin, I want to create and manage custom tables so that I can store and organize application-specific data effectively	1	U.Madhavi

ASSIGN USERS TO GROUPS	As a ServiceNow administrator, I want to assign users to groups so that they inherit group roles and can participate in group-based workflows and assignments.	1	T.Neeraja
ASSIGN ROLES TO USERS	As a ServiceNow administrator, I want to assign roles to users so that they have the appropriate access to perform their tasks in the platform.	2	T.Neeraja
APPLICATION ACCESS	As a ServiceNow administrator, I want to control application access so that only authorized users can access specific applications and perform tasks securely.	1	R.Yamuna
ACCESS CONTROL LIST	As a ServiceNow administrator, I want to create and configure Access Control Rules (ACLs) so that only authorized users can view or modify specific data in the system.	1	R.Yamuna
FLOW	As a ServiceNow administrator or	1	R.Yamuna

	<p>developer, I want to create automated flows using Flow Designer so that repetitive tasks and processes can be streamlined without writing code.</p>		
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6. FUNCTIONAL & PERFORMANCE TESTING

PROJECT: Optimizing User, Group, and Role Management with Access Control and Workflows

MILESTONE-1: USERS

USERS:User represents an individual who has access to the platform.

PURPOSE:User purpose is defined by the roles assigned to a user, which determine what they can see and do within the platform.

Activity-1:Create Users

1. Open service now
2. Click on All >> search for users
3. Select Users under system security
4. Click on new
5. Fill the following details to create a new user
6. Click on submit

servicenow All Favorites 1 User - Bob p

Update Set Password Delete

User ID: bob

First name: Bob

Last name: p

Title:

Department:

Email: bob@gmail.com

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...

☐ Password needs reset
☐ Locked out
☒ Active
☐ Web service access only
☐ Internal Integration User

Update Set Password Delete

Related Links

[View linked accounts](#)
[View Subscriptions](#)
[Reset a password](#)

Entitled Custom Tables Roles Groups Delegates Subscriptions User Client Certificates

Table Search

User = Bob p

Table	Application	Role
No records to display		

MILESTONE-2:GROUPS

GROUPS: Group is a set of users who share a common purpose. Groups may perform tasks such as approving change requests, resolving incidents, receiving email notifications, or performing work order tasks.

PURPOSE: Groups are designed to organize users based on their roles, responsibilities, or functions within an organization.

Activity-1:Create Groups

1. Open service now.

2. Click on All >> search for groups
3. Select groups under system security
4. Click on new
5. Fill the following details to create a new group
6. Click on submit

servicenow All Favorites : Group - Project team ☆

< ≡ Group Project team

Name Group email

Manager Parent

Description

Update Delete

Roles Group Members Groups

Created Search Edit...

Group = Project team

Created	Role	Granted by	Inherits
No records to display			

MILESTONE-3:ROLES

ROLES: Roles define the access and permissions users have within the platform.

PURPOSE: Roles are used to grant users specific permissions and access to different features and functionalities within the platform

Activity-1:Create Roles

Activity 1: Create roles

1. Open service now,
2. Click on All search for roles

3. Select roles under system security
4. Click on new
5. Fill the following details to create a new role

The screenshot shows the ServiceNow interface for a 'Group - Project team'. The top navigation bar includes the ServiceNow logo, 'All', 'Favorites', and a search bar. The main header shows 'Group - Project team' with a star icon. Below this, there are tabs for 'Group', 'Project team', and 'Roles'. The 'Roles' tab is currently selected. The form fields include 'Name' (filled with 'Project team'), 'Group email', 'Manager', 'Parent', and 'Description'. Below the form, there are 'Update' and 'Delete' buttons. The 'Roles' tab is active, showing a table with columns 'Created', 'Role', 'Granted by', and 'Inherits'. The table is empty, displaying a message 'No records to display' with a small icon of a building with a red 'X'.

Create one more role:

7. Create another role with the following details
8. Click on submit

servicenow All Favorites : Role - project mem... ☆

Role project member 2

Name project member 2 Application Global

Elevated privilege ☐

Description

Update Delete

Contains Roles Applications with Role Modules with Role Custom Tables

for text Search New Edit...

Role = project member 2

Contains

No records to display

MILESTONE-4: TABLE

TABLE: Tables are the fundamental structures for storing and organizing data

PURPOSE: Tables serve as the fundamental building blocks for organizing and managing data

Activity-1: Create Table

1. Open service now.
2. Click on All >> search for tables
3. Select tables under system definition
4. Click on new
5. Fill the following details to create a new table

Label: project table

Check the boxes Create module & Create mobile module

6. Under new menu name: project table
7. Under table columns give the columns

servicenow All Favorites History Workspaces Admin **Table - New Record** Search

Table New record

ServiceNow recommends creating custom tables in scoped applications. To learn more about creating scoped applications, click [here](#).

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 Application

* Name Create module ☒

Extends table Create mobile module ☒

Add module to menu

New menu name

Remote Table ☐

Columns Controls Application Access

Table Columns Type Search

Dictionary Entries

Column label	Type	Reference	Max length	Default value	Display
project id	Integer				false

Create one more table:

9. Create another table as task table 2 and fill with following details.

10. Click on submit

3. Select tables under system definition
4. Select the project team group
5. Under group members
6. Click on edit
7. Select alice p and bob p and save

servicenow All Favorites History Workspaces Admin Group - project team

Search

Group project team

Job to add or remove role(s) from user(s) of group has been queued

Name project team Group email abc@gmail.com

Manager Parent

Description

Update Delete

Roles Group Members (2) Groups

User Search

Group = project team

User	Actions on selected rows...
alice p	New Edit...
bob p	New Edit...

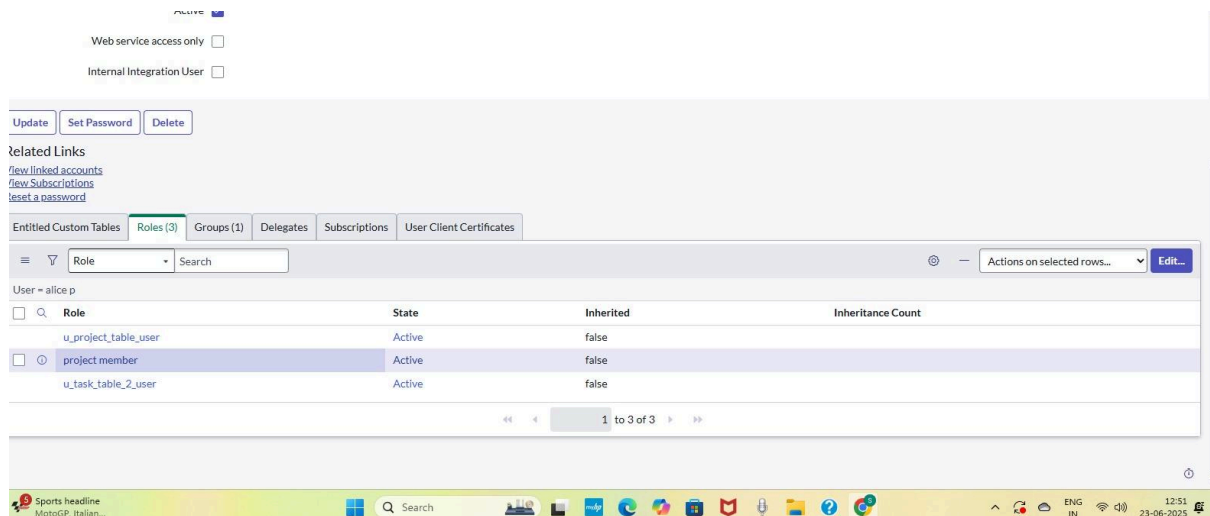
1 to 2 of 2

MILESTONE-6:ASSIGN ROLES TO USERS

PURPOSE:Assigning roles to users determines their access permissions and what they can do within the platform

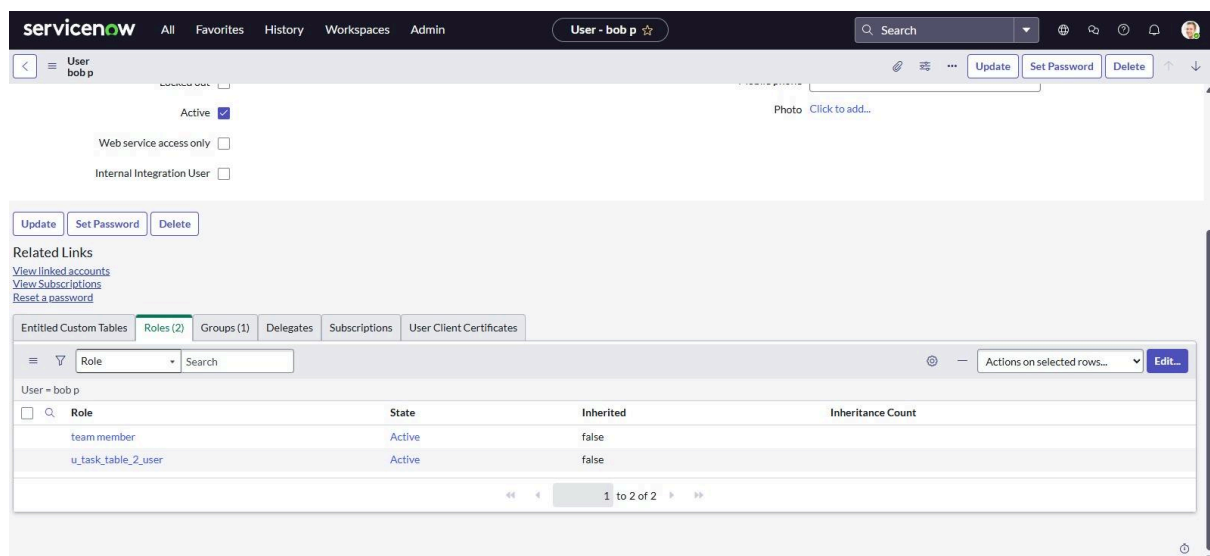
Activity-1:Assign Roles to Alice User

1. Open servicenow. Click on All >> search for user
2. Select tables under system definition
3. Select the project manager user
4. Under project manager
5. Click on edit
6. Select project member and save
7. click on edit add u_project_table role and u_task_table role
8. click on save and update the form.



Activity-2:Assign roles to bob user

- 1.Open servicenow.Click on All >> search for user
- 2.Select tables under system definition
- 3.Select the bob p user
- 4.Under team member
- 5.Click on edit
- 6.Select team member and give table role and save
- 7.Click on profile icon Impersonate user to bob
- 8.We can see the task table2.



MILESTONE-7:APPLICATION ACCESS

APPLICATION ACCESS:The mechanism that controls which applications and users can access specific tables and their data

PURPOSE:Application access settings control which applications and users can interact with the data and functionality of a specific application.

Activity-1:Assign table access to application

- 1.while creating a table it automatically create a application and module for that table
- 2.Go to application navigator search for search project table application
- 3.Click on edit module
- 4.Give project member roles to that application
- 5.Search for task table2 and click on edit application.
- 6.Give the project member and team member role for task table 2 application

The screenshot shows the ServiceNow 'Application Menu' configuration page for 'project table'. The page includes a header with navigation tabs (All, Favorites, History, Workspaces, Admin) and a search bar. The main content area contains several sections for configuring the application menu:

- Title:** A text input field containing 'project table'.
- Application:** A dropdown menu set to 'Global'.
- Active:** A checkbox that is checked.
- Roles:** A section with a plus icon and the text 'project member'.
- Category:** A dropdown menu set to 'Custom Applications'.
- Hint:** A text input field.
- Description:** A text input field.

At the bottom of the page, there are 'Update' and 'Delete' buttons.

The screenshot shows the 'Application Menu' configuration page in ServiceNow. The page title is 'Application Menu - task table 2'. The main form includes the following fields and sections:

- Title:** task table 2
- Application:** Global
- Active:** ☒
- Roles:** u_task_table_2_user, project member, team member
- Category:** Custom Applications
- Hint:** (empty text field)
- Description:** (empty text field)

Buttons at the bottom include 'Update' and 'Delete'.

MILESTONE-8:ACCESS CONTROL LIST

ACL:It is a security rule that controls user access to platform resources, such as tables, fields, and even scripts

PURPOSE:Access Control Lists (ACLs) are used to manage and restrict user access to data within the platform.

Activity-1:Create ACL

- 1.Open service now.
- 2.Click on All >> search for ACL
- 3.Select Access Control(ACL) under system security
- 4.Click on elevate role
- 5.Click on new
- 6.Fill the following details to create a new ACL

The screenshot shows the 'Access Control' configuration page in ServiceNow. The page title is 'Access Control - New record'. The main form includes the following fields and sections:

- Type:** record
- Operation:** create
- Decision Type:** Allow If
- Admin overrides:** ☒
- Protection policy:** -- None --
- Name:** task table 2 [u_task_table_2]
- Status:** status
- Description:** (empty text field)
- Applies To:** No. of records matching the condition: 0
- Buttons:** Add Filter Condition, Add OR Clause
- Fields:** -- choose field --, -- oper --, -- value --

Buttons at the bottom include 'Submit'.

- 7.Scroll down under requires role
- 8.Double click on insert a new row
- 9.Give task table and team member role
- 10.Click on submit
- 11.Similarly create 4 acl for the following fields

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

dev196626.service-now.com/now/nav/ui/classic/params/target/sys_security_acl_list.do%3Fsysparm_query%3Dsys_created_onONToday%40javascript%3Ags.beginningOfToday..

servicenow

All | Favorites | History | Workspaces | Access Controls

Search

Access Controls

Name Search

Actions on selected rows. New

All > Created on Today

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

1 to 20 of 23

12. Click on profile on top right side
13. Click on impersonate user
14. Select bob user
15. Go to all and select task table2 in the application menu bar
16. Comment and status fields are have the edit access

The screenshot shows the ServiceNow interface for creating a new record in 'task table 2'. The header bar includes the ServiceNow logo, navigation tabs (All, Favorites, History), and a breadcrumb trail 'task table 2 - Create Created'. The form itself has a left sidebar with a back arrow and a 'task table 2 New record' label. The main form area contains several input fields: 'assigned to' (text), 'task name' (text), 'task id' (text), 'due date' (calendar icon), 'status' (dropdown menu with '-- None --'), and 'comments' (text area). A 'Submit' button is positioned at the bottom left of the form area.

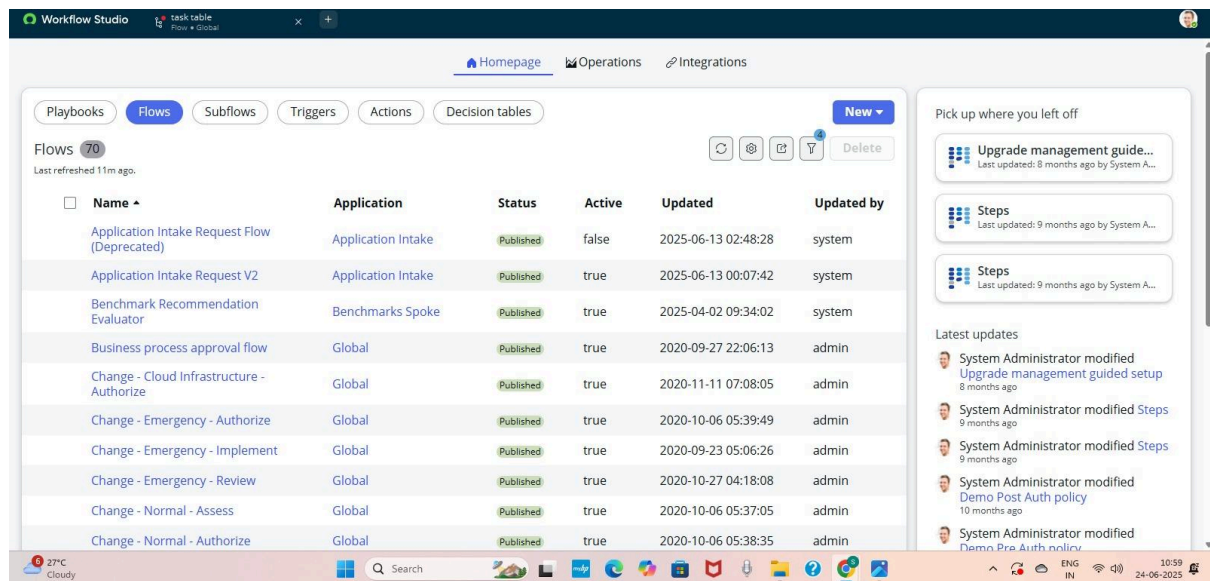
MILESTONE-9:FLOW

FLOW: Flow is a visual representation of an automated process.

PURPOSE: The purpose of a flow is to automate business processes by orchestrating a series of actions and logic.

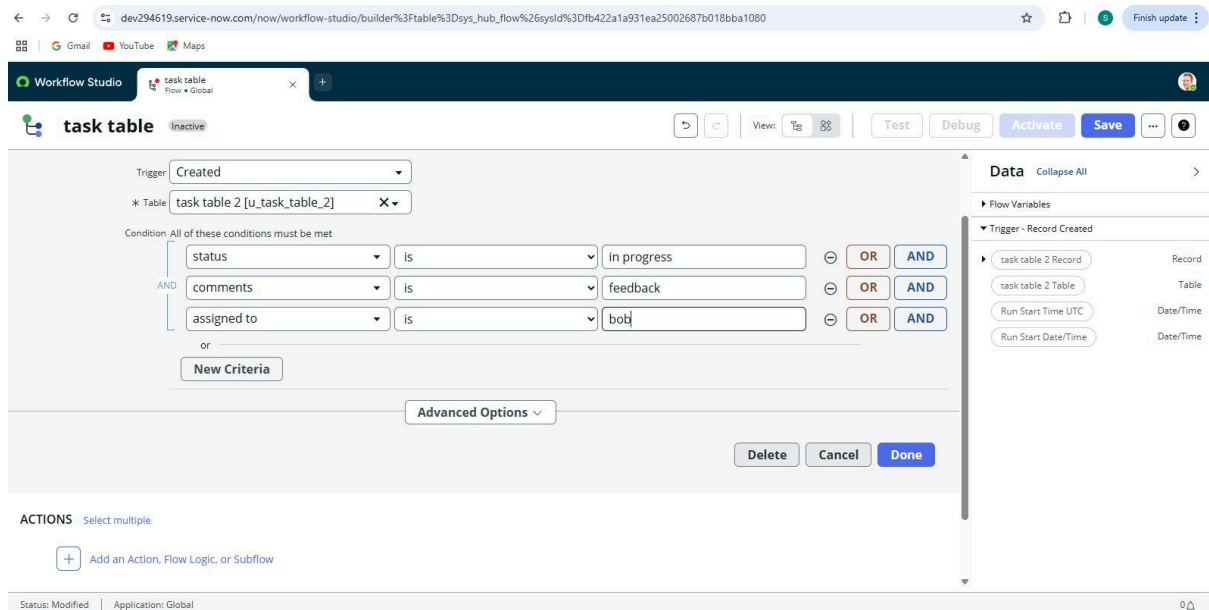
Activity-1: Create a Flow to Assign operations ticket to group

1. Open service now.
2. Click on All >> search for Flow Designer
3. Click on Flow Designer under Process Automation.
4. After opening Flow Designer Click on new and select Flow.
5. Under Flow properties Give Flow Name as “ task table”.
6. Application should be Global.
7. Click build flow.



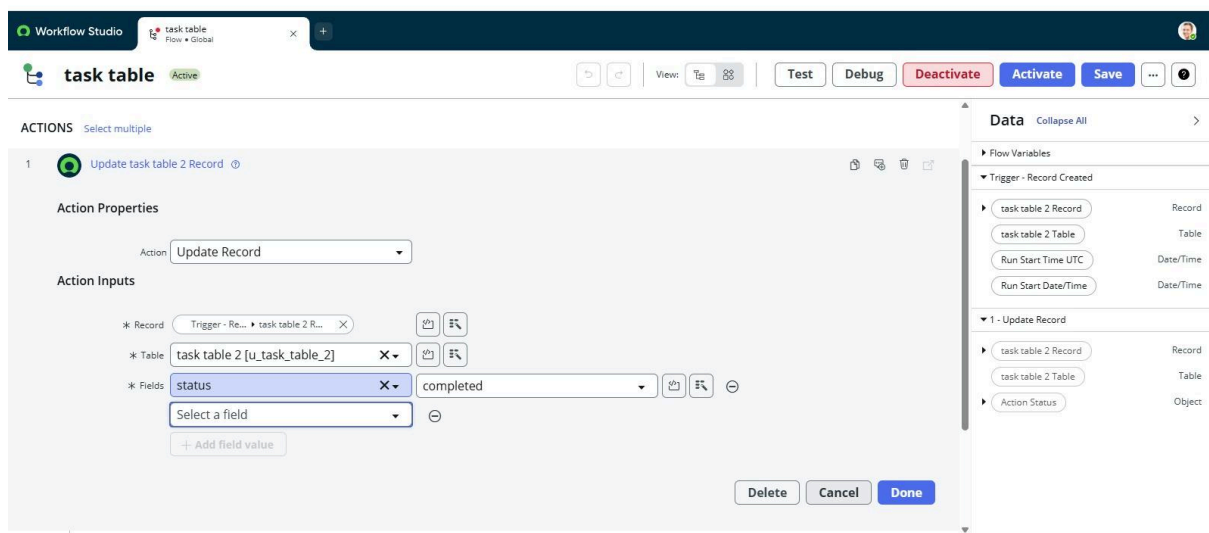
next step:

1. Click on Add a trigger
2. Select the trigger in that Search for "create record" and select that.
3. Give the table name as "task table".
4. Give the Condition as Field : status Operator :is Value : in progress
Field : comments Operator :is Value : feedback
Field : assigned to Operator :is Value : bob
5. After that click on Done



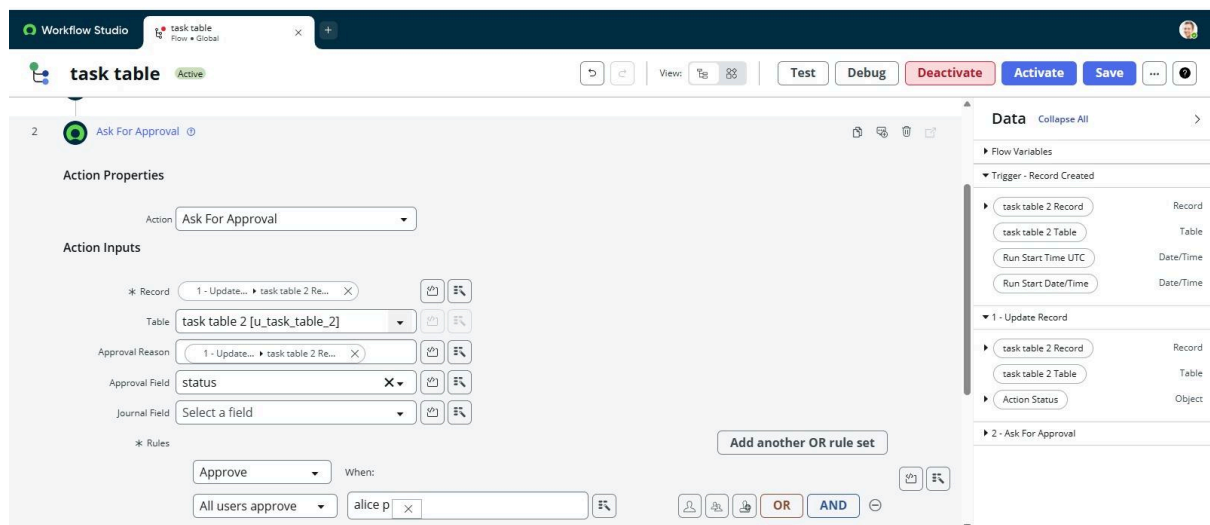
Next step:

1. Click on Add an action.
2. Select action in that ,search for “ update records”.
3. In Record field drag the fields from the data navigation from Right Side(Data pill)
4. Table will be auto assigned after that
5. Add fields as “status” and value as “completed”
6. Click on Done.

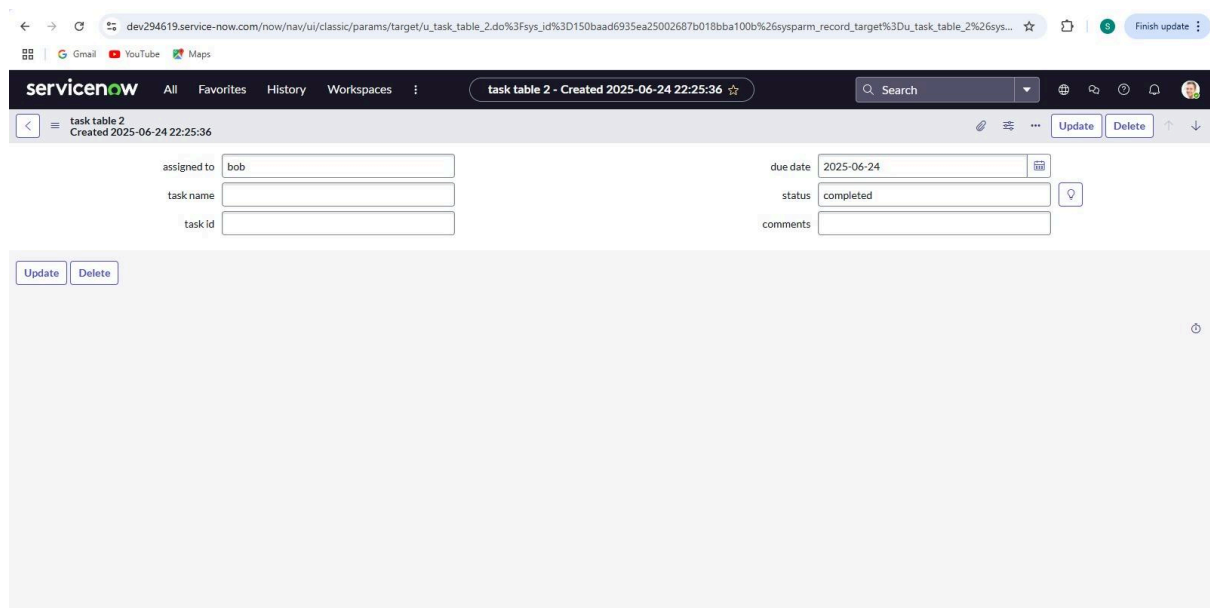


Next step:

- 1.Now under Actions.
- 2.Click on Add an action.
- 3.Select action in that ,search for “ ask for approval ”.
- 4.In Record field drag the fields from the data navigation from Right side
- 5.Table will be auto assigned after that
- 6.Give the approve field as “ status”
- 7.Give approver as alice p
- 8.Click on Done.



- 1.Go to application navigator search for task table.
- 2.It status field is updated to completed



- 1.Go to application navigator and search for my approval
- 2.Click on my approval under the service desk.
- 3.Alice p got approval request then right click on requested then select approved

servicenow All Favorites History Workspaces Approvals Search

Approvals Created Search

State	Approver	Comments	Approval for
Search	Search	Search	Search
Approved	alice p		(empty)
Rejected	Fred Luddy		(empty)
Requested	Fred Luddy		(empty)
Requested	Fred Luddy		(empty)
Requested	Howard Johnson		CHG0000096
Requested	Ron Kettering		CHG0000096
Requested	Luke Wilson		CHG0000096
Requested	Christen Mitchell		CHG0000096
Requested	Bernard Laboy		CHG0000096
Requested	Howard Johnson		CHG0000095
Requested	Ron Kettering		CHG0000095
Requested	Luke Wilson		CHG0000095
Requested	Christen Mitchell		CHG0000095
Requested	Bernard Laboy		CHG0000095

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dev294619.servicenow.com/now/nav/ui/classic/params/target/sysapproval_approver_list.do%3Fsysparm_query%3D%26sysparm_first_row%3D1%26sysparm_view%3D

servicenow All Favorites History Workspaces Admin Approvals Search

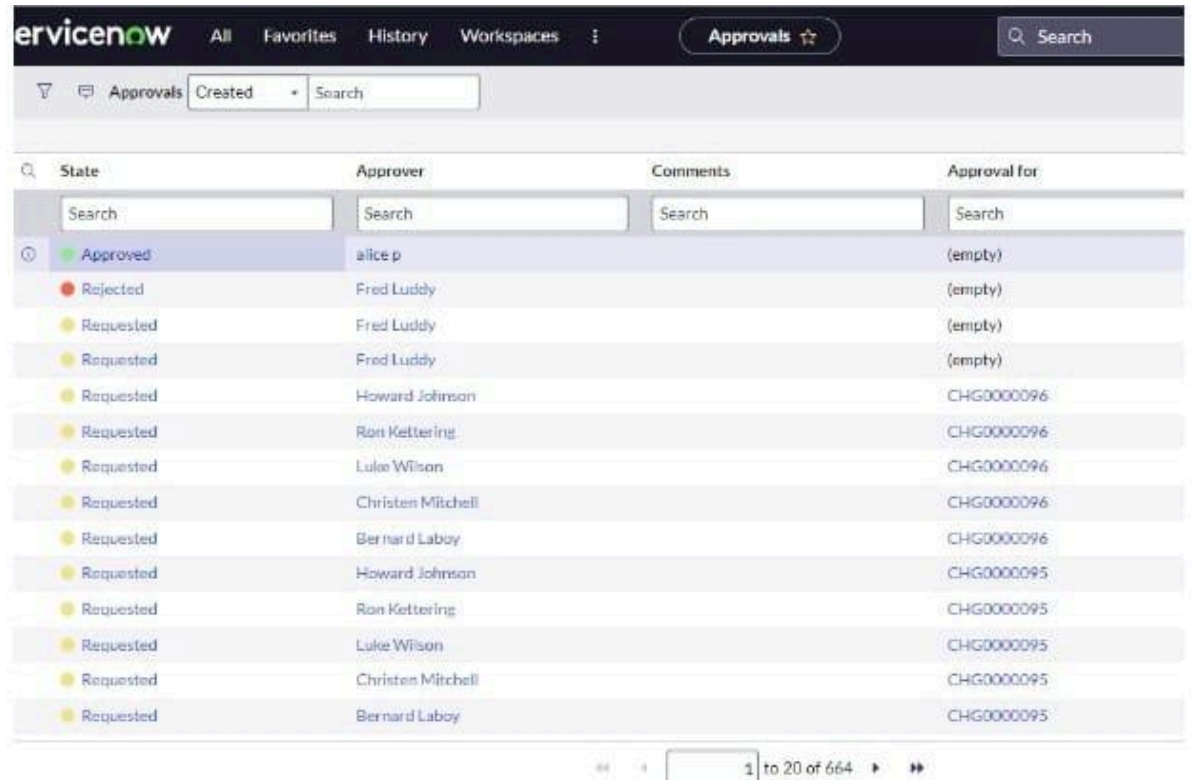
ServiceNow Service Management Approvals Created Search Actions on selected rows...

State	Approver	Comments	Approval for	Created
Approved	Don Goodliffe		CHG0000046	2024-08-29 07:52:40
Approved	Bow Ruggeri		CHG0000083	2024-08-29 07:52:45
Approved	Beth Anglin		CHG0000055	2024-08-29 07:52:33
Approved	Fred Luddy		CHG0000061	2024-08-29 07:52:50
Approved	ITIL User		CHG0000082	2024-08-29 07:52:47
Approved	Change Manager		STDCHG0000004	2015-07-01 08:59:06
Approved	David Loo		CHG0000042	2024-08-29 07:52:43
Approved	Don Goodliffe		CHG0000075	2024-08-29 07:52:51
Approved	Bow Ruggeri		CHG0000059	2024-08-30 06:27:41
Approved	Don Goodliffe		CHG0000056	2024-08-29 07:52:35
Approved	Fred Luddy		CHG0000040	2024-08-29 07:52:44
Approved	Fred Luddy		CHG0000063	2024-08-29 07:52:56
Approved	David Loo		CHG0000049	2024-08-30 06:27:41
Approved	ITIL User		CHG0000058	2024-08-30 06:27:41
Approved	Beth Anglin		CHG0000067	2024-08-29 07:52:36
Approved	ITIL User		CHG0000038	2024-08-29 07:52:40
Approved	Change Manager		STDCHG0000001	2015-06-29 03:52:34

9.RESULT :

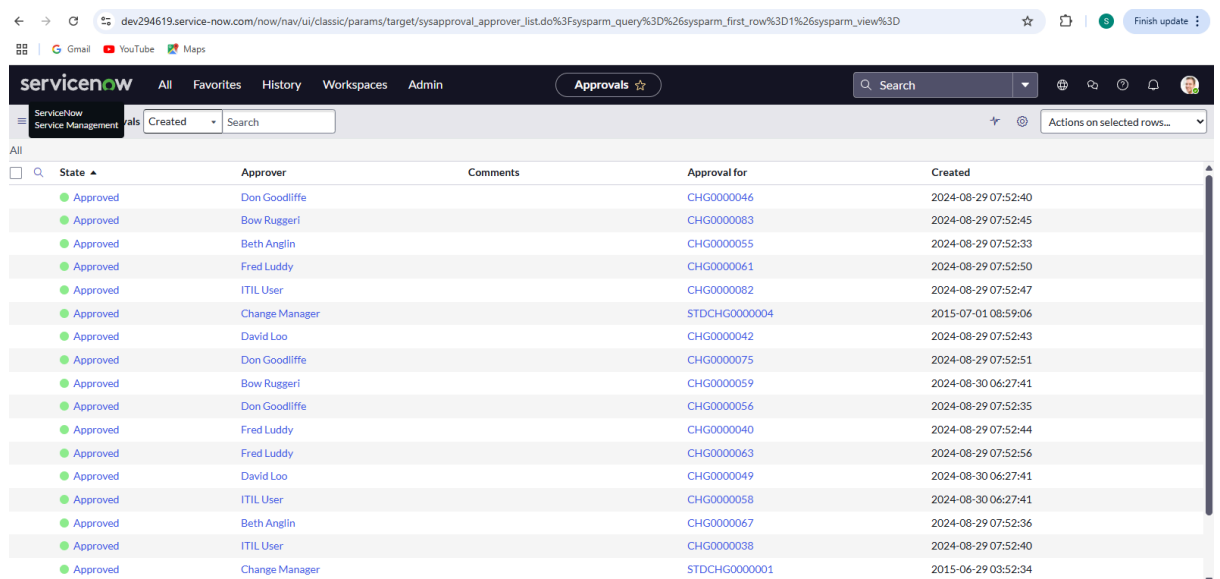
The project should demonstrate a complete and secure access management system built in ServiceNow, capable of:

- Preventing unauthorized access
- Ensuring role-based task visibility
- Streamlining user onboarding and access provisioning



The screenshot shows the ServiceNow 'Approvals' page. The top navigation bar includes 'All', 'Favorites', 'History', 'Workspaces', and a search bar. Below the navigation bar, there's a filter section with 'Approvals' selected and a 'Created' filter. The main table displays a list of requests with columns for State, Approver, Comments, and Approval for. The first row is 'Approved' with approver 'alice p'. Subsequent rows are 'Rejected' and 'Requested' with various approvers like Fred Luddy, Howard Johnson, Ron Kettering, Luke Wilson, Christen Mitchell, and Bernard Laboy. The 'Approval for' column shows values like '(empty)' and 'CHG0000096'.

State	Approver	Comments	Approval for
Approved	alice p		(empty)
Rejected	Fred Luddy		(empty)
Requested	Fred Luddy		(empty)
Requested	Fred Luddy		(empty)
Requested	Howard Johnson		CHG0000096
Requested	Ron Kettering		CHG0000096
Requested	Luke Wilson		CHG0000096
Requested	Christen Mitchell		CHG0000096
Requested	Bernard Laboy		CHG0000096
Requested	Howard Johnson		CHG0000095
Requested	Ron Kettering		CHG0000095
Requested	Luke Wilson		CHG0000095
Requested	Christen Mitchell		CHG0000095
Requested	Bernard Laboy		CHG0000095



The screenshot shows the ServiceNow 'Approvals' page with a 'Created' column added to the table. The table lists various requests, all in 'Approved' state, with approvers like Don Goodliffe, Bow Ruggeri, Beth Anglin, Fred Luddy, ITIL User, and Change Manager. The 'Approval for' column shows values like 'CHG0000046', 'CHG0000083', 'CHG0000055', 'CHG0000061', 'CHG0000082', 'STDCHG0000004', 'CHG0000042', 'CHG0000075', 'CHG0000059', 'CHG0000056', 'CHG0000040', 'CHG0000063', 'CHG0000049', 'CHG0000058', 'CHG0000067', 'CHG0000038', and 'STDCHG0000001'. The 'Created' column shows timestamps ranging from 2015-06-29 to 2024-08-29.

State	Approver	Comments	Approval for	Created
Approved	Don Goodliffe		CHG0000046	2024-08-29 07:52:40
Approved	Bow Ruggeri		CHG0000083	2024-08-29 07:52:45
Approved	Beth Anglin		CHG0000055	2024-08-29 07:52:33
Approved	Fred Luddy		CHG0000061	2024-08-29 07:52:50
Approved	ITIL User		CHG0000082	2024-08-29 07:52:47
Approved	Change Manager		STDCHG0000004	2015-07-01 08:59:06
Approved	David Loo		CHG0000042	2024-08-29 07:52:43
Approved	Don Goodliffe		CHG0000075	2024-08-29 07:52:51
Approved	Bow Ruggeri		CHG0000059	2024-08-30 06:27:41
Approved	Don Goodliffe		CHG0000056	2024-08-29 07:52:35
Approved	Fred Luddy		CHG0000040	2024-08-29 07:52:44
Approved	Fred Luddy		CHG0000063	2024-08-29 07:52:56
Approved	David Loo		CHG0000049	2024-08-30 06:27:41
Approved	ITIL User		CHG0000058	2024-08-30 06:27:41
Approved	Beth Anglin		CHG0000067	2024-08-29 07:52:36
Approved	ITIL User		CHG0000038	2024-08-29 07:52:40
Approved	Change Manager		STDCHG0000001	2015-06-29 03:52:34

ADVANTAGES AND DISADVANTAGES

ADVANTAGES:

- Granular control over user access using roles, groups, and ACLs.Reduces risk of unauthorized access to data and applications.
- Saves time by automating user-role assignments and access control.
- Easy to manage a large number of users via group and role hierarchy.
- Gives hands-on experience with ServiceNow administration.
- Teaches real-world ITSM (IT Service Management) best practices

DISADVANTAGES:

- Understanding ACLs, workflows, and role hierarchies can be confusing initially.
- If roles or ACLs are not defined properly, users may get more access than needed (violating the Principle of Least Privilege).
- As users and roles change over time, regular updates are needed to keep the system secure and efficient.
- Initial configuration of users, groups, roles, ACLs, and workflows can be time-intensive.

10. CONCLUSION :

The project "Optimizing User, Group, and Role Management with Access Control and Workflows" successfully demonstrated how to efficiently manage users, groups, and roles within the ServiceNow platform. Through structured workflows and the implementation of Access Control Lists (ACLs), the system ensures secure and scalable access management across applications and data tables.

By dividing the project into key modules—such as user creation, role assignment, group management, application access control, and ACL configuration—the project

achieved its core goal: to enhance administrative efficiency while maintaining strict security and data integrity.