

Access Control for Project table

1. Project Overview:

The ServiceNow Product Manager aims to customize the Project table to hide certain fields from the employees under their supervision, specifically those with the "Employee Management" user. This customization will ensure that these employees can focus solely on the fields accessible to them.

2. Objective:

- To restrict some field visibility for employees on the Project table .
- To enhance safety between Product management and employee management.

Specific Outcomes:

- Create a project label in the table.
- Create two users product management and employee management and assign respective roles for them.
- Create ACL by elevating to higher security and test them with 3 sample names to see whether they appear in the employee side.

3. Key Features and Concepts Utilized

Access Control Lists:

restrict user access to specific data based on defined conditions. They are applied at the row level (record) and field level (column).

Table-Level Security:

Allows you to specify who can read, create, update, or delete records in a table.

Controls who can view or modify individual fields within a record. This is managed using field-level ACLs.

Elevated Privileges:

Temporary elevated privileges can be granted to users when they need access beyond their normal role. The "Elevate Roles" feature can provide access like security admin temporarily

Implicit and Explicit Permissions

Implicit Permissions: Automatically granted based on the context (e.g., users with ITIL roles can access incident records).

Explicit Permissions: Defined by specific ACL rules or user role assignments.

4. Detailed Steps to Solution Design

Implementation

Activity-1 : Create project

- 1.Open ServiceNow
- 2.Open “Tables” >> New
- 3.create table name as project
- 4.Fill the details
5. Click on submit

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

Columns Controls Application Access

Table Columns for text Search 1 to 10 of 10 New

Column label	Type	Reference	Max length	Default value	Display
Updated by	String	(empty)	40	false	false
Name	String	(empty)	100	false	false
Project Overview	String	(empty)	200	false	false
Updated	Date/Time	(empty)	40	false	false

Tables Name Search Actions on selected rows... New

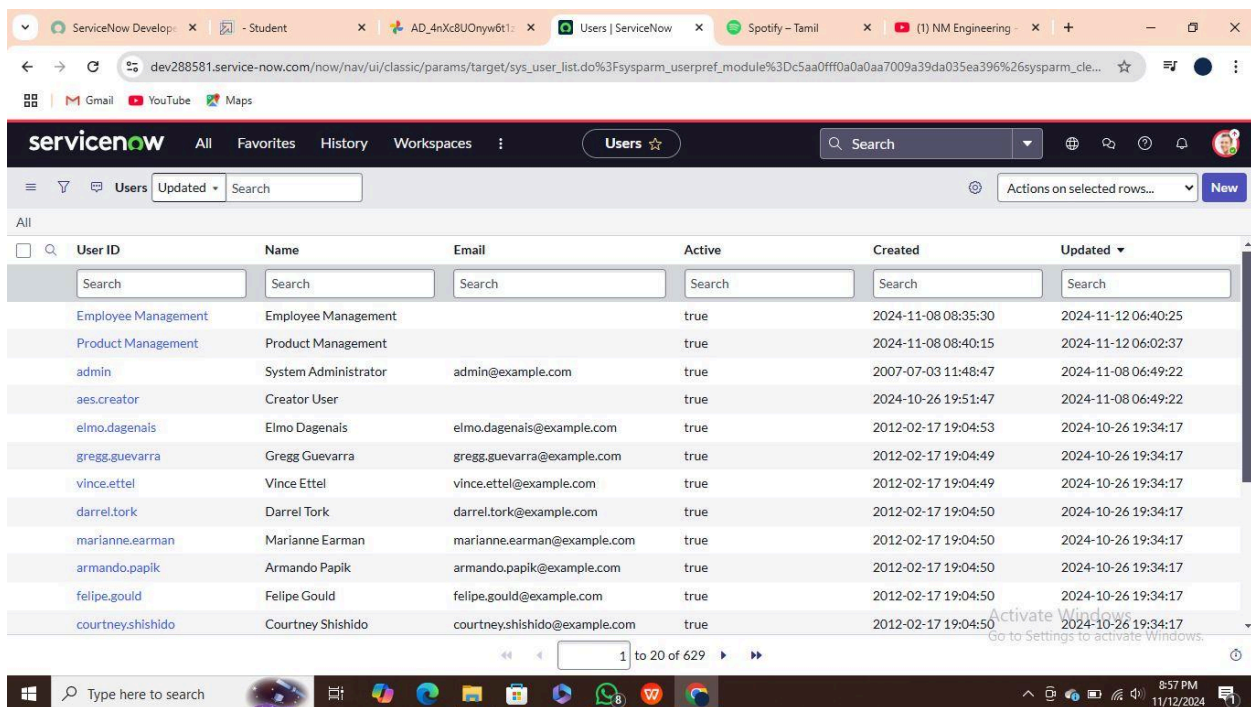
All > Update name is not empty > Label starts with Project

Label	Name	Extends table	Extensible	Updated
Project	Search	Search	Search	Search
Project Definition Version	promin_model_def_version	(empty)	false	2024-09-01 23:57:53
Project Definition	promin_project	(empty)	false	2024-09-01 23:58:03
Project	u_st_project	(empty)	false	2024-11-12 05:50:17

1 to 3 of 3

Activity-2 : Create Users

- 1.Open User >> New.
- 2.Create Two Users Product Manager and Employee Management.
- 3.Open Role >>New
- 4.Create Employee Role.

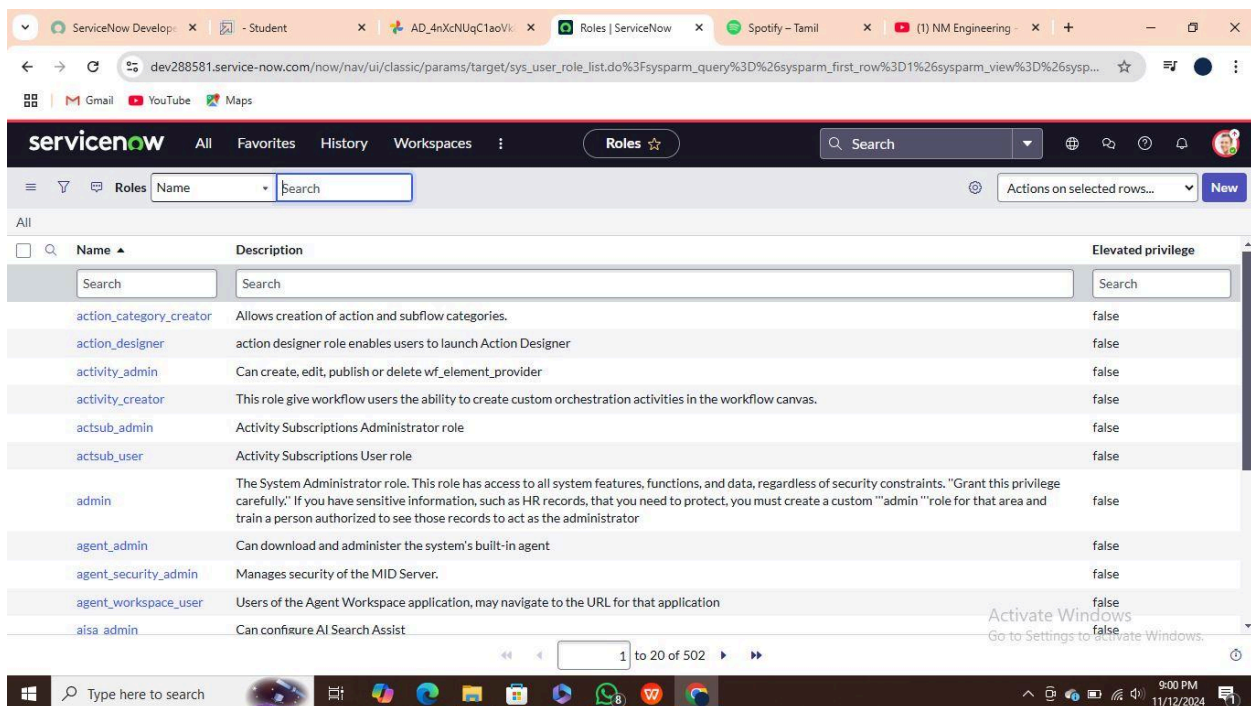


The screenshot shows the ServiceNow 'Users' list page. The table contains the following data:

User ID	Name	Email	Active	Created	Updated
Employee Management	Employee Management		true	2024-11-08 08:35:30	2024-11-12 06:40:25
Product Management	Product Management		true	2024-11-08 08:40:15	2024-11-12 06:02:37
admin	System Administrator	admin@example.com	true	2007-07-03 11:48:47	2024-11-08 06:49:22
aes.creator	Creator User		true	2024-10-26 19:51:47	2024-11-08 06:49:22
elmo.dagenais	Elmo Dagenais	elmo.dagenais@example.com	true	2012-02-17 19:04:53	2024-10-26 19:34:17
gregg.guevarra	Gregg Guevarra	gregg.guevarra@example.com	true	2012-02-17 19:04:49	2024-10-26 19:34:17
vince.ettel	Vince Ettel	vince.ettel@example.com	true	2012-02-17 19:04:49	2024-10-26 19:34:17
darrel.tork	Darrel Tork	darrel.tork@example.com	true	2012-02-17 19:04:50	2024-10-26 19:34:17
marianne.earman	Marianne Earman	marianne.earman@example.com	true	2012-02-17 19:04:50	2024-10-26 19:34:17
armando.papik	Armando Papik	armando.papik@example.com	true	2012-02-17 19:04:50	2024-10-26 19:34:17
felipe.gould	Felipe Gould	felipe.gould@example.com	true	2012-02-17 19:04:50	2024-10-26 19:34:17
courtney.shishido	Courtney Shishido	courtney.shishido@example.com	true	2012-02-17 19:04:50	2024-10-26 19:34:17

Activity-3 : Assign roles

- 1.Go to the Project table >> Controls
- 2.copy the role name from the table.
- 3.Go to Employee Management User
4. Add role : Employee role to it.

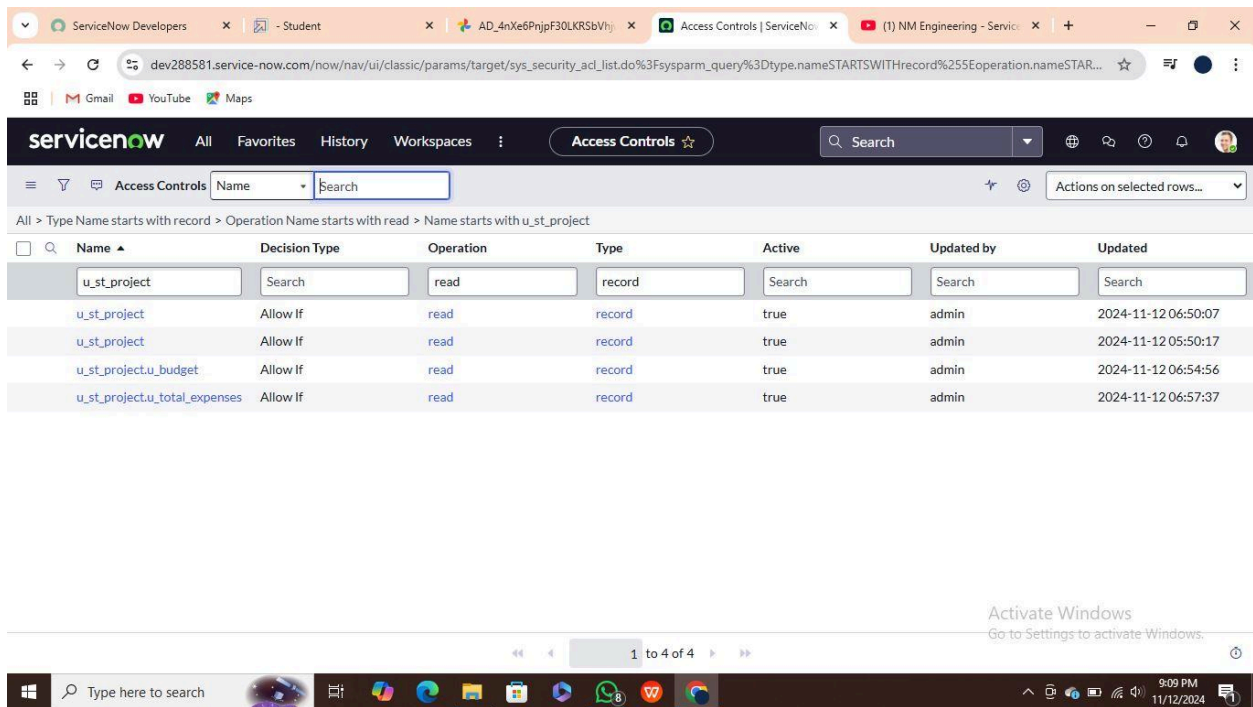


The screenshot shows the ServiceNow 'Roles' list page. The table contains the following data:

Name	Description	Elevated privilege
action_category_creator	Allows creation of action and subflow categories.	false
action_designer	action designer role enables users to launch Action Designer	false
activity_admin	Can create, edit, publish or delete wf_element_provider	false
activity_creator	This role give workflow users the ability to create custom orchestration activities in the workflow canvas.	false
actsub_admin	Activity Subscriptions Administrator role	false
actsub_user	Activity Subscriptions User role	false
admin	The System Administrator role. This role has access to all system features, functions, and data, regardless of security constraints. "Grant this privilege carefully." If you have sensitive information, such as HR records, that you need to protect, you must create a custom "admin" role for that area and train a person authorized to see those records to act as the administrator	false
agent_admin	Can download and administer the system's built-in agent	false
agent_security_admin	Manages security of the MID Server.	false
agent_workspace_user	Users of the Agent Workspace application, may navigate to the URL for that application	false
aisa_admin	Can configure AI Search Assist	false

Activity-4 : Access Control List

1. Click on the Profile avatar >> Elevate Role >> Grant the high security
2. Search & Open ACL >> New
3. Fill the details
4. Create Read Operation Table Level ACL(none) on Employee role and Save
5. Fill the details and Create Read Operation Field Level ACL(Budget)
6. Create Read Operation Field Level ACL(Total Expenses) on role: u_project_user and Save

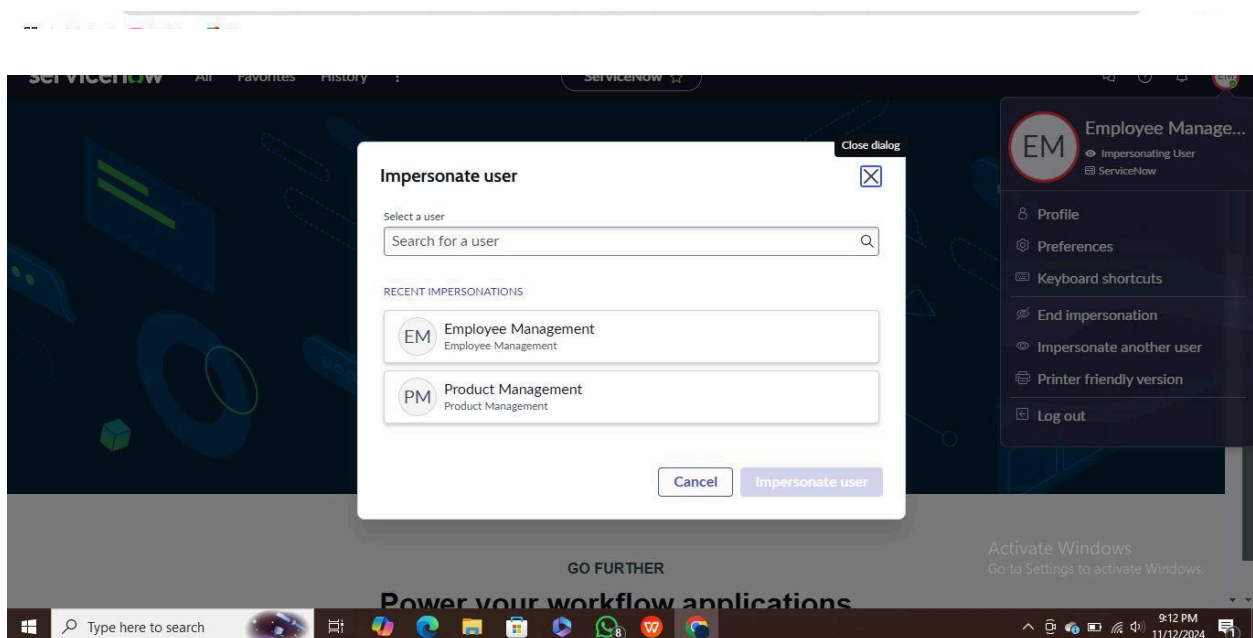


The screenshot shows the ServiceNow 'Access Controls' page. The breadcrumb trail is 'All > Type Name starts with record > Operation Name starts with read > Name starts with u_st_project'. The table below lists four ACLs:

Name	Decision Type	Operation	Type	Active	Updated by	Updated
u_st_project	Allow If	read	record	true	admin	2024-11-12 06:50:07
u_st_project	Allow If	read	record	true	admin	2024-11-12 05:50:17
u_st_project.u_budget	Allow If	read	record	true	admin	2024-11-12 06:54:56
u_st_project.u_total_expenses	Allow If	read	record	true	admin	2024-11-12 06:57:37

Activity-5 : Impersonate User

1. Impersonate User >> Product Management.
2. All >> Project >> New
3. Create 3 Records with any details .



The screenshot displays the ServiceNow web interface. The top navigation bar includes 'All', 'Favorites', 'History', and 'Projects'. Below this, a table lists projects with columns for Name, Budget, Project Overview, and Total Expenses.

Name	Budget	Project Overview	Total Expenses
Ajay	\$330.00	data integration	\$1,000,000.00
Meghana	\$100.00	Data Analyst	\$1,000,000.00
Sandeep	\$220.00	Data specilizer	\$1,000,000.00

Below the table, the 'Creator Studio' landing page is visible, featuring the text 'Create request-based apps quickly' and 'A guided and curated environment for creating forms and assigning automations to them. No-code required.' A search bar on the left shows 'u_st_project.LIST' with 'No Results' for both Favorites and All Results.

5. Testing and Validation

Purpose : Ensure that the data entries are not visible from the Employee side

Methodology:

Impersonate the user to Employee management and check for the table project.

- After creating tables and generating roles .
- The data will be entered in the table from the Product management and by elevating the role to higher security the access control list.

6. Key Scenarios Addressed by ServiceNow:

1.IT Service Management (ITSM)

- Streamlines the process of managing IT incidents, enabling quick resolution and minimizing the impact on business operations. Users can log incidents through the self-service portal or automatically through monitoring systems.
- Helps identify the root causes of recurring incidents to prevent future occurrences, improving service reliability.

2.Security Operations (SecOps)

- Identifies and prioritizes vulnerabilities in the IT environment, automating remediation processes to reduce exposure to threats.
- Integrates with external threat intelligence feeds to provide context to security incidents, helping analysts make informed decisions.

3.Governance, Risk, and Compliance (GRC)

- Manages policies and ensures compliance with regulations by automating assessments and monitoring controls.
- Identifies, assesses, and mitigates risks across the organization, enabling proactive risk management and decision-making.
- Streamlines the audit process by automating evidence collection, tracking, and reporting, ensuring efficient and effective audits.

4.Project Portfolio Management (PPM)

- Manages the entire project lifecycle, from planning and resource allocation to execution and reporting, improving project delivery and efficiency.
- Optimizes resource allocation across projects based on skills, availability, and demand, maximizing productivity.
- Prioritizes and manages incoming business demands, aligning them with strategic goals and resource availability.

5.Vendor Management

- Tracks vendor contracts, performance metrics, and compliance, helping organizations manage their relationships with external suppliers effectively.
- Monitors vendor performance against SLAs and other metrics, providing insights to improve vendor selection and performance management.

Conclusion

After switching to the Employee management we won't be able to see the project name under all projects sections . Thus confirms the creation of an Access Control List in the project .We can ensure that some fields(Budget,Total Expenses) visibility is restricted for employees on the Project table.