

PROJECT DESIGN

DATE	
TEAM ID	LTVIP2025TMID31357
PROJECT NAME	Importing&Securing Data in Servicenow

Proposed Solution:

Project team shall fill the following information in the proposed solution template

S. No	Parameter	Description
1	Data Source Type	Type of external source (CSV, Excel, JDBC, REST, SOAP, etc.)
2	Import Set Table	Temporary table where incoming data is staged before transformation
3	Transform Map	Defines how data is mapped and transformed from the import set to target table
4	Coalesce Fields	Used to determine uniqueness to prevent duplicate records
5	Scheduled Import Time	Specifies the frequency of data import (manual, hourly, daily, etc.)
6	Field Mapping Rules	Maps source fields to target fields, including data type conversions

Importing & Securing Data in ServiceNow

What is importing & securing data?

1. Importing Data - Bringing external data into the ServiceNow platform.
2. Securing Data Protecting that data through access controls, encryption, and compliance features to ensure it is safe, private, and used appropriately.

Types of Importing & Securing Data

- File-Based Import
- Database Import
- Web Service Import
- Email Import
- Third-Party Connectors

MILESTONE 1: TABLES

Activity 1: create table

PURPOSE:

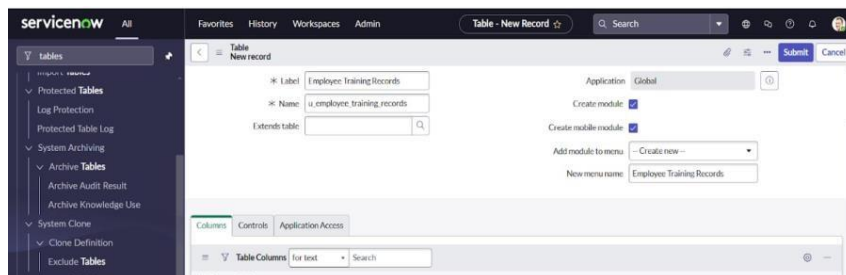
Creating a table lets you define Access Control Rules (ACLs) to secure it at the table, field, or record level. You can specify which roles or groups can access the data in that table (e.g., only HR users can see employee salaries). Sensitive fields in the table (e.g., SSN, bank info) can be encrypted using field-level or full-table encryption.

USE:

When importing data (e.g., from Excel or an API), the data must be inserted into a target table—either an existing one (like Incident or cmdb_ci) or a new custom table.

STEPS:

1. Open service now.
2. Click on All >> search for Tables
3. Select Tables under system security
4. Click on new
5. Fill the following details to create a new Table
7. Add the following fields:
- 6.



8. Training Name (Type: String)
9. Completion Date (Type: Date)
10. Status (Type: Choice)
11. Employee (Type: Reference), (Reference field to sys_user table)

Column label	Type	Reference	Max length	Default value	Display
Sys ID	Sys ID (GUID)	(empty)	32		false
Created	Date/Time	(empty)	40		false
Updated	Integer	(empty)	40		false
Updated by	String	(empty)	40		false
Training Name	String	(empty)	40		false
Completion Date	Date/Time	(empty)	40		false
Status	Choice	(empty)	40		false
Created by	String	(empty)	40		false
Employee	Reference	backup user	40		false

12. Click on submit

13. Click on Choice and Add to choices in the Dictionary Entry Status

Label	Value	Language	Sequence	Inactive	Updated
In progress	ip	en		false	2024-10-26 06:29:12
Completed	c	en		false	2024-10-26 06:29:33

MILESTONE 2: IMPORT DATA

Activity 1: Importing data

PURPOSE:

Importing data into ServiceNow is a critical function that allows organizations to integrate, centralize, and automate data-driven processes across their enterprise systems.

USE:

Importing data into ServiceNow allows organizations to leverage external data sources to drive workflows, maintain accurate records, and automate business processes. It's a powerful capability used across IT, HR, finance, customer service, and more.

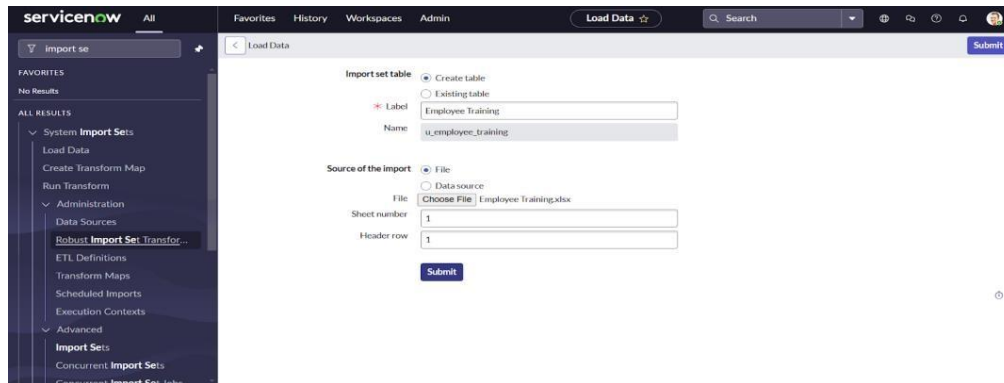
STEPS:

1. Open service now.
2. Click on All >> search for System Import Sets

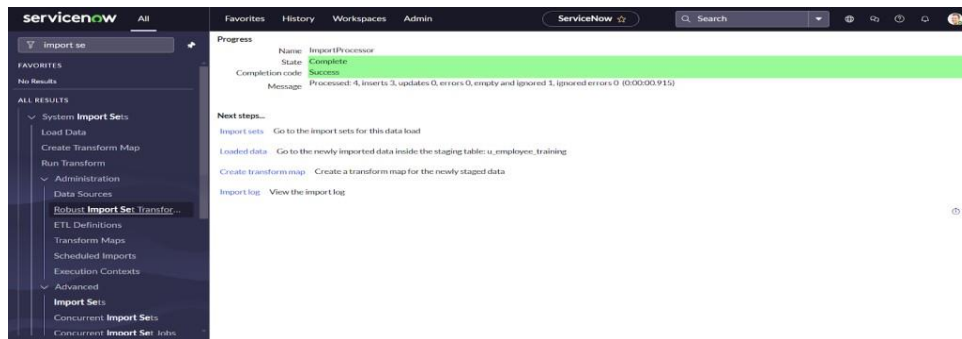
3. Select Load Data and Upload File that you have already created with four fields that are: (Training Name, Completion Date, Status and Employee)

4. Label: Employee Training

5. Name: u_employee_training



6. Click on submit

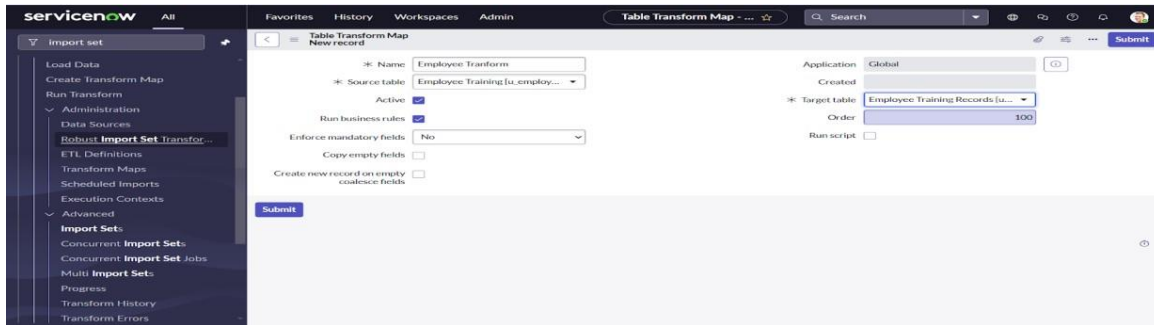


MILESTONE 2: UI ACTION

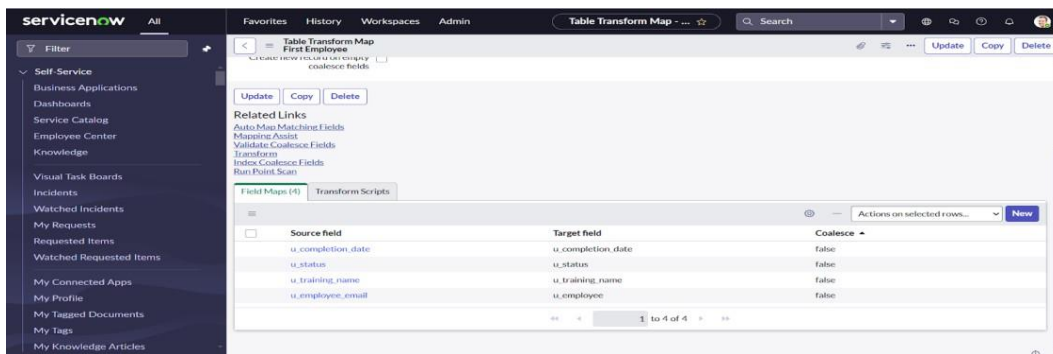
Activity 2: Map fields

STEPS:

1. Open Service Now
2. Click on All >> search for Transform Maps
3. Fill the following details to create a new Table.



4. Click on Submit.



5.

6. Add Field Maps as Shown

7. Click Transform to run the import.



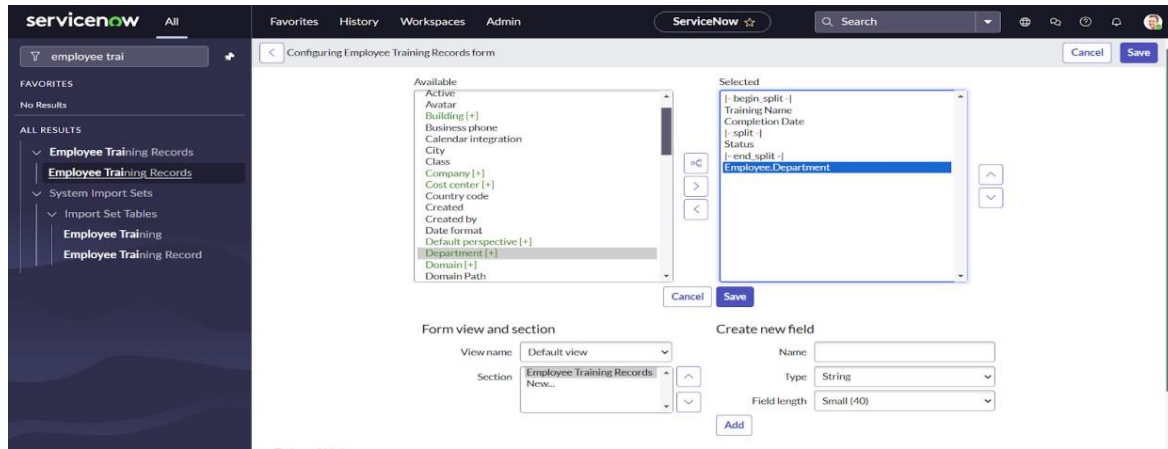
MILESTONE 3: USING DOT-WALKING TO ACCESS EMPLOYEE DEPARTMENT INFORMATION

Activity 1: DOT-WALKING

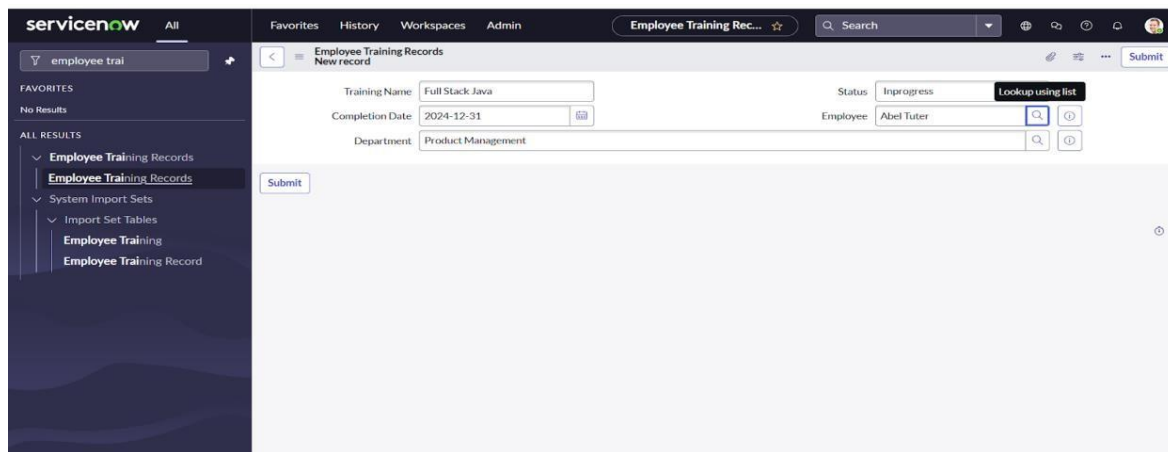
STEPS:

1. Open service now.
2. Click on All >> system definition>>List Layouts

3. Search for customer orders
4. Add the “Employee Department” field by using dot walking
5. Select the field and Save changes



6. Now you can see the field in the List view.



MILESTONE 4: ACCESS CONTROL LIST(ACL)

Activity 1: creating an ACL

PURPOSE:

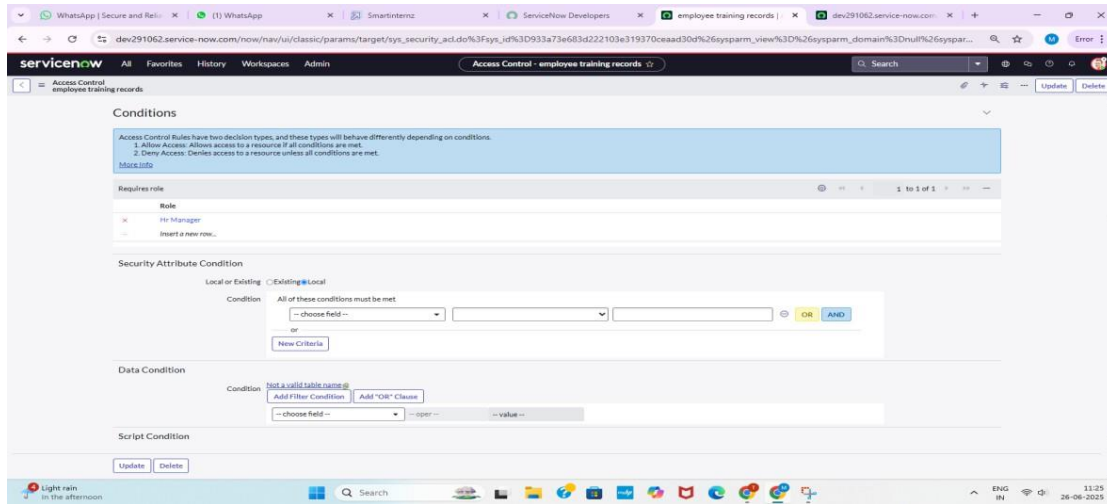
ACL stands for Access Control List in ServiceNow. Creating ACLs is essential when importing and securing data because they define who can access, modify, or view data in tables and fields.

USE:

ACLs can be applied to specific fields (like Social Security Numbers, salaries, or passwords), preventing unauthorized users from accessing sensitive data that was just imported.

STEPS:

1. Open Service now
2. Click on all>>ACL>>Create New ACL
3. Define ACL (Employees)
4. Operation: Read



MILESTONE 5: ROLES

Activity 1: create role

PURPOSE:

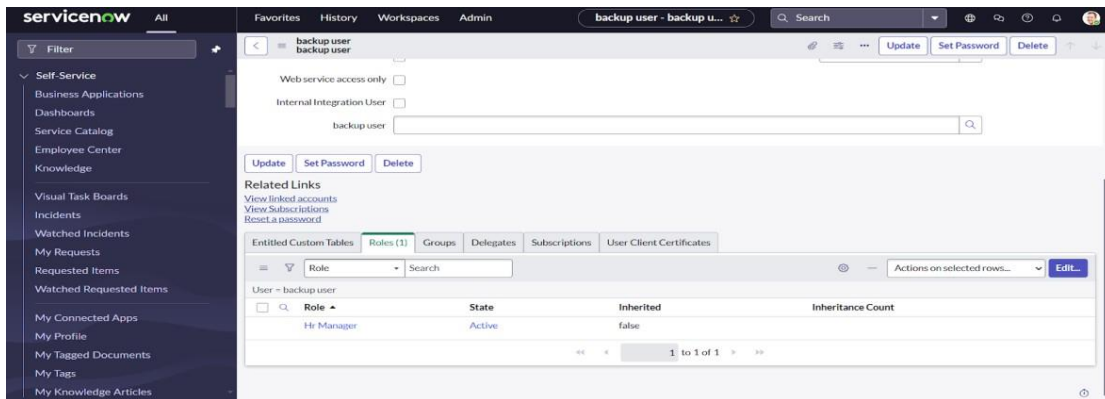
Creating a role in ServiceNow is essential for managing who can perform specific actions during data import and data security operations. Roles are used to grant permissions and enforce access control, making them a foundation of secure, scalable data management.

USE:

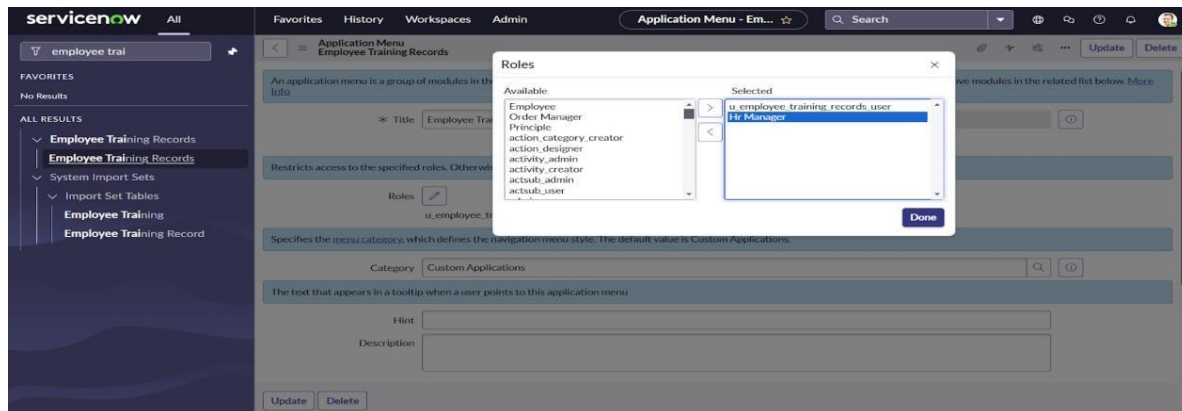
Creating a role in ServiceNow plays a central part in governing access and permissions- especially when handling imported data and enforcing data security. Roles define what users or systems are allowed to do, making them essential for secure and efficient data operations.

STEPS:

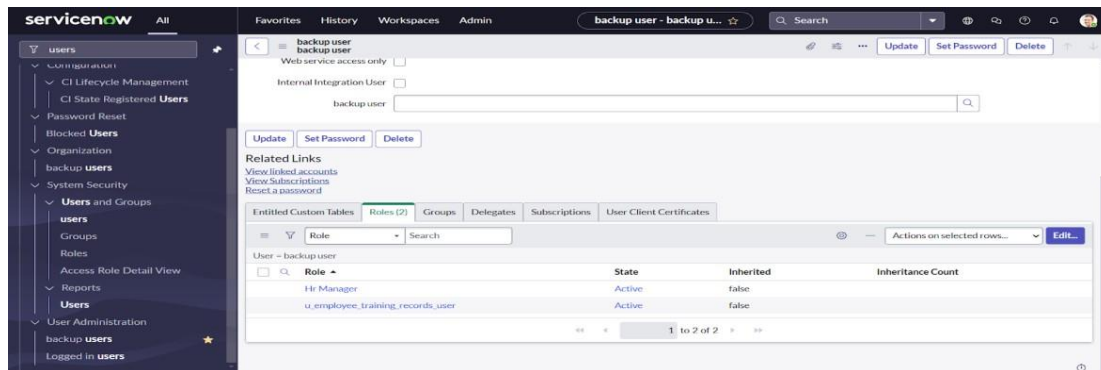
1. Open ServiceNow
2. Click on all>>Roles>> create a new role : Hr Manager
3. Add in the sys_user



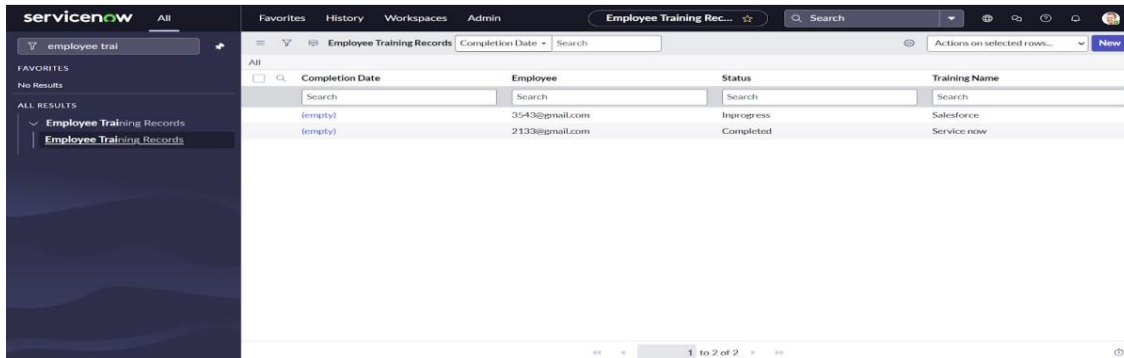
5. Add this role to the Tables Application and Module



6. Add the Hr Manager Role to the sys_user



7. Now, you can view each employee's department information directly in the Employee Training Records list view

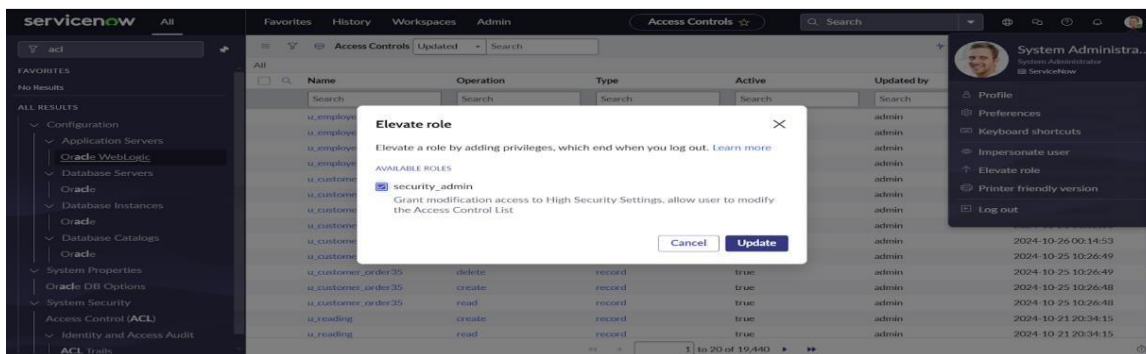


The screenshot shows the ServiceNow interface for the 'Employee Training Records' table. The left sidebar contains a navigation menu with 'Employee Training Records' selected. The main area displays a table with columns: Completion Date, Employee, Status, and Training Name. There are two rows of data: one with an empty completion date, email 3543@gmail.com, Inprogress status, and Salesforce training name; and another with an empty completion date, email 2133@gmail.com, Completed status, and Service now training name. Search filters are available for each column.

Completion Date	Employee	Status	Training Name
(empty)	3543@gmail.com	Inprogress	Salesforce
(empty)	2133@gmail.com	Completed	Service now

MILESTONE 5: ROLES

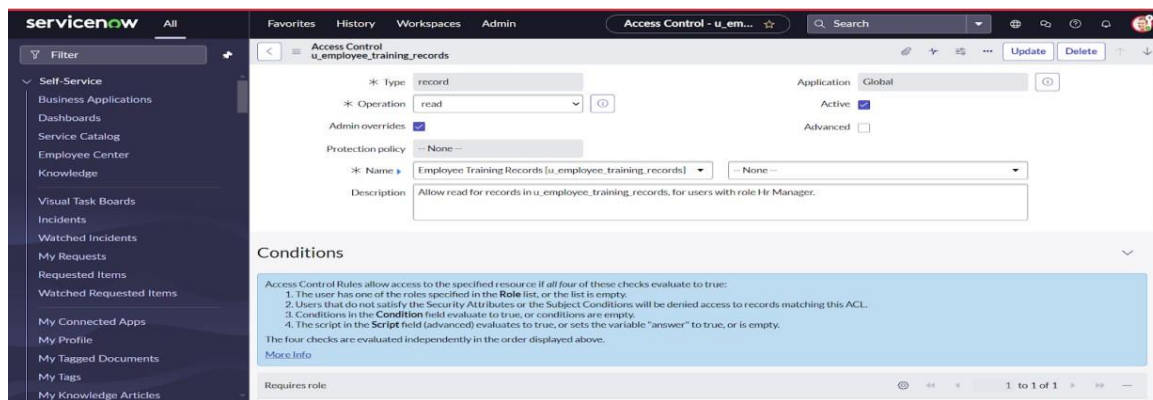
Activity 2: Update to elevate role STEPS:



The screenshot shows the ServiceNow 'Access Controls' table. A modal dialog titled 'Elevate role' is open, showing a list of available roles. The 'security_admin' role is selected, with a description: 'Grant modification access to High Security Settings, allow user to modify the Access Control List'. The dialog has 'Cancel' and 'Update' buttons. The background table shows columns: Name, Operation, Type, Active, and Updated by. The right sidebar shows the user profile for 'System Administrator'.

Name	Operation	Type	Active	Updated by
u_employee	delete	record	true	admin
u_employee	create	record	true	admin
u_employee	read	record	true	admin
u_customer	create	record	true	admin
u_customer	read	record	true	admin
u_customer_order35	create	record	true	admin
u_customer_order35	read	record	true	admin
u_reading	create	record	true	admin
u_reading	read	record	true	admin

1.Create New ACL and give Read Access to Employee Training Records Table



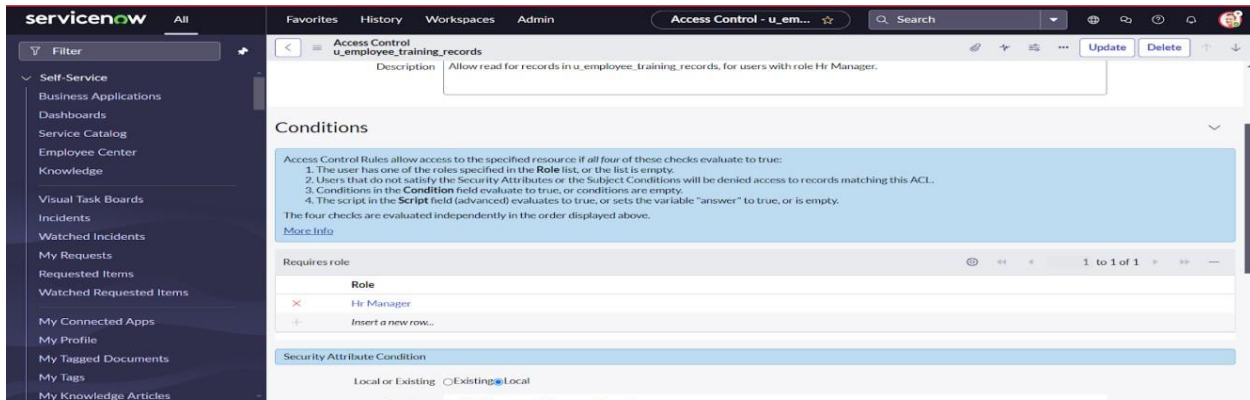
The screenshot shows the ServiceNow 'Access Control' form for the 'u_employee_training_records' table. The form includes fields for Type (record), Operation (read), Application (Global), Active (checked), and Protection policy (None). The Name field is set to 'Employee Training Records [u_employee_training_records]' and the Description is 'Allow read for records in u_employee_training_records for users with role Hr Manager.' The Conditions section is expanded, showing a list of conditions that must all evaluate to true for access to be granted.

Conditions:

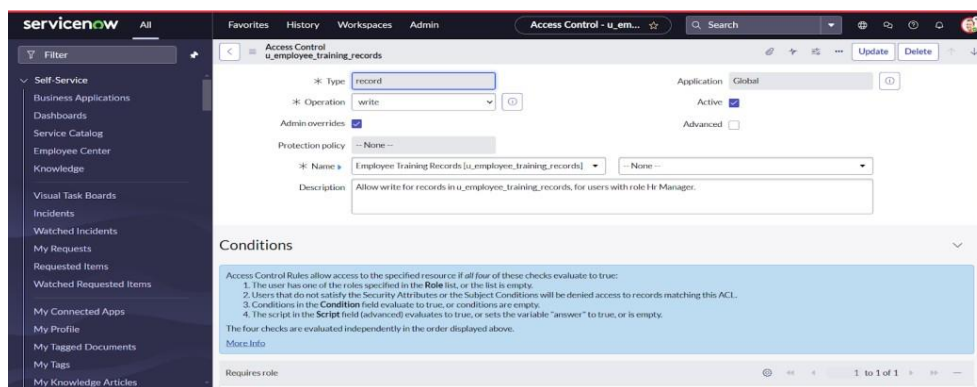
- Access Control Rules allow access to the specified resource if all four of these checks evaluate to true:
 - The user has one of the roles specified in the Role list, or the list is empty.
 - Users that do not satisfy the Security Attributes or the Subject Conditions will be denied access to records matching this ACL.
 - Conditions in the Condition field evaluate to true, or conditions are empty.
 - The script in the Script field (advanced) evaluates to true, or sets the variable "answer" to true, or is empty.

The four checks are evaluated independently in the order displayed above.

2.Give Hr Manager Role to the ACL



3. Create Another New ACL and Repeat the same Process to the Write Access



MILESTONE 6: RESULT

Activity 1: Testing Result

PURPOSE:

Provide the foundational data needed for automated workflows, notifications, approvals, and integrations within ServiceNow modules (e.g., ITSM, HRSD, CMDB). Prevent unauthorized modifications or deletions that could compromise the accuracy and reliability of the system.

USE:

Use Case: Automated incident, request, and change management workflows.

How the Result Helps: Clean, imported data (e.g., users, assets, locations) feeds processes with reliable inputs, improving accuracy and reducing manual entry.

STEPS:

1. Impersonate the sys_user and Search Employee Training Records
2. Now You can see and edit the Fields

Employee Training Records			
Completion Date	Employee	Status	Training Name
2024-10-27	Abel Tutor	In progress	full stack java
2024-12-31	Abel Tutor	In progress	Full Stack Java

1 to 2 of 2

servicenow Employee Training Rec...

Employee Training Records
New record

Training Name

Completion Date

Department

Status

Submit

3.Impersonate the other User you cannot See the Table

servicenow All Favorites History ServiceNow

EMPLOYEE

FAVORITES
No Results

ALL RESULTS
Self-Service
Employee Center

Creator Studio
Create request-based apps quickly
A guided and curated environment for creating forms and assigning automations to them. No-code required.
Open Creator Studio

GO FURTHER
Power your workflow applications