

PROJECT DESIGN

Proposed solution template

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

S No	Parameters	Description
1.	Problem statement	Linking each record to an employee and pulling some employee details (like department) into the record for easier reporting
2.	Ideal / solution description	Multi step process using important maps for data loading combined with robot security measures to protect sensitive information
3.	Novelty / uniqueness	Ensure should Data integrity and confidently during the import process and within the platform

4.	Social impact / customer satisfaction	Ensure that I is handled and securely leading to increase customer satisfaction and positive social impact
5.	Business model (revenue model)	Customer pay for the right to use service now and that includes the ability to import data from various source
6.	Scalability of the solution	Service now can handle growing that of volumes and maintain Data integrity and confidently

Milestone 1: tables

Purpose:

- Store imported data.
- Ensure data accuracy.
- Control data access.

Uses:

- Store and organize data
- Control secure access
- Link related information

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

ServiceNow Developers x New Record | Table | ServiceNow x +

dev202756.service-now.com/now/nav/ui/classic/params/target/sys_db_object.do%3Fsys_id%3D-1%26sys_is_list%3Dtrue%26sys_target%3Dsys_db_object%26sysparm_checked_items%3D%26sysp... Guest Finish update

servicenow All Favorites History Workspaces Admin Table - New Record Search

Table New record Submit Cancel

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 Employee Training Records

* Name u_employee_training_records

Extends table

Application Global

Create module ☒

Create mobile module ☒

Add module to menu -- Create new --

New menu name Employee Training Records

Remote Table ☐

Columns Controls Application Access

Table Columns for text Search

Dictionary Entries

6. Add the following fields:
7. Training name (type: string)
8. Completion date (type: date)

9. Status (type: choice)

10. Employee(type: reference),(reference field to system user table)

servicenow All Favorites History Workspaces Admin Table - Employee Training Records

Table Employee Training Records

* Label Employee Training Records

* Name u_employee_training_records

Application Global

Remote Table

Columns Controls Application Access

Table Columns for text Search

1 to 6 of 6

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

11. Click on submit

12. Click on choice and add to choices in the dictionary entry status

servicenow All Favorites History Workspaces Admin Dictionary Entry - status

Dictionary Entry status

Create Choice List Delete Choice List Update

Choice List Search Filter

Default Value

Display a help suggested value for Choice List in the Application when the user selects the Choice table and the Choice field to take choice values from, plus a description field.

Choice

Create Choice List Delete Choice List Update

Related Links

Show Table Full Path/URL Reference Name

Access Controls

Choices

Label	Value	Language	Timestamp	Created	Updated
Completed	1	en		2015-08-24 10:01:04	
In Progress	2	en		2015-08-24 10:01:07	

Milestone 2: import data

Purpose:

- Bring data into ServiceNow.
- Map data to correct tables.
- Enable secure access control.

Uses:

- Load external data
- Ensure data consistency
- Control secure access

Steps

1. Open service now
2. Click on all > >search for system imports Select
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

servicenow All Favorites History Workspaces Admin Load Data ☆

< Load Data Submit

Import set table ☒ Create table ☐ Existing table

* Label Employee Training

Name u_employee_training_

Source of the import ☒ File ☐ Data source

File Choose File | Employee Training.xlsx

Sheet number 1

Header row 1

Submit

6. Click on submit

servicenow All Favorites History Workspaces Admin ServiceNow ☆

Progress

Name ImportProcessor

State Complete

Completion code Success

Message Processed: 0, Inserts 0, updates 0, errors 0, empty and ignored 0, ignored errors 0 (0:00:01.384)

Next steps...

Import sets Go to the Import sets for this data load

Loaded data Go to the newly Imported data inside the staging table: u_employee_training_

Create transform map Create a transform map for the newly staged data

Import log View the Import log

Map fields

Purpose:

- Match source to target fields
- Enforce data security rules
- Ensure accurate data transfer

Uses:

- Match fields
- Place data correctly
- Prevent errors

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

The screenshot shows the 'Table Transform Map - New record' form in ServiceNow. The form is titled 'Table Transform Map' with a subtitle 'New record'. It contains several fields and checkboxes:

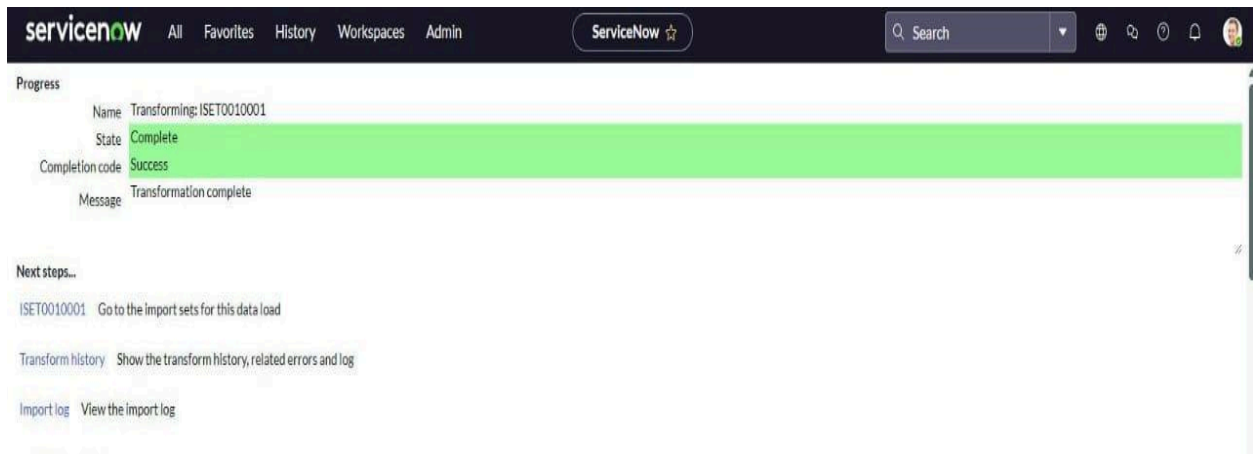
- Name:** Employee Transform
- Source table:** Employee Training [u_employee_training_]
- Active:** ☒
- Run business rules:** ☒
- Enforce mandatory fields:** No
- Copy empty fields:** ☐
- Create new record on empty coalesce fields:** ☐
- Application:** Global
- Created:** (empty field)
- Target table:** Employee Training Records [u_employee_trani]
- Order:** 100
- Run script:** ☐

A 'Submit' button is located in the top right corner.

The screenshot shows the 'Table Transform Map - Employee Transform' form in ServiceNow. The form is titled 'Table Transform Map - Employee Transform'. It contains several fields and checkboxes:

- Create new record on empty coalesce fields:** ☐
- Copy:**
- Update:**
- Delete:**
- Related Links:**
 - [Auto Map Matching Fields](#)
 - [Mapline Assist](#)
 - [Validate Coalesce Fields](#)
 - [Transform](#)
 - [Index Coalesce Fields](#)
 - [Run Point Scan](#)
- Field Maps (4):**
- Actions on selected rows...**
- Source field:** ☐ ☐ ☐ ☐
- Target field:** ☐ ☐ ☐ ☐
- Coalesce:** ☐ ☐ ☐ ☐

5. Add field maps as shown
6. Click transform to run the import



Milestone 3: using dot walking to access employee department information

Purpose:

- Retrieve related record data
- Display linked information easily
- Build reports and conditions using referenced fields

Uses:

- Retrieve related department data
- Apply security rules via ACLs
- Keep department info consistent

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

The screenshot shows the ServiceNow configuration interface for the 'Employee Training Records' form. The 'Available' list on the left contains various system fields, with 'Department [+]' highlighted. The 'Selected' list on the right shows the 'Employee.Department' field being added. Below these lists are sections for 'Form view and section' and 'Create new field'.

Available

- Country code
- Created
- Created by
- Date format
- Default perspective [+]
- Department [+]
- Domain [+]
- Domain Path
- Email
- Employee number
- Enable Multifactor Authentication
- Failed login attempts
- Fax
- Federated ID
- First name
- Gender

Selected

- [{- begin_split -}]
- Training Name
- Employee
- [{- split -}]
- Completion Date
- Status
- [{- end_split -}]
- Employee.Department

Form view and section

View name: Default view

Section: Employee Training Records

Create new field

Name:

Type: String

Field length: Small (40)

Buttons: Cancel, Save, Add

Milestone 4: Access control list (ACL)

Purpose:

- Restricts data access
- Secures sensitive info
- Controls user permissions

Uses:

- Restrict data access
- Protect sensitive fields
- Control user permissions

Steps:

1. Open service now
2. Click on all>>ACL>>create new ACL
3. Define ACL (Employees)
4. Operation: Read

Milestone 5: Roles

Purpose:

- Assign permissions to users
- Control access to imported data
- Enforce data security policies

Uses:

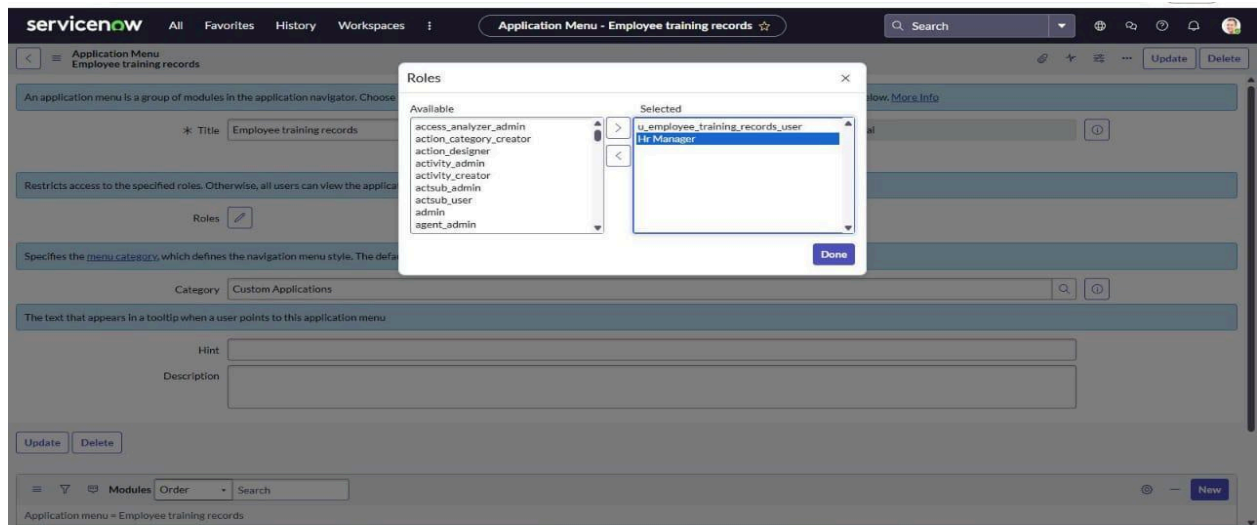
- Grant specific access rights to users
- Control who can import or modify data
- Secure sensitive data during import processes

Steps:

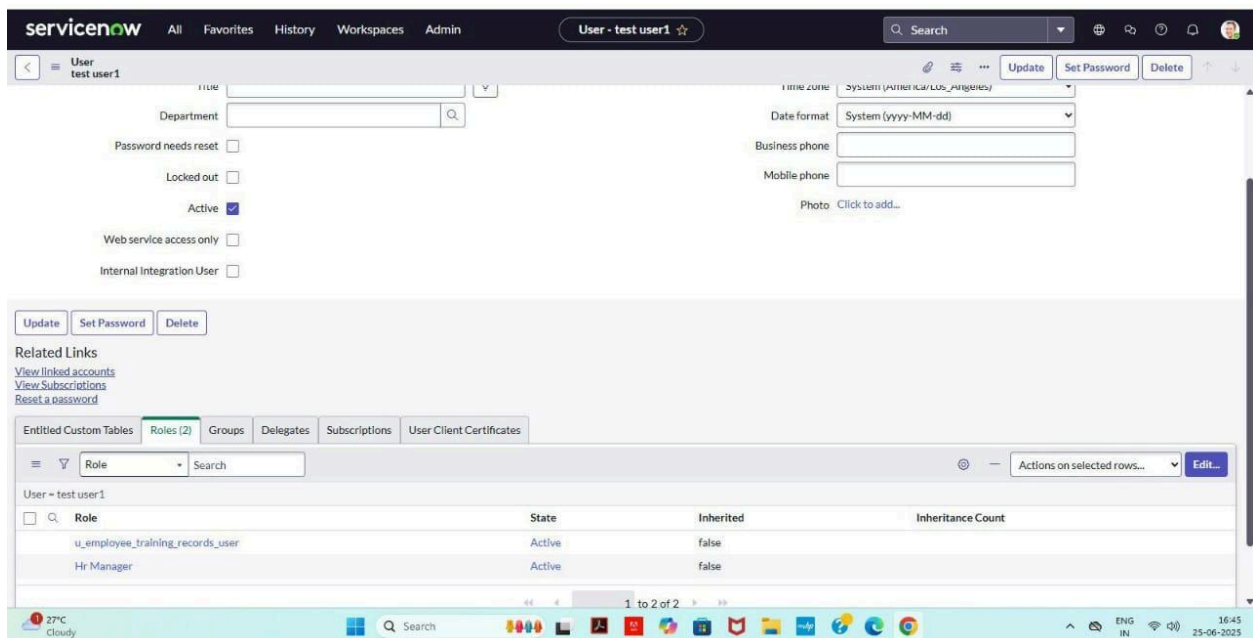
1. Open service now
2. Click on all>>roles>>create a new role:Hr manager
3. Add in the sys_user

The screenshot shows the ServiceNow user profile page for 'User - test user1'. The page is divided into two main sections: user details on the left and integration settings on the right. The user details section includes fields for Last name (user1), Title, and Department. There are checkboxes for 'Password needs reset', 'Locked out', 'Active' (checked), 'Web service access only', and 'Internal Integration User'. The integration settings section includes 'Calendar integration' (Outlook), 'Time zone' (System (America/Los_Angeles)), 'Date format' (System (yyyy-MM-dd)), 'Business phone', and 'Mobile phone'. A 'Photo' field with a 'Click to add...' link is also present. At the top right, there are buttons for 'Update', 'Set Password', and 'Delete'.

4. Add this roll to the tables application and module

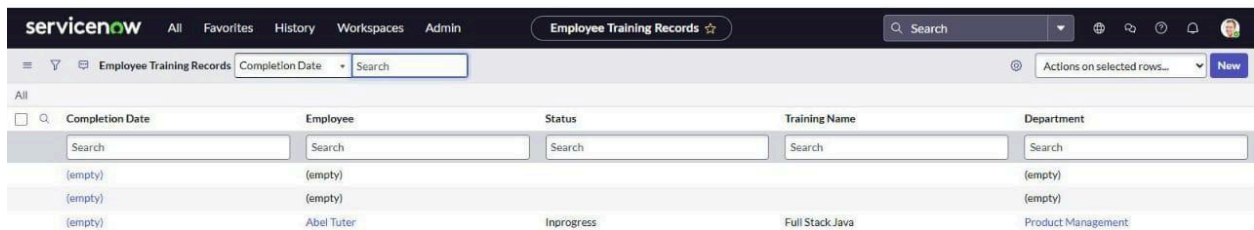


5. At the HR manager role to the sys_user



6. Now you can view each employees department information directly in the employee training records list view

Update to elevate role



Completion Date	Employee	Status	Training Name	Department
(empty)	(empty)	(empty)	(empty)	(empty)
(empty)	(empty)	(empty)	(empty)	(empty)
(empty)	Abel Tuter	Inprogress	Full Stack Java	Product Management

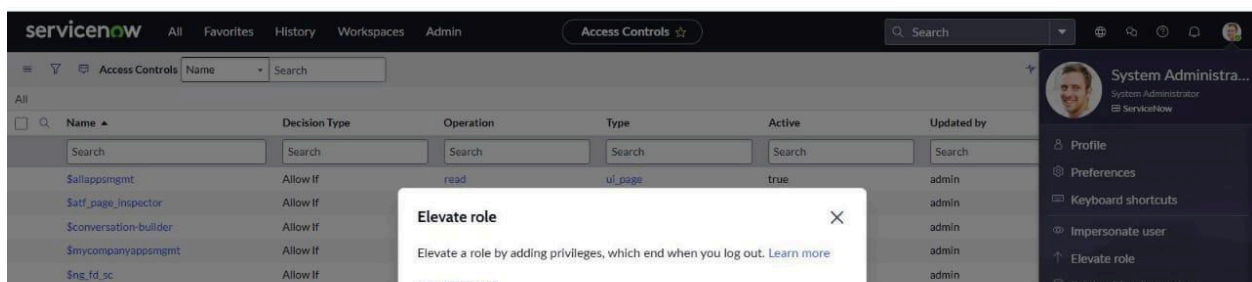
Purpose:

- Grant higher permissions for data import.
- Access restricted data and tables.
- Configure security controls during import.

Uses:

- Modify roles for data import.
- Approve imported data securely.
- Strengthen data access controls.

Steps:



1. Create new ACL and give read access to employee training records table

The screenshot shows the ServiceNow interface for creating an Access Control rule. The breadcrumb trail is "Access Control - u_employee_training_records". The form fields are as follows:

- * Type: record
- * Operation: read
- Decision Type: Allow If
- Admin overrides: ☒
- Protection policy: -- None --
- * Name: Employee Training Records [u_employee_training_records]
- Description: Allow read four records in u_employee_training_records for users with role Hr Manager.
- Applies To: No. of records matching the condition: 3
- Buttons: Add Filter Condition, Add OR Clause
- Fields: -- choose field --, -- oper --, -- value --
- Application: Global
- Active: ☒
- Advanced: ☐
- Buttons: Update, Delete

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. Additional ACLs may grant access to records where this ACL has not granted access.
2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.

[More Info](#)

2. Give HR manager role to the ACL

The screenshot shows the "Conditions" section of the ServiceNow Access Control form. The breadcrumb trail is "Access Control - u_employee_training_records".

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. Additional ACLs may grant access to records where this ACL has not granted access.
2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access.

[More Info](#)

Requires role

1 to 1 of 1

Role
Hr Manager
Insert a new row...

Security Attribute Condition

Local or Existing: ☐ Existing ☒ Local

Condition: All of these conditions must be met

-- choose field --

OR AND

New Criteria

3. Create another new ACL and repeat the same process to the write access

Milestone 6: result

The screenshot shows the ServiceNow Access Control configuration page for the resource 'u_employee_training_records'. The interface includes a top navigation bar with 'servicenow', 'All', 'Favorites', 'History', and 'Workspaces'. The main configuration area has the following fields and options:

- Type:** record
- Operation:** write
- Decision Type:** Allow if
- Admin overrides:** ☒
- Protection policy:** -- None --
- Name:** Employee Training Records [u_employee_training_records]
- Description:** Allow write for records in u_employee_training_records,for users with role Hr Manager.
- Applies To:** No. of records matching the condition: 3. Includes buttons for 'Add Filter Condition' and 'Add OR Clause'.
- Application:** Global
- Active:** ☒
- Advanced:** ☐

At the bottom, there is a 'Conditions' section with a blue informational box stating: '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. Additional ACLs may grant access to records where this ACL has not granted access. 2. Deny Access: Denies access to a resource unless all conditions are met. Additional ACLs may not grant access to records where this ACL has denied access. [More Info](#)'

Purpose:

- Confirms data imported correctly
- Identifies errors or issues
- Ensures security and compliance

Uses:

- Confirms data accuracy
- Tracks import status
- Validates security controls

Steps :

1. Impersonate the sys_user and search employee training records
2. Now you can see and edit the fields

servicenow All Favorites History Process Mining Workspace Employee Training Records ☆

Employee Training Records Completion Date Search Actions on selected rows... New

All

Completion Date	Employee	Status	Training Name	Department
(empty)	(empty)			(empty)
(empty)	(empty)			(empty)
(empty)	Abel Tuter	Inprogress	Full Stack Java	Product Management

servicenow All Favorites History Employee Training Records - Create Created ☆

Employee Training Records New record Submit

Training Name Completion Date

Employee Status -- None --

Department

Submit

3. Impersonate the other user you cannot see the table

