

Importing and Securing Data in ServiceNow

1. INTRODUCTION

1.1 Project Overview

The project “Importing & Securing Data in ServiceNow” focuses on managing enterprise data efficiently by importing external data into the ServiceNow platform and securely linking each record to an employee. In many organizations, data is received from multiple external sources such as Excel sheets or third-party systems. Without proper ownership and security, such data becomes difficult to manage and analyze.

This project demonstrates how ServiceNow can be used to associate each imported record with an employee and automatically fetch employee-related details such as department. By doing so, the system ensures better data organization, improved reporting capabilities, and enhanced security within the organization

1.2 Purpose

The main purpose of this project is to ensure secure data handling and improved reporting by linking imported records to employee information. It aims to reduce manual effort, avoid data duplication, and maintain data accuracy. The project also focuses on enforcing role-based access control so that users can access only the data relevant to them.

2. IDEATION PHASE

2.1 Problem Statement

2.2 Empathy Map Canvas

2.3 Brainstorming

3. REQUIREMENT ANALYSIS

3.1 Customer Journey map

3.2 Solution Requirement

3.3 Data Flow Diagram

3.4 Technology Stack

4. PROJECT DESIGN

4.1 Problem Solution Fit

4.2 Proposed Solution

4.3 Solution Architecture

5. PROJECT PLANNING & SCHEDULING

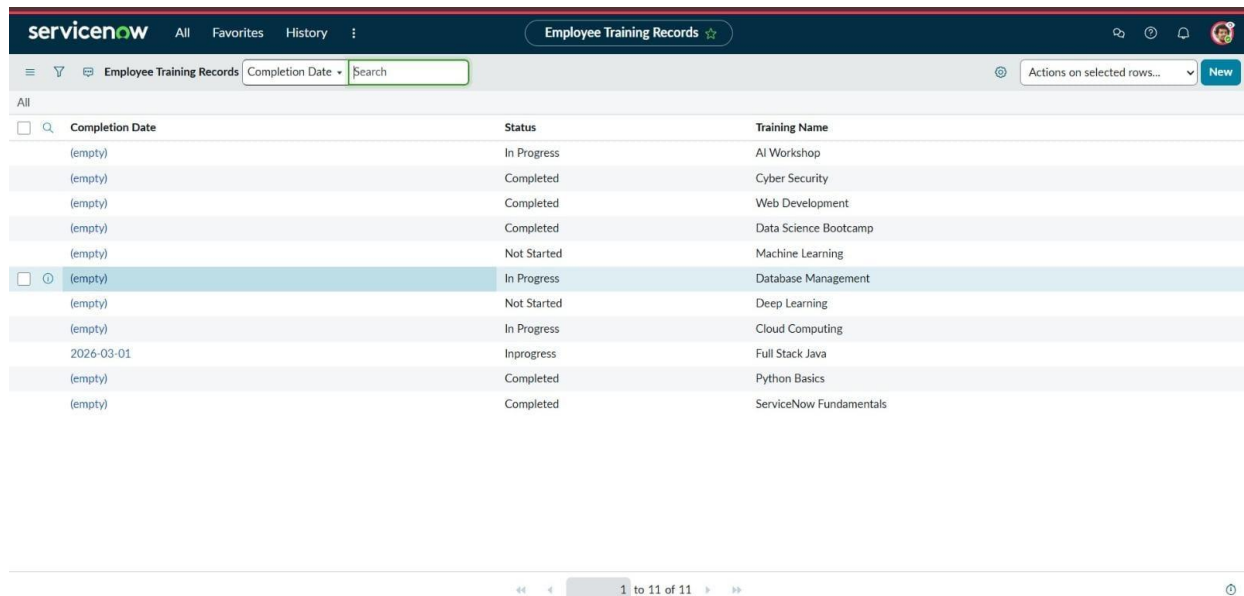
5.1 Project Planning

6. FUNCTIONAL AND PERFORMANCE TESTING

6.1 Performance Testing

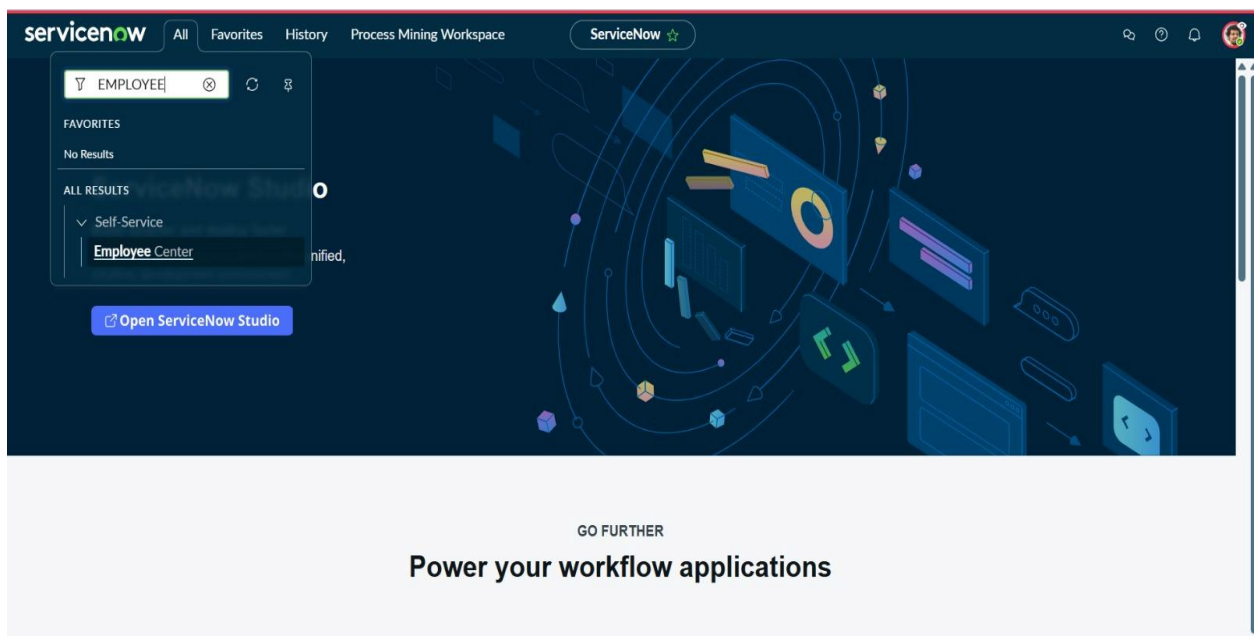
7. RESULTS

7.1 Output Screenshots



The screenshot shows the ServiceNow interface for the 'Employee Training Records' table. The table has three columns: 'Completion Date', 'Status', and 'Training Name'. The first row is highlighted in blue. The table contains 11 rows of data, with the first row being the only one with a non-empty 'Completion Date'.

Completion Date	Status	Training Name
(empty)	In Progress	AI Workshop
(empty)	Completed	Cyber Security
(empty)	Completed	Web Development
(empty)	Completed	Data Science Bootcamp
(empty)	Not Started	Machine Learning
(empty)	In Progress	Database Management
(empty)	Not Started	Deep Learning
(empty)	In Progress	Cloud Computing
2026-03-01	Inprogress	Full Stack Java
(empty)	Completed	Python Basics
(empty)	Completed	ServiceNow Fundamentals



8. ADVANTAGES & DISADVANTAGES

8.1 Advantages

- **Improved Data Security**

The project ensures that sensitive organizational data is protected using role-based access control and Access Control Lists (ACLs). Each record is linked to a specific employee, allowing users to view only the data that belongs to them. This minimizes unauthorized access and improves overall data security.

- **Better Data Ownership and Accountability**

By associating every imported record with an employee, clear data ownership is established. This improves accountability and helps administrators easily identify who is responsible for each record, reducing ambiguity in data management.

- **Automated Data Population**

Employee-related details such as department are automatically populated from the user record. This reduces manual effort, prevents data entry errors, and ensures consistency across the system.

- **Enhanced Reporting and Analytics**

Since employee and department information is readily available in each record, generating department-wise or employee-wise reports becomes simple and accurate. This supports better decision-making and organizational analysis.

- **Scalable Enterprise Solution**

The solution is designed using standard ServiceNow features, making it scalable and adaptable to large organizations. It can handle increasing data volumes without major architectural changes.

8.2 Disadvantages

- **Initial Configuration Complexity**

Setting up Import Sets, Transform Maps, Business Rules, and ACLs requires a good understanding of ServiceNow. Beginners may find the initial configuration process complex and time-consuming.

- **Dependency on Accurate Input Data**

The system heavily depends on the accuracy of the imported data. Incorrect employee identifiers such as email or employee ID can lead to failed mappings or incorrect data associations.

- **Performance Impact for Large Imports**

When importing very large datasets, system performance may temporarily degrade. Proper scheduling and optimization are required to avoid performance issues.

- **Maintenance Overhead**

Any changes in employee structure, roles, or department hierarchy may require updates to business rules and access controls, leading to additional maintenance effort.

9.CONCLUSION

The Importing & Securing Data in ServiceNow project successfully addresses real-world challenges related to data ownership, security, and reporting. By linking imported records to employees and automatically populating department details, the system ensures accurate and meaningful data storage.

This project highlights the effectiveness of ServiceNow in handling enterprise data securely and efficiently. It demonstrates how automation, security controls, and reporting features can be combined to build a reliable and scalable solution for organizational data management.

10.FUTURE SCOPE

The project can be further enhanced by integrating it with external HR management systems to enable real-time employee data synchronization. Automated scheduled imports can also be implemented to reduce manual intervention and improve efficiency.

Additional enhancements may include advanced dashboards, analytics-based insights, email notifications for record updates, and integration with other enterprise tools. These improvements would make the system more intelligent, automated, and suitable for large-scale enterprise applications.

11. APPENDIX

The screenshot displays the ServiceNow configuration interface for the 'Employee Training Records' table. The 'Columns' tab is active, showing a list of dictionary entries. The entries are as follows:

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

ColumnsControlsApplication Access

≡▽Table Columnsfor textSearch

1 to 10 of 10New

Dictionary Entries

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

DeleteUpdateDelete All Records

Import set table

☒ Create table

☐ Existing table

✖ Label

Enter a label for new table

Name

Source of the import

☒ File

☐ Data source

File

Choose FileNo file chosen

Sheet number

1

Header row

1

Submit






servicenow

All

FavoritesHistoryWorkspacesAdmin

ServiceNow ☆

Search



import se

Favorites

No Results

ALL RESULTS

System Import Sets

Load Data

Create Transform Map

Run Transform

Administration

Data Sources

Robust Import Set Transform...

ETL Definitions

Transform Maps

Scheduled Imports

Execution Contexts

Advanced

Import Sets

Concurrent Import Sets

Concurrent Import Set Jobs

Progress

Name

ImportProcessor

State

Complete

Completion code

Success

Message

Processed: 4, inserts 3, updates 0, errors 0, empty and ignored 1, ignored errors 0 (0:00:00.915)

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