

# Automating Data Import and Relationship Mapping Using Import Sets & Dot Walking

## Problem Statement:

Your organization wants to regularly import a list of new employees with their details, such as Name, Email, Department, and Manager, from an external system. Once imported, when an Incident is assigned to an employee, the Incident form should automatically show the manager's email of the employee's department.

## Objective:

Import employee records from an external CSV file into ServiceNow.

Automatically map relationships between employees, departments, and managers using dot-walking.

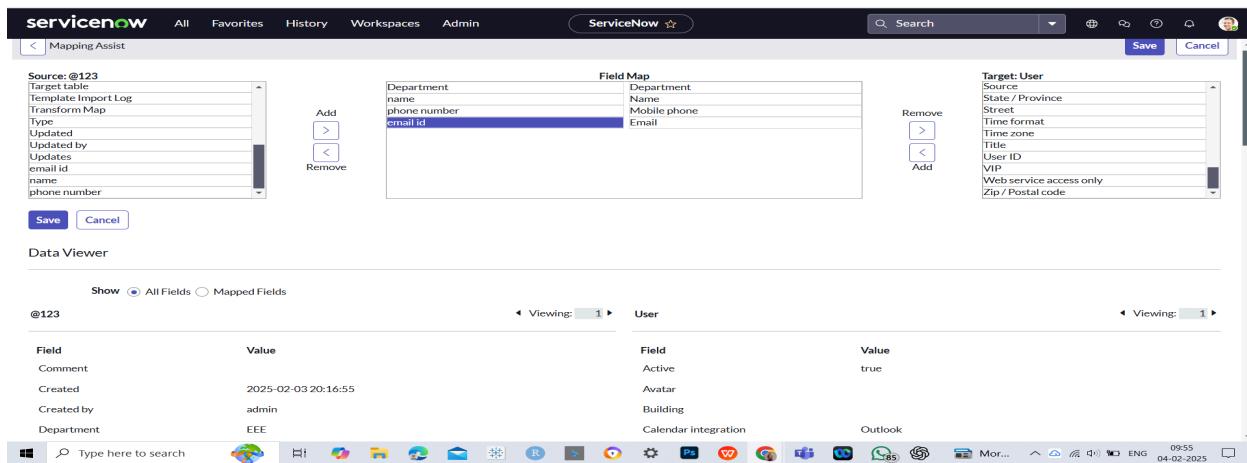
**Skills:** Import sets, Dot Walking

## TASK INITIATION

### Milestone 1 : Import data from data source

#### Activity 1: Create records in the Sheet

1. Open google sheet
2. Name the fields as name,email,department, manager and phone number
3. Enter some records



The screenshot shows the ServiceNow Import Assist interface. It consists of three main panels:

- Source:** Shows a list of fields from a Google Sheet named '@123'. Fields listed include: Source, Target table, Template Import Log, Transform Map, Type, Updated, Updated by, Updates, email id, name, and phone number. Buttons for Add, Remove, Save, and Cancel are at the bottom.
- Field Map:** A grid mapping source fields to target fields. It includes columns for Source and Target field names. Mapped fields include: Department (Source) to Department (Target), name to Name, phone number to Mobile phone, and email id to Email. Buttons for Add, Remove, and Save are on the right.
- Target:** Shows a list of fields for the User target table. Fields listed include: State / Province, Street, Time format, Time zone, Title, User ID, VIP, Web service access only, and Zip / Postal code. Buttons for Add, Remove, and Save are on the right.

At the bottom, there is a Data Viewer pane showing a single record (@123) with fields like Comment, Created, Created by, Department, and Value. Another Data Viewer pane on the right shows a single record for the User target table with fields like Active, Avatar, Building, and Outlook.

4. Save the sheet as: employee data
5. Download the file as .xlsx , .csv (or) .xml file

	A	B	C	D	E	F	G
1	name	email id	phone number	Department	manager		
2	Bojja	Bojja@gmail.com		9123455 CSE	shiva		
3	harika	harika@gmail.com	1.13656E+11	ECE	shiva		
4	mouni	mouni@gmail.com	9877756445	Mech	shiva		
5	raji	raji@gmail.com	7354556678	EEE	shiva		
6							
7							
8							
9							

## Activity 2: Import data

1. Open service now.
2. Click on All >> search for import sets
3. Select load data under system import sets
4. select create table
5. Give the the import set table name as: import employee
6. Choose the file which we created in the XL sheet.

Servicenow All Favorites History Workspaces Admin Load Data ★ Search  

**Import set table**  Create table  Existing table  
**\* Label** @123  
**Name** u\_123

**Source of the import**  File  Data source  
**File** Choose File emp.xlsx  
**Sheet number** 1  
**Header row** 1

**Submit**

Servicenow All Favorites History Workspaces Admin ServiceNow ★ Search  

**Source:** @123 **Target table:** Department **Field Map:** Department  
 name → Name  
 phone number → Mobile phone  
 email id → Email

**Add** **Remove** **Save** **Cancel**

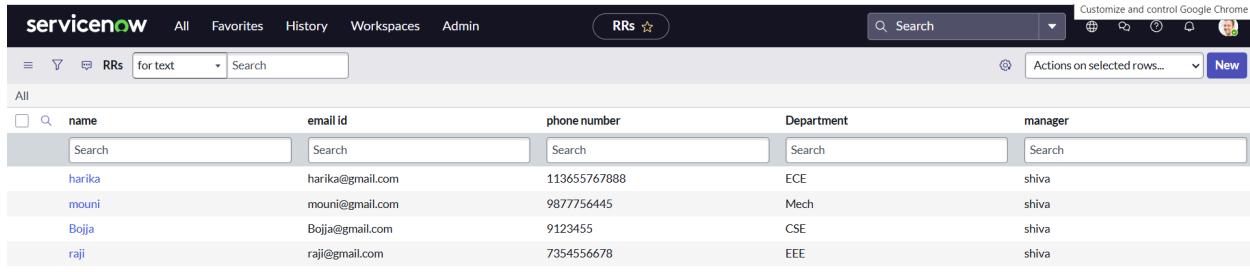
**Data Viewer**

Show  All Fields  Mapped Fields

Field	Value	Field	Value
Comment		Active	true
Created	2025-02-03 20:16:55	Avatar	
Created by	admin	Building	
Department	EEE	Calendar integration	
		Outlook	

Type here to search                  

- 7.The data is imported,click on personalized list
- 8.Add fields to the form.



The screenshot shows a ServiceNow list view for users. The columns are: name, email id, phone number, Department, and manager. The data includes:

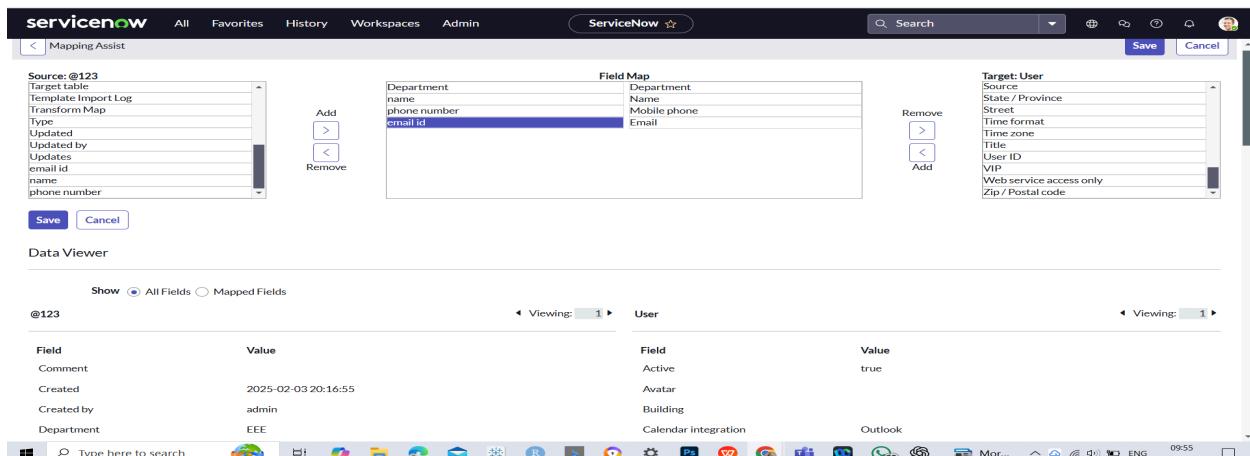
name	email id	phone number	Department	manager
harika	harika@gmail.com	113655767888	ECE	shiva
mouni	mouni@gmail.com	9877756445	Mech	shiva
Bojja	Bojja@gmail.com	9123455	CSE	shiva
raji	raji@gmail.com	7354556678	EEE	shiva

**Related Links**

- Import Sets
- Transform Maps
- Transform History
- Edit Web Service

### Activity 3: Create transform map

1. Open service now.
2. Click on All >> search for import set
3. Select create transform map under import sets
4. Click on new
5. Fill the following details to create a new transform map
6. Give name as: Test
7. Select source table: @123
8. Select target table: user[sys\_user]
9. Save the form.



The screenshot shows the ServiceNow Mapping Assist interface. It displays a 'Field Map' section with the following mappings:

Source Field	Target Field
name	Name
phone number	Mobile phone
email id	Email

**Data Viewer**

Show  All Fields  Mapped Fields

Field	Value	Field	Value
Comment		Active	true
Created	2025-02-03 20:16:55	Avatar	
Created by	admin	Building	
Department	EEE	Calendar integration	
		Outlook	

servicenow All Favorites History Workspaces : Table Transform Map - New Record 

Table Transform Map  
New record

Name: Test

Source table: @123[u\_123]

Active:

Run business rules:

Enforce mandatory fields: No

Copy empty fields:

Create new record on empty coalesce fields:

Application: Global

Created:

Target table: User [sys\_user]

Order: 100

Run script:

Submit

#### **Activity 4: Match the fields using mapping assist**

1. Scrolled down the created transform map form
  2. Click on auto matching fields
  3. Then in the mapping fields some fields are matched

The screenshot shows the ServiceNow Data Mapping interface. On the left, the 'Source' section lists fields from a table named '@123'. In the center, the 'Field Map' section maps these source fields to target fields in a 'User' record. On the right, the 'Target User' section lists various user-related properties. Buttons for 'Save' and 'Cancel' are at the bottom.

Source: @123

Target table:

Template Import Log

Transform Map

Type

Updated

Updated by

Updates

email id

name

phone number

Add >

< Remove

Field Map

Department

name

phone number

email id

Department

Name

Mobile phone

Email

Remove >

< Add

Target: User

Source

State / Province

Street

Time format

Time zone

Title

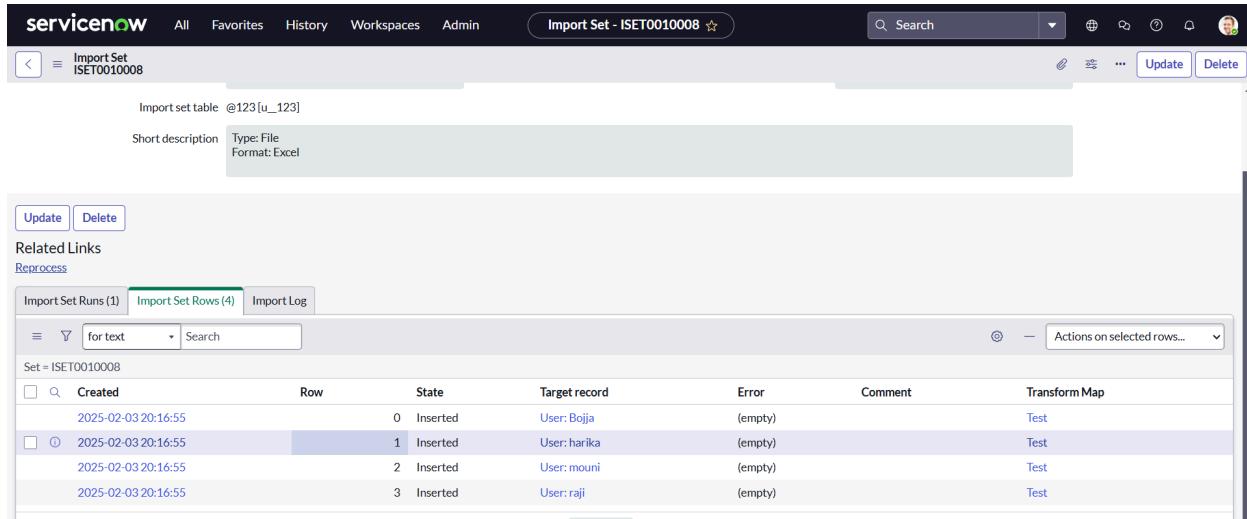
User ID

VIP

Web service access only

Zip / Postal code

Save Cancel



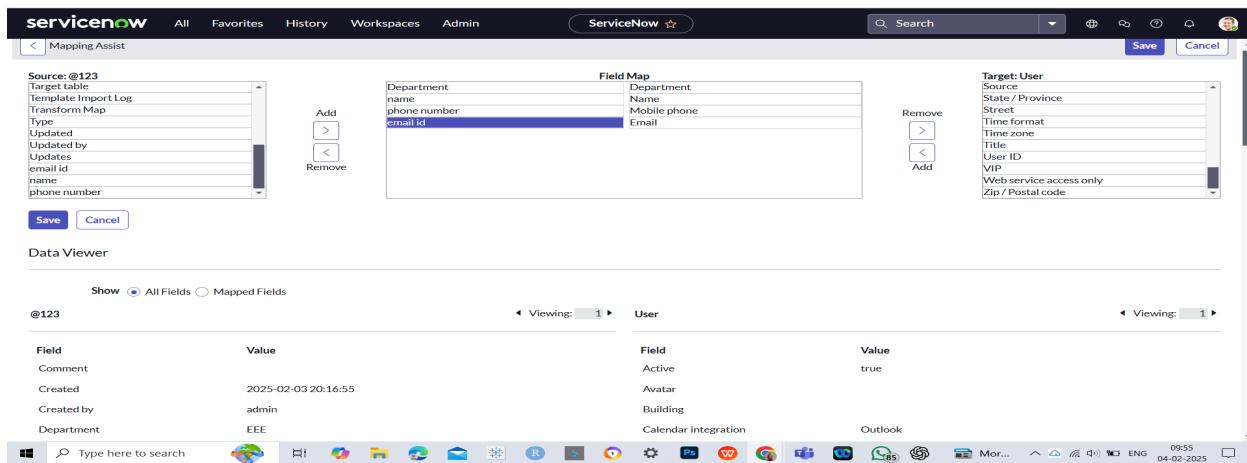
The screenshot shows the ServiceNow Import Set interface for 'Import Set - ISET0010008'. The table displays four rows of data with the following columns:

Created	Row	State	Target record	Error	Comment	Transform Map
2025-02-03 20:16:55	0	Inserted	User: Bojja	(empty)	Test	
2025-02-03 20:16:55	1	Inserted	User: harika	(empty)	Test	
2025-02-03 20:16:55	2	Inserted	User: mouni	(empty)	Test	
2025-02-03 20:16:55	3	Inserted	User: raji	(empty)	Test	

4. Using mapping assist map the manager field.
5. Select the fields which you are mapping in the staging table and target table
6. Select manager in source table and add
7. Select manager field in target table
8. Click on the save button.

## Activity 5: Transform the Data

1. Click on transform in the related links.
2. Click on transform.
3. Data's transform state is completed.



The screenshot shows the ServiceNow Mapping Assist interface. It displays three main sections: Source, Field Map, and Target.

- Source:** Shows fields: name, phone number, email id, name, phone number.
- Field Map:** Shows mappings between Source fields and Target fields. The mapping for 'email id' is selected.
- Target:** Shows fields: User ID, VIP, Web service access only, Zip / Postal code.

At the bottom, there is a Data Viewer section showing the mapping results for the row '@123'.

Field	Value	Field	Value
Comment		Active	true
Created	2025-02-03 20:16:55	Avatar	
Created by	admin	Building	
Department	EEE	Calendar integration	

The screenshot shows the ServiceNow Transform Map interface. At the top, there's a navigation bar with links for All, Favorites, History, Workspaces, and Admin. To the right of the bar is a search field labeled "ServiceNow" with a star icon. Below the navigation bar, a header bar has a back arrow and the text "Specify Import set and Transform map". The main area is divided into two sections: "Available maps" on the left and "Selected maps, run in order" on the right. In the "Available maps" section, there's a dropdown menu titled "Import set" containing the option "ISET0010008 - u\_123 (2025-02-04 04:16:55)". Below it is a list box containing "Test - sys\_user". To the right of this list box are "Add" and "Remove" buttons with arrows. A "Transform" button is located at the bottom left. The "Selected maps, run in order" section currently contains an empty list box labeled "Test - sys\_user".

**Progress**

Name	Transforming: ISET0010008
State	Complete
Completion code	Success
Message	Transformation complete

**Next steps...**

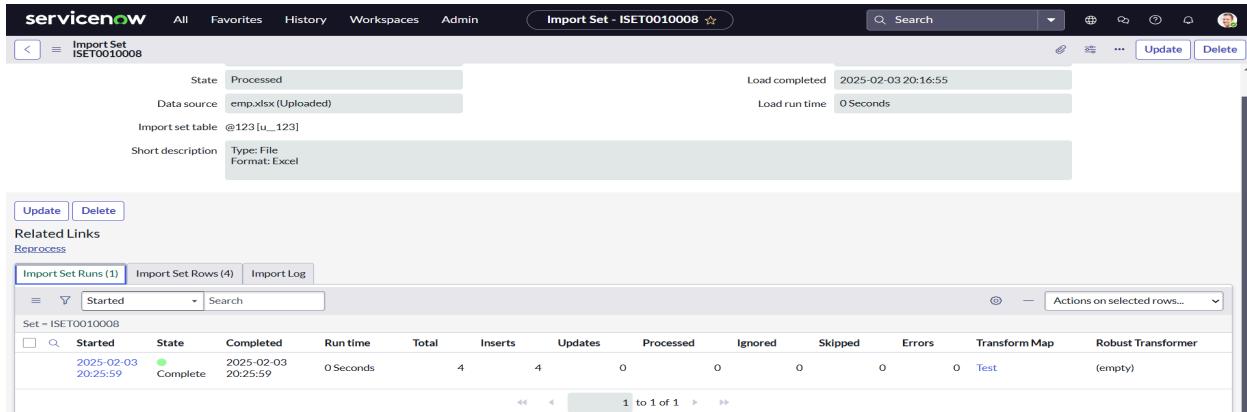
[ISET0010008](#) Go to the import sets for this data load

[Transform history](#) Show the transform history, related errors and log

[Import log](#) View the import log

4. Click on ISET0010008 under next steps
5. Four rows are inserted.

The screenshot shows the ServiceNow Data Mapping feature. On the left, the 'Source' section lists fields: @123, Target table, Template Import Log, Transform Map, Type, Updated, Updated by, Updates, email id, name, and phone number. The 'Target Map' section on the right shows a mapping between 'Department' and 'User'. Under 'Department', 'name' maps to 'Name', 'phone number' maps to 'Mobile phone', and 'email id' is selected and mapped to 'Email'. Below these are 'Remove' and 'Add' buttons. To the right of the target map is a 'Field Map' section with 'Remove' and 'Add' buttons. Further right is a 'Target: User' section listing fields: Source, State / Province, Street, Time format, Time zone, Title, User ID, VIP, Web service access only, and Zip / Postal code. At the top right are 'Save' and 'Cancel' buttons.

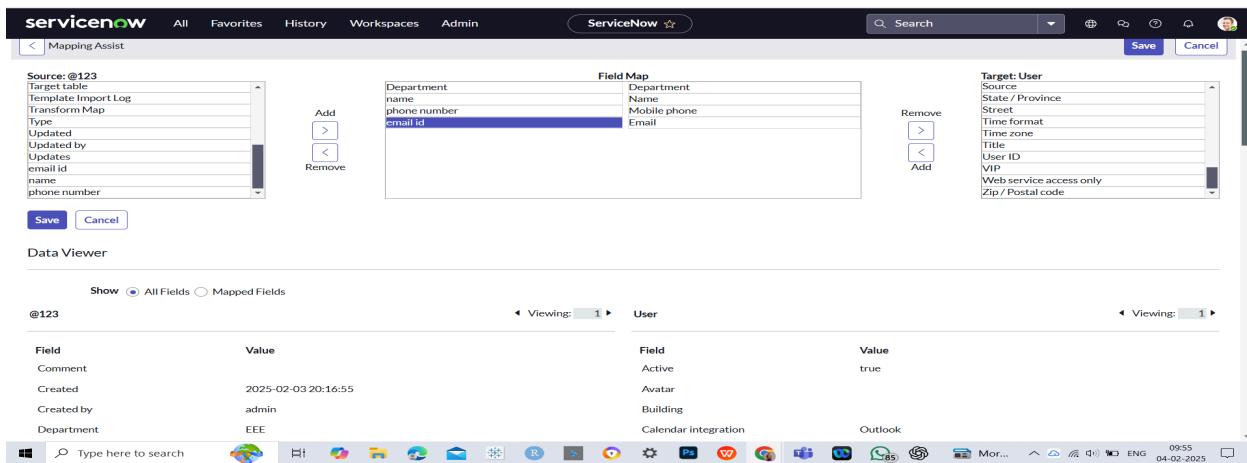


The screenshot shows the ServiceNow Import Set interface for 'Import Set - ISETO010008'. The top section displays basic information: State (Processed), Data source (emp.xlsx (Uploaded)), Import set table (@123 [u\_123]), Short description (Type: File Format: Excel). Below this, a summary table provides details about the last run: Load completed (2025-02-03 20:16:55), Load run time (0 Seconds). The bottom section shows the 'Import Set Runs' table with one entry: Started (2025-02-03 20:25:59), State (Complete), Completed (2025-02-03 20:25:59), Run time (0 Seconds), Total (4), Inserts (4), Updates (0), Processed (0), Ignored (0), Skipped (0), Errors (0), Transform Map (Test), Robust Transformer (empty).

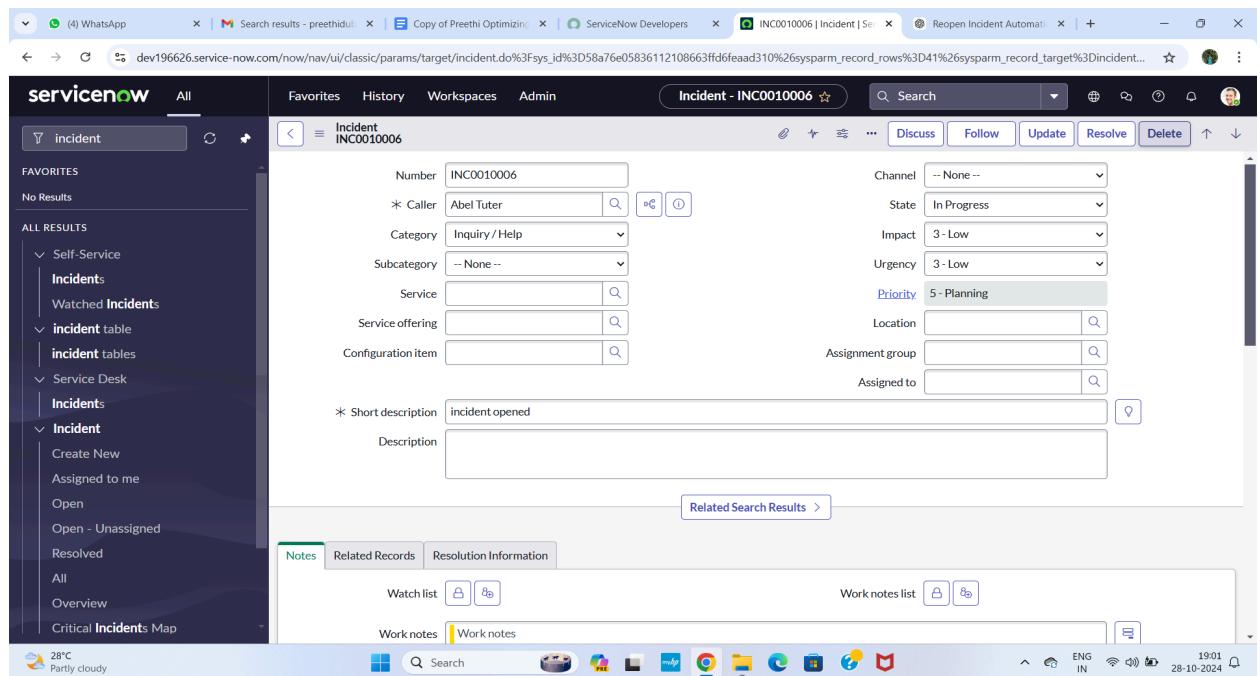
## Milestone 2: Dot walking

### Activity 1: Display department to the assigned to user

1. Open service now.
2. Click on All >> incident
3. Select create new under incidents
4. There is no field like department in the form
5. Email and manager fields are not visible

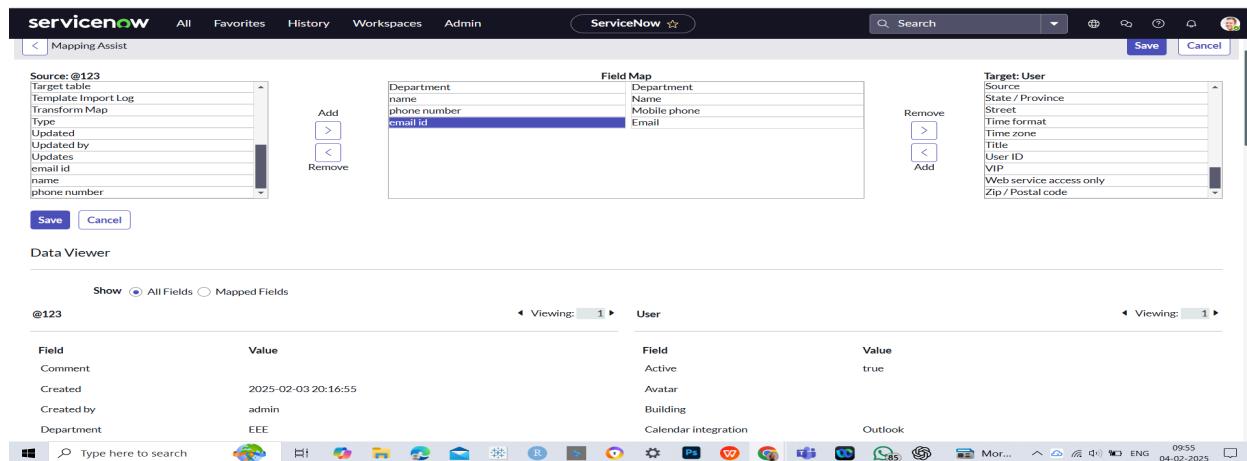


The screenshot shows the ServiceNow Mapping Assist interface. On the left, the 'Source: @123' table contains fields: name, phone number, email id, name, phone number. On the right, the 'Field Map' table shows mappings: Department (name) to Department (Name), Department (phone number) to Department (Mobile phone), and Department (email id) to Email. On the far right, the 'Target: User' table lists fields: State / Province, Street, Time format, Time zone, Title, User ID, VIP, Web service access only, and Zip / Postal code. At the bottom, the 'Data Viewer' shows a comparison of fields between the source table (@123) and the target table (User).



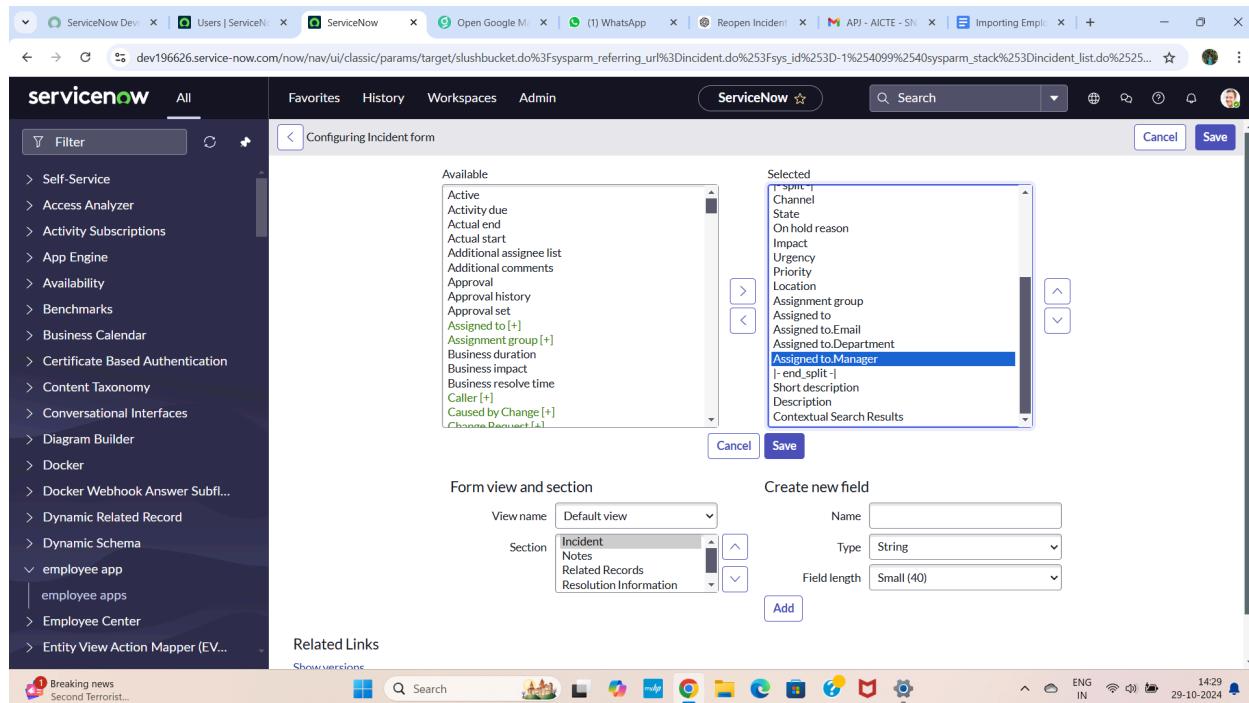
The screenshot shows the ServiceNow interface for an incident record. The record number is INC0010006, created by Abel Tuter. The category is Inquiry/Help, and the short description is "incident opened". Other fields include Channel, State, Impact, Urgency, Priority, Location, Assignment group, and Assigned to.

6. By using dot walking retrieve the data without opening the record
7. Click on context menu go to configure and select form layout
8. Select assigned to.department as mentioned below
9. Click on save
10. Add another field assignment.email.
11. Also add assignment.manager field
12. Click on save.



The screenshot shows the ServiceNow Mapping Assist tool. It maps fields from a source table (@123) to a target table (User). The source fields include name, phone number, email id, and phone number. The target fields include Department, Name, Mobile phone, and Email. The mapping is shown in a grid:

Source Field	Target Field
name	Name
phone number	Mobile phone
email id	Email
phone number	



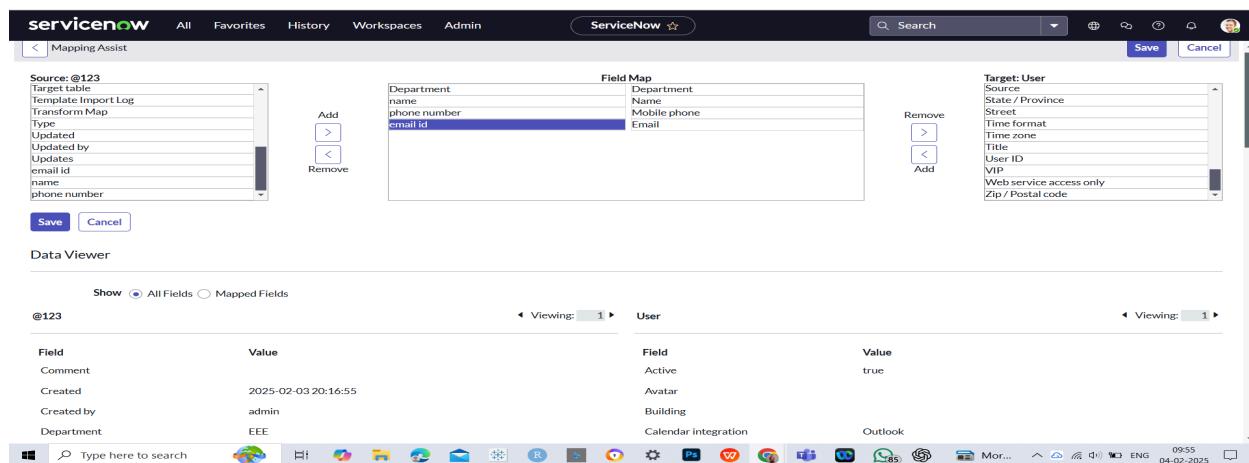
The screenshot shows the ServiceNow interface for configuring an incident form. On the left, a sidebar lists various system categories like Self-Service, Access Analyzer, and employee app. The main area is titled "Configuring Incident form". It displays two lists: "Available" fields (Active, Activity due, Actual end, Actual start, Additional assignee list, Approval, Approval history, Approvalset, Assigned to [+], Assignment group [+], Business duration, Business impact, Business resolve time, Caller [+], Caused by Change [+], Channel, State, On hold reason, Impact, Urgency, Priority, Location, Assignment group, Assigned to, Assigned to Email, Assigned to Department, Assigned to Manager, End split, Short description, Description, Contextual Search results) and "Selected" fields (which currently includes the "Assigned to Manager" field). Below these lists are sections for "Form view and section" (View name: Default view, Section: Incident Notes Related Records Resolution Information) and "Create new field" (Name: String, Type: String, Field length: Small (40)). A "Related Links" section is also visible.

13. Open an incident form
14. Fill the mandatory fields and assigned to just imported user
15. Then department and email field is automatically filled

## Result:

Open the New incident form.

Insert the assigned to then automatically update the email, department and manager.



The screenshot shows the ServiceNow "Mapping Assist" feature. It consists of three main panels: "Source" (listing fields like @123, Target table, Transform Map, Type, Updated, Updated by, Updates, email id, name, phone number), "Field Map" (mapping "Department" to "Department", "name" to "Name", "phone number" to "Mobile phone", and "email id" to "Email"), and "Target" (listing fields for a "User" target, such as Source, State / Province, Street, Time format, Time zone, Title, User ID, VIP, Web service access only, Zip / Postal code). At the bottom, there is a "Data Viewer" showing the mapping results for record "@123" and a toolbar with various icons.

Incident New record

Number	INC0010092	State	New
* Caller	Abel Tuter	Impact	1 - High
Email	abel.tuter@example.com	Urgency	2 - Medium
* Category	Inquiry / Help	Priority	2 - High
Name	Abel Tuter	Assignment group	
First name	Abel	Assigned to	mouni
Subcategory	-- None --	Email	mouni@gmail.com
Configuration item		Department	Mech
* Short description	dot walking	Manager	Shiva
Description			

Related Search Results ▾

Related Search (Q) Q dot walking Knowledge & Catalog (All)

## Conclusion :

This project automates data imports using **Import Sets**, **Transform Maps**, and **Dot Walking** in ServiceNow PDI, enabling efficient data migration and relationship mapping.

**Import Sets** allow easy data import from external sources.

**Transform Maps** ensure data is correctly mapped and processed.

**Dot Walking** enables automatic relationship mapping between tables.

servicenow All Favorites History Workspaces Admin

ServiceNow

Mapping Assist

Source: @123 Target table: Department

Add	Field Map	Remove
>	Department name phone number email id	<
<	Department Name Mobile phone	Add
	Email	

Save Cancel

Data Viewer

Show (A) All Fields (M) Mapped Fields

Field	Value	Field	Value
Comment		Active	true
Created	2025-02-03 20:16:55	Avatar	
Created by	admin	Building	
Department	EEE	Calendar integration	
		Outlook	

User

Type here to search