

- **What is ServiceNow ??**
- ServiceNow is a software company based in Santa Clara, California, founded by Fred Luddy in 2003, to solve problems large enterprises face with traditional IT delivery by providing a robust, simple to use, cloud-based environment in which businesspeople can solve the business problems themselves.
- ServiceNow was founded by **Fred Luddy** in 2004 to “automate the flow of work throughout a business. It is a cloud based. It provides a platform upon which you can develop your own custom solutions. It also provides a robust set of applications and workflows.
- **ServiceNow workflows** – IT workflows, Employee Workflows, Customer Workflows, Creator Workflows.
- **ServiceNow Architecture** – Application Navigator, Banner Frame, Content Frame. In these things there are sub categories such as Global Chat, Connect chat, Contextual Help, favourites, History.
- **ServiceNow Branding** – Branding in servicenow is done if a 3<sup>rd</sup> party company rents servicenow so the particular company can brand it's logo so that its users can feel comfortable while utilising the platform. Branding can be done by using tools like Service Portal and UI Builder
- **ServiceNow Lists** - A list in ServiceNow is a tabular representation of records from a specific table. For instance, the Incident table might have a list that displays all the incidents in a grid format, showing columns like Incident Number, Short Description, and State.
- **ServiceNow Filters** - Filters in ServiceNow are used to refine the data displayed in lists by specifying criteria. They help users focus on records that meet certain conditions. Users can create conditions based on field values. For example, filtering incidents where the priority is "High." Advanced filtering allows for more complex queries using multiple conditions and logical operators (AND, OR).
- **ServiceNow Forms** - Forms are a critical component for interacting with and managing records within the system. They are used to view, create, and edit records for various tables. Forms can be customized using form designer. This tool allows them to add, remove or rearrange fields and sections, adjust field properties and create new tabs. UI Policy controls the visibility, read only status and mandatory state of field based on certain conditions or user actions
- **Logging in ServiceNow** - To access ServiceNow, users typically log in through a web browser. The login page requires a username and password. For organizations using Single Sign-On (SSO), users might authenticate using their corporate credentials.

### Steps:

- **Navigate to Login Page:** Enter the ServiceNow instance URL in your browser.
  - **Enter Credentials:** Input your username and password. For SSO, authentication will be handled by your corporate identity provider.
  - **Multi-Factor Authentication (MFA):** If enabled, complete the additional MFA step.
- 
- **Next Experience UI** - The "Next Experience" UI in ServiceNow is an updated, modern interface designed to enhance user experience with improved navigation, visual elements, and usability. We can optimize for different devices, including desktops, tablets and smartphones.
  - **Application Overview** - ServiceNow offers a range of applications that cater to different business needs, from IT Service Management (ITSM) to Human Resources (HR) and Customer Service Management (CSM).
  - **Key Applications:**
    - **Incident Management:** Manages and resolves IT issues.
    - **Change Management:** Controls changes to the IT environment.
    - **Problem Management:** Identifies and manages the root causes of incidents.
    - **HR Service Delivery:** Manages HR cases and requests.
  - **ServiceNow Store** -The ServiceNow Store is an online marketplace where users can find and install applications, integrations, and plugins developed by ServiceNow and third-party vendors.
  - **Features:**
    - **Applications and Plugins:** Browse and install various solutions to extend ServiceNow's capabilities.
    - **Categories:** Applications are categorized by function, such as ITSM, HR, or Security Operations.
    - **Reviews and Ratings:** Check user reviews and ratings to assess the quality of applications.
  - **Knowledge Management** - Knowledge Management in ServiceNow helps organizations create, manage, and share knowledge articles.
  - **Key Features:**
    - **Knowledge Base:** A repository of articles and information.
    - **Article Creation:** Create and format knowledge articles, add attachments, and categorize content.
    - **Approval Workflows:** Set up workflows for article review and approval.
    - **Search and Retrieval:** Users can search for and access knowledge articles to find solutions and information.

- **ServiceNow Database** - The ServiceNow database is the underlying data storage system that holds all the records for various tables within the platform.
- **Key Concepts:**
- **Tables:** Organize data into records. Each table represents a different type of data, such as incidents, changes, or users.
- **Fields:** Define the types of data stored in each table, such as text, numbers, or references to other tables.
- **Records:** Individual instances of data within a table.
- **Importing data into ServiceNow** - Importing data into ServiceNow via integrations involves integrating ServiceNow with other systems or data sources to bring in data automatically or on-demand. This process is crucial for ensuring that ServiceNow has up-to-date and accurate information from various external systems. We can import data into servicenow through integrations data import methods, rest and soap API's, MID server . Ex – HR System Integration, Monitoring Tool Integration, CMDB Integration.
- **Data Source in SN** - Importing data into ServiceNow via integrations is a crucial process for maintaining data accuracy and consistency across different systems. It involves connecting ServiceNow with external data sources to bring data into the platform automatically or as needed. This ensures that ServiceNow has the most current and relevant information, which is essential for effective IT service management, business processes, and decision-making. **Data Import Sets** are used to import data from external files (CSV, Excel) into ServiceNow. The data is first staged in an Import Set table before being processed and moved to the final target table.

Process – 1) **Create an Import Set Table:** Define a temporary table in ServiceNow to hold the imported data.

2) **Upload Data File:** Upload the file containing the data (e.g., CSV or Excel) into the Import Set table.

3) **Define Transform Maps:** Create Transform Maps to specify how the data should be transformed and mapped from the Import Set table to the target table.

4) **Run Transform:** Execute the transform to move data from the Import Set table to the target table, such as the Incident or User table.

- **Import Sets in ServiceNow** - Creating and using import sets in ServiceNow involves a process where data is imported from external sources, temporarily stored in a staging table, and then transformed and mapped to target tables. This process allows for accurate data migration and integration into ServiceNow.

## **Creating Import Sets**

1). **Define Import Set Table:**

- An Import Set Table is a temporary table in ServiceNow used to hold data from external sources before it is processed.
- **Steps:**
  1. **Navigate to Import Sets:** Go to the Import Sets application in ServiceNow.
  2. **Create New Import Set Table:** Click on the "New" button to create a new import set. Specify the name and other attributes of the import set table.
  3. **Define Fields:** Define the fields in the import set table based on the structure of the data being imported.
- 2). **Upload Data File:**
- **Purpose:** Import data from external files (e.g., CSV, Excel) into the Import Set Table.
- **Steps:**
  1. **Go to Data Sources:** Navigate to the Data Sources module in ServiceNow.
  2. **Create Data Source:** Create a new data source for the file you want to import. Choose the file type (CSV, Excel) and specify the location of the file.
  3. **Import Data:** Use the "Load Data" function to upload the file into the Import Set Table.
- 2). **Transforming Data**
- 1. **Define Transform Map:**
- **Purpose:** A Transform Map defines how data in the Import Set Table is transformed and mapped to fields in a target table.
- **Steps:**
  1. **Create Transform Map:** Go to the Transform Maps module and create a new transform map. Specify the Import Set Table as the source and the target table where data should be inserted.
  2. **Map Fields:** Define field mappings between the Import Set Table and the target table. This involves specifying which fields in the import set correspond to fields in the target table.
- 2. **Transform Scripts:**
- **Purpose:** Use Transform Scripts to perform additional data transformation or processing that cannot be achieved through simple field mappings.
- **Types:**
  - **Script Include:** Custom scripts that can be called during transformation to manipulate data.
  - **Before and After Scripts:** Scripts that run before or after the transformation to handle complex logic, such as data validation or custom processing.
- 3. **Run Transform:**
- **Purpose:** Execute the transformation to move data from the Import Set Table to the target table.
- **Steps:**
  1. **Run Transform Map:** From the Transform Maps module, select the transform map and run it to process the data.
  2. **Monitor Progress:** Check the progress and status of the transformation. Address any issues or errors that occur during the process.
- 3). **Mapping Individual Fields**
- 1. **Field Mapping:**

- **Purpose:** Map fields in the Import Set Table to fields in the target table to ensure that data is accurately placed in the correct location.
- **Steps:**
  1. **Map Source Fields:** In the Transform Map, specify how fields in the Import Set Table correspond to fields in the target table. This includes defining source and target field names.
  2. **Field Type Matching:** Ensure that field types are compatible (e.g., text to text, date to date). Handle any conversions or transformations as needed.
- 2. **Data Transformation Rules:**
- **Purpose:** Apply rules and logic to handle data transformations that are not straightforward.

**ServiceNow Transform map** - A **Transform Map** is a set of instructions that defines how data from an Import Set Table is transformed and mapped to fields in a target table within ServiceNow. It is essential for ensuring that imported data is correctly processed and inserted into the appropriate tables with the correct formatting.

#### 1. **Source Table:**

- The Import Set Table from which data will be read. This table temporarily holds the data imported from external sources.

#### 2. **Target Table:**

- The ServiceNow table where the transformed data will be inserted. For example, this could be the incident table, sys\_user table, etc.

#### 3. **Field Mapping:**

- Defines how fields in the Import Set Table correspond to fields in the target table. This is critical for ensuring that data is correctly populated in the target table.

#### 4. **Transform Scripts:**

- Custom scripts that can be used to manipulate data during the transformation process. These scripts can run before or after the data transformation to handle complex logic or additional processing.
- **ServiceNow field map** - A **Field Map** is part of the Transform Map and defines how individual fields in the Import Set Table correspond to fields in the target table. It ensures that each piece of data is placed in the correct location within the ServiceNow table.

#### **Source Field:**

- The field in the Import Set Table that contains the data to be mapped.

#### **Target Field:**

- The field in the target table where the data should be inserted.

## Mapping Configuration:

- **Source Field Name:** The name of the field in the Import Set Table.
- **Target Field Name:** The name of the field in the target table.
- **Transform Rules:** Any rules or transformations that need to be applied to the data during the mapping process.
- **ServiceNow Incident Management** - Incident Management in ServiceNow focuses on logging, tracking, and resolving incidents to minimize service disruption. It involves several key processes and functionalities to ensure efficient management of IT issues.
  - ☐ **Identification:** Detect and log incidents through various channels such as email, phone, or the ServiceNow self-service portal.
  - ☐ **Categorization:** Classify incidents based on their impact and urgency to facilitate prioritization and assignment.
  - ☐ **Prioritization:** Assess the severity and urgency of incidents to determine their priority and impact on the business.
  - ☐ **Assignment:** Allocate incidents to appropriate support teams or individuals based on skills, availability, and workload.
  - ☐ **Resolution:** Investigate and resolve incidents using available resources and knowledge.
  - ☐ **Closure:** Confirm that the incident has been resolved and close it, ensuring that all necessary documentation is complete.
- **ServiceNow Task Administration** - Task Administration in ServiceNow involves managing tasks associated with incidents, changes, and other ITSM processes. Tasks are smaller, actionable items that contribute to resolving or completing a larger process.
- **ServiceNow Reporting** - ServiceNow provides robust reporting capabilities that allow users to generate, customize, and share reports based on data from various tables and applications. These reports help in analyzing performance, tracking metrics, and making informed decisions. Below is a comprehensive guide on ServiceNow's reporting capabilities, including the types of reports, how to create and manage them, and how to share them with users, groups, or via dashboards. 1.

### Creating a Report:

- **Steps:**
- **Navigate to Reports:** Go to **Reports > Create New** in the ServiceNow application navigator.
- **Select Report Type:** Choose the type of report you want to create (List, Chart, Pivot Table, etc.).
- **Define Data Source:** Select the table or data source for your report. You can use existing tables or create a new one.
- **Configure Report:**
- **Filter Data:** Apply filters to select the specific data you want to include.

- **Group and Aggregate:** Define how data should be grouped and summarized.
  - **Design Layout:** Customize the layout and appearance of the report, such as choosing chart types or table formats.
  - **Save and Run Report:** Provide a name for your report and save it. Run the report to view the results.
- 
- **Low Code No Code - Low-code and no-code** are approaches to software development that aim to simplify and accelerate the process of creating applications by minimizing the need for traditional coding. Here's a detailed look at both concepts. Low-code development platforms provide a graphical interface for application design, allowing users to build applications with minimal hand-coding. These platforms use visual tools and pre-built components to streamline the development process.