Week 1

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 provides a cloud-based(SAAS), Al-driven platform for automating multiple management workflows in enterprises.

Applications/Workflows:

It is categorised into 4 primary workflows:

- > IT Workflows: Service Management, Operations Management, Business Management, Asset Management, DevOps, Security Operations, Performance Management, Risk
- > Employee Workflows: HR Service Delivery, Workplace Service Delivery, Legal Service Delivery, Procurement Service Management
- > Customer Workflows: Customer Service Management, Field Service Management, Financial Service Operations
- > Creator Workflow: App Engine, Integration Hub



ServiceNow Platform Overview

The Now Platform is an Application Platform as a Service(APaaS). It is cloud-based and provides the infrastructure, and platform upon which we can develop our custom solutions and a robust set of applications and workflows to support the most common business processes.

Architecture:

- 1. Enterprise Cloud: ServiceNow is built on a multi-instance architecture where we can have our instance and database.
- 2. Availability & Redundancy: All ServiceNow data centres are paired with another data centre to provide redundancy and failover.
- 3. Backups & Security: ServiceNow provides 4 weekly full data backups and 6 days of daily differential backups.
- Domain Separation: The ServiceNow platform provides the ability to separate data, processes, and administrative tasks on an instance into logical groupings called domains.

ServiceNow provides 3 user interfaces for interacting with the Now platform:

- 1. Now Platform UI
- 2. ServiceNow Mobile Apps
- 3. Service Portals

ServiceNow uses role-based access to ensure users can get the information they need and no more. The primary components are:

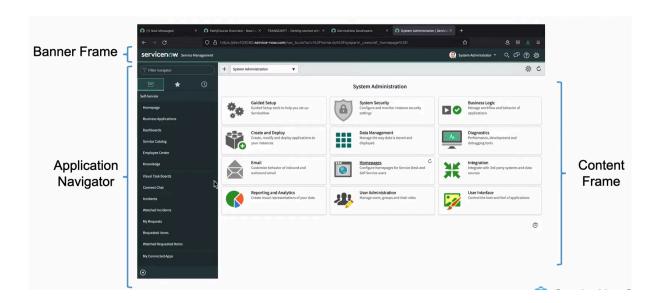
- 1. User: An individual that has been given access to an instance.
- 2. Group: A set of users who share a common purpose and need access to similar data.
- 3. Role: A collection of permission.

ServiceNow User Interface Overview

The ServiceNow platform UI is a web-based interface that serves as the primary tool for accessing the now platform.

The interface has 3 parts:

- Banner Frame: It contains the Logo, the User Menu that provides Profile,
 Impersonate User, Elevate Roles, and Logout, Tools such as Global Search,
 Connect Chat and Help, and System Settings
- 2. Application Navigation: It contains a Navigation Filter, all Applications, History, and Favourites
- 3. Content Frame: This is the main area where users interact with forms and lists, or where contents related to applications or modules are displayed.



ServiceNow Branding Overview

Branding in ServiceNow is applying your distinct corporate identity across the Now Platform UI to create a shared identity, build trust, and speed adoption.

ServiceNow provides guided setup wizards to help with branding. Guided Setup provides a System Administrator with step-by-step instructions to configure various Applications and Modules within your instance to suit the needs of the users. It has 2 modules:

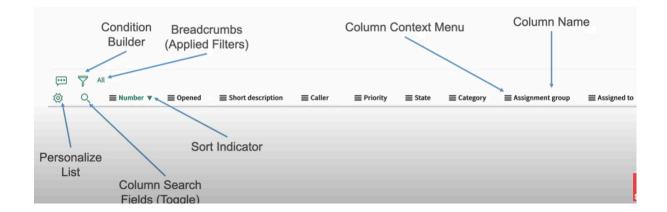
- ITSM Guided Setup: includes the categories such as Company, Connectivity, Foundation Data, CDMB, etc
- ITOM Guided Setup: includes the categories such as MID Server, Discovery, Event Management, etc

ServiceNow Lists and Filters

ServiceNow's list interface or list view is a user interface frame designed to present lists of records from database tables. It displays records in the form of a table. Each row is a record and the column is a field from the record.

There are two primary methods to access a list. These are through Application Navigator and Dot List Command.

The title bar is the name of the topmost section of the list view page. It contains a context menu, a new button, and a search tool. The list header is just below the title bar. It contains additional tools that allow us to customise the list further or to locate the records.



Forms in ServiceNow

A form in ServiceNow is a common set of tools and user-interface elements used to view and update a single record from the database.

Every form has a header bar across the top that provides a standard set of tools. The main section of every form is filled with fields displaying the record attributes and their labels. The additional sections can be displayed to group common fields and display related lists and formatters.

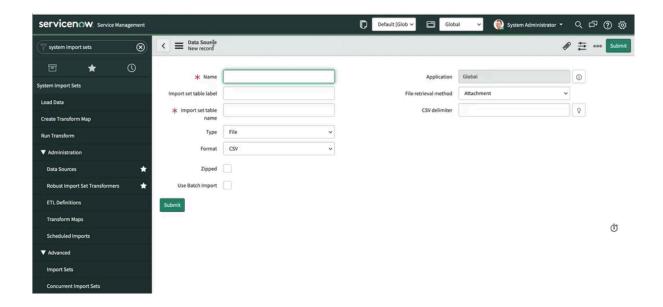
Form Related Lists: A related list is a form element that displays a list of records from another table that is related to the current record.

Form Formatters: A form element that displays information that is not a field in the record.

Form Views: It provides the ability to display and organize fields, related lists, and formatters in different ways to meet the needs of specific users.

Form Personalization: It allows the user to select which fields are displayed on a particular form view. They do not change or impact any other user.

Form Templates: These are used to simplify the process of creating new records by populating some form fields automatically.



A Hands-on ServiceNow Tool Demo

To access the ServiceNow, we need ServiceNow instances. An instance is a full-stack deployment of the platform.

The primary UI for the application and platform is Next Experience UI. There are other UIs such as Mobile Applications, Service Portal, and Employee Center. The various components of ServiceNow are the navigation bar, contextual pill, star icon, workspaces, history, applications, and admin menu.

There are 4 primary workflows. These are IT Workflows, Creator Workflows, Employee Workflows, and Customer Workflows.

Knowledge Bases in ServiceNow are built as libraries of important articles or documentation that admins create and publish so that all types of users can get access to help and information to help solve problems within the applications. Knowledge articles or libraries of knowledge are divided into Knowledge Bases.

Introduction to Importing Data in ServiceNow

The process of importing data normally involves pulling data from a Source entity and loading it into a Target data entity.

ServiceNow import involves 3 data entities:

- 1. Source: The entity containing the data to be imported into ServiceNow.
- 2. Staging: A table that ServiceNow automatically created as part of the import process to temporarily store data pulled from the Source before transforming and adding to the Target.
- 3. Target: The ServiceNow table in which data is to be imported.



Three data entities involved in a ServiceNow import

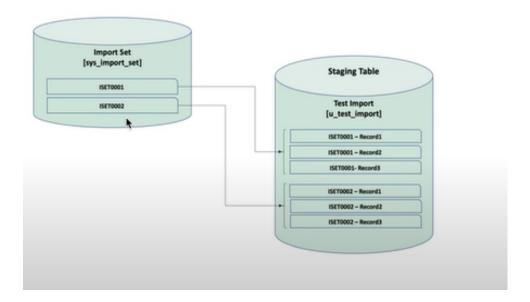
Creating a Data Source in ServiceNow

Data Source is a record in a table in ServiceNow that stores the parameters that the platform needs to understand the type of the source data entity, where it is located, and how to connect to it.

All the data source records are present in the sys_data_source table or through All - System import Sets - Administration - Data Source.

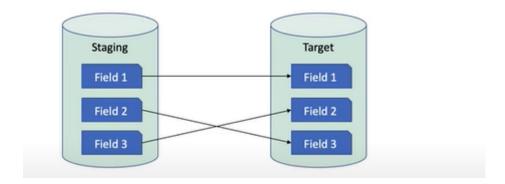
Understanding Import Sets in ServiceNow

To keep the imported records in our Staging table organised, ServiceNow provides a table named Import Set [sys_import_set]. Each time an import is executed, the platform adds a record to the Import Set table. As the imported rows are added to the staging table, each record is marked with a reference to the import set record. The Set attribute is used to store that reference.



ServiceNow Transform Maps & Field Maps

Field Maps[sys_transform_entry] are how the data is moved from the staging table to the target table. This mapping is crucial for ensuring that data is imported accurately. Transform Maps[sys_transform_map] provides a guide for moving data from Import Set tables to Target tables. It determines the relationships between fields in an import set and in an existing table.



ServiceNow Incident Management Tutorial and Task Administration

A Task is some item of work that needs to get done. In ServiceNow, each Task is represented by a record in a database table named Task [task].

There are 3 types of tasks:

- 1. Change Request
- 2. Incident
- 3. Problem

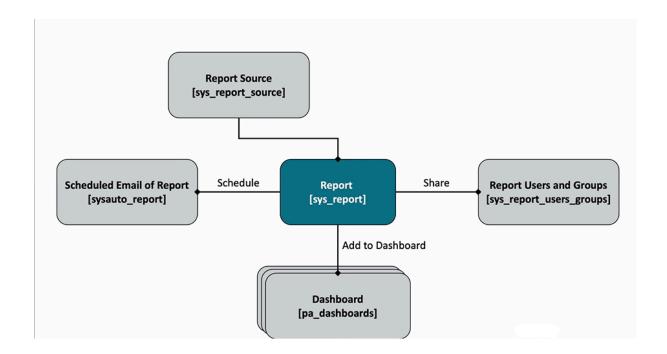
Task Management: defining and managing tasks in ServiceNow allows you to take common work that needs to be done and build repeatable processes to efficiently get it done. Tasks can be assigned to individual users or groups.

Visual Task Board: provides a more graphical or visual representation of tasks for easy management. The visual task boards are of 3 types:

- 1. Guided: normally created from a list using an attribute that has a predefined set of values as lanes
- 2. Flexible: normally created from a list using an attribute that does not have a predefined set of values as lanes.
- 3. Freeform: used for personalised work management via private tasks.

ServiceNow Reporting Tutorial

Report table [sys_report]: this is a system table in the ServiceNow database that stores a record for each report that exists within the instance.



4 tables support the functionality of the report table:

- 1. Report Source [sys_report_source]: provides the ability to store and reuse saved queries for retrieving data from Source tables and populating a report.
- 2. Scheduled Email of Report: provides the ability to set up a given report to execute automatically regularly and have it emailed to interested users.
- 3. Dashboard [pa_dashboards]: reports can be added to one or more dashboards for displaying alongside other related data.
- 4. Report Users and Groups [sys_report_users_groups]: reports can be shared directly with individual users or groups of users via report users and groups.

We can create a report in 3 ways:

- 1. Reports>Create New
- 2. ServiceNow Studio
- 3. List View

Why is Low Code No Code Development?

Low Code No Code development is an aspect of ServiceNow that allows users with minimal programming knowledge to create applications and workflows, speeding up development and reducing costs.

Advantages:

- 1. Empower the people that know the business to solve business problems themselves.
- 2. Improves agility via tools for creating IT services quickly.
- 3. Lower costs via more apps in less time with less dependence on IT.
- 4. Fewer automation opportunities.

Disadvantages:

- 1. Requires generalisation which limits flexibility.
- 2. Limits technical improvements.