

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 which business people can use to solve the problems themselves.

The company's core business revolves around management of "incident, problem, and change" IT operational events.

Purpose of ServiceNow Platform

The **ServiceNow Platform** is designed to deliver a cloud-based solution that empowers organizations to automate and optimize their business processes, elevate service delivery, and boost overall operational efficiency.

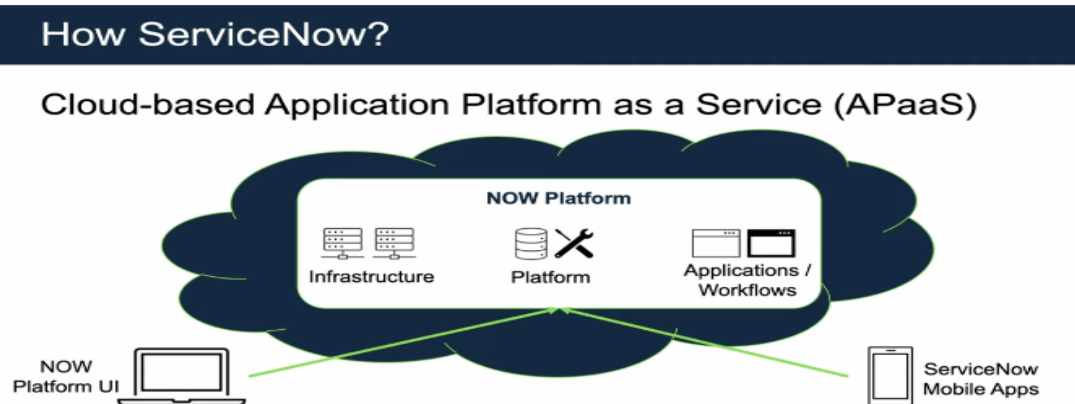
As a cloud-based platform, **ServiceNow** facilitates digital workflow automation, enabling the efficient management of diverse business processes and IT operations.

ServiceNow offers a wide array of applications, encompassing IT service management (ITSM), IT operations management (ITOM), IT business management (ITBM), as well as other key business areas like human resources, security, and customer service.



ServiceNow Platform Overview

The ServiceNow Platform operates as an Application Platform-as-a-Service (PaaS), which means it is hosted in the cloud. This eliminates the need for companies to invest in and maintain the hardware required to run these applications.



- **Multi-Instance, Single-Tenant Architecture:** ServiceNow's default architecture is a multi-instance, single-tenant model, where each instance is uniquely isolated with its own database, including data, applications, and customizations.
- **User Interface:** ServiceNow offers services through a customizable, web-based interface, built on a flexible database schema that adapts to different business needs.
- **Unified System of Record:** The platform and its applications leverage a unified system of record to streamline and consolidate an organization's business processes.
- **Integration and Flexibility:** The platform integrates seamlessly with other enterprise systems and supports a wide range of plug-and-play application.
- **Custom Application Development:** ServiceNow provides a robust platform for building custom applications tailored to specific business requirements.
- **Data Center Redundancy:** All ServiceNow data centers are paired with a secondary data center to ensure redundancy, with built-in redundancy at every layer, including devices and network resources.
- **Backup and Security:** ServiceNow performs four weekly full data backups and six daily differential backups, with the entire platform secured by third-party security organizations.

ServiceNow Applications and Workflows

A workflow is a set of activities or tasks that automate a business process. Workflows help streamline processes, enforce business rules, and reduce the need for manual intervention.

4 Primary Workflows of ServiceNow



IT Workflow

Focuses on automating IT service management processes. Includes Incident , Change and Request Management.

Example: Resolving an IT incident or processing a change request.

Employee Workflow

Streamlines internal processes to enhance the employee experience. Includes HR Service Delivery, Employee Center, and Employee Onboarding.

Example: Automating new employee onboarding or handling HR requests.

Customer Workflow

Enhances customer service and support functions. Includes Case Management, Field Service Management, and Customer Service Management.

Example: Managing customer inquiries or scheduling a field service appointment.

Creator Workflow

Allows custom app development to meet unique business needs. Includes App Engine, Integration Hub.

Example: Building a custom application to automate a specific business process.

Now Platform User-Interfaces

Now Platform UI (Classic UI) - it is traditional UI, best suited by the desktop and laptop . Features a navigation pane on the left and content on the right. Allows users to access modules, forms, lists, and other functionalities.

ServiceNow Mobile Apps - Mobile friendly interface used to perform on the go actions like requests and approval, create incidents and notifications.

Service Portal - A user-friendly, responsive web interface designed for end-users. Typically used for self-service tasks, like submitting requests, searching for knowledge articles, and reporting incidents.

Next Experience UI (Unified Navigation) - Offers a more visually appealing and user - friendly experience.

User, Role and Group in ServiceNow

User: An individual who has access to the ServiceNow platform. Each user has a unique login and can have various permissions based on their roles.
It is a record in the **sys_user** table.

Role: A set of permissions that define what a user can see and do within the ServiceNow platform. Roles are assigned to users and can grant access to specific features or applications.They are used to set Access Controls (ACL)
It is a record in the **sys_user_role** table.

Group: A collection of users who share a common purpose or responsibility, such as a department or team. Groups can be used to manage user permissions and workflows, and can have roles assigned to them for easier access management.
It is a record in the **sys_user_group** table.

Role Based Access in ServiceNow

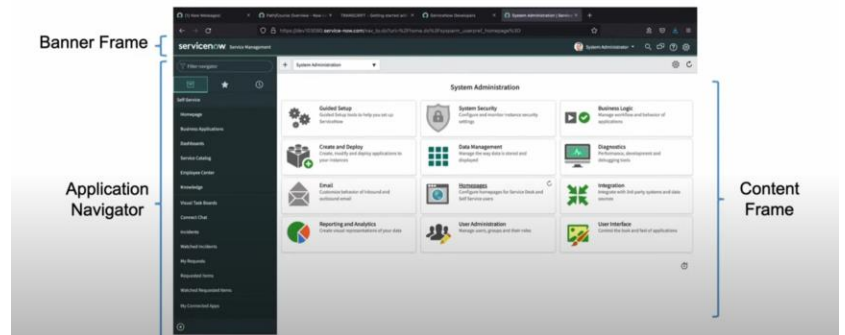
When a user logs in to an instance, Servicenow validates their identity and enables access to applications and modules based on their roles and groups. It uses

1. local database authentication
2. External single sign-on(SSO)
3. Multi factor authentication

ServiceNow User Interface Overview

There are three parts

1. Banner Frame
2. Application Navigator
3. Content Frame



Banner Frame Contains:

Company Logo , Navigation Menu, Global Search Bar, Discussions sidebar(chat tool) , Show Help, Notifications and User Menu

Important Things in **User Menu**

1. **Profile** - shows the profile of current user
2. **Impersonate User** - used to login and assume the identity of another user
3. **Elevate Roles** - Available to only base admin to elevate his role to security_admin

System Settings - allows you to access and personalize some settings for your user experience in ServiceNow like themes, Display options, Time zone.

Global Search : Search the entire instance for records matching keywords

Help : Displays contextual help as available; a badge on the icon indicates embedded help is available, provides access to User Guide and documentation Search tool

Discussions Sidebar (Connect Chat) - Chat tool for real-time messaging

Content Frame:

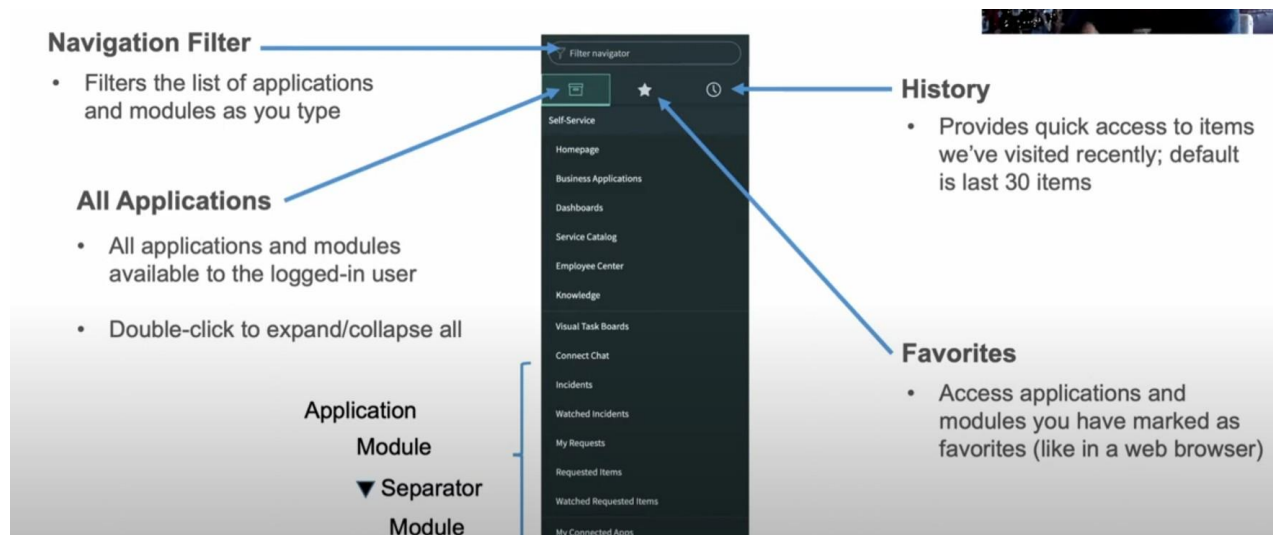
The Content Frame is the main area in the ServiceNow interface where the content related to the selected application or module is displayed. This is where users interact with forms, lists, dashboards, reports, and other data.

Application Navigator:

The Application Navigator in ServiceNow is a component located on the left side of the interface that provides a way for users to quickly access different applications, modules, and functionalities within the platform.

Applications are the Collection of files and data , they serve as the building blocks for delivering services such as IT, HR resource management , Service Desk etc .

Modules are the individual functionalities or operations available under each Application.



We can Pin the Applications and modules to favorites for quick access

We can use the Favourites to mark the application that we frequently use and have quick access to it. We also have a History option to look at our recent actions. Default is last 30 items we have accessed

ACL - Access Control List

it determines how the servicenow user is going to interact with the Data . It is a security imposed on tables to restrict users to interact or modify with the data of the table,It restricts the use of CRUD operations

It is stored in table **sys_security_acl**. We have to have a role of security admin to create or modify Acl. Thus we should Elevate role from Admin

ServiceNow Branding Overview

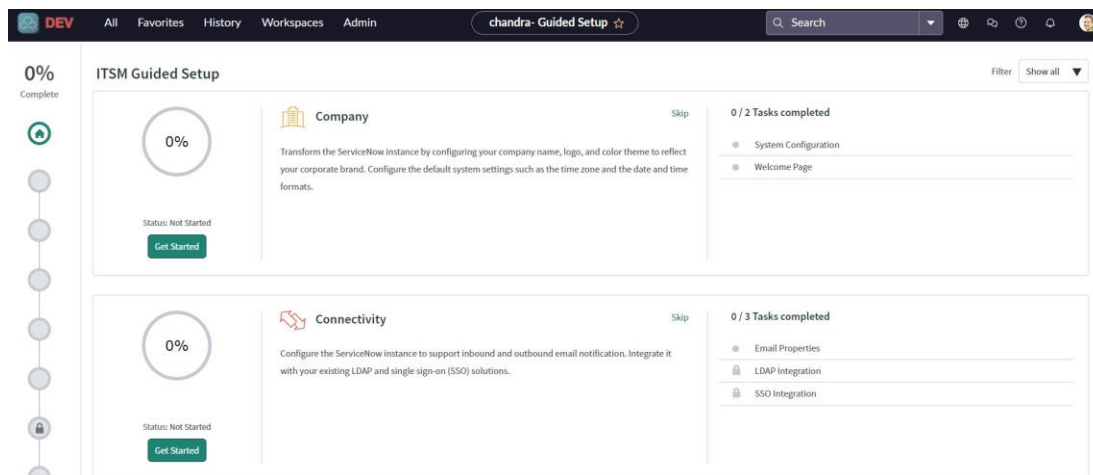
Applying your distinct corporate identity across the Now Platform UI to Create a shared identity is Called Branding in serviceNow.

Guided Setup

Guided Setup is a feature in serviceNow that provides a structured, Step-by-step process to help administrators configure and customize their ServiceNow Instance.

It incorporated best practices into the setup process, helping the administrators configure their instance according to recommended guidelines. It includes company, CMDB, incident Management, Problem Management, Change Management, Configuration Items, Service Catalog, Knowledge management, etc

Guided Setup for ITSM



Customization like changing logo, company name can be done using the system properties

ALL - System Properties - System Configuration - Set timezone, date, color

ALL - System Properties - My Company - UI Banner - logo - Banner Text

All the properties are a table in servicenow so these properties come under sys_properties table

ServiceNow Lists and Filters

Lists in serviceNow are a type of interface that displays a set of records from a table in a grid or tabular format. Lists provide a way to view, filter, sort and interact with multiple records at once.

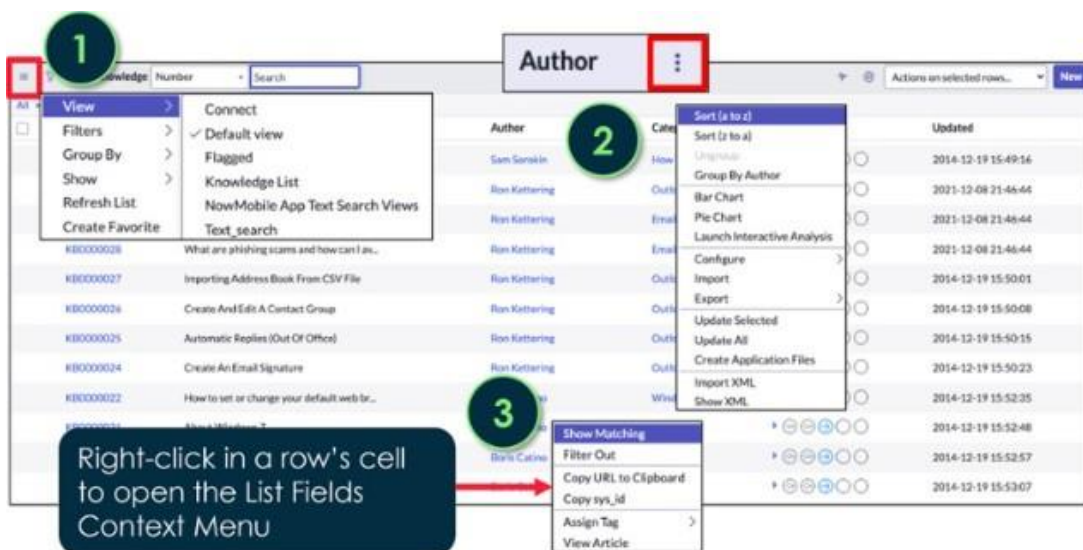
Table_name.list is used to display the list view of a table. **Table_name.LIST** opens list in new

tab The List Header contain many useful things to perform action on list

4. List Controls
5. Filter Lists
6. Table Search bar
7. Personalize Icon

List Controls

In ServiceNow, **context menus in lists** provide users with quick access to actions that can be performed on list items (records) or the list itself.



For lists there are three types

1. List Control menu - Has Views, Filters, GroupBy, Refresh List, Create Favorite
2. Column option men - Has Configure, import, Reporting, Sorting
3. List field menu - used to copy sys_id

Views

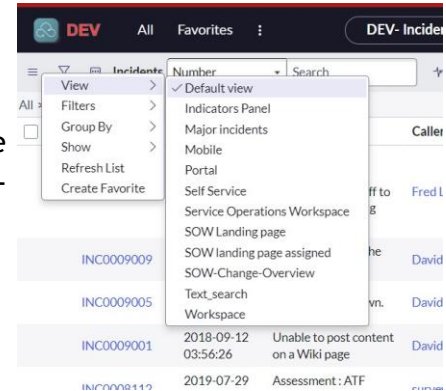
Views enable users to quickly display the same list or form in multiple ways. System administrators can create views for lists or forms.

You can create view by selecting

Control options menu - configure - List Layout - select the fields using list Collector - Scroll Down to select view - new - enter the view name - save

You can see the created view from

List Control Menu - views



Filters in List

A filter is a set of conditions applied to a table list to isolate a subset of the

data. The three parts of a filter condition are:

1. Field: A choice list based on the table and user access rights. The choice list includes fields on related tables by dot-walking.
2. Operator: A choice list based on the field type.
3. Value: A text entry field or a choice list, depending on the field type.

Wildcard conditions Used in column search row

*value contains

!*value does not contain

=value equals

!value does not

equal Value % starts

with

% value ends with

Add filters to your Favorites by clicking the List Controls icon and selecting Create Favorite

The screenshot shows the 'Incidents' list interface. At the top, there's a header bar with a menu icon, a filter icon, the title 'Incidents', a dropdown menu set to 'Number', and a search bar. Below the header, there's a row of buttons: 'Run', 'Save...', 'AND', 'OR', 'Add Sort', and a share icon. Underneath, there's a 'Save as:' field with a text input, followed by 'Visible to:' with radio buttons for 'Me' (selected), 'Everyone', and 'Group', and a 'Save' button. Below this, a summary bar states 'All of these conditions must be met'. It contains two filter conditions: 'Actual start' on 'Today' and 'Active' is 'true'. Each condition has 'AND' and 'OR' buttons, and a red 'X' button to remove it. Below the summary bar, a breadcrumb trail reads 'All > Actual start on Today > Active = true'. At the bottom, a table header is visible with columns: 'Number', 'Opened', 'Short description', 'Caller', 'Priority', 'State', 'Category', and 'Assignee'.

In the classic list, select **Run** to see the results of your filter displayed in the list.

To save a filter, select **Save**. A new field will appear where you can name your filter. After naming the filter, select who it will be visible to, then select the Save button to the right of the name and visible to options.

The new filter will be available by selecting Filters from the list context menu.

Breadcrumbs

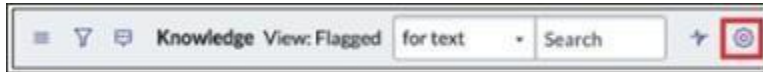
Filter conditions applied to the list are summarized in the breadcrumbs, shown in blue letters across the top of the list. Not only do the breadcrumbs provide an “at-a-glance” view of the filter’s conditions, but they allow you to modify conditions as necessary.

For example, you can select the greater than sign before a condition to remove that condition, or select a breadcrumb to remove all of the conditions that follow.

Group By - It is used to group the list records based on a field.

Refresh List - Used to refresh list to reflect the recent changes.

List Personalization



- Personalize List modifies the layout of a list for an individual user. It does not affect the platform default.
- Personalization should be used for temporary situations. Global changes will not be reflected in a personalized list

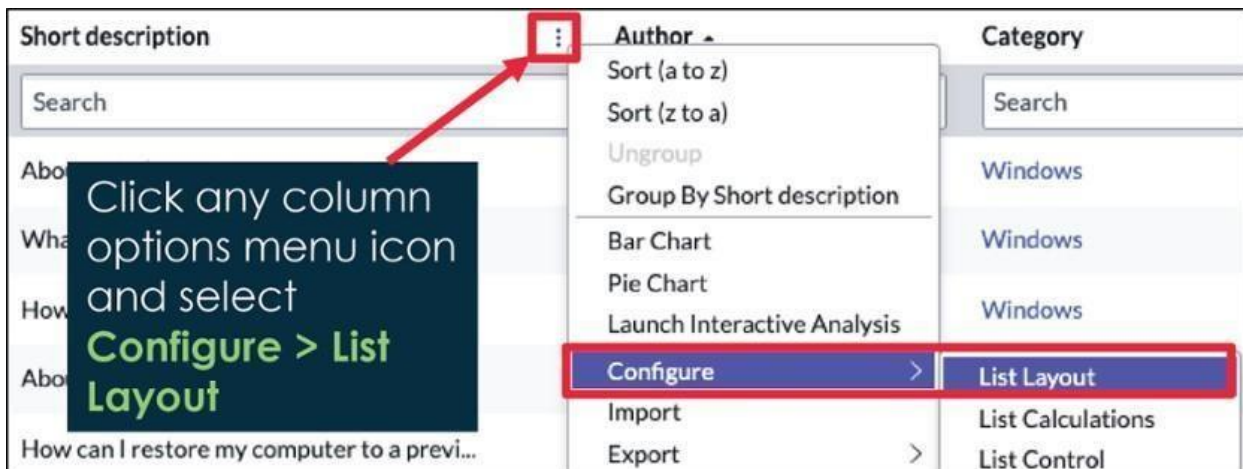
If the system administrator configures a list view a user has personalized, they will not see those newly added default changes until they choose Reset to Column Defaults.

List Layout Configuration

List layout means adding, removing, changing order of the columns or fields on the list view. The configuration can only be done by admin, and once configured it would apply to all the users

To configure the List Layout for a table:

1. Navigate to the list and ensure you are in the correct view
2. Select any column options menu
3. Select Configure > List Layout



Forms in ServiceNow

Forms are used to display single records in ServiceNow with all the fields. Users can enter new records, modify records into the form. Forms contain different fields to take in the data according to the use.

The standard Layout

The screenshot shows a ServiceNow Incident form for incident INC0000003. The form is divided into several sections, each highlighted with a red box and a label:

- Fields:** A red box highlights the top section containing input fields for Number (INC0000003), Caller (David Miller), Category (Incident / Help), Subcategory, Service, Service offering, Configuration item, Short description (Cannot sign into the company portal app), and Description (Having an issue with users trying to access the company portal app). It also includes dropdowns for Channel (None), State (Closed), Impact (2 - Medium), Urgency (2 - Medium), Assignment group, and Assigned to.
- Sections:** A red box highlights the middle section containing tabs for History, Related Records, and Resolution Information. Below these is a Watchlist and a Work notes list.
- Formatter:** A red box highlights a section within the Resolution Information tab, showing a list of activities with details like Request, Incident state, Opened by, Priority, Resolution code, and Resolution notes.
- UI Actions:** A red box highlights the bottom left corner, showing buttons for Update and Delete, and a Related Links section with links to Add to Unlinked Set, Create Incident Checklist, and Attach SLA.
- Related Lists:** A red box highlights the bottom right section, showing a table with columns for Task SLA, Affected Co, Expected Services Co, Child Incidents, and a search bar.

- **Sections** organize fields into logical groups in a form
- A **Formatter** is a form element used to display information that is not a field on a form.
- **Related Links** - UI Actions include the buttons, links, and context menu items on forms and lists. They make the UI more interactive, customized, and specific to user activities.
- **Related Lists** show records in tables that have a relationship to the current record. For example, the User form features Roles and Groups Related

Difference between Insert and Insert and Stay:

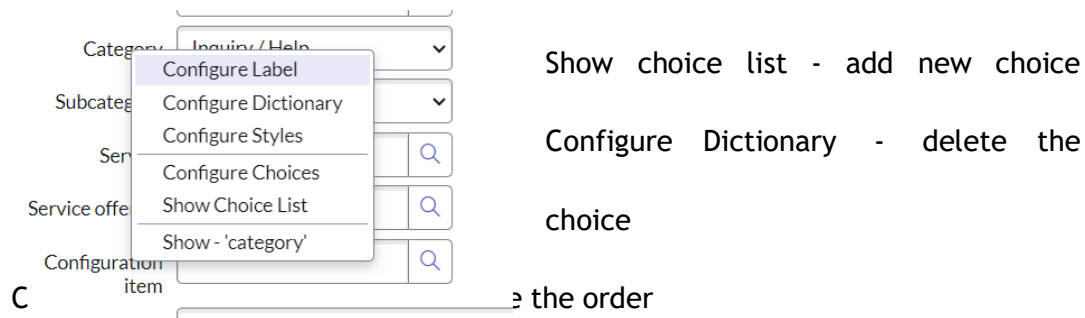
- **Insert:** Creates a new copy of the current record and returns to the list view or the previous page. The form is closed after the new record is created.
- **Insert and Stay:** Creates a new copy of the current record but keeps the user on the form view of the newly created record, allowing them to continue editing or review the new record immediately.

Field Types

8. **Reference Field:** Query that displays records from another table.
9. **Document ID :** Used to select records from multiple tables.
10. **Date/Time:** Day and time of day, which can be selected with a calendar widget. Depending on the record, some calendar widgets may not display the time and will only display the date (as seen in the image above).
11. **String:** Freely populated using letters, numbers, and special characters. For 254 characters or less, the string field will be a single-line text field. Anything 255 characters or over will appear as a multi-line text box.
12. **Choice List:** Drop-down list of choices that can be configured.
13. True / False - represented using a checkbox

Choice List

They show all the predefined values that a user could select from. We can add , remove , edit choices in choice list by right clicking on the choice field and opening From field menu



Dependent Choice list - The values that appear on the choice list depend on the choice made in another choice list , then it is called a dependent choice list.

Reference Field VS Document ID

Document Id is used to specify records from multiple tables at the same time Multi table reference. While the Reference field can be used to link records from one table only single table reference.

Document Id shows a dropdown menu from which you have to select table first and then also record from table, reference field you choose only record.

Document Id Stores both table name and sys_id , while reference field only stores sys_id

Formatters

A formatter is an element used to display information that is not a field in the record. Some Formatters included in the base platform are:



The **Activity Stream** is an example of a formatter; it displays a list of activities. Examples of formatters in the base platform include:

- **Activity formatter:** Displays the list of activities, or history, on a task form. It provides an easy way to track items not saved with a field in the record, for example, journal fields like comments and work notes
- **Process flow formatter:** Displays the different stages in a linear process flow across the top of a record
- **Parent breadcrumbs formatter:** Provides breadcrumbs to show the parent or parents of the current task
- **Approval summarizer formatter:** Displays dynamic summary information about the request being approved
- **CI relations formatter:** Displays on the CI form and allows for the viewing of relationships between the current CI and related CIs

Templates

Templates allow form fields to be populated automatically, simplifying the process of generating new records



Click the **More options icon (⋮)** from the formheader, then **Toggle Template Bar** to work with templates



Use the template bar at the bottom of the form to manually apply, create, or edit templates. To use a template, populate the most-used fields for a specific table, save it as a template, and then make the template accessible to users.

They have three Context menus

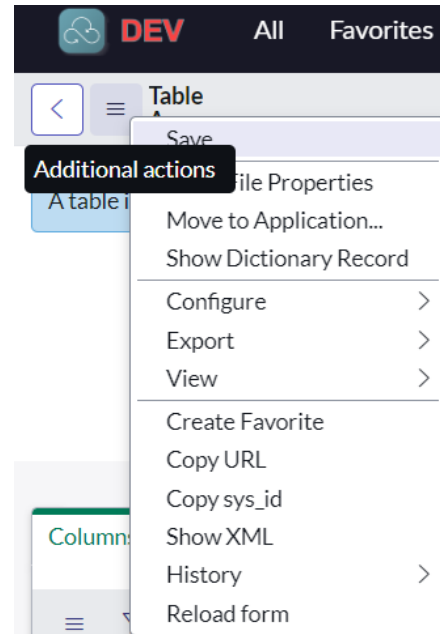
1. Form control menu / Additional Actions
2. Field context menu
3. Related list menu

Additional Actions

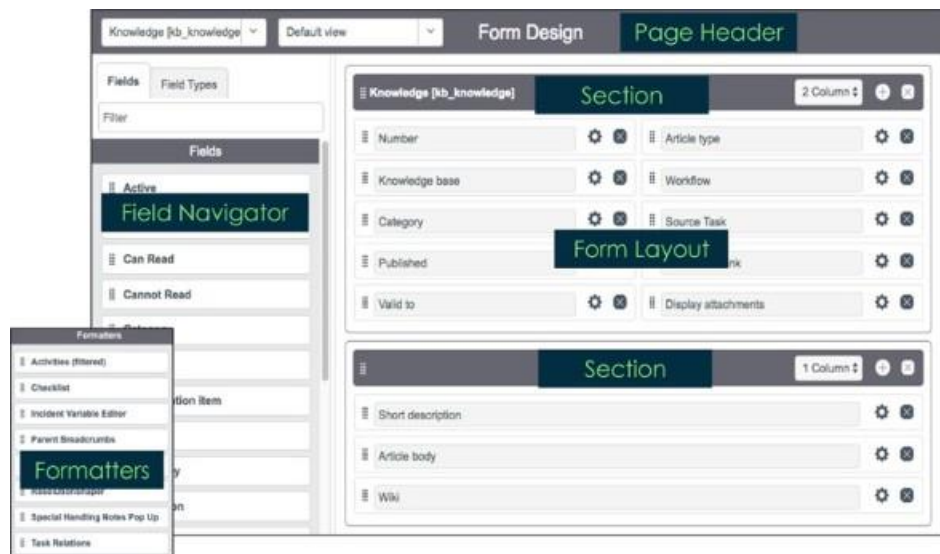
It has Form views and Configure Options

Configure

1. From Layout
2. Form Design
3. Form Controls



Creating and Editing Form Views with Form Design

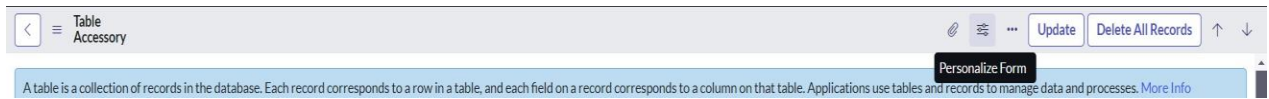


You can select or create a new view from the Page Header. Then we can drag and drop the fields we want in the form from the Field Navigator to the Form Layout.

Form Views can we viewed form additional Actions in the Form Header

Personalization of the form

Personalizing a form will affect only what you see on a form - others will not be affected.



Mandatory fields cannot be hidden. If you navigate away from the form, the next time you go to personalize the form, you must reset your customizations to show fields that you have hidden.

To disable personalization form for the itil role, navigate to `sys_properties.list` find the property `glide.ui.personalize_form.role` and set the Value to admin (to specify the role that can access form personalization).

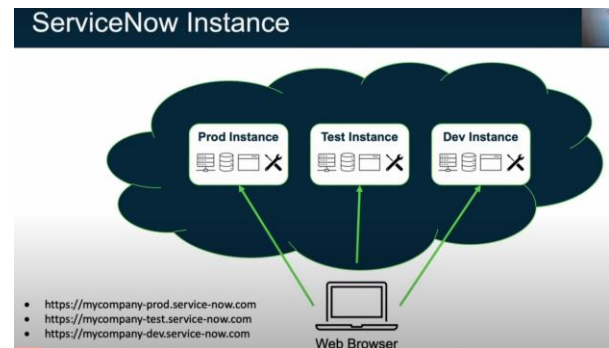
1.2A Hands-on ServiceNow Tool Demo

Instance In ServiceNow

In ServiceNow, an instance refers to a single, Unique implementation of the ServiceNow Platform. Each Instance is a separate and isolated environment where the platform is installed, configured, and customized according to the needs of the organization using it.

Instance In an organization

1. Single Instance Per organization
2. Shared Access for employees
3. Customization and configuration
4. Development and Production Instances



Types of Instance in Organization

1. Production - it is the instance used by employees in performing day to day tasks
2. Non Production - It is has development, Testing, Quality assurance

Each customer organization receives a minimum of two instances of ServiceNow: production and non-production (also referred to as sub-production). They have the ability to obtain additional non-production instances to be used for User Acceptance Testing (UAT), Review, Development, or Quality Assurance (QA).

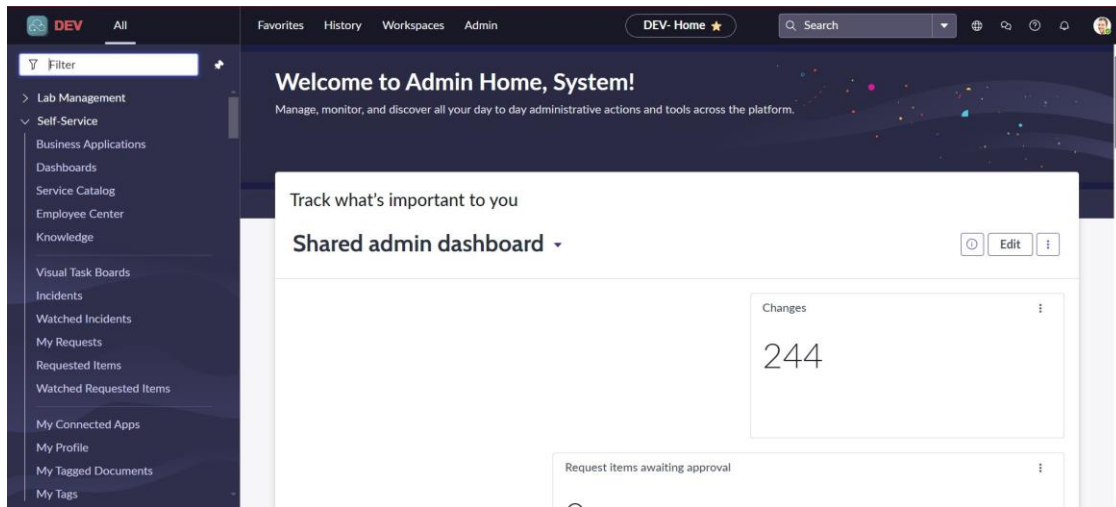
Each ServiceNow instance has a unique URL that uses a format similar to <https://<instance name>.service-now.com>

PDI - Personal Developer Instance in ServiceNow

A PDI is a free, individual instance of the ServiceNow platform provided to developers for learning, Experimentation, and building applications. This can be accessed by logging into the Dev servicenow platform and requesting a PDI

Next Experience and Navigation

In ServiceNow, the Next Experience user interface is the main way for users to interact with the applications and information in a ServiceNow instance. You can access all applications and modules within the Platform, as well as select your user preferences, all from the banner frame! Speaking of preferences, you can personalize your instance and customize the display accessibility and notifications in the Platform



Navigation bar Contains:

Company Logo , Navigation Menu, Favorites, Workspace, History, UI Banner, Global Search Bar, Application Scope picker, Browser tab Title, Discussions sidebar(chat tool) , Show Help, Notifications and User Menu

Important Things in **User Menu**

4. **Profile** - shows the profile of current user
5. **Impersonate User** - used to login and assume the identity of another user
6. **Elevate Roles** - Available to only base admin to elevate his role to security_admin
7. **Preferences** - allows you to access and personalize some settings for your user experience in ServiceNow like themes, Display options, Time zone.

The **Application Scope Picker** (represented by a globe) is a tool that allows developers and administrators to select and switch between different application scopes within theServiceNow platform.

History: Provides a list of recently viewed items and records , allowing users to easily navigate back to previously accessed content.

Favorites: Allows users to save and quickly access frequently used items like records, lists or reports

Workspace is a specialized interface that provides a modern, streamlined experience for performing tasks and managing work. Workspaces are designed to specific roles and responsibilities of the user.

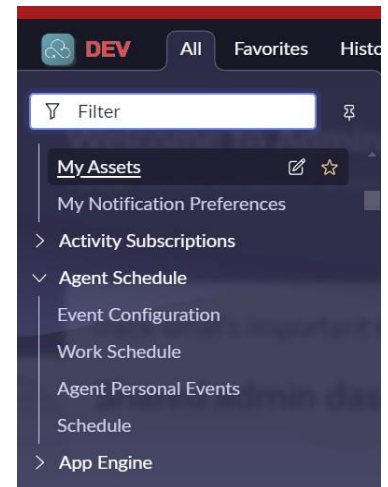
Examples: Service Operations Workspace , CMDB Workspace.

Application Navigator:

The Application Navigator in ServiceNow is a component located on the left side of the interface that provides a way for users to quickly access different applications, modules, and functionalities within the platform.

Applications can be custom-developed to meet specific organizational needs using ServiceNow's development tools and environment. Modules are the functionalities in a Application

Or They can be accessed from the ServiceNow Store



ServiceNow Store

It is an online marketplace where users can discover, purchase and download a variety of applications and integrations built on the ServiceNow platform. These apps and integrations are designed to extend the functionality of ServiceNow, allowing organizations to enhance their workflows and processes according to specific needs.

ServiceNow Certification and Roles

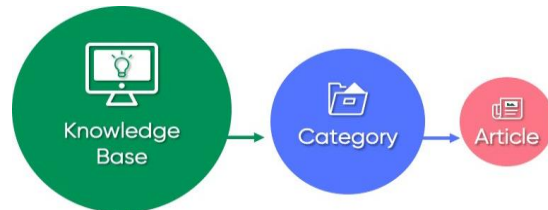
There are 5 main Certifications or roles to be done in ServiceNow

1. System Administrator
2. Developer
3. Implementer
4. Architech
5. Application Specialist

Being a Implementer enables out capabilities to integrate various applications and plugins into the serviceNow

Knowledge Management

The Knowledge Management application in the Platform enables the sharing and viewing of information in the form of articles. Users have access to Knowledge Bases (KB) where they may interact with useful content related to their daily work tasks.



Knowledge Management allows users to create, categorize, review, approve, and browse important information in a centralized location that is shared by the entire organization. Knowledge content exists within a Knowledge Base, which is managed by one or more Knowledge Managers. With Knowledge Management, each organization can have their own Knowledge Base (KB) .

Administrators can create multiple Knowledge Bases and assign them to individual users in the Platform. This is called **User Criteria**. User Criteria defines conditions that are evaluated against users to determine which users can create (upload or author), read (view), write (edit), and retire (make articles inaccessible to all users) knowledge articles. User Criteria is applied at the Knowledge Base level in the Platform.

ServiceNow DataBase

All the applications and features in servicenow are records in a table . Each record has a unique Sys_id. All the tables in servicenow are stored inside sys_db_object .

Sys_db_object - table used to store information about all the tables in servicenow

Sys_dictionary - table used to store information about all the fields of all the tables in

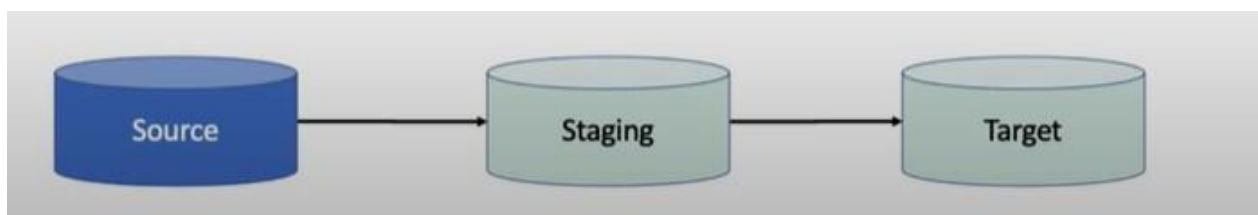
servicenow **Sys_documentation** - tables used to store all the field labels in servicenow

CMDB Configuration Management Database in service is a centralized repository that stores information about all the Configuration Items which are required to provide IT services. Using this we effectively manage all the IT infrastructure of the Organization.

1.3 Introduction to Importing Data Into Servicenow

Importing data into servicenow cannot be done directly , It mainly Involves 3 entities

1. **Source** - The entity containing the data to be imported into ServiceNow , Servicenow is prepared to work with many so sources like Excel, CSV,JSON,JDBC, etc
2. **Staging** - A table that ServiceNow created to temporarily store data pulled from source
3. **Target** - The ServiceNow table into which the data will imported



1.4 Creating a DataSource in ServiceNow

DataSource

All the data Source records are present in **sys_data_source** table, or you can access by navigation

All - System import Sets - Administration - Data Source

Creating a data Source

From Sys_data_source table select new and fill the from

The screenshot shows the 'Data Source' form in ServiceNow. The form has a header bar with a back arrow, a menu icon, the text 'Data Source New record', and a 'Submit' button. The form fields are organized into two columns. The left column contains: 'Name' (required, text input), 'Import set table label' (text input), 'Import set table name' (required, text input), 'Type' (required, dropdown menu with 'File' selected), 'Format' (dropdown menu with 'CSV' selected), and 'Zipped' (checkbox). The right column contains: 'Application' (dropdown menu with 'Global' selected), 'File retrieval method' (dropdown menu with 'Attachment' selected), and 'CSV delimiter' (text input). A 'Submit' button is located at the bottom left of the form.

Then Submit and go to attachments and attach the form you want to give as a data

1.5 Understanding Import Sets In serviceNow

In service now we can not directly load data into tables , Thus we use the Import sets.

Import Sets provide a mechanism to pull data into ServiceNow. Import Sets store data in Import Set tables. Any user logged in with the admin or import_admin role can manage all aspects of Import Sets.

You have to follow the below 6 steps to import data

1. Data Source
2. Load Data
3. Import set Table
4. Transform Map
5. Transform

Creating Import Sets:

1. **Data Source:** First, define a data source by specifying the location and format of the incoming data (e.g., CSV, Excel, JDBC).
2. **Import Set Table:** ServiceNow automatically creates an Import Set Table to temporarily hold the imported data.
3. **Load Data:** Use the "Load Data" module to import the data into the Import Set Table.

The screenshot displays the ServiceNow 'Load Data' configuration page. The interface is divided into a left sidebar and a main configuration area. The sidebar includes a search bar with 'load data' and a list of results under 'ALL RESULTS', where 'Load Data' is selected under 'System Import Sets'. The main area is titled 'Load Data' and contains the following configuration options:

- Import set table:**
 - ☒ Create table
 - ☐ Existing table
 - * Label: New table
 - Name: u_new_table
- Source of the import:**
 - ☒ File
 - ☐ Data source
 - File: Choose File CSE accent...072024.xls
 - Sheet number: 1
 - Header row: 1

A 'Submit' button is located at the bottom of the configuration area.

Upon Submitting the Form , the data will be loaded into the Staging table and progress will be displayed

Progress

Name	ImportProcessor
State	Complete
Completion code	Success
Message	Processed: 567, inserts 567, updates 0, errors 0, empty and ignored 0, ignored errors 0 (0:00:02.899)

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_new_table

[Create transform map](#) Create a transform map for the newly staged data

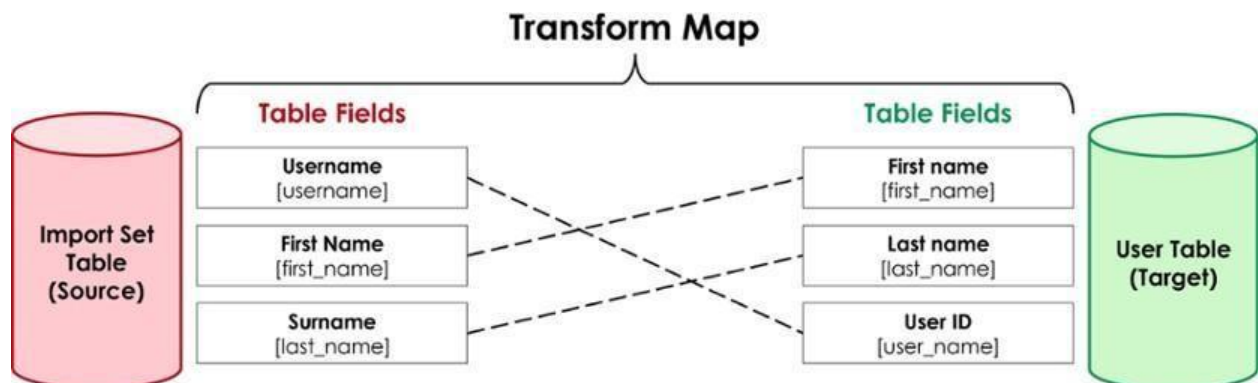
[Import log](#) View the import log

Now we can directly go to the Import sets sets of the new created staging table (Import set table) to build Transform Map

1.6 ServiceNow Transform Maps and Transform Fields

Transform Maps provide a guide for moving data from Import Set (staging) tables to “Target” tables. Field mapping provides direct field-to-field data moves.

A transform map is a set of field maps that determine the relationships between fields in an import set and fields in an existing ServiceNow table, such as Incidents [incident] or Users [sys_user].



There are two types of mapping done in Transform Map

Automatic Mapping Utility: field names of the Import Set match the name of the fields on the Target table where the data will be transformed. In this case, simply click Auto Map MatchingFields in the related links in the Table Transform Maps.

Mapping Assist Utility: The Mapping Assist utility provides a visually intuitive environment for specifying mapping between Import Set fields and Target table fields. With the Mapping Assist utility, it is possible to map a single source field (field on an Import Set table) to multiple destination fields (fields on a Target table).

The screenshot shows the 'Mapping Assist' utility interface. At the top, there's a navigation bar with 'DEV' and a star icon, and a search bar. Below the navigation bar, there's a header for 'Mapping Assist' with 'Save' and 'Cancel' buttons. The main area is divided into three sections: 'Source: HHD Imports', 'Field Map', and 'Target: Holographic Handheld HHD'. The 'Source' section lists fields like 'Asset Tag', 'Comment', 'Created', 'Created by', 'Device Number', 'Device Owner', 'Device Version', 'Error', 'Import set run', and 'Name'. The 'Field Map' section shows a table with 'Name' and 'Name' columns, and a row mapping 'Asset Tag' to 'Asset tag'. The 'Target' section lists fields like 'Approval group', 'Asset', 'Assigned', 'Assigned to', 'Attestation Score', 'Attestation Status', 'Attested', 'Attested By', 'Attested Date', and 'Attributes'. There are 'Add' and 'Remove' buttons between the source and target lists, and a 'Data Viewer' section at the bottom.

When all fields are matched properly, click **Transform** in the related links to begin transforming data onto the destination table.

Process to import data into servicenow table from excel

All - System import sets - load data - creating import set table - choosing the file - loading data into import set table - open the import set table - go to related links - transform map - Assist mapping - select the Servicenow table - map the fields - save - Transform

The following steps (process) can be completed by any user with the role import_admin or import_set_loader and import_transformer.

you can also use import option in Column options menu for excel and import XML for XML data

1.7 ServiceNow incident Management and Task Administration

Tasks in ServiceNow

A task is some item of work that needs to get done. In serviceNow, each Task is represented by a record in the Task table.

All - Navigation - Task.list

Three of the most commonly commonly used tasks are

1. Change Request
2. Incident
3. Problem

These are the children of the task table, they inherit the properties of the task table. Task table stores attributes of all types of the task and child children store attributes to specific task needs.

To administer a proper Task Management the following can be done

Assignment Rules - auto assign tasks to users and groups best to solveService

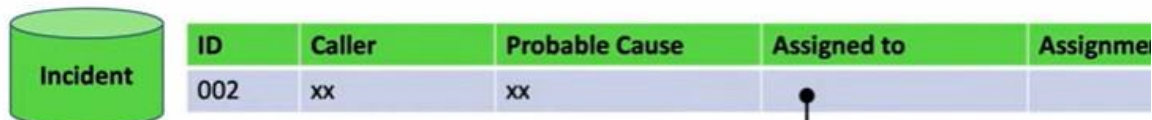
Level agreements - to ensure task completion in allotted time Inactivity

Monitors - to determine if the task is not touched

Workflows to process the task execution

Task Assignment

- Tasks can be assigned to an individual User or a Group of Users (or both)



Assignment Rules

- AppNav: All > System Policy > Rules > Assignment
- Table: Assignment Rule [sysrule_assignment]

Assignment Lookup Rules

- AppNav: All > System Policy > Rules > Assignment Lookup Rules
- Table: Assignment Data Lookup [dl_u_assignment]

Ex. Abraham Lincoln

Assignment Rules are used to automatically assign tasks to users and groups , they are stored in **sysrule_assignment**

ALL - system Policy - Rule - Assignment

Assignment rules are executed in the lowest order of the Execution Order, when certain conditions are met

Creating an Assignment Rules

New - Applies to - Table - Conditions - add condition -
- Assign to - User - Group - save

Assignment Lookup rules

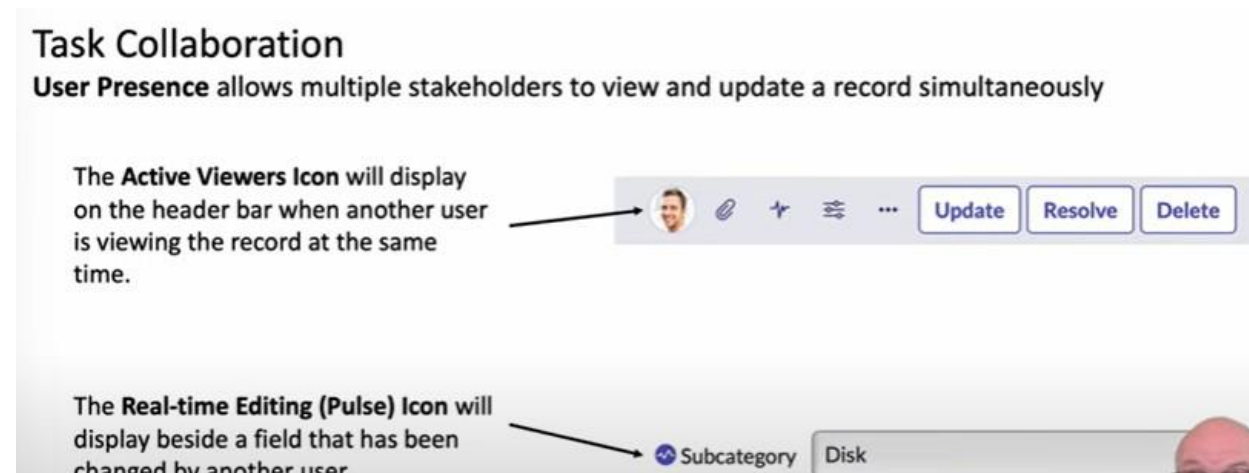
They can only be applied to incident tasks, not all the tasks, they are stored in dl_u_assignment table. They are way less powerful than assignment rules.

Resolving tasks from user perspective

We can view the tasks assigned to the user in Service Desk Navigation in my groups work or my works

Task Collaboration and User Presence

User Presence allows multiple stakeholders to view and update records Simultaneously.



Visual Task Boards (VTBs) in Servicenow.

Transform your lists and forms into an interactive graphical experience .VTBs can have a number of functions in the Platform. We can use them to create a personal to-do list, and collaborate in real-time with group members on assignments. Displayed graphically as lanes and cards, VTBs provide a landing page to view and organize work in ServiceNow.

All - self service - Visual Task Board

We can create a VTB from a list view by selecting a few records , selecting the Actions on selected rows dropdown menu, and then selecting Add to Visual Task Board.

[illegible]

You may also show a VTB from a list view, by breaking up data for whichever column the VTB is created from. All you have to do is select Column options (from any column) and select Show Visual Task Board.

Caller	State	Category
Christen Mitchell	Sort (a to z)	
	Sort (z to a)	
Adela Cervantsz	Show Visual Task Board	
	Ungroup	
Adela Cervantsz	Group By Caller	
	Bar Chart	
Allyson Gillispie	Pie Chart	
	Launch Interactive Analysis	
	Export	>

Cards and Lanes

The screenshot shows the 'Incidents by Category' dashboard. Annotations include:

- Title:** Points to the dashboard title 'Incidents by Category'.
- Quick Panel:** Points to the top navigation bar containing filters like 'Filter by title or number', 'Due By', and a search icon.
- Lanes:** Points to the category tabs: 'Inquiry / Help', 'Software', and 'Hardware'.
- Cards:** Points to the incident cards displayed in the main area, such as 'Can't log into SAP from my laptop today' and 'Sales forecast spreadsheet is READ ONLY'.

Cards represent the records and Lane Represents the grouping mechanism used to create the VTB

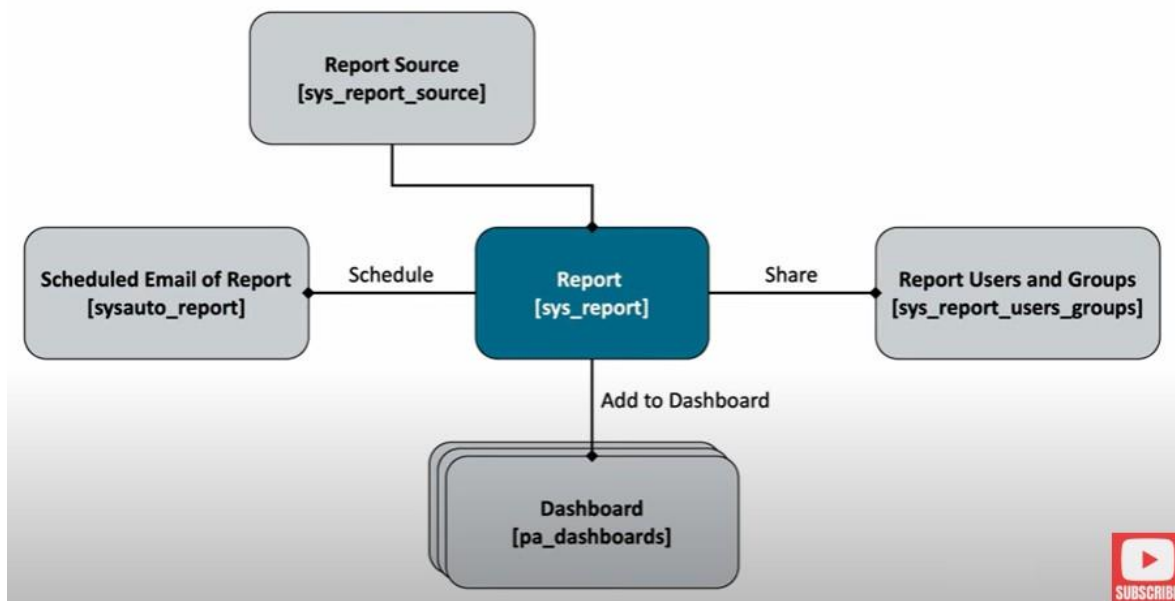
Types of Visual Task Board

1. Guided / Data Driven - Created from list using an attribute that has a predefined set of values as lanes
2. Freeform - Not created from list, used for personalized Work management

1.8 ServiceNow Reporting

Reports are a way to visualize ServiceNow data and can be viewed and analyzed by you and your colleagues. Data can be visually represented in many ways, including bar charts, pie charts, dials, lists, pivot tables, donuts, and more.

Reports can be run manually or scheduled to run automatically. Reports are interactive. Users with access can drill down into the report to view and manipulate the underlying records.



Sys_report - stores all the reports in the instance.

Report Source - **sys_report_source** table stores the filters condition of list that are used to populate the report.

Sys_report_users_groups - used to share reports to groups and tables. **Dashboard**

- **pa_dashboards** used to store multiple reports

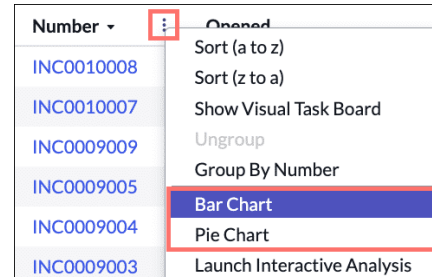
Predefined reports

All > Reports > View / Run

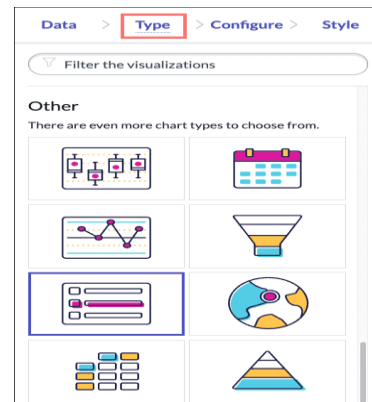
we can create our own reports by navigating to

All > Reports > Create Report module.

you can simply select most column context menus in any list to generate a report directly from the data in that list.



Creating a Report All > Reports > create new

A screenshot of the 'Data' tab in the report creation wizard. The breadcrumb navigation shows 'Data > Type > Configure > Style', with 'Data' highlighted. The form includes fields for 'Report name' (Active Change Requests), 'Source type' (Table), and 'Table' (Change Request [change_request]). There is also a 'Description' section with a message: 'There is no description for this table. To add a description, please contact your admin.'A screenshot of the 'Configure' tab in the report creation wizard. The breadcrumb navigation shows 'Data > Type > Configure > Style', with 'Configure' highlighted. It includes a 'Choose columns' button, a 'Group by' dropdown menu set to 'Active', and an 'Additional group by' button.A screenshot of the 'Style' tab in the report creation wizard. The breadcrumb navigation shows 'Data > Type > Configure > Style', with 'Style' highlighted. It contains settings for the chart title, including 'Show chart title' (Report only), 'Chart title' (empty field), 'Size of the chart title' (16 px), 'Chart title color' (Black), and 'Title horizontal alignment' (Center).

Creating a report from studio

All - System Applications - Studio - Select Application - File - Create New - Report - from this point it is the same again i.e Data - Type - configure - style

Scheduling Reports

All - Reports - view / run - open report - sharing icon - schedule - fill the form

Schedule an email containing this report

Name	Scheduled execution of Users by Depart	Application	Global
Report	Users by Department	Active	<input checked="" type="checkbox"/>
Users	Abraham Lincoln, Fred Luddy	Run	Monthly
Groups	CAB Approval	Day	1
Email addresses	jtt0340@gmail.com	Time	Hours 00 00 00
		Conditional	<input type="checkbox"/>
		Omit if no records	<input type="checkbox"/>
Subject	Monthly copy of users by department report.		
Introductory message	<div><div>B <i>I</i> <u>U</u> ↶ ↷</div><div>Verdana 8pt</div><div></div></div>		

Sharing the reports

All - Reports - view / run - open report - sharing icon - share - fill the form

Dashboard in serviceNow

A dashboard is a custom arrangement of widgets and enables you to display multiple performance analytics and reporting on a single screen.

All - Reports - view / run - open report - sharing icon - Dashboard - fill the form

Add to Dashboard

Dashboard

Dashboard: Change Overview

Tab: Q cmdb

- CMDb Dashboard - CMDb View
- CMDb Dashboard - Service View
- CMDb Dashboard - Group View
- CMDb Correctness Dashboard
- CMDb Completeness Dashboard
- CMDb Compliance Dashboard
- CMDb Service Correctness Dashboard
- CMDb Service Completeness Dashboard

1.9 Low Code No Code Development

Low Code/No Code development focuses on bridging the gap between business operations, IT, and digital transformation initiatives. It empowers non-IT professionals with tools to build traditional IT applications with minimal programming knowledge.

- **App Engine Studio (AES):** A guided experience that provides everything needed to create low-code/no-code applications, including building tables, importing data, creating workflows, and managing security.
- **Now Experience UI Builder:** A tool for creating workspaces and portals using a simple drag-and-drop interface.
- **Flow Designer:** Allows users to automate workflows, approvals, tasks, notifications, and record operations using natural language, eliminating the need for writing code.

Pros and Cons of Low Code/No Code

Pros:

1. Speeds up the development process.
2. Minimizes the need for extensive coding.
3. Enables non-developers to create applications, thereby empowering business users.

Cons:

1. Limited functionality and customization options.
2. Potential scalability challenges.