Week 1

Learning Objectives:

After completing this module, learners will be able to:

1. Define what ServiceNow is and explain its purpose in IT service management.

2. Identify the core components and architecture of the ServiceNow platform.

3. Describe the infrastructure for deploying and utilizing ServiceNow services.

4. Navigating the ServiceNow Platform and Mastering ServiceNow User Interfaces

5. Data Imports and Integrations, Report Creation and Management

6. Understand the platform data model that supports reporting capabilities in ServiceNow.

7. Demonstrate how to create, manage, and share different types of reports within ServiceNow to present data effectively.

8. Discuss the importance of data visualization in decision making.

9. ServiceNow Branding and Customization:

10. Explain the process of customizing the ServiceNow user interface through branding tools.

11. Demonstrate how to apply a corporate identity to the ServiceNow portal, using Company Guided Setup and UI Builder.

12. Define Low Code No Code development and its relevance in the context of digital transformation.

13. Discuss the benefits and limitations of following a Low Code No Code approach in software development.

14. Identify the career opportunities available in the Low Code No Code development space

1. What is ServiceNow

ServiceNow Employees and Customers

ServiceNow employs over 17,000 people worldwide.

ServiceNow's customers are typically mid to large enterprises, including companies like Coca-Cola, Deloitte, and Microsoft.

Fred Luddy is the founder and current chairman of the company's board of directors.

ServiceNow Company History

ServiceNow was founded in 2003 by Fred Luddy under the name Glidesoft shortly after the bankruptcy of Peregrine Systems.

In 2006, the company's name was changed from Glidesoft to ServiceNow.

ServiceNow became a publicly traded company in 2012 under the ticker NOW.

What Does ServiceNow Do?

Fred Luddy created ServiceNow to address the common issue of IT departments making business people feel frustrated due to inefficient processes and communication.

IT departments are often a significant expense for companies and exist to support revenue-generating activities, but the exchange between business needs and IT solutions is frequently flawed.

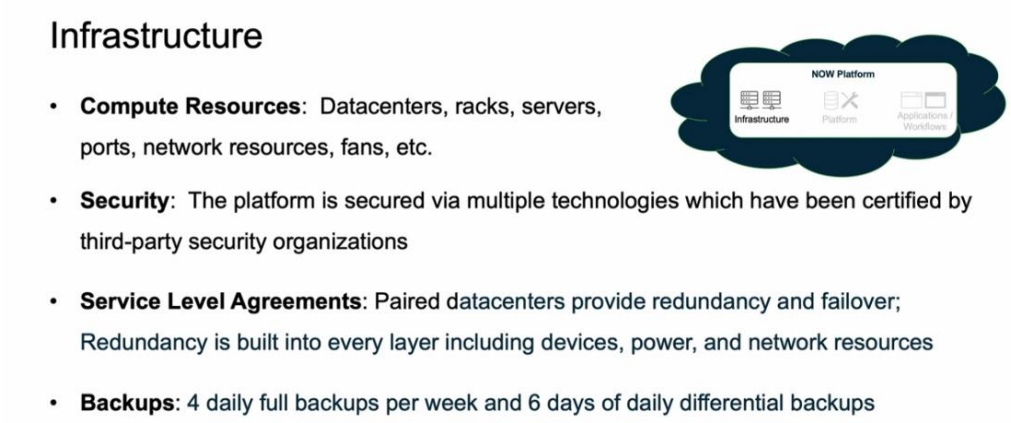
ServiceNow aims to empower business users to resolve their own IT issues through an intuitive platform, essentially functioning as a cloud-based IT department.

How ServiceNow Works (Platform Overview)

The Now Platform, a cloud-based application platform as a service (aPaaS), furnishes the necessary infrastructure, platform, applications, and workflows to accommodate business IT requirements.

ServiceNow ensures data protection through multiple layers of security, including physical and virtual measures, third-party audits and certifications, and a comprehensive redundancy and failover system across all levels.

The platform is built upon a unified enterprise-wide data model and database, offering a robust out-of-the-box solution for most IT functions, while also empowering users to develop custom workflows and applications that seamlessly integrate with the existing system.



Platform

- All applications (OOB and custom) for the entire enterprise are supported by a single, common, data-model and database
- Ability to develop custom applications and workflows that integrate seamlessly into the platform

ServiceNow Applications

ServiceNow categorizes its applications by the type of workflow they support, including IT, employee, customer, and creator workflows.

These categories are further divided into subcategories that address specific company needs.

While ServiceNow offers many pre-built applications, users can also create custom applications within the platform.

Applications / Workflows

ServiceNow comes with a robust suite of applications which are functionally categorized into 4 primary workflows:

- **IT Workflows:** Service Management (24), Operations Management (13), Business Management (10), Asset Management (4), DevOps (4), Security Operations (8), Governance, Risk, and Compliance (13), Telecommunications Network, Performance Management (3)
- **Employee Workflows:** HR Service Delivery (16), Workplace Service Delivery (10), Legal Service Delivery (10), Procurement Service Management (6), Safe Workplace Suite (1)
- **Customer Workflows:** Customer Service Management (29), Field Service Management (11), Connected Operations (4), Financial Service Operations (25), Telecommunications Service Management (24)
- **Creator Workflows:** App Engine (15), IntegrationHub (8)

ServiceNow Data centre Locations

ServiceNow's headquarters is located in Santa Clara, California, and the company has offices and employees worldwide.

ServiceNow has a global presence, with offices in North America, Latin America, Europe, the Middle East, Africa, Asia Pacific, and Japan.

The data centres that support the ServiceNow platform are strategically located in Asia Pacific, Japan, Europe, the Middle East, Africa, North America, and South America.

ServiceNow Definition

ServiceNow is a software company that provides a cloud-based environment for businesses to solve problems.

The company was founded in 2003 by Fred Luddy to address the challenges large enterprises encounter with traditional IT delivery methods.

ServiceNow aims to provide a user-friendly platform that empowers business users to resolve issues independently.

2. ServiceNow Platform Overview

Meet Fred Luddy

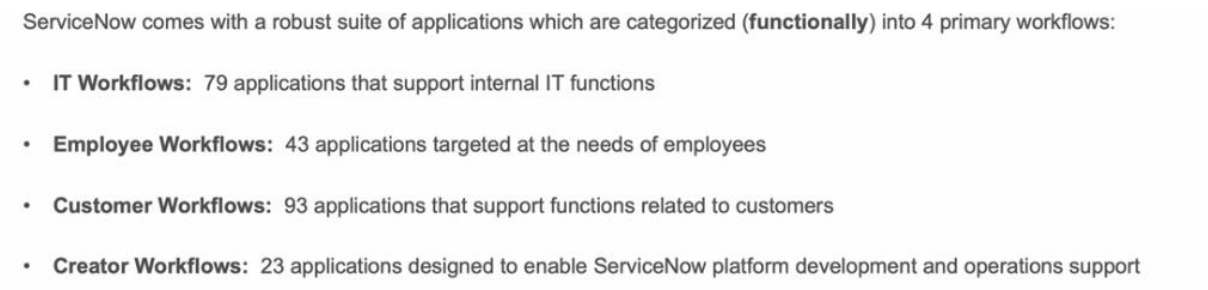
- Fred Luddy founded ServiceNow in 2004 to automate the flow of work within businesses.
- Luddy's inspiration for ServiceNow stemmed from his frustration with IT staff struggling to understand and address the needs of business people.
- Luddy's vision was to empower business people to solve their own problems using intuitive technology.

The Now Platform

- ServiceNow is described as an application platform as a service (aPaaS) delivery model, which combines aspects of infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS).
- ServiceNow provides the infrastructure, platform, and a suite of applications that can be used out of the box, while also allowing for custom development.
- The entire ServiceNow platform is built on a single, common database and data model, encompassing a wide range of business functions rather than focusing on a single aspect.

Applications and Workflows

- ServiceNow categorizes its application offerings into four workflows: IT workflows (79 applications), employee workflows (43 applications), customer workflows (93 applications), and creator workflows (23 applications).
- Each of the four top-level workflows is further subdivided into more specific sub-workflows, for example, IT workflows include subcategories like IT service management, IT operations management, and IT business management.
- ServiceNow's multi-instance architecture provides each company with its own dedicated instance, from the application server to the database, allowing for greater control and flexibility in scheduling upgrades and patches.

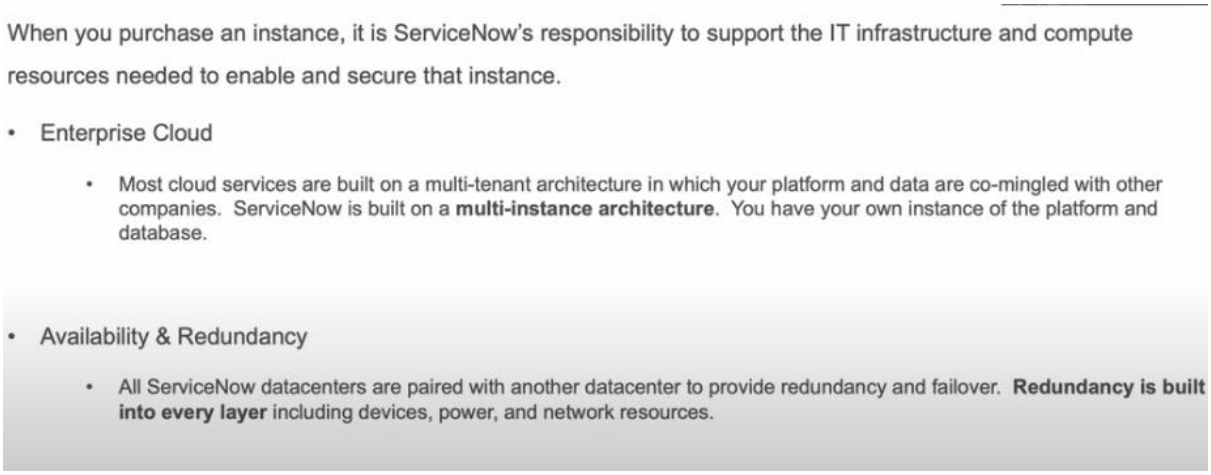

ServiceNow comes with a robust suite of applications which are categorized (**functionally**) into 4 primary workflows:

- **IT Workflows:** 79 applications that support internal IT functions
- **Employee Workflows:** 43 applications targeted at the needs of employees
- **Customer Workflows:** 93 applications that support functions related to customers
- **Creator Workflows:** 23 applications designed to enable ServiceNow platform development and operations support

Now Platform Architecture (2)

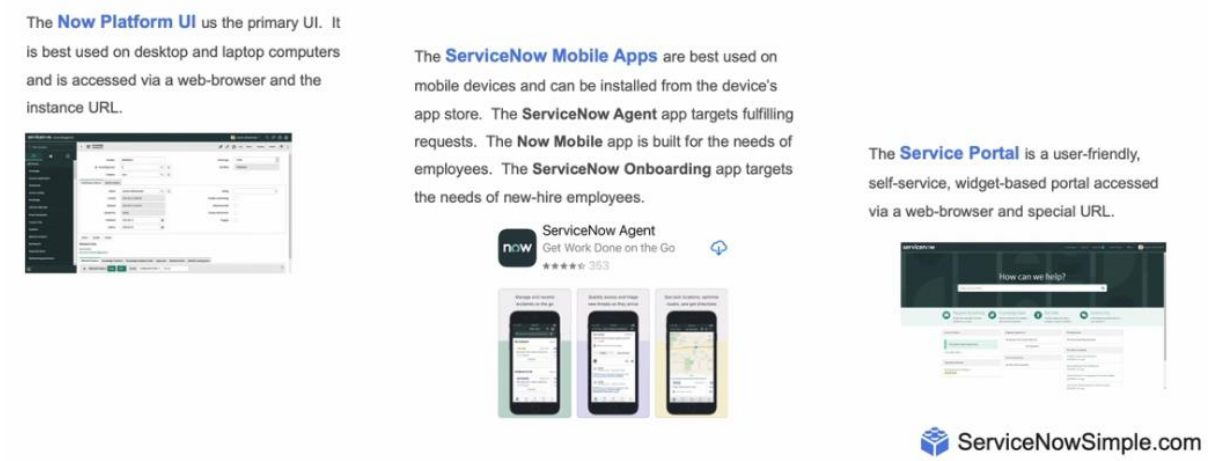
- ServiceNow provides four full backups each week and six days of differential backups. [806]
- The platform's security is certified by third-party organizations.

- ServiceNow offers domain separation, allowing the separation of applications and administrative tasks into different groups called domains for more granular security control.



Now Platform User-interfaces

- ServiceNow offers three primary user interface types: Now Platform UI, ServiceNow mobile apps, and Service Portal.
- ServiceNow provides three mobile applications: ServiceNow Agent app, Now Mobile app, and ServiceNow Onboarding app.
- The Service Portal is a customizable, widget-based interface that can be tailored for specific user groups.



Role-based Access

- ServiceNow uses users, groups, and roles to manage access and permissions.
- A user is typically assigned to a group and can be granted permissions through roles.
- A role is a collection of permissions that can be assigned to individual users or groups.
- Roles provide flexibility in managing permissions as users change roles or move within the organization.

User Authentication

- Users must log in with a username and password as the first level of security in ServiceNow.
- After authentication, ServiceNow checks roles and permissions to determine access to different parts of the application.
- While ServiceNow uses a local database for authentication, it also supports external single sign-on, LDAP, OAuth 2.0, digest tokens, and multi-factor authentication.

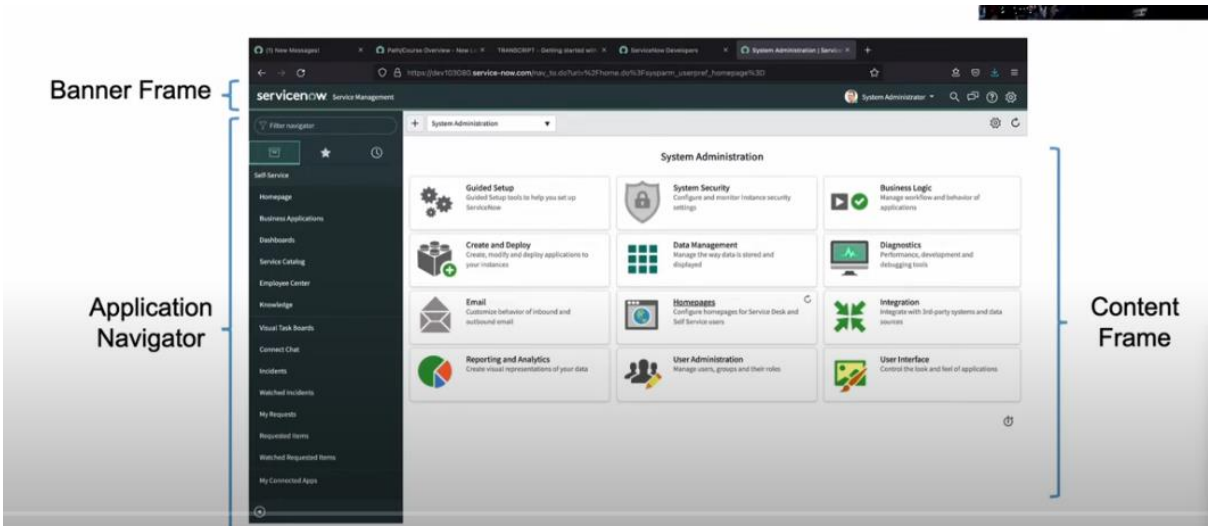
When a user attempts to login to an instance, ServiceNow validates their identity and enables access to functions and data based upon their related groups and roles. The platform can support several methods of user authentication including:

- **Local database authentication**
- **External Single Sign-on (SSO)**
- **LDAP**
- **OAuth 2.0**
- **Digest Token**
- **Multi-factor Authentication**

3. ServiceNow User Interface Overview

ServiceNow User Interface Elements

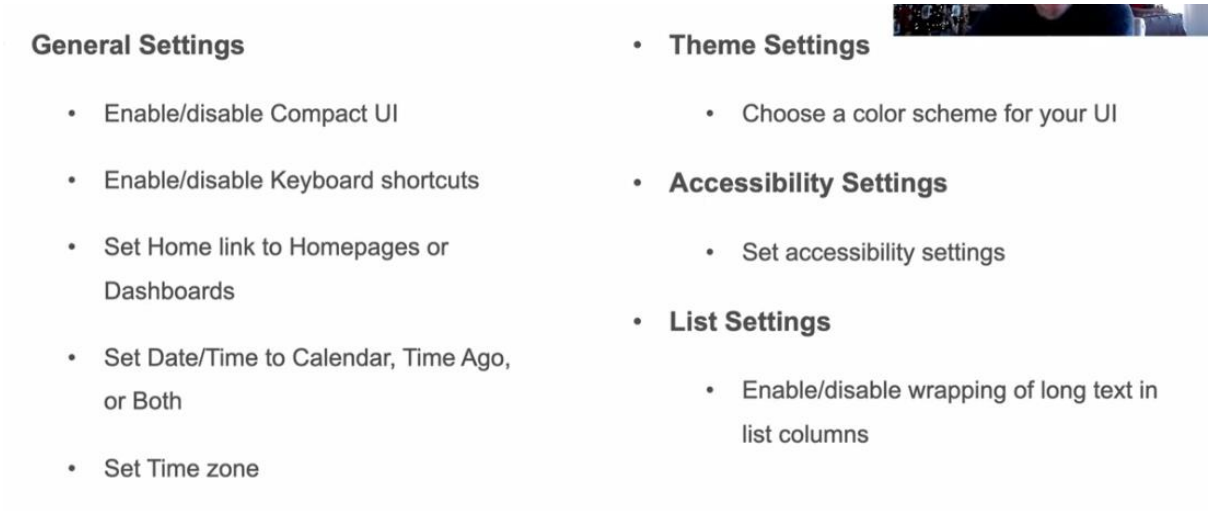
- The ServiceNow platform user interface has three primary elements: the banner frame, the application navigator, and the content frame.
- The ServiceNow user interface consists of three main elements: the application navigator (left sidebar), the banner frame (across the top), and the content frame (everything else).



Banner Frame Features

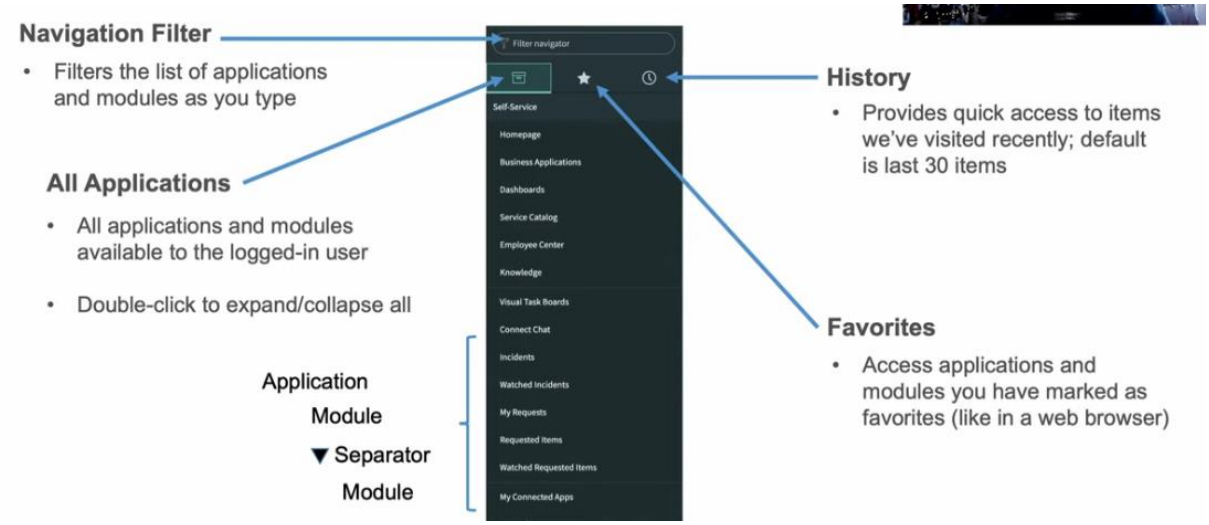
- The user menu, available from the banner frame, provides four menu options: Profile, Impersonate User, Elevate Roles, and Logout.
- The Global Search tool enables users to search the entire ServiceNow instance for records matching specific keywords. [428]

- System Settings, accessible via the gear icon, allow users to customize their user interface with options for general settings, themes, accessibility, list views, form views, notifications, and developer settings.
- The global search tool searches the entire instance for records matching any of the entered keywords, categorizing results by record type and displaying a snippet containing the keyword.
- Users can change the color theme of their ServiceNow user interface; this can be useful for differentiating between development, test, and production instances.
- The system settings area in ServiceNow allows users to customize their own user interface without affecting the experience of other users.



Application Navigator Features

- The Navigation filter, located at the top of the Application Navigator, allows users to search for specific applications or modules.
- The Application Navigator features three tabs: All Applications, Favorites (for frequently used applications, modules, or records), and History (displaying the last 30 visited items).
- The Application Navigator is structured hierarchically with applications at the top level, containing one or more modules. Separators can group modules within an application.
- The application navigator in ServiceNow has three tabs: All Applications, Favorites (marked with a star), and History (showing the last 30 accessed items).



User Specific Features

- The Impersonate User option allows support personnel to view the ServiceNow instance as if they were another user, aiding in troubleshooting and support.
- The Elevate Roles feature, available only to system admins, enhances security for high-impact actions by requiring role elevation, preventing accidental mistakes.
- Users can add applications, modules, specific records, lists of records, and filtered lists of records to their favorites for easy access.
- Favorites are user-specific, meaning they will only be visible to the user who created them.
- Users can customize their favorites by changing their order, name, color, and icon.

Developer Instance Access

- To access the personal developer instance, navigate to the developer portal from the ServiceNow homepage and click the "Start Building" button.

4. ServiceNow Branding Overview

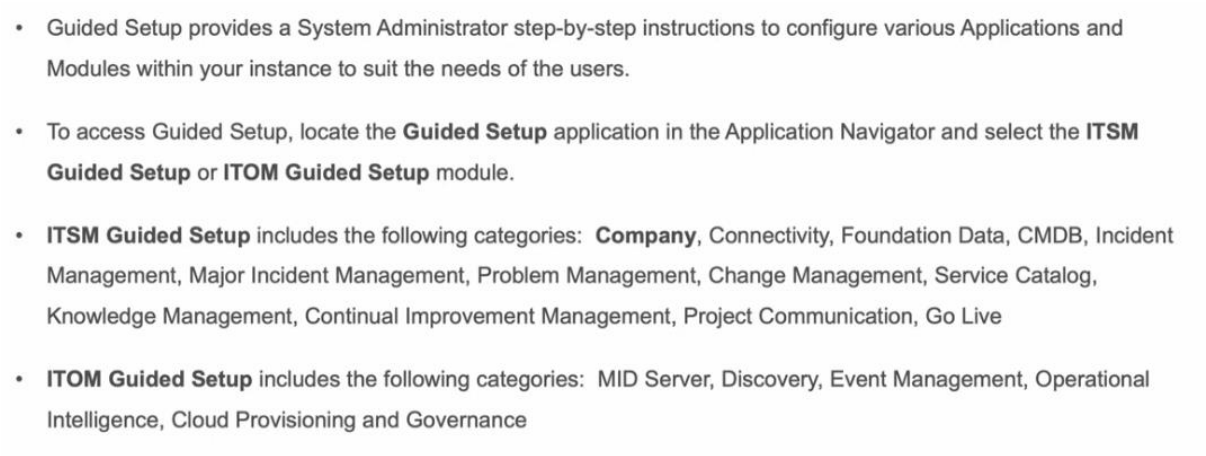
Lesson 4 Overview

- The lesson on ServiceNow branding is brief and not heavily focused on information relevant to the certification exam. [92]
- The lesson includes an overview video explaining ServiceNow branding and its purpose, followed by a simulation demonstrating a quick branding change.
- The video briefly mentions guided setup wizards, including one for branding, and other options like the ServiceNow portal and UI builder for personalizing the instance.

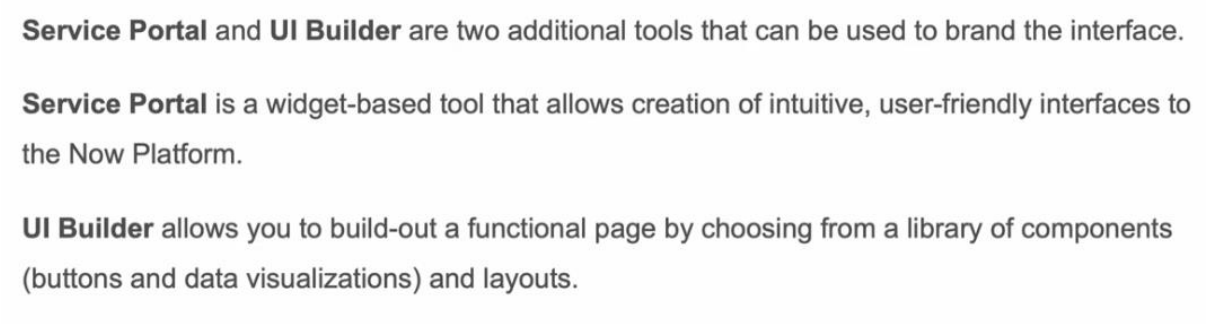
Lesson 4 Notes

- Branding in ServiceNow focuses on customizing the user interface to align with a company's brand identity, using elements like company colors, fonts, and logos.

- ServiceNow offers guided setup wizards to assist with application and module setup, including wizards for branding, connectivity, foundational data, and various IT Service Management (ITSM) processes.
- Beyond guided setup, ServiceNow provides additional personalization options through the Service Portal, a widget-based tool for user interface customization, and UI Builder, a WYSIWYG editor for building functional screens with customized elements.



- Guided Setup provides a System Administrator step-by-step instructions to configure various Applications and Modules within your instance to suit the needs of the users.
- To access Guided Setup, locate the **Guided Setup** application in the Application Navigator and select the **ITSM Guided Setup** or **ITOM Guided Setup** module.
- **ITSM Guided Setup** includes the following categories: **Company**, Connectivity, Foundation Data, CMDB, Incident Management, Major Incident Management, Problem Management, Change Management, Service Catalog, Knowledge Management, Continual Improvement Management, Project Communication, Go Live
- **ITOM Guided Setup** includes the following categories: MID Server, Discovery, Event Management, Operational Intelligence, Cloud Provisioning and Governance



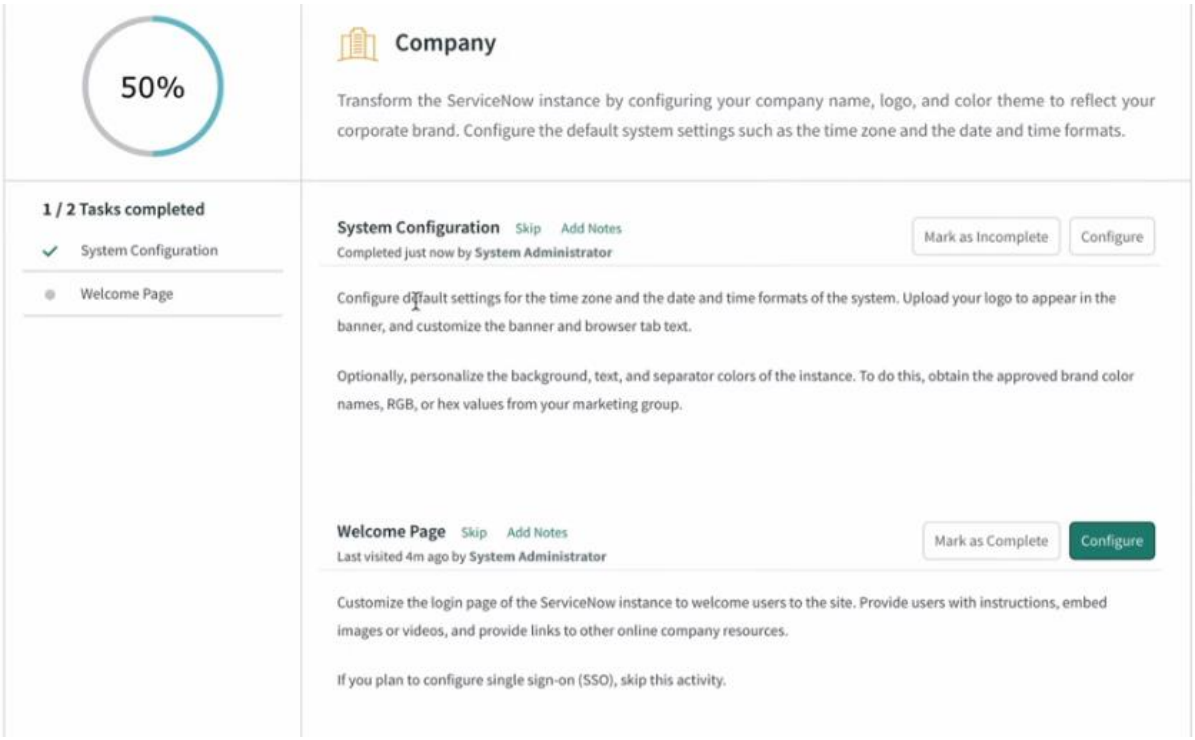
Service Portal and **UI Builder** are two additional tools that can be used to brand the interface.

Service Portal is a widget-based tool that allows creation of intuitive, user-friendly interfaces to the Now Platform.

UI Builder allows you to build-out a functional page by choosing from a library of components (buttons and data visualizations) and layouts.

Lesson 4 Configuration

- The page header caption can be customized, as well as the browser tab title, time zone, banner image, date and time formats, banner text colors, and themes.
- Changes made to the system settings are reflected in the page header caption, and saving these changes updates the system properties.
- The welcome page, which appears after entering login credentials, can be customized with messages for users, such as alerts, scheduled activity reminders, or welcome messages.



Lesson 6 Result

- The new welcome message has a display order of 10, while the about message has a display order of 100, placing it below the welcome message.
- The company step within the guided setup wizard is now marked as complete.
- It is suggested to explore the remaining setup options available in PDI.

Summary

- Branding in ServiceNow involves customizing the instance to reflect a company's image and enhance user experience.
- Guided Setup wizards, available for many applications, assist in configuring the instance, including system settings and welcome pages.
- The chapter concludes a lesson on ServiceNow branding and suggests that subsequent lessons will cover topics like lists and filters.

5. ServiceNow Lists and Filters

ServiceNow List Views

- ServiceNow extensively utilizes lists and list views to present the data stored in its database tables.
- A list view is available for every database table within the platform.
- The list view displays data from a specific table, such as the incident table.

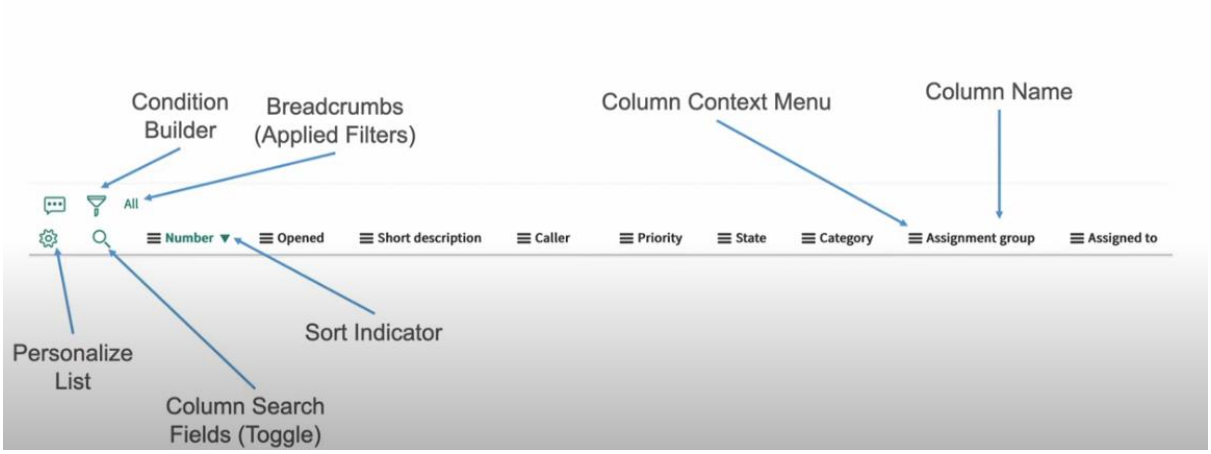
Accessing List Views

- The list interface can be accessed in several ways, including through the application navigator and by using the ".list" command followed by the table name.

- For instance, "task.list" opens the list interface for the task table.
- The command "sys*db*object.list" opens the list interface for a table named "sys*db*object," which contains information about all other tables in the ServiceNow database.

List View Features and Customization

- The list view in ServiceNow offers a standardized way to interact with lists, featuring elements like the title bar, list header (including column names), and the data itself in rows and columns.
- Users can customize their list view by using saved views, filters, and grouping options available in the list control menu, but these customizations might require specific permissions.
- Saved views and filters, once created, are accessible to all users for that specific table or list.
- The list control menu also allows users to adjust the number of records displayed per page, refresh the list, and add the current list view to their favorites for quick access.
- The personalized list tool, represented by a gear icon, allows users to customize which columns are displayed in their list view without affecting other users.



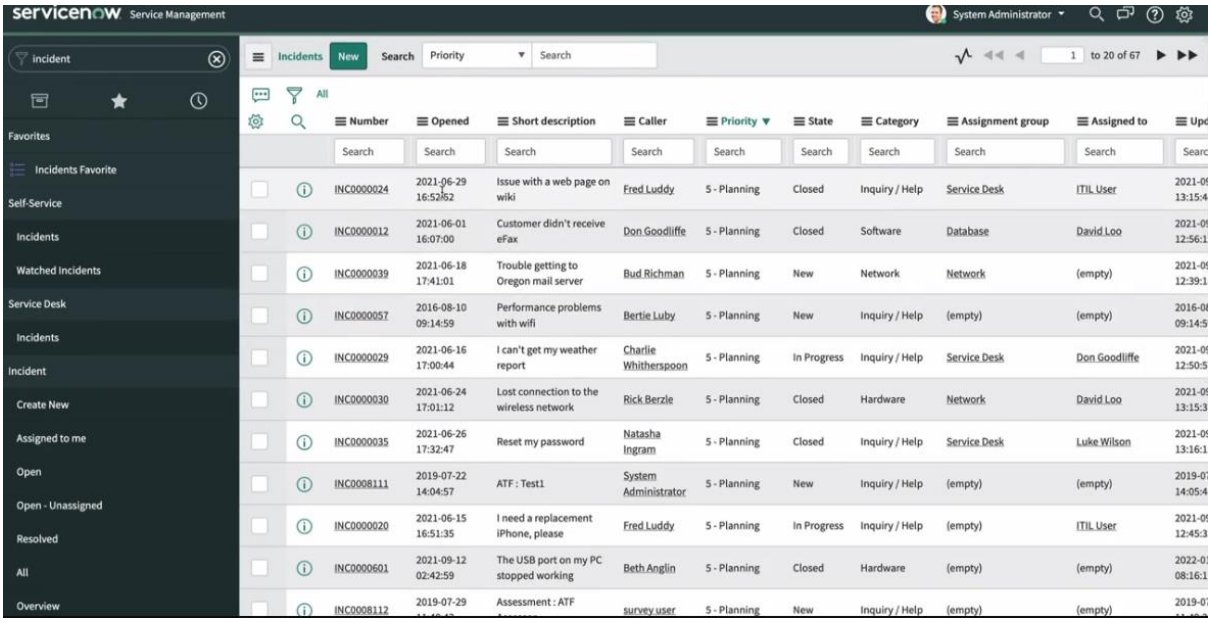
Filtering and Searching Data

- The search tool allows users to search for specific values within a chosen column, searching the entirety of the table's data.
- The filter icon, when clicked, enables the condition builder, which allows for the application of complex filters to the list view using multiple conditions and sorting options.
- The column search row, toggled by a magnifying glass icon, provides a way to filter data within specific columns displayed in the list view.
- Breadcrumbs indicate applied filters and can be used to clear filters.

Column Features and Interactions

- Column labels, derived from database table field labels, enable sorting by that column's data.

- The column context menu offers options like Visual Task Board, bar/pie chart views, and data export.
- The field context menu provides options like "Show matching," "Filter out," and "Copy URL/Sys ID."
- The first column in a list is typically a clickable link to the record's form view, unless the column has been modified.
- Within the incident list, clicking linked values in the 'caller' column will open the details for that specific caller.



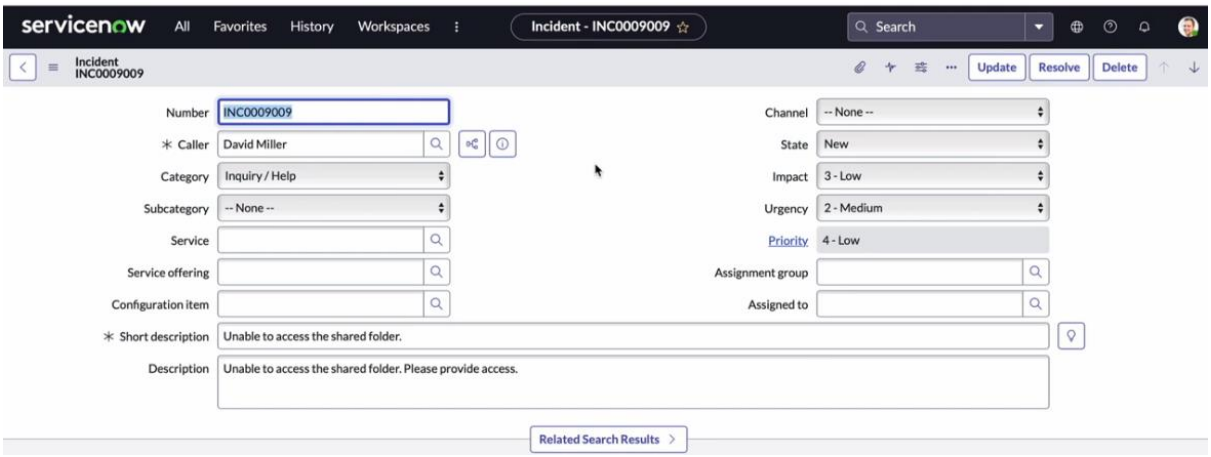
Record Interactions

- Checkboxes enable multi-record selection for actions like updating fields or assigning tags.
- The information icon next to the checkbox provides a preview of the record.
- The 'open record' button allows users to open the full detail form of a record.

6. Forms in ServiceNow

Forms in ServiceNow

- Forms are a critical aspect of ServiceNow, essential for both certification exams and general proficiency in the platform.
- This video is part of a larger series designed to simplify the ServiceNow Fundamentals learning path, aiming to equip viewers with the knowledge to succeed in the CSA certification exam.
- The series comprises 27 videos, offering a comprehensive guide to ServiceNow, beneficial for both certification seekers and those looking to enhance their skills on the platform.



What is a Form?

- Forms in ServiceNow are used to view, change, or add data to records stored in the ServiceNow database.
- Every record type in ServiceNow has a corresponding form.
- Forms can be accessed by opening a record from a list, entering the record ID in the global search, or creating a new record.

The Standard Layout

- ServiceNow has created a standardized layout for all forms.
- Every form has a header bar with a standard set of tools.
- The main section of every form contains fields that display the record's attributes and labels, with required fields marked with an asterisk and read-only fields marked with a gray background.
- Additional sections can group common fields, related lists, and formatters.

Form Field Types

- String fields are displayed as simple input elements.
- Reference fields display a value pulled from another table and offer tools to view and populate related values. [300]
- List fields, similar to reference fields, allow multiple value selection from a reference table, creating a one-to-many relationship.
- Journal fields enable adding notes viewable by specific users, often used in tasks, incidents, and change records.
- UI policies can alter a field's display and behaviour based on another field's value, such as hiding a field unless a specific condition is met.

Saving Changes

- ServiceNow, unlike some cloud-based platforms, does not automatically save changes to the database; users must proactively save changes.
- Clicking the "Submit" or "Update" button saves changes to the database and closes the form.

- The "Save" option in the form's context menu saves changes but leaves the form open, allowing for further edits.

Insert / Insert & Stay

- ServiceNow provides a feature that allows users to create a copy of an existing record.
- The "Insert" option creates a new record with the copied values, saves it, and closes the form.
- The "Insert and Stay" option creates a new record with the copied values, saves it, and leaves the form open, allowing for further edits.

Form Sections

- Forms in ServiceNow are structured using sections to organize fields and data.
- Users can choose to display additional form sections as either tabs or expandable/collapsible containers.
- The display preference for form sections is a user-specific setting managed through the "Preferences" menu, impacting only the logged-in user and persisting across sessions.

Related Lists & Formatters

- Sections below the main section of a form are populated with related lists and formatters.
- Related lists present a list of records from another table that are related to the current record being viewed.
- Formatters are special form elements that display information related to the record but are not fields or related lists of records.

Form Views

- Form views allow different users to see the same record in a way that best suits their needs.
- Form views can be accessed and changed from the form context menu under the "View" menu item.
- Every form has a default view that, when selected, removes the view name from the header bar.

Form Personalization

- Form views can be created and modified by users with specific permissions, and these changes will impact all system users.
- The form personalization tool allows individual users to customize their view of a form without affecting other users.
- Users can use the form personalization tool to show or hide specific fields in their view, and they can reset the form to its original design.

Adding Attachments

- The "Manage attachments" button is located to the left of the form personalization button.
- The "Manage attachments" button allows users to attach various document types to a record.
- Users can add or remove attachments from records using the pop-up window accessed via the "Manage attachments" button.

Form Templates

- Form templates allow users to automatically populate specific fields when creating new records, streamlining data entry for frequently used values.
- Users can create personal templates, the access to which can be controlled, and toggle the template bar on or off from the form header.
- Naming a template the same as the table it's applied to will automatically populate fields with the template's values upon creating a new record of that table type.

Creating & Editing Views

- Users with specific administrative roles can create and modify form views.
- The Form Design tool offers a drag-and-drop interface for adding, moving, removing, and reordering fields and sections.
- The Form Layout tool provides a simpler method for adding and removing fields between "available" and "selected" areas.

7. Hands-on ServiceNow Tool Demo

Logging In

- To access a ServiceNow instance, a URL is used with a preferred web browser.
- When a company licenses ServiceNow, they receive a cloud-based platform and suite of applications designed to provide IT services.
- Users are granted roles to manage their privileges within the platform.

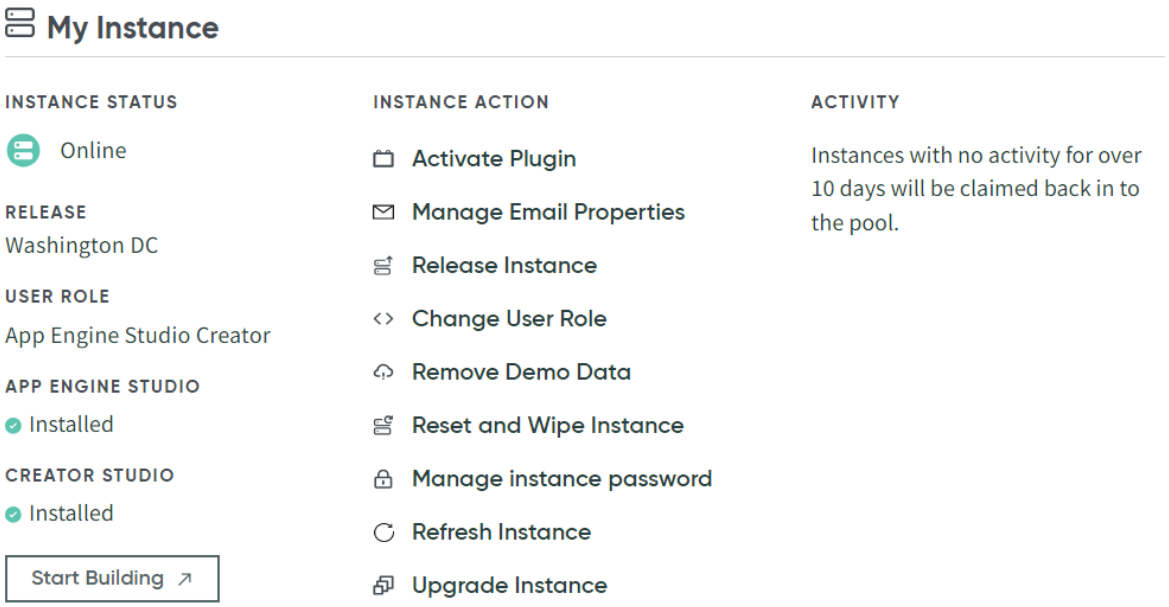
The ServiceNow Next Experience UI

- ServiceNow refers to its primary user interface for applications and the platform as the Next Experience UI.
- ServiceNow offers other user interfaces, including mobile applications for Android and Apple, a Service Portal, and an Employee Center.
- The Next Experience UI is the interface where users typically spend most of their time.

The Navigation Bar

- The User menu allows users to manage user-specific configurations, view notifications, and access contextual help. [201]
- The global search function enables users to search the entire platform for various data points, including user names and incident numbers.

- The contextual app pill provides a textual representation of the user's current location within the platform, while the star allows users to bookmark frequently accessed screens.
- Workspaces offer a consolidated view of specific work areas, such as the CMDB, by displaying multiple widgets on a single screen.
- The All menu serves as a central hub for accessing all ServiceNow applications, including both out-of-the-box and custom-developed applications.



ServiceNow Applications Overview

- ServiceNow categorizes its applications into four main workflows: IT, Employee, Customer, and Creator.
- These workflows are further divided into specific application groups, with IT having 79, Employee having 43, Customer having 93, and Creator having 23 applications.
- All applications are accessible through the "All" menu within the ServiceNow platform.

The Application Navigator

- ServiceNow comes with a large number of applications accessible through the "All" menu in the Application Navigator.
- Each application in the Application Navigator can be expanded to view its specific modules.
- ServiceNow provides the capability for users to design and develop their own applications directly within the platform.

The ServiceNow Store

- ServiceNow offers a platform similar to Apple Store or Google Store, called ServiceNow Store, where users can find a wide range of applications to enhance their platform.

- ServiceNow Store provides a comprehensive list of IT service applications, some of which are free to add while others require purchase.
- The applications available in the ServiceNow Store aim to assist users in accomplishing their work efficiently.

ServiceNow Application Training and Certifications

- ServiceNow offers a range of certification options for individuals and companies seeking to enhance their understanding of the platform.
- The certifications are categorized into five main groups, one of which is the "Implementer" certification, focusing on specific applications within ServiceNow.
- Individuals can choose to get certified in various application areas, covering modules related to specific application functions.

Working with Lists and Forms Overview

- Lists display multiple records from a database table or tables, while forms display a single record from a database table.
- Forms are used to view the details of a specific record and make modifications.
- The Incident application can be accessed from the All menu or by using the filter.

List Views

- List views in ServiceNow can be customized using various tools and features, including filters, grouping, sorting, and personalized settings.
- Users can create and save different views of lists, tailoring them to specific needs and preferences, such as mobile access or group-specific attributes.
- The platform offers multiple ways to filter data within list views, including a condition builder for sophisticated filters, a simple search box for quick filtering, and column header filters for specific column-based searches.

Form Views

- A form in ServiceNow displays a single record from a table, unlike lists that show multiple records.
- Forms can display sections and related lists associated with the record, such as roles and groups linked to a user record.
- Users can customize forms by creating different views, adding attachments, and personalizing displayed fields.

Knowledge Management in ServiceNow

- ServiceNow's knowledge bases function as repositories of articles and documentation designed to provide users with information and problem-solving assistance.
- Knowledge bases are organized into categories, which contain articles on specific topics. Users can search for articles across all knowledge bases or browse within specific categories.

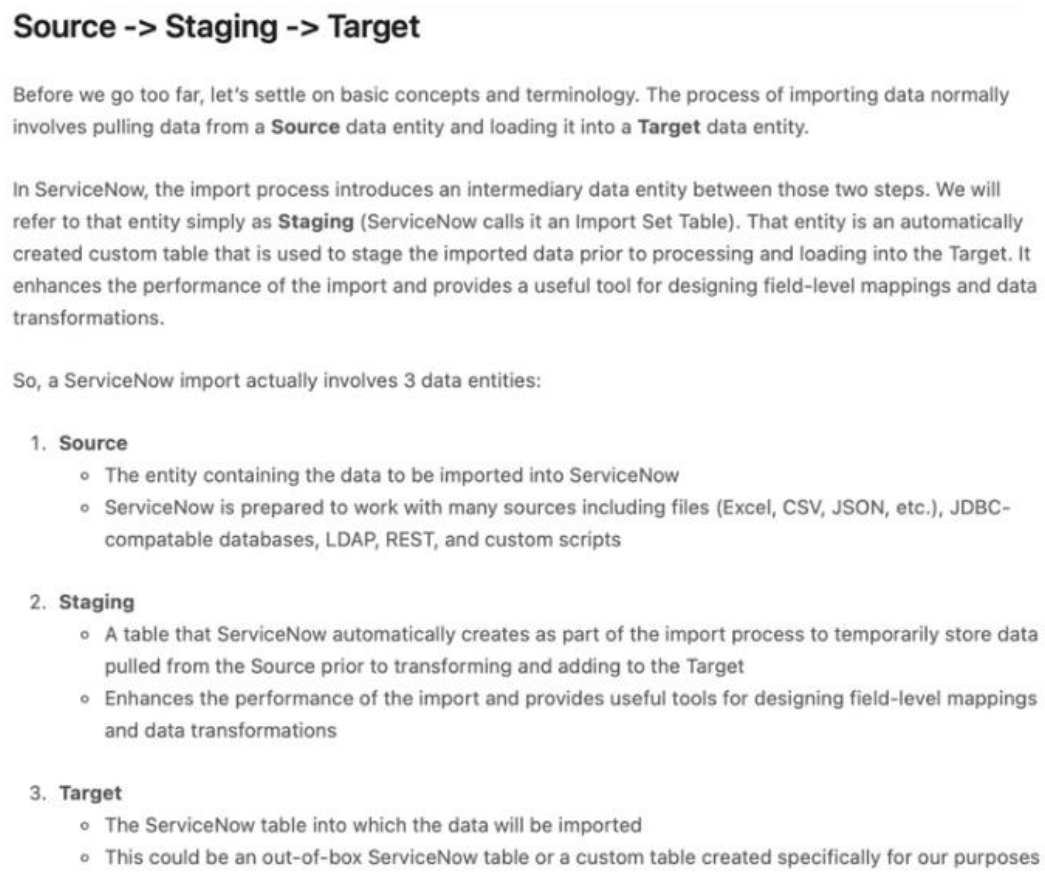
- Users can interact with articles by flagging them for review, creating incidents related to them, rating their helpfulness, and leaving comments to foster collaboration and discussion.

The ServiceNow Database

- The ServiceNow platform operates on a single database, encompassing all applications and IT services, ensuring data consistency across the platform.
- The database comprises nearly 5,000 tables, each customizable with appropriate permissions, allowing for modifications to existing tables, creation of new tables, and development of custom applications. [1932]
- Central to the database is the Configuration Management Database (CMDB), a collection of tables and processes designed to provide a comprehensive understanding of an organization's infrastructure, including software, hardware, and their associated services.

8. Introduction to Importing Data in ServiceNow

- When importing data into ServiceNow, the platform creates an intermediary data entity, referred to as an import set table or staging table, which sits between the source data and the target data store.
- The staging table is automatically generated by ServiceNow at the start of the import process.
- The first step in constructing a ServiceNow import involves creating a data source.



Source -> Staging -> Target

Before we go too far, let's settle on basic concepts and terminology. The process of importing data normally involves pulling data from a **Source** data entity and loading it into a **Target** data entity.

In ServiceNow, the import process introduces an intermediary data entity between those two steps. We will refer to that entity simply as **Staging** (ServiceNow calls it an Import Set Table). That entity is an automatically created custom table that is used to stage the imported data prior to processing and loading into the Target. It enhances the performance of the import and provides a useful tool for designing field-level mappings and data transformations.

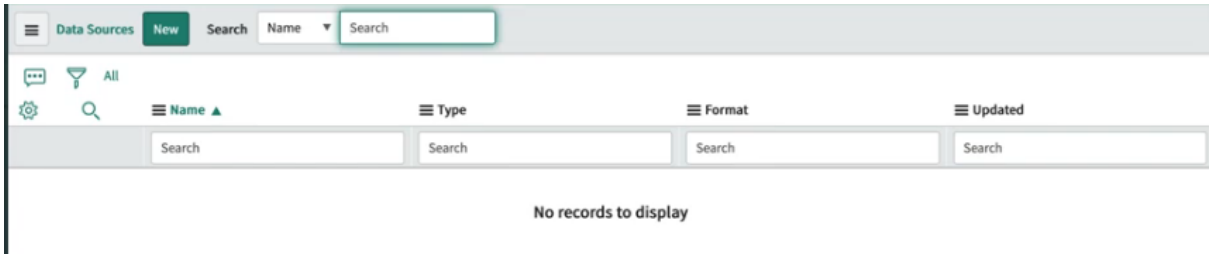
So, a ServiceNow import actually involves 3 data entities:

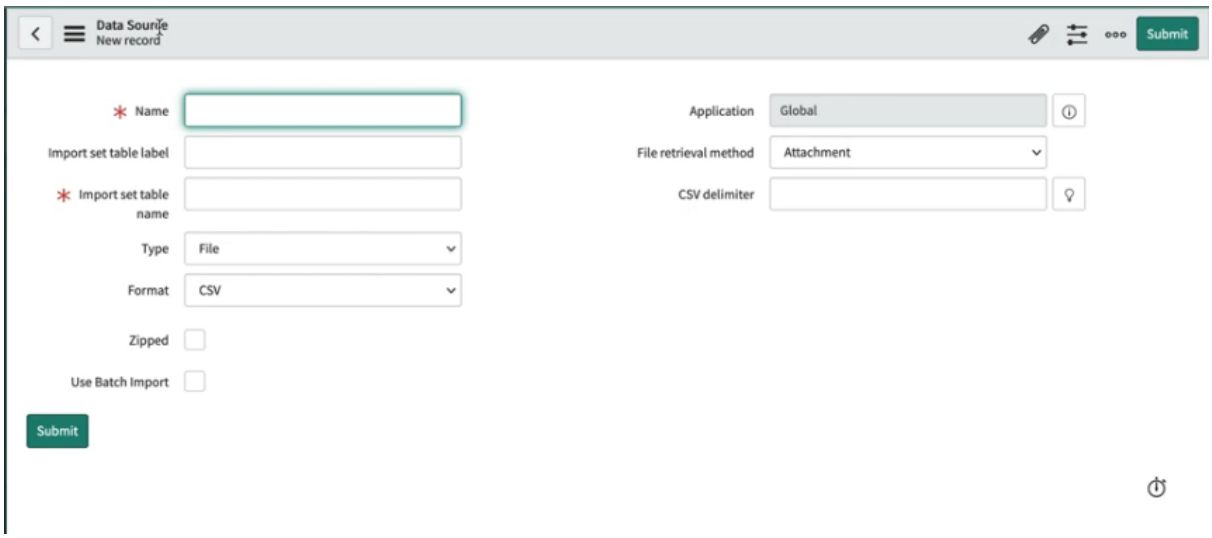
1. **Source**
   - The entity containing the data to be imported into ServiceNow
   - ServiceNow is prepared to work with many sources including files (Excel, CSV, JSON, etc.), JDBC-compatable databases, LDAP, REST, and custom scripts
2. **Staging**
   - A table that ServiceNow automatically creates as part of the import process to temporarily store data pulled from the Source prior to transforming and adding to the Target
   - Enhances the performance of the import and provides useful tools for designing field-level mappings and data transformations
3. **Target**
   - The ServiceNow table into which the data will be imported
   - This could be an out-of-box ServiceNow table or a custom table created specifically for our purposes

9. Creating a Data Source in ServiceNow

ServiceNow Data Sources

- A data source in ServiceNow is a record in the CIS_data_source table that stores information about the source of data being imported.
- The CIS_data_source table stores parameters that define the type of data source, connection details, data to import, and the staging table name.
- ServiceNow can connect to various data sources including JDBC compatible databases (e.g., Oracle, SQL Server, MySQL), LDAP, OIDC, REST, and custom scripts.





Staging Tables in ServiceNow

- When creating a data source, users can specify the label and name of the staging table that ServiceNow will create to hold the data before it is processed and loaded into the target table.
- Once the data source is connected and saved, ServiceNow will pull the data, create a staging table, and load the data into the staging table.
- When importing data, ServiceNow uses the header row in the spreadsheet to create fields within a staging table.

Connecting to a JDBC Data Source

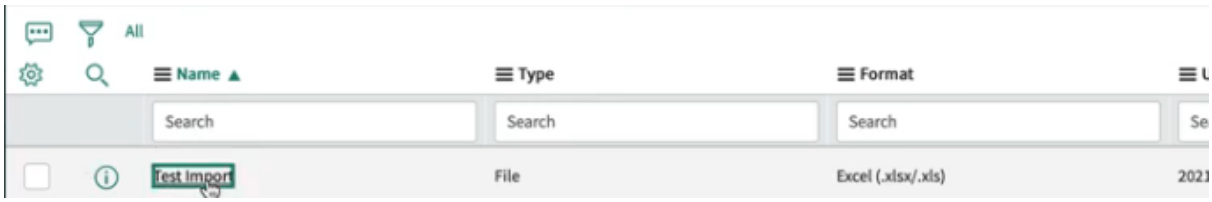
- When using JDBC, parameters such as database type, name, port, username, password, and server name are required.
- Data can be pulled from a table by specifying the table name or by using a custom SQL statement.

Example Data Source: Excel Spreadsheet

10. Understanding Import Sets in ServiceNow

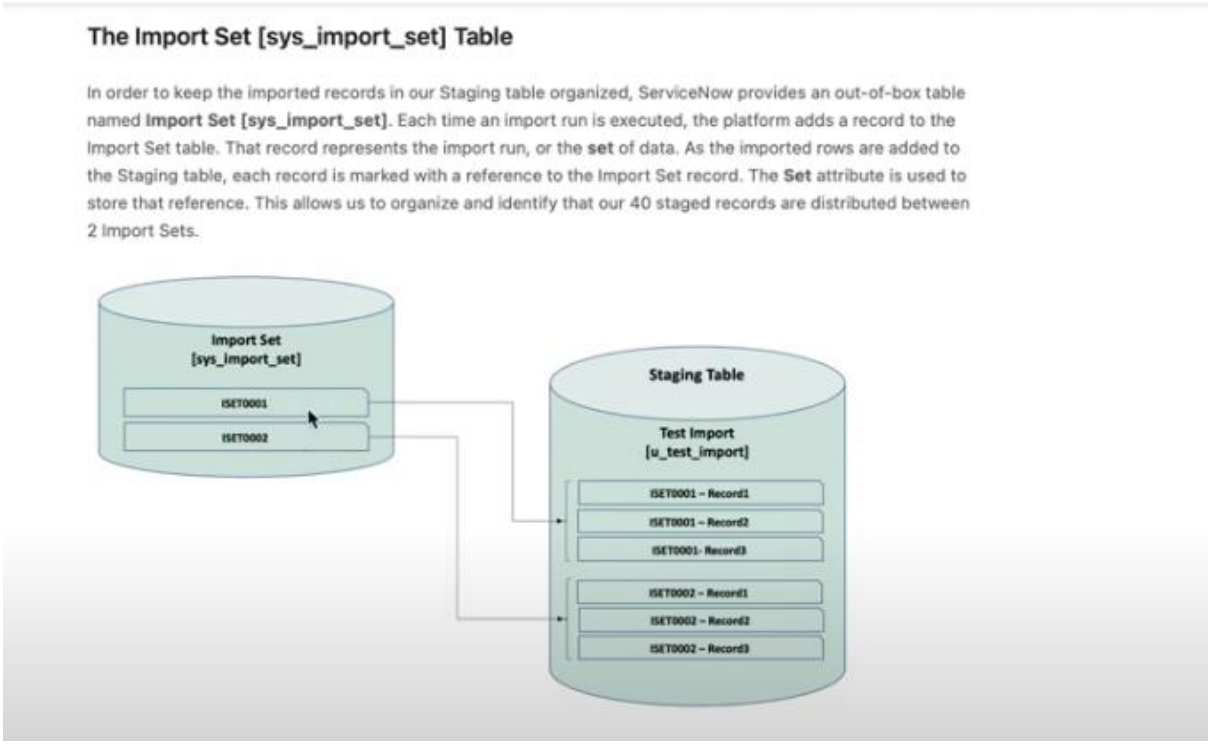
Data Sources and Staging Tables in ServiceNow

- ServiceNow uses a record called a 'data source' to connect to and import data. Data sources specify the source type, connection details, and data to be pulled.
- During the import process, ServiceNow creates a temporary 'staging table' to hold the imported data before it's processed. The staging table's name and label are defined in the data source record.
- When an import is run, ServiceNow checks for the existence of the staging table. If it doesn't exist, it creates the table based on the data source parameters and loads the imported data into it.
- ServiceNow uses the header row in a data source to label the columns in the staging table.
- Data has been pulled into a staging table and the connection has been tested.
- The data source has been tested and the staging table was created and loaded as expected.



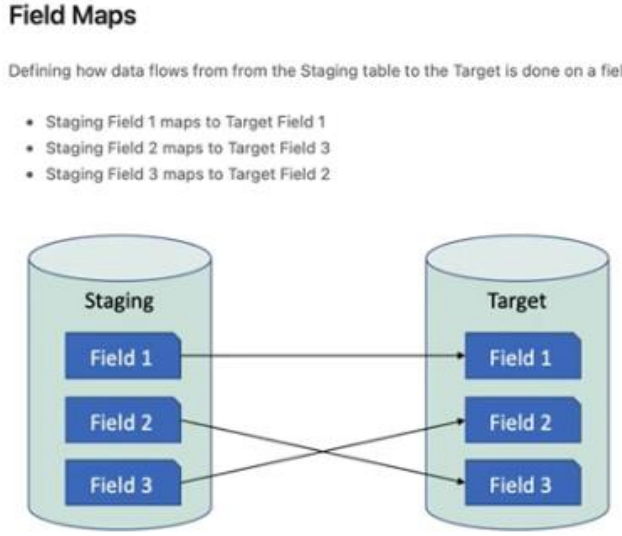
Import Set Tables

- All import set tables, also known as staging tables, are derived from the import set row table.
- The import set table, not to be confused with the staging table, tracks each import run and groups the records loaded into the staging table.
- Each record in the import set table represents a distinct import run, identified by a unique number (e.g., iset10036).
- Each execution of an import operation results in a new set of records in the staging table, even if the data is identical.
- Records in the staging table are linked to their corresponding import set run through a set attribute.



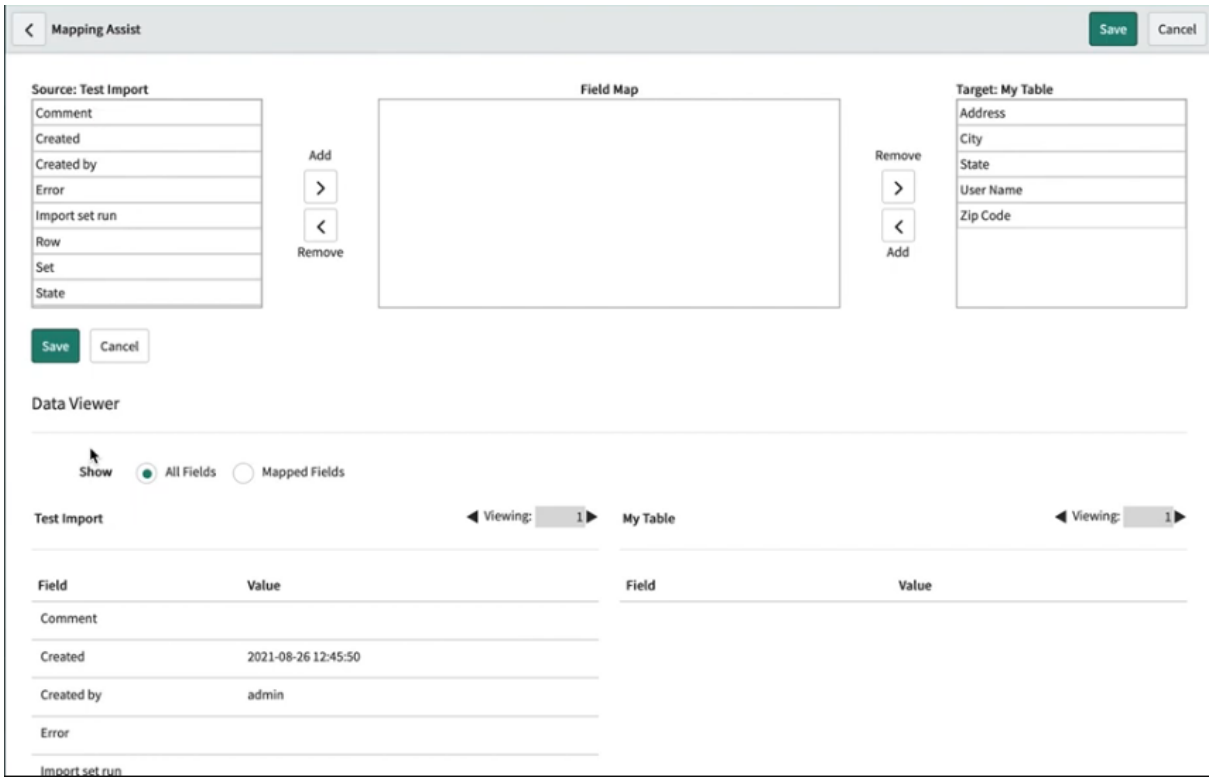
11. ServiceNow Transform Maps & Field Maps

- **Introduction to Data Import in ServiceNow:** Explains the importance of starting from the beginning of the tutorial to follow the series step-by-step.
- **Staging Table and Data Source Creation:** Discusses the creation of a data source, importing data into a staging table, and configuring ServiceNow to handle source data entities.
- **Transform Map and Field Maps Explained:** Provides a detailed explanation of transform maps and field maps, describing how they map fields from a staging table to a target table.

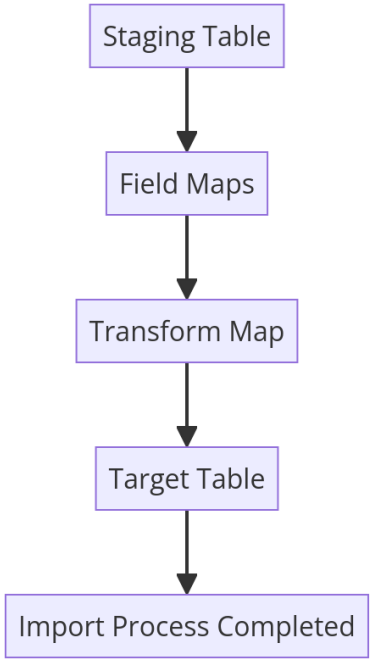


- **Creating and Managing Field Maps:** Demonstrates how to create field map records and group them using transform maps, essential for moving data in ServiceNow.

- **Defining and Linking Field Maps to Transform Maps:** Shows how to manually or automatically set up field maps and link them using ServiceNow tools like "Mapping Assist."

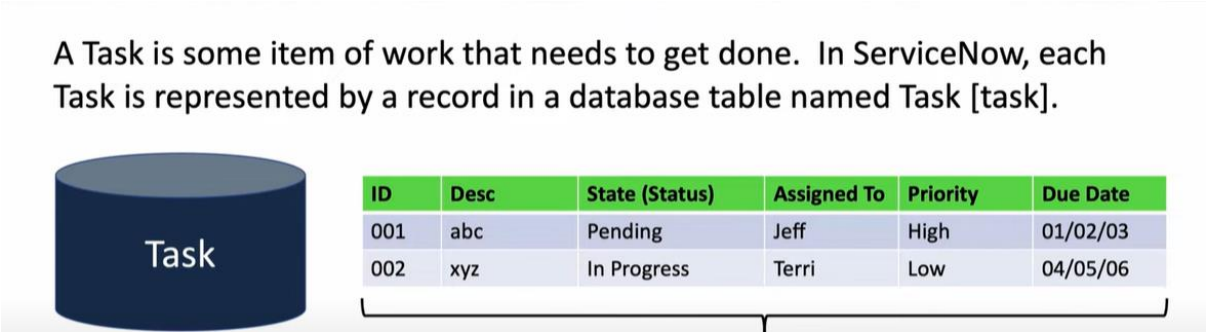


- **Configuring Coalesce Field for Data Matching:** Introduces the concept of "coalesce," which determines how ServiceNow avoids duplicates by matching fields during import processes.

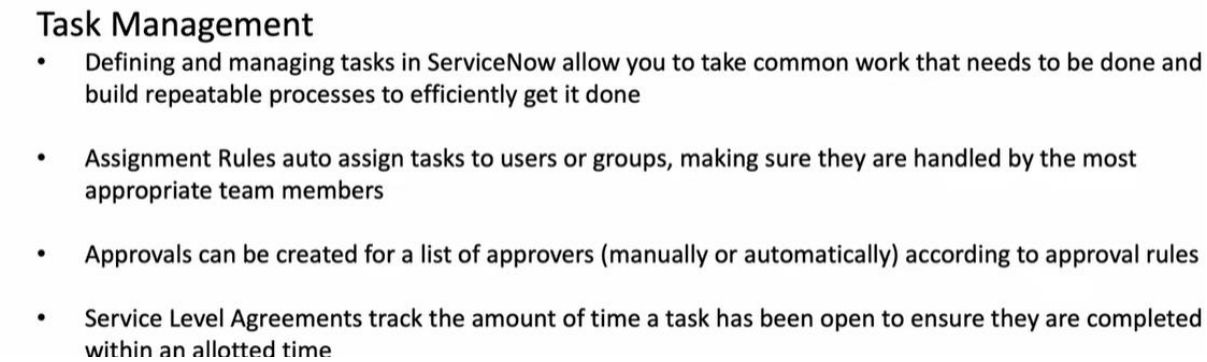


12. ServiceNow Incident Management Tutorial and Task Administration

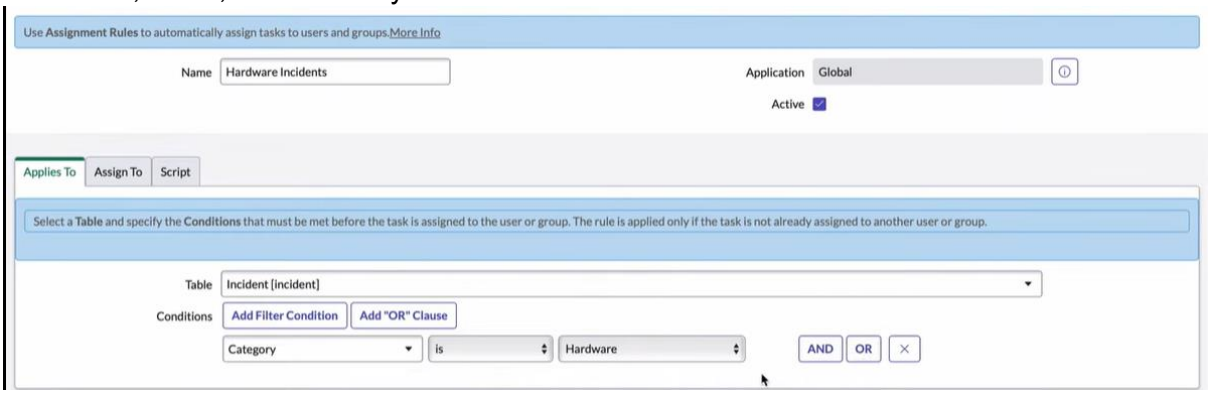
- **Introduction to ServiceNow Task Management:** Explanation of how ServiceNow was built to optimize work efficiency by managing tasks through its platform. The task table is a core component.



- **Key Concepts:** Tasks in ServiceNow are stored in a database as records representing items of work. They include attributes like descriptions, statuses, due dates, and responsible individuals.



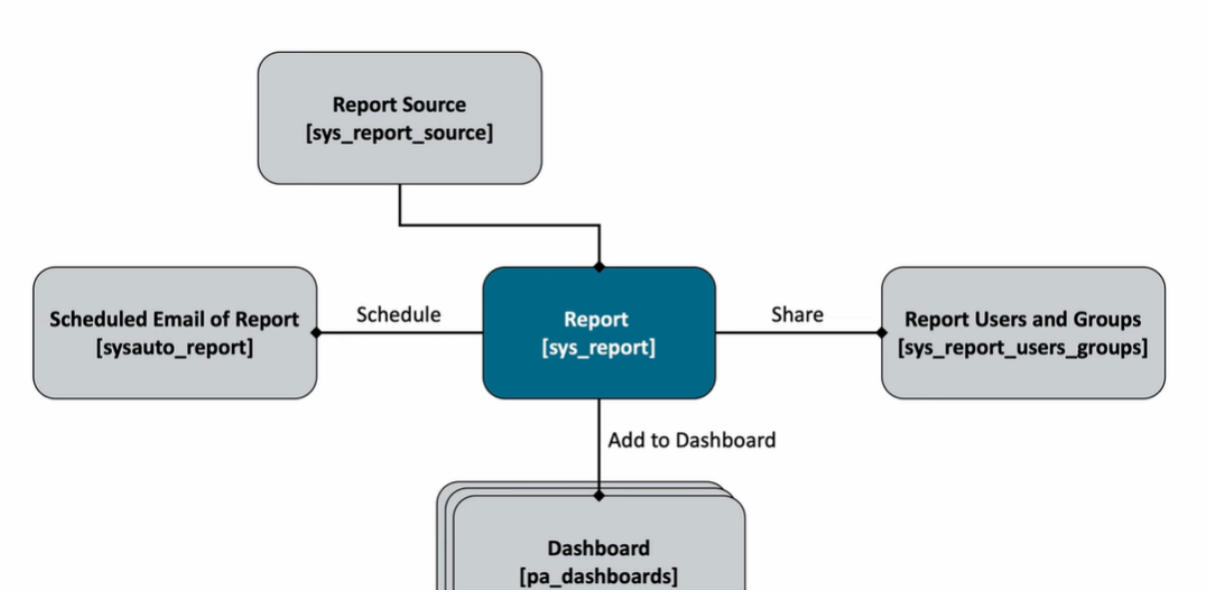
- **Hierarchical Database Design:** Discusses how change requests, incidents, and problems are implemented as extensions of the task table, inheriting common attributes while adding specific ones.
- **Task Assignment and Workflow:** Assignment rules automatically allocate tasks to appropriate users or groups, ensuring tasks are efficiently handled through workflows, SLAs, and inactivity monitors.



- **Visual Task Boards:** Explanation of guided, flexible, and freeform task boards for a visual overview and management of tasks with drag-and-drop functionality. Each board type offers drag-and-drop functionality, enabling users to adjust task assignments and priorities quickly. This visual approach adds another layer of efficiency to ServiceNow's task management capabilities.

13. ServiceNow Reporting Tutorial

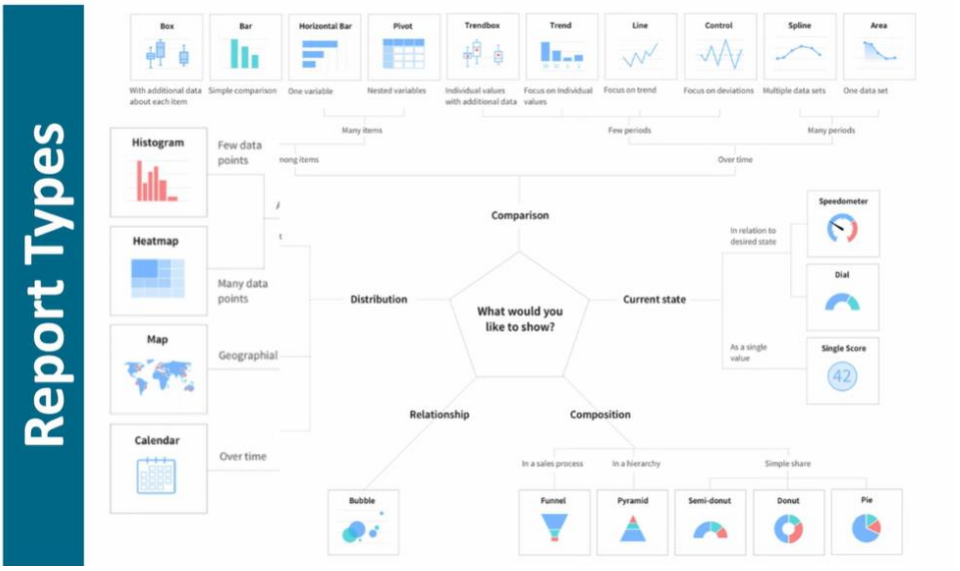
- **Introduction to Data-Driven Learning Approach:** The video emphasizes learning ServiceNow by focusing on data analysis, which is central to understanding platform functionality.



- **Reporting Capabilities in ServiceNow:** Key features include creating, managing, and sharing reports with a focus on passing CSA certification and effectively presenting data.
- **Understanding the Data Model:** The foundational report table (sys_report) is discussed, along with supporting tables like report_source, report_users, and scheduled_email_reports.

Report [sys_report] extends Application File		
FIELD LABEL	REPRESENTS	DATATYPE / DESCRIPTION
Sys ID	The unique identifier of the record	Sys ID (String)
Title	The title of the report	String
Source type	The type of data source for the report	String (Table or Data source)

- **Creating Reports and Visualizations:** The process of creating reports is demonstrated, from naming and setting source types to choosing visualization types like pie charts or bar charts.



- **Scheduling and Sharing Reports:** Details on automating report delivery and sharing reports with specific users, groups, or via dashboards are explained.

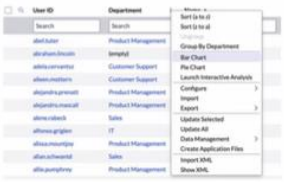
When you **create a new report** in ServiceNow, you are inserting a record into the Report [sys_report] table.

INSERT → Report [sys_report]

Reports > Create New

Studio

List View

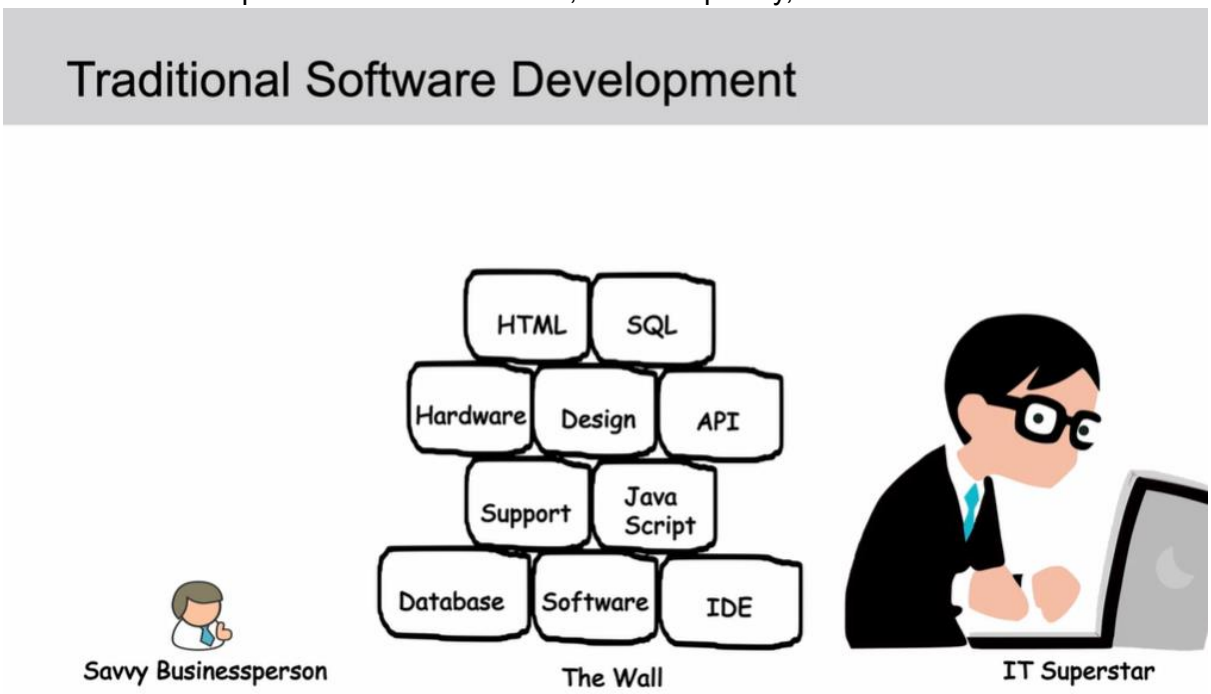


Report Users and Groups [sys_report_users_groups] extends Scheduled Job		
FIELD LABEL	REPRESENTS	DATATYPE / DESCRIPTION
Sys ID	The unique identifier of the record	Sys ID (String)
Report ID	The report being shared	Reference (Sys ID of a record in the Report table)
User ID	The user to whom the report is being shared	Reference (Sys ID of a record in the User table)
Group ID	The group to which the report is being shared	Reference (Sys ID of a record in the Group table)

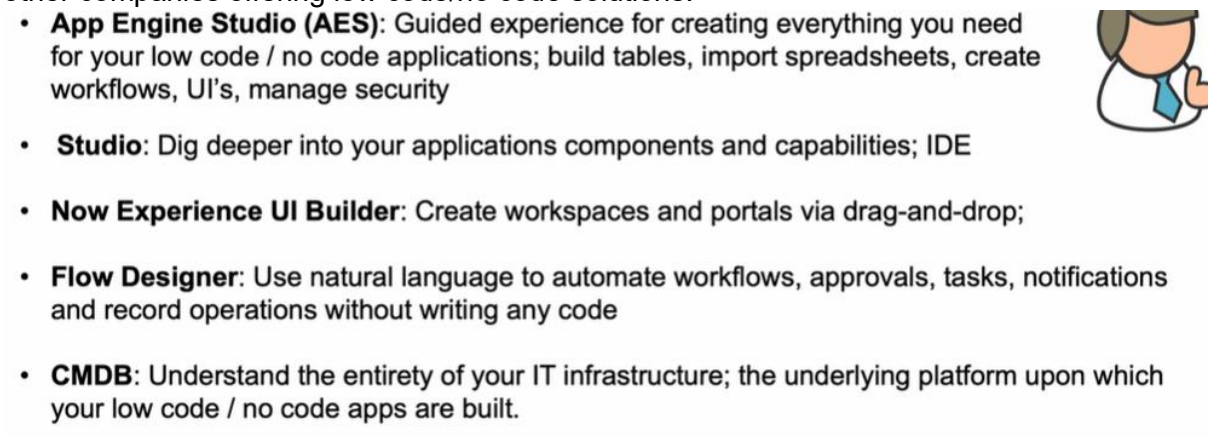
- **Adding Reports to Dashboards:** The final part shows how to incorporate reports into dashboards for easy accessibility.

14. What is Low Code No Code Development?

- **Introduction to Low Code/No Code:** The video explains low code/no code development, its functionality, and its benefits.
- **Key Characters:** Introduces the "Savvy Business Person," the "IT Superstar," and the "Wall" as metaphors for business needs, tech complexity, and barriers.\



- **Traditional Software Development Struggles:** Describes the challenges of traditional software development with frequent miscommunication between business and IT teams.
- **Low Code/No Code as a Solution:** Highlights how low code/no code platforms simplify complex IT tasks, enabling non-technical users to build and automate solutions.
- **Popular Tools & Platforms:** Mentions ServiceNow, Microsoft PowerApps, and other companies offering low code/no code solutions.



- **Drawbacks:** Discusses generalization, flexibility loss, and the hidden complexity behind low code/no code tools.

Pros

- Empowers the people that know the business to solve business problems themselves
- Improves agility via tools for creating IT-services quickly
- Lower costs via more apps in less time with less dependence on IT
- Increased automation opportunities

Cons

- Requires generalization which limits flexibility
- Limits technical improvements (I can code this better)

- **Career Opportunities:** Encourages business users to leverage low code/no code for creative problem-solving while developers should adapt to supporting these platforms.