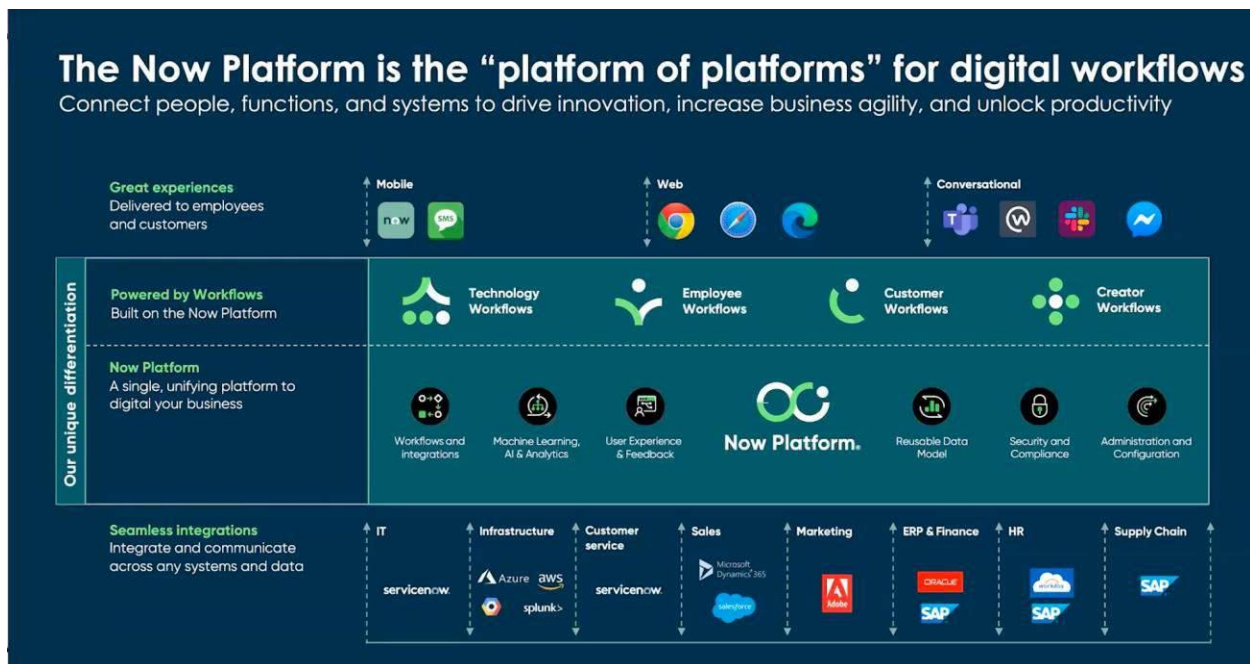# ServiceNow Understanding Document

Week 1:

1. What is ServiceNow

ServiceNow is a software Company based in Santa Clara, California, founded by Fred Luddy in 2003. ServiceNow is a cloud-based platform that provides IT service management (ITSM) and enterprise service management (ESM) solutions. It helps organizations automate and streamline their IT operations, offering tools for managing incidents, service requests, changes, assets, and more. ServiceNow platform is used to automate workflow in a business.

What is ServiceNow?

ServiceNow is a software company based in Santa Clara, California, founded by Fred Luddy in 2003, to solve problems large enterprises face with traditional IT delivery by providing a robust, simple to use, cloud-based environment in which businesspeople can solve the business problems themselves.

- ServiceNowSimple working definition

2. ServiceNow Platform Overview

ServiceNow provides services to its users from a configurable web-based user interface, built on top of a flexible database schema. The Platform and the applications that run on it use a single system of record to consolidate an organization's business processes. The Platform integrates with other enterprise systems and supports a wide variety of plug-and-play applications. ServiceNow Provides a platform upon which you can build custom applications. All ServiceNow Data Centers are paired with another datacenter to provide redundancy. Redundancy is built into every Layer including devices and network resources.

A strategic platform to enable Digital Transformation

4 Primary Workflows of ServiceNow:

ServiceNow's four primary workflows are designed to streamline and automate processes across various areas of an organization:

1. IT Workflows: These workflows focus on optimizing IT operations and service management. They help organizations manage IT services, infrastructure, and security more efficiently, ensuring that IT resources are used effectively and that issues are resolved quickly.
2. Employee Workflows: These workflows enhance the employee experience by automating HR processes and workplace services. They support employees throughout their lifecycle in the organization, from onboarding to offboarding, making it easier for them to access the services and support they need.
3. Customer Workflows: These workflows are centered around improving customer service and satisfaction. They help organizations manage customer interactions, resolve issues faster, and deliver consistent and high-quality customer experiences across different channels.
4. Creator Workflows: These workflows empower organizations to build custom applications and automate unique business processes. They provide tools that allow users to create tailored solutions without needing extensive coding knowledge, enabling innovation and flexibility in addressing specific business challenges.

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 logins 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(SS0)

3. Multi factor authentication

3. ServiceNow User Interface Overview

ServiceNow Platform User Interface:

The ServiceNow platform user interface is designed to be intuitive and user-friendly, enabling users to easily navigate and interact with the platform's various features and functionalities.

Fundamentals Lesson:
This typically refers to introductory training on the core features and functionalities of ServiceNow, providing users with the foundational knowledge needed to effectively use the platform.

Identifying Elements of the Interface:
This involves recognizing and understanding the different components within the ServiceNow user interface, such as the Application Navigator, Global Search, and other key tools that enhance user experience.

Global Search:
Global Search allows users to search for records, applications, and other information across the entire ServiceNow platform. It provides quick access to data and helps users find what they need without navigating through multiple menus.

Connect Chat:
Connect Chat is a real-time messaging tool within ServiceNow that enables users to communicate with colleagues, share information, and collaborate on tasks directly within the platform. It's useful for resolving issues quickly and enhancing team collaboration.

Contextual Help:
Contextual Help provides users with relevant guidance and resources based on their current location or task within the platform. It offers tutorials, documentation, and tips directly within the interface to assist users in navigating and using ServiceNow more effectively.

Application Navigator:
The Application Navigator is a panel on the left side of the ServiceNow interface that provides access to all available applications and modules. Users can quickly find and open the applications they need to perform their tasks.

Favorites:
Favorites allow users to bookmark frequently used applications, modules, or records for quick access. This feature helps users save time by enabling them to jump directly to their most important or commonly used items.

History:
The History feature keeps track of recently accessed records, applications, or modules, allowing users to easily return to previous work. This is especially useful for users who need to revisit recent tasks or data.

Access Control Lists (ACLs):

ACLs are rules that define who can access or interact with specific data within ServiceNow. They help secure the platform by controlling access to records, fields, and other elements based on user roles, permissions, and conditions.

UI Policies:

UI Policies are used to dynamically change the behavior and appearance of form fields based on specific conditions. They help in enforcing rules such as making fields mandatory, hidden, or read-only, depending on the form data.

Business Rules:

Business Rules are server-side scripts that execute when records are inserted, updated, deleted, or queried. They are used to enforce business logic, automate tasks, and ensure data consistency within the ServiceNow platform.

Client Scripting:

Client Scripts are JavaScript code that runs on the client side (in the user's browser) to manage form behavior, field values, and user interactions. They are used to create dynamic and responsive user interfaces by handling tasks such as form validation and field manipulation.
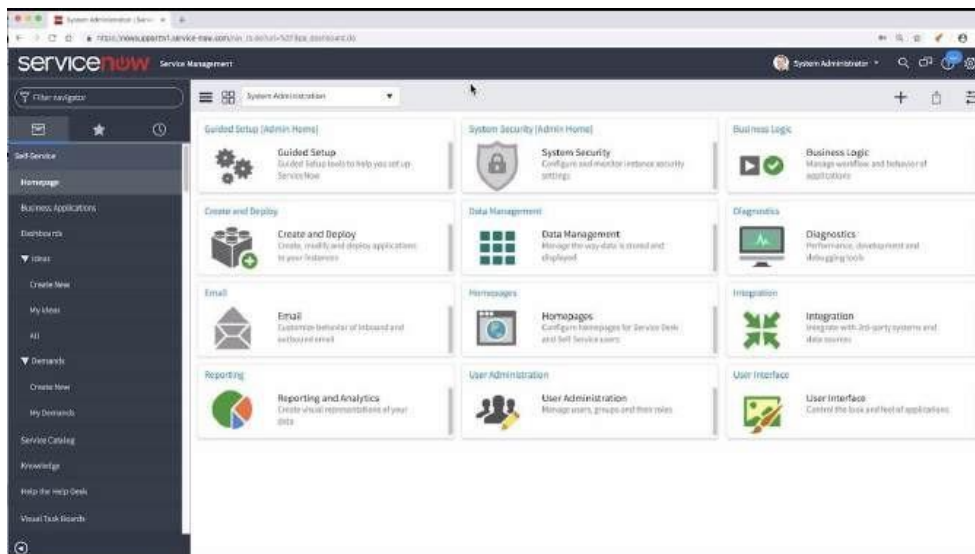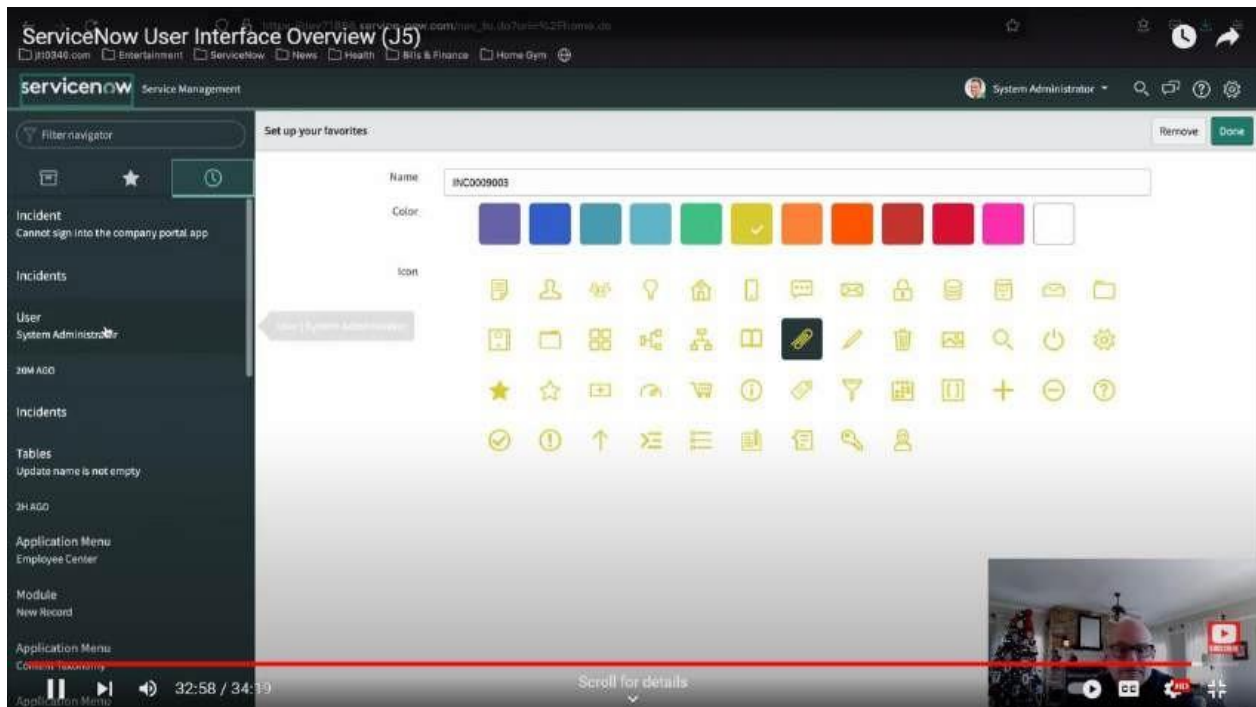
4. ServiceNow Branding Overview

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.

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
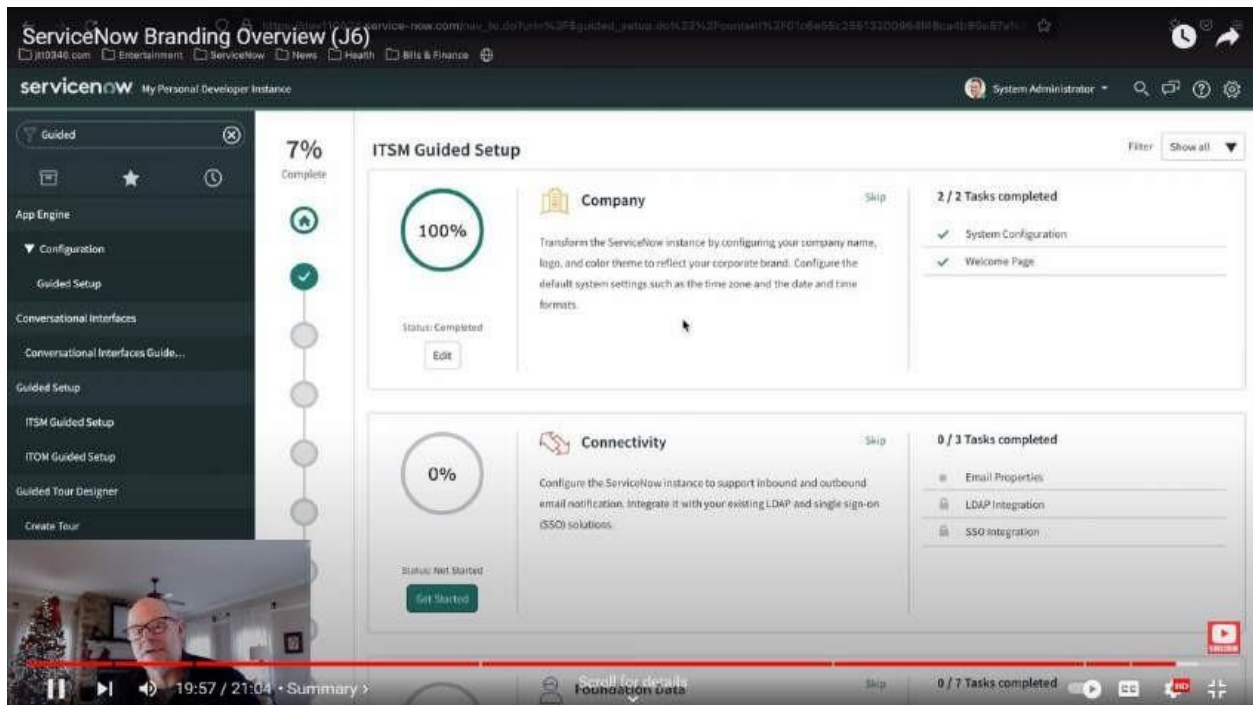
5. ServiceNow Lists and Filters

ServiceNow List View:

- The List View in ServiceNow displays records from a table in a tabular format, allowing users to view, search, and manage data efficiently. It provides a structured view of records, with columns representing fields and rows representing individual records.

Interface, Standard Paradigm:

- In ServiceNow, the interface follows a standard paradigm that emphasizes consistency, usability, and efficiency. This paradigm includes elements like lists, forms, and dashboards, designed to provide a unified user experience across the platform. The interface supports easy navigation and interaction with data, using familiar controls and layouts.

List Control:

- List Controls in ServiceNow are tools available within the List View that allow users to manage how data is displayed and interacted with. These controls enable actions like
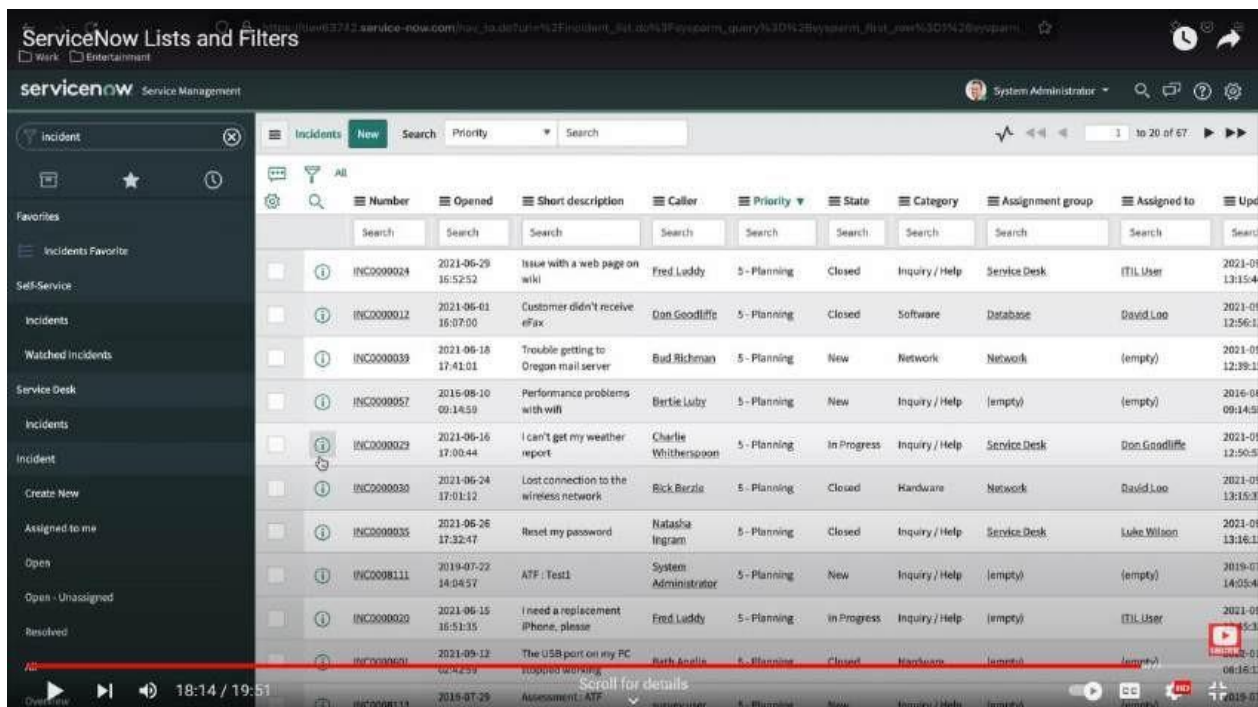
adding filters, sorting, grouping, and exporting data, providing users with flexibility in how they handle the information in a list.

Filter Conditions:

- Filter Conditions in ServiceNow are criteria set by users to refine the data displayed in a List View. By applying filter conditions, users can narrow down records based on specific field values, such as date ranges, statuses, or other attributes, helping them to focus on relevant data.

Refresh List:

- The Refresh List function in ServiceNow updates the data displayed in the List View. This ensures that users see the most current information, reflecting any recent changes or updates made to the records. Refreshing a list is crucial for keeping the displayed data synchronized with the actual state of the database.

6. Forms in ServiceNow

Forms in ServiceNow:

- Forms are user interfaces in ServiceNow that allow users to enter, view, and modify data in records. They are essential for interacting with data stored in the ServiceNow platform.

The Standard Layout:

- The standard layout of a ServiceNow form typically includes a header section with key information (e.g., record number, status), followed by form fields organized into sections for input and display.

Form Field Types:

- ServiceNow forms can contain various field types, such as text fields, choice lists, reference fields, checkboxes, and date pickers, each designed for specific types of data entry.

Saving Changes:

- Users can save changes made to a form by clicking the "Save" or "Update" button, which commits the modifications to the database.

Insert / Insert & Stay:

- "Insert" saves a new record and returns the user to the previous page, while "Insert & Stay" saves the new record and keeps the user on the same form for further editing.

Form Sections:

- Forms can be divided into sections to organize related fields logically. This makes it easier for users to find and input data relevant to different aspects of a record.

Related Lists & Formatters:

- Related lists display related records from other tables, while formatters add special visual elements or widgets to a form, such as activity streams or approval summaries.

Form Views:

- Form views are different layouts of a form, each tailored to specific roles or purposes. Users can switch between views depending on their needs, displaying only the relevant fields and information.

Form Personalization:

- Users with the appropriate permissions can personalize forms by adding, removing, or rearranging fields and sections to suit their workflow needs.

Adding Attachments:

- Users can attach files, images, or documents to a form, allowing for additional context or supplementary information to be stored with the record.

Form Templates:

- Form templates are pre-defined forms with specific fields and values filled in. They help users create records faster by providing a starting point for common tasks or requests.

Creating & Editing Views:

- Administrators can create and edit form views to customize how forms are presented to different user groups, ensuring that users see the most relevant information for their roles or tasks.

7. A Hands-on ServiceNow Tool Demo

Logging In: The process of accessing the ServiceNow platform by entering your credentials (username and password) to gain access to the system's features and functionalities.

ServiceNow Next Experience UI: The modern, intuitive user interface of ServiceNow, designed to enhance user experience by providing a streamlined and consistent navigation experience across the platform.

The Navigation Bar: The top section of the ServiceNow interface that provides quick access to essential features, including search, user settings, and system information, making navigation across the platform easier.

ServiceNow Applications Overview: A general overview of the various applications available on the ServiceNow platform, which cater to different business needs such as IT service management, HR, customer service, and more.

The Application Navigator: A menu within the ServiceNow interface that allows users to browse and access different applications, modules, and functionalities within the platform.

The ServiceNow Store: An online marketplace where users can discover, purchase, and deploy third-party applications, integrations, and extensions that enhance the functionality of the ServiceNow platform.

ServiceNow Application Training and Certifications: Programs and courses offered by ServiceNow that provide users with the knowledge and skills needed to effectively use the platform, including official certifications to validate their expertise.

Working with Lists and Forms Overview: A guide to managing and interacting with data in ServiceNow, focusing on how to use lists and forms to view, input, and manipulate information within the system.

List Views: Displays of data in a tabular format within ServiceNow, allowing users to see multiple records at once, sort, filter, and perform actions on the data.

Form Views: Interfaces within ServiceNow that display a single record's detailed information, allowing users to view, edit, and update fields within that record.

Knowledge Management in ServiceNow: A feature that allows organizations to create, manage, and share knowledge articles, helping users find information and solutions quickly.

The ServiceNow Database: The underlying data structure of ServiceNow, which stores all records, configurations, and customizations, ensuring that the platform's operations are based on accurate and accessible data.
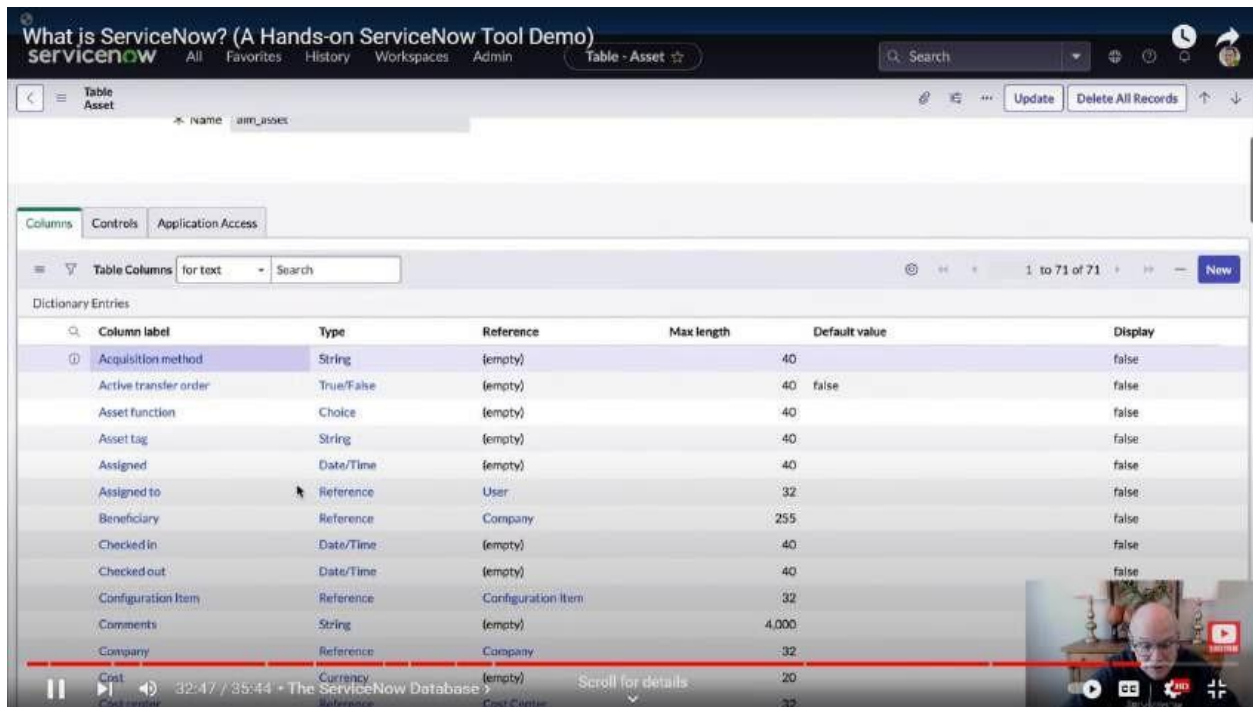
8. Introduction to Importing Data Into Servicenow

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

9. Creating a Data Source in ServiceNow

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

Then Submit and go to attachments and attach the form you want to give as a data.
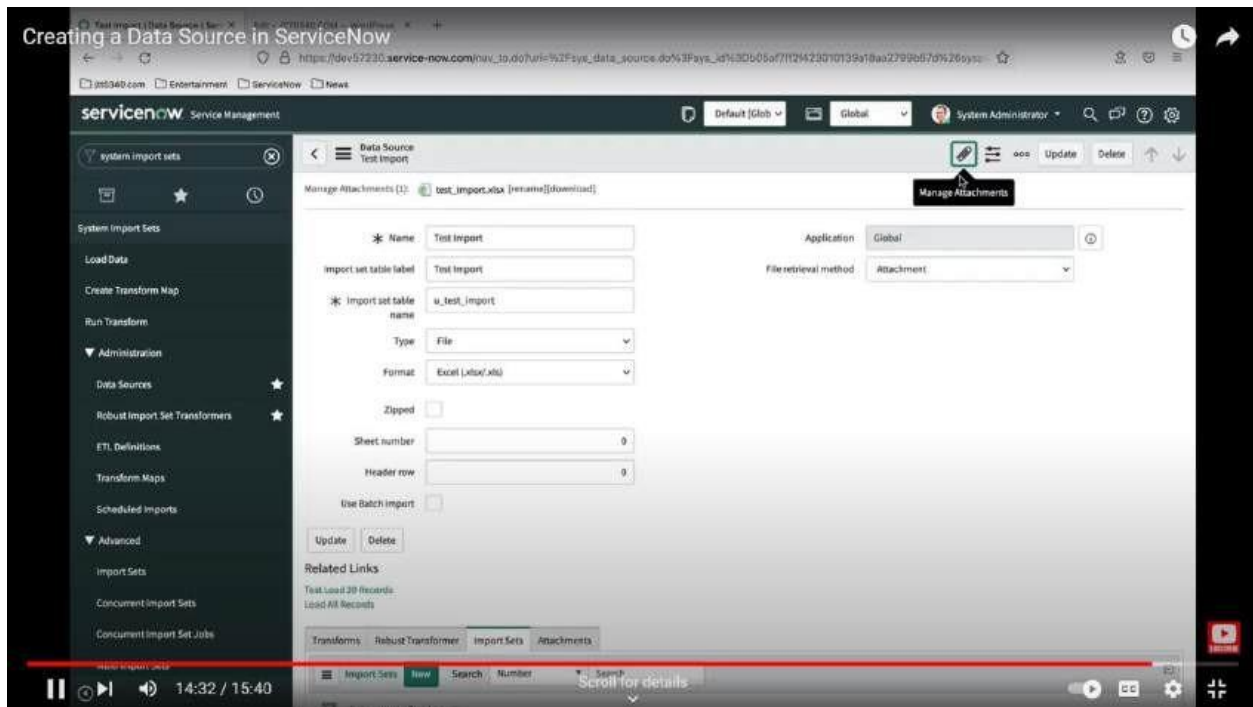
10. Understanding Import Sets in ServiceNow

In ServiceNow, Import Sets are tools used to import data from various sources into the platform. They allow organizations to bring in external data and then transform and map it to the appropriate tables within ServiceNow.

Creating Import Sets:

1. Data Source Definition:
   - First, define a data source from which the data will be imported. This could be a file (like CSV, Excel), a database, or even an integration with an external system.
2. Loading Data:
   - Once the data source is defined, the data is loaded into a temporary staging table, known as an *Import Set Table* in ServiceNow. Each record in the imported data becomes a row in this staging table.
3. Transform Map Creation:

- ◦ A *Transform Map* is then created, which is a set of instructions that tells ServiceNow how to map fields from the Import Set Table to fields in the target table (the table where the data ultimately needs to go).
- ◦ During this step, you specify which fields in the import set correspond to which fields in the target table.

Transforming and Mapping Data:

1. Field Mapping:
   - ◦ Within the transform map, you map individual fields from the Import Set Table to the target table. For example, if you're importing user data, you might map the "First Name" field in the import set to the "First Name" field in the User [sys_user] table.
2. Transformation Rules:
   - ◦ You can define additional transformation rules or scripts to manipulate data during the transformation process. For instance, you might convert a date format, combine multiple fields into one, or perform a lookup to match records based on specific criteria.
3. Running the Transformation:
   - ◦ After the mapping and rules are set, you run the transform map. This process moves the data from the Import Set Table to the target table in ServiceNow, applying any transformation rules defined in the process.

Benefits of Import Sets:

- Flexibility: Import Sets provide flexibility in how data is brought into ServiceNow, allowing for the transformation of data to fit the platform's data structure.
- Custom Mapping: Individual field mapping allows for precise control over where and how data is placed in the target tables.
- Error Handling: The platform offers error handling and rollback mechanisms, so if something goes wrong during the import, it can be addressed without affecting the target data.
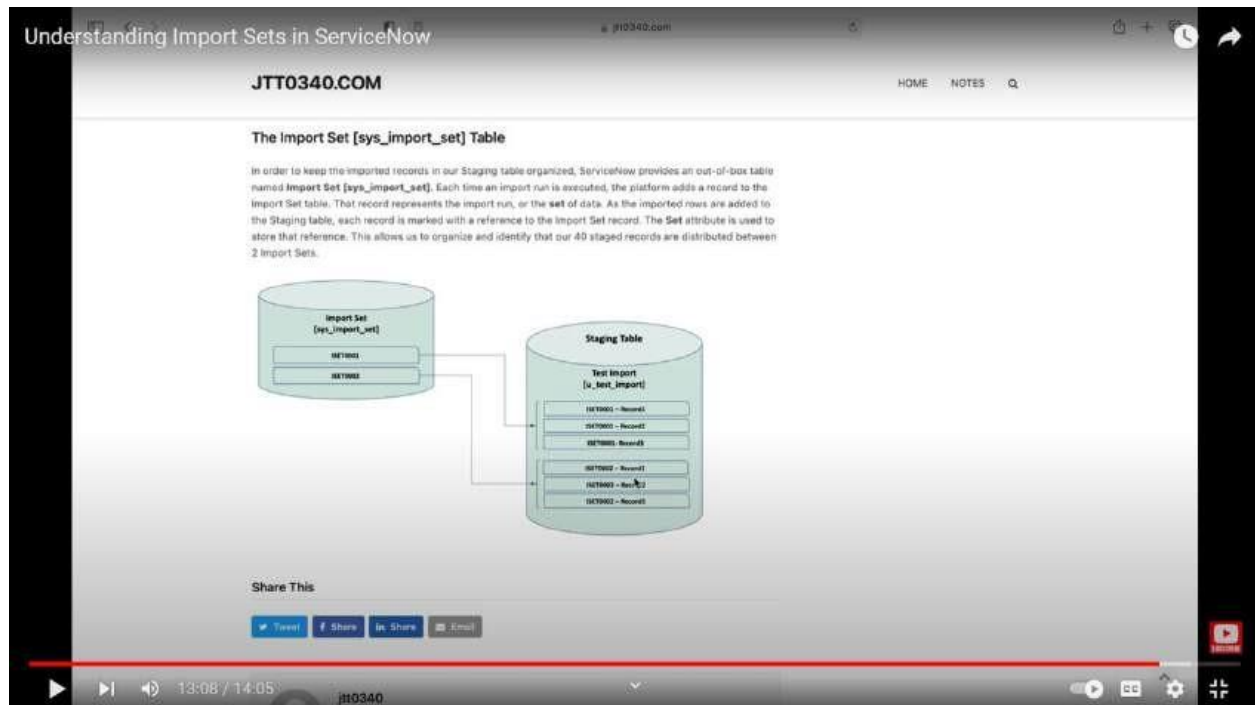
11. ServiceNow Transform Maps & Field Maps

Importing, transforming, and mapping data into ServiceNow involves several key steps to ensure that external data is accurately and efficiently integrated into the platform's database.

1. Importing Data:

- **Data Source Setup**: Begin by defining the data source from which the data will be imported. This can be a file (such as CSV, Excel), a database connection, or an API integration.
- **Import Set Table**: ServiceNow loads the data into a temporary table called an *Import Set Table*. This table acts as a staging area where the imported data is stored temporarily before being processed further.

2. Transforming Data:

- **Transform Map Creation**: After the data is imported, a *Transform Map* is created to define how the data in the Import Set Table should be transformed and where it should go in the target tables.

- **Data Transformation Rules**: During this process, you can define transformation rules that manipulate the data, such as converting formats, merging fields, or applying conditions to ensure the data meets specific criteria before it's moved to the target table.

3. Mapping Data:

- **Field Mapping**: Within the Transform Map, you map fields from the Import Set Table to fields in the target table. For example, a "Username" field in the import set might be mapped to the "User ID" field in the ServiceNow User [sys_user] table.
- **Running the Transformation**: Once the mappings and transformations are set, the transformation process is executed. This process takes the data from the Import Set Table, applies any defined transformation rules, and then inserts or updates records in the target table.

Benefits:

- **Data Integrity**: This process ensures that imported data is correctly formatted and mapped to the appropriate fields, maintaining the integrity and consistency of the data within ServiceNow.
- **Customization**: The ability to define custom transformation rules and mappings provides flexibility, allowing organizations to tailor the data import process to their specific needs.
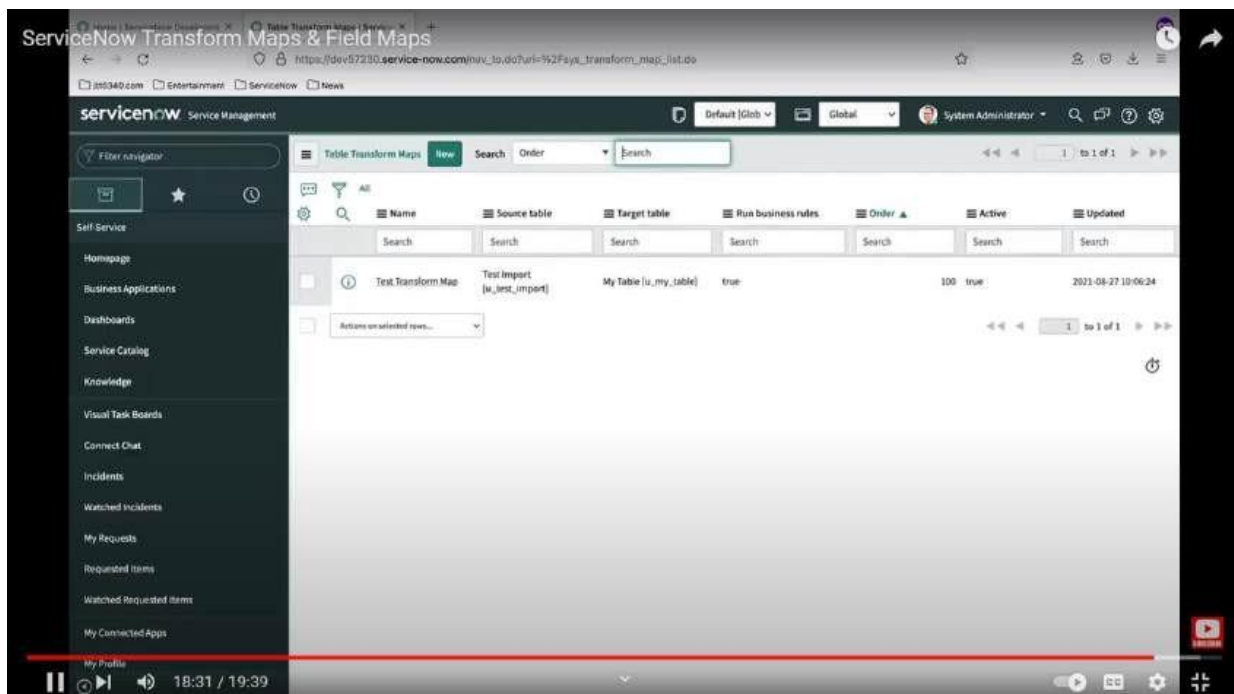
12. ServiceNow Incident Management Tutorial and Task Administration

- **Incident Management**
  - Manages lifecycle of incidents (unplanned IT service interruptions)
  - Incident tickets created manually or automatically
  - Automatic task assignment based on rules
  - Focus on quick resolution and closure
- **Problem Management**
  - Identifies and manages root causes of incidents
  - Problem tickets created from recurring incidents or proactive analysis
  - Involves tasks like root cause analysis and solution development
  - Teams collaborate on problem tasks for resolution
- **Change Management**
  - Controls and manages IT service changes systematically
  - Change requests (CRs) include impact, risk, and implementation details
  - Task assignment and approval workflows for changes
  - Changes implemented, reviewed, and documented

Task Creation and Management

- **Task Creation**
  - Tasks created within incidents, problems, or changes
  - Represent specific work to be completed
  - Can be automatically generated or manually created
- **Task Assignment Rules**
  - Automatic task assignment based on predefined criteria
  - Criteria include task type, impacted service, location, or required skills
- **Task Collaboration**
  - Facilitates real-time collaboration among team members
  - Allows communication, document sharing, and progress tracking
- **Visual Task Boards**
  - Provides a drag-and-drop interface for managing tasks
  - Tasks displayed as cards on a visual board

- ○ Users can move cards through workflow stages (e.g., "To Do," "In Progress," "Done")
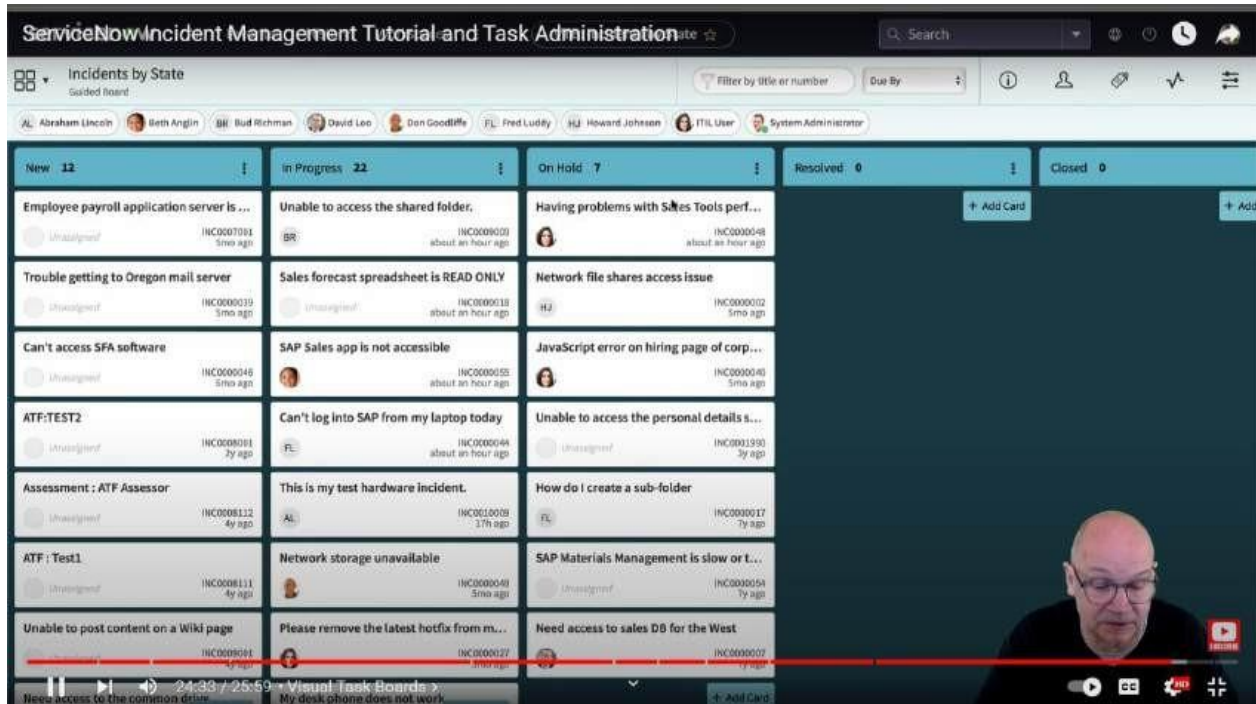
13. ServiceNow Reporting Tutorial

ServiceNow enables comprehensive data analysis and visualization through reporting capabilities, allowing for the tracking of performance metrics, identifying trends, and making informed decisions.

Reports can be created in different formats, including:

- **List Reports**: Display data in a table format, ideal for viewing and sorting large datasets.
- **Bar and Pie Charts**: Visualize data comparisons and proportions across categories.
- **Trend Reports**: Show data trends over time, useful for tracking metrics like incident resolution times.
- **Pivot Tables**: Summarize and aggregate data for multi-dimensional analysis.
- **Heat Maps**: Highlight data density or concentration across categories.

Reports are created using the Report Designer, a drag-and-drop interface that allows users to select data sources, define filters, choose report types, and customize layouts.

Reports can be scheduled to run at specific times or intervals, with results automatically emailed to recipients.

Report management features allow users to save, duplicate, or modify reports and set permissions for viewing or editing.

Reports can be shared with specific users or groups within the organization, with options for view-only or editing permissions.

Reports can be embedded into dashboards for a consolidated view, providing a comprehensive overview of key metrics.

Reports can also be exported to formats like PDF or Excel for sharing outside the platform or offline access.

14. What is Low Code No Code Development?

Low Code/No Code Software Development refers to a software development approach that enables users to create applications with minimal or no coding skills. It uses visual development

environments, drag-and-drop interfaces, and pre-built components to simplify the process of building software.

How It Works:

- **Visual Development**: Users design applications through visual interfaces, often dragging and dropping elements like forms, buttons, and workflows.
- **Pre-built Components**: Platforms offer a library of pre-built components, templates, and connectors, which can be used to quickly build functionality without writing code.
- **Automation and Integration**: Low code/no code platforms often include tools for automating processes and integrating with other systems, making it easier to connect various applications and services.
- **Customization**: While many elements are pre-built, users can usually customize them to meet specific needs. Advanced users may also be able to add custom code for more complex features.

Pros:

- **Speed**: Applications can be developed much faster than traditional coding methods, enabling rapid prototyping and deployment.
- **Accessibility**: Non-developers, such as business analysts or managers, can create applications, reducing reliance on specialized developers.
- **Cost-Effective**: Reduces development costs by lowering the need for extensive coding and reducing development time.
- **Scalability**: Many platforms offer scalable solutions, allowing businesses to grow their applications as needed.
- **Collaboration**: Encourages collaboration between IT and business users, as both can participate in the development process.

Cons:

- **Limited Customization**: While low code/no code platforms are flexible, they may not offer the same level of customization as traditional development, especially for highly complex or unique requirements.
- **Vendor Lock-In**: Businesses may become dependent on a particular platform, making it difficult to switch vendors or migrate applications to other systems.
- **Performance**: Applications built on low code/no code platforms may have performance limitations, particularly for very large-scale or complex applications.

- **Security**: There might be concerns about the security of applications, especially if the platform does not provide adequate security controls or if users are not fully aware of best practices.
- **Complexity in Advanced Use Cases**: While easy to start with, low code/no code platforms can become challenging when trying to implement highly specific or advanced features.

Career Opportunities:

- **Low Code/No Code Developer**: Specialists who focus on using these platforms to build applications, often within a specific platform like ServiceNow, OutSystems, or Microsoft PowerApps.
- **Business Analyst**: Professionals who bridge the gap between business needs and IT capabilities, often using low code/no code tools to prototype and build solutions that meet business requirements.
- **Citizen Developer**: Non-technical professionals who use low code/no code platforms to create applications that solve specific business problems without needing to rely on traditional development teams.
- **Platform Specialist/Administrator**: Individuals who manage, configure, and optimize low code/no code platforms within an organization, ensuring they are used effectively and securely.
- **Consultant**: Advisors who help organizations implement low code/no code solutions, offering expertise in selecting the right platform, training users, and guiding development best practices.

Low code/no code development is growing rapidly, offering a range of opportunities for those interested in software development, business process automation, and digital transformation. It enables more people to participate in the creation of applications, making it an attractive field for both technical and non-technical professionals.

The benefits of no-code development