**WEEK 1: SERVICENOW PLATFORM AND DEVELOPMENT FUNDAMENTALS**

ServiceNow

ServiceNow is a prominent company with over 17,000 employees and a diverse clientele, including major corporations like AT&T and Coca Cola. Its leadership includes notable figures like CEO Bill McDermott and founder Fred Luddy. ServiceNow has received multiple accolades, such as being named one of Glassdoor’s Best Places to Work in 2022 in both the US and UK. This highlights its positive work environment. The company serves a wide range of mid to large enterprises, showcasing its broad market appeal and strong customer base, which includes prestigious brands like Microsoft and Delta. Fred Luddy, the founder and current chairman, dropped out of college to pursue programming. His journey illustrates the innovation and passion that led to ServiceNow's creation. Fred Luddy founded ServiceNow in 2003 to address the disconnect between information technology and business efficiency. His goal was to create a system that empowers businesses rather than frustrates them. The bankruptcy of Peregrine Systems in 2003 led to the creation of GlideSoft, which later became ServiceNow. This shift marked a significant turning point in Fred's career. ServiceNow was recognized as one of the most innovative companies by FORBES in 2018, highlighting its impact on the tech industry. This recognition underscores the company's growth and success. Fred Luddy's motivation stemmed from witnessing IT's inefficiencies that embarrassed business professionals. He aimed to create a platform that helped streamline IT interactions. Fred Luddy aimed to transform the role of IT in businesses, making it a tool for revenue generation rather than just an expense. By creating ServiceNow, he facilitated intuitive interactions between business operations and IT solutions. The traditional view of IT as a necessary evil limits its potential to contribute to revenue generation in companies. This perception often leads to inefficient exchanges between business and IT departments.

Purpose

Fred Luddy aimed to transform the role of IT in businesses, making it a tool for revenue generation rather than just an expense. By creating ServiceNow, he facilitated intuitive interactions between business operations and IT solutions. The traditional view of IT as a necessary evil limits its potential to contribute to revenue generation in companies. This perception often leads to inefficient exchanges between business and IT departments. Fred Luddy's motivation stemmed from witnessing IT's inefficiencies that embarrassed business professionals. He aimed to create a platform that helped streamline IT interactions.

Platform and Infrastructure

The NOW Platform by ServiceNow provides a cloud-based solution that enables businesspeople to independently solve their IT-related issues. This platform enhances user experience by making IT services more accessible and intuitive. ServiceNow's infrastructure ensures security and reliability, incorporating redundancy and robust security measures. This foundation allows businesses to trust the platform for their critical IT needs. ServiceNow is a cloud-based platform that enables businesses to streamline their IT operations and workflows effectively. It offers a range of pre-built applications and customization options to meet unique business needs. The platform provides robust data management with daily backups and a single enterprise-wide data model, enhancing reliability and integration across IT functions. ServiceNow categorizes its applications into IT, Employee, Customer, and Creator Workflows, ensuring that businesses can easily find solutions tailored to their specific operational needs. The company operates globally, with data centres strategically located across various regions to support its services, ensuring redundancy and accessibility for users worldwide.

Fundamentals Lesson:

Understanding the ServiceNow platform is essential for certification as a system administrator. This includes grasping its architecture, applications, workflows, and user interface elements for effective management.

Identifying Elements of the Interface:

The ServiceNow platform provides various user interfaces designed to enhance user accessibility and experience. Key elements include the Now Platform UI, mobile apps, and a customizable service portal.

Global Search:

Global Search is a tool within the ServiceNow interface that allows users to perform comprehensive searches across the platform to find relevant information quickly.

Connect Chat:

Connect Chat enables real-time communication between users within the ServiceNow platform, facilitating collaboration and support.

Contextual Help:

Contextual Help provides users with relevant assistance and information based on their current task or screen within the ServiceNow platform.

Application Navigator:

The Application Navigator is a feature that allows users to easily navigate through various applications and modules within the ServiceNow platform.

Favorites:

Favorites in ServiceNow enable users to mark frequently used applications or modules for quick access, improving efficiency.

History:

History keeps track of recent activities and interactions within the ServiceNow platform, allowing users to revisit previous records and actions.

ACLs, UI Policies, Business Rules, and Client Scripting

ACLs (Access Control Lists):

ACLs in ServiceNow are used to define permissions and control access to data and functionality based on user roles and criteria, enhancing security.

UI Policies:

UI Policies in ServiceNow allow administrators to dynamically change the behavior and appearance of forms and fields based on user actions or data conditions.

Business Rules:

Business Rules are server-side scripts that execute in response to specific events within the ServiceNow platform, such as record creation or updates, to enforce business logic.

Client Scripting:

Client Scripting refers to scripts that run on the user's browser, enabling real-time interactions and validations on forms and data entries within the ServiceNow platform.

Here’s the paragraph divided into the specified sections:

ServiceNow Branding

Introduction:

Customizing the ServiceNow user interface enhances the user experience by aligning it with corporate branding. This includes incorporating company colors, logos, and fonts to foster familiarity and comfort. Branding in ServiceNow is essential for instilling confidence and comfort in users, reflecting the company's look and feel within the application.

Guided Setup Overview:

Guided setup in ServiceNow simplifies the configuration of applications and modules through user-friendly wizards. These tools streamline common activities, enhancing the overall user experience in the platform. The guided setup application simplifies the customization process by providing a series of steps for users to follow. This ensures that branding changes are consistent throughout the platform.

IT Service Management (ITSM) Guided Setup:

IT Service Management (ITSM) guided setup helps in configuring essential elements like incident management and company branding. It ensures a cohesive application appearance for users.

IT Operations Management (ITOM) Guided Setup:

IT Operations Management (ITOM) guided setup focuses on configuring operational aspects, such as mid servers and cloud provisioning. This enhances the efficiency of IT operations.

Modular Guided Setup:

Each application within ServiceNow may have its own guided setup wizard. This modular approach helps streamline specific configurations across different functionalities. The guided setup process involves configuring the system settings and customizing the welcome page for improved user experience. Proper adjustments ensure that the interface aligns with company branding and user needs.

Customizing the ServiceNow Homepage:

Customizing the ServiceNow homepage allows for a more personalized representation of a company. This involves utilizing the guided setup for a company-wide branding approach. Personalization options like the service portal and UI builder allow for further customization of the user interface. These tools enable users to create a tailored experience reflecting company branding.

Welcome Page Customization:

Setting up the welcome page in ServiceNow is crucial for user engagement and experience. It allows customization of login messages to enhance the overall branding of the application. The welcome page serves as the initial screen where users enter their login credentials, featuring username and password fields along with a login button. Users can add personalized messages or alerts to the welcome page, making it more informative and welcoming for those logging in.

System Configuration:

System configuration includes setting default time zones, date formats, and uploading logos for a personalized experience. These settings affect all users within the organization. A mark as complete function allows administrators to track progress in the setup process. This feature helps ensure that all necessary tasks are completed before moving to the next steps.

Introduction to UI Builder:

Personalization options like the UI builder allow for further customization of the user interface. This tool enables users to create a tailored experience reflecting company branding.

Customizing with UI Builder:

System administrators are responsible for implementing these branding changes, affecting all users. This is distinct from individual user settings that only impact personal interfaces. The UI builder provides a flexible environment for adjusting elements of the interface to align with organizational branding and user needs.

ServiceNow List View Interface

Standard Paradigm:

ServiceNow utilizes list views to effectively display the contents of database tables, enabling users to filter, sort, and analyze data efficiently. This interface allows users to access various lists and gain detailed insights into records. The list interface includes essential tools that simplify the process of handling data, such as sorting and searching functionalities. This ensures users can manage large datasets easily.

List Control:

Navigating through lists in ServiceNow can be done using the application navigator, which provides quick access to different records. The dot list command is another efficient way to open specific lists. Accessing the tables table with the command `sys\_db\_object.list` reveals a record of all tables in ServiceNow, which aids users in exploring the database structure. This command enhances user navigation within the platform.

Filter Conditions:

Users can customize their list views in ServiceNow by saving specific filters and sorting options for better data management. Creating saved filters allows users to focus on specific records, like those with an active status, enhancing data visibility. The condition builder provides advanced filtering options, allowing users to create complex queries to locate specific data efficiently. This tool is essential for working with large datasets.

Refresh List:

The refresh option allows users to reload list data quickly, ensuring they have the most current information. This feature is essential for maintaining accurate and up-to-date records. Understanding how to utilize the column search row and breadcrumbs in list views significantly enhances data management. These features allow for efficient filtering and navigation of displayed data.

Additional Features

Activity Stream:

The activity stream allows users to view a sequential account of all activities related to specific records, enhancing tracking capabilities. This feature is crucial for effective data management.

Personalized List Tool:

The personalized list tool enables users to customize the display of columns without affecting other users, promoting a tailored experience for individual needs and preferences.

Column Search Row:

The column search row enables users to apply filters to specific columns quickly using wildcards and multi-column values. This flexibility enhances data retrieval based on user-defined criteria.

Breadcrumbs:

Breadcrumbs serve a dual purpose by indicating applied filters and facilitating easy navigation through the list view. They help users understand their current view and quickly adjust filters as needed.

Column Labels and Context Menus:

Column labels and context menus provide additional functionalities like sorting and visualizing data. The context menus offer options such as exporting data or accessing advanced configurations. The video explains different context menus in ServiceNow, including the column and field context menus. These menus help users navigate and interact with data more efficiently.

Field Context Menu:

The field context menu allows right-clicking on a table field to access specific options related to that field or record. This enhances user interaction with the data presented.

Show Matching and Filter Out Options:

Using the show matching and filter out options helps users filter records based on specific field values. This provides a more tailored view of the data being managed.

Tagging Capability:

The tagging capability in ServiceNow allows users to organize records with text-based labels. Tags facilitate better sorting and filtering of related items for easier data management.

Forms in ServiceNow

The Standard Layout:

Forms in ServiceNow are essential for managing records, allowing users to view, create, and edit data. This lesson covers the structure of forms, including fields, sections, and related lists, as well as how to save changes, create templates, and customize views for different user roles. Understanding forms is crucial for effective ServiceNow usage.

Form Field Types:

Forms in ServiceNow contain various field types that dictate how data is displayed and collected. Understanding these fields is essential for effectively managing records in the system. Fields in ServiceNow can be categorized into different types, such as string, Boolean, and reference fields. Each type has a specific way of displaying data to users. Reference fields allow users to select values from other tables, ensuring data integrity and creating relationships between different records in the database. The behavior of fields can change based on the values of other fields, showcasing dynamic forms managed through UI policies, which enhance user experience.

Saving Changes:

Forms in ServiceNow offer various functionalities for managing records, such as submitting, saving, and creating new records based on existing ones. Users can submit or save records using buttons or the context menu, allowing changes to remain visible for further editing. This enhances the flexibility of data management. ServiceNow allows creating new records from existing ones through options like 'insert' and 'insert and stay,' streamlining the process of data entry when creating similar records.

Insert / Insert & Stay:

ServiceNow provides the 'insert' and 'insert and stay' options, which allow users to create new records based on existing ones. These options streamline data entry, making it easier to handle similar records and maintain consistency.

Form Sections:

Forms can be tailored for individual users, with options for tabbed or expandable sections, enhancing the user experience. Preferences are saved with each user's profile for future sessions. Changing form views in a user record allows customization for different users, enhancing usability and accessibility.

\*\*Related Lists & Formatters:

Forms in ServiceNow may include related lists and formatters, which provide additional contextual information and enhance data organization. Related lists display records related to the current record, while formatters add visual elements and additional data views.

Form Views:

Changing form views in a user record allows customization for different users, enhancing usability and accessibility. Understanding how to utilize different form views is crucial for effective form management. Users with appropriate permissions can save and modify views tailored to specific purposes.

Form Personalization:

Form personalization tools enable users to customize the display of fields according to their preferences. This allows individuals to optimize their experience without affecting others' views. The manage attachments feature allows users to attach documents relevant to a record easily, helping maintain comprehensive records with important supporting materials.

Adding Attachments:

The manage attachments feature allows users to attach documents relevant to a record easily. This functionality helps in maintaining comprehensive records that include important supporting materials.

Form Templates:

Templates facilitate the automatic population of fields when creating new records. This feature is particularly useful for users frequently entering similar data, saving time and effort. Creating and using templates in ServiceNow can significantly streamline the process of entering repetitive data. Templates can save time by automatically populating fields for frequently created records, enhancing efficiency in managing data entries.

Creating & Editing Views:

ServiceNow provides two tools for creating and editing form views: the form design tool and the formal layout tool. The form design tool offers a modern drag-and-drop interface, making it easier to customize form layouts visually. The formal layout tool is more traditional and straightforward. Understanding these tools is crucial for effective form management, as familiarity with both can help optimize user experience.

ServiceNow is a cloud-based IT service management platform.

* Cloud-Based Platform: ServiceNow offers a cloud-based suite for IT services.
* User Roles: Users have specific roles that dictate their access and privileges.
* Next Experience UI: The primary interface where most interactions occur.
* Application Suite: Over 200 applications across various workflows are included.
* Customization: Users can create and modify applications tailored to their needs.
* Knowledge Base: A library of articles to assist users in resolving issues.
* Developer Program: Offers a Personal Developer Instance for hands-on learning.

All-in-One Solution:   
ServiceNow integrates multiple IT functions within a single platform, streamlining processes for organizations. This reduces the need for disparate systems and enhances operational efficiency.

User-Friendly Interface:

The Next Experience UI is designed for ease of navigation, making it accessible for users of all skill levels. Familiarity with the interface can significantly improve user productivity as they interact with various applications.

Extensive Application Offerings:

With 200+ applications categorized into IT, Employee, Customer, and Creator workflows, ServiceNow provides businesses with tools tailored to their specific needs, enhancing their service delivery.

Customization Capabilities:

The platform allows organizations to create custom applications and workflows, ensuring they can adapt the tool to their unique operational requirements and challenges.

Robust Knowledge Management:

The Knowledge Base feature empowers users to access a wealth of resources, promoting self-service support and reducing dependency on IT personnel for common queries.

Career Development Opportunities:

ServiceNow’s certification programs provide pathways for professionals to enhance their skills, benefiting both individual career growth and organizational capability.

Personal Developer Instance Access:

The Developer Program encourages experimentation and learning by providing individuals with a free instance of ServiceNow, enabling them to practice and develop their skills in a real environment.

Welcome to a series on setting up and executing standard data imports in ServiceNow, covering essential components and terminology.

* Series Introduction: Learn about standard data imports in ServiceNow.
* Key Components: Explore data sources, import sets, and transform maps.
* Staging Table: Understand the intermediary import set table created by ServiceNow.
* Data Entities: Recognize the source, staging, and target data entities in the import process.
* Automated Creation: ServiceNow automatically generates the staging table for imports.
* Next Steps: The next session will focus on creating a data source.
* Thank You: Appreciation for joining the series.

Series Overview:

This video serves as an introduction to a comprehensive guide on importing data in ServiceNow, setting up a foundation for future lessons.

Understanding Components:

The significance of key components like data sources and import sets is vital for successful data management within ServiceNow.

Role of Staging Table:

The concept of the staging table is crucial as it acts as an intermediary, simplifying the import process and enhancing data integrity.

Automated Processes:

ServiceNow’s ability to automatically create staging tables eases the workflow, allowing users to focus on data quality rather than manual setup.

Data Relationships:

Understanding the relationships between source, staging, and target entities is essential for effectively managing data imports.

Future Topics:

The promise of covering detailed aspects like data source creation highlights the structured approach of the series, ensuring comprehensive learning.

Engagement:

The welcoming tone encourages viewers to actively participate and follow the series for an in-depth understanding of data imports in ServiceNow.

Creating a data source in ServiceNow is essential for importing data. This involves defining the source and configuring the staging table.

* Data Source: Record that holds parameters for data import.
* Staging Table: Serves as an intermediary for data before it reaches the target table.
* Types of Sources: Includes files, JDBC databases, and more.
* Excel Files: Can be used as a data source with a structured header.
* Connection Parameters: Necessary for ServiceNow to access the data source.
* Data Import: Allows selection of specific data or entire datasets.
* Administration: Navigate through Application Navigator for data sources.

Understanding Data Sources:

Recognizing that a data source is merely a record in ServiceNow enhances comprehension of data management within the platform.

Importance of Staging Tables:

Staging tables are crucial for organizing data before it’s processed, ensuring data integrity during imports.

Versatility of Data Sources:

ServiceNow supports various data sources, which provides flexibility in how organizations can import data based on their needs.

Simplifying Data Imports:

Utilizing tools like the Application Navigator can streamline the process of accessing and managing data sources in ServiceNow.

Significance of Headers in Files:

Including header rows in files is vital as it determines how fields are created in the staging table during imports.

Mid-Server Connection:

Understanding the role of mid-servers for connecting to databases behind firewalls is essential for secure data access.

Future Steps: Testing the import process after setting up the data source is necessary for validating the configuration and ensuring successful data integration.

* Staging Table Creation: ServiceNow automatically creates a staging table during the import process.
* Data Source Setup: A data source record informs ServiceNow how to connect and pull data.
* Import Process: Running an import loads data into the staging table based on defined parameters.
* Successful Imports: After importing, ServiceNow confirms data processing with success messages.
* Data Management: Each import run generates a record in the import set table to track loaded data.
* Duplicate Imports: Re-importing the same data creates additional records linked to the respective import runs.

Importance of Staging Tables:

Staging tables serve as temporary storage, allowing for data validation before final loading into target tables, enhancing data integrity.

Data Source Attributes:

The parameters set in the data source record, including table naming, directly affect how data is organized in ServiceNow.

Error Management:

The system checks for existing staging tables, preventing errors during data imports and ensuring smooth processes.

Tracking Imports:

Import set records provide an organized way to manage and review data import history, facilitating easier audits and troubleshooting.

Custom Columns:

ServiceNow dynamically creates columns based on data source headers, enabling flexibility in data handling and structure.

Data Overwrite Awareness:

Understanding how duplicate imports work is crucial for avoiding unintentional data inflation in staging tables.

Transition to Target Tables:

The next phase in the import process will focus on final data movement, emphasizing the importance of planning before executing imports.

* Data Source Creation: We created a data source to connect to our source data entity.
* Staging Table: A staging table was established to hold imported data before processing.
* Transform Maps: We defined transform maps as a grouping mechanism for field maps.
* Field Maps: Field maps allow us to specify how each field from the staging table maps to the target table.
* Coalesce Field: We discussed the importance of coalesce fields to prevent duplicate records.
* Custom Table: A custom table was created to serve as our target for the imported data.

Understanding Transform Maps:

Transform maps are essential for organizing field mappings, ensuring a structured import process that connects source and target data effectively.

Field Maps’ Importance:

Each field mapping is critical for accurately transferring data, allowing precise control over how information flows into the target table.

Role of Staging Tables:

Staging tables serve as a safe intermediary, allowing for validation and adjustments before final data import, which minimizes errors.

Coalesce Functionality:

Setting coalesce fields correctly is crucial for maintaining data integrity during imports, as it helps avoid unnecessary duplicates by identifying unique records.

Custom Tables Flexibility:

Creating custom tables enhances the flexibility of data management in ServiceNow, allowing tailored solutions for specific needs.

Database Navigation:

Navigating through database tables provides deeper insights into data structures, facilitating better management and understanding of ServiceNow functionalities.

Future Import Scheduling: Understanding how to schedule imports will enhance operational efficiency, enabling automated and recurring data integration processes.

* Task Table: Core component for managing various work tasks in ServiceNow.
* Hierarchical Design: Task types like incidents and changes extend the task table.
* Assignment Rules: Automatically assign tasks to users/groups based on conditions.
* Due Dates: Essential for tracking task completion timelines.
* Collaboration Tools: Enable teamwork with features like real-time editing and user presence.
* Visual Task Boards: Offer a graphical view for better task organization.

Task Management Efficiency:

ServiceNow’s task table allows for streamlined work processes, essential for managing organizational tasks effectively.

Hierarchical Structure:

The extension of the task table into specific task types fosters better organization and retrieval of task-related information, ensuring that unique attributes are maintained while sharing common fields.

Automation in Assignments:

Utilizing assignment rules not only saves time but also enhances accountability by ensuring the right tasks are directed to the right personnel based on predefined criteria.

Time Management:

Integrating due dates and service level agreements (SLAs) into task management supports timely task execution and accountability, crucial for maintaining service standards.

Enhanced Collaboration:

Features like user presence and real-time editing improve team coordination, enabling multiple stakeholders to effectively manage tasks together.

Visual Management Tools:

Visual task boards provide a unique and interactive way to track tasks, helping identify bottlenecks and improving overall task flow.

Comprehensive Learning Path: The tutorial series not only prepares users for certification but also enhances their practical skills in using ServiceNow, making it valuable for both aspiring and current users.

* Understand the importance of data-driven analysis for learning ServiceNow.
* Explore the report table (sys\_report) that stores all report records.
* Discover how to schedule reports for automatic email distribution.
* Learn about various report types available in ServiceNow.
* Share reports with users or groups for easy access.
* Create reports using multiple methods within the platform.
* Add reports to dashboards for consolidated data viewing.

Data-Driven Learning:

Emphasizes starting with data analysis to understand ServiceNow’s functionalities, providing a structured learning approach.

Sys\_Report Table:

The core table for report management, showing how every report is a database record, essential for report creation and customization.

Scheduling Reports:

Automating report distribution enhances efficiency, allowing users to receive timely updates without manual intervention.

Variety of Report Types:

ServiceNow offers over 23 report types, enabling tailored data presentations that suit specific needs and scenarios, enhancing user engagement.

User and Group Sharing:

Facilitates collaboration and communication by allowing users to access reports on demand, promoting data transparency within the organization.

Multiple Creation Methods:

Flexibility in creating reports through various methods ensures users can choose the most convenient way, enhancing usability and adoption.

Dashboard Integration:

Adding reports to dashboards consolidates key performance indicators and metrics in one view, aiding strategic decision-making.

* Low code no code empowers business users to solve problems independently.
* It minimizes barriers between savvy business people and IT solutions.
* Iterative development improves collaboration and feedback processes.
* ServiceNow and other companies provide tools for low code no code applications.
* Benefits include faster market speed, lower costs, and improved agility.
* Limitations involve reduced flexibility and reliance on pre-written code.
* Collaboration between business and IT is essential for success.

Empowerment of Business Users:

Low code no code tools enable non-technical users to create applications, fostering innovation and reducing dependency on IT. This democratization of technology can lead to more creative solutions that align closely with business needs.

Elimination of Barriers:

By simplifying processes, low code no code removes the traditional obstacles between business objectives and technological implementation, allowing for quicker responses to market changes.

Importance of Iteration:

The iterative development process encourages continual feedback and adaptation, making it easier to refine applications based on real-world usage and requirements.

Diverse Toolset:

Platforms like ServiceNow, Microsoft PowerApps, and Salesforce provide a range of low code no code solutions, catering to various business needs and enhancing digital capabilities across industries.

Potential for Cost-Saving and Agility:

Organizations adopting low code no code practices often experience reduced operational costs and faster project timelines, boosting overall productivity and market responsiveness.

Trade-offs in Flexibility:

While low code no code simplifies development, it may compromise certain customizations, leading to trade-offs in functionality that businesses must navigate carefully.

Collaboration is Key:

Successful low code no code implementations require ongoing collaboration between business users and IT professionals to ensure that all perspectives are considered, maximizing the potential for effective solutions.