**DIGITAL NURTURE 3.0 (Service Now)**

Week-1 Hands-ON

* **What is ServiceNow**

ServiceNow is described as a cloud-based platform designed to automate and streamline IT services and business workflows. It provides a unified environment where organizations can manage digital workflows, improve service delivery, and drive operational efficiency. The platform is modular, allowing for customization and integration of various applications to meet specific business needs, all while ensuring high availability, security, and scalability

* **ServiceNow Overview**

- Purpose: ServiceNow is a cloud-based platform that provides digital workflows and enterprise solutions to improve service management across an organization.

- Platform and Infrastructure:It is built on a single, unified platform that includes a wide range of applications and workflows designed to automate and streamline IT service management, operations, and business processes.

* **ServiceNow Platform Architecture**

- Applications and Workflows: The platform offers a modular architecture, allowing various applications to work together seamlessly. Workflows are designed to automate routine tasks, reduce manual effort, and ensure consistency in service delivery.

- User Interfaces: ServiceNow features a highly customizable UI that supports multiple roles and devices. It includes elements like the Application Navigator, Service Portal, and Mobile Interface.

- Role-Based Access and Authentication: Security is maintained through role-based access controls (RBAC) and authentication mechanisms that ensure users can only access resources appropriate to their roles.

* **ServiceNow User Interface Overview**

- Global Search: Allows users to search across multiple applications and data sources within ServiceNow.

- Connect Chat: Enables real-time communication within the platform.

- Contextual Help: Provides inline help and guidance relevant to the user's current task or screen.

- Application Navigator: The main navigation tool within ServiceNow, allowing users to access different modules and applications.

- Favorites and History: Users can mark frequently used applications or records as favorites and access a history of recently viewed items.

- ACLs, UI Policies, Business Rules, and Client Scripting: These are tools used to control and customize user experience, data access, and automation within the platform.

* **ServiceNow Branding Overview**

- Branding Introduction: ServiceNow allows extensive branding and customization options to match an organization's identity.

- Company Guided Setup: A step-by-step setup process to configure branding elements like logos, color schemes, and themes.

- ServiceNow Portal and UI Builder: Tools for customizing the Service Portal and creating tailored user experiences without needing extensive coding knowledge.

* **ServiceNow Lists and Filters**

- List View Interface: Standard interface for viewing and managing records in a tabular format.

- List Control and Filter Conditions: Provides options to customize the list view, filter records based on conditions, and refresh the list to reflect real-time data.

- Refresh List: Ensures the list is updated with the latest records or changes.

* **Forms in ServiceNow**

- Standard Layout and Form Field Types: Forms are the primary method for data entry, with various field types (text, choice, date, etc.) available for customization.

- Saving Changes and Insert/Insert & Stay: Different options for saving changes made to a form, either committing them directly or allowing further edits.

- Form Sections, Related Lists, and Formatters: Forms can be organized into sections, and related lists show connected records. Formatters allow additional customization.

- Form Views, Personalization, and Templates: Different views can be configured for different user roles or purposes. Users can personalize forms, add attachments, and use templates to streamline form creation.

* **Importing Data in ServiceNow**

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- compatible databases, LOAP, 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 prise 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.

* **Creating a Data Source in ServiceNow**

To create a DataSource in ServiceNow, first navigate to the Data Source table by entering "data source" in the filter navigator and selecting "Data Sources" from the results, then click on the "New" button to create a new DataSource record. Next, specify the type of data source, such as File, JDBC, LDAP, REST, etc., based on the format and location of your external data, and provide additional parameters like file format, database connection details, LDAP server URL, or REST API endpoint as needed. Configure the data retrieval method, determining how ServiceNow will access the data, and define the data you want to import by specifying the table or view name in the data source, choosing to import all data or a subset based on specific criteria. Specify the import set table name, which serves as the staging table where the data will be loaded before processing, allowing for review and transformation before importing into the target ServiceNow table. Test the data source by clicking the "Load 20 test records" related link to create an import set with the first 20 records from the data source, enabling you to validate that the data is being retrieved correctly. Finally, review the import set record to ensure the data was loaded successfully, troubleshooting any errors as necessary, and once the DataSource is set up, you can schedule regular imports or trigger them manually to keep your ServiceNow data up-to-date with the external data source.

* **Understanding Import Sets in ServiceNow**

Creating a data source record is essential for connecting to external data sources and specifying parameters for the staging table within ServiceNow. This process involves defining how the data will be imported and ensuring the connection is correctly established. Testing the data source involves running an import to verify if the staging table exists; if it does not, ServiceNow will automatically create it according to the specified parameters. Once the data is imported, you can view the staging table to examine its contents and structure, including any custom columns generated from the imported data. Effective management of records is also crucial, as it involves tracking data across multiple import runs, which facilitates better organization and data management.

* **ServiceNow Transform Maps & Field**

A transform map is a mechanism in ServiceNow that groups multiple field maps to represent the entire import process, linking a staging table to a target table where data will be loaded. Field maps define the specific mappings between fields in the staging table and those in the target table, detailing how data should be transferred on a field-by-field basis. In the demonstration, the process of creating a transform map and field maps is shown using a custom table named "my table" as the target, illustrating how to map fields from the staging table to the target table. The presenter highlights the importance of setting a coalesce field to avoid inserting duplicates by matching records based on a unique identifier in the source data. Testing the import process is emphasized to ensure that data flows correctly from the source, through the staging table, to the target table. Finally, the ability to schedule imports for recurring execution is mentioned as an additional feature.

**Incident Management Tutorial and Task Administration**  
  
Key features covered include task assignment rules, which dictate how tasks are allocated to users or groups, and the creation of assignment rules to streamline this process. The video also highlights collaboration tools that enable team members to work together effectively on tasks, including real-time updates and activity streams. Additionally, visual task boards are introduced, showcasing a graphical representation of tasks that allows users to manage and prioritize work visually. The tutorial aims to equip viewers with the knowledge needed to effectively utilize ServiceNow for task management, enhancing productivity and workflow within organizations.

* **Reporting**

1. **Data Model Overview**: The presenter introduces the core database tables that support reporting, particularly the **sys\_report** table, which stores records for each report. Other supporting tables include the report source table, scheduled email reports table, and report users and groups table.
2. **Report Creation**: The tutorial covers the process of creating reports, detailing the various fields within the report table, such as title, source type, table, and filter fields. The presenter explains how to populate these fields when creating a new report and highlights the importance of selecting the appropriate report type from over 23 available options, including pie charts, bar charts, and more.
3. **Report Management**: Viewers learn how to manage existing reports, including editing and updating them. The presenter demonstrates how to access the report table, view existing reports, and personalize the list of fields displayed.
4. **Scheduling Reports**: The video explains how to set up reports to be automatically executed and emailed to users on a recurring basis. The presenter walks through the fields necessary for scheduling a report, such as the report to be sent, the users or groups to receive it, and the frequency of the email.
5. **Sharing Reports**: Finally, the tutorial discusses how to share reports with users or groups within ServiceNow, allowing them to access and execute reports on demand.