ServiceNow Platform and Development Fundamental
(Module 1)

About ServiceNow:-

- ServiceNow is a cloud-based platform that helps organizations automate and manage various business processes. It's like a one-stop shop for companies to handle everything from IT services to customer support, human resources, and more.
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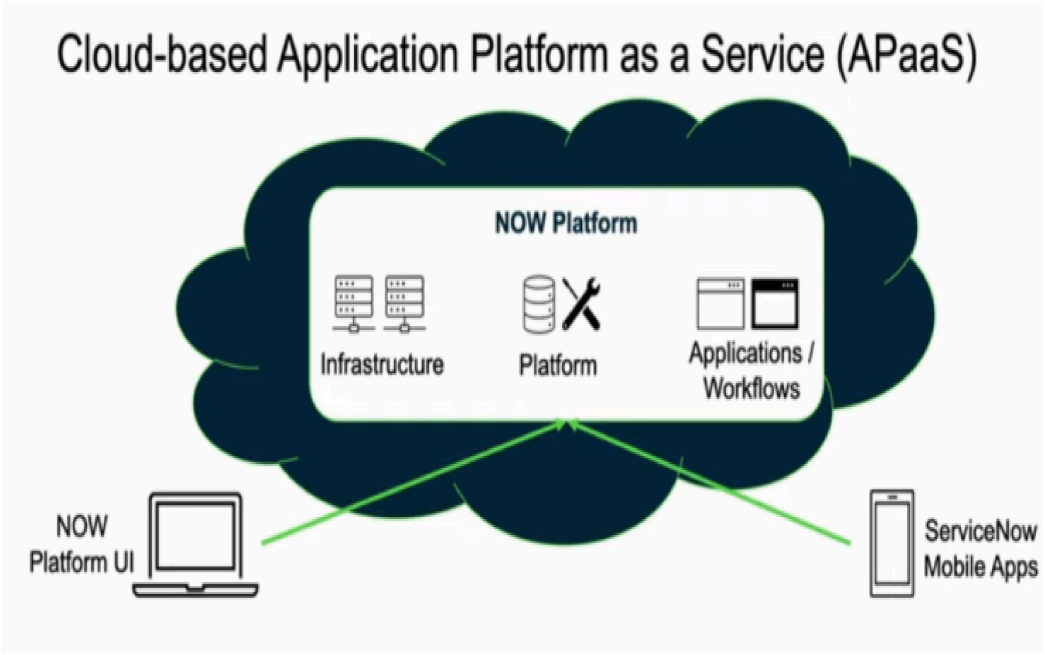
- ServiceNow, with over 17,000 employees worldwide, The organization has this year received other coveted industry awards for Best Workplaces, such as being listed in FORTUNE's World's Most Admired Companies and 100 Best Companies to Work For in 2021.
- ServiceNow is also its Customers. The company targets mid to large-enterprises and its customers include the like Coca Cola, Deloitte, Delta, McDonalds, Microsoft, The NBA etc



- Fred Luddy was the founder and current chairman and one of the company's board of directors.
- ServiceNow's infrastructure is supported by strong physical and virtual security measures, including regular external security checks. The platform also boasts

redundancy at every layer and globally paired data centers, offering robust failover capabilities.

- ServiceNow provides IaaS, PaaS, and SaaS with one consistent database across all applications.
- It contains 79 IT workflows, 43 employee workflows, 93 customer flows, and 23 flows for creators.
- The platform has a multi-instance model; each customer gets a different instance with built-in redundancy to address security and availability.
- Perform full and differential backups weekly to further enhance the third-party certified security in place.
- The primary interface is the Now Platform UI, which is made for desktops, but with other interfaces created depending on the need.
- Security is enhanced through role-based access controls permissions and domain separation, which isolates application and data security.

Understanding these elements is key for mastering ServiceNow and very important for certifications.

ServiceNow Interface Overview

Main Screen Elements:

- **Banner Frame:** Top of the screen with navigation tools.
- **Content Frame:** Center area for main workspace.
- **Application Navigator:** Left sidebar for navigating applications.

Banner Frame Details:

- **Logo:** Click to return to the homepage.
- **User Menu:** Access profile, impersonate users, elevate roles, or log out.
- **Tools:** Includes Global Search, Connect Chat, Help Tool, and System Settings (for interface and accessibility customizations).

Application Navigator:

- **Navigation Filter:** Quickly find applications/modules by typing keywords.
- **Tabs:**
    - **All Applications:** Browse all available apps.
    - **Favorites:** Access frequently used apps.
    - **History:** View the last 30 visited items.

The banner frame at the top of each page has user menu handling profiles, impersonating others, role elevation, or logout. It also has a global search for information on the platform. The system settings with the banner frame allow users to set preferences regarding the choice of interface theme and accessibility options as well as notification options.

The left part basically describes how to use applications and modules in ServiceNow. With a filter, it is easy for an individual to quickly and easily get access to any item by putting only keywords into it. This will surely give an individual easy access to functions that help him manage his tasks.

The content frame occupies the other space completely. It offers very fine-grained detail about user activities, being the most significant space in which users see and manipulate all the data and functions they need to perform the current task effectively. Its layout would ensure that all highly visible information will be visible; thus, it would increase effective use of the site.

Understanding these UI components is crucial for ServiceNow certification…

Branding Capabilities of ServiceNow

What is Branding in ServiceNow?

- Branding means personalizing the ServiceNow UI to match your company's identity. This could involve using your company's colors and logos to create a cohesive and familiar experience for users.

Make the UI very similar to your organization's branding elements—an equally gigantic leap further into making ServiceNow truly look and feel like part of your very own enterprise. If you need very advanced personalization, then tools like ServiceNow Portal and UI Builder have many more options for those who want these advanced features. Such leveraging tools will help

to personify the platform for a few business needs. This augmentation will make usability better so that experience can be made much better for the users.

Lists in ServiceNow are essential for displaying records from various database tables and facilitating navigation.

Methods to access lists include using the application navigator or dot list commands like “task.list” and “incident.list” for efficient record location.

The list interface includes the title bar, list header, and data rows. Sorting, searching, and analyzing data within lists can be done effectively.

Creating and using saved views and filters allows for personalized data presentation. Privileges are required for these actions.

Grouping data by columns helps organize and analyze large datasets.

Search functionality includes using wildcards and column-specific searches to locate records efficiently.

Customizing the list view by adding, removing, and reordering columns allows for personalization without affecting other users.

Lists are fundamental for navigating and managing records in ServiceNow. Dot list commands simplify access, saved views and filters enhance personalization, and customization supports both individual and collaborative workflows.

Lists And Filters

Lists are fundamental to the ServiceNow platform, providing a user-friendly way to view and manage data from various database tables, such as incidents, tasks, and problems. Users can quickly access lists using the Application Navigator or dot list commands (e.g., task.list, incident.list), streamlining navigation and saving time.

The list interface includes a title bar, list header, and data rows, with controls for sorting, searching, and filtering. Users can sort data by columns, search with wildcards for precise results, and group records to identify trends and insights.

Personalization is a key feature, allowing users to create and save custom views and filters. This customization includes adding, removing, and reordering columns without affecting other users' settings. Advanced search options, such as wildcard searches and column grouping, facilitate effective management of large datasets.

Customizable lists enhance team collaboration and productivity by enabling personalized views and filters tailored to individual needs. Proper use of ServiceNow lists boosts productivity and improves data management across teams.

FORMS

ServiceNow forms are used to view, edit, or update individual records. For example, the Incident Record Form manages cases, while the User Record Form handles user accounts.

Forms feature a Header Bar for record details and various fields: Reference Fields pull data from other tables, List Fields offer multiple options, and Journal Fields provide notes. Field visibility may change based on other inputs.

Users can either submit the form to save and close it or update it to save changes while keeping it open. If there are unsaved changes, users will receive a warning if they try to leave the page.

Introduction to Importing Data in ServiceNow

The Import Series in ServiceNow outlines how to set up and execute data imports efficiently. It covers key topics such as data sources, import sets, transform maps, field mapping, and scheduling. The series aims to help users effectively bring data into ServiceNow.

Important terms include the Source Data Entity, which is the data to be imported, and the Target Entity, where the data will be stored in ServiceNow. The Staging Table, or import set table, is a temporary holding area automatically created by ServiceNow to manage data during the import process.

The import process involves three main components: the Source Data (original data to import), the Staging Table (temporary storage during import), and the Target Data Store (final destination within ServiceNow where data is saved)

Creating a Data Source in ServiceNow

To create a data source in ServiceNow, start by configuring it with the necessary import parameters. Navigate to the ‘sys_data_source’ table using the Application Navigator or filter navigator, and click “New” to set up your data source. Provide a name and label for the staging table, which the system will automatically generate.

Choose the data source type: File (for CSV or Excel) or JDBC (for database connections). For file imports, attach the file and ensure it includes a header row for field mapping. For databases, enter connection details such as server name and credentials.

After configuration, click “Submit” to save the data source and verify that it appears correctly in the list. For example, an Excel file might include columns like Name and Address, which will define the staging table fields.

Understanding Import Sets in ServiceNow

The focus here is on understanding the Staging Table (Import Set Table) in ServiceNow, building upon the previous creation of a data source. To test the data source, access it through ‘sys_data_source.list’ and confirm the details, noting that the staging table won’t exist until an import is run. Initiate an import to create the staging table, which will then load the data from the source into it. You can view the staging table using ‘u_test_import.list,’ which should now contain rows matching the imported records and columns aligned with the source file's header.

Re-importing data demonstrates how records are managed, showing that multiple imports aggregate records in the staging table. The ‘sys_import_set’ table manages these imports, with each import run creating a record to track the data. Confirm that staging table records reference the correct import set, ensuring accurate tracking of data imports.

ServiceNow Transform Maps & Field Maps

In ServiceNow, **Transform Maps** and **Field Maps** are essential for mapping data from staging tables to target tables. **Field Maps** specify how each field's data moves from the staging table to the target table, and these mappings are recorded in the CIS_transform_entry table. **Transform Maps** group these field maps to handle the entire data import process and are stored in the CIS_transform_map table.

To set up a transform map:

1. **Create a Custom Table**: For demonstration, a custom table named u_my_table is created with fields like username, address, city, state, and zip_code.
2. **Create a Transform Map**: Navigate to CIS_transform_map.list, create a new record, and name it (e.g., test_transform_map). Set the source table (e.g., test_import) and target table (u_my_table).
3. **Add Field Maps**: Use the Mapping Assistant to map fields from the staging table to the target table, such as name to username and zip to zip_code.
4. **Set Coalesce Field**: Define a coalesce field (e.g., name) to prevent duplicate records.

Review the **Field Maps Table** (CIS_transform_entry) to see the created field maps and the **Transform Maps Table** (CIS_transform_map) to view the associated transform map record

ServiceNow Incident Management Tutorial and Task Administration

Task Management

- **Task Definition:** Represents work items in the "task" table (e.g., description, status).
- **Hierarchical Design:** Extended by tables like Incident, Change Request.
- **Business Value:** Streamlines processes with assignment rules, approvals, SLAs, inactivity monitors, and workflows.

Assignment Rules

- **Fields:** assigned_to and assignment_group.
- **Rules:** Automated task assignment; stored in sys_rule_assignment.

Visual Task Boards

- **Purpose:** Graphical drag-and-drop interface.
- **Components:** Cards, lanes, Quick Panel.
- **Types:** Guided (predefined attributes), Flexible (customizable lanes), Freeform (personalized)

ServiceNow Reporting Tutorial

- **Important Tables**:
    - sys_report: Stores report details.
    - sys_report_source: Holds reusable queries.
    - sys_auto_report: Manages report scheduling and emails.
    - sys_report_users_groups: Handles report sharing.
    - opa_dashboard: Manages dashboards with reports.

Report Table (sys_report):

- **Fields**:
    - sys_id: Unique report ID
    - title: Report title
    - source_type: Data source type (table or data source)
    - source: Data source record
    - table: Main table for report data
    - field_name: Field for grouping
    - filter: Data filter conditions
    - type: Report type (list, bar chart, etc.)

Report Types:

- Lists, bar charts, pie charts, pivot tables, heat maps.

Creating Reports:

- **Methods**:
    1. Reports Application

2. ServiceNow Studio
3. From List View

- **Steps**:
  1. Set report title.
  2. Choose source type (table or data source).
  3. Select table and visualization type.
  4. Configure fields and styling.
  5. Save the report.

Scheduling Reports:

- **Table**: sys_auto_report
- **Fields**:
  - Report reference
  - User/group lists
  - Email addresses
  - Recurrence (daily, weekly, etc.)
  - Time
  - Subject and body
  - Attachment type

Sharing Reports:

- **Table**: sys_report_users_groups
- **Options**: Share globally, by role, or with specific users/groups.

Adding to Dashboards:

- Add reports via the dashboard interface or sharing options.

Action Items:

- Create, manage, schedule, and share reports.
- Add reports to dashboards for visualization.