ServiceNow Administration Fundamentals (MODULE#2)

PLATFORM OVERVIEW AND ARCHITECTURE:

Key Architectural Components:

- Infrastructure Layer: This foundational layer includes the hardware, software, and network resources necessary for the operation of the ServiceNow platform. It ensures the platform's availability and performance.
- Platform/Database Layer: This layer encompasses core services such as the database, workflow engine, and user interface. The database utilizes the Common Service Data Model (CSDM) for data management, while the workflow engine automates ITSM processes, enabling efficient service delivery.
- Application Layer: This layer consists of various ITSM applications, including Incident Management, Change Management, and Service Catalog. These applications are built using the ServiceNow application development framework and are designed to streamline IT processes.
- User Interface Layer: Responsible for the end-user experience, this layer includes UI components like forms and dashboards, allowing users to interact seamlessly with the platform.
- Integration Layer: This layer facilitates connectivity with third-party systems through various integration methods such as REST and SOAP, enabling a cohesive ecosystem for IT operations.
- Workflow and Orchestration Layers: These layers provide tools for creating automated workflows that can span multiple systems, enhancing operational efficiency and reducing manual tasks.

USER INTERFACE AND BRANDING:

The ServiceNow user interface (UI) consists of several key components that work together to provide a comprehensive and customizable experience.

Unified Navigation Header:

- Banner Frame: Appears at the top of the interface, displaying the logo, global navigation, logged-in user's info, search, and settings icon.
- Application Navigator: Located on the left side, provides navigation links to different ServiceNow applications and modules.

- Notifications: Allows users to access system notifications and alerts Application Pages.
- List Views: Display records in a tabular format, allowing users to filter, sort, and take actions on multiple records.
- Form Views: Provide detailed information about a specific record and allow users to edit and update the record.
- Related Lists: Display associated records related to the current record, such as tasks, notes, or attachments.

UI Components:

- Widgets: Customizable UI elements that can be added to pages, such as charts, graphs, or custom content.
- Macros: Reusable code snippets that can be used to automate common tasks or add functionality to the UI.
- Themes: Provide a consistent look and feel across the UI, including colors, fonts, and icons Navigation and Search.
- Application Navigator: Allows users to quickly navigate to different applications and modules within ServiceNow.
- Global Search: Enables users to search for records, articles, and other content across the platform.
- Breadcrumbs: Provide a visual indication of the user's current location within the application hierarchy.

User Personalization:

- User Preferences: Allow users to customize their personal settings, such as the default homepage, theme, or language.
- Impersonation: Enables users with the appropriate permissions to temporarily assume the identity of another user for troubleshooting or support purposes.

Branding Components:

- Company Branding: ServiceNow's guided setup wizard helps configure the overall branding of the platform, including setting the company name, logo, and colors.
- Portal Branding: The ServiceNow Portal offers additional branding options, allowing organizations to customize the look and feel of the end-user interface. This includes setting the portal theme, adding custom images and banners, and configuring the navigation menu.

• UI Builder: For more advanced customization, the UI Builder tool enables developers to create custom UI pages and components. This allows for a high degree of flexibility in designing the user experience.

LISTS AND FORMS:

Lists and Forms are fundamental components that facilitate data management and user interaction. Lists in ServiceNow display records from a particular table in a tabular format, allowing users to view, filter, and manipulate data efficiently.

Key Features in Lists:

- Column Customization: Users can customize which columns are displayed in the list view, allowing for a tailored view of relevant information.
- Sorting and Filtering: Lists support sorting by any column and filtering records based on specific criteria, making it easier to find relevant data.
- List Layout: Administrators can configure the default layout of lists, including which fields are visible and their order.
- Context Menu: Right-clicking on a record in the list opens a context menu with options for actions such as editing, deleting, or viewing related records.
- List Actions: Users can perform bulk actions on selected records, such as updating or deleting multiple entries at once.

Forms are used to display and edit individual records in ServiceNow. They provide a structured way to input data and manage records within tables.

Key Features in Forms:

- Form Layout: Forms can be customized using the Form Designer, allowing administrators to add, remove, or rearrange fields based on user needs.
- Field Types: Various field types can be used in forms, including text fields, dropdowns, checkboxes, and reference fields, which enhance data entry and validation.
- Form Sections: Forms can be divided into sections to organize related fields, improving usability and clarity.
- UI Policies and Client Scripts: These can be applied to forms to dynamically change field visibility, mandatory status, or values based on user interactions, enhancing the user experience.
- Related Lists: Forms can include related lists that display associated records, providing context and additional information relevant to the main record.

Customization Options

- Form Designer: This tool allows for drag-and-drop customization of forms, making it easy to create user-friendly layouts without extensive coding knowledge.
- Service Portal Forms: Forms can also be created and customized for the Service Portal, allowing end-users to submit requests or report issues through a simplified interface.

The capabilities of lists and forms in ServiceNow, organizations can enhance data management, streamline workflows, and improve user interactions with the platform.

TASK MANAGEMENT:

Task Management is the process of assigning, tracking, and collaborating on tasks within the platform. A task is any record that can be assigned to a user or group for completion, such as an incident, problem, change request, or custom task type.

KNOWLEDGE MANAGEMENT:

Knowledge Management is the systematic process of creating, sharing, using, and managing knowledge and information within an organization. It aims to enhance efficiency and improve decision-making by ensuring that relevant knowledge is readily available to users when needed.

SERVICE CATALOG:

The ServiceNow Service Catalog is a user-friendly interface that allows employees to request IT services and products. It provides a structured view of available services and offerings managed by an organization. The Service Catalog serves as the entry point for users to request catalog items.

TABLES AND FIELDS:

The core of ServiceNow is its database, which consists of tables and fields to store data.

Tables represent entities like incidents, problems, changes, etc.

Fields within tables store specific attributes of each record.

ACCESS CONTROL LISTS(ACL):

ACLs define who can perform what operations (read, write, create, delete) on tables and fields.

ACLs are stored in the sys security acl table and sys security acl role table.

DATA IMPORT:

The Data Import feature allows importing data from external sources into ServiceNow tables.

Data imports can be scheduled to run periodically to keep data synchronized.

CONFIGURATUON MANAGEMENT DATABASE(CMDB):

The CMDB is ServiceNow's system of record for IT infrastructure and services.

It stores information about configuration items (CIs) like servers, applications, networks, etc.

UPDATE SETS:

Update Sets are used to transport customizations between different ServiceNow instances.

They capture changes made to tables, scripts, UI, workflows, etc. in a source instance.

Update Sets can be imported into a target instance to replicate the customizations.

EVENTS:

Events are mechanisms to trigger actions based on specific conditions or schedules.

They can be used to automate workflows, send notifications, run scripts, etc.

PLATFORM STATS:

Platform Stats provide performance metrics and analytics for the ServiceNow instance.

Platform Stats data can be used to generate reports and dashboards.