ServiceNow Understanding Document

Week 4:

Scripting on the ServiceNow Platform

Scripting in ServiceNow allows you to customize the platform beyond out-of-the-box functionalities. It enables administrators and developers to create business rules, client scripts, UI policies, UI actions, and more. This customization can automate processes, validate data, and ensure business logic is enforced across the platform. ServiceNow uses JavaScript as its scripting language, and scripts can be categorized into server-side (like Business Rules, Script Includes) and client-side (like Client Scripts, UI Policies).

1. **Server-Side Scripting:**
    - **Business Rules: Automatically execute on records in the database based on user-defined criteria.**
    - **Script Includes: Reusable scripts that can be invoked by other server-side scripts.**
    - **Scheduled Jobs: Automation tasks that run on the server based on a schedule.**
2. **Client-Side Scripting:**
    - **Client Scripts: JavaScript that runs in the user's browser to manipulate forms or UI components.**
    - **UI Policies: Condition-based UI controls that dynamically change form field behavior, visibility, or requirements.**

Understanding of How ServiceNow Functions

ServiceNow operates as a SaaS platform with a multitenant architecture, meaning multiple customers share the same infrastructure while maintaining data privacy and separation. The platform's core functionality is built around forms, lists, tables, and workflows. The fundamental building block in ServiceNow is the table, which stores data in records (like rows in a spreadsheet), and forms and lists allow users to interact with this data.

Key areas of functionality:

- **Tables: A table holds data such as incidents, users, and changes. Each table is associated with a unique record identifier.**

- **Forms: Used for data entry and displaying records from tables. Users can interact with records, add new entries, or modify existing ones.**
- **Lists: Show a tabular view of data from tables, allowing users to filter, sort, and search through records.**
- **Workflows: Automate processes and workflows to route records through various states (e.g., incident management).**

How to Properly Configure and Personalize the Platform

Configuring and personalizing ServiceNow is essential for tailoring the platform to the organization's specific needs. Administrators can configure the platform without extensive scripting through a combination of UI configuration, form design, and module management.

1. **User Interface (UI) Configuration: ServiceNow provides flexibility for modifying the platform's look and feel. Administrators can add branding (logos, themes), customize navigation, and alter the homepage design for specific users. The UI can also be tailored through the creation of custom forms and lists, ensuring users see only the data relevant to their roles.**
2. **Form and List Customization: Forms can be personalized by adding, removing, or rearranging fields, making sure users have the necessary information. Lists can be filtered, sorted, and grouped to present data clearly.**
3. **Table and Field Configuration: Tables can be customized by adding new fields, setting default values, or enforcing data integrity rules like field validation or mandatory fields. New custom tables can be created to handle data unique to the organization.**
4. **Workflows and Automation: By leveraging the Workflow Editor, users can design workflows with drag-and-drop functionality to automate multi-step processes. This reduces the need for manual intervention, enhancing productivity and reducing human error.**
5. **Business Rules and Scripting for Customization: For advanced customization, administrators can use Business Rules, Client Scripts, and other types of scripting to enforce specific rules, validations, or triggers based on user actions or data input.**

Incident Module

The Incident Management module in ServiceNow is designed to handle IT incidents efficiently, restoring normal service operation as quickly as possible while minimizing impact on the business. It follows the ITIL framework to ensure structured resolution.

1. **Incident Creation: Incidents can be logged manually by users or automatically through integrations. Incidents can be categorized, prioritized, and assigned to appropriate teams based on severity and urgency.**

2. **Incident Lifecycle: The incident passes through several stages such as New, In Progress, Resolved, and Closed. Each stage can have defined workflows, SLA (Service Level Agreement) metrics, and escalations.**
3. **Incident Resolution: Once assigned, agents can work on the incident by logging updates, collaborating with other teams, and resolving the issue. Knowledge base articles and problem management integrations often assist in faster resolution.**
4. **Reporting and Metrics: Dashboards and reports provide insights into incident trends, resolution times, and team performance. Metrics help in assessing SLA adherence and overall efficiency.**

Problem Module

Problem Management in ServiceNow helps identify and mitigate the root cause of recurring incidents. This module enables organizations to prevent future incidents by addressing the underlying causes.

1. **Problem Detection: Problems can be created either manually or through automatic detection based on incident patterns. The detection phase identifies areas of concern where incidents are regularly recurring.**
2. **Root Cause Analysis (RCA): Through problem investigation, the team performs a detailed analysis to determine the root cause of the problem. RCA tools and techniques help to pinpoint technical failures or procedural gaps.**
3. **Workarounds and Permanent Solutions: Problem management focuses on providing temporary workarounds to reduce the impact while working towards a permanent fix. These workarounds may be integrated with incident records for faster resolution of related issues.**
4. **Problem Resolution and Closure: Once the root cause is identified and a fix is implemented, the problem is marked as resolved. Reporting allows for tracking problem trends and ensuring no related incidents remain open.**

Change Module

The Change Management module in ServiceNow is used to handle changes to IT infrastructure in a controlled manner, reducing the risk of service disruption. It follows a structured approval process and ensures thorough documentation of each change.

1. **Change Creation: Changes can be requested by users or through incidents or problems that require infrastructure modifications. The change request includes details of what is being changed, the reason for the change, and the associated risk.**
2. **Change Types: There are different types of changes such as Normal, Standard, and Emergency. Each type has its own workflow, approval process, and risk assessment criteria.**

3. **Approval and Risk Management: Changes go through an approval process that includes risk evaluation. High-risk changes may require multiple levels of approval, while standard or pre-approved changes can be expedited.**
4. **Change Implementation and Review: After approval, the change is implemented. Following implementation, a review ensures that the change has achieved its intended goals without causing new issues.**

List

A List in ServiceNow displays a collection of records from a table in a grid or tabular format. Lists are interactive and allow users to filter, sort, and group data based on their needs.

1. **Filters: Users can apply filters to focus on specific data, like incidents assigned to them or changes awaiting approval.**
2. **Grouping: Records can be grouped by any column to help users categorize and analyze data more effectively.**
3. **Sorting: Data can be sorted based on different parameters such as date, priority, or status.**
4. **Exporting and Importing: Lists can be exported in formats such as Excel for reporting and analysis outside of ServiceNow.**

Forms

Forms in ServiceNow are used to display and input data for individual records within tables. Forms consist of fields where users can enter or view data.

1. **Field Types: Fields can be of various types like text, dropdowns, date pickers, reference fields, etc. Forms can include mandatory fields, dependent fields, and read-only fields.**
2. **Form Layout: Administrators can customize the layout of forms by dragging and dropping fields, sections, and related lists to ensure a logical structure.**
3. **Form Actions: Buttons or UI actions can be added to forms, allowing users to submit, save, or take specific actions on a record (like assigning an incident or escalating a problem).**

In conclusion, ServiceNow offers a robust platform that integrates incident, problem, and change management with extensive customization capabilities. Its flexible scripting environment and personalization features enable organizations to optimize their IT service management processes effectively.