

# Week-4 Deep Skilling ServiceNow Document

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## Scripting in ServiceNow

Scripting in ServiceNow is a powerful feature that allows users to enhance and customize the platform's functionality through JavaScript code. This scripting capability is crucial for tailoring ServiceNow to meet specific business needs, automating processes, and integrating with external systems. ServiceNow scripting is categorized into different types, including server-side, client-side, and integration scripts, each serving distinct purposes.

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### Fix Script

- **Definition:** A Fix Script is a server-side script used primarily for data corrections, updates, or maintenance tasks within the ServiceNow database. It helps address data inconsistencies or apply changes across multiple records efficiently.
  - **Usage:** These scripts are executed within the ServiceNow environment and are commonly employed during system upgrades, data migrations, or to resolve data issues discovered in routine operations. Fix scripts can be run manually or scheduled to execute at specified intervals.
  - **Example:** If a schema change results in inconsistent field values across records, a fix script could update those values uniformly across the affected table to ensure data consistency.
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### ACL Script (Access Control List Script)

- **Definition:** ACL (Access Control List) scripts establish security rules that govern which users or groups can access or modify specific records or fields in ServiceNow. These scripts are crucial for managing data and functionality securely according to organizational policies.

- **Usage:** ACL scripts are crafted to enforce permissions based on user roles, conditions, and contexts. They are evaluated whenever users attempt to interact with records, controlling operations such as reading, writing, creating, or deleting records.
  - **Example:** An ACL script might restrict access to a particular field in a form based on the user's role, ensuring that only authorized users can view or update sensitive data in a table.
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## GlideAjax

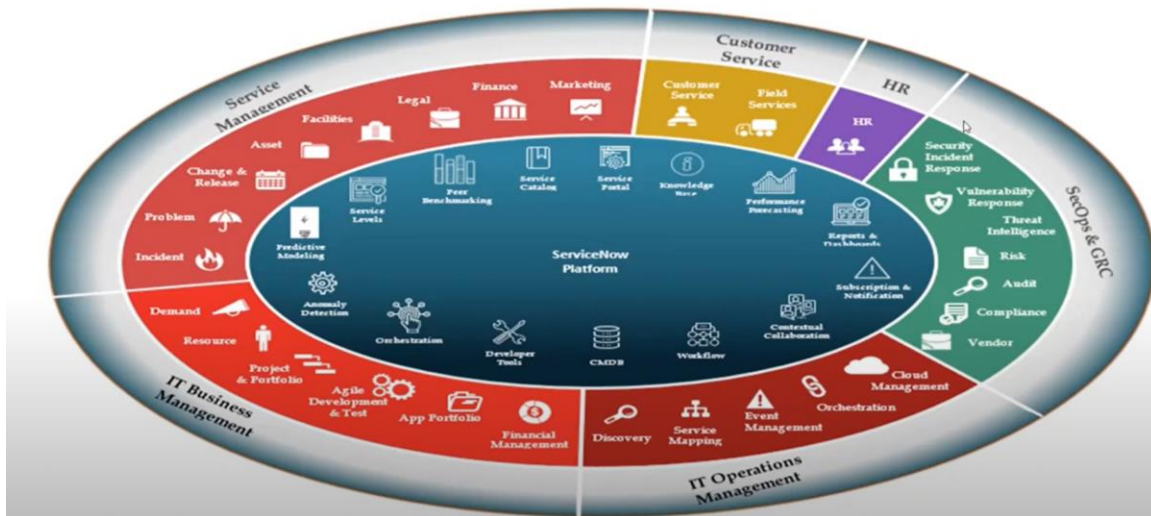
- **Definition:** GlideAjax is a server-side API in ServiceNow that enables asynchronous communication between client-side scripts (like UI policies or client scripts) and server-side scripts (such as business rules or script includes). It allows client scripts to invoke server-side code and fetch data without requiring a page reload.
- **Usage:** GlideAjax is utilized to perform server-side tasks in response to client-side events, enhancing the user experience by providing real-time feedback and updates without the need for a full page refresh.
- **Example:** A client script that needs to retrieve data based on user input (e.g., fetching related records or performing server-side calculations) can use GlideAjax to make an asynchronous call to a server-side script include, which processes the request and returns the results to the client.

## About ServiceNow

ServiceNow is a versatile cloud-based solution that focuses on enhancing and automating a variety of business functions. Originally built for IT Service Management (ITSM), the platform has expanded significantly to cater to multiple domains, including IT Operations Management (ITOM), IT Business Management (ITBM), customer service, human resources, security operations, and more. By leveraging a single, unified platform, ServiceNow empowers organizations to seamlessly integrate disparate processes, enabling smoother collaboration between departments and reducing bottlenecks.

## ServiceNow Architecture

ServiceNow provides a wide array of services designed to optimize and automate various organizational processes. Here are some of its key service offerings:



- **IT Service Management (ITSM):** Simplifies and improves IT service delivery and support, ensuring more efficient handling of incidents, problems, and changes, while also enabling self-service options for users.
- **HR Service Delivery (HRSD):** Automates HR processes to enhance the employee experience, from onboarding to case management, creating a seamless interface for employees to access HR services efficiently.
- **Governance, Risk, and Compliance (GRC):** Helps organizations manage risks, ensure compliance, and streamline governance processes through centralized risk assessments, policy management, and regulatory tracking.
- **Integrations:** Facilitates seamless connectivity between ServiceNow and other enterprise systems and tools, enabling data exchange and process automation across multiple platforms.
- **IT Asset Management (ITAM):** Provides end-to-end oversight of IT assets, ensuring better tracking, management, and optimization of hardware and software throughout their lifecycle, from procurement to retirement.
- **Finance Operations Management:** Streamlines financial workflows, automating tasks such as budgeting, invoicing, and expense management to improve overall financial efficiency.
- **IT Business Management (ITBM):** Aligns IT projects and operations with broader business objectives, ensuring that IT investments support organizational goals and deliver measurable value.

## ServiceNow Components

ServiceNow is a robust platform that integrates several key components to deliver its broad range of functionalities. These components work cohesively to ensure the platform meets diverse business needs efficiently and effectively.

### User Interface (UI)

- **Overview:** The User Interface is the visual and interactive layer of ServiceNow where users engage with the platform. It is designed to be intuitive and accessible, providing a streamlined experience for navigating the platform, accessing various applications, and managing tasks.
  - **Features:**
    - **Dashboard:** Provides a centralized view of key metrics, notifications, and personal tasks.
    - **Application Navigator:** Allows users to quickly access different applications and modules.
    - **Forms and Lists:** Used for data entry, record management, and reporting.
  - **Benefits:** The UI enhances usability by offering a user-friendly environment that simplifies complex processes and improves overall user experience.
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### Application Modules

- **Overview:** Application Modules in ServiceNow are specialized components designed to address specific business functions and processes. Each module focuses on a distinct area, providing tailored tools and features to manage particular tasks effectively.
- **Key Modules:**
  - **Incident Management:** Manages the lifecycle of incidents to ensure quick resolution and minimal disruption.
  - **Change Management:** Oversees changes to IT systems, ensuring they are implemented smoothly and with minimal risk.
  - **Asset Management:** Tracks and manages IT assets throughout their lifecycle, from acquisition to disposal.
- **Benefits:** These modules offer targeted solutions and functionalities, streamlining workflows and enhancing operational efficiency for different business functions.

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## Scripting Capabilities

- **Overview:** ServiceNow includes powerful scripting capabilities that enable customization, automation, and integration. Scripting is a crucial aspect of the platform, allowing users to extend its functionality and tailor it to specific business needs.
- **Types of Scripts:**
  - **Client-Side Scripts:** Executed in the user's browser, client-side scripts handle interactions and user interface behaviors.
  - **Server-Side Scripts:** Run on the server, server-side scripts perform background operations, data processing, and integration tasks.
  - **GlideAjax:** Facilitates asynchronous communication between client and server scripts, enabling real-time data retrieval and updates without page reloads.
- **Benefits:** Scripting allows for the creation of custom features, automation of repetitive tasks, and seamless integration with other systems, providing flexibility and enhancing the platform's capabilities.

## ServiceNow Modules

ServiceNow offers a wide range of modules that streamline various aspects of IT and business operations. These modules are designed to enhance service delivery, manage workflows, and ensure organizational efficiency. Some of the key modules include:

- **Incident Management:** Manages and resolves service interruptions or disruptions.
- **Problem Management:** Focuses on identifying and resolving the root causes of incidents.
- **Change and Release Management:** Oversees changes to IT systems and services.
- **Request Management:** Handles requests from users for products and services.
- **Asset and Cost Management:** Tracks IT assets and monitors associated costs.
- **Walk-Up Experience:** Enhances in-person service interactions, particularly for IT support.
- **Agent Workspace:** Provides a dedicated interface for agents to handle tasks efficiently.

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## Incident Management Module

Incident New record

Number: INC0010001

\* Caller: Aileen Mottern

Category: Network

Subcategory: Wireless

Service: SAP Enterprise Services

Service offering:

Configuration item: mobile PhoneTools

\* Short description: My wifi is not working

Description: Since 2 days i am facing this issue regarding my wireless connection. Please look into it.

Channel: -- None --

State: New

Impact: 3 - Low

Urgency: 3 - Low

Priority: 5 - Planning

Assignment group: Network

Assigned to:

Related Search Results

Related Search: My wifi is not working

Knowledge & Catalog (AI)

- **Definition:** In ServiceNow, an **incident** refers to any unplanned disruption, degradation, or failure in service operations that negatively impacts normal functioning. It represents an issue affecting the quality or availability of services.
- **Purpose:** The core objective of **Incident Management** is to handle the full lifecycle of incidents, from identification to resolution. By effectively managing incidents, businesses can:
  - Minimize the impact of issues on operations.
  - Quickly restore normal service to ensure business continuity.
  - Reduce risks and downtime, thus improving the overall user experience.

Efficient incident resolution helps ensure that service levels remain high, which is critical for customer satisfaction and operational efficiency.

## Problem Management Module

Problem New record

New Assess Root Cause Analysis Fix in Progress Resolved Closed

Number: PRB0040002

State: New

First reported by: INC0010001

Impact: 3 - Low

Category: -- None --

Urgency: 3 - Low

Service:

Service offering:

Configuration item:

Priority: 5 - Planning

Assignment group: Problem Analyzers

Assigned to: Problem Administrator

\* Problem statement: Demo

Description: Test123

Related Search Results

Related Search: Demo

Knowledge (All)

- **Purpose:** The **Problem Management** module in ServiceNow goes beyond addressing immediate incidents. Its main goal is to:
  - **Identify root causes** of recurring incidents and prevent them from happening again.
  - Analyze trends in incidents and underlying problems to address long-term issues.
  - Implement permanent solutions rather than quick fixes, which helps reduce the frequency of service disruptions.

By focusing on **prevention** rather than just incident resolution, Problem Management enhances service stability and reduces the overall impact of recurring issues. This proactive approach ensures a more reliable IT environment, improving service quality over time.

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### Change Management Module

- **Purpose:** The **Change Management** module is designed to oversee and manage changes to IT systems, processes, or services in a controlled manner. Its key objectives are to:
  - Ensure that changes are introduced with minimal disruption to service.
  - Safeguard against potential risks that could arise from poorly planned changes.
  - Maintain service quality and operational stability while facilitating innovation.

Change Management emphasizes balancing **innovation** and **operational continuity**, ensuring that new implementations, upgrades, or fixes are carried out without compromising the organization's existing services or compliance standards.

### Lists in ServiceNow

In ServiceNow, **Lists** are essential tools that allow users to view and manage records from a specific table in a structured, tabular format. Each row within a list corresponds to an individual record, while each column represents a field or attribute from that table. Lists are fundamental for navigating large datasets, offering users a clear and organized way to handle data efficiently.

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### Key Functionality of Lists

1. **Display Records:** Lists present records from a selected table in an easy-to-read format, enabling users to quickly review and manage the data.
2. **Search:** Users can search for specific records using keywords or criteria, making it easy to locate individual items without navigating through large datasets.

3. **Sort:** Columns within a list can be sorted, allowing users to organize records by attributes such as date, priority, or status for easier analysis.
  4. **Filter:** Filters can be applied to limit the records shown based on user-defined criteria, streamlining data retrieval for specific use cases.
  5. **Edit:** Records can be directly modified within the list view, enabling users to update fields without having to open each individual record.
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## Components of a List

### 1. Title Bar:

- **Purpose:** Displays the name of the list, often indicating the table or module being accessed.
- **Features:** Includes buttons for creating new records, customizing the list view, or accessing other actions relevant to the list.

### 2. Breadcrumbs:

- **Purpose:** Shows a navigational trail, helping users understand their current location within the platform and offering an easy way to return to previous views or levels.
- **Features:** Provides quick access to earlier navigational steps, improving ease of movement through the platform.

### 3. Filters:

- **Purpose:** Allows users to filter records based on specific criteria, such as status or date range.
- **Features:** Includes both standard filters and custom options to help users tailor the list to their specific needs.

### 4. Data Columns:

- **Purpose:** Each column represents a field or attribute from the table, such as name, date, or priority, offering relevant information for each record.
- **Features:** Columns can be reordered, added, or removed, allowing for customized views. Users can also sort data by clicking on column headers.

### 5. Footer:

- **Purpose:** Displays additional information about the list, including the total number of records and page controls for navigating through multiple pages of records.



- **Features:** Provides pagination options and shows the current page number, helping users efficiently manage and browse large datasets.
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### **Benefits of Lists in ServiceNow**

- **Data Management:** Lists simplify the process of reviewing and managing records, particularly for users who need to work with large volumes of data regularly.
- **Customization:** Lists offer flexible views, allowing users to customize their experience by sorting columns, applying filters, and editing records directly within the list.
- **Efficiency:** With the ability to search, filter, and sort data quickly, lists help streamline workflows and enable users to focus on the most relevant information.

## Forms in ServiceNow

In ServiceNow, **Forms** are a central component for interacting with individual records stored in the platform's tables. They provide a user-friendly interface where users can view, create, modify, or review detailed information about each record. Forms are integral to ensuring that data is accurately handled and updated, making them essential for daily operations such as incident logging, task management, and change tracking.

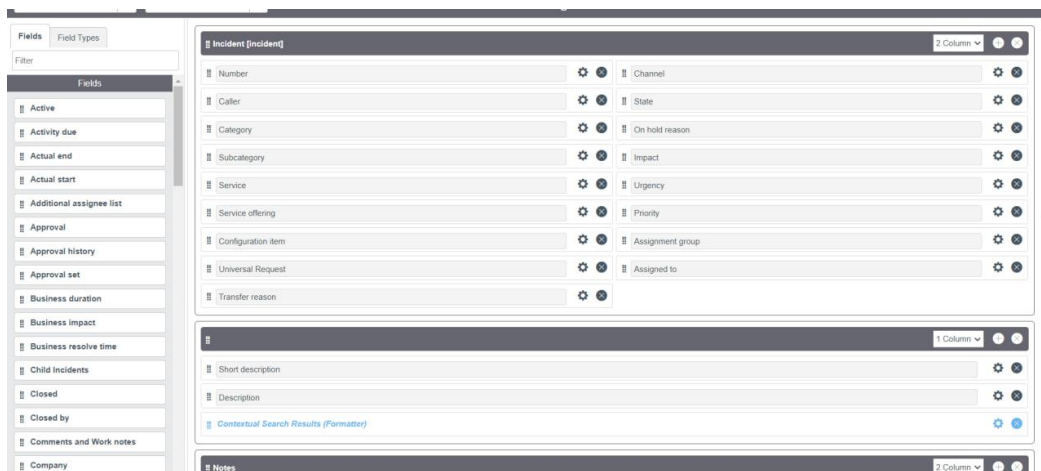
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### Purpose of Forms

- **Display and Manage Data:** Forms offer a structured layout to display record fields and their corresponding values. Users interact with these fields to input, update, or review data related to a specific record, ensuring accurate data management.

Forms allow users to:

- **Enter new information** for a record.
- **Modify existing data.**
- **Review details** and track history for better decision-making.



The screenshot displays a ServiceNow form for an 'Incident' record. On the left, a 'Fields' sidebar lists various attributes such as 'Active', 'Activity due', 'Actual end', 'Actual start', 'Additional assignee list', 'Approval', 'Approval history', 'Approval set', 'Business duration', 'Business impact', 'Business resolve time', 'Child incidents', 'Closed', 'Closed by', 'Comments and Work notes', and 'Company'. The main form area is titled 'Incident [Incident]' and features a '2 Column' layout. It contains fields for 'Number', 'Caller', 'Category', 'Subcategory', 'Service', 'Service offering', 'Configuration item', 'Universal Request', 'Transfer reason', 'Channel', 'State', 'On hold reason', 'Impact', 'Urgency', 'Priority', 'Assignment group', and 'Assigned to'. Below these fields, there is a 'Short description' field, a 'Description' field, and a 'Contextual Search Results (Formatter)' section. At the bottom, there is a 'Notes' section with a '2 Column' layout.

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### Form Layouts

To accommodate different data needs, ServiceNow offers multiple form layout styles to ensure flexibility and readability:

- **One-Column Layout:**
  - **Purpose:** Displays fields in a single vertical column. This layout is ideal for simple forms with fewer fields or when space efficiency is a priority.
  - **Use Case:** Ideal for straightforward tasks like filling out basic user information or logging incidents with limited data fields.

- **Two-Column Layout:**
    - **Purpose:** Arranges fields in two parallel columns, providing better organization for forms with a larger number of fields. This layout enhances readability and offers a more compact overview of information.
    - **Use Case:** Suitable for more complex records like change requests, where multiple data points need to be viewed and edited simultaneously.
  - **Combination Layout:**
    - **Purpose:** A hybrid layout that combines one-column and two-column sections within a single form. This allows for flexibility in designing forms, enabling certain fields to span the width of the form while others are displayed in a multi-column format.
    - **Use Case:** Useful when different types of data need varying levels of emphasis, such as important fields that require full-width display and secondary fields organized in columns.
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### Accessing Forms

- **Application Navigator:** Forms can be accessed through the **Application Navigator** by selecting the appropriate application or module. For example, navigating to the Incident module opens a form for logging or reviewing incident details.
  - **List View:** Users can also access forms by clicking on a specific record within a **List View**. Selecting a record number opens the form associated with that record, allowing the user to view or edit its detailed information.
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### Importance of Forms in ServiceNow

Forms play a crucial role in ServiceNow's data management framework. They ensure that users can interact with records in an organized and accurate way, supporting various operational tasks, including:

- **Logging Incidents:** Users can fill out incident forms to capture detailed information about service disruptions, enabling IT teams to address issues efficiently.
- **Managing Changes:** Change management forms allow for structured data entry, ensuring that changes are well-documented and reviewed.
- **Tracking Tasks:** Task forms provide users with a clear view of task progress and help ensure timely completion by updating key data fields.

## Filters in ServiceNow

**Filters** in ServiceNow are essential tools designed to help users refine and narrow down their search results within lists and forms. They are crucial for managing and retrieving data effectively by focusing on specific subsets of records based on user-defined criteria.

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### Purpose of Filters

#### 1. Refine Search Results:

- **Objective:** Filters help users limit the displayed data to only those records that meet specific conditions, making it easier to isolate relevant information from large datasets.
- **Benefit:** This prevents users from having to sift through irrelevant data, thereby enhancing the efficiency of data retrieval and decision-making.

#### 2. Improve Data Retrieval:

- **Objective:** By applying filters, users can quickly locate records that match particular criteria, such as status, date ranges, or attributes.
- **Benefit:** This targeted search capability improves efficiency, allowing users to focus on the most pertinent information.

#### 3. Enhance Data Management:

- **Objective:** Filters help organize and manage data by allowing users to view only the most relevant records.
  - **Benefit:** This is especially useful for handling large volumes of data, helping users avoid data overload and stay focused on critical information.
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### Types of Filters

#### 1. Basic Filters:

- **Single Criteria:** Allows users to filter records based on a single field or attribute. For example, filtering incidents by priority.
- **Operators:** Includes various operators such as equals, contains, starts with, or ends with, which match records according to the specified criteria.

#### 2. Advanced Filters:

- **Multiple Criteria:** Enables complex filtering by combining several conditions using logical operators (AND, OR). This allows users to refine results further based on more intricate criteria.

- **Dynamic Filters:** Supports real-time filtering based on user interactions or changes in data, providing a more responsive and adaptive user experience.

### 3. **Saved Filters:**

- **Reusability:** Users can save frequently used filter criteria for future use, simplifying the process of accessing commonly sought data.
- **Customization:** Saved filters can be customized and shared with other users or groups, promoting collaboration and standardizing data views across the organization.

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## **Applications of Filters**

- **In Lists:**

- Filters are applied to lists to manage and view records that meet specific criteria, such as filtering incidents by their status or severity. This streamlines workflows, especially in areas like incident management.

- **In Forms:**

- Filters can be used within forms to dynamically display relevant records or options based on user input or selected criteria. This enhances form usability and data accuracy by ensuring that users only interact with pertinent information.

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## **Key Stakeholders in ServiceNow**

Various stakeholders use ServiceNow to meet their specific business objectives:

- **Employees:**

- **Usage:** Utilize ServiceNow to request IT and business services, which simplifies their interaction with organizational support systems.
- **Benefit:** Streamlines service requests and improves the overall employee experience.

- **IT Support Team:**

- **Usage:** Manage and resolve service requests and incidents efficiently, ensuring effective IT service management.
- **Benefit:** Enhances the ability to address and resolve issues promptly.

- **Administrators:**

- **Usage:** Manage user access, roles, and privileges to maintain security and proper user permissions across the platform.
  - **Benefit:** Ensures that the platform operates securely and users have appropriate access.
- **Implementers:**
  - **Usage:** Deploy and configure process applications and platform features to meet organizational needs and improve workflows.
  - **Benefit:** Customizes and optimizes the platform to better serve the organization's requirements.
- **Developers:**
  - **Usage:** Create and customize functionality using scripts to extend and enhance the platform's standard configurations.
  - **Benefit:** Tailors ServiceNow to meet specific business needs, adding custom features and integrations.