

# **SERVICENOW HANDBOOK WEEK - 2**

**done by-**

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## ServiceNow Overview

ServiceNow is a cloud-based platform designed to streamline IT service management (ITSM) and other enterprise workflows. It offers a comprehensive suite of tools to automate tasks, manage incidents, requests, changes, approvals, and knowledge bases. Here's a breakdown of some key functionalities:

- **Incident Management:** Tracks and resolves reported issues experienced by users.
- **Request Management:** Fulfills user requests for access, services, or information.
- **Change Management:** Enables a controlled process for implementing changes to the IT infrastructure.
- **Problem Management:** Identifies the root cause of recurring incidents to prevent future occurrences.
- **Knowledge Base:** Provides a central repository for documented solutions and answers to frequently asked questions.
- **Workflow Automation:** Automates repetitive tasks to improve efficiency.
- **Reporting and Analytics:** Offers insights into IT operations and helps identify areas for improvement.

ServiceNow is a powerful platform that can be customized to meet the specific needs of an organization. It's widely used across various industries, including healthcare, finance, and manufacturing.

## Lists and Filters in ServiceNow

Lists and filters are fundamental functionalities in ServiceNow that help you navigate and manage data efficiently.

- **Lists:** Display information in a tabular format with rows and columns. They present various data points depending on the context, like a list of incidents, users, changes, or configuration items (CIs). Each record (row) typically contains details about the specific item.
- **Filters:** Allow you to refine the information displayed in a list. You can filter based on various criteria, such as urgency of an incident, status of a request, or category of a change. Filters help you focus on specific data relevant to your current task.

Here are some common ways to use lists and filters:

- **Search for specific records:** Use filters to narrow down the list to a particular record, like finding an incident by its unique identifier.
- **View records meeting certain criteria:** Filter a list to show only incidents with high priority or open requests assigned to your team.

## Forms and Templates:

- **Forms:** These are the building blocks for user interaction within ServiceNow. They allow users to submit requests, view data, and update records. Every time you view or modify a record (incident, change request, etc.), you're using a form.

## Form Components:

- **Fields:** Capture user input (text, date pickers, dropdown menus, etc.).

- **Sections:** Organize related fields for clarity.
- **Related Lists:** Display associated records for quick reference.
- **Formatters:** Control how field data is displayed (e.g., displaying a progress bar for a percentage field).
- **Views:** Define how specific user groups see the form (different fields, layouts).
- **Attachments:** Allow users to upload relevant documents.
- **Templates:** These pre-built forms serve as a starting point for creating custom forms. They save time and ensure consistency across your applications.

## Branding

Branding allows you to customize the look and feel of your ServiceNow instance to align with your organization's identity. This includes:

- **Company logo:** Displayed prominently within the platform.
- **Colors:** Define the primary and secondary colors used throughout the interface.
- **Navigation menus:** Customize menus to reflect your specific workflows and applications.
- **Banners and messages:** Display important announcements or welcome messages to users.

By effectively using branding, you can create a user-friendly and recognizable experience for your employees or customers interacting with ServiceNow.

## User Administration

ServiceNow relies heavily on users for various tasks and workflows. As a certified admin, you'll be responsible for creating, managing, and securing user accounts. This involves:

- **User creation and management:** Adding individual users, setting up groups for access control, and managing user profiles including contact information, roles, and permissions.
- **Authentication and authorization:** Configuring user authentication methods (e.g., username/password, Active Directory integration), and defining authorization rules that determine user access to specific features and functionalities within ServiceNow.
- **Security best practices:** Enforcing password policies, enabling two-factor authentication (2FA) for additional security, and managing user lifecycles (activation, deactivation, deletion).

## Task Management

Tasks are essential building blocks within ServiceNow, used to track activities and progress within various processes. You'll need to understand how to:

- **Create and manage tasks:** Creating tasks manually or through workflows, assigning them to specific users or groups, setting due dates and priorities.
- **Task routing and automation:** Leveraging automation rules to automatically route tasks based on pre-defined criteria, which improves efficiency and reduces manual work.
- **Task tracking and reporting:** Monitoring task progress, identifying bottlenecks, and

generating reports to analyze task completion rates and identify areas for improvement.

## Notifications

- Alerts sent to users via email or in-platform messages about specific events in ServiceNow.
- Examples include incident updates, task assignments, approval requests, and catalog item order confirmations.

### Configuring Notifications:

- ServiceNow offers various notification options that can be customized based on user preferences and specific scenarios.
- Administrators can configure:
  - **Recipients:** Who receives the notification (individuals, groups, roles).
  - **Conditions:** When a notification is triggered (e.g., on incident creation, assignment change, or reaching a specific state).
  - **Content:** The information included in the notification (e.g., incident details, task description, approval request details).
  - **Delivery Channels:** How the notification is delivered (email, pop-up message, SMS -might require plugins).

### Managing Notifications:

- Users can manage their personal notification preferences within their user settings.
- Administrators can create notification templates for consistent formatting and content across different events.
- Tools exist to monitor and troubleshoot notification delivery issues.

## Reporting

- **Reports:** These are pre-defined queries that present data from various ServiceNow applications in a user-friendly format, like tables, charts, or graphs.
- **Report Types:** ServiceNow offers various report types, including:
  - **List reports:** Display data in a tabular format with sorting and filtering capabilities.
  - **Pivot reports:** Allow for data aggregation and manipulation to identify trends and patterns.
  - **Graphical reports:** Use charts and graphs to visually represent data for easier comprehension.
- **Report Builder:** This is a drag-and-drop interface for creating custom reports tailored to specific needs. You can select data sources (tables), define filters and conditions, and choose how you want the data presented.
- **Scheduled Reports:** Reports can be automated to run at specific intervals and delivered via email to designated users.

### Importance of Reporting for a ServiceNow Admin:

- **Monitor Performance:** Track key metrics like incident resolution times, problem

identification rates, and change request approvals to assess the efficiency of your IT service management processes.

- **Identify Trends:** Analyze historical data to spot trends and patterns that might indicate potential issues or areas for improvement.
- **Support Decision Making:** Generate reports that provide insights to aid informed decision-making about resource allocation, process optimization, and service delivery.
- **Compliance:** Reports can be used to demonstrate adherence to industry regulations and internal standards.

## Data Schema

In simpler terms, a data schema is a blueprint that defines how data is organized within a database. It specifies the tables, fields (columns), data types, and relationships between them. For ServiceNow, the data schema dictates how information about users, incidents, changes, configuration items (CIs), and other entities is stored and accessed.

### Why is Data Schema Important in ServiceNow?

Understanding the data schema is crucial for a ServiceNow admin because it empowers you to:

- **Configure applications:** Knowing the schema allows you to effectively configure applications by understanding the data they use and how it interacts with other applications.
- **Manage data integrity:** A good grasp of the schema helps maintain data consistency and accuracy by ensuring data is entered in the correct format and adheres to the defined relationships.
- **Build reports and dashboards:** Schema knowledge is essential for creating reports and dashboards that leverage the data stored within ServiceNow.
- **Automate workflows:** Understanding how data flows through the schema is necessary for designing effective workflows and automations within ServiceNow.

### Components of a ServiceNow Data Schema:

There are several key components that make up a ServiceNow data schema:

- **Tables:** These are the fundamental structures that store data. Each table represents a specific entity, like "incident" or "user."
- **Fields:** These are individual columns within a table that hold specific data points. Examples include "incident\_number" or "short\_description."
- **Data Types:** These define the format of data stored in a field, such as text, number, date, or choice.
- **Relationships:** These connections establish how data in different tables is linked. Common relationships include one-to-one, one-to-many, and many-to-many.

### Understanding Common ServiceNow Tables:

While ServiceNow offers a vast number of tables, some of the most frequently used ones include:

- **Incident:** Stores information about reported issues.
- **Change Request:** Tracks planned modifications to the IT environment.

- **Problem:** Captures details about recurring incidents.
- **CMDB\_CI:** The Configuration Management Database (CMDB) stores data about Configuration Items (CIs), which are IT assets like servers, applications, and network devices.
- **User:** Stores user account information.

## CMDB

CMDB is a core component of ServiceNow that serves as a central repository for storing and managing configuration information about all Configuration Items (CIs) within your IT infrastructure. These CIs can include hardware assets (servers, desktops, laptops), software applications, network devices, and even services.

Here's a breakdown of key aspects of CMDB:

- **Data Model:** ServiceNow offers a pre-defined data model for CIs, including attributes like model name, serial number, vendor, and relationships with other CIs. You can also extend this model with custom fields to capture specific information relevant to your organization.
- **Discovery and Reconciliation:** CMDB can automatically discover new CIs on your network and populate the database. It also performs reconciliation to identify and remove duplicate entries or inconsistencies in the data.
- **Relationships:** CIs can be linked to each other to represent real-world dependencies. For example, a server can be linked to the applications running on it and the network devices it connects to. This allows you to visualize the impact of incidents or changes on related CIs.
- **Impact Analysis:** CMDB plays a crucial role in impact analysis. When an incident occurs, you can use CMDB to identify potentially affected CIs and prioritize resolution efforts.

## Application/Access Control

- **Understanding application components:** This involves familiarity with building blocks like modules, forms, fields, UI actions, and business rules. You'll need to know how these components work together to create functional applications.
- **Creating and configuring applications:** You should be able to create new applications, define their purpose and functionality, and configure them using modules and related components. This might involve setting field properties, defining workflows, and configuring UI elements.
- **Managing application lifecycle:** This includes managing the lifecycle of applications from creation and configuration to deployment, testing, and ongoing maintenance.

## Access Control

- **Understanding roles and ACLs (Access Control Lists):** ServiceNow uses roles to define user permissions. Access Control Lists (ACLs) specify which roles can access specific applications, forms, fields, and data.
- **Configuring roles and ACLs:** You'll need to be able to create and manage roles, assign users to roles, and configure ACLs to grant or restrict access to applications and data based on user roles.
- **Understanding security best practices:** This includes following best practices for secure access control, such as the principle of least privilege (granting users only the minimum access they need).

## Import Sets

Import Sets are a powerful tool in ServiceNow that allows administrators to efficiently bulk upload data into various tables within the platform. They are particularly useful when you need to populate a table with a large number of records, saving you significant time and effort compared to manual entry.

Here's a breakdown of Import Sets:

What they are:

- A structured approach to importing data into ServiceNow tables.
- Composed of a data file (typically a comma-separated values (CSV) file) and a corresponding map file.
- How they work:

### 1. Data Preparation:

- You prepare your data in a spreadsheet (e.g., CSV). Ensure the data matches the format expected by the target table in ServiceNow.

### 2. Map File Creation:

- A map file defines how data from your spreadsheet maps to the corresponding fields in the target ServiceNow table.
- This file essentially translates your data into a format understood by ServiceNow.

### 3. Import Set Creation:

- Within ServiceNow, you create an Import Set record.
- Here you specify the source data file (your spreadsheet) and the target table where you want to import the data.
- You also link the map file you created in step 2.

Transform & Import:

- ServiceNow provides a Transform engine that allows you to manipulate the data before import (optional).
- You can use the Transform engine for tasks like data cleaning, setting default values, or performing calculations.
- After any necessary transformations, you initiate the import process.

### 4. Import Review & Commit:

- ServiceNow provides a preview of the data before the final import.
- This allows you to review how the data will be mapped to the target table fields and identify any potential errors.
- Once satisfied, you commit the import, and the data is populated into the ServiceNow table.



### Benefits of using Import Sets:

- **Efficiency:** Bulk uploads save significant time compared to manual data entry.
- **Accuracy:** Reduces errors associated with manual data entry.
- **Scalability:** Ideal for importing large datasets.
- **Flexibility:** Can be used for various table types within ServiceNow.

### Tips for using Import Sets:

- **Plan your data structure:** Ensure your data file aligns with the target table schema.
- **Test your map file:** Use the preview functionality to verify data mapping before final import.
- **Consider transformations:** Utilize the Transform engine for data cleaning or manipulation.
- **Start small:** For large datasets, consider importing a smaller test set first.

### Knowledge Management

- **Purpose:** KM empowers users to find solutions to their problems independently through a central repository of articles, FAQs, KB (Knowledge Base) entries, and other self-service Resources
- **Key Features:**
  - **Article Creation & Management:** Creating, editing, and organizing knowledge articles for easy access.
  - **Categorization & Tagging:** Classifying articles with relevant categories and tags for efficient searching.
  - **Version Control & Approval Workflows:** Maintaining article versions and implementing approval processes for quality control.
  - **Search Functionality:** Enabling users to find relevant articles using keywords and search filters.
  - **Reporting & Analytics:** Tracking article usage and user behavior to identify areas for improvement.

### Self-Service & Process Automation:

- **Concept:** This aspect focuses on empowering users to resolve issues or request services independently, minimizing reliance on IT support.
- **Role of Knowledge Management:** Well-maintained knowledge articles are crucial for self-service. Users can find solutions and complete tasks without needing to submit tickets.
- **Process Automation:** ServiceNow allows automating workflows using tools like Flow Designer. This can streamline repetitive tasks associated with service requests, approvals, and notifications.

## How KM Supports Self-Service & Process Automation:

- Knowledge articles serve as a self-service resource, guiding users through troubleshooting steps or procedures.
- Automated workflows can trigger relevant knowledge articles based on user requests, further empowering self-service.
- By deflecting repetitive inquiries to the knowledge base, IT teams can focus on more complex issues.

## Service Catalog:

The Service Catalog is the foundation for self-service within ServiceNow. It acts as a menu of standardized IT services that users can access to request, track, and potentially fulfill their own

needs. This empowers users and reduces the burden on IT personnel. Here's what you should understand about the Service Catalog for the CSA exam:

- **Components:**
  - **Service:** A defined offering within the catalog, like "Password Reset" or "New Laptop Request."
  - **Catalog Items:** Specific variations of a service, allowing users to choose options (e.g., temporary vs permanent password reset).
  - **Categories:** sposób organizacji (sposob organizatsii - Polish for "way of organizing") services for browsing (e.g., Hardware Requests, Software Requests).
  - **Fields:** Data points used to capture user information during the request process (e.g., department, model number).
- **Configuration:** You'll need to understand how to create, configure, and manage these catalog items effectively. This includes defining workflows, approval processes, and fulfillment activities.
- **User experience:** The Service Catalog should be user-friendly and intuitive. Understanding how to design user-friendly interfaces is an important aspect.

## Workflows/Flow Designer:

Workflows are automated processes that streamline tasks within ServiceNow. Flow Designer is the visual tool used to create these workflows. A core concept for the CSA exam is:

- **Building workflows:** You should understand how to use Flow Designer to build workflows that automate tasks associated with service requests. This involves using pre-built actions, conditions, and loops to define the flow of activities.
- **Use cases:** Recognize how workflows can be applied in various scenarios within the Service Catalog. For instance, a workflow can automatically trigger password reset upon approval or route a hardware request to the appropriate IT team.

## Workflows/Flow Designer

- Automated processes that streamline tasks within ServiceNow.

- Triggered by specific events, like a new incident being submitted or a catalog item being requested.
- Defined sequence of activities like sending notifications, updating fields, or routing tasks to specific groups.

#### Benefits of Workflows:

- Improved efficiency by automating repetitive tasks.
- Increased accuracy by reducing manual errors.
- Enhanced user experience by providing faster resolution times.
- Standardized processes for consistent service delivery.

#### Flow Designer

- The ServiceNow application used to build and manage workflows.
- Drag-and-drop interface for creating visual representations of the workflow process.

#### Key Components of Flow Designer:

- **Flow Stages:** Represent steps within the workflow (e.g., approval stage, notification stage).
- **Conditions:** Define when a specific path is taken in the workflow (e.g., if priority is high, escalate).
- **Actions:** Specify tasks performed during the workflow (e.g., send email, assign a task, update a field).
- **Variables:** Store and manipulate data within the workflow.

#### Scripting

Scripting in ServiceNow revolves around using the built-in scripting engine to automate tasks and extend platform functionality. The primary scripting language used is JavaScript (specifically, a subset called ServiceNow Javascript).

Here are some of the key scripting concepts you should be familiar with for the CSA exam:

- **Business Rules:** Scripts that run automatically when certain criteria are met. They can be used to modify field values, display messages, or trigger workflows.
- **Client Scripts:** Scripts that execute on the client-side (user's browser) in response to user interactions like clicking a button or changing a field value.
- **UI Actions:** Scripts that are triggered by specific actions on the user interface, such as clicking a custom button.
- **Email Scripts:** Scripts used to customize email notifications sent by ServiceNow.
- Identify the appropriate scripting type (business rule, client script, etc.) for a given scenario.

- Write basic scripts to achieve simple automations.
- Troubleshoot common scripting errors.

## Migration and Integration

Migration in ServiceNow refers to the process of moving data and workflows from another system (like a legacy IT system) to the ServiceNow platform. This can involve migrating:

- **User data:** This includes user accounts, profiles, and contact information.
- **Configuration data:** This encompasses system configurations, settings, and customizations.
- **Historical data:** This might include incident records, change requests, problem tickets, and knowledge base articles.

The CSA exam expects you to understand the different migration approaches in ServiceNow, such as:

- **Full migration:** Moving all data and workflows to ServiceNow.
- **Partial migration:** Migrating only specific data sets or workflows.
- **Staged migration:** Migrating data and workflows in phases.

The exam will also assess your knowledge of ServiceNow migration tools, including:

- **ServiceNow Migration Toolkit:** A built-in tool that helps automate data migration.
- **Third-party migration tools:** Various tools can be integrated with ServiceNow to facilitate migration.

## Integration

Integration in ServiceNow refers to connecting the platform with other external systems to streamline workflows and exchange data. This allows for functionalities like:

- Automated incident creation from emails or ticketing systems
- User provisioning across different applications
- Data synchronization between ServiceNow and other platforms

The CSA exam will focus on your understanding of different integration methods in ServiceNow, such as:

- **REST APIs:** APIs (Application Programming Interfaces) that allow communication between ServiceNow and external systems.
- **Web Services:** A communication protocol for exchanging data between applications.
- **Plugins:** Pre-built extensions that enable integration with specific external systems.