

ServiceNow Week 2

1. Demonstrate a comprehensive understanding of ServiceNow platform overview and architecture.

ServiceNow is an American company, it provides application as a service it is a cloud-based platform that provide the infrastructure needed to run develop and manage application. It is not limited to any business function organization and been utilize in different area of organisation like Human Resources, IT Service Management, Customer Service Management.

Organisation can utilize ServiceNow to automate manual repeatable processes and standardised their delivery. It is an automated platform used to automate different businesses.

Application Platform as a Service -- ServiceNow platform is an application platform as a service that means it is a single platform to automate business processes across the enterprise by providing the infrastructure needed to develop run and manage applications.

Single Data Model -- it is a single data model which is built on a flexible table schema and delivers a common set of core capabilities and reusable components.

Multi Instance -- ServiceNow platform has a multi-instance architecture rather than multi-tenant architecture which is used by other cloud companies in multi-tenant your data is co-mingled with other customers on databases large and complex databases that require hardware and software maintenance on a regular basis which can lead to availability issues for customers if cloud companies have to take any action that affects this multi-tenant database and affects all other customers whose data is residing on that database infrastructure.

High Availability Architectures Data Centres -- service now cloud is built on an advanced architecture called multi-instance in this architecture your organization's data applications and customizations reside in a unique software stack called an instance your organization may have more than one instance each instance is isolated from every other instance but they can still communicate with each other ServiceNow provides high advanced availability data centres in any situation there is an operational failure or outage your instance traffic can be quickly rerouted to redundant servers to provide continuous availability.

Backups -- ServiceNow provides four weekly full backups of your data with six days of different daily backups.

2. Customize the user interface and branding elements within ServiceNow.

The user interface (UI) of ServiceNow is highly customizable, allowing businesses to tailor it to their branding and user experience needs. The platform offers multiple ways to alter the look and feel of the interface, such as:

Themes and Logos -- ServiceNow enables administrators to upload custom logos and change colour schemes to align with organizational branding guidelines.

UI Pages and Scripts -- Administrators can create or modify UI pages using Jelly (ServiceNow's proprietary scripting language) or AngularJS to control the visual elements of the platform.

Service Portal Customization -- ServiceNow's Service Portal allows businesses to create responsive, mobile-friendly portals for end-users. These can be further customized using HTML, CSS, and AngularJS to meet specific user requirements.

UI Policies and Client Scripts can also be used to dynamically control the visibility and behaviour of fields based on user inputs or predefined conditions.

3. Manage tasks efficiently using ServiceNow functionalities.

ServiceNow provides robust tools for managing data presentation through Lists, Filters, and Forms:

Lists -- These display multiple records from a database table. Administrators can configure list layouts by adjusting the displayed columns, sorting, and grouping records.

Filters -- Filters help users sort through vast amounts of data by applying specific criteria (such as date ranges, statuses, or assignment groups). Saved filters can be reused to automate routine tasks.

Forms -- Forms in ServiceNow display a single record and allow users to view or edit fields.

Administrators can customize forms to include specific fields relevant to a process, and apply form-specific UI Policies to automate field behaviour (e.g., making a field mandatory). These elements provide an intuitive way for users to interact with data, enhancing productivity and simplifying task management.

Task Management in ServiceNow is one of the core capabilities, primarily revolving around:

Incident Management -- Tracks and resolves user-reported issues.

Problem Management -- Investigates root causes of recurring incidents.

Change Management -- Manages requests for changes in IT infrastructure or applications.

Administrators can use workflows to automate the lifecycle of tasks, from assignment to resolution. Tasks are created, assigned, and tracked through various states like "New," "In Progress," "On Hold," and "Resolved." Tasks can also be escalated or reassigned based on urgency or priority.

4. Configure notifications and implement knowledge management practices.

Notifications play a critical role in keeping users informed about task progress, approvals, and system events. ServiceNow allows administrators to configure email notifications based on:

Conditions -- For example, when an incident is assigned to a group, a notification can be sent automatically.

Templates -- Administrators can create custom email templates to standardize notifications.

Subscription-Based Alerts -- Users can opt in or out of certain notifications based on preferences, improving flexibility in communication. Inbound email actions can also be set up, allowing the system to interpret incoming emails as commands for creating or updating records automatically.

ServiceNow's **Knowledge Management** module helps organizations manage and distribute critical information across departments. Administrators can:

Create and Manage Knowledge Bases -- Different knowledge bases can be created for IT, HR, or other departments to store relevant articles and documentation.

Publishing Workflow -- Articles can go through an approval process before being published to ensure accuracy.

Search and Categorization -- Users can easily search for articles by category, tags, or keywords. Advanced indexing and tagging options help ensure content is easy to find. By using knowledge articles, organizations can reduce the number of incoming service requests as users are empowered to resolve issues on their own through self-help content.

5. Create and manage service catalogs effectively.

The Service Catalog is a core element of ServiceNow's ITSM offerings, allowing organizations to offer standardized services to users. Administrators can create and manage service items like software requests, hardware procurement, or access requests through the Service Catalog.

Catalog Items -- Administrators can define various items such as request forms, workflows, and fulfillment tasks associated with specific service requests.

Workflows -- ServiceNow provides drag-and-drop tools to build complex workflows that automatically route approvals, send notifications, and complete fulfillment actions.

Approval Policies -- Some service requests may require managerial or departmental approvals. These can be configured within the catalog item.

This module ensures that services are consistently delivered in accordance with organizational standards.

6. Configure tables and fields, as well as access control lists.

ServiceNow uses a table-based structure to store data, and the Table and Field Configuration functionalities allow administrators to define how data is captured and stored.

Tables -- Administrators can create custom tables or extend existing ones to store information specific to their organization. Each table contains records, and each record is a collection of fields (e.g., text, date, choice).

Fields -- Fields define the type of data stored in a table, such as a string, integer, or date. ServiceNow offers various field types to cater to different data entry requirements.

Access Control Lists (ACLs) control who can view, create, update, or delete records. ACLs are highly customizable, enabling security policies based on user roles, conditions, or script-based evaluations.

7. Import data into ServiceNow and manage the CMDB.

ServiceNow provides Data Import capabilities to bring data from external sources into the platform. Administrators can:

Create Data Sources -- Data can be imported from CSV files, Excel spreadsheets, or other database sources.

Map Fields -- Data fields from the external source are mapped to corresponding fields in ServiceNow tables.

Transformation Maps -- These maps allow for advanced data manipulation, ensuring that imported data is properly formatted and validated before it's stored.

The **Configuration Management Database (CMDB)** is a crucial aspect of IT operations, storing information about hardware, software, networks, and other IT assets. The CMDB helps track dependencies between assets and ensures accurate impact analysis during changes or incidents.

8. Integrate ServiceNow with other systems and applications.

ServiceNow allows for integration with external systems and applications via:

Web Services (SOAP/REST) -- APIs that enable two-way data transfer between ServiceNow and external systems.

Integration Hub -- A low-code platform for building integrations that simplify workflows across applications.

9. Utilize update sets, events, and platform statistics for effective administration.

Update Sets allow administrators to capture configuration changes (like UI customizations, workflows, or scripts) and migrate them from one instance to another. This is particularly useful for promoting changes from a development instance to a production environment.

ServiceNow is **event-driven**, meaning it can generate events in response to certain conditions, such as the creation of a task or a change in a field's value. Administrators can create custom events to automate specific actions.

Platform Statistics provide insights into the performance of the ServiceNow instance. This includes metrics like database response times, script execution durations, and overall system health, helping administrators ensure optimal performance.