ServiceNow Understanding Document

Week 3:

What is ServiceNow?

ServiceNow is a comprehensive, cloud-based platform designed to help organizations streamline and automate their workflows, improve operational efficiency, and provide better services. Initially developed as an IT Service Management (ITSM) tool, ServiceNow has expanded its capabilities to include IT operations management, IT business management, security operations, and customer service management. The platform provides a unified system for managing digital workflows, making it easier for organizations to automate routine processes, manage incidents, and optimize the delivery of services.

Key features of ServiceNow include a robust service catalog, workflow automation, machine learning capabilities, and a powerful platform-as-a-service (PaaS) environment for developing custom applications.

Services of ServiceNow

ServiceNow offers a range of services across different domains. Some of the most commonly used services include:

- **IT Service Management (ITSM):** Helps organizations manage and deliver IT services efficiently. It includes modules for incident management, problem management, change management, and service catalog.
- **IT Operations Management (ITOM):** Provides tools to help IT departments manage infrastructure and applications in real-time. This includes monitoring, event management, and cloud management.
- **IT Business Management (ITBM):** A suite of applications for managing projects, portfolios, demand, and resources. ITBM aligns IT initiatives with business goals.
- **Security Operations:** Allows organizations to streamline and automate their response to security threats, enabling a more coordinated and efficient defense against attacks.
- **Customer Service Management (CSM):** Helps organizations manage customer inquiries, incidents, and requests. It integrates with other systems to provide a 360-degree view of the customer.
- **HR Service Delivery:** Designed to improve HR efficiency by automating routine tasks such as onboarding, benefits management, and payroll queries.

- **Custom App Development:** ServiceNow's PaaS allows organizations to build custom applications on top of the platform to address specific business needs.

How to Get Free ServiceNow (SNOW) Instances

To practice and learn ServiceNow, free instances of the platform are available for developers. Here's how you can get your own free instance:

1. **Sign Up for a Developer Account:** Go to the ServiceNow Developer Portal and create a free developer account. This gives you access to the platform's resources, including documentation, community forums, and tutorials.
2. **Request a Personal Developer Instance:** After signing up, you can request a free personal instance (PDI). This instance is fully functional and allows you to experiment with ServiceNow features like building applications, developing workflows, and testing integrations.
3. **Maintain Active Usage:** It's important to use your instance regularly, as inactive instances may be reclaimed by ServiceNow. You'll receive notifications if your instance is at risk of being deactivated.

How to Become a ServiceNow Developer

Becoming a ServiceNow developer involves gaining expertise in the platform's tools and technologies, including scripting, building applications, and creating workflows. Here are the steps to become a ServiceNow developer:

1. **Learn the Basics:** Familiarize yourself with ServiceNow's core features like ITSM, workflow automation, and the basic architecture of the platform. You can start with free resources available on the ServiceNow Developer Portal.
2. **Get Hands-On Experience:** Practice using a free ServiceNow instance to get comfortable with the platform. Try building simple applications, customizing workflows, and automating tasks.
3. **Complete Online Training:** ServiceNow offers various online training programs to help you master the platform. The courses range from beginner to advanced levels and cover topics such as scripting, development, and platform architecture.
4. **Obtain Certifications:** ServiceNow offers a range of certifications to validate your expertise. Becoming certified in various modules (such as Certified System Administrator, Application Developer, or Implementation Specialist) boosts your credibility and opens up more job opportunities.
5. **Join the ServiceNow Community:** Engage with the active ServiceNow community to share knowledge, ask questions, and keep up with the latest platform developments.

ServiceNow Certification Training

ServiceNow offers a structured certification program to validate the expertise of developers, administrators, and implementers on the platform. Here's a breakdown of the key certifications:

- **Certified System Administrator (CSA):** This certification verifies that you have the skills needed to manage and configure ServiceNow instances. It's the foundational certification for anyone working on the platform.
- **Certified Application Developer (CAD):** Designed for those who want to create applications on the ServiceNow platform. It covers advanced topics like UI design, data management, and scripting.
- **Certified Implementation Specialist (CIS):** This certification is for those who want to specialize in specific ServiceNow products like ITSM, ITOM, or CSM. It validates your ability to implement solutions for clients.
- **Certified Technical Architect (CTA):** The highest level of certification, this is aimed at architects who design ServiceNow implementations across large organizations.

Training for these certifications is available through ServiceNow's official training portal, where you can access self-paced courses, instructor-led classes, and exam preparation materials.

ServiceNow Components

The ServiceNow platform is made up of several key components that work together to enable digital workflows and automation. These include:

- **Service Catalog:** A central repository for all IT and non-IT services provided by the organization. Users can request services, and administrators can track fulfillment.
- **Workflow Engine:** This is the core of ServiceNow's automation capabilities. It allows administrators to design complex workflows that trigger actions based on predefined conditions.
- **Service Portal:** A user-friendly interface for accessing the ServiceNow platform. It enables users to interact with the platform, submit requests, and track incidents.
- **Knowledge Base:** A repository for articles and documentation that users can search to find solutions to their problems.
- **Reporting and Dashboards:** Built-in reporting tools allow users to generate real-time reports and visualizations of data. Dashboards provide a consolidated view of metrics and KPIs.
- **Scripting Engine:** ServiceNow provides JavaScript-based scripting tools for customizing applications, workflows, and the overall platform behavior.

ServiceNow Modules

ServiceNow's platform is modular, with specific applications catering to different business functions. Here are some key modules:

- **Incident Management Module:** Manages the lifecycle of IT incidents, from detection to resolution. It ensures that incidents are logged, categorized, prioritized, and resolved in a timely manner. The goal is to restore normal service operations as quickly as possible.
- **Problem Management Module:** Helps identify the root cause of recurring incidents to prevent future occurrences. It includes problem identification, root cause analysis, and resolution.
- **Change Management Module:** Manages the process of implementing changes to IT services and infrastructure. This module ensures that changes are tracked, approved, and deployed with minimal disruption to the business.

Incident Module

The **Incident Management Module** in ServiceNow is one of the core ITSM components. It allows organizations to track and resolve incidents (unplanned interruptions or reductions in the quality of an IT service). Key features include:

- **Ticketing System:** Incidents are logged as tickets with details about the issue, impacted users, and urgency.
- **Assignment Rules:** Incidents can be automatically assigned to appropriate support teams based on predefined rules.
- **Prioritization and Escalation:** Incidents are categorized based on their impact and urgency, ensuring the most critical issues are addressed first.

Problem Module

The **Problem Management Module** is designed to find and address the root cause of recurring incidents. By addressing underlying issues, it helps reduce the number of incidents over time. It involves:

- **Problem Detection:** Identifying patterns in incidents that may indicate a deeper issue.
- **Root Cause Analysis:** Analyzing problems to determine their underlying causes.
- **Workarounds and Resolutions:** Implementing temporary workarounds or permanent solutions to prevent future occurrences.

Change Module

The **Change Management Module** manages the implementation of changes to IT infrastructure and services. It includes:

- **Change Requests:** Users can submit requests for changes that need to be approved by a change advisory board (CAB).
- **Risk Assessment:** Changes are assessed for potential risks and impacts.
- **Change Calendar:** Ensures that changes are scheduled at optimal times to minimize disruption.

List

In ServiceNow, a **list** is a tabular representation of records from a particular module. Lists display data in rows and columns, with features like filtering, sorting, and exporting. It allows users to view and manage large datasets easily within the platform.

This covers the essential aspects of ServiceNow, from understanding what it is, how to use it, and how its various modules and services work together to optimize IT operations and business workflows.

Workflow and Process Automation as per ITIL Principles

ITIL (Information Technology Infrastructure Library) is a set of best practices for managing IT services, and ServiceNow aligns closely with ITIL principles. Workflow and process automation are essential to streamline service delivery, reduce manual intervention, and increase efficiency across organizations.

ServiceNow automates IT service management (ITSM) processes such as incident management, problem management, and change management by leveraging workflows that adhere to ITIL guidelines. Here's how workflows and process automation work within the ITIL framework:

- **Incident Management:** Automates the process of recording, tracking, and resolving incidents. Incidents are routed to the correct team based on predefined rules, and workflows ensure timely escalation if SLAs (Service Level Agreements) are at risk.
- **Problem Management:** Automates root cause analysis and links related incidents. Workflows trigger notifications to the necessary teams, reducing the recurrence of problems.

- **Change Management:** Ensures that all change requests follow a consistent approval and testing process. The workflow minimizes risks by automating assessments, approvals, and rollbacks in case of failure.

ServiceNow also uses automation to bridge IT, security, and other business functions, enabling seamless collaboration while ensuring compliance with ITIL standards.

IT, Security, HR Service Delivery, Customer Service, and Business Applications

ServiceNow provides solutions across various business functions beyond just IT:

- **IT Service Delivery:** The core ITSM capabilities are geared toward improving IT services and infrastructure. IT departments can use ServiceNow to automate incident, problem, and change management while also implementing self-service portals, service catalogs, and reporting tools to enhance service delivery.
- **Security Operations:** This module integrates with existing security tools to automate threat detection and response. It includes features for incident response, vulnerability management, and security event monitoring. Workflows can trigger alerts and assign tasks to the security team, ensuring rapid response to potential threats.
- **HR Service Delivery:** ServiceNow automates HR processes, such as employee onboarding, offboarding, and case management. Workflows in HR can trigger background checks, equipment requests, benefits enrollments, and other HR services, reducing manual work and improving employee satisfaction.
- **Customer Service Management (CSM):** ServiceNow automates customer service processes by integrating customer inquiries, support cases, and field service operations. It creates workflows that route issues to the appropriate support teams, ensuring fast and accurate resolution.
- **Business Applications:** ServiceNow allows for custom application development on its platform to support unique business processes. Companies can automate workflows for procurement, legal processes, marketing campaigns, and more. These custom applications can be integrated into existing ServiceNow modules or operate independently.

Explore Admin and Developer Roles

ServiceNow offers distinct roles for **administrators** and **developers**, both of whom play crucial roles in implementing and maintaining the platform.

- **Administrators:** ServiceNow admins are responsible for configuring and maintaining the platform. Their tasks include managing users and permissions, configuring workflows,

maintaining data integrity, and ensuring the platform operates smoothly. Administrators work on system configurations, manage updates, and ensure compliance with organizational policies.
- **Developers:** ServiceNow developers are responsible for customizing the platform, scripting, and building new applications. They work on creating custom workflows, developing new modules, writing JavaScript code to extend platform functionality, and integrating ServiceNow with external systems. Developers are also involved in creating UI elements, working with the Service Portal, and enhancing the overall platform experience through coding and design.

Both roles often collaborate, with administrators focusing on platform maintenance and developers driving innovation and customization.

Major Customers

ServiceNow is used by many large enterprises across various industries. Some of the major customers include:

- **Coca-Cola:** Uses ServiceNow to streamline global IT operations and improve service delivery.
- **General Electric (GE):** Employs ServiceNow for IT service management across its complex infrastructure.
- **McDonald's:** Leverages ServiceNow for automating IT operations and ensuring seamless service delivery across its global network.
- **Nokia:** Utilizes the platform to manage global customer support and IT services efficiently.
- **Qualcomm:** Automates security operations and IT service delivery with ServiceNow, integrating workflows for better visibility and threat response.

These customers span industries such as manufacturing, telecommunications, retail, and finance, showcasing the platform's versatility.

ServiceNow Growth

ServiceNow has experienced remarkable growth in the IT service management market and beyond. Over the years, it has evolved from being a pure ITSM platform into a comprehensive cloud-based solution for automating workflows across industries. Factors contributing to its growth include:

- **Cloud-first Approach:** The rise of cloud computing has boosted ServiceNow's adoption as more enterprises shift to cloud solutions for flexibility and scalability.

- **Expansion of Offerings:** ServiceNow has expanded its suite of products to include ITOM, ITBM, security operations, customer service, HR, and custom business applications.
- **Global Adoption:** ServiceNow is recognized as a leader in the digital transformation space, and its solutions are used by Fortune 500 companies worldwide.
- **Strategic Acquisitions:** ServiceNow has acquired several companies, including Element AI and Sweagle, to enhance its AI and configuration management capabilities.

ServiceNow Architecture

The **ServiceNow architecture** is a multi-instance cloud platform based on a single data model, which allows for scalability, flexibility, and customization. Here's a breakdown of its key components:

- **Application Layer:** The platform provides pre-built and custom applications for various services like ITSM, HR, and CSM. These applications are built on the ServiceNow framework and can be customized using low-code/no-code tools.
- **Database Layer:** ServiceNow uses a relational database management system (RDBMS) to store data. Each instance has its own database, providing data separation and ensuring that customizations do not affect the core product.
- **Integration Layer:** ServiceNow offers integration capabilities through APIs, web services (SOAP/REST), and Integration Hub, which allows the platform to connect with external systems like ERP, CRM, and security tools.
- **Security Layer:** The platform has built-in security features such as encryption, multi-factor authentication (MFA), and role-based access control (RBAC) to ensure the protection of sensitive data.

Who Uses ServiceNow?

ServiceNow is used across industries such as:

- **IT Departments:** Organizations use ServiceNow primarily for IT service management, operations, and business management to improve service delivery and operational efficiency.
- **Security Teams:** Security operations teams use ServiceNow to automate responses to security threats and manage incident responses.
- **HR Departments:** HR teams use the platform to automate employee services like onboarding, benefits management, and performance tracking.
- **Customer Service Teams:** ServiceNow is widely adopted by customer service departments to manage customer inquiries, support cases, and field service operations.

Companies across various sectors, including healthcare, telecommunications, manufacturing, retail, and finance, use ServiceNow to streamline workflows and improve service quality.

What is Catalog?

The **Service Catalog** in ServiceNow is a centralized repository of available services that end-users can request. It is part of the ITSM suite and can include items such as software, hardware, access requests, or any other service that a department provides.

- **Service Requests:** Users can browse through the catalog and submit requests for various services (e.g., software installation, hardware procurement).
- **Approval Workflows:** Catalog items are associated with approval workflows that ensure the proper chain of command approves requests before they are fulfilled.
- **Self-Service Portal:** The service catalog is integrated with the Service Portal, enabling users to access it through a user-friendly interface.

Dashboard Creation

Dashboards in ServiceNow are visual representations of data, helping users and administrators monitor performance metrics, KPIs, and track the status of workflows in real-time. Dashboards can be customized based on the user's needs, providing insights into:

- **Incident and Problem Management:** Track the number of open incidents, resolution time, and SLA adherence.
- **Change Management:** Monitor pending and completed changes, analyze the risk of upcoming changes, and track approval timelines.
- **Service Performance:** View metrics related to service uptime, performance, and customer satisfaction.

To create a dashboard in ServiceNow, you can use the built-in reporting tools, add widgets for real-time metrics, and customize the layout to display data in tables, charts, and graphs.