



Digital Nurture 3.0



# Cognizant ServiceNow Program

## Weekly Report

Week 3

**Submitted By:**

Atharv Gupta - A2345921019

(atharvg06@gmail.com)

Superset ID: 5103916

## 1. Introduction: 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.

## 2. What is ServiceNow?

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

- IT Service Management (ITSM): Centralizes IT services and automates common tasks like incident management, service requests, problem resolution, and change management.
- 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): Aligns IT with business goals by offering tools to manage projects, financials, and resource allocation.
- Security Operations: Helps detect, respond to, and resolve security threats efficiently. ServiceNow integrates with other security tools to streamline workflows for security incidents and vulnerabilities.
- HR Service Delivery: Automates HR workflows such as onboarding, employee lifecycle management, and other routine HR tasks, enhancing employee experience and productivity. 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.

### 3. How to Get Free ServiceNow Instances?

One of the most attractive features of ServiceNow for learners and developers is the ability to request a free personal instance to experiment with its tools and features. This is essential for practicing configuration, workflows, or custom applications on a private instance without cost.

#### Steps to Get Free Instances:

- **Go to the Developer Portal:** Visit ServiceNow Developer Portal.
- **Create an Account:** Sign up using your email and verify your account.
- **Request an Instance:** Once logged in, you can request a personal instance. This instance is isolated for you to perform development tasks.
- **Manage Your Instance:** Instances are auto-expired after a period of inactivity but can be reactivated by logging in again.

### 4. Becoming a ServiceNow Developer

To become a ServiceNow developer, you need to master the platform's core technologies and development environments. Developers are in high demand for their ability to create custom applications, automate workflows, and configure the platform for business-specific needs.

#### Key Steps to Becoming a Developer:

- **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.
- **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.
- **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.
- **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.

- **Join the ServiceNow Community:** Engage with the active ServiceNow community to share knowledge, ask questions, and keep up with the latest platform developments.

## 5. ServiceNow Certification Training

ServiceNow certifications are highly valued and can significantly boost your career opportunities. The certification paths validate your knowledge and expertise in specific areas of the platform.

### Popular Certifications:

- Certified System Administrator (CSA): This is the foundational certification required to manage and configure the ServiceNow platform. It covers topics such as instance management, UI customization, database schema, and reporting.
- Certified Application Developer (CAD): This certification is for those looking to build and customize applications on ServiceNow. It focuses on the development lifecycle, including UI design, security, data management, and automation.
- Certified Implementation Specialist (CIS): This is an advanced certification for professionals tasked with implementing ServiceNow solutions. It includes knowledge of ServiceNow products like ITSM, HR, CSM, and Security Operations. Self-Paced Learning: Available through the ServiceNow learning portal and developer site.
- Instructor-Led Training: Many training providers offer specialized ServiceNow courses that include hands-on labs and projects.

## 6. ServiceNow Components and Modules

ServiceNow offers a suite of modular components designed to manage various aspects of IT and business workflows. Each module focuses on a particular business function or IT process.

### Key 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.
- 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.
- Knowledge Management: A repository for articles and documentation that users can search to find solutions to their problems.

## 7. ServiceNow Administration and Developer Overview

**Administration:** ServiceNow administrators are responsible for configuring the platform, managing instances, setting up users, and ensuring system health.

### Core Admin Tasks:

- User Management: Define user roles and permissions.
- Instance Management: Configure instance settings, manage plugins, and handle system upgrades.
- Data Management: Set data policies, import data, and maintain system integrity.
- Developer Overview: ServiceNow developers design and create new applications or modify existing ones using various tools and frameworks provided by the platform.

### Developer Tasks:

Workflows: Create automated workflows using Flow Designer or the older Workflow Editor.

Custom Apps: Develop custom applications using ServiceNow Studio, which includes tools for scripting and UI design.

Scripting: Write scripts for automating tasks using Business Rules, Client Scripts, Script Includes, and UI Actions.

## 8. Workflow and Process Automation (ITIL Principles)

ServiceNow follows ITIL (Information Technology Infrastructure Library) principles, which provide a framework for delivering IT services. ServiceNow automates processes such as Incident

Management, Change Management, Service Requests, and more using predefined workflows. These workflows ensure that tasks are handled consistently and efficiently.

### **ITIL Principles Applied:**

- Incident Management: Automates the logging, categorization, and assignment of incidents.
- Change Management: Ensures that changes to IT services follow a structured approval and testing process.
- Request Fulfilment: Automates the fulfilment of service requests, improving response times.

### **Automation Tools:**

- Flow Designer: A modern drag-and-drop tool that allows non-technical users to design workflows.
- Workflow Editor: An older, more customizable tool for creating complex workflows with scripting capabilities.

## **9. IT, Security, HR Service Delivery**

ServiceNow is designed to handle workflows beyond IT, offering dedicated solutions for Security, HR, and Customer Service.

### **IT Service Delivery:**

- Incident Management: Automates incident resolution, helping IT teams respond faster.
- Service Request Management: Provides employees with a portal for requesting IT services (software, hardware, access, etc.).

### **Security Operations:**

- Security Incident Response: Automates the detection and handling of security threats.
- Vulnerability Management: Identifies and addresses vulnerabilities across the organization.

### **HR Service Delivery:**

- **Employee Onboarding**: Automates the onboarding process, from provisioning IT resources to creating HR documents.
- **Employee Self-Service**: Employees can access a portal for submitting HR requests, viewing pay stubs, or managing benefits.

## **10. ServiceNow Growth and Major Customers**

ServiceNow has grown from an ITSM tool to a comprehensive enterprise cloud platform. Its customer base spans various industries, including technology, finance, healthcare, and government.

## Growth Drivers:

- **Cloud Adoption:** ServiceNow's cloud-based platform makes it easy to scale and integrate.
- **Automation:** Companies are increasingly relying on automation to reduce costs and improve efficiency.
- **Cross-Department Solutions:** Expanding beyond IT to HR, security, customer service, and other business functions.

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.

## 11. ServiceNow Architecture

ServiceNow operates on a multi-instance, single-tenant cloud architecture. This means each customer has their own dedicated instance, ensuring data security and customization.

Key Architectural Components:

- **Database Layer:** Manages data storage and ensures integrity.
- **Application Layer:** Hosts ServiceNow modules (ITSM, HR, etc.) and supports custom application development.
- **Integration Layer:** Provides REST, SOAP APIs, and other tools for integrating with external systems.

## 12. ServiceNow Catalog and Dashboard Creation

- **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:** These provide real-time data insights and are customizable based on role (e.g., IT manager, HR director). Users can view incident trends, request statuses, and SLA performance.
- **Widgets:** Dashboards contain widgets like charts, tables, and performance indicators that give a comprehensive view of operational health.
- **Service Performance:** View metrics related to service uptime, performance, and customer satisfaction.

## 13. Who Uses ServiceNow?

ServiceNow is used across industries, including IT, HR, customer service, manufacturing, and finance. It's adopted by a wide range of professionals, from IT service desk teams to HR staff, security teams, and executives looking for workflow automation and performance insights.

### Key Users:

- **IT Teams:** Manage incidents, service requests, problems, and changes.
- **HR Teams:** Handle employee onboarding, case management, and HR service requests.
- **Security Teams:** Automate the identification and response to security threats.