

Cognizant
Digital Nurture 3.0
Deep Skilling

Module 3 – ServiceNow Development Modules

Overview:

These courses provide beginners with a comprehensive introduction to the ServiceNow platform, its functionalities, and its significance in business automation. The tutorials cover key concepts, user interface navigation, and the various modules within ServiceNow, such as incident, problem, and change management. Participants will gain insights into how ServiceNow aligns with ITIL principles and supports workflow automation across different business functions, including IT, Security, HR Service Delivery, Customer Service, and Business Applications. The courses also touch upon ServiceNow's cloud-based architecture, major customers, career opportunities, and the process of becoming a ServiceNow developer. By the end of these tutorials, learners will have a solid understanding of ServiceNow's capabilities and its role in streamlining processes and improving efficiency within organizations.

What is ServiceNow?

ServiceNow is a cloud-based platform that provides enterprise IT management services, automating workflows and offering various solutions for IT service management (ITSM), IT operations management (ITOM), and IT business management (ITBM). It helps businesses streamline their operations through digitization and automation of business processes across departments, leading to enhanced efficiency, reduced operational costs, and improved customer satisfaction.

Services of ServiceNow

ServiceNow offers a wide array of services across several domains:

1. IT Service Management (ITSM): Helps businesses streamline IT service delivery by automating workflows like incident management, problem management, change management, and request fulfillment.
2. IT Operations Management (ITOM): Focuses on monitoring infrastructure and services, enhancing visibility into business operations.
3. IT Business Management (ITBM): Provides a suite of applications to help manage business processes and align IT with business goals.
4. Security Operations: Integrates with security tools to help identify and remediate security issues.
5. HR Service Delivery: Helps automate and streamline HR operations such as employee onboarding, benefits administration, and case management.
6. Customer Service Management (CSM): Manages customer service workflows and improves customer experiences by automating service processes.
7. Governance, Risk, and Compliance (GRC): Helps organizations ensure compliance with regulations and manage risks.

How to Get Free ServiceNow Instances

ServiceNow provides free developer instances through its ServiceNow Developer Program. Here's how to get one:

1. Sign up on ServiceNow Developer Program: Go to the [ServiceNow Developer website](<https://developer.servicenow.com/>).
2. Request a free personal instance: After signing up, you can request a personal instance, which is a sandbox environment for you to explore and develop applications.
3. Use the instance for learning and experimentation: You can use this instance to practice workflows, build apps, or test new functionalities.

How to Become a ServiceNow Developer

1. Learn the Basics: Start with the fundamentals of IT Service Management (ITSM), cloud platforms, and scripting languages like JavaScript.
2. Access Free Resources: Use resources from the ServiceNow Developer Program, which offers:
 - Free training materials.
 - Learning paths on building apps on the ServiceNow platform.
3. Get Hands-On Experience: Use your free personal instance to gain practical knowledge by building applications and workflows.
4. Get Certified: ServiceNow certifications are recognized in the industry. Some common certification paths include:
 - Certified System Administrator (CSA)
 - Certified Application Developer (CAD)

ServiceNow Certification Training

To get certified in ServiceNow, you can explore the following training options:

1. ServiceNow Training and Certification: ServiceNow offers official certification training courses on their website.
2. Practice Exams: Many certification courses provide practice exams to help you prepare for the actual certification.

ServiceNow Components and Modules

ServiceNow has many components and modules that help businesses automate and streamline workflows. The key modules include:

1. Incident Management: Handles IT incidents and ensures a swift resolution to minimize business impact.
2. Problem Management: Focuses on identifying the root cause of recurring issues to prevent future incidents.
3. Change Management: Manages IT changes to avoid potential disruptions, ensuring minimal impact on business services.
4. Request Management: Allows users to request services, hardware, or software, and automates the approval and delivery processes.
5. Knowledge Management: A centralized repository for organizational knowledge that can be used for self-service by employees and customers.
6. Asset Management: Tracks IT assets throughout their lifecycle to improve visibility and optimize resource use.
7. Configuration Management Database (CMDB): Provides a single source of truth for IT infrastructure, helping manage relationships between assets and services.

List:

- A list displays a set of records from a table.
- Users have the ability to search, sort, filter and edit data in lists.
- Users can search, sort, filter, and edit data in lists. Lists can be integrated into forms and can have sublists.
- The list interface includes a title bar, breadcrumbs and filters, columns of data, and a footer. Every column in a list represents a field in the table.

List:

Number	Short description	State	Assignment group	Assigned to	Configuration item
INC0000000	Request for a BlackBerry	Open			
INC0000000	Please remove this hostfile	Open	IT User		Windows XP Hostfile (SP2) OS/700
INC0000007	Router Down	Open	IT User		
INC0000008	Hang when trying to call VISO department	Open	IT User		
INC0000009	Oracle Down	Open	IT User		ApplicationServerPeopleSoft
INC0000011	Unknown source of SAP outage	Open	David Loo		SAP Enterprise Services

List:

Number	Opened	Short description	Caller	Priority	State	Category
INC0000020	2020-08-07 15:51:35	I need a replacement iPhone, please	Erol Luddy	1 - Critical	In Progress	Inquiry / Help
INC0000041	2020-08-10 16:44:53	My desk phone does not work	Brian Buggess	3 - Moderate	Resolved	

Forms:

- A form is a content page that displays the fields and values of a single record in a database table.
- Forms have a 1-column layout, a 2-column layout, or a blend of both.

The screenshot shows a web form for an incident record. The form is divided into two main sections. The top section, labeled '3-Column Layout', contains fields for 'Number' (INC0000042), 'Caller' (Bew Ruggen), 'Category' (Hardware), 'Subcategory' (None), 'Service' (Probleem), 'Service offering', 'Configuration item', 'Contact type' (Phone), 'State' (In Progress), 'Impact' (1 - High), 'Urgency' (3 - Low), 'Assignment group', and 'Assigned to' (ITIL User). The bottom section, labeled '1-Column Layout', contains a 'Short description' field with the text 'My desk phone does not work' and a 'Description' field with the text 'Unable to dial out or receive calls. Phone is plugged in but there's no dial tone.' The form has a header bar with navigation icons and buttons for 'Follow', 'Update', 'Resolve', and 'Delete'.

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This is an identical screenshot to the one above, showing a web form for an incident record. The form is divided into two main sections. The top section, labeled '3-Column Layout', contains fields for 'Number' (INC0000042), 'Caller' (Bew Ruggen), 'Category' (Hardware), 'Subcategory' (None), 'Service' (Probleem), 'Service offering', 'Configuration item', 'Contact type' (Phone), 'State' (In Progress), 'Impact' (1 - High), 'Urgency' (3 - Low), 'Assignment group', and 'Assigned to' (ITIL User). The bottom section, labeled '1-Column Layout', contains a 'Short description' field with the text 'My desk phone does not work' and a 'Description' field with the text 'Unable to dial out or receive calls. Phone is plugged in but there's no dial tone.' The form has a header bar with navigation icons and buttons for 'Follow', 'Update', 'Resolve', and 'Delete'.

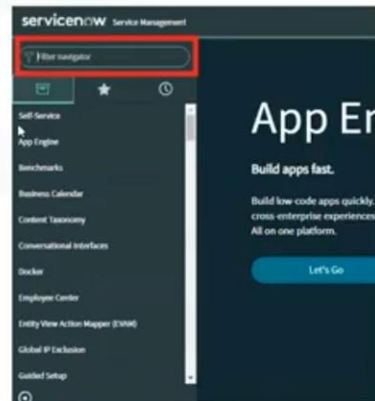
Forms:

Forms are opened from:

➤ modules in the Application navigator

or

➤ by clicking a record number in a list



Filters:



Workflow and Process Automation as per ITIL Principles

ServiceNow incorporates ITIL (Information Technology Infrastructure Library) principles to ensure best practices in managing IT services and workflows. ITIL offers a framework for aligning IT services with business needs and driving process improvements.

ServiceNow supports ITIL processes such as:

1. Incident Management: Restores service as quickly as possible.
2. Problem Management: Identifies root causes of incidents and resolves underlying issues.
3. Change Management: Manages changes to IT services with minimal disruption.
4. Request Fulfillment: Manages and fulfills user service requests.
5. Service Level Management (SLM): Monitors and ensures services meet agreed-upon service levels.

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

ServiceNow provides a range of solutions tailored to different business domains:

1. IT Service Delivery: Automates and streamlines IT services including incident, problem, and change management, enhancing service delivery and minimizing downtime.
2. Security Operations: Helps organizations respond faster to security incidents by automating the identification, prioritization, and resolution of threats.
3. HR Service Delivery: Simplifies HR processes by automating tasks like employee onboarding, benefits administration, and case management. This reduces manual effort and enhances employee experiences.
4. Customer Service Management (CSM): Enhances customer support through automated workflows that handle service requests, complaints, and issue resolutions across various channels.
5. Business Applications: Offers a platform for building customized business applications that streamline workflows, enhance decision-making, and improve business performance.

Explore Admin and Developer Roles

ServiceNow offers distinct roles for Administrators and Developers, each with different responsibilities:

1. Admin Role:
 - Administrators manage the overall configuration and maintenance of the ServiceNow platform.
 - Responsibilities include user management, system upgrades, security, and platform customizations.

2. Developer Role:

- Developers are responsible for creating and customizing applications, workflows, and integrations on the platform.
- Tasks include writing scripts (typically in JavaScript), designing forms, automating workflows, and building business logic using the ServiceNow framework.

ServiceNow Growth

ServiceNow has experienced significant growth due to its versatile platform that offers solutions across ITSM, ITOM, and other business functions. The platform has evolved from a simple ITSM tool to a comprehensive enterprise automation solution.

Key factors contributing to ServiceNow's growth include:

1. Cloud-First Approach: Its SaaS model enables easy adoption and scalability for enterprises.
2. Global Customer Base: ServiceNow serves thousands of customers globally across diverse industries.
3. Continuous Innovation: ServiceNow continually enhances its platform with new features like AI-driven automation, predictive intelligence, and low-code/no-code app development.

ServiceNow Architecture

ServiceNow's architecture is based on a multi-instance cloud platform, where each customer gets a dedicated instance. The key components of the architecture include:

1. Application Layer: Contains ServiceNow's core applications (e.g., ITSM, HR, CSM) and custom applications built using the Now Platform.
2. Database Layer: Each instance has its own database to store data, ensuring isolation and customization.
3. Integration Layer: ServiceNow provides integration capabilities with other systems via APIs and plugins, allowing seamless data exchange.
4. User Interface Layer: Offers web-based and mobile interfaces for users to access the platform.

Who Uses ServiceNow?

ServiceNow is used by:

- IT Departments: To manage incidents, problems, changes, assets, and requests efficiently.
- HR Teams: To automate employee lifecycle management and service delivery.
- Security Teams: To detect and respond to security threats and vulnerabilities.

- Customer Service Teams: To manage and resolve customer inquiries and issues across multiple channels.
- Business Operations: For automation of workflows and process improvement across various business functions.

What is a Catalog?

In ServiceNow, a catalog refers to a collection of services, products, or offerings that can be requested by users. Commonly used in Service Catalog, it provides a user-friendly interface where employees or customers can browse and request services, such as:

- Hardware requests (e.g., laptops, mobile devices).
- Software installations.
- IT services (e.g., password resets).
- HR services (e.g., leave requests).

Dashboard Creation in ServiceNow

ServiceNow allows users to create dashboards for visualizing data in real-time. Dashboards provide insights into key metrics and service performance across various business functions. Here's a basic guide to dashboard creation:

1. Access Reports: Navigate to Reports and create reports based on desired data (e.g., incidents, change requests).
2. Create a Dashboard:
 - Go to Self-Service > Dashboards.
 - Click "Create New" to define the dashboard layout and add widgets.
3. Add Widgets: Populate the dashboard with widgets such as charts, tables, and gauges representing different reports or metrics.
4. Customize: Set permissions, customize the layout, and define filters to suit the audience.