*Video:* [*https://www.youtube.com/watch?v=QxU-*](https://www.youtube.com/watch?v=QxU-)

*Introduction to ServiceNow Admin Training and Fundamentals:*

* *Overview of the ServiceNow platform and its capabilities.*
* *Understanding the core features and functionalities of ServiceNow.*
* *Introduction to the ServiceNow architecture and its components.*
* *Importance of ServiceNow in IT Service Management (ITSM) and business processes.*
* *Setting up a foundational understanding of ServiceNow administration tasks.*

*ServiceNow Platform Overview and Architecture:*

* *Explanation of the multi-instance architecture of ServiceNow.*
* *Overview of the data centers and how they support ServiceNow’s scalability and reliability.*
* *Understanding the different layers: data, application, and user interface.*
* *Introduction to the ServiceNow database schema and table structure.*
* *Key concepts such as instances, updates, and patches.*

*User Interface and Role-Based Access in ServiceNow:*

* *Overview of the ServiceNow user interface, including navigation and key components.*
* *Explanation of how roles and permissions control access to various features and data.*
* *Customization of the user interface based on roles and business needs.*
* *How to assign and manage roles for users in ServiceNow.*
* *Importance of Role-Based Access Control (RBAC) for security and efficiency.*

*ServiceNow Authentication and Authorization Methods:*

* *Overview of authentication methods such as LDAP, SSO, and multi-factor authentication.*
* *Explanation of authorization mechanisms like Access Control Lists (ACLs).*
* *Importance of OAuth and SAML for integrating with other platforms.*
* *Configuring user authentication to align with organizational security policies.*
* *Best practices for managing user identities and permissions.*

*ServiceNow User Interface Elements and Navigation:*

* *Detailed explanation of the Application Navigator, its components, and usage.*
* *Understanding the main interface elements: forms, lists, and related lists.*
* *Customizing the ServiceNow interface for a more intuitive user experience.*
* *Using the filter navigator for quick access to applications and modules.*
* *Introduction to dashboards, reports, and UI macros for enhanced navigation.*

*Understanding Groups and Roles in ServiceNow:*

* *Definition and purpose of groups and roles in ServiceNow.*
* *How groups are used to manage user access and permissions collectively.*
* *Role inheritance and how roles can be assigned to groups.*
* *Managing group memberships and understanding their impact on permissions.*
* *Best practices for setting up and maintaining roles and groups for streamlined administration.*

*ServiceNow Security Features and Access Control:*

* *Implementation of Access Control Lists (ACLs) to manage user permissions.*
* *Role-Based Access Control (RBAC) for defining access based on user roles.*
* *Data encryption methods for securing sensitive information.*
* *Integration with external authentication systems (e.g., SSO, LDAP).*
* *Auditing and logging for monitoring user activities and access.*

*Exploring the ServiceNow User Interface and Navigation:*

* *Overview of the Application Navigator for accessing modules and applications.*
* *Key interface elements: forms, lists, and related lists.*
* *Customization options for a personalized user experience.*
* *Use of global text search and filter navigation for efficiency.*
* *Navigating between different applications and modules with ease.*

*Branding and Customizing the ServiceNow Instance:*

* *Customizing the logo, colors, and overall theme for branding consistency.*
* *Configuring the instance to align with corporate identity and user preferences.*
* *Modifying the welcome page and banners to reflect branding.*
* *Implementing custom UI scripts and styles for a unique look.*
* *Ensuring branding does not impact performance or usability.*

*Understanding List Components and Personalization:*

* *Breakdown of list components: columns, filters, and related links.*
* *Customization of list layouts to suit user needs.*
* *Use of personal and global filters to display relevant data.*
* *Sorting and grouping list data for better organization.*
* *Saving and sharing personalized list views.*

*Working with Filters and List Search in ServiceNow:*

* *Creating and applying filters to refine data visibility in lists.*
* *Using condition builders to set complex filter criteria.*
* *Employing list search to quickly locate specific records.*
* *Saving frequently used filters for future use.*
* *Combining multiple filters for granular data retrieval.*

*Configuring Welcome Page Settings and Branding:*

* *Setting up a custom welcome page with relevant information for users.*
* *Branding the welcome page with logos, banners, and corporate colors.*
* *Configuring default modules and dashboards displayed on login.*
* *Customizing user greetings and important messages on the welcome page.*
* *Regular updates to the welcome page for consistency with corporate changes.*

*Effective Task Management with Service Desk Application:*

* *Centralizes task tracking and management for efficient service delivery.*
* *Facilitates ticket assignment, prioritization, and monitoring in real-time.*
* *Integrates with SLAs to ensure timely task completion.*
* *Provides visibility into task status, ownership, and history.*
* *Supports automation for repetitive task management processes.*

*Custom Rules and Scripting for Task Assignment:*

* *Automate task assignment using custom business rules.*
* *Leverage scripting to implement complex assignment logic based on specific conditions.*
* *Dynamically reassign tasks based on changes in task attributes or status.*
* *Use scripts to enforce assignment rules, reducing manual errors.*
* *Enhance workflow efficiency by customizing task assignment logic.*

*Email Functionality and Activity Stream for Task Management:*

* *Automate task updates and notifications through email integration.*
* *Track all task-related communications within the activity stream.*
* *Enable users to respond to tasks and update records via email.*
* *Maintain an audit trail of all email interactions related to a task.*
* *Streamline collaboration and keep stakeholders informed with real-time updates.*

*Notification Management with ServiceNow Platform:*

* *Centralize notification creation and management for consistency.*
* *Configure notifications based on task updates, SLA breaches, or approval actions.*
* *Utilize different channels, including email, SMS, and in-app notifications.*
* *Customize notification templates to align with organizational standards.*
* *Track notification delivery and user responses for better communication management.*

*Creating and Managing Notifications with Notification Application:*

* *Define notification triggers based on specific events or conditions.*
* *Customize notification content using templates and variables.*
* *Schedule notifications for specific times or recurring intervals.*
* *Manage notification subscriptions to control who receives alerts.*
* *Monitor the effectiveness of notifications with tracking and reporting tools.*

*Creating Notifications in ServiceNow:*

* *Use the Notification Application to create new notifications.*
* *Specify triggering conditions, such as record updates or user actions.*
* *Customize the notification message using HTML and variables.*
* *Select recipients based on roles, groups, or individual users.*
* *Test notifications to ensure proper configuration before deployment.*

*Inbound Email Actions in ServiceNow:*

* *Configure inbound email actions to automate record creation and updates.*
* *Parse incoming emails to extract relevant data for processing.*
* *Map email content to fields in ServiceNow records.*
* *Use conditions to trigger specific actions based on email content.*
* *Implement error handling and logging for inbound email processing.*

*Knowledge Management in ServiceNow:*

* *Centralizes knowledge creation, storage, and retrieval.*
* *Supports the creation of knowledge articles to document solutions and processes.*
* *Enables feedback and approval workflows for knowledge content.*
* *Provides search and categorization tools for easy access to knowledge.*
* *Integrates with incident and request management for contextual knowledge sharing.*

*Configuring Inbound Actions for Email Processing:*

* *Set up inbound email actions to handle specific email types.*
* *Define rules to create, update, or resolve records based on email content.*
* *Use scripting to enhance email processing logic and data extraction.*
* *Implement error handling mechanisms for failed email actions.*
* *Test inbound actions thoroughly to ensure accurate email-driven automation.*

*Knowledge Article Creation and Feedback Process:*

* *Authors create articles based on organizational knowledge needs.*
* *Articles undergo a review process before being published.*
* *Users can provide feedback on articles to improve content quality.*
* *Feedback is reviewed and incorporated into articles as needed.*
* *Continuous updates ensure that articles remain accurate and relevant.*

*ServiceNow Knowledge Management Application Overview:*

* *Centralizes knowledge creation, storage, and sharing across the organization.*
* *Facilitates the creation, categorization, and publishing of knowledge articles.*
* *Integrates with other ServiceNow modules, such as Incident Management.*
* *Offers tools for feedback, approvals, and reporting on knowledge usage.*
* *Supports multi-language and localization features for global access.*

*Advanced Email Scripting and Notification Customization:*

* *Allows customization of email templates with advanced HTML and scripting.*
* *Facilitates dynamic content generation based on record data and conditions.*
* *Supports conditional logic to tailor notifications to specific audiences.*
* *Enhances user experience by providing contextually relevant information.*
* *Automates complex notification workflows to reduce manual intervention.*

*Understanding Servicenow Knowledge Portal and Its Features:*

* *Provides a centralized location for accessing and searching knowledge articles.*
* *Supports categorization, tagging, and filtering of articles for easy navigation.*
* *Offers self-service options for users to find solutions without assistance.*
* *Includes feedback mechanisms to continuously improve content quality.*
* *Integrates with incident and request management for seamless user support.*

*Customizing Servicenow Knowledge Portal for Users:*

* *Tailor the portal's appearance to align with organizational branding.*
* *Configure personalized views and recommendations based on user roles.*
* *Customize search and filter options to enhance article discoverability.*
* *Implement user-specific content visibility settings for targeted access.*
* *Enhance user engagement with interactive elements like polls and ratings.*

*Creating and Managing Knowledge Articles in Servicenow:*

* *Authors create articles using templates and predefined structures.*
* *Articles are categorized and tagged for easy retrieval.*
* *Content is reviewed and approved before being published.*
* *Ongoing management ensures articles remain up-to-date and accurate.*
* *Metrics and feedback are used to assess article effectiveness.*

*ServiceNow Knowledge Management Roles and Responsibilities:*

* *Knowledge Managers oversee the knowledge creation and maintenance process.*
* *Authors are responsible for creating and updating articles.*
* *Reviewers ensure content accuracy and relevance before publication.*
* *Users provide feedback and suggest improvements to knowledge content.*
* *Administrators manage permissions and configurations of the knowledge system.*

*ServiceNow Knowledge Management Workflow and Article Approval:*

* *Articles follow a defined workflow from creation to publication.*
* *Review and approval stages ensure content accuracy and quality.*
* *Automated notifications alert stakeholders at each stage of the workflow.*
* *Workflow flexibility allows customization to fit organizational processes.*
* *Approved articles are published to the knowledge portal for user access.*

*Importing Articles into ServiceNow Knowledge Management:*

* *Bulk import existing articles from external sources using data import tools.*
* *Map imported content to ServiceNow fields and categories.*
* *Ensure consistency and accuracy during the import process with validation rules.*
* *Review and update imported articles to align with current standards.*
* *Utilize import templates for efficient processing of large article volumes.*

*Understanding ServiceNow Service Catalog and Its Benefits:*

* *Centralizes service offerings, allowing users to request services and products easily.*
* *Enhances user experience with a self-service portal for submitting requests.*
* *Streamlines service delivery by automating approval and fulfillment processes.*
* *Reduces operational costs by standardizing and automating routine tasks.*
* *Improves visibility and tracking of service requests from submission to completion.*

*Managing Categories in Service Catalog:*

* *Organizes catalog items into logical categories for easy navigation.*
* *Allows administrators to create, edit, and manage categories based on organizational needs.*
* *Supports multi-level categorization for better structure and user experience.*
* *Ensures relevant items are grouped together, improving searchability.*
* *Enables role-based visibility, ensuring users see only applicable categories.*

*Creating and Managing Catalog Items in ServiceNow:*

* *Define and configure catalog items, including forms, fields, and variables.*
* *Associate items with appropriate categories and workflows for automated processing.*
* *Set up pricing, approvals, and fulfillment tasks for each catalog item.*
* *Continuously update and maintain items to meet changing business needs.*
* *Monitor item usage and performance through reports and analytics.*

*Understanding Service Catalog Roles and Responsibilities:*

* *Service Catalog Administrators manage catalog structure, items, and user permissions.*
* *Catalog Managers oversee specific categories and ensure items are accurate and up-to-date.*
* *Requesters submit requests through the catalog and track their status.*
* *Fulfillers are responsible for processing and completing service requests.*
* *Approvers review and approve or deny requests based on predefined criteria.*

*Service Catalog Components: Orders, Order Forms, and Ordering Process:*

* *Orders represent a collection of requested catalog items submitted by users.*
* *Order forms capture the necessary details for each item within the order.*
* *The ordering process includes submitting requests, approvals, and fulfillment.*
* *Orders are tracked through various stages, from submission to delivery.*
* *Notifications keep users informed about the status of their orders.*

*Designing and Implementing Service Catalog Workflows and Flows:*

* *Workflows automate the fulfillment process, including approvals and task assignments.*
* *Design workflows to handle complex processes, such as multi-step approvals.*
* *Implement flows to streamline task creation, assignment, and notification.*
* *Use flow designers to visually build and customize workflows without coding.*
* *Regularly review and optimize workflows to ensure efficiency and effectiveness.*

### **Understanding Service Catalog Request and Task Records**

* Service catalog requests capture user needs for services or products.
* Each request can generate multiple task records, which track the work needed to fulfill it.
* Requests are managed in the "Requests" table (sc\_request), while tasks are tracked in the "Requested Item" table (sc\_req\_item).
* ServiceNow workflows are often triggered to manage approvals and processes associated with requests and tasks.
* Each task can be assigned to specific fulfillment groups or agents based on business rules.

### **Creating and Customizing Service Catalog Stages**

* Catalog stages define the lifecycle of a catalog request.
* These stages help track where a request is in the fulfillment process (e.g., "Submitted," "Approved," "In Progress," "Completed").
* Administrators can customize stages to fit specific business needs.
* Configuring catalog stages improves the user experience by providing visibility into request status.
* Stages are often visualized through progress bars on catalog request forms.

### **Designing and Creating Service Catalog Items and Variables**

* Service catalog items represent the services or products users can request.
* Items are built by defining variables that collect specific data from users (e.g., text fields, checkboxes).
* Variables can be organized into variable sets for better reusability across catalog items.
* Catalog items can include logic, approvals, and fulfillment workflows.
* A well-designed catalog item streamlines the request process and ensures users provide the necessary information.

### **Understanding ServiceNow Data Structure and Tables**

* ServiceNow’s data is organized into tables, with each table storing records related to specific functionalities (e.g., incidents, users).
* Tables follow a relational database structure, with fields (columns) representing different data attributes.
* Common table types include base, core, and extended tables.
* ServiceNow also uses record hierarchies, where extended tables inherit properties from base tables.
* Understanding this structure is crucial for efficient configuration and data management.

### **Creating and Configuring Custom Tables and Fields**

* Custom tables allow administrators to extend ServiceNow beyond out-of-the-box functionalities.
* Custom fields can be added to both standard and custom tables to capture specific data.
* Table and field configuration includes setting field types (e.g., text, number) and defining table relationships (e.g., one-to-many).
* Administrators must define access controls for these tables and fields to ensure data security.
* Properly configured custom tables enable a tailored experience aligned with organizational requirements.

### **Understanding Table Relationships and Field Configuration**

* Tables in ServiceNow can have relationships such as one-to-many, many-to-many, and parent-child relationships.
* Field configuration involves selecting the appropriate field types (e.g., reference fields, choice fields) to represent data.
* Reference fields create relationships between tables, linking records from one table to another.
* Field configurations must align with data accuracy and workflow requirements, ensuring efficient data handling and reporting.
* Understanding table relationships is key to building scalable and maintainable systems.

### **Table Relationships and Inheritance**

* Table inheritance refers to the relationship where an extended table inherits fields and functionalities from a base table.
* Inherited tables share characteristics of their parent, while still allowing for customization and additional fields.
* This enables ServiceNow to implement new features without rebuilding tables from scratch.
* For example, the "Incident" table is an extension of the "Task" table, inheriting core fields like assignment and priority.
* Inheritance simplifies development and maintains consistency across tables.

### **Types of Tables: Base, Extended, Core, and Custom**

* **Base tables** are foundational tables like “Task” and “cmdb\_ci.”
* **Extended tables** inherit from base tables and add unique functionalities (e.g., “Incident” from “Task”).
* **Core tables** are provided out-of-the-box and fulfill standard business functions.
* **Custom tables** are created by administrators to fulfill specific organizational needs.
* Understanding these types is key to navigating and configuring data storage in ServiceNow.

### **Creating Custom Tables and Fields**

* Custom tables are built to address unique business needs not covered by out-of-the-box solutions.
* Administrators define fields, relationships, and workflows for these custom tables.
* Field types can be customized (e.g., text, date, reference) to collect specific information.
* Creating custom tables requires careful planning to ensure they fit within the existing data structure.
* Custom tables help tailor ServiceNow to specific business processes.

### **ACL Security in ServiceNow**

* Access Control Lists (ACLs) are used to secure data at the record and field level.
* ACLs define who can read, write, or delete data in a particular table or field.
* Security roles, scripts, and conditions can be applied to control access.
* Proper ACL configuration ensures compliance with organizational data policies.
* A robust ACL strategy balances security with ease of access.

### **ACL Rule Types and Configurations**

* ACLs can be applied at both the table level (to secure all records) and field level (to secure specific fields).
* The three main ACL actions are: read, write, and delete.
* ACL rules can be based on user roles, conditions, and scripts.
* ACL rules are evaluated from most specific to least specific.
* Misconfiguring ACLs can lead to unauthorized access or blocking legitimate users from needed data.

### **Implementing ACL Security in ServiceNow Tables and Fields**

* Implementing ACLs involves creating rules that control access to specific tables and fields.
* Rules are often role-based and may include conditions or scripts for granular access control.
* Testing ACLs is essential to ensure they work as intended without disrupting workflows.
* Properly implemented ACLs protect sensitive data while allowing authorized users to perform their tasks.
* ACLs can be fine-tuned over time to accommodate evolving security needs.

### **How ACL Works in ServiceNow Reporting and Data Access**

* ACLs control what data users can access in reports, ensuring users only see data they’re authorized to view.
* When a report is run, ACLs are checked for each record and field included in the report.
* Unauthorized data is either hidden or excluded from reports entirely.
* ACLs help organizations maintain compliance by restricting access to sensitive information in reports.
* Reporting with ACLs ensures data confidentiality across the platform.

**ACL Rules in ServiceNow**

* ACL (Access Control List) rules determine which users can access data in tables and fields.
* ACL rules evaluate based on user roles, conditions, and optional scripts.
* They control three primary actions: read, write, and delete.
* The system evaluates ACL rules from the most specific to the least specific.
* If multiple ACL rules apply, all must grant access for the user to perform the action.
* Configuring ACL rules effectively ensures data security and appropriate access control.

### **Creating and Managing ACL**

* Administrators create ACL rules by specifying access conditions on tables or fields.
* ACLs can be managed through the Security module under "Access Control (ACL)".
* When creating an ACL, administrators must define actions (read/write/delete), the role(s), and conditions or scripts.
* ACL testing is important to verify that only authorized users have access to sensitive data.
* Proper management of ACLs is critical for maintaining data confidentiality and integrity across the platform.

### **Elevating Roles and Security Admin Access in ServiceNow**

* Elevating roles temporarily grants users higher privileges, such as the security\_admin role, which allows configuration of security settings.
* Users with elevated roles can modify ACLs, manage roles, and perform other security-related tasks.
* Elevation requires users to manually activate the security\_admin role during a session.
* Elevation increases security by ensuring that high-level administrative permissions are not always active.
* Elevating roles is crucial for tasks like modifying sensitive ACL rules or changing key system properties.

### **Importing Data into ServiceNow: Methods**

* ServiceNow supports several methods for importing data, including manual imports via CSV, XML, and Excel files, as well as automated imports through integrations.
* Common methods include using Import Sets and REST or SOAP APIs.
* Data imports can be scheduled for periodic updates or run as one-time jobs.
* Before importing, administrators need to define data sources, staging tables, and transformation logic to ensure data is correctly mapped.
* Importing data accurately is key to maintaining data integrity in ServiceNow.

### **Using Import Sets and Transform Maps in ServiceNow**

* **Import Sets** temporarily hold imported data before it is transformed into the target table.
* **Transform Maps** define how data from an import set is mapped to fields in the target table.
* Import Sets allow administrators to review and clean data before it is permanently imported.
* Transform Maps use **coalesce** fields to ensure that records are updated or inserted correctly based on matching criteria.
* Using Import Sets and Transform Maps ensures efficient data migration while reducing errors.

### **Configuring Data Sources and Staging Tables for Import**

* **Data sources** are the origins of imported data, such as files (CSV, Excel) or external systems via web services.
* Administrators must configure data sources in ServiceNow to recognize and process incoming data.
* Staging tables (Import Sets) act as temporary holding areas where data is stored before being mapped to target tables.
* Proper configuration of data sources ensures accurate imports, while staging tables allow for validation before permanent changes.
* Staging data provides administrators control over data quality and structure during imports.

### **Mapping and Transforming Data with Transform Maps and Coalesce**

* **Transform Maps** specify how fields from an import set are mapped to the target table’s fields.
* The **coalesce** option identifies unique fields used to determine if a record should be updated or inserted.
* If coalesce fields match an existing record, the record is updated; if no match is found, a new record is created.
* Transform Maps allow for complex field mappings, including data transformation logic (e.g., converting data formats).
* Correctly configuring Transform Maps ensures data is migrated efficiently without duplicating or losing records.