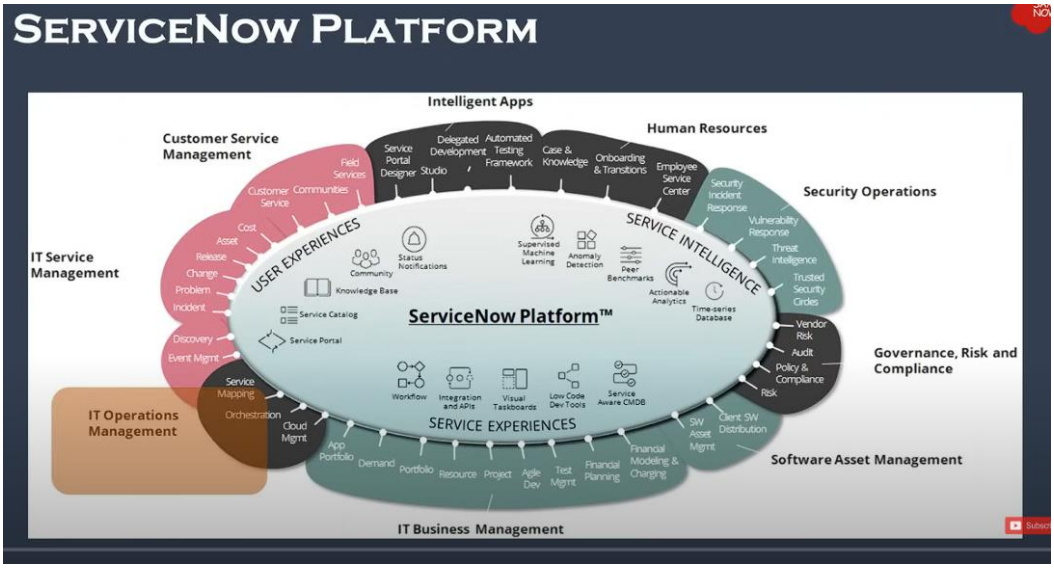
Platform Overview and Architecture



ServiceNow Platform:

ServiceNow is a cloud-based platform offering "Application Platform as a Service" (aPaaS).It is versatile, supporting various organizational functions like IT, HR, finance, and security.Initially known as a ticketing tool, it has evolved into a platform for automating business processes.

ServiceNow Architecture:

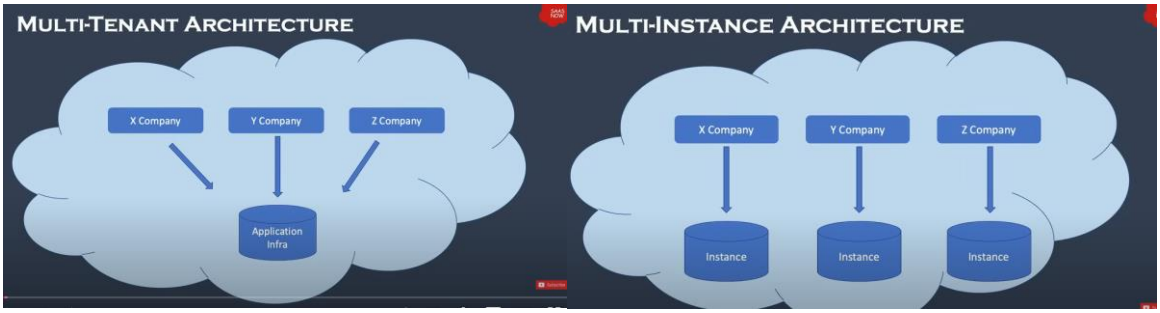
Single Platform: Automates business processes across the enterprise.

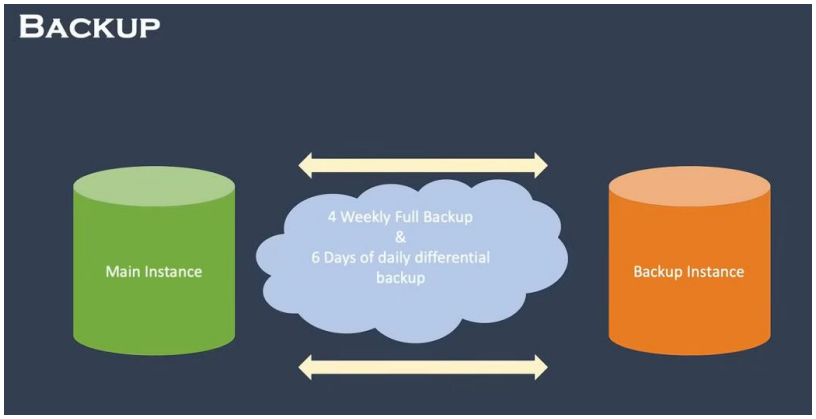
Single Data Model: Built on a flexible table schema with core capabilities and reusable components.

Multi-Instance Architecture: Each customer's data, applications, and customizations reside in a unique software stack (an instance). Instances are isolated but can communicate with each other.

High Availability: ServiceNow provides advanced data centers with redundancy to ensure continuous availability in case of failures.

Backup: ServiceNow performs four full weekly backups and daily differential backups for six days to protect data.





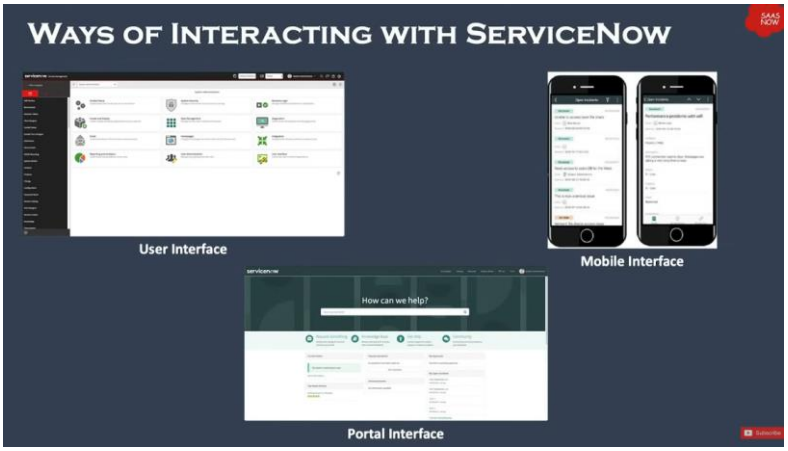
User Interface and Branding

Ways to Interact with ServiceNow:

Native UI: The primary web interface for interacting with ServiceNow. It includes features like real-time form updates, activity streams, and an application navigator.

Mobile Apps: ServiceNow provides mobile applications (ServiceNow Agent, Now Mobile, and ServiceNow Onboarding) for users to access the platform on the go.

Service Portal: A user-friendly, customizable interface where users can access services, search knowledge articles, and submit requests.



Supported Browsers:

ServiceNow supports major browsers like Chrome, Microsoft Edge, Firefox, and Safari. Chrome and Safari are recommended for the best experience.

Mobile Apps:

SN Agent: A mobile application designed for agents to manage tasks, incidents, and other workflows on the go.

Now Mobile: An app for employees to access the ServiceNow platform for requests, approvals, and other functions.

SN Onboarding: A mobile app focused on onboarding processes, providing new hires with a seamless experience.

Accessing the Service Portal: The Service Portal can be accessed by appending /sp to the domain URL. It provides a customizable and responsive user interface for end-users to interact with the ServiceNow platform.

Supported Authentication Methods:

Local Database: Users log in with a username and password stored in the ServiceNow database.

Single Sign-On (SSO): Enables users to authenticate using external identity providers, like without needing separate credentials for ServiceNow.

OAuth 2.0: Involves using a client ID and secret for secure authentication.

LDAP: Allows integration with corporate directories for authentication.

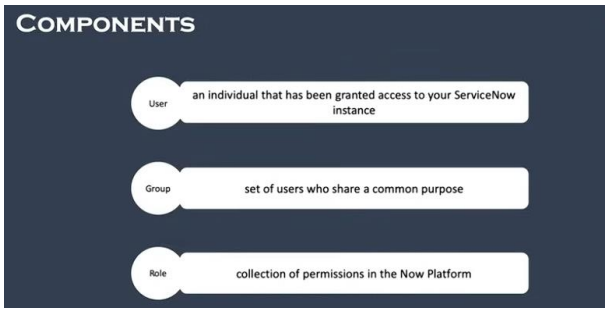
Multi-factor Authentication (MFA): Supported through services like Google Authenticator, adding an extra layer of security.

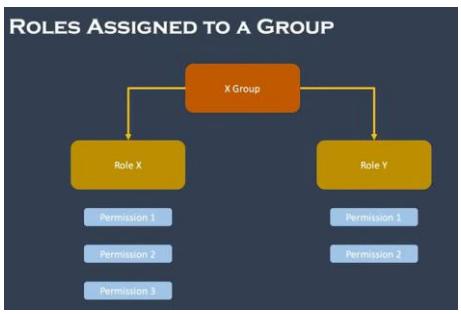
Digest Token: Encrypts the username and password for secure communication.

Role-Based Access Control (RBAC)

Roles: Access to different parts of the platform is managed through roles, such as admin, itil, knowledge_admin, and approver. Users assigned specific roles have permissions tailored to their responsibilities.

Out-of-the-Box (OOB) Roles: These are pre-configured roles provided by ServiceNow for common use cases, such as admin or catalog_admin.





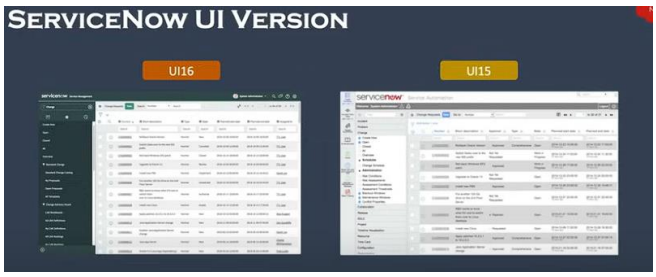
Branding:

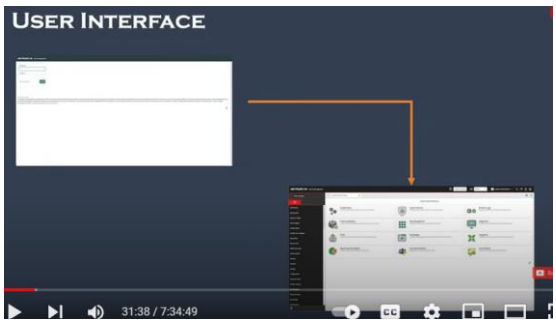
ServiceNow allows customization of the user interface to align with organizational branding. This includes changing logos, themes, and colors to reflect the company's identity.

UI Versions:

UI 15: Includes additional elements like an edge on the left side of the screen for easier navigation.

UI 16: The default interface with updated design elements and functionality.





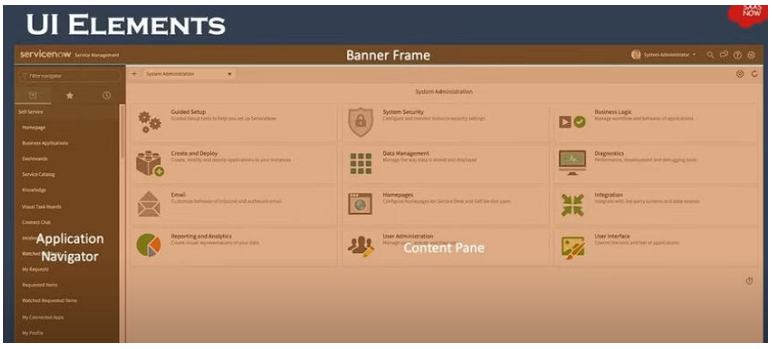
Switching UI Versions: Users can switch between UI 15 and UI 16 via the settings menu.

UI Elements:

Banner Frame: The top section of the interface, displaying the company logo, instance name, user menu, global search, chat, help, and settings.

Application Navigator: Located on the left side, it includes tabs for all applications, favorites, and history.

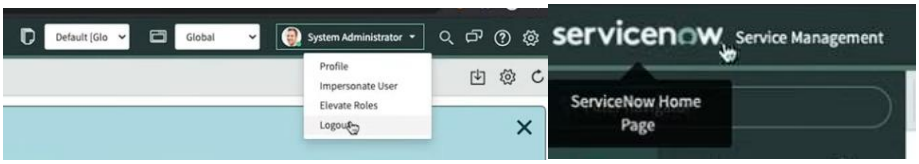
Content Pane: The main area where the selected application or module is displayed.

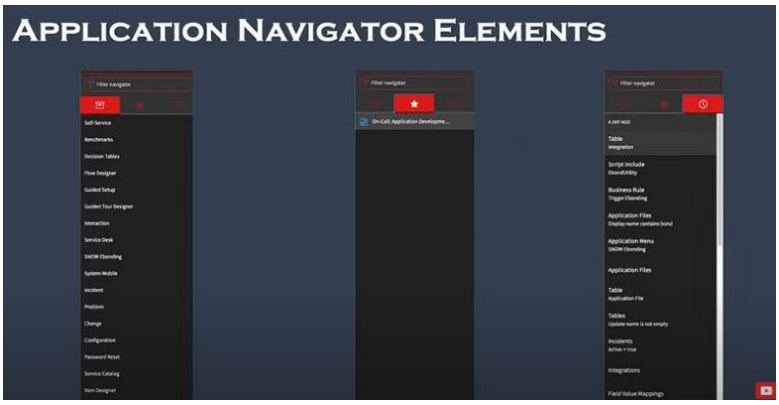


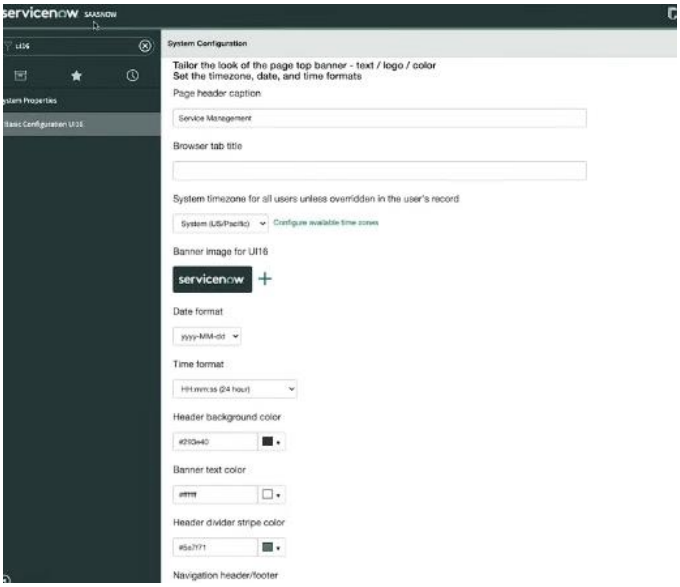
Branding (UI 16):

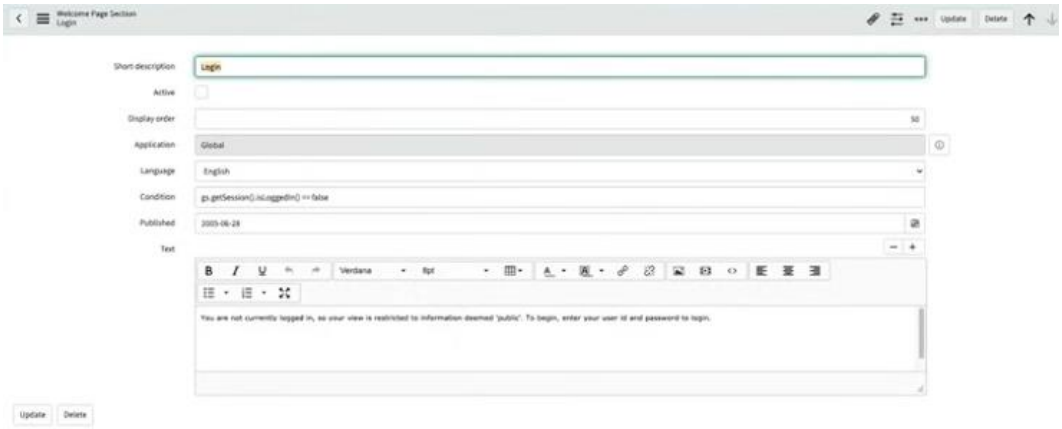
Basic Configuration: Allows customization of the UI to align with company branding. This includes changing the title and banner image.

Welcome Page Content: Managed under the System UI module, where short descriptions and additional information can be added.


Default [Glo
Global
System Administrator
Profile
Impersonate User
Elevate Roles
Logout
servicenow
Service Management
ServiceNow Home Page


APPLICATION NAVIGATOR ELEMENTS


servicenow
System Configuration
Tailor the look of the page top banner - text / logo / color
Set the timezone, date, and time formats
Page header caption
Service Management
Browser tab title
System timezone for all users unless overridden in the user's record
Banner image for UI16
Date format
Time format
Header background color
Banner text color
Header divider stripe color
Navigation header/footer


Update
Delete
Short description
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Global
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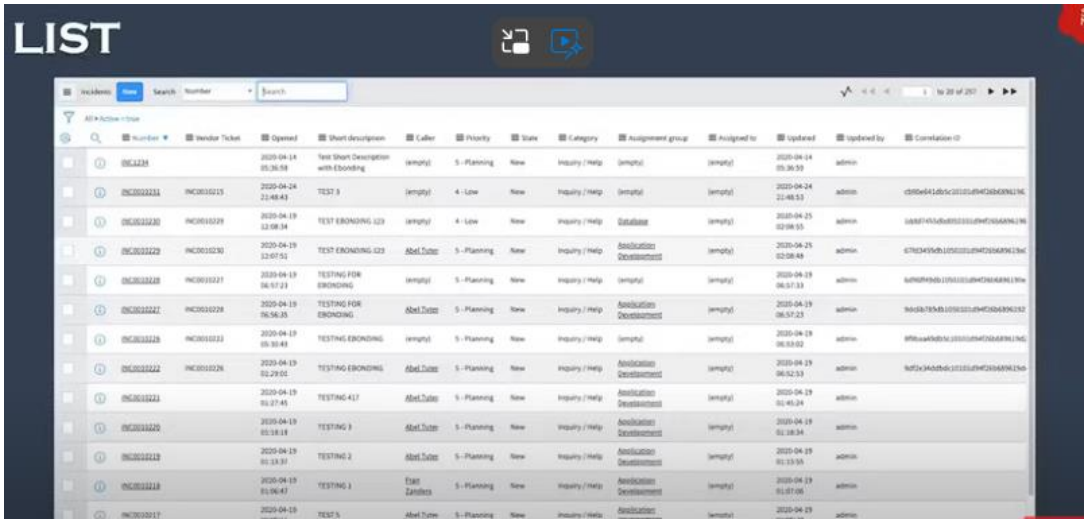
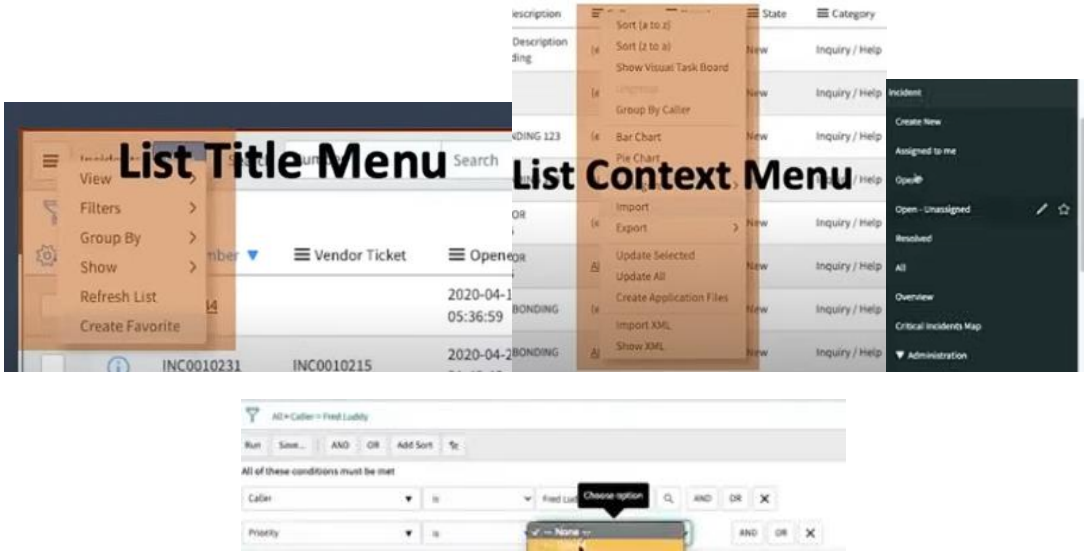
List & Filters and Forms





List Components:

Main List: Displays records from a table (e.g., incidents).

Title Bar: Located at the top of the list, it shows the name of the list and may include options to manage or modify the list.

Filters: Allow you to apply conditions to refine the displayed data. You can use various filter criteria to view specific records.

Breadcrumbs: Show the applied filter conditions in a hierarchical manner, helping users understand the current filter settings and navigate back to previous conditions if needed.

Columns/Fields: Represent the data attributes from the table, such as the "Number" field that stores the record number.

List Title Menu: Provides options to manage the list, such as applying filters, grouping data, adjusting the number of records displayed, refreshing the list, and creating favorites.

List Context Menu: Offers additional functionalities such as sorting, converting lists into charts, exporting/importing data, and updating records. It provides a right-click menu with various options.

Operations:

Filtering: Apply conditions to view specific records (e.g., incidents by user or priority). Filters can be saved for reuse.

Grouping: Organize data by a field (e.g., incidents by state or priority) for better analysis.

Refreshing: Update the list to reflect recent changes or new data.

Creating Favorites: Save specific list views or filter configurations for quick access.

Views and Personalization:

Views: Create custom views to display specific fields or data sets (e.g., major incidents view).

Personalization: Add or remove fields from the list view to suit user needs.

Export/Import:

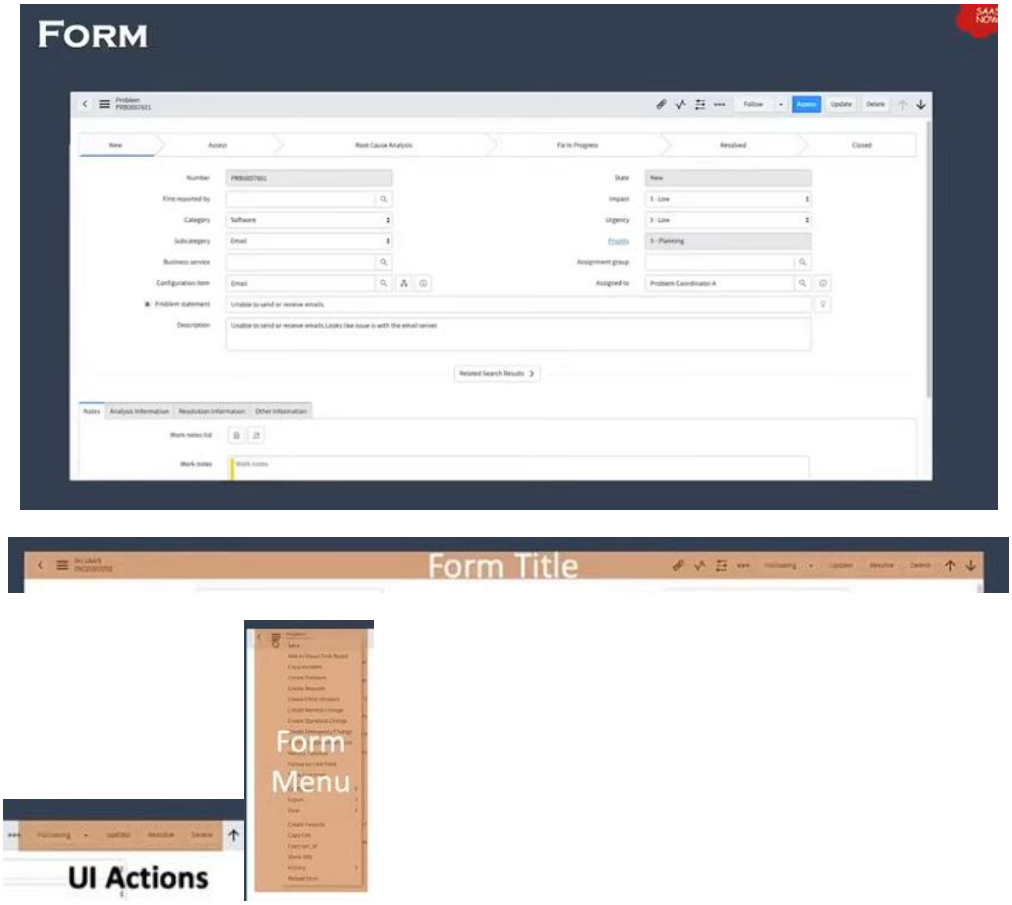
Export: Save data in formats like Excel, CSV, XML, JSON, or PDF.

Import: Add new data using XML or other supported formats.

Advanced Features:

List Layout: Modify which fields are shown or hidden.

Update Selected/Update All: Edit multiple records at once or based on conditions



Form Components:

Content Frame: Displays record details.

Form Title: Shows the record's name.

Form Buttons (UI Actions): Includes "Submit" (saves and exits), "Save" (saves and keeps the form open), and other actions like "Update" and "Delete."

Form Menu: Provides options for additional actions and configurations.

Field Types:

Mandatory Fields: Required fields indicated with a red asterisk.

Read-Only Fields: Non-editable fields used to display static data.

Field Examples:

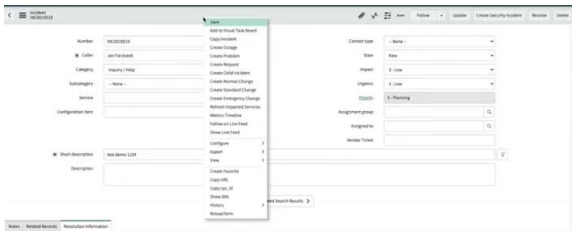
Choice Fields: Dropdown options (e.g., Impact).

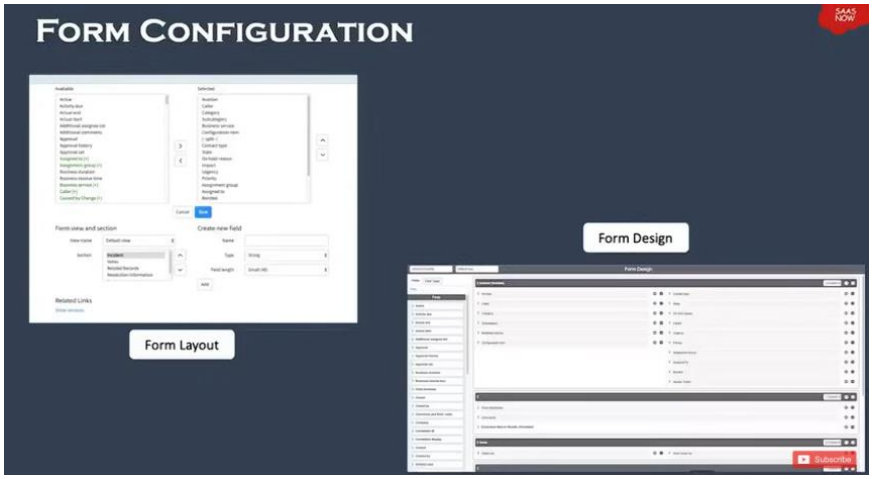
Reference Fields: Show data from other tables (e.g., Caller referencing the Users table).

Related Lists:

Function: Display related records from other tables at the form's bottom.

Configuration: Manage via "Configure > Related Lists."





Form Layout and Design:

Form Layout: Configure field positions and visibility. Access via "Configure > Form Layout."

Form Design: Advanced UI for drag-and-drop customization. Access via "Configure > Form Design."

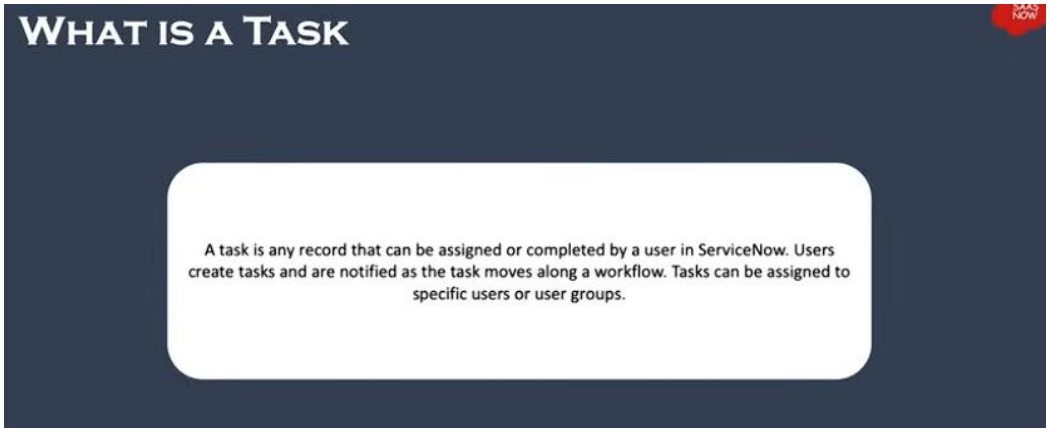
Templates:

Purpose: Predefine common field values for streamlined record creation.

Usage: Accessible through the "Create New" button; templates auto-fill fields with predefined values.

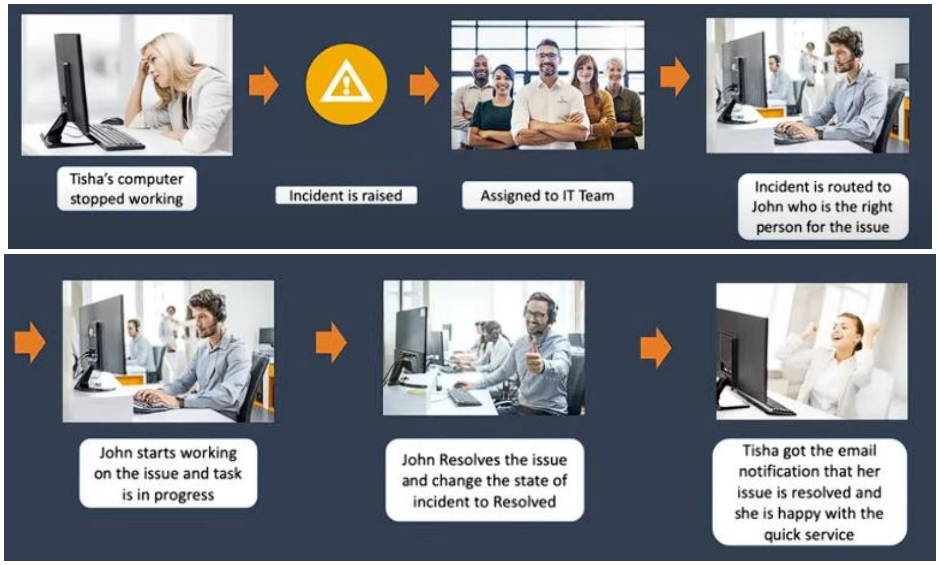
Task management

A task in ServiceNow is any record that can be assigned and completed by users. Tasks track actions and progress within various workflows. Examples include incident records, problem records, and change requests. Tasks can be assigned to individual users or groups and are crucial for managing and resolving issues effectively.



Task workflow

For instance, if an employee named Tisha faces a computer issue and raises an incident, it gets assigned to the IT team. John, an IT specialist, is then tasked with resolving it. Once John resolves the issue, he updates the incident status to "Resolved," and Tisha receives a notification about the resolution.



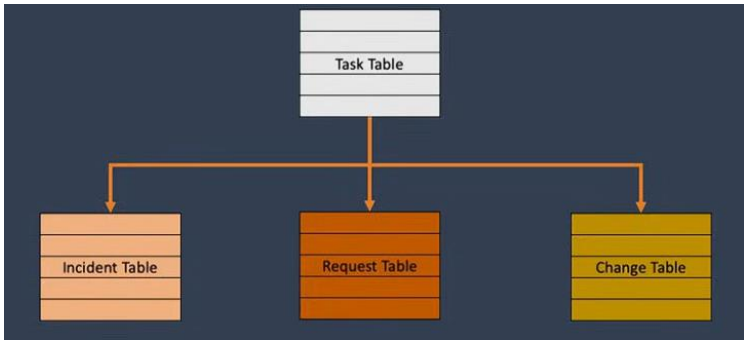


Table and Extensions

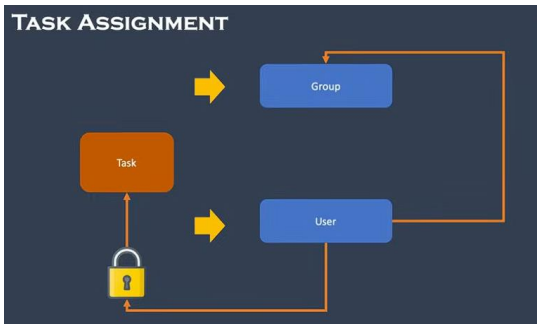
The core table for tasks in ServiceNow is the **Task** table, which many other tables extend from, such as:

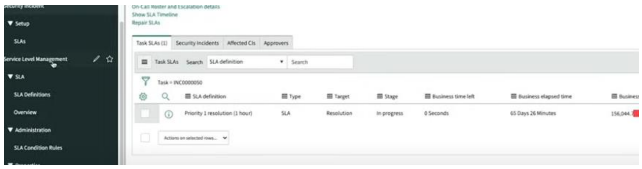
- **Incident Table**
- **Change Table**
- **Problem Table**
- **Request Table**

These extended tables inherit fields from the Task table and may include additional specific fields.

Task Assignment

Tasks can be assigned in various ways:



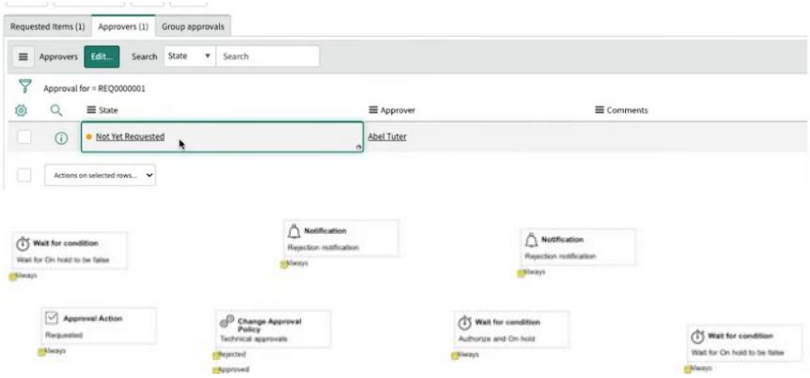


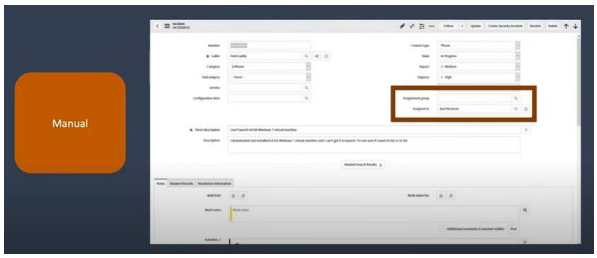
Task Functionalities

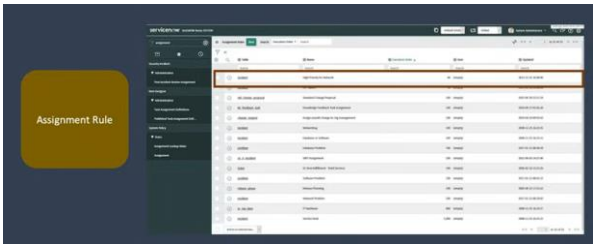
Approvals: Tasks can require approvals which can be managed manually or through workflows.

Assignments: Tasks can be assigned manually or automatically through assignment rules.

SLAs (Service Level Agreements): SLAs track whether tasks meet agreed-upon timelines. If not met, the SLA is considered breached.

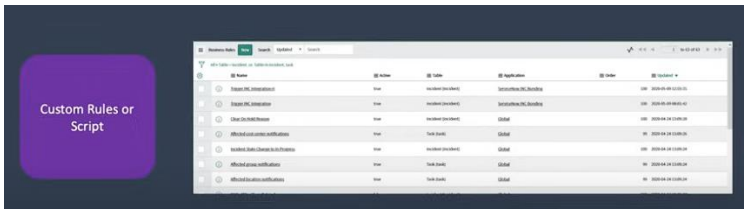






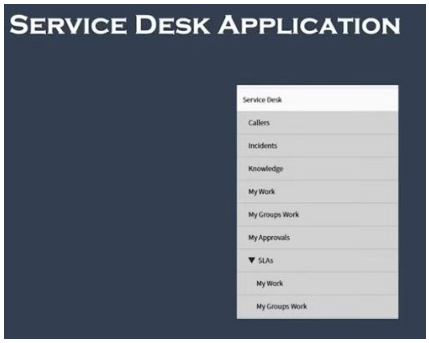
Manual Assignment: Users can assign tasks manually to themselves or others.

Assignment Rules: Automated rules set values for assignment fields based on predefined conditions.



Predictive Intelligence: Machine learning algorithms predict assignment fields based on historical data.

Custom Rules/Scripts: Administrators can create custom scripts for task assignment.



Service Desk Application

The Service Desk application in ServiceNow provides a centralized place for users to view and manage all their tasks, including:

My Work: Tasks assigned to the user.

My Group's Work: Tasks assigned to the user's group.

My Approvals: Tasks waiting for user approval.

SLA: Information on SLA compliance.

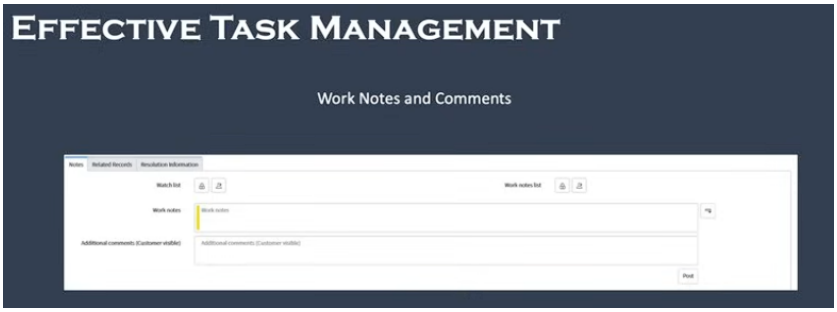
Effective Task Management

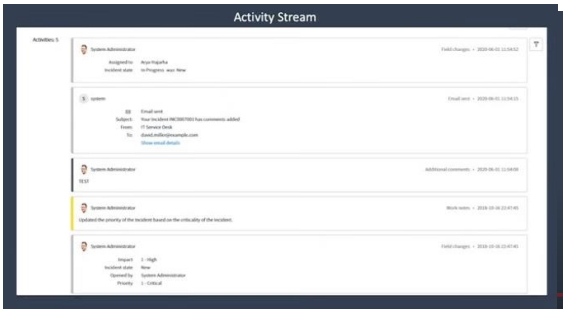
To manage tasks effectively:

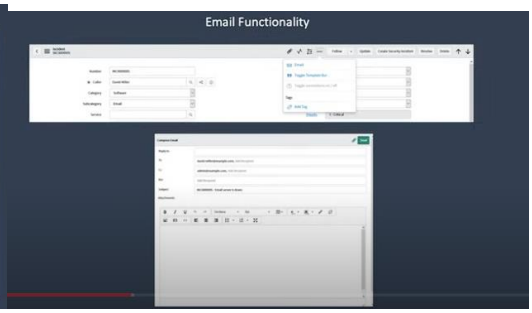
Work Notes and Comments: Use these to update progress and communicate with other stakeholders.

Activity Stream: Shows all activities related to a task, including updates and comments.

Email Functionality: Allows sending custom emails related to the task.





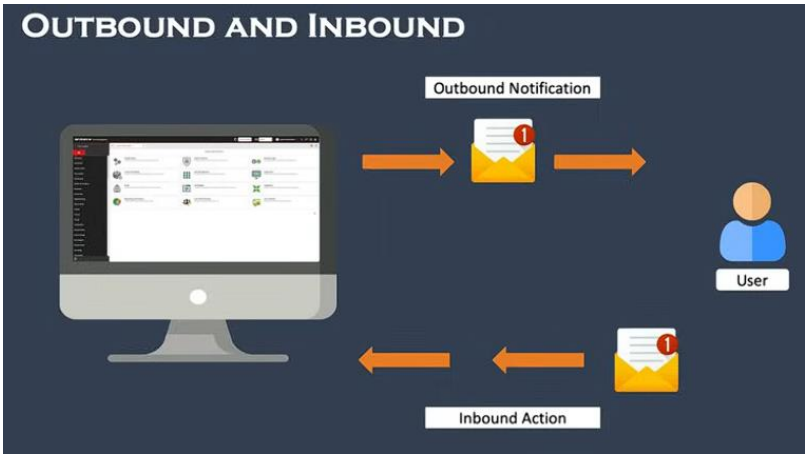


Notifications

Types of Notifications

Outbound Notifications: These are sent by ServiceNow to users based on specific events, such as an incident being assigned to a group. Users receive these notifications via email or mobile push notifications.

Inbound Notifications: Users can respond to these notifications by sending emails to ServiceNow, which can then trigger actions like creating or updating records in ServiceNow.



Notification Management in ServiceNow

System Notification Application:

Email: Manages email notifications. Includes modules for digest intervals, email scripts, notification categories, and templates.

Push: Manages mobile push notifications.

Provider: Configures notifications for agent workspace and virtual agents.

Key Modules:

Digest Intervals: Reduces the number of emails sent by aggregating notifications into a single email sent at defined intervals.

Notifications: Lists all notifications and allows the creation of new ones.

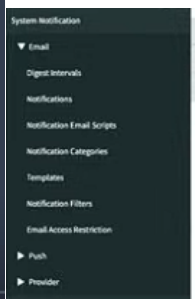
Notification Email Scripts: Contains scripts for customizing email content.

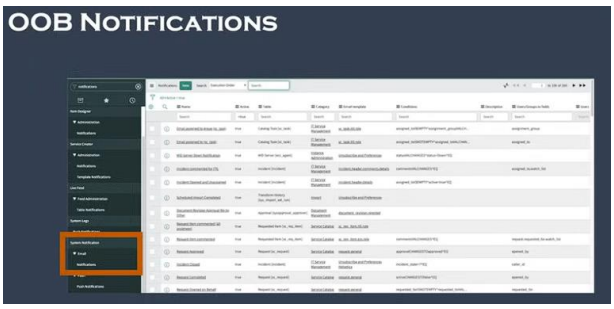
Notification Categories: Helps in organizing and categorizing notifications.

Templates: Reusable content for email subject and body.

Notification Filters: Allows filtering notifications based on conditions like critical issues.

Email Access Restrictions: Restricts access to specific types of email notifications.





Creating a New Notification

Fields to Configure:

Name: Identifier for the notification.

Table: Select the table for which the notification is applicable (e.g., Incident).

Category: Defines the category of the notification.

Sections in the Notification Form:

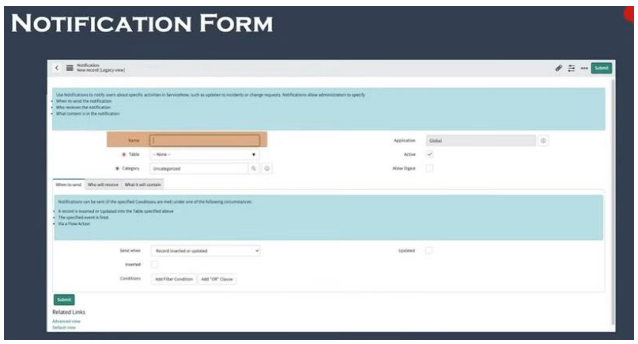
When to Send: Defines the condition for sending the notification.

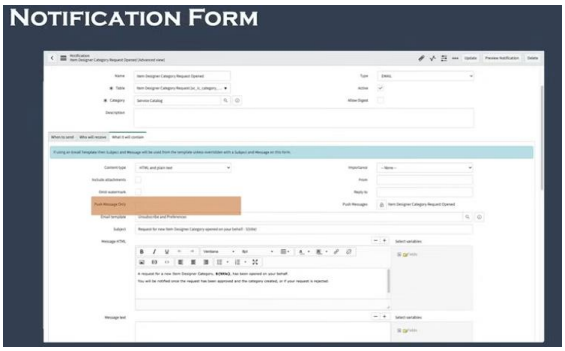
Options include record insertion/update, event, or triggered by a flow designer.

Who Will Receive: Specifies recipients (users, groups) and whether the notification is subscribable.

What It Will Contain: Configures the content of the notification.

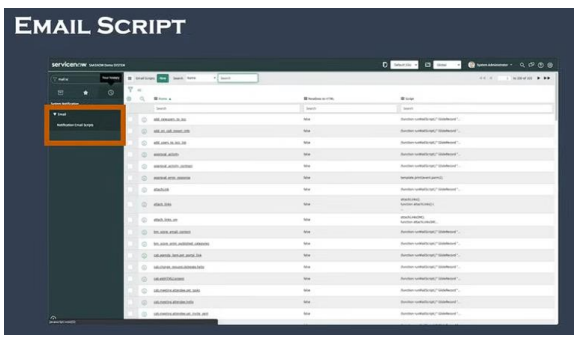
Includes content type (HTML, plain text), subject, message body, email template, and sender/receiver email addresses.

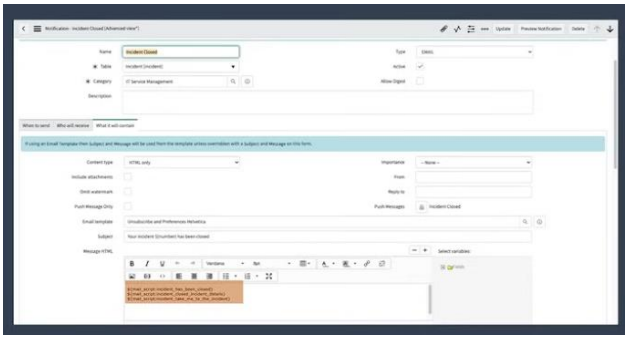




Testing Notifications

After creating a notification, test it by updating records to match the notification's trigger conditions and verify that the notification is sent correctly.





Inbound Actions

Purpose: Configures actions to be performed when emails are received, such as creating or updating records.

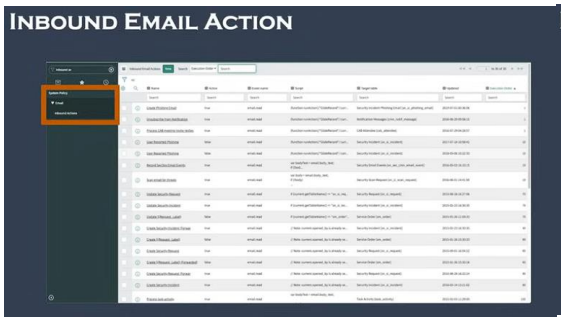
Fields:

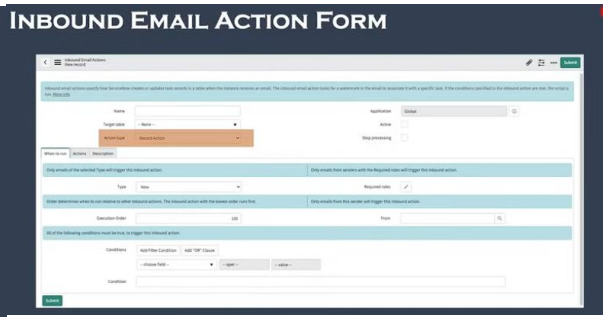
Name: Identifier for the inbound action.

Target Table: The table where actions are to be applied.

Action Type: Defines what should happen when the email is received (e.g., create, update, respond).

Conditions: Specifies criteria for when the action should be triggered.





Knowledge Management

Knowledge management involves managing knowledge articles such as policies, self-help tips, troubleshooting documents, and resolution steps.

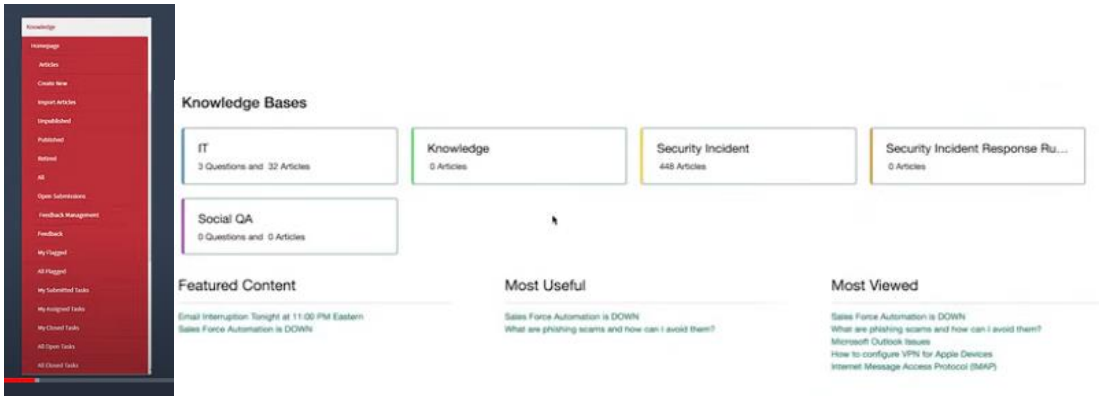
It centralizes the creation, categorization, and viewing of articles, providing a one-stop solution for users to find answers and get quick help.

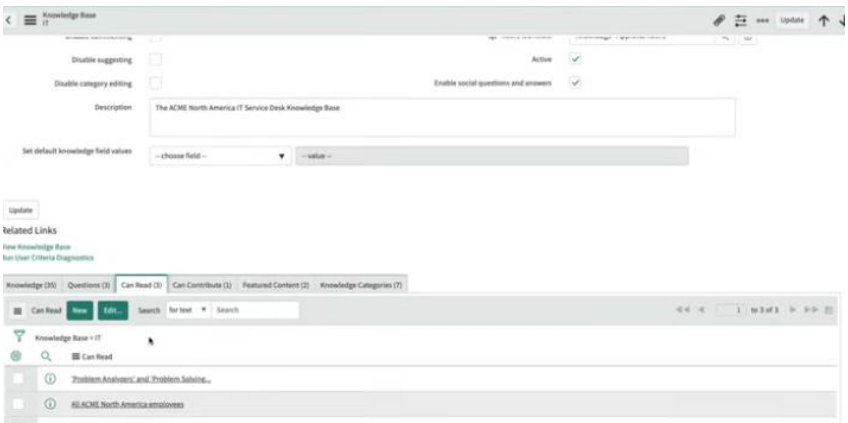
Benefits of Knowldege Management

Knowledge Application

The Knowledge Management application in ServiceNow allows users with appropriate roles to create and manage knowledge articles.

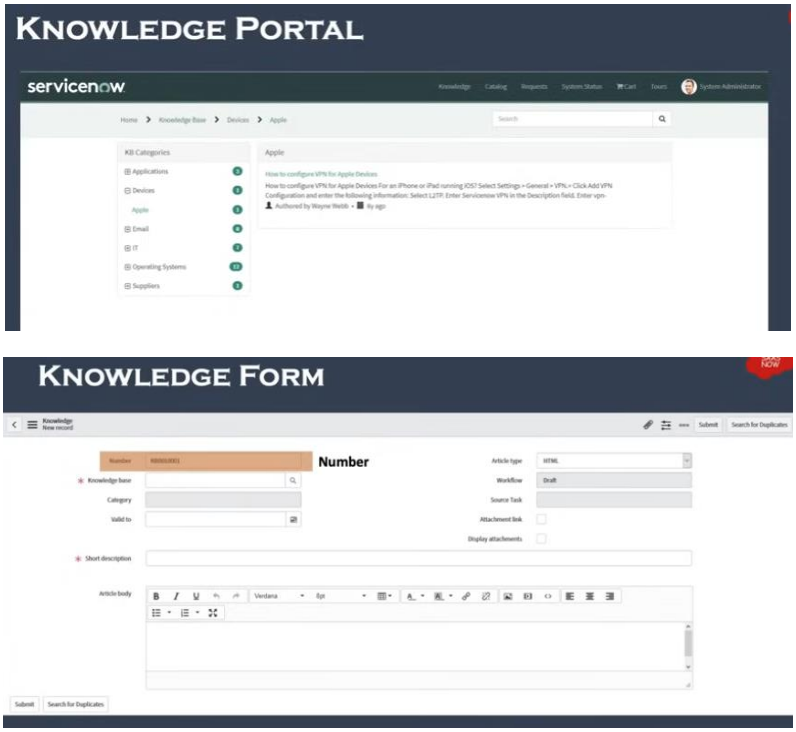
Access the Knowledge Management application by typing “knowledge” in the Application Navigator.





Knowledge Portal:

An advanced UI for accessing knowledge articles, allowing for improved user interaction and customization.



Key Components of the Knowledge Form:

Number: Automatically generated identifier for the article.

Knowledge Base: The specific knowledge base where the article will be created. This helps in categorizing and managing articles effectively.

Category: The category within the selected knowledge base that the article falls into. Categories help in organizing articles by topic or type.

Valid To: The date until which the article is considered valid. After this date, the article may be retired or removed.

Short Description: A brief summary or title of the article that provides a quick insight into its content.

Article Type: Defines the format of the article. Common types include HTML or Wiki. This affects how the content is rendered.

Workflow: Specifies the stages the article will go through before being published, such as Draft, Review, and Publish. The workflow ensures proper review and approval processes are followed.

Source Task: Indicates if the article was created from an existing task or record. This helps in tracking the origin of the content.

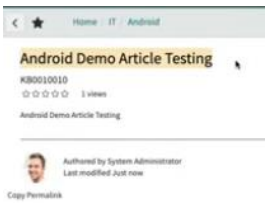
Attachment Link: Option to attach a document that users can download. When checked, the article will include a link to download the attached file instead of displaying the content directly.

Display Attachments: If checked, any attachments associated with the article will be visible at the bottom of the article page.

Article Body: The main content of the article where detailed information, instructions, or solutions are provided.

Submit Button: Saves and creates the article based on the provided information.

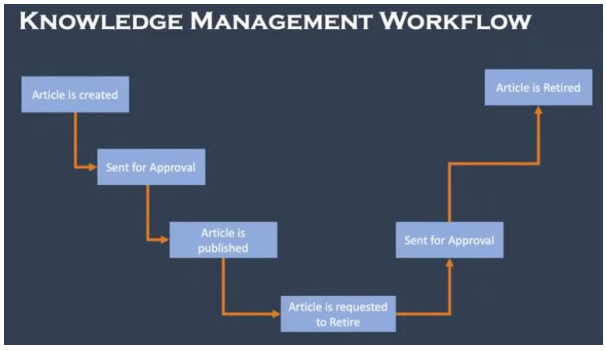
Search for Duplicates: A button to check if similar articles already exist in the knowledge base. This helps in avoiding duplication and consolidating information.

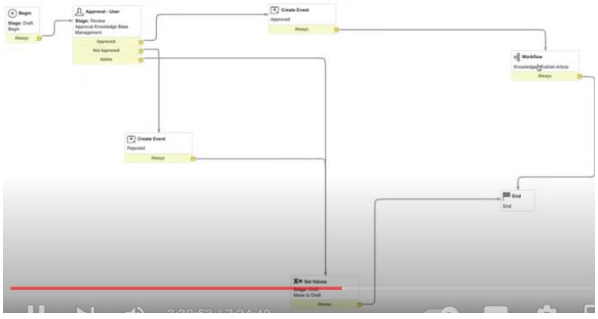


Feedback and Ratings:

Users can rate articles, flag them, and provide feedback on their helpfulness.

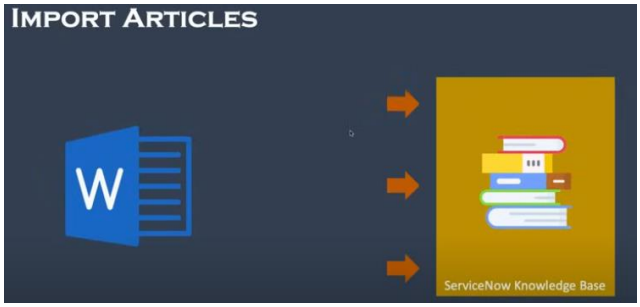
Feedback is tracked and managed in the Feedback Management section.

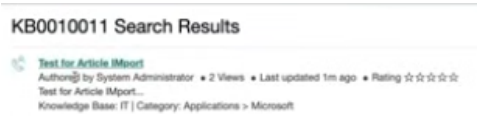




Articles follow a workflow from draft to approval, publication, or retirement.

Custom workflows can be created as needed.





Articles can be imported from DOC or DOCX files into ServiceNow. Attachments can be included, and the content can be previewed and managed.

Definition: A request ordering system for services and products offered by various departments within an organization.

Examples:

Cloud server requests from the hosting team.

Password reset services provided by the Windows team.

Benefits of Service Catalog

Centralized Ordering: Acts as a one-stop shop for requesting different services across departments.

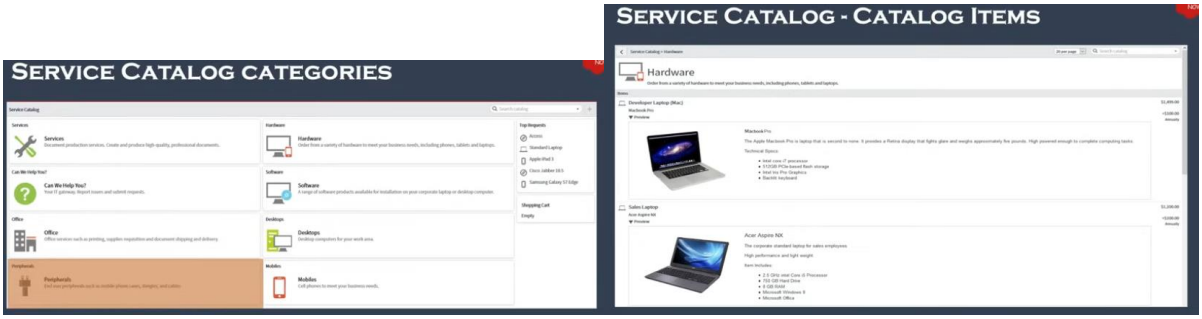
Categorization: Services are organized into categories for easier navigation, similar to shopping on Amazon.

Tracking: Users can track their requests and see estimated delivery times.

Catalog Categories

Purpose: Logical groupings of services/products to help users find the right service.

Management: Categories can be created and maintained under the Service Catalog application.



Catalog Items

Definition: Services or products offered, such as hardware or software.

Management: Items are managed through the Service Catalog application, including setting prices, delivery times, and visibility.

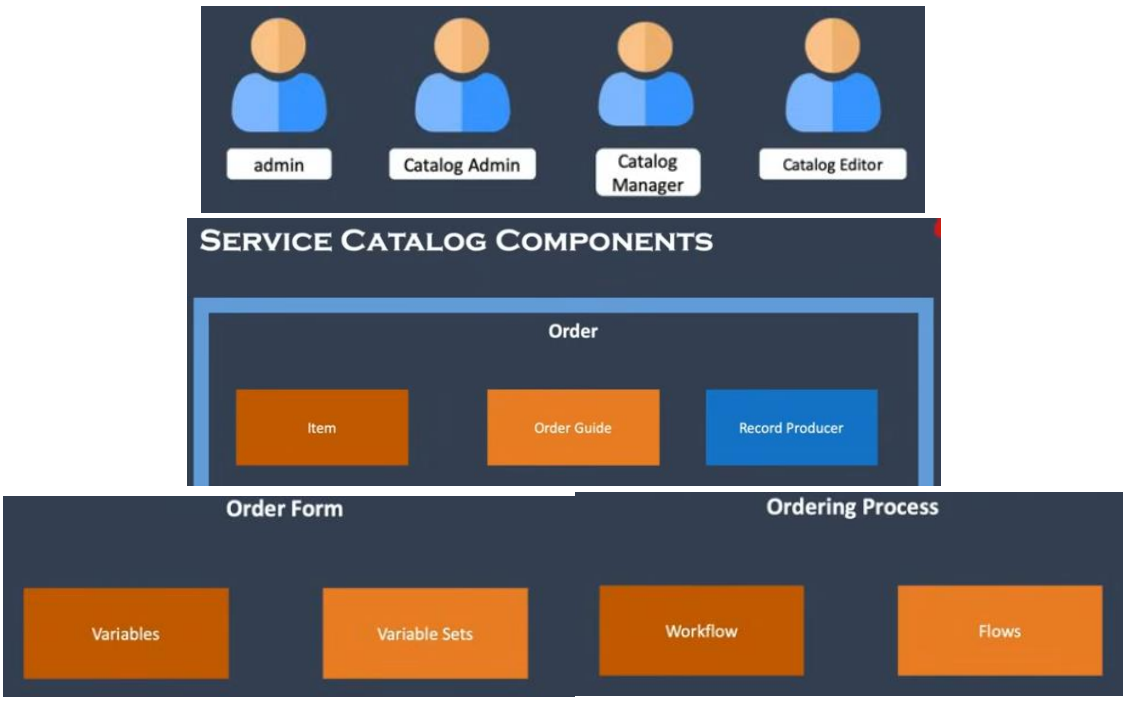
Catalog Roles

Admin: Full access to configure and manage the Service Catalog.

Catalog Admin: Manages catalogs, categories, and items but cannot do scripting.

Catalog Manager: Updates and manages service catalogs, including assigning editors.

Catalog Editor: Edits and updates catalogs, categories, and items but cannot manage other editors.

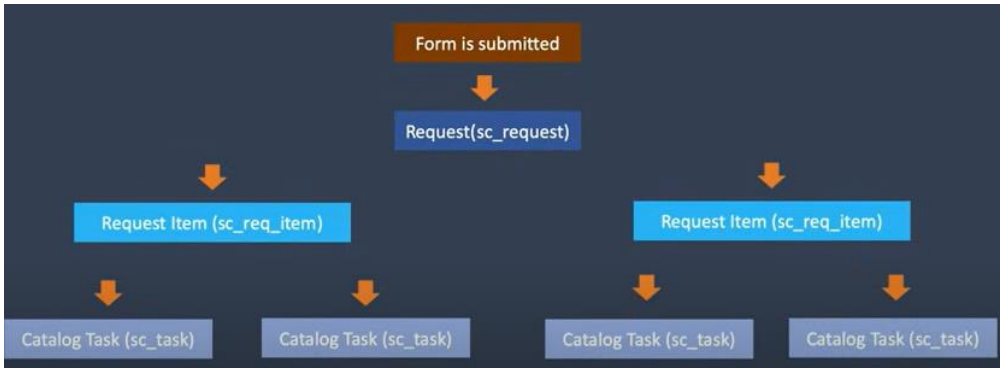


Catalog Components

Order: The service or product itself.

Order Form: Includes variables and variable sets for user input.

Ordering Process: Handled through workflows or flows for processing requests.



When a request is submitted, it creates records in different tables:

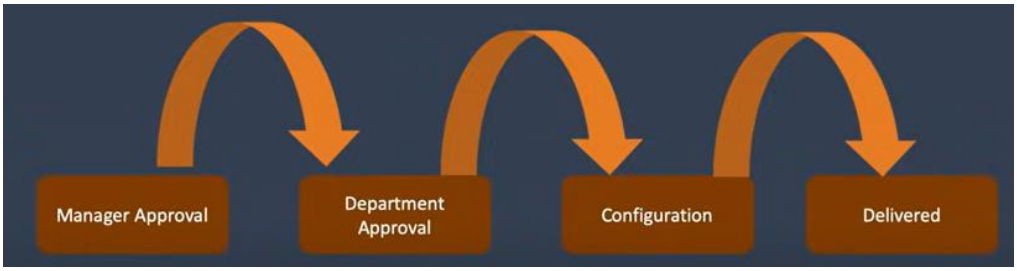
sc_request for the overall request.

sc_req_item for individual items in the request.

sc_task for tasks assigned to teams for processing

Request Stages

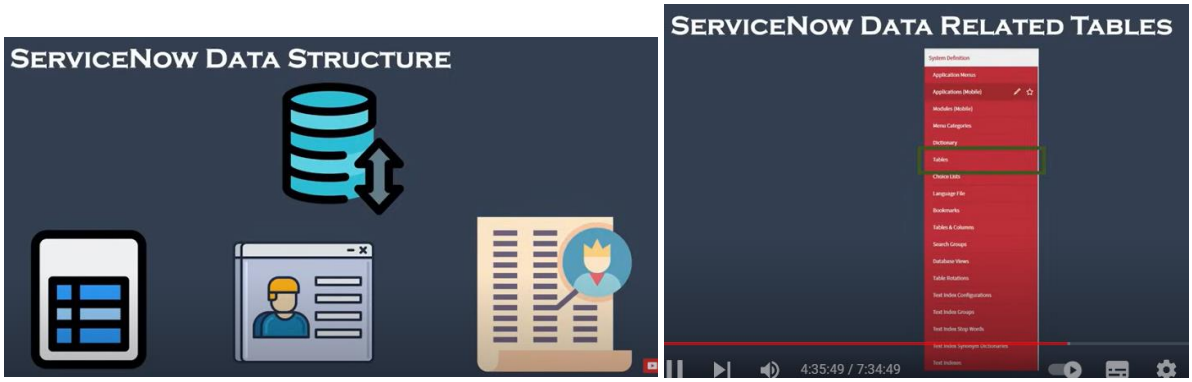
Requests go through various stages, such as approval and fulfillment. Stages can be customized to fit specific business requirements.



Tables and Fields:

Tables: ServiceNow stores data in tables, which are database components that store records. Each table consists of rows (records) and columns (fields).

Fields: Fields are columns in a table that hold specific pieces of data about a record. They can be of different types such as strings, numbers, dates, etc.

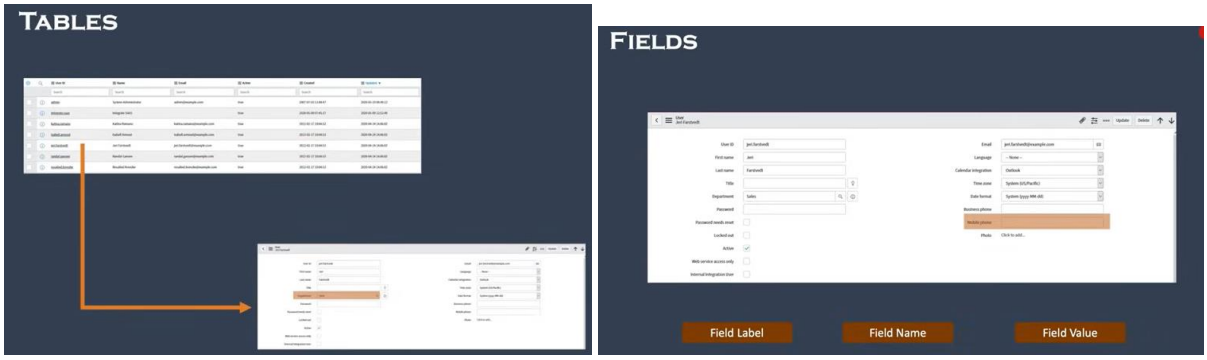


System Definition:

Tables Module: Shows a list of all tables in your ServiceNow instance. This includes both core and custom tables.

Tables and Columns Module: Provides a detailed view of tables and their fields. Allows for the creation of new tables and indexing.

Dictionary: Contains definitions for each table and field, including field attributes like label, name, and type.



Field Management:

Field Types: Different types of fields can be created, such as strings, choices, references, etc.

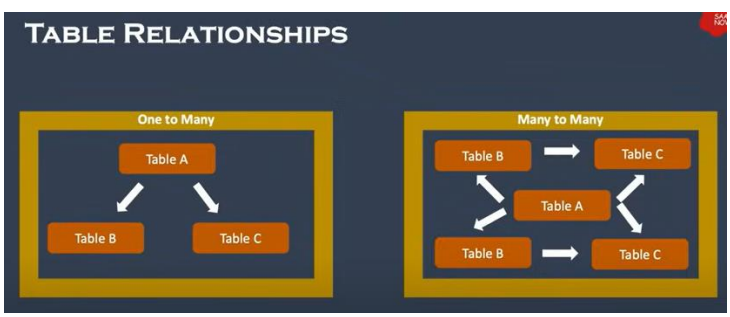
Field Attributes: Includes field label (display name), field name (backend name), and field value (data stored).

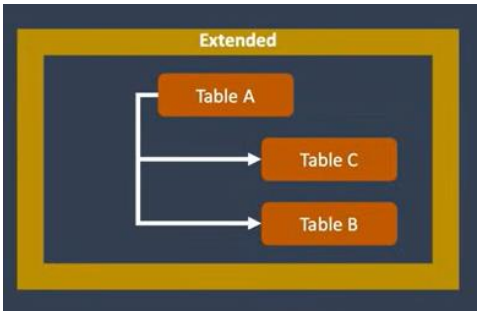
Table Relationships:

One-to-Many: One table references multiple records in another table (e.g., a user table referenced in the incident table).

Many-to-Many: Two tables are related to each other with multiple records in each (e.g., group and role tables).

Extended Relationship: Tables inherit fields from a parent table (e.g., incident and problem extending the task table).





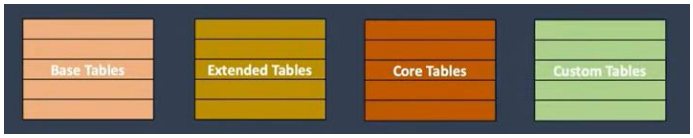
Creating and Managing Tables:

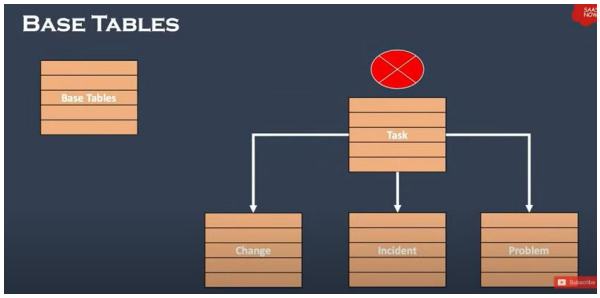
Base Tables: Tables not extended from any other table. Example: task table.

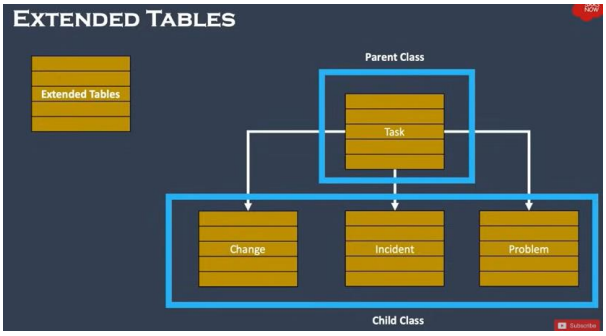
Extended Tables: Tables that inherit fields from a parent table. Example: incident table extends task table.

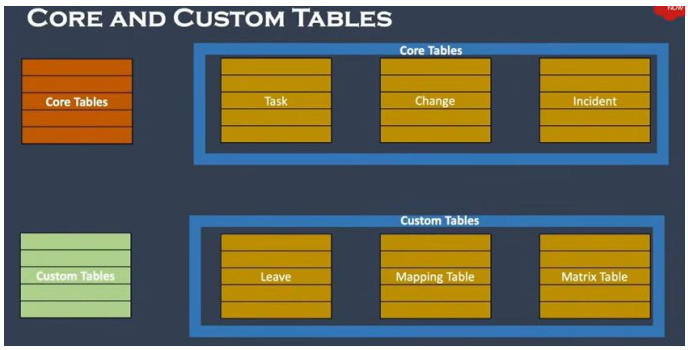
Core Tables: Predefined tables provided by ServiceNow. Example: incident, change, problem.

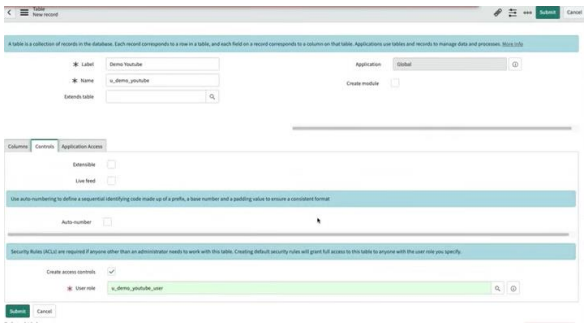
Custom Tables: Tables created by administrators or developers to meet specific business needs

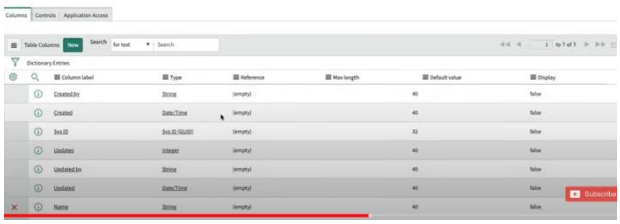




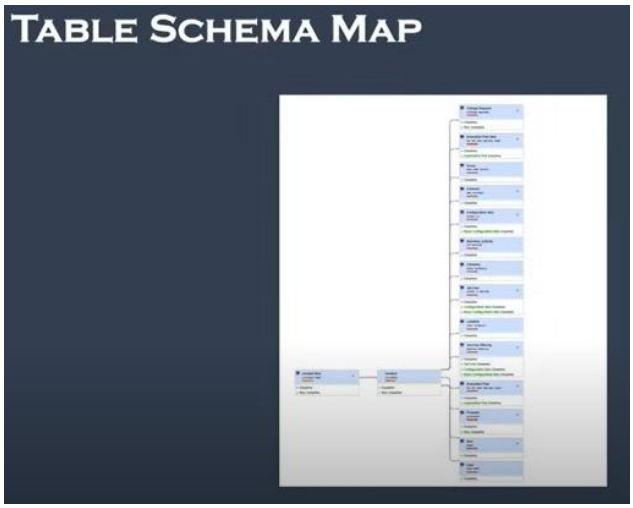








Schema Map: A graphical representation of table relationships. Shows how tables are related, including references and extensions.



ACL (Access Control List):

A security rule in ServiceNow that restricts access to tables, records, or fields.

Purpose: To control user permissions at various levels (table, record, field) and ensure that data access is restricted based on roles and conditions.

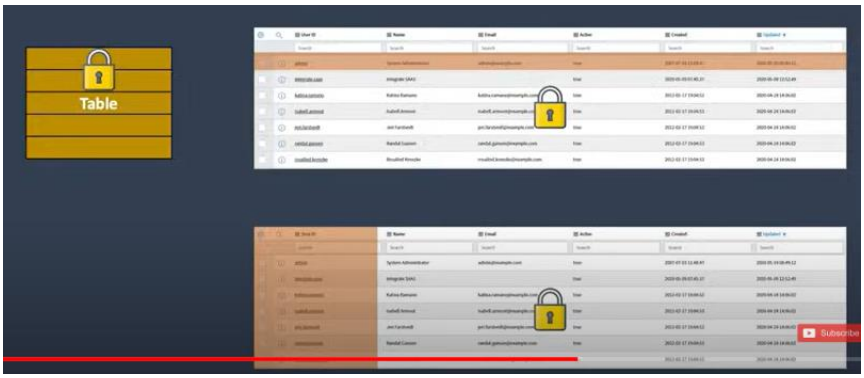
Types of Permission

Login Security: Controlled by user groups and roles.

Application and Module Security: Visibility based on roles.

Table and Record Security: Controlled by ACLs.

Access Control



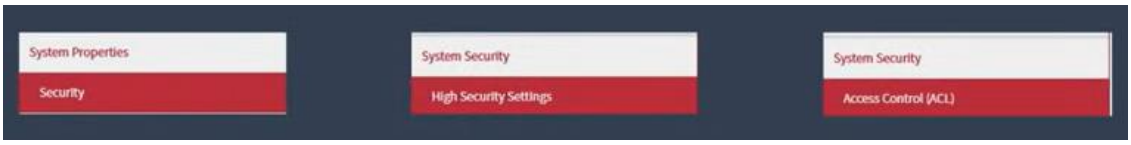
Operations restricted

CRUD Operations: Create, Read, Update, Delete.

ServiceNow-Specific Operations: Execute scripts, add CI relations, save as template, create reports, personalize choices.

Security modules

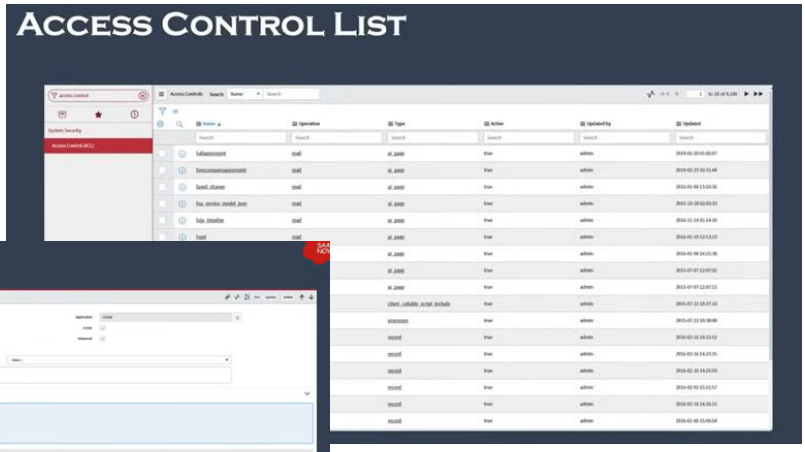
Under system security application

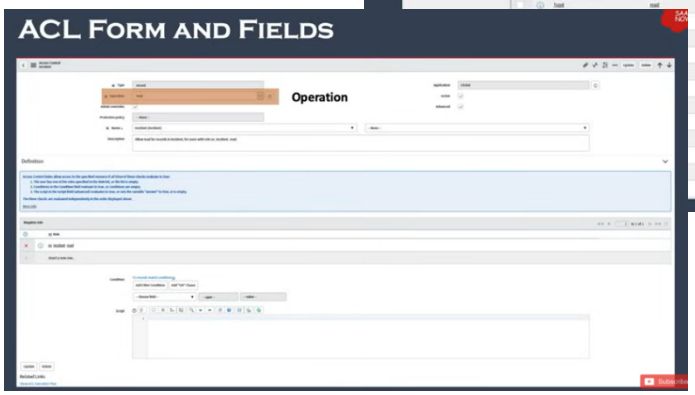


Security: Configures overall security settings like authentication and encryption.

High Security Settings: Manages stringent security measures, such as IP restrictions.

Access Control (ACL): Defines and manages access rules for tables, records, and fields based on roles and conditions.





Name: Descriptive name of the ACL rule.

Type: Type of access control (e.g., record, field, table).

Operation: Specifies the operation (e.g., read, write, create, delete) the ACL rule applies to.

Table: The table to which the ACL rule applies.

Condition: Conditions that must be met for the ACL rule to be applied.

Script: Custom script to define complex access control logic.

Role: Roles that have the permission defined by the ACL.

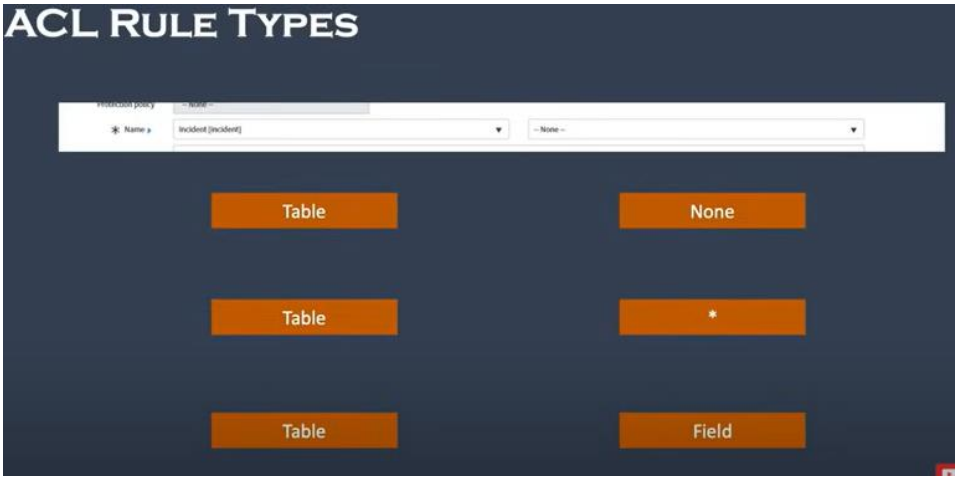
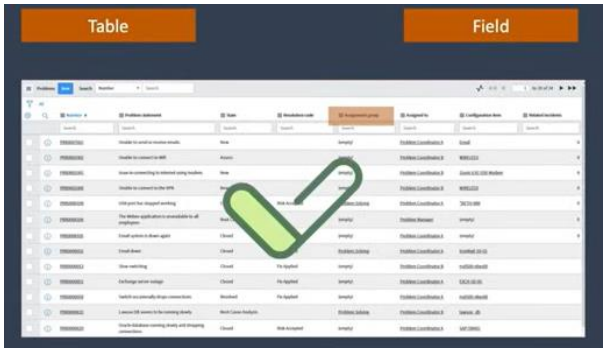


Table.none: Applies to the entire table *Table. **:Applies to all fields within the table.



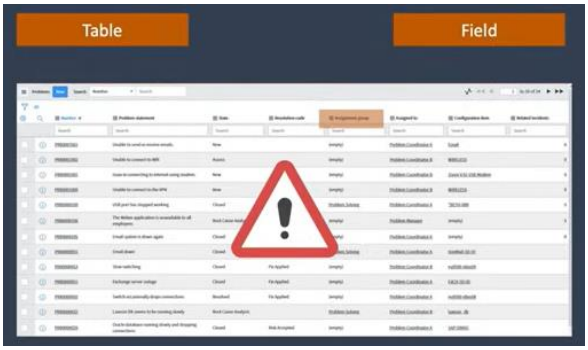
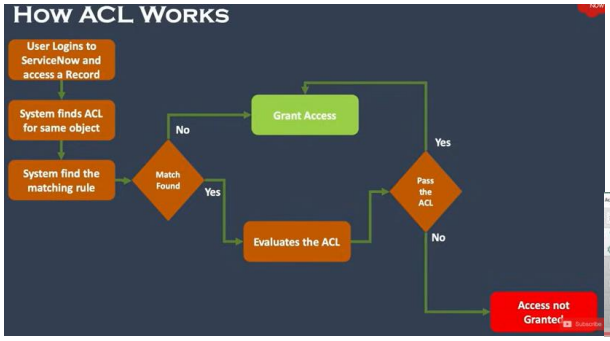


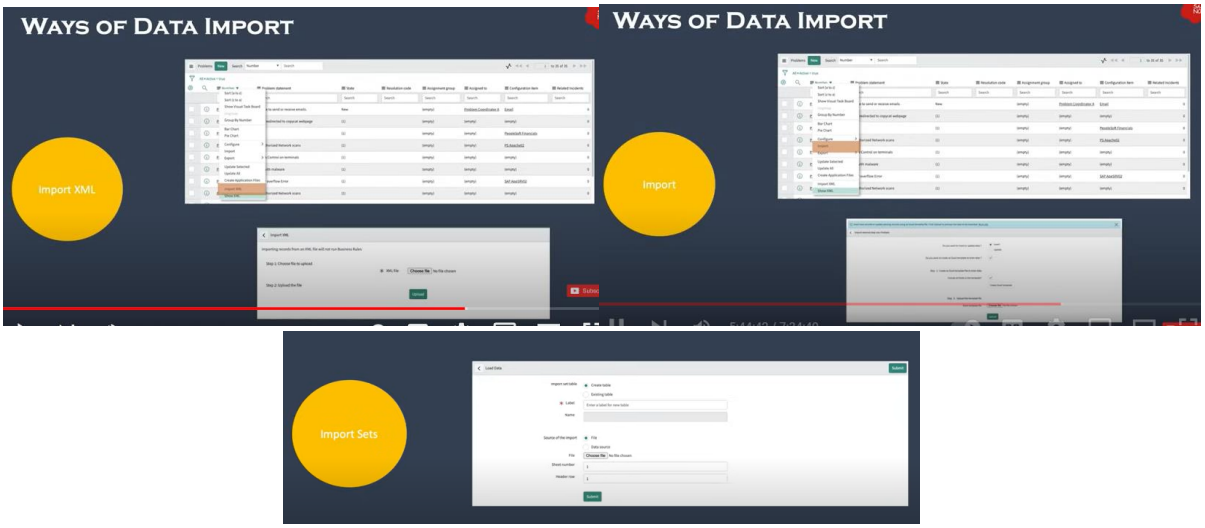
Table.field: Applies to a specific field within the table.



Need for Data Import:

Bulk upload data to avoid manual entry.

Examples include importing user data from Active Directory, employee data from HR systems, knowledge articles, and asset information



Ways to Import Data:

Import XML: Use XML files for moving data between ServiceNow instances. Useful for transferring data directly.

Import Sets: Core functionality for importing data from various sources (files, LDAP, etc.). Uses staging tables to process data before updating target tables.

Transform Maps: Define relationships between source data fields and ServiceNow target table fields. Maps fields automatically or manually.

Data Sources: Specify the origin of the data, such as files, LDAP, or JDBC connections.

Import Set Components:

Data Source: Where data originates from (e.g., file, LDAP, JDBC).

Import Set Table: Temporary staging table where data is initially loaded.

Transform Map: Maps fields from the import set table to target tables.

Coalesce Fields: Check for existing records before importing data to update or insert new records.

Target Table: Final table where processed data is saved.

Steps to Import Data:

Create an Import Set: Define the source of data and load it into the import set table.

Create a Transform Map: Map source data fields to target table fields.

Run Transform: Process data from the import set table to the target table.

Monitor and Troubleshoot: Check import progress, errors, and logs.

Data Import Tools in ServiceNow:

System Import Sets Application: Manage import sets, create transform maps, load data, and view logs.

Scheduling Imports: Automate regular data imports from sources.

step-by-step process for importing data into ServiceNow using the Import Sets and Transform Maps features.

Save Excel File: Prepare and save your data in an Excel file.

Load Data:

Navigate to System Import Sets > Load Data.

Select your file, define the header row, and submit to load data into the staging table.

Create Transform Map:

Create a Transform Map to map fields from the staging table to the target table.

Use Mapping Assist to match fields and save the Transform Map.

Transform Data:

Run the Transform Map to move data from the staging table to the target table.

Check the Import Set log for success.

Configure Coalesce Fields:

Set Coalesce fields in the Transform Map to update existing records instead of creating duplicates.

Apply Data Policies:

Create Data Policies to enforce rules like mandatory fields.

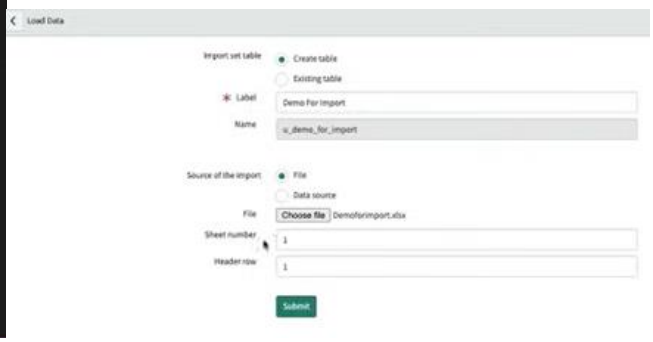
Test by importing data that should be rejected if it violates the policy.

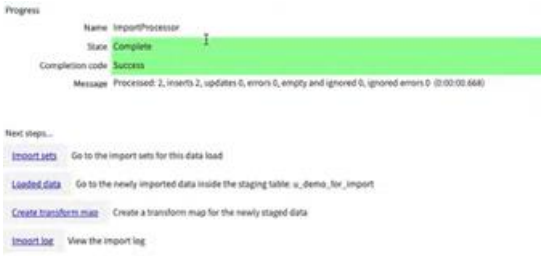
Handle Errors:

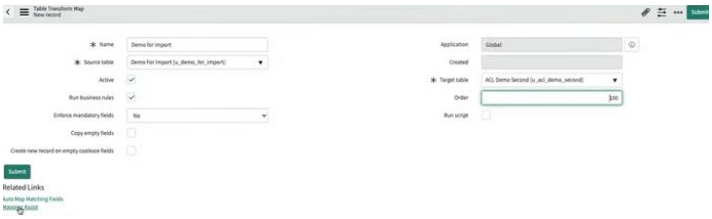
Review import logs and correct any issues with Coalesce fields or Data Policies.

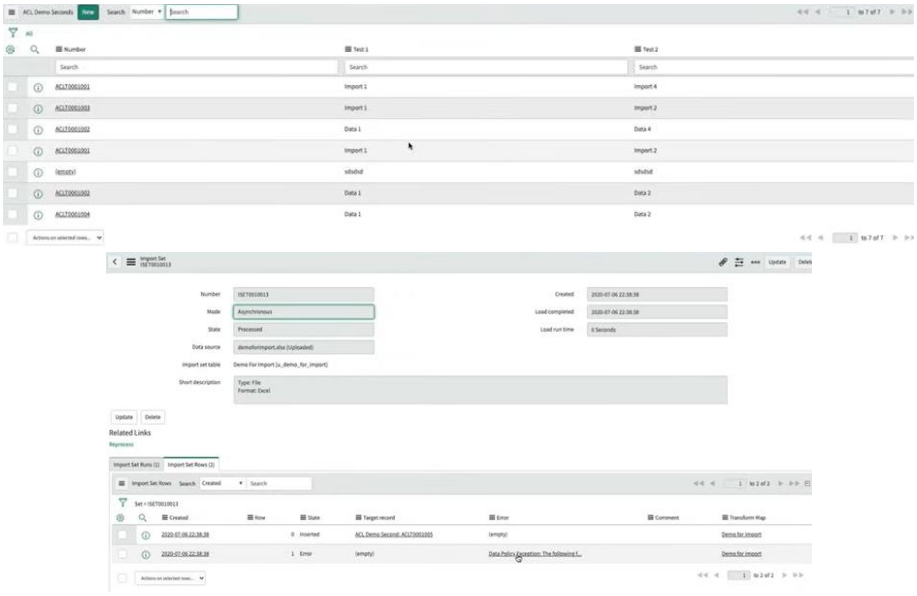
Explore CMDB:

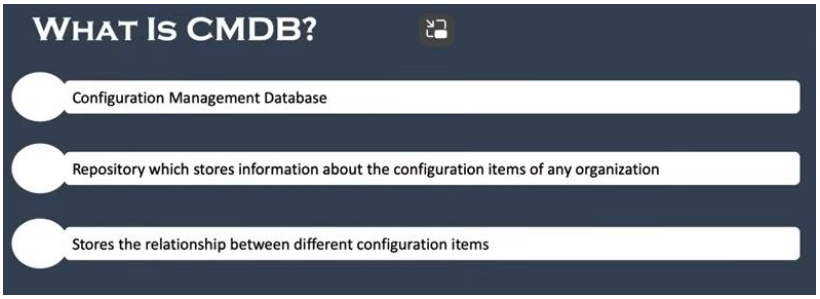
Understand CMDB tables, CI classes, and relationships to manage configuration items effectively.





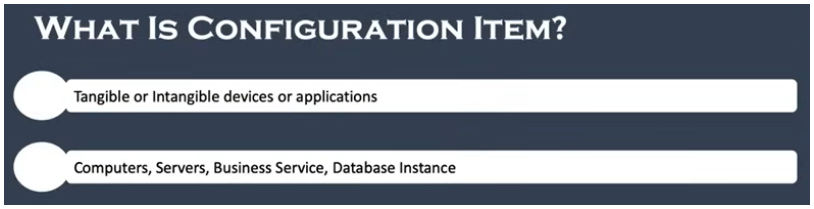






CMDB

Is a database that stores information about configuration items (CIs), such as computers, servers, applications, and their relationships. It helps manage and track these items within an organization.

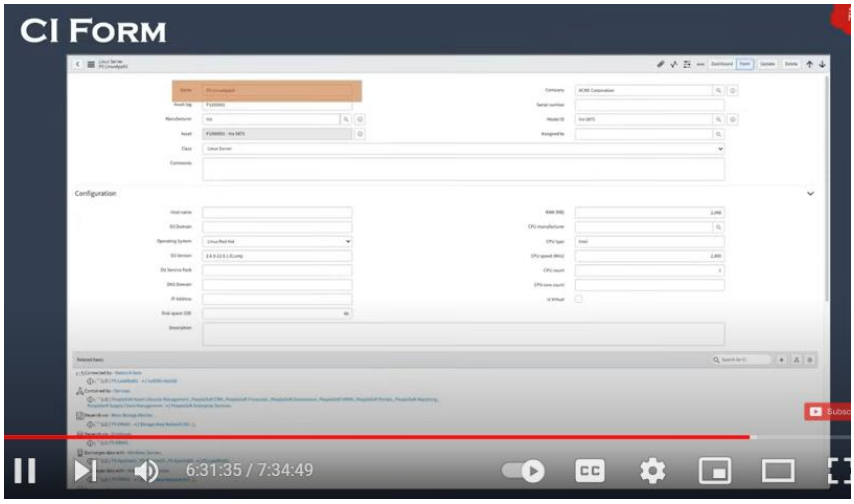


A **Configuration Item (CI)** is any component that needs to be managed in order to deliver an IT service. In ServiceNow, a CI can be:

Tangible: Physical items like computers, servers, or network devices.

Intangible: Non-physical items like software applications, databases, or services.

The **CMDB (Configuration Management Database) application** in ServiceNow is a foundational module used to manage and maintain information about Configuration Items (CIs) within an organization



In ServiceNow, a **CI (Configuration Item) form** is used to view and manage details of a specific Configuration Item within the CMDB.

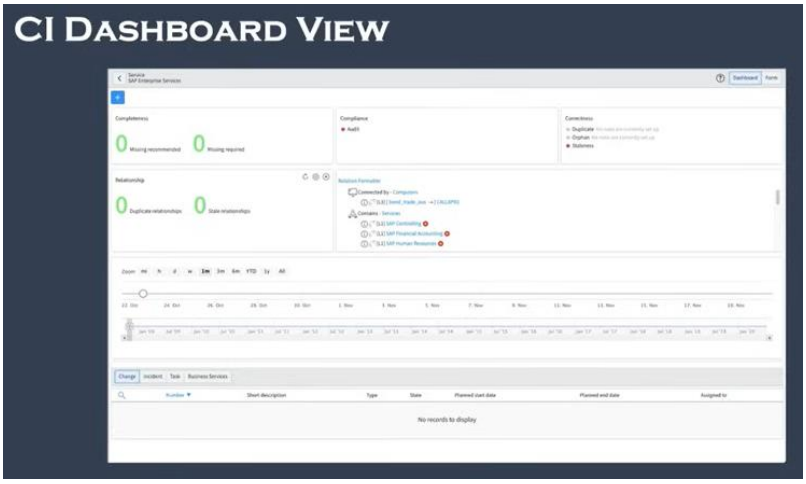
Form Header: Displays CI name and options for actions like save or delete.

Form Fields: Basic information and attributes specific to the CI class.

Related Lists: Shows related CIs, change history, and attachments.

Tabs: Sections for general details and specific attributes.

Contextual Actions: Links to related change requests, incidents, and service catalog items.



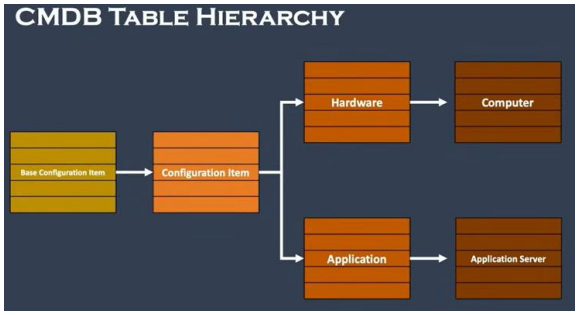
CI (Configuration Item) Dashboard View in ServiceNow provides a visual summary of Configuration Items, offering insights into their status, relationships, and key metrics.

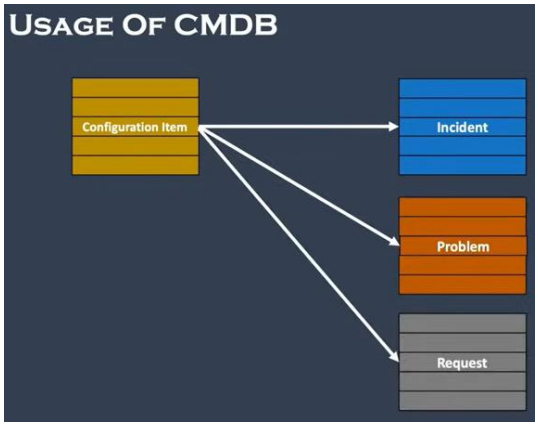
Widgets: Graphs, charts, and reports displaying CI data such as status distributions, change requests, and incidents.

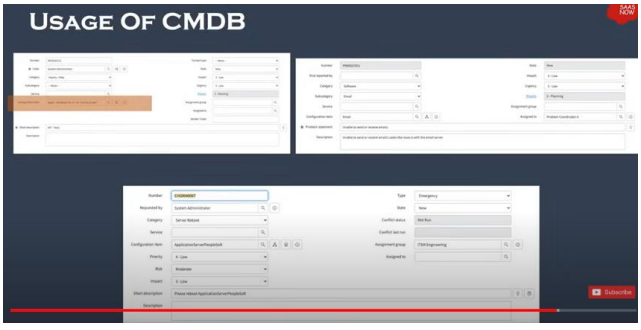
Filters: Options to view CIs based on criteria like type, status, or location.

Maps: Visual representations of CI relationships or physical locations.

Lists: Summaries of CIs, including critical or recently updated items.



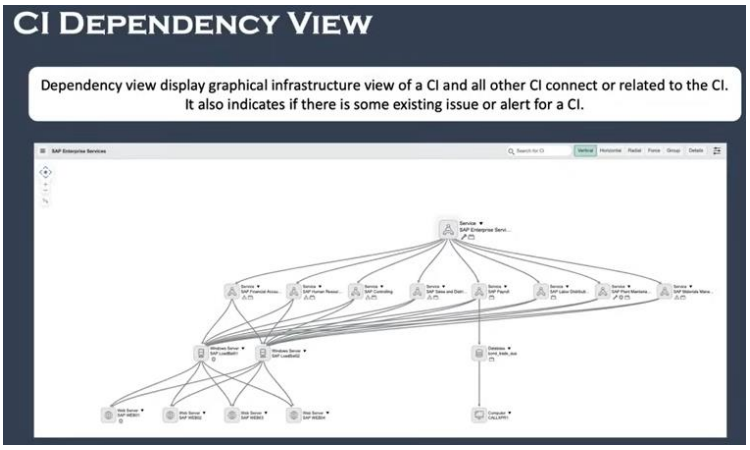




Usage of CMDB.

Incident and Change Management: Identifies which CIs are impacted during incidents or changes to ensure effective resolution.

Impact Analysis: Assesses how changes to one CI might affect other related CIs.



CI Dependency View

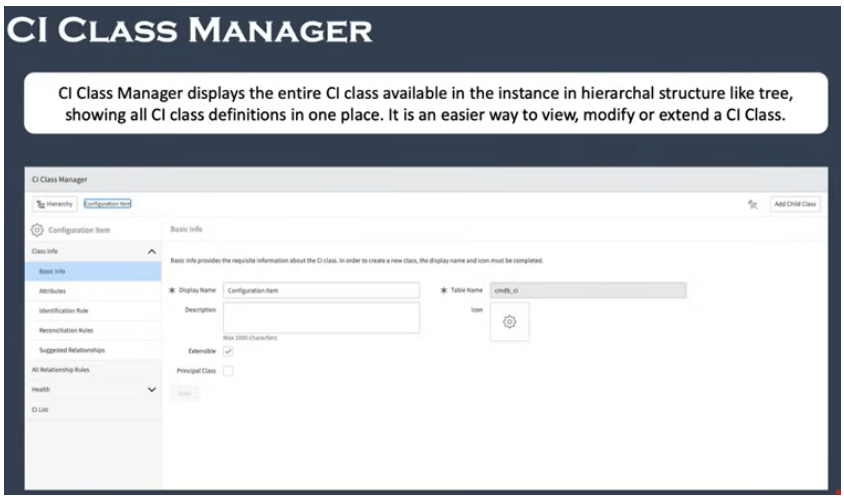
Purpose: Provides a visual representation of how CIs are interrelated, showing dependencies and interactions.

Benefits:

Impact Analysis: Helps to evaluate the potential impact of changes on other CIs.

Troubleshooting: Facilitates identification of dependencies that may be contributing to issues.

Change Planning: Assists in planning changes by understanding potential impacts on dependent CIs.



Purpose: Manages Configuration Item (CI) classes within the CMDB.

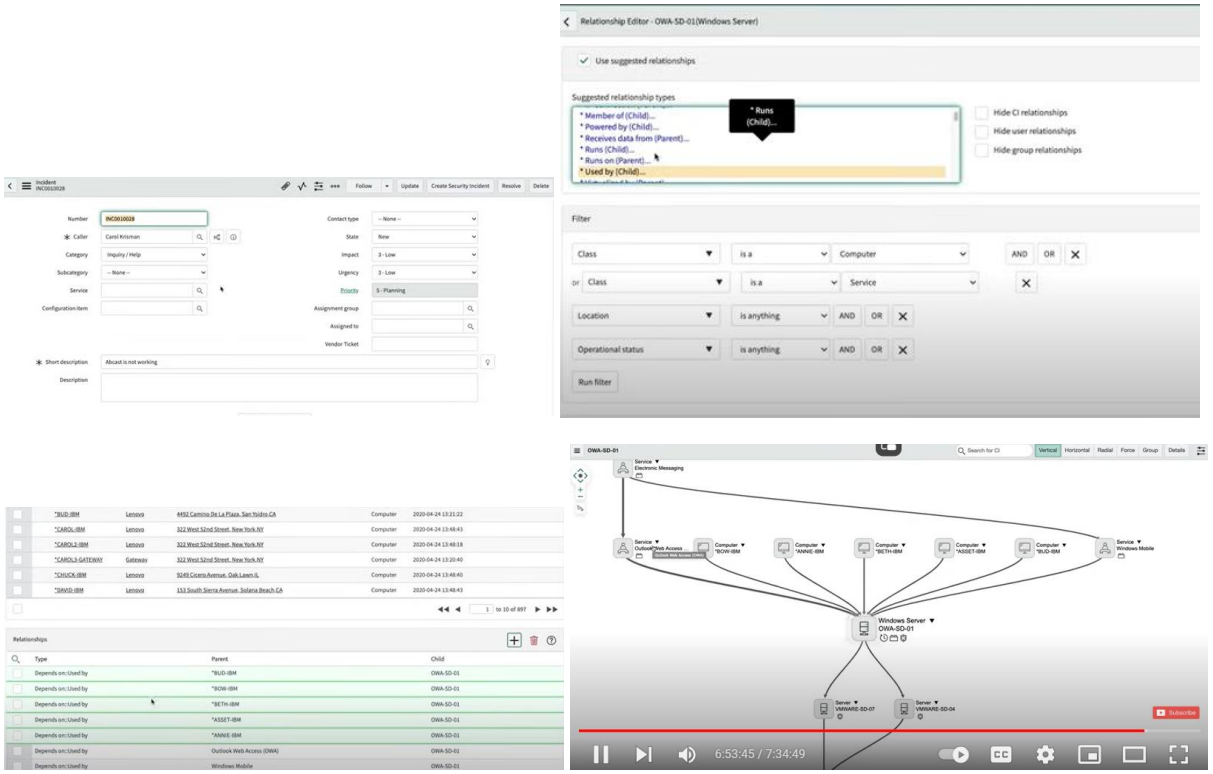
Functions:

Define and Manage Classes: Create and manage CI classes, their attributes, and relationships.

Class Hierarchies: Set up parent-child relationships among different CI classes.

Attributes and Fields: Define specific attributes and fields for each CI class.

Relationship Types: Specify and manage types of relationships between different CIs.



Key CMDB Tables

cmdb_ci: The fundamental table for storing Configuration Items (CIs). All other CI tables extend from this base table.

cmdb_ci_computer: Details about computer hardware, including servers and desktops.

cmdb_ci_server: A specialized table for server-related CIs.

cmdb_ci_network: Contains network-related CIs, like routers and switches.

cmdb_ci_database: Information about database servers.

cmdb_ci_application: Manages application-related CIs.

CMDB Table Hierarchy

Base Table: cmdb_ci

Extends: cmdb_ci_computer, cmdb_ci_server, cmdb_ci_network

cmdb_ci_database , cmdb_ci_application

Login and Integration :

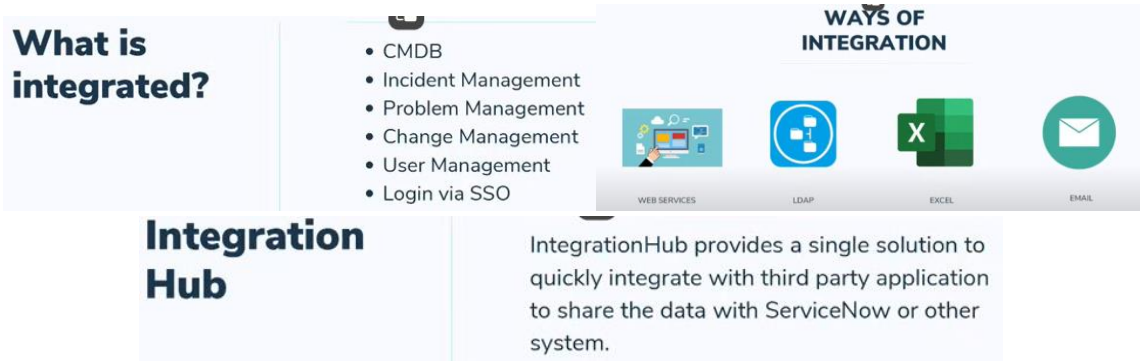
ServiceNow provides multiple methods for integrating with other systems:

Web Services: Utilize REST or SOAP APIs for data exchange.

LDAP (Lightweight Directory Access Protocol): Integrate with directory services for user authentication and data synchronization.

Excel: Import and export data through Excel spreadsheets.

Email: Use email integration for notifications and data processing.



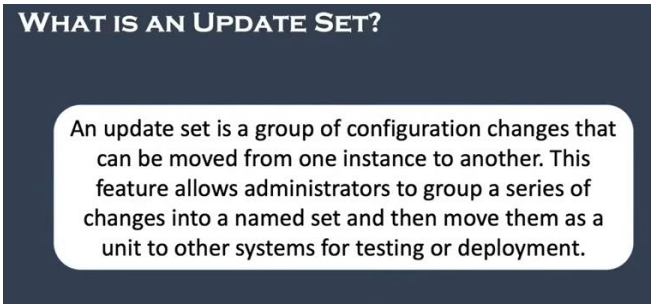
Integration Hub:

Purpose: Integration Hub offers a streamlined solution for integrating with third-party applications and sharing data with ServiceNow or other systems.

Features:

No-Code Integration: Utilizes Flow Designer to create integrations without writing code.

Spokes: Pre-built integration connectors for various applications.

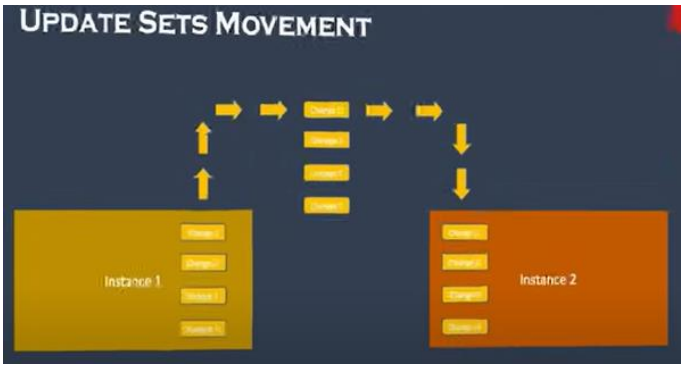


Update Sets

A collection of configuration changes grouped together that can be moved from one instance to another. This feature enables administrators to consolidate and transfer changes as a single unit.

Purpose: To manage and migrate configuration changes between ServiceNow instances (e.g., from development to production).

Example: If you modify a form by adding fields and a UI action button, these changes are captured in an update set, allowing you to move all these changes together to another instance.



Update Set Movement:

Process: Changes made in one instance (e.g., development) are captured in an update set and then moved to another instance (e.g., production) for testing or deployment.

Diagram: Development Instance → Production Instance. Changes are captured in update sets and replicated in the target instance.

Update Sets Application:

System Update Sets Module: Manage update sets through various modules:

Update Sources: Configure remote instances for update set retrieval.

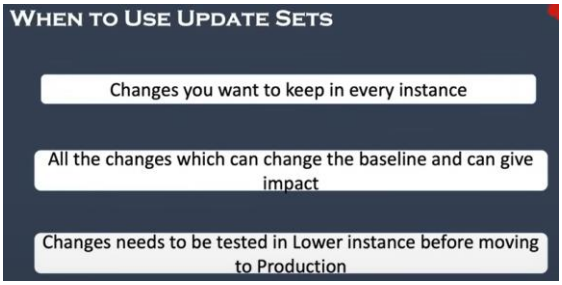
Retrieved Update Sets: View update sets pulled from other instances.

Update Log: Log of actions related to update sets.

Local Update Sets: Update sets specific to the current instance.

Merge Update Sets: Combine multiple update sets into one.

Update Sets to Commit: Review and commit update sets for installation.

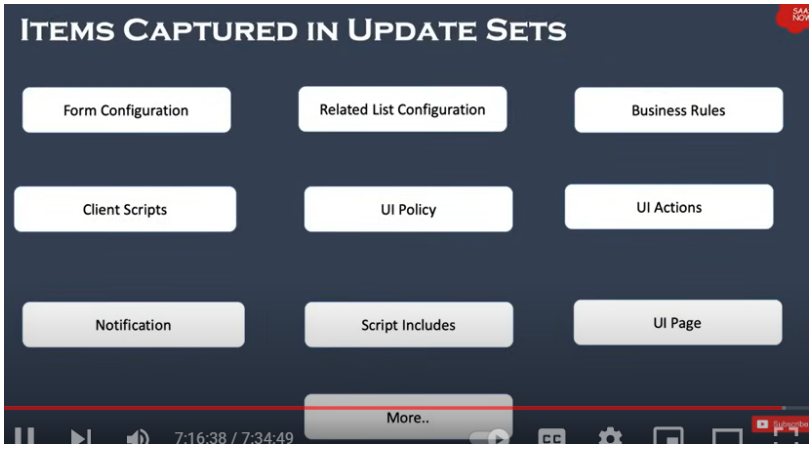


Use Cases:

Consistency Across Instances: Move changes from development to production to ensure consistency.

Impactful Changes: Capture significant changes that affect the baseline configuration.

Testing: Ensure changes are tested in lower environments before moving to production.

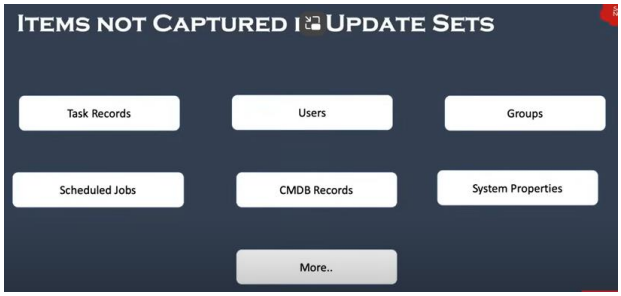


Automatically Captured:

Form configurations, business rules, client scripts, UI policies, UI actions, notifications, script includes, UI pages.

Not Captured:

Task records (e.g., incidents, changes), user data, groups, scheduled jobs, CMDB records, system properties.



Version Consistency: Ensure both source and target instances are on the same ServiceNow version.

Correct Update Set: Verify the right update set is selected during development.

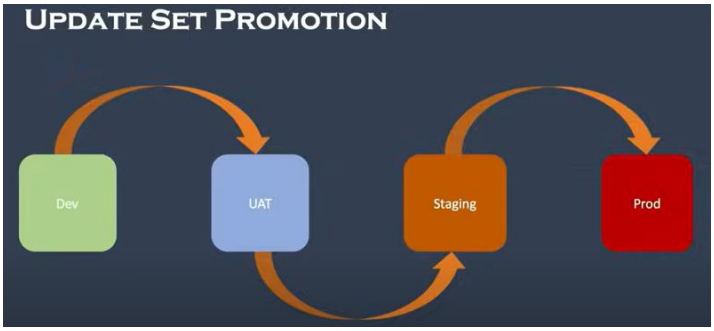
Instance Cloning: Clone production to lower instances to maintain data consistency.

Update Set Path: Define a clear path for update set movement (e.g., Dev → UAT → Staging → Production).

Commit Planning: Plan and schedule update set commits carefully to avoid surprises.

Naming Convention: Use a clear and consistent naming convention for update sets.

Preview and Commit: Review and fix any issues before committing the update set.



Development to Production: Move update sets through different stages:

Dev Instance: Capture and test changes.

UAT Instance: Conduct user acceptance testing.

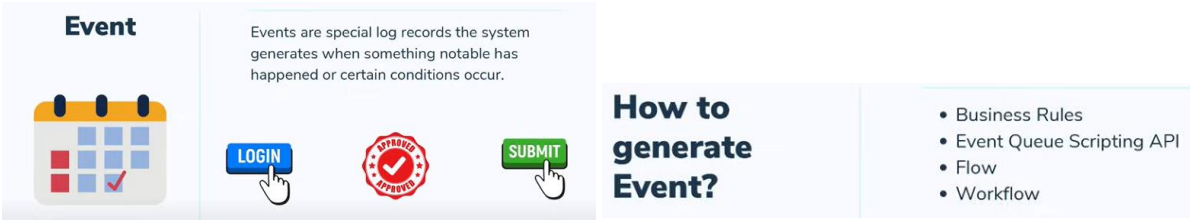
Staging Instance: Perform pre-production testing.

Production Instance: Implement changes.

System Update Set Tables:

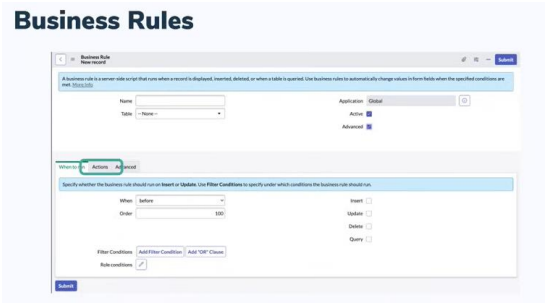
Update Set Table: Stores details about update sets (e.g., sys_update_set).

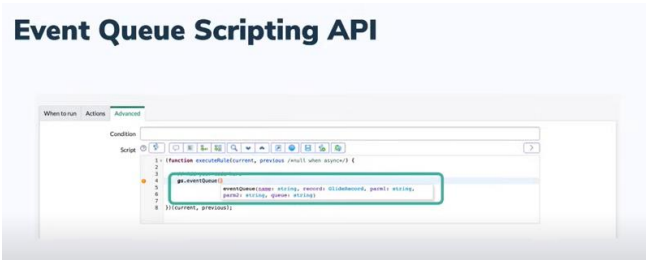
Customer Update Table: Contains XML-formatted changes related to an update set



Events

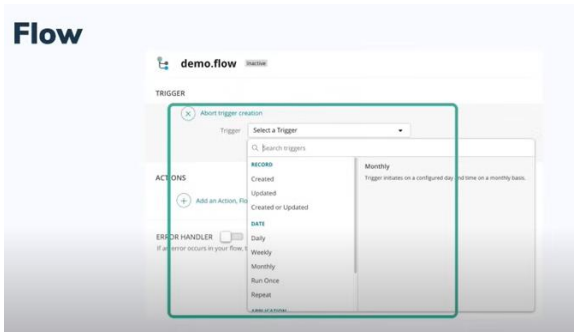
Are special log records generated when something notable happens in ServiceNow. These events can be triggered by various conditions or actions and are used to perform specific actions or trigger notifications based on those events.

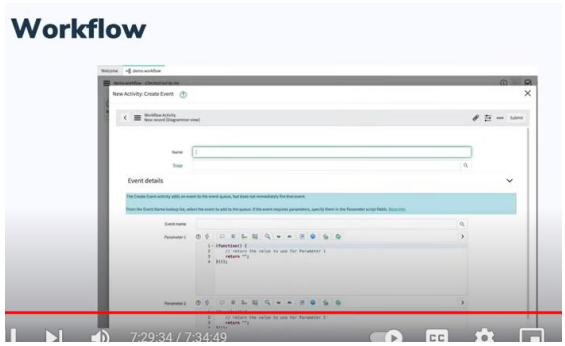




Business Rules: Events can be generated when conditions defined in business rules are met, such as record updates, inserts, or deletions.

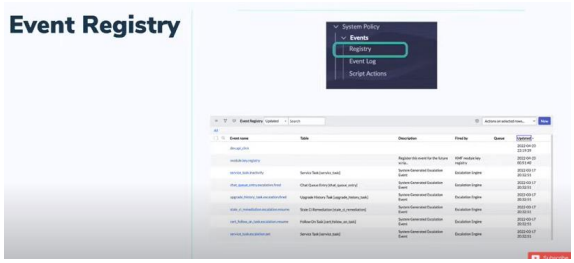
Event Queue Scripting API: Use the gs.eventQueue method in server-side scripts to generate events manually. This method requires specifying the event name, record, parameters, and optionally, a specific queue.

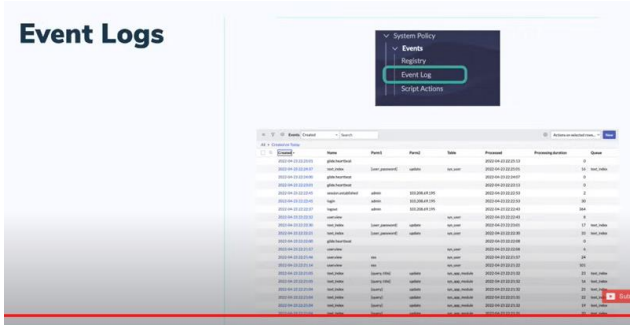




Flow: In flows, you can define triggers for events, such as record creation or updates, and perform actions based on these triggers.

Workflow: In workflows, use the "Create Event" activity to generate events and define actions to be taken when the event occurs.





Event Registry:

Events must be registered in the Event Registry before they can be triggered. The naming convention often includes the table name and the action (e.g., incident.inserted).

Event Log:

Location: Found under System Policy > Event Log.

Purpose: Shows all events generated in the platform. Useful for monitoring and troubleshooting, such as checking if a script's event has been processed.

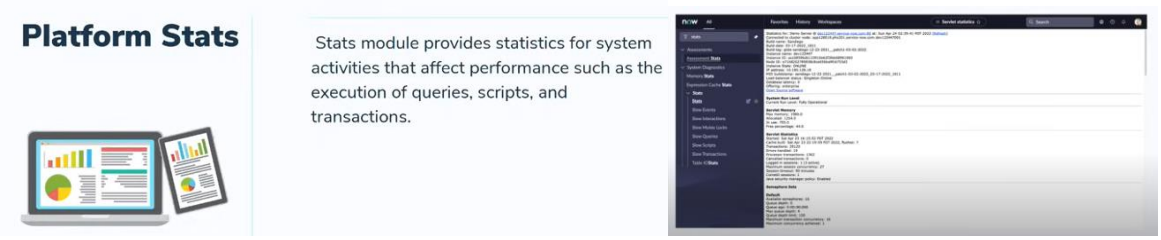
Event Actions:

Notifications: Send notifications based on events.

Business Rules: Configure actions in business rules for events like record insertion or updates.

Flow Actions: Define actions in flows triggered by events.

Script Actions: Write custom scripts to handle events if needed.



Platform Stats provides statistical information about system activities that impact performance, such as script execution, queries, and transactions.

Features:

Version Information: Displays the version of the ServiceNow instance (

Instance Details: Shows instance name, IP address, and cluster details.

Performance Metrics: Provides information on server memory usage, transaction statistics, and errors.

Troubleshooting: Useful for diagnosing performance issues or identifying instance details for administrative purposes.

Usage:

Accessed through System Diagnostic > Stats.

Helps developers and administrators understand the instance's performance and troubleshoot issues.