# ServiceNow Administration Fundamentals

## Week – 2 Hand Book

**My Learnings:**

**Baseline Implementation:** It is a set of installed applications on a ServiceNow instance before any configuration or customization has been done.
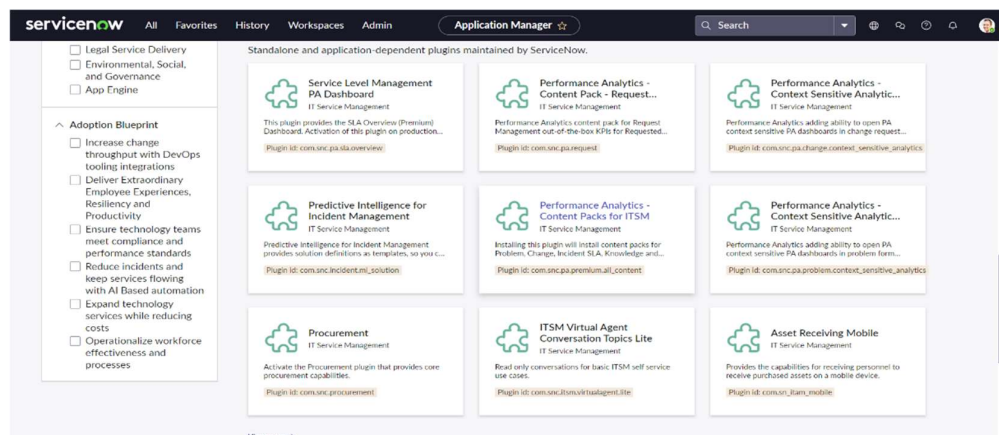
**Instance:** It is a copy of a ServiceNow environment specific to a customer.

- **Production Instance** – Employees do their work
- **Development Instance** – Admins & Implementers Configure.
- **Testing Instance** – Implementers Test their changes before moving into production.

**Applications:** Available in the ServiceNow Store, Developed by ServiceNow partners.
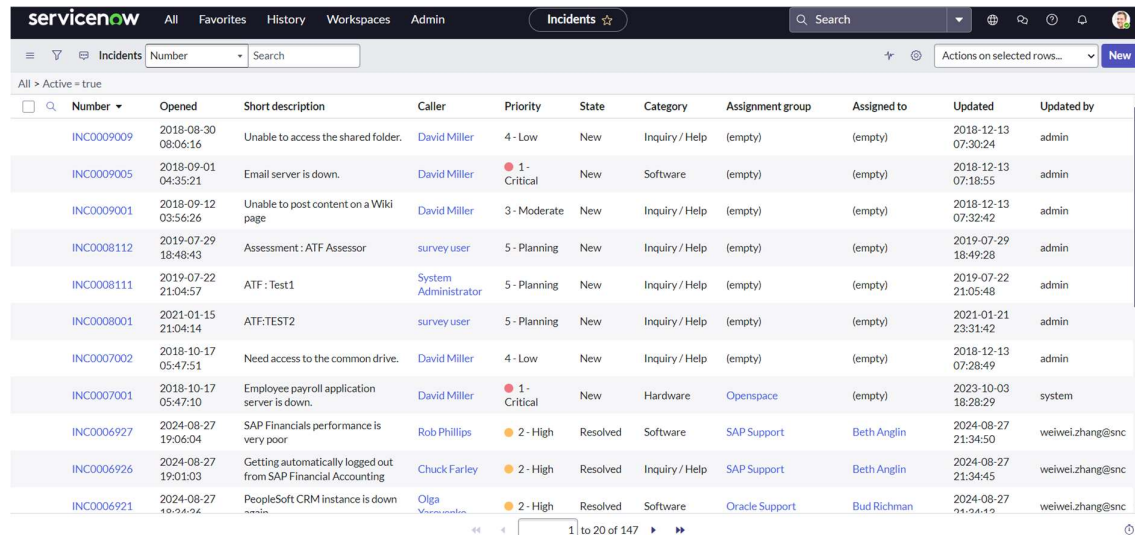
**Plugins:** Exclusively developed by ServiceNow, these are functionalities added to the present instance.

- It adds additional features and functionalities to the platform.
- Plugins are basically available in the servicenow store

**List** – A list displays a set of records from a table within the content environment.



- The intersection of each row and column is the data value.
- Each row represents one record.
- Each column represents one field.

**List Views** – Views provide specific fields or columns to support different work activities.
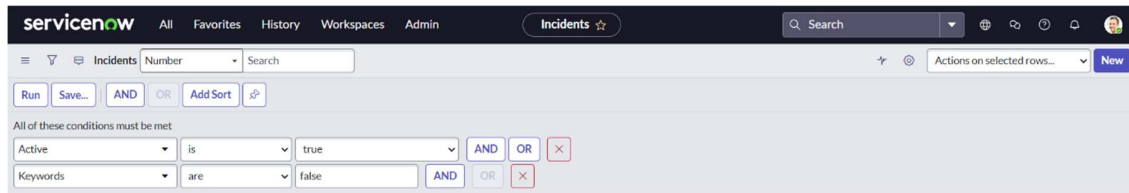
**Sort Controls** – A list that is displayed to a user for the first time will be sorted by one of the following.

- Order Field
- Number Field
- Name Field
- Specific Field

- To access the fields on related tables, we use dot-walking
- We cannot dot-walk to a field when using Form Design.

**List Filters** – A filter is a set of conditions applied to a table list to isolate a subset of the data.



The three parts of a filter conditions are:

- Field
- Operator
- Value

1. The fields on the form are the same in the classic Environment and a workspace, but the details appear in different places.
2. Personalize form is a way to meet the needs of some groups without configurations that would affect everyone.
3. Context Menus provide different levels of controls for any given list view.
4. By using list filters, we can quickly narrow down large datasets, improving efficiency in data management and helping users find relevant records more easily.

# Form Configurations

**Form Layout Customization:**

1. Add, remove, and rearrange fields on the form to fit user needs.

**UI Policies:**

2. Create dynamic form behaviours (e.g., making fields mandatory or read-only) based on conditions.

**Form Views:**

3. Create multiple views for different user roles or purposes to tailor form presentation.

**Field Styles and Scripting:**

4. Customize field appearances and use client scripts to add dynamic functionality and validation.

**Access Controls:**

5. Set permissions to control user access to form fields and functionalities.

**Form Designer:**

6. Use the Form Designer tool to visually customize form layouts, organize fields, and add sections.

**Field Types:**

7. Utilize different field types (e.g., choice, reference, date) to capture various data types and improve form usability.

## 8. A form displays fields from one record

# Form Configuration

- Data in ServiceNow is stored and managed according to a database structure that administrators can view and configure
- **Tables:** These are data structures that contain records.
- **Records:** These are data stored in tables, which contain fields
- **Fields:** These are individual pieces of data within a record.
- There are different field types in forms
    - Eg: Reference, Date, Choice, True/False
- There are different views according to the user's need.
- We can configure form design & form layout according to user's requirement.

- **Formatter:** A formatter is an element used to display information that is not a field in the record

  The following are the basic formatters:

  Activity, Process, Parent breadcrumbs, Approval Summarizer, CI relations
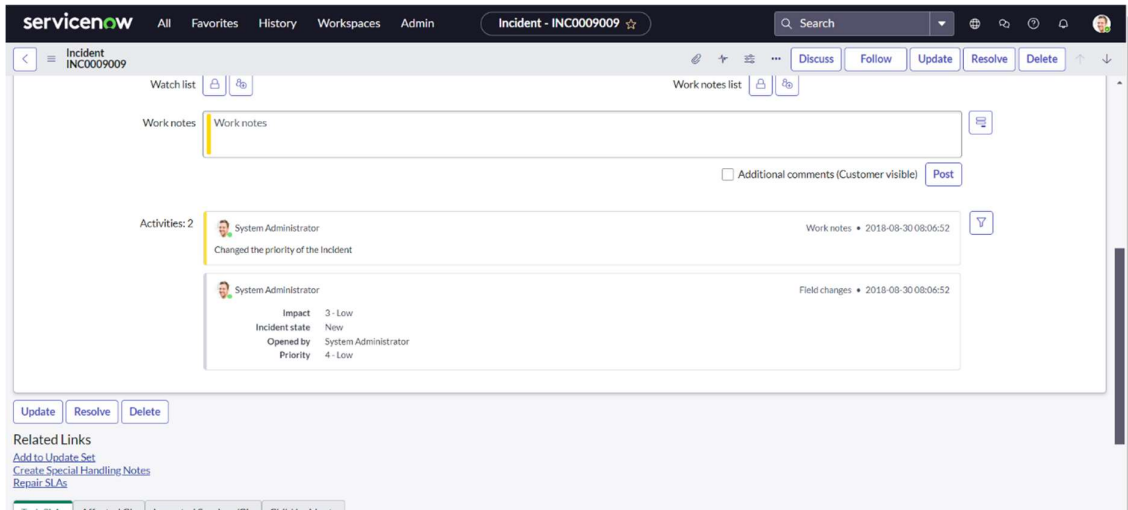


- **Related Lists:** They show records in tables that have a relationship to the current record.

  Related lists are presented as tabs at the bottom of the form view.
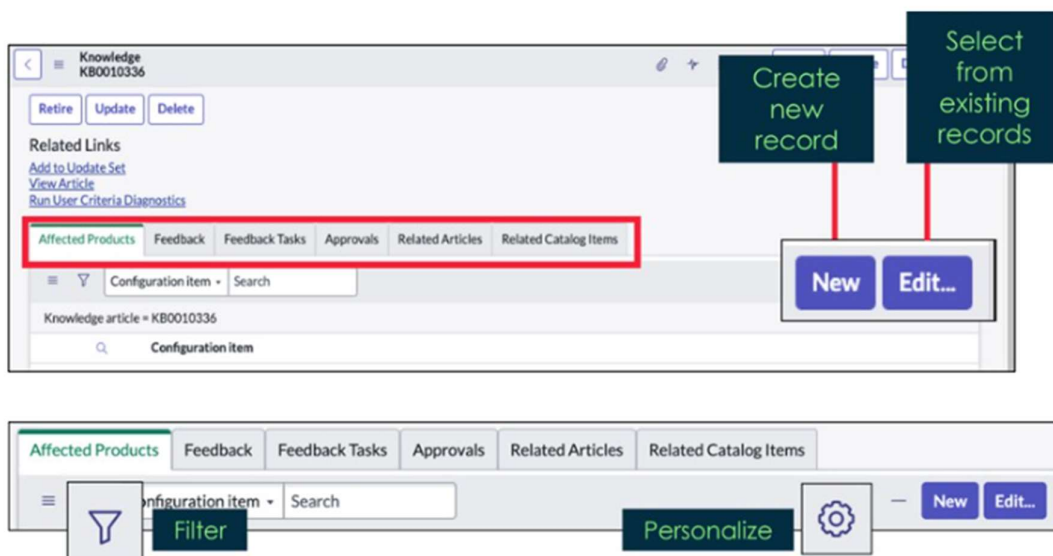
- Everything in ServiceNow is built on a relational database accessible through the ServiceNow Platform.
- The servicenow infrastructure includes tables, records and fields
  - Tables contain records.
  - A field is an individual column of data.
  - The value is the data where the field and record intersect.
- Field Attributes: Each field has three key attributes a label, a name, and a value.

| First Name | Last Name | Location |
|---|---|---|
| Field Name: first_name | Field Name: last_name | Field Name: city |
| Abel | Tuter | Brasilla |
| Adela | Cervantsz | Miami |
| Aileen | Mottern | Rome |
| Alejandra | Prenatt | Paris |
| Alejandro | Mascall | Frankfurt |
| Alene | Rabeck | London |

Table: [sys_user]

**Field Label**
The label is a **user-friendly term** which allows people to identify the field in the user interface.

**Field Name**
The field name is a **system-friendly** unique term that the system uses to identify the field.

**Field Data**
The values are **actual data** entered into the field.

- Reference Fields are identified with the reference lookup icon.
- Administrators can create a new reference fields and configure several options for reference fields.
- Table can be related to each other in various ways.
- One-to-many, Many-to-Many, Database Views, Extensions.

- Schema Map provides a graphical representation of other tables related to a specific table.
- Relationships can be filtered by extension or reference classes by checking the appropriate boxes at the top of the map.
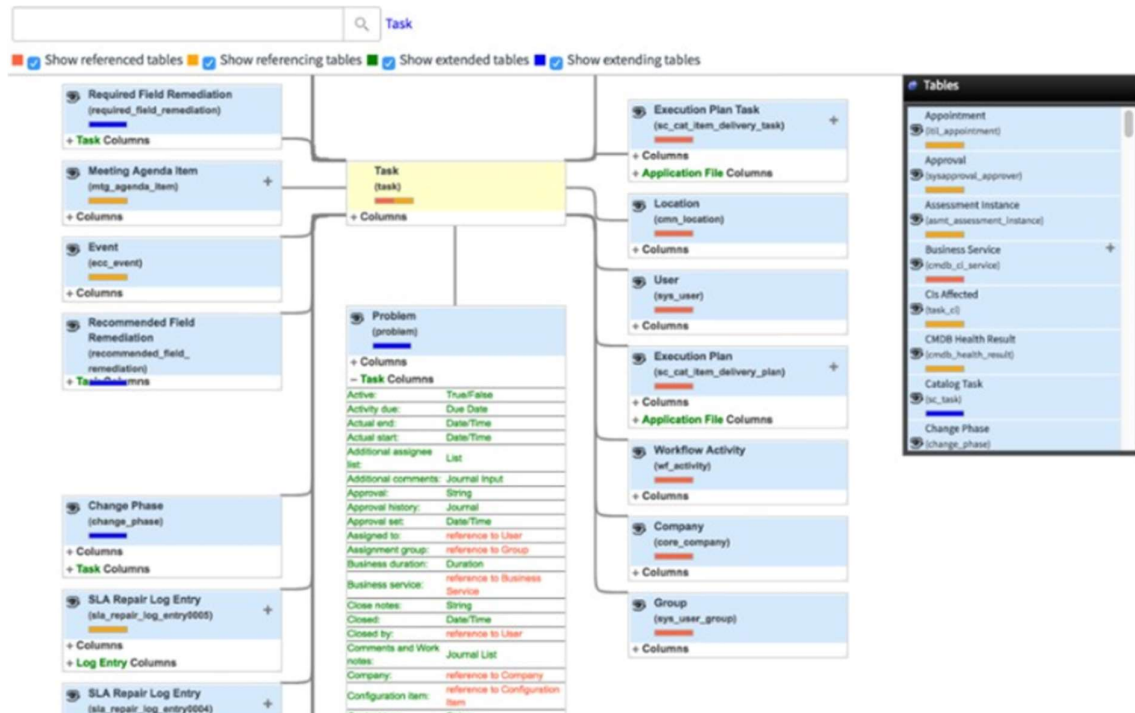


- Table Relationships
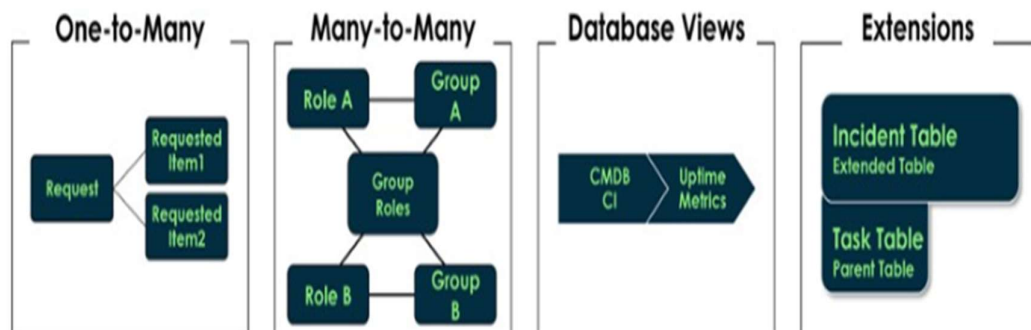
# Permissions

- ServiceNow provides several levels of security before an end user has the capability to perform CRUD operations on a table.
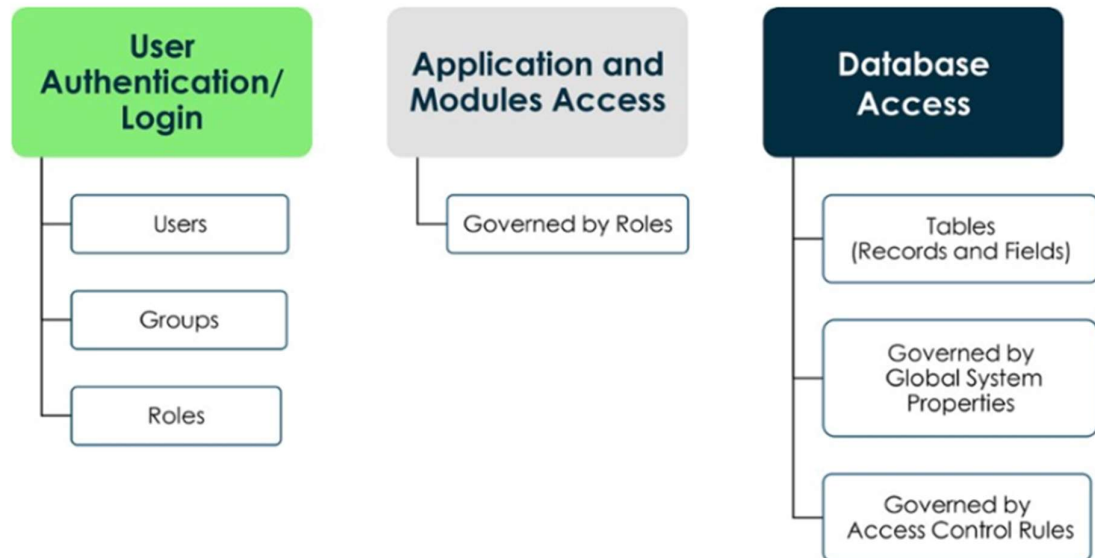


- There are three security modules typically used by the System Administrator.
- All > System Properties > Security
- All > System Security > Access Control (ACL)
- All > System Security > High Security Settings

- The base system admin can elevate to a privileged role to access features of high-Security Settings.

  - **Note:** Not all admins should have the security_admin role.

# Access Control

- An access control is a security rule defined to restrict the permissions of a user from viewing and interacting with data.
- Access control rules restrict ServiceNow – Specification and CRUD operations.
  - **C – Create**
  - **R – Read**
  - **U – Update(Write)**
  - **D – Delete**
- **Access Control List (ACL) –** It contains an instance's access control rules. Users with the appropriate admin permissions can modify rules and their definitions.

- An Import Set is a tool used to import data various data sources, and map that data into ServiceNow Tables.
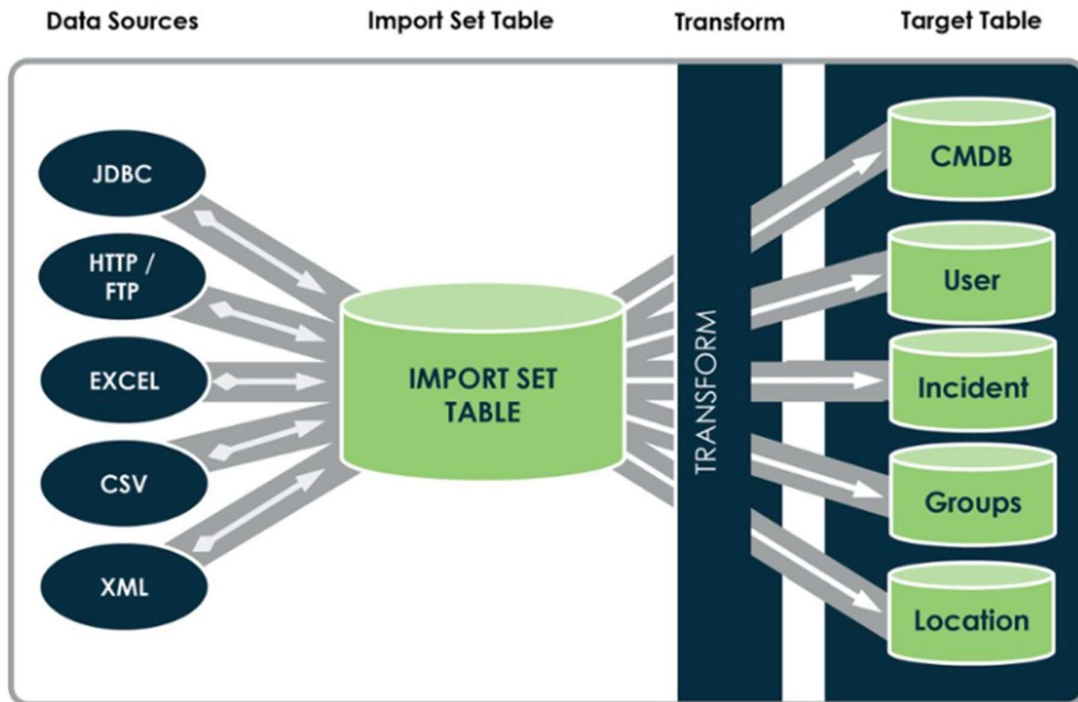


- The Import Set Table acts as a tagging area for records imported from a data source.
- The target table is an existing table where the data will be placed.
- **Transform Maps:** It is a set of field maps that determine relationships between fields in an import set and fields in an existing ServiceNow table.
- **Coalesce Fields:** Coalescing a field means the field will be used as a unique key during imports.

- **CMDB** – Configuration Manager Database.
  It is a series of tables and fields that contain all of the Configuration Items controlled by the company
    - These are the permissions required for the access relationships.
    - Asset, ititl, itil_admin, cmdb_read.
- **Configuration Items:** These can be tangible or intangible devices or applications in the CMDB.

**Computers**

**Devices on the network**

**Applications**

**Services**

An infrastructure component broke in our data center. What part of the business is affected?

**Incident Management**

We have identified a defect in our infrastructure. What business applications are affected?

**Problem Management**

We need to change something in our Data Center. How will this affect our business?

**Change Management**

**CMDB**

I would like to have new software loaded on my computer.

**Request Management**

- **Dependency Views** provide an interactive graphical interface to visualize relationships between configurations items.
- **Map Icons**
  - Active Incidents
  - Active Problems
  -
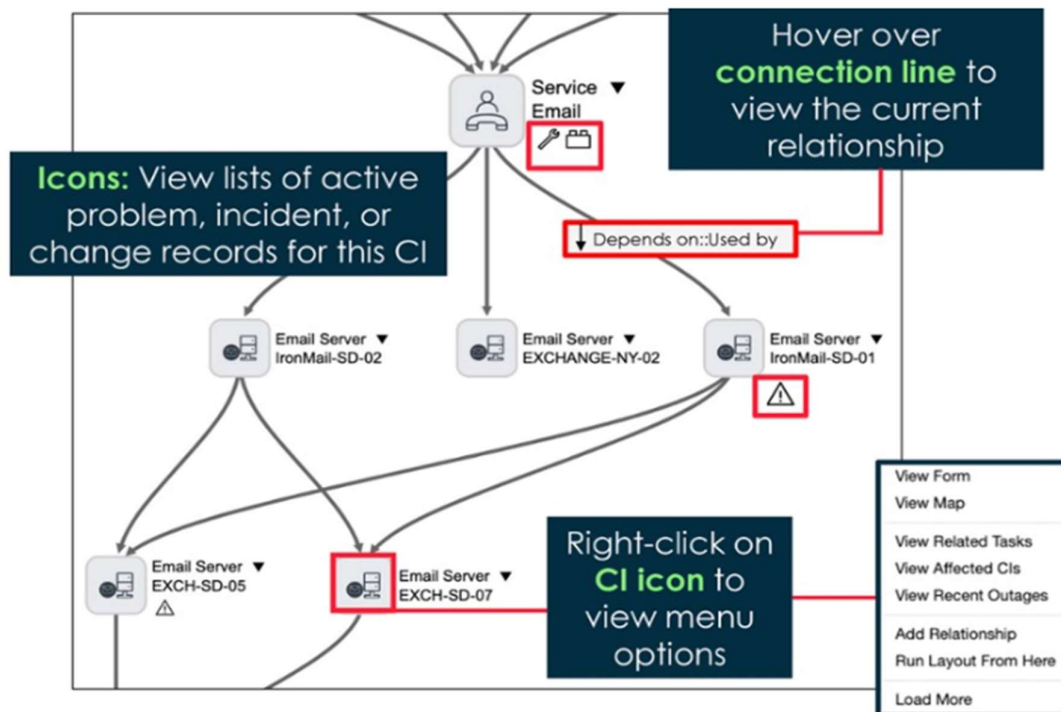


Dependency views also indicate the status of configuration items and allow access to the CI's related alerts.

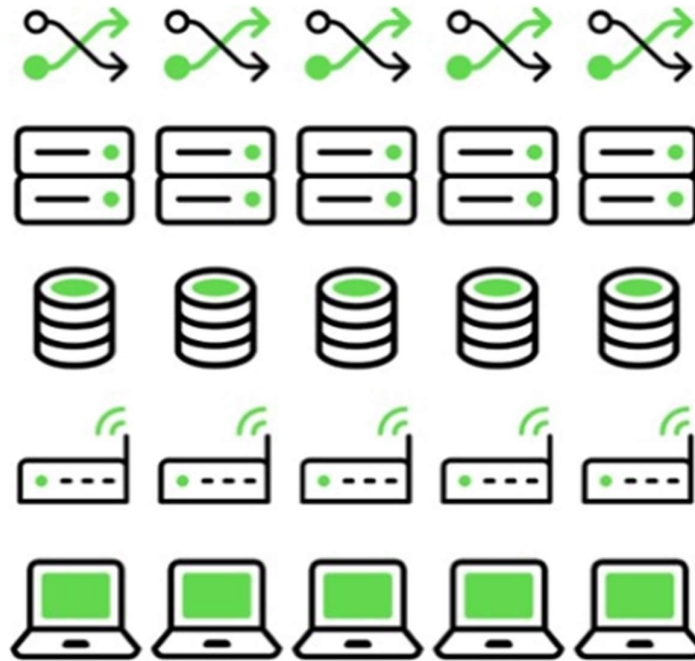**CSDM: (**Common Service Data Model) It is a standardized structure and manage data within the ServiceNow Platform. It enables consistent and reliable data management
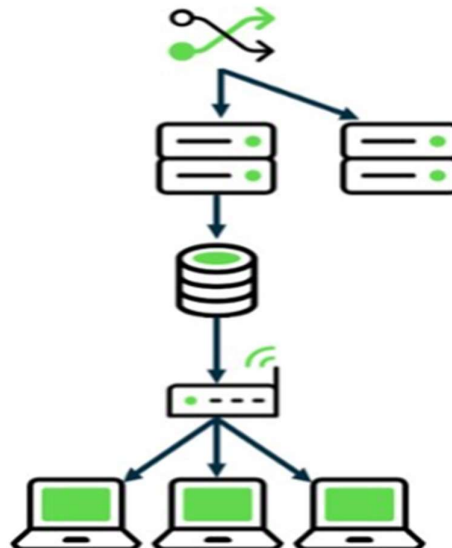
- **ServiceNow Discovery:** Scans the network to inventory devices and applications and updates the CMDB with the results for each unique type of hardware and software

Horizontal discovery

- **Service Mapping: (Top – Down Discovery)** It augments the CMDB with IT relationships and dependencies between Cis to model IT components that comprise a Service.

Top-down mapping by Service Mapping

# Knowledge Management

- It is a portal where it simplifies access to information.
    - **Employee Centre:** It provides information related to the employees.
    - **Service Portal:** It provides the ability to provide and search Knowledge bases and browse multiple catalogs.
    - **Knowledge Portal:** Users can view Knowledge Bases and articles, to search for information
    - **CAB Workbench:** It enables the CAB Manager to schedule, plan, and manage CAB meetings.
    - **ISC:** It monitors the compliance level of instance security controls, and views security event monitoring metrics.



Employee Center (/esc)



Service Portal (/sp)



Knowledge Portal (/kb)



CAB Workbench (/cab)



Instance Security Center (/isc)
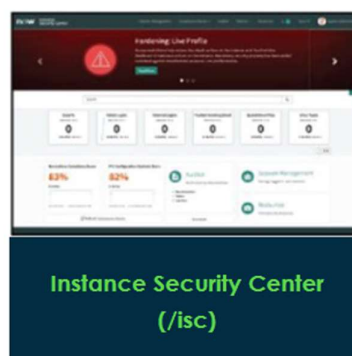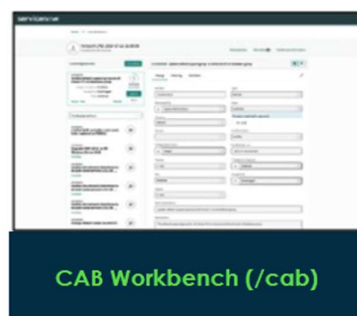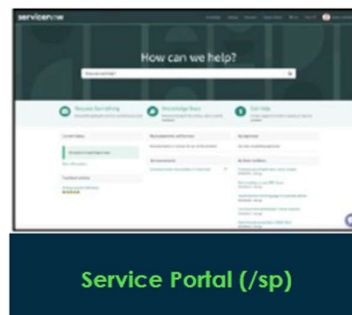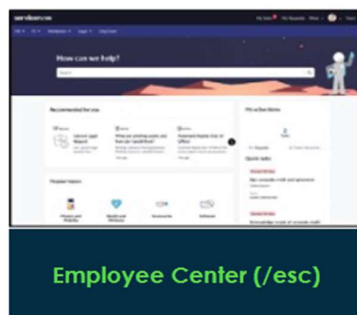
# ServiceNow Reporting

- It allows users to create, customize, and share reports that provide insights into various aspects of their business processes, service management, and operational performance.
- **Features of ServiceNow Reporting**
    - Pre-Built Reports
    - Custom Report Creation
    - Filters and Conditions
    - Scheduling and Distribution
    - Interactive Dashboards
    - Sharing and Security
    - Performance Analytics
- **Report Types**
    - List Reports
    - Bar and Column Charts
    - Pie Charts
    - Line Charts
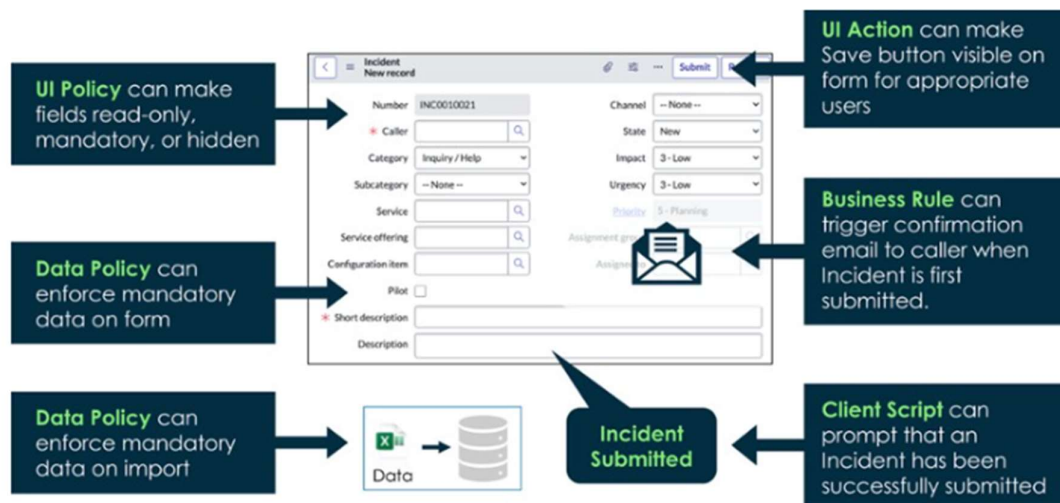    - Heat Maps
    - Pivot tables
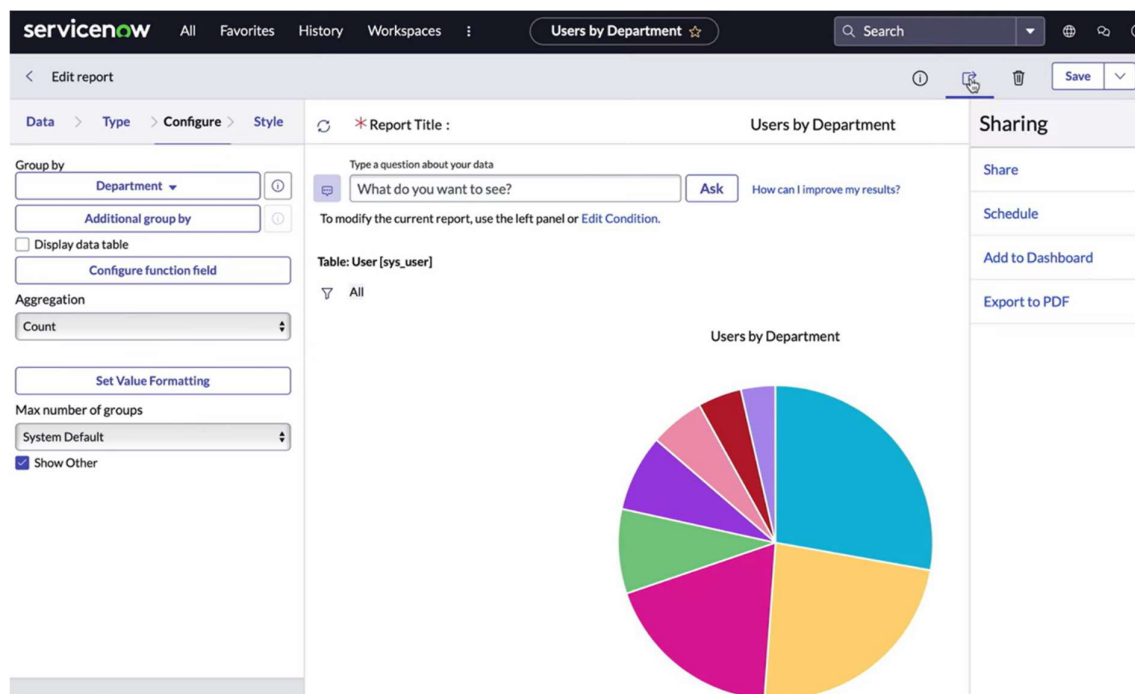
- **UI Policy** – It is a rule that is applied to a form to dynamically change information or the form itself.

  UI Policies execute on the client side.

- UI Policies are used for
    - Making fields Mandatory or Optional
    - To Hidden or Visible
    - To read-Only or Editable



**Business Rules:** These are server-side scripts that automatically execute based on specific conditions and rules defined by the user

- They Automate the process
- They set default values
- They trigger Workflows