

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.

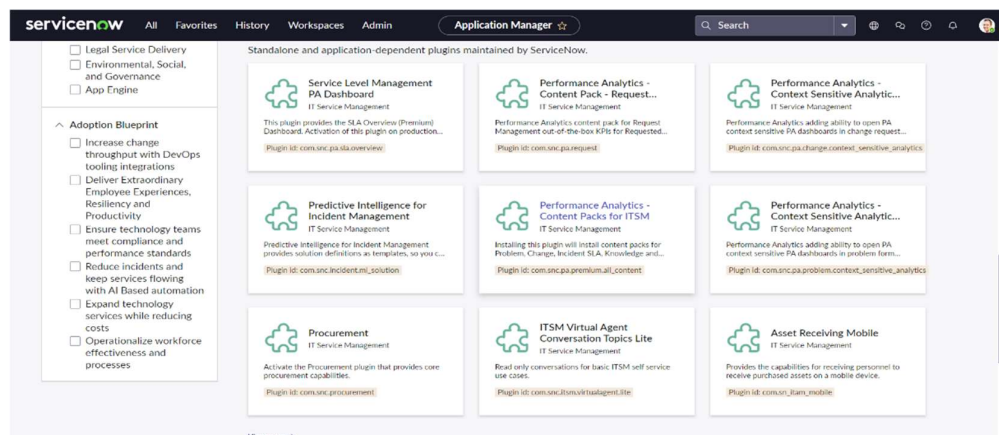
Instance: It is a copy of a ServiceNow environment specific to a customer.

- **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.

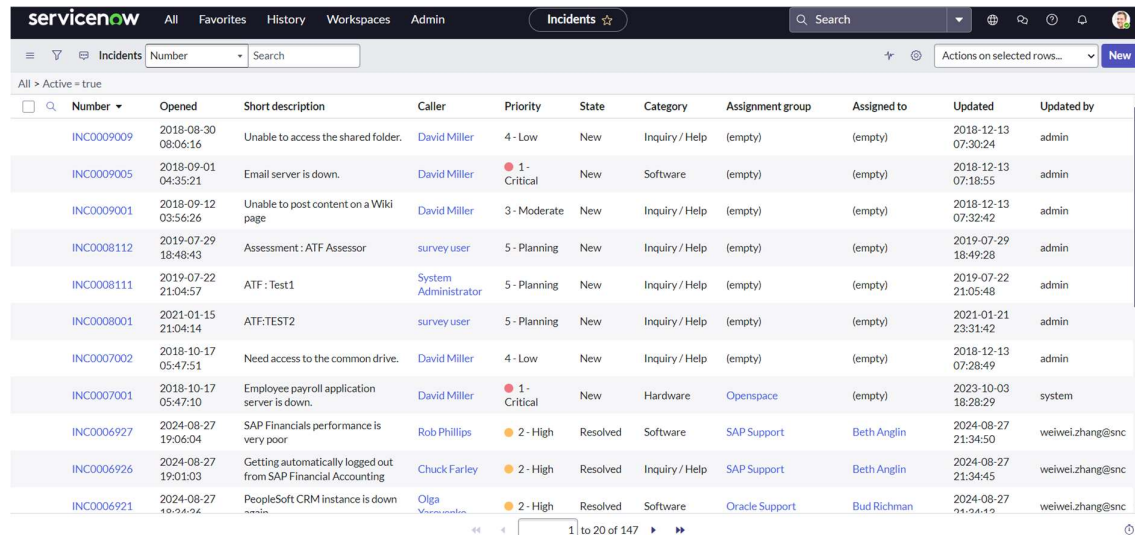
Plugins: Exclusively developed by ServiceNow, these are functionalities added to the present instance.

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



List Records and Fields

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



Number	Opened	Short description	Caller	Priority	State	Category	Assignment group	Assigned to	Updated	Updated by
INC0009009	2018-08-30 08:06:16	Unable to access the shared folder.	David Miller	4 - Low	New	Inquiry / Help	(empty)	(empty)	2018-12-13 07:30:24	admin
INC0009005	2018-09-01 04:35:21	Email server is down.	David Miller	1 - Critical	New	Software	(empty)	(empty)	2018-12-13 07:18:55	admin
INC0009001	2018-09-12 03:56:26	Unable to post content on a Wiki page	David Miller	3 - Moderate	New	Inquiry / Help	(empty)	(empty)	2018-12-13 07:32:42	admin
INC0008112	2019-07-29 18:48:43	Assessment : ATF Assessor	survey user	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2019-07-29 18:49:28	admin
INC0008111	2019-07-22 21:04:57	ATF : Test1	System Administrator	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2019-07-22 21:05:48	admin
INC0008001	2021-01-15 21:04:14	ATF:TEST2	survey user	5 - Planning	New	Inquiry / Help	(empty)	(empty)	2021-01-21 23:31:42	admin
INC0007002	2018-10-17 05:47:51	Need access to the common drive.	David Miller	4 - Low	New	Inquiry / Help	(empty)	(empty)	2018-12-13 07:28:49	admin
INC0007001	2018-10-17 05:47:10	Employee payroll application server is down.	David Miller	1 - Critical	New	Hardware	Openspace	(empty)	2023-10-03 18:28:29	system
INC0006927	2024-08-27 19:06:04	SAP Financials performance is very poor	Rob Phillips	2 - High	Resolved	Software	SAP Support	Beth Anglin	2024-08-27 21:34:50	weiwei.zhang@snc
INC0006926	2024-08-27 19:01:03	Getting automatically logged out from SAP Financial Accounting	Chuck Farley	2 - High	Resolved	Inquiry / Help	SAP Support	Beth Anglin	2024-08-27 21:34:45	weiwei.zhang@snc
INC0006921	2024-08-27 19:04:24	PeopleSoft CRM instance is down	Olga Vlasovskaya	2 - High	Resolved	Software	Oracle Support	Bud Richman	2024-08-27 21:04:12	weiwei.zhang@snc

- 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.

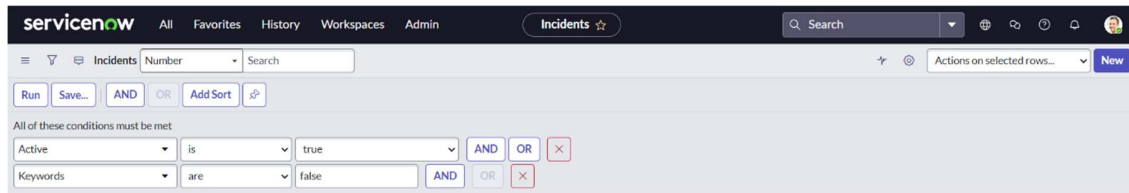
Sort Controls – A list that is displayed to a user for the first time will be sorted by one of the following.

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

Configurations

- 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 screenshot shows the ServiceNow user interface for the 'Incidents' table. At the top, there's a navigation bar with 'servicenow' logo and tabs for 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. The 'Incidents' tab is selected. Below the navigation bar, there's a search bar and a 'Run' button. The main area displays a filter configuration for the 'Incidents' table. It shows two conditions: 'Active' is 'true' and 'Keywords' are 'false'. The conditions are connected by an 'AND' operator. There are buttons for 'Run', 'Save...', 'AND', 'OR', 'Add Sort', and 'X' to remove conditions.

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 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.

Classic Form Overview

8. A form displays fields from one record

← → ↻ nowlearning-nlms02024291-0001.lab.service-now.com/now/hav/ui/classic/params/target/incident.do%3Fsys_id%3D57a7aec73d423002728660c4cfa71c%26sysparm_record_target%3Dincide... Incident - INC0009009

Incident - INC0009009

Number: INC0009009

* Caller: David Miller

Category: Inquiry/Help

Subcategory: --None--

Service:

Service offering:

Configuration item:

* Short description: Unable to access the shared folder.

Description: Unable to access the shared folder. Please provide access.

Channel: --None--

State: New

Impact: 3 - Low

Urgency: 2 - Medium

Priority: 4 - Low

Assignment group:

Assigned to:

Related Search Results >

Notes Related Records Resolution Information

Watch list:

Work notes list:

Work notes:

Additional comments (Customer visible) Post

Activities: 2

System Administrator

Changed the priority of the Incident

Work notes • 2018-08-30 08:06:52

System Administrator

Field changes • 2018-08-30 08:06:52

Impact: 3 - Low

Incident state: New

Opened by: System Administrator

Priority: 4 - Low

Update Resolve Delete

Related Links

Add to Update Set

Create Special Handling Notes

Repair SLAs

Task SLAs Affected CIs Impacted Services/CIs Child Incidents

SLA definition Search

Incident - INC0009009

System Administrator

Field changes • 2018-08-30 08:06:52

Impact: 3 - Low

Incident state: New

Opened by: System Administrator

Priority: 4 - Low

Update Resolve Delete

Related Links

Add to Update Set

Create Special Handling Notes

Repair SLAs

Task SLAs Affected CIs Impacted Services/CIs Child Incidents

SLA definition Search

SLA definition	Type	Target	Stage	Business time left	Business elapsed time	Business elapsed percentage	Start time	Stop time
No records to display								

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.

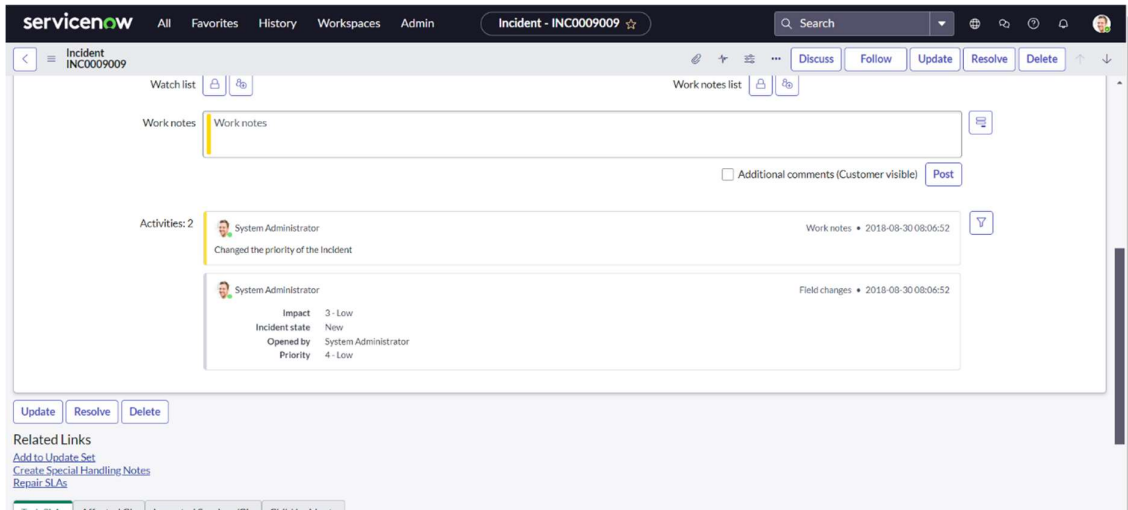
The screenshot displays the configuration interface for an Incident form (INC0009003). The interface is divided into several sections, each highlighted with a red box and a label:

- Fields:** A red box highlights the top section of the form, which contains various input fields such as Number, Caller, Category, Subcategory, Service, Configuration item, Short description, and Description. It also includes dropdown menus for Channel, State, Impact, Urgency, Priority, and Assignment group.
- Sections:** A red box highlights the 'Resolution Information' tab, which contains a 'Watch list' and a 'Work notes list'.
- Formatter:** A red box highlights the 'Activities' section, which displays a list of activities performed on the incident, including details like Impact, Incident state, Opened by, Priority, Resolution code, and Resolution notes.
- UI Actions:** A red box highlights the 'Related Links' section, which contains links for 'Add to Update Set', 'Create Special Handoff Notes', and 'Reopen SLA'.
- Related Lists:** A red box highlights the 'Task SLAs' section, which contains a table with columns for SLA definition, Type, Target, Stage, Business time left, Business elapsed time, Business elapsed percentage, Start time, and Stop time.

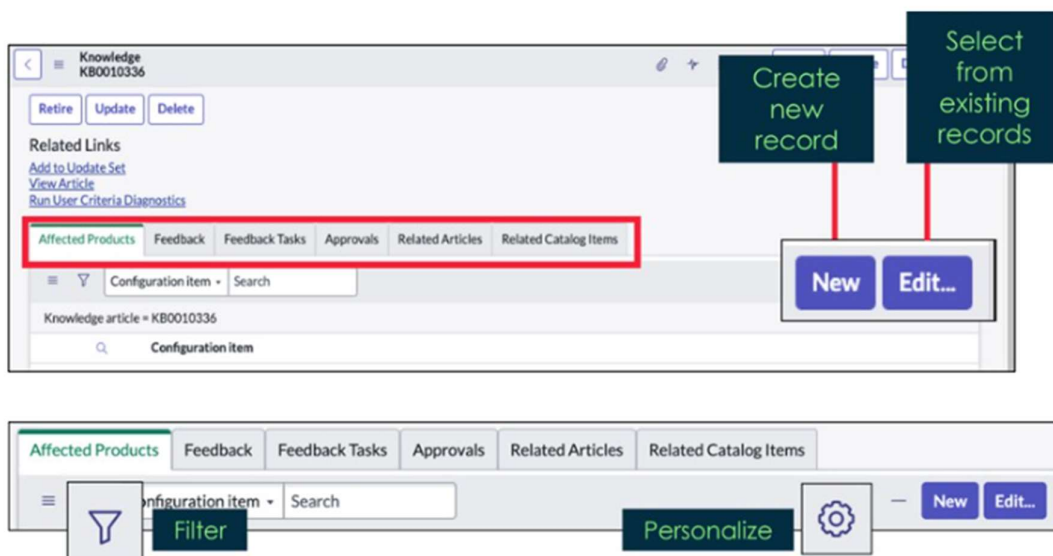
The bottom of the interface shows a table with the following columns: SLA definition, Type, Target, Stage, Business time left, Business elapsed time, Business elapsed percentage, Start time, and Stop time. The table currently displays 'No records to display'.

Formatters & Related Lists

- **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.



ServiceNow Infrastructure

- 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.

The diagram shows a table with three columns: First Name, Last Name, and Location. Red boxes highlight the headers and a specific row. Callouts point to these elements with definitions: Field Label (user-friendly term), Field Name (system-friendly unique term), and Field Data (actual data entered).

First Name	Last Name	Location
Field Name: first_name	Field Name: last_name	Field Name: city
Abel	Tuter	Brasilia
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.

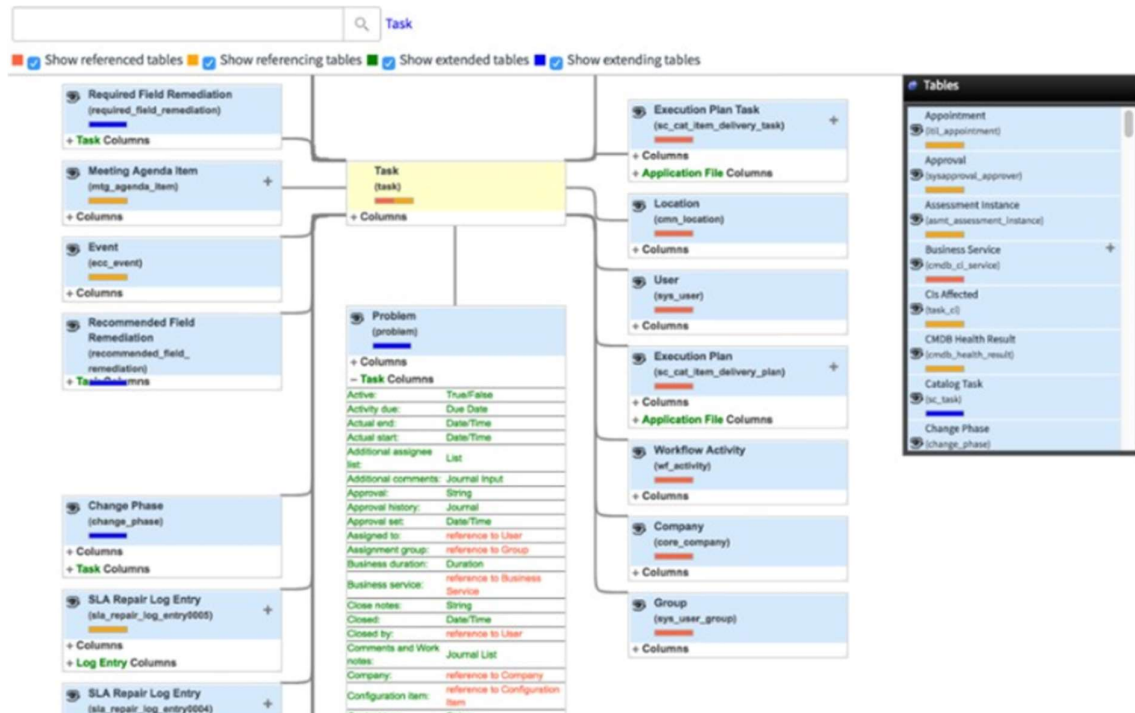
Field Name
The field name is a **system-friendly** unique term that the system uses to identify the field.

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

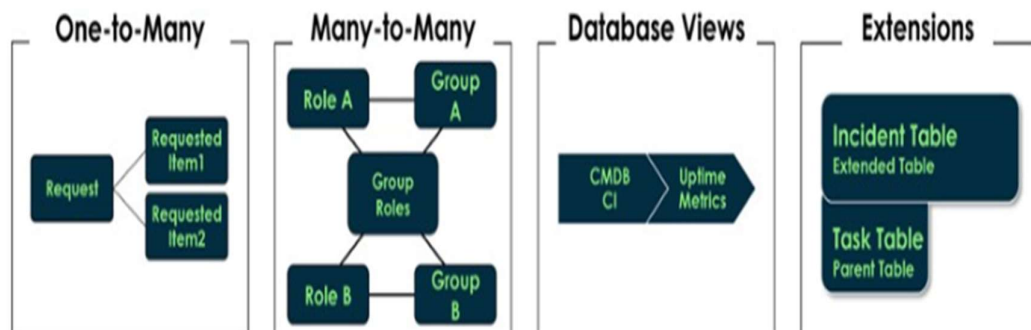
- Reference Fields are identified with the reference lookup icon.
- Administrators can create a new reference fields and configure several options for reference fields.
- Table can be related to each other in various ways.
- One-to-many, Many-to-Many, Database Views, Extensions.

Schema Map

- 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.

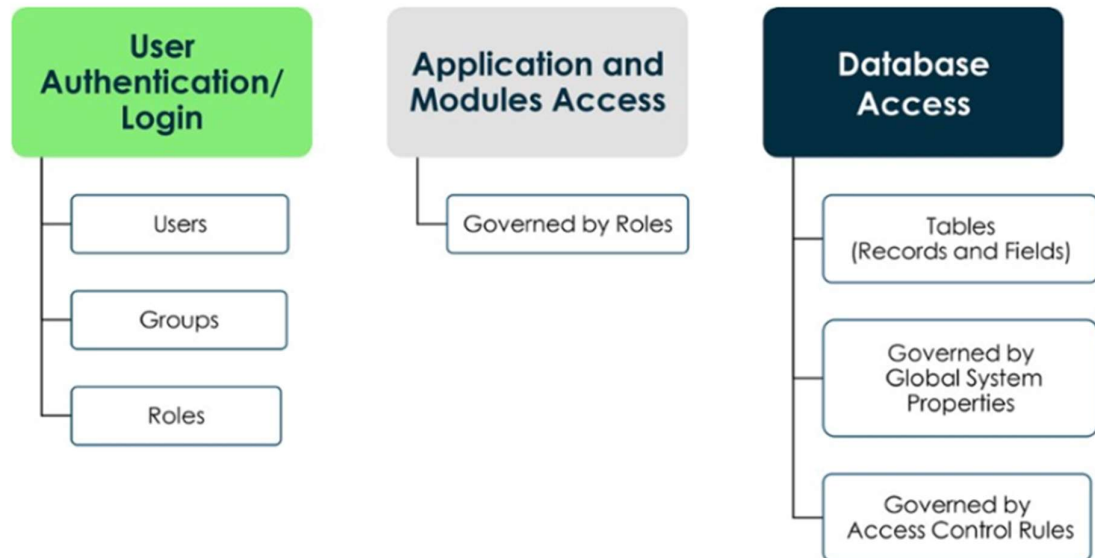


- Table Relationships



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

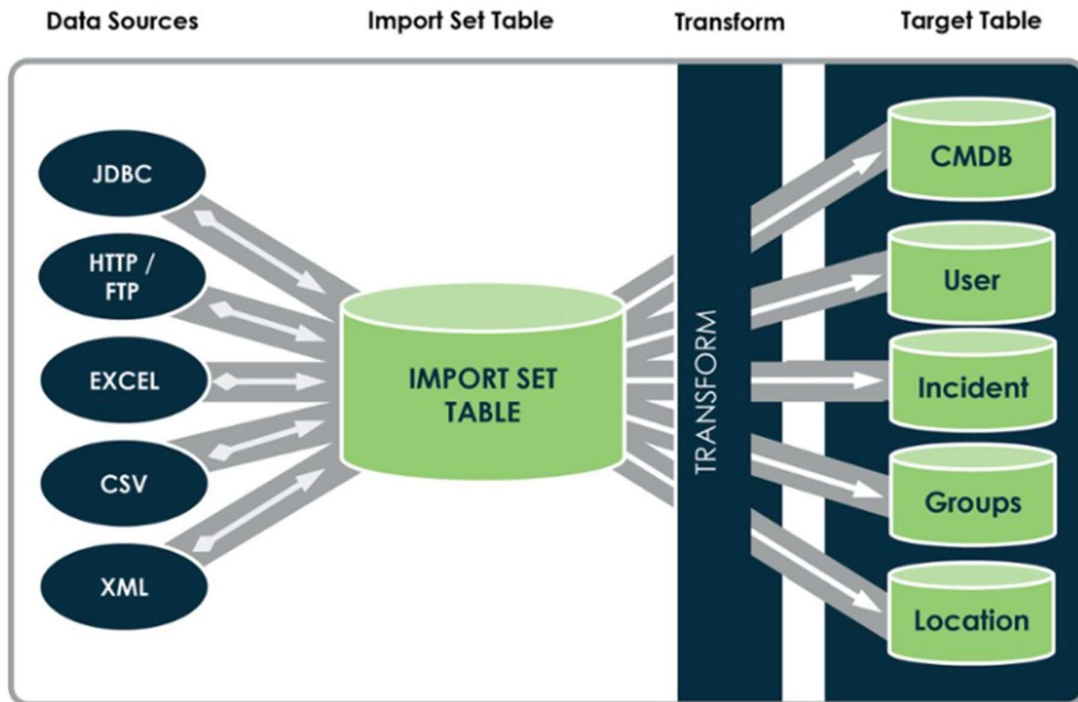
- An access control is a security rule defined to restrict the permissions of a user from viewing and interacting with data.
- Access control rules restrict ServiceNow – Specification and CRUD operations.
 - **C – Create**
 - **R – Read**
 - **U – Update(Write)**
 - **D – Delete**
- **Access Control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

The screenshot displays the ServiceNow 'Access Controls' interface. At the top, the 'servicenow' logo is visible on the left, and navigation icons are on the right. Below the header, there's a search bar and a filter dropdown set to 'Name'. A table of access control rules is shown with columns: Name, Operation, Type, and Active. The table lists several rules, all with 'read' operations and 'ui_page' types, and all are active. An 'Actions on selected rows...' menu is open on the right side of the table, showing options like 'Add to Update Set', 'Delete', 'Move to Application...', 'Create Application File', 'Assign Tag' (with sub-options: New tag, Android, Java, JavaScript, Development, Security Center Suites, EVAM configuration for Search, Includes code, Now Intelligence), 'More...', 'Remove Tag' (with sub-options: Android, Java), and '201'.

Name	Operation	Type	Active
\$allappsmgmt	read	ui_page	true
\$atf_page_inspector	read	ui_page	true
\$conversation-builder	read	ui_page	true
\$mycompanyappsmgmt	read	ui_page	true
\$ng_fd_sc	read	ui_page	true
\$products	read	ui_page	true
\$pwd_change	read	ui_page	true
\$pwd_reset_serviceDesk	read	ui_page	true
\$sa_service_model_json	read	ui_page	true
\$sla timeline	read	ui_page	true

Importing Data

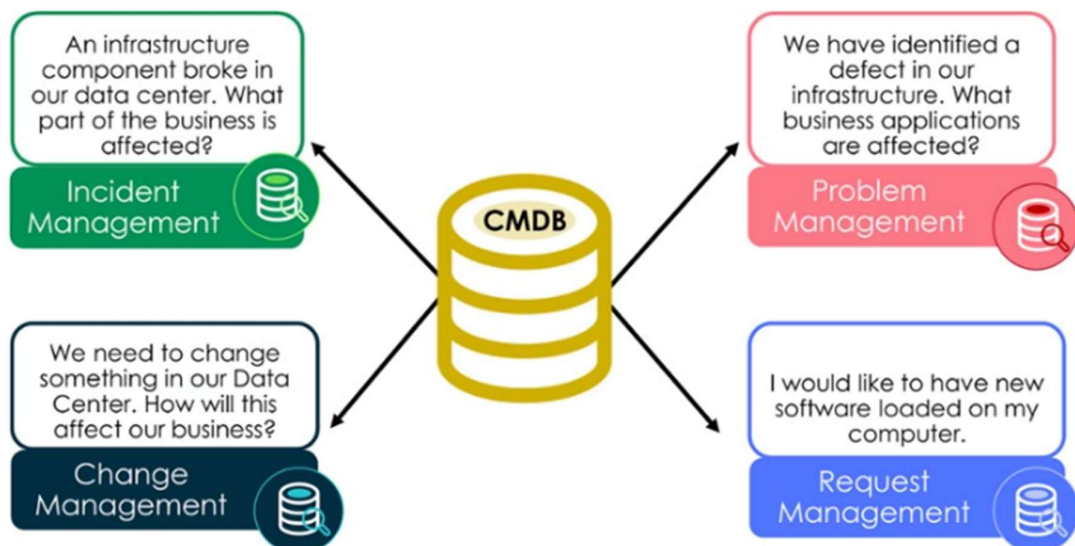
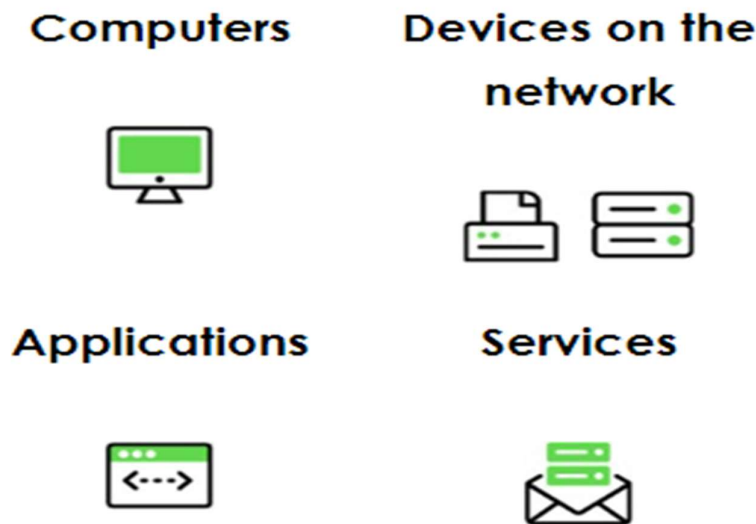
- An Import Set is a tool used to import data from various data sources, and map that data into ServiceNow Tables.



- 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.

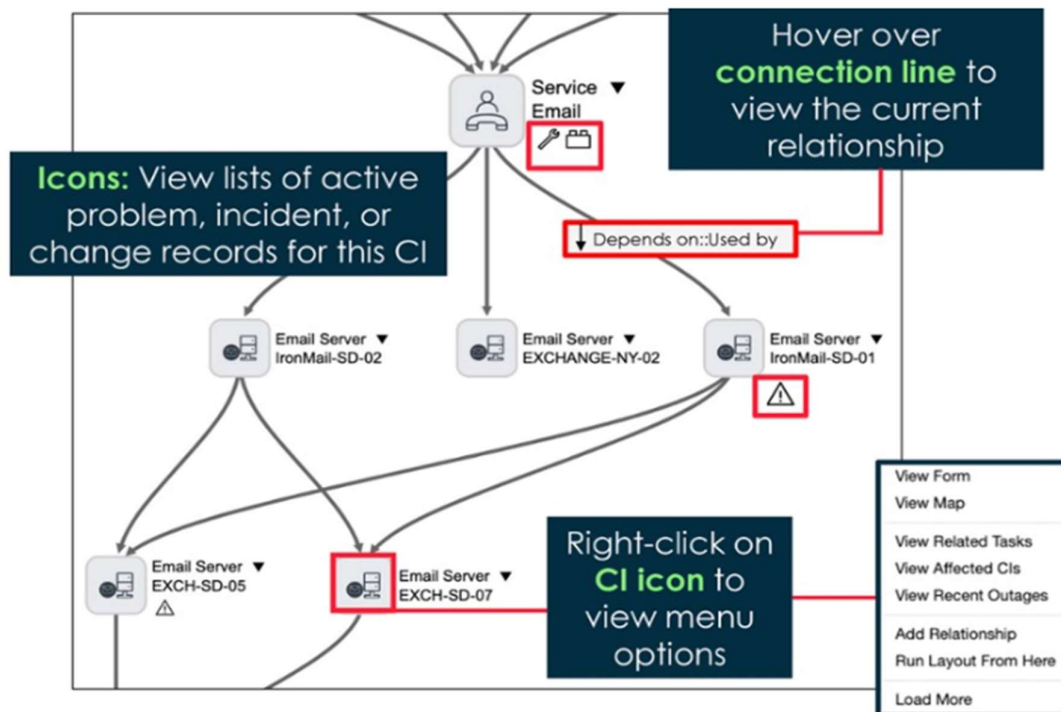
CMDB

- **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.



Configuration Items

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

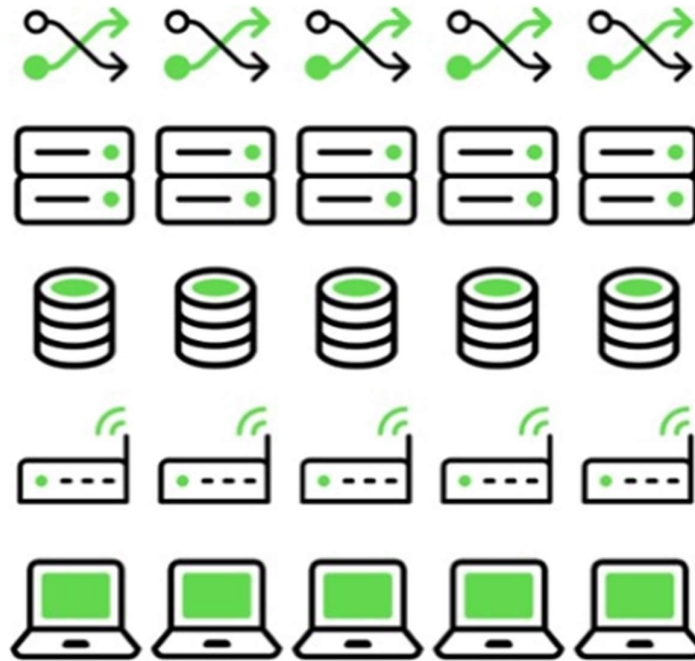


Dependency views also indicate the status of configuration items and allow access to the CI's related alerts.

CSDM: (Common Service Data Model) It is a standardized structure and manage data within the ServiceNow Platform. It enables consistent and reliable data management

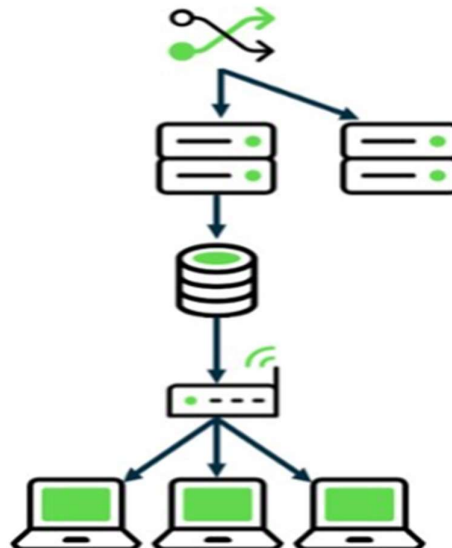
ServiceNow Discovery and Service Mapping

- **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

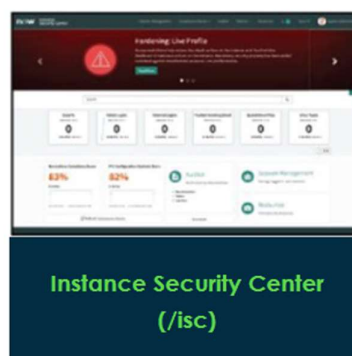
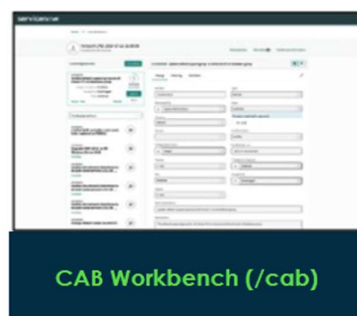
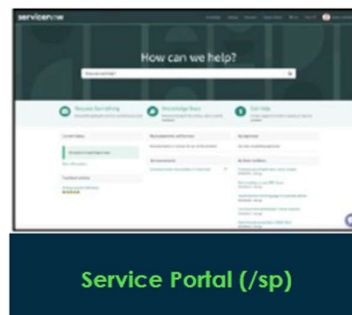
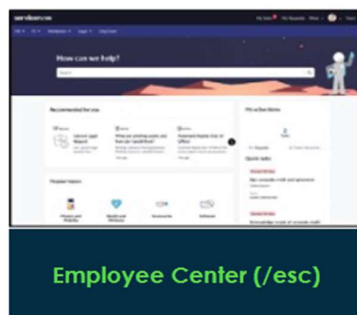
- **Service Mapping: (Top – Down Discovery)**
It augments the CMDB with IT relationships and dependencies between CIs to model IT components that comprise a Service.



Top-down mapping by
Service Mapping

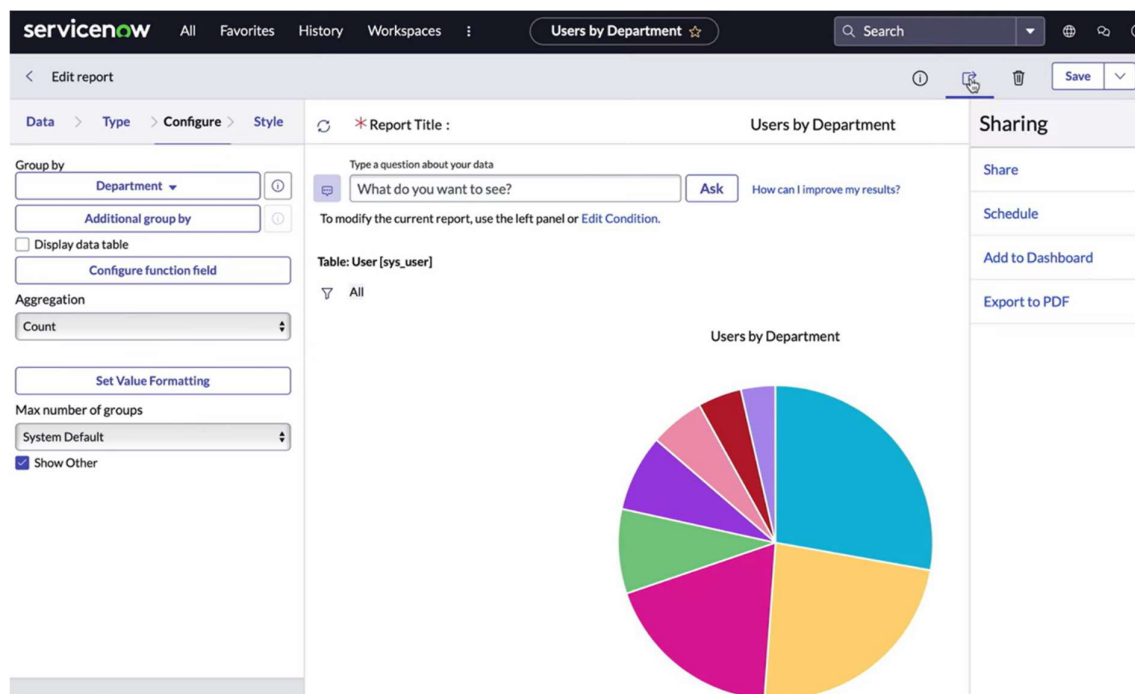
Knowledge Management

- 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.



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

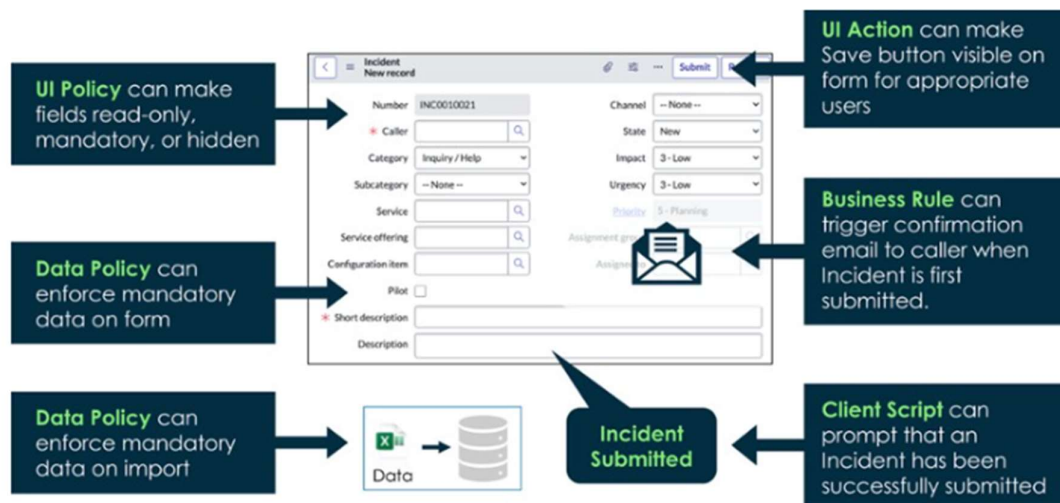


UI Policies & Business Rules

- **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