

The Complete ServiceNow System Administrator Course

Section 5 - Tables & Fields



Course Outline

1 Course Introduction

2 ServiceNow Overview

3 Lists, Forms, & the UI

4 Customizations

5 Tables & Fields

6 User Administration

7 Core Applications

8 System Administration

9 Building A Custom App

Section Outline

1 Table Overview

2 Major Tables

3 Data Dictionaries

4 Fields

5 Field Types

6 Unique Identifiers

7 Reference Fields

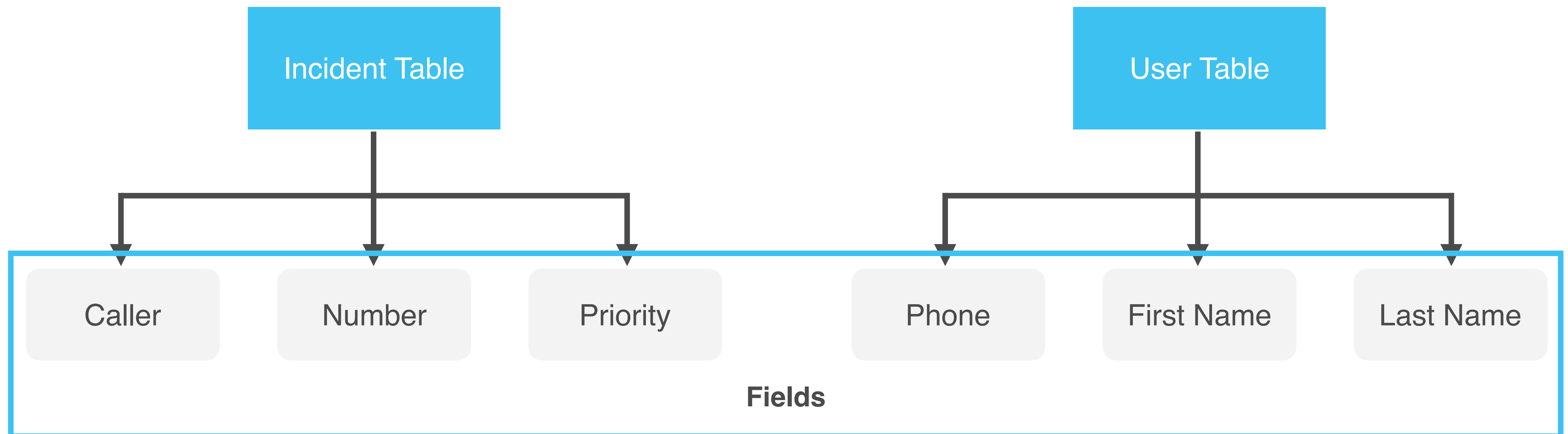
8 Table Relationships

9 Table Management

10 Creating an App

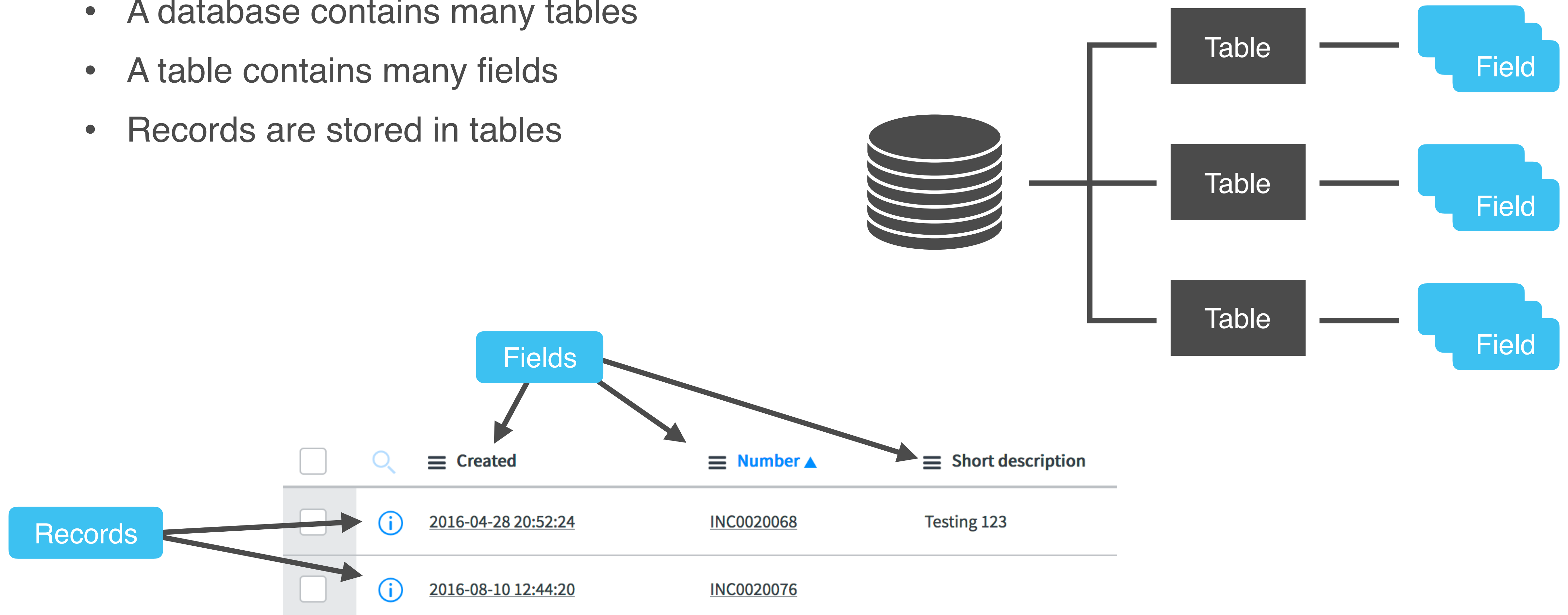
Database Table Overview

- Over 2,000 tables in base instance
- Tables have fields
- Tables may extend other tables
- Naming convention
- Create/modify tables
- Each app has 1 or many tables



The Database, Tables, & Fields

- A database contains many tables
- A table contains many fields
- Records are stored in tables

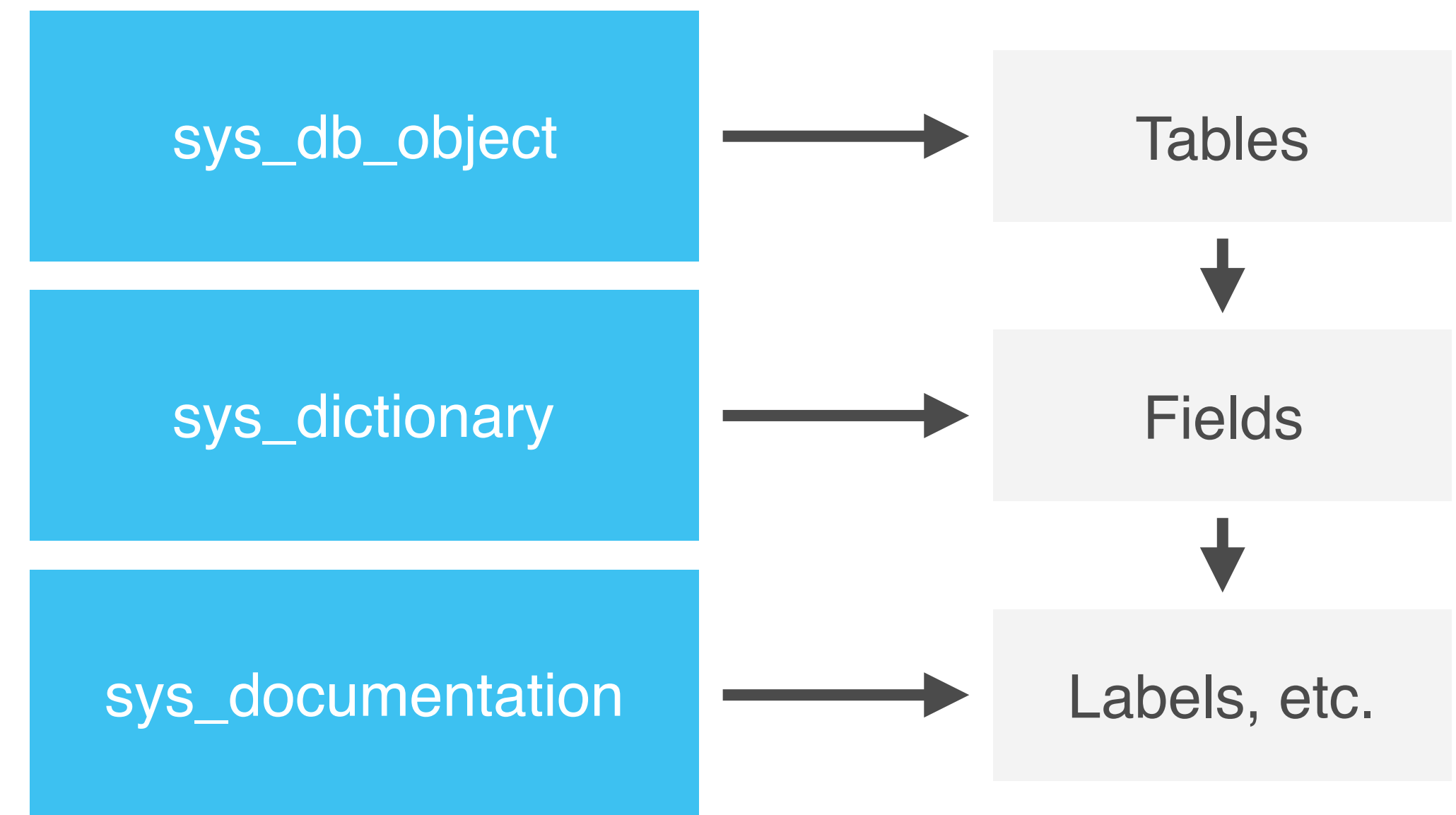


Major Tables

- Task [task]
- Incident [incident]
- Problem [problem]
- Change [change_request]
- User [sys_user]
- Group [sys_user_group]
- Role [sys_user_role]
- Location [cmn_location]
- Company [core_company]
- Knowledge [kb_knowledge]
- Knowledge Category [kb_category]
- Knowledge Base [kb_knowledge_base]
- Service Catalog [sc_catalog]
- Catalog Items [sc_cat_item]
- Configuration Item [cmdb_ci]
- Server CI [cmdb_ci_server]

Data Dictionary Tables

- Contain metadata about tables
- sys_db_object record represents a table
- sys_dictionary record represents a field on a table
- sys_documentation record represents a field label, etc.



Dictionary Entries **New** for text Search Grid Split

🔍 All > Table = incident > Column name starts with category

	Table	Column name	Type	Reference	Default value	Display
	=incident	category	Search	Search	Search	Search
<input type="checkbox"/>	incident	category	String	inquiry	false	

Tables & Fields

Demo


Fields




- Each table contains many fields
- Different field types
- Calculated values
- Attributes
- Default values
- Dictionary overrides




≡	Table Columns	New	Go to	Column label ▼	Search
⚙	🔍	≡ Column label ▲	≡ Column name	≡ Type	
	ⓘ	<u>Active</u>	active	<u>True/False</u>	
	ⓘ	<u>Activity due</u>	activity_due	<u>Due Date</u>	
	ⓘ	<u>Additional assignee list</u>	additional_assignee_list	<u>List</u>	
	ⓘ	<u>Additional comments</u>	comments	<u>Journal Input</u>	


Field Types




- String
- Date
- Time
- Choice
- True/False
- List
- HTML
- Script
- Reference
















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Category Inquiry / Help  Watch list  

Caller Stephen Hawking   

Text 

B *I* U   Font Family  18pt

What is Spam?

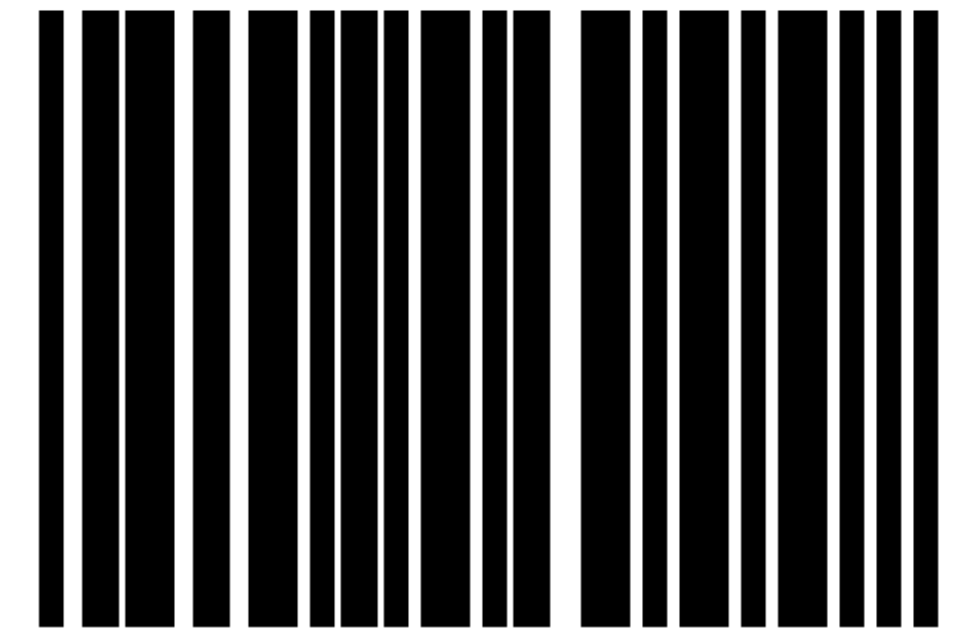
Spam has increasingly become a problem on the Internet. While every Internet newsgroups and chat rooms attract the most spam.'

Definitions

The term "spam" is Internet slang that refers to unsolicited commercial communication as junk email to equate it with the paper junk mail that c services or products, but very few reputable marketers use UCE to adver

Globally Unique Identifier (GUID)

- Referred to by **sys_id**
- A unique 32-character hexadecimal string
- Every record has a sys_id
- sys_id's are automatically generated for all records
- Example: ef4225a40a0a0b5700d0b8a790747812



Reference Fields

- Power of RDBMS
- References are everywhere
- Store sys_id in reference field
- Must match exact record (1 to 1)
- Reference qualifiers

Location



Dictionary Info: incident.location

Table	task
Field	location
Type	reference
Reference	cmn_location
Max Length	32
Dependent	company
Attributes	all_tables.text_index_translations=true, tree_picker=true



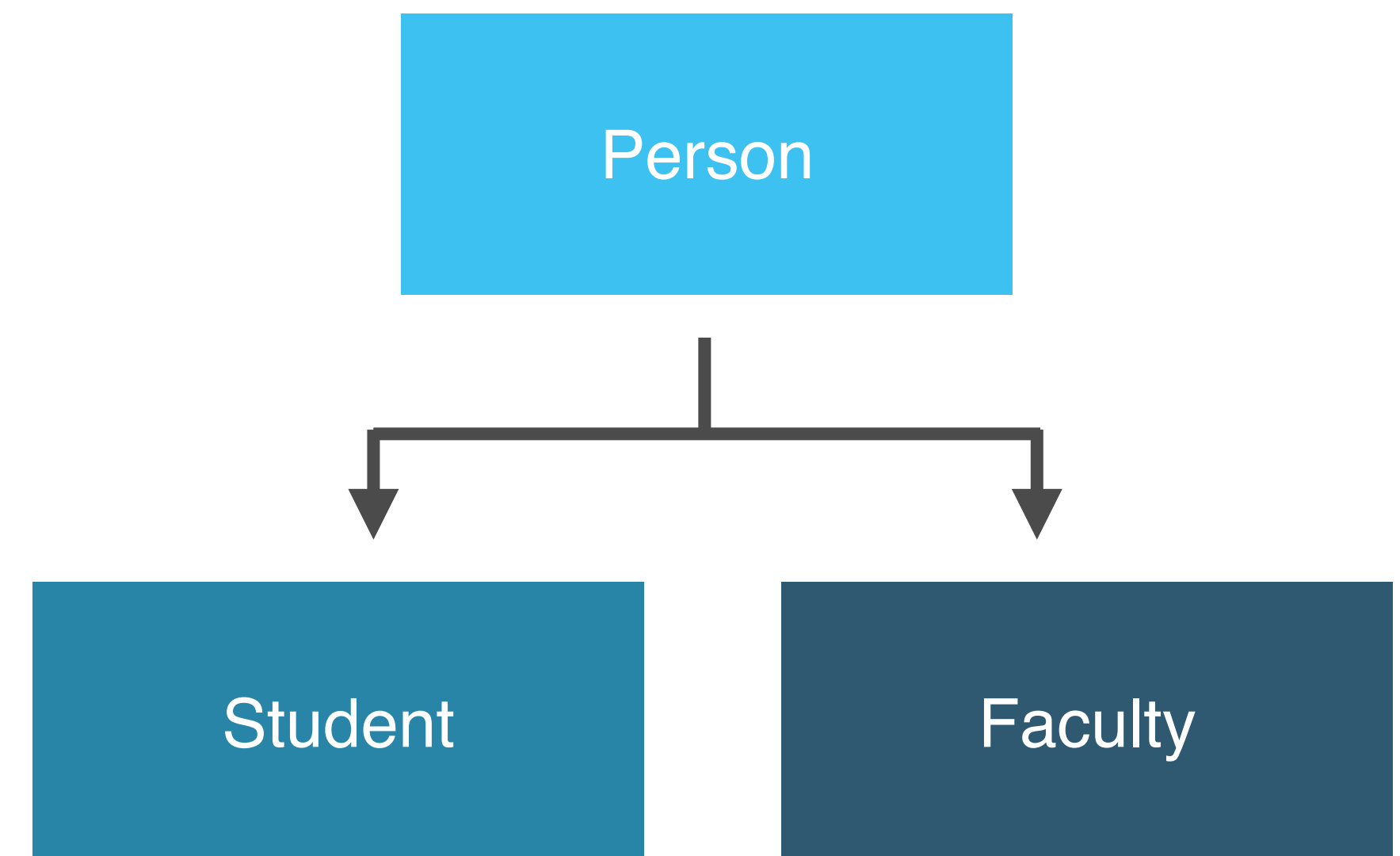
Covered in ServiceNow 201: Development

Fields & Field Types

Demo

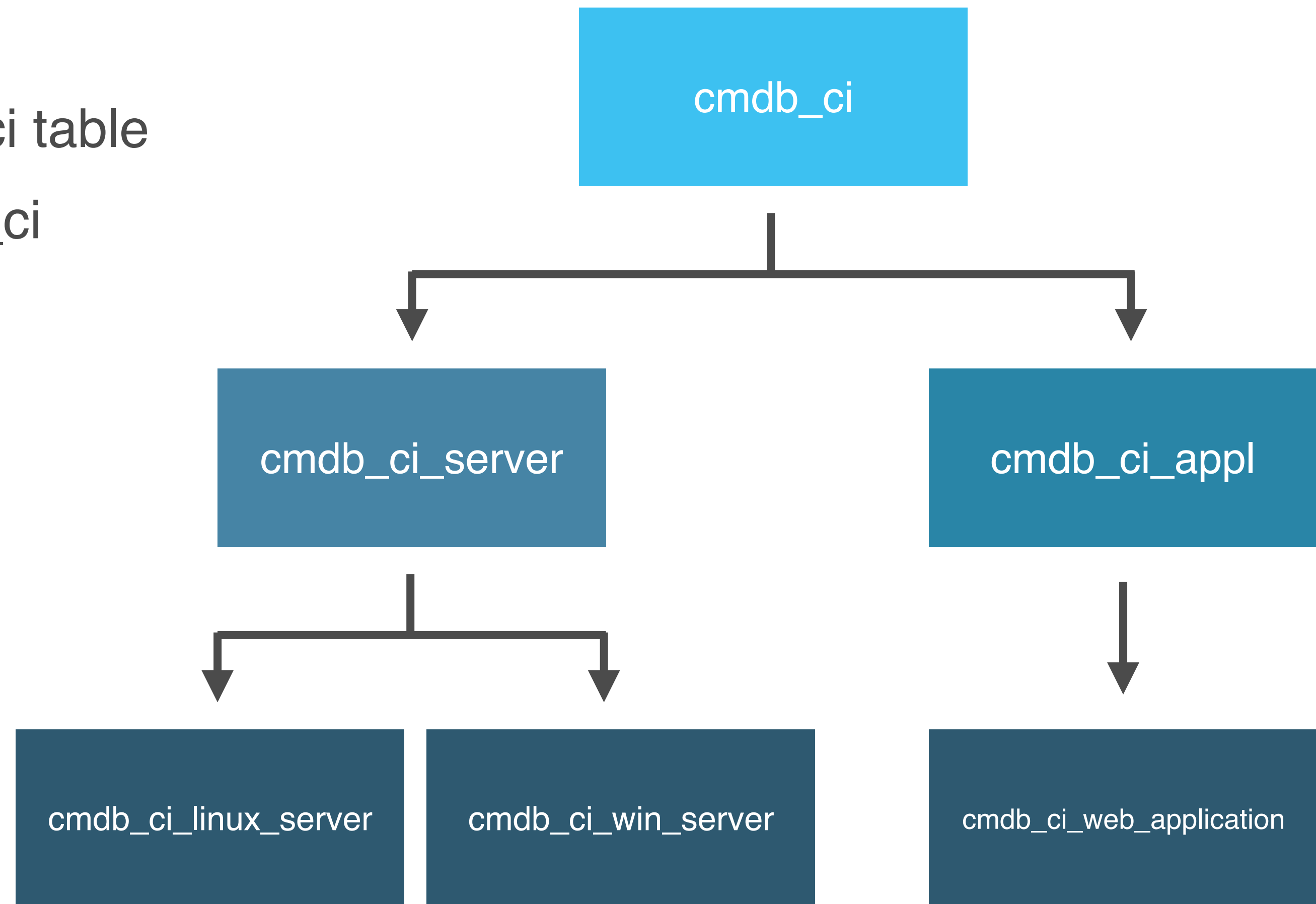
Table Relationships

- Example:
 - Person table has *first name* and *last name* fields
 - Student & Faculty tables extend Person table, thus Student and Faculty tables inherit *first name* and *last name* fields
- Dictionary overrides
- Very common in CMDB



Example: CMDB Tree Structure

- Hundreds of CMDB tables
- Majority of tables extend cmdb_ci table
- New CI classes extended cmdb_ci



Tables & Columns Module

- Great for exploring tables and fields
- Shows field attributes
- Link to schema map

Tables & Columns

Click a button to create a new table or application, or browse all applications.

Create Table

Create Application

Browse Applications

Or, select a table to browse its columns and indices.

Table Names

.NET Application [cmdb_ci_appl_dot_net]
A10 Load Balancer [cmdb_ci_lb_a10]
Access Control [sys_security_acl]
Access Roles [sys_security_acl_role]
Accessory [cmdb_ci_acc]
Account [customer_account]
Account Relationship [account_relationship]
Account Relationship Access [sn_customerservice_account_relationship_access]
Account Relationship Type [sn_customerservice_account_relationship_type]
Account Team Member [sn_customerservice_team_member]
ACE [cmdb_ci_lb_ace]
ACL EP [cmdb_ci_endpoint_acl]
Action [ecc_action]
Action Category [sys_hub_category]
Action Inputs [sys_hub_action_input]
Action Instance [sys_hub_action_instance]
Action Outputs [sys_hub_action_output]
Action Step Definition [sys_flow_step_definition]
Action Step Definition Input [sys_flow_step_definition_input]
Action Step Definition Output [sys_flow_step_definition_output]
Action Type [sys_hub_action_type_definition]
Action Type Base [sys_hub_action_type_base]
Action Type Snapshot [sys_hub_action_type_snapshot]
Active Cluster Transactions [v_cluster_transaction]
Active Directory Domain Controller [cmdb_ci_ad_controller]

Column Names

Fields (cmdb_ci_acc)
Approval group
Asset
Asset tag
Assigned
Assigned to
Assignment group
Attributes
Can Print
Category
Checked in
Checked out
Class
Comments
Company
Correlation ID
Cost
Cost center
Cost currency
Created
Created by
DNS Domain

Column Attributes

Element cmdb_ci_acc.assigned_to

active	true
array	false
audit	false
choice	0
dependent	company
dependent_on_field	company
display	false
dynamic_creation	false
element_reference	false
filterable	true
function_field	false
groupable	true
hint	Person using or primarily responsible for this item
i18n_sortable	true
internal_type	reference
label	Assigned to
language	en
mandatory	false
matchable	true
max_length	255

Edit Table

Schema map

Delete all records

Schema Map

- Visual schema map
- Shows extended tables
- *Focus* on different tables

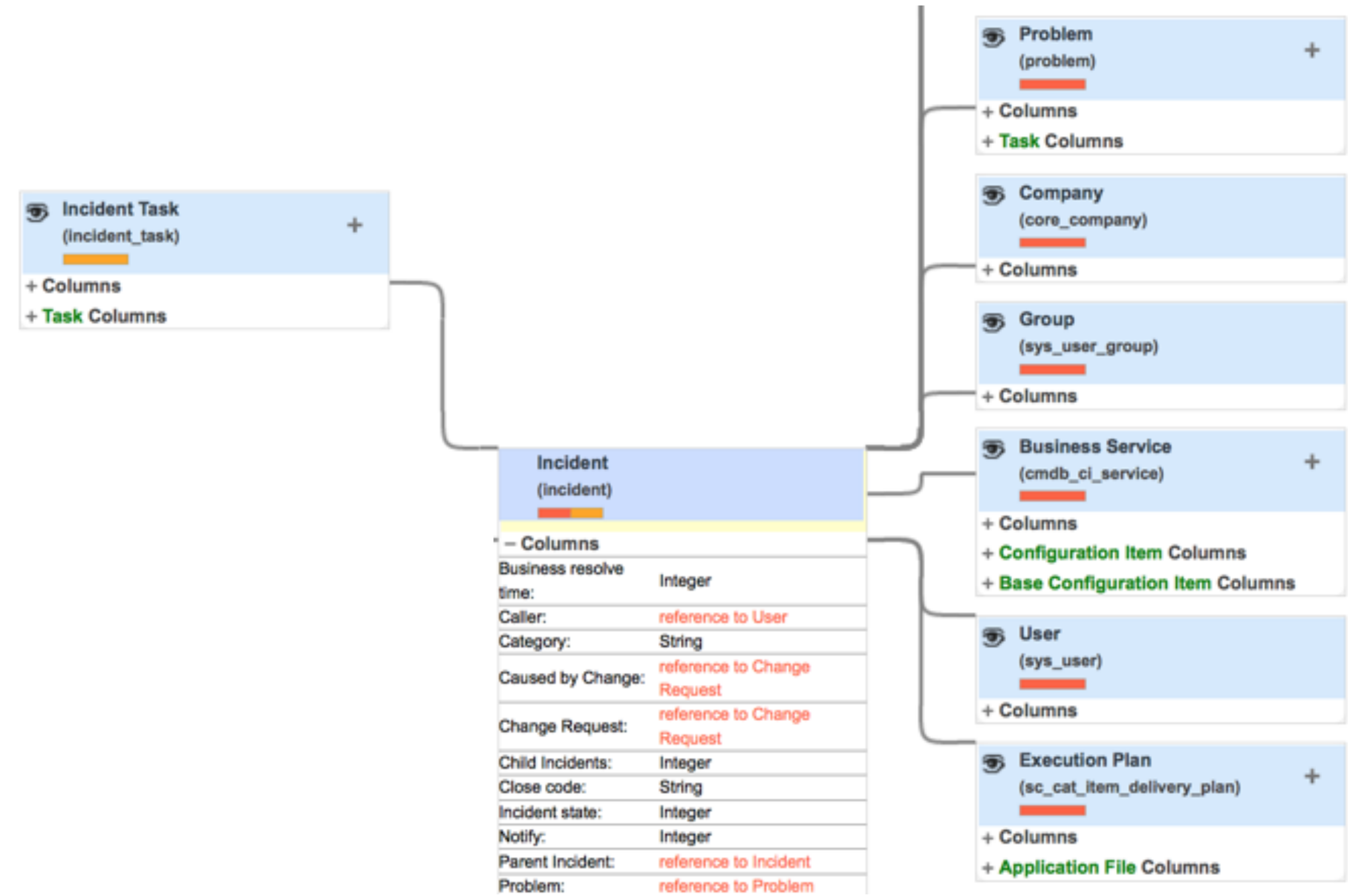


Table Structure & Schema Map

Demo



Create a Table

* Label	<input type="text"/>	Application	<input type="text" value="Global"/>	<input type="button" value="i"/>
* Name	<input type="text"/>	Create module	<input checked="" type="checkbox"/>	
Extends table	<input type="text"/> <input type="button" value="Q"/>	Create mobile module	<input checked="" type="checkbox"/>	
		Add module to menu	<input type="text" value="-- Create new --"/>	<input type="button" value="v"/>
		New menu name	<input type="text"/>	

- Label
 - Human readable
 - May have spaces
- Name
 - No spaces
 - Lowercase
- Create a new module and/or role
- Add module to existing app



Delete a Table

The screenshot shows the Salesforce table configuration interface for two tables: 'Table - Incident' and 'Table - Inbound WS'. The 'Table - Incident' configuration is at the top, and the 'Table - Inbound WS' configuration is at the bottom. A blue arrow points from the 'Delete All Records' button in the 'Table - Incident' configuration to the 'Delete' button in the 'Table - Inbound WS' configuration, indicating the sequence of actions for deleting a table.

Table - Incident Configuration:

- Label: Incident
- Name: incident
- Extends table: Task
- Application: Global
- Buttons: Update, Delete All Records

Table - Inbound WS Configuration:


- Label: Inbound WS
- Name: u_inbound_ws
- Application: Global
- Buttons: Update, Delete, Delete All Records

- First delete all records, then delete table
- Cannot delete out-of-box tables

Creating an Application

- 3 templates
 - From scratch
 - Create custom application
 - Start from template
- Application scope


[Get started building applications](#)



Start from scratch

Create an empty application.


Start with a blank slate when building workflow, activity or API based apps and components.



Create custom application

Create a powerful business application in two clicks.

Start with a table, menu and simple access controls. Then build from there using all of the power of the platform behind you.



Start from a template

Create an advanced task-oriented solution instantly by starting from a template.

Get a head start on an enterprise-grade service management solution, right now.

Table Maintenance & Custom Apps

Demo

Demo

