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
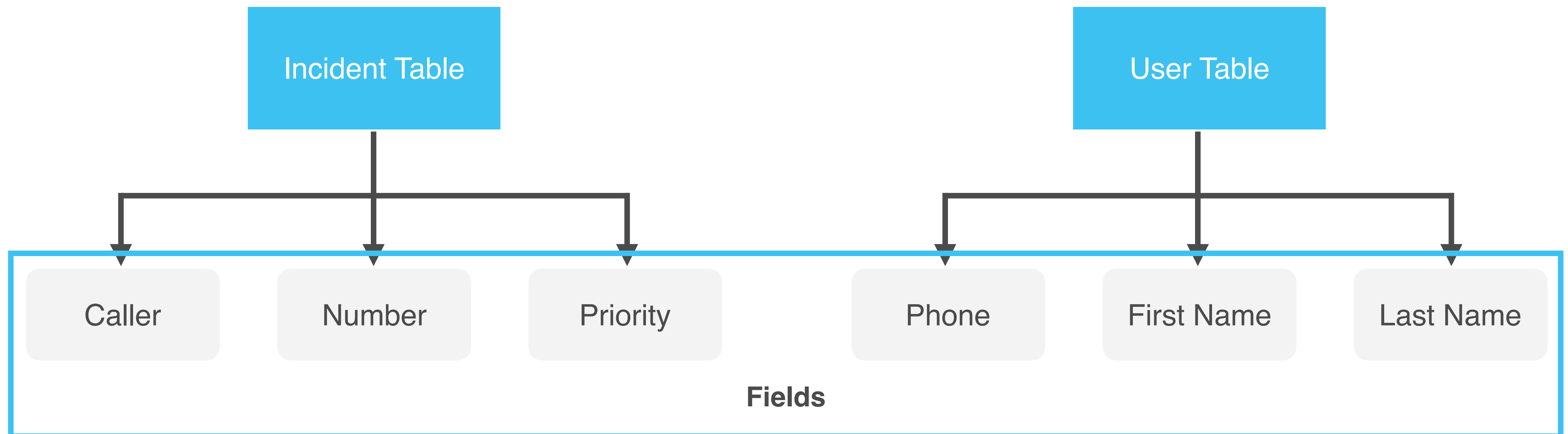7. Reference Fields
8. Table Relationships
9. Table Management
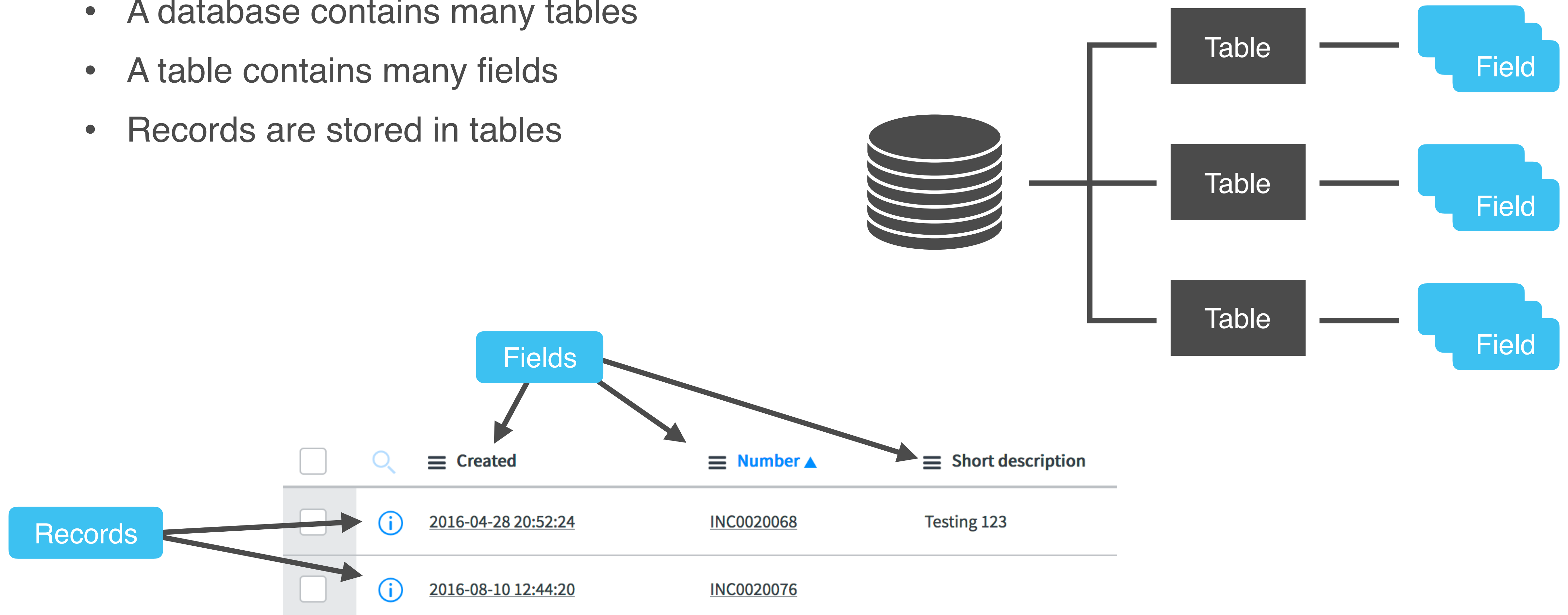10. Creating an App

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.

sys_db_object	→	Tables
sys_dictionary	→	Fields
sys_documentation	→	Labels, etc.
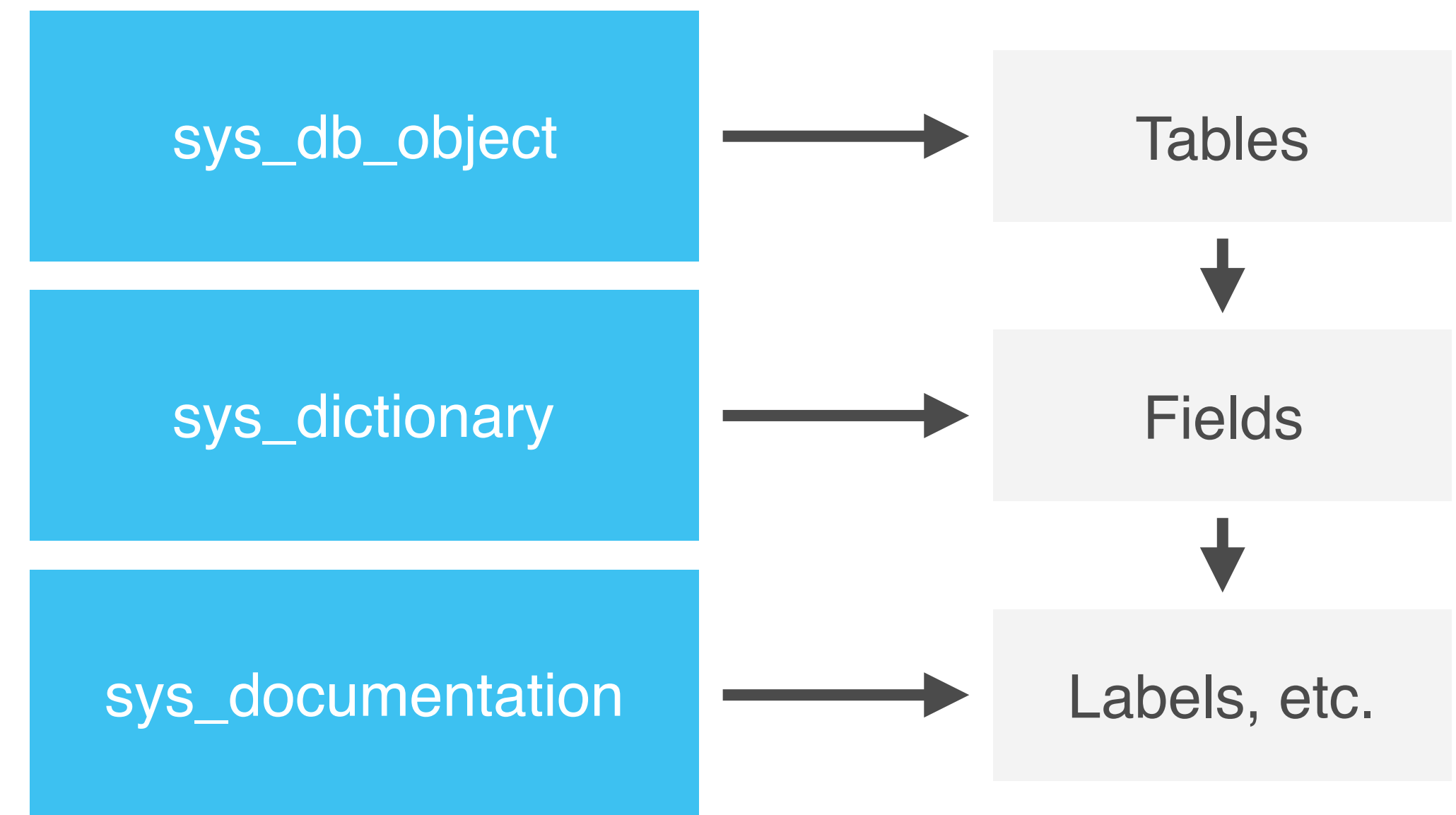
☰ **Dictionary Entries** [New] [for text ▼] [Search]   [Grid | Split]

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

☐ 🔍	☰ Table	☰ Column name	☰ Type	☰ Reference	☰ Default value	☰ Display
	=incident	category	Search	Search	Search	Search
☐ ⓘ	incident	category	String		inquiry	false

Tables & Fields

Demo

Fields

- Each table contains many fields

- Different field types

- Calculated values

- Attributes

- Default values

- Dictionary overrides

Field Types

- String

- Date

- Time

- Choice

- True/False

- List

- HTML

- Script

- Reference

Draft KB ☐

Published 2016-01-15 📅

Category | Inquiry / Help ▾

Watch list 🔒 👤

Caller | Stephen Hawking 🔍 🔗 ⓘ

Text ❓

B *I* U ↩ ↪ | Font Family ▾ | 18pt

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What is Spam?

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

Definitions

The term "spam" is Internet slang that refers to unsolicited commercial e
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`
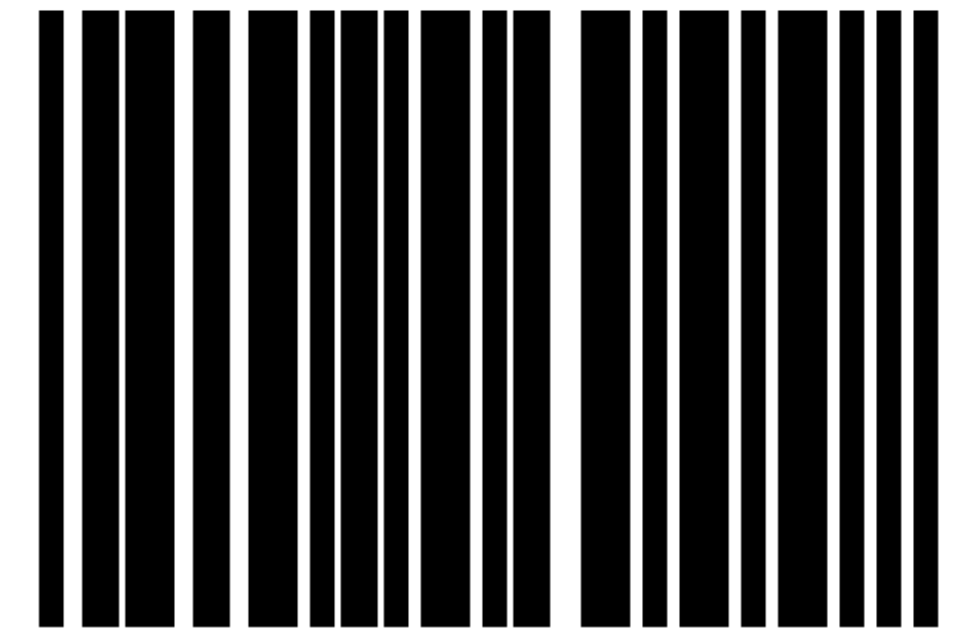
Reference Fields

- Power of RDBMS

- References are everywhere

- Store sys_id in reference field

- Must match exact record (1 to 1)

- Reference qualifiers

Location [Colorado] 🔍 ⓘ

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
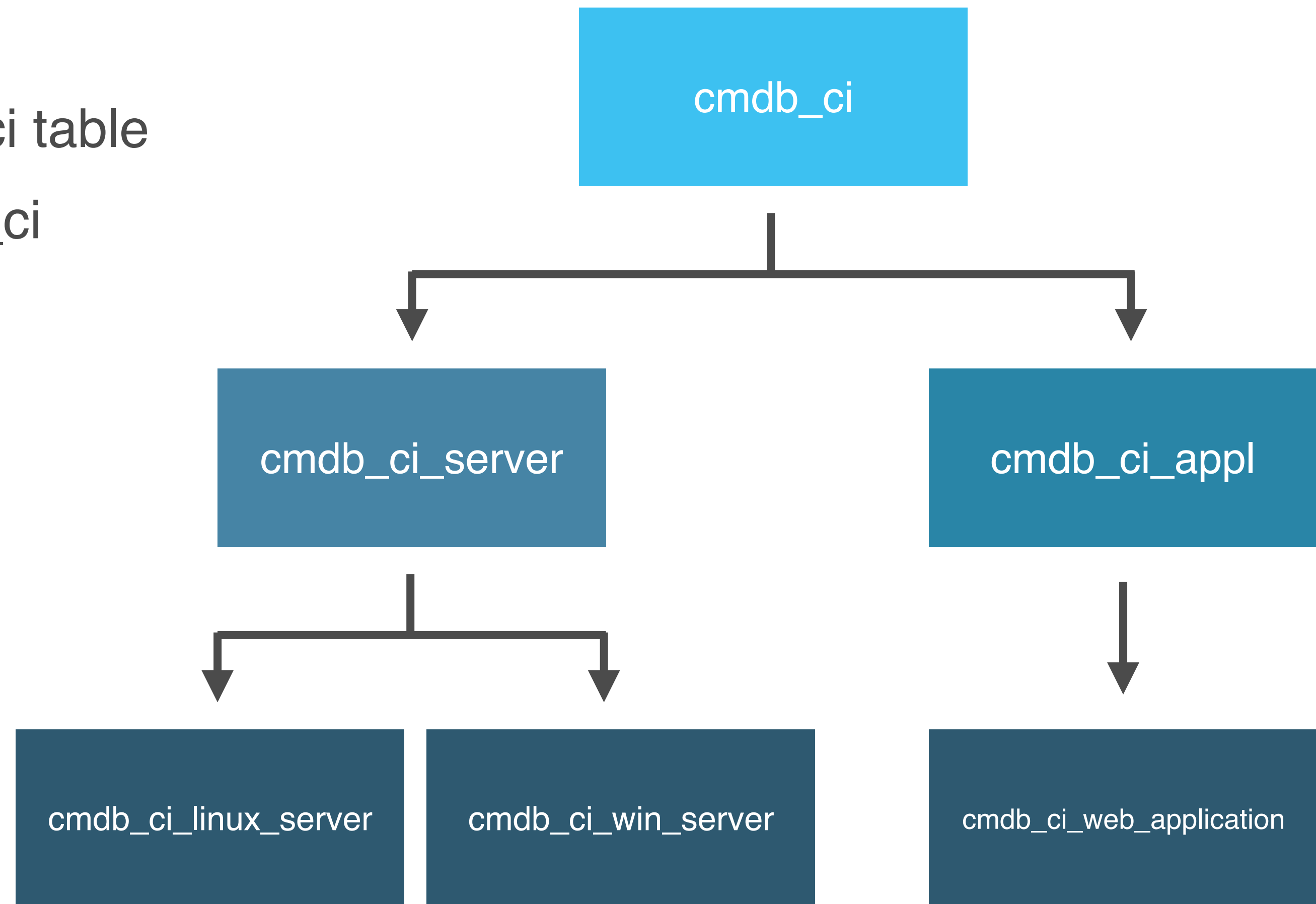
Fields & Field Types

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
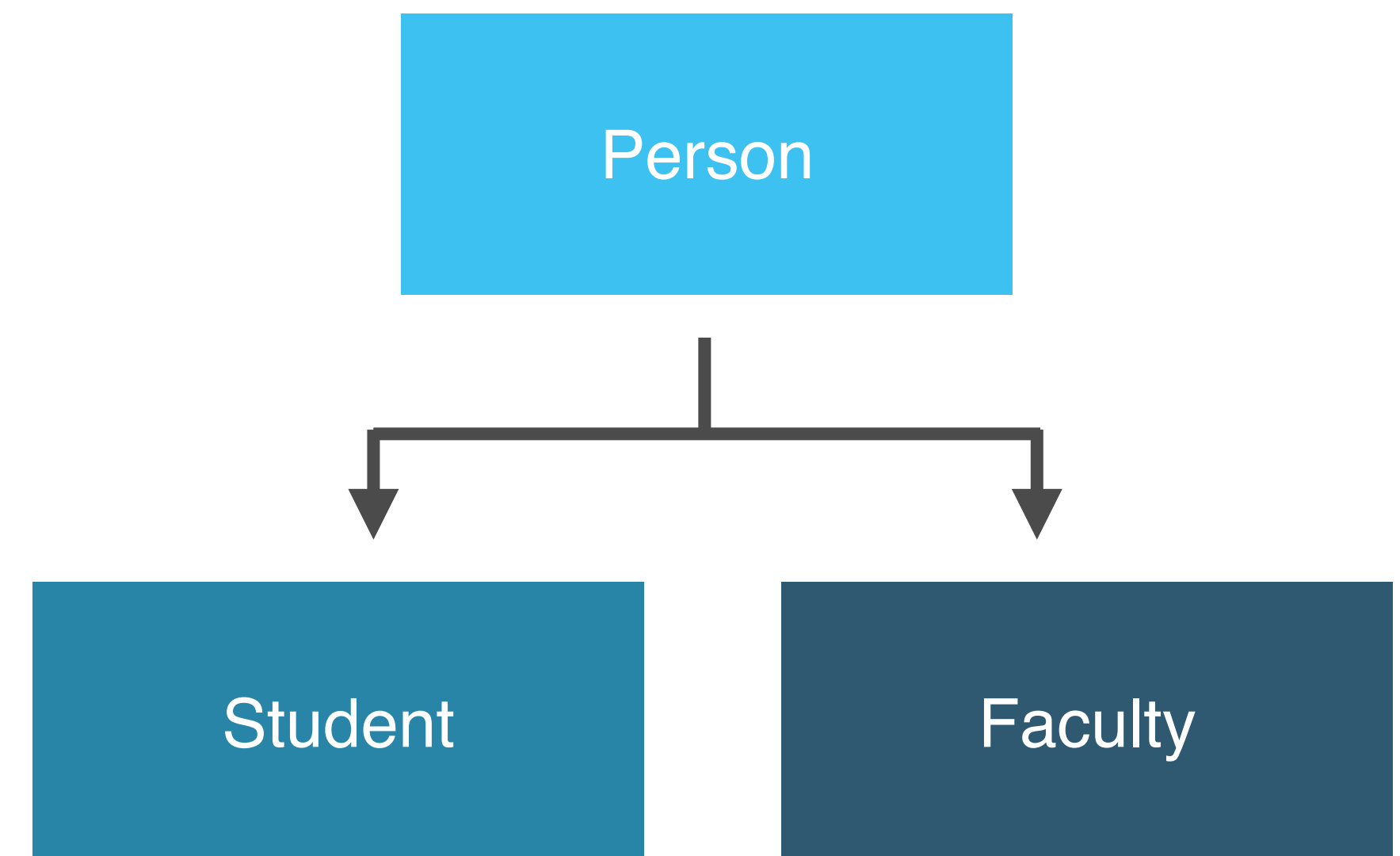
Example: CMDB Tree Structure

- Hundreds of CMDB tables

- Majority of tables extend cmdb_ci table

- New CI classes extended cmdb_ci

```
                              ┌─────────────┐
                              │   cmdb_ci   │
                              └─────────────┘
                   ┌─────────────────┴─────────────────┐
                   ▼                                     ▼
        ┌───────────────────┐                 ┌───────────────────┐
        │  cmdb_ci_server   │                 │   cmdb_ci_appl    │
        └───────────────────┘                 └───────────────────┘
           ┌───────┴────────┐                           │
           ▼                ▼                           ▼
 ┌────────────────────┐ ┌──────────────────┐ ┌──────────────────────────┐
 │ cmdb_ci_linux_server│ │cmdb_ci_win_server│ │ cmdb_ci_web_application  │
 └────────────────────┘ └──────────────────┘ └──────────────────────────┘
```

Tables & Columns Module

- Great for exploring tables and fields

- Shows field attributes

- Link to schema map

Schema Map

- Visual schema map
- Shows extended tables
- *Focus* on different tables
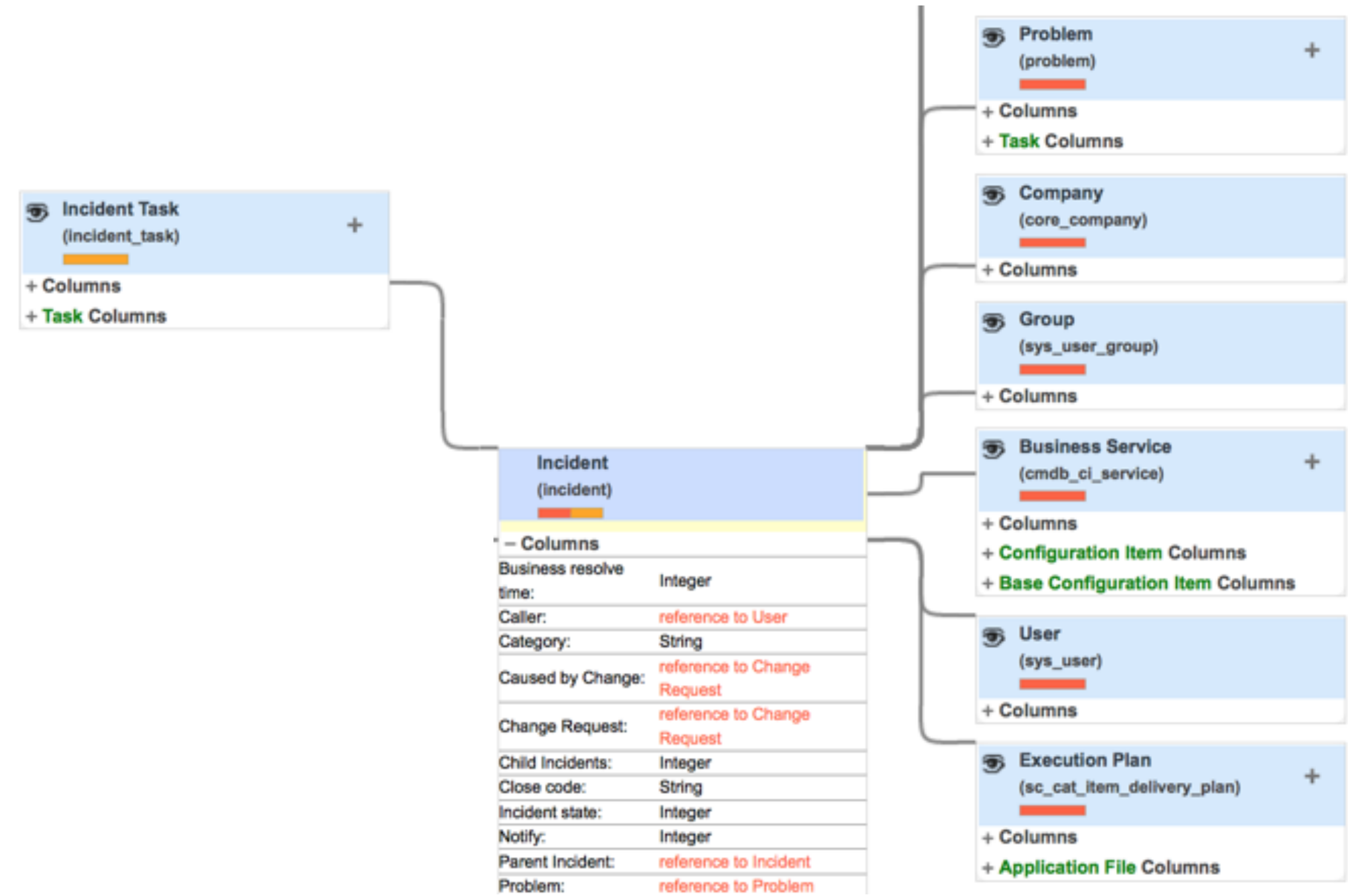
Table Structure & Schema Map

Demo

Create a Table

- 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

- 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

Table Maintenance & Custom Apps

Demo

Demo