



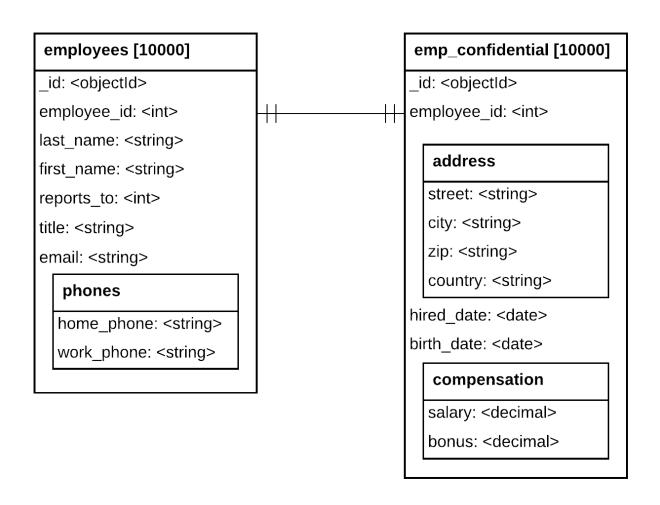
View Discussion

### Chapter 2: Relationships

Lab: One-to-One Relationship

**Secretarian** Back to the Question

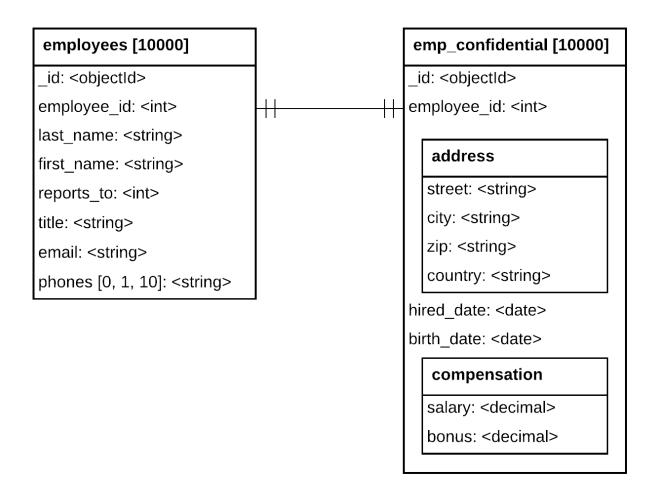
#### **Correct Option:**



In the original schema, all fields had a One-to-One relationship by being at the same level.

First we migrated fields containing confidential information to the **emp\_confidential** collection and established a relationship between the two collections. Even though this information is stored across two collections, it still represents a One-to-One relationship.

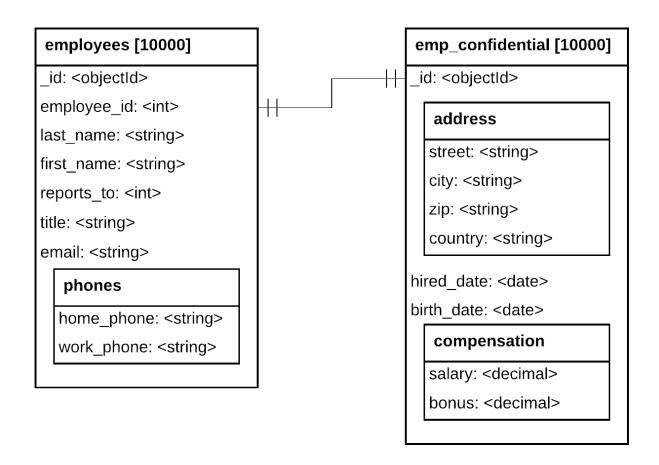
Then we created sub-documents for **phones**, **address**, and **compensation** to organize the information. Embedding an entity inside our collection does not change the relationship, as long as the embedded entities are not arrays of entities.



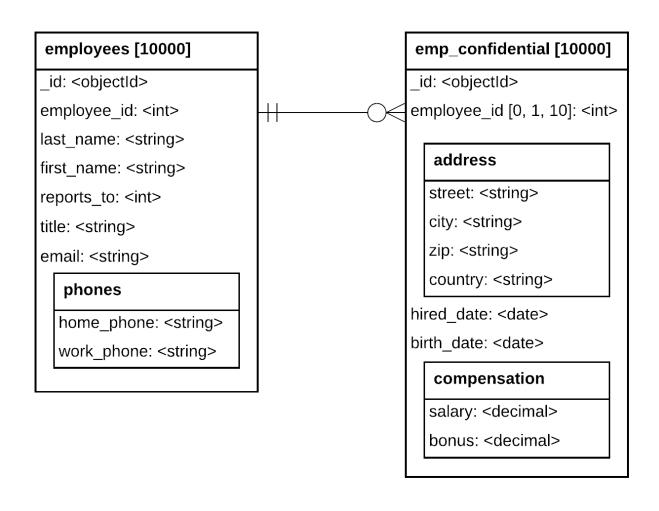
In this option, the **phones** are represented as an array. You see it through the **[0, 1, 10]** notation of the cardinalities of the array.

Using an array of phones instead of an embedded sub-document changes the relationship between an employee and their phone numbers. Instead of an employee having a One-to-One relationship with each of their specific phone numbers, they now have a One-to-Many relationship between a person and a variable number of phone numbers. Additionally, each number can no longer be identified by its intended purpose.

Because, there is only one **home\_phone** and one **work\_phone**, creating a sub-document is sufficient.



In this option, the field **employee\_id** does not exist in the **emp\_confidential** collection. We can't use **\_id** to establish the relationship back to the **employees** collection field **employee\_id** because they have different types.



In this option, we erroneously established a One-to-Many relationship between an employee and their confidential information.

You can see the relationship by the Crow's Foot connector or by the [0, 1, 10] cardinality on the relationship.

# employees [10000]

\_id: <objectId>

lastname: <string>

first\_name: <string>

#### address

street: <string>

city: <string>

zip: <string>

country: <string>

employee\_id: <int>

reports\_to: <int>

title: <string>

## phones

home\_phone: <string>

work\_phone: <string>

hired\_date: <date>

birth\_date: <date>

# compensation

salary: <decimal>

bonus: <decimal>

In this option, we did not create a separate collection for the confidential information.

We could still restrict the access of some fields through the use of views in MongoDB, but it is much easier to do it at the collection level.

Proceed to next section