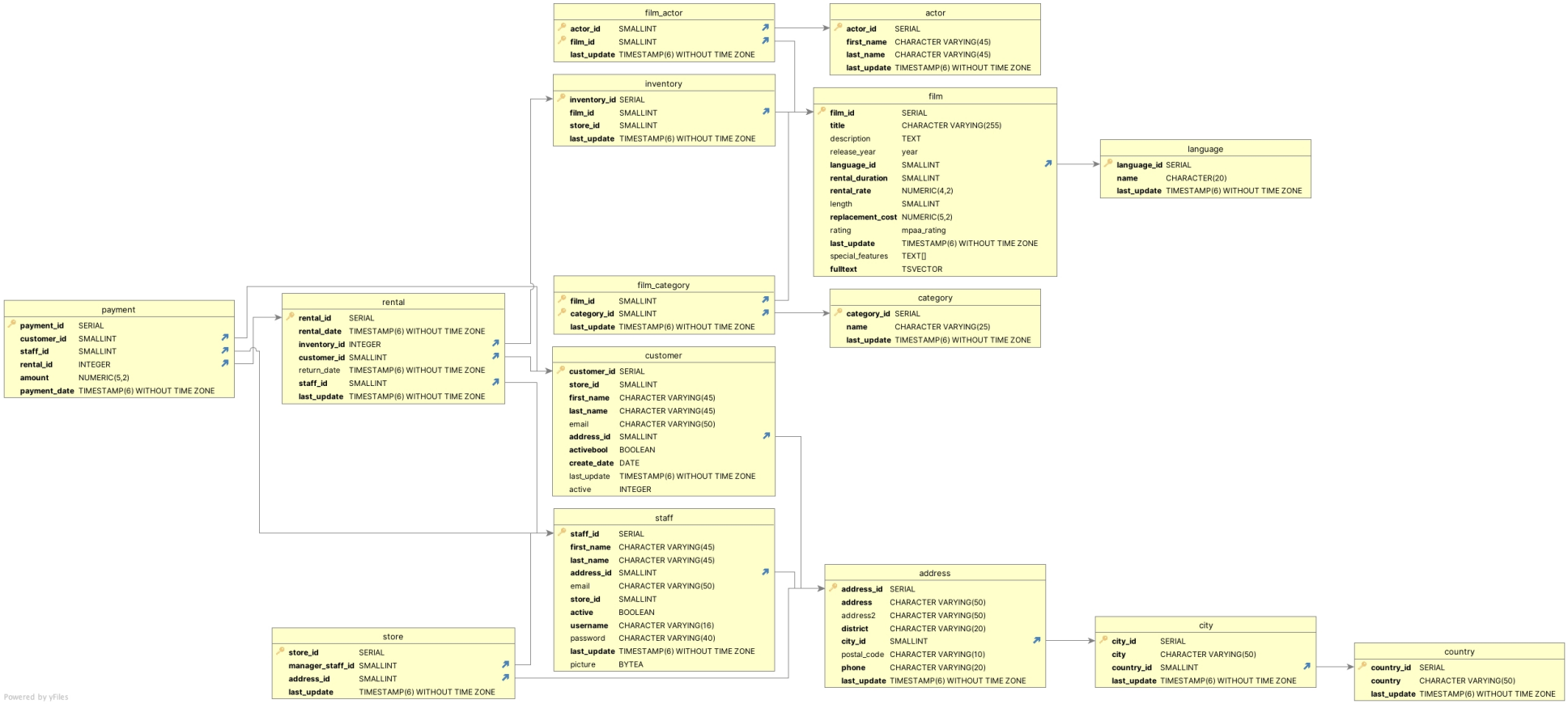
ROCKBUSTER STEALTH
DATA DICTIONARY

BY DAT DO
20 MARCH 2024

Table of Contents

Rockbuster Stealth ERD (Entity Relationship Diagram)



I would say that the Rockbuster database is mores a snowflake schema because there are fact, dimension and sub-dimension tables. In this scenario we can see that payment and rental are fact tables whereas the next once are dimension tables which are leading to sub-dimension tables.

Fact Table

payment

Columns	Data Type	Description
payment_id	SERIAL	payment_id is the primary key for the table, ensuring that each value is unique and providing a way to uniquely identify each row in the table.
costomer_id	SMALLINT	customer_id is a Foreign key that has the smallint data type, suitable for representing smaller integer values.
staff_id	SMALLINT	staff_id is a Foreign key that has the smallint data type, suitable for representing smaller integer values.
rental_id	INTEGER	rental_id is a foreign key that has the data type INTEGER which represents a 32-bit signed integer.
amount	NUMERIC(5,2)	Amount is a foreign key whereas NUMERIC(5,2) is the data type, indicating that it can store numbers with up to 5 digits in total, where 2 digits are reserved for the decimal part.
payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information. Date of payment (YYYY/DD/MM)

rental

Columns	Data Type	Description
rental_id	SERIAL	rental_id is the primary key for the table, ensuring that each value is unique and providing a way to uniquely identify each row in the table.
rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information Rental Date (YYYY/DD/MM)

inventory_id	INTEGER	inventory_id is a foreign key that has the data type INTEGER which represents a 32-bit signed integer.
customer_id	SMALLINT	Customer is a Foreign key that has the smallint data type, suitable for representing smaller integer values.
return_date	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information. Return Date (YYYY/DD/MM)
staff_id	SMALLINT	staff_id is a Foreign key that has the smallint data type, suitable for representing smaller integer values.
last_updates	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information. Updated Date (YYYY/DD/MM)

Dimension Table

store

Columns	Data Type	Description
store_id	SERIAL	store_id is the primary key for the table, ensuring that each value is unique and providing a way to uniquely identify each row in the table.
manager_staff_id	SMALLINT	Small integer id of the manager staff
address_id	SMALLINT	Small integer id of the address
last_updates	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information. Updated Date (YYYY/DD/MM)

film_actor

Columns	Data Type	Description
actor_id	SMALLINT	actor_id is the composite key, connecting to actor table. It represents the ID of the Actor in small integer.
film_id	SMALLINT	film_id is the composite key, linked to film table. It represents the ID of the Film in small integer.
last_updates	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information. Updated Date (YYYY/DD/MM)

inventory

Columns	Data Type	Description
inventory_id	SERIAL	Primary key, larger integer, unique number used to identify a film or item to be rented by customers
film_id	SMALLINT	film_id is the composite key, linked to film table. It represents the ID of the Film in small integer.
store_id	SMALLINT	store_id is small integer, unique number used to identify the store in Rockbuster classification
last_updates	TIMESTAMP(6) WITHOUT TIME ZONE	timestamp(6) without time zone is the data type, specifying that it stores date and time information with microsecond precision and does not include time zone information. Updated Date (YYYY/DD/MM)

Film_category

Columns	Data Type	Description
film_id	SMALLINT	film_id is the composite key, linked to film table. It represents the ID of the Film in small integer.
category_id	SMALLINT	category_id is the composite key, linked to category table. It represents the ID of the category of the film in small integer.
last_updates	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

category

Columns	Data Type	Description
category_id	SERIAL	Primary key, larger integer, unique number used to identify a film category
Name	CHARACTER VARYING (25)	The name of the film category, max 25 characters.
last_updates	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

customer

Columns	Data Type	Description
customer_id	SERIAL	Primary key, unique number used to identify the customer in this database.
store_id	SMALLINT	Small integer, unique number used to identify the store in Rockbuster classification
first_name	CHARACTER VARYING (45)	Customer's first name, max 45 characters.
last_name	CHARACTER VARYING (45)	Customer's last name, max 45 characters.
Email	CHARACTER VARYING (50)	Customer's email, max 50 characters.

address_id	SMALLINT	Small integer, unique number used to identify the address of customer, linked to address table
Activebool	BOOLEAN	True or false statement to indicate the customer account status. Boolean data can hold three possible values: true, false or null.
create_date	DATE	The date when the customer account was created. Temporal date (yyyy-mm-dd)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)
Active	INTEGER	Integer, a number to indicate whether the customer account is active or not

actor

Columns	Data Type	Description
actor_id	SERIAL	Primary key, unique number used to identify the actor in this database.
first_name	CHARACTER VARYING (45)	Actor's first name, max 45 characters.
last_name	CHARACTER VARYING (45)	Actor's last name, max 45 characters.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

staff

Columns	Data Type	Description
staff_id	SERIAL	Primary key, unique number used to identify the staff in this database.
first_name	CHARACTER VARYING (45)	Employee's first name, max 45 characters.
last_name	CHARACTER VARYING (45)	Employee's last name, max 45 characters.
address_id	SMALLINT	Small integer, unique number used to identify the address of employee, linked to address table
Email	CHARACTER VARYING (50)	Employee's email, max 50 characters.

store_id	SMALLINT	Small integer, unique number used to identify the store in Rockbuster classification
Active	BOOLEAN	True or false statement to indicate the customer account status. Boolean data can hold three possible values: true, false or null.
Username	CHARACTER VARYING (16)	Employee's username, max 16 characters.
Password	CHARACTER VARYING (40)	Employee's password, max 40 characters.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)
Picture	BYTEA	Employee's picture. Bytea data type is used to store raw binary data, e.g. images.

language

Columns	Data Type	Description
language_id	SERIAL	Primary key, unique number used to identify the language in this table
Name	CHARACTER VARYING (20)	The name of the language of the film audio, max 20 characters.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

film

Columns	Data Type	Description
film_id	SERIAL	Primary key, unique number used to identify the film in this database.
title	CHARACTER VARYING (255)	the title of the film, max 255 characters.
Description	TEXT	Film synopsis with unlimited length
release_year	year	Integer, the year the film was released
language_id	SMALLINT	Foreign key, unique number used to identify the language of film audio; linked to Language table

rental_duration	SMALLINT	Small integer, the number of days the item was rented for
rental_rate	NUMERIC(4,2)	Rating, number with max 4 digits, including and 2 digits in fraction part;
length	SMALLINT	Small integer, the length of film (minutes)
replacement_cost	NUMERIC(5,2)	The cost the customer can be charged in case of lost or damage of rental item. Monetary amount, number with max 5 digits, including and 2 digits in fraction part.
rating	mpaa_rating	Film rating introduced by Movie Picture Association
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)
special_features	TEXT[]	Extra videos related to the film available for audience
fulltext	TSVECTOR	Text-searchable data where we can use a word as an index

address

Columns	Data Type	Description
address_id	SERIAL	Primary key, unique number used to identify the address in this table.
address	CHARACTER VARYING (50)	Any address in this database - line1 (street number and street name)
address2	CHARACTER VARYING (50)	Any address in this database - line2, it can be used as a secondary address designator such as apartment number or building name
district	CHARACTER VARYING (20)	Any address in this database - district / state / region name
city_id	SMALLINT	Foreign key, small integer, unique number used to identify the city in this database, linked to City table
poostal_code	CHARACTER VARYING (10)	Any address in this database - postal code, max 10 characters
phone	CHARACTER VARYING (20)	Phone number related to the address in this database, max 20 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

city

Columns	Data Type	Description
city_id	SERIAL	Primary key, unique number used to identify the city in this database
City	CHARACTER VARYING (50)	The name of the city, max 50 characters
country_id	SMALLINT	Foreign key, unique number used to identify the country in this database, linked to Country table
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)

country

Columns	Data Type	Description
country_id	SERIAL	Primary key, unique number used to identify the country in this database
Country	CHARACTER VARYING (50)	The name of the country, max 50 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Temporal data, store both date (yyyy-mm-dd) and time (hours:minutes:sec)