

Rockbuster Stealth

Data Dictionary

September, 2023

Table of Contents

1. Rockbuster Stealth LLC.....	2
2. Entity Relationship Diagram.....	3
3. Tables.....	4

1. Rockbuster Stealth LLC

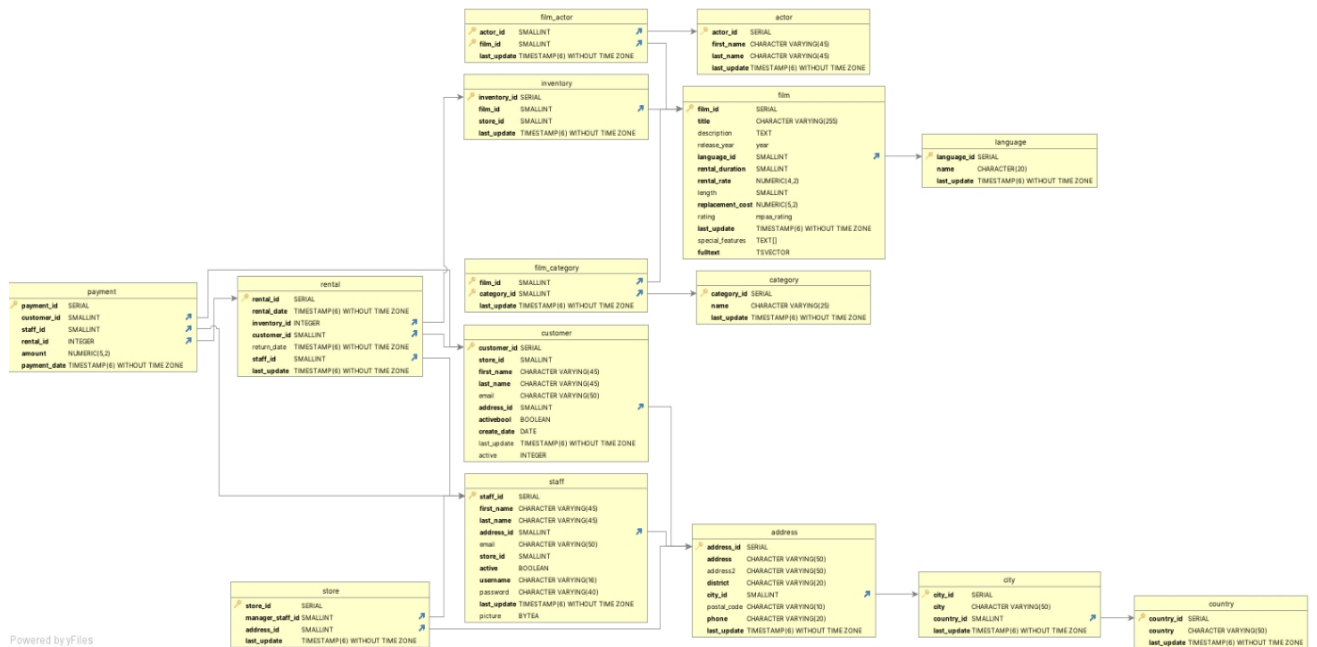
This is a documentation of Rockbuster Microsoft SQL Server database.

Rockbuster Stealth LLC is a fictitious movie rental company that used to have stores around the world. Facing stiff competition from streaming services such as Netflix and Amazon Prime, the Rockbuster Stealth management team is planning to use its existing movie licenses to launch an online video rental service in order to stay competitive.

You can download Rockbuster dataset here:

- <http://www.postgresqltutorial.com/wp-content/uploads/2019/05/dvdrental.zip>

2. Entity Relationship Diagram (ERD)



The ERD for the Rockbuster database has a snowflake schema.

3.1. Fact Tables

3.1.1. Payment

Columns	Data Type	Description
payment_id	SERIAL	Number uniquely identifying payment; continuous
Customer_id	SMALLINT	Number identifying customer who made payment
Staff_id	SMALLINT	Number identifying staff responsible for rental
Rental_id	INTEGER	Number identifying the renting of a particular film
Amount	NUMERIC(5,2)	Amount paid
Payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of payment

Links to

Table	Join
Rental	Payment.rental_id = Rental. Rental_id
Customer	Payment.customer_id = Customer. customer_id
Staff	Payment.staff_id = Staff.staff_id

Unique Keys

Columns	Description
payment_id	Primary key
rental_id	Foreign key
customer_id	Foreign Key
staff_id	Foreign Key

3.1.2. Rental

Columns	Data Type	Description
Rental_id	SERIAL	Number identifying the rental of film

Rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of rental
Inventory_id	INTEGER	Number identifying film inventory
Customer_id	SMALLINT	Serial number identifying customer
Return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date of return of rented film
Staff_id	SMALLINT	Unique number identifying staff
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date "rental" table was last updated

Links to

Table	Join
Inventory	rental.inventory_id = inventory.inventory_id
Customer	rental.customer_id = Customer.customer_id
Staff	rental.staff_id = Staff.staff_id

Linked from

Table	Join
payment	rental.rental_id = payment.Rental_id

Unique Keys

Columns	Description
rental_id	Primary key
inventory_id	Foreign key
customer_id	Foreign Key
staff_id	Foreign Key

3.2. Dimension Tables

3.2.1. Film_category (Composite Key)

Columns	Data Type	Description
film_id	SMALL INT	This is a number uniquely identifying the film.
category_id	SMALL INT	Number showing the category of the film.

last_update	TIMESTAMP (6)	Date, without time zone, film was last updated.
-------------	---------------	---

Links to

Table	Join
film	film_category.film_id = film. film_id
category	film_category.category_id = category. category_id

Unique Keys

Columns	Description
film_id	Primary key
category_id	Primary key

3.2.2. Film_actor (Composite Key)

Columns	Data Type	Description
Actor_id	SMALLINT	Number uniquely identifying the actor
Film_id	SMALLINT	Number identifying film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “film_actor” table was updated

Links to

Table	Join
actor	film_actor.actor_id = actor. actor_id
film	film_actor.film_id = film. film_id

Unique Keys

Columns	Description
actor_id	Primary key
film_id	Primary key

3.2.3. Inventory

Columns	Data Type	Description
Inventory_id	SERIAL	Number identifying film inventory
Film_id	SMALLINT	Number identifying film
Store_id	SMALLINT	Number identifying store for the film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “inventory” was last updated

Links to

Table	Join
film	inventory.film_id = film. film_id

Linked from

Table	Join
Rental	inventory.inventory_id = rental. inventory_id

Unique Keys

Columns	Description
inventory_id	Primary key
film_id	Foreign Key

3.2.4. Actor

Columns	Data Type	Description
Actor_id	SERIAL	Number identifying actors in film on table
First_name	CHARACTER VARYING (45)	First name of actor in both upper and lower case; max. 45 characters
Last_name	CHARACTER VARYING (45)	Last name of actor in both upper and lower case; max. 45 characters
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “actor” table was last updated

Linked from

Table	Join
film_actor	actor.actor_id = film_actor. actor_id

Unique Keys

Columns	Description
actor_id	Primary key

3.2.5. Film

Columns	Data Type	Description
Film_id	SERIAL	Serial number identifying film on table
Title	CHARACTER VARYING (255)	Title of film
Description	TEXT	Description of the film
Release_year	YEAR	Year film was released
Language_id	SMALLINT	Number identifying language of the film
Rental_duration	SMALLINT	How long film can be rented
Rental_rate	NUMERIC (4,2)	How much to be paid for renting of film
Length	SMALLINT	Length of the film
Replacement_cost	NUMERIC (5,2)	How much to be paid in case film gets lost
Rating	mpaa_rating	Rating of the film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date "film" table was last updated
Special_features	TEXT[]	Special feature in films
fulltext	TSVECTOR	Characters in the film

Links to

Table	Join
language	film.language_id = language. language_id

Linked from

Table	Join
film.actor	film.film_id = film_actor.film_id
inventory	film.film_id = inventory.film_id

Unique Keys

Columns	Description
film_id	Primary key
language_id	Foreign key

3.2.6. Language

Columns	Data Type	Description
Language_id	SERIAL	Serial number identifying language on table
Name	CHARACTER (20)	Name of the language of the film
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “language” table was last updated

Linked from

Table	Join
film	language.language_id = film.language_id

Unique Keys

Columns	Description
language_id	Primary key

3.2.7. Category

Columns	Data Type	Description
Category_id	SERIAL	Serial number identifying category on table
Name	CHARACTER VARYING (25)	Name of the category of film

Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “category” table was last updated
-------------	--------------------------------------	--

Linked from

Table	Join
film_category	category.category_id = film_category. category_id

Unique Keys

Columns	Description
category_id	Primary key

3.2.8. Customer

Columns	Data Type	Description
Customer_id	SERIAL	Serial number identifying customer on table
Store_id	SMALLINT	Number identifying the store
First_name	CHARACTER VARYING (45)	First name of customer in both upper and lower case; max. 45 characters
Last_name	CHARACTER VARYING (45)	Last name of customer in both upper and lower case; max. 45 characters
Email	CHARACTER VARYING (50)	Email of Customer
Address_id	SMALLINT	Address of Customer
activebool	BOOLEAN	
Create_date	DATE	Date customer’s account was created
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “customer” table was last updated
Active	INTEGER	Number to show if customer is active or not

Links to

Table	Join
address	customer.address_id = address. address_id

Linked from

Table	Join
payment	customer.customer_id = payment. customer_id
rental	customer.customer_id = rental. customer_id

Unique Keys

Columns	Description
customer_id	Primary key
address_id	Foreign key

3.2.9. Staff

Columns	Data Type	Description
Staff_id	SERIAL	Unique number identifying staff
First_name	CHARACTER VARYING (45)	First name of staff in both upper and lower case; max. 45 characters
Last_name	CHARACTER VARYING (45)	Last name of staff in both upper and lower case; max. 45 characters
Address_id	SMALLINT	Number identifying staff address
Email	CHARACTER VARYING (50)	Email of staff
Store_id	SMALLINT	Number identifying store where staff is
active	BOOLEAN	
Username	CHARACTER VARYING (16)	Username of staff on store intranet
Password	CHARACTER VARYING (40)	Password of staff
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “staff” table was last updated
Picture	BYTEA	Picture of staff

Links to

Table	Join
language	staff.address_id = address. address_id

Linked from

Table	Join
payment	staff.staff_id = payment. staff_id
rental	staff.staff_id = rental. staff_id
store	staff.staff_id = store. staff_id

Unique Keys

Columns	Description
staff_id	Primary key
address_id	Foreign key

3.2.10. Store

Columns	Data Type	Description
Store_id	SERIAL	Unique identifier of store
Manager_staff_id	SMALLINT	Staff identity of the manager of the store
Address_id	SMALLINT	Address of the store
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date “store” table was last updated

Links to

Table	Join
staff	store.staff_id = staff. staff_id
address	store.address_id = address. address_id

Unique Keys

Columns	Description
store_id	Primary key
staff_id	Foreign key

address_id	Foreign key
------------	-------------

3.2.11. Address

Columns	Data Type	Description
Address_id	SERIAL	Serial number identifying address of customer
Address	CHARACTER VARYING (50)	Address of customer
Address2	CHARACTER VARYING (50)	Address of customer
District	CHARACTER VARYING (20)	District of the address
City_id	SMALLINT	Number identifying the city of address
Postal_code	CHARACTER VARYING (10)	Postal code of customer's address
Phone	CHARACTER VARYING (20)	Phone number of customer
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date "address" table was last updated

Links to

Table	Join
city	address.city_id = city. city_id

Linked from

Table	Join
store	address.address_id = store. address_id
staff	address.address_id = staff. address_id
customer	address.address_id = customer. address_id

Unique Keys

Columns	Description
address_id	Primary key
city_id	Foreign key

3.2.12. City

Columns	Data Type	Description
City_id	SERIAL	Number identifying the city of address
City	CHARACTER VARYING (50)	Name of city
Country_id	SMALLINT	Number identifying the country of address
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date "city" table was last updated

Links to

Table	Join
country	city.country_id = country. country_id

Linked from

Table	Join
address	city.city_id = address. city_id

Unique Keys

Columns	Description
city_id	Primary key
country_id	Foreign key

3.2.13. Country

Columns	Data Type	Description
Country_id	SERIAL	Number identifying the country of address
Country	CHARACTER VARYING (50)	Name of country
Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date "country" table was last updated

Linked from

Table	Join
city	country.country_id = city. country_id

Unique Key

Columns	Description
country_id	Primary key

