ROCKBUSTER STEALTH

Data Dictionary

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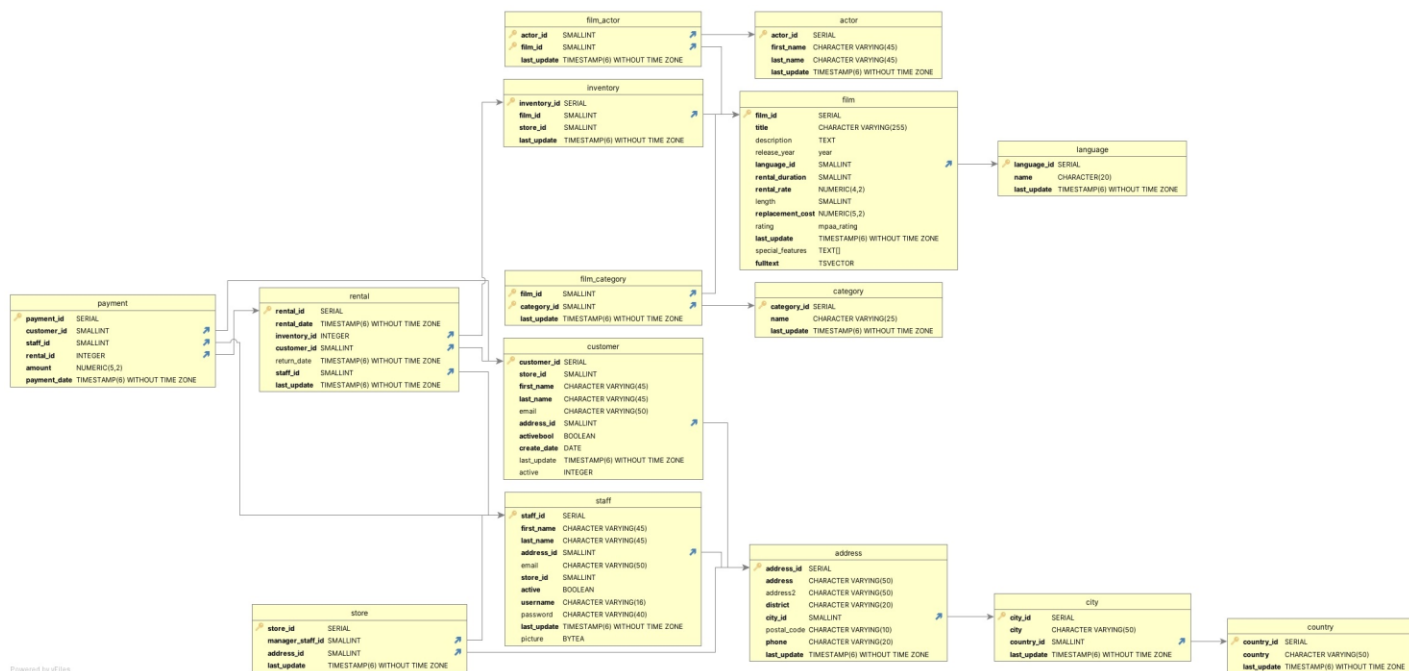**November 2023**

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Data Storage & Structure Rockbuster Entity Relationship Diagram (ERD):

film_actor
actor_id	SMALLINT
film_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

actor
actor_id	SERIAL
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

inventory
inventory_id	SERIAL
film_id	SMALLINT
store_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

film
film_id	SERIAL
title	CHARACTER VARYING(255)
description	TEXT
release_year	year
language_id	SMALLINT
rental_duration	SMALLINT
rental_rate	NUMERIC(4,2)
length	SMALLINT
replacement_cost	NUMERIC(5,2)
rating	mpaa_rating
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
special_features	TEXT[]
fulltext	TSVECTOR

language
language_id	SERIAL
name	CHARACTER(20)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

payment
payment_id	SERIAL
customer_id	SMALLINT
staff_id	SMALLINT
rental_id	INTEGER
amount	NUMERIC(5,2)
payment_date	TIMESTAMP(6) WITHOUT TIME ZONE

rental
rental_id	SERIAL
rental_date	TIMESTAMP(6) WITHOUT TIME ZONE
inventory_id	INTEGER
customer_id	SMALLINT
return_date	TIMESTAMP(6) WITHOUT TIME ZONE
staff_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

film_category
film_id	SMALLINT
category_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

category
category_id	SERIAL
name	CHARACTER VARYING(25)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

customer
customer_id	SERIAL
store_id	SMALLINT
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
email	CHARACTER VARYING(50)
address_id	SMALLINT
activebool	BOOLEAN
create_date	DATE
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
active	INTEGER

staff
staff_id	SERIAL
first_name	CHARACTER VARYING(45)
last_name	CHARACTER VARYING(45)
address_id	SMALLINT
email	CHARACTER VARYING(50)
store_id	SMALLINT
active	BOOLEAN
username	CHARACTER VARYING(16)
password	CHARACTER VARYING(40)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE
picture	BYTEA

address
address_id	SERIAL
address	CHARACTER VARYING(50)
address2	CHARACTER VARYING(50)
district	CHARACTER VARYING(20)
city_id	SMALLINT
postal_code	CHARACTER VARYING(10)
phone	CHARACTER VARYING(20)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

city
city_id	SERIAL
city	CHARACTER VARYING(50)
country_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

country
country_id	SERIAL
country	CHARACTER VARYING(50)
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

store
store_id	SERIAL
manager_staff_id	SMALLINT
address_id	SMALLINT
last_update	TIMESTAMP(6) WITHOUT TIME ZONE

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🔑 = Primary Key

📌 = Foreign Key

Fact Table: Payment

Key	Columns	Data Type	Description

🔑	Payment_id	SERIAL	Special # for each payment
📌	Customer_id	SMALLINT	Special # for each customer
📌	Staff_id	SMALLINT	Special # for each staff
📌	Rental_id	INTEGER	Special # for each movie rental
	Amount	NUMERIC(5,2)	$ amount for each movie rental
	Payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time for each payment

Links to:

Table	Join
Customer	payment.customer_id = customer.customer_id
Staff	payment.staff_id = staff_staff_id
Rental	payment.rental_id = rental.rental_id

Dimension Tables:

Rental

Key	Columns	Data Type	Description
🔑	Rental_id	SERIAL	Special # for each movie rental
	Rental_date	TIME STAMP(6) WITHOUT TIME ZONE	Date and time of the movie rental
📌	Inventory_id	INTEGER	Special # for each movie rental in the inventory
📌	Customer_id	SMALLINT	Special # for each customer
	Return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of movie rental return
📌	Staff_id	SMALLINT	Special # for each Staff
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated

Links to:

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

Links from:

Table	Join
Payment	payment.rental_id = rental.rental_id

Store:

Key	Columns	Data Type	Description
🔑	Store_id	SERIAL	Special # for each store
📌	Manager_staff_id	SMALLINT	Special # for manager of each store
📌	Address_id	SMALLINT	Special # for each store's address
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated

Links to:

Table	Join
Address	store.address_id = address.address_id
Staff	store.manager_staff_id = staff.staff_id

Links from:

Table	Join
Staff	staff.store_id = store.store_id
Customer	customer.store_id= store.store_id
Inventory	inventory.store_id = store.store_id

Film Actor:

key	Columns	Data type	Description

Key	Columns	Data type	Description
🔑📌	Actor_id	SMALLINT	Special # for each Actor
🔑📌	Film_id	SMALLINT	Special # for each film
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated

Links to:

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

Film Category:

Key	Columns	Data type	Description
🔑📌	Film_id	SMALLINT	Special # for each film
🔑📌	Category_id	SMALLINT	Special # for each film category
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time for when the table was last updated

Links to:

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

Inventory:

Key	Columns	Data type	Description
🔑	Inventory_id	SERIAL	Special # for every movie in the inventory

	Film_id	SMALLINT	Special # for each film
📌	Store_id	SMALLINT	Special # for each store
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated

Links to:

Table	Join
film	film Inventory.film_id = film.film_id
store	store Inventory.store_id = store.store_id

Links from:

Table	Join
rental	rental.inventory_id = inventory.inventory_id

Customer:

key	Columns	Data type	Description
🔑	Customer_id	SERIAL	Special # for each customer
📌	Store_id	SMALLINT	Special # for each store
	First_name	CHARACTER VARYING(45)	First name of each customer

	Last_name	CHARACTER VARYING(45)	Last name of each customer
	email	CHARACTER VARYING(50)	Email address of each customer
📌	Address_id	SMALLINT	Special # for each customer address
	activebool	BOOLEAN	It's the customer active? True or False response
	Create_date	DATE	The date of when the customer's account was created
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time when the table was last updated
	active	INTEGER	0 or 1 indicates the customer's active status

Links to:

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

Links from:

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

Staff:

key	Columns	Data type	Description
🔑	Staff_id	SERIAL	Special # for each staff member
	First_name	CHARACTER VARYING(45)	First name of each staff member
	Last_name	CHARACTER VARYING(45)	Last name of each staff member
📌	Address_id	SMALLINT	Special # for each staff member's address

	email	CHARACTER VARYING(50)	Email address of each staff member
	Store_id	SMALLINT	Special # for each store
	active	BOOLEAN	It's the staff member active? True or false response
	username	CHARACTER VARYING(16)	Username for each staff member
	password	CHARACTER VARYING(40)	Password for each staff member
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated
	picture	BYTEA	Photo of each staff member, if is available

Links to:

Table	Join
address	staff.address_id = address.address_id

Links from:

Table	Join
payment	payment.staff_id = staff.staff_id rental
rent	customer.customer_id = rental.customer_id store
store	store.manager_staff_id = staff.staff_id

Actor:

key	Columns	Data type	Description
🔑	Actor_id	SERIAL	Special # for each actor
	First_name	CHARACTER VARYING(45)	First name of each actor
	Last_name	CHARACTER VARYING(45)	Last name of each actor
	Last_update	TIME STAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated

Links from:

Table	Join

	film_actor	film_actor.actor_id = actor.actor_id

Category:

key	Columns	Data type	Description
🔑	Category_id	SERIAL	Special # for each film category
	name	CHARACTER VARYING(25)	Name of each category
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when last the table was updated

Links from:

Table	Join
Film_category	film_category.category_id = category.category_id

Film

key	Columns	Data type	Description
🔑	Film_id	SERIAL	Special # for each film
	Title	CHARACTER VARYING(255)	Title of the film
	Description	TEXT	Film decription
	Release_year	year	The year of the film release
📌	Language_id	SMALLINT	Special # for each film language
	Rental_duration	SMALLINT	The number of days the film was rented
	Rental_rate	NUMERIC(4.2)	$ amount of the film rental
	length	SMALLINT	# of hours for each film
	Replacement_cost	NUMERIC(5,2)	$ amount to replace each film

	Rating	Mpaa_rating	The rating of each film (i.e G,PG,PG13,PG18 etc)
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated
	Special_features	TEXT[]	Special features that each film contains
	fulltext	TSVECTOR	Keywords linked to each film that maybe used by customers to search for the film

Links to:

Table	Join
language	film.language_id = language.language_id

Links from:

Table	Join
Film_actor	film_actor.film_id = film.film_id
inventory	inventory.film_id = film.film_id
Film_category	film_category.film_id = film.film_id

Address:

key	Columns	Data type	Description
🔑	Address_id	SERIAL	Special # for each store, staff member and customer address
	Address	CHARACTER VARYING(50)	The street address
	Address2	CHARACTER VARYING(50)	The 2nd part of the address for apartment #'s, suite #'s etc
	district	CHARACTER VARYING(20)	The state, province or territory of the address
📌	City_id	SMALLINT	Special # for each city
	Postal_code	CHARACTER VARYING(10)	Postal code for each address
	phone	CHARACTER VARYING(20)	Phone number for each address
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when last the table was updated

Links to:

Table	Join
city	address.city_id = city.city_id

Links from:

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

Language

key	Columns	Data type	Description
🔑	Language_id	SERIAL	Special # for each film's language
	name	CHARACTER(20)	Language name of each film
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when last the table was updated

Links from:

Table	Join
film	film.language_id = language.language_id

City

key	Columns	Data type	Description
🔑	City_id	SERIAL	Special # for each city
	city	CHARACTER VARYING(50)	The name of city
📌	Country_id	SMALLINT	Special # for each country
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when last the table was updated

Links to:

Table	Join
country	city.country_id = country.country_id

Links from:

Table	Join
country	country.country_id = city.country_id
address	address.city_id = city.city_id

Country

key	Columns	Data type	Description
🔑	Country_id	SERIAL	Special # for each country
	Country	CHARACTER VARYING(50)	Name of the country
	Last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date and time of when the table was last updated

Links from:

Table	Join
city	city.country_id = country.country_id