# **ROCKBUSTER STEALTH**

**Data Dictionary** 

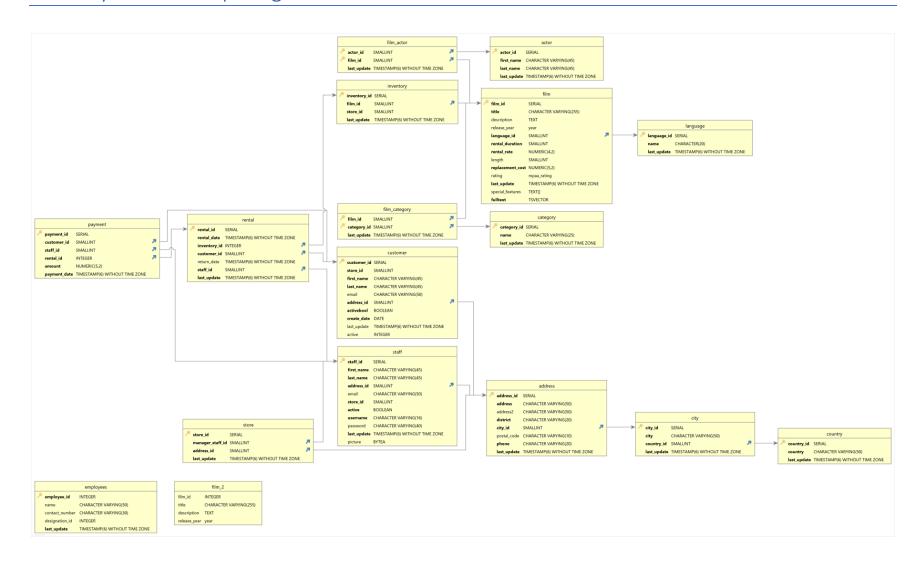
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## 1. Entity Relationship Diagram



## 2. Fact Table

### 2.1 Rental

Displays the rental rate, customer who rented, and date the film was rented.

Columns	Data Type	Description
rental_id	SERIAL	Primary key that acts as an identifier for each rental record created.
rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	The date the rental was made in YYYY-DD-MM HH:MM:SS format without time zone.
inventory_id	INTEGER	Foreign key to the inventory table. It is a unique identifier key for each inventory record created.
customer_id	SMALLINT	Foreign key to the customer table. It is a unique identifier key for each customer record created.
return_date	TIMESTAMP(6) WITHOUT TIME ZONE	The date the rental was returned in YYYY-DD-MM HH:MM:SS format without time zone.
staff_id	SMALLINT	Foreign key to the staff table. It is a unique identifier key for each staff record created.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the rental record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

#### 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	

## 3. Dimension Tables

### 3.1 Payment

Contains payment amount and date received from customers.

Columns	Data Type	Description
payment_id	SERIAL	Primary key that acts as an identifier for each payment record created.
customer_id	SMALLINT	Foreign key to the customer table. It is a unique identifier key for each customer record created.
staff_id	SMALLINT	Foreign key to the staff table. It is a unique identifier key for each staff record created.
rental_id	INTEGER	Foreign key to the rental table that acts as an identifier for each rental record created.
amount	NUMERIC(5,2)	Payment record amount in numeric format.
payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	The payment date in YYYY-DD-MM HH:MM:SS format without time zone.

Table	Join
inventory	payment.inventory_id =
	inventory.inventory_id
customer	payment.customer_id =
	customer.customer_id
rental	payment.staff_id = staff.staff_id

## 3.2 Store

Lists the store locations.

Columns	Data Type	Description
store_id	SERIAL	Primary key that acts as an identifier for each store record created.
manager_staff_id	SMALLINT	
address_id	SMALLINT	
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the store record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

#### Links to

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

### 3.3 Film Actor

Lookup table containing the actor and film ID.

Columns	Data Type	Description
actor_id	SMALLINT	Primary key that acts as an identifier for each film actor record created.
film_id	SMALLINT	
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the film actor record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

#### Links to

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

## 3.4 Inventory

Look up table linking the films available at each store.

Columns	Data Type	Description
inventory_id	SERIAL	Primary key that acts as an identifier key for each inventory record created.
film_id	SMALLINT	
store_id	SMALLINT	Primary key that acts as an identifier for each store record created.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the inventory record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

#### Links to

Table	Join
film	inventory.film_id = film.film_id

## 3.5 Film Category

Lookup table linking the film to the category name.

Columns	Data Type	Description
film_id	SMALLINT	Primary key that acts as an
		identifier for each film category
		record created.

Columns	Data Type	Description
category_id	SMALLINT	
last_update	TIMESTAMP(6) WITHOUT	The date the film category
	TIME ZONE	record was last updated in
		YYYY-DD-MM HH:MM:SS
		format without time zone.

Table	Join
category	film_category.category_id =
	category.category_id

## 3.6 Customer

Contains customer information such as names and addresses.

Columns	Data Type	Description
customer_id	SERIAL	Primary key that acts as an identifier key for each customer record created.
store_id	SMALLINT	Primary key that acts as an identifier for each store record created.
first_name	CHARACTER VARYING(45)	Customer's first name, maximum 45 characters.
last_name	CHARACTER VARYING(45)	Customer's last name, maximum 45 characters.
email	CHARACTER VARYING(50)	Customer's email address, maximum 50 characters.
address_id	SMALLINT	Primary key that acts as an identifier for each address record created.
activebool	BOOLEAN	Binary variable indicating if the customer is active or not (true/false)
create_date	DATE	Date the customer record was created.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the customer record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.
active	INTEGER	Indicating if a customer is active or not in numeric format.

#### Links to

Table	Join
address	customer.address_id =
	address.address_id

## 3.7 Staff

Contains staff names, their addresses and if they are actively employed.

Columns	Data Type	Description
staff_id	SERIAL	Primary key that acts as an identifier for each staff record created.
first_name	CHARACTER VARYING(45)	Staff's first name, maximum 45 characters.
last_name	CHARACTER VARYING(45)	Staff's last name, maximum 45 characters.
address_id	SMALLINT	Primary key that acts as an identifier for each address record created.
email	CHARACTER VARYING(50)	Staff's email address, maximum 50 characters.
store_id	SMALLINT	Primary key that acts as an identifier for each store record created.
active	BOOLEAN	Binary variable indicating if the staff is active or not (true/false)
username	CHARACTER VARYING(16)	Staff's username, maximum 16 characters
password	CHARACTER VARYING(40)	Staff's password, maximum 40 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the staff record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.
picture	BYTEA	Staff's picture.

### Links to

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

### 3.8 Actor

Displays the actors' first and last names.

Columns	Data Type	Description
actor_id	SERIAL	Primary key that acts as an identifier for each actor record created.
first_name	CHARACTER VARYING(45)	Actor's first name, maximum 45 characters.
last_name	CHARACTER VARYING(45)	Actor's last name, maximum 45 characters.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the actor record was last updated in YYYY-DD-MM

	HH:MM:SS format without time
	zone.

Table	Join	
film_actor	actor.actor_id =	
	film_actor.actor_id	

### 3.9 Film

Displays the film titles and description as well as their rental rates.

Columns	Data Type	Description
film_id	SERIAL	Primary key that acts as an identifier for each film record created.
title	CHARACTER VARYING(255)	Film title, maximum 255 characters.
description	TEXT	Film description.
release_year	year	Year the film was released.
language_id	SMALLINT	Primary key that acts as an identifier for each language record created.
rental_duration	SMALLINT	Amount of time a rental can be taken.
rental_rate	NUMERIC(4,2)	Amount the rental can be purchased.
length	SMALLINT	
replacement_cost	NUMERIC(5,2)	Amount the rental can be replaced if lost or damaged.
rating	mpaa_rating	Film's MPAA rating.
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the film record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.
special_features	TEXT[]	Film's special features.
fulltext	TSVECTOR	Film index with full text.

#### Links to

Table	Join	
inventory	film.film_id = inventory.film_id	
language	film.language_id =	
	language.language_id	
film_category	film.film_id = film_categor.film_id	

## 3.10 Category

Lookup table linking to film category that displays the category name.

Columns	Data Type	Description
category_id	SERIAL	Primary key that acts as an identifier for each category record created.
name	CHARACTER VARYING(25)	Category name, maximum 25 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the category record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

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

## 3.11 Language

Lookup table linking to film table that displays the language name of the film.

Columns	Data Type	Description
language_id	SERIAL	Primary key that acts as an identifier for each language record created.
name	CHARACTER VARYING (20)	Language name, maximum 20 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the language record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

#### Links to

Table	Join
language	language.language_id =
	film.language_id

### 3.12 Address

Contains all address information for the store, staff, and customers.

Columns	Data Type	Description
address_id	SERIAL	Primary key that acts as an identifier for each address record created.
address	CHARACTER VARYING (50)	Street address line 1, maximum 50 characters
address2	CHARACTER VARYING (50)	Street address line 2, maximum 50 characters
district	CHARACTER VARYING (20)	Address district, maximum 20 characters

Columns	Data Type	Description
city_id	SMALLINT	Primary key that acts as an identifier for each city record created.
postal_code	CHARACTER VARYING (10)	Address postal code, maximum 10 characters
phone	CHARACTER VARYING (20)	Phone number, maximum 20 characters
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the address record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

Table	Join
store	address.address_id =
	store.address_id
city	address.city_id = city.city_id

## 3.13 City

Contains the city name for all addresses.

Columns	Data Type	Description
city_id	SERIAL	Primary key that acts as an identifier for each city record created.
city	CHARACTER VARYING(50)	City name, maximum 50 characters
country_id	SMALLINT	Country ID
last_update	TIMESTAMP(6) WITHOUT TIME ZONE	The date the city record was last updated in YYYY-DD-MM HH:MM:SS format without time zone.

#### Links to

Table	Join
country	city.country_id =
	country.country_id

## 3.14 Country

Contains the country names for all the addresses.

Columns	Data Type	Description
country_id	SERIAL	Primary key that acts as an identifier for each country record created.
country	CHARACTER VARYING(50)	Country name, maximum 50 characters

Columns	Data Type	Description
last_update	TIMESTAMP(6) WITHOUT	The date the country record was
	TIME ZONE	last updated in YYYY-DD-MM
		HH:MM:SS format without time
		zone.

### Summary:

- Tables 3.3 3.5 are all joined by the film\_id key.
- Tables 2.1, 3.1, and 3.6 are all joined by the customer\_id key.
- Tables 3.2, 3.6, 3.7, and 3.12 are all joined by the address\_id key.