



ROCKBUSTER DATABASE

Data Dictionary



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ROCKBUSTER STEALH LLC

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1. Introduction

- a. **Purpose of the Documentation:** The purpose of this documentation is to provide a comprehensive guide to the Rockbuster Database, offering insights into its structure, relationships, and key components. As a vital resource for stakeholders, developers, and analysts, this documentation aims to facilitate a better understanding of the database and its potential applications.
- b. **Overview of Rockbuster Database:** Rockbuster Stealth LLC, a prominent movie rental company, is adapting to the digital era by leveraging its vast movie licenses to launch an online video rental service. As part of this transformation, a robust relational database has been established, encapsulating essential information related to movies, customers, transactions, and more. This documentation serves as a roadmap to navigate through the database, empowering users to harness its potential for data-driven decision-making.



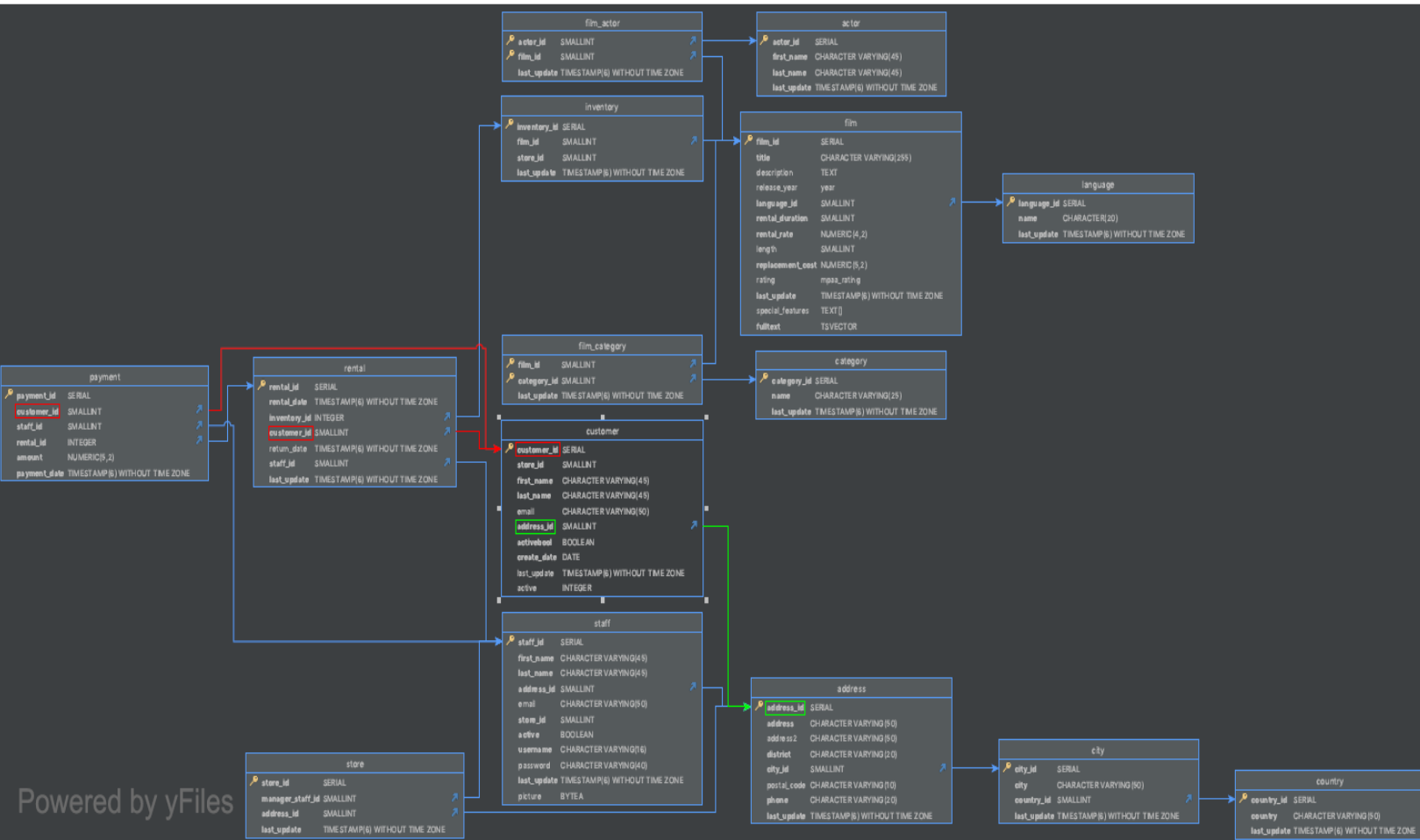
2. Database Overview

- a. **Purpose:** The Rockbuster Database serves as the backbone for the company's transition into the online video rental domain. It consolidates critical information about movies, customers, staff, transactions, and inventory. The database's primary objective is to empower Rockbuster Stealth LLC with valuable insights, enabling strategic decision-making, optimizing inventory management, and enhancing the overall customer experience.
- b. **Snowflake Schema:** The database adopts a snowflake schema, with the "Customer" table as the central hub. Various related tables branch out from this central point, forming a structured and organized schema. This design enhances the granularity of data storage, promoting efficient data retrieval and analysis.
- c. **Key Objectives:** The key objectives of the Rockbuster Database include:
 - ✓ **Supporting Business Intelligence:** Providing a foundation for data-driven decision-making across departments.
 - ✓ **Enhancing Customer Experience:** Optimizing inventory, tracking customer preferences, and streamlining rental processes.
 - ✓ **Enabling Strategic Planning:** Offering insights into revenue, popular genres, and market trends.
 - ✓ **Facilitating Operational Efficiency:** Streamlining inventory management, payment processing, and staff coordination.



3. Data Storage & Structure

a. Snowflake Schema:



b. Fact Table:

Fact Table: Actor

Linked From:

Annotation	Column	Data Type	Description
Primary Key	actor_id	SERIAL	Unique identifier for each actor.
Unique Key	first_name	CHAR(45)	First name of the actor.
Unique Key	last_name	CHAR(45)	Last name of the actor.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	actor_id	SERIAL	Unique identifier for each actor.

Fact Table: Address

Linked from:

Annotation	Column	Data Type	Description
Primary Key	address_id	SERIAL	Unique identifier for each address.
Unique Key	address	VARCHAR(50)	Street address.
Unique Key	address2	VARCHAR(50)	Additional address information.
Unique Key	district	VARCHAR(20)	District or region.
Foreign Key Relation	city_id	INT	Foreign key referencing city_id in the city table.
Unique Key	postal_code	VARCHAR(10)	Postal code.
Unique Key	phone	VARCHAR(20)	Phone number.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	city_id	SERIAL	Unique identifier for each city.

Fact Table: category

Linked from:

Annotation	Column	Data Type	Description
Primary Key	category_id	SERIAL	Unique identifier for each category.
Unique Key	name	VARCHAR(25)	Category name.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to: No columns are linked to other tables.



Fact Table: city

Linked from:

Annotation	Column	Data Type	Description
Primary Key	city_id	SERIAL	Unique identifier for each city.
Unique Key	city	VARCHAR(50)	City name.
Foreign Key Relation	country_id	INT	Foreign key referencing country_id in the country table.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update

Linked to:

Annotation	Column	Data Type	Description
Primary Key	country_id	SERIAL	Unique identifier for each country.

Fact Table: country

Linked from:

Annotation	Column	Data Type	Description
Primary Key	country_id	SERIAL	Unique identifier for each country.
Unique Key	country	VARCHAR(50)	Country name.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to: No columns are linked to other tables.

Fact Table: customer

Linked from:

Annotation	Column	Data Type	Description
Primary Key	customer_id	SERIAL	Unique identifier for each customer.
Foreign Key Relation	store_id	INT	Foreign key referencing store_id in the store table.
Unique Key	first_name	VARCHAR(45)	Customer's first name.
Unique Key	last_name	VARCHAR(45)	Customer's last name.
Unique Key	email	VARCHAR(50)	Customer's email.
Foreign Key Relation	address_id	INT	Foreign key referencing address_id in the address table.
Unique Key	activebool	BOOLEAN	Customer's active status as a boolean.
Unique Key	create_date	DATE	Date of customer creation.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.
Unique Key	active	INT	Customer's active status.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	store_id	SERIAL	Unique identifier for each store.
Primary Key	address_id	SERIAL	Unique identifier for each address.

Fact Table: film

Linked from:

Annotation	Column	Data Type	Description
Primary Key	film_id	SERIAL	Unique identifier for each film.
Unique Key	title	VARCHAR(255)	Film title.
Unique Key	description	TEXT	Film description.
Unique Key	release_year	YEAR	Year when the film was released.
Foreign Key Relation	language_id	INT	Foreign key referencing language_id in the language table.
Unique Key	rental_duration	INT	Duration available for rental.
Unique Key	rental_rate	DECIMAL	Cost for renting the film.
Unique Key	length	INT	Duration of the film.
Unique Key	replacement_cost	DECIMAL	Cost of replacing the film.
Unique Key	rating	VARCHAR(10)	Film rating.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.
Unique Key	special_features	VARCHAR(100)	Special features of the film.
Unique Key	fulltext	TEXT	Fulltext information.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	language_id	SERIAL	Unique identifier for each language.

c. Dimensions:

Dimension Table: film_actor

Linked from:

Annotation	Column	Data Type	Description
Foreign Key Relation	actor_id	INT	Foreign key referencing actor_id in the actor table.
Foreign Key Relation	film_id	INT	Foreign key referencing film_id in the film table.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	actor_id	SERIAL	Unique identifier for each actor.
Primary Key	film_id	SERIAL	Unique identifier for each film.

Dimension Table: film_category

Linked from:

Annotation	Column	Data Type	Description
Foreign Key Relation	film_id	INT	Foreign key referencing film_id in the film table.
Foreign Key Relation	category_id	INT	Foreign key referencing category_id in the category table.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	film_id	SERIAL	Unique identifier for each film.
Primary Key	category_id	SERIAL	Unique identifier for each category.

Dimension Table: inventory

Linked from:

Annotation	Column	Data Type	Description
Primary Key	inventory_id	SERIAL	Unique identifier for each inventory item.
Foreign Key Relation	film_id	INT	Foreign key referencing film_id in the film table.



Foreign Key Relation	store_id	INT	Foreign key referencing store_id in the store table.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	film_id	SERIAL	Unique identifier for each film.
Primary Key	store_id	SERIAL	Unique identifier for each store.

Dimension Table: language

Linked from:

Annotation	Column	Data Type	Description
Primary Key	language_id	SERIAL	Unique identifier for each language.
Unique Key	name	VARCHAR(20)	Language name.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to: No columns are linked to other tables.

Dimension Table: Payment

Linked from:

Annotation	Column	Data Type	Description
Primary Key	payment_id	SERIAL	Unique identifier for each payment.
Foreign Key Relation	customer_id	INT	Foreign key referencing customer_id in the customer table.
Foreign Key Relation	staff_id	INT	Foreign key referencing staff_id in the staff table.
Foreign Key Relation	rental_id	INT	Foreign key referencing rental_id in the rental table.
Unique Key	amount	DECIMAL	Payment amount.
Unique Key	payment_date	TIMESTAMP	Date and time of payment.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	customer_id	SERIAL	Unique identifier for each customer.
Primary Key	staff_id	SERIAL	Unique identifier for each staff member.
Primary Key	rental_id	SERIAL	Unique identifier for each rental.



Dimension Table: Rental

Linked from:

Annotation	Column	Data Type	Description
Primary Key	rental_id	SERIAL	Unique identifier for each rental.
Unique Key	rental_date	TIMESTAMP	Date and time of rental.
Foreign Key Relation	inventory_id	INT	Foreign key referencing inventory_id in the inventory table.
Foreign Key Relation	customer_id	INT	Foreign key referencing customer_id in the customer table.
Unique Key	return_date	TIMESTAMP	Date and time of return.
Foreign Key Relation	staff_id	INT	Foreign key referencing staff_id in the staff table.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	inventory_id	SERIAL	Unique identifier for each inventory item.
Primary Key	customer_id	SERIAL	Unique identifier for each customer.
Primary Key	staff_id	SERIAL	Unique identifier for each staff member.

Dimension Table: staff

Linked from:

Annotation	Column	Data Type	Description
Primary Key	staff_id	SERIAL	Unique identifier for each staff member.
Unique Key	first_name	VARCHAR(45)	Staff member's first name.
Unique Key	last_name	VARCHAR(45)	Staff member's last name.
Foreign Key Relation	address_id	INT	Foreign key referencing address_id in the address table.
Unique Key	email	VARCHAR(50)	Staff member's email.
Foreign Key Relation	store_id	INT	Foreign key referencing store_id in the store table.
Unique Key	active	BOOLEAN	Staff member's active status.
Unique Key	username	VARCHAR(16)	Staff member's username.
Unique Key	password	VARCHAR(40)	Staff member's password.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.
Unique Key	picture	BYTEA	Staff member's picture.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	address_id	SERIAL	Unique identifier for each address.
Primary Key	store_id	SERIAL	Unique identifier for each store.

Dimension Table: Store

Linked from:

Annotation	Column	Data Type	Description
Primary Key	store_id	SERIAL	Unique identifier for each store.
Foreign Key Relation	manager_staff_id	INT	Foreign key referencing staff_id in the staff table (manager).
Foreign Key Relation	address_id	INT	Foreign key referencing address_id in the address table.
Active Trigger	last_update	TIMESTAMP	Timestamp indicating the last update.

Linked to:

Annotation	Column	Data Type	Description
Primary Key	manager_staff_id	SERIAL	Unique identifier for each staff member.
Primary Key	address_id	SERIAL	Unique identifier for each address.

✧ Rockbuster Stealth: Unleashing Data Insights for Strategic Excellence: [Tableau presentation](#)

