

A structured reference of Rockbuster's database tables, keys, and relationships to support data-driven decision making

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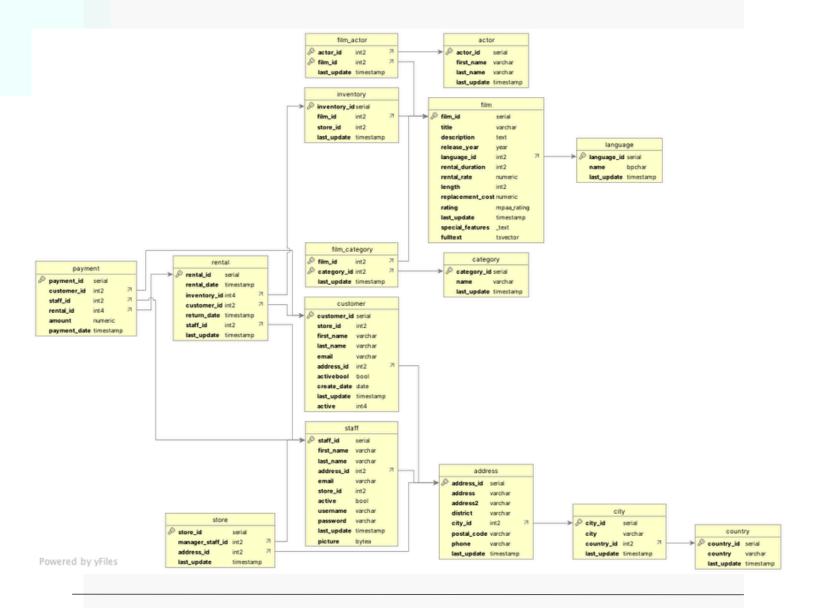
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MISSION STATEMENT

The purpose of this data dictionary is for Rockbuster Stealth LLC to provide a comprehensive and accessible reference for Rockbuster's database structure, enabling analysts, developers, and business stakeholders to confidently navigate, query, and interpret the data for strategic insights and informed decision-making. Strategy impact areas include sales performance, customer demographics and behaviors, as well product efficiency.



1. ENTITY RELATIONSHIP DIAGRAM (ERD)



About this Diagram

The Entity Relationship Diagram (ERD) provides a visual overview of how Rockbuster's database tables—such as customers, films, payments, and inventory—are structured and connected through primary and foreign key relationships.

2. FACT TABLES

2.1 Table: Payment

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	payment_id	SERIAL	unique identifier for each payment
Foreign Key	customer_id	SMALLINT	ID of the customer making the payment
Foreign Key	staff_id	SMALLINT	ID of the staff processing the payment
Foreign Key	rental_id	INT	associated rental transaction
	amount	NUMERIC (5,2)	payment amount
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	date and time of payment

2. FACT TABLES

2.2 Table: Rental

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	rental_id	SERIAL	unique identifier for each rental
	rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	date and time of rental
Foreign Key	inventory_id	INT	ID of the rental inventory item
Foreign Key	customer_id	SMALLINT	ID of the customer renting
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	date and time of return
Foreign Key	staff_id	SMALLINT	ID of the staff handling the rental
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last updated timestamp

3.1 Table: Staff

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	staff_id	SERIAL	unique identifier for each staff member
	first_name	VARCHAR(45)	staff member's first name
	last_name	VARCHAR(45)	staff member's last name
Foreign Key	address_id	SMALLINT	staff member's address
	email	VARCHAR(50)	staff member's email address
Foreign Key	store_id	SMALLINT	store ID the staff is assigned to
	active	BOOLEAN	whether the staff is active
	username	VARCHAR(16)	username for login
	password	VARCHAR(40)	password for login
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp
	picture	ВҮТЕА	staff member's photo

3.2 Table: Customer

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	customer_id	SERIAL	unique identifier for each customer
	first_name	VARCHAR(45)	customer's first name
	last_name	VARCHAR(45)	customer's last name
Foreign Key	address_id	SMALLINT	address ID of the customer
	email	VARCHAR(50)	customer's email address
Foreign Key	store_id	SMALLINT	store the customer belongs to
	activebool	BOOLEAN	whether the customer is active
	create_date	DATE	account creation date
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp
	active	INT	customer's active status as binary integer

3.3 Table: Inventory

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	inventory_id	SERIAL	unique identifier for each inventory item
Foreign Key	film_id	SMALLINT	ID of the film in inventory
Foreign Key	store_id	SMALLINT	ID of the store holding the inventory
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

3.4 Table: Film_Actor

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Foreign Key	actor_id	SMALLINT	ID of the actor
Foreign Key	film_id	SMALLINT	ID of the film
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

3.5 Table: Film_Cateogry

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Composite Primary Key	film_id	SMALLINT	ID of the film
Composite Primary Key	category_id	SMALLINT	ID of the category
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Last update timestamp

3.6 Table: Store

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	store_id	SERIAL	unique identifier for each store
	manager_staff_id	SMALLINT	ID of the store manager
Foreign Key	address_id	SMALLINT	address ID of the store
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

4.1 Table: Actor

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	actor_id	SERIAL	unique identifier for each actor
	first_name	VARCHAR(45)	actor's first name
	last_name	VARCHAR(45)	actor's last name
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

4.2 Table: Language

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	language_id	SERIAL	unique identifier for each language
Foreign Key	name	BPCHAR	name of the language
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

4.3 Table: Film

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	film_id	SERIAL	unique identifier for each film
	title	VARCHAR(255)	title of the film
	description	TEXT	film description
Foreign Key	release_year	YEAR	year the film was released
Foreign Key	language_id	SMALLINT	language ID of the film
	rental_duration	SMALLINT	duration of rental in days
	rental_rate	NUMERIC (4,2)	rental cost
	length	SMALLINT	film length in minutes
	replacement_cost	NUMERIC (5,2)	cost to replace the film
	rating	MPAA_RATING	MPAA raing
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp
	special_feature	TEXT	special features of the film
	fulltext	TSVECTOR	text search vector

4.4 Table: Category

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	category_id	SERIAL	unique identifier for each category
	name	VARCHAR(25)	name of the category
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

4.5 Table: Address

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	address_id	SERIAL	unique identifier for each address
	address	VARCHAR(50)	primary address field
	address2	VARCHAR(50)	secondary address field
	district	VARCHAR(20)	district of the address
Foreign Key	city_id	SMALLINT	city ID
	postal_code	VARCHAR(10)	postal code
	phone	VARCHAR(20)	phone number
	last_upate	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

4.6 Table: City

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	city_id	SERIAL	unique identifier for each city
	city	VARCHAR(50)	name of the city
Foreign Key	country_id	SMALLINT	ID of the country the city belongs to
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

4.7 Table: Country

KEY	COLUMNS	DATA TYPE	DESCRIPTION
Primary Key	country_id	SERIAL	unique identifier for each language
	country	VARCHAR(50)	name of the country
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	last update timestamp

THANK YOU

Contact me if you have any questions

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