Rockbuster Stealth LLC

Data Dictionary

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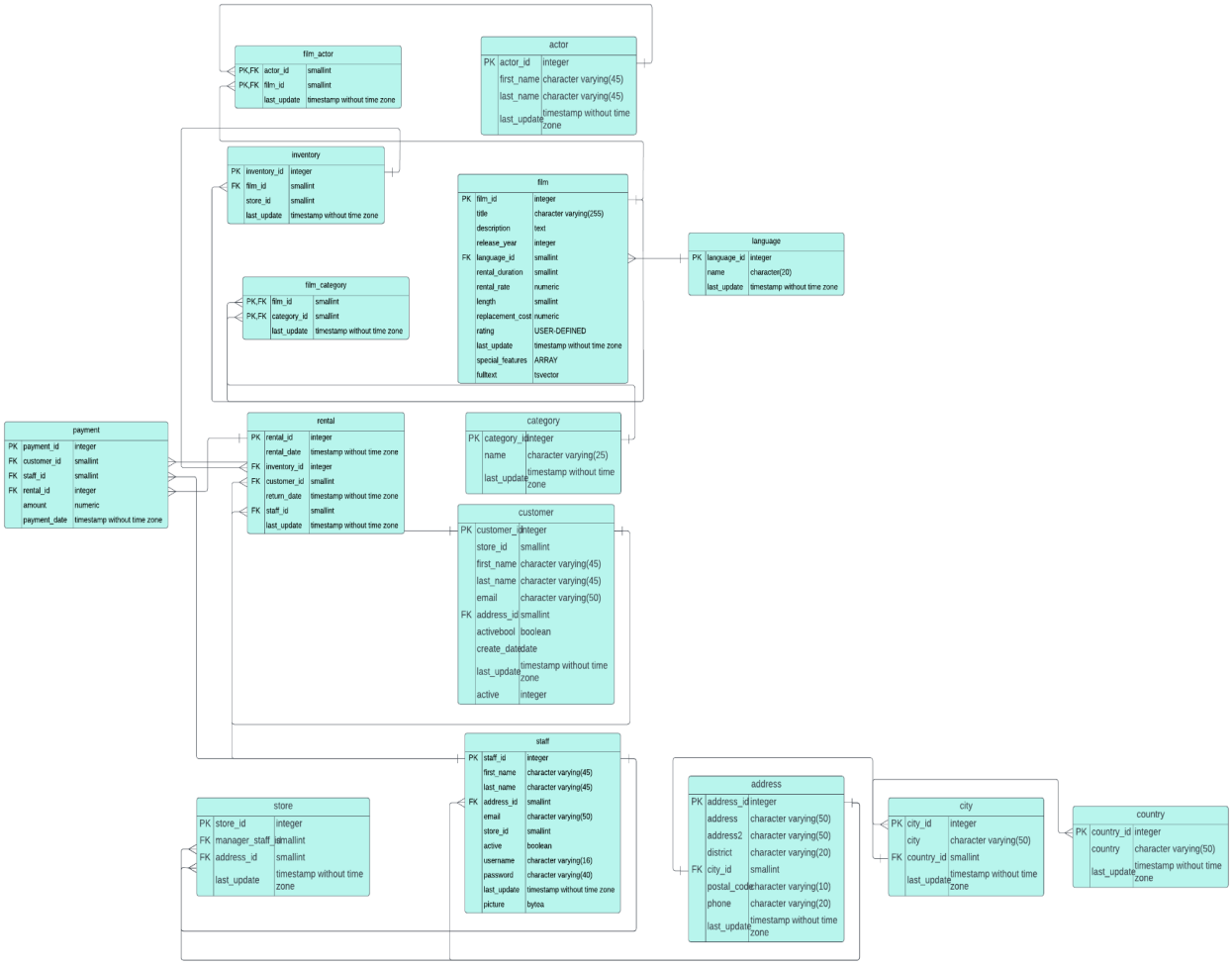
Entity Relationship Diagram (ERD): Rockbuster Data Storage & Structure



The Rockbuster ERD represents a snowflake schema as it doesn't have one central table connecting all sub-tables. Instead, it extends into various smaller segments.

Legend:

Legend Keys	
Primary Key	**Foreign Key**

Fact Table

Payment:

	Columns	Data Type	Description
	Payment_id	Serial	Unique number assigned to each payment. (Primary Key)
	Customer_id	smallint	Number assigned to each customer
	Staff_id	smallint	Number assigned to each employee
	Rental_id	integer	Number assigned to each rental transaction
	Amount	Numeric (5,2)	$ amount of each rental
	Payment_date	Timestamp (6) without time zone	Date and time when the movie was rented

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

Rental Table:

	Columns	Data Type	Description
	Rental_id	Serial	Unique number assigned to each payment. (Primary Key)
	rental_date	Timestamp (6) without time zone	Date and time of rental
	inventory_id	integer	Unique Inventory identification number
	customer_id	smallint	Unique customer ID
	return_date	Timestamp (6) without time zone	Date of latest to return product
	staff_id	smallint	Unique Staff ID
	last_update	Timestamp (6) without time zone	Time and date of last update of product status

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

Dimension Table:

Store

	Columns	Data Type	Description
	store_id	INTEGER	Unique store ID number used for primary key for stores.
	manager_staff_id	SMALLINT	Unique managers ID
	address_id	SMALLINT	Unique Address ID
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update of product status

Links to:

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

Customer

	Columns	Data Type	Description
	customer_id	INTEGER	Unique customer ID
	store_id	SMALLINT	Unique store ID number
	first_name	CHARACTER VARYING (45)	Costumer first name
	last_name	CHARACTER VARYING (45)	Costumer last name
	address_id	SMALLINT	Unique Address ID
	email	CHARACTER VARYING (50)	Costumer email address
	store_id	SMALLINT	Unique ID number
	active	BOOLEAN	True or false if a customer is active
	username	CHARACTER VARYING (16)	Username of a costumer
	password	CHARACTER VARYING (40)	Password of a costumer
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update
	picture	BYTEA	Photo of a costumer

Links to:

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

Links from:

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

Staff

	Columns	Data Type	Description
	staff_id	INTEGER	Unique Staff ID
	first_name	CHARACTER VARYING (45)	Staff first name
	last_name	CHARACTER VARYING (45)	Staff last name
	address_id	SMALLINT	Unique Address ID
	email	CHARACTER VARYING (50)	Staff members email address
	store_id	INTEGER	Unique ID number
	active	BOOLEAN	True or false if a staff member is active
	username	CHARACTER VARYING (16)	Username of a staff member
	password	CHARACTER VARYING (40)	Password of a staff member
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update
	picture	BYTEA	Photo of a staff member

Links to:

Table	Join
address	staff.address_id=address.address_id

Links from:

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

Address

	Columns	Data Type	Description
	address_id	SMALLINT	Unique Address ID used for primary key for addresses
	address	CHARACTER VARYING (50)	Full address
	address2	CHARACTER VARYING (50)	Second line for address
	district	CHARACTER VARYING (20)	Full district name
	city_id	SMALLINT	Unique city code
	postal_code	CHARACTER VARYING (10)	Full postal code
	phone	CHARACTER VARYING (20)	Phone number
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

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

City

	Columns	Data Type	Description
	city_id	INTEGER	Unique city code used for primary key for city
	city	CHARACTER VARYING (50)	Full city name
	country_id	SMALLINT	Unique country ID
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links to

Table	Join
country	city.country_id=country.country_id

Links from

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

Country

	Columns	Data Type	Description
🔑	country_id	INTEGER	Unique country ID used for primary key for country
	country	CHARACTER VARYING (50)	Full country name
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links from:

Table	Join
city	city.country_id=country.country_id

Film

	Columns	Data Type	Description
	film_id	SERIAL	Unique film ID used for primary key for film
	title	CHARACTER VARYING(255)	Film full title name
	description	TEXT	Film full description
	release_year	INTEGER	Year of film release
	language_id	SMALLINT	Unique language ID
	rental_duration	SMALLINT	The film rental duration
	rental_rate	NUMERIC	Rental price
	length	SMALLINT	Film length in minutes
	replacement_cost	NUMERIC	Cost of replacing each film unit lost
	rating	mpaa rating	Rating given to each film by the MPAA
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update
	special features	TEXT	Special features included in a film (e.g., trailers, deleted scenes, behind the scenes etc.)
	fulltext	TSVECTOR	Key words related to film (describing the film, searching for a 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

Film_Category

	Columns	Data Type	Description
	film_id	SMALLINT	Unique film ID
	category_id	SMALLINT	Unique category ID given to each film
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links to:

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

Category

	Columns	Data Type	Description
🔑	category_id	SMALLINT	Unique category ID given to each film
	name	CHARACTER VARYING(25)	Full name of the category type
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links from

Table	Join
film_category	film_category.category_id=category.category_id

Language

	Columns	Data Type	Description
🔑	language_id	INTEGER	Unique language ID
	name	CHARACTER VARYING(20)	Full language type
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links from:

Table	Join
film	film.language_id=language.language_id

Actor

	Columns	Data Type	Description
🔑	actor_id	SMALLINT	Unique actor ID
	first_name	CHARACTER VARYING (45)	Actor first name
	last_name	CHARACTER VARYING (45)	Actor last name
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links from:

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

Film_Actor

	Columns	Data Type	Description
	actor_id	SMALLINT	Unique actor ID
	film_id	SMALLINT	Unique film ID
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links to:

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

Inventory

	Columns	Data Type	Description
	inventory_id	INTEGER	Unique inventory ID
	film_id	SMALLINT	Unique film ID
	store_id	SMALLINT	Unique store ID number
	last_update	TIMESTAMP WITHOUT TIME ZONE	Year, month, day, and time of last update

Links to:

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

Links from:

Table	Join
rental	rental.inventory_id=inventory.inventory_id