

Rockbuster Stealth LLC

DATA DICTIONARY

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1. About Rockbuster

Rockbuster Stealth LLC is a movie rental company that used to have stores around the world. Facing stiff competition from streaming services such as Netflix and Amazon Prime, the Rockbuster Stealth management team is planning to use its existing movie licences to launch an online video rental service in order to stay competitive.

Rockbuster's data set contains information about the company's film inventory, customers, and payments, among other things. This document depicts and describes the Entity Relationship Diagram (ERD) from this data set.

2. Entity Relationship Diagram

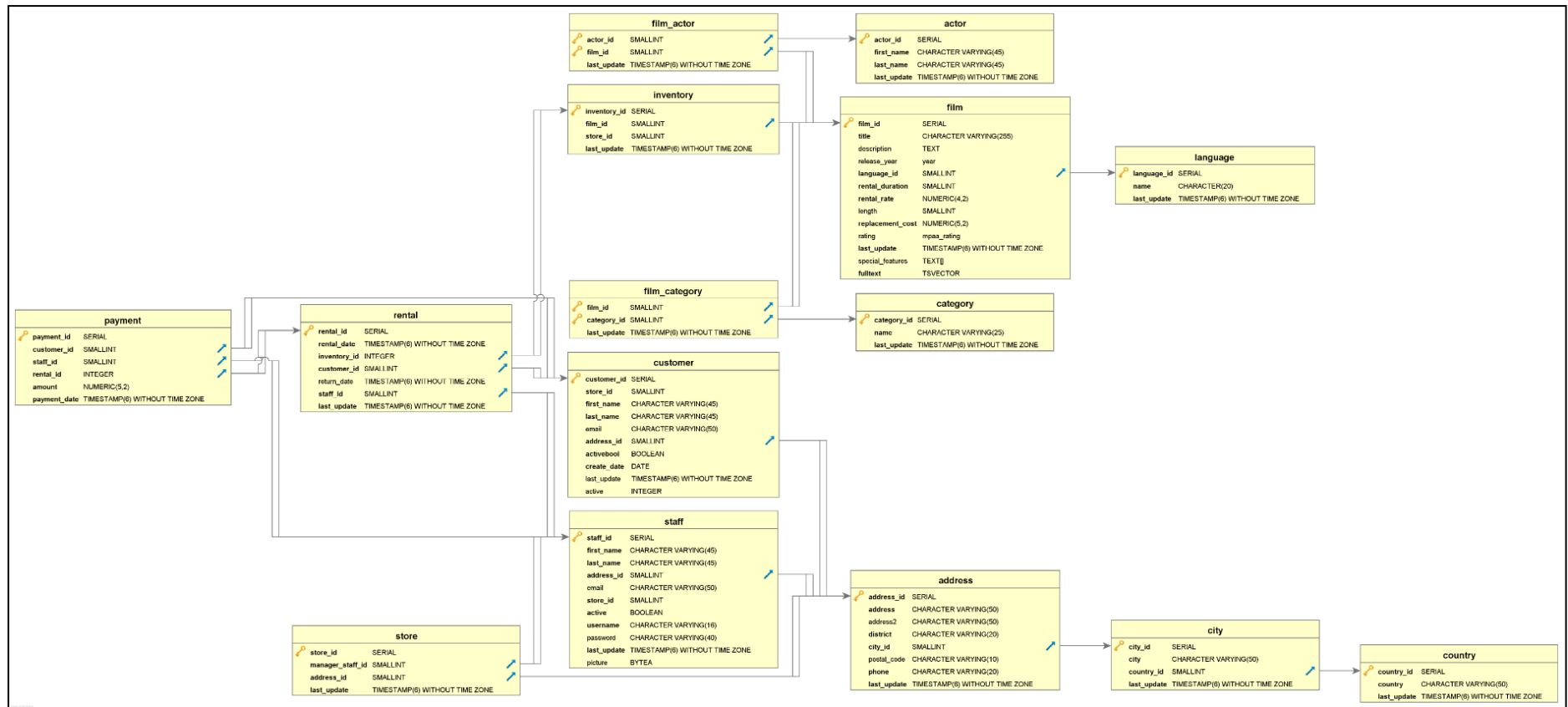


Fig 1. Rockbuster Entity Relationship Diagram

3. Fact Tables







Primary Key



Foreign Key

3.1 Payment Table





	Column	Data Type	Description
	payment_id	SERIAL	Unique number use to identify the transaction in the system
	customer_id	SMALLINT	Unique number use to identify the customer in the system
	staff_id	SMALLINT	Unique number use to identify the staff member in the system
	rental_id	INTEGER	Assigned number to identify each rent
	amount	NUMERIC (5,2)	Total price of the rental
	payment_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the rental was paid

This table links to:





	Table	Join	Description
	customer	customer_id	Payment.customer_id is a foreign key that references to the primary key in the customer table customer.customer_id
	staff	staff_id	Payment.staff_id is a foreign key that references to the primary key in the staff table staff.staff_id
	rental	rental_id	Payment.rental_id is a foreign key that references to the primary key in the rental table rental.rental_id

This table link from: None

3.1.1 Unique Keys:

	Column	Description
	payment_id	Unique number use to identify the transaction in the system
	customer_id	Unique number use to identify the customer in the system
	staff_id	Unique number use to identify the staff member in the system
	rental_id	Assigned number to identify each rent

3.2 Rental Table

	Columns	Data Type	Description
	rental_id	SERIAL	Assigned number to identify each particular rent
	rental_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which film was rented
	inventory_id	INTEGER	Contains information about the physical product and the back-end information used for managing inventory, shipping, and fulfillments.
	customer_id	SMALLINT	Unique number use to identify the customer in the system
	return_date	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which film was returned
	staff_id	SMALLINT	Unique number use to identify the staff member in the system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the event was last modified





This table links to:

	Table	Join	Description
	inventory	inventory_id	rental.inventory_id is a foreign key that links to the primary key in the inventory table inventory.inventory_id
	customer	customer_id	
	staff	staff_id	

This table links from:



	Table	Join	Description
	payment	rental_id	Payment.rental_id is a foreign key that links to the primary key in the rental table rental.rental_id

3.2.1 Unique Keys

	Column	Description
	rental_id	Assigned number to identify each particular rent
	inventory_id	Contains information about the physical product and the back-end information used for managing inventory, shipping, and fulfillments.
	customer_id	Unique number use to identify the customer in the system
	staff_id	Unique number use to identify the staff member in the system

4. Dimension Tables

4.1. Film Table

	Columns	Data Type	Description
	film_id	SERIAL	Unique number use to identify the film in the system
	title	CHARACTER VARYING (255)	Full title of film
	description	TEXT	Contains information about film plot
	release_year	year	Indicates year in which the rented film was released
	language_id	SMALLINT	Unique number use to identify the original language of the film in the system
	rental_duration	SMALLINT	Information about how many days was the film rented
	rental_rate	NUMERIC (4,2)	Information about the rate of the film
	length	SMALLINT	Length of film in minutes
	replacement_cost	NUMERIC (5,2)	Contains information about how much would it cost to replace the film
	rating	mpaa_rating	Contains information about film rate based on motion picture content rating system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the film entry was last modified
	special_features	TEXT	Includes information about additional features in film like 'behind the scenes' or trailers
	fulltext	TSVECTOR	Key words used to describe film



This table links to:

	Table	Join	Description
	language	language_id	film.language_id is a foreign key that links to language table at language.language_id


This table links from:


	Table	Join	Description
	film_actor	film_id	Film_actor.film_id is a foreign key that links to primary key film.film_id
	inventory	film_id	Film_actor.film_id is a foreign key that links to primary key film.film_id
	film_category	film_id	Film_actor.film_id is a foreign key that links to primary key film.film_id

4.1.1. Unique Keys

	Column	Description
	film_id	Film_actor.film_id is a foreign key that links to primary key film.film_id
	language_id	Film_actor.film_id is a foreign key that links to primary key film.film_id

4.2. Customer Table

	Columns	Data Type	Description
	customer_id	SERIAL	Unique number use to identify the customer in the system
	store_id	SMALLINT	Unique number use to identify the store in the system
	first_name	CHARACTER VARYING(45)	First name of customer
	last_name	CHARACTER VARYING(45)	Last name of customer
	email	CHARACTER VARYING(50)	Email of customer

	address_id	SMALLINT	Unique number use to identify the address in the system
	activebool	BOOLEAN	Indicates whether customer is active or not in the system
	create_date	DATE	Date of creation of user profile
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the customer entry was last modified
	active	INTEGER	Not clear



This table links to:

	Table	Join	Description
	address	address_id	Customer.address_id is a foreign key that links to primary key address.address_id



This table links from:

	Table	Join	Description
	payment	customer_id	Payment.customer_id is a foreign key that links to primary key customer.customer_id
	rental	customer_id	rental.customer_id is a foreign key that links to primary key customer.customer_id

4.2.1. Unique Keys

	Column	Description
	customer_id	Unique number use to identify the customer in the system
	store_id	Unique number use to identify the store in the system
	address_id	Unique number use to identify the address in the system

4.3. Staff Table

	Columns	Data Type	Description
	staff_id	SERIAL	Unique number use to identify the staff member in the system
	first_name	CHARACTER VARYING(45)	First name of staff member limited to 45 characters
	last_name	CHARACTER VARYING(45)	Last name of staff member limited to 45 characters
	address_id	SMALLINT	Unique number use to identify the address in the system
	email	CHARACTER VARYING(50)	Email of staff member limited to 50 characters
	store_id	SMALLINT	Unique number to identify store in system
	active	BOOLEAN	Indicates whether staff member is active or not in the system
	username	CHARACTER VARYING(16)	Username of staff member in the system
	password	CHARACTER VARYING(40)	Password of staff member in the system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the staff member entry was last modified
	picture	BYTEA	Information about picture file of staff member in the system

This table link to:



	Table	Join	Description
	address	address_id	Customer.address_id is a foreign key that links to primary key address.address_id

This table links from:



	Table	Join	Description
	store	staff_id	Store.manager_staff_id is a foreign key that links to primary key staff.staff_id
	payment	staff_id	Payment.staff_id is a foreign key that links to primary key staff.staff_id

	rental	staff_id	rental.staff_id is a foreign key that links to primary key staff.staff_id
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4.3.1 Unique Keys

	Column	Description
	staff_id	Unique number use to identify the staff member in the system
	address_id	Unique number use to identify the address in the system
	store_id	Unique number use to identify the store in the system

4.4. Address Table

	Columns	Data Type	Description
	address_id	SERIAL	Unique number use to identify the customer's address in the system
	address	CHARACTER VARYING(50)	Address of customer limited to 50 characters
	address2	CHARACTER VARYING(50)	Address of customer limited to 50 characters
	district	CHARACTER VARYING(20)	District in which customers lives limited to 20 characters
	city_id	SMALLINT	Unique number use to identify the customer's city in the system
	postal_code	CHARACTER VARYING(10)	Post code of customer's address limited to 10 characters
	phone	CHARACTER VARYING(20)	Phone number of customer limited to 20 characters
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the address entry was last modified



This table links to:

	Table	Join	Description
	city	city_id	Address.city_id is a foreign key that links to primary key city.city_id




This table links from:

	Table	Join	Description
	customer	address_id	Customer.address_id is a foreign key that links to primary key address.address_id
	staff	address_id	Staff.address_id is a foreign key that links to primary key address.address_id
	store	address_id	Store.address_id is a foreign key that links to primary key address.address_id

4.4.1. Unique Keys

	Column	Description
	address_id	Unique number use to identify the customer's address in the system
	city_id	Unique number use to identify the customer's city in the system

4.5. Store Table




	Columns	Data Type	Description
	store_id	SERIAL	Unique number to identify store in system
	manager_staff_id	SMALLINT	Unique number to identify manager in system
	address_id	SMALLINT	Unique number to identify store's address in system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the store entry was last modified

This table links to:



	Table	Join	Description
	staff	manager_staff_id	store.manager_staff_id is a foreign key that references to the primary key in the staff table staff.staff_id
	address	address_id	Store.address_id is a foreign key that references to the primary key in the address table address.address_id

This table links from: None

4.5.1. Unique Keys

	Column	Description
	store_id	Unique number to identify store in system
	manager_staff_id	Unique number to identify manager in system
	address_id	Unique number to identify store's address in system

4.6. City Table

	Columns	Data Type	Description
	city_id	SERIAL	Unique number to identify customer's city of residence in system
	city	CHARACTER VARYING(50)	Name of city limited to 50 characters
	country_id	SMALLINT	Unique number to identify customer's country of residence in system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the city entry was last modified



This table links to:

	Table	Join	Description
	country	country_id	City.country_id is a foreign key that links to primary key country.country_id


This table links from:

	Table	Join	Description
	address	city_id	Address.city_id is a foreign key that links to primary key city.city_id

4.6.1. Unique Keys

	Column	Description
	city_id	Unique number to identify customer's city of residence in system
	country_id	Unique number to identify customer's country of residence in system

4.7. Country Table


	Columns	Data Type	Description
	country_id	SERIAL	Unique number to identify customer's country of residence in system
	country	CHARACTER VARYING(50)	Name of country limited to 50 characters
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the country entry was last modified

This table links to: None



This table links from:

	Table	Join	Description
	city	country_id	City.country_id is a foreign key that links to primary key country.country_id

4.7.1. Unique Keys

	Column	Description
	country_id	Unique number to identify customer's country of residence in system

4.8. Film category Table





	Columns	Data Type	Description
	film_id	SMALLINT	Unique number use to identify the film in the system
	category_id	SMALLINT	Unique number use to identify the film's category in the system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the film category entry was last modified

This table links to:



	Table	Join	Description
	category	category_id	Film_category.category_id is a foreign key that links to primary key category.category_id
	film	film_id	Film_category.film_id is a foreign key that links to primary key film.film_id


This table links from: None

4.8.1. Unique Keys

	Columns	Description
 	film_id	Unique number use to identify the film in the system
 	category_id	Unique number use to identify the film's category in the system

4.9. Film actor Table

	Columns	Data Type	Description
 	actor_id	SMALLINT	Unique number use to identify the each actor in the system



	film_id	SMALLINT	Unique number use to identify the film in the system
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the film actor entry was last modified

This table links to:




	Table	Join	Description
	actor	actor_id	Film_actor.actor_id is a primary key and foreign key that links to actor table at actor.actor_id
	film	film_id	Film_actor.film_id is a primary key and a foreign key that links to film table at film.film_id

This table links from: None

4.9.1. Unique Keys

	Columns	Description
	actor_id	Unique number use to identify the each actor in the system
	film_id	Unique number use to identify the film in the system

4.10. Inventory Table

	Columns	Data Type	Description
	inventory_id	SERIAL	Contains information about the physical product and the back-end information used for managing inventory, shipping, and fulfillments
	film_id	SMALLINT	Unique number use to identify the film in the system
	store_id	SMALLINT	Unique number use to identify the store in the system

	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the inventory entry was last modified
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This table links to:

	Table	Join	Description
	film	film_id	inventory.film_id is a foreign key that links to film table at film.film_id


This table links from:

	Table	Join	Description
	rental	inventory_id	Rental.inventory_id is a foreign key that links to primary key inventory.inventory_id

4.10.1. Unique Keys

	Columns	Description
	inventory_id	Contains information about the physical product and the back-end information used for managing inventory, shipping, and fulfillments
	film_id	Unique number use to identify the film in the system
	store_id	Unique number use to identify the store in the system

4.11. Actor Table


	Columns	Data Type	Description
	actor_id	SERIAL	Unique number use to identify the actor in the system
	first_name	CHARACTER VARYING(45)	First name of actor limited to 45 characters
	last_name	CHARACTER VARYING(45)	Last name of actor limited to 45 characters
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the actor entry was last modified

This table links to: None


This table links from:

	Table	Join	Description
	film_actor	actor_id	Film_actor.actor_id is a foreign key that links to the primary key actor.actor_id

4.11.1. Unique Keys

	Columns	Description
	actor_id	Unique number use to identify the actor in the system

4.12. Category Table


	Columns	Data Type	Description
	category_id	SERIAL	Unique number use to identify the film's category in the system
	name	CHARACTER VARYING(25)	Name of category limited to 25 characters
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the category entry was last modified

This table links to: None


This table links from:

	Table	Join	Description
	film_category	category_id	Film_category.category_id is a primary key and foreign

4.13.1. Unique Keys

	Columns	Description
	category_id	Unique number use to identify the film's category in the system

4.14. Language Table


	Columns	Data Type	Description
	language_id	SERIAL	Unique number use to identify the film's language in the system
	name	CHARACTER(20)	Name of language
	last_update	TIMESTAMP(6) WITHOUT TIME ZONE	Date in which the language entry was last modified

This table links to: None

This table links from:

	Table	Join	Description
	film	language_id	Film.language_id is a foreign key that links to primary key language.language_id

4.14.1. Unique Keys

	Columns	Description
	language_id	Unique number use to identify the film's language in the system