

RockBuster Stealth LLC

Data Dictionary

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Using PostgreSQL & DBVisualizer



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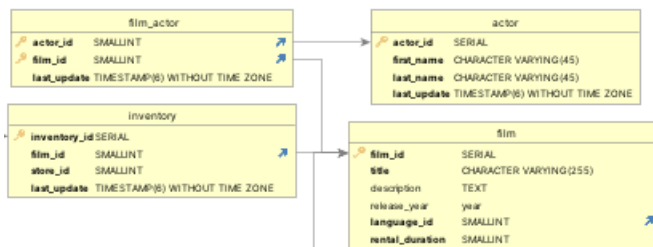
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1. Enterprise Relationship Diagram (ERD)



2. ERD and TABLE KEY

Close up example of ERD:



SYMBOL	DEFINITION
	Foreign Key
	Primary Key
	Key Connection Between Tables

3a. **FACTS**

i. **Payment**

Columns	Data Type	Description
Payment_id	Serial	Primary Key, Surrogate field for payment value
Customer_id	SMALLINT	Foreign Key, Unique ID for customer details
Staff_id	SMALLINT	Foreign Key, Unique ID for staff details
Rental_id	INTEGER	Foreign Key, Unique ID for rental/order information
Amount	NUMERIC (5,2)	total invoice amount related to specific rental transactions
Payment_date	TIMESTAMP (6) WITHOUT TIME ZONE	transaction date

Links to:

Table	JOIN
Rental	payment.rental_id = rental.rental_id
Customer	Payment.customer_id = customer.customer_id
Staff	Payment.staff_id = staff.staff_id

ii. **Rental**

Columns	Data Type	Description
Rental_id	Serial	Primary Key, Surrogate field for payment value
Rental_date	TIMESTAMP (6) WITHOUT TIME ZONE	date that the units were rented out of the system
Inventory_id	INTEGER	Foreign Key, Unique ID that links to Inventory table to retrieve inventory details
customer_id	SMALLINT	Foreign Key, Unique ID for customer details
Return_date	TIMESTAMP (6) WITHOUT TIME ZONE	date the rented units were returned back to the system
Staff_id	SMALLINT	Foreign Key, Unique ID for staff details
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

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

Links from (using *rental_id* as Primary Key):

Table	JOIN
Payment	payment.rental_id = rental.rental_id

iii. Customer

Columns	Data Type	Description
Customer_id	SERIAL	primary key, Unique ID for each Customer record
store_id	SMALLINT	Unique ID, meant to link up to Store dimension (Though no foreign Key is established according to schema)
First_name	CHARACTER VARYING(45)	first name of customer
Last_name	CHARACTER VARYING(45)	last name of customer
email	CHARACTER VARYING(52)	mixed text/number/special character field for staff email details.
Address_id	SMALLINT	foreign key that links to address key in Address table
activebool	BOOLEAN	true/false statement
create_date	DATE	Date that the record was created
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table
active	INTEGER	Binary 1-0 field indicating whether the customer is still active

Links to:

Table	JOIN
Store	customer.store_id = store.store_id
Address	customer.address_id = address.address_id

Links from (using *customer_id* as Primary Key):

Table	JOIN
Payment	payment.customer_id = customer.customer_id
Rental	rental.customer_id = customer.customer_id

iv. Staff

Columns	Data Type	Description
staff_id	SMALLINT	primary key, Unique ID for each staff record
first_name	CHARACTER VARYING(45)	first name of staff member
Last_name	CHARACTER VARYING(45)	last name of staff member
address_id	SMALLINT	foreign key that links to address key in Address table
email	CHARACTER VARYING(50)	mixed text/number/special character field for staff email details.
store_id	SMALLINT	Unique ID, meant to link up to Store dimension (Though no foreign Key is established according to schema)
active	INTEGER	Binary 1-0 field indicating whether the Staff Member is still active
username	CHARACTER VARYING(16)	mixed text/number/special character field for staff username details.
password	CHARACTER VARYING(40)	mixed text/number/special character field for staff login details.
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table
picture	BYTEA	staff image, presumably with restrictions on byte size.

Links to:

Table	JOIN
Store	staff.store_id = store.store_id
Address	staff.address_id = address.address_id

Links from (using *staff_id* as Primary Key):

Table	JOIN
Payment	payment.staff_id = staff.staff_id
Rental	rental.staff_id = staff.staff_id

v. Film

Columns	Data Type	Description
film_id	Serial	mixed text/number/special character field for staff username details.
title	CHARACTER VARYING(255)	mixed text/number/special character field for film title name
description	TEXT	Text field that provides brief title overview
release_year	YEAR	Date (specifically Year) indicating the year of release
language_id	SMALLINT	foreign key that links to address key in languagetable
rental_duration	SMALLINT	length of time the film was on loan
rental_rate	NUMERIC(4,2)	Cost of overall rental period once returned
length	SMALLINT	Length of film, in minutes
replacement_cost	NUMERIC(5,2)	replacement cost if rental unit is presumably lost or damaged by the customer
rating	MPAA_RATING	age rating provided by external ratings board
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table
special_features	TEXT[]	on disc extras available for the customers to view
fulltext	TSVECTOR	Searchable terms/tags related to the film and it's plot

Links to:

Table	JOIN
language	Film.language_id = language.language_id

Links from (using *film_id* as Primary Key):

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

3b. DIMENSIONS

i. Film_actor

Columns	Data Type	Description
actor_id	SMALLINT	Foreign Key, Unique ID connecting to Actor Table
Film_id	SMALLINT	Foreign Key, Unique ID connecting to Film Table
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links to:

Table	JOIN
Actor	Actor.actor_id = film_actor.actor_id
Film	Film.film_id = film_actor.film_id

ii. Inventory

Columns	Data Type	Description
Inventory_id	SERIAL	Primary Key, Unique ID used to define a combination of specific film and item location
Film_id	SMALLINT	Foreign Key, Unique ID connecting to Film Table
Store_id	SMALLINT	Foreign Key, Unique ID connecting to Store Table [Though no link is actually present in this schema]
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links to:

Table	JOIN
Film	inventory.film_id = film.film_id
Store	Inventory.store_id = store.store_id

Links from (using *inventory_id* as Primary Key):

Table	JOIN
Rental	Rental.inventory_id = inventory.inventory_id

iii. Actor

Columns	Data Type	Description
Actor_id	SERIAL	Primary Key, Unique ID referencing Actor details
First_name	CHARACTER VARYING(45)	First name of actor
last_name	CHARACTER VARYING(45)	First name of actor
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links from (using *actor_id* as Primary Key):

Table	JOIN
Film_actor	Film_actor.actor_id = actor.actor_id

iv. Language

Columns	Data Type	Description
Language_id	SERIAL	Primary Key, Unique ID referencing lanaguage details
name	CHARACTER(20)	Name of language
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links from (using *language_id* as Primary Key):

Table	JOIN
Film	Film.language_id = language.language_id

v. Category

Columns	Data Type	Description
category_id	SERIAL	Primary Key, Unique ID referencing category / genre of film
name	CHARACTER VARYING(25)	Name of category
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links from (using *category_id* as Primary Key):

Table	JOIN
Film_category	Film_category.category_id= category.category_id

vi. Film_category

Columns	Data Type	Description
film_id	SMALLINT	Foreign Key, Unique ID connecting to Film Table
category_id	SMALLINT	Foreign Key, Unique ID connecting to category
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links to:

Table	JOIN
Film	Film.film_id = film_category.film_id
category	category.category_id = film_category.category_id

vii. Store

Columns	Data Type	Description
Store_id	SERIAL	Primary Key, Unique ID referencing Store
Manager_staff_id	SMALLINT	Foreign Key, linking to manager of store details (Though no link in this current schema)
address_id	SMALLINT	Foreign Key, linking to store address details
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links to:

Table	JOIN
staff	Staff.manager_staff_id = Store.manager_staff_id
address	Address.address_id = Store.address_id

Links from (using *store_id* as Primary Key):

Table	JOIN
Staff	Staff.store_id = Store.store_id

viii. Address

Columns	Data Type	Description
address_id	SERIAL	Primary Key, Unique ID referencing address details
address	CHARACTER VARYING(50)	First line of address, typically Street name & Number
address2	CHARACTER VARYING(50)	Second line of address - Typically unused
district	CHARACTER VARYING(20)	State / province / county of given address
city_id	SMALLINT	Foreign Key, linking to city details
postal_code	CHARACTER VARYING(10)	Combination of text and numbers for postal code or ZIP
phone	CHARACTER VARYING(20)	Number combination for address contacts Phone number
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links to:

Table	JOIN
City	Address.city_id = City.city_id

Links from (using *address_id* as Primary Key):

Table	JOIN
Staff	Staff.address_id = address.address_id
Customer	Customer.address_id = address.address_id
Store	Store.address_id = address.address_id

ix. City

Columns	Data Type	Description
City_id	SERIAL	Primary Key, Unique ID referencing city details
City	CHARACTER VARYING(50)	Name of City using text and number
country_id	SMALLINT	Foreign Key, linking to country details
Last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links to:

Table	JOIN
Country	Country.country_id = city.country_id

Links from (using *city_id* as Primary Key):

Table	JOIN
address	city.city_id = address.city_id

x. Country

Columns	Data Type	Description
Country_id	SERIAL	Primary Key, Unique ID referencing country details
country	CHARACTER VARYING(50)	Name of Country using text and number
last_update	TIMESTAMP (6) WITHOUT TIME ZONE	Date for when the system last updated this specific record in the table

Links From:

Table	JOIN
City	Country.country_id = city.country_id

