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Legend

Primar key



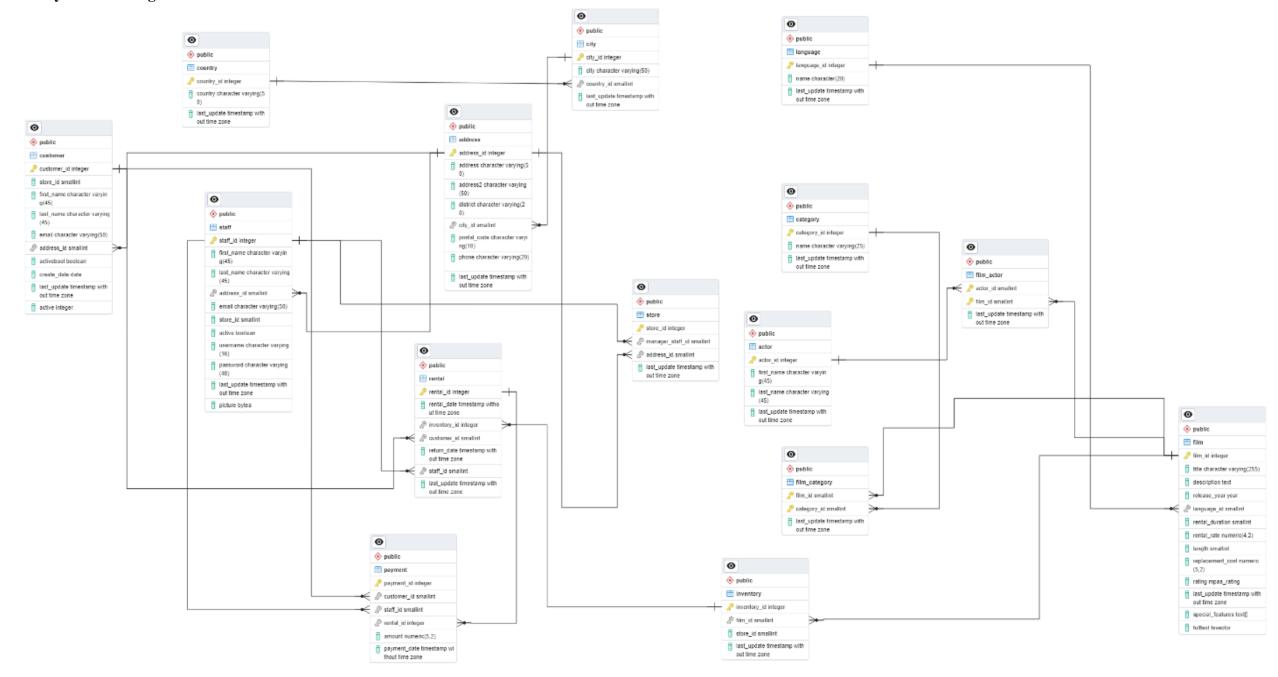
Foreign key



Primary key relation >

Foreign key relation \prec

Entity relation Diagram ERD for Rockbuster stealth



The Rockbuster Stealth database utilizes a snowflake schema, where fact tables establish connections with dimension tables via primary and foreign keys. Elaborate data is stored in subdimension tables. To illustrate, the customer and staff tables are linked to the country table through the address and city tables.

Fact tables payment

Key	Columns	Data Type	Description
	payment_id	serial	Unique ID to payment transaction
	customer_id	smallint	Unique ID linked to customer
	staff_id	smallint	Unique ID linked to the staff
	rental_id	serial	Unique ID to rental transaction
	amount	numeric (5, 2)	Amount of the payment
	payment_date	timestamp (6) without time zone	Date when payment was made

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

rental

Key	Columns	Data Type	Description
	rental_id	Serial	Unique ID to rental transaction
	rental_date	Timestamp (6) without time zone	When movie was rented
	inventory_id	interger	Unique ID linked to the inventory
	customer_id	smallint	Unique ID linked to customer
	return_date	Timestamp (6) without time zone	Date when movie was returned
	staff_id	smallint	Unique ID linked to the staff
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated

Links to

	Table	Join
>	_	rental.inventory_id = inventory.inventory_id
>	customer	rental.customer_id = customer.customer_id
—	staff	rental.staff_id = staff.staff_id

Links From

	Table	Join
-	payment	payment.rental_id = rental.rental_id

Dimension tables

store

Key	Columns	Data Type	Description	
	store_id serial		Unique ID for a store	
	manager_staff_id	smallint	Unique ID for a manager	
	address_id	smallint	Unique ID for a store	
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated	

Links to

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

film_actor

Key	Columns	Data Type	Description
	actor_id	smallint	Unique ID for an actor
	film_id	smallint	Unique ID for a film
	last_update Timestamp (6) without time zone		Date and time when the information was recently updated

Links to

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

actor

Key	Columns	Data Type	Description	
actor_id smallint		smallint	Unique ID for an actor	
	first_name Character varying (45)		First name of the actor	
	last_name Character varying (45)		Last name of the actor	
	_ 1		Date and time when the information was recently updated	

Links from

	Table	Join
-	film_actor	film_actor.actor_id = actor.actor_id

Inventory

Key	Columns	Data Type	Description
	inventory_id	serial	Unique ID for an inventory
	film_id	smallint	Unique ID for a film
	store_id	serial	Unique ID for a store
	last_update Timestamp (6) without time zone		Date and time when the information was recently updated

Links to

	Table	Join
>	film	inventory.film_id = film.film_id

Links from

	Table	Join
-		rental.inventory_id = inventory.inventory_id

film

Key	Columns	Data Type	Description
	film_id	smallint	Unique ID for a film
	tittle	Character varying (255)	Films tittle
	description	text	Films description
	release_year	year	Films year release
	language_id	smallint	Films language
	rental duration	smallint	Duration of the rental
	rental_rate	Numeric (4,2)	Films rating rental
	length	smallint	Films length
	replacement_cost	Numeric (5, 2)	Films cost replacement
	rating	Mpaa_rating	Films rating
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated
	special features	text	Special films feature
	fulltext	TSvector	How much text is used to describe the 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

language

Key	Columns	Data Type	Description
	language_id	smallint	Films language
	name	Character (20)	Languages name
	— I		Date and time when the information was recently updated

Links from

	Table	Join
-	film	film.language_id = language.language_id

film_category

Key	Columns	Data Type	Description
	film_id	smallint	Unique ID for a film
	category_id	smallint	Unique ID for a category

last_update	Timestamp (6) without time	Date and time when the information was recently
	zone	updated

Links to

	Table	Join
	film	film_category.film_id = film.film_id
-		film_category.category_id = category.category_id

category

Key	Columns	Data Type	Description
	category_id	smallint	Unique ID for a category
	name	Character (25)	Category name
	_ 1		Date and time when the information was recently updated

	Table	Join
-	_	film_category.category_id = category.category_id

customer

Key	Columns	Data Type	Description
	customer_id	serial	Unique ID for a customer
	store_id	serial	Unique ID for a store
	first_name	Character varying (45)	First name of the customer
	last_name	Character varying (45)	Last name of the customer
	email	Character varying (50)	Customers email
	address_id	smallint	Unique ID for a customer address
	create_date	date	Date when the account was created
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated
	active	integer	Active account

Links to

	Table	Join
—	address	customer.address_id = address.address_id

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

Staff

Key	Columns	Data Type	Description
	staff_id	serial	Unique ID for a staff
	first_name	Character varying (45)	First name of the staff
	last_name	Character varying (45)	Last name of the staff
	address_id	smallint	Unique ID for a staff address
	email	Character varying (50)	Staffs email
	store_id	serial	Unique ID for a store
	active	boolean	Active true or false
	username	Character varying (16)	Staff username
	password	Character varying (40)	Staff password
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated
	picture	bytea	Staffs photo

Links to

	Table	Join
>	address	staff.address_id = address.address_id

Table	Join
payment	payment.staff_id = staff.staff_id
rental	rental.staff_id = staff.staff_id
store	store.address_id = staff.address_id

Address

Key	Columns	Data Type	Description
	address_id	serial	Unique ID for an address
	address	Character varying (50)	Main address
	address2	Character varying (50)	Backup address
	district	Character varying (20)	District
	city_id	Small int	Unique ID for a city
	postal_code	Character varying (10)	Addresss postal code
	phone	Character varying (20)	Phone number
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated

Links to

	Table	Join
—	city	address.city_id = city.city_id

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

city

Key	Columns	Data Type	Description
	city_id	serial	Unique ID for a city
	city	Character varying (50)	City name
	country_id	smallint	Unique ID for a country
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated

Links to

	ŗ	Table	Join
>	(country	country.country_id = city.country_id

Links from

Table	Join
address	address.city_id = city.city_id

Country

Key	Columns	Data Type	Description
	country_id	serial	Unique ID for a country
	country	Character varying (50)	Country name
	last_update	Timestamp (6) without time zone	Date and time when the information was recently updated

Table	Join
city	city.country_id = country.country_id