

Parlevel Enterprise Data Service (EDS) Data Dictionary

Snowflake-based data warehouse reference for Parlevel VMS customers — table schemas, relationships, and query patterns.

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Introduction

This document provides a comprehensive overview of data available through the Parlevel Enterprise Data Service (EDS), a Snowflake-based data warehouse solution for Parlevel VMS customers. The EDS aggregates data from multiple VMS database instances into unified views, providing enterprise customers with consolidated reporting and analytics capabilities.

Common Fields

All tables include a standard `vms` column as the first field:

- **Field:** vms
- **Type:** varchar(200)
- **Description:** VMS database name identifier
- **Purpose:** Identifies the source VMS database for multi-tenant aggregation
- **Applies to Vending:** Yes
- **Applies to Kiosks:** Yes

Dimension Tables

Dimension tables contain descriptive attributes about business entities such as machines, locations, products, and users.

machines_and_kiosks

Description: The table outlines the characteristics of machines and micro market kiosks.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the machine or kiosk in the database	
name	Yes	Yes	Name of the machine or kiosk	
serial_number	Yes	No	Serial number of the hardware	
device_id	Yes	No	ID of the telemeter or kiosk used by our software for identification	
type	Yes	Yes	Type of machine or kiosk	
connected_status	Yes	Yes	Indicates if the machine or kiosk is connected or disconnected	
make_model	Yes	No	Machine make or model	
location_id	Yes	Yes	Foreign key; relates the machine or kiosk to a location in the locations table	
last_sale_at	Yes	Yes	Date and time of the last recorded sale for this machine or kiosk	All times are in UTC
last_service_at	Yes	Yes	Date and time of the last recorded service for this machine or kiosk	All times are in UTC
offline	Yes	Yes	Indicates if the machine or kiosk is online or offline	
last_comm_at	Yes	Yes	Date and time of the last recorded communication for this machine or kiosk	All times are in UTC
cst_id	Yes	Yes	Custom ID that can be set by the operator; it represents the Asset ID	

Field	Vending	Kiosks	Description	Notes
kiosk_model	No	Yes	Kiosk model	
vmc_model	Yes	No	Control board model; pulled from DEX	
paired	No	Yes	In cases where there is more than one kiosk at a micro market, this column will be populated for the secondary kiosk, with the value being the ID of the primary kiosk	
last_audit_at	Yes	Yes	Date and time of the last recorded audit for this machine or kiosk	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this machine or kiosk was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC
subsidy_group_id	Yes	Yes	Foreign key; if applicable, relates the machine to a subsidy group in the subsidy_groups table that defines which products receive subsidies and at what rates	
effective_commission_rate	Yes	Yes	The effective commission rate that applies to this machine after resolving the hierarchical commission logic (broker > machine config > location config > account config > direct values)	
effective_commission_type	Yes	Yes	The type of commission that applies (text: "Percentage" or "Flat Rate")	
card_reader	Yes	Yes	Flag indicating if the machine has a card reader installed	
cc_commission	Yes	Yes	Flag indicating if card sales should be included in commission calculations (null means use system default)	
tax_percent	Yes	Yes	Static tax percentage for this machine if not using dynamic tax calculations	

Field	Vending	Kiosks	Description	Notes
bottler_asset_number	Yes	Yes	Bottler asset number assigned to the machine	
total_in_coinmech	Yes	No	Dollar value of money in the machine as of the last DEX file received	

routes

Description: The table contains all existing routes.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the route in the database	
name	Yes	Yes	Name of the route	
driver_id	Yes	Yes	Foreign key; relates the route to a driver in the users table	
truck_id	Yes	Yes	Foreign key; relates the route to a truck in the trucks table	
deleted_at	Yes	Yes	If this column is not null, it means this route was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

scheduled_routes

Description: This table contains services, which are occurrences of a route in the routes table.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the scheduled route in the database	
route_id	Yes	Yes	Foreign key; relates the scheduled route to a route in the routes table	
driver_id	Yes	Yes	Foreign key; relates the route occurrence to the driver it was assigned to at the time it happened, referencing the users table	

Field	Vending	Kiosks	Description	Notes
truck_id	Yes	Yes	Foreign key; relates the route occurrence to the truck it was assigned to at the time it happened, referencing the trucks table	
status	Yes	Yes	Status of the route occurrence	
created_at	Yes	Yes	Date and time the route occurrence was planned	All times are in UTC
started_at	Yes	Yes	Date and time the route occurrence actually started	All times are in UTC
finished_at	Yes	Yes	Date and time the route occurrence was actually completed	All times are in UTC
service_at	Yes	Yes	Date and time the route occurrence was planned for	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this route occurrence was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

Locations

Description: This table lists locations.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the location in the database	
name	Yes	Yes	Name of the location	
type_name	Yes	Yes	Type of location (text: e.g. "Hospital", "Office", "School", "Factory", etc.)	
account_id	Yes	Yes	Foreign key; relates the location to an intermediary client account in the accounts table	
route_id	Yes	Yes	Foreign key; relates the location to a route in the routes table	
created_at	Yes	Yes	Date and time the location was created in the VMS	All times are in UTC

Field	Vending	Kiosks	Description	Notes
updated_at	Yes	Yes	Date and time the location was last updated	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this location was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC
tax_group_id	Yes	Yes	Foreign key; relates the location to a tax group in the tax_groups table which defines which tax rates apply at this location	
effective_commission_rate	Yes	Yes	The effective commission rate that applies to this location after resolving the hierarchical commission logic	
effective_commission_type	Yes	Yes	The type of commission that applies (text: "Percentage" or "Flat Rate")	
sales_tax	Yes	Yes	Static sales tax percentage for this location if not using tax groups	
ocs_status	Yes	Yes	Status indicating if this location uses OCS (Office Coffee Service)	
ocs_route_id	Yes	Yes	Foreign key; relates the location to the route that services OCS at this location in the routes table	
street	Yes	Yes	Street address of the location	Retrieved from addresses table via polymorphic join; NULL if no address on file
city	Yes	Yes	City of the location	Retrieved from addresses table via polymorphic join; NULL if no address on file

Field	Vending	Kiosks	Description	Notes
state	Yes	Yes	State of the location	Retrieved from addresses table via polymorphic join; NULL if no address on file
zipcode	Yes	Yes	Zip code of the location	Retrieved from addresses table via polymorphic join; NULL if no address on file
country	Yes	Yes	Country of the location	Retrieved from addresses table via polymorphic join; defaults to USA
lat	Yes	Yes	Latitude coordinate of the location	Retrieved from addresses table via polymorphic join; NULL if address not geocoded
lng	Yes	Yes	Longitude coordinate of the location	Retrieved from addresses table via polymorphic join; NULL if address not geocoded

accounts

Description: This table contains information about accounts—these are the clients of operators.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the account in the database	
name	Yes	Yes	Name of the account	

Field	Vending	Kiosks	Description	Notes
number	Yes	Yes	Number assigned to the account	
created_at	Yes	Yes	Date and time the account was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the account was last updated	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this account was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC
effective_commission_rate	Yes	Yes	The effective commission rate that applies to this account after resolving the hierarchical commission logic	
effective_commission_type	Yes	Yes	The type of commission that applies (text: "Percentage" or "Flat Rate")	
cost_of_goods_commissions	Yes	Yes	Flag indicating if cost of goods should be deducted from gross sales when calculating commissions (1=yes, 0=no)	
broker_name	Yes	Yes	Name of the broker who manages this account (if applicable)	

users

Description: This table contains information on system users, including roles such as admin, manager, and drivers.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the user in the database	
username	Yes	Yes	Username of the user	
role	Yes	Yes	Role assigned to the user	
active	Yes	Yes	Flag indicating if the user is active	

Field	Vending	Kiosks	Description	Notes
created_at	Yes	Yes	Date and time the user was created	All times are in UTC
updated_at	Yes	Yes	Date and time the user was last updated	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this user was soft deleted, it won't be possible to use it to access our systems; it indicates the date and time it was deleted	All times are in UTC

trucks

Description: This table lists trucks.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the truck in the database	
name	Yes	Yes	Name of the truck	
created_at	Yes	Yes	Date and time the truck was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the truck was last updated	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this truck was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

products

Description: This table lists products along with some of their characteristics.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the product in the database	
name	Yes	Yes	Name of the product	

Field	Vending	Kiosks	Description	Notes
brand	Yes	Yes	Brand of the product	Retrieved from operator_product_brands table via brand_id; products without a valid brand are excluded from this view
manufacturer	Yes	Yes	Manufacturer of the product	Retrieved from operator_product_manufacturers table via manufacturer_id; products without a valid manufacturer are excluded from this view
type	Yes	Yes	Type of product	Retrieved from products table and mapped via eds_enum_mappings; shows product type classification
case_quantity	Yes	Yes	Units per case of this product	
price	Yes	Yes	Current price of the product	
cost	Yes	Yes	Current cost of the product	
status	Yes	Yes	Status of the product	Retrieved from wh_inventory table; shows warehouse inventory status for the product; products without warehouse inventory are excluded from this view
custom_name	Yes	Yes	Flag that indicates if the name of the product was modified by the operator	
cst_id	Yes	Yes	Customer code for the product	
tax_class_id	Yes	Yes	Foreign key; relates the product to a tax class in the product_tax_classes table which defines how the product is taxed	
created_at	Yes	Yes	Date and time the product was created	All times are in UTC
updated_at	Yes	Yes	Date and time the product was last updated	All times are in UTC

Field	Vending	Kiosks	Description	Notes
deleted_at	Yes	Yes	If this column is not null, it means this product was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC
size	Yes	Yes	Size of the product (e.g. "12 Fluid Ounce CAN", "20 oz")	Retrieved from product_sizes table via product_size_id; defaults to "Not Specified" if no size on file
container	Yes	Yes	Container type of the product (e.g. Can, Bottle, Bag, Bar, Box)	Retrieved from products table and mapped via eds_enum_mappings (table_name='products', column_name='container_type')

product_upcs

Description: This table stores product UPCs.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the product_upc in the database	
product_id	Yes	Yes	Foreign key; relates the UPC to a product in the products table	
upc	Yes	Yes	UPC (12-digit barcode used to identify product)	
created_at	Yes	Yes	Date and time the UPC was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the UPC was last updated	All times are in UTC

mm_users

Description: This table lists micro market users, those with an account and a Parlevel Wallet.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	No	Yes	Primary key; ID of the mm_user in the database	

Field	Vending	Kiosks	Description	Notes
account_id	No	Yes	Foreign key; relates the user to an account in the accounts table	
first_name	No	Yes	First name of the user	
last_name	No	Yes	Last name of the user	
email	No	Yes	Email of the user	
user_number	No	Yes	User number input by the user when creating their account	
last_activity	No	Yes	Date and time of last registered activity	All times are in UTC
balance	No	Yes	Current account balance	
email_receipts	No	Yes	Flag indicating if the user opted for email receipts	
created_at	No	Yes	Date and time of user creation	All times are in UTC
updated_at	No	Yes	Date and time of user last update	All times are in UTC
deleted_at	No	Yes	If this column is not null, it means this user was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

mm_assets

Description: This table contains information about micro market assets.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	No	Yes	Primary key; ID of the mm_asset in the database	
cst_id	No	Yes	Custom ID assigned to the asset by the operator	
machine_id	No	Yes	Foreign key; relates the asset to a machine or kiosk in the machines_and_kiosks table	
location_id	No	Yes	Foreign key; relates the asset to a location in the locations table	
type	No	Yes	Type of asset	

Field	Vending	Kiosks	Description	Notes
name	No	Yes	Name assigned to the asset	
created_at	No	Yes	Date and time the asset was created in the VMS	All times are in UTC
updated_at	No	Yes	Date and time the asset was last updated	All times are in UTC
deleted_at	No	Yes	If this column is not null, it means this asset was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

Fact Tables

Fact tables contain transactional and event data, recording business activities and measurements.

services

Description: This table contains information about the planning and service of individual machines or micro markets that are included in the route occurrence from the scheduled_routes table.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the service in the database	
scheduled_route_id	Yes	Yes	Foreign key; relates the service to a route occurrence in the scheduled_routes table	
machine_id	Yes	Yes	Foreign key; relates the service to a machine or kiosk in the machines_and_kiosks table	
location_id	Yes	Yes	Foreign key; relates the service to the location it was assigned to at the time, referencing the locations table	
status	Yes	Yes	Status of the service to the machine or micro market	
type	Yes	Yes	Type of service planned for the machine or micro market	
bag_number	Yes	Yes	Number on the money bag	

Field	Vending	Kiosks	Description	Notes
amount_sold	Yes	Yes	Total amount of money sold from previous service to this one, and expected to be picked up	
amount_collected_bills	Yes	Yes	Amount of money in bills collected from service; input during consolidation	
amount_collected_coins	Yes	No	Amount of money in coins collected from service; input during consolidation	
amount_refunds	Yes	Yes	Amount of money refunded to client or consumer during service; input by the driver	
amount_change_added	Yes	No	Amount of money added to the machine as change during service; input by the driver	
overshort	Yes	Yes	Difference between expected amount of money and collected amount of money; calculated after consolidation	
amount_card_sales	Yes	Yes	Amount of money sold in cashless sales from previous service to this one	
route_order	Yes	Yes	The position or sequence in the route where this machine or micro market will be serviced	
dex_expected_bills	Yes	No	Amount of money expected to be collected in bills, according to DEX	
dex_expected_coins	Yes	No	Amount of money expected to be collected in coins, according to DEX	
audit	Yes	Yes	Flag indicating if an audit was scheduled	
audit_at	Yes	Yes	Date and time machine or micro market was audited	All times are in UTC
wallet_purchases_total	No	Yes	Amount of money sold in wallet credit between last service and this one	
created_at	Yes	Yes	Date and time the service was planned	All times are in UTC

Field	Vending	Kiosks	Description	Notes
updated_at	Yes	Yes	Date and time the service was updated	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this service was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC
user_id	Yes	Yes	User that executed this service	
served_at	Yes	Yes	Date and time the service was executed	All times are in UTC

fill_rate

Description: This table describes the changes in inventory of a specific slot because of a service.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the fill_rate record in the database	
daily_route_id	Yes	Yes	Foreign key; relates the inventory change to a scheduled route in the scheduled_routes table	
service_id	Yes	Yes	Foreign key; relates the inventory change to a service in the services table	
machine_id	Yes	Yes	Foreign key; relates the inventory change to a machine or micro market in the machines_and_kiosks table	
slot_id	Yes	Yes	Foreign key; relates the inventory change to a slot in the slots table	
product_id	Yes	Yes	Foreign key; relates the inventory change to a product in the products table	
former_product_id	Yes	Yes	Foreign key; if there was a product change, it indicates the previous product, referencing the products table	

Field	Vending	Kiosks	Description	Notes
paired	Yes	Yes	Flag indicating if this was a paired slot at the time of the inventory change	
parlevel	Yes	Yes	Parlevel of the slot	
inventory_before	Yes	Yes	Inventory before service	
inventory_after	Yes	Yes	Inventory after service	
price	Yes	Yes	Price of an individual product at the time	
inventory_stocked_final	Yes	Yes	Quantity of units stocked in the machine or micro market during service	

slots

Description: This table contains information of each slot in a machine or micro market, and its current settings (product, price, etc.)

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the slot in the database	
machine_id	Yes	Yes	Foreign key; relates the slot to a machine or kiosk in the machines_and_kiosks table	
row	Yes	Yes	Row of the slot	
column	Yes	Yes	Column of the slot	
parlevel	Yes	Yes	Current parlevel of the slot	
capacity	Yes	Yes	Current capacity of the slot	
quantity	Yes	Yes	Current inventory of the slot	
price	Yes	Yes	Current price of the slot, per the VMS	
price_dex	Yes	No	Current price of the slot, per the last received DEX	
product_id	Yes	Yes	Foreign key; relates the slot to product in the products table	

Field	Vending	Kiosks	Description	Notes
cst_alias	Yes	Yes	Custom name that the operator can give the slot	
mdb_alias	Yes	Yes	MDB protocol alias for the slot	
paired	Yes	Yes	If the slot is paired to another one, this column will contain the id of the primary slot	
daily_consumption_rate	Yes	Yes	Average units purchased from this slot per day	
mm_asset_id	No	Yes	Foreign key; relates the slot to an asset in the mm_assets table	
created_at	Yes	Yes	Date of creation	All times are in UTC
updated_at	Yes	Yes	Date of last update	All times are in UTC
deleted_at	Yes	Yes	If this column is not null, it means this slot was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

sales

Description: This table records individual slot sales. In vending, sales are tracked by the total number of units sold between received DEX files; for example, if 5 units are sold from a slot between DEX reports, that counts as a sale of 5 units. In micro markets, sales are logged for each transaction as they occur. If a single transaction includes multiple units of the same product, all units are counted in that sale. If the transaction involves different products, each product is recorded as a separate sale.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the sale in the database	
slot_id	Yes	Yes	Foreign key; relates the sale to a slot in the slots table	
product_id	Yes	Yes	Foreign key; relates the sale to a product in the products table	
quantity	Yes	Yes	Number of units sold	
price	Yes	Yes	Price per unit at the time of the sale	

Field	Vending	Kiosks	Description	Notes
total_tax	No	Yes	Total amount of taxes charged	
total_price	Yes	Yes	Total amount of money received (quantity*price + taxes)	
cost_per_item	Yes	Yes	Cost per unit at the time of the sale	
created_at	Yes	Yes	Date and time the sale was recorded	All times are in UTC
mm_transaction_id	No	Yes	Foreign key; relates the sale to a transaction in the mm_transactions table	
machine_id	Yes	Yes	Foreign key; relates the sale to a machine or kiosk in the machines_and_kiosks table	
location_id	Yes	Yes	Foreign key; relates the sale to a location in the locations table	
route_id	Yes	Yes	Foreign key; relates the sale to a route in the routes table	

alerts

Description: This table registers alerts.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the alert in the database	
machine_id	Yes	Yes	Foreign key; relates the alert to a machine or kiosk in the machines_and_kiosks table	
type	Yes	Yes	Type of alert	
category	Yes	Yes	Category of the alert	
status	Yes	Yes	Status of the alert	
message	Yes	Yes	Message displayed to the operator when the alert is triggered	
slot_id	Yes	Yes	Foreign key; if applicable, it relates the alert to a slot in the slots table	
created_at	Yes	Yes	Date and time the alert was first registered	All times are in UTC

Field	Vending	Kiosks	Description	Notes
updated_at	Yes	Yes	Date and time the alert was last updated; if the alert has been solved, this will reflect the time of resolution	All times are in UTC

slot_shrinkage

Description: This table records shrinkage in a specific slot, typically noted by a driver during the servicing of the machine or micro market.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the shrinkage record in the database	
user_id	Yes	Yes	Foreign key; user that recorded the shrinkage, referencing the users table	
product_id	Yes	Yes	Foreign key; relates the shrinkage to a product in the products table	
created_at	Yes	Yes	Date and time the shrinkage was recorded	All times are in UTC
updated_at	Yes	Yes	Date and time the shrinkage was last updated	All times are in UTC
add	Yes	Yes	If there was an increase in the inventory, this column indicates the number of units added	
reentry	Yes	Yes	Units that need to go back into the warehouse	
returned	Yes	Yes	Amount of units that actually came back into the warehouse	
total_difference	Yes	Yes	Difference between units recorded as returned and units that actually came back into the warehouse	
service_id	Yes	Yes	Foreign key; relates the shrinkage to a service in the services table	
verified_by	Yes	Yes	Foreign key; user that verified the shrinkage, referencing the users table	

Field	Vending	Kiosks	Description	Notes
verified_at	Yes	Yes	Date and time the shrinkage was verified	All times are in UTC
slot_id	Yes	Yes	Foreign key; relates the slot to a service in the slots table	
cost	Yes	Yes	Total cost of the shrinkage (individual cost*quantity)	
loss	Yes	Yes	Total sales loss of the shrinkage (individual price*quantity)	
deleted_at	Yes	Yes	If this column is not null, it means this shrinkage record was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC
machine_id	Yes	Yes	Foreign key; relates the shrinkage to a machine or kiosk in the machines_and_kiosks table	

mm_transactions

Description: This table lists micro market transactions and their details.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	No	Yes	Primary key; ID of the mm_transaction in the database	
type	No	Yes	Type of transaction	
subtotal	No	Yes	Total to pay before adding taxes	
tax	No	Yes	Amount to pay in taxes	
deposit	No	Yes	Amount to pay for deposit tax (applicable in certain regions when purchasing specific packages, such as bottles)	
two_tier_fee	No	Yes	Configurable charge applied to consumers for various reasons, such as service type or payment method (commonly when paying by card)	
paid_wallet	No	Yes	Amount paid with wallet credit	
paid_cash	No	Yes	Amount paid with cash	

Field	Vending	Kiosks	Description	Notes
paid_cashless	No	Yes	Amount paid with card	
credit_to_wallet	No	Yes	Amount credited to the wallet after the transaction (applicable for wallet reloads or when change from a cash payment is credited to the wallet)	
balance_after_charge	No	Yes	Wallet balance after the transaction	
mm_user_id	No	Yes	Foreign key: if applicable, relates the transaction to a user in the mm_users table	
machine_id	No	Yes	Foreign key; relates the transaction to a machine or kiosk in the machines_and_kiosks table	
location_id	No	Yes	Foreign key; relates the transaction to a location in the locations table	
route_id	No	Yes	Foreign key; relates the transaction to a route in the routes table	
status	No	Yes	Status of the transaction	
exit_btn	No	Yes	Method of exiting the transaction (completed, timeout, cancellation, etc.)	
source	No	Yes	Source of the transaction (kiosk or Koin)	
created_at	No	Yes	Date and time the transaction was recorded in the VMS	All times are in UTC
completed_at	No	Yes	Date and time the transaction was really completed	All times are in UTC

credit_card_sales

Description: This table records credit card sales totals for machines with card readers; used for commission calculations.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	

Field	Vending	Kiosks	Description	Notes
id	Yes	Yes	Primary key; ID of the credit card sale record in the database	
machine_id	Yes	Yes	Foreign key; relates the credit card sale to a machine in the machines_and_kiosks table	
total_sold	Yes	Yes	Total amount of sales via credit card	
two_tier_fee	Yes	Yes	Configurable charge applied to credit card transactions (two-tier processing fee)	
created_at	Yes	Yes	Date and time the credit card sale was recorded	All times are in UTC
updated_at	Yes	Yes	Date and time the credit card sale was last updated	All times are in UTC

offline_machine_slot_prekits

Description: This table captures the prekitting plan for offline machines (what to stock), showing the planned inventory changes before service. This is the offline equivalent of online prekitting systems.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the offline_machine_slot_prekit record in the database	
daily_route_id	Yes	Yes	Foreign key; relates to a scheduled route in the scheduled_routes table	Denormalized from daily_route_machines via service_id
service_id	Yes	Yes	Foreign key; relates to a service in the services table	Source column: daily_route_machine_id
machine_id	Yes	Yes	Foreign key; relates to a machine in the machines_and_kiosks table	Denormalized from machine_slots via slot_id
slot_id	Yes	Yes	Foreign key; relates to a slot in the slots table	Source column: machine_slot_id
product_id	Yes	Yes	Foreign key; relates to the product being prekitted in the products table	

Field	Vending	Kiosks	Description	Notes
former_product_id	Yes	Yes	Foreign key; if there was a product change, the previous product in the products table	Nullable field
price	Yes	Yes	Price of the product at prekitting time	
former_price	Yes	Yes	Previous price if there was a price change	Nullable field
start_quantity	Yes	Yes	Quantity in slot at prekitting time (snapshot before service)	
prekit_quantity	Yes	Yes	Number of individual units to prekit for this slot	
end_quantity	Yes	Yes	Expected quantity after stocking (start_quantity + prekit_quantity)	Used for verification
prekit_units	Yes	Yes	Number of cases/boxes to prekit (prekit_quantity ÷ min_prekit_unit)	Decimal field
product_change	Yes	Yes	Flag indicating if this prekit involves a product change	Boolean
price_change	Yes	Yes	Flag indicating if this prekit involves a price change	Boolean
no_stocked	Yes	Yes	Flag indicating product was prekitted but not actually stocked on truck	Boolean
modified_quantity	Yes	Yes	Modified prekit quantity if changed from original plan	Nullable field
modified_units	Yes	Yes	Modified prekit units if changed from original plan	Nullable field
original_prekitting	Yes	Yes	Original calculated prekit quantity before any modifications	Nullable field

offline_service_slots

Description: This table records manual/offline service slot transactions entered by drivers during service when DEX data is unavailable or for machines without telemetry. This is the offline equivalent of the fill_rate table.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	

Field	Vending	Kiosks	Description	Notes
id	Yes	Yes	Primary key; ID of the offline service slot record in the database	
daily_route_id	Yes	Yes	Foreign key; relates the inventory change to a scheduled route in the scheduled_routes table	Denormalized from daily_route_machines via service_id
service_id	Yes	Yes	Foreign key; relates the inventory change to a service in the services table	Source column: daily_route_machine_id
machine_id	Yes	Yes	Foreign key; relates the inventory change to a machine or micro market in the machines_and_kiosks table	
slot_id	Yes	Yes	Foreign key; relates the inventory change to a slot in the slots table	Source column: machine_slot_id
product_id	Yes	Yes	Foreign key; relates the inventory change to a product in the products table	
route_id	Yes	Yes	Foreign key; relates to the master route in the routes table	
location_id	Yes	Yes	Foreign key; relates the inventory change to a location in the locations table	
parlevel	Yes	Yes	Parlevel of the slot at the time of service	
price	Yes	Yes	Price of an individual product at the time	
cost_per_item	Yes	Yes	Cost per item at the time of service	
inventory_stocked	Yes	Yes	Quantity of units stocked in the machine or micro market during service	Source column: stocked
inventory_taken	Yes	Yes	Quantity removed as waste/shrinkage during service	Source column: taken
product_change	Yes	Yes	Flag indicating if there was a product change during this service	
manual_count	Yes	Yes	Manual inventory count if performed during service	Nullable field

Field	Vending	Kiosks	Description	Notes
created_at	Yes	Yes	Date and time the offline service slot record was created	All times are in UTC

Subsidy Tables

These tables support subsidy calculations, allowing operators to track and calculate subsidy payments for eligible products.

subsidy_groups

Description: This table defines subsidy group configurations that can be assigned to machines to specify which products receive subsidies and at what rates.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the subsidy group in the database	
name	Yes	Yes	Name of the subsidy group	
created_at	Yes	Yes	Date and time the subsidy group was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the subsidy group was last updated	All times are in UTC

subsidy_sub_groups

Description: This table defines subsidy rates and product categories within each subsidy group (e.g. beverages at \$0.50 per unit or snacks at \$0.75 per unit).

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the subsidy sub-group in the database	
subsidy_group_id	Yes	Yes	Foreign key; relates the sub-group to a subsidy group in the subsidy_groups table	
name	Yes	Yes	Name of the subsidy category (e.g. "Beverages", "Snacks", "Healthy Options")	

Field	Vending	Kiosks	Description	Notes
subsidy_amount	Yes	Yes	Dollar amount subsidized per unit sold (e.g. 0.50 means \$0.50 per unit)	
created_at	Yes	Yes	Date and time the subsidy sub-group was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the subsidy sub-group was last updated	All times are in UTC

subsidy_sub_group_items

Description: This table maps which products qualify for subsidies within each subsidy sub-group; join this with sales data to calculate subsidy amounts.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the subsidy sub-group item in the database	
subsidy_sub_group_id	Yes	Yes	Foreign key; relates the item to a subsidy sub-group in the subsidy_sub_groups table	
product_id	Yes	Yes	Foreign key; relates to a product in the products table that qualifies for this subsidy rate	
created_at	Yes	Yes	Date and time the mapping was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the mapping was last updated	All times are in UTC

Tax Tables

These tables support multi-jurisdictional tax calculations across products and locations.

tax_groups

Description: This table defines tax group configurations that are assigned to locations to specify which tax rates apply.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	

Field	Vending	Kiosks	Description	Notes
id	Yes	Yes	Primary key; ID of the tax group in the database	
name	Yes	Yes	Name of the tax group	
created_at	Yes	Yes	Date and time the tax group was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the tax group was last updated	All times are in UTC

product_tax_classes

Description: This table defines tax classifications for products (e.g. food, beverage, non-food).

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the product tax class in the database	
name	Yes	Yes	Name of the tax class	
created_at	Yes	Yes	Date and time the tax class was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the tax class was last updated	All times are in UTC

tax_group_items

Description: This table links tax rates to product classes within tax groups; defines the actual tax percentages that apply to products at specific locations.

Field	Vending	Kiosks	Description	Notes
vms	Yes	Yes	VMS database name	
id	Yes	Yes	Primary key; ID of the tax group item in the database	
tax_group_id	Yes	Yes	Foreign key; relates to a tax group in the tax_groups table	
product_tax_class_id	Yes	Yes	Foreign key; relates to a product tax class in the product_tax_classes table	
tax_percent	Yes	Yes	Tax percentage rate (e.g. 8.5 for 8.5% tax)	

Field	Vending	Kiosks	Description	Notes
taxable_percent	Yes	Yes	Percentage of the product price that is taxable (typically 100 but can vary)	
surcharge_amount	Yes	Yes	Surcharge amount applied to products in this tax class	
surcharge_type	Yes	Yes	Type of surcharge (e.g. percentage or flat amount)	
surcharge_taxable	Yes	Yes	Flag indicating if the surcharge amount is taxable	
deposit_amount	Yes	Yes	Deposit amount applied to products in this tax class (e.g. bottle deposit)	
deposit_taxable	Yes	Yes	Flag indicating if the deposit amount is taxable	
ocs_tax_percent	N/A	N/A	Tax percentage rate specifically for OCS products	
ocs_taxable_percent	N/A	N/A	Percentage of the OCS product price that is taxable	
mm_tax_percent	No	Yes	Tax percentage rate specifically for micro market products	
mm_taxable_percent	No	Yes	Percentage of the micro market product price that is taxable	
created_at	Yes	Yes	Date and time the tax group item was created in the VMS	All times are in UTC
updated_at	Yes	Yes	Date and time the tax group item was last updated	All times are in UTC

OCS Tables

These tables support OCS (Office Coffee Service) operations, including equipment management, service invoicing, and rental tracking.

ocs_stations

Description: This table defines OCS (Office Coffee Service) stations/break rooms where coffee equipment is installed at customer locations.

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the OCS station in the database	
name	N/A	N/A	Name of the OCS station (e.g. "Main Break Room" or "2nd Floor Kitchen")	
location_id	N/A	N/A	Foreign key; relates the station to a location in the locations table	
description	N/A	N/A	Description of the station	
last_serviced_at	N/A	N/A	Date and time the station was last serviced	All times are in UTC
last_maintenance_at	N/A	N/A	Date and time equipment at this station last had maintenance performed	All times are in UTC
notes	N/A	N/A	Notes about the station	
cst_id	N/A	N/A	Custom ID assigned to the station by the operator	
created_at	N/A	N/A	Date and time the station was created in the VMS	All times are in UTC
updated_at	N/A	N/A	Date and time the station was last updated	All times are in UTC
deleted_at	N/A	N/A	If this column is not null, it means this station was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

ocs_invoices

Description: This table contains OCS invoices generated for each service visit; the main transaction table for OCS revenue tracking.

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the OCS invoice in the database	
driver_id	N/A	N/A	Foreign key; relates the invoice to the driver who serviced it in the users table	

Field	Vending	Kiosks	Description	Notes
daily_route_id	N/A	N/A	Foreign key; relates the invoice to the scheduled route in the scheduled_routes table	
location_id	N/A	N/A	Foreign key; relates the invoice to the location in the locations table	
invoice_number	N/A	N/A	Unique invoice number	
status	N/A	N/A	Status of the invoice: 1=Draft, 2=Pending, 3=Sent, 4=Authorized, 5=Paid, 6=Partially Paid	
type	N/A	N/A	Type of invoice	
total_amount	N/A	N/A	Total invoice amount (products + equipment rental)	
total_paid	N/A	N/A	Amount paid on this invoice	
served_at	N/A	N/A	Date and time the service was performed	All times are in UTC
payment_at	N/A	N/A	Date and time payment was received	All times are in UTC
tax_override_amount	N/A	N/A	Manual tax override amount if operator adjusts tax on the invoice	
notes	N/A	N/A	Notes about the invoice	
created_at	N/A	N/A	Date and time the invoice was created in the VMS	All times are in UTC
updated_at	N/A	N/A	Date and time the invoice was last updated	All times are in UTC
deleted_at	N/A	N/A	If this column is not null, it means this invoice was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

ocs_orders

Description: This table groups products delivered to a specific station within an OCS invoice.

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the OCS order in the database	

Field	Vending	Kiosks	Description	Notes
ocs_station_id	N/A	N/A	Foreign key; relates the order to a station in the ocs_stations table	
ocs_invoice_id	N/A	N/A	Foreign key; relates the order to an invoice in the ocs_invoices table	
notes	N/A	N/A	Notes on the order	
daily_route_id	N/A	N/A	Foreign key; relates to the scheduled route in the scheduled_routes table	
created_at	N/A	N/A	Date and time the order was created in the VMS	All times are in UTC
updated_at	N/A	N/A	Date and time the order was last updated	All times are in UTC
deleted_at	N/A	N/A	If this column is not null, it means this order was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

ocs_order_items

Description: This table contains individual products delivered in an OCS order; the source of product revenue for OCS.

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the order item in the database	
ocs_order_id	N/A	N/A	Foreign key; relates the item to an order in the ocs_orders table	
product_id	N/A	N/A	Foreign key; relates the item to a product in the products table	
quantity	N/A	N/A	Quantity of the product delivered	
price	N/A	N/A	Price per unit	
total	N/A	N/A	Total amount for this line item (quantity × price + tax)	
parlevel	N/A	N/A	Par level for this product at the station	
tax_percent	N/A	N/A	Tax percentage applied to this product	

Field	Vending	Kiosks	Description	Notes
tax_amount	N/A	N/A	Tax amount calculated for this product (tax_percent × total_price)	
surcharge	N/A	N/A	Surcharge amount applied to this item	
deposit	N/A	N/A	Deposit amount (e.g. bottle deposit)	
created_at	N/A	N/A	Date and time the order item was created in the VMS	All times are in UTC
updated_at	N/A	N/A	Date and time the order item was last updated	All times are in UTC
deleted_at	N/A	N/A	If this column is not null, it means this order item was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

ocs_equipment_order_items

Description: This table contains equipment rental line items on OCS invoices; shows which equipment was billed on each invoice.

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the equipment order item in the database	
ocs_order_id	N/A	N/A	Foreign key; relates to an order in the ocs_orders table (which then links to ocs_invoices)	
equipment_id	N/A	N/A	Foreign key; relates to equipment in the equipments table	
rental_type	N/A	N/A	Type of rental: 1=Rental (charged), 2=Complimentary (no charge)	
rent_amount	N/A	N/A	Rental charge amount for this billing period	
tax_rate_equipment	N/A	N/A	Tax rate applied to equipment rental (calculated and stored at invoice time)	
status	N/A	N/A	Status of the equipment order item	

Field	Vending	Kiosks	Description	Notes
rental_frequency	N/A	N/A	Billing frequency: 1=First Service (one-time), 2=Monthly, 3=Annual, 4=Quarterly	
rental_period_end	N/A	N/A	End date of the rental period being billed on this invoice	All times are in UTC

equipments

Description: This table contains OCS equipment inventory (coffee machines, brewers, etc.).

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the equipment in the database	
equipment_type	N/A	N/A	Type of equipment (denormalized from equipment_types.name)	
serial_number	N/A	N/A	Serial number of the equipment	
brand	N/A	N/A	Brand name of the equipment	
model	N/A	N/A	Model name of the equipment	
purchased_at	N/A	N/A	Date and time the equipment was purchased	All times are in UTC
description	N/A	N/A	Description of the equipment	
created_at	N/A	N/A	Date and time the equipment was created in the VMS	All times are in UTC
updated_at	N/A	N/A	Date and time the equipment was last updated	All times are in UTC
deleted_at	N/A	N/A	If this column is not null, it means this equipment was soft deleted, it won't appear in our systems; it indicates the date and time it was deleted	All times are in UTC

ocs_station equipments

Description: This table links OCS equipment to stations; defines the rental agreements for which coffee machines/brewers are installed at each station. This is the master table for equipment assignments. For actual invoiced equipment rentals, see ocs_equipment_order_items.

Field	Vending	Kiosks	Description	Notes
vms	N/A	N/A	VMS database name	
id	N/A	N/A	Primary key; ID of the station equipment record in the database	
ocs_station_id	N/A	N/A	Foreign key; relates to a station in the ocs_stations table	
equipment_id	N/A	N/A	Foreign key; relates to equipment in the equipments table	
rental_type	N/A	N/A	Type of rental agreement: 1=Rental, 2=Complimentary	
rent_amount	N/A	N/A	Monthly rental amount charged for this equipment	
status	N/A	N/A	Status of the equipment installation	
installed_at	N/A	N/A	Date and time the equipment was installed at the station	All times are in UTC
purchased_at	N/A	N/A	Date and time the equipment was purchased (if applicable)	All times are in UTC
description	N/A	N/A	Description of the equipment installation	
rental_frequency	N/A	N/A	Billing frequency for equipment rental	
rental_day	N/A	N/A	Day of month when rental is billed	
rental_month	N/A	N/A	Month when annual rental is billed (for annual rentals only)	
created_at	N/A	N/A	Date and time the record was created in the VMS	All times are in UTC
updated_at	N/A	N/A	Date and time the record was last updated	All times are in UTC

Technical Implementation Notes

Data Types

- **timestamp**: Date and time values in UTC format
- **date**: Date values without time component
- **int**: Integer values for IDs and counts
- **decimal(p,s)**: Decimal values with precision and scale for monetary amounts

- **varchar(n)**: Variable-length character strings
- **text**: Variable-length text fields for transformed/readable values
- **tinyint(1)**: Boolean flag values (0 = false, 1 = true)

Field Applicability

Fields marked with applicability flags indicate their relevance to different equipment types:

- **Applies to Vending = Yes**: Field is populated and relevant for vending machines
- **Applies to Kiosks = Yes**: Field is populated and relevant for micro market kiosks
- Fields may apply to both, one, or neither type depending on business logic

Denormalized Fields

Several fields in version 2.0 are denormalized to simplify enterprise queries:

Commission Fields:

- `effective_commission_rate`: Pre-calculated commission rate after hierarchical resolution
- `effective_commission_type`: Human-readable commission type (“Percentage” or “Flat Rate”)
- `broker_name`: Broker name denormalized from internal broker table

Location Fields:

- `type_name`: Location type as text instead of numeric ID

Equipment Fields:

- `brand_name`: Equipment brand denormalized from ocs_equipment_brands
- `model_name`: Equipment model denormalized from ocs_equipment_models

Soft Deletes

Tables with `deleted_at` timestamp fields implement soft delete functionality:

- Records are never physically removed from the database
- Non-NULL `deleted_at` values indicate logical deletion
- Deleted records are retained for audit trails and historical analysis

Data Freshness

Replication Schedule:

- Daily synchronization via Fivetran
- Timestamp fields reflect source system times (UTC)

Source System Identifiers: The `vms` column enables:

- Cross-database aggregation and reporting
- Division-specific filtering

- Multi-tenant data isolation

Foreign Key Relationships

While Snowflake does not enforce referential integrity, the following logical relationships exist:

Core Relationships:

- `machines_and_kiosks.location_id` → `locations.id`
- `machines_and_kiosks.subsidy_group_id` → `subsidy_groups.id`
- `locations.account_id` → `accounts.id`
- `locations.tax_group_id` → `tax_groups.id`
- `locations.ocs_route_id` → `routes.id`
- `routes.truck_id` → `trucks.id`
- `routes.driver_id` → `users.id`
- `scheduled_routes.route_id` → `routes.id`
- `scheduled_routes.driver_id` → `users.id`
- `scheduled_routes.truck_id` → `trucks.id`
- `services.scheduled_route_id` → `scheduled_routes.id`
- `services.machine_id` → `machines_and_kiosks.id`
- `services.location_id` → `locations.id`
- `services.user_id` → `users.id`

Inventory Relationships:

- `slots.machine_id` → `machines_and_kiosks.id`
- `slots.product_id` → `products.id`
- `slots.mm_asset_id` → `mm_assets.id`
- `fill_rate.daily_route_id` → `scheduled_routes.id`
- `fill_rate.service_id` → `services.id`
- `fill_rate.machine_id` → `machines_and_kiosks.id`
- `fill_rate.slot_id` → `slots.id`
- `fill_rate.product_id` → `products.id`
- `sales.slot_id` → `slots.id`
- `sales.machine_id` → `machines_and_kiosks.id`
- `sales.location_id` → `locations.id`
- `sales.route_id` → `routes.id`
- `sales.product_id` → `products.id`
- `sales.mm_transaction_id` → `mm_transactions.id`

Alert & Shrinkage Relationships:

- `alerts.machine_id` → `machines_and_kiosks.id`
- `alerts.slot_id` → `slots.id`
- `slot_shrinkage.service_id` → `services.id`
- `slot_shrinkage.machine_id` → `machines_and_kiosks.id`
- `slot_shrinkage.slot_id` → `slots.id`
- `slot_shrinkage.product_id` → `products.id`
- `slot_shrinkage.user_id` → `users.id`
- `slot_shrinkage.verified_by` → `users.id`

Micro Market Relationships:

- `mm_users.account_id` → `accounts.id`
- `mm_assets.machine_id` → `machines_and_kiosks.id`
- `mm_assets.location_id` → `locations.id`
- `mm_transactions.mm_user_id` → `mm_users.id`
- `mm_transactions.machine_id` → `machines_and_kiosks.id`
- `mm_transactions.location_id` → `locations.id`
- `mm_transactions.route_id` → `routes.id`

Product Relationships:

- `products.tax_class_id` → `product_tax_classes.id`
- `product_upcs.product_id` → `products.id`

Subsidy Relationships:

- `subsidy_sub_groups.subsidy_group_id` → `subsidy_groups.id`
- `subsidy_sub_group_items.subsidy_sub_group_id` → `subsidy_sub_groups.id`
- `subsidy_sub_group_items.product_id` → `products.id`

Tax Relationships:

- `tax_group_items.tax_group_id` → `tax_groups.id`
- `tax_group_items.product_tax_class_id` → `product_tax_classes.id`

OCS Relationships:

- `ocs_stations.location_id` → `locations.id`
- `ocs_invoices.driver_id` → `users.id`
- `ocs_invoices.daily_route_id` → `scheduled_routes.id`
- `ocs_invoices.location_id` → `locations.id`
- `ocs_orders.ocs_station_id` → `ocs_stations.id`
- `ocs_orders.ocs_invoice_id` → `ocs_invoices.id`
- `ocs_orders.daily_route_id` → `scheduled_routes.id`

- `ocs_order_items.ocs_order_id` → `ocs_orders.id`
- `ocs_order_items.product_id` → `products.id`
- `ocs_station equipments.ocs_station_id` → `ocs_stations.id`
- `ocs_station equipments.equipment_id` → `equipments.id`

Commission Relationships:

- `credit_card_sales.machine_id` → `machines_and_kiosks.id`

Offline Service Relationships:

- `offline_service_slots.daily_route_id` → `scheduled_routes.id`
- `offline_service_slots.service_id` → `services.id`
- `offline_service_slots.machine_id` → `machines_and_kiosks.id`
- `offline_service_slots.slot_id` → `slots.id`
- `offline_service_slots.product_id` → `products.id`
- `offline_service_slots.route_id` → `routes.id`
- `offline_service_slots.location_id` → `locations.id`

Offline Prekitting Relationships:

- `offline_machine_slot_prekits.daily_route_id` → `scheduled_routes.id`
- `offline_machine_slot_prekits.service_id` → `services.id`
- `offline_machine_slot_prekits.machine_id` → `machines_and_kiosks.id`
- `offline_machine_slot_prekits.slot_id` → `slots.id`
- `offline_machine_slot_prekits.product_id` → `products.id`
- `offline_machine_slot_prekits.former_product_id` → `products.id`

Example Query Patterns

Basic Service Query:

```
SELECT
    m.name AS machine_name,
    s.serviced_at,
    s.amount_sold,
    u.username AS technician_name
FROM services s
JOIN machines_and_kiosks m ON s.machine_id = m.id AND s.vms = m.vms
JOIN users u ON s.user_id = u.id AND s.vms = u.vms
WHERE s.vms = 'vms-database'
    AND s.deleted_at IS NULL
    AND s.serviced_at >= '2025-01-01'
ORDER BY s.serviced_at DESC;
```

Subsidy Calculation Query:

```
SELECT
    m.name AS machine_name,
    p.name AS product_name,
    SUM(s.quantity) AS units_sold,
    ssg.subsidy_amount,
    SUM(s.quantity * ssg.subsidy_amount) AS total_subsidy
FROM sales s
JOIN machines_and_kiosks m ON s.machine_id = m.id AND s.vms = m.vms
JOIN products p ON s.product_id = p.id AND s.vms = p.vms
JOIN subsidy_sub_group_items ssgi ON p.id = ssgi.product_id AND s.vms = ssgi.vms
JOIN subsidy_sub_groups ssg ON ssgi.subsidy_sub_group_id = ssg.id AND s.vms = ssg.vms
JOIN subsidy_groups sg ON ssg.subsidy_group_id = sg.id AND s.vms = sg.vms
WHERE s.vms = 'vms-database'
    AND s.created_at BETWEEN '2025-01-01' AND '2025-01-31'
GROUP BY m.name, p.name, ssg.subsidy_amount
ORDER BY m.name, p.name;
```

OCS Revenue Query:

```
-- OCS revenue comes from product sales tracked in ocs_order_items
-- Equipment rental agreements are tracked in ocs_station equipments
SELECT
    i.invoice_number,
    l.name AS location_name,
    i.serviced_at,
    SUM(oi.total) AS product_revenue,
    i.total_amount AS total_invoice
FROM ocs_invoices i
JOIN locations l ON i.location_id = l.id AND i.vms = l.vms
LEFT JOIN ocs_orders o ON i.id = o.ocs_invoice_id AND i.vms = o.vms
LEFT JOIN ocs_order_items oi ON o.id = oi.ocs_order_id AND o.vms = oi.vms
WHERE i.vms = 'vms-database'
    AND i.status > 1 -- Exclude drafts
    AND i.serviced_at >= '2025-01-01'
GROUP BY i.invoice_number, l.name, i.serviced_at, i.total_amount
ORDER BY i.serviced_at DESC;
```