

Tables and Attributes

Package

Primary Key: PackageID

Attributes: TrackingNumber, Weight, Dimensions, ServiceType, Status, DeclaredValue, CustomerID (FK)

Customer

Primary Key: CustomerID

Attributes: Name, Address, PhoneNumber, Email, PreferredDeliveryLocation

Order

Primary Key: OrderID

Attributes: OrderDate, TotalCost, ServiceType (FK), CustomerID (FK)

Driver

Primary Key: DriverID

Attributes: EmployeeName, EmployeeNumber, ContactNumber, AssignedHubID (FK), AssignedVehicleID (FK)

Vehicle

Primary Key: VehicleID

Attributes: VehicleType, LicensePlate, CurrentMileage, MaintenanceStatus, HubID (FK)

DeliveryRoute

Primary Key: RouteID

Attributes: DriverID (FK), StartPoint, EndPoint, EstimatedDuration, RouteDistance

Stop

Primary Key: StopID

Attributes: StopOrder, StopAddress, StopType, PackageID (FK), RouteID (FK)

Hub

Primary Key: HubID

Attributes: Location, Region, Capacity, HubManagerID

Feeder

Primary Key: FeederID

Attributes: TrailerType, SourceHubID (FK), DestinationHubID (FK), Status, Date

TrackingStatus

Primary Key: TrackingID

Attributes: PackageID (FK), Location, Timestamp, Status

Recipient

Primary Key: RecipientID

Attributes: Name, Address, ContactNumber, DeliveryInstructions, PackageID (FK)

Billing

Primary Key: BillingID

Attributes: OrderID (FK), PaymentMethod, Amount, BillingDate, PaidStatus

IncidentReport

Primary Key: ReportID

Attributes: DriverID (FK), IncidentDate, IncidentType, Description, Resolution

ServiceType

Primary Key: ServiceID

Attributes: Description, DeliveryTimeframe, BaseCost, PriorityLevel (FK)

PriorityLevel

Primary Key: PriorityID

Attributes: Description, DeliveryGuarantee

CustomerFeedback

Primary Key: FeedbackID

Attributes: CustomerID (FK), FeedbackDate, Rating, Comments

Relationships and Constraints

- A Stop must be associated with one Package and one DeliveryRoute.
- A DeliveryRoute is assigned to one Driver.
- A Driver may submit multiple IncidentReports.
- A Driver is assigned to one Vehicle.
- A Vehicle is stationed at one Hub.
- A Hub can send/receive multiple Feeders.
- A Customer can give multiple Feedback entries.
- A Package is tracked by one TrackingStatus.
- A Package is delivered to one Recipient.
- A ServiceType belongs to one PriorityLevel.
- An Order is assigned one ServiceType.
- An Order is billed by one Billing entry.