DimClient

	destination (DWH)				source		remarks
COLUMN_NAM	DATA_TYPE DW	rule	nullable	RELATION_NAM	COLUMN_NAM	DATA_TYPE S	remarks
ClientKey	Serial (identity)	-	not null	-	-	-	surrogate key, assign value with sequence
ClientID	int	-	not null	Client	ClientID	int	natural key
Gender	char(1)	1 or 2, unknown: 9	null	Client	Gender	char(1)	
DateOfBirth	date		null	Client	DateOfBirth	date	
AgeGroup	nvarchar(50)		null	-	calculation from DateOfBirth, see remarks for specific rules	-	Teenager (13 - 17), Young Adult (18 - 20), Adult (21 - 39), Young Middle-Aged Adult (40 - 49), Middle-Aged Adult (50 - 54), Very Young Senior Citizen (55 - 64), Young Senior Citizen (65 - 74), Senior Citizen (75 - 84), Old Senior Citizen (85+)
-	-		-	Client	ClientCard	smallint	not considered: the value in our file is always
Phone	varchar(50)		null	Client	Contact	varchar(50)	
Email	varchar(50)		null	Client	Email	varchar(50)	
Occupation	varchar(130)		null	Occupation	Occupation	varchar(130)	
JobFamily	varchar(100)		null	Occupation	JobFamily	varchar(100)	
ValidFrom	date	SCD type 2 of the variable Phone	null	-	-	-	
ValidTo	date	SCD type 2 of the variable Phone	null	-	-	-	

DimGender

destination (DWH)				source			
COLUMN_NAM	DATA_TYPE D	rule	nullable	RELATION_NA	COLUMN_NAM	DATA_TYPE S	remarks
GenderKey	Serial (identity)	-	not null	-	-	-	surrogate key, assign value with sequenc
Gender	char(1)	1 or 2, unknown: 9	not null	Client	Gender	char(1)	

DimPayment

destination (DWH)				source			
COLUMN_NAME	DATA_TYPE D	rule	nullable	RELATION_NAME	COLUMN_NAME	DATA_TYPE S	remarks
PaymentTypeKey	Serial (identity)	-	not null	-	-	-	surrogate key, assign value with sequenc
PaymentTypeID	smallint	-	not null	Payment_Type	PaymentTypeID	smallint	natural key
NoOfDifferentPayments	int	-	null	-	-	-	number of distinct payment types per receipt
MainPaymentTypeID	smallint	-	null	-	-	-	main payment type of a given receipt
PaymentTypeDescription	nvarchar(50)	-	null	Payment_Type	PaymentTypeDescription	nvarchar(50)	

DimProduct

destination (DWH)				source			remarks
COLUMN_NAME	DATA_TYPE D	rule	nullable	RELATION_NAME	COLUMN_NAME	DATA_TYPE S	remarks
ProductKey	Serial (identity)	-	not null	-	-	-	surrogate key, assign value with sequenc
ProductID	int	-	not null	Product	ProductID	int	natural key
ProductDescription	nvarchar(200)	-	null	Product	ProductDescription	nvarchar(200)	
SubCategoryID	char(8)	-	null	Product / Subcategory	SubCategoryID	char(8)	parent dimension
SubCategoryDescriptio	nvarchar(30)	-	null	Subcategory	SubCategoryDescriptio	nvarchar(30)	
CategoryID	char(6)	-	null	Product / Category	CategoryID	char(6)	grandparent dimension
CategoryDescription	nvarchar(30)	-	null	Category	CategoryDescription	nvarchar(30)	
SectionID	char(4)	-	null	Product / Section	SectionID	char(4)	great-grandparent dimension
SectionDescription	nvarchar(30)	-	null	Section	SectionDescription	nvarchar(30)	
DepartmentID	char(2)	-	null	Product / Department	DepartmentID	char(2)	idontknow-parent dimension
DepartmentDescription	nvarchar(30)	-	null	Department	DepartmentDescription	nvarchar(30)	
ProductClass	char(1)	-	null	Product	ProductClass	char(1)	values 0, 2, 3
ProductSubclass	char(1)	-	null	Product	ProductSubclass	char(1)	values null, 1,2,3,9,A,B,C,I,M,O,R,V

DimSection

destination (DWH)				source			
COLUMN_NAME	DATA_TYPE D	rule	nullable	RELATION_NAME	COLUMN_NAME	DATA_TYPE S	remarks
SectionKey	Serial (identity)	-	not null	-	-	-	surrogate key, assign value with sequenc
SectionID	char(4)	-	null	Product / Section	SectionID	char(4)	
SectionDescription	nvarchar(30)	-	null	Section	SectionDescription	nvarchar(30)	
DepartmentID	char(2)	-	null	Product / Department	DepartmentID	char(2)	
DepartmentDescription	nvarchar(30)	-	null	Department	DepartmentDescription	nvarchar(30)	

DimDate

destination (DWH)				source			
COLUMN_NAME	**DATA_TYPE D**	**rule**	**nullable**	**RELATION_NAM**	**COLUMN_NAME**	**DATA_TYPE S**	**remarks**
DateKey	int	yyyymmdd	not null	dates in range 01/01/1995 - 31/12/2020			
CalendarYear	int	yyyy	null	-	calculated from Date	-	year
CalendarSemester	varchar(20	yyyySx	null	-	calculated from Date	-	semester of year
DescriptionSemester	varchar(20)	yyyy / xºSem	null	-	calculated from Date	-	semester of year description
Quarter	int	x	null	-	calculated from Date	-	quarter
CalendarQuarted	varchar(20)	yyyyQx	null	-	calculated from Date	-	quarter of year
DescriptionQuarter	varchar(20)	yyyy / xºQuarter	null	-	calculated from Date	-	quarter of year description
Month	varchar(20)	month_name		-	calculated from Date	-	name of month
CalendarMonth	int	mm (m)	null	-	calculated from Date	-	number of month
CalendarYearMonth	int	yyyymm	null	-	calculated from Date	-	month of year
DescriptionMonth	varchar(20)	yyyy month_sho	null	-	calculated from Date	-	short name of month of year
CalendarDayMonth	int	dd (d)	-	-	calculated from Date	-	day number of month
Week	int	ww	null	-	calculated from Date	-	number of week
CalendarWeek	int	yyyyww	null	-	calculated from Date	-	week of year
Date	datetime	yyyy-mm-dd 00:	null	-	calculated from Date	-	date and time
DescriptionDay	varchar(20)	yyyy/mm/dd	null	-	calculated from Date	-	description date
DayOfWeek	varchar(15)	day_name	null	-	calculated from Date	-	name of day
CalendarDayOfYear	int	ddd (dd, d)	null	-	calculated from Date	-	day number of year
IsWeekend	smallint	default 0	null	-	calculated from Date	-	is weekend? yes 1, no 0
IsHoliday	smallint	default 0	null	-	calculated from Date	-	is holiday? yes 1, no 0
DescriptionHoliday	varchar(50)	default 'NA'	null	-	calculated from Date	-	description of holiday
IsWorkday	smallint	default1	null	-	calculated from Date	-	is workday? yes 1, no 0
Season	varchar(20)	default 'Winter'	null	-	calculated from Date	-	season of the year
SellingSeason	nvarchar(50)	-	null	-	calculated from Date	-	possible values "Back to school", "Halloween" and "Christmas"

DimStore

destination (DWH)				source			
COLUMN_NAM	DATA_TYPE D	rule	nullable	RELATION_NAM	COLUMN_NAM	DATA_TYPE SA	remarks
StoreKey	Serial (identity)	-	not null	-	StoreKey	-	surrogate key, assign value with sequenc
POSID	int	-	not null	POS	POSID	int	
POSNr	smallint	-	null	POS	POSNr	smallint	
POSClass	char(1)	-	null	POS	POSClass	char(1)	
StoreID	smallint	-	not null	POS / Store	StoreID	smallint	natural key
StoreDescription	nvarchar(30)	-	null	Store	StoreDescription	nvarchar(30)	

FACT TABLE LineItem

destination (DWH)				source			
COLUMN_NAME	DATA_TYPE DW	rule	nullable	RELATION_NAM	COLUMN_NAM	DATA_TYPE S	remarks
LineItemKey	Serial (identity)		not null	-	-	-	
ProductKey	numeric		not null	DimProduct	ProductKey	Serial (identity)	FK from DimProduct
StoreKey	numeric		not null	DimStore	StoreKey	Serial (identity)	FK from DimStore
ClientKey	numeric		not null	DimClient	ClientKey	Serial (identity)	FK from DimClient
GenderKey	numeric		not null	DimGender	GenderKey	Serial (identity)	FK from DimGender
DateKey	int		null	DimDate	DateKey	Serial (identity)	FK from DimDate
ReceiptID	int	degenerate dimensio	not null	Receipt__t_	ReceiptID	int	FK from DimReceipt
DiscountValue	int		null	LINE_ITEM__TL_	DiscountValue	int	
Quantity	int		null	LINE_ITEM__TL_	Quantity	int	
TotalValue	int		null	LINE_ITEM__TL_	TotalValue	int	

FACT TABLE Receipt

destination (DWH)				source			
COLUMN_NAME	DATA_TYPE D	rule	nullable	RELATION_NAM	COLUMN_NAME	DATA_TYPE SA	remarks
ReceiptKey	Serial (identity)	-	not null	-	-	-	
StoreKey	numeric	-	not null	DimStore	StoreKey	Serial (identity)	FK from DimStore
ClientKey	numeric	-	not null	DimClient	ClientKey	Serial (identity)	FK from DimClient
GenderKey	numeric	-	not null	DimGender	GenderKey	Serial (identity)	FK from DimGender
PaymentTypeKey	numeric	-	not null	DimPayment	PaymentTypeKey	Serial (identity)	FK from DimPayment
DateKey	int	-	null	DimDate	DateKey	Serial (identity)	FK from DimDate
TransactionBegHou	time	-	null	Receipt__t_	TransactionBegHour	varchar(8)	
TransactionEndHou	time	-	null	Receipt__t_	TransactionEndHour	varchar(8)	
TransactionDuration	int	TransactionEndHour - TransactionBegHour	null	-	(TransactionEndHour - TransactionBegHour)	-	
DiscountValue	int	-	null	Receipt__t_	DiscountValue	int	
TotalValue	int	-	null	Receipt__t_	TotalPayed	int	