WINPOS MEGASTORE 3 - SOLUTION DESCRIPTION

VERSION 1.4
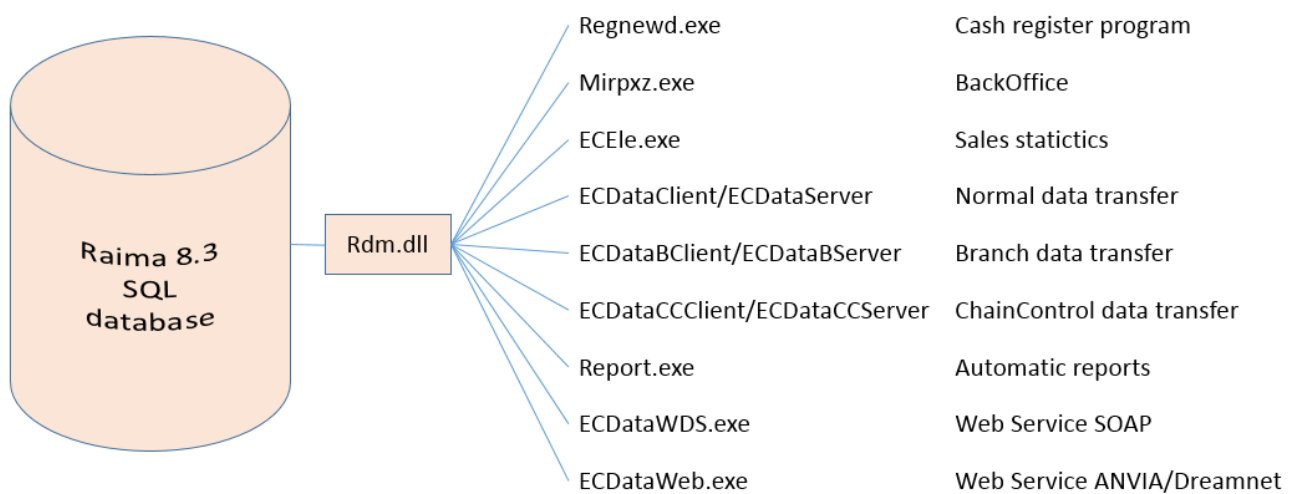
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ECDataCCClient/ECDataCCServer	ChainControl data transfer
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Raima 8.3 SQL database — Rdm.dll

Winpos system consists of several programs, all communicating with SQL database (Raima 8.3 or MSSQL) through Rdm.dll -file. Rdm.dll is used for future database upgrading purposes.

Regnewd.exe is the cash register program used to register customer's purchases.

Mirpxz.exe is the BackOffice program used for maintenance, stock and reporting sales analysis.

ECEle.exe creates sales statistics for reporting and sales analysis.

If there are multiple cash registers, they have ECDataClients communicating with one ECDataServer. With server you can control BackOffice, for example any changes to product price information can be sent to the terminals. ECDataClients send transactions to ECDataServer. ECDataClient/ECDataServer are for normal data transfer. ECDataBClient/ECDataBServer are used with branch offices. ECDataCCClient/ECDataCCServer are for office chain control.

ECDataServer — ECDataClient Terminal — ECDataClient Terminal — ECDataClient Terminal
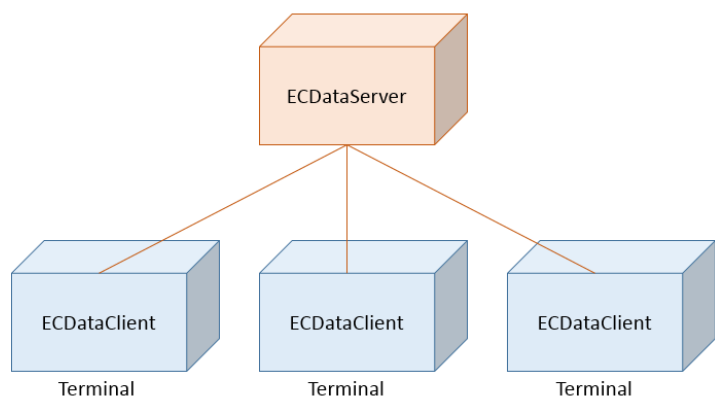
Report.exe runs batch reports at chosen time. Batch reports are created in BackOffice.

ECDataWDS.exe is Web service SOAP (Simple Object Access Protocol) used with online web stores. For more information see document WDSSOAPGuide.pdf.

ECDataWeb.exe is Web service for specific web shop integrations. For more information see document WebShopTransferer.pdf.

ECDataSDClient.exe and ECDataSDServer.exe are services to replicate the contents of the server's database. Most commonly to replicate data from the POS database running ECDataSDClient.exe to a data warehouse or a BI database where a replica database is updated by ECDataSDServer.exe. The ECDataSDServer.exe is multitenant compatible by being able to update databases from multiple client instances.

RDM.DLL STRUCTURE AND DATABASE

WinposDB.sql is structure of database tables and fields. It is used as base to create WinposDB.H file.

Give DOS command:

- sddlp -L 127.0.0.1;Winpos;3097 "C:\WinposMega\RDM Server 8.3\WinposDB\WinposDB.Sql"
- (-L 127.0.0.1;Username;Password)

The output is empty database and WinposDB.H file.
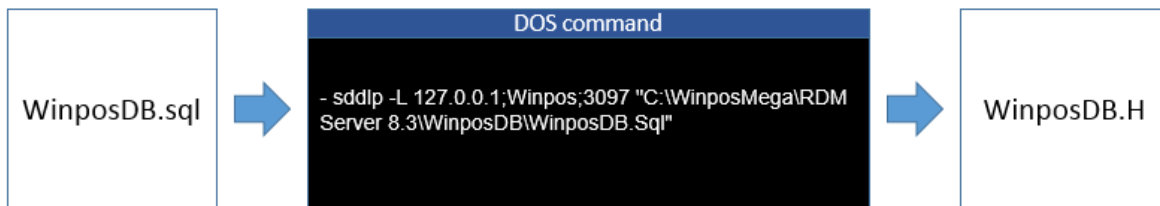
Rdm.dll structure

Methods	
Count	- Gives record counts in table
Delete	- Delete records
EmptyAll	- initialize table record
FillNew	- Insert new record
Find	- Find record
FindFirst	- Find first record
FindLast	- Find last record
FindNext	- Find next record
FindPrev	- Find previous record
GetRecordName	- Get name of field
Update	- Update record
FillNewServer	- Insert new record on server
FindServer	- Find server record
FindFirstServer	- Find first server record
FindLastServer	- Find last server record
FindNextServer	- Find next server record
FindPrevServer	- Find previous server record
UpdateServer	- Update server record

Properties
All tables fields get/let

COMMUNICATION BETWEEN CLIENTS AND SERVER

Creating RdmClient.dll and RdmServer.dll happens the same way as Rdm.dll above. If there is need for changes in dll file, you must update the original program and make a new dll file from it.

ECDataClient → (..\Extra Tools\ECDataClient) generate cls files → RdmClient.dll

ECDataServer → (..\Extra Tools\ECDataServer) generate cls files → RdmServer.dll

- o   RdmClient.dll base for ECDataClient.exe
- o   RdmServer.dll base for ECDataServer.exe
- o   RdmCCClient.dll base for ECDataBClient.exe and ECDataCCClient.exe
- o   RdmCCServer.dll base for ECDataBServer.exe ECDataCCServer.exe
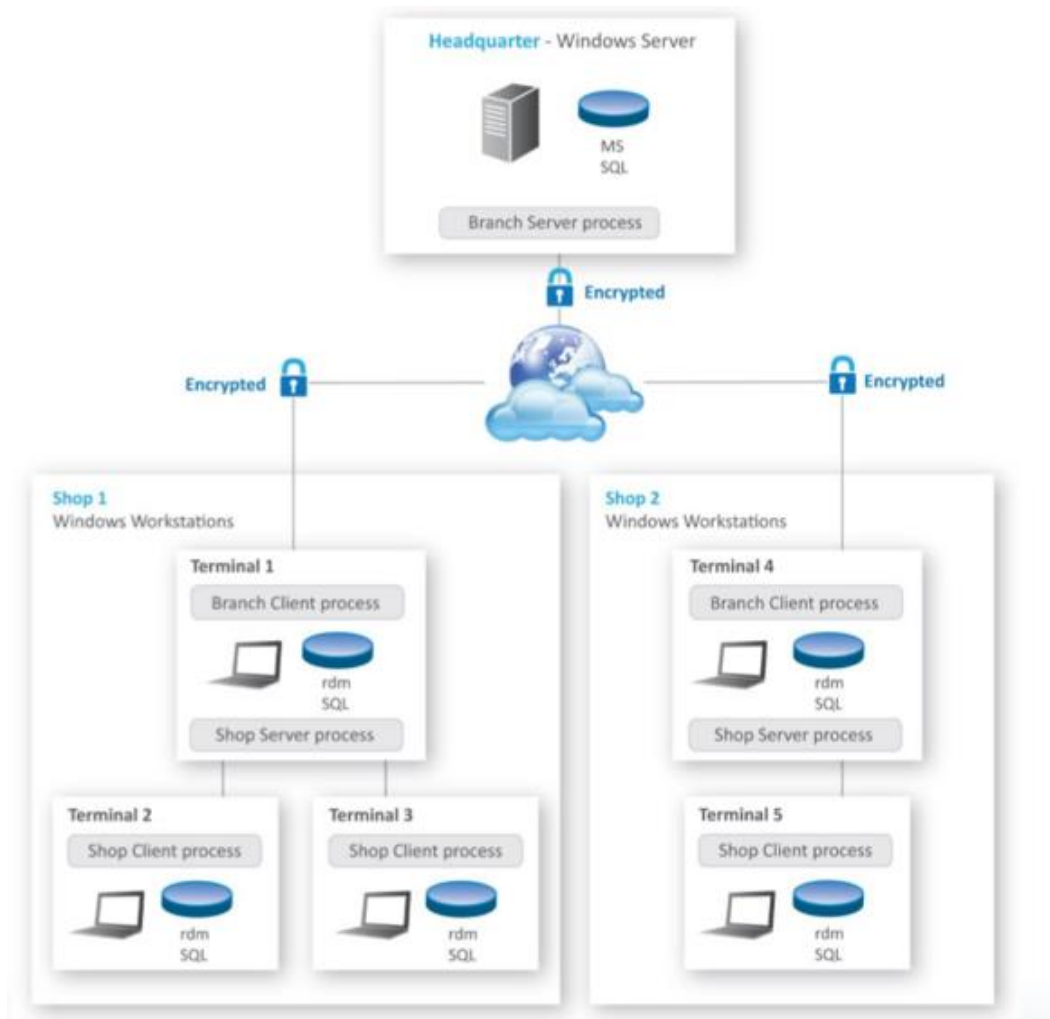
ECDATACLIENT

ECDataClient sends a query to server. This query asks server if there is new basic data and fetches the data if it exists. It also checks locally for new transactions and sends it to server if it exists.

ECDataClient (1/1sec.)

1. Asks from server if there is a new WinposTo*.zip (if file does not exist, skips to 5.)
2. File transfer from server to terminal *
3. Unzips file
4. Reads and updates/inserts to/deletes from database
    Example: Products (Plutable)
    ❖ update changes in existing products
    ❖ insert a new product
    ❖ delete an existing product
5. Checks for new transactions in local database (if there are no new transactions, end)
6. Dumps transactions to file WinposFrom*.zip
7. File transfer to WinposFrom*.zip server
    *: Terminal number
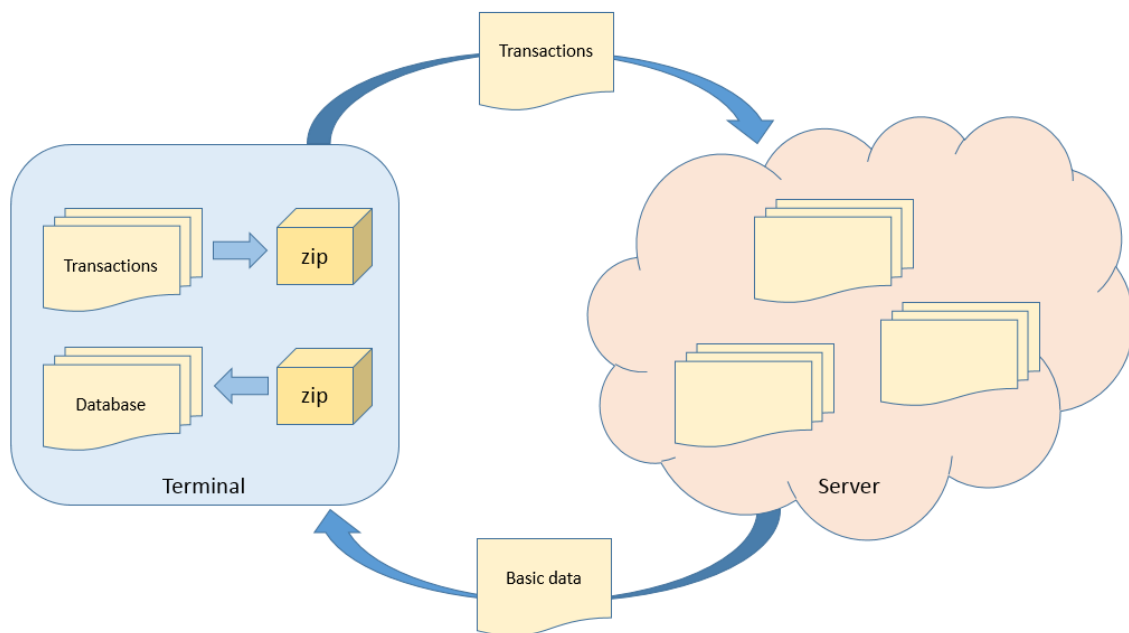
ECDataClient transactions

- ○ OpenDrawerTable
- ○ CashierTransactionTable
- ○ CashierTimeTable
- ○ JournalHeader/Journal/DeliveryWayItem/DeliveryDateItem/CustomerAddressItem /EmvTextTable

ECDATASERVER

ECDataServer checks for new data on server (local) once per second. Also checks for new WinposFrom*.zip files.

ECDataServer (1/1sec.)

1. Checks for new basic data on server
   ❖ If database has been updated, new data needs to be sent to terminals.
2. Dumps data to file WinposTo*.zip
3. Checks if there are new WinposFrom*.zip files
   ❖ There can be data from multiple terminals.
4. Unzips file
5. Reads and updates/inserts/deletes transactions.
6. Deletes WinposFrom*.zip -file which was already processed, repeats steps 3-6 until all WinposFrom*.zip files have been processed.

   *: Terminal number
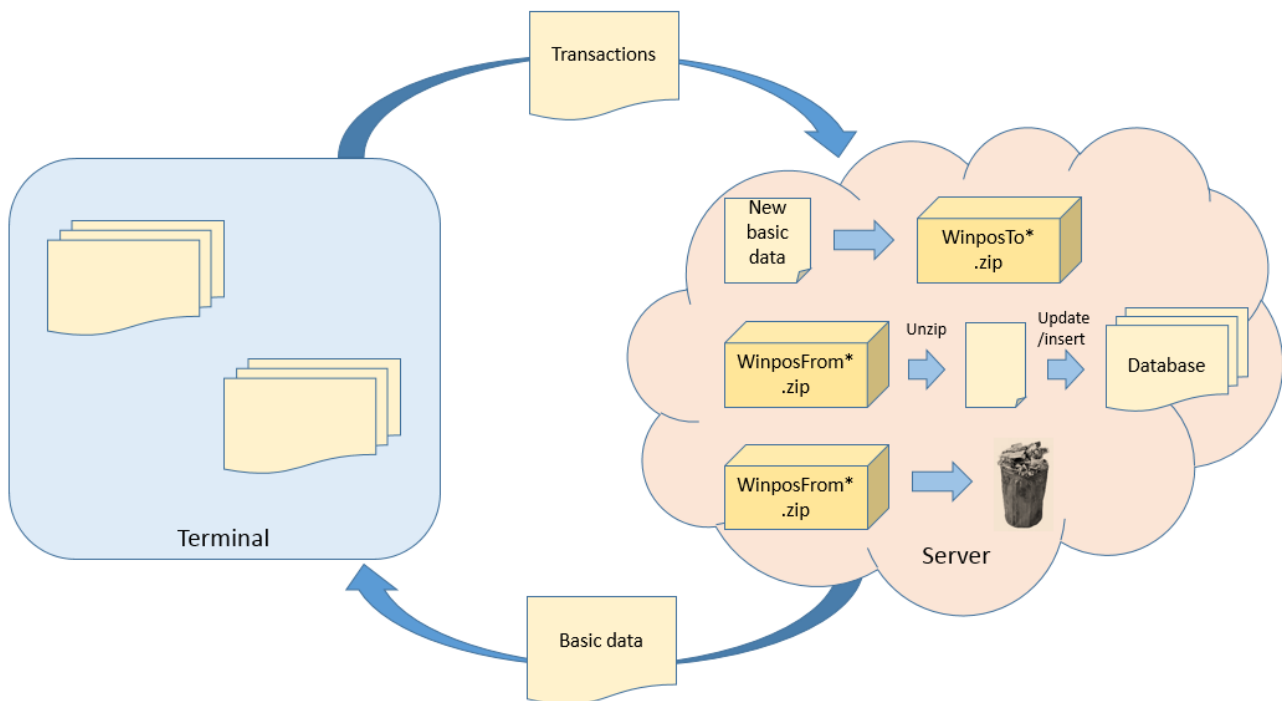
ECDataServer basic data

- AccountGroupTable
- AccountTable
- ArchiveHeader
- BonusLevelTable
- BudgetAccountTable
- BudgetCashierAccountTable
- BudgetCashierDptTable
- BudgetCashierPluTable
- BudgetCashierProfitCenterTable

- BudgetCashierSdptTable
- BudgetCashierSupplierTable
- BudgetCashierTable
- BudgetDptTable
- BudgetPluTable
- BudgetProfitCenterTable
- BudgetSdptTable
- BudgetSupplierTable
- BudgetTable

- CampaignItemTable
- CampaignTable
- CashierGroupTable
- CashierTable
- CashierTimeTable
- CashierTypeTable
- CashierWebPasswordTable
- CashierWebTable
- CustomerAddressTable
- CustomerAutoInvoiceHeader
- CustomerBenefitTable
- CustomerCategoriesTable
- CustomerCategoryTable
- CustomerCodesTable
- CustomerGroupBonusTable
- CustomerPaymentTableCC
- CustomerRefTable
- CustomerSearchTable
- CustomerTable
- CustomerWebPasswordTable
- CustomerWebTable
- DatabaseSaleTable
- DeliveryDateTable
- DeliveryWayTable
- DiscountGroupDiscTable
- DiscountGroupTable
- DiscountTable
- DptGroupTable
- DptTable
- Ean2Table
- EanHistTable
- EanTable
- ExportHeader
- FileCustomerTable
- FileDptTable
- FileGoodsReceivedTable
- FilePlu2Table
- FilePluTable
- FileSdptTable
- FileSupplierTable
- FileTable
- FileTransferHeader
- FinancialTable
- ForeignCurrencyTable
- GCGroupTable
- GCHeader
- GiftHeader

- GoodsReceivedHeader
- HeadofficeTable
- InsuranceHeader
- InsuranceSdptTable
- InsuranceTable
- InventoryHeader
- JournalHeader
- KeymapGroupTable
- KeymapTable
- KitchenHeader
- KitchenItem
- KitchenPrinterTable
- LabelHeader
- LabelItemTable
- LanguageTextTable
- LedgerHeader
- ManagerRightsTable
- MessageTable
- OffertHeader
- OpenDrawerTable
- OrderHeader
- OrderValidTable
- PaymentTable
- Plu2SearchTable
- Plu2Table
- PluFit2Table
- PluFitTable
- PluGroups2Table
- PluGroupsTable
- PluGroupTable
- PluMainGroupTable
- PluSearchTable
- PluTable
- PostNrTable
- PriceGroupTable
- PriceListTable
- ProfitCenterAreaTable
- ProfitCenterGroupTable
- ProfitCenterSubTable
- ProfitCenterTable
- PurchAccountTable
- PurchDptTable
- PurchPluGroupTable
- PurchPluTable
- PurchSdptTable
- PurchSLAccountTable
- RecipeItem2Table

- RecipeItemTable
- ReportHeader
- ScaleHeader
- ScaleItem
- SdptTable
- SecondHandTable
- SerienumberTable
- ServiceHeader
- SettingsTable
- ShelfTable
- ShiftTable
- SLAccountGroupTable
- SLAccountTable
- SLHeader
- StockCenterAreaTable
- StockCenterGroupTable
- StockCenterSubTable
- StockCenterTable
- StockEan2Table
- StockEanTable
- StockMoveHeader
- StockPlu2Table
- StockPluTable
- StockPluTransactionsItem
- SubProfitCenterTable
- SubProfitTerminalTable
- SubscriptionHeader
- SubscriptionItem
- SubStockTerminalTable
- SubTerminalTable
- SuppItem2Table
- SuppItemTable
- SupplierGroupTable
- SupplierTable
- TaxTable
- TemplateTable
- TerminalTable
- TicketTable
- UnitGroupTable
- UnitTable
- VoucherHeader
- WarrantyTable
- WarrantyTextItem
- WasteHeader

ECELE.EXE

Creates sales statistics for the server, based on JournalHeader/JournalItem (receipt data) information.

Checks once per second if ExChangeEleTable -> UpdateTable = 0

If not updated, updates and creates statistics.

When done, changes ExChangeEleTable -> UpdateTable = 1

> 0: not updated

> 1: updated
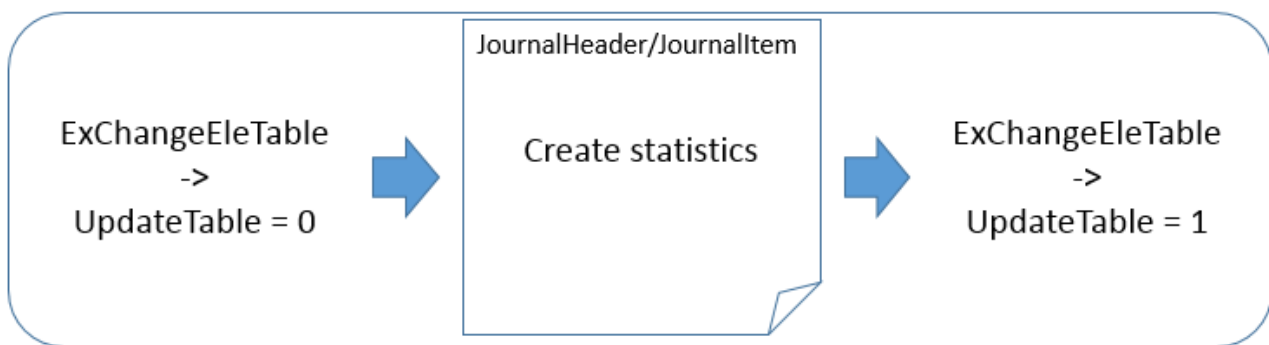
JOURNALHEADER/JOURNALITEM

Following tables can be updated based on JournalHeader/JournalItem.

- o BudgetCashierAccountTable
- o BudgetCashierDptTable
- o BudgetCashierPluTAble
- o BudgetCashierProfitCenterTable
- o BudgetCashierSdptTable
- o BudgetCashierSupplierTable
- o BudgetCashierTable
- o SaleAccountTable
- o SaleCampaignItemTable
- o SaleCampaignTable
- o SaleCashierTable
- o SaleCustomerAccountTable
- o SaleCustomerDptTable
- o SaleCustomerGroupTable
- o SaleCustomerPluTable
- o SaleCustomerSdptTable
- o SaleCustomerTable
- o SaleDiscountCashierReasonTable
- o SaleDiscountCashierTable
- o SaleDiscountReasonTable

- o SaleDiscountTable
- o SaleDiscountTerminalTable
- o SaleDptCashierTable
- o SaleDptTable
- o SaleDptTerminalTable
- o SaleEanTable
- o SaleFinancialCashierTable
- o SaleFinancialTable
- o SaleFinancialTerminalTable
- o SaleForeignCurrencyCashierTable
- o SaleForeignCurrencyTable
- o SaleForeignCurrencyTerminalTable
- o SaleFrequencyTable
- o SaleGiftHeader
- o SaleLedgerHeader
- o SalePaymentCashierTable
- o SalePaymentTable
- o SalePaymentTerminalTable
- o SalePluGroupTable
- o SalePluTable
- o SalePluTerminaltable
- o SaleProfitCenterTable
- o SaleSdptTable
- o SaleShiftTable
- o SaleStockEanTable
- o SaleStockPluGroupTable
- o SaleStockPluTable
- o SaleStockWasteReasonTable
- o SaleSupplierStockTable
- o SaleSupplierTable
- o SaleTaxCashierTable
- o SaleTaxForeignCurrencyTable
- o SaleTaxPaymentTable
- o SaleTaxTable
- o SaleTaxTerminalTable
- o SaleTemplateHeader
- o SaleTemplateItem
- o SaleTerminalTable
- o SaleTextTable
- o SaleVoucherHeade
- o SaleWasteReasonTable
- o SaleVoidCashierReasonTable
- o SaleVoidReasonTable
- o SaleVoucherTable

o Sale tables

Primary key consists of Profitcenter, Period, PeriodId and PeriodTime.

- ❖ Profitcenter
  - o Profitcenter number
- ❖ Period
  - o Period when sales statistics are created
  - o 1 = hour
  - o 2 = day
  - o 3 = week
  - o 4 = month
  - o 5 = quarter
    - always 3 months
    - example: quarter 1 = January, February, March
  - o 6 = year
  - o 7 = Leg (Shift)
- ❖ PeriodId
  - o PeriodId is the first day of the period in format YYYYMMDD
  - o period year: 6 = xxxx0101, period week: 3 = 20140602
  - o 7 = PeriodId is a running number (start / stop)
    - User manually starts and stops period
    - When Period 1 ends, period 2 starts
- ❖ PeriodTime
  - o If PeriodTime is not 1, it is not used
  - o PeriodTime: (14:00 – 14:59) this example period of time is marked as "1400"

SalePaymentTable unique index
(Number, ProfitCenter, Period, PeriodId, PeriodTime)

Number	PaymentTable
ProfitCenter	ProfitCenterTable

SalePluTable unique index
(Code, ProfitCenter, Period, PeriodId, PeriodTime)

Code	PluTable
ProfitCenter	ProfitCenterTable

REPORT.EXE

Report.exe runs a check in Reportheader once per second to confirm if there are any reports to run.
PrintLevel and PrintTime in Reportheader determine when reports should be run. Batch reports can be called using Windows Task Scheduler using batch reports report Id in ReportHeader.

1 = hour	5 = quarter
2 = day	6 = year
3 = week	7 = shift
4 = month	

PrintLevel 2 = once a day
PrintTime = time of day

If due reports were found, ReportItem runs them.
ReportID specifies which reports need to be run.

REPORTID LIST

1	shop	39	labels
2	media	40	backup
3	vat	41	Gift
4	terminal	42	mail
5	cashier	43	ticket
6	ean	44	pluscale
7	article	45	referenc
8	sdpt	46	bonus
9	dpt	47	ledger
10	account	48	customerlist
11	profit	49	Financial
12	plui	50	WorkHour
13	stkwar	51	Frequency
14	order	52	invoiceReminder
15	invertor	53	accountPluSales
16	artspec	54	articleGroup
17	pluprice	55	PludptGroup
18	artwaste	56	CustSaleProduct
19	artmove	57	CustSaleSdpt
20	fcrep	58	CustSaleDpt
21	campaign	59	ExternalProgram
22	shelf	60	PaymentTerminal
23	suppl	61	Offerts
24	suppdeli	62	Resume
25	suppsale	63	mediaTerminalVat
26	cards	64	ProductSpeed
27	tobank	65	SdpbyDptInfo
28	tobankAll	66	VatStock
29	blacklist	67	CampignStartEnd
30	cardpay	68	PluControll
31	export	69	DPTStock
32	import	70	PaymentCashier
33	guestchk	71	NewEMVMaintenance
34	customer	72	mediaVat
35	custgrp	73	ProductSalesTop
36	custdgrp	74	ProductSalesTopSdpt
37	invoice	75	ProductSalesTopDpt
38	Etiquette	76	ProductInfo

77	GoodsReceivedItems	124	ProductPriceChanges
78	WFI	125	ProductsEANStock
79	AccountDebitCredit	126	ProductEANSale
80	PurchaseInvoicePayedToBank	127	Datalogic
81	InsuranceBatch	128	ProductEanSaleQtySumHeadMatrix
82	CashierSaleProduct	129	ProductSumEanSaleQtySumHeadMatrix
83	CashierSaleProductAndBudget	130	CashierSalesMatrix
84	dptMatrix	131	Recipe
85	SdptMatrix	132	StockMove2
86	PluSaleMatrix	133	LegerDebetList
87	PluStockMatrix	134	CustomerInfoEmail
88	X_DayReport	135	Serialnumber
89	X_Arrears	136	CashierSaleProductAndBudgetMatrix
90	dptGroup	137	DepartmentGraph
91	PluEanStockMatrixFlow	138	DepartmentGraphTime
92	Z_DayReport	139	SubDepartmentGraph
93	CashierList	140	SubDepartmentGraphTime
94	CashierList2	141	ProductGraph
95	BusinessControlCaspeco	142	ProductGraphTime
96	BudgetCashierDpt	143	EanGraph
97	StockList	144	EanGraphTime
98	BudgetCashierSdpt	145	ProductsstkwarEan
99	BudgetCashierPlu	146	Assortment -Matrix
100	BudgetCashierAccount	147	Summary report
101	BudgetCashierSupplier	148	Articles Pricelist Matrix
102	BudgetCashierProfitCenter	149	Insurances
103	suppStock	150	Bookkeeping acc – comparison
104	ExchangeCCServer	151	X-Day terminal
105	ExchangeBranchServer	152	Z-Day terminal
106	ExchangeServer	153	X-Day Cashier
107	ExchangeElectronicJournal	154	Working Time export
108	WDS	155	SQL Query
109	WEB	156	IMO Ship's Declaration
110	Report	157	IMO Ship's Stores Declaration
111	LogicalErrors	158	Supplier's stock
112	ProductList	159	Supplier's stock movement
113	PaymentTransactions	160	Supplier's stock vs number of passengers
114	PaymentExport	161	Article's Waste reason – Stock Center
115	ArticleExport	162	Article's Waste reason – Profit Center
116	PluEanStockMatrix	163	Customer Restrictions
117	ProductGroupSale	164	Accounting of Excise Tax
118	ReceiptNumberLog	165	GDPR Customer Anonymizing
119	EanSalesMatrix	166	Subscriptions
120	OpenOrders	167	Article Groups
121	ReceiptReport	168	Article list 3
122	InactiveCashiers	169	Daily Waste with cause
123	stkwarEan	170	Inventory

171 Articles Waste   172 Terminal Sales statistics

REG – CASH REGISTER

REFERENCES USED

You need permissions to access these documents.

- ❖ CreditSafe.dll   Creditsafe Sweden
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\CreditSafe

- ❖ doIngenico.dll/EmvCard.dll   Luottokunta EMV
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Screenway

- ❖ ElisaSOAPClient.dll   Serial number -check to SAP
- ❖ Winpos.BrightPointWS.dll   BrightPoint prepaid card for Sweden
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\BrightPoint kontantkort

- ❖ Winpos.Emv.3.0.dll   Auriga ATC, Baxi, Bpti, Manison ThinClient,
                                                     Paypoint ICA, Payzone Spectracard 2, Payzone
                                                     Spectracard 3, Point CEPA, Point Denmark, PWC,
                                                     Point ESF
- ❖ Winpos.Hotellinx.dll   Hotel management software
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Hotellinx

- ❖ Winpos.Microdeb.dll   Microdeb voucher
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Microdeb

- ❖ Winpos.PusatecPt10.dll   Smart card & bracelet solutions
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Pusatec

- ❖ Winpos.Rebnis.dll   Rebnis Jupiter booking system
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Rebnis

- ❖ Winpos.ReceiptControlUnit.dll   Fiscal law in Sweden
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Blackbox Sverige

- ❖ Winpos.RestechSkipass.dll   Restech Skipass
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Skipass

- ❖ Winpos.SalesFinance.dll   Handelsbanken Finans Sweden
    - o   \\dc\Windoc\Development\Group Private\Integrations\Mega\Handelsbanken Finans

- ❖ Winpos.Scale.dll   Cash register scale
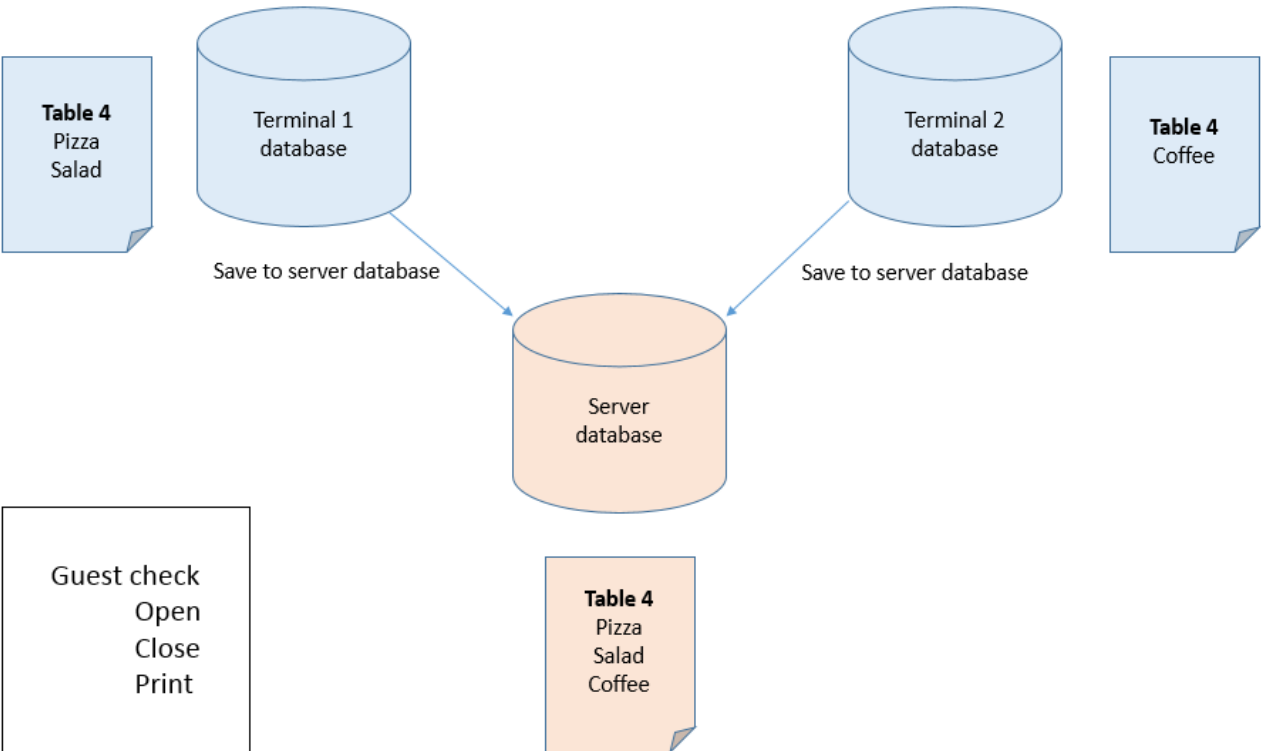- ❖ Winpos.Seqr.dll   Seamless SEQR payment

o \\dc\Windoc\Development\Group Private\Integrations\Mega\Seamless SEQR

❖ Winpos.SunWallet.dll   SunWallet payment
    o \\dc\Windoc\Development\Group Private\Integrations\Mega\SunWallet

❖ Winpos.VB6Utils.dll   Terminal Service Client Info
❖ WinposReports.dll   Winpos Report
❖ Winpos.MobilePay.dll   MobilePay integration
❖ Winpos.EspressoHouse.dll   Loyalty app integration
❖ Winpos.PersonalKollen.dll   Personalkollen integration
❖ Winpos.Transticket.dll   Transticket integration
❖ Winpos.Carus.dll   Carus integration
❖ Winpos.Bprti.dll   Babs Paylink RTI Server
❖ Winpos.GBIC2.dll   Global Blue (Taxfree) integration
❖ Winpos.NetsPayAtTable*   Nets Pay@Table server
❖ Winpos.PointWLAN*   Verifone (Point) WLAN Server
❖ Winpos.PrepaidCard.dll   Bonwal integration

GUEST CHECK

If parameter "Guest check.Use Server database" is activated, server database is used instead of local database, this means that server has to be online, otherwise Guest check will use local database.

Guest check is a restaurant feature that saves orders for certain table to the server database or local database. When server database is in use, if customers at this table later want to order more, it is possible to add it to their check from different terminal than what was originally used.

When customers are ready to leave, their check can be closed and printed, and their table will be free for new customers.

winpos

Table 4
Pizza
Salad

Terminal 1
database

Terminal 2
database

Table 4
Coffee

Save to server database

Save to server database

Server
database

Guest check
Open
Close
Print

Table 4
Pizza
Salad
Coffee

GIFT VOUCHER / VOUCHER

BUYING GIFT VOUCHER / VOUCHER

Buying voucher occurs at certain cash register terminal.

1. This terminal confirms from server that the voucher number is not in use.
2. If it is not used, voucher will be created to server.
3. Payment is accepted at terminal.
4. New receipt is created.
5. ECDataClient transfers receipt to the server.
6. At server ECEle creates sale statistics.
7. ECDataServer transfers voucher to all terminals. Optionally the server's database is used directly and all voucher transactions are done updating a single database directly from the clients.
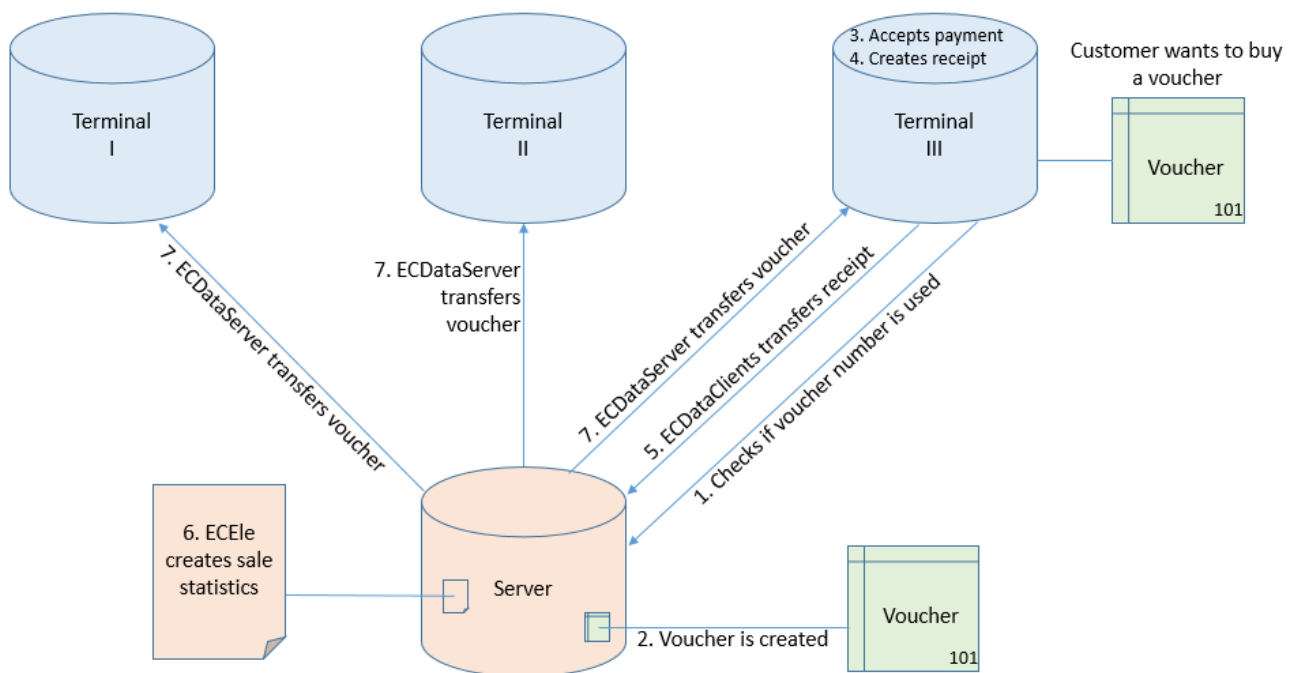
USING GIFT VOUCHER / VOUCHER

Voucher is used as payment, this transaction is done locally unlike when buying the voucher.
Receipt is created, ECDataClient transfers it to the server. There ECEle creates sale statistics. ECDataServer transfers data to all terminals. Voucher number has now been used and cannot be used again. Optionally the server's database is used directly and all voucher transactions are done updating a single database directly from the clients.
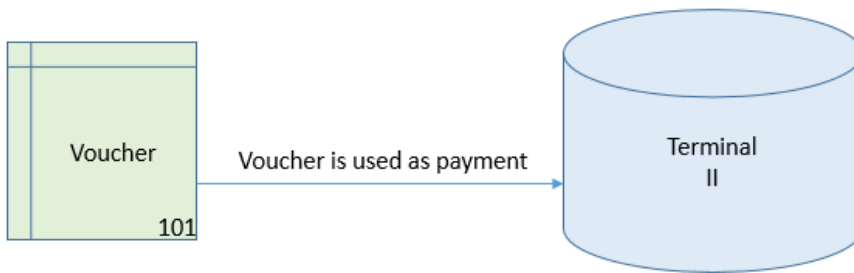
MIRPXZ.EXE (BACKOFFICE)

REFERENCES USED

You need permissions to access these documents.

- ❖ CreditSafe.dll   Creditsafe Sweden
  - o \\dc\Windoc\Development\Group Private\Integrations\Mega\CreditSafe

- ❖ doIngenico.dll/EmvCard.dll   Luottokunta EMV
  - o \\dc\Windoc\Development\Group Private\Integrations\Mega\Screenway

- ❖ FinvoiceGenerator.dll   Finvoice electronic invoice standard for Finland
  - o \\dc\Windoc\Development\Group Private\Integrations\Mega\Finvoice

- ❖ Winpos.Emv.3.0.dll   Auriga ATC, Baxi, Bpti, Manison ThinClient, Paypoint ICA, Payzone Spectracard 2, Payzone Spectracard 3, Point CEPA, Point Denmark, PWC, Point ESF
- ❖ Winpos.ReceiptControlUnit.dll   Fiscal law in Sweden
  - o \\dc\Windoc\Development\Group Private\Integrations\Mega\Blackbox Sverige

- ❖ Winpos.Scale.dll   Cash register scale
- ❖ Winpos.Seqr.dll   Seamless SEQR payment
  - o \\dc\Windoc\Development\Group Private\Integrations\Mega\Seamless SEQR

- ❖ Winpos.SunWallet.dll   SunWallet payment
  - o \\dc\Windoc\Development\Group Private\Integrations\Mega\SunWallet

- ❖ Winpos.VB6Utils.dll   Terminal Service Client Info
- ❖ WinposReports.dll   Winpos Report

FEATURES OF WINPOS MEGASTORE

- ❖ POS application for all types of retail and restaurant environments
- ❖ Reliance Windows OS and .NET Frameworks
- ❖ Database MSSQL or Raima SQL
- ❖ Client server architecture with offline support
- ❖ Generic graphical user interface for hospitality, Retail and Mixed-mode environments
- ❖ Object oriented structure
- ❖ Interface options; case by case. Standard SOAP and REST JSON API available

APPLICATION FEATURES

FRONTEND

- ❖ Classic POS UI with One shot Buttons for PC, layout maintenance from Backoffice
- ❖ Restaurant Mode, Retail Mode, Sales order Mode, Mixed mode
- ❖ Self-service / Kiosk Solution for PC, layout maintenance from Backoffice. Uses same application as classic POS with dedicated user interface.
- ❖ Mobile POS for PC as well as native Mobile POS for Android and IOS
- ❖ A list of selected parameters, parameters affect the frontend's behavior and can be defined on terminal level:
    - o Allow direct qty
    - o Article search settings
    - o Up-sales and Cross-sales menu visibility
    - o Access to article maintenance from frontend
    - o Ask additional info for suspend receipt
    - o Ask for price on variable price articles
    - o Ask for price on variable weight articles
    - o Ask reason for negative sum
    - o Automatic order import
    - o Auto search after x milliseconds
    - o Stretch font size
    - o Bonus card is chip and PIN
    - o Booking order restriction
    - o Cash rounding
    - o Cashier auto login
    - o Turnover behavior with offert/sales order/service/suspend receipt
    - o Cashier login from keyboard
    - o Customer additional info show
    - o Customer address show
    - o Customer benefit discount number
    - o Customer change question
    - o Customer credit override
    - o Customer edit not allowed
    - o Customer info to customer display
   - o Customer info restricted
    - o Customer load search window

- o Customer not found use default number
- o Customer number mandatory
- o Customer number search
- o Customer account database
- o Customer search window is disabled
- o Debug path
- o Decimal separator
- o Declaration bank note is mandatory
- o Declaration mandatory before end-of-shift reports are run
- o Delivery quantity in sales basket
- o Discount not allowed on campaign price
- o Discount not allowed on item discount
- o Enter Gift voucher number
- o Function keys visible
- o Gift voucher database
- o Grid row height
- o Hide menu button row
- o Interrupt ordering
- o Invoice barcode for direct invoice
- o Load data automatically
- o Login with password
- o Min tab width
- o Modify article description
- o On screen keyboard
- o Payment forms all always shown
- o Price control when open order
- o Price warning level
- o Price VAT0 in sales basket
- o Print Gift voucher a4
- o Print change payment receipt
- o Print declaration receipt
- o Print difference on declaration receipt
- o Print invoices directly
- o Print signature receipt with X- and Z reports
- o Print declaration difference on X- and Z reports
- o Print level of X- and Z reports (terminal/ profit center / cashier)
- o Refund and sales not allowed on same receipt
- o Sales basket consolidate
- o Sales basket to the left
- o Sales basket width
- o Sales order database
- o Sales order is always created on sales receipt
- o Sales order restriction
- o Search focus on description
- o Search in external stock
- o Second hand articles
- o Serial number add

- o Serial number can be duplicate
- o Serial number can be empty
- o Serial number check from SAP
- o Serial number shown in sales basket
- o Show article form when article is not found
- o Show cost price
- o Show in article form:
- o Show price excl. VAT
- o Show shelf info of article
- o Show start/end shift buttons
- o Show stock qty for articles
- o Silent ordering database
- o Split sales basket article rows with qty >1
- o Stock lists include recipe articles
- o Stock warning/block when stock is zero
- o Sub profit terminal
- o Sub stock terminal
- o Takeaway/tax free is default
- o Takeaway/tax free is staydown
- o Takeaway with new price
- o Touchscreen keys
- o Update timestamp on row level
- o Void allowed only on same day
- o Void warning for voiding same receipt again
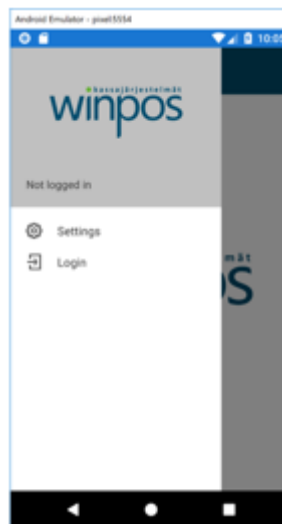
Picture 1: Classic layout with sales basket to the left
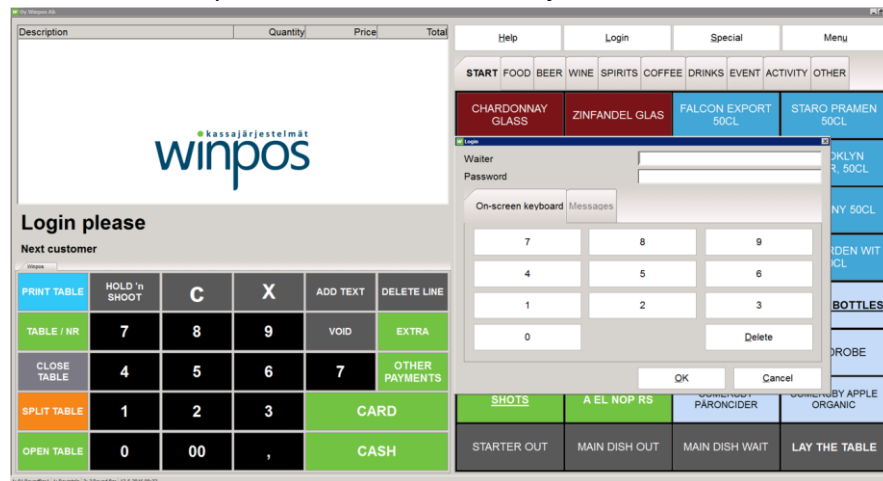
Picture 2: Classic layout with pictures
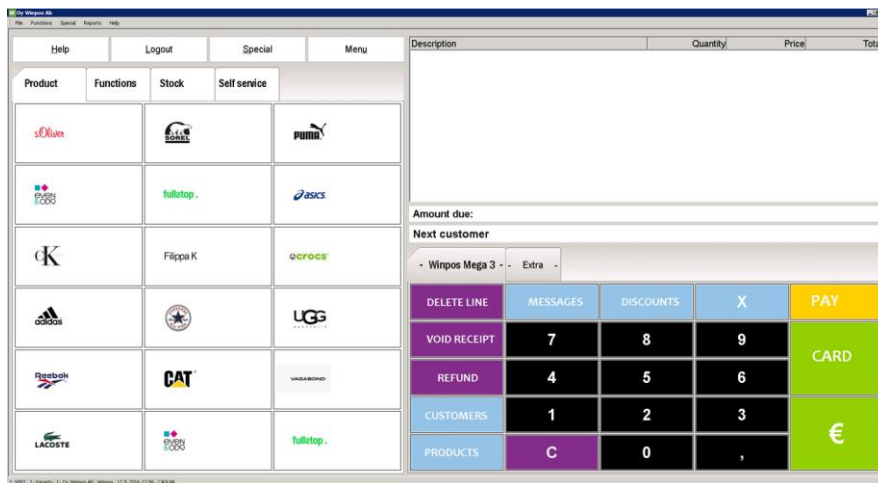
Picture 3: Mobile Layout (Android)

EMV

❖ EMV integrations to: Nets, Verifone, Babs Paylink Bpti, Payex, Paypoint, PayZone, Point Denmark, Point ESF, Poplatek, S5 Ips, Samport, VeriFone Denmark, VeriFone UK, WestInt
❖ Regular EMV, Wireless Pay@Table, Wireless ECR Mode
❖ Multiple regular and/or wireless terminals on a single POS with parallel transaction handling supported
❖ Forced offline mode

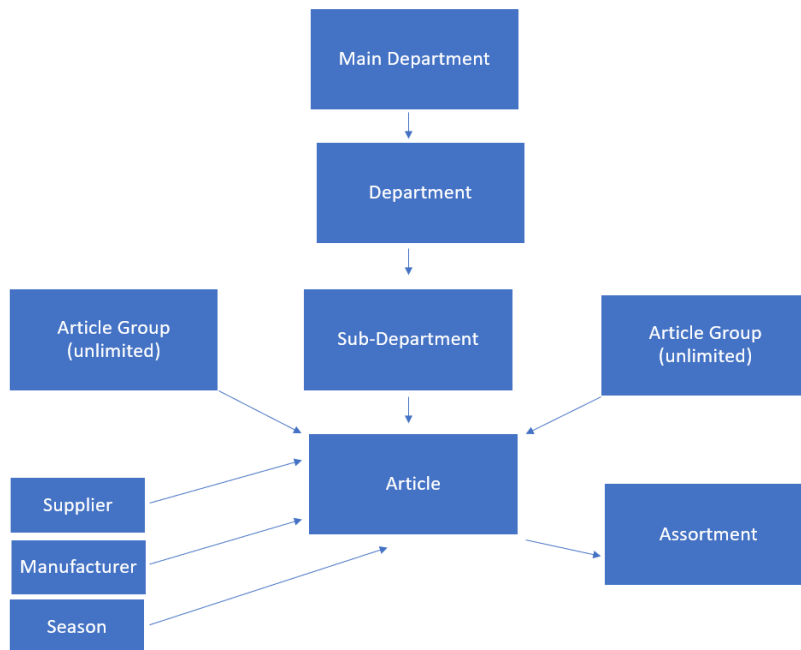## HIERARCHICAL ORGANIZATION OF COMPANIES, BRANCHES, PROFIT CENTERS, STOCK LOCATION AND VESSELS

❖ Each sales point and Backoffice unit is labeled as a Terminal and terminals are given a set of parameters and settings to define the behavior of a terminal
❖ Terminals must be linked to a Profit center, Stock location, price lists and can be linked to a Terminal Group

❖ Stock locations can be linked to Stock location Groups, Divisions, Areas, Countries and Vessels
❖ Profit Centers can be linked to Profit Center Groups, Divisions, Areas, Countries and Vessels
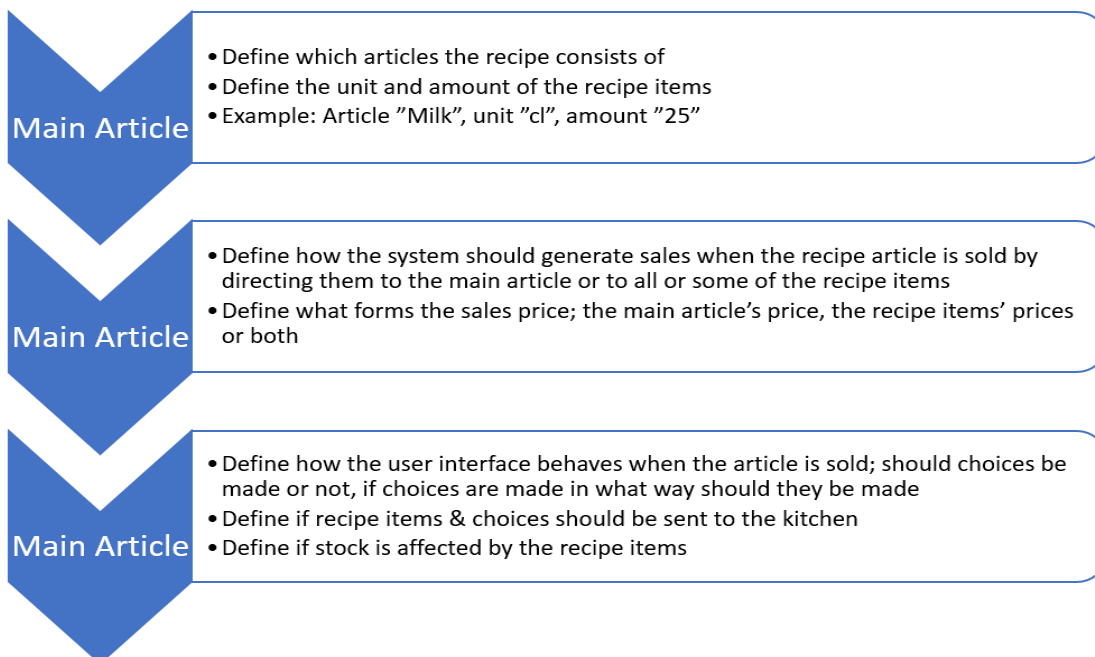❖ Vessels can be linked to Routes

ARTICLE REGISTER

❖ Article types: Assortment (Matrix), Variable price, Variable weight, Prepaid, Recipe Article, Serial Number (with warranty), QR Code, Insurance, Subscription
❖ Hierarchy with: Main department (one article-to-one department), Department (one-to-one), Sub-department (One-to-One), Article Group (one-to-many)
❖ All departments and groups have a Fast adjustment feature giving the user the ability to change values for all articles inside a group
❖ Article value inheritance from sub-department level
❖ Main code (primary, secondary code, supplier & order code, additional EAN codes
❖ Multiple descriptions with warning when description is longer than receipt width
❖ Supplier, Manufacturer, Profit Center, fixed stock location
❖ Bookkeeping accounts, Purchase accounts and Stock accounts
❖ Min and max Stock values for auto-ordering
❖ Sales unit, Stock unit, Comparison unit, Order (Supplier) unit, Excise tax unit
❖ Recipe article with support for menu, ingredients, stock updates, pop-ups, dynamic cost price calculation, kitchen screen/printer link, sub-recipes
❖ Pricelists (unlimited amount)
❖ Campaigns
❖ Advert and label printing
❖ Bottle refund
❖ Scale articles
❖ Stock & shelf position
❖ Print to stock and kitchen
❖ Macro feature to auto-link features and functions; discounts, payments, financials, articles, customers and all functions
❖ Web shop relevancy parameter
❖ Web shop Group
❖ Up sales and Cross sales menu
❖ Campaign, bonus, discount and new price block parameters
❖ Templates
❖ Slab score
❖ Vol %
❖ Max sales quantity

Picture 1: Article Categories

Picture 2: Recipe item fundamentals

Main Article
- Define which articles the recipe consists of
- Define the unit and amount of the recipe items
- Example: Article "Milk", unit "cl", amount "25"

Main Article
- Define how the system should generate sales when the recipe article is sold by directing them to the main article or to all or some of the recipe items
- Define what forms the sales price; the main article's price, the recipe items' prices or both

Main Article
- Define how the user interface behaves when the article is sold; should choices be made or not, if choices are made in what way should they be made
- Define if recipe items & choices should be sent to the kitchen
- Define if stock is affected by the recipe items

(CASH) DECLARATION

- ❖ Available in both frontend and Backoffice
- ❖ Payment method specific parameter to activate
- ❖ Available on Profit center, Group, Terminal and User level

❖ Differences, previously declared amounts and possible restriction to run end of shift reports before confirmed declaration

BOOKKEEPING ACCOUNTS

❖ Departments, Sub-departments, Articles, Discounts, Financial Transactions and Payment Methods can be linked to Bookkeeping accounts
❖ Articles can be linked to several accounts
❖ Bookkeeping accounts available separately for each Leg
❖ Purchase accounts and Stock accounts available for articles
❖ Ability to populate bookkeeping data according to the Double-entry bookkeeping system
❖ Payment methods specific exception rules available
❖ Export to external systems

BUDGETING

❖ Sales budget function for Departments, Sub-departments, Articles, Profit centers, Sales accounts and Waiters
❖ Comparison reporting between budget and actual sales

CASHIERS, WAITERS, WORKING TIME AND RESTRICTIONS

❖ Users can be identified when using the POS and Backoffice
❖ Code, ID, login, password supported
❖ Backoffice login can be linked to Windows login (single sign-on)
❖ Can be linked to Role, Group, Profit Center and Stock Location
❖ An account can be linked to Terminal, Price list and layout, affects both Backoffice and POS
❖ Automatic logout after each transaction or after chosen timeout
❖ Sales budget function
❖ POS and Backoffice user restrictions available on role level
❖ Function for registering and reporting working times using cashier ID
❖ User can be inactivated directly or by scheduling to inactivation by defining the first date of deactivation

MESSAGES

❖ Function for sending text-based messages from Backoffice to chosen terminals
❖ Presented to user at login to POS
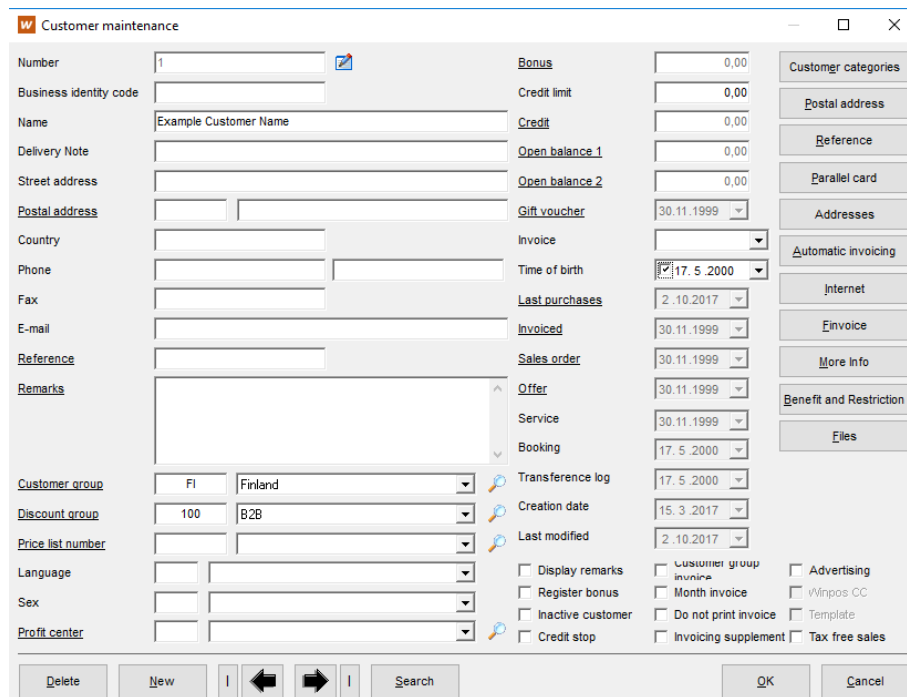❖ Visible until user has acknowledged message

TEMPLATES

❖ Function available for: Articles, Departments, Sub-departments, Customers, Stock Orders, Goods Received, Stock movements, Inventories and Waste

❖ Simplifies creation of new records, available when creating new records both via imports and via GUI

CUSTOMER ACCOUNT ADMINISTRATION WITH BONUS, BALANCE AND CREDIT FEATURES

❖ Customer Account management

❖ Hierarchy, pricing and discounts: Customer Group, Category, Discount Group and Pricelist

❖ Sales invoicing

❖ Bonus points collection using a Customer Group specific customizable Bonus tables

❖ Bonus available as payment method

❖ Gift vouchers

❖ 2 separate customer balances, top-up down from external system or via POS

❖ Customer balance available as payment method

❖ Customer Credit feature, linked to Invoice ledger

❖ Macro

❖ Purchase restriction on chosen period

❖ Purchase benefits on chosen period

❖ Benefits and restrictions available on Article, Article Group, Department, Sub-department, Sales account and season level (SLABI)

❖ Tax free sales

❖ Technology free customer identification

❖ Parallel customer cards supported

❖ Invoice parameters: customer group invoice, invoice supplement, invoicing period

❖ Separate customer ID for external system supported

❖ Sales Order / Preorder functionality with REST API

❖ Campaigns and promotions by discount group

❖ Access to customer's transactions history

Picture 1: Customer main window

STOCK CONTROL

- ❖ Profit base calculation options: avg purchase price / purchase price / sales price / FIFO
- ❖ Locked unit and purchase prices on stock lists
- ❖ Purchase orders via SAP or directly to supplier
- ❖ Use article groups to define terminal specific stock list templates
- ❖ Save daily stock for historical reporting purposes
- ❖ Same purchase price for all stock locations
- ❖ Remove all non-stock articles from stock relevant functions
- ❖ Define price base for Inventory, Stock and waste:
- ❖ Multiple suppliers for single article
- ❖ Link article to port, supplier as well as having a supplier-port link

PURCHASE ORDERS AND GOODS RECEIVED

- ❖ Create purchase orders in different formats: internal order, pdf, csv, xls, xml,
- ❖ Create purchase orders using different methods: manual, wireless terminal, Android/IOS App, Min and Max values, Statistics, templates, supplier specific order values, automatically/scheduled tasks
- ❖ Send to supplier as e-mail, EDI, to ERP, direct to supplier, to HQ
- ❖ Supplier register with harbor dimension
- ❖ 3-level authorization flow with user role and stock location specific parameters
- ❖ Goods received function to confirm receival of purchase orders
- ❖ Support for backorders and item level confirmation
- ❖ Receive goods with or without a purchase order
- ❖ Item level statistics and history for all confirmed and open orders
- ❖ Both function available in both POS/frontend and Backoffice

WASTE REGISTRATION

- ❖ Function for waste registration via both Frontend and Backoffice
- ❖ Define cause of waste, profit center and stock location
- ❖ Manually, from wireless terminal, using Android/IOS app, template
- ❖ Affect profit calculation or simply save to log

STOCK MOVEMENTS

- ❖ Transfer stock between locations
- ❖ Define from which profit center and stock location, to which profit center and stock location
- ❖ Manually, from wireless terminal, using Android/IOS app, template

INVENTORY

- ❖ Inventory function for counting and setting the stock quantities and value
- ❖ Manually, from wireless terminal, using Android/IOS app, template
- ❖ Using parameters such as: "Not inventoried", only basic assortment, separately per department, by excluding articles with zero as stock amount, only stock relevant articles
- ❖ Difference reporting
- ❖ Function for zeroing not inventoried articles
- ❖ Export to most common file formats

PRODUCTION

- ❖ Function for converting stock amounts from ingredient level to actual sales article
- ❖ To give knowledge of production amounts and more relevant stock quantities to support e.g. Preorders
- ❖ The function withdraws an article's ingredient stock according to its recipe and adds the equivalent stock quantity to the main article. Used for instance with hamburgers, bagels, sandwiches.

LAUNDRY MANAGEMENT

- ❖ Function for managing and registering laundry exchange to and from suppliers on port and supplier level
- ❖ Registration on item level via POS, reporting and statistics via Backoffice

CUSTOMIZABLE SCREEN LAYOUT

- ❖ Maintenance via Backoffice
- ❖ Changes using drag and drop
- ❖ Any function is available to any button
- ❖ Pictures supported
- ❖ Number of rows, columns tabs customizable via GUI
- ❖ Button sizes customizable from GUI

- ❖ Number of layouts unrestricted
- ❖ Sales basket size customizable
- ❖ User and terminal specific layouts supported
- ❖ User restriction functionality supported
- ❖ Support for macros
- ❖ Time, date and weekday to define a layout's active times
- ❖ Default tab definable per layout or per terminal
- ❖ Easy to use and maintain centrally

SALES ORDER

- ❖ Module for processing offers, orders, delivered orders and converting order to sales invoices
- ❖ Linked to customer register
- ❖ Add remarks, print packing slip, define status
- ❖ Support for web shop integration using standard API
- ❖ Down payment feature
- ❖ Delivery ways and times feature

TABLE ORDERING

- ❖ Function for waiter to take orders and assign them to a table
- ❖ Unlimited table layouts
- ❖ Graphical UI and list-based UI supported
- ❖ Available at stationary POS and mobile POS
- ❖ Split, merge, item split table, partial payments and movements supported
- ❖ Use static chairs or virtual chairs created automatically when necessary
- ❖ Print to kitchen printer, send to kitchen display or from Mobile POS to stationary POS
- ❖ See the table's status using color codes
- ❖ Different layouts during different times, dates and weekdays

Picture 1: Table view with waiting times visible
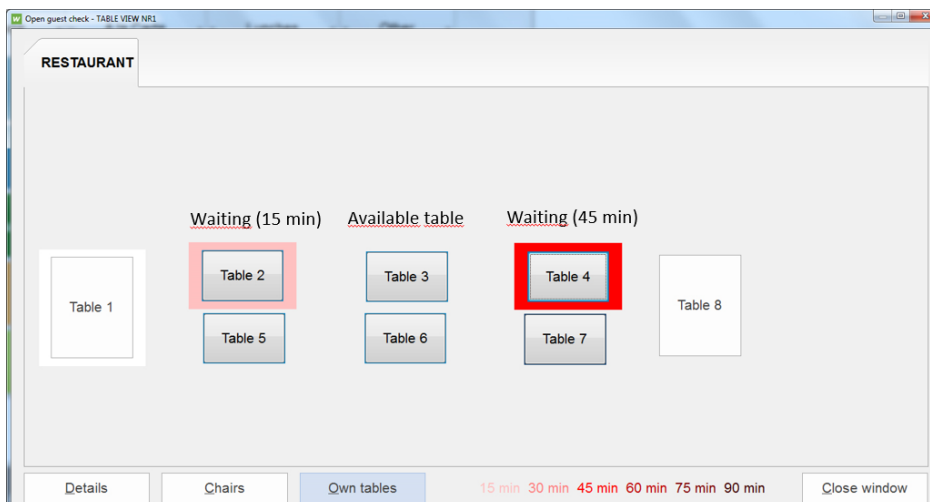
Picture 2: Split Table view
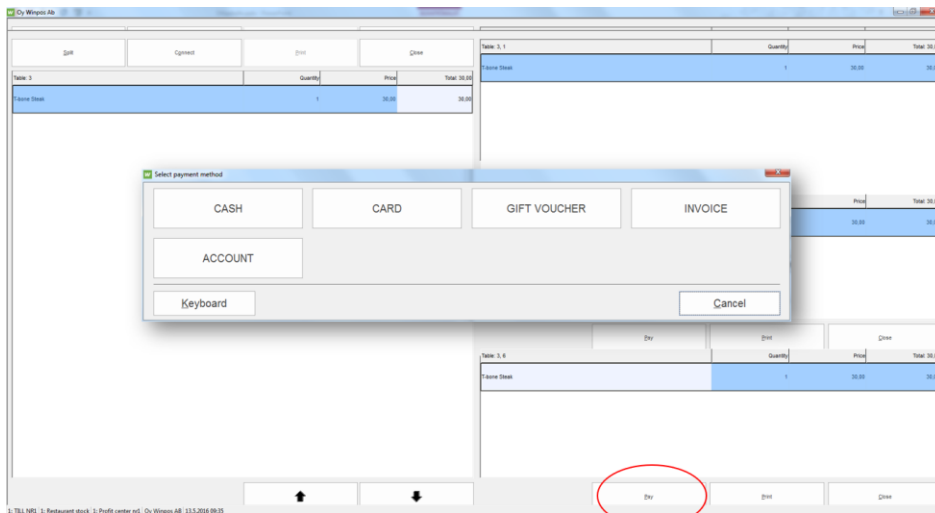
INTERRUPT ORDERING

- ❖ Multiuser function for faster sales, order processing
- ❖ Multiple users can be logged in concurrently and are able to interrupt ordering quickly and securely
- ❖ Typically used in bar environments where several users use the same POS unit to serve multiple customers concurrently
- ❖ Interrupt ordering automatically suspends another user's transaction as well as continues a possible suspended transaction without extra input

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KITCHEN PRINTING AND DISPLAYS

- ❖ Send orders to kitchen printer, kitchen display or to POS UI
- ❖ Kitchen display statistics and reporting
- ❖ Article specific colors to kitchen display
- ❖ Preorder compatibility with standard API
- ❖ Waiting times and color codes to kitchen display
- ❖ Straight forward single display, multiscreen or workface based multiscreen
- ❖ Send to kitchen feature to send data to kitchen before order is confirmed, to start preparation as early as possible
- ❖ Hold and shoot feature to send multiple orders to kitchen at once
- ❖ Terminal specific kitchen printer settings
- ❖ Detailed parameters for display and printer behavior and layout

REPORTING

- ❖ Available from: Backoffice, POS, browser, app
- ❖ Available as grid from UI, Bar chart from UI, exportable to xls/csv/xml/html/preview
- ❖ Data comparison
- ❖ Automated report generation using scheduler
- ❖ Statistics including: profit center, terminal, discounts, payments, currencies, financial transactions, customers, articles, departments and article groups, accounting, suppliers, campaigns, waiters, invoices, kitchen displays, insurances, warranties, gift vouchers, vouchers, sales orders, electronic journal

ROUTE AND LEG

- ❖ A table of Legs can be created
- ❖ Each leg is linked to a route, with settings such as port of departure, port of destination and currency
- ❖ A leg can define VAT, pricing, accounting and descriptions of articles
- ❖ A leg can be started at any moment of time, starting a leg at the vessel server, stops the previous leg

CAMPAIGNS

- ❖ Feature for defining lower pricing under certain conditions
- ❖ Supported conditions: customer category (discount group), Leg(s), Profit center(s), stock location, Quantity, Time, Date, Weekday, Article, Department, Sub-Department, Article Group, Sales Account, Season, combination of articles/departments/sub-departments/article groups/sales accounts/seasons
- ❖ Mix and match
- ❖ Label printing
- ❖ Discount Block on campaign
- ❖ Campaign block on article
- ❖ Lowest price applies principle
- ❖ Different benefits: fixed price, discount % and sum, article or departments specific fixed price, lowest or highest for free

PRICE LISTS

- ❖ Unlimited amount of price lists
- ❖ Creation manually or by import
- ❖ Changes manually, scheduled
- ❖ Activation by time, date and weekday
- ❖ Currency parameter
- ❖ Can be linked to terminal, customer, button
- ❖ Tax-free support
- ❖ Can be applied only for exception priced articles
- ❖ Label printing supported

DISCOUNTS

- ❖ Item and subtotal discounts supported
- ❖ Percent and sum supported
- ❖ User restrictions available
- ❖ Unlimited amount
- ❖ Reason/explanation feature
- ❖ Terminal specific discounts supported
- ❖ Fixed value or user definable
- ❖ Discount calculation feature
- ❖ Available via macro
- ❖ Discount Groups linkable to customer register
- ❖ Bookkeeping account feature
- ❖ Parameters for affecting behavior when applied together with campaigns

PAYMENTS

- ❖ Terminal specific payment methods
- ❖ Can be linked to any position in button layout
- ❖ Payment method types: Account, Invoice, Balance, Gift Voucher, Bonus, Integrated Card Handling, Cash on delivery, Leasing, Voucher, Down Payment, Bracelet, Free of charge, Hotellinx, Guest check, Reference payments, Microdeb, Seamless SEQR, Sunwallet, Rebnis, Ecster – Invoice, AXS – Prepaid, MobilePay, Coffee card, Svea, Klarna, Asynchrony integrated card handling, Lunch note
- ❖ Receipt types: receipt printer, A4 printer, e-mail (with offline support), SMS, Signature receipt, Signature (representation), Signature (with empty lines), Signature (with customer info), waybill
- ❖ Accounting link
- ❖ Payment and change limits
- ❖ Fixed value
- ❖ Macro
- ❖ Parameters: direct tender, over tender, under tender, open drawer, declaration
- ❖ Bonus registration parameter

FINANCIAL TRANSACTIONS

- ❖ Feature for creating transactions without affecting sales, such as shorting a customer account's debt
- ❖ Types: Paid out, Received, Customer account, Customer Balance, Invoice, Gift voucher, Voucher, Bancomat, Down Payment, Cash Float, Tip, Bracelet, Guest check, Microdeb, Conversion of currency, Profit center

CURRENCIES

- ❖ Currencies as payment methods
- ❖ Currency exchange function
- ❖ Exchange commission
- ❖ Country specific home currencies
- ❖ Change method setting (preset, manual, home currency)
- ❖ Rounding rules
- ❖ Dedicated cash drawer parameter

- ❖ Accounting
- ❖ Different buy and sell rates
- ❖ Currency for price list
- ❖ Currency for supplier
- ❖ Print to label feature
- ❖ Macro

ADVERTS AND LABELS

- ❖ Function for printing shelf labels
- ❖ Support for both A4 printers and label printers
- ❖ Article data exportable to external ESL system
- ❖ Reload old data to reprint (e.g. Printer error situations
- ❖ Possibility to edit contents of label
- ❖ Separate data for labels and article register
- ❖ Upload data from wireless terminal
- ❖ Preview before print
- ❖ Normal price, campaign price, pricelist price, foreign currency price

PERIPHERALS

- ❖ Receipt printer
- ❖ Kitchen printer
- ❖ Kitchen display
- ❖ Slip printer
- ❖ Customer display
- ❖ Bar code reader
- ❖ POS Scale
- ❖ Service Scale
- ❖ Wireless terminal
- ❖ Control unit (black box)
- ❖ Gift printer (refund label printer)
- ❖ Guest paging unit
- ❖ Fingerprint reader
- ❖ Total Order Board (Control order flow and Order Ready Board)
- ❖ Order Ready Board (present orders to end-consumer)

MOBILE APP

- ❖ Sales and stock app for IOS and Android
- ❖ RESTful backend using MSSQL database
- ❖ Maintenance and configuration from Winpos MegaStore
- ❖ See separate documentation for more details (Winpos_Mobile_Technical_Documentation_xx.docx)

SALES DASHBOARD

- ❖ Realtime statistics via browser
- ❖ Graphical charts
- ❖ Drill-down and period comparison
- ❖ Localization
- ❖ Export to formats png, jpeg, pdf, csv and xls

GET EXTERNAL DATA

- ❖ Import data to database from csv files
- ❖ Create your own import profiles, with any data from supported tables
- ❖ Use templates to preconfigure selected data
- ❖ Schedule imports at chosen interval from chosen location
- ❖ The following database tables supported: Plutable(articles), SdptTable (Subdepartments), DptTable (Departments), CustomerTable (Customers), StockPluTable (Stock), SupplierTable (Supplier), SuppItemTable (Article supplier data), PluFitTable (article cross sales and up sales), EanTable (Assortments articles and additional article codes), CashierTable (Users), PricelistTable (Pricelists), CountryTables (Countryspecific data), RecipeItemTable (Article recipes), GiftHeader (Gift vouchers)

ARCHIVING

- ❖ Feature for archiving transactional (receipt) data
- ❖ Delete transaction from database and places them to an archive
- ❖ Can be run manually or as an automated task

HARDWARE PLATFORMS

- ❖ PC, Mobile App on IOS and Android
- ❖ Standard interface for POS peripherals
- ❖ "Any" POS equipment may be integrated

OPERATING SYSTEMS

- ❖ Windows 7
- ❖ Windows 8
- ❖ Windows 10
- ❖ Windows POS Ready / Embedded / IOT
- ❖ IOS and Android for Mobile App

USER INTERFACE

- ❖ Backoffice

❖ POS display
❖ Online User Guides

COMMUNICATIONS

❖ TCP/IP based Remote object access
❖ Ascii data exchange
❖ XML

DATA MANAGEMENT

❖ RDM 8.3
❖ ODBC interface

CLIENT SERVER CONCEPT

❖ Real-time transaction processing
❖ Multi-user operation
❖ Offline transactions support with automatic recovery
❖ Support for using local database on clients

## WINPOS MEGASTORE™ - APPLICATION WORKFLOW

Set of applications are installed to each installment of the system, and applications are activated as "services" running in the background. Main User Applications are Front-End POS application "Registration" and Back-End POS application "BackOffice".

Each Sub Application has its purpose and can be activated based on the nature of the installation and purpose of the installed unit of the system.

Application use internal API calls and RDM.dll to communicate with SQL database engine, and COM-interface to communicate with Report Viewer application.

![Winpos logo]

Applications and Sub Apps
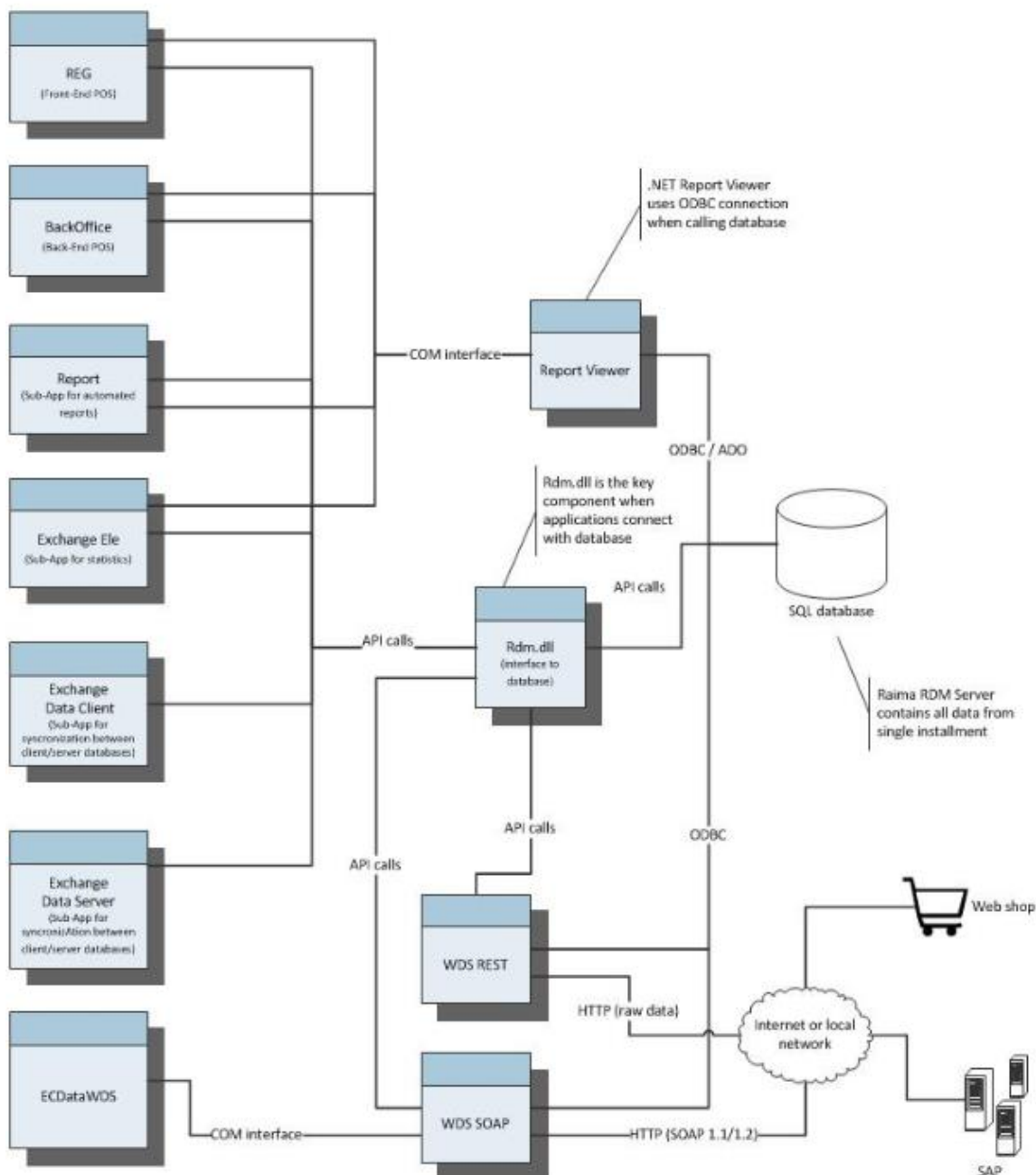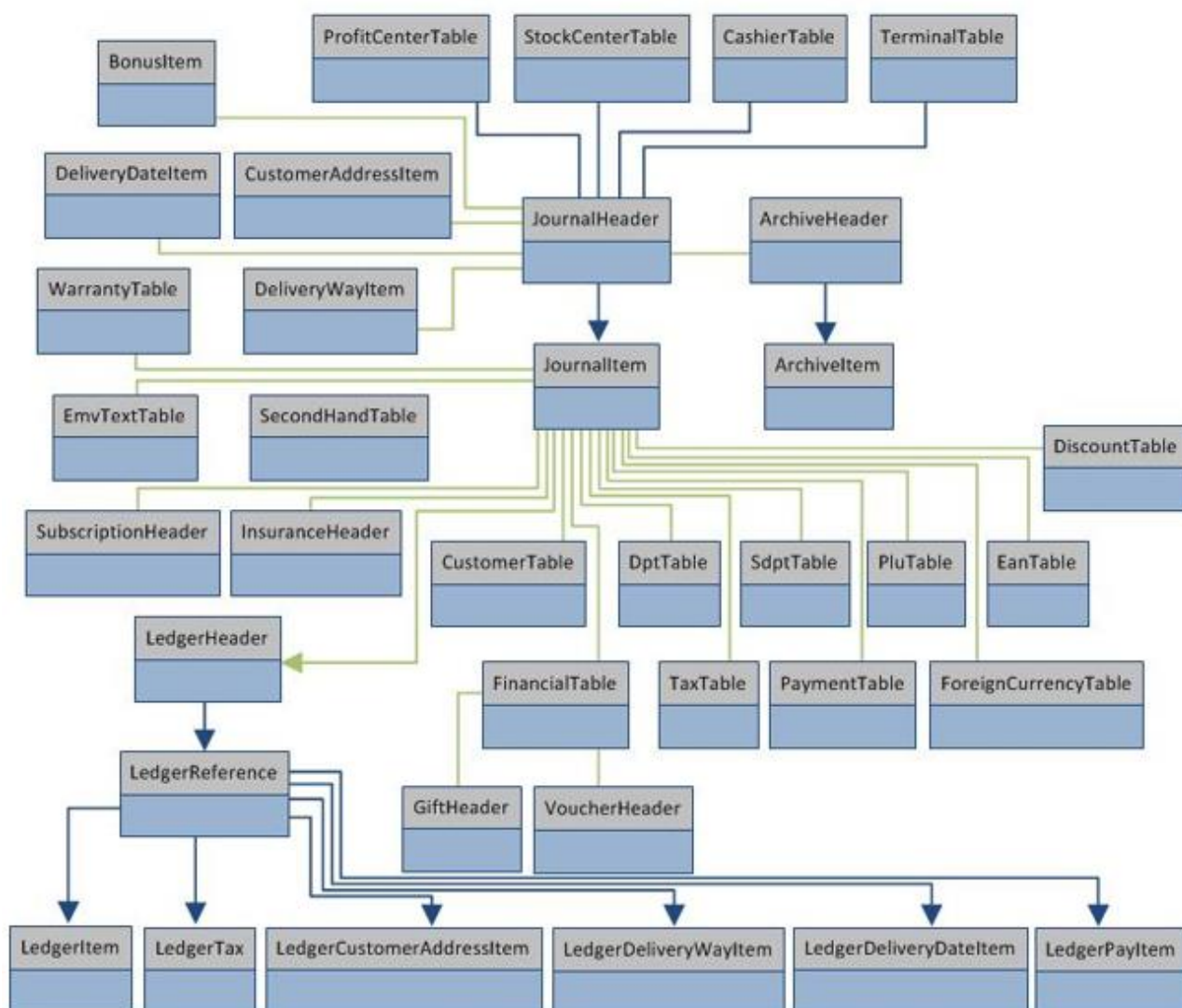

WINPOS MEGASTORE – DATA RELATIONSHIPS

CASHIER

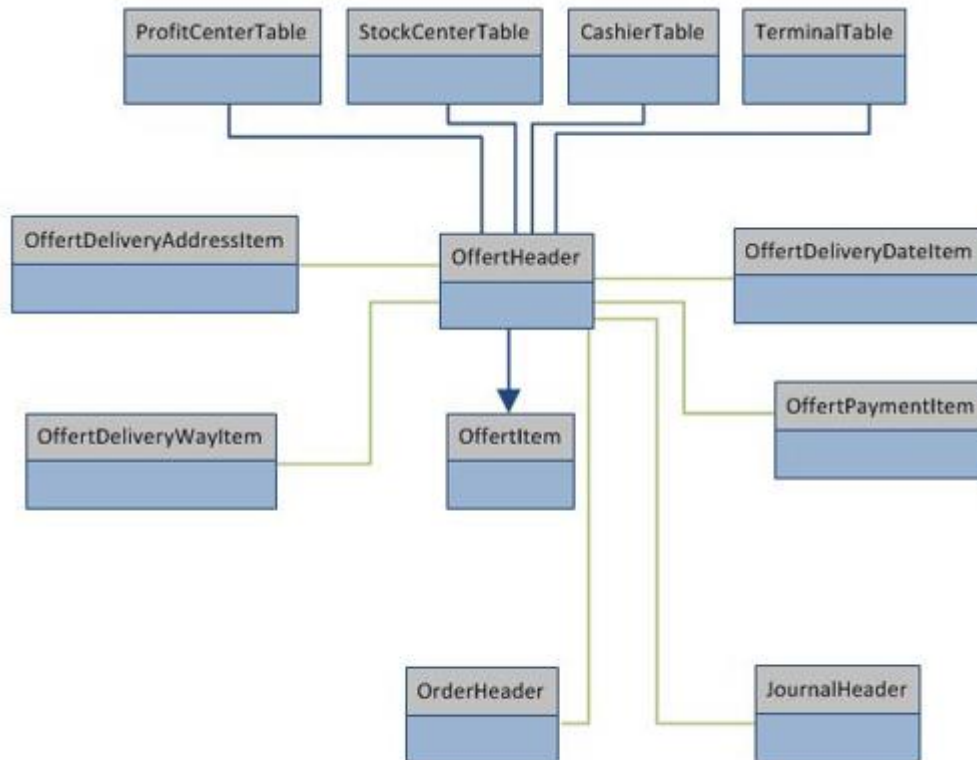Cashier related data is stored in the main register database table called "CashierTable". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.

Sales statistics are created based on the Electronic Journal Items stored related to Electronic Journal Headers linked to Cashier number. Cashier data access is allowed from the BackOffice application.
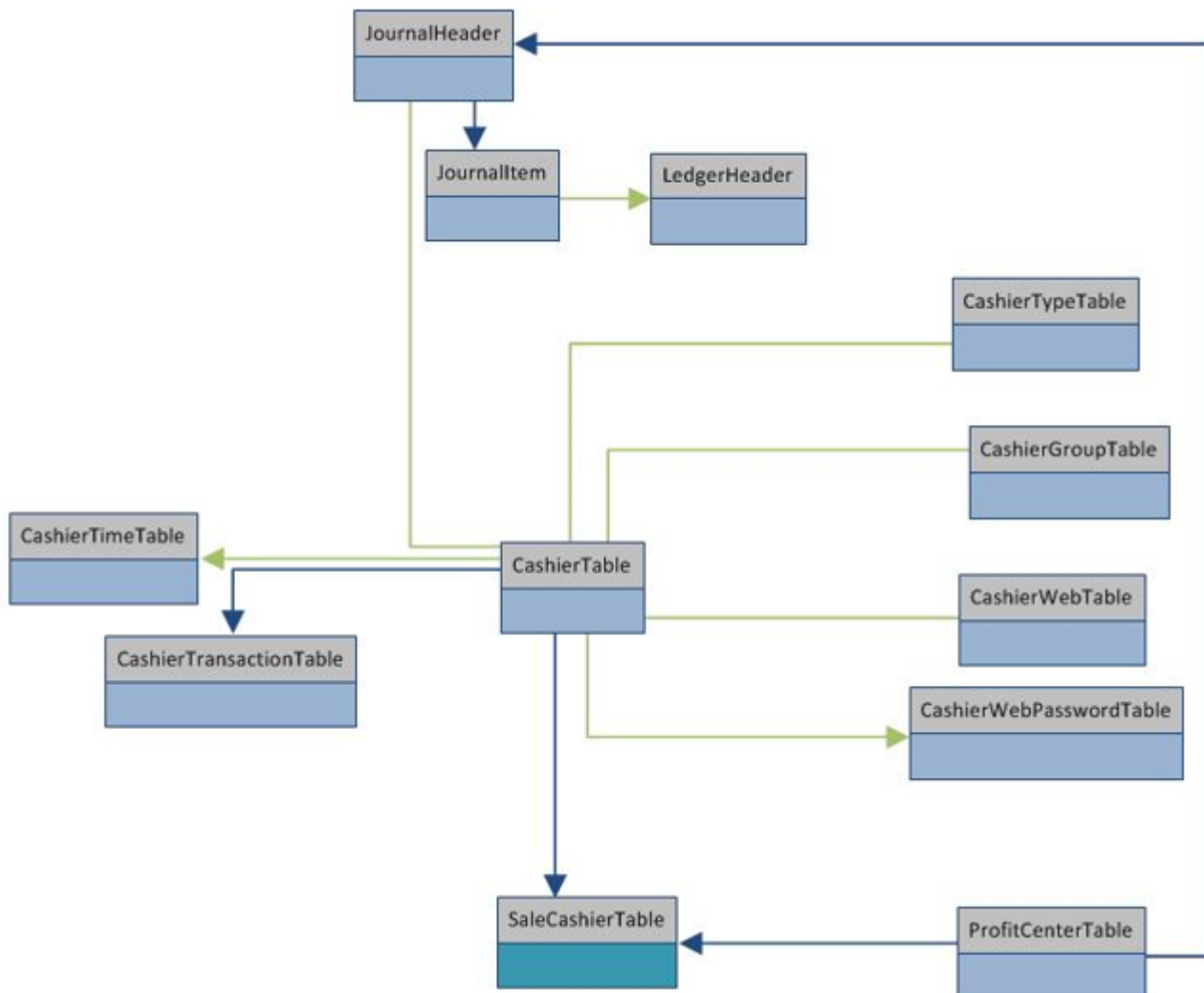
CUSTOMER

Customer related is stored in the main register database table called "CustomerTable". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table. Sales statistics are created based on the Electronic Journal Items stored related to Electronic Journal Headers linked to Customer ID. Customer data access is allowed from the BackOffice application and the REG-application.
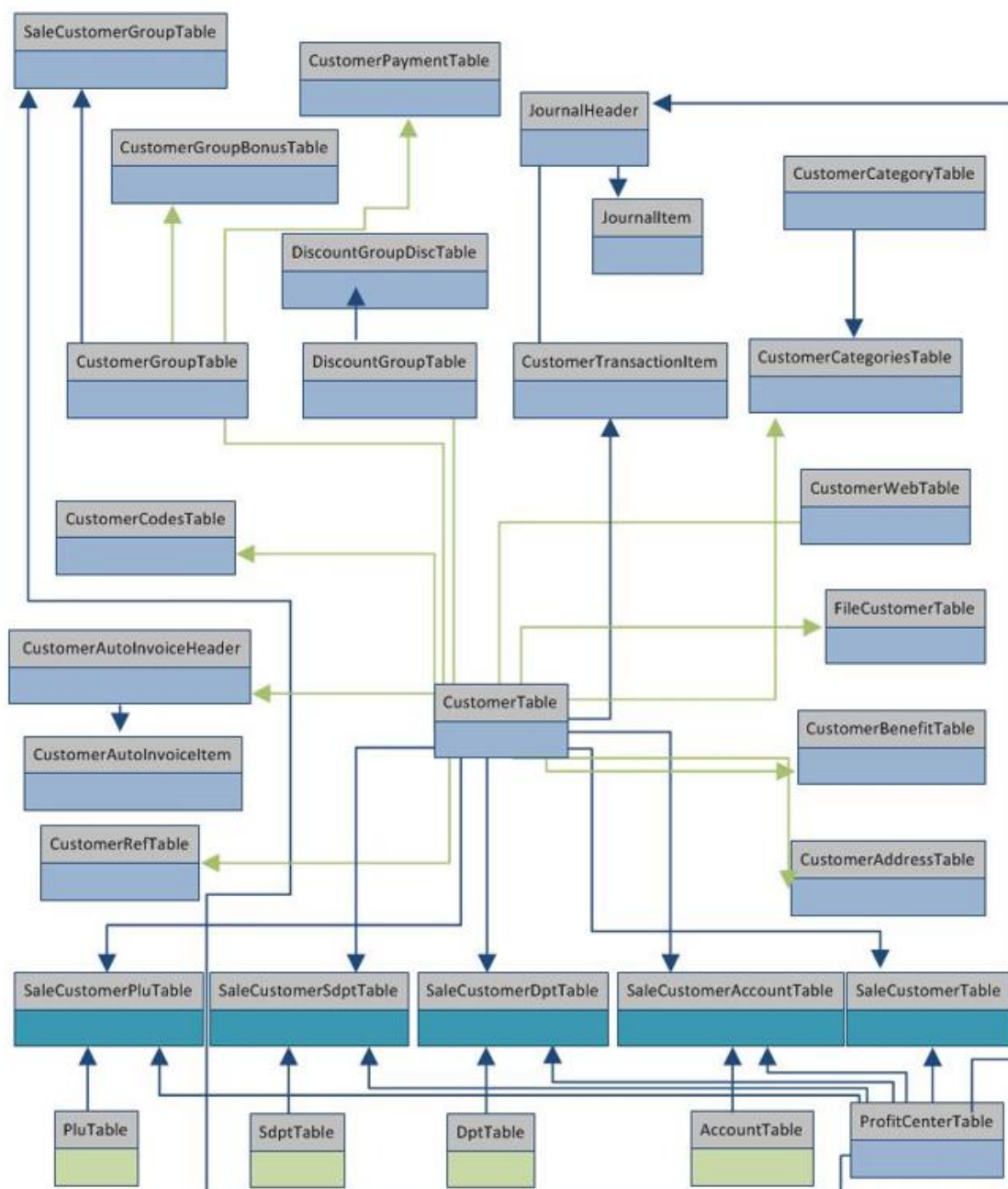
RECEIPT

Receipt related data is stored in the main register database table called "JournalHeader". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.
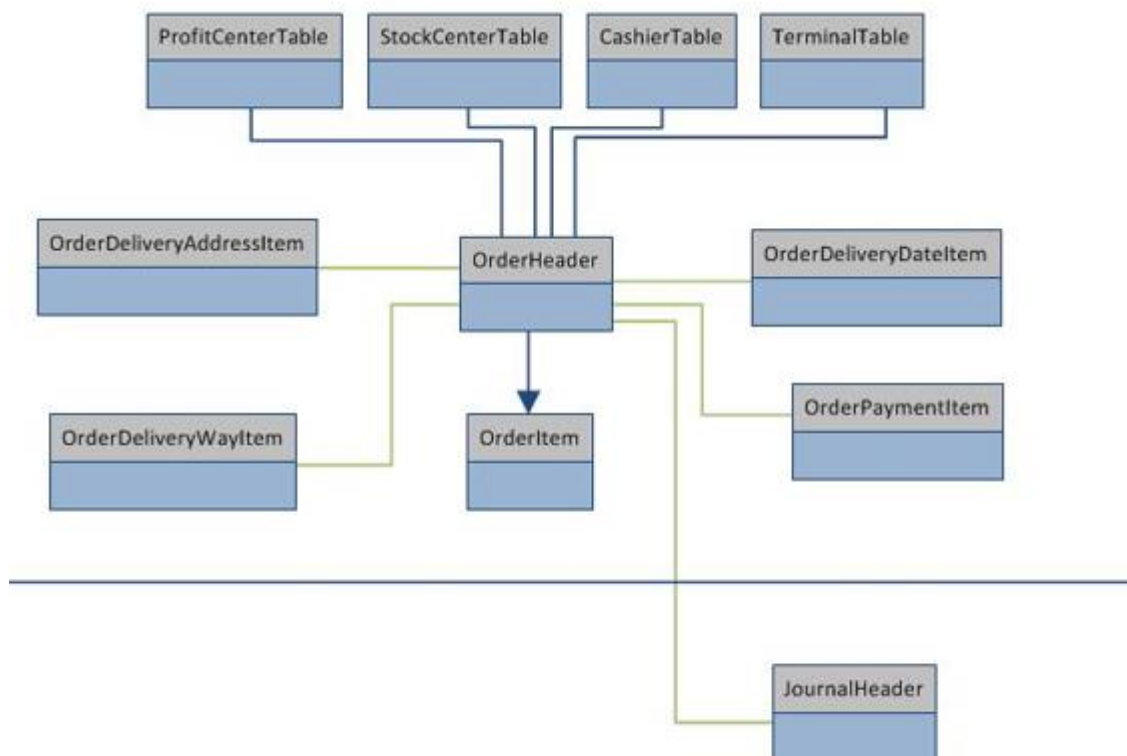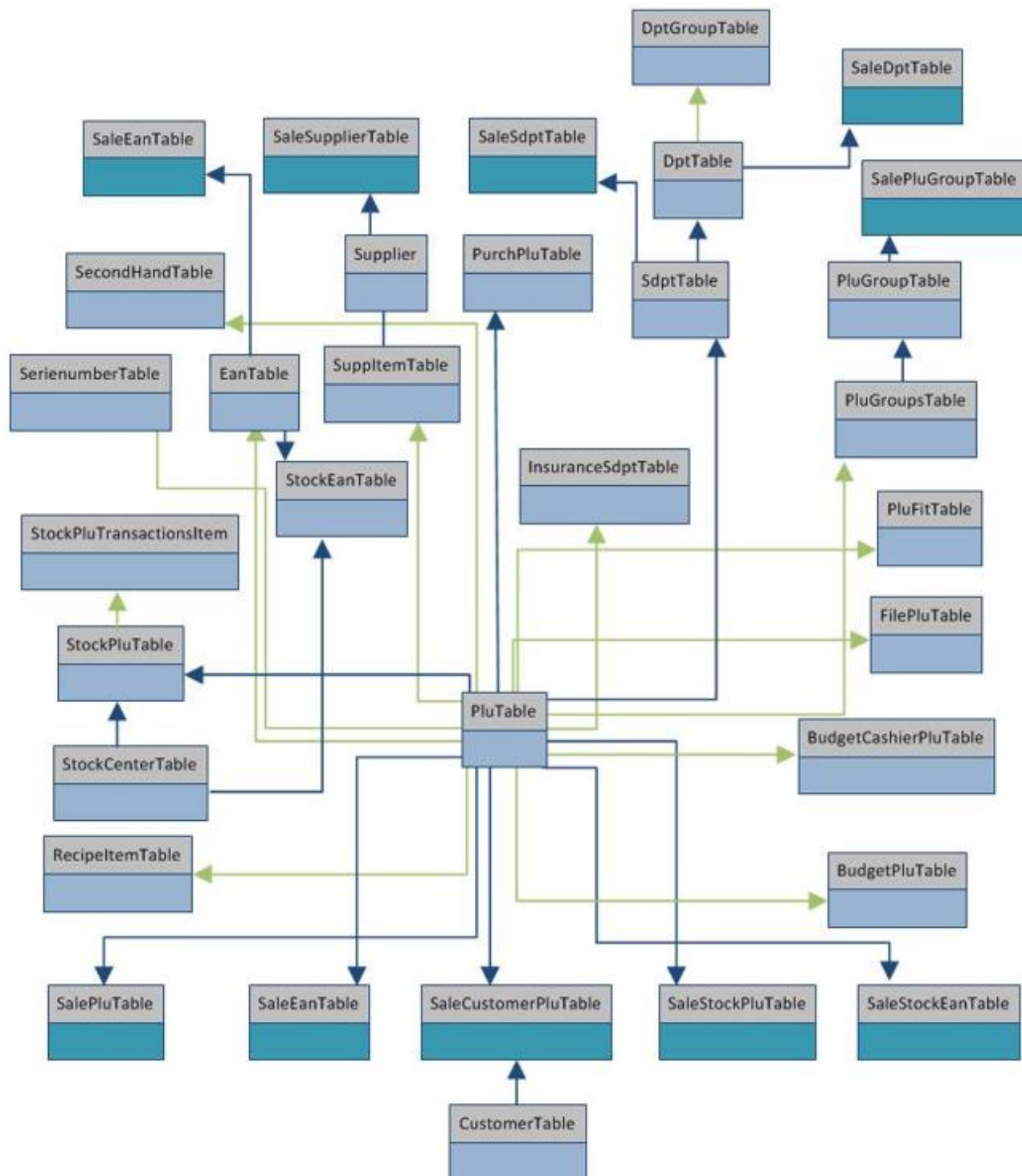
CUSTOMER OFFERT

Customer offer related data is stored in the main register database table called "OffertHeader". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.

CUSTOMER ORDER

Customer order related data is stored in the main register database table called "OrderHeader". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.
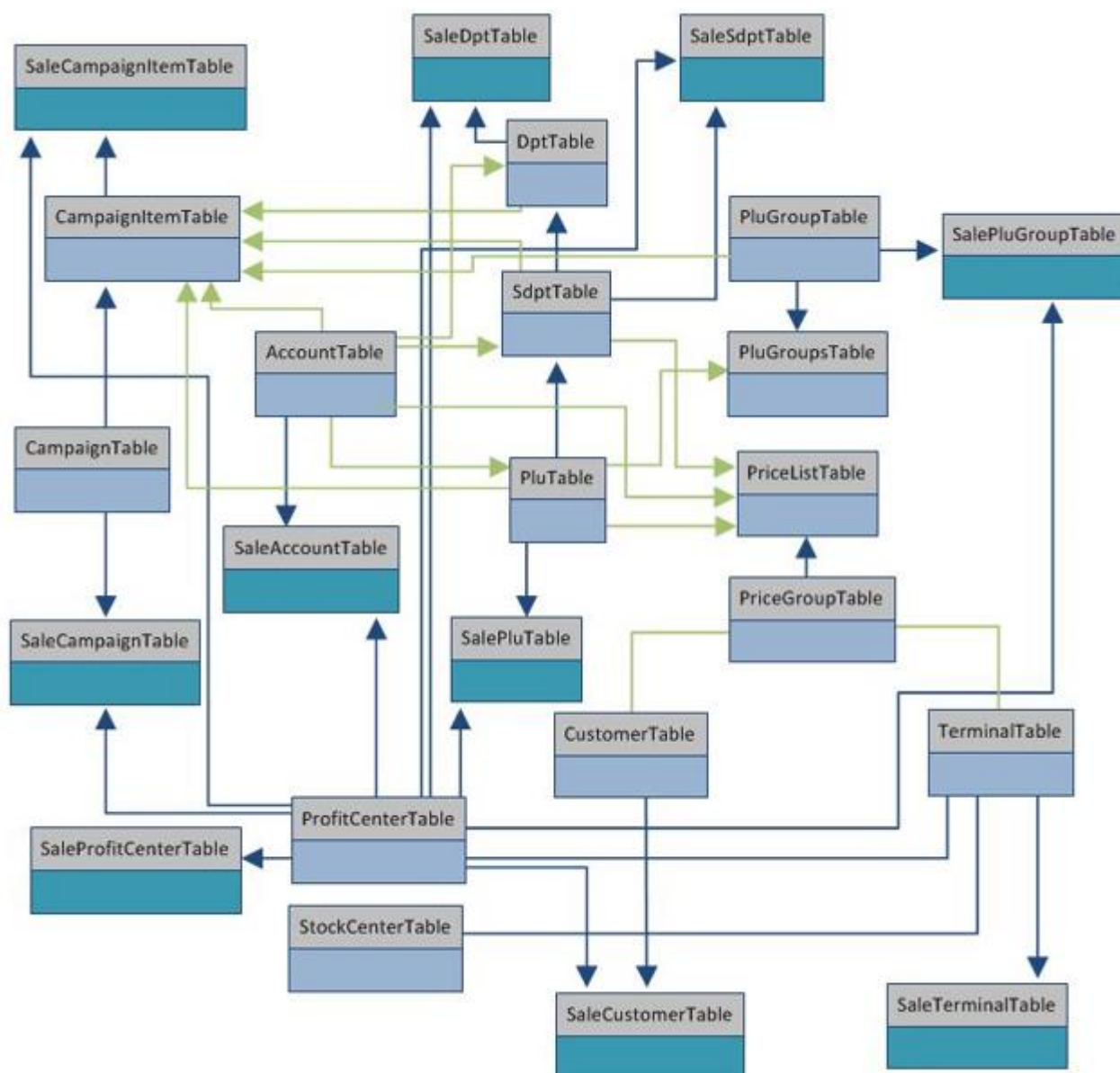
ARTICLE

Article related data is stored in the main register database table called "PluTable". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database
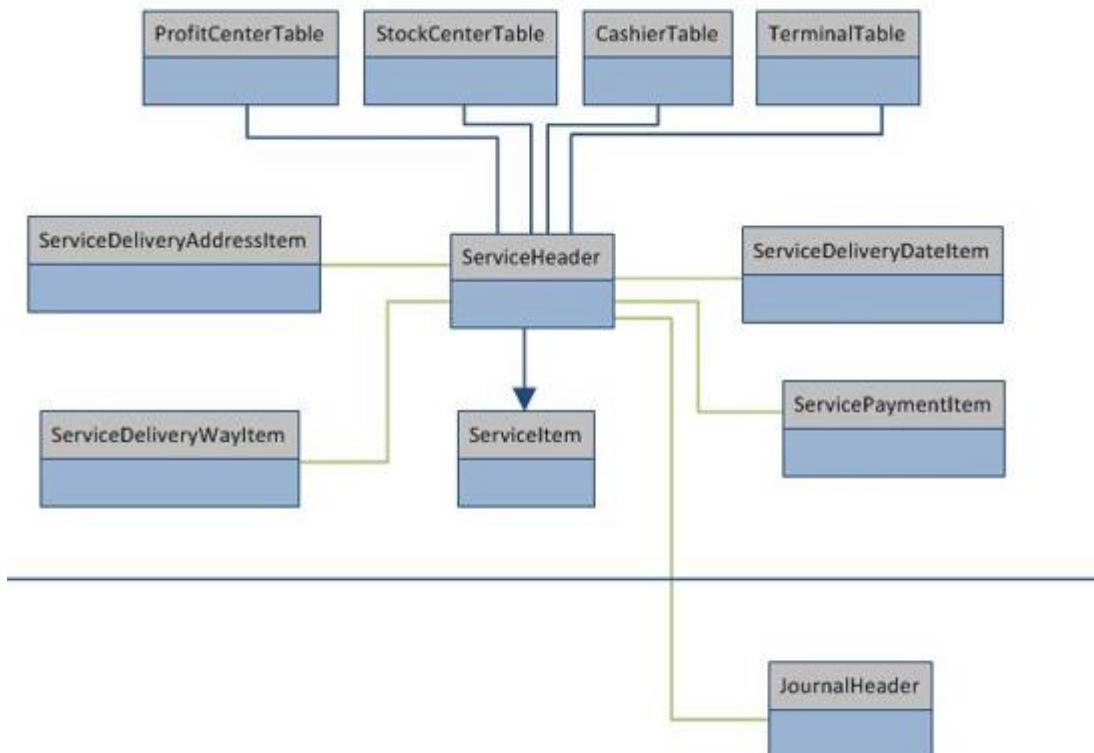
PRICE LIST

Price list related data is stored in the main register database table called "PriceListTable". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.

CUSTOMER SERVICE

Customer service related data is stored in the main register database table called "ServiceHeader". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.

SUPPLIER

Supplier related data is stored in the main register database table called "SupplierTable". As shown on the diagram, the data relationship is either "one to one" or "one to many" based on the structure of the corresponding database table.
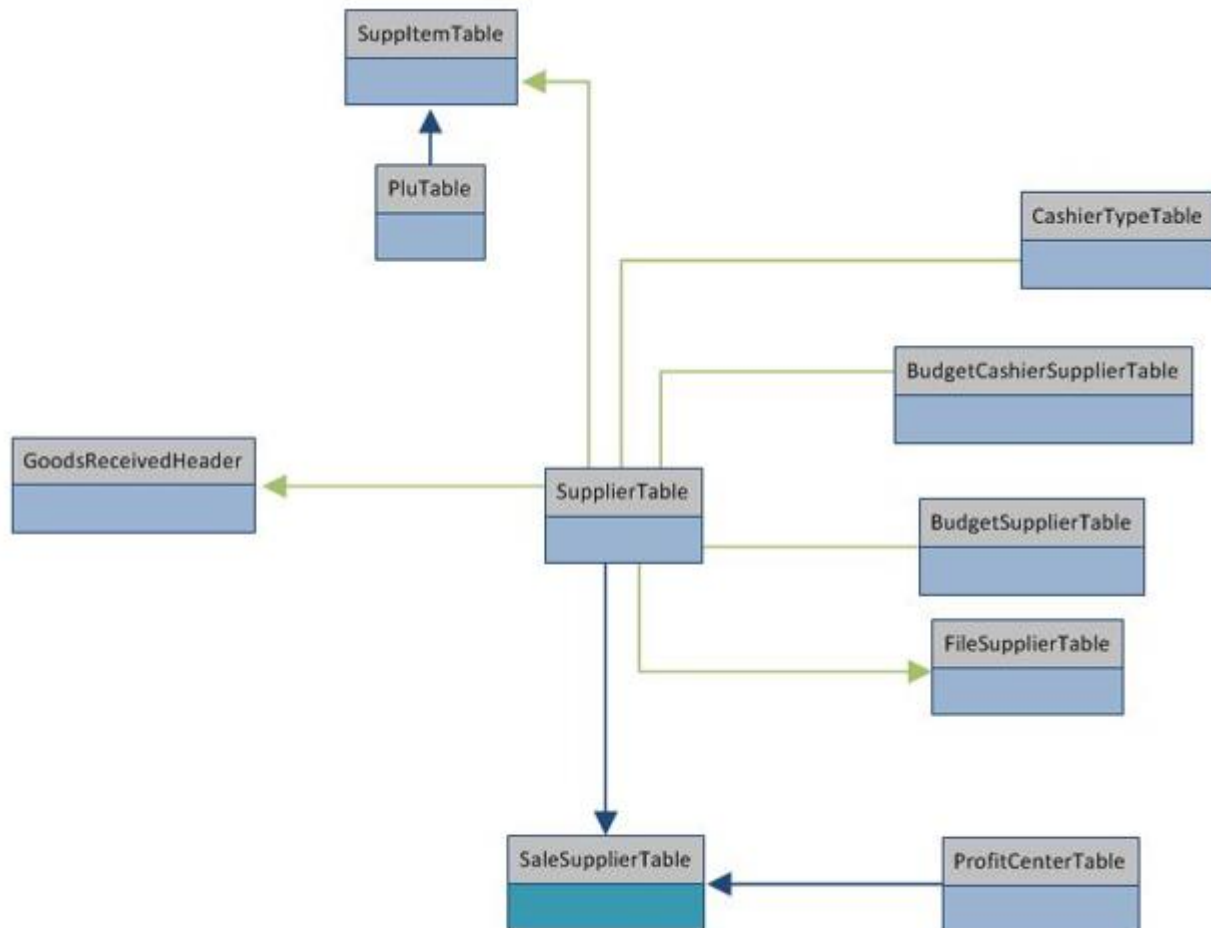
VERSION HISTORY

1	1.1.2016
1.1	1.5.2017
1.2	1.4.2018
1.3	19.12.2018
1.4	4.1.2019