Documentation Catering Point Of Sale. (POS)

						Barcodescan	8002000005124	
H3-1	H3-2	Н3-3	нз			N	lumber + 1 🚊	Information
				1	number:		n o	
Н3-4	Н3-5	Н3-6	Here your own logo	1 Cor	nputervo inter Ca	eding	67.90 ¹ 56.78	Printing
нз-7	нз-8	нз-9	^	1 DDI	rddisk S 03 Ram 2	x 4GB	86.90 71.90	Big Display
				Total	incl. V	AT	372.91	
H3-10	Н3-11	H3-12		1	2	3	TRANSFER PAYED	Open/Chang Tables/Seats
-				4	5	6		
							372.91	Select
H3-13	H3-14	H3-15		7	8	9	400	Client
			300	0		DEL	REFUND	
H3-16	H3-17	H3-18	+			and here the	27.10	Exit
					TRANSFE	R DATA - PAY	ING	

Screenshot mainscreen.

Point of Sale Catering

Custom daily operations

The system detects if a logon -, product - or a client barcode is scanned.

When no logon is established processing is blocked.

The red sign in the notification bar above the display is showed.

By valid logon the notification bar shows a green sign.

The logon is invisible with scanning.

When the logged employee logs the barcode a second time, the employee is logged out. When another employee logs his barcode, the logon is switched towards this employee.

The normal operation starts with logon by barcode.

When customers arrive, the employee push the button "Open Table/Change Tables/Seats" The table management screen is displayed:

Table 01-1 Clientnr 2 Serving: Tess	Table 01-2 Clientnr 2 Serving: Tess	Table 02-1	Table 02-2	Table 03-1	Table 03-2	Table 04-1 Clientnr 7 Serving: Ellie	Table 04-2 Clientnr 7 Serving: Ellie	Table 05-1 Clientnr 7 Serving: Ellie	Table 05-2	Switch E	mployee
Table 06-1	Table 06-2	Table 07-1	Table 07-2	Table 08-1	Table 08-2	Table 09-1	Table 09-2	Table 10-1	Table 10-2	Clo	se
Table 11-1	Table 11-2 Clientnr 4 Serving: Iris	Table 12-1 Clientnr 4 Serving: Iris	Table 12-2 Clientur 4 Serving: Iris	Table 13-1	Table 13-2	Table 14-1 Clientnr 1 Serving: Sandra	Table 14-2 Clientnr 1 Serving: Sandra	Table 15-1	Table 15-2	Refi	MIN .
Table 16-1	Table 16-2	Table 17-1	Table 17-2	Table 18-1	Table 18-2	Table 19-1	Table 19-2	Table 20-1	Table 20-2	Ap Se	
Table 21-1	Table 21-2	Table 21-3	Table 21-4	Table 22-1	Table 22-2 Clientnr 2 Serving: Tess	Table 22-3 Clientnr 2 Serving: Tess	Table 22-4	Table 23-1	Table 23-2	Table 23-3	Table 23-
Table 24-1	Table 24-2	Table 24-3	Table 24-4	Table 25-1	Table 25-2	Table 25-3	Table 25-4	Table 26-1	Table 26-2	Table 26-3	Table 26-
Table 27-1 Clientnr 3 Serving: Thilda	Table 27-2 Clientnr 3 Serving: Thilda	Table 27-3 Clientnr 3 Serving: Thilda	Table 27-4 Clientnr 3 Serving: Thilda	Table 28-1	Table 28-2	Table 28-3	Table 28-4	Table 29-1 Clientnr 6 Serving: Liesje	Table 29-2 Clientnr 6 Serving: Liesje	Table 29-3 Clientnr 6 Serving: Liesje	Table 29-
Table 30-1	Table 30-2	Table 30-3	Table 30-4	Table 31-1	Table 31-2	Table 31-3	Table 31-4	Table 32-1	Table 32-2	Table 32-3	Table 32-
Table 33-1	Table 33-2	Table 33-3	Table 33-4	Table 34-1 Clientur 5 Serving: Dirk	Table 34-2 Clientur 5 Serving: Dirk	Table 34-3 Clientnr 5 Serving: Dirk	Table 34-4 Clientnr 5 Serving: Dirk	Table 35-1 Clientnr 5 Serving: Dirk	Table 35-2 Clientnr 5 Serving: Dirk	Table 35-3	Table 35-
					Notifica	tion Bar					

Each button on the screen represents a seat. The green buttons represents tables paired with two seats. The brown buttons represents tables with 4 seats. In total 100 seats are available. By clicking the buttons the seats are checked as occupied. For groups of customers every combination of tables and seats is possible. For conformation chose pulldown menu "Open new table" (default choice) and push button "Apply Seats". With this "Open new table" choice more arrangements can be made after each other. Push the seats and push the button "Apply seats" and repeat this for the next client or group of clients.

By applying a popup is showed, asking to print a client barcode. This barcode serves the purpose to switch fast between clients with the printed barcode.

During the stay, it's possible to add or to free up seats by leaving or arriving members of a group. When no costs are made it it's possible to remove all seats.

Establishe this with menu choice "Change table client <number>, with the client number who booked the arrangement. Only customers linked by the concerned employee are showed in the choice fields. For every client combination from the concerning employee a line is added in the menu choices.

When costs are made the last seat cannot be removed in this screen. It will be removed if the payment is done in the mainscreen.

On the buttons for the seats, the table and seatnumber, clientnumber and serving employee is showed.

The buttons with there belongings are visible for every employee, but only operable for the employee who established the linking.

With the "Switch Employee" button it is possible to transfer the service to another employee by end of working time or interim absence.

If al buttons for the seats are confirmed, push the "Refresh" button to make the changes visible, and push the "Close" button to leave the tablemanagement screen. Next push the "Select Client" button to select the customers to serve, for fast selecting or switching between clients use the barcode from the concerning client. Here only the linked clients for the concerning employee can be chosen.

After this steps has been accomplished, it it possible to choose products with the productbuttons, or scaning products. Default a number of 1 is chosen. If more of the same products are required, use the spinbox to change the number (1 towards 99) before scanning or pushing a button. After scanning of each product or pushing a product button the number of the spinbox is reset to 1. For return bookings a little button before the number is provided. Push this checkable button before operating and the numbers will be operable from -1 towards -99. After each operation the spinbox will been reset to it's oriniginal state, to avoid wrong bookings.

The product buttons are organized as follows:

The 10 maingroups with the double arrows are accessable by pushing the double arrowbuttons up or down.

Here a picture of the maingroup is presented between the arrowbuttons. With the button above the logo, 5 subgroups of each maingroup can be chosen. Left on the screen 18 productbuttons can be pushed, possibly preceded with the right number if more then 1 product required. The consumptions and their prices are showed in the little display. Also the total amount of the consumptions is showed. For a clearer total overview push the button "Big Display"

After serving the client, the next client can be chosen, with the barcode, or by the button "Select Client"

If the client belongs to another employee, first switch the employee with the barcode and next scan the client code or choose with button "Select client"

Booking additional products:

With the selected client it is possible to book additional products. These products (for instance sugar, milkcups, potatoes, vegetables, meat and so on) are not direct attributable to a customer but booked on groupitems as additional costs. The transactions must be established if the products are picked from the storage.

If a client will pay the bill, then chose the concerning client, print the receipt if desired, with the "Printing" button, by cash paying use the modest calculator on the screen to fill in the cash payed by the customer in the CASH field and push the "REFUND" button. The change will be calculated and showed in the CHANGE field, taking into account the rounding, which is set in advance. The customer also can pay by a pin transaction. By typing a wrong number correct with "DEL" button. After payment is done press the "TRANSFER PAYED" button to make the necessary bookings and free the tables / seats for this customer. If no costs are made, it's also possible to make a "null" booking to free tables and seats on the main screen.

A notification bar is visible for displaying several notifications during operation. A INFO button is available for information of the program.

The following documentation concerns description of the backend for administration reasons and is accessable with level 2 by pushing the "Administration" button.

The structure of the adminmenu:

Employees submenu

New employee View / change employee Articles submenu Insert new articles

View / change articles Booking loss articles View loss articles

Article-groups lines – view / change

Purchase submenu Collecting purchases

Manual ordering

Unknown supplier ordering Receiving / processing deliveries

Ordering suppliernumber suppliername

Ordering suppl...
To order yet - view
Ordered – view
All orders – view
Delivered orders - view

Suppliers submenu Suppliers new

Suppliers view / change Invoices suppliers /paying

Imports submenu Import new articles

Import price changes Import expired articles Import deliveries articles

Groupbuttons grouptext /color

Payments view / pay

Parameters view / change

Sales – view

Additionals view

Turnover submenu – view Daily gross turnover

Monthly gross turnover Yearly gross turnover

Reprint purchase orders

Reprint sales receipts

We will describe the menuitems with their purpose and possibilities.

Employee submenu:

With the logon from barcode accesslevel 2 the "Administration" button is activated. With this button and submenu Employees it is possible to generate other barcodes for logon purposes.

The barcodefield will be generated as 5 random digits by the program. (The first 2 digits starts with 24 the 8th digit is a check number). The program will check and correct for duplicates. Access is default set on level 1, change if desired. If accesslevel is set to 0 processing is blocked for the employee.

The first name, last name and callname of the employee must be inserted.

The callname field will be printed on the saleslip, it's also saved in the sales table.

The barcodelabel is saved in folder ./Barcodes/Employees/ after inserting a new employee, a barcode can be printed for logon in the menuchoice View / change employee with the print button. Before printing remove the number under barcode for security reasons and replace by logon name. (For instance use application Paint)

By the menuchoice "View / change employee" click the first field of the list with employees to select.

Articles submenu:

General remarks:

It is important to pay particular attention to the completion of the fields, for reasons of clarity and stock control.

Always fill in description (for purchase) and short description (for receipts and display text), and surely in the start-up phase the order-size and minimum stock. When the system builds a history of usage, the system calculate the items minimum stock and order-size

In the table articles, the columns minimum stock, category, order_size, order_status, order_balance, annual consumption1 and annual-consumption2 are available for stock control.

We will explain the purpose of these columns.

The minimum_stock column is used for purchasing, if item_stock + order_balance < minimum_stock a orderline is generated. These lines are generated in the "Purchase submenu" Collecting purchases.

If the purchase orderlines are collected the field order_status is set to False, so no further orders are generated until the products are delivered. The order-balance is increased with the ordered number. After delivery the field order_status is reset to True, so the product is released for calculations of stock, order_balance is reduced with the delivered number.

The column category determines the delivery time. The category runs from 3 days to 1 year in 8 steps and 1 category daily fresh products. The latter is outside the supply system and must be manual handled.

The calculation of the items is established by the Camp formula:

Camp formula: $Q = \sqrt{2DF/HP}$

Stands for:

Q = Quantity

· D = Demand / year (table articles)

• F = Fixed Costs (order costs conversion costs) (from table params)

• H = Stock costs as a percentage of the price (from table params)

 \cdot P = Price of the product (from table articles)

The annual consumption is counted by the article usage in a year.

Even year annual consumption 1

Odd year annual consumption 2

By starting of a new year the oldest year of annual consumption is set to 0, so the counting restarts, with this column, so always the last year is preserved for calculation of stock.

You can influence the minimum stock and order size by changing the paramID 5 and 6 (Ordercosts and surcharge for interest and storage)

Columns description, short description, selling price and selling contents and their usage:

The column description is used for the product purchase. For instance a bottle Chardonnay white wine 2007 of 0.75 liter. The short description can be in this case Glass white wine. The item_price Euro 6.95. The selling_price 5.00 Euro (1 glass). The selling_price for the bottle 21.95. The selling_contents is in this case 0.15 for the glass, and for the bottle 1. The selling by glass can be established with a button coupled to barcodenumber and with 0.15 as selling_content. With selling a bottle the item can be scanned or pushed by button or both.

Articles:

By inserting articles 3 items are important. The checkbox manual, the checkbox additional and inserting articles generated or scanned.

The checkbox manual will be set, if the manager wants to control the ordersize. This is surely in the startup phase important. The orderlines will be generated, but the order-size can be adjusted. The checkbox additional must be set, when the products are not direct assignable to the customer. For instance cleaning products, sugar, milkcups, cookies, potatoes, vegetables, meat and so on. These products will be booked on the several article groups for further calculation.

By inserting articles it is possible to use a generated article by the system, or to use a scanned article product in the commercial range. The generated article is an EAN13 number starting with 28 (free, so no conflicts arise with commercial numbers), then 10 digits serial number and last a checksum number as a valitidy check. (usage for instance own products like maindish, desert, cup of coffee) When a commercial number is wanted the generated number can be overruled in the last field. Fill in all items, position the cursor in the last field and scan the product. The product is inserted without pushing the button, with the scanned code.

The other menu choices are for changing articles, booking loss articles, and view loss articles. Loss articles are divided in obsolete, warehouse differences, damaged or shelf life.

A thumbnail picture can be showed in the articles base poductlines. Place a picture as a png file 80 x 80 pixels in folder thumbs (use Paint for scaling and save as png) and set the path in the field thumbnail as ./thumbs/<name of picture> It is possible to make subfolders with picturegroups in the folder thumbs, for organise reasons.

Article-groups lines – view / change

The article-group lines are group classification of products. The group-lines are determined by the manager. Up to 19 lines filled lines will be used by the program in a top down menu. Click on the first field of the line from the list and change if desired.

Purchase submenu

Collecting orderlines.

This menuchoice iterates the whole table articles and generate based on contents of the fields item_stock, minimum_stock, order_balance, order_status and category the orderlines. The list is stored in the table purchase_orderlines, with the clientnumber if known and also indicated wether the orderline should be ordered manual.

Manual ordering

Represents the products marked as manual ordering in the database.

The menuitem opens a list of productlines.

Click on the 1st field of listitem to order, fill in the number of products to order and print the order.

Follow this procedure for the whole list.

The ordered number and date of ordering are stored in the table purchase_orderlines

Unknown supplier ordering

Represents the products with no supplier known in the articlebase.

The menuitem opens a list of productlines.

Click on the field of listitem to order, fill in the suppliernumber and print the order.

Follow this procedure for the whole list.

The ordered number and date of ordering and supplier are stored in the table purchase_orderlines. The suppliernumber is also stored in the articles table.

Ordering suppliernumber suppliername

These lines are represented by suppliernumber + suppliername

The ordering is realised as a collection per supplier.

To order push the Print /Order button on the list per supplier.

An orderlist per supplier is printed.

Follow this procedure for all lines in this range.

The ordered number and date of ordering and supplier are stored in the table purchase orderlines

Receiving / processing deliveries

This menuline calls all orderlines.

By clicking on the first field of the listed items a form is showed, where the delivered number can be processed. The field order_balance is reduced and the field order-status is reset in table articles The delivered number is added and date of delivery is stored in the table purchase_orderlines Thurdermore choices for viewing list are available for information.

Suppliers

Suppliers new

The zip field is not coupled with check tables, because so many variations over the world exists. A textform is included for country like requirements like VAT numbers, chamber of commerce numbers and so on (1000 positions possible)

Suppliers view / change

For changing items above.

Invoices suppliers /paying

These items are booked in table invoices after delivery.

The form includes a checkbox to check if invoice is received and approved to pay. The paydate is stored, the checkbox is disabled, the caption is changed in payed.

Imports

Imports are done by csv files. (most used import standard)

The separate item of the file field is default ',' and is stored as ascii code 44 in table params. Can be changed if the csv field gets another separator character.

The program determines if headings are present in the importfiles and skips the heading, if provided.

All the present files in the concerning folder will be treated in one go.

If the files are processed, they are moved to same subdirectory under ImportsDone.

Not imported files must be stored in folder ./forms/Imports under New, Prices, Expired and Deliveries for processing.

Import new articles

Articles that have to be added to the table articles

If errors occur – the errors are saved in a file catering_import.log in your home directory (Windows: /users/<username>,

Linux: /home/<username>)

Import price changes

Articles with changed prices. The item_price is changed in table articles.

If errors occur – the errors are saved in a file catering_import.log in your home directory (Windows: /users/<username>.

Linux: /home/<username>)

Import expired articles

These articles must be removed. The article records in this file are deleted from table articles.

If errors occur – the errors are saved in a file catering_import.log in your home directory (Windows: /users/<username>,

Linux: /home/<username>)

Import Deliveries articles

Number of delivered products is increased by item_stock in table articles, the order_status is reset to True and the order_balance is deducted by the delivered number.

In the purchase orderlines table the fields delivery and delivery date are updated.

Remark by imports:

It will be clear that imports are far more efficient then manual processing.

Soo it is worth the effort to ask your suppliers to operate with this importlists. Mind the layout of the files matches exactly.

Groupbuttons and productbuttons

For groupbuttons a menuitem is set.

A list of buttons is presented. Clicking on the first field of this list opens a groupbuttonform,

Insert or change the buttontext maximum 5 lines of 14 characters per line.

As administrator the buttonnumber and reference is showed on the button.

Besides the buttontext also the buttoncolor can be chosen. https://htmlcolorcodes.com/ is a site where it's very easy to chose the right color with a slider and a cross movable with your mouse.

You see the hex color right copy and paste in the color field of the buttonform, don't forget to add # before the colorcode.

If no colorcode or wrong code is chosen the default color is applied #FFFFFF0.

Productbuttons (900)

As administrator the buttons change there text 1st line buttonnumber, 2nd line reference and 3thrd line barcodenumber if applied. To change, push the button.

A list of products is showed, browse to your desired product for the button. By clicking on the first field the buttonform of the clicked button opens.

Insert or change the buttontext maximum 4 lines of 14 characters per line.

Here it's possible to place a bullet on the 5th line for favorite products, by checking the checkbox.

Besides the buttontext also the buttoncolor can be chosen. https://htmlcolorcodes.com/ is a site where it's very easy to choose the right color with a slider and a cross movable with your mouse.

You see the hex code of the chosen color on the right above on the site, copy and paste the color in the field of the buttonform, don't forget to add # before the colorcode.

If no colorcode or wrong code is chosen the default color is applied #FFFFFF0.

For the productbuttons it may be recommended to preserve the first page of buttons for most selled items.

Payments – view / pay

This are the payments for instances, for instance VAT payments.

In the list click first field and then in the opened form check the checkbox to book the payment.

The paydate is saved in the table payments.

The list is also for viewing purposes.

Parameters view / change

These are the parameters for the system. To change click the first field in the list.

Parameters:

VAT low: as a factor presented percentage change if desired

VAT high: as a factor presented percentage change if desired

VAT zero is hard coded in the program as it's always 0

CSV separator as ascii code (default 44) for import files, change if csv file separator change.

EVEN/ODD YEAR leave alone, for it is handled by the system.

ORDERCOSTS PURCHASE costs of administration and handling of 1 order – change if desired STORAGE SURCHARGE as a factor presented percentage for surcharge stock (costs for storage and loss products)

The last two items influence also the minimum-stock and order-sizes.

CHANGE rounding. The rounding of cash payments by checkout sell.

Sales – view

The viewing list of the realized sale orders.

Additionals view

The viewing list of the additional products, products not directly attributable to a customer.

Turnover submenu – view

Daily gross turnover

Viewing daily total gross turnover + daily total VAT

Insert yyyy-mm-dd in the searchfield,

Monthly gross turnover

Viewing monthly total gross turnover + monthly total VAT Insert yyyy-mm in the searchfield

Yearly gross turnover

Viewing yearly total gross turnover + yearly total VAT Insert yyyy in the searchfield.

Reprint purchase orders

Give a list of all produced purchase orders. Pick one and print.

Reprint sales receipts

Give a list of all sales. Pick one and print.

For testing is a barcode sheet with logon codes provided in folder ./Barcodes/employees/ The barcodes for clients starts with 26 and are stored in folder ./Barcodes/clients/ Some Barcodes for products are stored in folder ./Barcodes/Articles

Three databases are provided in the installation folder.

One partly filled database as default,

One empty database to fill from scratch with your own propriety items.

One filled database with approximily 38000 items for testing purposes, but not assignable to catering.

Database structure catering:

catering=	=# \d		
	List of relation	ons	
Schema	Name	Туре	Owner
	· · · · · · ·	+	·
public	additional	table	postgres
public	article_grouplines	table	postgres
public	articles	table	postgres
public	buttons	table	postgres
public	clients	table	postgres
public	employees	table	postgres
public	groupbuttons	table	postgres
public	invoices	table	postgres
public	loss	table	postgres
public	order_lines	table	postgres
public	params	table	postgres
public	payments	table	postgres
public	purchase_orderlines	table	postgres
public	sales	table	postgres
public	suppliers	table	postgres
public	tables_layout	table	postgres

Column	Туре	Collation	Nullable	Default
	+	t	h	
addID	integer		not null	
barcode	character varying(13)			''::character varying
description	character varying(13)			''::character varying
item_price	double precision			0
number	double precision			0
item_unit	character varying(16)			''::character varying
article_group	character varying(40)			''::character varying
location warehouse	character varying(8)			''::character varying
ndexes:		3		

catering=# \d ar	rticle_grouplines Table "public	.article_grou	uplines"	
Column	Туре	Collation		
lineID grouplinetext Indexes:	integer character varying(40) puplines_pkey" PRIMARY K	 	not null	

Column	Туре	Collation	Nullable	Default
parcode	character varying(13)		not null	
description	character varying(50)			''::character varying
item_price	double precision		1	0
item_stock	double precision		I	0
item_unit	character varying(16)	I	1	''::character varying
ninimum_stock	double precision			0
order_size	double precision			0
location_warehouse	character varying(8)	Ì	ĺ	''::character varying
article_group	character varying(40)	i	ĺ	''::character varying
humbnail	character varying(50)	į	İ	''::character varying
ategory	integer	į	İ	0
order balance	double precision	İ	İ	0
order_status	boolean	İ	İ	true
nutation_date	character varying(10)	İ	İ	''::character varying
annual consumption 1	double precision	İ	İ	0
annual_consumption_2	double precision	ĺ	İ	0
/AT	character varying(4)	İ	İ	'high'::character varyin
short descr	character varying(15)	İ	j	''::character varying
selling price	double precision	İ	j	0
selling contents	double precision	į	İ	0
additional	integer	İ	İ	0
supplierID	integer	İ	İ	i
ordering manual	integer	İ	İ	0
ndexes:		•	•	• *********
"barcode_pkey" PRI	MARY KEY, btree (barcode))		
"barcode idx" btree	(barcode)			

Column	Туре	Collation	Nullable	Default
ttonID	integer		not null	
ttontext	character varying(60)			''::character varying
rcode	character varying(13)		not null	''::character varying
ference	character varying(5)			''::character varying
cent	integer			0,
_color	character varying(7)			'#FFFFF0'::character varyi
ference	character varying(5) integer		not null	''::character varyin 0

catering=#	\d clients						
	Table	"public.clie	ents"				
Column	Туре	Collation	Nullable	Default			
	+	·	+				
clientID	integer		not null				
employee	character varying(20)			''::character varying			
barcode	character varying(8)			''::character varying			
Indexes:							
"client	"clients pkey" PRIMARY KEY, btree ("clientID")						
Referenced	by:						
TABLE '	"order_lines" CONSTRAINT	"clientID_fl	key" FOREIG	N KEY ("clientID") REFERENCES clients("clientID")			

Туре	Collation	Nullable	Default
character varying(8)	+ 	not null	
character varying(20)	į i		''::character varying
character varying(30)	ĺ		''::character varying
integer	į i		1
character varying(20)	ĺ		''::character varying
			,
	character varying(8) character varying(20) character varying(30) integer	character varying(8) character varying(20) character varying(30) integer	character varying(8) not null character varying(20) character varying(30) integer

catering=# \d gro	upbuttons			
	Table "¡	public.group	outtons"	
Column	Туре	Collation	Nullable	Default
	!	+		
groupID	integer		not null	0
reference	character varying(2)			''::character varying
buttongrouptext	character varying(60)			''::character varying
bg color	character varying(7)			'#FFFFF0'::character varying
Indexes:	•	• 1		· · · · · · · · · · · · · · · · · · ·
"groupbuttons	_pkey" PRIMARY KEY, btree	e ("groupID"))	

Column	Туре	Collation	Nullable	Default
nvoiceID	integer	† 	not null	
arcode	character varying(13)	ĺ		''::character varyi
escription	character varying(50)	İ		''::character varyi
elivery	double precision	I		0
tem_price	double precision	1		0
upplierID	integer	I		0
rderlineID	integer	1		0
aydate	character varying(10)	l		''::character varyi
ookdate	character varying(10)	I		''::character varyi
tem_unit	character varying(16)	I		''::character varyi

catering=#	\d loss							
Table "public.loss"								
Column		Collation						
	integer		not null	+ 				
	double precision			0				
	character varying(22)		l	''::character varying				
	character varying(10)							
Indexes:	character varying(13)	lel.	M					
	_pkey" PRIMARY KEY, btre	e ("lossID")					
"fki_ba	rcode_fkey" btree (barco	ode)						
	constraints:							
"barcoo	le_fkey" FOREIGN KEY (bar	code) REFER	ENCES artic	les(barcode)				

Column	Type			
		Collation	Nullable	Default
D	integer		not null	
arcode	character varying(13)			''::character varying
escription	character varying(40)			''::character varying
hort_descr	character varying(15)			''::character varying
umber	double precision			0
tem_price	double precision			0
ub_total	double precision			0
ub_vat	double precision			0
utation_date	character varying(10)			''::character varying
allname	character varying(20)			''::character varying
lientID	integer			0
dexes:				
"tables_acco	unts_pkey" PRIMARY KEY,	btree ("ID")		

catering=# \d params						
Table "public.params"						
Column	Туре	Collation	Nullable	Default		
value Indexes:	integer character varying(20) double precision nID_pkey" PRIMARY KEY, b	ĺ	not null ID")	 ''::character varying 0		

Table "public.payments"						
Column	Туре	Collation	Nullable	Default		
payID	integer		not null			
kind	character varying(25)			''::character varying		
amount	double precision			0		
bookdate	character varying(10)			''::character varying		
paydate	character varying(10)			''::character varying		
instance	character varying(25)			''::character varying		
accountnumber	character varying(25)			''::character varying		
ovorderID	integer			0		
basis	double precision			0		
ndexes:						
"pavID pkev"	" PRIMARY KEY, btree ("pa	avID")				

Column	Type	Collation N	Nullable	Default
rderlineID	integer	n	not null	
arcode	character varying(13)	i i		''::character varyir
escription	character varying(50)	İ		''::character varying
tem_price	double precision	İ	İ	0
tem_unit	character varying(16)	İ İ	Ì	''::character varyi
tem_stock	double precision	į į	i	0
inimum_stock	double precision	i i	ĺ	0
rder_size	double precision	i i	ĺ	0
rdering_manual	integer	i i		0
upplierID	integer	į į	i	0
ookdate	character varying(10)	i i	j	''::character varyi
rdered	double precision	i i	i	0
rder date	character varying(10)	i i	i	''::character varyi
elivery	double precision	i i	i	0
elivery date	character varying(10)	į į	i	''::character varyi

catering=# \d sa	les			
	Table	"public.sales	;"	
Column	Туре	Collation	Nullable	Default
salesID receiptnumber barcode description number item_price sub_total sub_vat callname mutation_date short_descr clientID Indexes: "ID_pkey" PR	integer integer character varying(13) character varying(40) double precision double precision double precision double precision character varying(20) character varying(10) character varying(15) integer EIMARY KEY, btree ("sale		not null	0 ''::character varying ''::character varying 0 0 0 0 '::character varying ''::character varying ''::character varying

	Table "pu	blic.supplier	`S"	
Column	Туре	Collation	Nullable	Default
upplierID	integer	 	not null	0
ompany_name	character varying(40)	1 1		''::character varyin
treet	character varying(40)	1 1		''::character varyin
ousenumber	character varying(14)	1 1		''::character varyin
esidence	character varying(40)	1 1		''::character varyin
elephone	character varying(13)	1 1		''::character varyin
mail	character varying(200)	1 1		''::character varyin
ddition	character varying(1000)	1 1		''::character varying
ipcode	character varying(7)	1 1		''::character varyin

catering=# \d tables_layout						
Table "public.tables_layout"						
Column	Туре	Collation	Nullable	Default		
clientID callname Indexes: "tables_	t integer integer character varying(4) integer character varying(20) layout_pkey" PRIMARY KEY entID_fkey" btree ("clien	, btree ("ID'	not null	 0 ''::character varying 0 ''::character varying		