



## Initial Administration Training

UI and Architecture

12 February 2018



### User interface

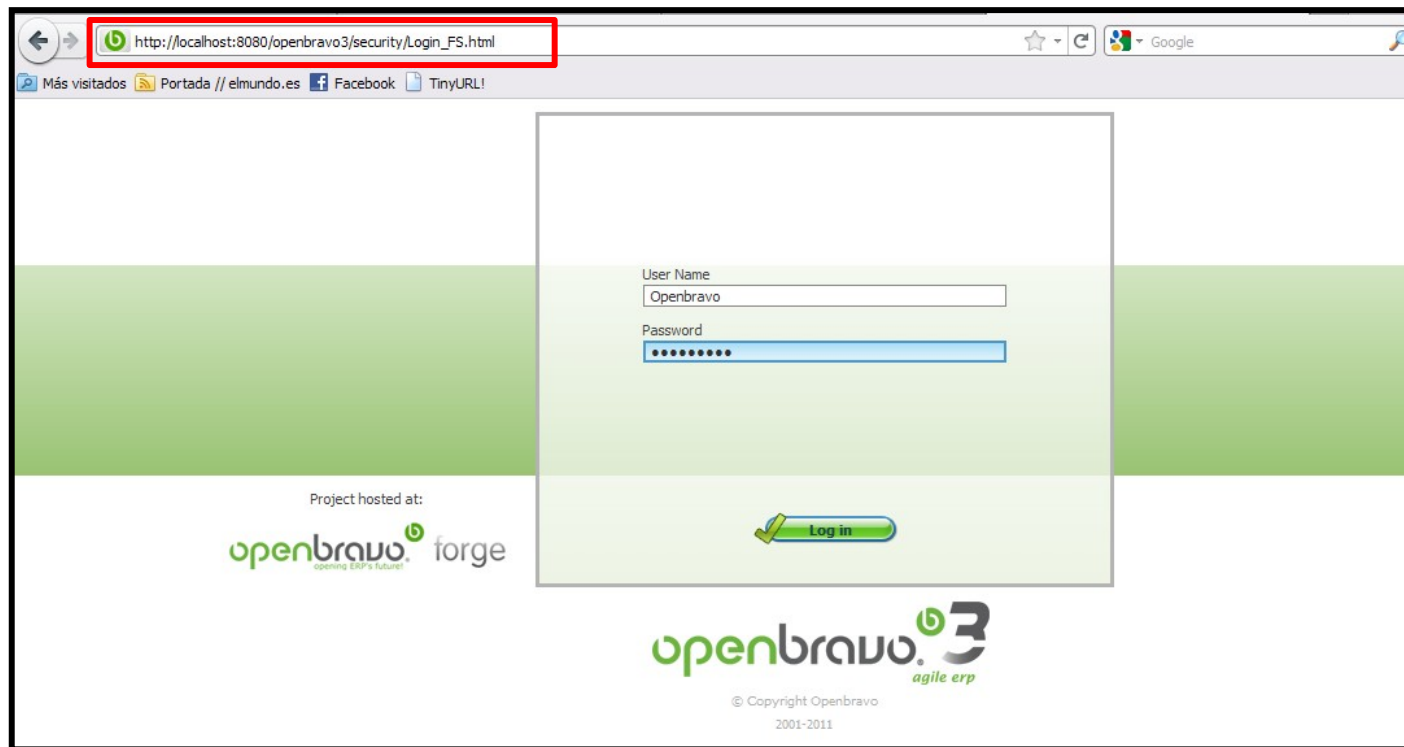
### Architecture

# User interface

## Web-based application

Openbravo has a native **web-based architecture**, which enables a universal access to the application from each device connected to the network. OS-independent browser enables full-function use to support modern, flexible and secure (SSL) usage scenarios like work-from-home, remote contractors, customer access to information, etc.

Recommended browsers are: ***Chrome 9, Firefox 4 and Internet Explorer 9.0***



# User interface

## My Openbravo

The screenshot shows the Openbravo 3.0 Professional Edition user interface. At the top is a navigation bar with a 'Main Menu' (indicated by a green arrow) containing icons for Application, Alerts (4), Help, Openbravo, and a search icon. To the right of the menu is an 'F&B' button and the 'openbravo 3 Professional' logo. Below the navigation bar is a 'Workspace' header. On the left side, there are two sections: 'Recent Views' with links to Preference, Process Request, Sales Invoice, DunningRun, and Business Partner; and 'Recent Documents' with links to OBUIAPP\_UseClassicMo..., PaymentPriority, Reclamación nivel 1, Alimentos y Supermer..., and Inmediate. Below these is a 'Manage Workspace' section with 'Refresh', 'Add Widget >', and 'Admin Others >' (indicated by a green arrow). The main content area is titled 'Welcome to Openbravo 3' and features a 'TESTING' banner, '3.0 - Professional Edition - CI', a 'Links' section with links to Openbravo.com, Exchange, Planet, Forge, and Wiki; a 'Welcome!' message about subscription benefits and a 'share' link; and a 'Learn more about Professional Edition' section with a video player and a plant icon. On the right side, there is an 'Invoices to pay' table (indicated by a green arrow) with columns for Document Number, Business Partner, Date, Amount, and Currency. The table contains 7 rows of invoice data.

Document Number	Business Partner	Date	Amount	Currency
PI/1000000	Be Soft Drinker, Inc.	09-07-2010	979.12	USD
FC/70000	Bebidas Alegres, S.L.	09-07-2010	3,064.17	EUR
PI/1000004	Happy Drinks, Inc.	16-08-2010	398.84	USD
PI/1000005	Happy Drinks, Inc.	18-08-2010	169.49	USD
PI/1000006	Fruit & Bio is Life, Inc.	23-08-2010	568.71	USD
FC/70006	La Fruta es la Vida, S.L.	23-08-2010	486.75	EUR
PI/1000007	Happy Drinks, Inc.	26-08-2010	882.75	USD
FC/70007	La Fruta es la Vida, S.L.	26-08-2010	132.75	EUR

Recent views and documents  
Workspace customizations

Widgets

# User interface

## Users and roles

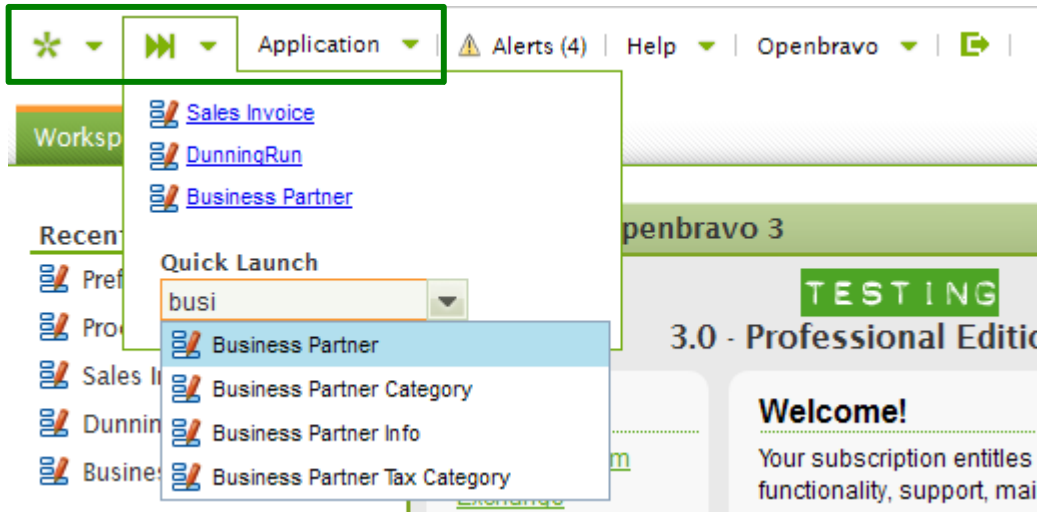
The screenshot displays the Openbravo ERP user interface. At the top, there is a navigation bar with icons for home, application, alerts (4), and help. Below this, a 'Workspace' tab is active. On the left side, there are two panels: 'Recent Views' with links to Preference, Process Request, Sales Invoice, DunningRun, and Business Partner; and 'Recent Documents' with links to OBUIAPP\_UseClassicMo..., PaymentPriority, Reclamación nivel 1, Alimentos y Supermer..., and Inmediate. Below these is a 'Manage Workspace' section with 'Refresh' and 'Add Widget »' buttons. A 'Widget' dialog box is open at the bottom left, showing a search field and an 'Add' button. The main content area shows a 'Welcome to Openbravo 3.0' message with links to Openbravo.com, Exchange, Planet, Forge, and Wiki. A 'Learn more about' section features a video player for 'Openbravo Professional Edition'. Overlaid on the right is a 'Profile' configuration window. This window has two tabs: 'Profile' (selected) and 'Change Password'. The 'Profile' tab contains the following fields: 'Role' (F&B International Group Admin - F&E), 'Client' (F&B International Group), 'Organization' (\*), 'Warehouse' (España Región Norte), and 'Language' (English (USA)). There is a 'Set as default' checkbox and 'Apply' and 'Cancel' buttons at the bottom.

Menu and access privileges depend on the role with we are logged-in in the application.

In Openbravo ERP, each user can have more than an associated role.

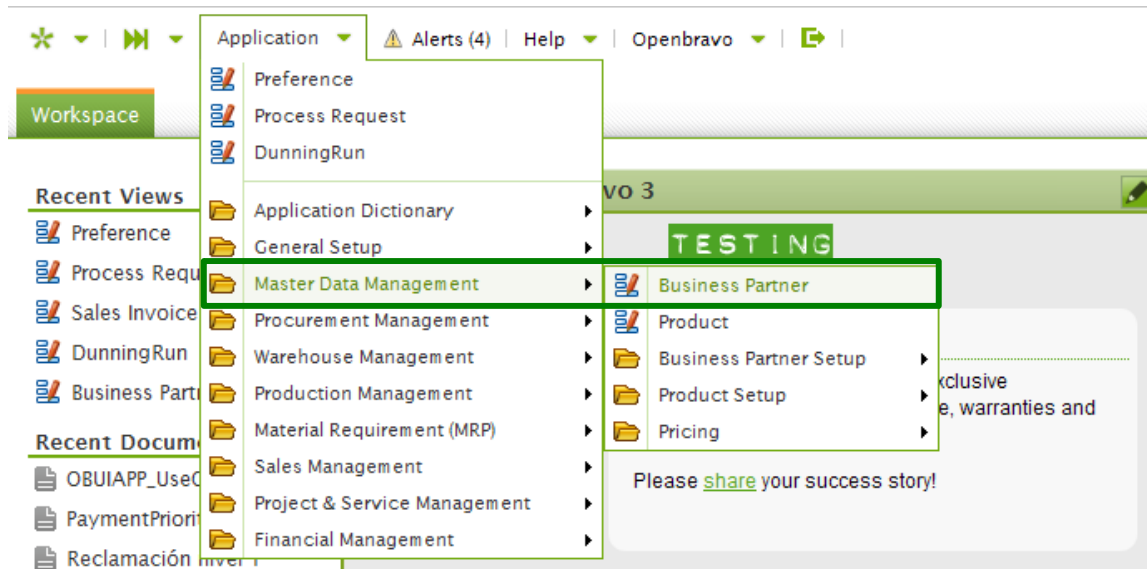
# User interface

## Navigation – application menu



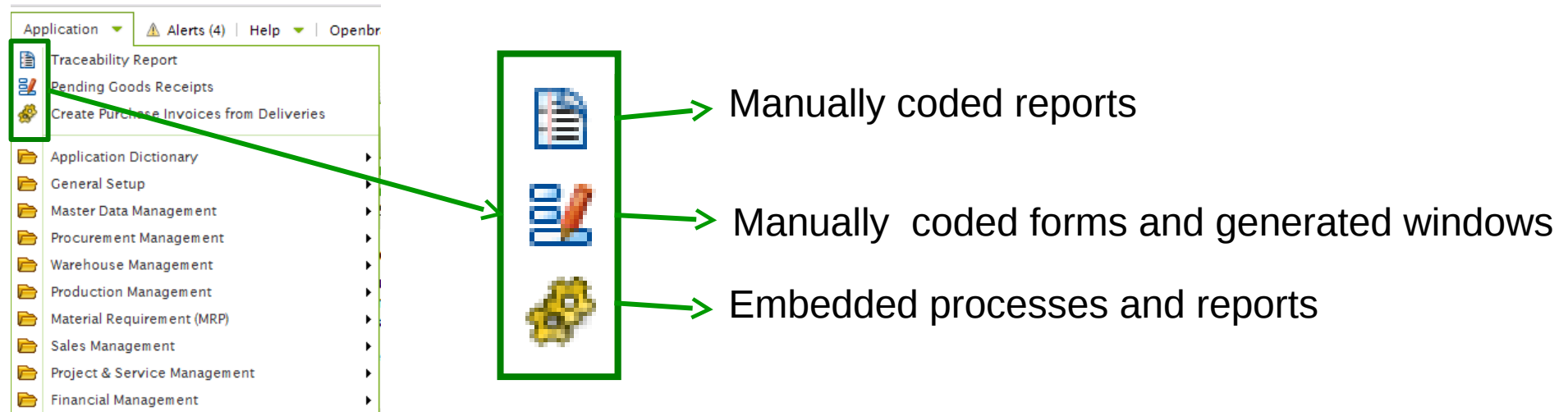
Access to processes, data and reports of the ERP can be done by using

- Create New
- Quick Launch
- Application menu



# User interface

## Type of menu items



- 3.0
1. **Generated windows:** automatically generated windows from metadata
  2. **Embedded processes:** execution of processes with view and controller automatically generated
  3. **Embedded reports:** execution of reports with filters automatically generated by the system engine

# User interface

## Type of menu items - examples

### 1. Manually coded reports

The screenshot displays the 'Sales Dimensional Report' interface within the Openbravo application. At the top, a navigation bar includes icons for home, back, and search, followed by menu items: 'Application', 'Alerts (9)', 'Help', 'Openbravo', and a user icon. Below this, a 'Workspace' tab shows the active report. The interface is divided into several sections: 'Primary Filters' with 'From Date' (31), 'To Date' (31), and a 'Comparative Report' checkbox; 'Secondary Filters' with dropdowns for 'Organization', 'Warehouse', 'Business Partner Group', 'Product Group', 'Business Partner', 'Product', 'Commercial Document', and 'Commercial File'; 'Dimensions' with a list of dimensions (Business Partner Group, Business Partner, Product Group, Product) and a corresponding empty box; 'Sort' with radio buttons for 'Standard' (selected), 'By Ascending Amount', and 'By Descending Amount'; and 'View Results' with 'HTML Format' and 'PDF Format' buttons, and a 'Currency' dropdown set to 'EUR'. A red error message '\* This value is required.' is visible next to the 'Amount Greater Than' field.

Most elements

under folders

***Analysis Tools.***

Multi-choice

selectors and radio

buttons are available

in this type of items.

100% manually

coded with previous

3.0 platform



# User interface

## Type of menu items - examples

### 2. Manually coded forms



Workspace | Sales Dimensional Report x | Pending Goods Receipts x

Business Partner  Organization F&B US, Inc.

From Order Date  To Order Date

Document No. %

Happy Drinks, Inc.		Lines 2	Reception date	<input type="text" value="31"/>
Document No. PO/800012		Date 07-09-2010		
<input type="checkbox"/> Red Wine		80.00	80.00	<input type="text"/>
<input type="checkbox"/> White Wine		75.00	75.00	<input type="text"/>

Fruit & Bio is Life, Inc.		Lines 3	Reception date	<input type="text" value="31"/>
Document No. PO/800014		Date 12-09-2010		
<input type="checkbox"/> Apple Juice Bio		90.00	90.00	<input type="text"/>
<input type="checkbox"/> Orange Juice Bio		80.00	80.00	<input type="text"/>
<input type="checkbox"/> Pineapple Juice Bio		50.00	50.00	<input type="text"/>

Be Soft Drinker, Inc.		Lines 5	Reception date	<input type="text" value="31"/>
Document No. PO/800013		Date 09-09-2010		
<input type="checkbox"/> Diet Soda		40.00	40.00	<input type="text"/>
<input type="checkbox"/> Energy Drink		50.00	50.00	<input type="text"/>

Rapid entry forms  
to process  
batches of data.

100% manually  
coded with  
previous 3.0  
platform

# User interface

## Type of menu items - examples

### 3. Generated windows



Workspace Sales Order - QU/10000 - 13-09-... x

Copy Lines Copy from Order Book

1	10	Organization	Document No. ▲	Transaction Document	Order Date	Business Partner	Partner Address	Total Gross Amount
<input type="checkbox"/>	<input type="checkbox"/>	F&B US West Coast	QU/10000	US Quotation	13-09-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	83.1
<input type="checkbox"/>	<input type="checkbox"/>	F&B US East Coast	QU/10003	US Quotation	15-09-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	55.1
<input type="checkbox"/>	<input type="checkbox"/>	F&B US West Coast	SO/50000	US Standard Order	25-06-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	85.8
<input type="checkbox"/>	<input type="checkbox"/>	F&B US West Coast	SO/50003	US Standard Order	07-07-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	174.5
<input type="checkbox"/>	<input type="checkbox"/>	F&B US West Coast	SO/50004	US Standard Order	01-07-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	191.1
<input type="checkbox"/>	<input type="checkbox"/>	F&B US West Coast	SO/50005	US Standard Order	02-07-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	164.9
<input type="checkbox"/>	<input type="checkbox"/>	F&B US West Coast	SO/50010	US Standard Order	19-08-2010	Healthy Food Supermarkets, Co.	109 S Castle St, Baltimore, MD 212	277.6

Lines Discounts Tax Payment In Plan

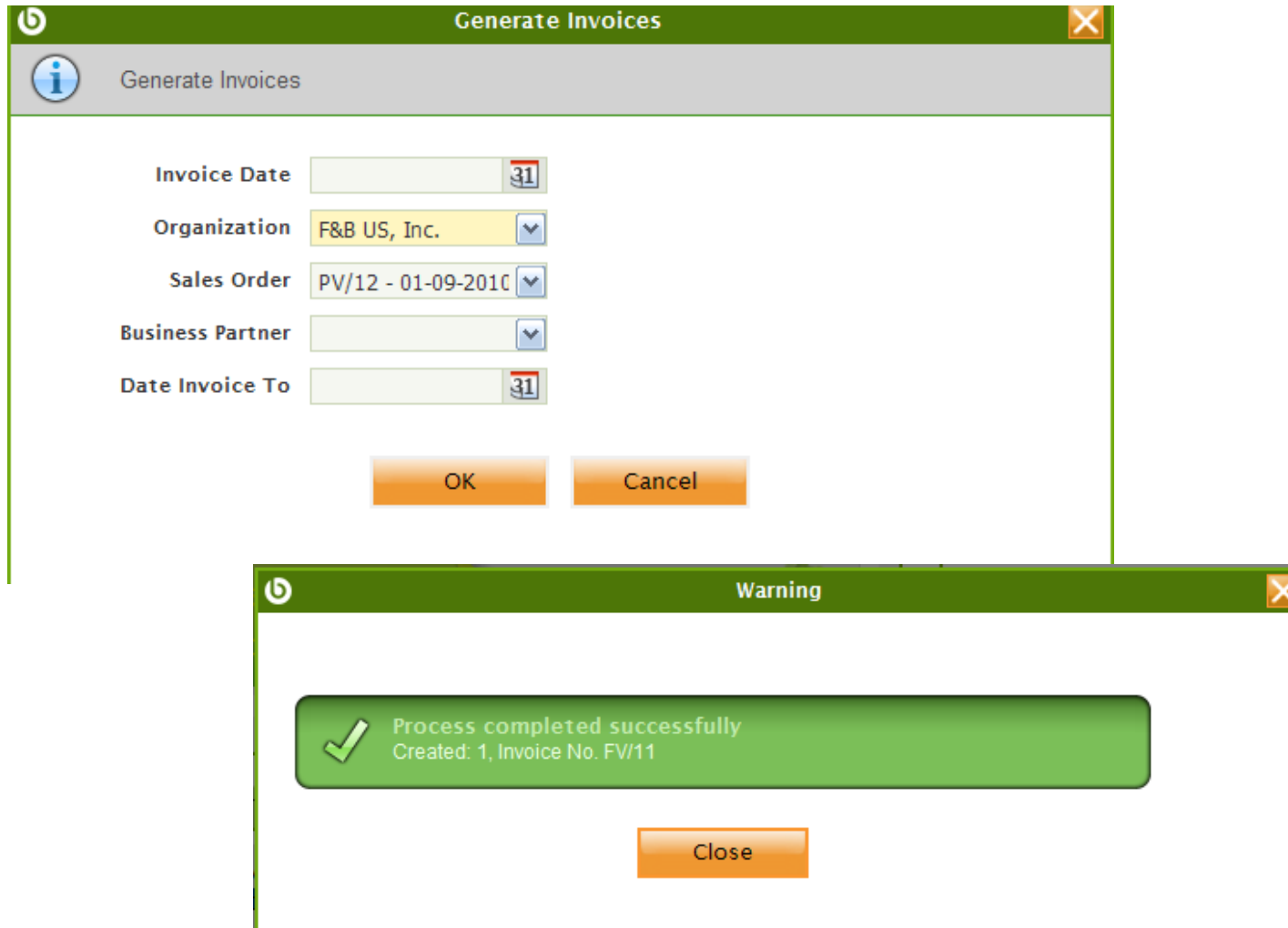
4	Line No. ▲	Product	Ordered Quantity	Attribute Set Value	UOM	Net Unit Price	Line Net Amount	Tax
<input type="checkbox"/>	10	Ale Beer	10		Unit	2.04	20.40	CA Sales Tax
<input type="checkbox"/>	20	Orange Juice Bio	15		Unit	1.27	19.05	CA Sales Tax
<input type="checkbox"/>	30	Plain Water	30		Liter	1.53	45.90	CA Sales Tax
<input type="checkbox"/>	50	Discount 10%	1		Unit	-8.54	-8.54	CA Sales Tax

Generated by the system based on metadata. Most of the windows of the application follows this pattern. A table or a view is always behind this type of elements. Little manual coding is required.

# User interface

Type of menu items - examples

## 3. Embedded processes



The image shows two overlapping windows from an Openbravo application. The top window is titled 'Generate Invoices' and contains several input fields: 'Invoice Date' (set to 31), 'Organization' (set to 'F&B US, Inc.'), 'Sales Order' (set to 'PV/12 - 01-09-2010'), 'Business Partner' (empty), and 'Date Invoice To' (set to 31). Below these fields are 'OK' and 'Cancel' buttons. The bottom window is titled 'Warning' and displays a green message box with a checkmark icon, stating 'Process completed successfully' and 'Created: 1, Invoice No. FV/11'. A 'Close' button is located below the message box.

Execution of java  
processes or  
database store  
procedures.



Input parameters  
can be  
automatically  
configured y using  
metadata

50% of coding  
required

# User interface

Type of menu items - examples

## 4. Embedded reports

### Purchase Order Report

Customer Be Soft Drinker, Inc.

Product	Quantity	UOM	Price	Price (USD-\$)	Amount	Amount (USD-\$)
Cherry Cola	100,00	Unit	0,55 \$	0,55 \$	55,00 \$	55,00 \$
Diet Soda	70,00	Unit	0,55 \$	0,55 \$	38,50 \$	38,50 \$
Lemonade	80,00	Unit	0,55 \$	0,55 \$	44,00 \$	44,00 \$
Total Order:						137,50 \$

Product Quantity UOM Price Price (USD-\$) Amount Amount (USD-\$)

Plain Water

Sparkling Water

Plain Water w/ Peach

Product Quantity

Sports Drink

Energy Drink

Purchase Order Report

Purchase Order Report JR

Business Partner

Currency USD

Starting Date 24-05-2011

Ending Date

Project

Warehouse

Output type Excel

OK Cancel

Rendering of  
jasper reports.



Input parameters  
and output format  
can be  
automatically  
configured y using  
metadata  
  
50% of coding  
required

# User interface

Navigation – linked data

## Related records and multi-tab

\* | || Application | Alerts (4) | Help | Openbravo | |

Workspace Product - Bottle of water x Tax Category - IVA Normal x

Organization \* F&B España, S.A. Search Key \* Bottle of water Name \* Bottle of water UOM \* Box (6 u.)

Product Category \* Aguas Tax Category \* IVA Normal ☒ Purchase ☒ Sale

Description Product Type \* Item ☒ Stocked Weight 0.00

## Linked items

### ▼ Linked Items

Linked Items Category	Linked Item
Master Data Management    Pricing    Price List - Product Price (2)	PR/4 - 15-09-2010 - 91.67 - 30 - 32.49
Master Data Management    Product - Accounting (1)	PV/13 - 03-09-2010 - 172.52 - 10 - 85.50
Master Data Management    Product - Price (2)	
Sales Management    Transactions    Goods Shipment - Lines (1)	
Sales Management    Transactions    Sales Order - Lines (2)	
Warehouse Management    Transactions    Goods Movements - Lines (1)	

# User interface

## Window layout – header and tabs

✱ | | Application | Alerts (4) | Help | Openbravo | |

Workspace Business Partner - Happy Drink... x Purchase Order - PO/800004 - 0... x

Filters, sorting and customized view

1	7	h	Name	Search Key	Tax ID	Busines
			Happy Drinks, Inc.	US-SP/0001		
			David McHill	US-EM/0004		
			John Smith	US-EM/0001		
			Sleep Well Hotels, Co.	US-C3/0001		
			Moon Light Restaurants, Co.	US-C2/0001		
			Healthy Food Supermarkets, Co.	US-C1/0001		
			Hoteles Buenas Noches, S.A.	ES-C3/0001		

Sort Ascending  
Sort Descending  
Columns  
Freeze Search Key  
Add formula column...  
Add summary column...

Customer - Happy Drinks, Inc. Vendor/Creditor - Happy Drinks... Employee Bank Account Location/Address - New Jersey... Contact

Child tabs

Vendor Accounting

- ✓ Name
- ✓ Search Key
- ✓ Tax ID
- ✓ Business Partner Category
- ✓ One Time Transaction
- ✓ Customer Balance
- Forced org
- Prices Shown in Order
- Customer
- Vendor
- Valuation
- UPC/EAN
- Invoice Terms
- Operator
- Share
- Volume of Sales
- Expected Lifetime Revenue
- No. of Employees
- Potential Customer
- Date of First Sale
- Lifetime Revenue to Date
- Language
- Tax Exempt
- Acquisition Cost
- Isofiscalcode
- NAICS/SIC
- Summary Level
- D-U-N-S
- Client
- Invoice Grouping
- Fiscalcode
- Creating

# User interface

## Window layout – view modes

Application Alerts (4) Help Openbravo

Workspace Business Partner - Happy Drink...

1	7	h				
		Search Key ▲	Name	Tax ID	Business Partner Category	One Time
		ES-C3/0001	Hoteles Buenas Noches, S.A.	L51927352	Cliente – Tier 3	No
		US-C1/0001	Healthy Food Supermarkets, Co.	BK452719	Customer – Tier 1	No
		US-C2/0001	Moon Light Restaurants, Co.	NB717172	Customer – Tier 2	No
		US-C3/0001	Sleep Well Hotels, Co.	TG917356	Customer – Tier 3	No
		US-EM/0001	John Smith	MW54193	Employee	No
		US-EM/0004	David McHill	TC891737	Employee	No
		US-SP/000	Happy Drinks, Inc.	BA253461	Supplier	

Click to save your changes to the database

Grid view

Form view

Application Alerts (4) Help Openbravo

Workspace Business Partner - Happy Drink... Purchase Order - PO/800004 - 0...

Organization \* F&B US, Inc. Search Key \* US-SP/0001 Name \* Happy Drinks, Inc. Tax ID BA253461

Business Partner Category \* Supplier Name 2 Description Supplier for alcoholic beverages URL

Reference No. Consumption Days 150 ☒ Active

Audit

Notes

Linked Items

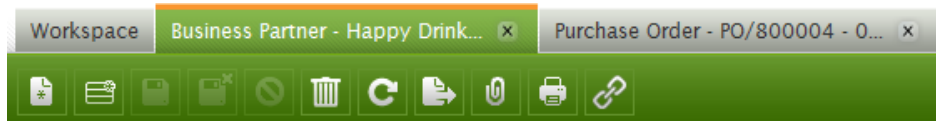
Linked Items Category	Linked Item
General Setup    Security    User - User (1)	
Master Data Management    Business Partner - Bank Account (1)	PO/800004 - 07-07-2010 - 1197.12
Master Data Management    Business Partner - Contact (1)	PO/800007 - 18-08-2010 - 882.75
Master Data Management    Business Partner - Customer Accounting (2)	PO/800012 - 07-09-2010 - 580.21
Master Data Management    Business Partner - Location/Address (1)	

# User interface

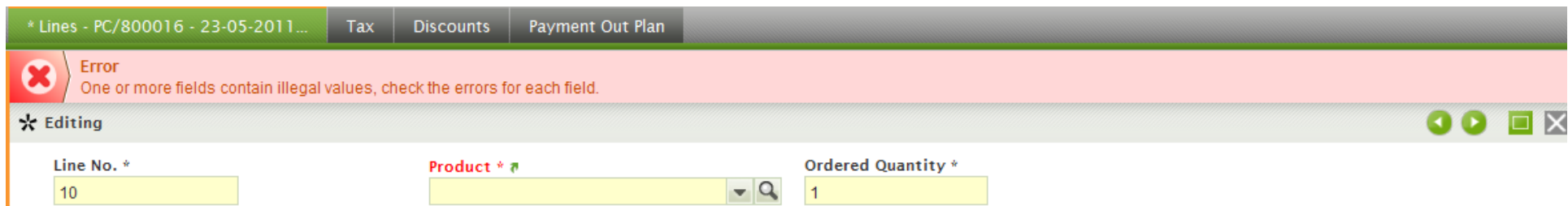
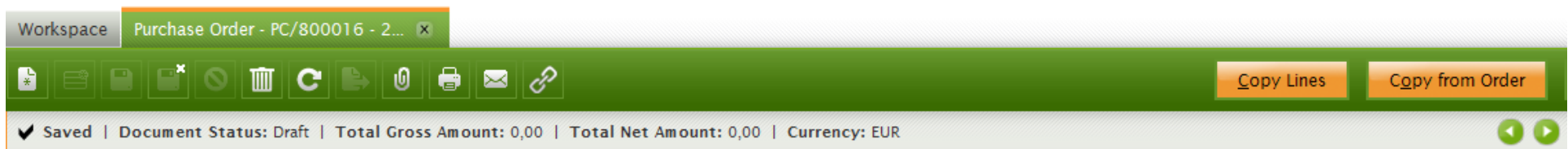
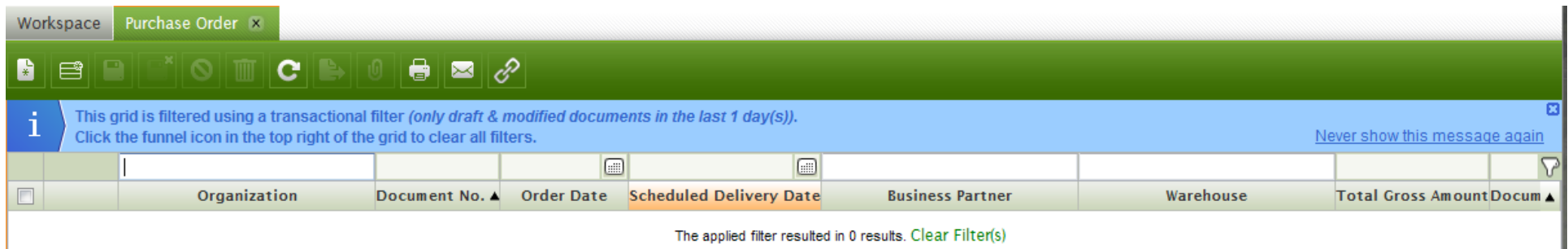
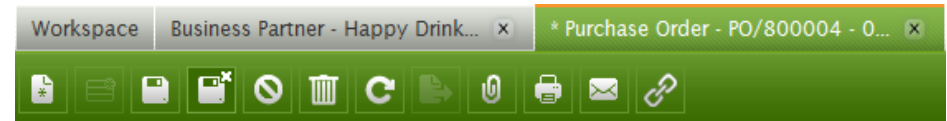
## Window layout – toolbars and messages

Depending on the view mode, icons are enabled/disabled in the toolbar

### Grid view



### Form view



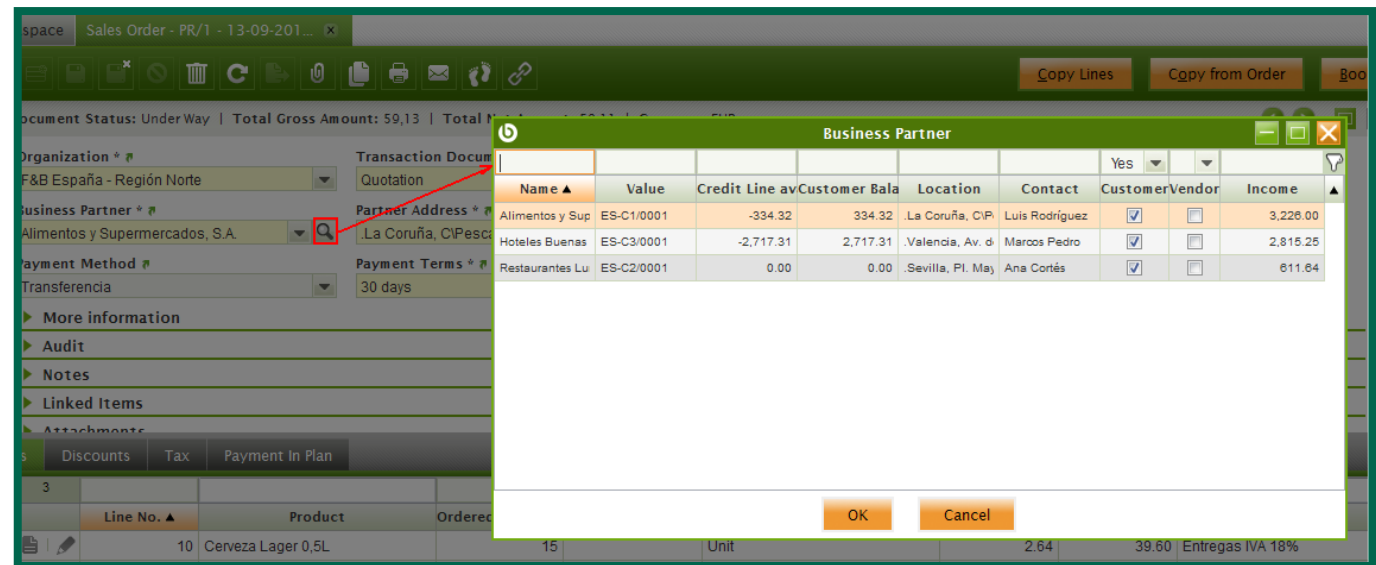


# User interface

## Window layout – selectors

Selectors combine a suggestion box with a popup window with filter and sorting capabilities.

- **Definition** (columns, search criteria, where clause) **can be changed** at runtime without re-compiling or re-starting the system.
- Easy to show **linked information** of a selected entity or search, sort and filter on linked information.
- Suggestion box and popup grid support paging with look ahead, makes them also suitable for **large datasets**



[http://wiki.openbravo.com/wiki/Projects/Selector/Developers\\_Manual](http://wiki.openbravo.com/wiki/Projects/Selector/Developers_Manual)

# User interface

Fully audited

\* | || Application | Alerts (4) | Help | Openbravo | ↻

F&B

openbravo  
Professionals

Workspace Product - Bottle of water x



1	62			Show Audit Trail							
		Search Key	Name	ACTIVE	Product Category	UOM	Product Type	Stocked	Cost Type	Standard Cost	Lease B
		Bottle of water	Bottle of water	Yes	Aguas	Box (6 u.)	Item	Yes			No
		ES/0025	Agua sin Gas al Limón 1L	Yes	Aguas	Liter	Item	Yes	Average		No

Record changes can  
be fully audited and  
tracked by field,  
action, user and time

**Filtros Primarios**

Desde fecha  Hasta

User  Field

[View deleted records](#)

	Modification Time	Action	User	Process	Field	Old value	New value
51	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Nivel agrupación		N
52	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Agente comercial		
53	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Unidad		Unit
54	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	UPC/EAN		
55	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Descripción		
56	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Nombre		Prueba
57	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Identificador		Prueba
58	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Activo		Y
59	2010-02-16 10:15:49.0	Insert	Openbravo	Ventana: Producto	Organización		*

# User interface

## Alert management

Alert platform enables configuration and creation of alerts by role and user

Navigation bar: \* | > | Application | Alerts (4) | Help | Openbravo | >

Workspace: Alert Management

Tools: [Icons for file operations]

▼ New (4) [Move selected to Acknowledged] [Move selected to Suppressed]

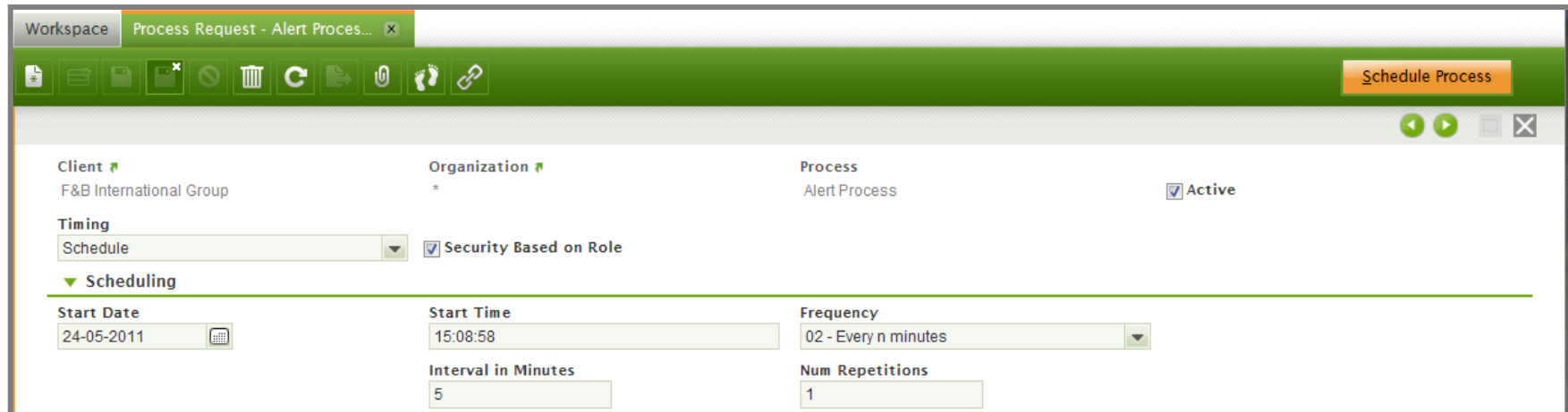
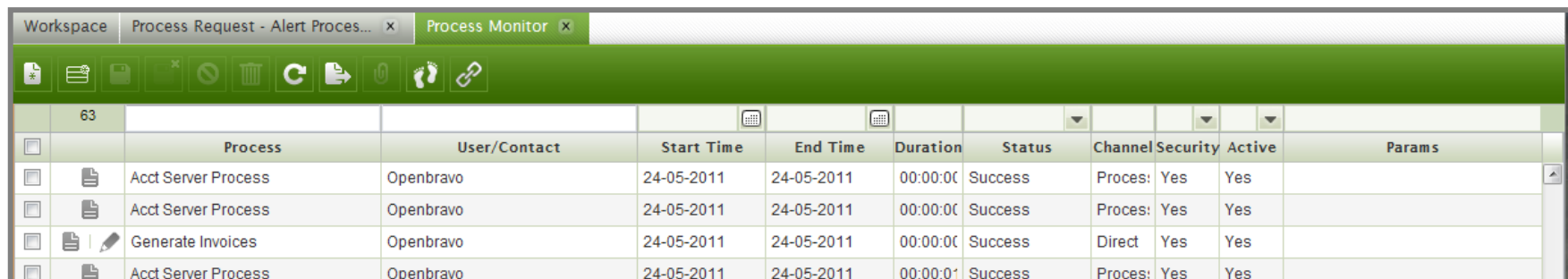
1	Alert Rule	Alert	Time ▼	Note	Record ▼
<input checked="" type="checkbox"/>	Wrong sales invoice. Wrong amount in payment plan detail	Invoice: 'SI/100007 - 23-08-2010 - 906.83' nee	15-04-2011	Reported by controller	
<input type="checkbox"/>	Wrong sales invoice. Wrong amount in payment plan detail	Invoice: 'SI/100008 - 26-08-2010 - 368.99' nee	15-04-2011		
<input type="checkbox"/>	Wrong sales invoice. Wrong amount in payment plan detail	Invoice: 'FV/4 - 27-07-2010 - 338.90' needs to l	15-04-2011		
<input type="checkbox"/>	Wrong sales invoice. Wrong amount in payment plan detail	Invoice: 'SI/100006 - 18-08-2010 - 538.97' nee	15-04-2011		

4

▼ Acknowledged (0) [Move selected to New] [Move selected to Suppressed]

	Alert Rule	Alert	Time ▼	Note	Record ▼
No items to show.					

Openbravo ERP enables the scheduling of background processes. Existing processes are ***Alert management, Accounting , Hearbeat and Payment Monitor***. Execution of these processes can be monitored.

Process	User/Contact	Start Time	End Time	Duration	Status	Channel	Security	Active	Params
Acct Server Process	Openbravo	24-05-2011	24-05-2011	00:00:00	Success	Proces:	Yes	Yes	
Acct Server Process	Openbravo	24-05-2011	24-05-2011	00:00:00	Success	Proces:	Yes	Yes	
Generate Invoices	Openbravo	24-05-2011	24-05-2011	00:00:00	Success	Direct	Yes	Yes	
Acct Server Process	Openbravo	24-05-2011	24-05-2011	00:00:01	Success	Proces:	Yes	Yes	

# User interface

## Preferences

For each application user, log-in preferences as language and organization can be set as preferences, as well as default values for different processes, windows... etc.

The screenshot shows the 'Preference - Autosave' window in the Openbravo application. The interface includes a top menu bar with options like 'Application', 'Alerts (0)', 'Help', and 'Openbravo'. Below the menu is a toolbar with various icons. The main content area is divided into several sections:

- Client:** A dropdown menu set to 'System'.
- Organization:** A dropdown menu set to '\*' with an 'Active' checkbox checked.
- Module:** A dropdown menu.
- Attribute:** A text field containing 'Autosave'.
- Property List:** A section with a 'Value' field containing 'Y' and a 'Selected' checkbox.
- Visibility:** A section with four dropdown menus: 'Visible at Client' (set to 'System'), 'Visible at Organization' (set to '\*'), 'Visible at User', and 'Visible at Role'.
- Window:** A dropdown menu.

# User interface

## Other interesting features

✱ | | Application | Alerts (4) | Help | Openbravo |

Workspace Purchase Order - PC/800016 - 2...

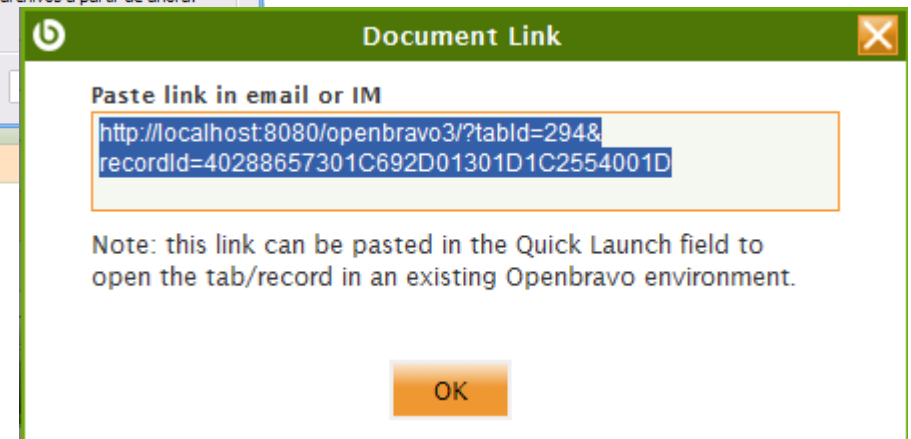
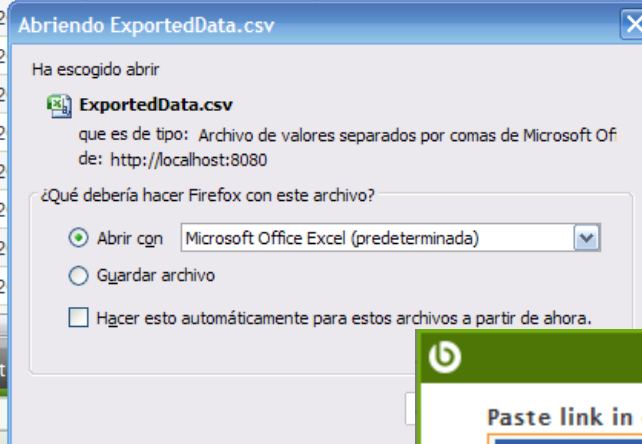
1 33

		Organization	Document No. ▲	Order Date	Scheduled Delivery Date	Business Partner	
		F&B España - Región Norte	PC/800000	25-06-2010	02-07-2010	Bebidas Alegres, S.L.	Esp
		F&B España - Región Norte	PC/800001	01-07-2			
		F&B España - Región Norte	PC/800002	02-07-2			
		F&B España - Región Norte	PC/800003	07-07-2			
		F&B España - Región Sur	PC/800004	29-07-2			
		F&B España - Región Sur	PC/800005	13-08-2			
		F&B España - Región Sur	PC/800006	16-08-2			
		F&B España - Región Sur	PC/800007	18-08-2			
		F&B España - Región Norte	PC/800008	19-08-2			

Lines - PC/800016 - 23-05-2011...

		Line No. ▲	Product	Ordered Quantity	Attribute Set Value	Unit
		10		1		Unit

- Export data to CSV file
- Send by e-mail
- Direct link to a particular record

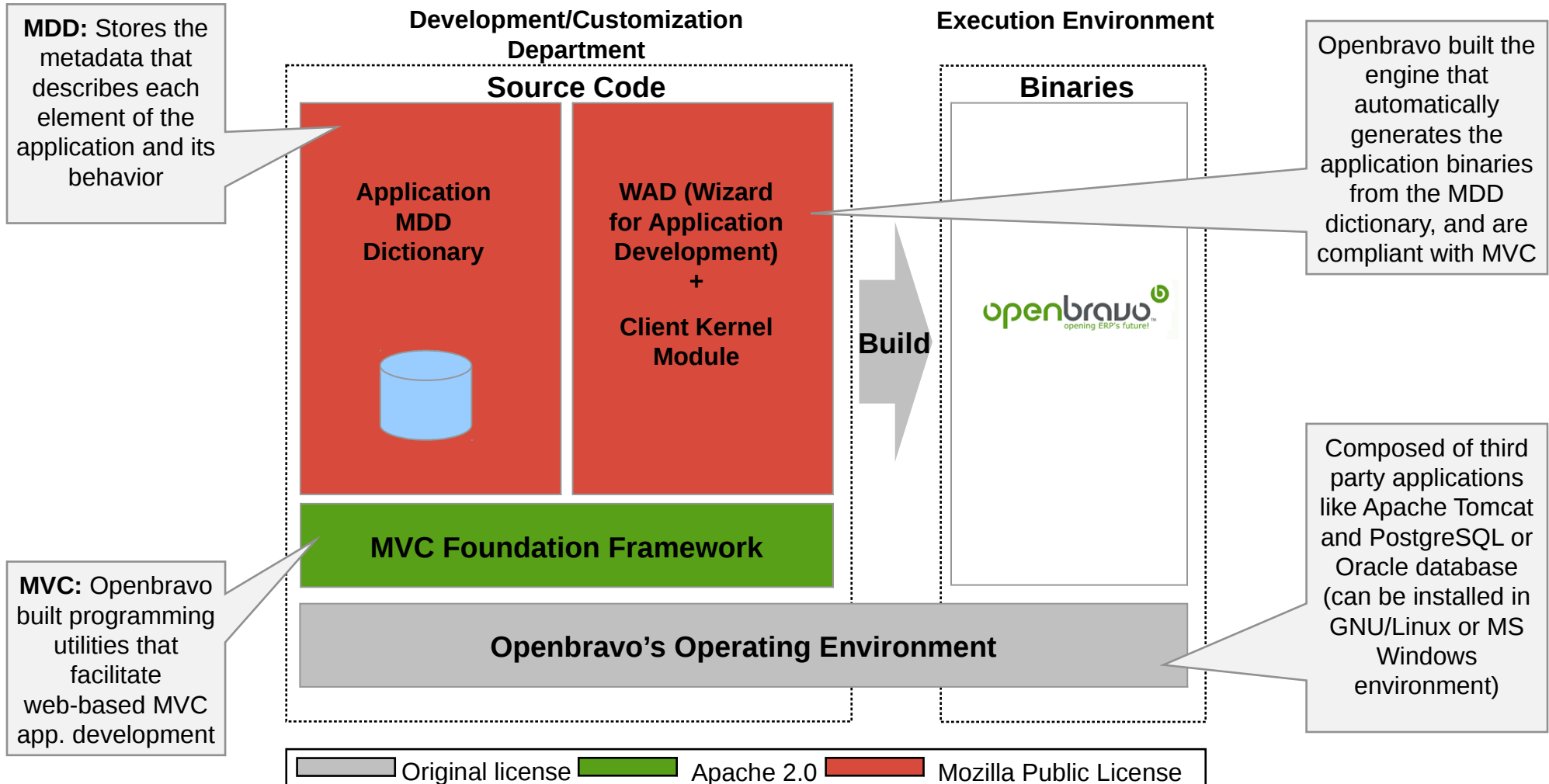


### User interface

### Architecture

# Architecture

## How Does It Work?

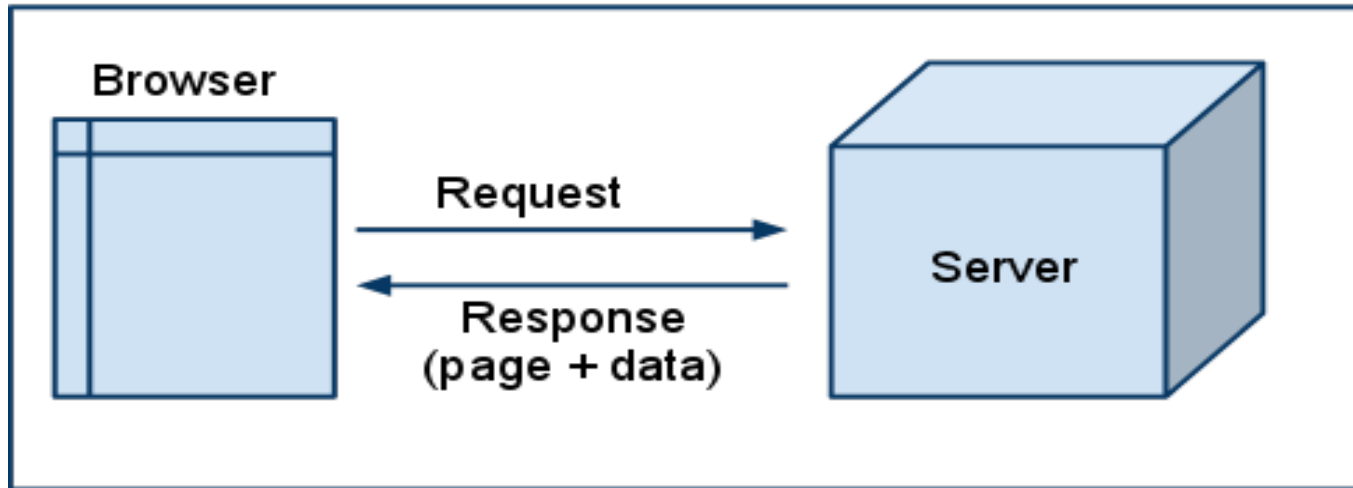




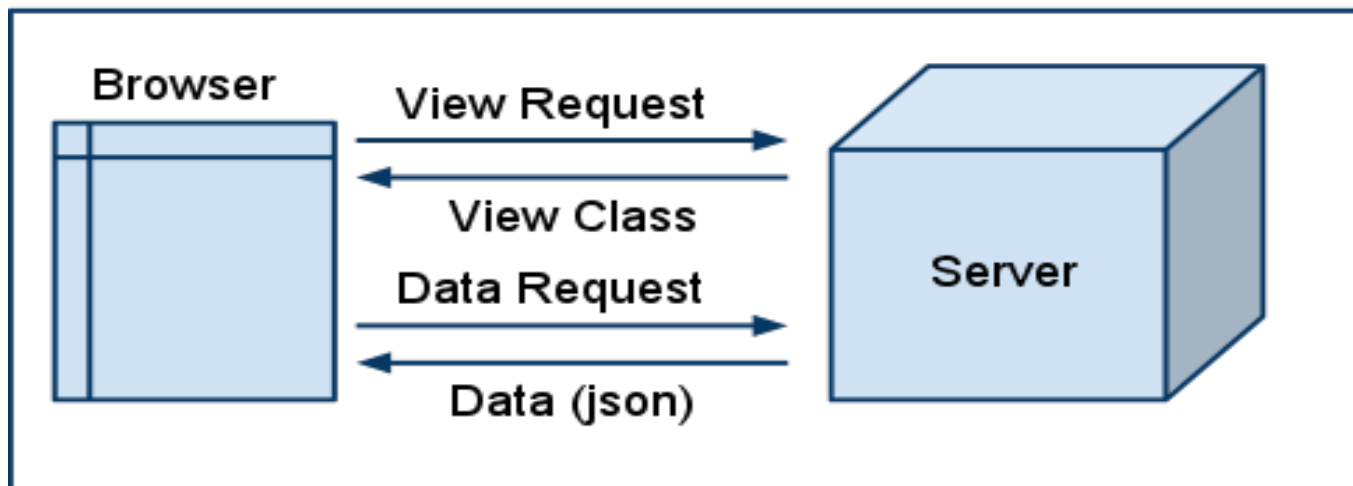
# Architecture

2.50 vs 3.0

Openbravo 2.50



Openbravo 3.00



- JavaScript code is generated at runtime
- Increases execution on the client (browser) side
- Data requests are separated from view requests
- Generated JavaScript code extends JS classes statically defined

- Oracle 11g or PostgreSQL 8.3
- Sun JDK 1.6
- Apache Tomcat 6.0
- Apache Ant 1.7

Further information about stack components tuning

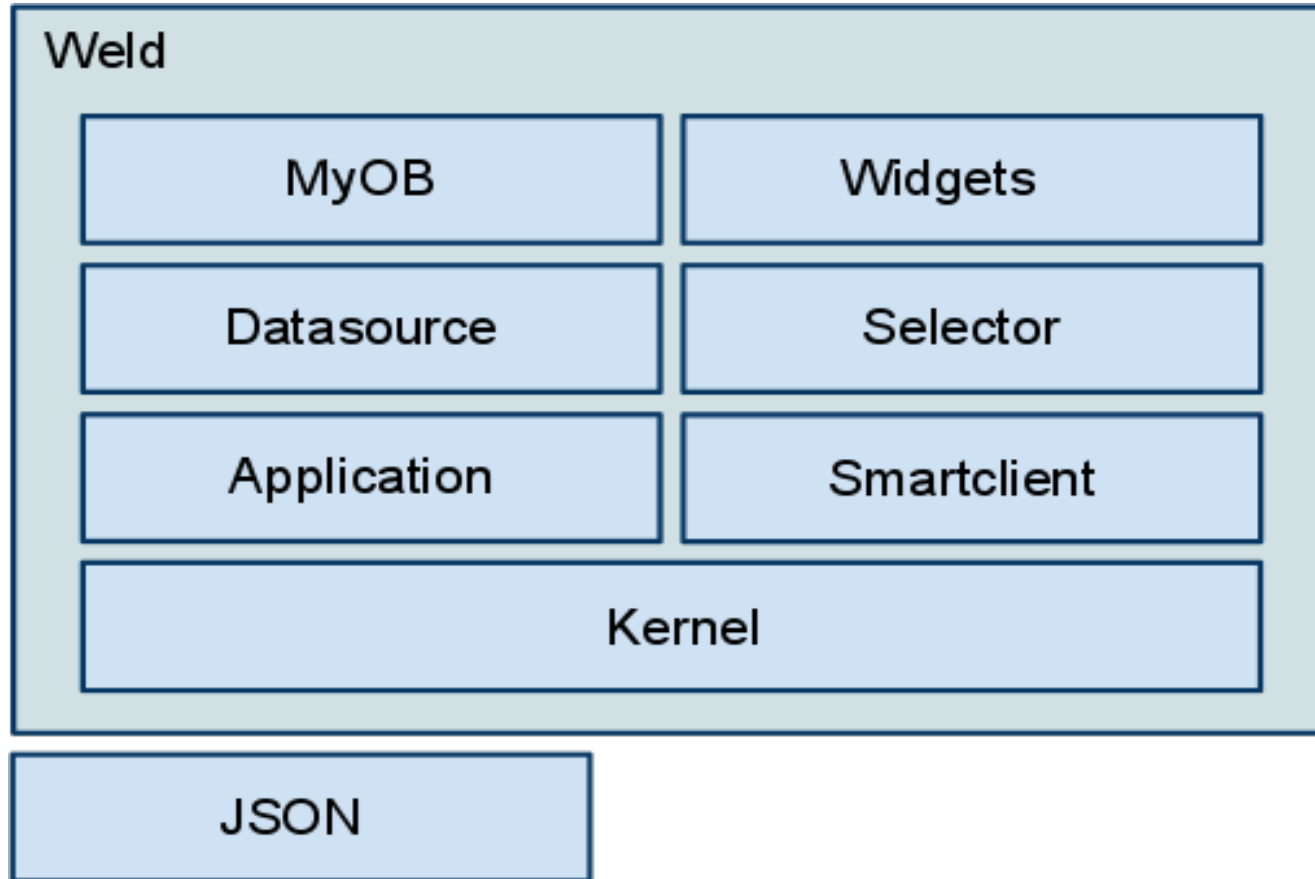
[http://wiki.openbravo.com/wiki/ERP/2.50/Openbravo\\_environment\\_installation](http://wiki.openbravo.com/wiki/ERP/2.50/Openbravo_environment_installation)

Build Ant tasks

[http://wiki.openbravo.com/wiki/ERP/2.50/Developers\\_Guide/Concepts/Development\\_Build\\_Tasks](http://wiki.openbravo.com/wiki/ERP/2.50/Developers_Guide/Concepts/Development_Build_Tasks)

# Architecture

## Main Components



# Architecture

## Openbravo Platform Components

- **DBSourceManager:** Java Library based on Apache DDLUtils to manage database structure with XML files
- **MyOB:** The MyOB module provides a customizable home page for a user in the new user interface. MyOb is visualized in a main tab and exists of widgets which can be provided by modules

[http://wiki.openbravo.com/wiki/Projects/MyOB/Developers\\_Manual](http://wiki.openbravo.com/wiki/Projects/MyOB/Developers_Manual)

- **Widgets**

- *URL Widget:* Shows the content of the specified URL.
- *HTML Widget:* Embeds the specified HTML code in the widget.
- *Query/List Widget:* Shows in a grid the result of the specified [HQL](#).

- **Selector**

Provides a new selector field implementation supporting both a suggestion box as well as a popup window with a grid. Supports all Openbravo tables out-of-the-box, including new tables added by modules.

[http://wiki.openbravo.com/wiki/Projects/Selector/Developers\\_Manual](http://wiki.openbravo.com/wiki/Projects/Selector/Developers_Manual)

- **Datasource**

The Datasource Service module provides a client side javascript implementation of a datasource and a serverside implementation which can handle JSON retrieval and update requests

[http://wiki.openbravo.com/wiki/Projects/DatasourceService/Developers\\_Manual](http://wiki.openbravo.com/wiki/Projects/DatasourceService/Developers_Manual)

- **Application**

The Client Application module is responsible for building the main layout of the new Openbravo user interface. It makes it possible for other modules to add new navigation bar components and view implementations to Openbravo

- **Smartclient**

This module integrates Openbravo and Smartclient.

[http://wiki.openbravo.com/wiki/Projects/Smartclient/Developers\\_Manual](http://wiki.openbravo.com/wiki/Projects/Smartclient/Developers_Manual)

- **Kernel**

The Kernel module is the core of Openbravo's new UI The Client Kernel module is the core of the new Openbravo User Interface. The responsibilities of this module:

- serve (javascript) components to the client (browser)
- caching/compression/compiling of components
- generation of components using templates
- offering an extensible templating mechanism

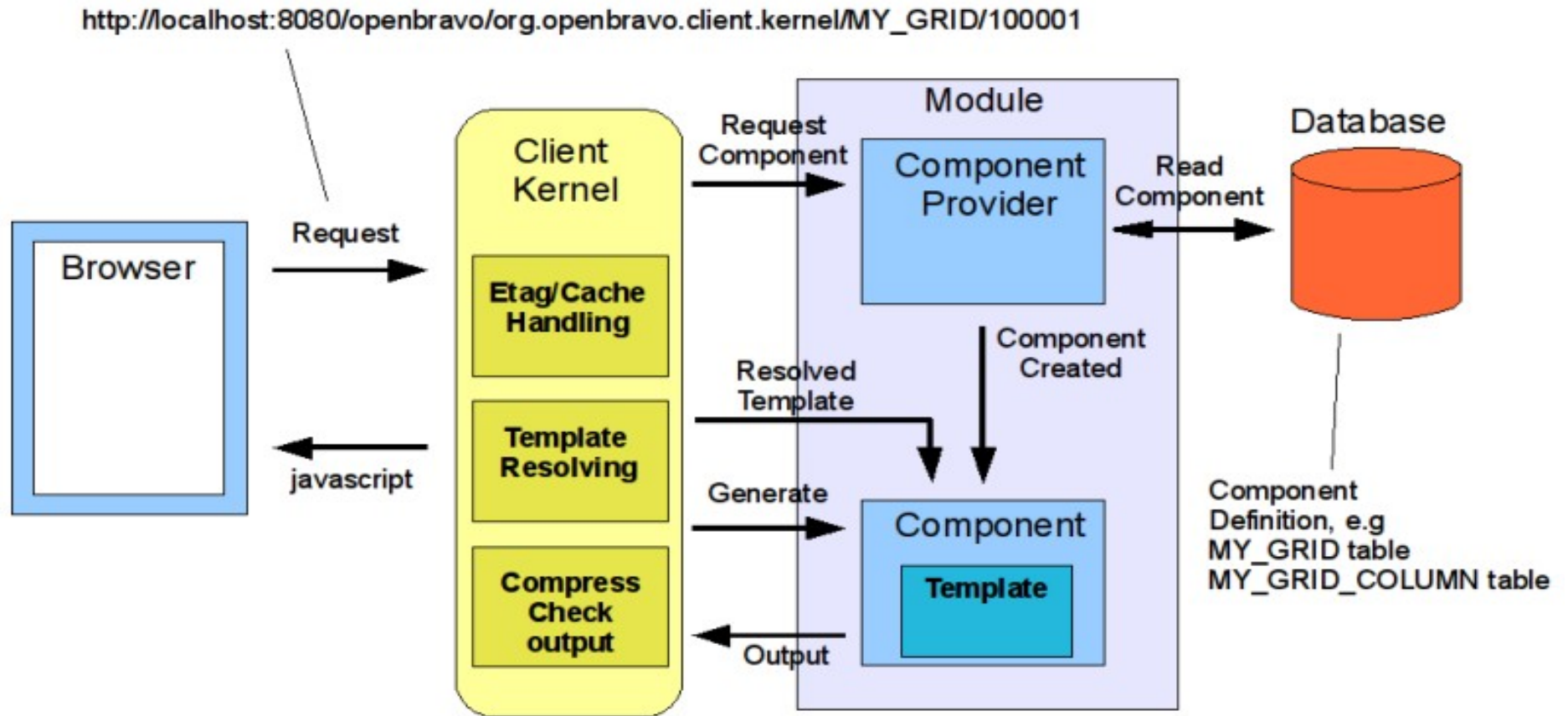
Modules can extend and use the Client Kernel module by:

- implementing new user interface components
- adding new templates for existing components
- add new templating languages to the system.

- **JSON** The JSON REST module adds a JSON webservice to Openbravo

# Architecture

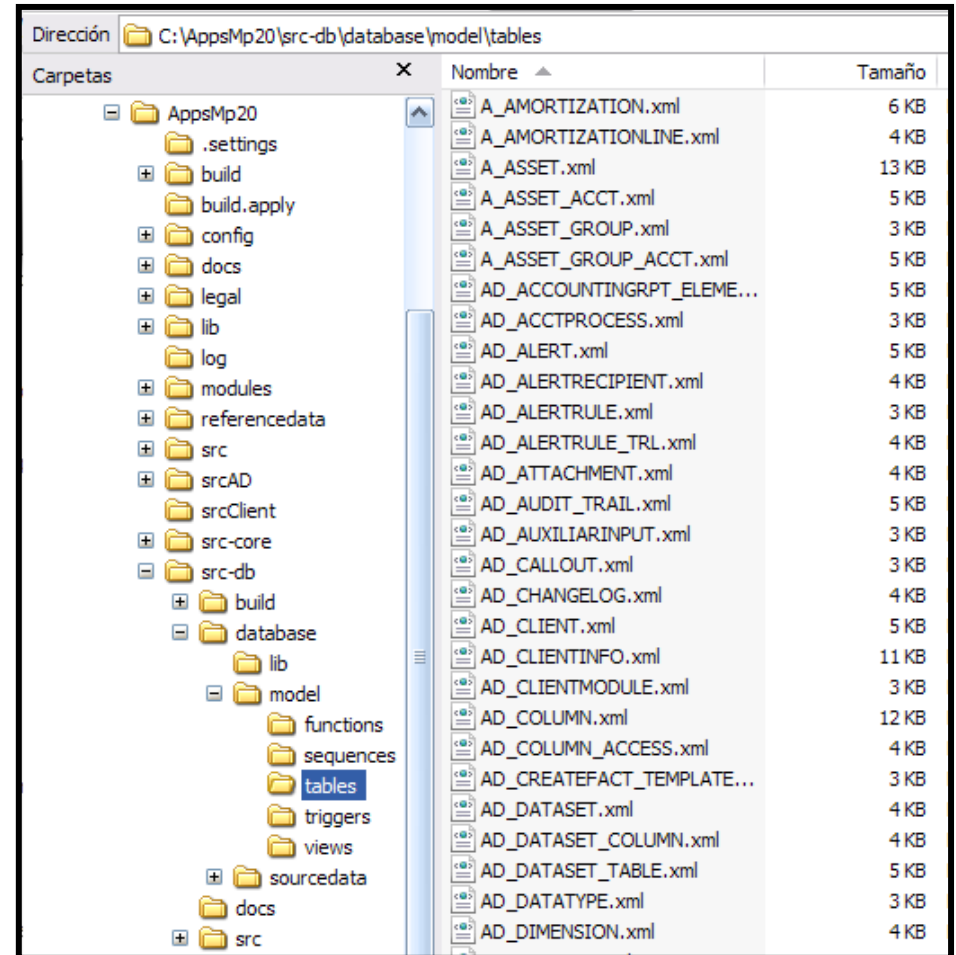
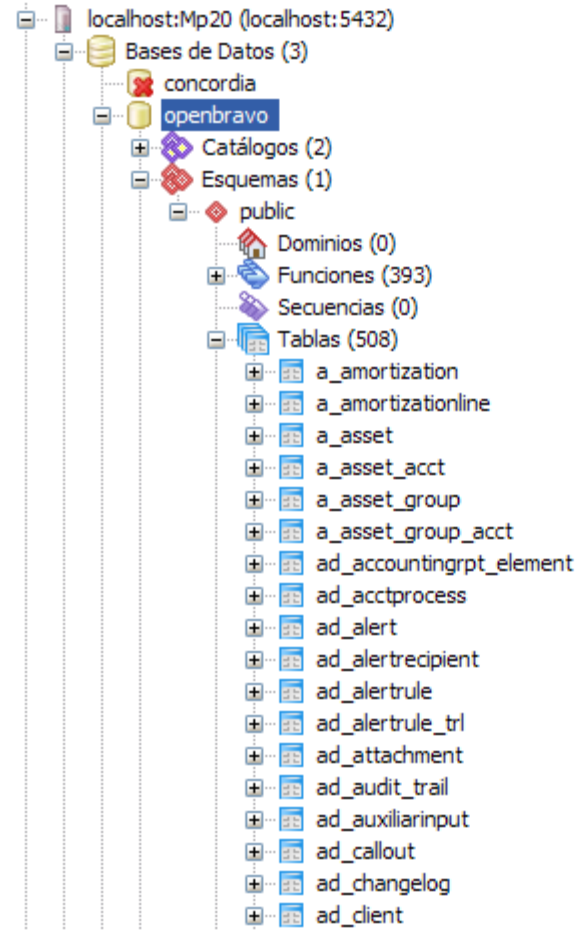
## Client Kernel



[http://localhost:8080/openbravo/org.openbravo.client.kernel/0BUIAPP\\_MainLayout/View?viewId=\\_102](http://localhost:8080/openbravo/org.openbravo.client.kernel/0BUIAPP_MainLayout/View?viewId=_102)

# Architecture

## DBSourceManager Library







[www.openbravo.com](http://www.openbravo.com)

