

A 3D graphic of a grid of cubes. The cubes are arranged in a grid that recedes into the distance. Some cubes are grey, while others are a vibrant green. Several green cubes are shown floating in the air, appearing to be in motion or falling from the grid. The background is white.

# Openbravo Commerce Suite Technology Platform

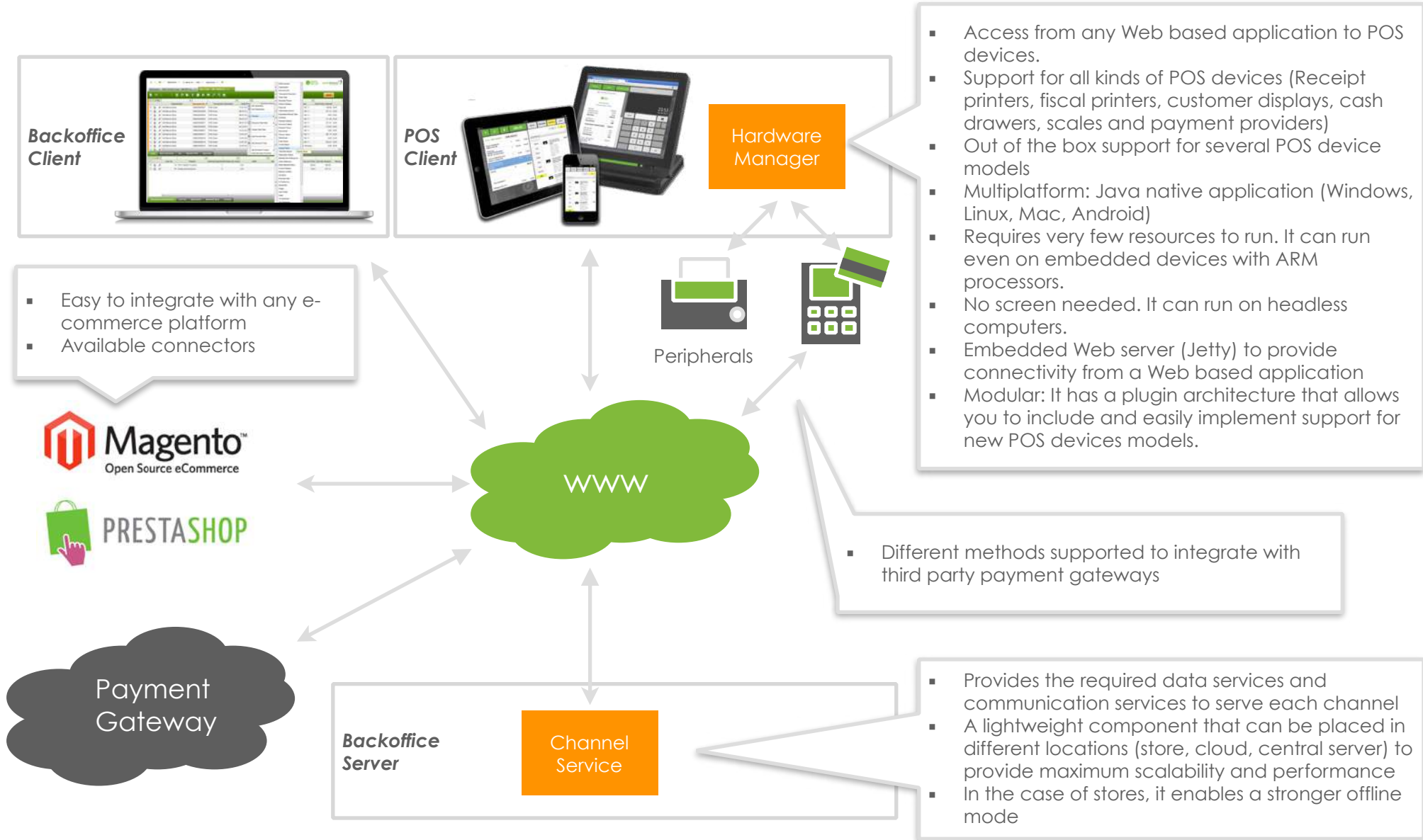
A Future-Proof Platform to Deliver  
Omnichannel Services

# Single Solution to Manage the Entire Multi-Channel Retail Business



- Keep it **as simple as possible**
- Optimize for the common case but be **ready for the exceptional**
- **High reliability** for both sales operations and ticket persistence
- **Simplify IT operations**, specially at the store
- **Enable scaling** for future growth. Easy, quick and dynamic
- Make the client (POS) **as light as possible**
- Facilitate multiple channel integration and distributed order management for **omnichannel services**

# Multi-Location and Multi-Channel



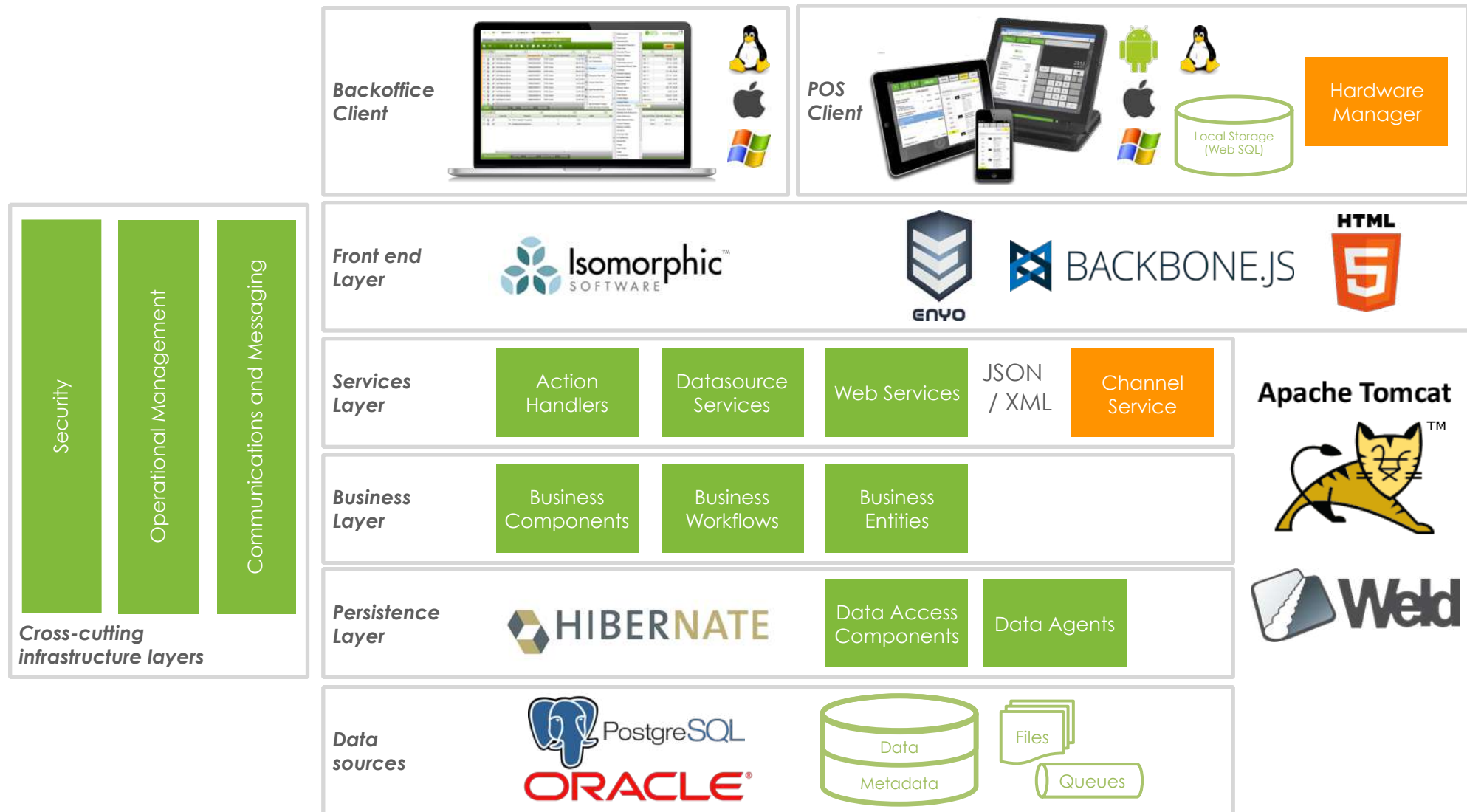
- Easy to integrate with any e-commerce platform
- Available connectors

- Access from any Web based application to POS devices.
- Support for all kinds of POS devices (Receipt printers, fiscal printers, customer displays, cash drawers, scales and payment providers)
- Out of the box support for several POS device models
- Multiplatform: Java native application (Windows, Linux, Mac, Android)
- Requires very few resources to run. It can run even on embedded devices with ARM processors.
- No screen needed. It can run on headless computers.
- Embedded Web server (Jetty) to provide connectivity from a Web based application
- Modular: It has a plugin architecture that allows you to include and easily implement support for new POS devices models.

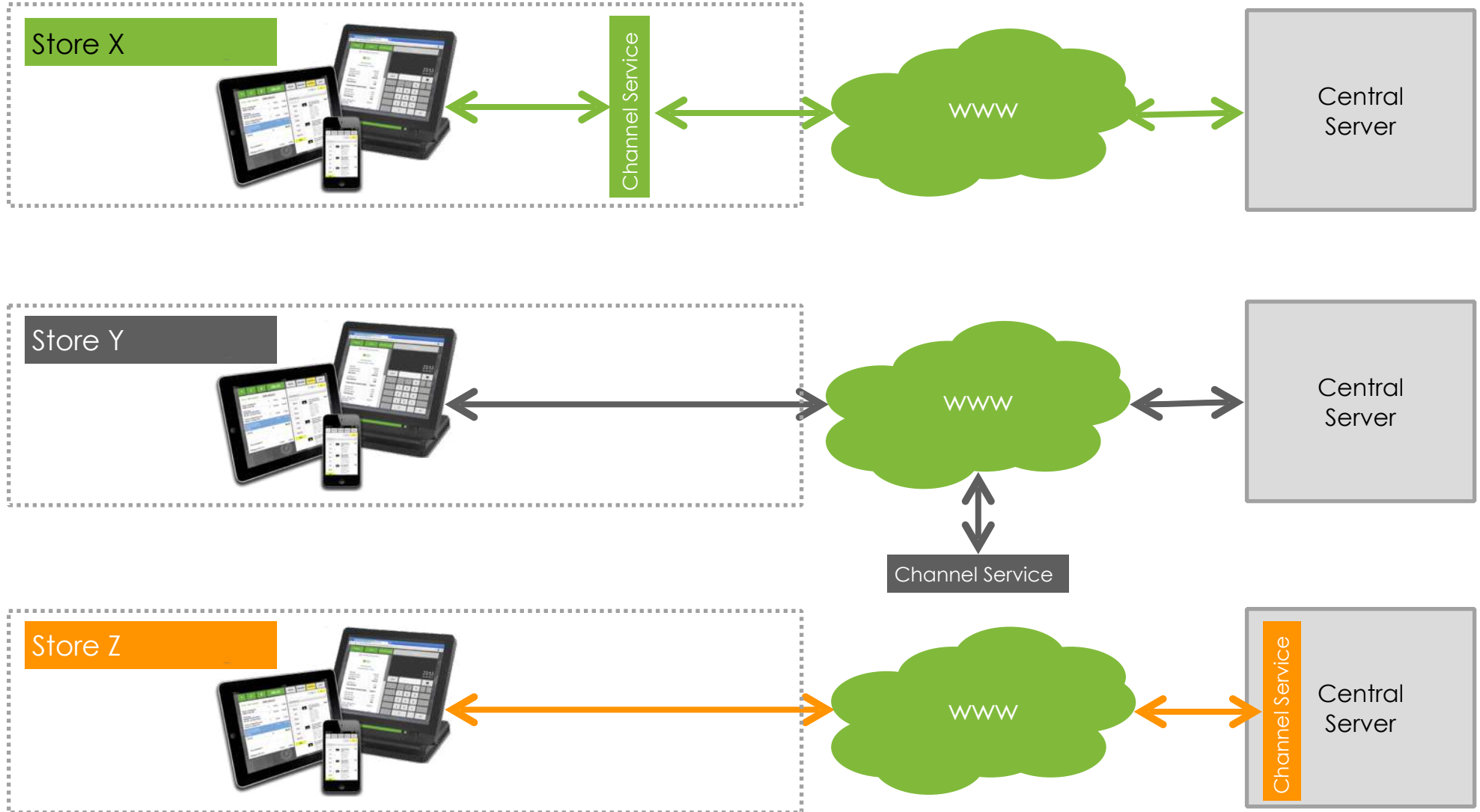
- Different methods supported to integrate with third party payment gateways

- Provides the required data services and communication services to serve each channel
- A lightweight component that can be placed in different locations (store, cloud, central server) to provide maximum scalability and performance
- In the case of stores, it enables a stronger offline mode

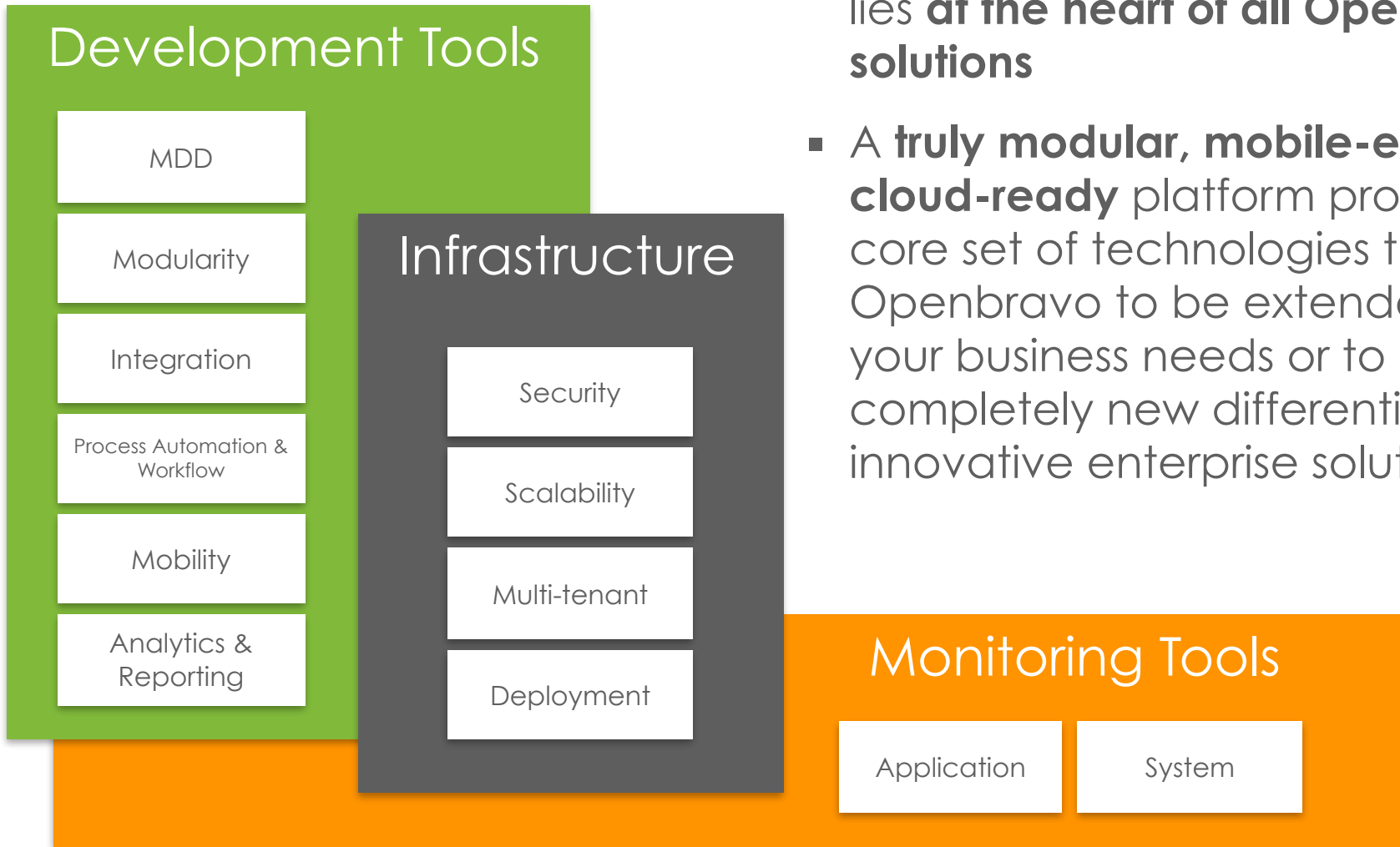
# An Application Architecture to Deliver Web-scale Digital Retail Business Solutions



# Distributed Architectures for Maximum Scalability and Performance



- Much **lighter POS Client**
  - Full master data does not need to be copied to each client
  - Enable (light) mobile devices as fully operational POS
- Much **faster data propagation**
  - Data transfers reduced in two orders of magnitude
  - Better infrastructure for higher performance and easier monitoring
- Much **higher and easier scalability**, truly dynamic
- **Higher reliability**. Intermediate buffer. More complete offline operation
- **Simple IT operation at the store** (silent transparent deployment)
- **Large reduction on HW and SW cost** (lighter client, simpler server stack)
- Ready for **gradual production deployment**
- Prepared to **deliver omnichannel services**



- The Openbravo Technology Platform lies **at the heart of all Openbravo solutions**
- A **truly modular, mobile-enabled and cloud-ready** platform providing the core set of technologies that allow Openbravo to be extended to fit your business needs or to develop completely new differentiating and innovative enterprise solutions



# Development Environment: Robust and Highly Productive

- Fully **open source stack** that minimizes vendor lock-in and provides a more stable platform to build on, while assuring a global supply of competitive Openbravo-capable IT talent
- Pre-packaged **Eclipse-based IDE**
- Distributed **SCM with Mercurial**
- Database model (schema, metadata) automatically exported to XML files for standard management of database code
- **Automated development tasks** using Apache Ant (build, update, deploy, exportDB, etc...)
- **Automated testing** based on JUnit and QUnit (unit testing) and Selenium (functional testing)

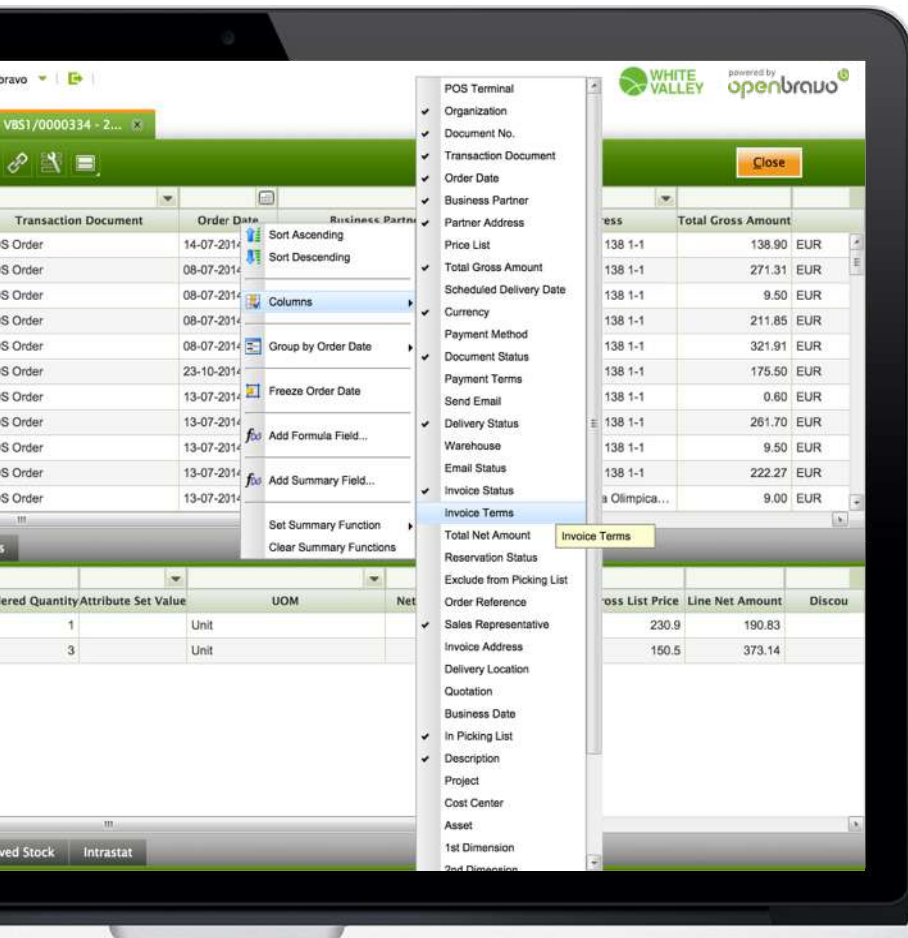
openbravo<sup>®</sup>



JUnit



# User Interface: Increase People's Productivity and Satisfaction



- Built on top of the **powerful SmartClient library**, a JavaScript/AJAX user interface library for building high-productivity web applications, providing key features like:
  - [Windows personalization](#) by end-users
  - [Spreadsheet familiarity](#)
  - [Social-like and collaborative features](#)
  - Powerful [tree navigation](#) capabilities
  - Embedded multi-language capabilities to support your international operations
- Complete definition for standard windows within the Application Dictionary (MDD) without any need for manual developments, which allows **faster development and higher quality**. Manual windows to cover your most specific user interface requirements.

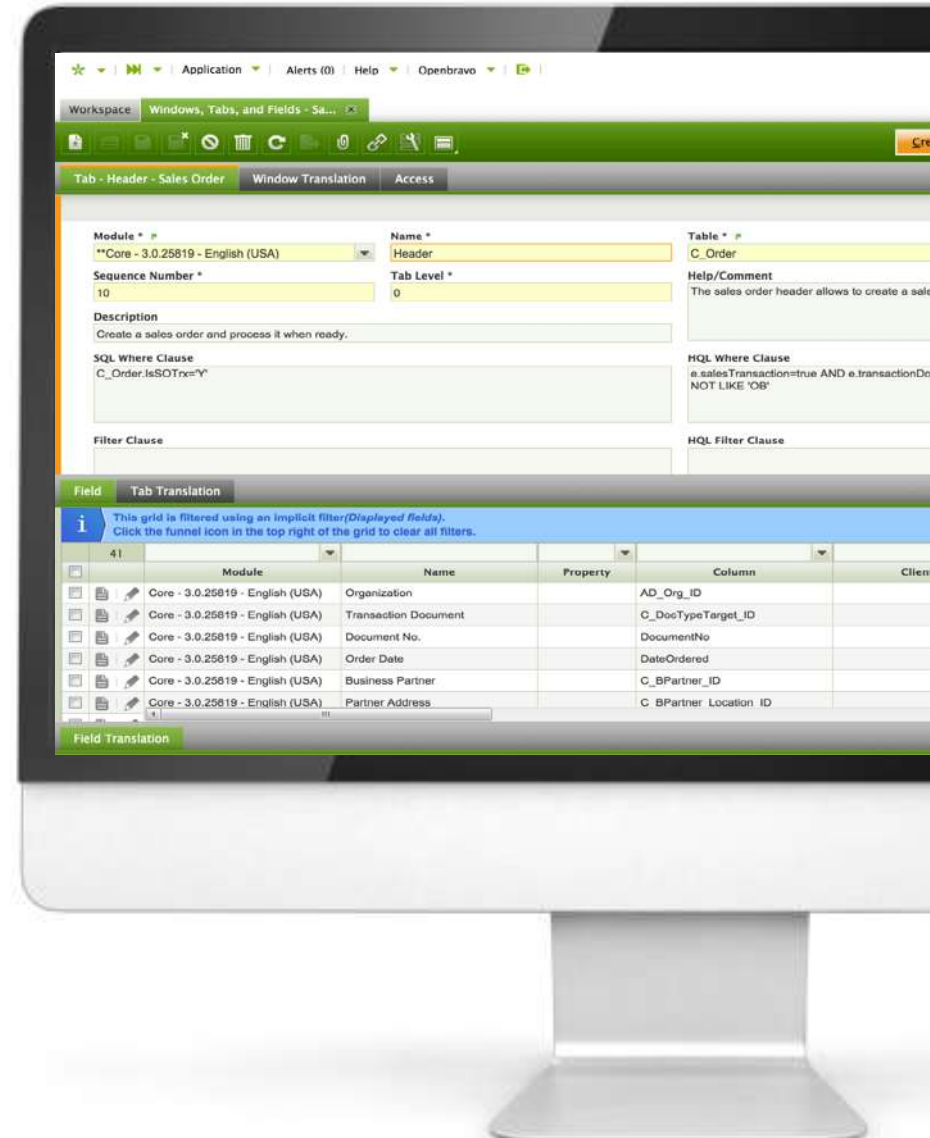


Watch ["How to personalize windows" video](#).

Watch ["Editable grid" video](#).

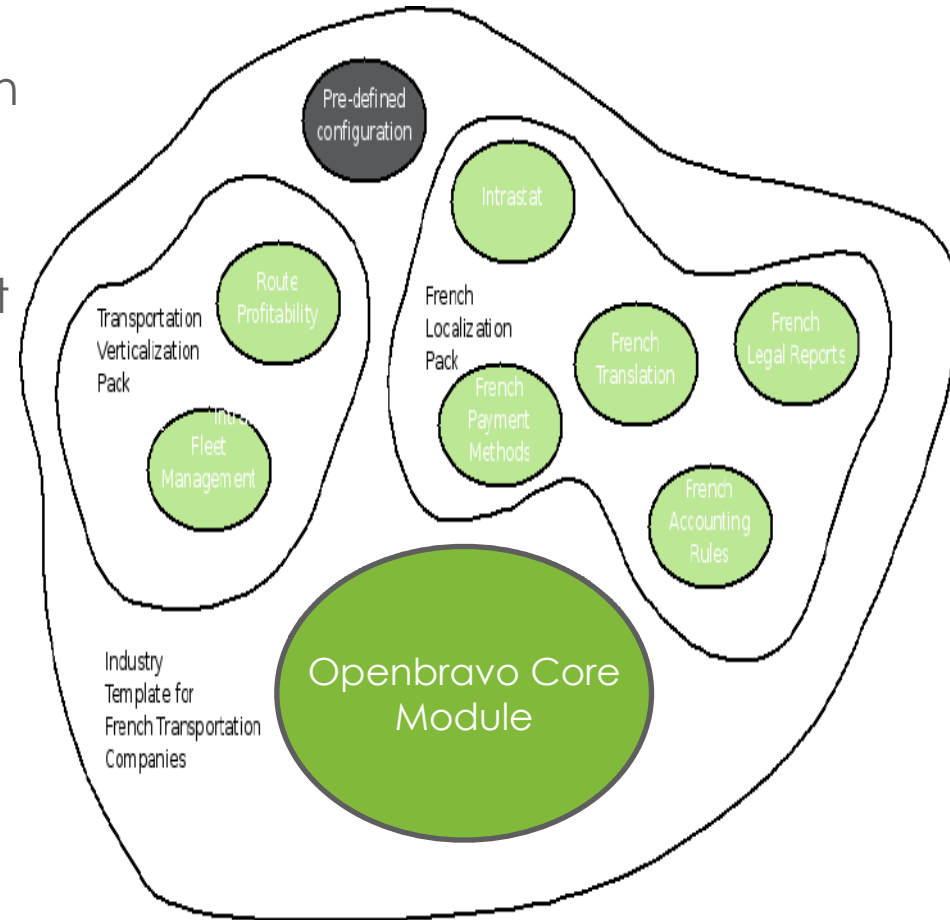
# MDD: Gain Development Efficiency with a Metadata-Driven Architecture

- **Increase development speed** with a metadata-based approach (MDD: Model Driven Development) to defining applications
- **Gain capacity to extend** by adding a language layer on top of code and defining the application in terms of views and data
- **Easily create and manage all your metadata** information through the Openbravo Application Dictionary
- Generate **user interface on the fly**
- Data access component **generated on compilation**

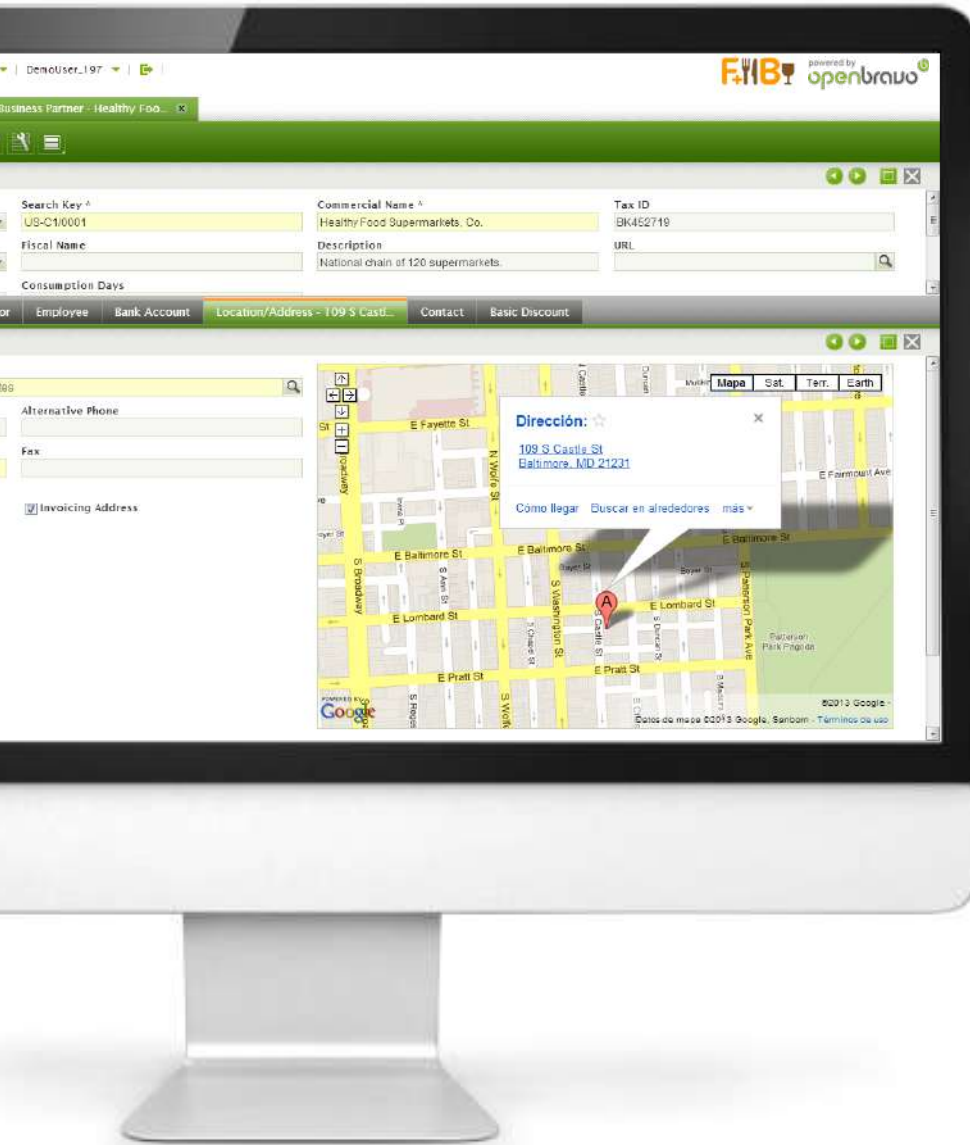


# Modularity: Do More and Faster with a Truly Modular Architecture

- An Extension Module is a piece of additional functionality that can be **deployed optionally and independently** on top of the Openbravo solution
- **As simple as a particular report, or as sophisticated as a complete localization**, it can include all kinds of software components (code, database schema, meta-data and business data)
- **Provides ability to rapidly adapt** (extend and change existing components) and with a higher granularity level
- **Makes really easy to package and distribute extensions** by simply creating its .obx file
- **Simplifies administration** through the embedded [Module Management Console](#)



# Integration: Integrate and Connect Everything, Faster



- **Easily integrate other systems** with an automatically generated JSON/XML CRUD REST Web Services layer for all common data entities or create your ad-Hoc web services (RESTful, SOAP) for specific entities
- **Achieve higher flexibility and improved performance** with datasource-based tables
- **Allow seamless consumption of other solutions** by injecting third party user interface applications in the Openbravo user interface (Google maps, Google docs, Zoho, etc) with widgets
- **Leverage available integration modules** (Magento, SugarCRM, ZohoReports, etc)

# Process Automation and Workflow: Automate Tasks and Orchestrate Processes

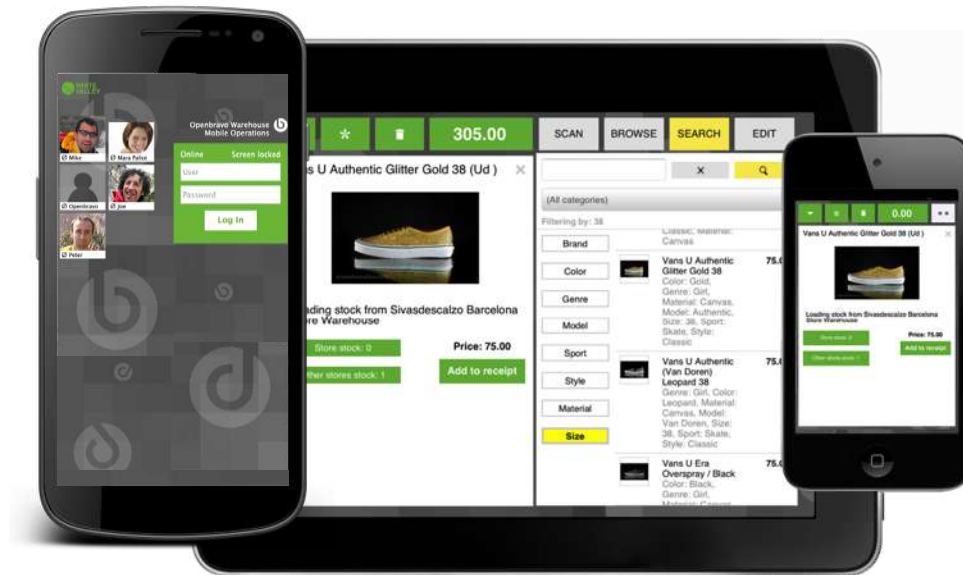
- **Build your workflows** with an embedded BPM engine (Activiti console integrated in Openbravo user interface)
- **Leverage advanced process scheduling options** to automate your daily tasks and gain control over their process execution status (Quartz)
- **Stay informed in real-time** about business events requiring immediate action with configurable alerts notified by email or application interface
- **Create email templates** to be used integrated with delivered functionality



# Mobility: Enable Your Mobile-first Strategy

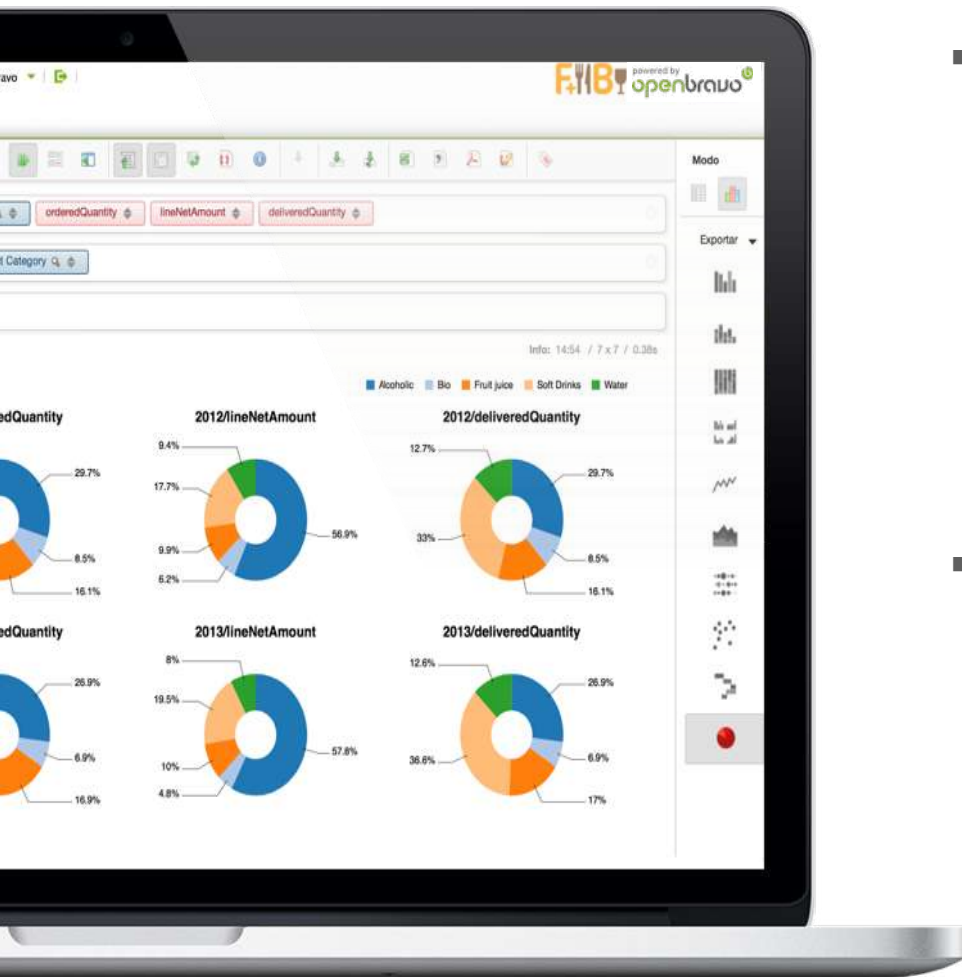


- Enjoy an **identical architecture, just a new client** (provided by the Openbravo Mobile Infrastructure module)
- **Build powerful mobile solutions** based on HTML5, Enyo and Backbone.js technologies
- Build full web solutions **only requiring a browser to be run**
- **Gain full freedom of choice of your terminals** with multi-device support (iOS, Android) and responsive design
- **Ensure uninterrupted operations** with secure offline storage
- **Leverage modularity to extend** available mobile functionality or create a new one



# Reporting and Analytics: Gain Greater Insight with Powerful Open Source BI Technologies

openbravo®



## ■ Analytics

- Embedded OLAP engine (Mondrian and Saiku)
- Create your own analytical cubes from the Application Dictionary
- Simplified deployment and maintenance by installing it as a module on the same Openbravo server

## ■ Query and Reporting

- Extend or create new reports with Jasper Studio
- Embed query list widgets in the workspace or as a field on any application form

mondrian™

TIBCO™

SAIKU

Jaspersoft

CUTTING EDGE OPEN SOURCE ANALYTICS

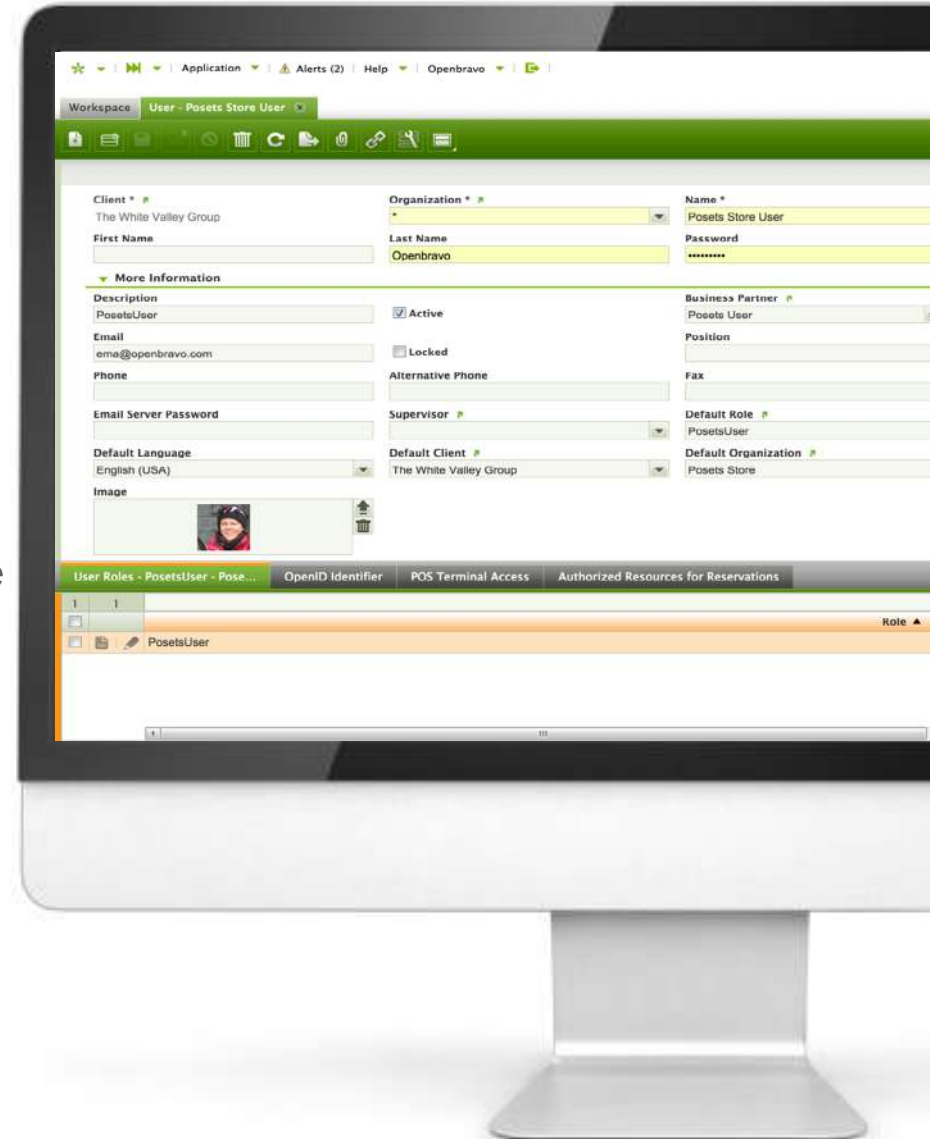
 Watch [video](#)



# Security: Adopt a Secure Architecture Trusted by Companies Around the World

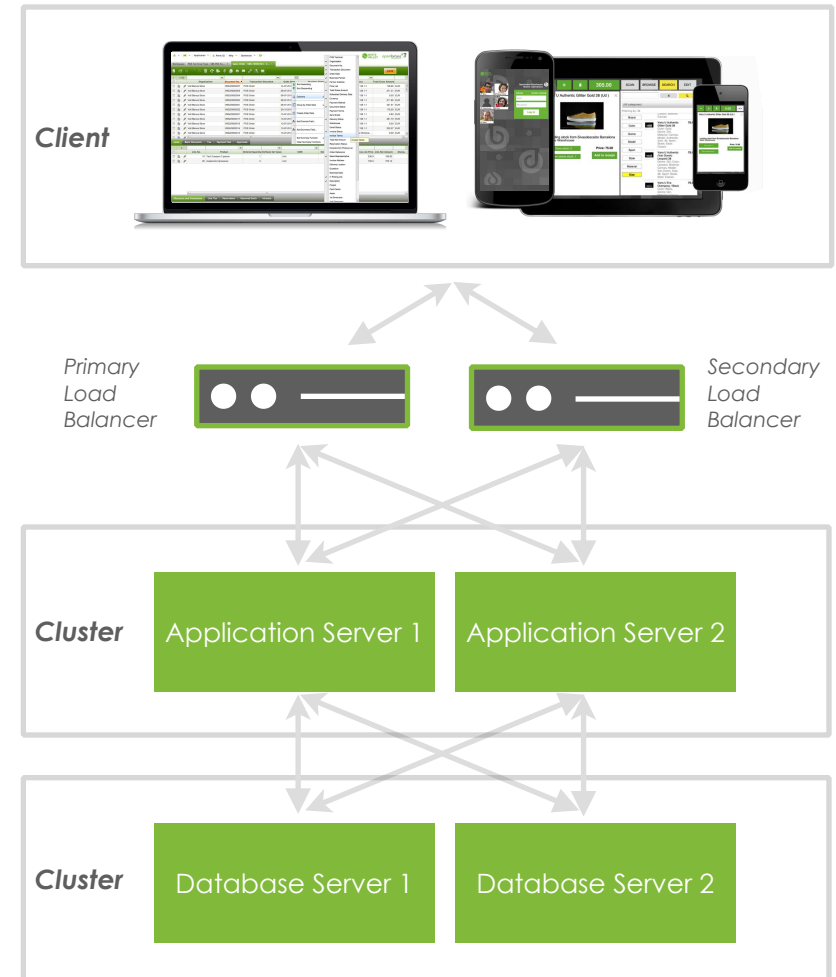


- **Protect your organization's data** from all other organizations by using unique entity/organization identifiers in all tables that restrict access at every level to your data
- **Gain control and visibility into what users are doing** in the system with a flexible security engine and audit trails
- **Leverage programmatic security:** Configurable, authenticated sessions secure access to logic, data, and metadata
- **Gain secure access** through HTTPS and provide users the ability to authenticate through LDAP, like Microsoft's Active Directory or OpenLDAP. Centralizing user authentication in this way allows for a single password for each user, instead of a different password for each application



# Scalability: Ensure High Performance on Big Load Environments

- Scale with single or multiple server architecture **designed for high performance on big load environments** (users and data) with cache levels (client, browser, UI server, App. Server, DB) and protection mechanisms (filtering/sorting configuration, request timeout)
- Scaling capabilities (clustering) provided by both Application Server and Database Server
- Standard relational schema in DB (for DB optimization)
- Client processing
- Distributed Architecture (partitioned by organizational hierarchy) for **unlimited scaling capabilities**



# Deployment: Gain Full Freedom to Deploy While Adapting to Your Changing Business Needs

- **On Premise** in your Headquarters or in a different location
- **In the Cloud** thanks to being a web native solution
- Or **hosted** by your trusted hosting provider
- Move **easily from each scenario to the other** as your business requirements evolve
- Managed **by you, a Partner or Openbravo** to enjoy a fully managed Commerce solution in the cloud, the [Openbravo Commerce Cloud](#)



# Monitoring: Deliver Performance Assurance with Leading Solutions



- **Application Monitoring with AppDynamics**
  - Leading solution named for 3 years in a row (2012,2013,2014) as a Leader in Gartner's APM Magic Quadrant
  - Model your complete installation for full control of all your components
  - Collect hardware statistics and JVM information
  - Detect potential problems before they become a real issue
  - Get automatic notification as soon as something starts to go wrong
  - Pinpoint problem root causes when the system has poor performance
- **System-level monitoring with Munin**

- **Drive** greater user acceptance more quickly
- **Deliver** business process improvements faster
- **Enable** more focus on business differentiation
- **Allow** users to innovate in business processes



**Want to know more?**

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

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

# Windows Personalization

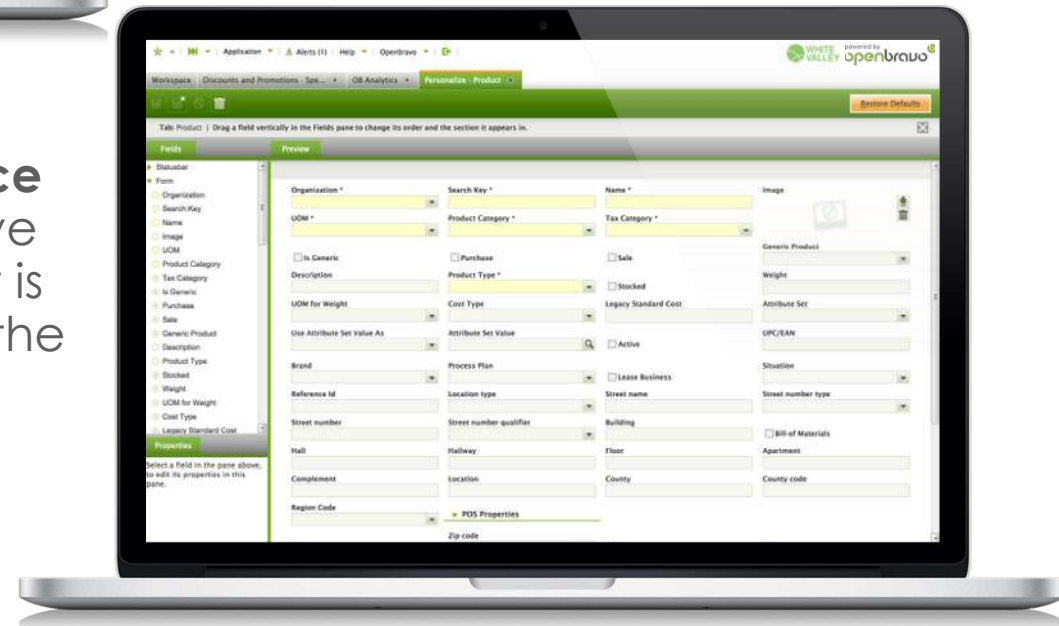


An easily **customizable portal-style home page** from which users can directly access all recently visited windows and documents, and administer the available widgets.

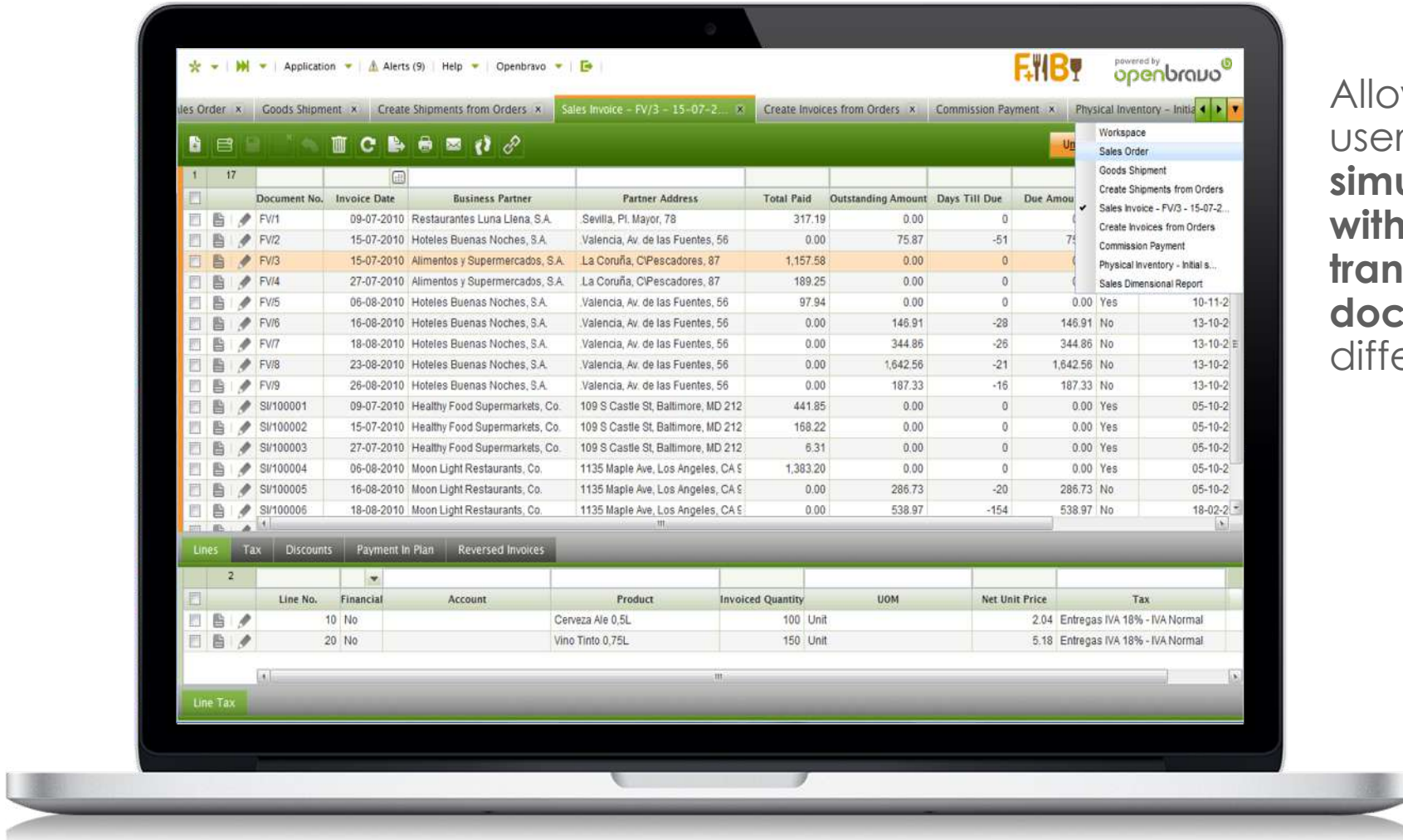
Enable end users to **personalize form layouts and grid appearance without technical assistance**. Save final configuration as a **view** that is automatically loaded next time the user visits the window.

Watch [video](#).

[Back](#)



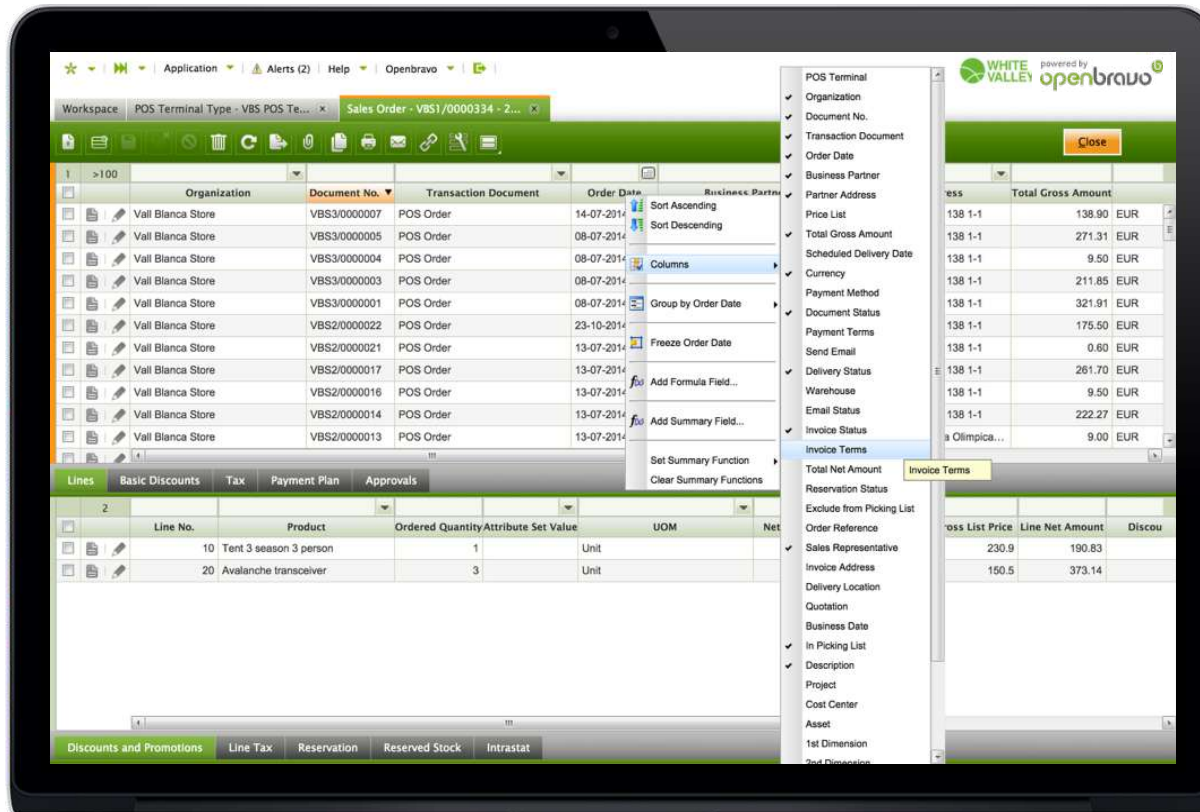
# Real Multitasking



Allow your end users to **work simultaneously with multiple transactions or documents** on different tabs.



# Spreadsheet Familiarity

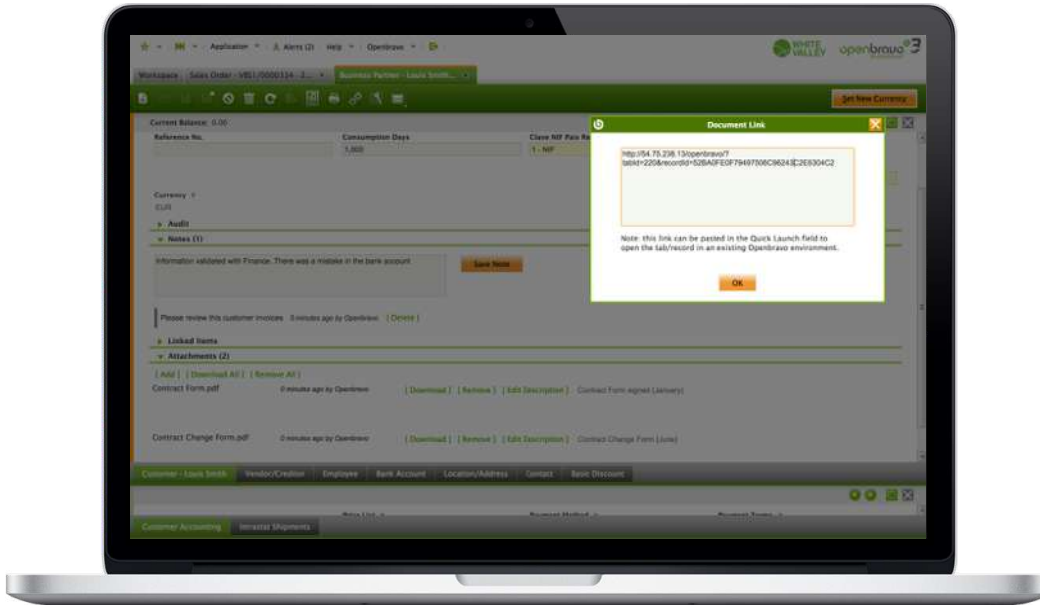


**Editable spreadsheet-style grid** that's familiar and fast to learn for users.

**Advanced grid functionalities** like column sorting, sizing and freezing, records grouping, adding formula and summary columns or exporting grid content to an spreadsheet.

 Watch [video](#).

# Social-like and collaborative features

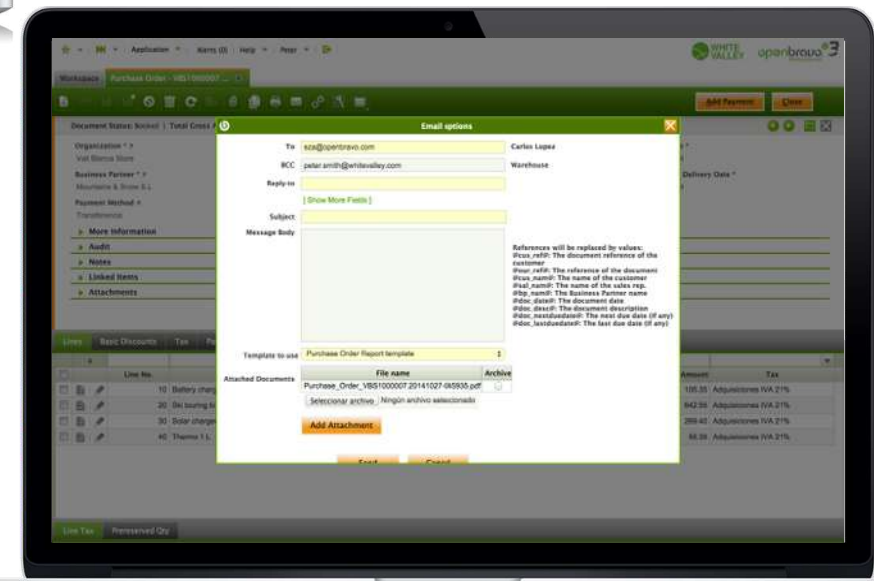


Get links to particular records that can be shared and used by another user for direct access.

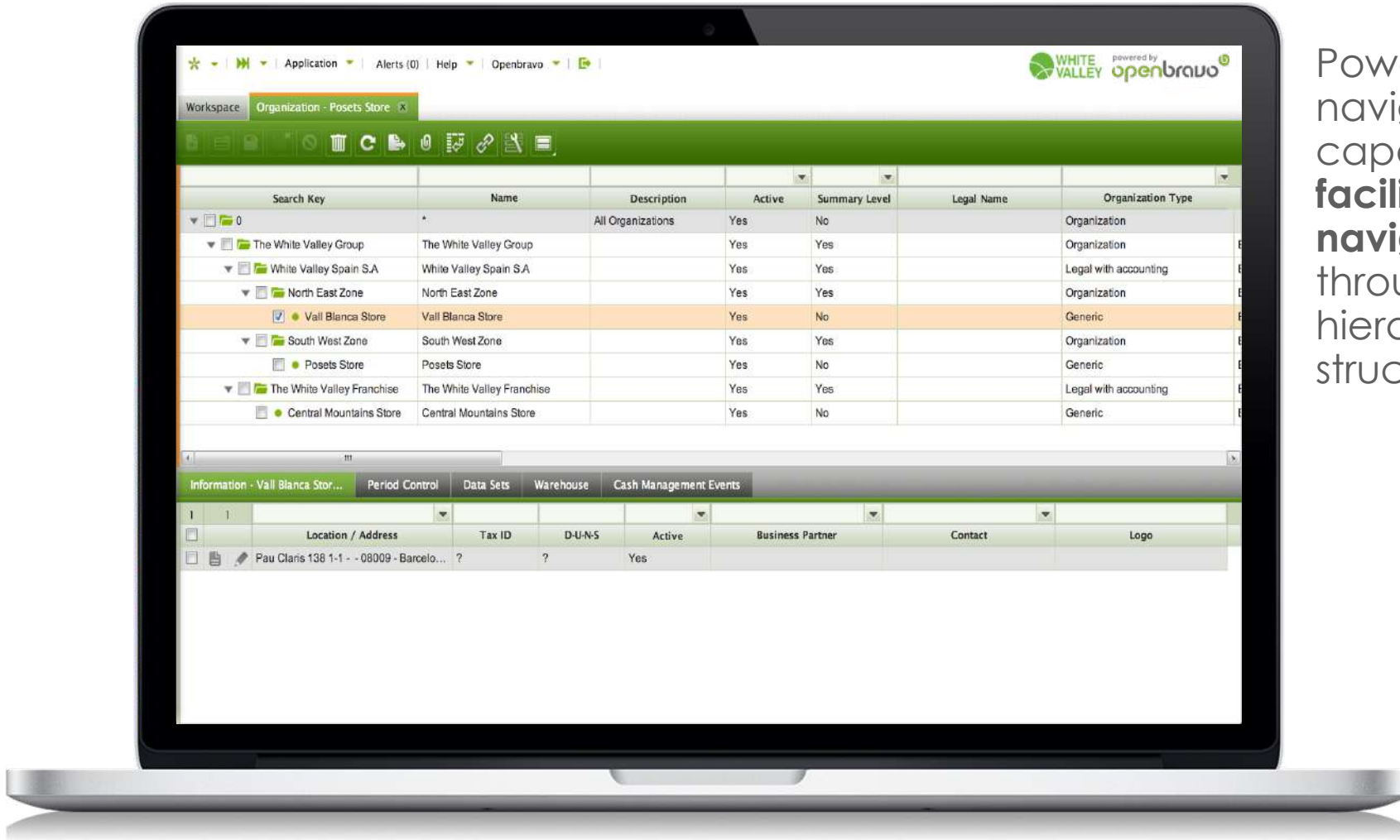
Facebook-style notes that can be associated with any object in the data model.

Share complementary documentation that can be **attached to any particular record** and can be easily downloaded later by other people.

Mail **templates** and automatic **generation of PDF documents**.



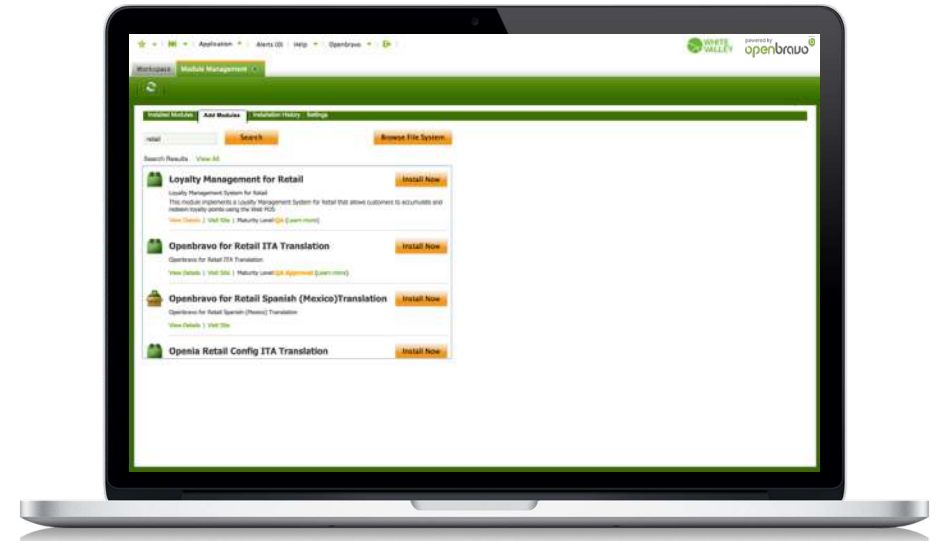
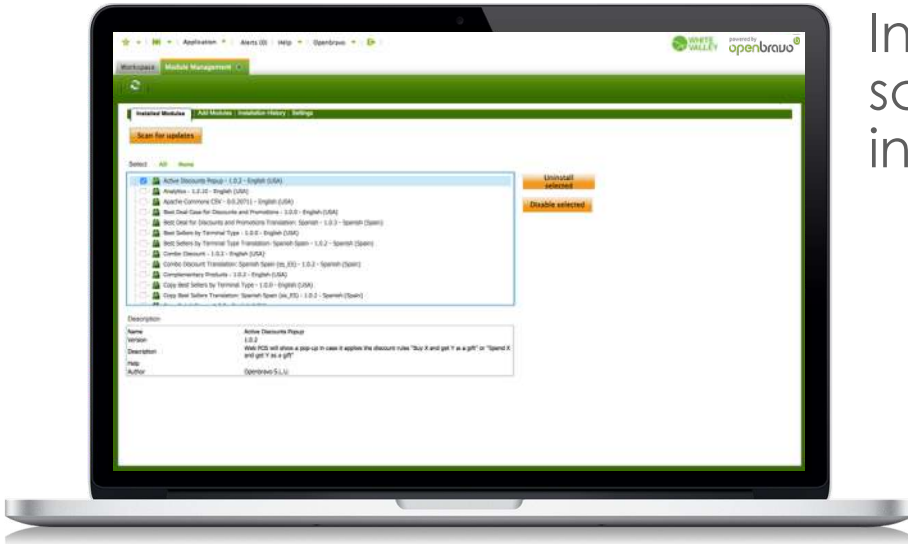
# Tree Navigation



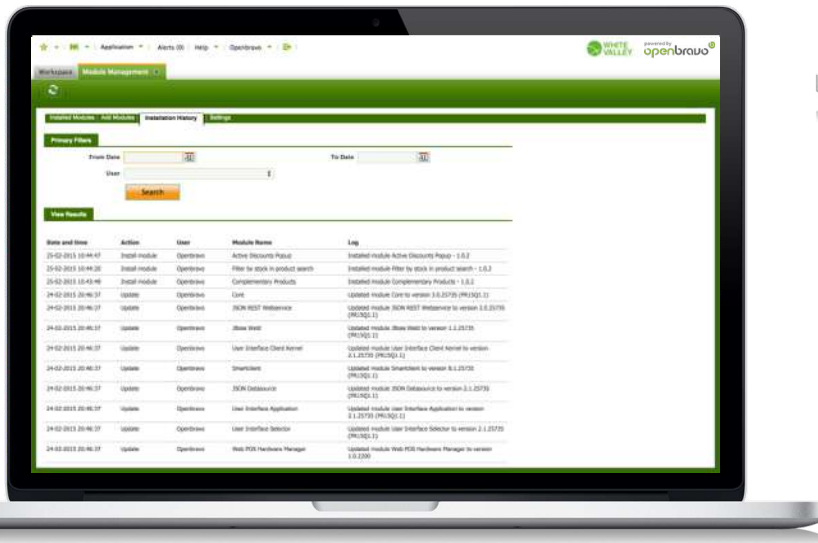
Powerful tree navigation capabilities that **facilitate data navigation** through hierarchical data structures.

# Embedded Module Management Console

Install, uninstall and disable modules, scan for updates and check module information.



Search for new modules in the central repository or your file system and check the installation history.



Watch [video](#).

[Back](#)