

***Zend Server for IBM i:***  
**ISBAN's experience**

**May 2011**

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**Director of Development**



# Agenda

- ◆ **Who is ISBAN?**
- ◆ **ISBAN Italia's mission**
- ◆ **Size, revenue, employees/external collaborators**
- ◆ **Technical structure**
- ◆ **Hardware: Servers, OS, Tipology etc.**
- ◆ **Why PHP and why Zend?**
- ◆ **Support and Training delivered by Zend**
- ◆ **Our web application**
- ◆ **What it meant to move to Zend Server?**
- ◆ **Q&A**

# Who is ISBAN?: More than 150 year with “Grupo Santander”, really close to the people of all over the world.

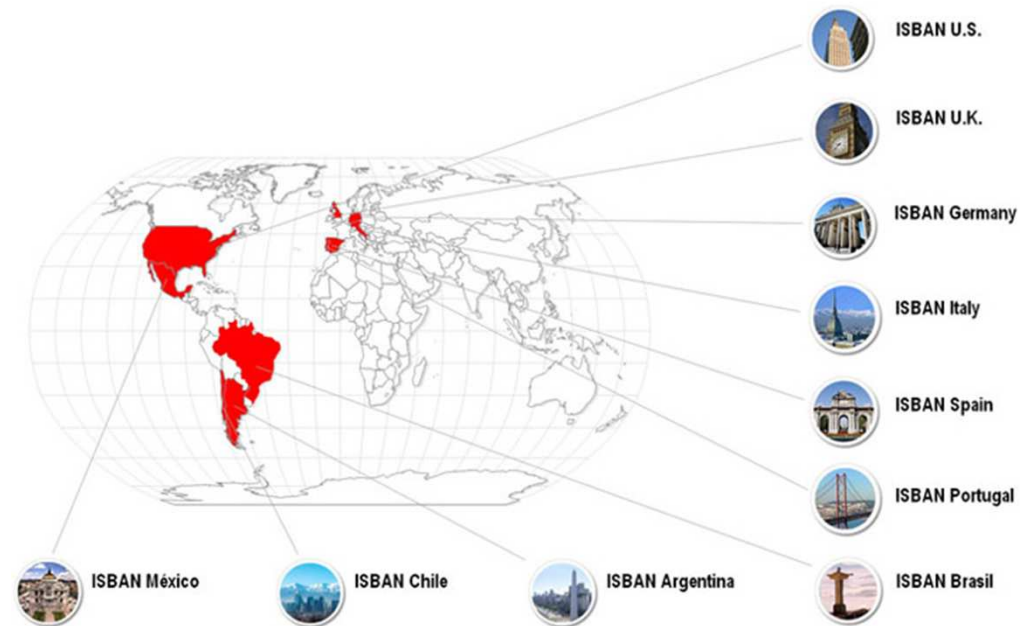
Isban (Ingeniería de Software Bancario) is part of the Technology and Operations division of the Santander Group.

Banco Santander was founded in 1857 by a decree of Queen Isabel II of Spain to facilitate the trade between the port of Santander and South America.

The Santander Group is the fourth largest bank in the world by profits and eighth by stock market capitalisation.

**Isban** is the leading Spanish company in Technological Services, **specialising in banking software development.**

Isban develops software and provides system integration services, which are shared by the different companies in the Group.



# ISBAN's Mission

**Isban** provides support to Santander Group , enabling them to function more effectively in the areas of:

- global customer management,
- time-to-market efficiency,
- integrated channel management

This support is also helpful in reducing operational costs while increasing the quality of information management.



Leading Company  
in **Technological Services**,  
from the best Worldwide Bank



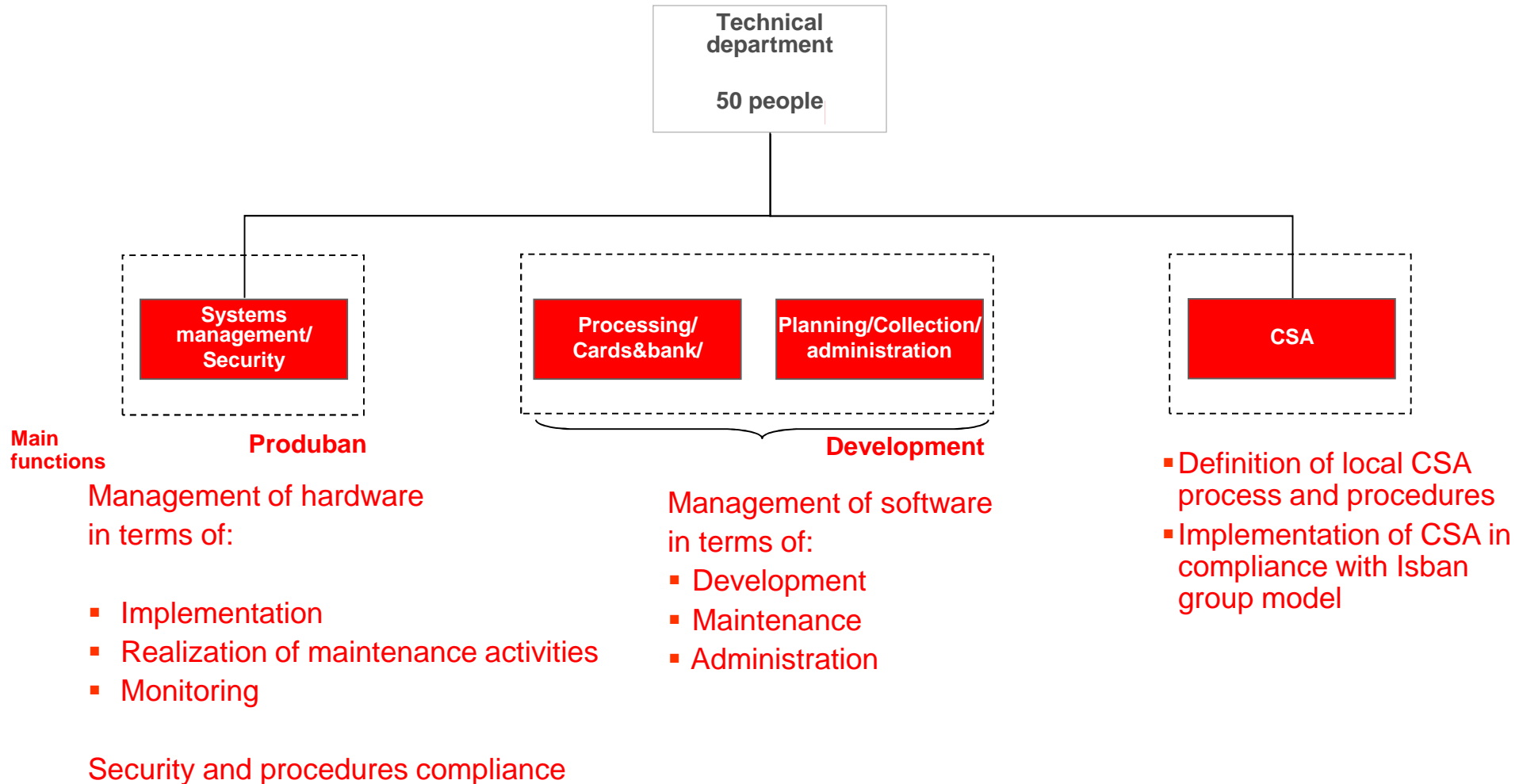
# Size, revenue, employees of “Grupo Santander”

**Madrid February 4<sup>th</sup> 2010:**

Banca Santander achieved its 2009 goal with revenue of **8.943 billions euros**, a growth of 1%

<b>Number of countries</b>	<b>40</b>	
<b>World wide customers</b>	<b>90.000.000</b>	
<i>More data</i>	<i>Year 2009</i>	<i>Year 2007</i>
<b>Number of shareholders</b>	3.034.816,00	2.278.321,00
<b>Number of employees</b>	170.961,00	131.819,00
<i>Continental Europe</i>	48.467,00	47.838,00
<i>United Kingdom</i>	24.379,00	16.827,00
<i>Latin America</i>	96.405,00	65.628,00
<b>Number of Branches</b>	13.390,00	11.178,00
<i>Continental Europe</i>	5.998,00	5.976,00
<i>United Kingdom</i>	1.303,00	704,00
<i>Latin America</i>	6.089,00	4.498,00

# Technical Department



# Hardware

The hardware described is related to IBM servers dedicated to the online service:

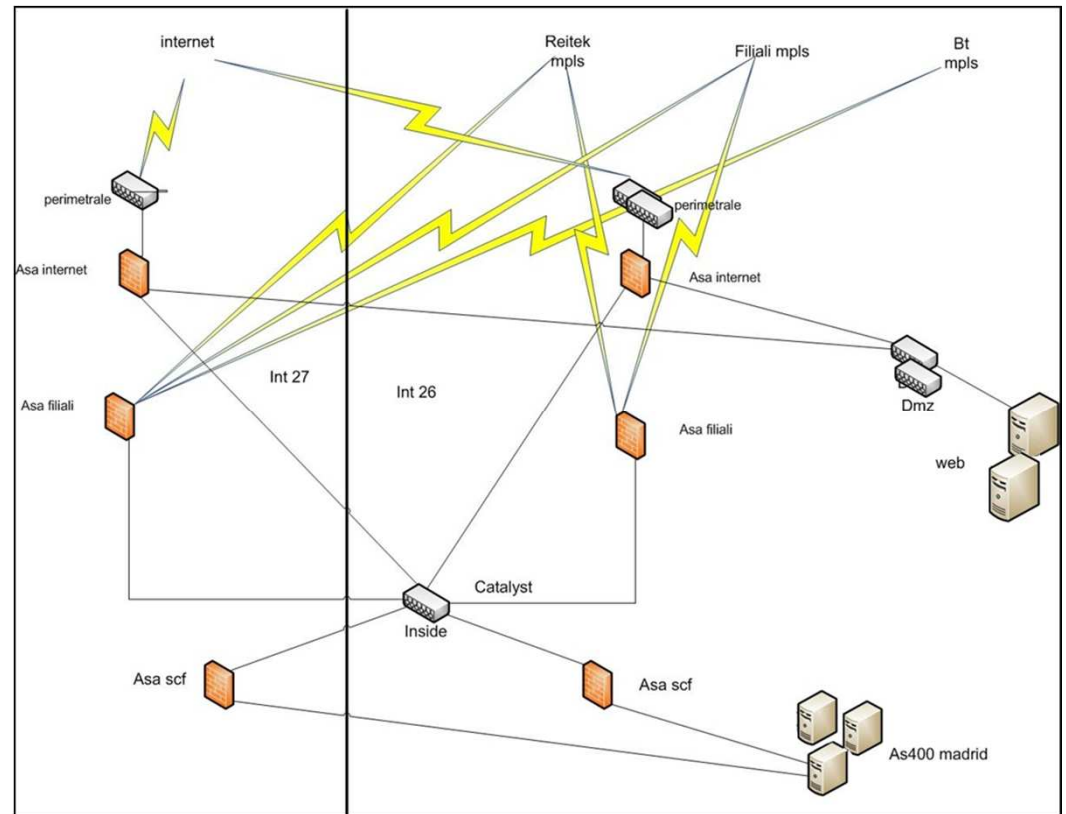
**In Turin: 2 units**

**Model** iSeries Power 7  
**HD** total 1.3 Tb  
**OS** 6.1

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**In Madrid: 3 units**

**Model** iSeries Power 6  
**HD** total 30 Tb  
**OS** 6.1



At the end of 2010 we migrated from **Zend Core** and **Zend Platform** to **Zend Server for IBM I**

## Why PHP and Zend?

- ◆ Web Application developed in NetData, no longer supported by IBM
- ◆ Cobol developers with procedural approach
- ◆ PHP is the best option because its low learning curve, flexibility and support delivered by Zend Technologies
- ◆ **Choice done!**

# Support and Training delivered by Zend

## ◆ 2007:

- Started the on site training in several sessions for a total of **40 developers** starting from the basis up to advanced and **Object oriented** concepts.

## ◆ 2008:

- First project of creation of web services to Mediolanum, project supported by Zend
- Completion of training course

## ◆ 2008-2009:

- Second project, the migration of about 800 macro **NetData** to PHP with support by Zend

## ◆ 2010:

- Validation of the code converted by Zend and migration to **Zend Server for IBM I**

## Our web application

- ◆ The applications developed in PHP are divided into four main areas:
  - Advertisement site, the classic web-window
  - Dedicated to the end-user
  - Portal and web services for dealers
  - Internal operative interface for management practices

# Our web application

## Some numbers:

**1,220,000** users

**15 millions** page views monthly

**150,000** users with access to reserved area

**4,000,000** page served

**1,400,000** SOAP's requests of web services

# Our application : Web site

The screenshot shows the Santander Consumer Bank website in a Mozilla Firefox browser window. The browser's address bar displays the URL `http://sviluppo.finconsumo.it:89/erremme/prestiti.php`. The website's header includes the Santander logo and the text "CONSUMER BANK", along with the date and time: "Martedì 17.05.2011 | 15:58:21".


The main content area features a navigation menu with the following icons and labels:

- Prestiti
- Carte
- Leasing
- Conti Deposito
- Assicurazioni
- Offerte Riservate
- Chi Siamo
- Filiali
- Area Riservata
- Scuderia Ferrari
- FAQ e Contatti

The central banner displays the text "vai >>>" in white, set against a background of a woman sitting on a grassy field holding a large bunch of red balloons. Below the banner, the main headline reads: "Il prestito è **Risolto!** Fino a **30.000 euro**, senza spese di apertura pratica!".

The footer of the page contains the following text: "Trasferimento dati da maps.gstatic.com... | 34290010 | Credits | Credito Consapevole | Contratti | Sicurezza | Trasparenza Bancaria e Assicurativa | Informativa Privacy".

# Our application : Financial Leasing Calculator



PREVENTIVO LEASING N. 170

[Modulistica:](#)  
[Utilizzo dati](#)  
[Nota integrativa precontrattuale ISVAP](#)  
[Fascicolo Informativo Leasing Protection](#)  
[Fascicolo Informativo FI Vamos Lease](#)  
[Elenco documento per istruttoria leasing](#)

[Menù](#)

**DATI BENE**

Pagina 1 di 3 [Successivo>>](#)

**I dati contrassegnati con \* sono obbligatori**

Tipo cliente *	Privato <input checked="" type="radio"/> Società <input type="radio"/> Ditta individuale <input type="radio"/>		
Prodotto *	Autoveicolo leasing consumo		
Tipo bene *	Nuovo <input type="radio"/> Usato <input checked="" type="radio"/>		
Marca *	MAZDA	Modello *	Pick Up
Cilindrata *	2499		
Mese/Anno immatricolazione *	Maggio 2010		
Eurotax *	14000,00	Eurotax/Prezzo di listino	
Descrizione bene	Freestyle Cab 2.5 TD 143 CV "Hot"		
Kw	105,00		
Portata	,00		
Targa/Telaio	/		
Note			

# Our application : Financial Personal Loan Calculator

**Il prestito è Risolto! Fino a 30.000 euro in 120 mesi!**  
**Risolto** è il prestito personale **senza spese di apertura pratica**: puoi chiedere fino a **30.000 euro**, rimborsarli anche in 120 rate e avere l'importo in 24 ore dall'approvazione!

Finalità del prestito: Selezione 0 30.000  
Tipologia: 0 60

Importo della rata: € **25.000**  
Rate n. **60**  
ASSICURAZIONE  Sì  No

A partire da **7,50%** (tan)

La promozione è riservata alle richieste on-line.  
[Recupera il preventivo >>>](#)

**preventivo gratuito**

**IN CORSO**  
Prestiti  
Carte  
Leasing  
Conti Deposito  
Assicurazioni  
Offerte Riservate  
Chi siamo  
Filiali  
Area Riservata  
Scuderia Ferrari  
FAQ e Contatti

Messaggio pubblicitario promozionale. Offerta valida dal 01/07/2010 al 31/12/2010. Salvo approvazione di Santander Consumer Bank. Tan variabile a partire da 7,50%, Taeg variabile, max 11,44%. Spese apertura pratica €0. Copertura assicurativa Creditor Protection Insurance facoltativa (però non compresa nel Taeg). Per prestiti con durata fino a 18 mesi l'imposta di bollo è di €14,62, per durate superiori si applica l'imposta sostitutiva pari allo 0,25% dell'importo finanziato. Spese di incasso rata €2,50 per pagamento con RID ed €2,00 con bollettino postale. Per le condizioni contrattuali del prestito e della polizza assicurativa riferirsi, rispettivamente, ai fogli informativi "Prestiti personali" e alla Nota Informativa, disponibili presso le filiali e nell'area "Trasparenza bancaria" del sito [www.bancasantander.it](http://www.bancasantander.it)

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# Our application : Content Management System (CMS)

Santander - Mozilla Firefox

File Modifica Visualizza Cronologia Segnalibri Strumenti Aiuto

Santander

http://sviluppo.finconsumo.it:89/erremme/informativa.php?sez=5&doc=3

Più visitati Come iniziare Ultime notizie Personalizza collegam... Siti suggeriti !stampe

Disattiva Cookie CSS Moduli Immagini Informazioni Varie Contorna Ridimensiona Strumenti Visualizza sorgente Opzioni

**Santander**  
CONSUMER BANK

Martedì 17.05.2011 | 16:00:04

Principali Diritti del Cliente  
8 Documenti

Fogli Informativi  
19 Documenti

Guida Arbitro Bancario Finanziario  
4 Documenti

Assicurazioni  
8 Documenti

Visualizza i file PDF con Acrobat Reader  
SCARICA

Puoi usare la tastiera per navigare questa sezione

Fogli Informativi > **SANTANDER CONSUMER FINANZIA E PARTNER COMMERCIALI**

Prestiti personali BPPB (649KB)

Prestiti finalizzati Harley-Davidson (683KB)

Prestiti personali Banca Mediolanum (127KB)

Leasing cassa centrale (947KB)

Leasing Banca Mediolanum (1.612KB)

Carte di credito a saldo Allianz (1.184KB)

Carte di credito revolving Allianz (778KB)

Carte di credito a saldo Generali (1.232KB)

Carte di credito revolving Generali (795KB)

Prestiti personali (153KB)

Prestito personale di rinegoziazione del debito (722KB)

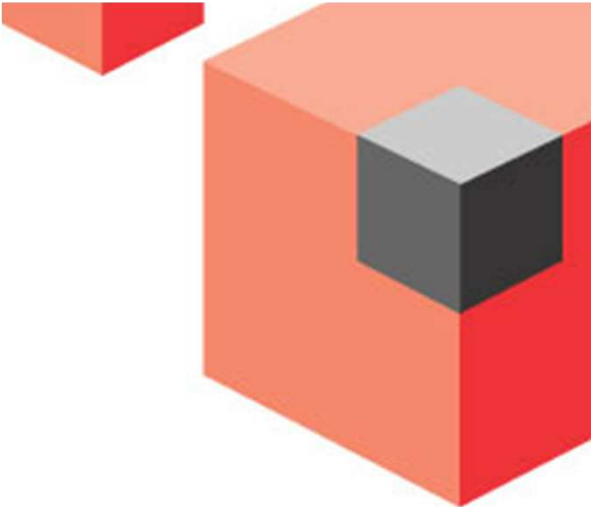
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## What it meant to move to Zend Server?

- Improved the security and stability of the PHP stack by using the latest version of the PHP engine.
- Improved our performance compared to previous solution: Zend Core + Zend Platform.
- With “*Code Tracing*” - new functionality in Zend Server-, we were able to reduce the time dedicated to debugging.
- We have simplified the management of our PHP environment with the ability to restart services from the web interface.
- We have used the latest version of Zend Framework 1.10



# Q&A

