GEOAddress: An environment integrated with the company process.

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**Project**

This project proposed the implementation of a corporation system for address management, named GEOAddress. It is integrated with other systems to management of customers and electric networks, and is supported by the street centerline and cartographic feature classes.

It was designed with integration to three systems: SAP Customer Care and Service (CCS), using the XI broker of SAP, Operation and Dispatch System and Cadastre/Designer (GIS/Designer), using web services and ESRI replication technology.

The cadastre and queries environment is available on the intranet, through web services and ArcGIS Server technology. This strategy was elaborated for optimization and dissemination of the spatial information through a unique GIS data source, to support business and technical processes of the company.

For quality assurance of the cadastre and updating process of the addresses, and to avoid inconsistent data insertion, business rules were implemented to make verification between dependents systems.
Past

For fifteen year the company used the system based on main frame for register, update and control of the your assets.

After 2000, the company change the technical systems on main frame for ESRI platform connected with tools Miner & Miner for Electricity. Then born the GIS for Cadastre.

In 2006, the company worked for implementation the tool for designer.

But, users continued creating and updating register of the address inside de main frame.

This fact was due to GIS don’t have the rules for cadastre and updating for street centerline. And, GIS don’t have all tables for relationships (City, District, segments of the address etc).

Then, the users needed to use two technical environments for maintenance the business of the company (GIS and Address Main Frame).
Addres Main Frame: schema

Commercial (Main Frame) -> Address (Main Frame) -> GIS

- Cadastre and Update
- Syncronize of the address
- ID Address COD POSTE

SAP
CRM
Data Master
Operation and Dispatch System
Cadastre on Main Frame
Project’s Proposal

Data Model

From the feature class street centerline was elaborated the data model that have reciprocity with main frame’s data model.

This is necessary because all data contained inside address main frame were migrated for GEOAddress.

User Interface

User interface was projected to GIS environment.

This form the users view the spatial information by street centerline and the attributes available inside de related tables.

For cadastre and update data, GEOAddress had form for fill by users, however with business rules.
**Project’s Proposal**

**Interface with other Systems**

GIS interface uses the two ways:
1. Integration with wire devices that they use the address information by auto updaters.
2. Replication street centerline data for view inside de GIS.

Operation and Dispatch System
This case was projected an interface to send files with de registers from GEOAddres to database of the Operation and Dispatch System.

SAP (CRM)
An store procedure was projected to send register from GEOAddres to database of the CRM by XI.
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GEOAddress: schema
Technologies involved

• ARC GIS Server
• SDE Replication
• JBOSS
• XI

• Program language: JAVA
Products

• Tools for cadastre and update of the geo-address.

• Tools for view and select of the address and wire devices.

• Integrations:

  – GIS

  – Operation and Dispatch System

  – SAP (CRM).
**Profits**

- Integrated Systems
  - GIS by SDE Replication and rules connections;
  - SAP by XI;
  - Operation and Dispatch System bys rules connections.

- Adaptation the same match coding used on SAP, Operation and Dispatch System and GIS.

- Environment by WEB
  - All users have access for information inside of company;
  - Update for cadastre has more completed: street centerline with attributes.
  - The update by web, then the information for user is update faster.