Telecom & IT Solutions

Telefonica: Geospatial Database for Operations and Engineering

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Technology is our art.

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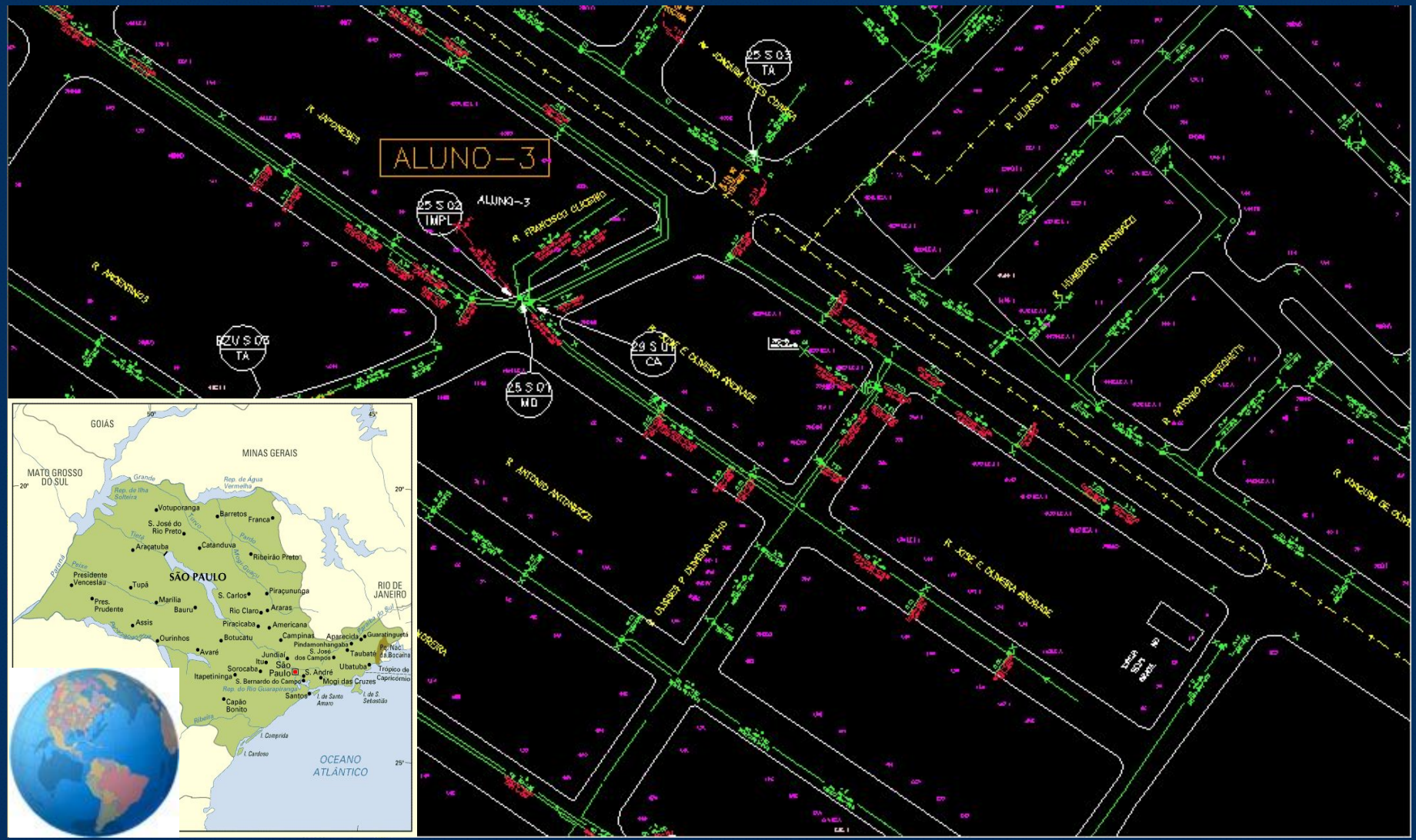
What really matters

ROI

Telecom perspective of facilities geospatial database



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Incremental Conversion

Network and services data for 500,000 new subscribers per month

1300 major engineering projects per month

Engineering – Design, Build, Maintain

- Bulk conversion
- Use of forecast and planning information
- What if scenarios
- Bill of materials
- Integration with asset management
- Phased information acquisition
- Dependency on existing network
- Phased construction
- Support for long transactions
- Versioning and dependency trees
- Integration with third parties applications
- Control of missing data
- Workflow configuration
- Scalability
- Desktop
- Security and Control

Operating

1,000,000 Geographic Queries and
200,000 Service Orders / month

12,000,000 customers
16,000,000 access lines

Operating – customer care, provision, 24 x 7

- Integration with CIS
- Integrated engineering design information
- Incremental data conversion
- Geographical on-the fly queries for locating closest facilities
- Qualification of circuits for broadband
- Provisioning data for workorder management
- Response time / throughput critical
- Short transactions
- Spatial queries
- Network models
- Network traces
- Best paths
- Workflow management
- EAI

Analysing

5,000,000 qualified landbase addresses

Marketing – demand segmentation, forecast

- Demographics
- Customer profiling
- Zoning
- Demand forecasting
- Integration with BI tools
- Thematic analysis
- Integration with planning tools
- Thematic mapping
- Simulation tools
- Flexible, configurable data modelling
- Web mapping
- Metadata

Information Exchange – regulation, local government

- Multiple information sources and destinations
- Reporting
  - Local and federal government
  - Sarbannes-Oxley act
  - Tariff cost model
- Goals for universal access
  - Regulation
- Local government
  - Social responsability
- Use of standards
  - De jure
  - De facto
- Simulation tools
- Thematic analysis
- Export/Import tools
- Reporting tools

Querying

2,000,000,000 database queries / month

Oracle Spatial

- Universal open data access
  - Oracle is the single point of truth, so storing geographical information in Oracle enables other application to share the information
- OpenGIS compliance facilitates integration
- Overall simplification of modelling and deployment of applications

Scalability

- 100,000,000 spatial objects
- 60 servers
- 1000 concurrent users

Return On Ivestments

- Operational
  - Dramatically higher proportion of automatic assignments
  - Reduced number of assignment errors
  - Resources required for provisioning reduced by 60%
  - Cost of provisioning reduced by 40%
- Engineering
  - Backlog eliminated
  - Project life cycle reduced from weeks to days
  - Automated as-built process
  - Automated job estimates and BOM
  - Integrated with SAP asset management
- Faster revenue recognition
- Reduced cost of selling for broadband
  - Marketing direct campaigns
  - Increased hits
  - Identification of dark areas
- Reduced cost of data maintenance

THANK YOU!

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