





O FIRMIE ENION S.A.

ENION S.A. is an electricity distributor, established via merger of 5 power companies: Beskidzka Energetyka, Bedzinski ZE, ZE Czestochowa, ZE Kraków and ZE Tarnow. ENION S.A. services about 2.3 million customers, and the company's turnover for 2005 were in excess of PLN 4.25 billion.

ENION S.A. created a data warehouse for 5 companies, using the Comarch Business Intelligence, Microsoft® SQL Server 2005 64-bit Edition platform, as well as the Microsoft® Windows server platform.

These days, consolidation of operational and management information from five very different IT environments may not seem very spectacular. Yet, when it involves consolidating information on 2,3 million customers, stored in 5 different application environments, even a slight mistake in the assumptions, or wrong technological choice could be very expensive. ENION S.A. not only managed to do it right at first try, but also within the assumed budget and time. The data consolidation project took ENION S.A. IT specialists 3 months, and the experts from Comarch managed to build and implement a system which fully meets the ambitious assumptions within an equally ambitious time – 4 months. In order to





repeat such feat, one must gather in one place: an ambitious customer, a supplier eager to face challenges, and the best technology. "We knew that the architecture we offer will have to stand the test of time, that is it will have to be flexible enough to be useable in the future, also for other purposes" – says Adam Borek, Chief IT Specialist at ENION S.A.



SITUATION

Today, it is difficult to imagine a merger of companies without IT support. When on 01 July 2004, five power companies (Beskidzka Energetyka, Bedzinskiego ZE, ZE Czestochowa, ZE Krakow and ZE Tarnow) were merged to create ENION S.A., the highest priority was given to consolidation of management IT. In the initial period, information from the billing systems was consolidated in reports generated using calculation sheets. From the very beginning it was certain that a new solution, which will solve the problem of data consolidation in the long term and comprehensively, must be created. Each power company used a different set of basic application. There were different billing systems, ERP systems, which were also at various stages of implementation, auxiliary systems... Also, the traditions related do defining of business

concepts and reporting varied. It was obvious that none of the Branches would be able to replace its application within a short period of time, thus it was necessary to develop an integration solution allowing to combine all five environments. IT specialists from ENION S.A. decided to develop a model of the future solution before deciding on a specific technological platform. "This was very important conceptual work. We knew that the architecture we offer will have to stand the test of time, that is it will have to be flexible enough to be useable in the future, also for other purposes" – says Adam Borek, Chief IT Specialist at ENION S.A.

The preliminary assumption was that consolidation of information from the billing systems within the company would be carried out using a data warehouse, consisting of a central warehouse and five cooperating branch warehouses. Such a structure resulted directly from the fact that the field branches of ENION S.A. are autonomous in terms of operational IT and, regardless of consolidation of information for the purposes of managing the entire company, they require local analytical support for the ongoing business. "When we specified the terms of reference, we already had a very precise vision of how the entire solution was supposed to work. We knew what we wanted and thus we reduced the risk of potential failure. The potential contractor clearly knew our expectations and could not argue that we provided them with insufficient information" – says Adam Borek.

The contractor selected to develop the system was Comarch SA from Kraków, which presented an offer based on the Comarch Business Intelligence, Microsoft® SQL Server 2005 64 bit Edition and Microsoft®, Windows Server 2003 platforms, with Business Objects as the presentation layer. "We also considered offers from other providers, offering different technologies. The solution from Comarch and Microsoft, which was selected by way of the tender, suits us, as it combines a lot of elements: abundance of functionalities and the resulting flexibility, high scalability and accessibility, as well as attractive price. Solution The problem of ENION S.A. consisted in inconsistency of the systems and the resulting inconsistency of data definition.





Therefore, all the works were based on determination of a universal glossary of business terms and the scope of their meanings. On these grounds, it was possible to create local glossaries for the branches. "In practice, local glossaries are universal glossaries, enhanced with elements specific for the given branch" – says Adam Borek. The implemented analytical areas of Comarch Business Intelligence encompassed the following business process, essential for the company's operation:

- · sales of power,
- · industrial services,
- · monitoring of receivables,
- · generation of tariff plans,
- · payments service,
- · debt collection.

According to earlier assumptions, the solution consists of a single warehouse at the central office and five ware-



houses at the branches, yet this is not what determines the difficulty of the project at ENION S.A. First of all, the company decided for the system to include all its customers, both business and individual. The total number of customers in the system exceeds 2.3 million. Secondly,

Customer's perspective

ADAM BOREK, CHIEF IT EXPERT AT ENION S.A. IN KRAKÓW

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the warehouse model contains several dozen fact tables. "Each invoice contains several dozen entries of various formal and business significance. In practice, this complicates the model and creates high requirements in the scope of data analysis efficiency" – says Adam Borek. One of the assumptions made while developing the preliminary conception of the system was for the warehouse to store data for at least three years back, in order to use them to predict trends. With this number of customers, this is quite the challenge – particularly as it is not only about storage, but about calculation of indexes taking them into account. An additional complication is the fact that although the data arriving at the central warehouse are partially aggregated, the data in the branches are stored in the original, non-aggregated form. "We cannot afford losing detailed information - we must store the original data somewhere. Besides, the branches need non-aggregated data to make analysis for their own purposes" – says Adam Borek.

As part of the Comarch Business Intelligence implemented at ENION S.A., Microsoft® SQL Server 2005 is used as platform for data storage and protection. Comarch Data Warehouse Manager, implemented as part of the project, manages the ETL services embedded in the Microsoft® SQL Server 2005 platform. The application developed by Comarch allows to define the ETL process (extraction of data from source systems, conversion thereof into universal form and upload into analytical bases), to manage the glossaries used in the project and





the process of synchronizing data from the branch warehouses to the central warehouse. Application of Microsoft® SQL Server Integration Services enable efficient transfer of data between systems, as well as validation of their quality and coherence "on the fly". Thus, ENION S.A. can define both techni-

cal processes, e.g. maintaining quality of the customers' address details, as well as business ones, e.g. detecting deviations from typical electricity consumptions at specific terminals. Microsoft® SQL Server 2005 stores data

in a Comarch-designed multidimensional structure RO-LAP, to which the employees of ENION S.A. have direct access, using analytical tools Business Objects. Finished reports for the management are generated using Busi-

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ness Object and an IT portal, implemented in parallel, which has been customized for business users.

BENEFITS

Preparing for implementation of the data consolidation platform,

ENION S.A. made ambitious assumptions. The company decided that in the future the integration platform would be used as a source base for other applications, that there would be more data models and that the quantity of data would increase significantly. ENION S.A. expects that apart from consolidating the management information, Microsoft® SQL Server 2005 will let it save specific amounts of money.

"We expect that the data warehouse will allows us to decrease illegal electricity consumption by about 20% – that is sheer profit. We also improve profitability of debt collection. Soon we will be implementing mechanisms for data drilling and anomaly detection, embedded in Microsoft® SQL Server 2005" says Adam Borek.

Regardless of the aforementioned direct benefits, EN-ION S.A. also enjoys a number of additional benefits provided by implementation of Microsoft® SQL Server 2005, including high accessibility of the environment, which the entire company uses intensively, as well as high scalability thereof.

Comarch SA

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Comarch Spółka Akcyjna with its registered seat in Kraków at Aleja Jana Pawła II 39A, entered in the Nationa Court Register kept by the District Court for Kraków-Śródmieście in Kraków, the 11th Commercial Division o the National Court Register under no. KRS 000057567. The share capital amounts to 8.051.637,00 zł. The share capital was fully paid.

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