



## Microsoft SQL Server 2005



### Overview

**Country:** Belgium

**Sector:** Gas and electricity

### Profile

Since the liberalisation of the energy market in 2003 Nuon has been active in Belgium as a supplier of energy to homes and businesses. It currently has 400,000 electricity and gas connections in Flanders.

### Challenge

To ensure error-free energy bills and provide faultless services, Nuon needs to work with data from different sources and from different parties such as system operators and meter reading companies. The same applies to the other suppliers too of course. However, this data does not always correspond. Nuon's challenge was to find the abnormalities or errors to ensure that customers receive correct bills and services.

### Solution

Based on MS SQL Server 2005's business intelligence module the diagnostic software 'Dr. Nuon' was developed. It compares information from the different sources with each other.

### Advantages

- Clear reporting simplifies error handling
- Customer service improvement
- Reporting is the basis of improvement



## Nuon improves customer service thanks to Microsoft SQL Server 2005

“We have a very good understanding of our complicated system landscape and are able to perfectly situate irregularities and any failures. This is impossible without advanced technology.”

*Nino Blanckaert, ICT manager of Nuon.*

Nuon supplies energy to homes and businesses. From the start of its Belgian activities in 2003 Nuon has worked with system operators and metering companies. For its own operation Nuon relies heavily on the data of these companies. Practice soon showed that this data was not always correct which was extremely annoying for Nuon because they are in direct contact with the customer.

To solve this problem, Microsoft partner Self-Star and Nuon developed the diagnostic software 'Dr. Nuon', a business-intelligence application based on MS SQL Server 2005. This application allowed information from different sources to be compared in all possible combinations and to report any abnormalities that might have an impact.

Errors are intercepted before they even get to the consumer. A second generation of the diagnostic tool will soon be available. In addition to the quality of data, Dr. Enterprise also measures the business processes in progress and maps their effectiveness.

Filip Verhaeghe, General manager of Self-Star and Nino Blanckaert, ICT manager of Nuon.



Since the liberalisation of the market in 2003 when companies and consumers in Belgium have been able to choose their electricity and gas supplier freely Nuon has managed to capture a market share in excess of 8%. This amounts to almost 400,000 electricity and gas connections in Flanders and this figure is still rising. Nuon has a leading position on the Dutch market as an integrated producer, distributor and supplier of energy to homes and businesses.

Nuon Belgium's customers can count on a team of more than one hundred specialists with wide-ranging experience on the

national energy market. Nuon is the most successful newcomer on the liberalised energy market in Flanders, partly thanks to its attention for energy savings and its ethical management.

Immediately after its launch Nuon was in a triangular relationship with the system operators and the metering company. This triumvirate can vary per region. A constant exchange of information is necessary between the three organisations which is strictly regulated in technical terms. For the exchange of this data the different

parties created a kind of central network, based on EDI messages, from where they are able to send and receive information.

### Supporting success with technology

The fact that Nuon is a success story has an effect on the company's internal operation. "From the start we have known volume increases. We also noticed gaps in the exchange of data between the different stakeholders. Internally too, with regard to customer details, a complex information flow exists", says Nino Blanckaert, ICT manager of Nuon.

When someone chooses for Nuon, this person is registered with the system operator. From then on the market determines as from when the customer receives Nuon energy and Nuon then buys this energy. The monthly bills for the advances and the annual final settlement based on consumption are the next steps. Within these major steps, several smaller steps are hidden which may all contribute to more errors. Of course Nuon's primary aim is to keep the number of errors to a minimum. The many factors and actors meant that during the first year this was the biggest problem, a problem that the Nuon management wanted to solve as soon as possible. The need for a control system that would detect all possible irregularities became necessary.

Faced with this problem, Nuon went in search of solutions. However, the energy market is also a new market for IT suppliers and there are no out-of-the-box software packages available. "In the end we came to Microsoft partner Self-Star. In a number of other projects they had already proven they could handle major challenges", says Nino Blanckaert.

### Dr. Nuon

In response to Nuon's needs Microsoft partner Self-Star developed 'Dr. Nuon', a diagnostic application that compares

**"Dr. Enterprise 2005 enables our customer to map and manage the effectiveness of his operation. Quickly responding to questions of customers, making links with all kinds of sources of information and growing toward very large volumes is possible thanks to MS SQL Server 2005's unique properties."**

Filip Verhaeghe, General manager of Self-Star:

**"SQL Server 2005 enables us to monitor many different links simultaneously, not for one customer, but for thousands at the same time and at the right time."**

Nino Blanckaert, ICT manager of Nuon.

information from many different sources. For each one of the 400,000 connections data from all these sources is used. This concerns data from, among others, SAP, Siebel and tailor-made software. A clear diagnosis is given about improbabilities and data that does not correspond in the different sources, thus allowing Nuon employees to take immediate targeted action. "Dr. Nuon also enables us to gauge how well our complicated system landscape functions. Now, we are able to perfectly situate irregularities and any failures. This is impossible without advanced technology", says Nino Blanckaert.

### **A factory full of data**

Nuon supplies gas and electricity but internally it is a large factory full of data. Nino Blanckaert: "It would be wrong to view this data only as an IT matter. Our services largely depend on the correct transfer of the external data throughout our internal organisation. Filip Verhaeghe, General manager of Self-Star: "We started from zero and initially talked chiefly with the Nuon employees who work with the different applications. This showed us what a user-friendly report needed to look like. It chiefly needed to get the complexity out of the data and present any abnormalities in crystal clear fashion."

Dr. Nuon is chiefly a monitoring tool. For instance, following the acceptance procedure a new customer is mutated from the customer application to the ERP system. And ultimately this should result in correct bills. "From the moment you do that you need to be sure that the customer has been effectively accepted by the system operator as a buyer. The complexity of our process lies chiefly in the fact that we need to work with data that is kept by others, such as the system operator or the metering company. Consequently it comes down to being able to monitor many connections, and not just for one customer,

but for thousands at the same time and simultaneously."

"The different applications that exchange data give different names and different codes to the same concepts. It is very important for us that all applications speak the same language, among others by designing a data model for the branch. When you want to monitor consistency you first need to have comparable data. For instance is the EAN distribution system connection code known to both Siebel and SAP, and is it linked to the same customer, e.g. after a move? To find answers to these questions, we need to define rules so that the different applications are able to communicate and the data monitoring can be implemented."

It is important that actions are taken to remedy the problem following the reporting procedure. "We also need to deal with the cause. Improvement actions result in a more robust system and less errors. In fact we have hired people specifically for this."

### **Opportunities galore with SQL Server 2005**

Self-Star opted for MS SQL Server 2005 because they already knew the product well and because Nuon was looking to find a good solution as soon as possible. Moreover, Nuon's Siebel software also ran on MS SQL Server which only served to confirm this choice even more. It also enabled the Belgian IT management to keep the knowledge about the database in-house.

"MS SQL Server 2005 offers many extra advantages compared to the 2000 version, particularly in the field of reporting and business intelligence. The increased development productivity is very interesting. The Visual Studio 2005 development platform is closely integrated with SQL 2005, which meant the developers were able to work in their own trusted environment", concludes Filip

Verhaeghe of Self-Star. Dr. Nuon's success has prompted partner Self-Star to develop the 'Dr. Enterprise' package that can be used in other energy firms and sectors. Dr. Enterprise's second generation will be released in November 2005. In addition to the quality of data, Dr. Enterprise also measures the effectiveness of business processes. Dr. Enterprise departs from the same data set that it uses for the quality control. By using the same data Dr. Enterprise is able to map the actual processes. As always, Dr. Enterprise reports the discrepancies that could cause disruption for the operation or for the customer.

## More information

For more information about Microsoft's products and services, call +32 (0)2 704 30 00 or visit our website at <http://www.microsoft.com>

For more information about the products and services of Self-Star, call +32 473 382 721 or surf to <http://www.self-star.com>

For more information about Nuon, call +32 800 210 31 or visit the website <http://www.nuon.be>

## About Microsoft SQL Server 2005

Microsoft SQL Server 2005 is comprehensive, integrated data management and analysis software that enables organizations to reliably manage mission-critical information and confidently run today's increasingly complex business applications. By providing high availability, security enhancements, and embedded reporting and data analysis tools, SQL Server 2005 helps companies gain greater insight from their business information and achieve faster results for a competitive advantage.

And, because it's part of Windows Server System, SQL Server 2005 is designed to integrate seamlessly with your other server infrastructure investments.

For more information about SQL Server 2005, go to:  
<http://www.microsoft.com/sqlserver>

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