

TOP TO BOTTOM

we know

they know

END TO END

## Gemeente Goes hosts SAP applications for six municipalities on IBM i

### Overview

#### ■ The Challenge

*Gemeente Goes and five other Dutch municipalities ('gemeentes') were running CiVision Belastingen & Kadaster Suite, a qualified SAP Business All-in-One partner solution from PinkRoccade Local Government, on a variety of IBM and HP platforms on separate servers at their own data centers. Hardware costs were relatively high, and obtaining local support was difficult and expensive.*

#### ■ The Solution

*Working with PinkRoccade Local Government, the six municipalities consolidated their SAP Business All-in-One environments into separate IBM i subsystems within a single logical partition on an IBM Power 550 Express server running at the Gemeente Goes data center. The subsystems also run a number of legacy applications in mixed workload mode.*

#### ■ The Benefits

*Consolidating to a single Power 550 Express server reduces hardware, maintenance and support costs by approximately 40 percent. IBM i subsystems provide a highly secure and reliable environment even for a mixed workload of multiple legacy and SAP applications. IBM POWER6 processors deliver excellent performance for the combined overall workload.*

#### ■ Key Solution Components

*Industry Government Applications: CiVision Belastingen & Kadaster Suite, a qualified SAP® Business All-in-One partner solution from PinkRoccade Local Government, SAP Business All-in-One for Public Sector, SAP NetWeaver® 7.0  
Hardware: IBM® Power™ 550 Express with IBM POWER6™ processors  
Software: IBM i, IBM DB2® for i  
Services: IBM Business Partner PinkRoccade Local Government*

Gemeente Goes is the local council for the city and municipality of Goes in the south-western Netherlands.

Traditionally an agricultural area, Goes has grown rapidly since 1970 and is now the fourth largest economic center in Zeeland. The municipality has more than 36,000 inhabitants, and the gemeente employs 420 people.

Like many gemeentes in the Netherlands, Goes was using CiVision Belastingen & Kadaster Suite, a qualified SAP Business All-in-One partner solution from PinkRoccade Local Government, to manage its financial processes – including the specialized tax calculations that are required by Dutch law.

“The SAP Business All-in-One solution from PinkRoccade Local Government is vital for our financial processes – giving us an end-to-end way to manage crucial processes such as municipal taxation,” says Patrick Schouw, Head of the IT Department at Gemeente Goes.

Gemeente Goes was also running a number of legacy applications on the IBM i platform, to support

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Michaël Leushuis  
Manager System Technology  
PinkRocade Local Government

administrative functions such as citizen registration and other public services. With limited IT resources, managing and supporting the server hardware and applications was difficult.

#### **Making the most of limited resources**

“The IBM i platform is well known for its stability, so it was a good choice from the point of view of maintaining our IT environment – but even so, we had to either employ one person full-time to manage the infrastructure, or outsource the work to an external provider,” comments Patrick Schouw. “Moreover, replacing the hardware every three or four years was a significant cost.”

Gemeente Goes and several other gemeentes in the nearby area – Kapelle, Noord-Beveland, Reimerswaal, Tholen and Borsele – realized that they were all facing the same issue: their SAP and legacy environments were running on a variety of platforms, including IBM i, HP-UX and Linux, with DB2, Oracle or MaxDB databases, and they wanted to move to a more cost-effective infrastructure. With the help of PinkRocade Local Government, an IBM Business Partner, these six

gemeentes began to investigate ways to work together to find a solution.

#### **Consolidating to a single server**

“Our SAP environments are all relatively small – we don’t have more than 100 concurrent users between us,” explains Wilko Fokke, staff member at Gemeente Noord-Beveland. “We realized that by leveraging the latest generation of IBM POWER6 processors, we would be able to consolidate all six environments to one physical server – saving hardware costs and centralizing server management in a single location.”

Goes is the largest of the six municipalities, and also the most central; as a result, it was chosen to host the new IBM Power 550 Express server, which contains four IBM POWER6 cores of which two are currently active, 80GB of memory and 3TB of disk storage. The other gemeentes laid new fiber optic links between their main sites and the Gemeente Goes data center, enabling users to access the SAP applications from a distance of many kilometers.

#### **IBM i and subsystems**

PinkRocade Local Government helped to architect and configure the new solution, exploiting the IBM i subsystem feature that allows multiple runtime environments within an IBM i LPAR. A single logical partition runs the IBM i operating system and its integrated DB2 database to support the SAP applications. The IBM i partition is divided into seven subsystems – one production environment for each of the gemeentes, and a single test environment shared by all six.

“The beauty of the subsystem approach is that you can run completely separate systems within a single logical partition and a single



instance of the IBM i operating system,” explains Michaël Leushuis, Manager System Technology, at PinkRocade Local Government. “This can significantly reduce software licensing costs.”

He adds, “Even better, you can run the subsystems in mixed workload mode – which enables them to handle both SAP and legacy applications simultaneously, prioritizing the workload in an intelligent manner and ensuring the best possible performance. PinkRocade Local Government has been a pioneer of this approach in the Netherlands, and these six gemeentes have used it to achieve considerable improvements in both performance and cost-efficiency.”

So far, all six of the main SAP ERP environments have been moved onto the new server, as well as the legacy applications from Noord-Beveland’s existing IBM i environment. The next step is to migrate the IBM i legacy workload from two of the other gemeentes. Finally, the legacy applications of the remaining three gemeentes, which are currently running on HP-UX, will be ported to either IBM i or Linux– which can also run on the same IBM Power 550 Express server, in a separate LPAR parallel with IBM i.

IBM Business Partner ExtraVar and PinkRocade Local Government worked together closely on designing the appropriate hardware infrastructure for the applications, and developed the concept of mixed workload in partnership with IBM.

With the mixed workload approach, different applications run within the same operating system image, improving the interoperability of the data contained in the different databases. The simplicity helps to

minimize system management tasks, and it tends to improve back up reliability and ease. The complete portfolio, which includes internet-based applications, is up and running 24 hours a day, seven days a week.

In the case of Gemeente Goes, ExtraVar configured the appropriate environment based on the sizing requests from PinkRocade Local Government. Several different options were developed, concluding with a specific configuration tailored for the customer environment.

### **Introducing SAP NetWeaver**

The new server has also enabled expansion of the SAP environments. Prior to this project, the gemeentes of Gem, Goes, Noord-Beveland and Reimerswaal had not yet implemented the SAP NetWeaver technology platform. The performance and capacity of the new server enabled four new SAP NetWeaver instances to be deployed rapidly, with no need to buy, install, manage and support any additional hardware.

“Currently, Tholen and Kapelle are running their SAP NetWeaver environments on Linux and Windows servers, but we plan to upgrade our IBM Power 550 Express to provide enough capacity for them to be consolidated too,” comments Patrick Schouw.

“The Power 550 architecture is highly scalable, so it will be easy to increase the capacity as and when we need it. Enabling expansion without adding complexity is a key advantage of this solution – helping us deploy new SAP applications and innovate in our business processes without increasing costs or workload.”

### **Optimizing operational costs**

“Many local government IT departments have problems meeting

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Patrick Schouw  
Head of the IT Department  
Gemeente Goes

all their requirement with limited resources, and it is hard to do it well," adds Patrick Schouw. "The IBM i shared infrastructure concept reduces the need to run, maintain and replace numerous expensive physical servers, and we no longer have to employ server management specialists at every gemeente."

The next steps are to improve the service level agreement with a high availability and disaster recovery design that is being discussed with the same partners (IBM, PinkRoccade Local Government and ExtraVar). Part of this design is the integrated replication technologies of IBM i-Cluster. As well as the enhanced disaster recovery protection, planned downtime for maintenance can be greatly reduced and the server utilization can be improved even further.

Wilko Fokke concludes: "Over the lifetime of our new IBM Power 550 Express server, we will make considerable savings on hardware, software licensing and operational costs. At Noord-Beveland we estimate that we will achieve cost reductions of approximately 40 percent, and the other gemeentes should be making similar savings. As public-funded organizations, it is important for us to get the best possible value for tax-payers' money; this solution from IBM and PinkRoccade Local Government gives us all the advantages of a modern SAP environment without incurring significant costs."

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Wilko Fokke  
Gemeente Noord-Beveland



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