LOWER SAXONY STATE POLICE

WITH THE HELP OF COGNOS ANALYTICAL AND REPORTING SOLUTIONS, THE LOWER SAXONY STATE POLICE HAVE DEVELOPED AN INFORMATION SYSTEM FOR CRIMINAL STATISTICS.

The technology and logistics requirements of the Lower Saxony State Police, with about 22,000 personnel, are met by one central service provider—the Police Office for Technology and Procurement. Today the office employs a staff of 320. The office's mandate includes centralized procurement and two large technical areas within IT: one for the operation of voice and data networks and the development and operation of IT operations; another for vehicles, weapons, and traffic engineering.

NIVADIS PROCEDURAL ADMINISTRATION SYSTEM

For over ten years the Police Office has operated a procedural administration system known as MIKADO to handle all core processes. MIKADO aggregates Criminal Investigation Office information and feeds it into position reports. This old system no longer meets new and exacting system requirements. Knowledge generated in the organization today must be available everywhere as rapidly as possible so that, for example, traveling serial criminals can be detected, rapid response operations planned or newly emerging criminal phenomena identified. "For that we needed a system," says project director Axel Köhler, "that can provide easy-to-use status reports for every particular investigation at the strategic, tactical, and operational levels."

The new NIVADIS Procedural Administration System has been developed by the State Police with support from Mummert Consulting. It is based at the secure computing center in Hannover on a central UNIX cluster. When the project is complete, 11,600 workstations will be connected. The entire business logic, as well as the database, runs directly over a WAN on this central server. Köhler recognizes the advantages: "We will now have central data management with direct, simultaneous access, and parallel processing of procedures to provide instantaneous, state-wide information. We have located a backup data warehouse on a second computer to facilitate extraction of production data on an eight-hour basis." Data is imported through an ETL tool (an Informatica PowerCenter) into the database structure for OLAP evaluation using Cognos analysis.

At present, the NIVADIS procedural administration system is in production at one pilot site. In the remaining stations, procedure management is still performed with the old MIKADO system. Using replication procedures, extractions are prepared nightly from 205 UNIX units and then imported into the Cognos solution by the ETL tool.

THREE-STAGE IT SOLUTION

As part of the Cognos project, criminal investigation in Lower Saxony has been reorganized in three stages. The crucial objective is to make evaluations as comprehensive as possible and to make investigations efficient. The Cognos system, based on a data warehouse, has been operational since early 2003. Parts of the Cognos solution are accessible to every police officer: a multitude of daily status and situation reports are generated through the associated Cognos Web report solution.

COGNOS®

THE NEXT LEVEL OF PERFORMANCE™

In addition to the evaluation function, reporting can call up daily status reports from 11,600 workstations to update individual situations. For this function a query module is added, making it possible to launch an additional free search of the backup data warehouse.

As the third stage, the actual data warehouse with the OLAP cubes is implemented with Web browser access for approximately 250 evaluation workstations. No Cognos software needs to be installed on the workstations. Rather, zero administration clients are used. These facilitate central administration of the applications, enhanced failure protection, and scalability while ensuring data protection. "In future, we will be mapping all areas of investigative evaluation using OLAP," says Köhler, "and not only criminal investigation, but also crimes by common criminals, crimes against the State, organized crime, criminal investigation statistics, traffic accident analysis, and investigations by the waterways and harbor police."

The uniform reporting solution creates efficiency at all levels: organizations, training, and operating costs. Here the universal approach offered by Cognos pays off, because the diverse aspects of police operations can be consolidated. "That is a big advantage," Köhler confirms, "and at the same time gives us a springboard for more wide-ranging organizational changes. Soon we will have the benefits of synergy, such as correlating traffic accidents with suspected organized insurance fraud, or with faked accident claims."

DAILY STATUS REPORTS

Today, thanks to Cognos, daily local area status reports, traffic accident reports, minor crime incidents, and other aspects of police work can be called up with a mouse click. Previously, such reports had to be compiled by hand. "It's very easy," says Köhler, "to provide the entire State with status reports."

YEARS OF INSTITUTIONAL MEMORY

For the first time, the data warehouse allows for the centralization and analysis of institutional memory from all over the State making geographical comparisons between different communities possible. Time series, specific phenomena or types of crime, and other correlations can now be researched in the OLAP cubes in 27 dimensions. Drilldowns can be performed directly to individual investigations along with efficient and rapid analysis.

LARGEST GERMAN LINUX INSTALLATION

As part of the project, the Lower Saxony Police Office operates the largest LINUX installation in Germany, with plans for 11,620 PCs running Su Se LINUX 8.1, 5,500 of which are up and running. Support is provided by 100 decentralized servers in the WAN, while the central computer for LINUX (Redhat) is now being configured.

A NATIONAL SOLUTION?

The Lower Saxony data warehouse solution was conceived and executed by the Federal German Office of Criminal Investigation, but incorporates requirements specific to Saxony. Future linkage with neighboring federal states is highly desirable and one already has plans to run a pilot test of this system.

The Lower Saxony State Police Office for Technology and Procurement is striving towards further improvements including the addition of cost and billing data. Professional evaluation and analysis to support work in the area of crime prevention will also be refined, which promises benefits for society as a whole.

The Cognos solution for command and control and for continual improvement of police procedures contributes not only to the efficiency of police work, but in the long run it lightens the burden on the taxpayer.

ABOUT COGNOS

Cognos is the world leader in business intelligence and enterprise planning software. Our solutions for corporate performance management let organizations drive performance with planning, budgeting and consolidation, monitor it with scorecarding, and understand it with business intelligence reporting and analysis. Cognos is the only vendor to support all of these key management activities in a complete, integrated solution. Founded in 1969, Cognos now serves more than 23,000 customers in over 135 countries.

COGNOS®