HVR Software

Case: The United States Coast Guard

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HVR Provides Near Realtime Replicated Data for U.S. Coast Guard

BAC KGROUND

The United States Coast Guard (USCG) is one of the country's five armed services. In times of peace USCG operates as part of the Department of Homeland Security, serving as the nation's front-line agency for enforcing laws at sea, protecting the coastline and ports, and saving life. In times of war, or on direction of the President, USCG serves under the Navy Department.

AIRCRAFT REPAIR AND SUPPLY

To perform its tasks, USCG deploys various kinds of equipment. USCG uses boats for patrolling purposes, but also for cutting the ice in the northern parts of the country in cold periods. And USCG operates aircraft, ranging from helicopters to jets. There are a total of 211 aircraft in USCG inventory. This figure fluctuates operationally due to maintenance schedules. Major missions: Search/Rescue, Law Enforcement, Environmental Response, Ice Operations, and Air Interdiction. Fixed-wing aircraft (C-130 Hercules turboprops and HU-25 Falcon jets) operate from large and small Air Stations. Rotary wing aircraft (HH-65 Dolphin and HH-60 Jayhawk helicopters) operate from flight-deck equipped Cutters, Air Stations and Air Facilities.

A separate part of the USCG organization is responsible for the maintenance of these aircraft. It is their job to ensure that USCG has enough aircraft available to perform its tasks. Aiming for optimal availability of the aircraft, the Aircraft Repair and Supply Center (ARSC) relies on information to calculate and plan effective deployment of material. The ARSC is located in Elizabeth City, North Carolina.

LET THE INFORMATION DO THE JOB

To register and consult all information about aircraft maintenance schemes and spare parts, ARSC decided to build their own application, called Aviation Logistics and Maintenance Information System (ALMIS), based on an Ingres database by CA. The system turned out to be working perfectly and soon the ARSC people learned that the database could not only be used for registration and retrieval of information, but also for data analysis and reporting. Thus enabling USCG to improve efficiency considerably. However, it soon appeared that reporting requests were slowing down the system's daily operation. USCG decided that it was time to create a separate database with identical content to the ALMIS production database, solely for reporting purposes. So USCG started looking for a replication solution. While building ALMIS, USCG had taken Ingres technology to its limits, so they were looking for a replicator that was at least as ambitious as ALMIS itself. USCG found HVR initially at CAWorld in Orlando Florida, April 2002.

HVR

A replicator is a middleware application that exchanges data between different relational databases. The HVR, developed by the Amsterdam-based IT company HVR Software bv, realizes this at an extremely high transaction speed: 1,200 times faster than other replicators in an Oracle/Ingres environment. Thanks to its speed, the HVR provides near realtime replicated data. Moreover, the system is extremely robust and reliable. At any given speed, the HVR ensures maximum data performance with minimum management effort.

WHO WE ARE

The parent company of HVR Software bv is PSB bv. From its conception in 1985, PSB has been a specialist in database technology, aiming to match and better the engineering quality of the biggest names in the industry.

Initially PSB focused on the Ingres DBMS, quickly acquiring a reputation as a key center of in-depth DBMS knowledge for the Dutch market. In the 1990's PSB founded HVR Software bv which aimed at widening focus and offer more service solutions by including other database products, for example datawarehousing tools, Oracle, Microsoft's SQL Server and more.

Around this time HVR Software was assisting an important customer – Royal TNT Post - with its data distribution requirements, and became aware of the chronic gap in the database market for robust and efficient database replication. HVR was built to solve this problem. The HVR has been quickly adopted in logistics, telecommunications and public sectors, and is now sold worldwide.

HVR Software also delivers
• implementation
• support
• training services

FURTHER INFORMATION

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Speed and reliability are HVR's strongest points, together with flexibility.

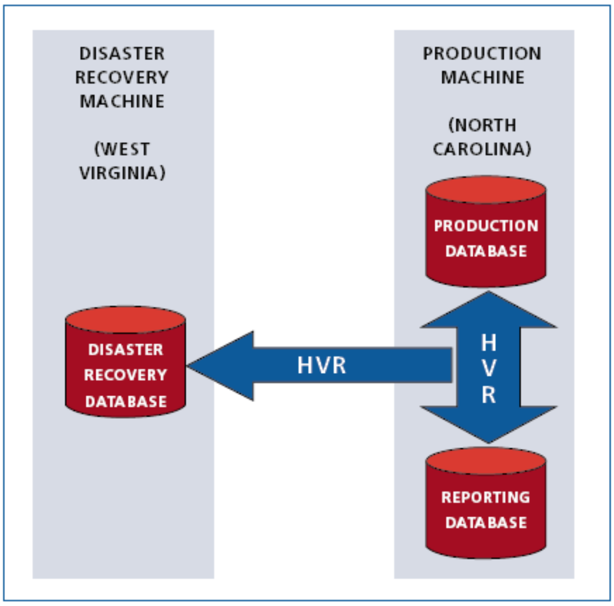
HVR has a proven track record in business situations where there is a need for quick and reliable database management. To USCG, the HVR offers the following solutions:

- Workload distribution
  To minimize pressure on the capacity of the production system
- Hot Standby
  To avoid loss of data or loss of access to data and to minimize the maintenance window.

The data replication to a separate reporting database has been successfully implemented.

Because of HVR's proven value in workload distribution and with a view to hurricane vulnerability of USCG's North Carolina location, USCG has also implemented replication to a (remote) disaster recovery database.

COMMENTS



According to Commander Peter Weddington of USCG, the technology of HVR was convincing from the start. 'But we had our doubts about the limited size of HVR Software bv and the time difference between our office and Europe', he explains. 'You see, the HVR may work well, but if something goes wrong with a mission critical system like ours, you want to be served swiftly.' USCG has been working with HVR Software bv for almost a year now. Technical expert Steve Peck says: 'HVR has proven to be very robust and reliable. And in fact the same goes for PSB itself. Of course we had a few problems at the start, but HVR Software bv were always very alert and came up with patches that would solve our problems within 24 hours.' 'We are all amazed by the performance of the HVR'. Commander Weddington adds. 'It performed near flawlessly from the very beginning. I would recommend HVR to organizations that seek excellent replicating solutions.'

HVR Software

Realtime Data Integration for Mission Critical Environments