# **Crédit Agricole:**

## Managing a Distributed Windows NT Environment with PATROL®

Crédit Agricole was founded over 100 years ago to serve France's farming community and continues to be the principal source of bank financing for the agricultural sector. It is active in retail banking due to its decentralized organizational structure and vast network, and is also the leading banking institution servicing households. Crédit Agricole is a vital partner to corporations, small businesses and local government - the key players in France's local and regional economies.

Year-end results in 1997 showed sustained growth in all markets with net income increasing 15.3 percent and total funds under management rising 7.7 percent. Commenting on these strong results, Chairman Yves Barasalou, said: "Crédit Agricole can take pride in the fact that it has successfully transformed its organizational structure. We have been able to accommodate - and in some cases anticipate - the changes that are taking place in our business environment."

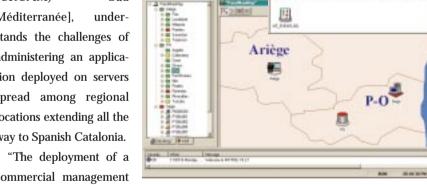
These changes have included the acquisition of Bank Indosuez by Crédit Agricole. With this acquisition, Crédit Agricole has additional subsidiaries in Asia and New York.

## **Mastering the Challenges of Distributed Systems**

Pascal Dieunidou, the IT Manager for the Regional Bank of Mutual Crédit Agricole South Mediterranean [Caisse Régionale

Crédit Agricole Mutuel (CRCAM) Sud Méditerranée], stands the challenges of administering an application deployed on servers spread among regional locations extending all the way to Spanish Catalonia.

commercial management



application under Microsoft Windows NT and Microsoft SQL Server in 100 agencies creates administration problems, which are radically different from those found in a mainframe environment," Dieunidou states. "Without a centralized supervision and administration solution, the situation would quickly become unmanageable. That is why implementing an administration solution was one of our priorities."

### **Building Comprehensive Management Capabilities**

Three applications comprise CRCAM's administration platform – BMC Software's PATROL product, Compaq Insight Manager and Microsoft Systems Management Server.

(continued on inside back cover)

## Company

Crédit Agricole, France's largest bank, is pursuing efforts to build a universal banking group in France and abroad by taking advantage of its credit rating, financial strength and placing capability. The company has over 84,000 employees in its 53 regional and 2,775 local banks and over 8,000 branches.

Evolving from a mainframe environment for commercial management to a client/server application deployed over 100 Windows NT servers.

Supervising and administering 100 agencies of a commercial management application under Windows NT and Microsoft SQL Server spread over geographically dispersed departments.

Implementing a centralized supervision and administration platform using BMC Software's PATROL product in combination with Compaq Insight Manager and Microsoft Systems Management Server.

PATROL is the key element used to supervise all the components of the Windows NT servers - the operating system, and the applications. An upstream alert mechanism keeps the company informed of any malfunction before it impacts the application. Compaq Insight Manager compiles all the system information that is aggregated in the PATROL Console<sup>™</sup> while the Microsoft Systems Management Server performs complementary operations of teledistribution of software, domain management and data replication.

Today, there is one PATROL Agent<sup>™</sup> on each of the 100 Windows NT servers. Each agent is coupled to the PATROL Knowledge Modules<sup>™</sup> (KMs) which are in charge of Windows NT surveillance: Compaq Insight Manager, Microsoft SQL Server, Microsoft Exchange Server and Microsoft Internet Server.

Dieunidou believes PATROL was the optimum solution for managing CRCAM's distributed system for a number of reasons. "We were attracted to PATROL because of the relevance of its architecture, the quality of its agents and the variety of technologies that it supervises using common standards," Dieunidou says. "This point was crucial for us - we were looking for a solution that is easy to use and immediately operational. Our choice was based on its compliance with common standards - TCP/IP, SNMP - and its openness to third-party solutions. Finally, the widespread distribution of PATROL in the marketplace was essential for us."

## Contributing to Productivity and Service Quality

PATROL provides IT organizations with proactive monitoring, problem diagnosis and automated error-correction tools that improve the availability of applications and their associated components, and boost user and IT productivity.

Says Dieunidou: "PATROL allows us to master our distributed system operations remain centralized and transparent. The availability of the computer tools of our agencies is improved by prevention and quick resolution of incidents. PATROL contributes to the productivity of our teams and the quality of our service."

CRCAM is considering the PATROL agent for OS/390, which will enable IT to supervise the information system globally - from the mainframe all the way to the agency server. The IT department is also in the process of testing the PATROL IP/Optimizer<sup>™</sup> product, a software solution that optimizes performance of highvalue TCP/IP applications across the enterprise.

### **About BMC Software**

BMC Software is the world leader in the development of Application Service Assurance (ASA<sup>™</sup>) solutions – improving the availability, performance and recoverability of critical applications in complex computing environments. BMC Software is the world's 12th largest independent software vendor and a Forbes

500 company, with revenues exceeding \$730 million in fiscal 1998. The company is headquartered in Houston, Texas, with offices worldwide. For more information, please call 800 841-2031 or 713 918-8800 or visit our Web site at www.bmc.com/info.





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