

# INFORMATICS

FOR COMPUTING, NETWORKING & COMMUNICATIONS SPECIALISTS

MAY 1993

28 SEP 1993

## Patrolling the software sea

Martin Picard got the idea of Patrol from an 'event driven alert' system he designed to catch fish from a yacht. Now this revolutionary applications monitor is poised to take on the world.



➤ **NETWORKING**  
Bridges, routers, gateways.  
What do they all mean?

➤ **BENCHMARKS**  
We've come a long way from  
MIPS and VUPs.

➤ **TECHNOLOGY**  
How Nigel Mansell won his  
race, with a little help from IT.

➤ **DEVELOPMENT**  
Why Japan wants your  
software.

➤ **YOUR PROFESSION**  
What ACS members think will  
be the hot skills of the future.

➤ **MANAGEMENT**  
How not to do too much  
without doing too little.

\$5.95

OFFICIAL PUBLICATION  
OF THE AUSTRALIAN  
COMPUTER SOCIETY

BMC EXHIBIT 2001

ServiceNow v. BMC

IPR2015-01176

DOCKET  
ALARM

Find authenticated court documents without watermarks at [docketalarm.com](http://docketalarm.com).



28 SEP 1993

# IN S I D E

## Input

5

Is this a sexist magazine? One reader thinks so. Another wonders about the real cost of downsizing.



## Informer

7

Did you miss anything? A summary of all the important news in last month's Australian computer press. By all accounts, a rather quiet month.

## Interstate

17

A monthly roundup of ACS news. Is it unethical to enter a vendor-run contest?



## Patrolling the software sea

19

Patrol is a revolutionary new software system developed in Sydney. It may mean that applications management on distributed networks will never be the same again. We talk to the man behind the product, and look at how it works.

## Internetworking

24

Heard about bridges, routers and gateways but unsure of what they are? This guide to internetworking will set you right.

What is benchmarking?



## Insight

28

Benchmarks have come a long way since the days of MIPS and VUPs. John Tulloch takes a look at today's benchmarking standards and what they mean.



## Mansell Magic

30

Nigel Mansell's victory in the Gold Coast Indy Race was not a fluke. He was supported by the most sophisticated racing car monitoring system ever developed.



## Japan wants you

34

Would you believe that Japan is actively seeking software imports? A seminar in Sydney showed Australian developers how to get into the market.

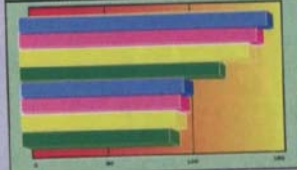
## Certification

39

IT is one of the few non-regulated professions. Alan Underwood argues that the industry

should develop its own certification system, before somebody else does it for us.

What skills will be hot and what skills will not



## Indicators

42

What do ACS members think will be the key skills in demand over the next few years. If you're a Cobol programmer, perhaps you should have a hard think about the future.

## IN office

45

Ashley Goldsworthy argues the case for IT elitism.

## Why bother planning?

46

Keith Power looks at how to get the right balance in project planning. It's often a case of too much or too little.

## Humanities in IT

47

Roger Coldwell says that the IT industry has much to learn from the Humanities. Recruiting the right people is a good way to start.



## INthings

49

The flow of new products never ceases. A roundup of the month's important releases.

## Info

53

All significant events, including ACS meetings, user groups, vendor seminars and national conferences and exhibitions.

### Editorial Director:

Graeme Philipson

News Editor: Adam Lincoln

Info Editor: Ruth Lindsay

Production Editor: Julia Carlisle

Production Director:

Lachlan Brown

Sales Manager: Wendi Fraser

Publishing Manager: Sally Fryar

Publisher: Alistair Gordon

Illustrators: Bob Fletcher,

Jane Reid, Loui Silvestro

The Australian Computer Society

President: Geoff Dober

Vice-Presidents: Garry Trinder,

Bob Tisdall

Immediate Past President:

Alan Underwood

National Treasurer: Glen Heinrich

Publications Officer: John Hughes

Chief Executive Officer:

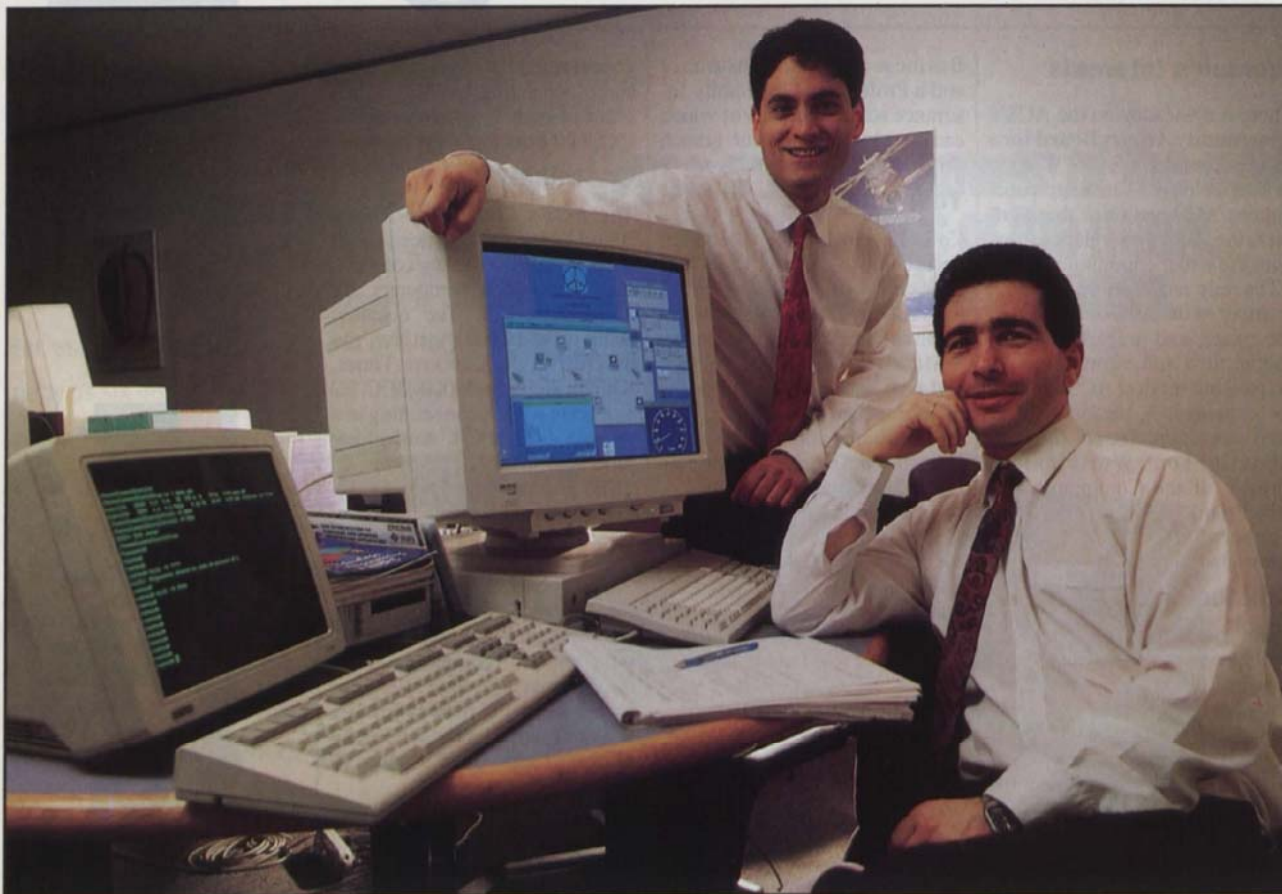
Ashley Goldsworthy

*Informatics* is published by the Strategic Publishing Group Pty Ltd on licence from the Australian Computer Society. *Informatics* is published on the first Wednesday of each month, excepting January. Annual subscription: \$59 (11 issues). Copies are distributed free to members of the Australian Computer Society as part of their membership fee. Strategic Publishing Group Pty Ltd, Level 4, 204 Clarence Street, Sydney NSW 2000. Ph: (02) 267 2084 Fax: (02) 267 2094. CompuServe 100026,2330. ACN 054 973 653 ISSN 0000-0000. ACS: PO Box 319, Darlinghurst NSW 2010. Ph: (02) 211 5855 Fax: (02) 281 1208.

All material in *Informatics* is protected under the Commonwealth Copyright Act 1968. No material may be reproduced in part or in whole, in any manner whatsoever, without prior written consent of the publishers and copyright holders. Printed by Offset Alpine Printing, Derby and Wetherill Streets, Silverwater, NSW 2141. Distributed by Automail Pty Ltd.







Martin Picard (standing) with Patrol development team member Kirill Tatarinov.

**P**atrol is coming. A small Sydney-based software company has begun to attract a lot of interest worldwide for a revolutionary knowledge-based graphical front end that has the potential to revolutionise applications management in distributed systems.

The product is called Patrol, from a company with the same name. It has been developed with the backing of Oracle Australia, which distributes the product in this region. Negotiations are also under way with a number of major vendors, which could well see the product emerge as something of a standard for distributed applications management.

For a long time, sophisticated systems management tools have been the preserve of mainframe-based computer systems. Products like IBM's NetView and SDI's Australian-developed Net/Master have been a feature of SNA-based networks for many years, and are now being extended down to incorporate the management of LAN and other components of enterprise-wide wide area networks.

Unix-based networks have not been so well served by systems and network management products. Unix provides a rich programming environment, but network and systems management have never been its strong

# Patrolling the software sea

A revolutionary new software system developed in Sydney means that applications management on distributed systems will never be the same again. **Graeme Philipson** talks to the man behind Patrol, and looks at the product.

points. One problem has been that Unix-based systems, which typically comprise a number of networked peers, are inherently different to hierarchical mainframe-based systems.

Patrol is not a true network management tool, at least not in the sense that the concept is understood in the traditional SNA world. It

is a knowledge-based graphical front end, which uses software agents to track the performance of hardware and software throughout a network (see following story).

The product's initial acceptance by many significant users indicates its wide appeal. Patrol has the potential to be a major com-



ponent of the next generation of network management systems, those which will need to handle large and heterogeneous networks comprising an amorphous mix of applications, from databases to transaction processing monitors, and from financial applications to the operating system itself.

### What is it?

What is Patrol, and where has it come from? The product's brief history is one of the more interesting tales in the long and chequered record of software development in this country.

To understand Patrol it is necessary to know the story of one man. His name is Martin Picard.

Picard was born in Italy in 1963, of French and Austrian parents. After high school he moved to the USA, where he did a combined electrical engineering and computer science course at Harvard and MIT.

In 1986 he graduated and joined satellite design contractor Ma-Com, where he worked on satellite networking. Soon after that he moved to Oracle, where he became product manager for the SQL\*Net product, and later director of networking products.

Picard took SQL\*Net from nothing to a \$US23 million a year product in four years. How? "It was the first example of a true client-server utility and of a true distributed database," says Picard. "Oracle was growing quickly through that period, and I guess I was just in the right place at the right time."

Picard says that that experience got him thinking about the concept of using software to manage software. "But probably more important was my sailing experience."

While working at Oracle, Picard decided he wanted to sail. Though he had never messed around in boats, talking to friends who sailed got him liking the idea. He bought a 34-foot (10m) boat called Orca, "which sounds a bit like Oracle", and jumped straight into sailing without the usual apprenticeship.

Typically, he decided that his first solo sailing trip would be a little jaunt down the North American west coast, through the Panama canal, and back home to Italy. He wanted a change after his time with Oracle, and knew that there would be opportunities in Europe for someone with his skills.

### Canal therapy

But fate stepped in, as it often does. "I got to the Panama canal, and it was closed because of all the fuss about Noriega. So I decided to turn around and go through the Suez canal, via Tahiti and Australia.

"By the time I got to Sydney, the Gulf War had broken out and the Suez canal didn't look

too healthy either. And Sydney was such a great place I decided to stay a while."

The trip had more significance. Being alone on a boat for weeks on end provides an unequalled opportunity for extended contemplation. It was on the trip from San Francisco to Sydney that the idea of Patrol was really born. "When you are sailing, catching fish becomes an important event. I rigged up a fishing line attached to a bell, which you might call an event-driven alert. That ship's bell was Patrol 1.0."

The key to any great software product, as with most other inventions, is the idea rather than the execution. "With Patrol, the concept was the difficult thing," says Picard. "By comparison, the coding and the rest of the product development has been relatively straightforward."

When he arrived in Australia, Picard and Orca were put into quarantine at Neutral Bay. Ken Jacobs, an old Oracle colleague and the company's director of database marketing, was in Sydney for an Oracle conference (the 1990 users' conference in Adelaide). He saw the Orca and suggested Picard attend the conference. "It was like I had never been away," says Picard. "I was straight back into the Oracle scene." But he didn't want to rejoin the company after the freedom of the high seas, and he set himself up as an independent Oracle consultant, specialising in distributed systems. He called his company Distributed Data Systems. And all the time he was thinking a lot about the fish and the bell and the concept that became Patrol.

### Why Australia?

Although he arrived almost by accident, Picard says he is committed to Australia. "The lifestyle here is fantastic, and the country has very good software developers. The world is a small place nowadays, and a software company can really be based anywhere."

"We're not really an Australian company, just as we are not really an American company. The location of the development team is irrelevant. We are simply a software company."

Picard says that his big strength is that he understands both networking and applications. "That's important, because not many people do. And my long time with Oracle meant that I had some important contacts."

It was one of those contacts that saw him in January 1991 in Italy with the large bank Banco di Bergamo, an organisation renowned for its R&D. The bank wanted a network authentication server, which was the genesis of Patrol. Picard's contract with the bank allowed him to retain the development rights to any systems he was working on.

*It was on the trip from San Francisco to Sydney that the idea of Patrol was really born. "I rigged up a fishing line attached to a bell, which you might call an event-driven alert."*





# How would you feel if you missed next month's MIS magazine?



Pretty miffed eh? No wonder.

Imagine missing our profiles of innovative MIS sites. Our key interviews with MIS managers. Our reporting and analysis of MIS management issues which are simply not covered anywhere else.

You have probably noticed how quickly MIS disappears from the newsagent racks. We have noticed how many MIS managers and financial managers have already subscribed to MIS.

Why? Because in the words of one, "At last, there's someone who talks to me like a manager, not a technician."

It really is your magazine, designed to reflect your interests and keep you informed about the issues that are relevant. Our Editorial Advisory Board of MIS executives makes sure of that.

So send us your subscription today and save 20% on the newsstand price. Then you can be sure you won't miss MIS. Ever.



# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.