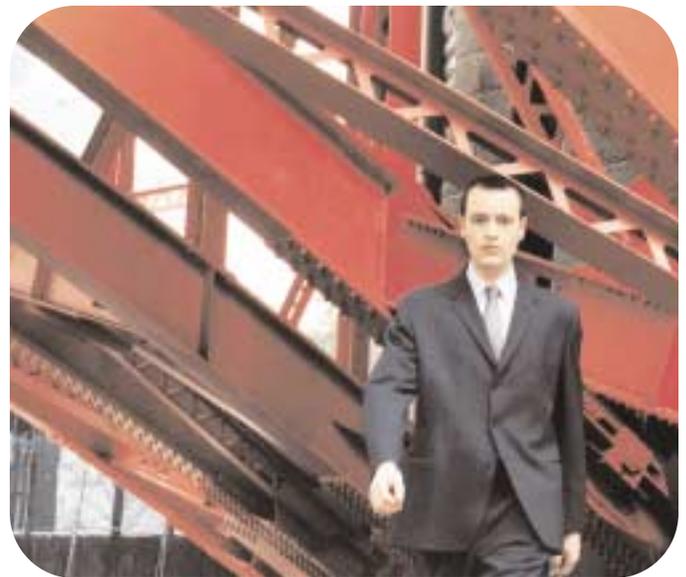


# success story



**New Zealand Steel runs process control systems on hp OpenVMS AlphaServer systems**



"We've still to find an environment as robust as HP OpenVMS, so we will look closely at running HP OpenVMS on Itanium® when available."

Slavica Marsic  
Principal Engineer  
Database and Applications Manager  
New Zealand Steel

## time is money

In some industries you cannot afford downtime. "Time is money", says Murray Lye, Maintenance Services Manager of New Zealand Steel in Glenbrook, South Auckland, New Zealand. "And down time is lost money. When you have tens of millions of dollars of heavy machinery responsible for producing over 600,000 tons of steel every year, you need access to information fast."

So step in the Primary Plants Level 3 (PPL3) computing group. This group is responsible for taking information from various process control systems around the steel plant, assimilating them, and making them available where they are needed. Originally written in the early 1990s, the application suite boasts in excess of 600 discreet modules, reporting on all aspects of iron and steel production, such as chemical analysis of samples during the manufacturing process, production schedules, and environmental measurements. BEA MessageQ is used as the middle ware to "glue" the disparate systems together, and allow them to communicate.

Originally RMS based, the last few years have seen increased use of Oracle® RDB for the database. Principal Engineer, database and applications manager Slavica Marsic explains: "While RMS was suitable originally, we found a need to use a relational database to allow us to be more flexible, and allow our users to customize their reports." Much of the application is written in DECForms and Fortran. Programmer and chief designer Robert Gale has been involved in the design and support of the application for much of the system's lifetime. "The products were appropriate at the time. We have recently begun to change the way the application is accessed; our philosophy now is 'everything to the web' so we are using tools to make reporting and informational screens available on the Intranet via browsers. Much of this at the moment is done using an intranet page which uses ODBC calls through to the database. We are looking at the HP OpenVMS

system possibly serving web pages out in the future. We've done this largely because people still want the same information, but they want different access to it: to be able to download into a spreadsheet application, so they can format and manipulate them to suit their needs, for example."

## achieving goals through server consolidation

So how important has HP OpenVMS been to this set-up? System manager Paul Jerrom suggests it has been critical. "We only have about four hours down-time permissible every six weeks", says Jerrom, "and we haven't had an unplanned outage in well over a year now. As a result, we have taken another HP OpenVMS-based application, which controls our analysis of laboratory sampling, and consolidated it and our main PPL3 application onto the same server, thereby reducing management costs. We are safe in the knowledge that the server can run each application safely, without one affecting the other or the need for continual reboots. Our laboratory sampling is required to turn around samples, and send data back to the requestor, within a five minutes period. Without it, steel production grinds to a halt, and that just is not allowed to happen as this is a continuous 24 hour per day industry."

So will PPL3 be migrating to another platform? "Unlikely in the short-to-medium term", says Marsic. "We looked at the costs of moving the laboratory application to a PC-based client-server, industry standard architecture, but a business case study shows that it is much cheaper to stay with HP OpenVMS. This was predominantly due to the support costs associated with client-server environments, as well as licensing issues. Plus we've still to find an environment as robust as HP OpenVMS, so we will look closely at running HP OpenVMS on the Itanium® processor family when available. We ported from VAX to Alpha without much fuss, so we expect the same from the port to Itanium."

## industry

manufacturing

## challenges

- ensure maximum uptime so process control systems are available whenever they are needed

## solutions

- HP AlphaServer systems for high availability, reliability and performance

## results

- cost savings – consolidation and staying with HP OpenVMS resulted in lower management costs
- improved system reliability – increased application availability due to minimized downtime and reduced risks; laboratory environment much more robust

Final word goes to Murray Lye:  
"We have to remember we are in the steel making business, so we in PPL3 must do whatever we can to assist in making steel quicker, more efficiently, and better. Being highly reliable, flexible, and fitting in with an intranet-available strategy means that HP OpenVMS helps us to achieve our goals."

#### additional information

For more information on how working with Hewlett-Packard can benefit you, contact your local HP service representative, or visit us through the Internet at our World Wide Web address: <http://www.hp.com>

#### at-a-glance:



**company profile:** New Zealand Steel Limited operates a fully integrated steel mill at Glenbrook, South Auckland. They produce a range of steel products from local materials for use in the building, construction, manufacturing and agricultural industries. New Zealand Steel's fully integrated steel mill produces approximately 700,000 tons of steel per annum, of which approximately 60% is exported.

**headquarters:** Auckland, New Zealand

**founded:** Incorporated in 1965 with the long-term goal of establishing a steel industry built on local raw materials of ironsand and coal to satisfy New Zealand's demand for flat steel products.

**URL:** [www.nzsteel.co.nz](http://www.nzsteel.co.nz)

#### solution highlights

- One HP AlphaServer DS10 as the test/development/DR server
- One HP AlphaServer DS1200 application and database server
- HP OpenVMS operating system
- HP StorageWorks RA3000
- BEA MessageQ
- Oracle RDB

[www.hp.com](http://www.hp.com)

[www.nzsteel.co.nz](http://www.nzsteel.co.nz)

Technical information contained in this document is subject to change without notice.

AlphaServer, OpenVMS, StorageWorks, VAX and VMS are trademarks of the Hewlett-Packard Company. All other names and products are property of their respective companies.

©Copyright Hewlett-Packard Company 2002. All Rights Reserved. Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

June 2002

