

Tomago Aluminium improves SAP environment performance, security with Red Hat and IBM



Tomago Aluminium, Australia's largest aluminum smelter, requires a stable, reliable infrastructure and high visibility into IT performance to support 24x7 availability for its production systems. To maintain availability at scale while improving development efficiency, the company migrated its SAP HANA® environment to Red Hat Enterprise Linux for SAP Solutions, supported by Red Hat Ansible Automation Platform and IBM hardware. With improved control and insight, Tomago Aluminium has improved development efficiency, consolidated its server footprint, and enhanced system and data security.

Software

Red Hat® Enterprise Linux® for SAP Solutions

Red Hat Insights

Red Hat Ansible® Automation Platform

Hardware

IBM POWER H924 server

IBM FlashSystem 5000 block storage

Partners

SAP

IBM

Advent One

SAPWORKS



Manufacturing

950 employees

Benefits

- Maintained 24x7 availability and optimized processes at scale
- Improved development efficiency with automation
- Reduced infrastructure costs with consolidated server footprint
- Enhanced security with faster issue resolution and greater control

"The partnership is seamless, and the solutions fit together perfectly. We're confident that we have a resilient, stable system and would recommend it to anyone."

Dennis Moncrieff
IT Superintendent,
Tomago Aluminium



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About Red Hat Innovators in the Open

Innovation is the core of open source. Red Hat customers use open source technologies to change not only their own organizations, but also entire industries and markets. Red Hat Innovators in the Open proudly showcases how our customers use enterprise open source solutions to solve their toughest business challenges. Want to share your story? [Learn more.](#)

“Red Hat impressed us with the speed of security patches and bug fixes. Working with a responsive partner gives us the confidence that our operating system will continue to be stable and effective.”

Dennis Moncrieff
IT Superintendent,
Tomago Aluminium

Supporting innovation at the speed of business

Operating continuously since 1983, Tomago Aluminium is Australia’s largest aluminum smelter. It contributes more than AUD\$1.5 billion annually to the country’s economy and exports 90% of its products to global markets.

To maintain 24x7 operations, Tomago Aluminium’s IT systems must be reliable and highly available. Its IT team works to refine processes and improve data access to help the company respond faster to issues affecting production. Tomago Aluminium uses [SAP HANA](#) to support its enterprise resource planning (ERP) and business warehouse systems, including a variety of processes from project management and peer-to-peer (P2P) networking to health and safety and human resources.

“For instance, we have a large warehouse of spare parts that are critical for our plant. If something breaks or wears out, we need to find parts and get the system running again quickly,” said Dennis.

Previously, the company ran its SAP HANA workloads in a managed public cloud environment, but this solution lacked visibility into performance or effective notification when systems approached capacity. Additionally, the vendor’s service contract limited development to business hours, hindering innovation and rapid response to changing business needs. When the service contract was due for renewal, Tomago Aluminium decided to find a new partner for its hybrid cloud infrastructure to improve agility and complexity while maintaining availability.

“Our partner was very risk-averse, which limited progress and made it hard to innovate,” said Dennis Moncrieff, IT Superintendent, Tomago Aluminium. “Without visibility of how things were running, we couldn’t even identify opportunities for improvement. We finally realized how restricted we were.”

Standardizing SAP operations with a hybrid cloud solution from Red Hat and IBM

Based at a single site with no expansion plans, Tomago Aluminium decided to migrate its SAP HANA architecture from public cloud to a private, on-premise solution based on Red Hat software running on IBM server and storage hardware.

The company consolidated multiple operating systems onto [Red Hat Enterprise Linux for SAP Solutions](#), a single, consistent foundation for SAP workloads that includes:

- Red Hat Enterprise Linux High Availability Add-On for increased uptime.
- Red Hat Smart Management for life-cycle management.
- Red Hat Insights for proactive issue identification and remediation.
- Update Services for SAP Solutions.
- In-place upgrades and live patching for critical and important security issues.

Additionally, Tomago Aluminium adopted Red Hat Ansible Automation Platform to automate operational and provisioning processes, such as virtual machine (VM) creation for testing.

“We had a mix of Red Hat and SUSE Linux environments, but we lacked in-house SUSE expertise and Red Hat offers stronger support,” said Dennis. “Building on Red Hat’s technology would help us grow our existing in-house skills to fix issues and better support innovation.”

Red Hat partners Advent One and SAPWORKS supported the deployment. Advent One inspected for certification issues, then implemented the new hardware and software solutions in just six days. SAPWORKS completed a parallel migration of Tomago's SAP environment and related testing.

"The partnership is seamless, and the solutions fit together perfectly. We're confident that we have a resilient, stable system and would recommend it to anyone," said Dennis. "Our collaboration with Advent One helped us get our IT environment how we want it."

Optimizing processes and security with integrated, efficient infrastructure

Maintained critical production availability at greater scale

By standardizing its SAP HANA environment on Red Hat Enterprise Linux for SAP Solutions, running on IBM Power servers, Tomago Aluminium can keep its critical business and production processes running 24x7—even at larger scale.

Red Hat Insights provides greater transparency into performance and efficiency through a single, user-friendly dashboard, helping the company improve operational efficiency while maintaining availability.

"Previously, we could only view monthly reports, but with Red Hat Insights we have real-time visibility that helps us make smarter decisions about processes," said Dennis. "For example, for five years we ran a certain transaction only once a week, because it was so slow. Now, we have the information we need to look for ways to make that process faster."

Improved development efficiency with automation

By integrating Ansible Automation Platform with IBM PowerVM server virtualization, Tomago can use standardized playbooks to speed provisioning and other manual, repeatable processes.

"Automating processes such as SAP HANA deployments using Ansible Automation Platform helps us automate VM provisioning for testing environments and accelerates development of new, innovative features," said Dennis.

Reduced infrastructure costs

Compared to its previous managed cloud solution, running Red Hat software on IBM POWER hardware has helped Tomago Aluminium improve server density. As a result, the company has consolidated its server footprint from 32 CPUs to just eight, reducing related operational and power costs.

"Our goal is to improve effectiveness and efficiency while keeping infrastructure costs down. With Red Hat, we get a better return on our investment," said Dennis.

Enhanced security with faster issue resolution and greater control

By adopting an integrated solution from Red Hat, IBM, and SAP, Tomago Aluminium has improved control and [security](#) capabilities across its application environment.

Tomago Aluminium uses Red Hat Insights to proactively identify potential security and compliance issues, analyzed against a large volume of internally defined, Red Hat-defined, and industry-defined advisories. Additionally, Red Hat provides ongoing patches, updates, and bug fixes to protect against vulnerabilities and threats.

About SAP

As a market leader in enterprise software, SAP turns businesses into intelligent enterprises. Our applications and services enable business and public customers across 25 industries globally to operate profitably and adapt continuously. With a global network of customers, partners, and employees, SAP helps the world run better and improve people's lives. For more information, visit sap.com.

About Advent One

Advent One's deep experience with critical enterprise workloads makes it uniquely positioned to provide advisory services to optimize existing environments and partner with customers to build a strategy for modernization and transformation of IT for the digital world. adventone.com

"Red Hat impressed us with the speed of security patches and bug fixes," said Dennis. "Working with a responsive partner gives us the confidence that our operating system will continue to be stable and effective."

Adopting IBM hardware, managed through Red Hat Enterprise Linux, has also helped the company improve security for its data and systems. IBM PowerVM isolates applications for improved performance and scalability on Tomago Aluminium's servers while maintaining security for critical services and processes.

Expanding digital transformation to new processes

After its initial success with its new SAP environment, Tomago Aluminium plans to migrate additional SAP ERP and production processes to Red Hat Enterprise Linux for SAP Solutions.

"So far, everything we've migrated to Red Hat runs better. Now that we've got the high-priority work done, we can focus on enhancing and expanding our environment to make sure we can keep supporting our critical operational processes," said Dennis.

About Tomago Aluminium

Tomago Aluminium is Australia's largest smelter. It produces more than 590,000 tons of aluminum every year, which is 25% of the country's primary aluminum. It employs 950 full-time staff and 190 contractors.

About Red Hat

Red Hat is the world's leading provider of enterprise open source software solutions, using a community-powered approach to deliver reliable and high-performing Linux, hybrid cloud, container, and Kubernetes technologies. Red Hat helps customers integrate new and existing IT applications, develop cloud-native applications, standardize on our industry-leading operating system, and automate, secure, and manage complex environments. Award-winning



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