TMG Health, the largest business process outsourcing (BPO) provider in the Medicare and Medicaid market, relied on a slow, batch-oriented legacy application environment that prevented it from providing continuous data visibility and access to its clients. With help from Red Hat Consulting, TMG deployed a new application platform using Red Hat JBoss Enterprise Application Platform and other Red Hat solutions. As a result, TMG reduced development time and costs and delivered real-time data access and visibility to its clients.

“Red Hat gives us a price point we couldn’t get from any other leading vendor. And we felt we could grow with Red Hat. We didn’t want to buy an IBM product that requires 20 administrators and a lot of overhead.”

NICOLAAS BOTES, EXECUTIVE DIRECTOR OF ENTERPRISE, ARCHITECTURE, TMG HEALTH

HEALTHCARE INDUSTRY

1,500 EMPLOYEES

SOFTWARE AND SERVICES
Red Hat® JBoss® Enterprise Application Platform
Red Hat JBoss BPM Suite
Red Hat JBoss Developer Studio
Red Hat JBoss Fuse
Red Hat Enterprise Linux®
Red Hat Consulting

HEADQUARTERS
King of Prussia, PA

BENEFITS
• Reduced length of development life cycle by 75%
• Gained potential to increase market reach by 50%
• Improved return on investment (ROI) by lowering development costs by 60%
TMG Health is the largest business process outsourcing (BPO) provider in the Medicare and Medicaid market. The company handles billing, claims processing, and customer service for its clients, health plan and health insurance providers, delivering more than 3 million file feeds daily. But its legacy technology was preventing the company from giving its clients the real-time data access they needed to effectively serve their own customers.

“We needed a paradigm shift—for us and our customers,” said Nicolaas Botes, executive director of enterprise architecture for TMG. “We needed to move from limited data visibility to real-time visibility.”

TMG’s data interactions and integration occurred from once daily in a batch feed to sometimes just once a month, but its clients wanted immediate, constant interaction to serve their own customers better. For example, if a patient visits a doctor in the morning, that visit could put her over her out-of-pocket expenditure cap. To fill a prescription later that day, she might be required to pay and be reimbursed later if the pharmacy cannot see that she has already hit her expenditure cap.

“We needed to modernize our business,” said Botes. “And we needed to do it without a large in-house infrastructure footprint.”

To discover a solution, TMG ran a comparison of several vendors, including IBM and Red Hat. The company chose Red Hat, based on the solution’s competitive pricing and other benefits.

“Red Hat gives us a price point we couldn’t get from any other leading vendor,” said Botes. “And we felt we could grow with Red Hat. We didn’t want to buy an IBM product that requires 20 administrators and a lot of overhead.”

To serve customers in real time, TMG deployed its new Medicaid Operating Model Strategy (MOMS) platform using Red Hat solutions to replace legacy components, including:

• Replaced Microsoft Internet Information Services (IIS) 7.5 web server-based software with Red Hat JBoss Enterprise Application Platform (EAP), which serves as the core of the platform

• Replaced Microsoft .NET Framework, IBM WebSphere Java™-based tools, and custom coding with Java-based Red Hat JBoss Middleware

• Replaced legacy web applications and custom integrations with Red Hat JBoss Fuse, Red Hat JBoss Enterprise Application Platform, and Liferay, an open source portal and collaboration solution

• Deployed Red Hat JBoss BPM Suite, Red Hat JBoss Developer Studio, and Red Hat Enterprise Linux to support operating systems

“We’re in constant communication with Red Hat Consulting, and they are extremely responsive. They provide constant updates to the software and answer any questions we have. They’re on top of their game.”

NICOLAAS BOTES, EXECUTIVE DIRECTOR OF ENTERPRISE ARCHITECTURE, TMG HEALTH
In addition, TMG is building an application program interface (API) gateway to serve as an entry point for internal and external requests and provide abilities such as:

- Redaction
- API versioning
- Authentication
- Content-based routing
- Throttling
- Enterprise integration patterns

As the foundation of this API gateway, TMG implemented Red Hat JBoss Fuse, which protects business and data services through interfacing with a security API and providing auditing, redaction, and transformation capabilities. Red Hat JBoss Fuse also lets TMG to track and log metrics to identify problems and inefficiencies in its software and integration points.

To migrate its legacy applications to Red Hat JBoss Enterprise Application Platform, TMG engaged Red Hat Consulting. Red Hat's experts suggested configuration changes for data source validation, domain mode, and high availability. In addition, Red Hat's consultants provided knowledge on management console techniques—including command-line and web interfaces—that increase capacity for automated deployments and reduce human error. Red Hat also helped TMG develop proof-of-concept enterprise integration patterns, and helped deploy and troubleshoot Red Hat JBoss BPM Suite.

**IMPROVED CAPABILITIES FOR TMG AND ITS CLIENTS**

**GREATER EFFICIENCY**

With the new solution from Red Hat, TMG is developing pattern-based integration based on Apache Camel, which is included in Red Hat JBoss Fuse. This will let developers quickly develop integrations by focusing on services that will add business value instead of building and maintaining integration software. The solution has reduced the development life cycle by 75% and, as a result, reduced development costs by 60%.

"Integration is a vital capability, with huge bang for the buck," said Botes.

In addition, the efficiency of its Red Hat solution lets TMG track data more effectively and accurately to achieve compliance with government regulations. Whenever the government introduces new compliance requirements, TMG can complete development faster to swiftly implement the new rules.

**INCREASED COMPETITIVENESS**

TMG is now able to offer more services to its customers—such as real-time enrollment, a service that is not currently available from other BPO vendors—that create new revenue sources that will potentially increase TMG's market reach by 50%.

"We can now add new clients quickly and easily while lowering their total cost of ownership. This implementation lets us provide a very attractive option to health insurers," said Botes.

**ENHANCED SUPPORT**

Consolidating its systems on a single technology suite lets TMG develop applications that are easier to support. In addition, TMG has gained enterprise-grade support from Red Hat for its own solutions.
"We're in constant communication with Red Hat Consulting, and they are extremely responsive. They provide constant updates to the software and answer any questions we have. They're on top of their game," said Botes.

IMPROVED AUTOMATION

With Red Hat JBoss Fuse, TMG is able to make its software more efficient and find new ways to automate. Patterning development lets developers focus less on integration and more on business logic. In addition, TMG can use metrics and data to serve clients more effectively. For example, TMG can guarantee response times by prioritizing requests from clients that purchase more bandwidth on its systems.

BETTER HEALTHCARE FOR MILLIONS

Transitioning from batch processing to real-time data processing provides impressive benefits not only for TMG and its clients but also for millions of consumers. For instance, a patient who visits the pharmacy just hours after reaching her out-of-pocket cap will not have to pay for her prescription.

“The pharmacy can see in real time that she hit her cap that morning. So we’re enhancing the consumer experience with our new environment. A lot of healthcare companies are still running heavy, batch-processing systems to adjudicate claims, but we’re moving our systems into the 21st century with real-time capabilities,” said Botes.

In the future, the Red Hat solution will help TMG continue to standardize and meet constantly evolving government mandates, as well as continue to provide competitive service to clients by providing data throughout the BPO life cycle.

“Our clients can now access their data at any given point,” said Botes. “In the BPO industry, the more visibility you can give your clients, the happier and more productive they are. So this is a game changer for us.”

ABOUT TMG HEALTH

TMG Health is the leading national provider of business process outsourcing solutions for Medicare Advantage, including billing, claims processing, and customer service for Medicare Part D and Managed Medicaid plans. With more than 17 years of experience in providing technology-enabled services to the government market exclusively, TMG Health has unrivaled knowledge of health plan processes, regulatory requirements, and the daily challenges that plans face in the government market.