

Omnitracs builds digital logistics platform, agile development approach with Red Hat



Omnitracs, a pioneer in transportation technology, sought to transition to cloud-native technology and efficient, modern development practices and chose Red Hat OpenShift as the foundation of its new offering. Working closely with technology experts through Red Hat Open Innovation Labs and ongoing consulting, its teams learned how to work collaboratively and iteratively using agile, CI/CD, and DevSecOps approaches. Now, its teams can support reliable operations at scale and deliver new features to market faster, helping Omnitracs maintain its role as an industry leader in innovation.

Software

Red Hat® OpenShift®

Services

Red Hat Open Innovation Labs

Red Hat Consulting

Red Hat Training

Partner

Amazon Web Services (AWS)



"With Red Hat, we've changed how we develop, test, secure, and deploy software. We've learned how to use powerful, cloudnative tools and technologies to create new applications for a successful digital future."

Kent Norton

CTO, Omnitracs

Transportation and logistics

More than 800 employees

Benefits

- Transformed fleet management with creation of mobile, cloud-native platform
- Established collaborative practices, such as CI/CD and DevSecOps
- Learned OpenShift and Ansible automation best practices
- Reduced time to market for new features



facebook.com/redhatinc @RedHat linkedin.com/company/red-hat

redhat.com



Building a cloud-native platform for digital fleet management

The transportation and logistics industry, like many other industries, is undergoing a shift to digital-centric business. With 35 years of experience, Omnitracs provides trucking technology and insight to help customers around the world address a variety of needs, from compliance and safety to tracking and transportation management. The company has a yearly research and development budget of more than US\$70 million dedicated to developing the latest innovative services.

To stay current with industry trends and deliver the next generation of fleet management solutions, Omnitracs sought to create a cloud-native, scalable mobile platform that would connect drivers, office staff, and customers. To complement this technology shift, the company sought to adopt more iterative, agile development approaches.

"We needed to transform how we work," said Kent Norton, Chief Technology Officer, Omnitracs. "We wanted to modernize, consolidate, and standardize our development processes and tools—all while we continued to run our existing platforms."

Balancing new and existing resources was key to maintaining the company's critical logistics availability. Omnitracs sought enterprise cloud technology backed by an experienced, responsive vendor that could not only share software best practices but also support the company's shift to more collaborative, inclusive, and open practices.

"We have highly skilled developers and architects who understand our existing environments but don't necessarily know the best tools and processes for cloud-native development," said Norton.

Working with a trusted, experienced vendor to adopt new tools and technology

Omnitracs selected Red Hat to support its shift to cloud-native development, based on Red Hat's reputation for providing supported, enterprise open source technology and expert guidance on modern work approaches like DevOps, agile, lean, and open collaboration.

"For this project, we needed a vendor that would be more: not just a vendor, but a partner," said Norton. "Red Hat has the right tools, architectures, and design skills, and they understand how to work efficiently."

As the foundation of its new fleet management platform, Omnitracs One, Omnitracs worked with Red Hat Consulting to deploy Red Hat OpenShift running in Amazon Web Services (AWS). Based on Red Hat Enterprise Linux® and Kubernetes, Red Hat OpenShift provides a single platform for faster, more reliable development, deployment, and management of container-based applications across cloud infrastructure. Omnitracs also uses the community version of Ansible® to automate, patch, and update management for complex deployments using human-readable language and reusable processes.

Working with Red Hat Services, Omnitracs developed a comprehensive transformation strategy for its technology and development practices, including Red Hat Training and two eight-week residencies at Red Hat Open Innovation Labs. This hands-on experience, led by Red Hat Consulting, included workshops and other activities to help Omnitracs efficiently begin its shift to modern tools and practices—including lean agile development, integrated DevSecOps, creating a safe environment for change, and product portfolio management. During these engagements, Omnitracs worked with Red Hat to develop the architecture for the Omnitracs One platform.

"We started with a vision. Nine months later, thanks to working with consultants at Red Hat Open Innovation Labs, we've built a fully functional, automated CI/CD pipeline that spans from development provisioning to production. That is an amazing feat."

Kent Norton CTO, Omnitracs



Redefining business strategy with collaborative practices and modular technology

Transformed fleet management with mobile, cloud-native platform

Omnitracs One offers a superior driver experience, a comprehensive library of third-party integrations across devices, and exchangeable data across operations. By adopting container technology and iterative development practices to create Omnitracs One, Omnitracs has built a scalable, reliable platform that streamlines management for fleets of all sizes – and can adapt to future needs for years to come.

The platform currently supports more than 15,000 customer vehicles and manages 59 billion data transactions annually. Red Hat OpenShift's auto-scaling capability supports this growth as demand increases. Monitoring and self-healing automation helps Omnitracs keep its services and systems operational at scale.

"This new approach is much more modular and quicker to build and scale," said Justin Newcom, Chief Information Officer at Omnitracs. "To modernize a lot of our older products, we spent a lot of time building on Red Hat OpenShift, and we can then run what we built on any public cloud provider or multiple providers, depending on our needs. For instance, using Infrastructure as Code helps us easily expand into other AWS environments or even to other cloud service providers if we want."

Established collaborative, iterative development approach

Learning best practices and insights has helped Omnitracs successfully – and quickly – shift from more isolated, traditional IT processes to an iterative, collaborative approach, including practices like continuous integration and continuous delivery (CI/CD), agile, open practices, and DevSecOps.

Tools like social contracts, domain-driven design, and event storming ensure teams are kept informed and are empowered to participate in shaping Omnitracs One – and the future of Omnitracs.

"We started with a vision. Nine months later, thanks to working with consultants at Red Hat Open Innovation Labs, we've built a fully functional, automated CI/CD pipeline that spans from development to staging to production. That is an amazing feat," said Norton. "The approach we used on this project, relying on the Red Hat team to help us make crucial decisions, took a lot of pressure off and helped us rapidly move forward."

Now, Omnitracs has a clear roadmap to ongoing success. The company appointed an agile coach and has aligned projects with corporate goals to take advantage of the momentum gained during the project and continue innovating with its new cloud, container, and automation technology.

Learned new skills with enterprise open source technology

Working with Red Hat Consulting and Red Hat Training has helped Omnitracs' development teams continue to hone their container and automation technology skills.

The company has purchased Red Hat Learning Subscription, an all-access training subscription that includes on-demand courses, videos, and more. Omnitracs also worked with Red Hat Training during an on-site, instructor-led course on OpenShift administration, as well as developer training at various skill levels on Ansible automation.

With this new knowledge on tools and best practices, Omnitracs' development teams can continue to take advantage of the innovation journey begun at Red Hat Open Innovation Labs.



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

support, training, and consulting services make Red Hat a trusted

adviser to the Fortune 500. As a

strategic partner to cloud providers, system integrators, application

vendors, customers, and open

source communities, Red Hat can help organizations prepare for the

digital future.

Reduced time to market

By combining robust enterprise technology from Red Hat with integrated DevSecOps teams and open practices, Omnitracs can now deliver new services – and solve issues – faster than before.

"You have to move fast; you've got to get to deliverables. You've got to get a product out there and that's one reason you want a partner like Red Hat," said Norton. "Because of the tools and processes we're using now, development problems that used to take us three or even six months to solve are being handled in days, so we can deliver new services and features faster."

Expanding current innovation to new opportunities

Beyond continuing to add new users to Omnitracs One, Omnitracs has recently enhanced the platform with major new applications, such as Omnitracs Tax Manager and other partner integrations.

In 2019, the company announced a partnership with SkyBitz Inc., a provider of Internet of Things (IoT) telematics solutions, to offer customers more advanced fleet and trailer tracking solutions. Omnitracs also acquired Software-as-a-Service (SaaS) compliance solution provider VisTracks to speed platform growth and enhance the company's device agnostic hardware and original equipment manufacturer (OEM) strategy.

Omnitracs also plans to expand its relationship with Red Hat through joint community and social good initiatives. More recently, the companies collaborated on a codefest to improve the Truckers Against Trafficking mobile application. Omnitracs is a premium sponsor of this organization dedicated to fighting human trafficking.

"With Red Hat, we've changed how we develop, test, secure, and deploy software. We've learned how to use powerful, cloud-native tools and technologies to create new applications for a successful digital future," said Norton. "As as result of this key partnership, we've grown as an industry leader, not just in size but also in innovation."

About Omnitracs

Omnitracs, LLC is the global pioneer of trucking solutions for all business models. Omnitracs' more than 1,800 employees deliver software-as-a-service-based solutions to help over 14,000 customers manage nearly 1,100,000 assets in more than 70 countries. The company pioneered the use of commercial vehicle telematics 35 years ago and serves today as a powerhouse of innovative, intuitive technologies. Omnitracs transforms the transportation industry through technology and insight, featuring best-in-class solutions for compliance, safety and security, productivity, telematics and tracking, transportation management (TMS), planning and delivery, data and analytics, and professional services. Omnitracs.com





facebook.com/redhatinc @RedHat linkedin.com/company/red-hat North America 1888 REDHAT1 www.redhat.com Europe, Middle East, and Africa 00800 7334 2835 europe@redhat.com Asia Pacific +65 6490 4200 apac@redhat.com **Latin America** +54 11 4329 7300 info-latam@redhat.com