

# Red Hat and Meteorcomm Collaborate to Support Deployment of Interoperable Positive Train Control Communication System, Improve Railroad Safety

SEP 19, 2013

*Interoperable Train Control Messaging System developed with Red Hat JBoss messaging technologies*

RALEIGH, N.C. & RENTON, Wash.--(BUSINESS WIRE)-- Red Hat, Inc. (NYSE: RHT), the world's leading provider of open source solutions, and Meteorcomm, North America's leader in development of PTC communications systems which provide reliable, effective data communications infrastructure solutions to the railroad industry, today announced that the companies have collaborated to deploy Meteorcomm's Interoperable Positive Train Control (PTC) communications solution with Red Hat JBoss messaging technologies and Red Hat Enterprise Linux. The resulting deployment initiatives support ongoing railroad efforts to implement the technologies in day-to-day operations. PTC communication solutions are diverse and complex. Railroads are faced with big challenges brought on by the new technology while structuring their deployment activities to accommodate existing system architectures and operational processes.

In support of the North American PTC program to be implemented across most of the U.S. rail network to position all PTC-enabled trains to detect and react to unsafe conditions in real time, Meteorcomm began work on a solution that would enable interoperability across both system architectures and operating platforms. Requiring flexible technology solutions to meet a wide range of requirements -- including high availability, interoperability, mobility, and the ability to support a large network of remote and back office communications -- railroads have selected Meteorcomm's data communications platform and the company's wide array of professional services. The professional services required to support the deployment of PTC systems include Interoperable Train Control Communications (ITCC) design and deployment activities requiring technical talent and training that Meteorcomm and Red Hat both commit to fulfilling for the railroad community.

Meteorcomm customers are freight railroads, commuter railroads, and systems integrators with a railroad specialty practice. The company's experts in railroad data communications worked closely with leading-edge technology suppliers to develop the industry's first demonstrated Interoperable Positive Train Control data communications platform.

"The railroads did a tremendous amount of work developing their own messaging protocol," explained James Kirkland, principal enterprise architect, Red Hat. "Faced with the aggressive timeline and the new technologies required for the protocol, they began considering alternatives. Red Hat worked with Meteorcomm to leverage an open, standard, wire-level messaging protocol that became the messaging component of the PTC communications system."

Red Hat JBoss messaging technologies are built on an open, wire-level messaging protocol designed for maximum interoperability and complex networked systems with mobile endpoints. They enable servers to communicate and send messages to each other via the protocol, mapping easily into application-level APIs. Red Hat's technical expertise and implementation of an open, wire-level messaging protocol are proven assets during the design and configuration of a back office.

"This project is highly complex. It introduces a reliability concept of 5 9s into the rail industry's wireless communication infrastructure," says Robert Turnbull, CEO, Meteorcomm. "This means that the system downtime cannot exceed 5.26 minutes per year. It's the combination of highly reliable hardware and software components, processes and people working together in near-perfect unison that will bring about this level of reliability. Our mission is to support the new PTC communications ecosystem and to assist the railroads with adopting this new technology."

"In a highly-distributed mobile environment like this, interoperable communications are what transform a collection of servers, relays and devices into an intelligent system," said Craig Muzilla, vice president, Middleware, Red Hat. "As a Red Hat Embedded partner, Meteorcomm was able to seamlessly implement their ITC Messaging System while offering superior support services to their customers, serving as a true indication of where the market is headed."

"The railroads are pushing hard to implement these complex technologies, and we're working to get them there," said Turnbull. "They're implementing a new technological communications system across tens of thousands of field locations and locomotive equipment. Once deployments are complete, they'll have the interoperable communications infrastructure they need to meet the safety requirements, and a system that they can operate with confidence."

## Additional Resources

Learn more about [Meteorcomm](#)

Learn more about [Red Hat](#)

Learn more about [Red Hat JBoss messaging technologies](#)

Learn more about [Red Hat Enterprise Linux](#)

Read more about how [Red Hat Embedded](#) is enabling organizations to build intelligent systems across multiple industries

Red Hat is the world's leading provider of open source software solutions, using a community-powered approach to reliable and high-performing cloud, Linux, middleware, storage and virtualization technologies. Red Hat also offers award-winning support, training, and consulting services. As the connective hub in a global network of enterprises, partners, and open source communities, Red Hat helps create relevant, innovative technologies that liberate resources for growth and prepare customers for the future of IT. Learn more at <http://www.redhat.com>.

#### About Meteorcomm LLC

Meteorcomm LLC is a data communications company providing technical expertise in reliable, effective data communications infrastructure solutions to the railroad industry. The company's robust data networks are integrated into the railroads' IT infrastructure to help them achieve compliance with government mandates for PTC (Positive Train Control) safety systems. Meteorcomm collaborates with customers throughout the project lifecycle, providing products and services that play a role in achieving customers' technical and business objectives in the deployment of complex communication systems.

#### Red Hat's Forward-Looking Statements

Certain statements contained in this press release may constitute "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements provide current expectations of future events based on certain assumptions and include any statement that does not directly relate to any historical or current fact. Actual results may differ materially from those indicated by such forward-looking statements as a result of various important factors, including: risks related to delays or reductions in information technology spending; the effects of industry consolidation; the ability of Red Hat, Inc. (the "Company") to compete effectively; the integration of acquisitions and the ability to market successfully acquired technologies and products; uncertainty and adverse results in litigation and related settlements; the inability to adequately protect Company intellectual property and the potential for infringement or breach of license claims of or relating to third party intellectual property; the ability to deliver and stimulate demand for new products and technological innovations on a timely basis; risks related to data and information security vulnerabilities; ineffective management of, and control over, the Company's growth and international operations; fluctuations in exchange rates; and changes in and a dependence on key personnel, as well as other factors contained in the Company's most recent Quarterly Report on Form 10-Q (copies of which may be accessed through the Securities and Exchange Commission's website at <http://www.sec.gov>), including those found therein under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations". In addition to these factors, actual future performance, outcomes, and results may differ materially because of more general factors including (without limitation) general industry and market conditions and growth rates, economic and political conditions, governmental and public policy changes and the impact of natural disasters such as earthquakes and floods. The forward-looking statements included in this press release represent the Company's views as of the date of this press release and these views could change. However, while the Company may elect to update these forward-looking statements at some point in the future, the Company specifically disclaims any obligation to do so. These forward-looking statements should not be relied upon as representing the Company's views as of any date subsequent to the date of this press release.

*Red Hat, the Shadowman logo, JBoss, and OpenShift are registered trademarks of Red Hat, Inc. in the U.S. and other countries. Linux is a registered trademark of Linus Torvalds and OpenStack is a registered trademark of OpenStack, LLC.*

*Meteorcomm is a registered trademark of Meteorcomm, LLC.*

Red Hat, Inc.  
Stephanie Wonderlick, +1-571-421-8169  
[swonderl@redhat.com](mailto:swonderl@redhat.com)  
or  
Meteorcomm, LLC  
Pam Morton, +1-253-214-8009  
[pmorton@meteorcomm.com](mailto:pmorton@meteorcomm.com)

Source: Red Hat, Inc.

News Provided by Acquire Media