Modernizing Army IT
Build a Resilient, Reliable Software Supply Chain

The U.S. Army, alongside the joint services, is committed to a broad operational imperative: transition from the industrial to the information age and ensure – across every domain – data is used as a strategic asset to drive mission success.

Modernizing the software supply chain, migrating to a hybrid enterprise cloud environment, and enabling enterprise IT-as-a-service are all key to achieving this goal. They are complex tasks for the third-largest organization in the world, of any kind. But, as Lt. Gen. Bruce Crawford emphasized, the Army does two things very well, "we adapt and we innovate."

Moving forward requires the Army and contractor ecosystem to rethink traditional technology acquisition, development, and implementation processes. Today, application development is too slow, too risky, and too focused on function versus value. Departments lack the ability to optimize legacy applications they can't replace or turn off. Review process bottlenecks can slow delivery, impacting readiness and outcomes. Culture, as well as technology, must evolve.

Against this backdrop, mission partners are increasingly measured on their ability to impact the mission, rather than on the technology delivered. Achieving mission impact requires tight collaboration between development, security, and operations teams with clear delineation of responsibilities and new ways to build automation and speed into the governance process. Partners who deliver a modern software supply chain will have new opportunities for competitive differentiation as they deliver applications and updates that are reliable, repeatable, and relevant.

Achieving Competitive Advantage with DevSecOps

DevSecOps provides the foundation for modern application development and a modern, secure software supply chain, but its building blocks are often misunderstood and misused.

Teams might look to containers, but containers don't solve problems. They look to Kubernetes, which also, alone, does not solve problems. They consider container orchestration, but container orchestration is a toolbox. The Army and its partners need a way to make development and orchestration easier and deliver rapid value by focusing on the problem sets of their warfighter, rather than those of infrastructure.

With Red Hat's solution ecosystem offering a solid foundation for flexibility from the edge to the cloud, teams can leverage existing tools to address key challenges and achieve workloads faster. Red Hat OpenShift Container Platform serves as the basis of a consistent and modern hybrid cloud application development and delivery platform. When implemented alongside cultural and process shifts, OpenShift delivers the enterprise Kubernetes environment to power developer productivity and innovation and a secure environment for modern application development and delivery models, at scale.

Automated safety controls eliminate process bottlenecks. New applications (or capabilities/updates) are not built from scratch. And, teams can resolve application delivery challenges in the development process, leading to the creation of compliant, relevant, and secure applications at scale.

As a result, the value of the development process increases exponentially, positioning your team as a trusted partner with the proven capabilities to support rapid development and updates.

Agile in Action: Red Hat Innovation Labs Drive Innovation at Scale

Recognizing that facilitating organization innovation at scale requires culture and process change, Red Hat established the Open Innovation Labs to offer hands-on training that focuses beyond the technology. Partners are paired with Red Hat engineers to

The OpenShift Advantage:

- Delivers a consistent hybrid cloud foundation for building/scaling applications
- Ensures compatibility and interoperability between containers
- Builds security checks into the container stack
- Offers pre-validated integration with hundreds of vendors

collaborate on solving a specific problem using agile development and DevSecOps methodologies.

The development team achieves time and cost savings and improvements in the end-user experience. They then take their training back to their organizations for long-term cultural change.

Lockheed Martin Aeronautics worked with Red Hat through the Open Innovation Labs to transform development processes, speed delivery, and accelerate upgrades to the U.S. Air Force's F-22 Raptor fighter jets.

Through this experience, Lockheed Martin implemented an agile transformation process and an open-source architecture using the OpenShift Container Platform for the F-22, successfully accelerating application development and delivery. The new agile processes improved forecasting abilities for future development sprints by 40 percent, eliminated multiple-day design reviews, and accelerated communication capability delivery by three years.

For the Army, these types of successes will accelerate the mission, giving decision-makers the information they need to forge ahead on all fronts, physical and cyber. Red Hat supports Federal contractors with open-source technology and immutable platforms that enable a reliable software supply chain and power Enterprise IT-as-a-Service – key to building the Army of the future.

Learn More

Take advantage of the Innovation Labs: https://www.redhat.com/en/services/consulting/open-innovation-labs
See What Lockheed Martin Achieved: https://www.redhat.com/en/success-stories/lockheed-martin
Understand OpenShift: https://www.openshift.com/