

# IT Modernization: more secure, more integrated, more interoperable

Leaders are under enormous pressure to stay ahead of cyber threats. And that makes IT modernization one of the top priorities for U.S. government agencies. The increase in cloud adoption coupled with reliance on mobile devices and the steady growth of the Internet of Things (IoT) is forcing agencies to do more with less — all with a zero tolerance for cyber risk. But with a dizzying array of technologies available, organizations need guidance in testing and evaluating new solutions that can build upon legacy assets to deliver more secure and integrated interoperability.

# That's where ManTech's ACRE™ cyber range makes the difference.

ACRE is a unique physical and virtualized cyber range that brings
ManTech's best-in-class cyber defense expertise to a new generation of professionals in business, infrastructure, transportation and federal civilian agencies. It enables you to efficiently create replicas of your



existing systems and network structures, and then activate those environments with realistic traffic, automated users and even malware.

## **Evaluate new technologies**

New technologies bring your organization new capabilities and cost savings, but they can also bring unforeseen performance and security risks. Does the technology truly do what it claims? How much effort is involved in its setup and configuration? How long will it take to integrate and begin realizing value? Does it inadvertently introduce new surface areas vulnerable to attack?

## Seeing is believing

Testing within a cyber range environment yields insight into each of these questions. ReadyRange<sup>TM</sup> Lab as a service provides persistent access to a dedicated ACRE environment with pre-staged system and network configuration items for use. ReadyRange Express provides the same environment with the addition of automation to assist in rapid development of maximally realistic networks for organizations short on time or dedicated development staff.

With this Lab as a service, you can test new technologies, tools and techniques. Invite your vendors to deploy proofs-of-concept within your own ReadyRange lab



environment and see for yourself how the product performs. Flow realistic network traffic through ACRE and introduce realistic network constraints – bandwidth limitation, packet loss, jitter and latency – to see the product's realistic performance characteristics rather than under ideal, antiseptic lab conditions. By comparing product alternatives, you can make truly informed decisions.

#### **Develop integrated solutions**

Once you've identified a technology that meets your requirements, how can you get the most out of it while minimizing the disruption to ongoing operations? A ReadyRange lab environment lets your technologists rapidly work out optimal system configurations and integration points – all without the cumbersome documentation, rollback plans and outage windows necessary for each capability rollout into a production environment. An experiment didn't work? Simply roll the entire network environment back to its original state. You'll be able to test systems, assess their security posture, solicit user feedback and practice deployment procedures without ever affecting your production environment. Once your solution is complete, instantly replicate it for reuse as a training environment.

#### Need help?

#### ManTech is an experienced, trusted partner and offers technical assistance at every level:

- Provide development, engineering, information assurance and testing support
- · Model existing or target network environments within the ACRE
- Develop benign and malicious traffic patterns to challenge your systems and defenders
- · Analyze your organization's existing security posture and recommend strategies to improve
- Design and support high level exercises