

Persistent Cyber Training Environment (PCTE)

If you want to defeat your attackers, you need to know how they think and what they will use against you. That's what we mean by offense-informed defense, and it's the way we tackle the world's toughest cyber threats. It's a fact: Cyber attackers will always have an advantage over cyber defenders. The asymmetry between cyber-attack and defense is a basic principle of cyber. In order to prepare for this environment and protect our most critical information, we train ourselves to think like our adversaries—and we train others to think like them, too.

ManTech's partnership with PM ITTS to prototype the PCTE

- A unique physical and virtualized computing facility;
- Cybersecurity experts with more than 20 years' experience to provide workforce development and training;
- Cyber compliance, policy and standards validation;
- Technology partners who provide advanced capabilities that support information security training.

Learn from the Best

Experience. In the unforgiving world of cyber defense, it's everything. ManTech is a true pioneer in this demanding specialty. We were engaged in cyber before "cyber" even had a name. And we have applied our expertise to designing and prototyping the PCTE in Cyber Innovation Challenge #1. Cyber specialists in the U.S. Department



of Defense, the U.S. Marine Corps, the National Guard Bureau, and many other military and national security institutions have sharpened their skills and learned new techniques in our facility. We are actively training the next generation of federal cybersecurity experts.

PCTE is based on an open, standards-based framework that can support a federated architecture and a cloud-based model. Coupled with custom tools and commercial products, ManTech ensures the PCTE can meet the commander's intent quickly and provide an operationally realistic training environment that can simulate any real-world scenario.



End-to-End Cyber Training

We can train and conduct self-directed mission workups 24x7x365 anywhere in the world. ManTech's Learning Management System and courses can emulate day-to-day activities as well as incident response processes in a hands-on lab environment. Among the many valuable uses:

- Workforce development and training: Train and evaluate cyber personnel on individual tools, techniques and processes. Leverage the hundreds of online training courses available through our web-based Learning Management System. Deliver online courses, certification exams and social media training with our partner Ultimate Knowledge Institute (UKI). Training also includes EMF360, a unique learning management tool.
- Academic and operational collaboration: Flexibility
 and custom course content keeps us ahead of the
 threat. Whether we use formally approved schoolhouse
 material or other authoritative technical resources,
 training content consists of foundational material that
 is updated regularly. This material can be packaged
 and presented on demand. The LMS can also provide a
 containerized, sandbox environment for participants to
 experiment, practice, or simply "check something out."