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Threat Systems Management Office (TSMO) Cyber Range Capabilities Overview



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TSMO Mission



Manage the Army Threat Systems Program to include the total life cycle and operation of threat systems for testing and training in live, virtual, and constructive environments in support of Army, DoD, and Other Government organizations.



EW

- Threat C3
- SIGINT/DF
- Electronic Attack
- Communications
- GPS
- SATCOM jamming

This block contains several small images illustrating EW capabilities, including a control room, a vehicle, and a satellite.

OPFOR

- OPFOR Commander
- Integrated Battle Staff
- Integrated Threat COP

This block features a red diamond symbol with a black 'X' and images of a commander's station, a battle staff, and a threat COP.

TCNO

- Threat IO
- Wired
- Wireless
- Nearsider
- Outsider

This block includes a globe with network connections and images of a control room and a satellite.



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Threat Cyberspace Operations

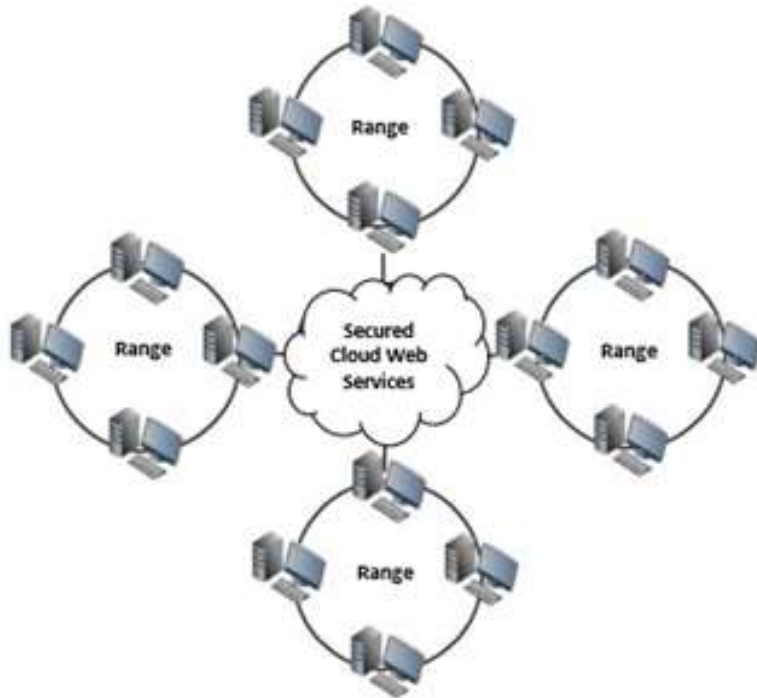


- Army Acquisition Red Team
 - NSA/CYBERCOM Certified/Accredited
 - Army G2 TCO Certified
- DOT&E Persistent Cyber Operations
 - Army EXORD
 - Joint Red Team Initiative
 - COCOM
 - MDA
 - AMC
- Advance Persistent Threat Network Environments
 - Intelligence Community (IC) validated low, medium and high fidelity environments
 - Cyber “Sandbox” for Threat support at multiple security classification levels
 - Environments scalable and rapidly restorable to baseline
- Globally connected through JMN and/or JIOR





Cyber Range Capabilities



- Utilize existing “Cloud Computing” capabilities of JMN coupled with JMN/JIOR distributed connectivity enabling Army Threat Cyber Operations

- Red Team/PCO
- APTNE
- Service Integration

- Facilitator of “Cloud Computing” infrastructure

- Design, develop and field cloud computing technology for use in collaboration with TRMC
- Assisting Army Cyber Center of Excellence (CCOE) with integration of virtual training vignettes into the automated cloud computing infrastructure.





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Challenges



- **Constant evolution of Threat Cyberspace Activities**
- **Accurate threat representation while fulfilling data collection, instrumentation and training objectives**
- **Time constraints imposed by exercise cycles, event scheduling and target network access**
- **Portrayal of emerging threat capabilities**





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Summary



- **T&E Supported in End to End Operational environments on existing cyber range infrastructure**
 - Persistent, integrated, scalable and distributed Threat environments via JMN, JIOR and NCR
 - Red Team/Threat Cyberspace Operations
- **T&E, training, and exercises supported at multiple security levels**
- **DoD, other Services, and OGO range capabilities leveraged through distributed access maximizing return on investments in threat capabilities**

