Joint Test and Evaluation Methodology (JTEM)
JT&E Overview

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Overview

• Mission

• Capability Test Methodology

• Test Products
Mission

JTEM will develop and evaluate methods and processes used to conduct testing in a realistic joint mission environment across the acquisition life cycle to improve the program manager’s ability to deliver joint capabilities to the warfighter.
JTEM Capability Test Methodology (CTM)

1. Characterize Test
- Program Introduction Document (PID)
- Statement of Capabilities (SOC)
  - Develop Test Concept
  - Develop Joint Operational Context for Test
  - Develop Evaluation Strategy
  - Technical Assessment

2. Plan Test
- Develop Test Design
- Perform LVC Distributed Environment Analysis
- Develop Test Plan

3. Implement LVC* Distributed Env.
- Design LVC Distributed Environment Configuration
- Integrate LVC Distributed Env

4. Execute Test
- Client Systems
- Joint Threat Environment
- Test Control and Monitoring

5. Evaluate Test
- Analyze Data
- Evaluate SoS Performance & Joint Mission Effectiveness

5 Steps 11 JTEM Processes

- Validated by M&P Working Group Nov 05
- Updated by JTEM Mar 06

Unclassified

* LVC – Live, Virtual, Constructive
JTEM Products and Transition Strategy

**Type 1**

**M&P TEMPLATES:**
- PID/SOC
- Test Plan
- SDD
- JFM
- JCELER:
  - Joint Testing Checklists
  - Transitions to JCIDS/DOT&E

**Type 2**

**Handbooks for Test & Acquisition Community:**
- CTM PM/Capability Manager Handbook
- CTM Action Officer Handbook
- JMe Analysis Guidebook
  - Transitions to DOT&E

**Type 3**

**Recommended Changes to Acq. Instructions & Directives:**
- Supplements or Changes to DAU T&E Management Guide
  - Transitions to AT&L and/or DOT&E

**Type 4**

**GAPS, SEAMS, & OVERLAPS:**
- Input Issues (M&P WG, MSDE, CTTRA)
- Rock Drill, Gap Analysis, Test Event Issues & Watch List Findings
- Process Anomaly Reports (PARs) with associated actions

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**M&P WG** - Methods and Processes Working Group  
**PID** - Program Introduction Document  
**SOC** - Statement of Capability  
**JMe** – Joint Mission Effectiveness

**CTTRA** - Common Test & Training Range Architecture  
**JFM** - Joint Mission Environment Foundation Model  
**SDD** - System Design Document  
**CTM** – Capability Test Methodology

**MSDE** - Multi-Service Distributed Event  
**JME** - Joint Mission Environment  
**JCEER** – Joint Capabilities Evaluation Report  
**COI** – Community of Interest

*Unclassified*
BACKUPS
Background: JTEM Problem Statement

Processes and methods for designing and executing tests of system of systems in the joint mission environment are not well defined or understood. Nor is there a clear understanding of how to assess system performance as it pertains to capabilities supporting joint missions.

Overall Goal: Recommended Best Practices for a consistent approach to describing, building, and using an appropriate representation of a particular Joint Mission Environment across the acquisition lifecycle.

Unclassified
**Background:**

**JTEM Mission and Objectives**

- **Mission:** JTEM will develop and evaluate methods and processes used to conduct testing in a realistic joint mission environment across the acquisition life cycle to improve the program manager’s ability to deliver joint capabilities to the warfighter.

- **Objectives:**
  - Demonstrate the CTM’s ability to:
    - Establish a joint mission environment suitable for testing
    - Test and evaluate system/system of system (SoS) capabilities in realistic joint mission environments
    - Assess system/SoS contributions to joint mission effectiveness
  - Create an approach to institutionalize testing in a joint mission environment

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*As we move force structure, doctrine and acquisition toward being born joint, we need to ... test using the joint mission environments in which we expect the weapons and systems to operate.*

Ref: Testing in a Joint Environment Roadmap, November 2004