Performance Work Statement (PWS)

For

Battle Command Training Equipment (BCTE)

Prepared by:
United States Army
Program Executive Office Simulation, Training and Instrumentation
(PEO STRI)

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Battle Command Training Equipment (BCTE)

Part 1 General Information

1 General

This is a non-personal services contract to provide Program Management (PM), engineering support services, logistics, procurement of Commercial-Off-The-Shelf (COTS) Information Technology (IT) hardware and software, licensing, furniture, audiovisual and video teleconference equipment, installation services, and Electronic Security Systems in support of the Battle Command Training Equipment (BCTE) mission to provide training enablers for Mission Training Complex (MTC) locations and new MTC Military Construction, Army (MCA) projects. This effort includes the purchase of hardware and necessary licenses for the Joint Land Component Constructive Training Capability (JLCCTC). The Government shall not exercise any supervision or control over prime contractor employees or subcontractor employees, if any. In addition the subcontractors, if any, shall be accountable solely to the prime contractor who, in turn, is responsible to the Government.

1.1 Description of Services

The Contractor shall provide personnel, equipment, supplies, facilities, transportation, tools, materials, supervision, labor and other items necessary to perform PM, Risk Management Framework, engineering support services, logistics, procurement of COTS IT hardware and software, furniture, audiovisual and video teleconference equipmentand installation services at various MTC locations in the Continental United States (CONUS) and Outside the Continental United States (OCONUS) as defined in thisPerformance Work Statement (PWS).

1.2 Background

The U.S. Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI) has a requirement to equip MTC locations with the training enablers needed to conduct individual and collective Mission Command (MC) training. The MTC serves as the installation’s focal point for integrated Home Station Training by integrating multiple training assets - facilities, technical and support personnel, live digital ranges, virtual simulators and simulations and constructive simulation in support of mission command training (individual, leader, crew/section, battle staff, collective) for operational units. The BCTE program

provides training enablers to 34 MTC locations supporting the Active Component (AC), Army National Guard (ARNG) and US Army Reserve (USAR) at CONUS and OCONUS installations. In addition to providing the initial fielding, PEO STRI has the requirement to provide life cycle replacement of COTS IT hardware and software required to meet the Cybersecurity and Risk Management Framework (RMF) policies for Department of Defense (DoD) IT systems to maintain cybersecurity and replacement of defective furniture, fixtures & equipment (FFE) during the performance of this contract. BCTE enables training effectiveness by providing the MTC with an improved ability to link constructive simulations with MC training; connecting the training environment to the operational environments. All hardware and software required to support JLCCTC at various sites worldwide is included.

JLCCTC is a scalable architecture consisting of various configurations made up of multiple security enclaves: Lower Enclave (LE), Middle Enclave (ME) and Upper Enclave (UE). Each enclave is composed of a server based Technical Control and a collection of user workstations. A JLCCTC Technical (Tech) Control is required for each enclave. The number of enclaves at a given JLCCTC site is dependent upon that site's designation. Sites can host a Single Enclave (SE), Dual Enclave (DE), and/or three enclave configuration. A multi enclave site consists of two or more enclaves with each paring of enclaves connected by a Cross Domain Solution (CDS). The collection of user workstations at a given site, or across the JLCCTC sites can be comprised of different computer desktop types, computer laptop types or thin clients. The quantity of user workstations at each JLCCTC site may vary but typically falls within 3 ranges (Small, Medium or Large). Each enclave operates at a unique security classification level.

The Contractor will recommend the best hardware solution(s) based on specifications to be supplied by the Government. The best hardware solution will result from the analysis of multiple factors to include: cost, capability, performance, reliability, supportability and quality.

Products to be procured under this contract will be acquired only at the direction and approval of the Government. Products acquired must be on the Government's Approved Products list.

1.3 Objectives

a. Provide technical, management and professional engineering support services in support of the BCTE program by identifying and applying best business practices reducing the overall cost while improving customer satisfaction.

b. Provide interior design, procurement and installation services for furniture, audiovisual, video teleconference capability, ancillary equipment, network hardware and devices and extend the network and power infrastructure to modular furniture install for MTC MCA projects.

c. Provide life cycle management and refresh of the training enablers fielded by the BCTE program to legacy MTC locations based on the approved refresh cycle.

d. Provide Configuration Management (CM) of the COTS IT hardware and

software fielded to an MTC to maintain cybersecurity in accordance with (IAW) the RMF policies for DoD IT systems.

e. Provide necessary equipment, software, and licensing to support JLCCTC.

- Procure and deploy products to support JLCCTC Technical Control Component Deployment
- Procure and deploy products to support JLCCTC Technical Control / Workstation Component Refresh

f. Provide a Radio-Wire Integration System (RWIS) capable of connecting simulated and virtual voice over IP tactical radio networks to live tactical radio networks.

g. To create a Government Contractor relationship that promotes achievement of mutually beneficial goals and promotes a partnership environment.

1.4 Scope

The Contractor shall provide PM, logistics, system engineering, information assurance, procurement, installation and CM of COTS products, furniture design layout and implementation of network infrastructures to meet the Cybersecurity and RMF policies for DoD IT system requirements. The Contractor shall accomplish the procurement, installationand New Equipment Training (NET) for the COTS products, furniture, audiovisual, video teleconferencing, ancillary equipment and requirements specified in the individual Task Orders.

1.5 Period of Performance

The period of performance (PoP) is to be determined and the actual PoP shall be based on the contract award date.

1.6 General Information

1.6.1 Quality Program

Quality Control: Quality Control is the responsibility of the Contractor. The Contractor is responsible for the delivery of quality services/supplies to the Government (see FAR 52.246-1 Contractor Inspection Requirements).

Quality Control Plan: The Government is committed to a highly interactive relationship between quality control by the Contractor and quality assurance by the government recipient of services. This relationship shall be achieved through an effective Prevention Based Quality Control Program dedicated to ensuring the best possible products and services to end users. The Contractor shall provide their final written Quality Control Plan (QCP) no later than (NLT) thirty (30) days after contract award and within five (5) days of any proposed change to the Contracting Officer (KO) and Contracting Officer's Representative (COR).

The Contractor's quality program shall demonstrate its prevention-based outlook by meeting the objectives stated in the PWS throughout all areas of performance. The QCP shall be developed to specify the Contractor's responsibility for management and quality control actions to meet the terms of the contract. The QCP as a minimum shall

address continuous process improvement; procedures for scheduling, conductingand documentation of inspection; discrepancy identification and correction; correctiveaction procedures to include procedures for addressing Government discovered non-conformances; procedures for root cause analysis to identify the root cause and root cause corrective action to prevent re-occurrence of discrepancies; procedures for trend analysis; procedures for collecting and addressing customer feedback/complaints.

The Contractor shall provide all reports generated as a result of the Contractor's quality control efforts within twenty (24) hours of completion. This shall include any summary information used to track quality control including any charts/graphs.

The Contractor's QCP shall be incorporated into and become part of this contract after the plan has been accepted by the KO. Proposed changes made after KO acceptance shall be submitted in writing through the COR to the KO for review and acceptance prior to implementing any revision. The Contractor's QCP shall be maintained throughout the life of the contract and shall include the Contractor's procedures to routinely evaluate the effectiveness of the plan to ensure the Contractoris meeting the performance standards and requirements of the contract.

Contractor Discrepancy Report (CDR): A CDR will be issued when the Contractor's performance is unsatisfactory. The Contractor shall reply in writing within five (5) work days from the date of receipt of the CDR and provide the reasons for the unsatisfactory performance, corrective action taken, and procedures to precluderecurrence.

1.6.2 Quality Assurance

The Government shall evaluate the Contractor's performance under this contract IAW the Quality Assurance Surveillance Plan (QASP). This plan is primarily focused on inspections to ensure that the Contractor has performed IAW the performance standards. The QASP defines how the performance standards will be applied, the frequency of surveillance and the minimum acceptable defect rate(s).

1.6.3 Recognized Holidays

The Contractor is not required to perform on-site services on the following Federal Holidays:

New Year's Day
Martin Luther King Jr Day
President's Day
Memorial Day
Independence Day
Juneteenth
Labor Day
Columbus Day
Veteran's Day
Thanksgiving Day
Christmas Day

1.6.4 Hours of Operation

The Contractor is responsible for conducting business eight (8) hours per day Monday through Friday except Federal Holidays or when the Government facility is closed for administrative reasons when performing on-site work at a Government facility. Contractor personnel providing on-site services business hours will match the Government facility's hours of operation. The Contractor must at all times

maintain an adequate workforce for the uninterrupted performance of all tasks defined within this PWS. When hiring personnel, the Contractor shall keep in mind that the stability and continuity of the workforce are essential.

1.6.5 Place of Performance

The work under this contract will be performed at the Contractor facility and on-site at various CONUS/OCONUS MTC locations. See PWS Addendum 1, BCTE Fielding Locations.

1.6.6 Type of Contract

The Government intends to award a Single Source Indefinite Delivery/Indefinite Quantity (IDIQ) Task/Delivery Order contract. Each Task/Delivery Order will identify the specific requirements and consist of Firm-Fixed Price (FFP) and Cost Contract Line Item Number (CLIN) structure.

1.6.7 Security Requirements

Contractor personnel requiring access to sensitive data or networks shall at a minimum, possess a Secret Security clearance at time of the contract award and must maintain the level of security required for the life of the contract. The security requirements are IAW the DD Form 254, Contract Security Classification Specification, located in Section J of the RFP.

1.6.8 Special Qualifications

The Contractor shall be responsible for ensuring all employees supporting the network hardware and device installation possess and maintain current Information Assurance Technician (IAT) Level I professional certification during the execution of this contract IAW DoD 8570.01-M. The DoD Approved Information Assurance Baseline Certifications for IAT Level I requires an individual to have one of the following certifications: Application+ - Computing Environment (A+-CE); Network+CE); System Security Certified Practitioner (SSCP); or, Cisco Certified Network Associate-Security (CCNA-Security).

1.6.9 Post Award Conference/Periodic Progress Meetings

The Contractor shall attend any Post Award Conferences convened by the contracting activity IAW Federal Acquisition Regulation Subpart 42.5. The Contracting Officer (KO), Contracting Officer Representative (COR) and other Government personnel, as appropriate, may meet periodically with the Contractor to review the Contractor's performance. At these meetings the KO will apprise the Contractor of how the Government views the Contractor's performance and the Contractor will apprise the Government of problems, if any, being experienced. Appropriate action shall be taken to resolve outstanding issues.

1.6.10 Contracting Officer Representative (COR)

The Government’s COR will be identified by separate letter. The COR monitors all technical aspects of the contract and assists in contract administration. The COR is authorized to perform the following functions: assure that the Contractor performs the technical requirements of the contract; perform inspections necessary in connection with contract performance; maintain written and oral communications

with the Contractor concerning technical aspects of the contract; issue written interpretations of technical requirements, including Government drawings, designs, specifications; monitor Contractor's performance and notify both the Contracting Officer and Contractor of any deficiencies; coordinate availability of Government furnished property; and, provide site entry of Contractor personnel. A letter of designation issued to the COR, a copy of which is sent to the Contractor, states the responsibilities and limitations of the COR, especially with regard to changes in cost or price, estimates or changes in delivery dates. The COR is not authorized to change any of the terms and conditions of the resulting contract/orders.

1.6.11 Key Personnel

The following personnel are considered key personnel by the Government: Program/Contract Manager (P/CM); Network Systems Engineer/Senior Technician; and, Interior Designer. The Contractor shall provide a P/CM who shall be responsible for the performance of the work. The name of this person and an alternate who shall act for the Contractor when the P/CM is absent shall be designated in writing to the KO. The P/CM or alternate P/CM shall have full authority to act for the Contractor on all contract matters relating to daily operation of this contract. The P/CM or alternate P/CM shall be available eight (8) hours a day Monday thru Friday except Federal holidays or when the Government facility is closed for administrative reasons when performing work at a Government facility.Qualifications for all key personnel are listed below:

a. Program/Contract Manager: Master's degree in Business Administration or related technical field with 10 years of experience in Program Management. (Current Project Management Professional certification preferred)

b. Lead Network/Systems Engineer: Bachelor's degree in Computer Science, Information Technology or similar field with at least seven (7) years of experience in Information Assurance technology or a related area. This individual must have a degree of expertise with the following systems/protocols: Microsoft Server 2012 R2, Cisco Call Manager, access and core switches, routers, firewalls and at least one of the following current certifications: Microsoft Certified Systems Engineer, Cisco Certified Network Professional Routing and Switching.

c. Interior Design Professional: Bachelor's or Master's degree in interior design with five (5) years of work experience in interior design. (National Council for Interior Design Qualification Certified Designer preferred)

1.6.12 Identification of Contractor Employees

All Contractor personnel attending meetings or working in other situations whereth eir Contractor status is not obvious to third parties shall be required to identify themselves as Contractor to avoid creating an impression that they are Government officials. The Contractor shall be responsible for obtaining required identification cards, tags and badges for personnel working on Government premises IAW DoDI 1000.13.

1.6.13 Contractor Travel

The Contractor will be required to travel to both CONUS and OCONUS MTC locations identified in PWS Addendum 1, BCTE Fielding Locations and PEO STRI during the performance of this contract to attend meetings, for site surveys, for installation services and on-site training services. Contractor will be authorized travel expenses IAW the Joint Travel Regulation (JTR) and the limitation of funds specified in this contract.

1.6.14 Other Direct Costs

This cost category includes travel (outlined in 1.6.13), reproduction and shipping expenses associated with training activities and other allowable cost authorized by the Federal Acquisition Regulation (FAR).

1.6.15 Data Rights

The Government has unlimited rights to all documents/material produced under this contract. All documents and materials produced under this contract shall be Government owned and are the property of the Government with all rights and privileges of ownership/copyright belonging exclusively to the Government. These documents and materials may not be used or sold by the Contractor without written permission from the KO.

1.6.16 Organizational Conflict of Interest (OCI)

The Contractor shall notify the KO immediately whenever they become aware of an actual or potential OCI as defined in FAR Subpart 9.5. The contractor shall include any subcontractor personnel within the notification to the KO. The Contractor shall promptly notify via a letter to the KO to avoid or mitigate any OCI. The Contractor's mitigation plan will be determined to be acceptable at the discretion of the KO. In the event the KO determines that the OCI cannot be satisfactorily avoided or mitigated, the KO may affect other remedies as deemed necessary, including prohibiting the contractor from participation in subsequent contracted requirements which may be affected by the OCI.

The potential of an OCI exist if an Army Computer Hardware, Enterprise Software and Solutions (CHESS) vendor were to propose as a Prime or Subcontractor for this effort. The BCTE Contractor will be providing management, systems engineering and technical direction work leading to the procurement and deployment of COTS products. The contract requires the Contractor to make purchases utilizing the Army CHESS contract. To avoid the potential OCI, Army CHESS vendors will only be allowed as suppliers after the COTS product requirements for each MTC are completed by the Prime Contractor. IAW FAR 9.5, no additional OCI nor the need for consultants are anticipated. No waiver will be sought.

1.6.17 Transition

1.6.17.1 Phase In

The Contractor shall provide a transition phase-in strategy with the Contractor's proposal that addresses all work efforts identified in the PWS. The Contractor shall hire, train and be able to provide services to meet the requirements of the contract no-later- than thirty (30) calendar days after Contract Award.

1.6.17.2 Phase Out

The Contractor shall provide a transition phase-out strategy with the Contractor's proposal that addresses all work efforts identified in the PWS. The phase-out transition strategy shall ensure a smooth transition of support from the incumbent to the new contractor on a non-interference basis. Transition phase-out shall be conducted starting 30 calendar days prior to the conclusion of the contract's period of performance. The Contractor shall provide a phase-out plan in order to perform phase-out activities in conjunction with the incumbent Contractor and the Government to include the following: transition planning; over-the-shoulder training of incoming contractor personnel; property inventory; property accountability; property transfer; data inventory; data accountability; and data transfer.

1.6.18 Safety

The Contractor shall maintain compliance with current Federal, State and Local Occupational Safety and Health Administration requirements as defined by the country in which services are being provided.

Part 2 Definitions & Acronyms

2 Definitions and Acronyms

2.1 Definitions

2.1.1 CONTRACTOR. A supplier or vendor awarded a contract to provide specific services or supplies to the Government. The term used in this contract refers to the prime**.**

2.1.2 CONTRACTING OFFICER. A person with authority to enter into, administer, and or terminate contracts, and make related determinations and findings on behalf of the Government. Note: The only individual who can legally bind the Government.

2.1.3 CONTRACTING OFFICER'S REPRESENTATIVE (COR). An employee of the U.S. Government appointed by the contracting officer to administer the contract. Such appointment shall be in writing and shall state the scope of authority and limitations. This individual has authority to provide technical direction to the Contractor aslong as that direction is within the scope of the contract, does not constitute a change andhas no funding implications. This individual does NOT have authority to change the termsand conditions of the contract.

2.1.4 DEFECTIVE SERVICE. A service output that does not meet the standard of performance associated with the Performance Work Statement.

2.1.5 DELIVERABLE. Anything that can be physically delivered, but may include non- manufactured things such as meeting minutes or reports.

2.1.6 HOST BASED SECURITY SYSTEM. The Host Based Security System is the DoD COTS suite of software applications used within DoD to monitor, detect and counterattacks against DoD computer networks and systems.

2.1.7 KEY PERSONNEL. Individuals who contribute to the development or execution of a project in a substantive, measurable way having authority and responsibility for planning, directing and controlling activities. See paragraph 1.6.11 for the list of key personnel under this requirement.

2.1.8 QUALITY ASSURANCE SURVEILANCE PLAN (QASP). An organized written document specifying the surveillance methodology to be used for surveillance of Contractor performance.

2.1.9 UNIFIED CAPABILITIES are the integration of voice, video, and/or data services delivered ubiquitously across a secure and highly available network infrastructure, independent of technology, to provide increased mission effectiveness to the warfighter and business communities

2.1.10 SUBCONTRACTOR. An entity that enters into a contract with a prime Contractor. The Government is not privy to the contract with the subcontractor.

2.2 Acronyms

AC	Active Component
ARNG	Army National Guard
APL	Approved Product List
AR	Army Regulation
BCTE	Battle Command Training Equipment
CDRL	Contract Data Requirements List
CHESS	Computer Hardware, Enterprise Software and Solutions
CM	Configuration Management
CONUS	Continental United States (excludes Alaska and Hawaii)
COR	Contracting Officer's Representative
COTS	Commercial-off-the-Shelf
CPSMR	Contractor's Progress Status Management Report
CPU	Central Processing Unit
DoD	Department of Defense
DD Form	Department of Defense Form
DD 250	DD Form 250, Material Inspection and Receiving Report
DD 254	DD Form 254, Contract Security Classification Specification
DFARS	Defense Federal Acquisition Regulation Supplement
FAR	Federal Acquisition Regulation
FFE	Furniture, Fixture and Equipment
HBSS	Host Based Security System
IAW	In Accordance With

IMS	Integrated Master Schedule
IPR	In Progress Review
IT	Information Technology
KO	Contracting Officer
MCA	Military Construction, Army
MTC	Mission Training Complex
OCI	Organizational Conflict of Interest
OCONUS	Outside Continental United States (includes Alaska and Hawaii)
ODC	Other Direct Costs
PEO STRI	Program Executive Office for Simulation, Training and Instrumentation
PM-ITE	Project Manager, Integrated Training Environment
POC	Point of Contact
PRS	Performance Requirements Summary
PWS	Performance Work Statement
QASP	Quality Assurance Surveillance Plan
RMF	Risk Management Framework
UC	Unified Capabilities
UID	Unique Identification Number
USAR	US Army Reserve
VTC	Video Teleconference

Part 3 Government Furnished Property, Equipment and Services

3.1 Services

The Government will provide telephone services and internet access when services are being performed on-site at an MTC location.

3.2 Facilities

The Government will provide an administrative area when services are being performed on-site at an MTC location.

3.3 Utilities

The Government will provide utilities when services are being performed on-site at an MTC location.

3.4 Equipment

None

3.5 Materials

The Government will provide the Architecture Engineering drawings for MCA projects.

Part 4 Contractor Furnished Items and Services

4.1 General
The Contractor shall furnish all supplies, equipment, facilities and services required to perform work under this contract.

4.2 Secret Facility Clearance
The Contractor shall possess and maintain a Secret Facility Security Clearance from the Defense Security Service. Contractor personnel requiring access to sensitive data or networks shall at a minimum, possess a Secret Security clearance at time of the contract award and must maintain the level of security required for the life of the contract. The DD 254, DoD Contract Security Classification Specification, is provided in Section J of the RFP.

4.3 Materials
The Contractor shall furnish all materials and supplies necessary to meet the requirements under this PWS.

4.4 Equipment
The Contractor shall furnish all equipment to meet the requirements under this PWS.

Part 5 Specific Tasks

5.1 Program Management
The Contractor shall provide the overall management and administrative effort necessary to ensure the requirements of this contract are accomplished. The Contractor shall use an integrated project management approach for the overall management and execution of this contract. The Contractor shall provide a management structure which supports providing training enablers to an installation MTC to facilitate home station training for the US Army. The Contractor shall provide key personnel, staff and team members with required skills and experience in design, procurement and installation services for furniture, audiovisual, video teleconference, networking infrastructure capability and ancillary equipment. The Contractor shall provide an organizational structure which supports a working relationship with stakeholders and the ability to manage multiple task orders and simultaneous fielding activities. The Contractor shall track program progress utilizing metrics. The Contractor shall manage the program throughout the life cycle of the program. The Contractor shall facilitate Government insight into contract activities.

5.1.1 Integrated Master Schedule (IMS)
The Contractor shall develop, implement, manage to, update and maintain the contract IMS. All contract schedule information delivered or presented at Program Management Reviews (PMR) shall originate from the IMS. The IMS shall contain all critical tasks and milestones, including any predecessors and successors tasks and their dependencies. The IMS shall address total program activities including tasks

performed by Subcontractors. The tasks activities time and progress data shall be updated to reflect accomplished activities and any changes in activity time estimates. The Contractor shall conduct critical path analysis of the tasks and identify problem areas and corrective actions required to eliminate or reduce schedule impacts.

(DI-MGMT-81861) Integrated Program Management Report (IPMR)

5.1.2 Management Reviews

The Contractor shall conduct Program Management Reviews (PMR), at the request of the Government (e.g.; quarterly), with Government personnel at the Contractor's facility, develop the agenda and provide minutes within five workdays of the conclusion of the review. The PMR shall provide a program overview (cost, schedule, and performance) and a detailed discussion of pre-selected topics, including action items and status from previous reviews and risk management topics. The Contractor shall conduct In Progress Reviews (IPR) prior to each delivery to coordinate with the Government, including BCTE site personnel receiving the delivery, to establish and manage site deployment plans. The Contractor will provide IPR minutes within five (5) workdays of the conclusion of the IPR. The Contractor shall develop and deliver a Progress Report at each PMR.

(DI-MGMT-80227) Contractor's Progress Status Management Report (CPSMR)
(DI-ADMN-81250B) Conference Minutes/Meeting Minutes

5.1.3 Contractor Manpower Reporting

The Office of the Assistant Secretary of the Army (Manpower & Reserve Affairs) operates and maintains a secure Army data collection site where the Contractor shall report ALL Contractor manpower (including subcontractor manpower) required for performance of this contract. The Contractor shall completely fill in all the information in the format using the following web address https://cmra.army.mil.

The required information includes: (1) Contracting Office, Contracting Officer, Contracting Officer's Representative (COR); (2) Contract number, including task order number; (3) Beginning and ending dates covered by reporting period; (4) Contractor's name, address, phone number, e-mail address, identity of Contractor employee entering data; (5) Estimated direct labor hours (including subcontractors); (6) Estimated direct labor dollars paid this reporting period (including subcontractors); (7) Total payments (including subcontractors); (8) Predominant Federal Service Code (FSC) reflecting services provided by Contractor (and separate predominant FSC for each subcontractor if different); (9) Estimated data collection cost; (10) Organizational title associated with the Unit Identification Code (UIC) for the Army Requiring Activity (the Army Requiring Activity is responsible for providing the Contractor with its UIC for the purposes of reporting this information); (11) Locations where Contractor and Sub-Contractors perform the work (specified by zip code in the United States and nearest city, country, when in an overseas location, using standardized nomenclature provided

on website); (12) Presence of deployment or contingency contract language; and (13) Number of Contractor and Subcontractor employees deployed in theater this reporting period (by country).

As part of its submission, the Contractor shall provide the estimated total cost (if any) incurred to comply with this reporting requirement. Reporting period shall be the period of performance not to exceed 12 months ending September 30 of each Government fiscal year and must be reported by 31 October of each calendar year. Contractors may use a direct XML data transfer to the database server or fill in the fields on the website. The XML direct transfer is a format for transferring files from a Contractor's system to the secure website without the need for separate data entries for each required data element at the website. The specific formats for the XML direct transfer may be downloaded from the website.

5.1.4 Subcontractor Management

The Contractor shall manage and have agreements with Subcontractors and Partners as required. Contractor shall integrate Subcontractors and Partners into program Integrated Product Teams (IPT). The Contractor shall ensure the requirements of this contract are applied to all Subcontracts and Associate contracts.

5.1.5 Integrated Product Teams (IPT)

Contractor shall implement and maintain an IPT structure for the duration of the contract. The IPT structure shall bring together functions that have a stake in the performance of a product or process. The IPT shall make recommendations for decisions affecting that product or process (e.g., Requirements Analysis, Market Research, Design, Integration, Evaluation and Peer Reviews). Each IPT shall consist of Government and Contractor personnel and have Government and Contractor co-chairs. The Contractor shall define and document composition, structure, roles, and responsibilities of each IPT. With Government input, each IPT shall develop a governing charter and maintain a membership list. Each IPT shall be empowered to make critical life cycle decision recommendations regarding each product or process within their assigned areas in compliance with their defined charter authority. Each IPT shall prepare a conference agenda, maintain minutes and make them available to the Government upon request.

5.1.6 Technical Reviews

The Contractor shall conduct and participate in technical reviews for the purpose of assessing COTS Products availability and maintainability. The reviews at a minimum shall include a discussion on the DoD Unified Capabilities (UC) Approved Products List (APL) status for COTS Products, results of trade-off analysis for COTS Products nearing end-of-life (EOL) and/or end-of-support (EOS) and replacement recommendations for next generation of COTS Products to meet the BCTE mission requirements.

5.1.7 Configuration Management (CM)

Configuration Management (CM) addresses the tracking of all associated data relative to COTS Product procurement, deployment and DoD UC APL status.

The Contractor shall establish and follow internal/industry best practices for CM processes. The Contractor shall obtain and keep a copy of all signed Department of Defense Form (DD Form) 250, Material Inspection and Receiving Report, for all COTS Products delivered to an MTC. The DD Form 250 information shall be available from within the Contractor's CM system. The Contractor's CM system shall track the procurement and deployment of COTS Products. Contractor's CM system shall track COTS Products status on the DoD UC APL.

COTS hardware CM will include at a minimum the following per deployment and item:

1. Item Nomenclature
2. Item Model
3. Item Serial Number
4. Item specifications (Central Processing unit (CPU) quantity, CPU Speed, random access memory, hard disk drive)
5. Item Warranty information (including coverage, duration, transferability and method of execution)
6. Fielded location
7. Deployment trail (i.e.; ship date, receive date, DD250 signature chain)
8. COTS Product delivered under the prior Constructive Training System contract

The Contractor shall maintain CM of all contractor supplied COTS software licenses. COTS software Licensing CM will include at a minimum the following per deployment and item:

1. Location (site), machine and/or person license is assigned to
2. License Key data
3. License expiration date
4. Renewal cycles
5. Maintenance/version release cycles
6. Version fielded

The Contractor shall, upon request by the Government, provide access within one working day to CM data related to BCTE procured COTS Products and aCM Report. The Contractor shall provide assistance to the Government in accessing CM data.

5.1.8 Antiterrorism (AT)/Operations Security (OPSEC)

5.1.8.1 Anti-Terrorism (AT) Level 1 Training

All Contractor employees, to include Subcontractor employees, requiring access to Army installations, facilities, and/ or controlled access areas shall complete AT Level I awareness training in accordance with AR 381-12 within 90 calendar days of contract start date or effective date of incorporation of this requirement into the

contract whichever is applicable, then annually thereafter for the life of the contract. The Contractor shall submit certificates of completion for each affected Contractor employee and subcontractor employee to the COR, or the Contracting Officer if a COR is not assigned, within ninety (90) calendar days after completion of training by all employees and subcontractor personnel. AT level I awareness training is available at the following website: https://jkodirect.jten.mil.

5.1.8.2 Access and General Protection Policy and Procedures for Contractor Requiring Common Access Card (CAC)

Contractor and all associated Subcontractors employees shall provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor

Personnel as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel) as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in Contractor security matters or processes.

Before CAC issuance, the Contractor employee requires, at a minimum, a favorably adjudicated National Agency Check with Inquiries (NACI) or an equivalent or higher investigation in accordance with Army Directive 2014-05. The Contractor employee will be issued a CAC only if duties involve one of the following: (1) Both physical access to a DoD facility and access, via logon, to DoD networks on-site or remotely; (2) Remote access, via logon, to a DoD network using DoD-approved remote access procedures; or (3) Physical access to multiple DoD facilities or multiple non-DoD federally controlled facilities on behalf of the DoD on a recurring basis for a period of six (6) months or more. At the discretion of the sponsoring activity, an initial CAC may be issued based on a favorable review of the FBI fingerprint check and a successfully scheduled NACI at the Office of Personnel Management.

5.1.8.3 Access to DoD Facilities or Installations

The Contractor and all associated subcontractor employees shall provide all information required for background checks to meet installation access requirements to be accomplished by installation Provost Marshal Office, Director of Emergency Services or Security Office. Contractor workforce must comply with all personal identity verification requirements (FAR clause 52.204-9, Personal Identity Verification of Contractor Personnel) as directed by DOD, HQDA and/or local policy. In addition to the changes otherwise authorized by the changes clause of this contract, should the Force Protection Condition (FPCON) at any individual facility or installation change, the Government may require changes in contractor security matters or processes.

The contractor shall also arrange for their personnel to obtain the required post/base access and necessary local badges. This process requires the contractor personnel to provide pertinent contractor information such as company name, address, etc. The government will use these documents and information to process the vendor personnel for placement on the installation access roster.

Vendor personnel shall process the required security level clearance through the Joint Personnel Adjudication System (JPAS) or current system prior to assignment to a specific task and fielding site in order to effectively perform assigned work.

5.1.8.4 AT Awareness Training for US Based Contractor Personnel Traveling Overseas

All US-based Prime Contractor and Subcontractor employees must take Government provided Area of Responsibility (AOR) specific AT awareness training as directed by AR 525-13. Specific AOR training content is directed by the combatant commander with the unit Anti-Terrorism Officer (ATO) being the local point of contact.

5.1.8.5 Army Training Certification Tracking System (ATCTS) Registration

All Prime Contractor employees and subcontractor employees with access to a Government information system (IS) must be registered in the ATCTS at commencement of services, and must successfully complete the DoD Cybersecurity Awareness prior to access to the IS and then complete training annually thereafter.

5.1.8.6 Operations Security (OPSEC)

Per AR 530-1 Operations Security, Contractor employees must complete Level I OPSEC Awareness training within thirty (30) calendar days of contract award, employment, or assignment to this contract, whichever comes first, and annually thereafter. Confirmation of training shall be provided to the COR not later than thirty (30) calendar days following completion of training.

5.1.8.7 Information Assurance (IA) Training and Certification

Per DoD 8570.01-M, DFARS 252.239.7001 and AR 25-2, the Contractor employees supporting IA/IT functions shall be appropriately certified upon contract award. The baseline certification as stipulated in DoD 8570.01-M must be completed upon contract award to ensure that personnel accessing information systems have the proper and current information assurance (IA) certification to perform IA functions in accordance with DoD 8570.01-M, Information Assurance Workforce Improvement. Program. Confirmation certification shall be provided to the COR within thirty (30) calendar days of certification.

5.1.8.8 Performance or Delivery in a Foreign Country

The Contractor shall comply with DFARS clause 252.225-7043, Antiterrorism/Force Protection for Defense Contractors outside the US. The key AT requirement is for non-local national contractor personnel to comply with theater clearance requirements and allows the combatant commander to exercise

oversight to ensure the contractor's compliance with combatant commander and subordinate task force commander policies and directives.

5.1.8.9 Threat Awareness Reporting Training

For all Contractors with security clearances, per AR 381-12 Threat Awareness and Reporting Program (TARP), all Contractor employees must receive annual TARP training by a counterintelligence agent or other trainer as specified in paragraph 2-4b of the AR within 180 calendar days after contract award. Confirmation of training completion shall be provided to the COR within thirty (30) calendar days of completion of training.

5.2 Procurement and Installation Support Services

5.2.1 COTS Product Procurement

As authorized by the Government, the Contractor shall procure COTS Products. The Contractor shall pre-coordinate any material purchasing activities with the Government Integrated Product Team. All computer related hardware, software, Information Technology (IT), or related services shall be purchased through the Army's Computer Hardware Enterprise Software and Solutions (CHESS) IT and DoD Enterprise Software Initiatives (ESI) schedules in performing this contract. COTS Products acquired shall be on the DoD UC APL.

The Army's CHESS program is the mandatory source for commercial IT purchases. CHESS contracts provide IT products and services that comply with the Network Enterprise Technology Command, Department of Defense (DOD) and Army policies and standards. If the COTS Products are not available or can be obtained at a reduced cost, then a waiver must be submitted utilizing the Information Technology Approval System (ITAS) requesting an ITAS Waiver to purchase the COTS Products outside of CHESS contracts. A complete list of CHESS contracts and the ITAS Waiver process can be found at https://chess.army.mil.

The Contractor shall be responsible for the procurement and deployment of the COTS Products required to meet the Government provided deployment schedule. The Contractor shall be responsible for labeling all procured COTS products in accordance with Unique Identification (UID) guidance & procedures. The Contractor shall provide the Logistics Product Data (LPD) and Logistics Product Data Summary (LPDS) to the Government at least ninety (90) days prior to each deployment. The Contractor shall deploy all required procured COTS Products to sites/locations as designated by the Government. The Contractor shall provide a recommended buy list to the Government of COTS Products that meet the specifications/requirements as provided by the Government for each COTS Products procurement and deployment. The Contractor shall notify the Government within thirty (30) days of the original equipment manufacturers (OEM) notification of the End of Life (EOL) and/or End of Support (EOS) for any fielded COTS Products. If the equipment is EOL/EOS or no longer appears on the DoD UC APL, the

Contractor shall propose the next generation of that capability.

(DI-SESS-81758A) Logistics Product Data
(DI-SESS-81759A) Logistics Product Data Summaries

Note: If an ITAS Waiver is required, the Contractor shall inform the COR within three (3) days of identification of the need for an ITAS waiver to process the submittal. Contractors making CHESS purchases on behalf of the Government can negotiateprices with CHESS contractors.

The Contractor shall qualify and maintain multiple COTS vendors and suppliers in addition to CHESS for the purposes of ensuring a competitive price on quantity buys or other such commercially available discounts. A Request for Quote shall be submitted through the CHESS website for each COTS Product purchase. For further instructions refer to the CHESS guidelines.

Following Government approval, the Contractor shall procure all required items on the approved buy list and deploy to each site IAW Government approved schedule. The Contractor shall assemble a digital COTS manual that contains a full set of the vendor supplied manuals for each deployed set of equipment.

The Contractor shall perform procurement and deployment of COTS Products for each site which falls within the scope of the BCTE contract, and are further delineated in TOs or in written direction prepared and signed by the COR.

The Government sites and configurations to be supported shall consist of the sites and configurations identified in the Addendums as well as any sites and configurations that may, at some future date during the Period of Performance of this contract, be identified by the Government.

5.2.2 COTS Product Compatibility

The Contractor shall research and verify with original equipment manufacturers that proposed COTS Products are capable of being integrated with both existing legacy site systems as well as the delivery of new systems. The Contractor shall maintain a record of the due diligence conducted.

5.2.3 Delivery of COTS Products

The Contractor shall deliver COTS Products to approximately 34 worldwide Mission Training Complex locations (26 CONUS and 8 OCONUS).

The Contractor shall plan and execute a series of IPR a minimum of ninety (90) days prior to each delivery to coordinate with the Government, including BCTE site receiving the delivery, to establish and manage site deployment plans. The Contractor shall provide IPR meeting minutes within five (5) working days of the conclusion of the IPR.

(DI-ADMN-81250B) Conference Minutes/Meeting Minutes

The Contractor shall install and configure COTS hardware and software at the fielding sites IAW Government approved site specific system layout diagram with site personnel present. Additionally, the Contractor per the request of the Government shall drop ship equipment to specified sites.

The Contractor shall use the established baseline of equipment suite to support MCA and legacy sites. The RMF baseline includes the following as defined by the Government:

a) Edge Routers
b) Firewalls
c) Layer 3 Core Switch and or Internal Router
d) Intrusion Detection System (IDS)/ Intrusion Prevention System (IPS)
e) Network Monitoring System (NMS)

The RMF and FFE requirements will be identified during the execution of the MCA Red Zone meeting and/or legacy site survey.

5.2.4 Hardware and Software Integration

The Contractor shall perform all activities required to integrate and assemble the hardware and software to achieve a fully functional system. The Contractor shall be responsible for testing connectivity from the patch panel to final outlet.

5.2.5 Logistics

5.2.5.1 Item Unique Identification (IUID)

The Contractor shall label the COTS equipment IAW with MIL-STD-130N. The Contractor shall coordinate with the Government IPT to determine items requiring IUID labeling. The Contractor shall submit the data to the UID national registry IAW DFARS 252.211-7003. UID marking design for each item shall be both machine readable and human readable.

The Contractor shall be responsible for labeling all procured products in accordance with Unique Identification (UID) guidance & procedures. The Contractorshall provide the Logistics Product Data (LPD) and Logistics Product Data Summary(LPDS) to the Government at least 120 days prior to each deployment. The serial number requirement referenced within the LPD CDRL must reflect the OEM serial number. Reseller (contractor) serialization is not acceptable to meet this data requirement. The Contractor shall deploy all required procured products to sites/locations as designated by the Government. The Contractor shall provide a recommended buy list to the Government of products that meet the specifications/requirements as provided by the Government for each JLCCTC system enclave, audio/visual equipment, and network hardware as appropriate. The Contractor shall notify the Government within fifteen (15) days of the original equipment manufacturers (OEM) notification of the End of Life (EOL) and/orEnd of Support (EOS) for any fielded CBCSE products. If the equipment is EOL/EOS or no longer appears on the DISA APL, the Contractor shall propose the next generation of that capability.

The contractor shall create and maintain a database which provides visibility to the Government on equipment shipped to sites. This database can be either COTS or developed by the contractor, but ***shall be retained by the Government at the end of the contract.*** The contractor shall input any currently available historical data (provided by the Government) into this database. The fidelity of the information shall be major end-item level – e.g. Common Hardware Platforms, Cameras, Projectors, Servers, Boundary Hardware, etc. The Government does not require cables, connectors, extension cords, etc. to be tracked. The records shall contain serial numbers when applicable. The database shall be searchable and able to print hard copy reports of the information.

(DI-MGMT-81804A) Item Unique Identification (IUID) Marking Activity, Validation and Verification Report

5.2.5.2 Warranty Purchases

All COTS Products shall be purchased with the commercially available warranty for a minimum of one year on parts, labor, replacement and some repair at the discretion of the original equipment manufacturer. Additional features shall be considered in discrimination between warranty values. All COTS network infrastructure equipment (i.e., switches, routers, cabling, etc.) will have the industry standard warranty, generally one year, for parts and labor from date of delivery.

The Contractor shall document all warranties that are provided and shall be responsible for maintaining a current list of warranties for each fielded site as a part of their CM process. The Contractor shall provide the Government an updated warranty list for each site on a quarterly basis in a Microsoft Office excel workbook. The updated warranty list will at a minimum identify the site, list the noun/nomenclature, serial number and warranty expiration date for all COTS products fielded to the site. The Contractor shall ensure all warranties are transferable to the Government without additional cost. Warranty features shall be used as a factor in determining component selection.

5.2.5.3 COTS Manuals

The Contractor shall deliver the commercially available technical publications available from the original equipment manufacture or other commercial source for the COTS Products deployed in support of the BCTE program. The COTS manuals shall include operation, maintenance and other instructions for the associated COTS equipment.

(DI-TMSS-80527C) Commercial-off-the-Shelf Manuals & Associated Supplemental Data

5.2.5.4 Packaging, Handling, Storage and Transportation

The Contractor shall be responsible for PHS&T of COTS Products from initial shipment to final site acceptance. PHS&T of COTS Products shall be done in such a manner to prevent loss or damage. Fragile items or items requiring special

handling shall be boldly marked as such. Packaging for storage shall be the same as required for transportation and will not require items to be repackaged. Transportation to the site shall be by commercial means and shall be the responsibility of the Contractor.

5.2.5.5 Site Damage/Repairs

In accordance with FAR Clause 52.237-2, Protection of Government Buildings, Equipment and Vegetation the Contractor shall utilize reasonable precautions and deployment methodologies as protective means to safeguard against facility damage while at a site. The Contractor shall repair/replace any aesthetic or structurally damaged floors, walls, doors, etc., that are damaged as a result of the Contractor's failure to utilize reasonable care to avoid such damages during installation at each site.

5.2.5.6 Site Survey

The Contractor shall provide a site specific system layout diagram for Government approval via the Trainer Facility Report (TFR). The Contractor shall collect detailed information about the facility to ensure the COTS Products and FFE can be properly operated, maintained and oriented within the available space. The Contractor shall document the site survey findings and develop recommendations in the TFR. The Contractor shall prepare the Trainer Facilities Report IAW the CDRL.

DI-FACR-80966 Trainer Facilities Report

5.2.6 New Equipment Training (NET)

The Contractor shall provide operator training for the COTS Products and FFE delivered to the site. The operator training shall include, at a minimum, installation,configuration, operation and troubleshooting of the system. The operator training course shall address the physical and functional descriptions and operation of the equipment including features, advantages and configurations. After completion of the course, all personnel shall be capable of operating, maintaining and troubleshooting the equipment. The Contractor shall provide all instruction,training materials and system documentation in the English language.

5.2.6.1 New Equipment Training (NET) Support

The Contractor shall define, develop and conduct training for users/operators to understand the functional and operational capabilities of the equipment. The Contractor shall provide equipment training and training documents required to support setup, installation, configuration, operation and troubleshooting of equipment. The training shall include best practice techniques and procedures for operating and maintaining the equipment. The Contractor shall develop an exportable training support package that integrates training products, materials and other pertinent information necessary to train the equipment. For commercial and non- developmental item courses, existing training materials shall be utilized.

(DI-ILSS-80872) Training Materials

5.2.6.2 Class Size
Maximum class size shall be ten (10) trainees.

5.2.6.3 Location of Training
The Contractor shall conduct the training courses on location at the Government site where the system is to be installed.

5.2.6.4 Training Facility and Equipment
The Contractor shall utilize the classroom facilities and equipment available at Government site. The Contractor shall utilize the Contractor produced or commercially available training materials for courses conducted. Training shall include classroom and practical exercise and shall total no more than eight (8) hours per day.

5.2.6.5 Timing of Training Delivery
The Contractor shall conduct training at the completion of the installation of all equipment, exceptions can be made based on prior Government approval.

5.2.7 Military Construction, Army Support
The Contractor shall utilize the Government provided information from the Architectural and Engineering (AE) drawings for an MTC MCA project to design the FFE and COTS Product solution. The COTS Products and FFE solution shall be presented during the Red Zone meeting, normally conducted six (6) months prior to the MTC MCA project completion date. The Contractor shall provide a fully operational training system that includes: installation and networking of the COTS Products to include installation of the required software operating systems; end-to-end functional thread testing to ensure connectivity; and, the correct placement and installation of all FFE per the furniture design and AE drawings to include the extension of the network infrastructure and electrical power to the modular furniture installed by the Contractor. Any additional effort required and not covered herein will be handled in accordance with the requirements of the task order.

5.2.7.1 Red Zone Meetings
The Contractor shall conduct a Red Zone meeting for each MTC MCA project. The Contractor shall present a briefing illustrating the proposed COTS Products and FFE solutions. The presentation shall include proposed room layouts, cut sheets and material color selections. Contractor shall participate in a question and answer session addressing any discrepancies or issues brought up during the Red Zone meeting. The Contractor shall provide a finalized project packet identifying floor plans, room layouts, cut sheets and required equipment. The Contractor shall prepare the Trainer Facilities Report IAW the CDRL.

(DI-FACR-80966) Trainer Facilities Report
The Contractor shall present to the construction team and MTC staff the methods that allow for the successful fielding of the proposed FFE and RMF for DoD IT systems. The Contractor shall indicate the alignment of the project team roles and

responsibilities, obtain MTC user sign-off of the FFE solution and ensure the building’s infrastructure is sufficient to support the COTS Products and FFE components to be fielded. The Contractor shall discuss the logistics plan from delivery of the FFE to the disposal of packing material to ensure a successful fielding.

5.2.7.2 COTS Products and FFE Procurement

The Contractor shall provide a recommended equipment buy list to the Government, based on the outcome of the Red Zone meeting. The recommend buy list shall include sufficient detail for the Government to evaluate the proposed solution to ensure the equipment is equivalent to the capability identified in the PWS and attachments identifying the requirements for each specific task order. All proposed hardware must be compliant with the DoD UC APL and should, at a minimum, have five (5) years of support available from the original equipment manufacturer. The list shall be submitted for approval no later than 120 days prior to the planned installation date. The Contractor shall coordinate the procurement and shipment of the COTS Products and FFE systems with the Government. The Contractor shall install the necessary FFE and RMF for DoD IT equipment to include software licenses for the network and ancillary equipment. Any additional effort required and not covered herein will be handled IAW the requirements of the specific task order.

5.2.7.3 COTS Products and FFE Installation

Contractor shall commence each MTC MCA fielding with a "Kick-Off" meeting detailing the project plans. Contractor shall develop and provide to the Government and site participants, a presentation that includes at a minimum the following: meeting agenda; participant (fielding and site) names, roles, responsibilities and contact information; floor plans of each area where equipment will be installed; rack (or table) diagrams; system overviews; and, hardware list for each system and installation details, including a line drawing ("to" configuration) for each system. In addition the Contractor shall include a daily schedule of events and "Score Card" fortracking all work. This"Kick-Off Package" shall be provided to the Government and Site POC fifteen (15) days prior to the Fielding. The Contractor shall update the "Score Card" and deliver to the Government and site personnel at the completion of each day. The Contractor shall inspect and record any facility damage prior to installationwith General Contractor or Government representative following the Project Kick offmeeting. The Contractor shall provide protection for the floors, doors and frames in areas affected by the installation to protect them from damage. All surface work areas impacted by installation should be covered to prevent any damage to surfaces from equipment and tools. The Contractor shall ensure all spaces affectedby the installation including corridors and equipment staging areas are swept of debris and mopped to clean conditions.

The Contractor shall utilize the AE drawings for MTC MCA projects and finalized project packet containing the approved floor plans, room layouts, cut sheets and required equipment to execute the COTS Products and FFE installation.

The Contractor shall extend and terminate the network infrastructure and electrical power to the modular workstations being installed. The Contractor shall run all Non-Secure Internet Protocol Router (NIPR) cabling from the building telecommunication infrastructure to the modular furniture telecom outlet. The Contractor shall install the telecom outlet based on Government guidance making final terminations at the modular furniture. The Contractor shall provide test results that connectivity from patch panel to final outlet location is successful. The Contractor shall make 120V/220V electrical connections as needed or required from the building electrical infrastructure to the modular furniture at wall locations and/or via power poles. The Contractor shall install power poles to bring electrical and telecommunications services to modular workstations when required.

Contractor shall participate in a mid-progress and end of installation After Action Reviews (AAR) providing site personnel a status report on fielding activities. The Contractor shall provide a status on all equipment installations, current configuration and operational state, as well as the installation location within the MTC. The Contractor shall perform an end-to-end test following installation, integration and training/orientation activities to ensure training system is operational and ready for transition to the MTC staff. The Contractor shall reporton the status of all required documentation and property transfers.

5.2.8 Legacy Site Refresh – Furniture, Fixtures, and Equipment

The Contractor shall conduct a site survey prior to each legacy site refresh. The Government will coordinate the dates for the site survey with the sites. The purpose of the survey is to assess the condition of the FFE and COTS Products then discuss and identify a proposed solution to include the identification of any facility modifications required prior to installation. The Contractor shall collect detailed information about the facility to ensure the COTS Products and FFE can be properly operated, maintained and oriented within the available space. The Contractor shall document the site survey findings and develop recommendationsin the TFR. The Contractor shall prepare the Trainer Facilities Report IAW the CDRL.

The Contractor shall provide a recommended COTS Products and FFE buy list to the Government, based on the outcome of the site survey. The recommend buy list shall include sufficient detail for the Government to evaluate the proposed solution to ensure the equipment is equivalent to the capability identified by the Government. All proposed hardware must be compliant with the DoD UC APL and should, at a minimum, have five (5) years of support available from the original equipment manufacturer. The list shall be submitted for approval no later than 120 days prior to the planned installation date. The Contractor shall coordinate the procurement and shipment of the COTS Products and FFE systems with the Government. The Contractor shall install the necessary COTS Products and FFE to include software licenses for the network and ancillary equipment. The Contractor shall perform all installation preparatory work required to facilitate installation. Any additional effort required and not covered herein will be handled IAW the requirements of the specific task order.

5.2.9 JLCCTC Site Refresh

The Contractor shall refresh JLCCTC products located at approximately 50 sites worldwide (9 OCONUS and 36 CONUS) over the life of this contract, as authorized by the Government.

The Contractor shall, coordinate with the Government to establish and manage site deployment plans**. The Contractor shall provide IPR meeting minutes within** five (**5**) **workdays of the conclusion of the IPR. As required, the Contractor shall conduct a site survey prior to delivery of** p**roducts to a site.**

The Contractor shall procure and deploy CBCSE Products to JLCCTC sites insupport of refresh activities. The Contractor shall assist PEO STRI and site personnel with the inventory of deployed equipment to facilitate Government property accountability transactions**.**

If the deployment does not require travel of Contractor personnel, the Contractor shall send instructions with the shipment of hardware detailing for on-site personnel how to install the new hardware or components and remove old hardware or components, as necessary. The Contractor shall prepare the Trainer Facilities Report IAW the CDRL.

(DI-FACR-80966) Trainer Facilities Report

5.2.10 Equipment Failure Notification

The Contractor shall identify any equipment related failures found during the installation and take immediate corrective action as appropriate. If this cannot be corrected at the time of installation, the Contractor shall advise the Government of approach to rectify the situation and a time line to rectify the failure. Government approval shall be required by the Contractor in order to extend beyond the initial period of installation.

5.2.11 Software Licenses

The Contractor shall ensure all COTS software licenses are available and in place at each of the installations. The Contractor shall document all software licenses, duration, renewal cycles and associated maintenance/version release cycles for tracking purposes. The Contractor shall identify then notify the Government of any software licenses previously provided that are no longer used in current installation. Software licenses shall be made available and documented IAW the requirements of the task order.

5.2.12 Installation Tools and Test Equipment

Contractor shall insure the installation team is equipped with all necessary tools and test equipment required for the equipment installation, configuration, operation, fault isolation and site cleanup during the installation. Tools and equipment include but are not limited to ladders, man lifts, fork lifts and dumpsters unless these items are provided by the site.

5.2.13 End to End Integration

For site refresh equipment, the Contractor shall ensure that there is proper integration and functionality with legacy and new equipment installations. This work may be requested in conjunction with the FFE fielding or during updates to an MTC as part of the planned refresh cycle or IAW the requirements of the task order.

5.2.14 Close Out

The Contractor shall deliver all documentation, complete required training, ensure security badges are turned-in to security and post-fielding support infrastructure is in place and functional, such as the Help Desk number and email address for trouble reporting prior to departing the site. For further instruction, the Contractor shall refer to the task order. Contractor should use the most economical practices by using residual materials for subsequent jobs unless the site requests residual items to be left at the site. If material cannot be used on subsequent job and site does not request to keep residual materials, the contactor shall remove such materials from the site. The Contractor personnel shall be available as requested to aid a full accountability of delivered items and property transfer with site personnel and the designated PEO STRI Government on-site representative with a final delivered FFE list or DD250.

5.3 Radio Wire Integration System Support

The Contractor shall provide an Enterprise License Agreement (ELA) for the MTC radio wire integration system (RWIS). The RWIS ELA shall include annual software license renewals and information assurance (IA) maintenance support. The IA maintenance support shall provide monthly software updates including the latest RWIS software release, COTS operating system security patch set and automated hardening scripts to ensure compliance with Defense Information Systems Agency (DISA) Security Technical Implementation Guide (STIG). The IA maintenance support shall include Help Desk support, virtual classroom courses (to be priced separately when required), engineering development services for product enhancements and development of the Risk Management Framework artifacts and accreditation package to achieve and maintain an Authority to Operate (ATO) for operations on other than closed restricted networks. The Help Desk shall have the ability to provide remote diagnostic, troubleshooting and system configuration assistance to the users. The Help Desk support shall be available Monday-Friday during your organization’s normal business hours. The objective is for users to have the ability to submit request for support twenty-four (24) hours perday via email, website or voicemail and receive a callback the next business day. The RWIS ELA shall include unlimited licenses and support for the BCTE program. The current MTC RWIS system is the Advanced Simulations Technologies, Inc. (ASTi) Voisus radio wire integration system.

5.4 Video Teleconference Support

The Contractor shall provide Help Desk support for the video teleconference (VTC) capability fielded to each MTC. The Help Desk shall have the ability to provide remote diagnostic, troubleshooting, system configuration assistance to theusers and will assist sites in initiating return material authorizations for

equipment still under warranty from the original equipment manufacturer. The Help Desk support shall be available Monday-Friday during your organization's normal business hours. The objective is for users to have the ability to submit request for support twenty-four (24) hours per day via email, website or voicemail and receive a callback the next business day. The current MTC VTC systems are an Ultra Electronics,3eTI secure video conferencing capability.

5.5 Over and Above Mission Requirements

Over and Above Mission Requirements represent tasks that may be executed through the life of the contract based on mission requirements and available funding. These tasks will provide support to external customers, enhance current fielding events and/or provide increased support for BCTE within the scope of the Contract. Previous mission requirements have included procurement, fielding of software, hardware, FFE, ancillary equipment and VTC troubleshooting. As these tasks are identified, the Contractor shall be asked to submit a proposal for execution of the task on an FFP basis for the labor and a Cost basis for travel.

A cost comparison shall be made by the Government staff based on historical information and a technical evaluation shall be performed to indicate the relevance of the presented solution from the Contractor, as compared to the requirement. Additional mission requirements shall be executed in accordance with the requirements of the task order.

5.6 **Electronic** Security Systems (ESS)

5.6.1 SYNOPSIS. The objective of this Performance Work Statement (PWS) is for the Maintenance & Service (M&S) of all integrated Electronic Security Systems (ESS), and the supporting communications and power equipment.

5.6.2 Existing Conditions. The current ESS systems used at each MTC were installed at various times and were tested and accepted by the Government. The current ESS consists of an IDS, ACS and CCTV systems. This task order applies only to the ACS and the CCTV systems at each MTC. As-Built drawings will be provided to show device locations and configurations upon request. The new MTCs are built to the new MTC standard and each is classified as a Small, Medium or Large. The ESS standard design includes the following:

5.6.3 Closed Restricted Network (CRN). Each of the MTCs ESS is a Lenel OnGuard CRN except for JBLM and the Fort Leavenworth RSC. Each MTC is configured roughly the same. JBLM has a DAQ Security Management System (SMS) standalone CRN. The Fort Leavenworth RSC Software House system resides on the base-wide CRN.

5.6.3.1 The Lenel OnGuard standalone CRN is a fully integrated system which operates the ACS and the CCTV system providing camera call-up on door alarms. Each Lenel system

includes at a minimum the following:

Lenel OnGuard Server
Lenel OnGuard Client
Lenel 3300 Intelligent System Controller
Lenel 8000 Star Multiplexer
Lenel 2220 Intelligent Dual Reader Controller
Lenel 1320 and 1300 Dual/Single Reader Module
Lenel 1110 Input Control Module

5.6.3.2 The DAQ Starwatch Security Management System (SMS) standalone CRN is a fully integrated system which operates the ACS and the CCTV system providing camera call-up on door alarms with a network time server. The JBLM MTC includes two (2) buildings (See Attachment 1). The configuration of the DAQ system installed at the JBLM MTCs is roughly the same as the Lenel systems installed at the other MTCs. The DAQ system includes at a minimum the following:

DAQ SMS_Server
DAQ SMS_Clients
DAQ Entrostar

5.6.3.3 The Software House CCure 9000 door controllers and client workstations connect and integrate with the existing Fort Leavenworth ACS server and provide camera call-up on door alarms. The Software House CCure 9000 includes at a minimum the following:

Software House CCure 9000 Client
Software House CCure 9000 Client

5.6.3.4 CCTV System: Exterior Pan-Tilt-Zoom (PTZ) cameras are mounted on the facilities corners to provide coverage to each entrance and exit of the MTC. Two (2) fixed cameras are normally mounted within each lane of the Entry Control Facility (ECF). An interior fixed camera is mounted at the roof hatch. Axis and Pelco cameras are installed at the MTCs.

5.6.3.5 ACS: Access control is used for separation and controlled entrance at each MTC. ACS includes an Image Capture Kit with a badge printer and a report printer. ACS also contains recessed and surface mounted magnetic door contacts and card readers on each door used for separation and high security recessed or surface mounted Balance Magnetic Switches (BMS) or Magnaspheres for each perimeter doors. Lenel, HID, and Bridgepoint Trust Point card reader and card reader with keypads are installed at the MTCs.

5.7 SCOPE – Electronic Security Systems

5.7.1 The Contractor shall provide the management staff, material and financial resources, and technical expertise to perform all the tasks included in this task order. Contractor shall manage the total work effort associated with all services required herein to assure full and timely completion of these services.

5.7.2 The Contractor and/or its subcontractor shall be a Value Added Reseller (VAR) for Lenel, DAQ, Software House, Pelco, and Axis equipment. Contractor employees assigned to this task order shall have current certifications in all ESS systems listed. The contractor shall be able to purchase equipment, obtain technical and warranty support when needed directly from the manufacturer. The Contractor shall provide certified technicians to perform maintenance, service, adjustment, repair, replacement and installation of the following: Closed-Circuit Television (CCTV) system, Access Control System (ACS), Intercom System, exterior turnstiles, automated vehicle gates, electrified locks and other communications and ancillary equipment supporting the ESS at each MTC. M&S for the turnstiles, vehicle gates and electrified locks will be limited to just the ESS related components for these devices.

5.7.3 For any equipment currently under warranty, the Contractor shall determine whether the fault is due to the warranted issues or other causes. If it is determined that the fault is due to other causes than warranty then the Contractor shall repair the fault. If it is determined that it is warranted equipment then Contractor shall do the following:

5.7.4 Contractor is to provide suspected faulty equipment information to the owner of the equipment. The information shall include, as minimum, the location, model & serial number of part, and the trouble shooting tests that have been performed.

5.7.5 Contractor shall receive written permission from the owner to repair or remove warranted equipment.

5.7.6 If written permission to remove warranted equipment is provided, then the Contractor shall remove the warranted equipment and turn over to the On-Site Representative for shipment of equipment for repair. Upon return of equipment the Contractor shall re-install it.

5.7.7 If written permission to repair the equipment is received, the Contractor shall repair the equipment in accordance with the procedures in this PWS.

5.7.8 It is the Contractor's responsibility to provide resources to support all services requests. The Contractor shall provide a work force possessing the skills, knowledge and training to satisfactorily perform the services required by this task order. All personnel utilized by the Contractor in the performance of this task order shall not be construed to be employees of the Government. All personnel utilized by the Contractor in the performance of this task order shall be legal residents of the United States and maintain the required security clearances as defined in the task order.

5.7.9 Contractor shall supply all equipment, materials, documentation and labor required to

implement this ESS effort. All supplied equipment and materials shall be consistent with existing equipment and manufacturers. All work is to be done IAW industry standards, ESS Guide Specifications, manufacturers' recommendations, and all applicable U.S. Regulations and Codes.

5.7.10 Contractor shall make no public disclosures of work being performed under this task order. Performance under this effort may require the Contractor to access data and information proprietary to a Government agency, another Government contractor, or of such that its dissemination or use other than as specified in this PWS would be adverse to the interests of the Government or others.

5.7.11 Video, still photos, and digital photos taken during the execution of this task order shall be turned over to the Government with their associated negatives and files within the required monthly reports. Digital photographs shall be submitted to the Government on compact discs in Joint Photographic Experts Group (JPEG) format, and the Contractor shall destroy all associated files from their records not disclose such information unless authorized in advance, in writing, by the KO.

5.7.12 All supplied equipment and materials shall be consistent with existing manufacturers and equipment and shall meet all PWS and contract specifications. The Contractor shall provide integration of new state-of-the-art equipment as the current components fail with new government approved components and provide Operation and Maintenance (O&M) information to the MTC POC for incorporation into their O&M manual/database.

5.7.13 All new equipment and materials provided shall be compatible with existing infrastructure and ESS systems and must be installed by trained and certified technicians. Materials and equipment shall be installed in accordance with recommendations of the manufacturer to conform to the contract documents. Workers skilled in this type of work shall accomplish the installation.

5.7.14 Software License Agreement. During the term of this task order, and as applicable, the Contractor shall provide to the Government any new, corrected, or enhanced version of the Security System Software as created by the Developer. Such enhancement shall include all modifications to the Security System Software which increase the speed, efficiency, or ease of use of the Security System Software, or add additional capabilities or functionality to the Security System Software, but shall not include any substantially new or rewritten version of the Security System Software. All software upgrades shall first be approved (in writing) by the NEC Representative before installation.

5.8 CONTRACTOR STAFFING.

5.8.1 Certifications. Key personnel shall hold current certification with Lenel, DAQ, Software House, Pelco, and Axis certifications. Key personnel are defined as technicians who performed maintenance and services on any of the above mentioned ESS systems and/or equipment.

5.8.2 Experience. The Contractor and/or any Subcontractors shall have, as

a minimum, one (1) technician having a at least three (3) years of certified system experience and an additional technician having at least one year certified system experience in maintenance and repair on systems equal in size, type and complexity of the systems indicated. Technicians shall also be able to configure, troubleshoot and repair communication equipment within the entire ESS to include system infrastructure.

5.9 **Cybersecurity (CS)**: Any changes made to the system(s) as a result of the maintenance and sustainment covered in this document that impact the security posture of the system must be documented and provided to the government customer. These changes may include but are not limited to: changes in hardware vendor, changes to software versions, system configuration changes, and hardware location changes. Updated documentation and artifacts that may be required include but are not limited to: software and hardware lists, network diagrams, dataflow diagrams, and Ports, Protocols, and Services (PPS). The contractor shall provide support for the maintenance of the ESS ATO, as well as support to reissue the ATO as required. This involves expertise on RMF processes and procedures. Additionally, the contractor shall maintain a lab with the ESS equipment baseline in order to test and issue IAVA patches on a quarterly basis.

5.10 **APPLICABLE DOCUMENTS**. Technical criteria for the work described herein shall be as defined in by industry standards. The following criteria shall be applied during the execution of all work performed.

5.11 Comply with the current version of all documents applicable for each year M&S is provided:

a. Unified Facilities Guide Specification (UFGS) 28 20 01.00 01 Electronic Security Systems
b. UFGS 27 21 10.00 10 Fiber Optic Data Transmission System
c. UFGS 27 15 19.00 10 Wire Line Data Transmission System
d. UFGS 28 23 23.00 10 Closed Circuit Television Systems
e. UFGS 01 45 00.15 10 Resident Management System Contractor Mode
f. American Disabilities Act (ADA)
g. Unified Facilities Criteria (UFC) 4-021-02, Electronic Security System
h. Army Regulation 190-13, The Army Physical Security Program
i. AR 190-51, Security of Unclassified Army Property (Sensitive and Nonsensitive)
j. AR 380-5, Department of the Army Information Security Program
k. AR 380-67, Personnel Security Program
l. AR 530-1, Operations Security (OPSEC)
m. AR 25-1, Army Information Technology
n. AR 25-2, Information Assurance
o. Intelligence Community Standard (ICS) 705-1

p. ICS 705-2
q. IC Tech Spec-for Intelligence Community Directive (ICD)/ICS 705
r. Underwriters Laboratories (UL) 2050
s. National Fire Protection Association (NFPA) 70 National Electrical Code
t. NFPA 101 Life Safety Code
u. Homeland Security Presidential Directive (HSPD)-12
v. Federal Information Processing Standards (FIPS) 140-2
w. FIPS 197
x. FIPS 201
y. The Federal Information Security Management Act (FISMA)
z. Committee National Security Systems, Policy No 11
aa. Defense Information System Agency (DISA) Secure Technical Implementation Guides (STIGs)
bb. Department of Defense (DoD) Directive 8500.1, Information Assurance
cc. DoD Instruction 8500.2, Information Assurance Implementation
dd. DoD Instruction 8510.01, Risk Management Framework (RMF)
ee. DoD 8570.01-M Information Assurance Workforce Improvement Program
ff. Technical Criteria for Installation Information Infrastructure Architecture (TC-I3A), February 2010
gg. Department of Defense Manual (DODM) 5200.01 Vol 3
hh. Joint Air Force Army Navy Manual (JFAN) 6/9
ii. All work shall be IAW industry standards and manufacturer recommendations.

5.12 SUMMARY OF ESS REQUIREMENTS.

5.12.1 Maintenance and Service. Contractor shall perform Maintenance and Service for the existing ESS as described in Paragraph 1.1 Existing Conditions and the standard As-Built drawings for a typical large, medium, and small/medium MTCs. A copy of those As-Built drawings are available upon request.

5.12.2 Preventative Maintenance (PM). Contractor shall perform all PM activities consistent with the operational requirements to ensure continuous operation and reliability of the systems. All equipment is to be maintained per the manufacturer's recommendations. As a minimum all possible alarms and entry control shall be exercised to confirm operability to include intrusion, tamper, loss of power or communication, proper annunciation, and graphics call-up. It shall also include proper voltage readings for equipment. The PM is to be conducted on all equipment per the approved Maintenance Plan. Additionally, the Contractor is to ensure that the ESS Service Agreements (SA) and software licenses are up-to-date and current. These agreements and licenses may be purchased at a later date under a service order. Corrections that can be accomplished without

additional parts (except minor screws or wire) such as loss or broken wires, misalignments, cleaning, tightening, and adjustments shall be provided under the PM and no CM SO shall be required.

5.12.3 Inspection & Testing Frequencies: Testing and documentation methods shall comply with the referenced codes, standards and manufacturer's recommendations. Where there are no records indicating last test performance, Contractor shall assume no test was performed, and schedule accordingly. PM Inspections and testing shall be conducted during the M&S year annually.

5.12.4 Corrective Maintenance (CM). The Contractor shall ensure that sufficient funds are available to conduct service before proceeding. Contractor shall perform CM and shall replace or repair failed, damaged, or defective components, including hardware and software, on the ESS equipment. Repair may be the overhaul, or the replacement of nonfunctional parts or materials that have failed, that require continual repair, or shows signs of imminent failure. Repair work may also include inspection, testing, adjustment, calibration, part or component replacement and programming, modernization, and cybersecurity (CS) support as required to complete the service request.

5.12.4.1 CM may be utilized to modernize outdated equipment, move equipment, or provide additional coverage within the limits of a job requirement as set forth by the Government. CS support can include software updates and support to run any scans

5.12.4.2 An effort at a site may include removing ESS equipment that is no longer required. All sensitive equipment not within an enclosure such as motion sensors, and electronic equipment shall be boxed and packed with packing material and identification labeled on the box exterior. Computers, primary control units, and digital video recorders (DVR) removed from service shall have all memory wiped after coordination with the government representative.

5.12.4.3 In the event of providing CM it is determined by the Contractor that a broken electronic component cannot be replaced with a one for one component, the Contractor shall provide information concerning compatibility and CS risk on the replacement part. Approval shall be obtain from the Government COR before the replacement can be utilized.

5.12.5 Customer Support Center (CSC). Contractor shall operate a CSC and shall be the single point of contact for reporting all customer requests. Contractor shall have procedures for receiving and

responding to technical inquiries and service requests five (5) days a week, Monday through Friday from 0800 to 1630 Central Time. A single telephone number shall be provided by the contractor for the receipt of service requests and technical inquiries. Service requests shall be considered received by the Contractor at the time and date the telephone call is placed by the authorized Government representative. Contractor shall separately record each service request, as received. The CSC will document the service request, coordinate resources and monitor progress to ensure the resolution of all work.

5.12.6 **Work Execution**. The Contractor shall coordinate all service requests with end users. The Contractor shall provide an estimated completion time to the Government prior to starting the tasks. The Contractor, as authorized by the Government, shall furnish all repair parts and supplies required to perform the work specified herein. The Contractor shall only furnish material that meets specifications of this task order. Provide all required parts and service to repair and perform maintenance on all equipment. Respond to all service requests within the required time frame from the initial request and following the approved process.

5.12.7 **Replaced Equipment Disposition**. All equipment, except batteries, that has been replaced shall be returned to the Government On-Site Representative. Outdated, damaged, or replaced batteries shall be properly disposed of by the Contractor.

5.12.8 **Spare Parts Inventory**. The Contractor shall provide a recommended spare parts list to the site POC for review. After approval from the site POC and the COR, the Contractor shall either carry an inventory of critical spare parts or provide the spare parts for the site POC to minimize disruptions in service. Initial spare parts and any follow on requirements shall be procured in accordance with established practices.

5.12.9 **Response Times**: Response time to routine calls to the Help Desk is one business day. If the issue cannot be resolved by telephonic means, the contractor is to contact the Government immediately and provide a timeline for getting a team on site to troubleshoot the system.

5.12.10 **Routine Corrective Maintenance Service and Repair**. The Contractor shall provide Routine Corrective Maintenance Service and Repair for all the ESS components specified herein during normal business hours, Monday through Friday, 0800 to1630 Central Time, excluding United States (US) Federal holidays. Failure of any non-critical equipment on weekends, US Federal holidays, or after normal business hours shall not be considered Emergency

Corrective Maintenance Service and Repair. Service personnel shall respond, or be on-site, within the time frames agreed upon with the Government. In the event of simultaneous calls for routine repairs, calls shall be handled on a first come, first serve basis.

5.12.11 Maintenance Plan. Contractor shall develop a Maintenance Plan for this task order. The Maintenance Plan shall include, as a minimum, the following:

1. Narrative describing the work to be performed.
2. Tasks, frequency and staffing for preventative maintenance based on manufacturers' data and system security standards
3. Procedures for responding to preventative and corrective maintenance service requests
4. Procedures for testing of systems after repairs are performed
5. Applicable codes, standards and regulations
6. Reports to be prepared and submitted, and records to be maintained
7. Standard test procedures to be performed for corrective and preventative maintenance
8. Contractor shall submit a detailed schedule for the duration of the period of performance to the Government, detailing scheduled preventive maintenance. The schedule shall provide dates, location of equipment, and equipment type and model number. No changes to the schedule shall be made without prior approval from the COR.
9. Check off sheets indicating tasks and tests conducted during PM for alarm zones equipment. Sheets shall list the site, building number, equipment quantity, equipment model, and serial numbers.
10. Spare parts recommendation.
11. CSC plans and procedures.

5.12.12 Training. The contractor shall provide any necessary ESS training required for personnel at the sites. This training should be part of PMIs or by virtual means. The Contractor shall be prepared to provide quarterly virtual training events if required.

5.12.13 LENEL Service User Support Program. The contractor shall renew and maintain the Lenel Service User Support Program.

5.12.14 GOVERNMENT SUPPORT. The site will provide the Contractor and its subcontractors with access to the site five days a week, 0800 to 1630, as a minimum, excluding US Federal holidays. The site may also provide access at other times to include weekends and after duty hours after receipt of a service request.

5.12.15 Schedule: The contractor shall conduct one Preventive Maintenance Inspection and one Corrective Maintenance visit per year at each of the following sites:

Joint Base Elmendorf-Richardson, AK
Ft. Bragg, NC – MTC
Ft. Bragg, NC – USASOC
Ft. Campbell, KY
Ft. Stewart, GA
Ft. Bliss, TX
Ft. Carson, CO
Ft. Riley, KS
Ft. Hood, TX
Ft. Wainwright, AK
Schofield Barracks, HI
Joint Base Lewis-McChord, WA
Ft. Sill, OK
Sagami Depot, Japan
Camp Humphries, South Korea
Shaw AFB, SC
Joint Multinational Simulation Center (JMSC) – Grafenwoehr, GE

Other sites may be added during the course of the contract.

Part 6 Applicable Publications

6 Applicable Publications (Current Editions)

6.1 General

The Contractor must abide by all applicable regulations, publications, manuals, and local policies and procedures.

6.1.1 DoDI-1000.13

Identification Cards for Members of the Uniformed Services, Their Family Members, and Other Eligible Personnel, dated January 23, 2014, http://www.cac.mil/docs/DODI- 1000.13.pdf.

6.1.2 DoD 8570.01-M

Information Assurance Workforce Improvement Program dated 19 December 2005 with Change 4, dated 10 November 2015, www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/857001m.pdf

6.1.3 DoD UC APL

Defense Information Systems Agency Unified Capabilities Approved Products List located at: https://aplits.disa.mil/processAPList.action

6.1.4 DODI 5000.74

Defense Acquisition of Services, http://www.esd.whs.mil/Portals/54/Documents/DD/ issuances/dodi/500074p.pdf?ver=2017-10-05-073243-807

6.1.5 AR 25-2
Information Assurance, October 24, 2007**,** https://armypubs.army.mil

6.1.6 AR 381-12
Threat Awareness and Reporting Program, October 4, 2010, https://armypubs.army.mil

6.1.7 AR 525-13
Antiterrorism, September 11, 2008, https://armypubs.army.mil

6.1.8 AR 530-1
Operations Security, September 26, 2014, https://armypubs.army.mil

6.1.9 AR 70-13
Management and Oversight of Service Acquisitions,
https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/r70_13.pdf

6.1.10 DoDM 5220.22M
National Industrial Security Program Operating Manual (NISPOM), 28 February 2006, incorporating chg 2, 18 May 2016,
www.esd.whs.mil/Portals/54/Documents/DD/issuances/dodm/522022m.pdf

6.1.11 DoDI 5200.46
DoD Investigative and Adjudicative Guidance for Issuing the Common Access Card (CAC), 9 Sept 2014 http://www.cac.mil/docs/DODI-5200.46.pdf

6.1.12 AR 380-5
Department of the Army Information Security Program, 29 Sep 2000,
https://armypubs.army.mil/ProductMaps/PubForm/AR380-5

6.1.13 AR 380-49
Industrial Security Program 20 Mar 2013,
https://armypubs.army.mil/epubs/DR_pubs/DR_a/pdf/web/r380_49.pdf

Note: If document version in this list is not the most current, then substitute with the latest version available at the site referenced.
http://www.dtic.mil/whs/directives

Part 7 Attachment/Technical Exhibit Listing

7.1. Technical Exhibit 1 – Performance Requirements Summary

7.2. Technical Exhibit 2 – Deliverables Schedule

7.3. Addendum 1: BCTE Fielding Locations

7.4. Addendum 2: Mission Training Complex Size by Location

7.5. Addendum 3: MCA and MTC Furniture, Fixtures, and Equipment Refresh Plan

7.6. Addendum 4: JLCCTC Hardware Refresh

7.7. Addendum 5: MTC Cybersecurity Equipment/Software List

7.8 Addendum 6: JLCCTC Product Specifications

7.9 Addendum 7: JLCCTC System Diagrams

7.1 Technical Exhibit 1 – Performance Requirements Summary

The Contractor service requirements are summarized into performance objectives that relate directly to mission essential items. The performance threshold briefly describes the minimum acceptable levels of service required for each requirement. These thresholds are critical to mission success.

Performance Requirements Summary

The Performance Requirements Summary (PRS) Table provides the following information.

a. Required Service. Lists the contract requirements which are considered necessary for acceptable contract performance. The absence of any contract requirement from this table does not relieve the Contractor of compliance with all of the contract requirements.

b. Standards. Brief description of the standards for the respective “Required Service”.

c. Acceptable Quality Level (AQL). Sets forth the maximum allowable deviation from perfect performance for each listed service. Allowable Level of Performance that may occur before the Contractor will receive less than 100% of the maximum payment for the listed service.

d. Method of Surveillance. Sets forth the primary surveillance methods that the Government will use to evaluate the Contractor’s performance in meeting the contract requirements. Definition of the lot used as the basis for surveillance or for payment computation purposes is also included in this column.

Require Service	Standards	AQL	Frequency Measured	Method of Surveillance
COTS Products Procurement	Procurement of DoD UC APL COTS Products which meet the specifications identified by the Government.	95%	Monthly	Direct Observations, Contractor furnished CDRLs/Reports and feedback from MTC sites

COTS Products Delivery	On time delivery and installation of DoD UC APL COTS Products IAW the established delivery schedule.	95%	Monthly	Direct Observations, Contractor furnished CDRLs/Reports and feedback from MTC sites
Configuration Management	Maintain effective configuration management processes and procedures to control the BCTE software and hardware baselines and project artifacts.	95%	Monthly	Direct Observations, Contractor furnished CDRLs/Reports
Reports	CDRLs/Reports are submitted NLT the due date. Reports submitted are accurate and comprehensive identifying metrics, issues and corrective actions to prevent recurrence.	95%	Monthly	Contractor furnished CDRLs/Reports
Military Construction, Army Support	Execution of the Red Zone meeting, submission and acceptance of required data products and completion of the installation IAW the established delivery schedule.	95%	Job	Direct Observations, Contractor furnished Reports and Feedback from MTC sites.

Legacy Site Refresh	Execution of the site survey, submission and acceptance of required data products and completion of the installation IAW the established delivery schedule.	95%	Job	Direct Observations, Contractor furnished Reports and Feedback from MTC sites.

7.2 Technical Exhibit 2 – Required Document Delivery List

Required Document Delivery List.
The following list represents deliverables that the Contractor shall provide per the instructions specified in DD Form 1423 (please see Section J - Exhibit A CDRL):

1. (DI-MGMT-81861) Integrated Program Management Report Integrated Master Schedule
2. (DI-MGMT-80227) Contractor's Progress Status Management Report
3. (DI-FACR-80966) Trainer Facilities Report
4. (DI-SESS-81758A) Logistics Product Data
5. (DI-MGMT-81804A) Item Unique Identification Marking Activity, Validation and Verification Report
6. (DI-TMSS-80527C) Commercial Off The Shelf Manuals & Associated Supplemental Data
7. (DI-SESS-81759A) Logistics Data Summaries
8. (DI-ADMN-81250B) Conference Minutes/Meeting Minutes

7.3 Addendum 1: BCTE Fielding Locations

CONUS

1. Fort Bragg, NC
2. Fort Drum, NY
3. Fort Stewart, GA
4. Fort Campbell, KY
5. Fort Polk, LA
6. Fort Hood, TX
7. Fort Riley, KS
8. Fort Carson, CO
9. Fort Bliss, TX
10. Fort Sill, OK
11. Joint Base Lewis-McChord (JBLM), WA
12. United States Army Central (USARCENT), Shaw AFB, SC
13. United States Army Special Operations Command (USASOC), Ft Bragg, NC
14. Joint Base San Antonio (JBSA) (Ft Sam Houston), TX

15. Fort Leavenworth Global Simulation Capability (GSC), KS

OCONUS

16. Schofield Barracks, HI
17. Joint Base Elmendorf-Richardson (JBER), AK
18. Fort Wainwright, AK
19. Sagami General Depot, Japan
20. Warrior Training Complex (WTC) Camp Casey, Korea
21. United States Army Garrison (USAG) Bavaria (Grafenwoehr), Germany
22. USAG Italy (Vicenza), Italy
23. USAG Rheinland-Pfalz (Kaiserslautern), Germany
24. Satellite Site USAG Rheinland-Pfalz (Baumholder), Germany

Army National Guard (ARNG)

25. Leavenworth, KS
26. Fort Indiantown Gap, PA
27. Camp Dodge, IA
28. Gowen Field, ID
29. Camp Atterbury, IN
30. Fort Chaffee, AR

United States Army Reserve (USAR)

31. Southern Training Division (TD) Ellington Field, TX – (1 BDE/75TC Houston)
32. Atlantic TD Joint Base McGuire–Dix–Lakehurst (JBMDL), NJ – (2 BDE/75TC Dix)
33. Great Lakes TD Arlington Heights, IL – (3 BDE/75TC)
34. Gulf TD Fort Knox, KY – (4 BDE/75TC)
35. Pacific TD Camp Parks, CA – (5 BDE/75TC)

7.4 Addendum 2: Mission Training Complex Size by Location

SMALL
Example Troop List:
1 BCT;
2 SPT BDEs;
Army HQs

- Fort Polk
- Fort Sill
- Fort Wainwright
- Joint Base Elmendorf-Richardson
- Joint Base San Antonio (Fort Sam Houston)
- Sagami Depot
- Shaw Air Force Base
- USASOC
- Kaiserslautern
- Vicenza
- RSC Ft Leavenworth
- Joint Multinational Simulation Center*

*Planned MCA FY 24

MEDIUM
Example Troop List:
1 Division Headquarters;
4 BCT; 5 Support Brigades

- Camp Casey
- Fort Bliss
- Fort Campbell
- Fort Carson
- Fort Drum
- Fort Riley
- Fort Stewart

USAR
- Arlington Heights
- Camp Parks
- Ellington Field
- Fort Knox
- Joint Base McGuire-Dix-Lakehurst

USARNG
- Camp Atterbury
- Camp Dodge
- Fort Chaffee
- Fort Indiantown Gap
- Fort Leavenworth
- Gowen Field

LARGE
Example Troop List:
1 Corps HQs; 1 DIV HQs;
4 BCT;
9 Support Brigades

- Fort Bragg
- Fort Hood
- Joint Base Lewis-McChord
- Schofield Barracks

7.5 Addendum 3: MCA and MTC Furniture, Fixtures, and Equipment Refresh Plan

FY 24 (5 Sites):
JMSC MCA – Grafenwoehr
Camp Humphrey, South Korea
Fort Campbell, KY
Fort Knox, KY
Fort Bliss, TX

FY 25 (5 Sites):
Arlington Heights, IL
Joint Base Lewis-McChord
Ellington Field, TX
Camp Atterbury, IN
Sagami Depot, JP

FY 26 (5 Sites):
Ft. Bragg, NC – MTC
Ft. Bragg, NC – USASOC
Schofield Barracks, HI
Joint Base Elmendorf-Richardson, AK
Ft. Wainwright, AK

FY 27 (5 Sites):
Fort Carson, CO
Fort Drum, NY
Gowen Field, ID
Ft. Riley, KS
Fort Leavenworth (ARNG), KS

FY 28 (5 Sites):
Fort Chaffee, AR
Base McQuire-Dix-Lakehurst (Fort Dix), NJ
US Army Garrison Vicenza, Italy
US Army Garrison Rheinland-Pfalz (Kaiserslautern)
Shaw AFB, SC

7.6 Addendum 4: JLCCTC Hardware Refresh

Approximately 20% of all fielded hardware products will be refreshed yearly. Typically, hardware will be refreshed five years after deployment. This is primarily focused on approximately 1300 workstations annually. Details of the refresh plans will be addressed in the appropriate Task Orders.

Type of Site	Number of Sites	FY22	FY23	FY24	FY25	FY26	Total Refreshed
BDE LE Sites	28	0	0	0	0	23	23
DIV Sites	20	0	3	4	0	3	10
UE Sites	8	0	6	6	0	6	18

Workstation Procurements	Number of Units						
Number of workstations	7260	2111	1985	1802	1362	TBD	7260

7.7 Addendum 5: MTC Cybersecurity Equipment/Software List

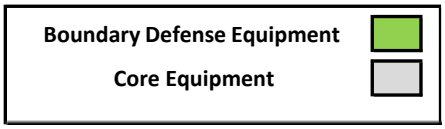
SMALL	
3 Security Boundary Stacks	
Core Switch Cisco Nexus 9504 Series - One 48 Port Copper Blade - One 48 Port Fiber Blade	Qty 3
Optical Ports [GLC-LH (SFP)] *Qty based on port coverage	Qty 30*
Access Switch Cisco C9300L *Qty based on port coverage	Qty 84*
Call Manager UCSC-C240-M5SX	Qty 3
KVM Tripp Lite B020-U08-19KTAA	Qty 3
Firewall Cisco Firepower 1000 Series	Qty 3
Edge Router Cisco 4451-X Series router	Qty 3
USB Smart Card Access Reader - PKI Requirement	
SMART card reader - USB 2.0 Unclass	Qty 2
SMART card reader - USB 2.0 Secret	Qty 2
Voip Phone	
CISCO UC IP PHONE 7821 Black	Qty 80
Licenses	
Unified Communications Manager 11.5 Server Software	Qty 2
Microsoft SQL Server Standard 2016 ELA	Qty 3
Microsoft Windows Server 2016 ELA	Qty 180
HBSS (provided by DISA)	Qty 3
ACAS (provided DISA)	Qty 3
Red Hat Linux Enterprise License	Qty 3
Solarwinds (SL NPM100)	Qty 2

Notes:
Provided list is for Military Construction, Army projects.

Legacy MTC locations may have different overall equipment quantities.

COTS Software Licenses requiring renewal are identified in PWS Attachment 1, COTS Annual Software Maintenance and Information Assurance Renewals.

The Cisco Unified Call Manager Server Software and Call Manager User licenses are covered by the US Army Cisco Joint Enterprise License Agreement



Solarwinds (SL NPM 250)	Qty 1
Solarwinds (SL NCM 50)	Qty 2
Solarwinds (SL NCM 100)	Qty 1

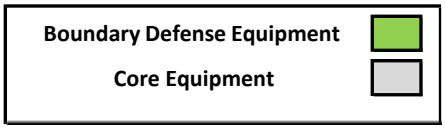
MEDIUM	
3 Security Boundary Stacks	
Core Switch Cisco Nexus 9504 Series - One 48 Port Copper Blade - One 48 Port Fiber Blade	Qty 3
Optical Ports [GLC-LH (SFP)] *Qty based on port coverage	Qty 40*
Access Switch Cisco C9300L *Qty based on port coverage	Qty 104*
Call Manager UCSC-C240-M5SX	Qty 3
KVM Tripp Lite B020-U08-19KTAA	Qty 3
Firewall Cisco Firepower 1000 Series	Qty 3
Edge Router Cisco 4451-X Series router	Qty 3
USB Smart Card Access Reader - PKI Requirement	
SMART card reader - USB 2.0 Unclass	Qty 2
SMART card reader - USB 2.0 Secret	Qty 2
Voip Phone	
CISCO UC IP PHONE 7821 Black	Qty 100
Licenses	
Unified Communications Manager 11.5 Server Software	Qty 2
Microsoft SQL Server Standard 2016 ELA	Qty 3

Notes:
Provided list is for Military Construction, Army projects.

Legacy MTC locations may have different overall equipment quantities.

COTS Software Licenses requiring renewal are identified in PWS Attachment 1, COTS Annual Software Maintenance and Information Assurance Renewals.

The Cisco Unified Call Manager Server Software and Call Manager User licenses are covered by the US Army Cisco Joint Enterprise License Agreement



Microsoft Windows Server 2016 ELA	Qty 180
HBSS (provided by DISA)	Qty 3
ACAS (provided DISA)	Qty 3
Red Hat Linux Enterprise License	Qty 3
Solarwinds (SL NPM100)	Qty 3
Solarwinds (SL NPM 500)	Qty 2
Solarwinds (SL NCM 50)	Qty 1
Solarwinds (SL NCM 100)	Qty 2

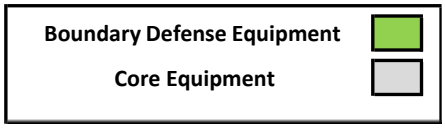
LARGE	
3 Security Boundary Stacks	
Core Switch Cisco Nexus 9504 Series - One 48 Port Copper Blade - One 48 Port Fiber Blade	Qty 3
Optical Ports [GLC-LH (SFP)] *Qty based on port coverage	Qty 70*
Access Switch Cisco C9300L *Qty based on port coverage	Qty 124*
Call Manager UCSC-C240-M5SX	Qty 3
KVM Tripp Lite B020-U08-19KTAA	Qty 3
Firewall Cisco Firepower 1000 Series	Qty 3
Edge Router Cisco 4451-X Series router	Qty 3
USB Smart Card Access Reader - PKI Requirement	
SMART card reader - USB 2.0 Unclass	Qty 2
SMART card reader - USB 2.0 Secret	Qty 2

Notes:
Provided list is for Military Construction, Army projects.

Legacy MTC locations may have different overall equipment quantities.

COTS Software Licenses requiring renewal are identified in PWS Attachment 1, COTS Annual Software Maintenance and Information Assurance Renewals.

The Cisco Unified Call Manager Server Software and Call Manager User licenses are covered by the US Army Cisco Joint Enterprise License Agreement



Voip Phone CISCO UC IP PHONE 7821 Black	Qty 150
Licenses	
Unified Communications Manager 11.5 Server Software	Qty 2
Microsoft SQL Server Standard 2016 ELA	Qty 3
Microsoft Windows Server 2016 ELA	Qty 180
HBSS (provided by DISA)	Qty 3
ACAS (provided DISA)	Qty 3
Red Hat Linux Enterprise License	Qty 3
Solarwinds (SL NPM100)	Qty 4
Solarwinds (SL NPM 500)	Qty 3
Solarwinds (SL NCM 50)	Qty 4
Solarwinds (SL NCM 100)	Qty 3

7.8 Addendum 6: JLCCTC Product Specifications

Products required to procure the various virtualized solutions for JLCCTC (i.e. JLCCTC BDE Single Enclave (SE), JLCCTC BDE Single Enclave Mobile (SE Mobile), JLCCTC BDE Dual Enclave (DE), JLCCTC Division (DIV), JLCCTC Virtual Tech Control Forward (VTCF), and Sustainment Virtual Suite (SVS). There is a Common Hardware Platform (CHP) based JLCCTC Stand-Alone System (SAS).

		JLCCTC BDE SE	JLCCTC BDE SE MOBILE	JLCCTC BDE DE	JLCCTC DIV (LE+ME +UE)	JLCCTC VTCF	JLCCTC SVS	JLCCTC SAS
Product Number	**Description**	**Qty**	**Qty**	**Qty**	**Qty**	**Qty**	**Qty**	**Qty**
HP DL360 G10 (To build the Cloud)								
875966-B21	HPE DL360 GEN10 TAA 8SFF CTO SVR (Chassis)	7	7	10	15	0	2	0
870974-L21	HPE DL360 GEN10 XEON-P 8160 FIO KIT (CPU 1)	7	7	10	15	0	2	0
870974-B21	HPE DL360 GEN10 XEON-P 8160 KIT (CPU 2)	7	7	10	15	0	2	0
815100-B21	HPE 32GB 2RX4 PC4-2666V-R SMART KIT	84	84	120	180	0	24	0
868000-B21	HPE DL360 GEN10 8SFF DP/USB/ODD BLNK KIT	7	7	10	15	0	2	0

764302-B21	HPE FLEXFBRC 10GB 4P 536FLR-T ADPTR	7	7	10	15	0	2	0
AF556A	HPE 1.83M 10A C13-UL DOM PWR CORD	14	14	20	30	0	4	0
804331-B21	HPE SMART ARRAY P408I-A SR GEN10 CTRLR	7	7	10	15	0	2	0
629135-B22	HPE ETHERNET 1GB 4P 331FLR ADPTR	7	7	10	15	0	2	0
874543-B21	HPE 1U GEN10 SFF EASY INSTALL RAIL KIT	7	7	10	15	0	2	0
865414-B21	HPE 800W FS PLAT HT PLG LH PWR SPLY KIT	14	14	20	30	0	4	0
871244-B21	HPE DL360 GEN10 HIGH PERF FAN KIT	7	7	10	15	0	2	0
726537-B21	HPE 9.5MM SATA DVD-RW OPTICAL DRIVE	7	7	10	15	0	2	0
	HP Support and Services							
H7J35A3 X09	HPE ISS PRICE BAND 2 CDMR SERVICE	7	7	10	15	0	2	0
H7J35A3 WAG	HPE DL360 GEN10 SUPPORT	7	7	10	15	0	2	0
H1SQ8A3 WHM	HPE ISS BAND3 AMS ONSHORE SVC	7	7	10	15	0	2	0
MB-MJ32GA/AM	**MicroSDHC PRO Endurance Memory Card w/ Adapter 32GB**	7	7	10	15	0	2	0
Dell VRTX - 2 Blade	**Virtual Tech Control Forward Only**							
225-4380	PowerEdge VRTX Rack (225-4380)	0	0	0	0	1	0	0
	PowerEdge VRTX Chassis Configure to Order (468-0891)	0	0	0	0	1	0	0
Blade	PowerEdge M640 Server (210-ALYK)	0	0	0	0	3	0	0
Cisco Switch	**Virtual Tech Control Forward Only**							
C9300L-48T-4X-A	Catalyst 9300L 48p data, Network Advantage ,4x10G Uplink	0	0	0	0	1	0	0
CAB-TA-NA	North America AC Type A Power Cable	0	0	0	0	2	0	0
	SFP+ 10Gb multimode or single mode fiber adapters	0	0	0	0	4	0	0
	Fiber cables	0	0	0	0	2	0	0
4PT-KIT-T2=	4 Point Type 1 rack mount kit New	0	0	0	0	1	0	0
Cisco Switch								
N9K-C93108TC-FX	Nexus 9300 with 48p 10G-T, 6p 100G QSFP28	2	2	3	4	0	1	0
NXA-PAC-500W-PE	Nexus NEBs AC 500W PSU - Port Side Exhaust	8	8	12	16	0	4	0
CAB-9K12A-NA	Power Cord, 125VAC 13A NEMA 5-15 Plug, North America	8	8	12	16	0	4	0
NXOS-9.3.3	Nexus 9500, 9300, 3000 Base NX-OS Software Rel 9.3.3	4	4	6	8	0	2	0
QSFP-4X10G-AOC3M=	Cisco network cable - 10 ft (Switch to SAN Cable)	2	2	3	4	0	1	0
NXA-FAN-30CFM-F	Nexus Fan, 30CFM, port side exhaust airflow	16	16	24	32	0	8	0
N3K-C3064-ACC-KIT	Nexus 3K/9K Fixed Accessory Kit, 1RU front and rear removal	4	4	6	8	0	2	0

Cisco Switch	**Stand Alone System Only**							
C9300L-48T-4X-A	Catalyst 9300L 48p data, Network Advantage ,4x10G Uplink	0	0	0	0	0	0	1
CAB-TA-NA	North America AC Type A Power Cable	0	0	0	0	0	0	2
4PT-KIT-T2=	4 Point Type 1 rack mount kit New	0	0	0	0	0	0	1
SAN								
Q1J01A	HP MSA 2050 Energy Star SFF Chassis	1	1	2	3	0	1	0
	Power Supplies	2	2	4	6	0	2	0
	Power Cables	2	2	4	6	0	2	0
	Rack Mounting Rail Kit	1	1	2	3	0	1	0
C8R09A	MSA 2050 SAN Controller - (1Gb/10GbE iSCSI)	2	2	4	6	0	2	0
	Power Supplies	2	2	4	6	0	2	0
	Power Cables	2	2	4	6	0	2	0
	Rack Mounting Rail Kit	1	1	2	3	0	1	0
Q2R41A	HPE MSA 2.4TB 12G SAS 10K 2.5IN 512E HDD 3yr Warranty Hard Drive	24	24	48	72	0	24	0
	MSA and Disk Enclosure Support	1	1	2	3	0	1	0
Rialto								
	OEM PowerEdge R640 XL Server (210 - ALXZ)	0	0	2	3	0	0	0
Radiant Mercury	**Upper Enclave Only**							
P/N: 210-ALUJ	PowerEdge R740 Rack Server	0	0	1	1	0	0	0
TCSP Replacement TBD								
TBD	TBD	0	0	1	1	0	0	0
CHP								
Dell 7920 (5247866)	Precision 7920 XL Tower XCTO Base (210-AMRP)	1	1	2	3	0	1	1
Dell 7820 (210-AMWV)	Precision 7820 XL Tower XCTO Base (210-AMWV)	12	2	17	19	0	3	15
Dell 7760 LAPTOP (210-AYYG)	**Mobile Suites Only**							
	Mobile Precision Workstation 7760 CTOG (210-AYYG)	0	6	0	0	1	0	0
4349842	TP-Link Gigabit Adapter	0	9	0	0	1	0	0
Master Console								
210-ARGO	Dell R340	0	0	0	0	1	1	0
400-ATJJ	1TB 7.2K RPM SATA 6Gbps 512n Hot-Plug Hard Drive with Carrier	0	0	0	0	1	1	0
KVM								
B020-U08-19KTAA	Tripp Lite 8-Port Rack Console KVM Switch 19" LCD PS2/USB Cables	0	1	0	0	1	1	0
Monitors								
1C4Z5AA	HP Z24N G3 24" DISPLAY	17	9	27	36	6	4	15
210-APWQ	Dell Ultrasharp 27 4K Monitor - U2718Q	0	0	0	0	0	8	0

815-2533	Advanced Exchange Service, 3 Years							
2Thin Clients								
2Q6V7UA#ABA	HP t540 Flexible Thin Client	7	7	9	13	6	0	0
N6N00AA	HP Mounting Bracket for Monitors	7	7	9	13	6	0	0
VN567AA	Video Connectors and Cables	7	7	9	13	6	0	0
MB-MJ32GA/AM	HP t740 Thin Pro, with AMD Ryzen Quad Core, 128GF, 8GR, AMD Ryzen e9173 Discrete Graphics Card	0	0	0	0	0	2	0
USB to SATA HDD Dock								
U339-001-FLAT	Tripp Lite USB 3.0 to SATA Hard Drive Flat Quick Dock 2.5in 3.5in HDD SSD	1	1	2	3	1	1	1
Blu-Ray Burner								
BRXL-16U3	BUFFALO MediaStation™ 16x External BDXL Blu-ray Burner	1	8	2	3	1	1	1
vmWare SW License	**Target Systems (jhost, vCenter)**							
11-2155-LIC	U.S. Federal VMware ***vSphere 6*** with Operations Management Enterprise Plus for 1 processor VMware Inc. - VS6-OEPL-F	7	7	10	15	3	2	0
11-2155-M1P	U.S. Federal Production Support/Subscription VMware ***vSphere 6*** with Operations Management Enterprise Plus for 1 year VMware Inc. - VS6-OEPL-P-SSS-F	7	7	10	15	3	2	0
11-2118-LIC	U.S. Federal VMware ***vCenter Server*** 6 Standard for vSphere 6 (Per Instance) VMware Inc. - VCS6-STD-F	1	1	2	3	1	1	0
11-2118-M1P	U.S. Federal Production Support/Subscription VMware ***vCenter Server*** 6 Standard for vSphere 6 (Per Instance) for 1 year VMware Inc. - VCS6-STD-P-SSS-F	1	1	2	3	1	1	0
JAVA SW	**Target Systems (WARSIM)**							
LICENSE	Processor and Annual Support (Database)	1	1	2	3	0	0	1
Windows Server 2019	**Target Systems (Various)**							
LICENSE	Standard	24	24	48	72	18	24	8
RHEL v7.9 SW	**Target Systems (Various)**							
LICENSE	OS	42	42	60	74	20	7	17
RT-NG Pro	**Target Systems (RTI)**							
LICENSE	RTI	2	2	3	6	0	0	0
Global Mapper SW	**Target Systems (STT)**							
LICENSE	Terrain	1	1	2	3	0	0	1

Symantec Ghost	**Target Systems (Clone Server)**							
LICENSE	Cloning Software	1	1	2	3	1	1	1
Rack #1	**Fixed Rack**							
AF046A	HP 42U 600mm x 1075mm Standard Pallet Rack	1	0	2	3	0	0	0
AF047A	HP 42U Standard Series Rack Side Panel Kit	1	0	2	3	0	0	0
AF040A	HP 42U Standard Series Rack Grounding Kit	1	0	2	3	0	0	0
AF099A	HP Rack Cable Management Kit	1	0	2	3	0	0	0
H5M58A	HP 4.9kVA 208 Volt 20 Outlet NA/JP Basic Power Distribution Unit	1	0	2	3	0	0	0
BW928A	HP 1U 10-pack Black Universal Filler Panel	1	0	2	3	0	0	0
Rack #2	**4RU Transit Racks (Mobile Suites Only)[1]**							
3SKB-R904U30	30" Deep 4U Roto Shock Rack	0	6	0	0	0	0	0
3SKB-SA	Shock Absorber Kit	0	6	0	0	0	0	0
3SKB-BB62	Caster Accessory Bag	0	6	0	0	0	0	0
3SKB-SLP	Shipping Label Plate	0	6	0	0	0	0	0
3SKB-LSB	Load Spreaders	0	6	0	0	0	0	0
Rack #3	**Mobile Racks (Mobile Suites Only)**							
DE2430-TSA2276	Pelican Hardigg 14U Mobile Case/Rack	0	0	0	0	1	1	0
DE2414-TSA2274	Pelican Hardigg 6U Mobile Case/Rack	0	0	0	0	1	1	0
UPS #1	**2200 Watt (L5-20P option)**							
J2R00A	HP R/T2200 Uninterruptible Power System (UPS)	2	2	3	4	2	2	0
L4Q11A	2U R/T UPS ERM Shipping Kit	2	2	3	4	2	2	0
Cabling & Misc.								
Misc	Cables	18	18	23	30	13	10	27

[1]For sites requiring a Mobile solution, replace the Fixed Rack with the 6 Mobile 4 RU Transit Racks.

7.9 Addendum 7: JLCCTC System Diagrams

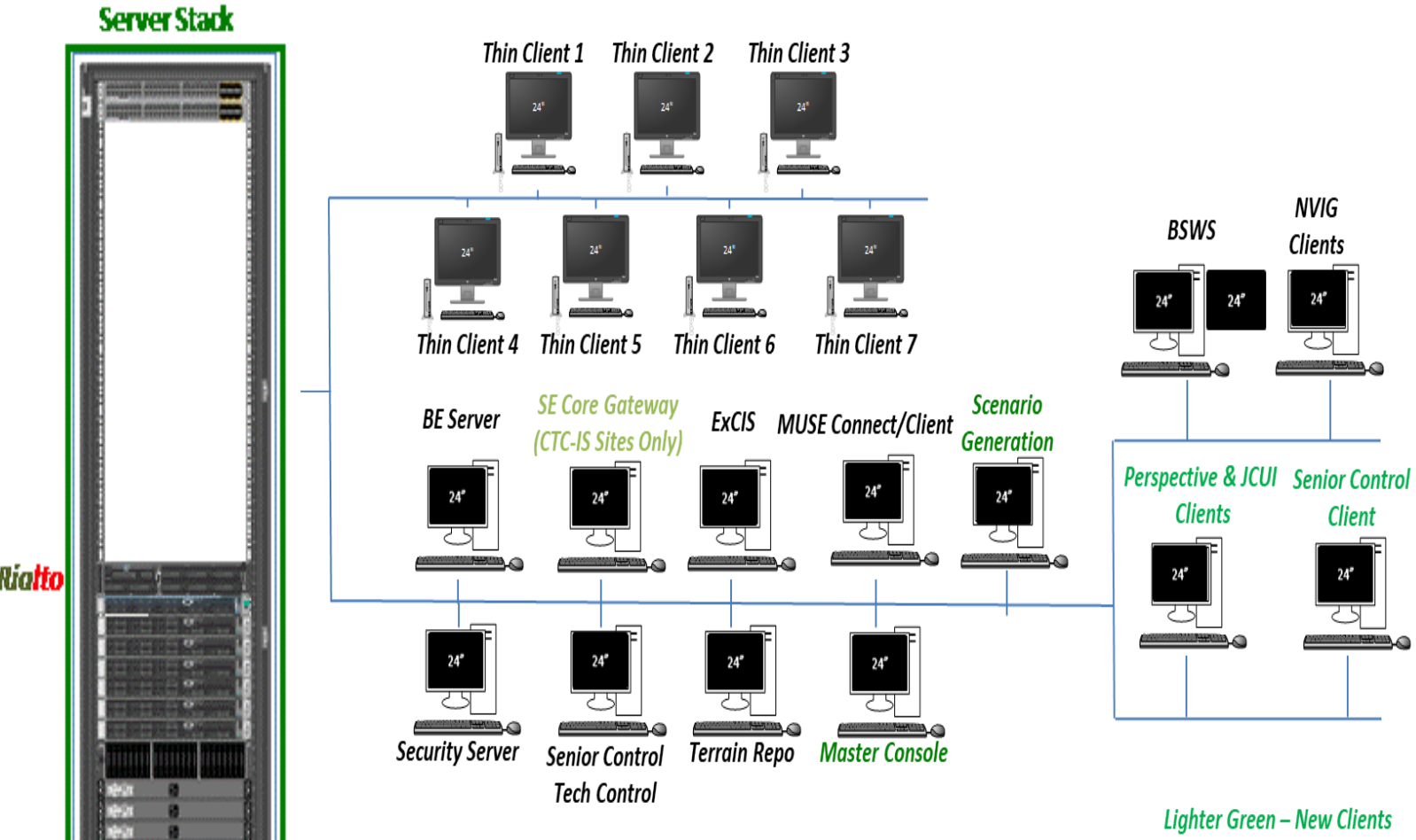
The table below maps the various virtualized solutions for JLCCTC with the applicable enclaves.

JLCCTC BDE SE	JLCCTC Brigade Lower Enclave
JLCCTC BDE SE MOBILE	JLCCTC Brigade Lower Enclave Mobile
JLCCTC BDE DE	JLCCTC Brigade Lower Enclave & JLCCTC UE
JLCCTC DIV	JLCCTC DIV LE, JLCCTC ME, & JLCCTC UE
JLCCTC VTCF	JLCCTC Virtual Technical Control Forward Lower Enclave
JLCCTC SVS	JLCCTC Sustainment Virtual Suite
JLCCTC SAS	JLCCTC Stand Alone System

What follows is a system diagram for JLCCTC (i.e. JLCCTC BDE Single Enclave (SE), JLCCTC BDE Single Enclave Mobile (SE Mobile), JLCCTC BDE Dual Enclave (DE), JLCCTC Division (DIV), JLCCTC Virtual Tech Control Forward (VTCF), and JLCCTC Sustainment Virtual Suite (SVS). There is a Common Hardware Platform (CHP) based JLCCTC Stand Alone System (SAS).

Details of the system layout diagram per enclave is addressed in the appropriate TO(s).

Virtualized JLCCTC Brigade Lower Enclave



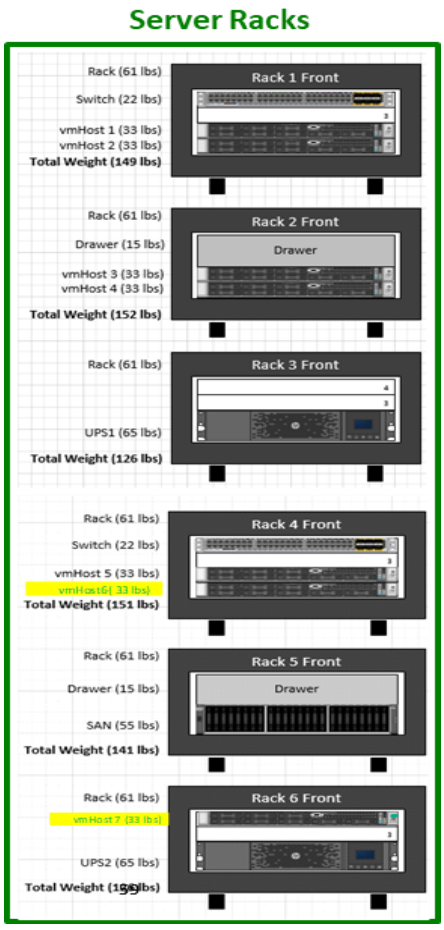
Server Stack HW List

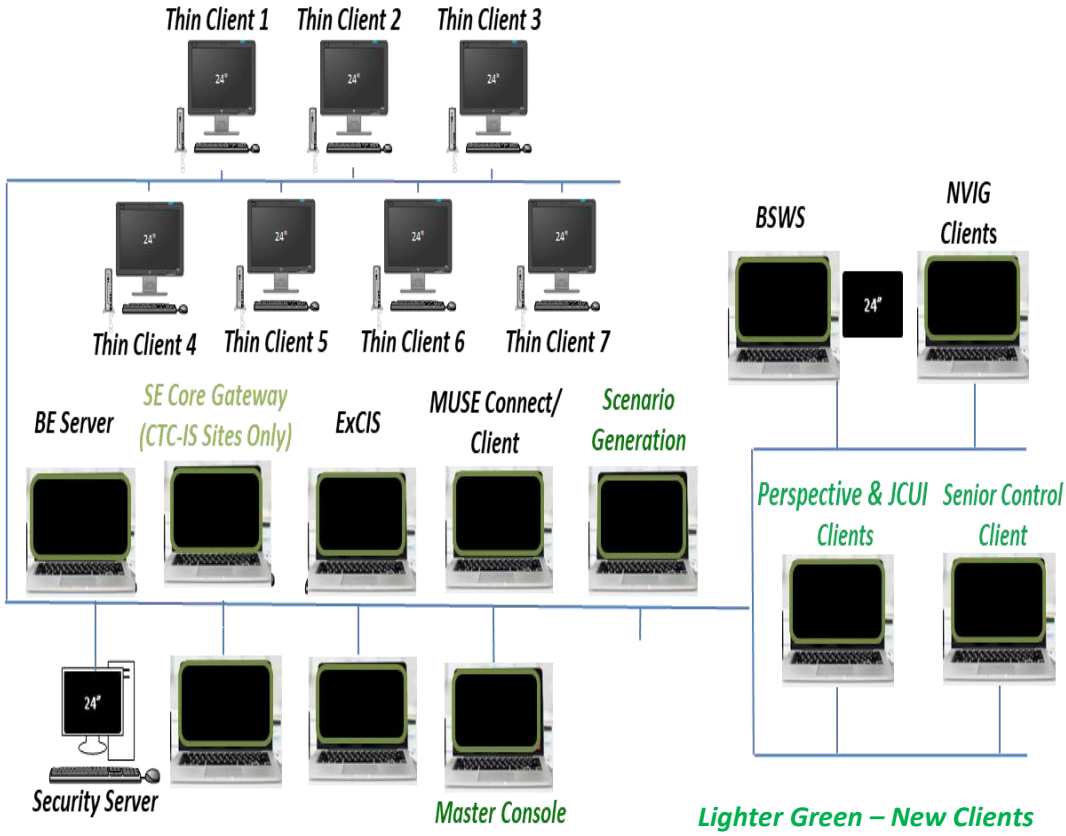
APC Net Shelter 42RU Rack
HPE MSA 2040 or 2050 - SAN
HPE DL360 Gen9 or 10 - jHost 1 - 5
HPE DL360 Gen10 - jHost 6 - 7
Dell R640 – Rialto
Nexus 3172 – Switchx 2
TRIPP PDU x 4
HPE R/T2200 UPS x 2

Virtual Components: *Insight, RTI JLCCTC, INTEL Model, Land Model, ESS Model, ESS Gateway, ESS Bridge, RTI Gateway, Object Owner, Federation Bridge, Data Processor, Data Collector, MC Gateway, MC Adapter, Jcontrol, Exercise Data Server, Cluster Gateway, Remote Gateway, NFS, Parametric Data Controller, Web Server, Clone Server, Perspective Server, Listello, Vcenter Server Appliance, Domain Controller/Active Directory, jCUI Web Server, Database – WARSIM, AAR Web Server, Database – Sustainment, Sim Data Server*

Lighter Green – New VMs
Green – New JLCCTC v9.0 HW Black – Reuse of existing HW

Virtualized JLCCTC Brigade Lower Enclave Mobile





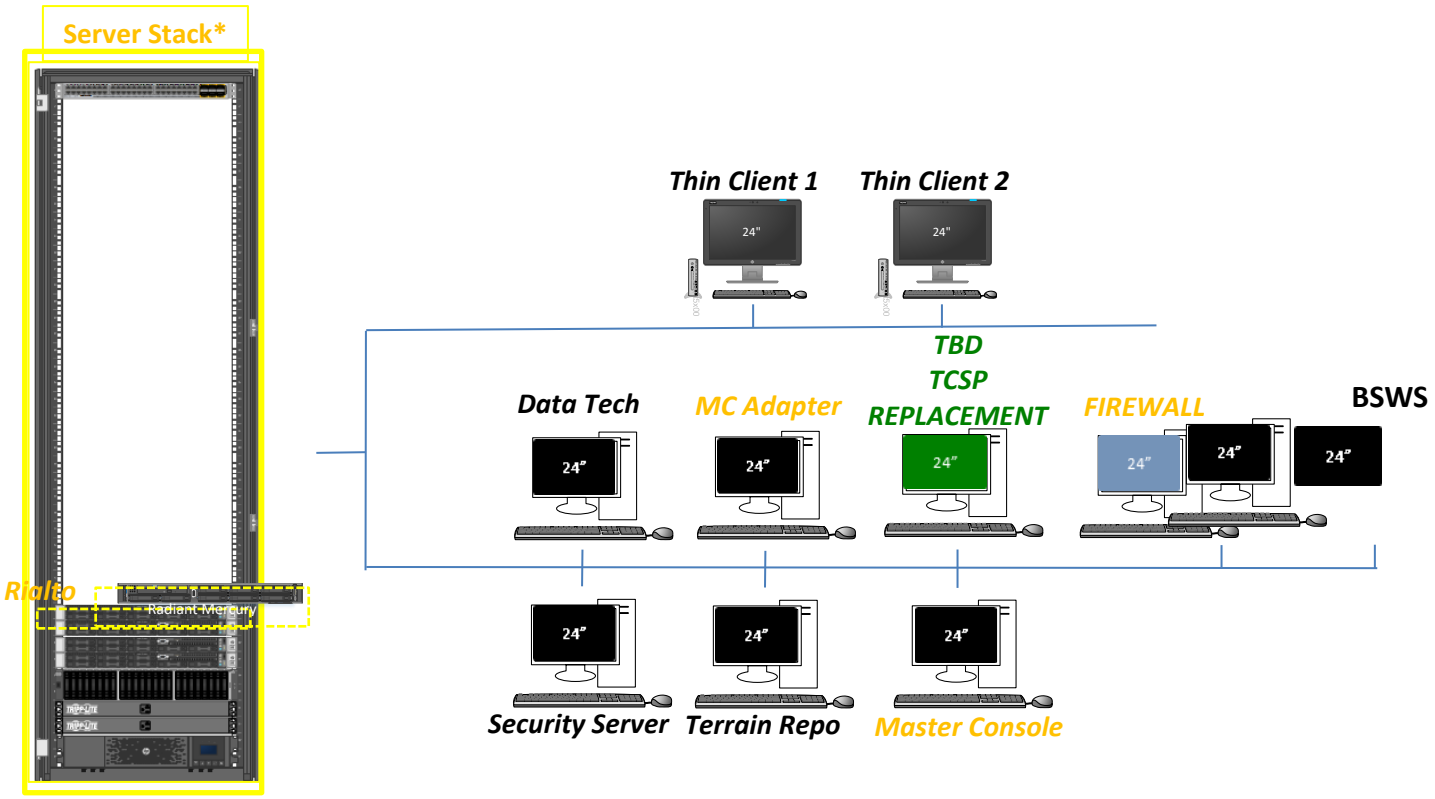
Server Stack HW List

30" Deep 4U Roto Shock ***Rack x 6***
HPE MSA 2040 or 2050 - ***SAN***
HPE DL360 Gen 9 or 10 - ***jHost 1 - 5***
HPE DL360 Gen10 - jHost 6 - 7
Nexus 3172 – ***Switch x 2***
TRIPP ***PDU x 4***
HPE R/T2200 ***UPS x 2***

Virtual Components: *Insight, RTI JLCCTC, INTEL Model, Land Model, ESS Model, ESS Gateway, ESS Bridge, RTI Gateway, Object Owner, Federation Bridge, Data Processor, Data Collector, MC Gateway, MC Adapter, Jcontrol, Exercise Data Server, Cluster Gateway, Remote Gateway, NFS, Parametric Data Controller, Web Server, Clone Server, Perspective Server, Listello, Vcenter Server Appliance, Domain Controller/Active Directory, jCUI Web Server, Database – WARSIM, AAR Web Server, Database – Sustainment, Sim Data Server*

Lighter Green – New VMs
Green – New JLCCTC v9.0 HW Black – Reuse of existing HW

Virtualized JLCCTC Upper Enclave



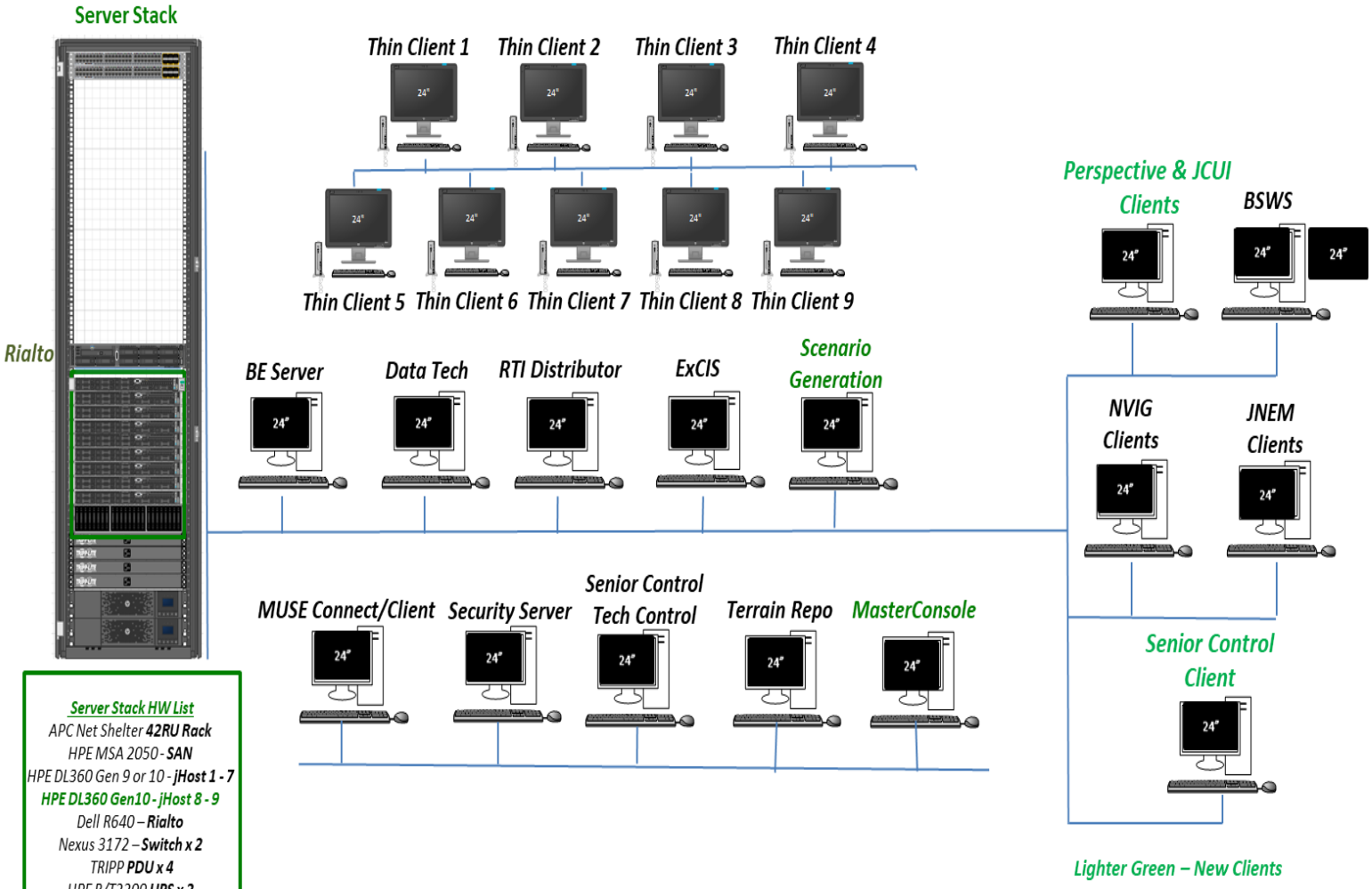
UE Server Stack HW List

APC Net Shelter ***42RU Rack***
HPE MSA 2040 or 2050 - ***SAN***
HPE DL360 Gen 9 or 10 - ***jHost 1 & 2***
HPE DL360 Gen10 - ***jHost 3***
Dell R640 – ***Rialto***
Dell R740 – ***Radiant Mercury***
Nexus 3172 - ***Switch***
TRIPP ***PDU x2***
HPE R/T2200 ***UPS x1***

Virtual Components: *RTI JLCCTC, INTEL Model, Land Model, RTI Gateway, Object Owner, Data Processor, Data Collector, Jcontrol, Exercise Data Server, Cluster Gateway, Remote Gateway, NFS, Parametric Data Controller, Clone Server, Vcenter Server Appliance, Domain Controller/Active Directory, Database WARSIM – WIM, MC Gateway*

Lighter Orange – New VMs
Orange – New JLCCTC v9.0 HW ***Black – Reuse of existing HW***

Virtualized JLCCTC Division Lower Enclave

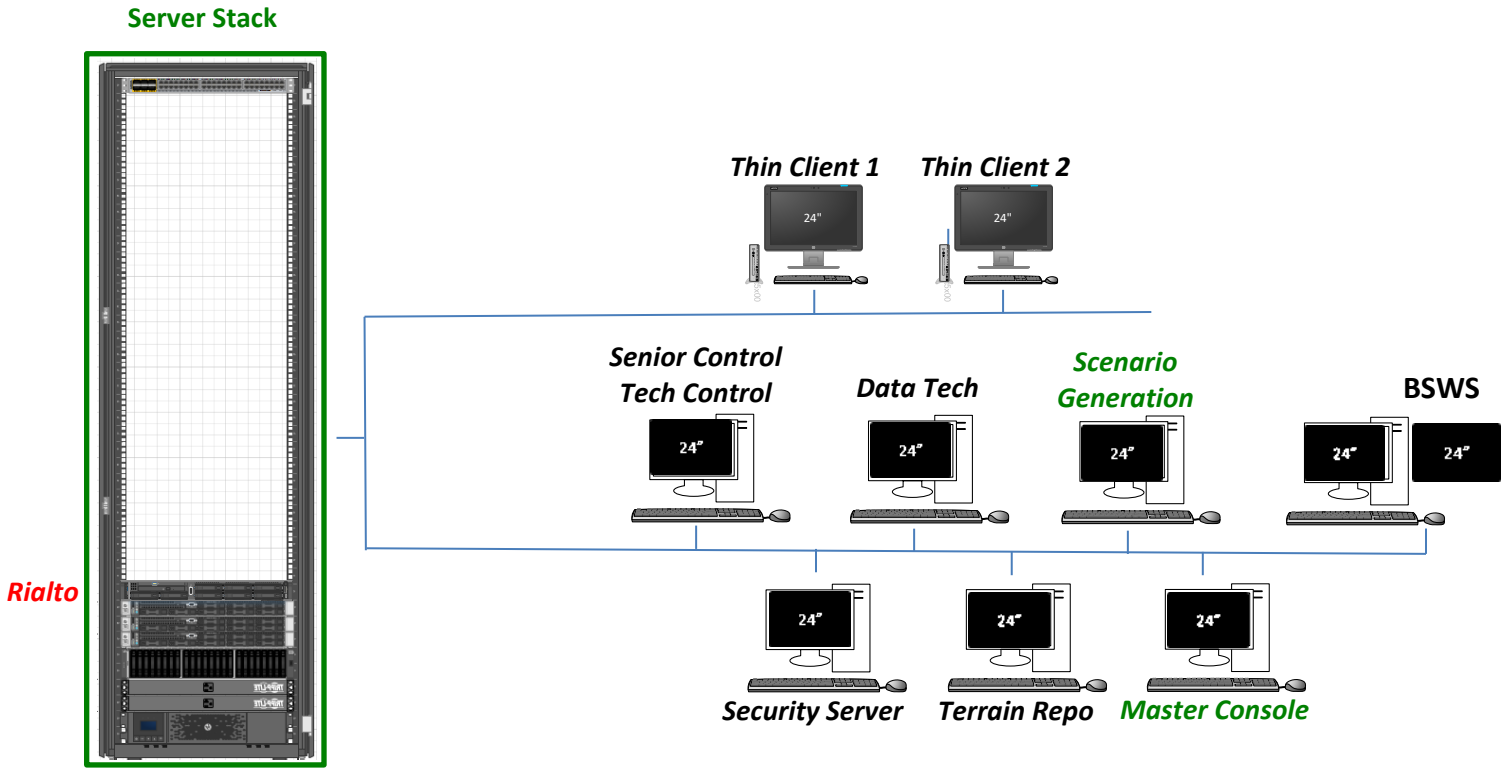


Server Stack HW List
APC Net Shelter ***42RU Rack***
HPE MSA 2050 - ***SAN***
HPE DL360 Gen 9 or 10 - ***jHost 1 - 7***
HPE DL360 Gen10 - jHost 8 - 9
Dell R640 – ***Rialto***
Nexus 3172 – ***Switch x 2***
TRIPP ***PDU x 4***
HPE R/T2200 ***UPS x 2***

Virtual Components: *ISM Server, JNEM, Insight, RTI JLCCTC, INTEL Model, Land Model, RTI Gateway, Object Owner, Federation Bridge, Data Processor, Data Collector, MC Gateway, MC Adapter, JControl, Exercise Data Server, Cluster Gateway, Remote Gateway, NFS, Parametric Data Controller, Web Server, Clone Server, Perspective Server, Listello, Vcenter Server Appliance, Domain Controller/Active Directory, jCUI Web Server, Database – WARSIM, AAR Web Server, Database – Sustainment, Sim Data Server, (ESS Model, ESS Gateway, ESS Bridge-*added to DIV LE to account for sites that interoperate with LVC-IA or CTC-IS)

Lighter Green – New VMs
Green – New JLCCTC v9.0 HW ***Black – Reuse of existing HW***

Virtualized JLCCTC Middle Enclave



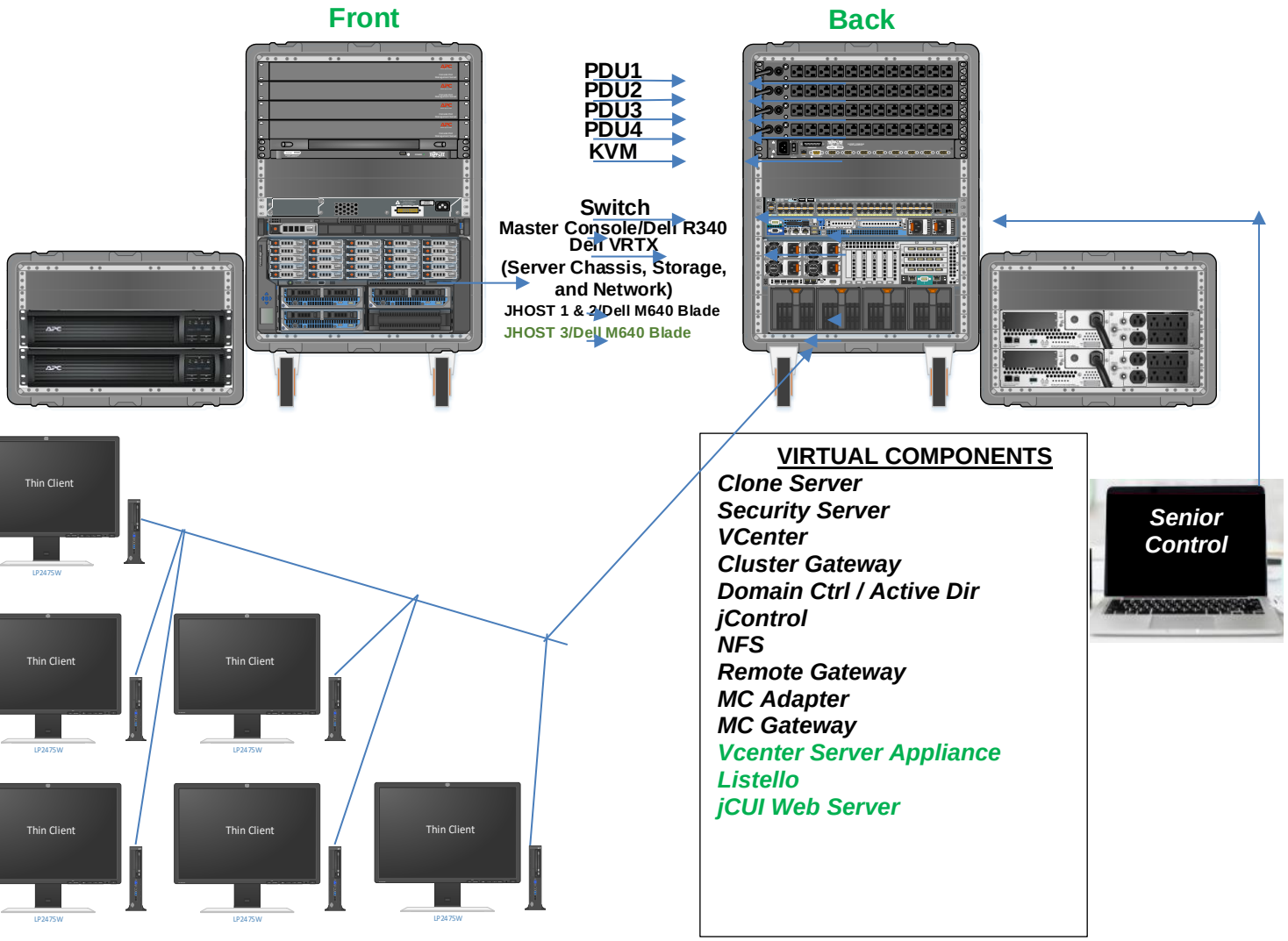
ME Server Stack HW List

HPE MSA 2040 or 2050 - ***SAN***
HPE DL360 Gen 9 or 10 - ***jHost 1 - 2***
HPE DL360 Gen10 - jHost 3
Dell R640 – ***Rialto***
Nexus 3172 - ***Switch***
TRIPP ***PDU x2***
HPE R/T2200 ***UPS x1***

Virtual Components: *INTEL Model, RTI Gateway, Object Owner, Data Processor, Data Collector, MC Gateway, MC Adapter, Jcontrol, Exercise Data Server, Cluster Gateway, Remote Gateway, NFS, Parametric Data Controller, Clone Server, Vcenter Server Appliance, Domain Controller/Active Directory, Database – WARSIM*

Lighter Green – New VMs
Green – New JLCCTC v9.0 HW ***Black – Reuse of existing HW***

Virtualized JLCCTC Tech Control Forward



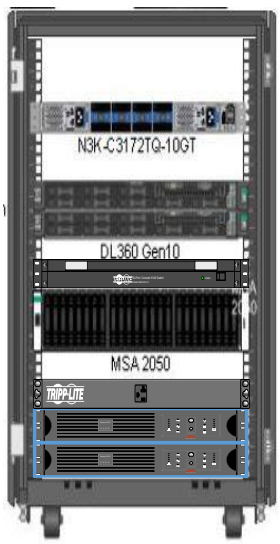
Lighter Green – New VMs

Green – New JLCCTC v9.0 HW

Black – Reuse of existing HW

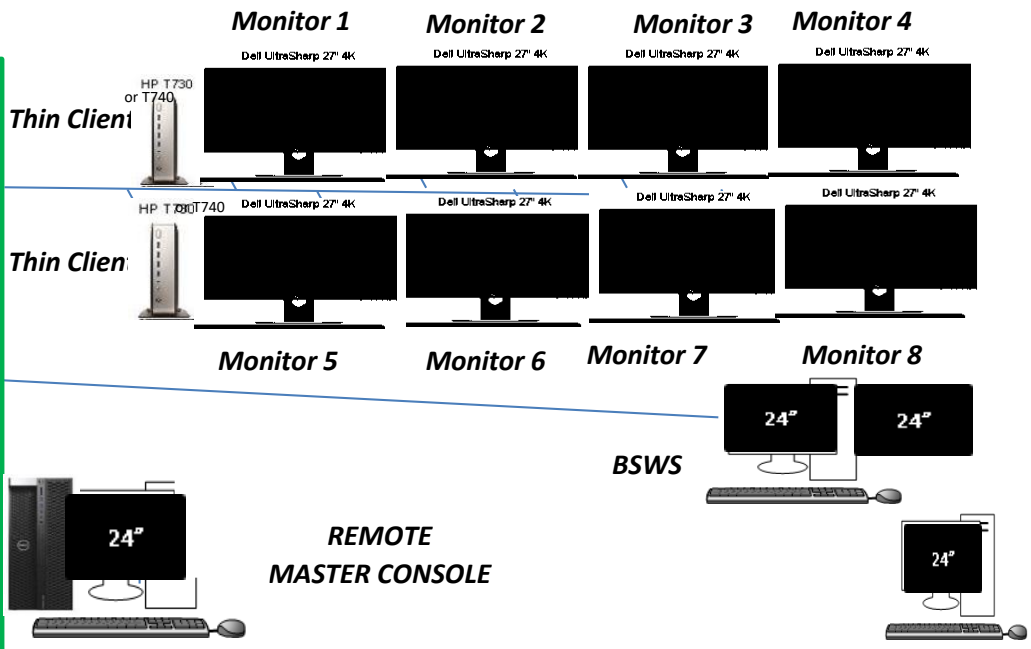
Sustainment Virtual Suite

Server Stack



Server Stack HW List

Rack
HPE MSA 2050 - ***SAN***
HPE DL360 Gen10 - ***jHost 1 - 2***
Nexus 3172 – ***Switch x 1***
Rack Mount ***KVM*** *- 8port* ***x 1***
TRIPP ***PDU x 2***
HPE R/T2200 ***UPS x 2***
Dell R340 ***Config 1***



VMs: ***Network File Server, Remote Gateway, JCONTROL, Clone Server, Domain Controller/Active Directory,*** ***JCUI Webserver, Listello, Local Database – Sustainment, Local Sim Data Server, Local jCUI Web Server, Vcenter Server Appliance***

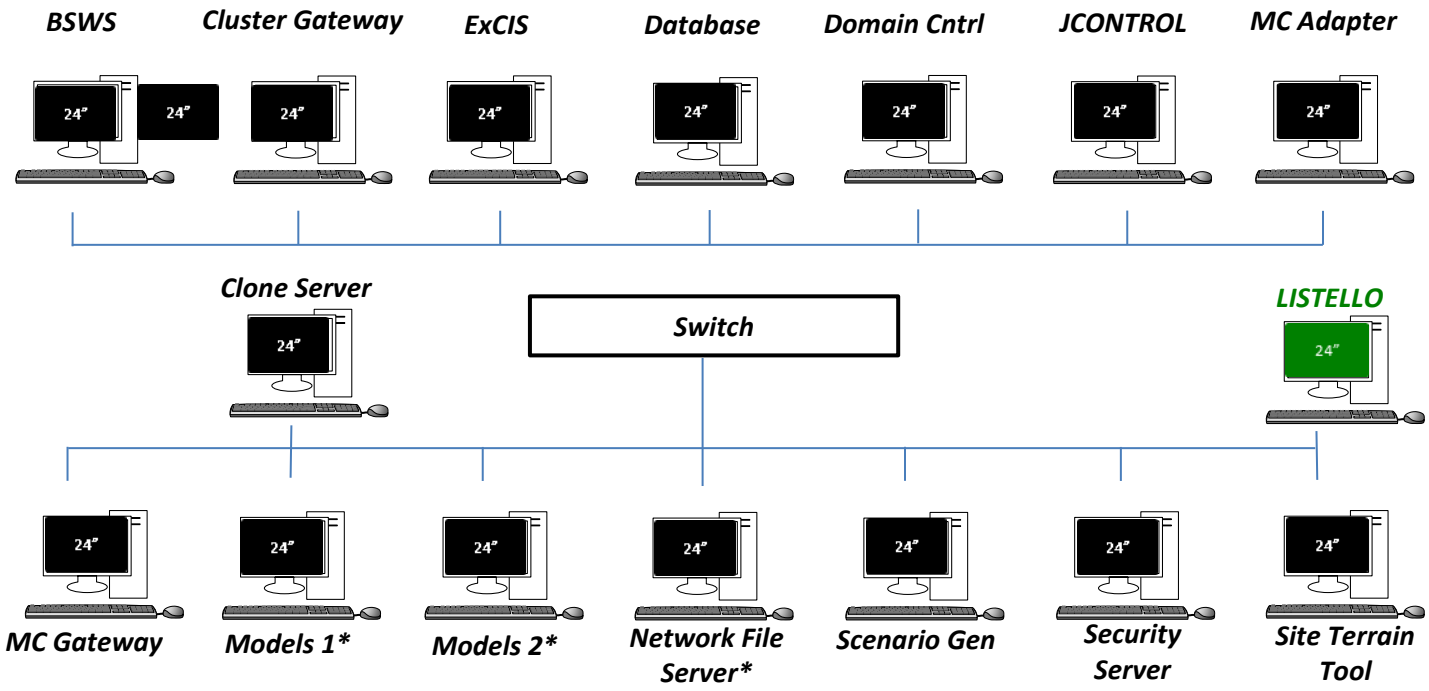
JCUI Client & Perspective

Lighter Green – New Clients

Lighter Green – New VMs

Green – New JLCCTC v9.0 HW ***Black – Reuse of existing HW***

JLCCTC Stand Alone System



Green – New JLCCTC v9.0 HW ***Black – Reuse of existing HW***