



U.S. Army Research, Development and Engineering Command



TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.

MATREX Simulation Initialization

DoD M&S Conference

10 March 2008

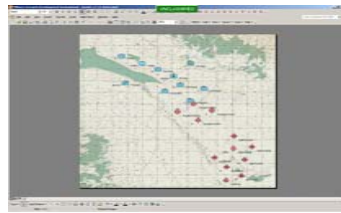
Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE 10 MAR 2008		2. REPORT TYPE N/A		3. DATES COVERED -	
4. TITLE AND SUBTITLE MATREX Simulation Initialization				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) U.S. Army Research, Development and Engineering Command				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release, distribution unlimited					
13. SUPPLEMENTARY NOTES 2008 DoD M&S (Modeling and Simulation) Conference Presentations held in Orlando, Florida on March 10 - 14, 2008, The original document contains color images.					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT UU	18. NUMBER OF PAGES 8	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			

- In the past, most organizations supported dedicated simulation programs.
- Considerable pre-exercise effort was required to enable the collaboration of multiple simulations.
- 12-18 months of pre-exercise effort was not uncommon for some DoD Joint training events involving multiple, dissimilar simulations.
- Accordingly, DoD has identified “rapid scenario generation” as a top M&S priority.

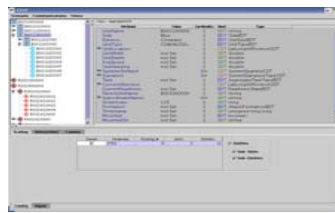
FEDERATION ENVIRONMENT DESIGN:

- ✓ Scenario Description.
- ✓ Unit/Entity Distribution Plan.
- ✓ Network Design.
- ✓ Command Scripts.

MSDE



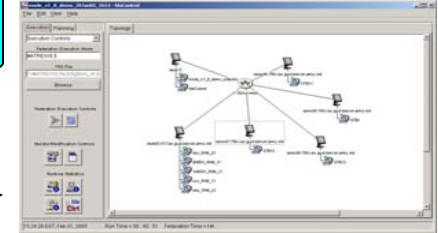
CSAT



FSE DB



hlaControl



remote creates

HLA RTI

remote creates

AMS

remote creates

C3GRID

OneSAF

IWARS

remote creates

OTB

HC-NEBC

CES

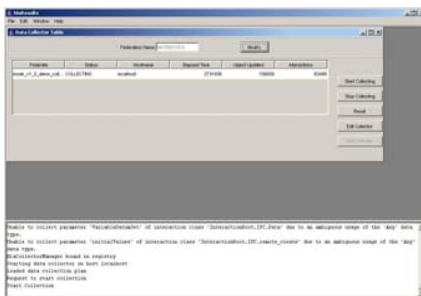
ARMS

NV Tool Set

MSLS

NEC2

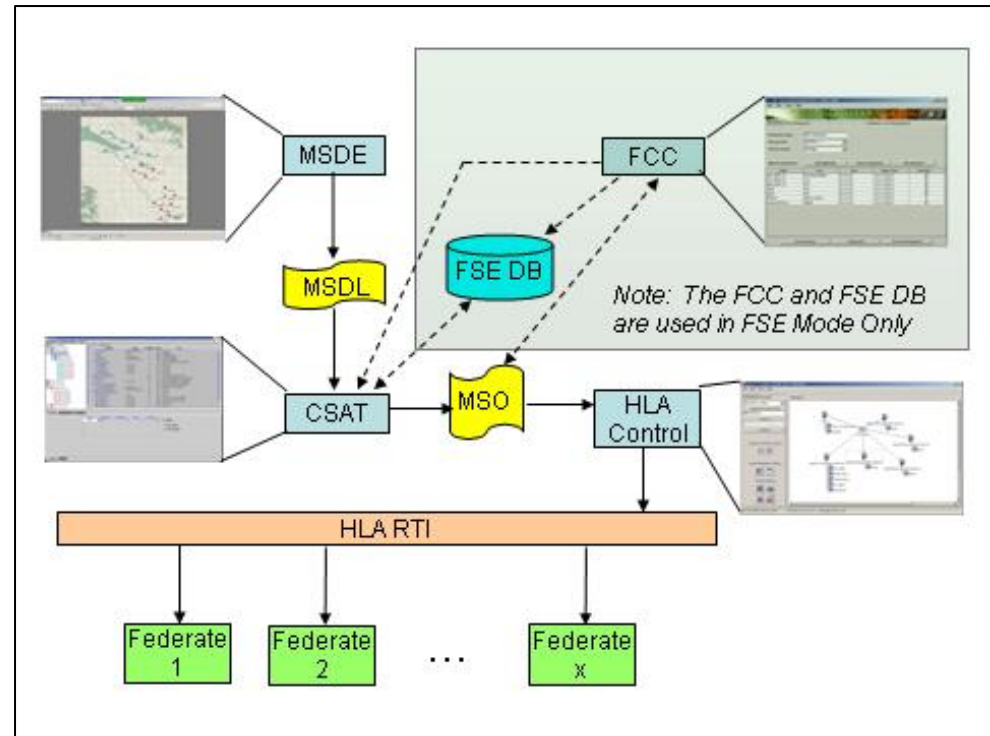
hlaResults



- AMS – Air Mobility Server
- ARMS – Armaments Server
- CES – Communications Effects Server
- C3GRID – Command, Control & Communications Grid
- HC-NEBC – Human Centric Network Enabled Battle Command
- IWARS – Infantry Warrior Simulation
- MSLS – Missile Server
- NEC2 – Network Effects Command & Control
- NV Tool Set – Night Vision Tool Set
- OneSAF – Semi-Automated Forces
- OTB – OneSAF Test Bed

- Quickly and efficiently generates both tactical scenario and HLA Federation instantiation reader files in standardized formats
- Initializes HLA Federations from a common point
- Minimizes both manual input and configuration conflict errors
- Simplifies configuration management and increases data consistency
- All simulation environments that employ the MATREX standard for scenario and federation reader files have access to all other MATREX initialization compliant scenarios

- Reduces time and resources required to initialize a distributed simulation.
- Promotes the reuse of standardized scenario data formats.
- Improves configuration management via an easily manageable number of data sets.
- Allows incorporation of additional components and scenarios that are compliant with the MSDL format.



- Align the MATREX Simulation Initialization process with the following external activities as required:
 - OneSAF Initialization Process
 - LSI FSE Initialization Process
 - 3CE LVC SimInit TFA IPT Process
 - Army Initialization IPT Process
 - JFCOM Joint Rapid Scenario Generation (JRSG) IPT
 - DoD M&S Steering Committee Directed Joint Data Alternatives (JDA) Study



Customers



- RDECOM:
 - CERDEC C4ISR OTM Federation
 - AMRDEC JAMUS Federation
- TRADOC:
 - Multiple BLCSE Federations
- FCS Program:
 - FSE Federation

Name	Title	Phone	Email
Government:			
Tom Hurt	MATREX PM	(703) 806-0995	tom.hurt@us.army.mil
Chris Metevier	MATREX Deputy PM	(407) 384-3865	chris.metevier@us.army.mil
Contractors:			
Charley Budde	MATREX SimInt Lead	(703) 428-6101	cbudde@mitre.org
Gary Smith	Design & Dev Lead	(703) 425-2205 ext. 224	gsmith@d-a-s.com
Chris Parker	Sr. SW Engineer	(703) 425-2205 ext. 226	cparker@raytheonvtc.com
Howard Borum	Sr. Test Engineer	(703) 428-6107	hborum@raytheonvtc.com

MATREX IDE Website: <https://www.matrex.rdecom.army.mil>