

Integrating CPOF, JSAF and ONESAF through CBMS

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Agenda

- Problem
 - C2-SIM as a System of Systems
- Design Alternatives
 - Incremental
 - Change of direction
- Application
 - Initialization and execution
- Discussion
 - Lessons learned

C2-SIM as a System of Systems

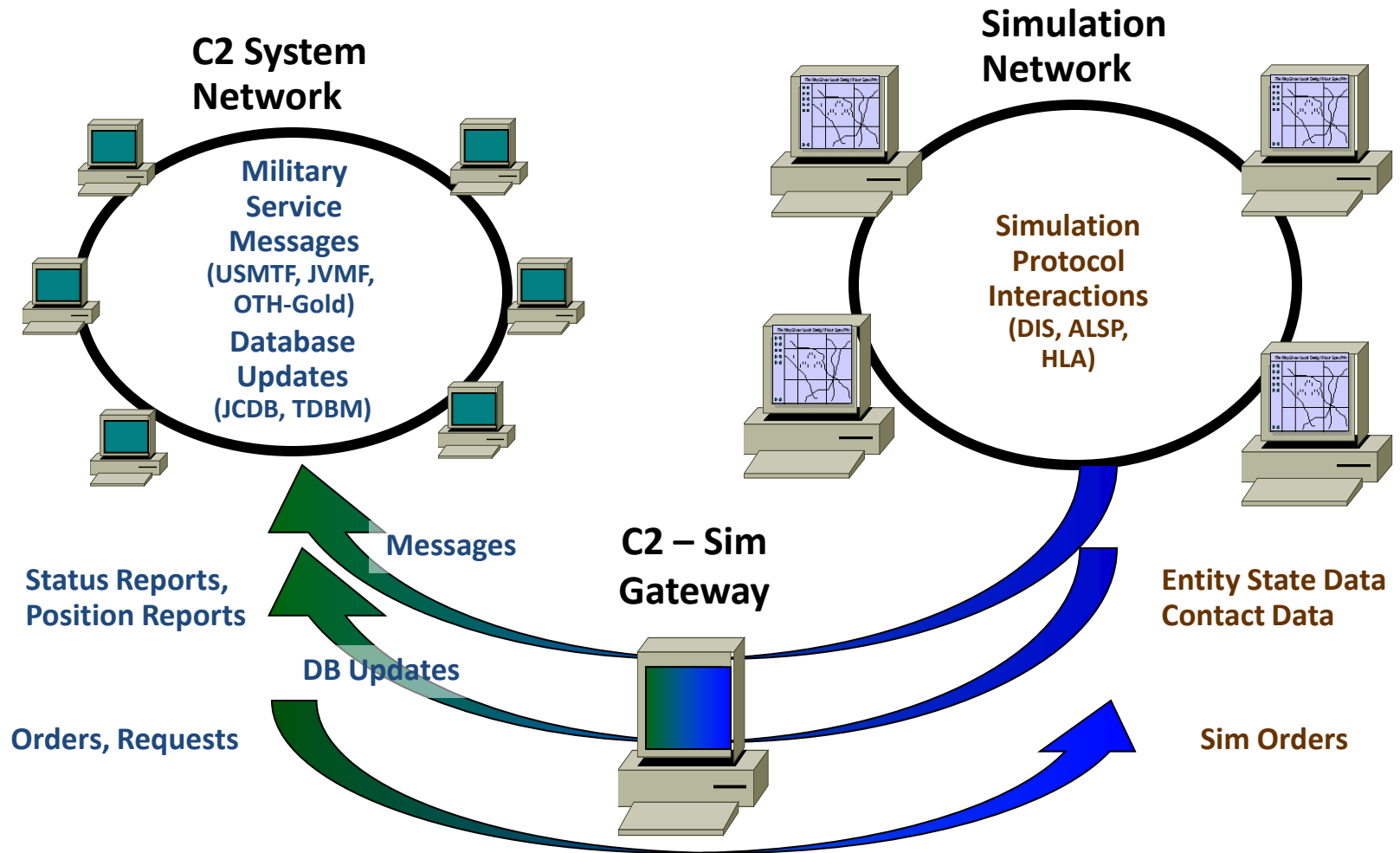
PROBLEM

Observations

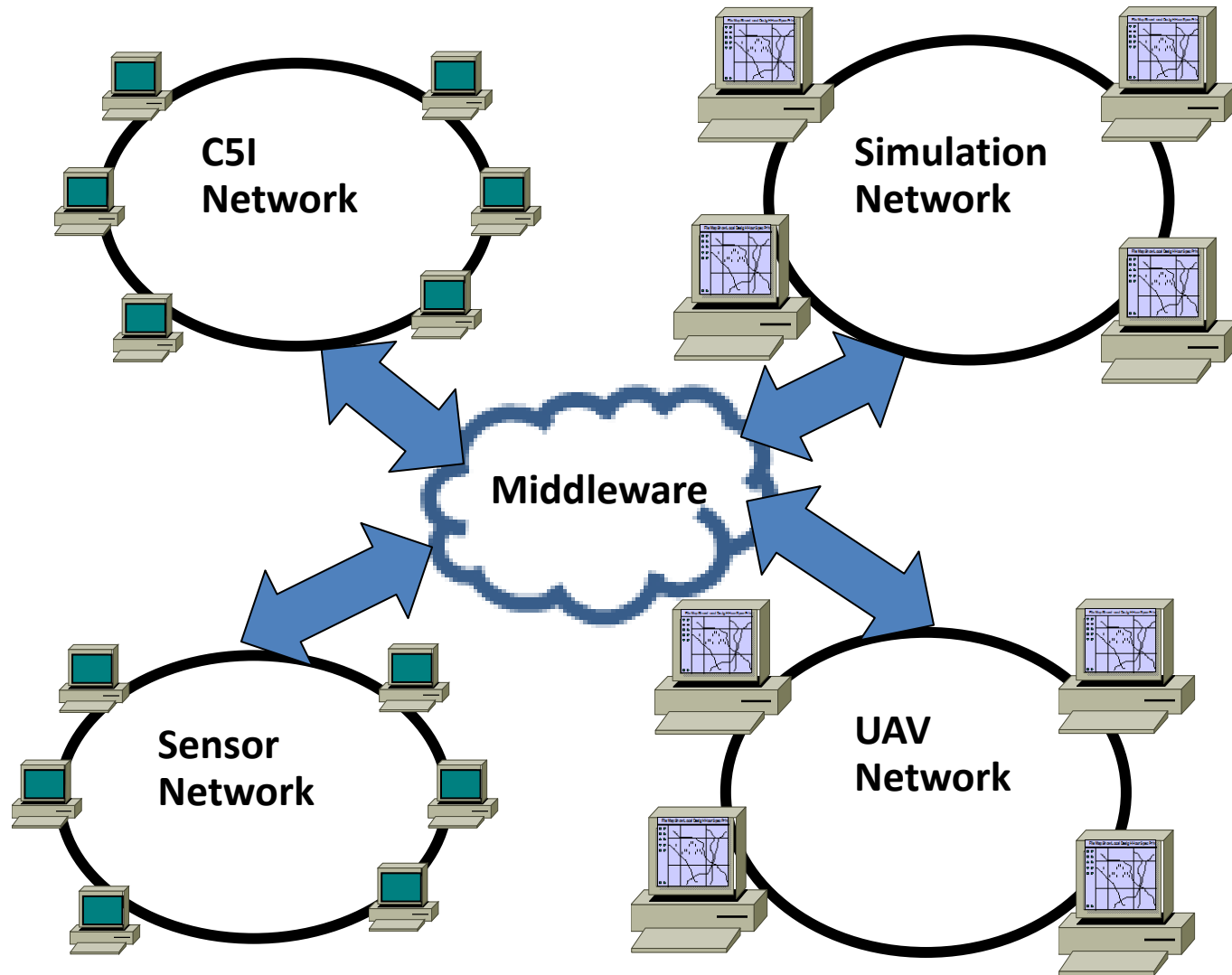
- Multiple Systems
 - Live, Virtual, Constructive (LVC)
- Multiple Sources and Formats
 - Voice, Chat, Binary, Free Text, XML, JSON, etc.
- Multiple Levels of Decision
 - Strategic, Operational, Tactical
- Multiple Standards
 - Message formats, M&S standards, etc.

We operate in a System of Systems (SoS) environment

The Current Solution



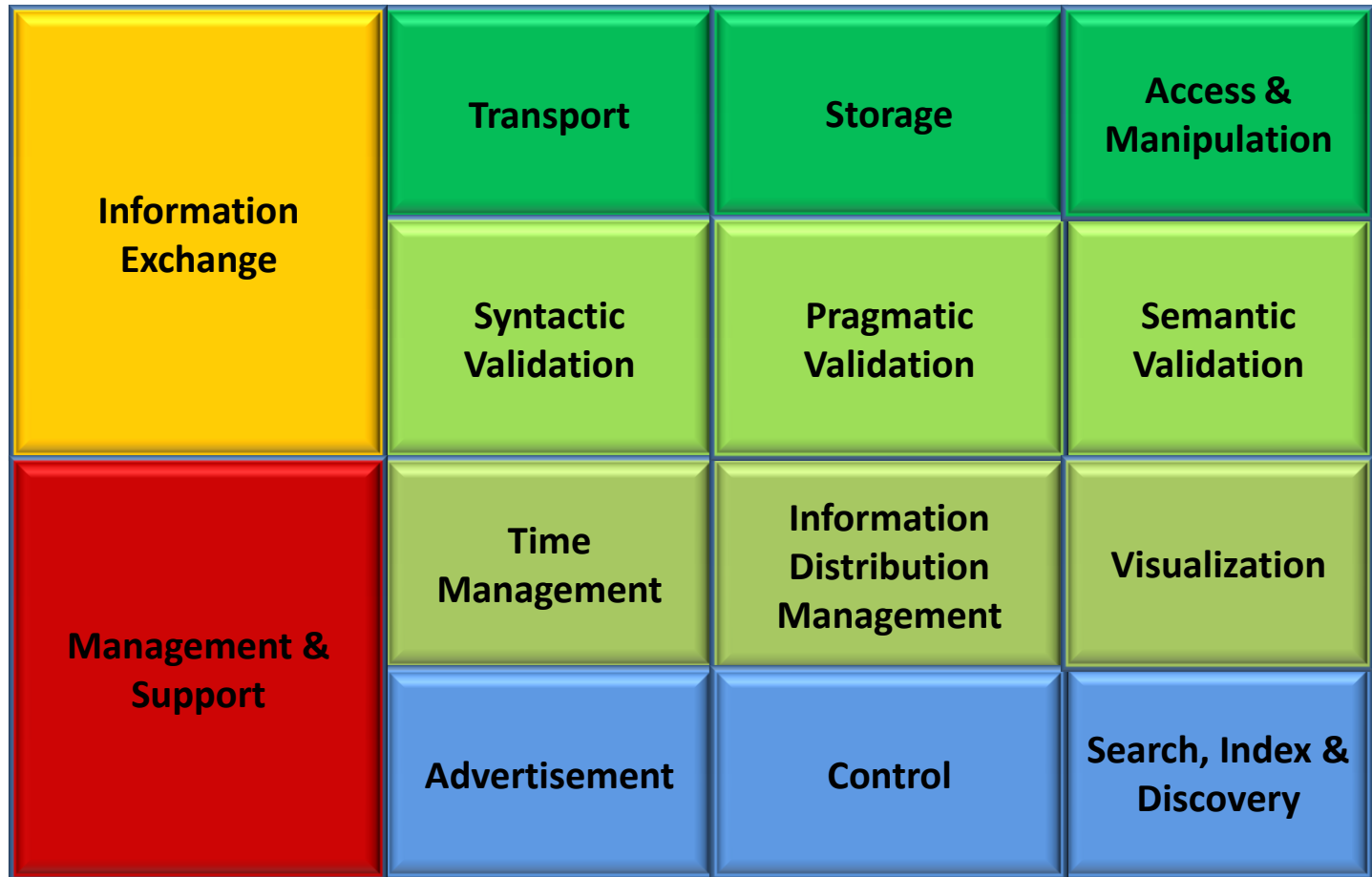
System of Systems Interoperability



We need to be interoperable in a SoS environment

C2-SIM Design Approach

Interoperability Support Services

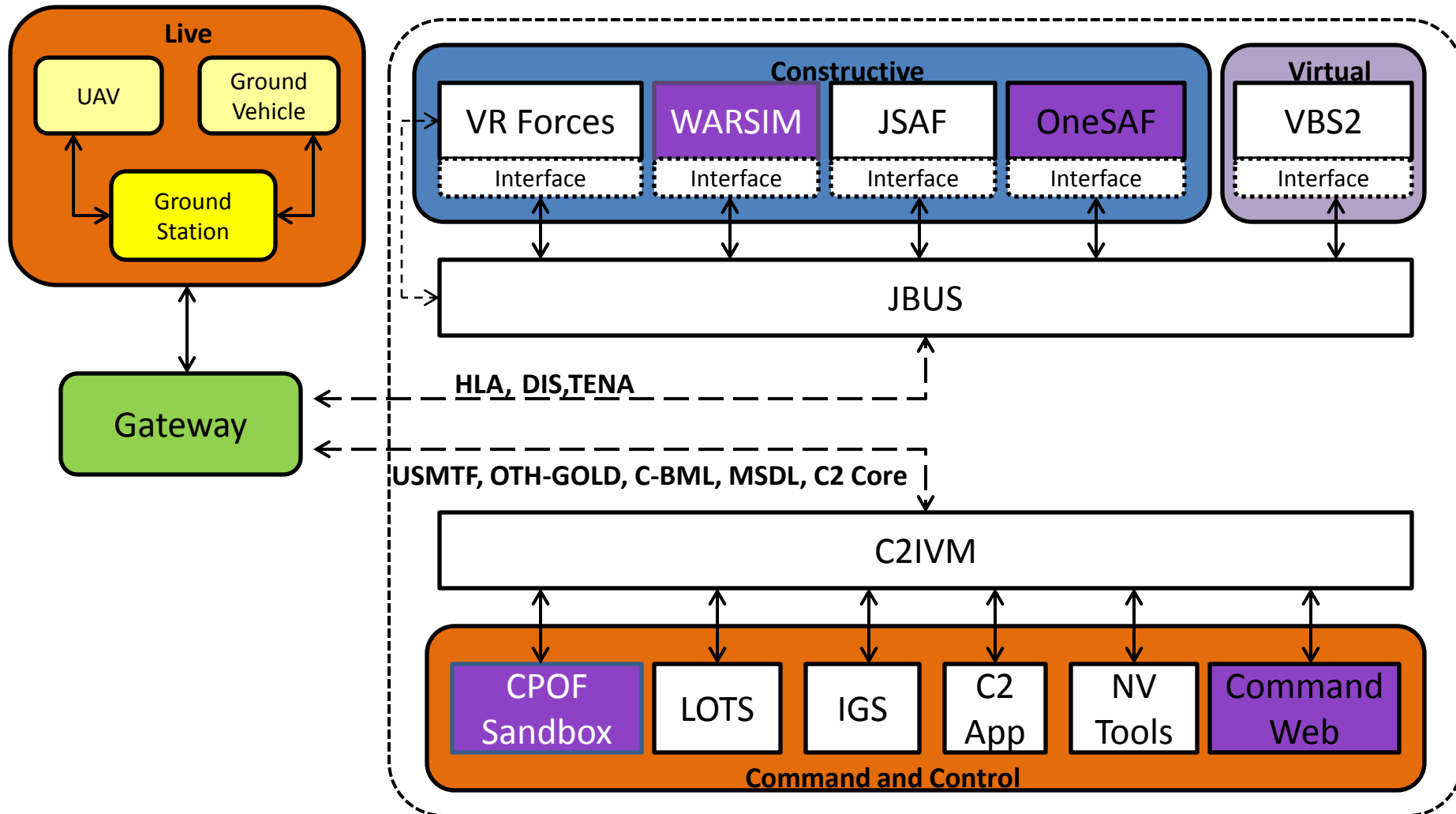


Interpretation and use of information is determined by the system

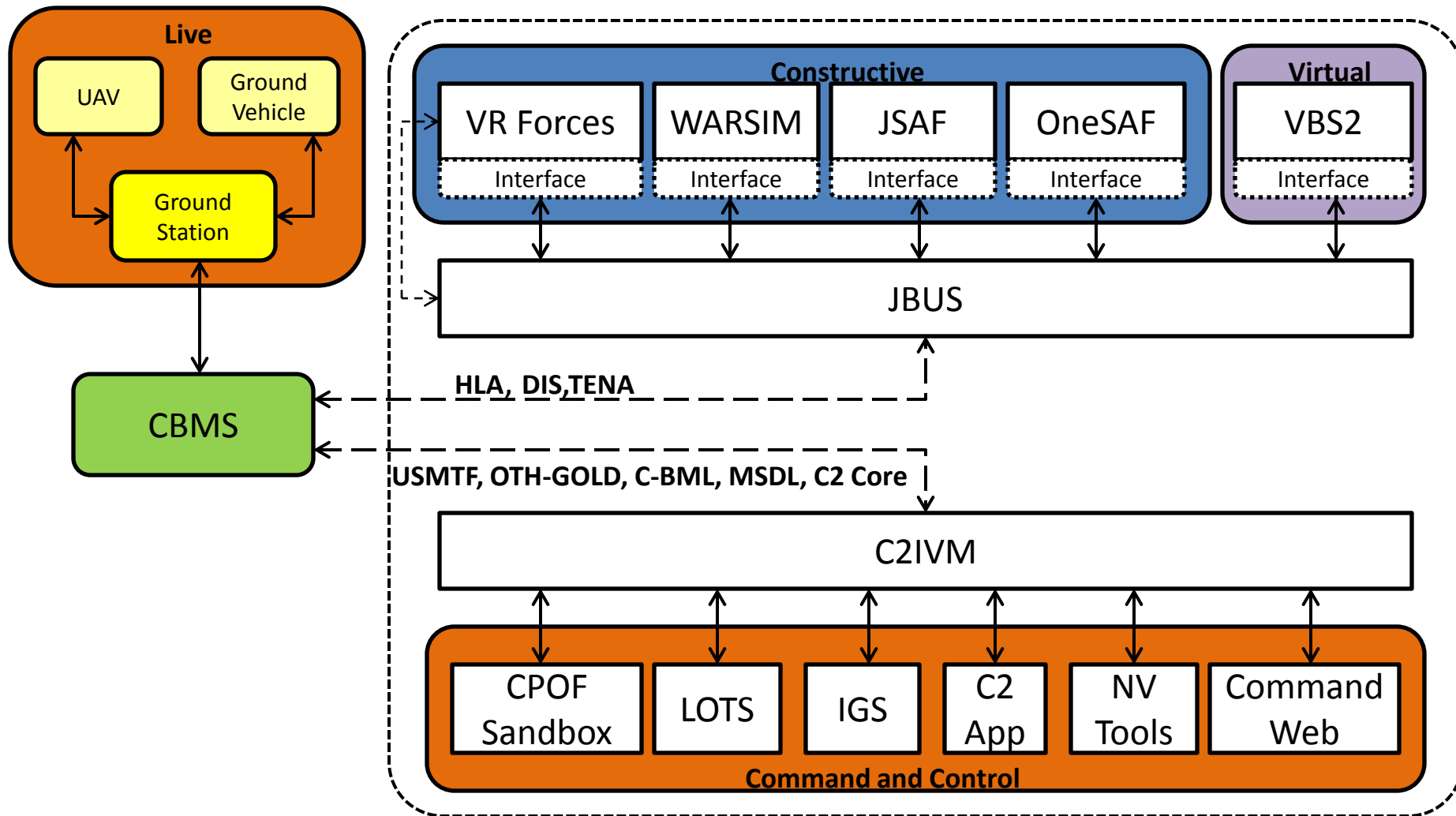
Incremental or change of direction

DESIGN ALTERNATIVES

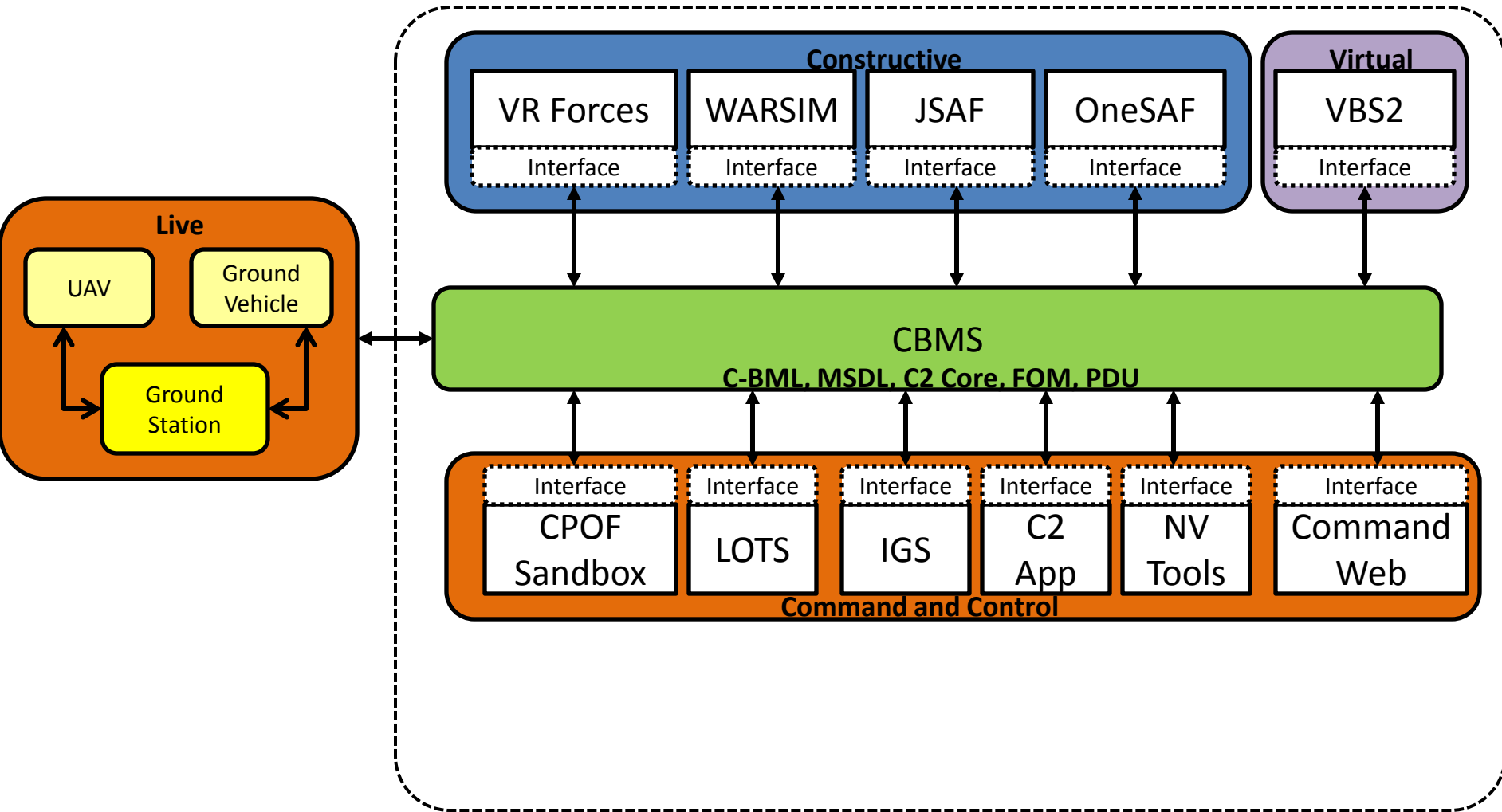
C2-SIM: Gateway of Gateway Configuration



C2-SIM: Gateway/Translator Approach



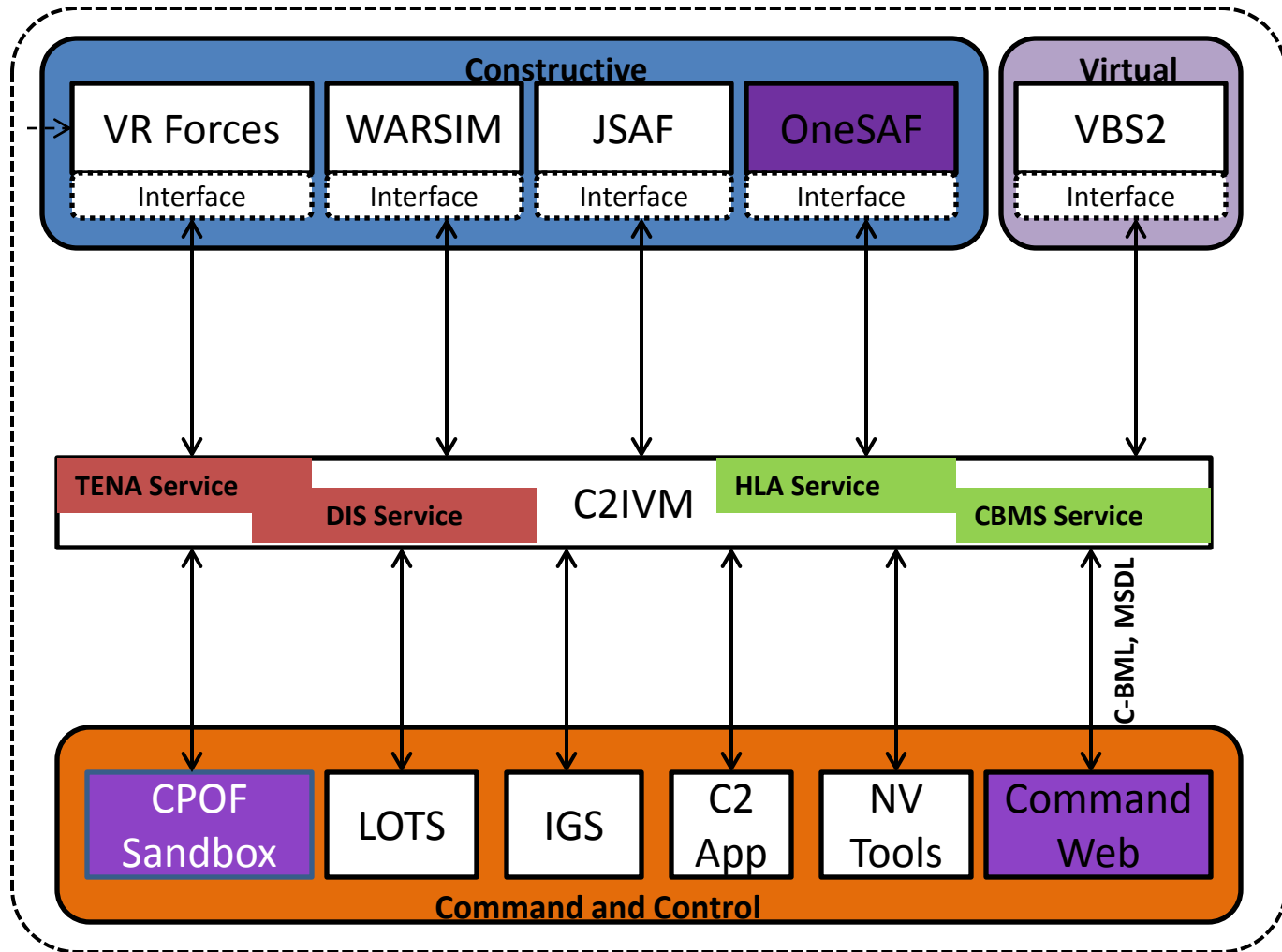
C2-SIM: Language-Centric Approach



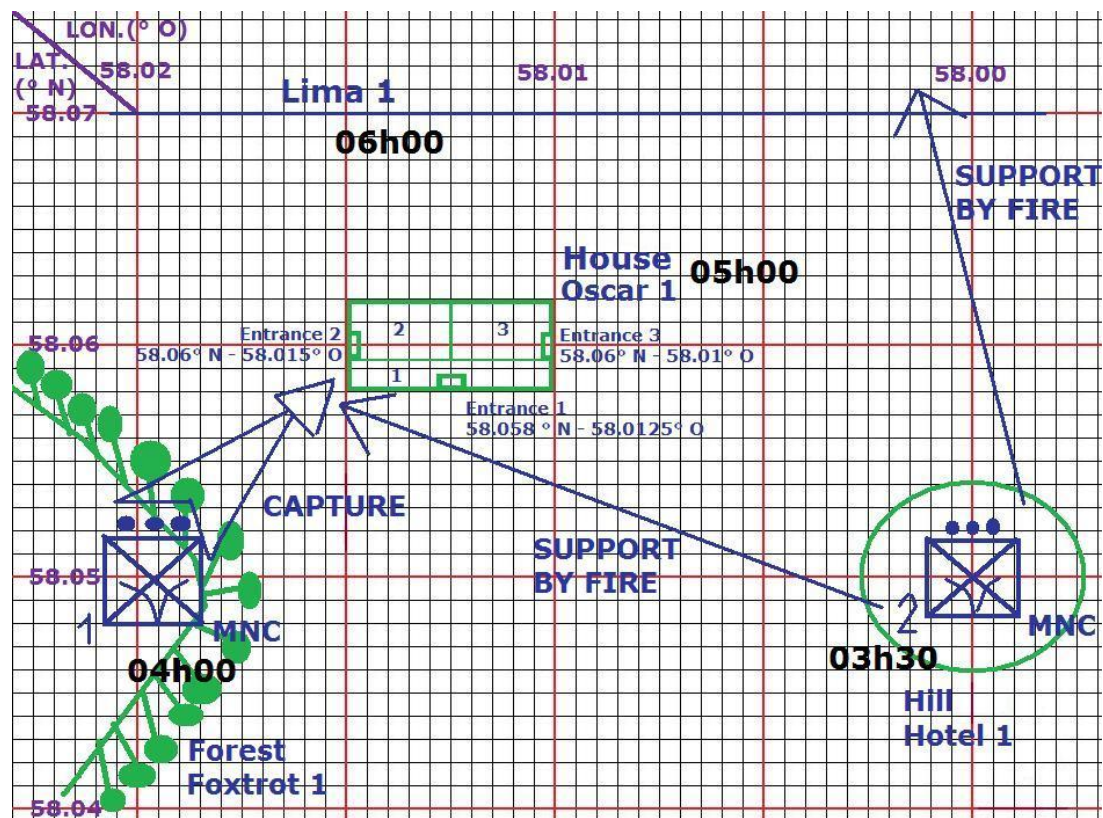
Implementation

APPLICATION EXAMPLE

SIMCII 009-Arcitecture

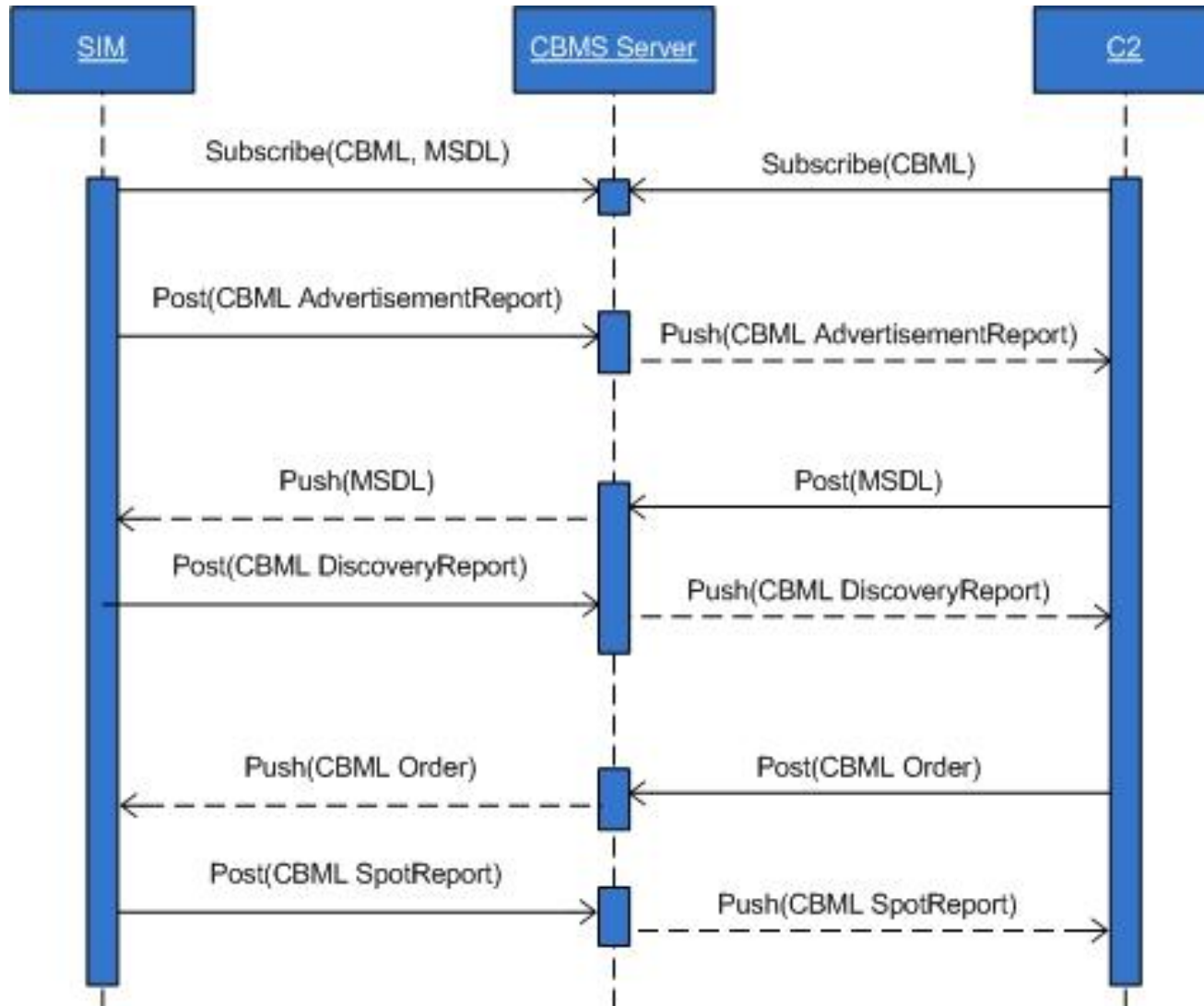


Scenario

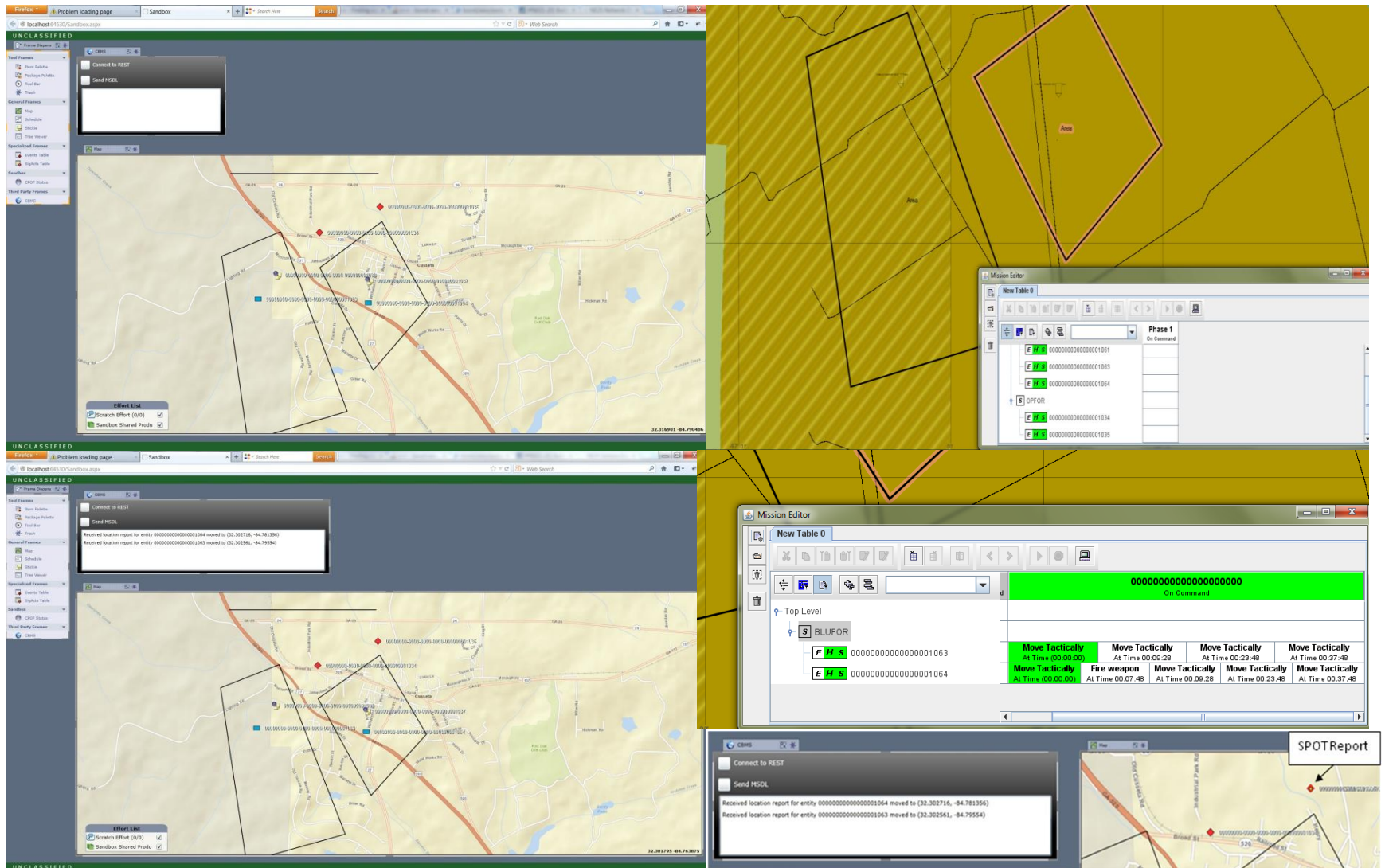


Phase I Capture Oscar 1						
Unit	H-1h30	H-1	H Hour	H+1		
1st Plt FR		Move to Foxtrot 1	Capture Oscar 1	Surveillance		
2d Plt US	Move to Hotel 1		Support 1st Plt FR	Surveillance		

Information Exchange Sequence



Results



Lessons learned

- Design makes a difference
 - Time
 - Level of effort
 - Reuse
- C2 languages
 - Can drive simulations
 - Not straightforward
 - ROE, others
 - Additional level of translation is needed
- C2-SIM and SIM-C2
 - Not equivalent
- C-BML and MSDL
 - Part or the solution
 - C2 Core/MILOPS
 - Others
- Should be hidden from operators
- Ultimate language is the war fighter's language
- New ways to use simulation in training
 - Excursion
 - Scenario design

QUESTIONS

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