JLOD - What's New in JLOD V7.0

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SysAdmin

- Operating Systems for V7.0
  - RHEL 7.6/7.7 (default)

Enhancements & Improvements

- Aggregate Combat in JLVC

- Network Bandwidth reduction

- Improved Logistics Control

- Situation Report

- OBS Exporting

- Who-Shot-Who quick linkage

- Quick Magic Health/Log settings

Aggregate Combat – Technology Preview

- Technology Preview using the Aggregate Combat Service
  - Currently only with in the JLVC Federation
  - Expected full capability to be released for JLVC 2020
  - JLOD V7.0.x patches expected to support more capabilities

- Supports Ground Direct-Fire Combat
  - JLOD ⇔ JLOD, JLOD ⇔ JCATS, JLOD ⇔ MTWS
  - Consumes platform level logistics during combat
  - Uses data exported from Fchar data for PhPk, Ranges, target classes, etc

- Limited evaluation / examination of Combat Datasets
  - View and Plot Kills/Supply Usages verses Time
  - Examine any Aggregate Combat in the federation

- Aggregate Combat Estimator
  - Support What-If calculations between two units

Aggregate Combat in the JLVC Federation

- ➢ **Integration into the JLVC Federation**
  - ➢ ACS Interactions: InitiateCombat, CombatResults, TerminateCombat
  - ➢ Update of Federation State object to signal ACS

- ➢ **Integrated Damage**
  - ➢ BDA Reporting of combat losses
  - ➢ Intel State updates on attrition notification

- ➢ **Work still in progress**
  - ➢ Notification to ACS when engaging platforms are logistically resupplied
  - ➢ Consumption of ACS Combat Status for notification of active engagements
  - ➢ Tracking of entities in multiple engagements
  - ➢ Use of Intel State when in aggregate combat to notify ACE-IOS

Fix List Items
- JLOD-1357
- JLOD-1358
- JLOD-1367
- JLOD-1377

Aggregate Combat Engagements Window

- ➢ Technology Preview
  - ➢ Work in process

- ➢ Status and Control Window
  - ➢Commands
  - ➢Filters
  - ➢Status

Fix List Items
- • JLOD-1372

Aggregate Combat Graphic Display

> Visually Display Engagements
>> Directed arrows show engagements
>> Hover Tip
>> Right-Click to commands
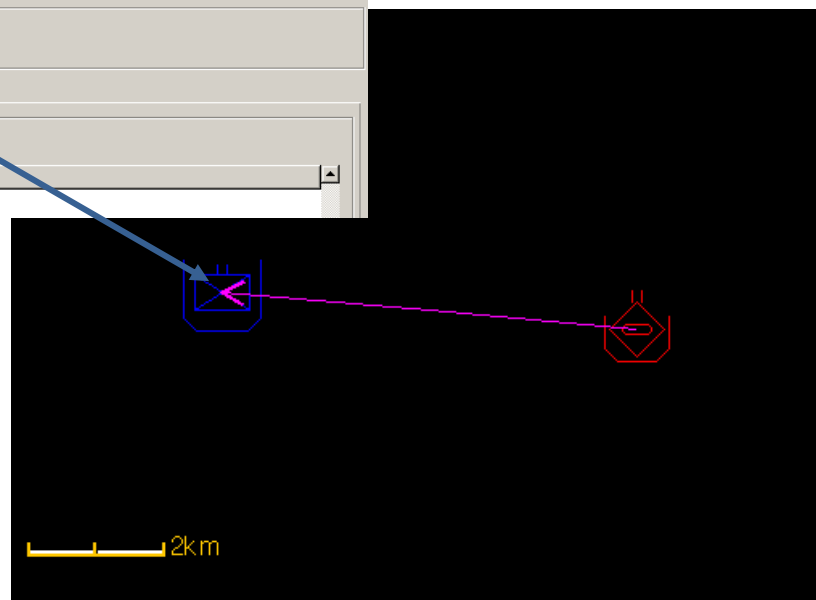
Fix List Items
- JLOD-1360

Aggregate Combat Dataset Viewer

- ➤ View Results of Combat
  - ➤ Double Click engagement

- ➤ Still a work in progress

- ➤ Viewer can Graph Wounding and Supplies
  - ➤ Data items can be grouped
  - ➤ Plotted verses JLOD Sim Time

Fix List Items
- • JLOD-1372

Aggregate Combat Dataset Graph
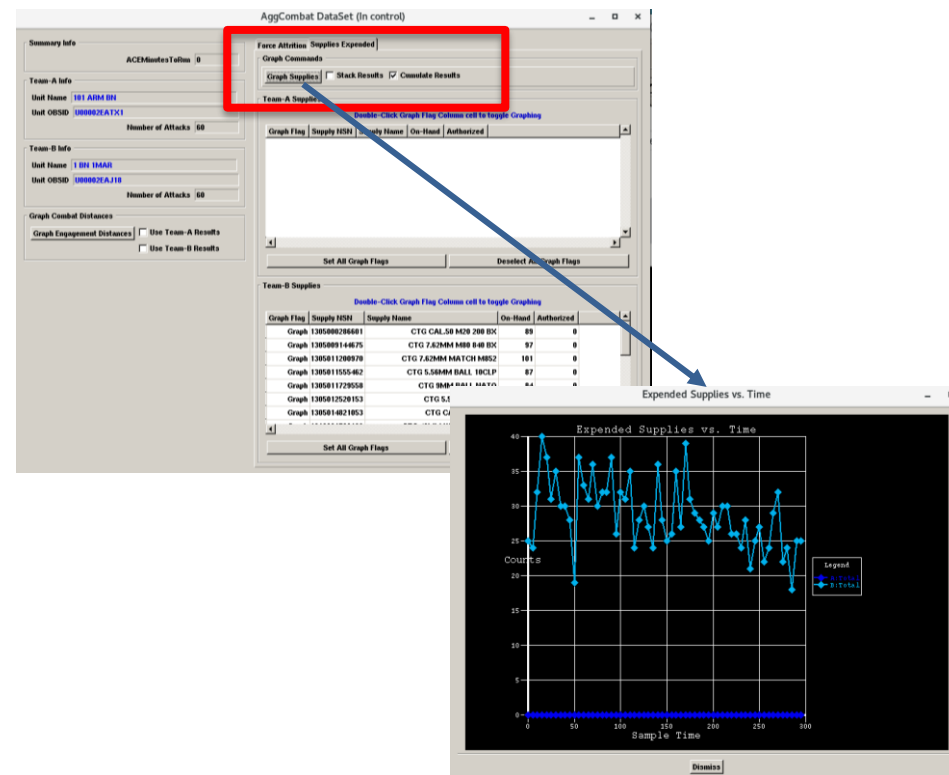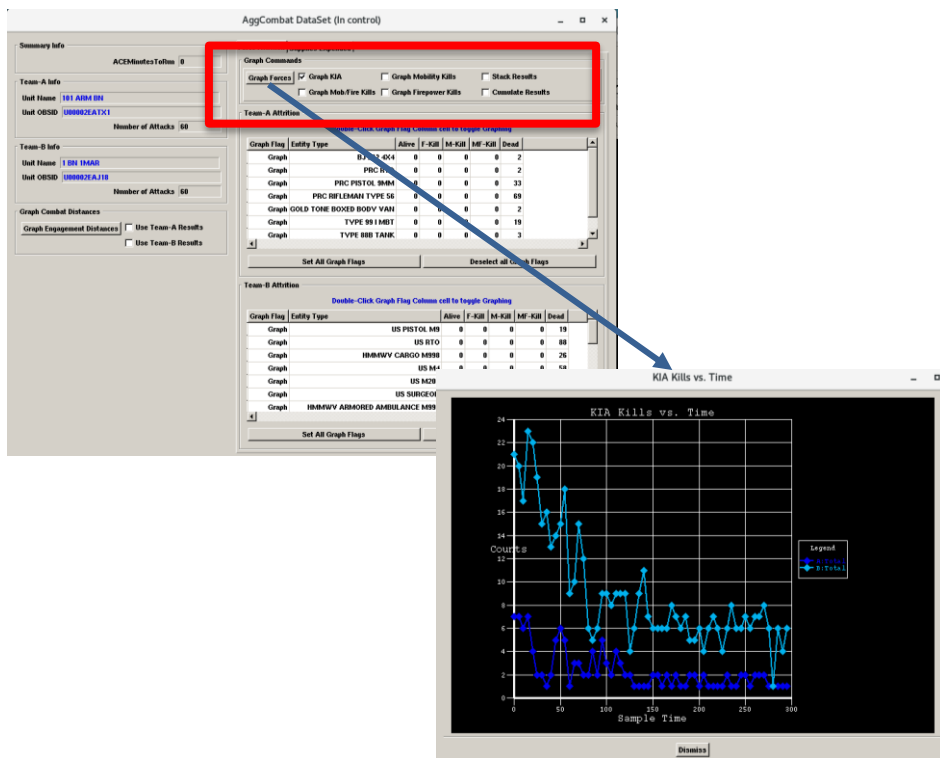
Fix List Items
- JLOD-1372

➢ Graphs are totals returned from ACS
  ➢Health State updates
  ➢Supply usage

Aggregate Combat Estimator

- ➢ Estimate Combat between Units
  - ➢Support What-Ifs

- ➢ Technology Preview
  - ➢Still a work in progress
  - ➢Intended to be stand alone support

- ➢ Generates all data like ACS
  - ➢Supports Combat results viewer

Fix List Items
- JLOD-1372

OBS Exporting - Overview
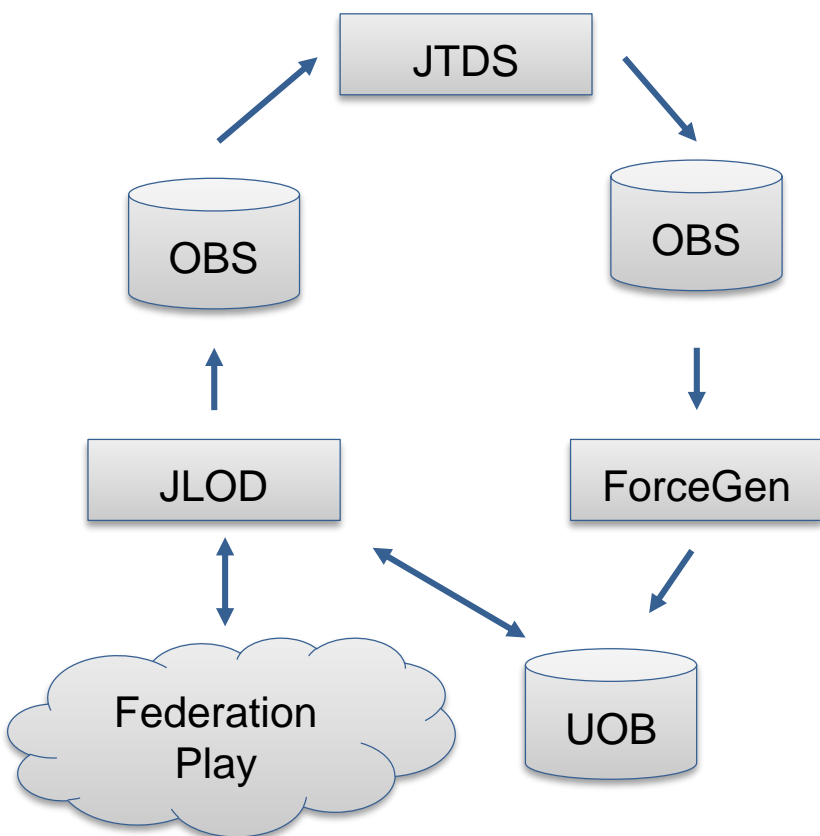
- ➢ **Several Aspects of Importing OBS Updated**
  - ➢Additional OBS data items tracked
  - ➢Sanitizing Input Data

- ➢ **Exporting Life cycle**
  - ➢Capture original data – OBS Parsing
  - ➢Convert to local data – ForceGen tool
  - ➢Populate Scenario – Federation Play
  - ➢Export scenario – OBS exporting

- ➢ **Federation Play Data Quality**
  - ➢Federation allows more flexibility than OBS
  - ➢Not all federates populate all the data
  - ➢JLOD does best-effort to convert provided data

Improved OBS Parsing

- Code base was refactored
  - OBS V2.0, V3.0, V4.0 and V4.1 use similar class processing software
  - Consistent error checking and input cleanup steps performed

- Captured more OBS data items
  - Visualization Symbol Name
  - Shared Flyout and Munition list data

- Sanitize input Strings (only Class Data Types)
  - Removed leading/Trailing Blanks
  - Removed special Control Characters seen in sample files

- SAX Parser (V4.1)
  - Improved SupplyClass decoding

- Fixed Embarked Unit's Position
  - Only OBS V4.x versions impacted
  - Unit no longer placed at 0N, 0E

Fix List Items
- JLOD-1356
- JLOD-1362
- JLOD-1363
- JLOD-1374
- JLOD-1376
- JLOD-1393
- JLOD-1404

ForceGen – Save OBS Class Data to CSV files

File	Export Classes	Validate Classes	OBS Fix/Repair	Positions

Save Emitter-Class
Save Supply-Class
Save Transceiver-Class

Save EntityComposition-Class
Save Unit-Class

Save Flyout-List
Save Munition-List
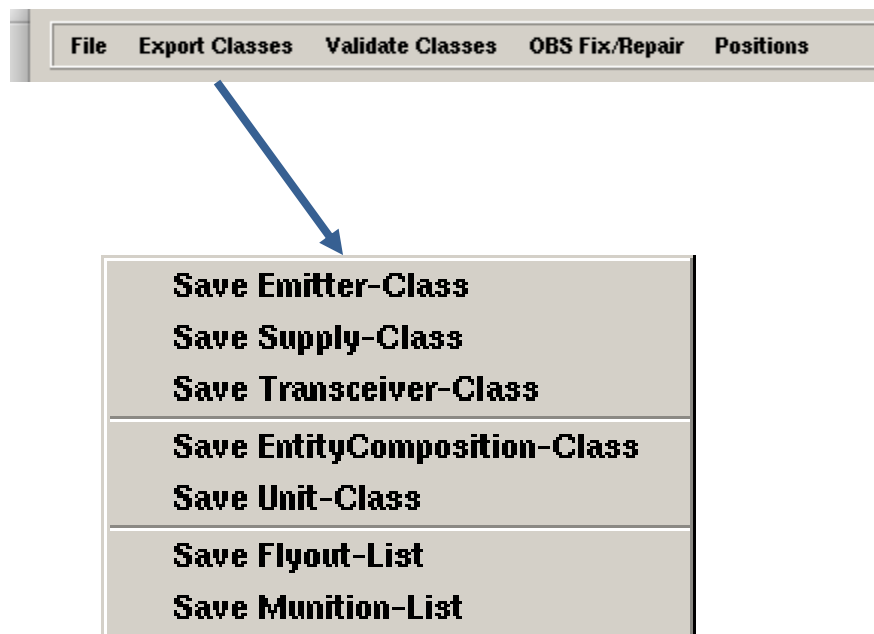
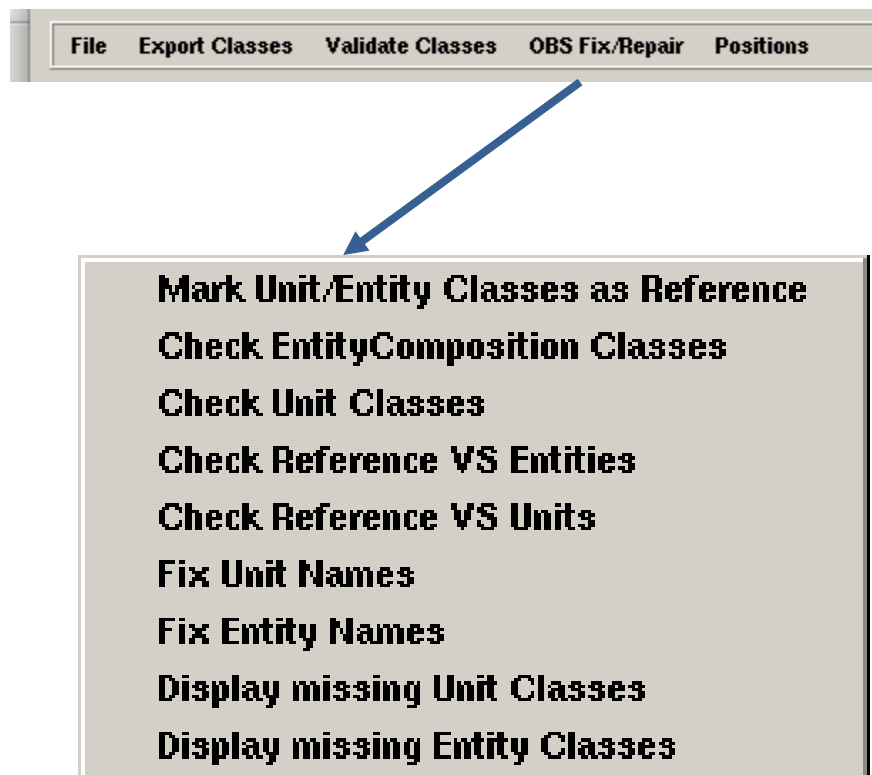➢ Dump OBS Class data to CSV Files

➢ Supports all versions of OBS files
  ➢V1.4, V2.0, V3.0, V4.0, V4.1

➢ Part of OBS Export effort
  ➢Ensure exported/consumed data matches

Fix List Items
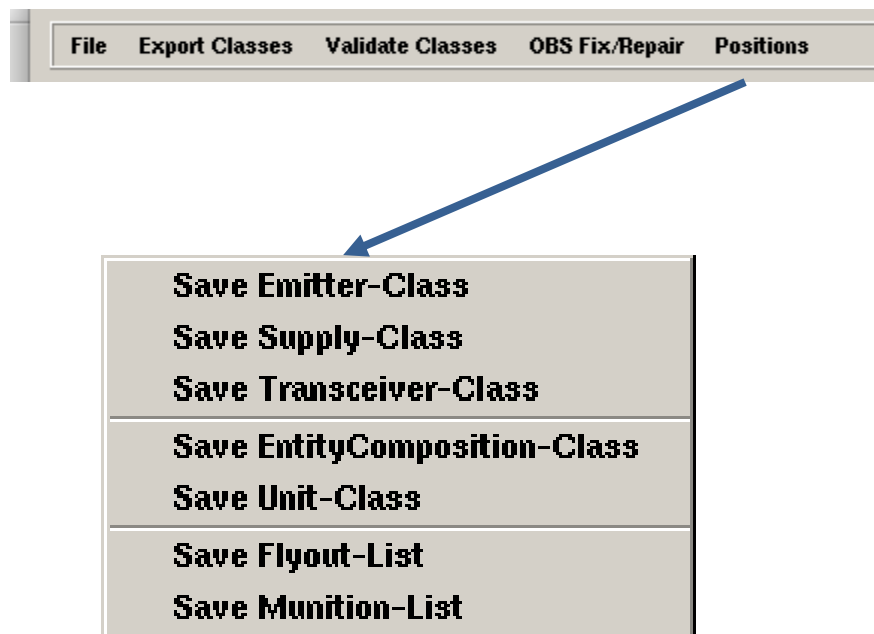- JLOD-1375

ForceGen: Simple Repairs to non-JTDS OBS files

File	Export Classes	Validate Classes	OBS Fix/Repair	Positions

- ➢ Simple Repairs/Fixes to OBS files
  - ➢Non-JTDS generated files
- ➢ Entity/Unit Name Repairs
- ➢ Unit Class remapping
- ➢ Entity Class remapping

Mark Unit/Entity Classes as Reference
Check EntityComposition Classes
Check Unit Classes
Check Reference VS Entities
Check Reference VS Units
Fix Unit Names
Fix Entity Names
Display missing Unit Classes
Display missing Entity Classes

Fix List Items
- JLOD-1392

ForceGen – Save Entity Positions to CSV files

File | Export Classes | Validate Classes | OBS Fix/Repair | **Positions**

- Save Emitter-Class
- Save Supply-Class
- Save Transceiver-Class
- Save EntityComposition-Class
- Save Unit-Class
- Save Flyout-List
- Save Munition-List

➢ Dump all Entity Positions to a CSV file
  ➢ Input can be used for Positioning/Tasking in the simulation

➢ Supports all versions of OBS files
  ➢ V1.4, V2.0, V3.0, V4.0, V4.1

➢ Part of OBS Export effort
  ➢ Ensure exported/consumed data matches

Fix List Items
- JLOD-1403

# OBS Exporting: Federation Play

- Data Source Tracking (ie. From OBS, Federation, etc)
  - Class and Instance data are marked from OBS, Federation, etc

- OBS will save the following
  - Positions of Units and Entities that are not part of an active Unit
  - Towed states
  - Health States (ALIVE/DEAD only)
  - Current Controlling Simulation (post transfers)
  - Embarked state

- OBS Data Loss due to Federation conversion
  - Positions of entities in an aggregate are not saved to OBS
  - Only ALIVE and DEAD are valid state from OBS
  - Platform level logistics are only saved from JLOD
  - Only OBS and DUC entities are saved from the federation.
  - JLOD can optionally add its REC'ed entities to the output OBS file

Fix List Items
- JLOD-1379

NOTE: OBS snapshot of externals only as good as data provided

Improved OBS Exporting
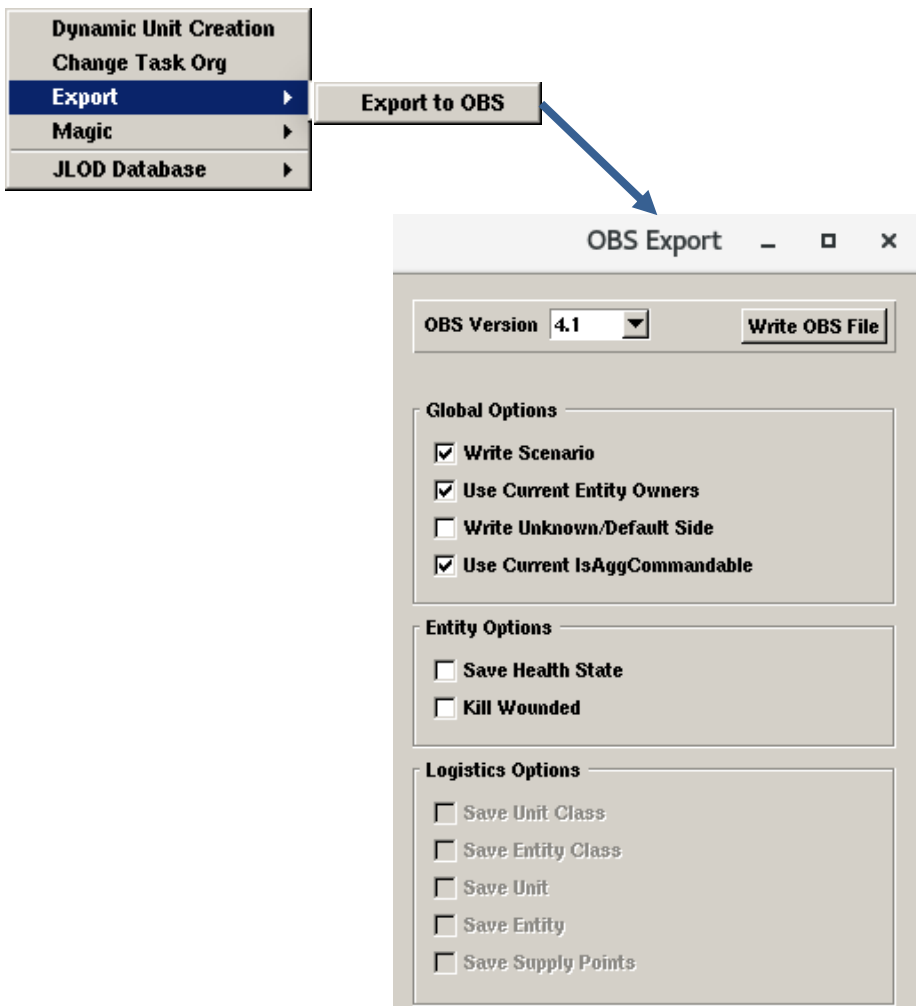
- ➢ Take snapshot anytime
  - ➢ Best when all federates are playing

- ➢ Write several version of the OBS file

- ➢ Fixes this version include
  - ➢ Supply Class – DODIC and DIS codes
  - ➢ Track Entity Class Visualization Symbol
  - ➢ OBS V4.1 Header fix (DDMS Person tags)
  - ➢ Instance Source Tracking
  - ➢ Supply Classes correct write Burst Descriptions
  - ➢ Smaller XML files via empty XML tags

Fix List Items
- JLOD-1355
- JLOD-1363
- JLOD-1366
- JLOD-1354
- JLOD-1373
- JLOD-1380

Quick Link to Flyout Damage Report

Fix List Items
- JLOD-1398

- ➢ Perform data query from Missile Flyout Report
  - ➢ As Shooter and Target
  - ➢ Auto-fills LVCID into Query Tab
  - ➢ Performs query for Engagement Results
- ➢ Incoming Shots Option
  - ➢ Gathers all BDA records were entity was a target
- ➢ Shots Taken
  - ➢ Gathers all BDA records were entity was the shooter
- ➢ BDA Records are gathered from Federation
  - ➢ Not all simulations provide hit/miss records
  - ➢ Ground to Ground Combat is not captured

Added Sea/Land Mine Engagements Reports

➢ Added Sea/Land mine engagements to missile flyout report
  ➢ NOTE: Only JLOD and MTWS mines will captured in report
➢ Added ability to capture external Sea/Land mine engagements (must use seamine)

Fix List Items
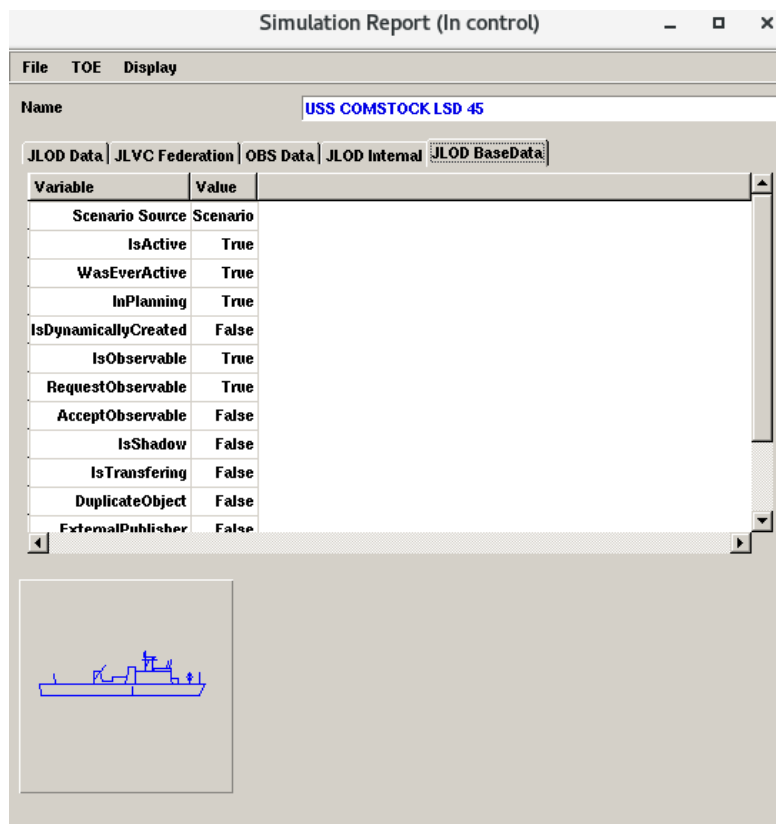- JLOD-1342
- JLOD-1343

Removed LogMsgType Controls

➤ Removed a depreciated user control

➤ User Windows impacted
  ➤ Controller Panel – Logistics Pane
  ➤ SimulationReportWindow
  ➤ GroupControl – Magic Logistics

➤ Removed Filter

Grouping	Attribute	Description	Range of Values
Database (Dynamic)			
	Log Msg Type	Controlled communication scheme for logistics	NONE, JLOD, JLVC

Extended Simulation Report Window

- ➢ Added internal Federation State information
  - ➢ Scenario Source indicates entity's source
  - ➢ Other state can be used for diagnostics

- ➢ Population Entities can now seen in report.
  - ➢ JLOD's Population Entity info can be examined

Fix List Items
- • JLOD-1395

Improved Entity Logistics Controls

- Display of supplies controlled by class-type

- Sort Table by Selecting Header

- Right-Click Commands
  - Resupply – Resupply selected item
  - Dump – dump selected item
  - Resupply All – Resupply all in table
  - DumpAll – Dump all from table

- Color Coded Supply Levels
  - 85%+ = Green
  - 70%+ = Yellow
  - 50%+ = Red
  - 50% and Lower = BLACK

Fix List Items
- JLOD-1397

Improved Magic Health Controls

- Enabled Processing of Units

- Process all Subordinate Entities
  - Immediate Entities are included

- Process all Subordinate Units
  - Auto selects Include Entities
  - Recursively processes Units

Fix List Items
- JLOD-1400

Improved Magic Logistics Controls

Controller Group Orders Tool (In control)

Order Input: Magic Logistics

Magic Log Percent (In control)

Logistics Levels

Supply Classes to Impact

- [ ] Class-1 [ ] Class-2 [ ] Class-3 [ ] Class-4 [ ] Class-5 **Set All**
- [ ] Class-6 [ ] Class-7 [ ] Class-8 [ ] Class-9 [ ] Class-10 **Clear All**

Desired Stockage Percent: 100

[ ] Include Subordinate Units   [ ] Include Immediate Subordinate Entities

Select: ANY SYSTEMs or ROSTERs or POPULATIONs that are ACTIVE

Order Recipients

Load Group	Row	Item Type	Name	OBS ID
Clear Table				
Insert Row				
Delete Row				

SUBMIT Order

GUI Moved

Menu items:
- Position/Tasking Tool
- Emissions Scheduler Tool
- Distance Tool
- Filter Tool
- Group Orders Tool
- Locations Tool
- Logistics Tool
- Movement Controls
- Movement Orders Tool
- Networks
- Radio MSEL Tool
- Population Moods
- Mines / Lanes / Barriers
- Magic
  - Position
  - Health
  - Health (Implicit)
  - Shoot
  - Repair Status
  - Logistics Percent

➢ Enabled Processing of Units

➢ Process all Subordinate Entities
  ➢ Immediate Entities are included

➢ Process all Subordinate Units
  ➢ Auto selects Include Entities
  ➢ Recursively processes Units

➢ Select Supply Class Types
  ➢ Can adjust several at same time
  ➢ Adjust levels

Fix List Items
- JLOD-1402

Added Situation Report

- ➢ Generate Report On-Demand
  - ➢ Control Panel -> Reports -> SitRep

- ➢ Captures the following info
  - ➢ Time of report
  - ➢ Location at time of report
  - ➢ Unit reporting
  - ➢ Subordinate Units Location
  - ➢ Logistics Values
  - ➢ Personal and Equipment

Fix List Items
- JLOD-1405

Simulation Improvements and Fixes

➢ Set Orientation as an option with magic set position
➢ Fixed processing of empty string from federation
➢ Reduced LogReport network traffic from federation
➢ Magic Health Updates use the new Smoking/Burning effects routines
➢ Fixed Crash when using the Entity Report
➢ Fixed Supply Package Editor to use OBS Supplies values
➢ Fixed Crash when using Logistics Tool to load package with a bad supply name
➢ Added LVCID to the BDA interaction to support mounted entities.
➢ Improved Health adjustments to drive IntelState and ACE-IOS intel feeds

Fix List Items
- JLOD-1340
- JLOD-1351
- JLOD-1368
- JLOD-1370
- JLOD-1396
- JLOD-1406
- JLOD-1407
- JLOD-1365
- JLOD-1377

Workstation Improvements and Fixes

➢ Population Entities and Missions now can open Federation Reports

➢ Fixed Display of OBS Supplies on both PEChar and RosterChar data viewer windows.

➢ Improved support for Scene Generators (MUSE/VBS3/etc)

➢ On kills, both FlamesPresent and Smoking appearances are set

Fix List Items
- JLOD-1344
- JLOD-1381
- JLOD-1369

New Filter Attributes

➢ Filter Attributes used in Reports, Raster Displays, TOE filtering

Grouping	Attribute	Description	Range of Values
Database			
	Self Detonation Munition	Munition Name	String that can be empty
	Is Flyout	Is on the OBS Flyout List	On or NOT On OBS flyout list
	Scenario DataType	Defines were the entity was added to the as-played game	Unknown, Scenario, Ad-Hoc, Run-Time

Fix List Items
- JLOD-1371
- JLOD-1378
- JLOD-1399

Questions?
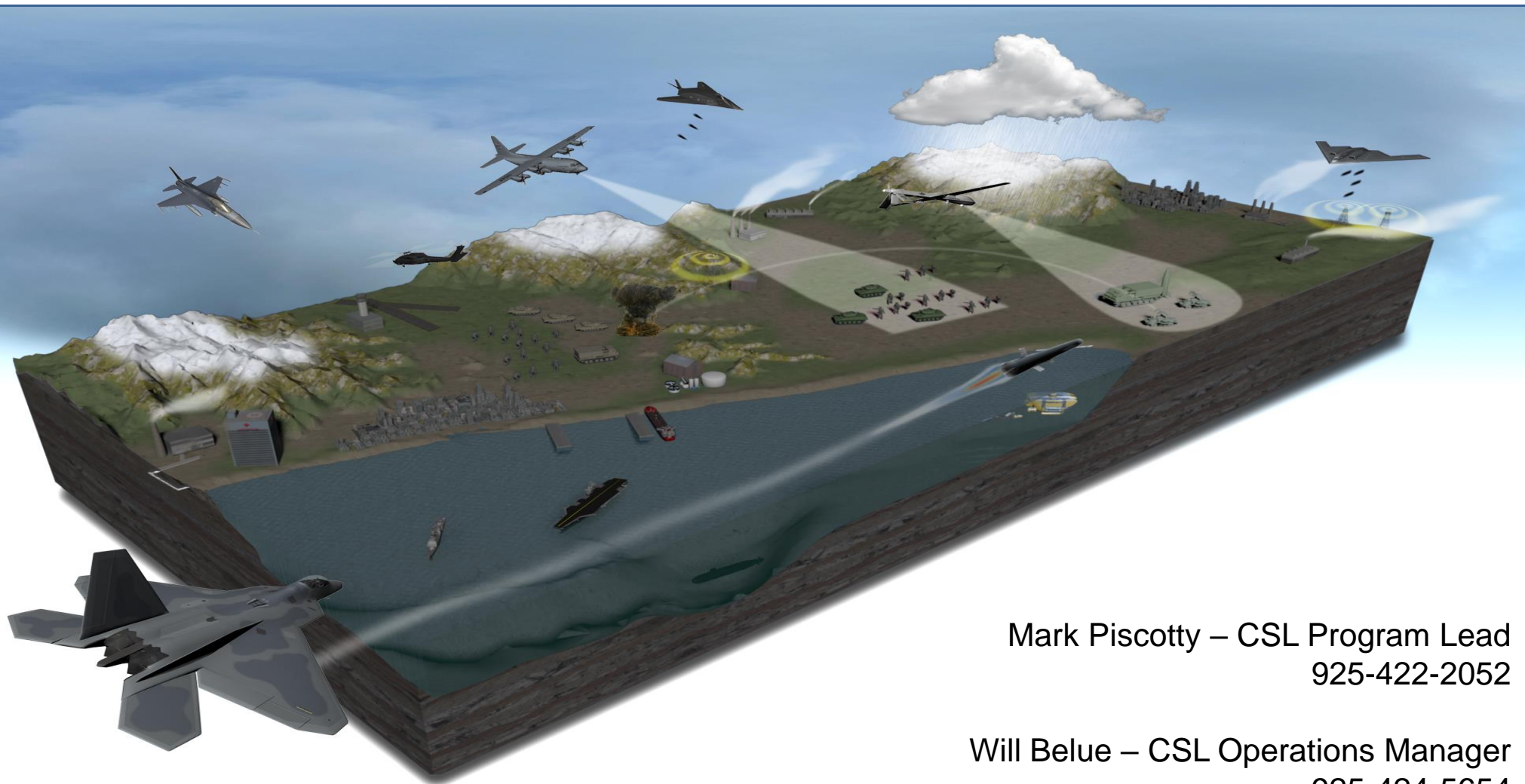
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Backups