

JCATS – What's New in JCATS 18.0

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JCATS Web Page: <https://csl.llnl.gov/>



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Enhancements & Improvements

(NF) = New Feature (I) = Improvement

Client

- (NF) Google Earth KML Importer
- (I) Cruise & Harpy Launch Controls
- (I) SimExec Workstation/Client Status delete

Event Batch Analyzer

- (I) Details Report Filter

JCATSRC

- (NF) Browser Client Banner

Vista

- (I) Tadil-J Link-16 Capable Check

Browser Client

- (NF) CAC Login Shows Name

GCCS Bridge

- (NF) New Tadil-J Messages
- (I) Tadil-J Parameter Configuration
- (I) Tadil-J Publication Table

System Administration

Operating System

JCATS v18.0 runs on the following Operating System:

- Preferred: RHEL 8.8
- Supported on: RHEL 8.7 & 8.9

Client

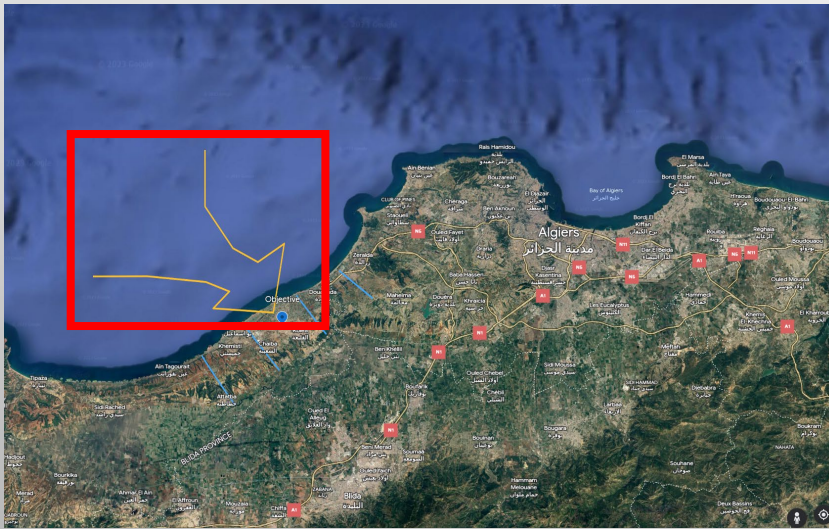
Google Earth KML Importer

- Google Earth allows creation of CAC overlays to can be exported in KML format
 - The overlay has associated position data; it must be imported into a playbox with the area where it was created in Google Earth
 - Google Earth currently only supports lines, polygons, and markers with a heading
 - Headings are imported
 - Markers are not imported
- Editing KML overlays:
 - Each object created in Google Earth is imported as a single object
 - Objects can be edited by the JCATS CAC editor similar to standard JCATS CAC overlays.
 - Objects can be positioned, rotated, or the color changed
 - the shape is fixed; nodes cannot be moved, deleted, or added

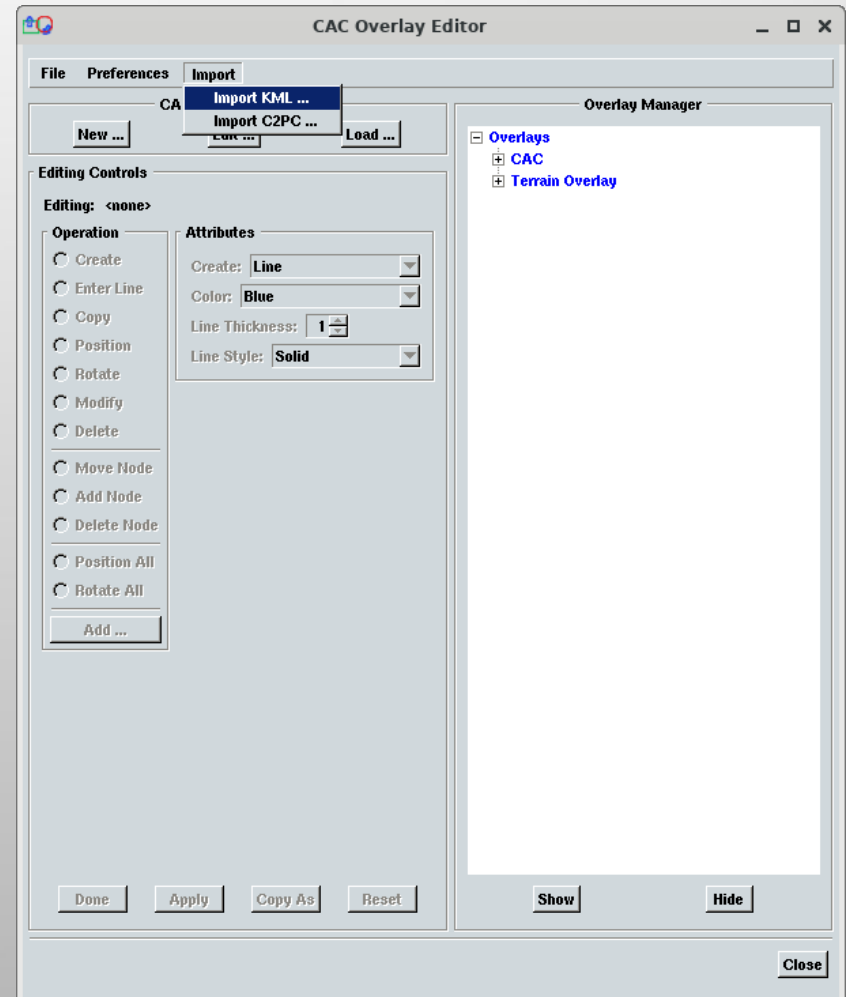
Google Earth KML Importer



Google Earth

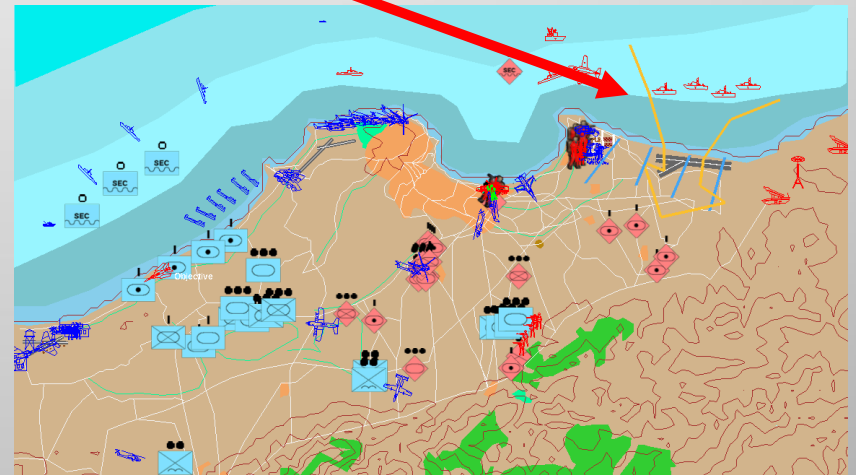
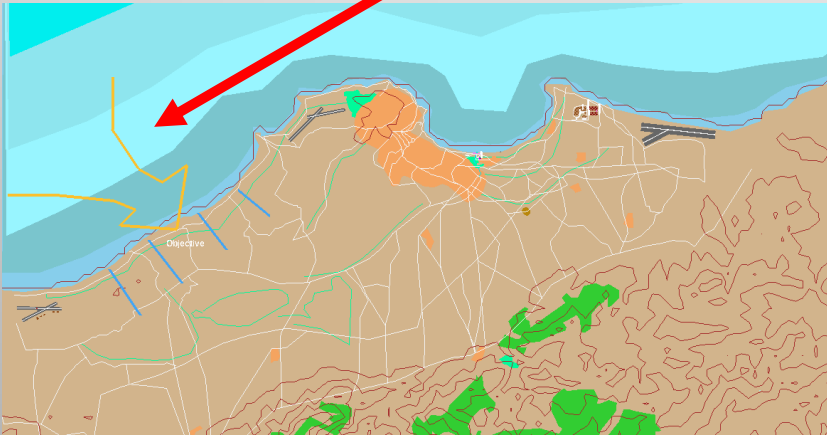


The CAC Overlay is created in Google Earth and then exported in KML format; the JCATS Workstation can then import that KML file



Google Earth KML Importer

The imported CAC overlay has been rotated and moved but it cannot be reshaped



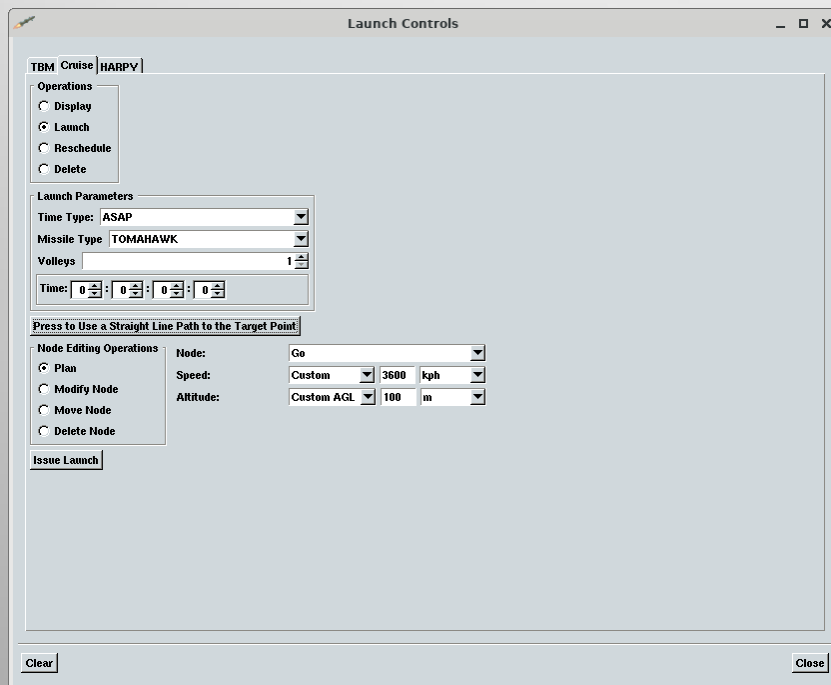
Cruise Missile Routes & Command

The Launch controls have been modified for both Cruise & Harpy munitions:

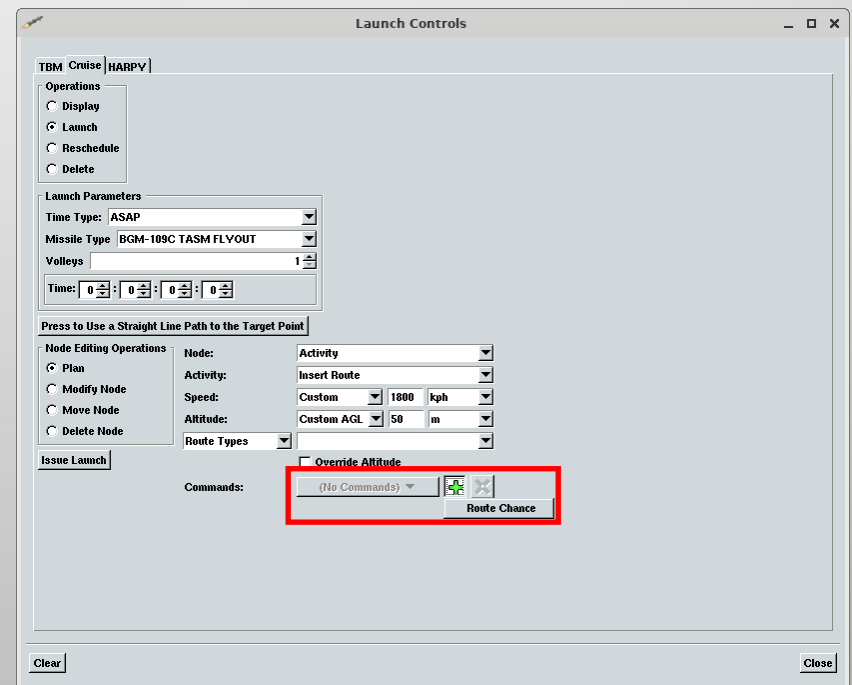
- The Movement Commands options have been added
- Movement Activities not useable by the munitions have been removed from the pull-down list

Cruise Missile Route Chance

The Route Chance Command option has been added to both the Cruise and Harpy Launch controls.



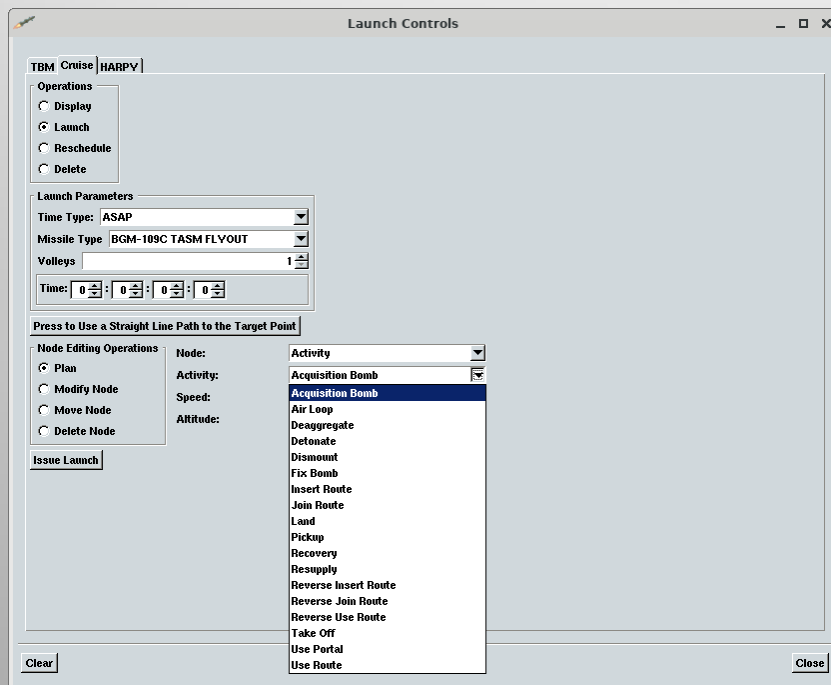
v17.1



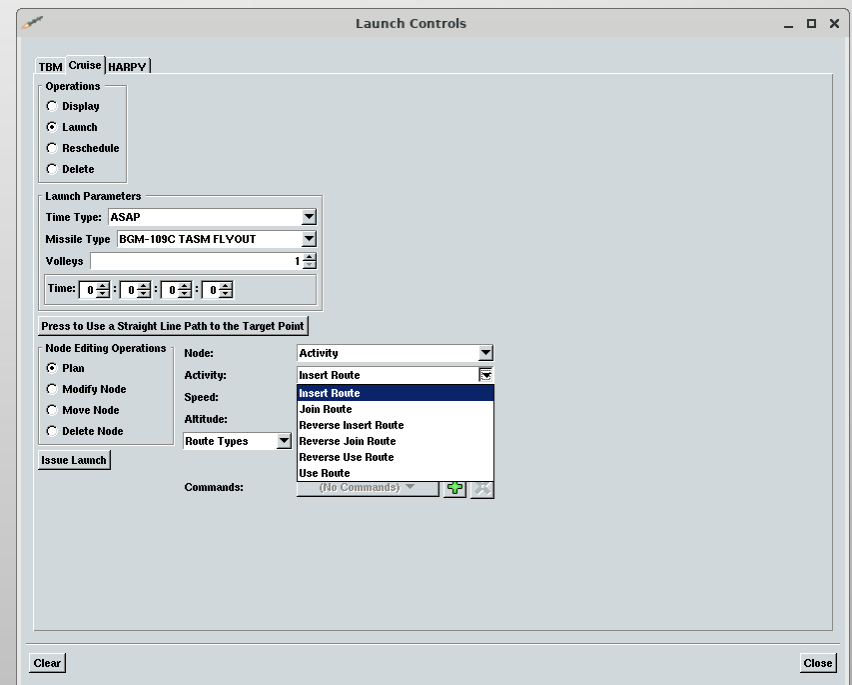
v18.0

Cruise Missile Activity

Movement Activities unusable to Cruise and Harpy munitions have been removed from the pull-down menu.



v17.1



v18.0

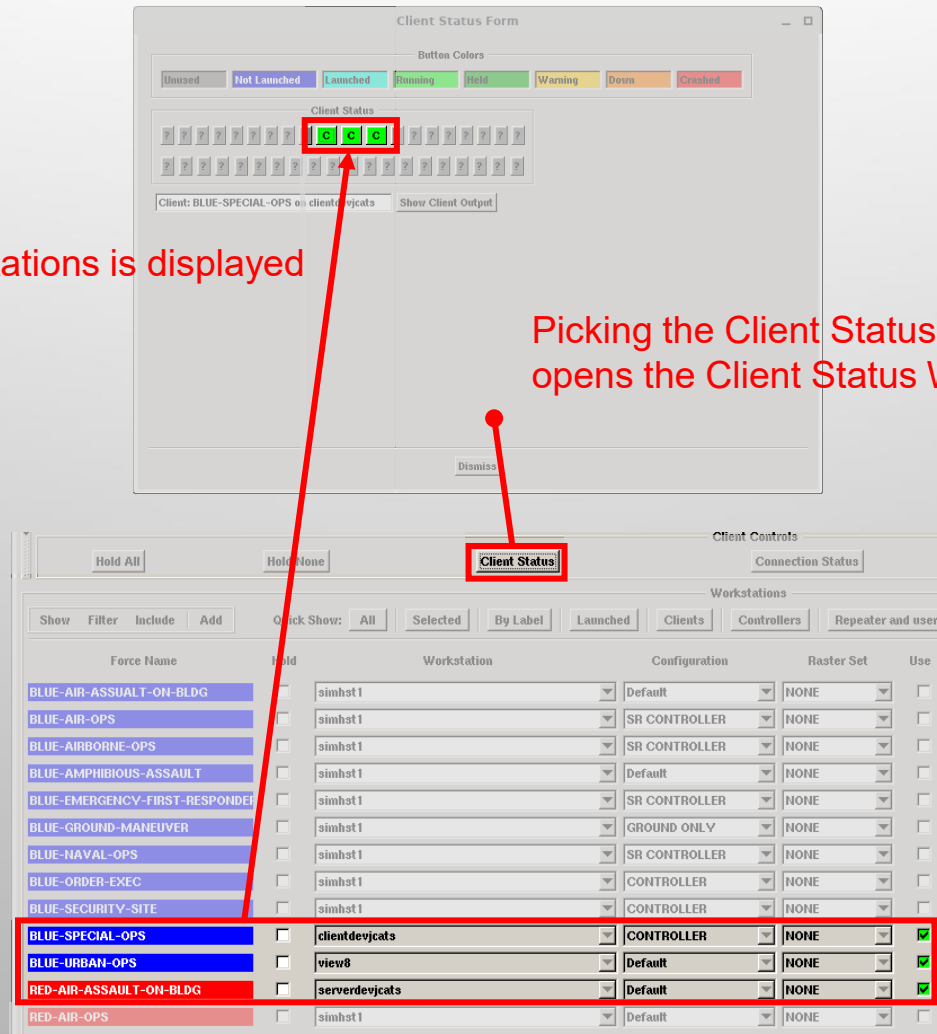
SimExec Client Status delete

SimExec has long had the Client Status box. JCATS v16 introduced the option to delete workstations from the SimExec Client list. However, deleting from the Client list didn't remove the workstation from the Client Status. Now it does.

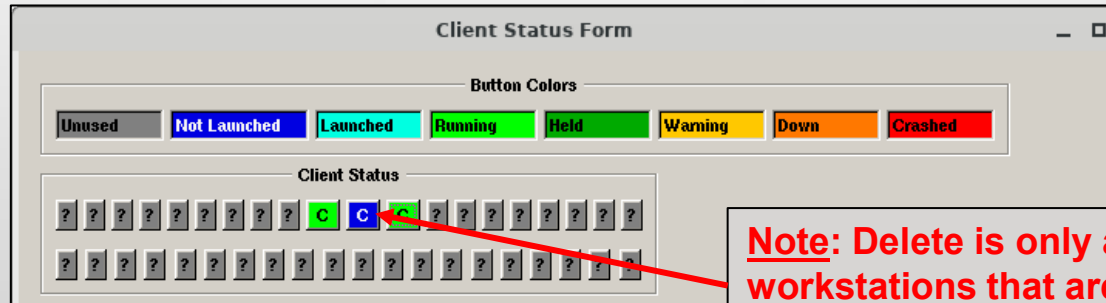
SimExec Client Status delete

Status of workstations is displayed

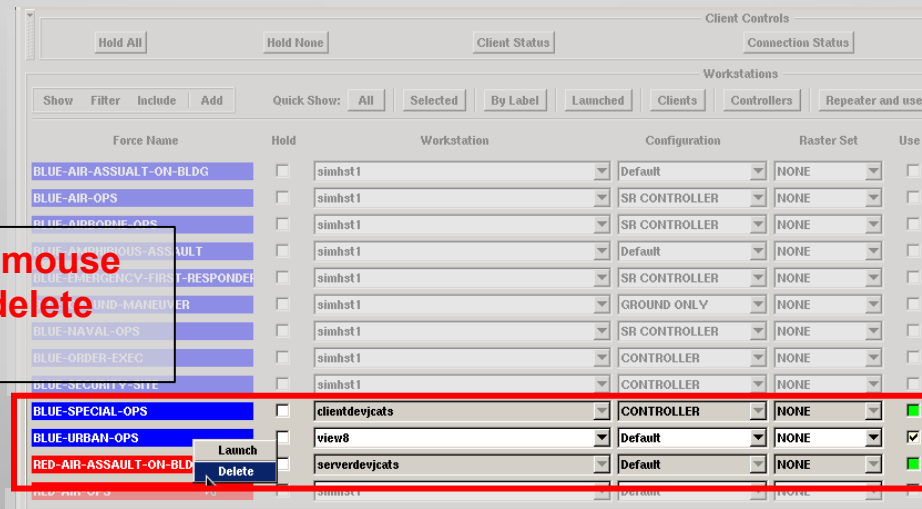
Picking the Client Status button opens the Client Status Window



SimExec Client Status delete

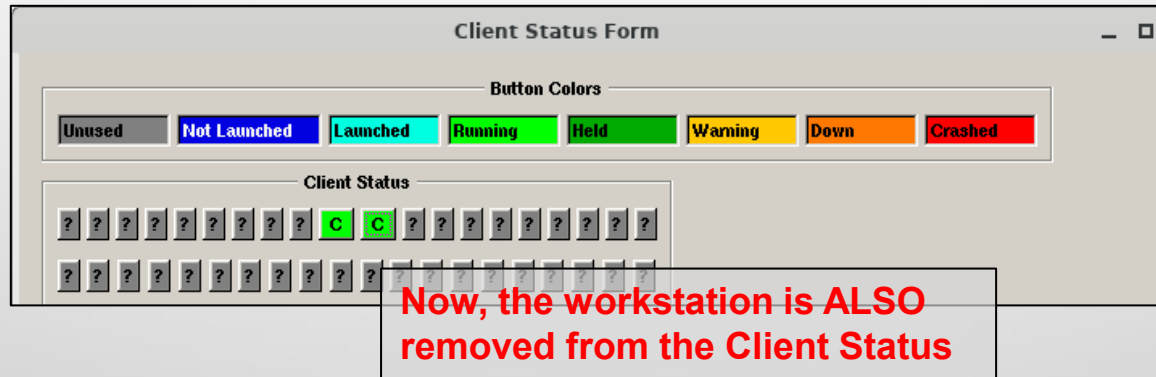


Note: Delete is only available on workstations that are NOT running



Pick a workstation with mouse button 3 to display the delete option

SimExec Client Status delete



The selected workstation is deleted as it has been since v16

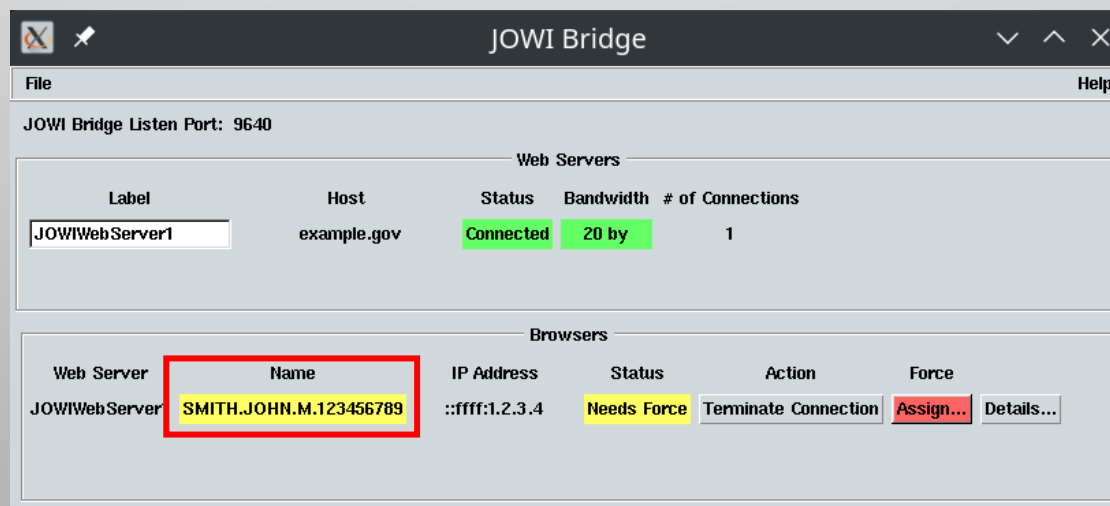
The screenshot shows the 'Workstations' table in the SimExec interface. The table has columns for 'Force Name', 'Hold', 'Workstation', 'Configuration', 'Raster Set', and 'Use'. The 'Workstation' column contains the values 'simhot1' and 'clientdevcats'. The 'Configuration' column contains the values 'SR CONTROLLER', 'Default', and 'CONTROLLER'. The 'Raster Set' column contains the value 'NONE'. The 'Use' column contains checkboxes. The row for 'BLUE-SPECIAL-OPS' with workstation 'clientdevcats' and configuration 'CONTROLLER' is highlighted in blue. The row for 'RED-AIR-ASSAULT-ON-BLDG' with workstation 'serverdevcats' and configuration 'Default' is highlighted in red. A red box is drawn around these two rows.

Force Name	Hold	Workstation	Configuration	Raster Set	Use
BLUE-AIR-OPS	<input type="checkbox"/>	simhot1	SR CONTROLLER	NONE	<input type="checkbox"/>
BLUE-AMPHIBIOUS-ASSAULT	<input type="checkbox"/>	simhot1	Default	NONE	<input type="checkbox"/>
BLUE-EMERGENCY-FIRST-RESPONDER	<input type="checkbox"/>	simhot1	SR CONTROLLER	NONE	<input type="checkbox"/>
BLUE-NAVAL-OPS	<input type="checkbox"/>	simhot1	GROUND ONLY	NONE	<input type="checkbox"/>
BLUE-ORDER-EXEC	<input type="checkbox"/>	simhot1	CONTROLLER	NONE	<input type="checkbox"/>
BLUE-SECURITY-SITE	<input type="checkbox"/>	simhot1	CONTROLLER	NONE	<input type="checkbox"/>
BLUE-SPECIAL-OPS	<input type="checkbox"/>	clientdevcats	CONTROLLER	NONE	<input checked="" type="checkbox"/>
RED-AIR-ASSAULT-ON-BLDG	<input type="checkbox"/>	serverdevcats	Default	NONE	<input checked="" type="checkbox"/>
RED-AMPHIBIOUS-ASSAULT	<input type="checkbox"/>	simhot1	Default	NONE	<input type="checkbox"/>
RED-EMERGENCY-FIRST RESPONDERS	<input type="checkbox"/>	simhot1	Default	NONE	<input type="checkbox"/>

Browser Client

CAC Login Shows Name

When using a Common Access Card (CAC) to log in, the Browser Client reads the user's name and displays it in the Name field

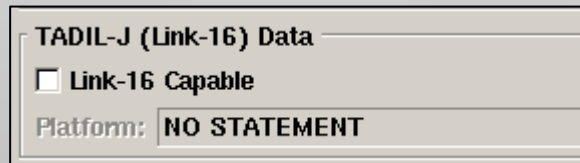


Vista

Tadil-J Data

The TADIL-J (Link-16) Data field has been updated in the following ways:

- The information in the pull-down list has been updated in coordination with MIL-STD-6016G
- A Link-16 Capable checkbox has been added to specify which air, surface, subsurface, or land platforms can publish link-16 messages



TADIL-J (Link-16) Data

☐ Link-16 Capable

Platform: NO STATEMENT

Event Batch Analyzer

Details Report Filter

The Direct Fire & the Indirect Fire Shot analyzers both have a Details button at the lower left which opens the Details report. This report can now be filtered.

- Columns can be filtered multiple times; the filter only analyzes what is currently in the report – items filtered out don't get considered
- Multiple columns can be filtered at once
- The following slides only show the Direct Fire Shots Details report, but the information applies to the Indirect Fire Shots Details report as well

Details Report Filter

The empty row at the top of the Details report is the filter row

- Each cell is the search field for the column below it
- Enter the text to be searched for and select the Filter button
- Use the Clear button to remove the search filters and restore all entries to the report
- The filter doesn't require an exact match – it searches partial matches

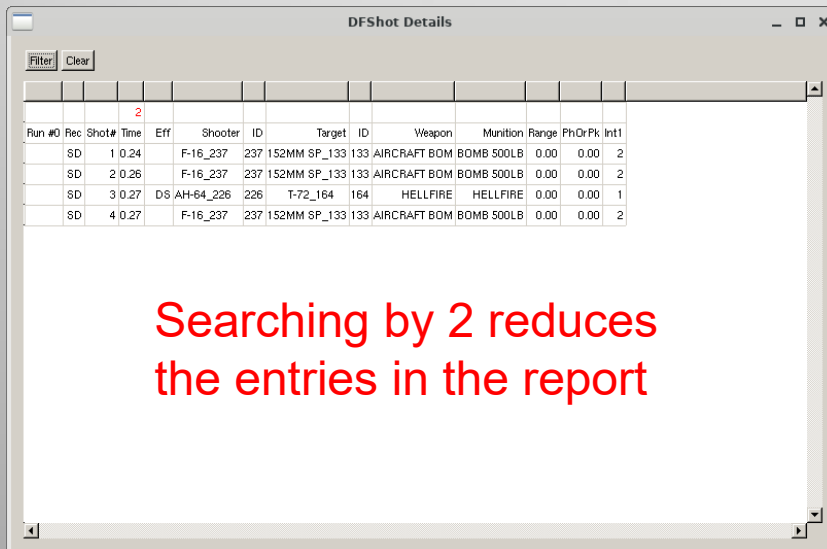
DFShot Details

Shot ID	Shot Time	Shot Type	Shooter ID	Target ID	Weapon	Warhead	Range	Altitude	Count
SD	1 0.24		F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00 0.00 2
SD	2 0.26		F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00 0.00 2
SD	3 0.27	DS	AH-64_226	226	T-72_164	164	HELLFIRE	HELLFIRE	0.00 0.00 1
SD	4 0.27		F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00 0.00 2
SD	5 0.34		F-16_236	236	152MM SP_139	139	AIRCRAFT BOM	BOMB 500LB	0.00 0.00 2
SD	6 0.35		F-16_236	236	152MM SP_139	139	AIRCRAFT BOM	BOMB 500LB	0.00 0.00 2
ID	3 0.37	DUD	AH-64_226	226	T-72_164	164		HELLFIRE	2.00 0.95 0
SD	7 0.37		F-16_236	236	152MM SP_139	139	AIRCRAFT BOM	BOMB 500LB	0.00 0.00 2
SD	8 0.44	DS	AH-64_226	226	T-72_164	164	HELLFIRE	HELLFIRE	0.00 0.00 1

Details Report Filter

Filtering can be done in stages:

1. Enter a search string in the appropriate field and select Filter
2. Enter a second search string and select Filter
 - The report searches only those entries currently in the display and removes any that don't fit the search parameters
 - It's not necessary to search in the same field each time

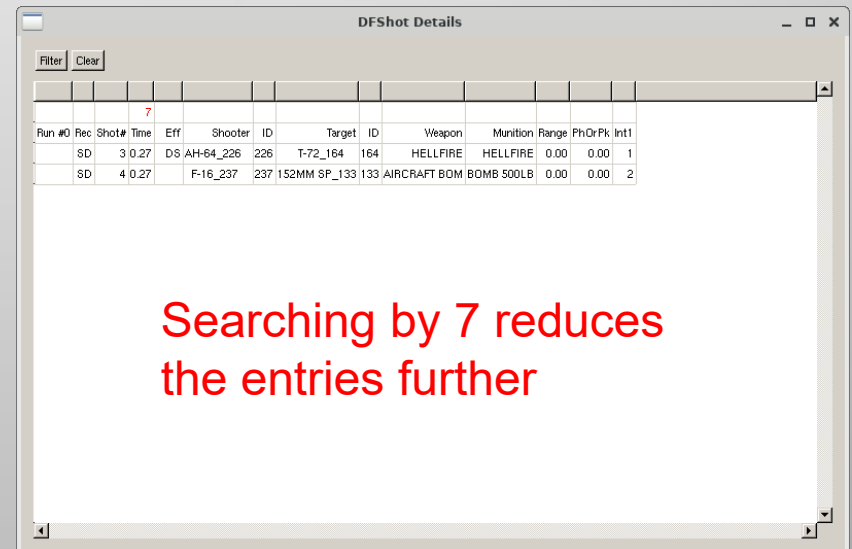


DFSOT Details

Filter Clear

Run #	Rec	Shot#	Time	Eff	Shooter	ID	Target	ID	Weapon	Munition	Range	PhOrPk	Int1
SD	1	0.24			F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00	0.00	2
SD	2	0.26			F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00	0.00	2
SD	3	0.27			DS AH-64_226	226	T-72_164	164	HELLFIRE	HELLFIRE	0.00	0.00	1
SD	4	0.27			F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00	0.00	2

Searching by 2 reduces the entries in the report



DFSOT Details

Filter Clear

Run #	Rec	Shot#	Time	Eff	Shooter	ID	Target	ID	Weapon	Munition	Range	PhOrPk	Int1
SD	3	0.27			DS AH-64_226	226	T-72_164	164	HELLFIRE	HELLFIRE	0.00	0.00	1
SD	4	0.27			F-16_237	237	152MM SP_133	133	AIRCRAFT BOM	BOMB 500LB	0.00	0.00	2

Searching by 7 reduces the entries further

Details Report Filter

Filtering can be done using multiple fields at once; simply enter the desired search parameters in each field and select Filter

DFShot Details													
Filter		Clear											
Run #	Rec	Shot#	Time	Eff	Shooter	ID	Target	ID	Weapon	Munition	Range	PhOrPk	Int1
SD	3	0.27	DS	AH-64_226	226	T-72_164	164	HELLFIRE	HELLFIRE	0.00	0.00	1	
ID	3	0.37	DUD	AH-64_226	226	T-72_164	164	HELLFIRE	HELLFIRE	2.00	0.95	0	

GCCS Bridge Tadi-J Messages

JCATS added new Tadi-J messages published across the GCCS Bridge using the latest MIL-STD-6016G

- Surface: (J2.3) and (J3.3) messages
- Subsurface: (J2.4) PPLI and (J3.4) messages
- Air Track: (J3.2) message

Refer to the following slides for additional details

Tadil-J PPLI (J2.x) Messages

The following Precise Participation Location & Identification messages have been added:

- J2.3 – Surface PPLI messages
- J2.4 - Subsurface PPLI messages
- J2.5 – Stationary Ground PPLI messages
- J2.6 – Mobile Ground PPLI messages

Tadil-J Hostile Track (J3.x) Messages

The following Hostile Track messages have been added:

- J3.2 – Acquired Air tracks
- J3.3 – Acquired Surface tracks
- J3.4 – Acquired Subsurface tracks

Tadil-J Management Messages

The following Management messages have been added:

- J7.0 – Track dropped messages

Tadil-J Parameter Configuration

- Added a Track Number Assignment section to allow users to specify the required low and high track number ranges
- Additional ranges can be added if desired
- Track numbers in the specified range are used to assign Source PPLI track numbers and Track Target numbers

TADIL-J Parameters

JREAP/TADIL-J Connection

Host: gccs

Port: 7022

☒ Fast Common Time Reference Negotiation

JRE Configuration

Interface Unit number (octal): 12

Track Number Assignment

Low Track Number Range : 02000 03777 +

High Track Number Range : 20000 37777 +

Ok Cancel

Tadil-J Publication Table

The JREAP/TADIL-J Publications table has been modified to display all J2, J3, and J7 messages

Filters have also been added enabling users to display only the desired messages

JREAP/TADIL-J Publications

J2.X Publications

Display J2 message: ☒ J2.2 ☒ J2.3 ☒ J2.4 ☒ J2.5 ☒ J2.6

Message Type	Platform	Source Track Number	Publication Time	
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J3.X Publications

Display J3 message: ☒ J3.2 ☒ J3.3 ☒ J3.4

Message Type	Platform	Source Track Number	Publication Time	Track Number	
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J7.0 Drop Track Publications

Platform	Source Track Number	Drop Time	Track Number	
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Find by Track Number

JCATS RC File Additions

Browser Client Banner

- Entry:

```
!! Browser Classification Banner  
Jowi.Podman.Classification.Bgcolor: green  
Jowi.Podman.Classification.Textcolor: white  
Jowi.Podman.Classification.Text: Unclassified
```

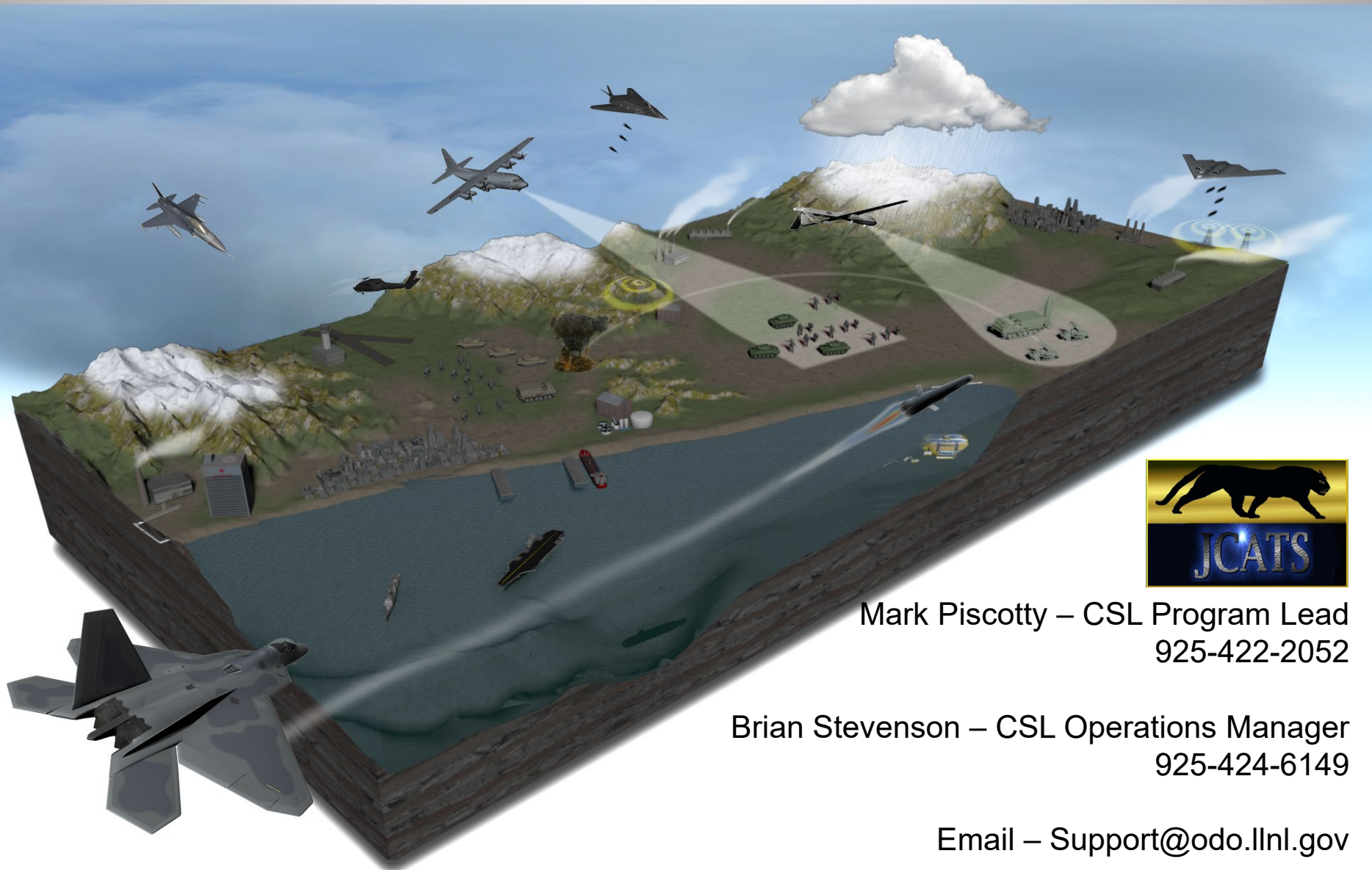
- Purpose:

- Allows users to apply a banner to the Browser Client; intended for use in displaying classification level
- Users can edit the Text, Text Color, and Banner Color
- Only available in the new podman-based browser client

Additional Improvements

- (NF) NETN-MRM (Multi-Resolution Modelling)
- (NF) NETN-ETR (Entity Tasking & Reports)
- (NF) NETN-ORG (Organization)
- (NF) RPR3 based on JLVC FOM
- (NF) Added Planned Direct munitions to the ACE xml export schema; includes burst descriptor and fire mode
- (I) STIG-Compliant Containerized Web Server

Questions?



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