

JTLS-2013-11683 Multiple Line Delete In DDS

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1.0 Summary of Model Change Request

The desire of this Engineering Change Proposal (ECP) is to allow the user to highlight several rows of a table and delete all of the records that are highlighted. The preference is to use the standard Shift and Control keys to highlight the rows the user wants to delete.

2.0 Design Summary

The ECP is fairly straight forward and a capability that many users have referenced in the past. The biggest reason that this has not been implemented previously is because once a record is delete, it is a difficult process to put the record information back. Given that [JTLS-2008-10000 Database Repository](#) is also being delivered with JTLS 5.1.0.0, it is now easier to retrieve full data records if something is accidentally deleted.

The design team feels that this multiple line capability should not be simply limited to the deleting of records, but should include other multiple line capabilities desired by users. As a summary three multiple line capabilities will be delivered as part of this ECP. These are:

- Multiple line or record delete from a table.
- Multiple line attribute update.
- Multiple line Scenario Verification Program (SVP) correction.

3.0 Detailed Design

Each of these multiple line capabilities are addressed independently.

3.1 Multiple Line Record Delete

The purpose of this multiple line capability is to allow the user of the web-enabled Database Development System Client (DDSC) to easily delete several records from a table as a group. The design is fairly straight forward.

The user brings up any table in the DDSC. The user has the following choices to highlight the rows or records that should be deleted:

- Using the mouse click on any table record. This will highlight the single table record.
- Using the mouse and the “Control Key” click on any table record. This will highlight the current row and add it to the list of highlight rows.
- Using the mouse and the “Shift Key”, click on any table record. This will highlight all rows from the first highlighted row in the table to the row that was just clicked.

These are the same rules used by the WHIP to highlight multiple IMT rows when using the Quick Retrieval buttons or the DDSC to highlight multiple rows for retrieval of child-table records.

Once the rows that should be deleted are highlighted, the user will simply click the “Right Mouse Button”, and select the option for “Delete Rows”. Once the “Delete Rows” option is selected the highlighted rows will be deleted by the DDSC through the Glassfish Server, one at a time just as if they were being deleted one at a time by the user.

The delete process will:

- Delete the highlighted records
- Delete the child records of the highlighted records.
- If one of the records is referenced elsewhere in the relational database tables, the delete record will fail. A failed record will not stop the delete process. The problem record will fail, but the DDSC will simply move on to the next highlighted record and attempt to delete the next record. At the end of the delete cycle through the highlighted records, the user will get a single failed delete “Pop-up” Information box that lists the records that had a problem.

3.2 Multiple Record Attribute Change

Multiple users would like to change an attribute of multiple records more easily than is currently possible. In previous versions of JTLS-GO, a DDSC user must click on an attribute, and enter the new value for the field. Click on the next record field, and again using the keyboard enter the new value for the field. For one or two records this is no big deal, but attempting to set the protection sectors to 360 degrees for all Air Search Radars would become a timely procedure.

To help with this issue, expert users directly access the database using the “sqlplus” capability. There are several issues with this solution:

- It is time consuming process to access sqlplus, look up the exact names of tables and attributes as held by the database system.

- Using “sqlplus” requires direct knowledge of the Standard Query Language (SQL). This knowledge helps a JTLS database development team, but it is not a mandatory job requirement.
- The use of “sqlplus” requires direct access to a server. Many current JTLS user organization are attempting to minimize the need for direct access to the servers on which JTLS operates. The feeling is that the web-enabled application with which JTLS is delivered should be able to handle all of the tasks required to interface with the database and the model.

This multiple record attribute change will work as follows:

- The user will highlight multiple rows of a table, using the same methods described in [Section 3.1](#).
- Once several rows are highlighted, the user will right click on the mouse, while the mouse is in the column header that should be changed. Currently this capability exists, but gives the user two options, as shown in [Figure 1](#) circled in Red. When the portion of this design is implemented, a third option, “Enter Value”, will be offered.

Name	Range	NAP Range	Max Altitude	Cruise Altitude	Efficient Altitude
A10	1200.0000 KM	1100.0000 KM	1150.0000 KM	23000.0000 FT	23000.0000 FT
C130	2000.0000 KM	500.0000 KM	1050.0000 KM	27000.0000 FT	27000.0000 FT
COBRA	1300.0000 KM	1100.0000 KM	1200.0000 KM	3000.0000 FT	3000.0000 FT
COCKARODACH	3000.0000 KM	1000.0000 KM	2800.0000 KM	25000.0000 FT	25000.0000 FT
E3A	8000.0000 KM	3500.0000 KM	7000.0000 KM	40000.0000 FT	40000.0000 FT
ERROR. 307	1200.0000 KM	1100.0000 KM	1150.0000 KM	23000.0000 FT	23000.0000 FT
ERROR. 312	1200.0000 KM	1100.0000 KM	1150.0000 KM	23000.0000 FT	23000.0000 FT
ERROR. 313	1200.0000 KM	1100.0000 KM	1150.0000 KM	23000.0000 FT	23000.0000 FT
ERROR. 314	1200.0000 KM	1100.0000 KM	1150.0000 KM	23000.0000 FT	23000.0000 FT
ERROR. 317	1200.0000 KM	1100.0000 KM	1150.0000 KM	23000.0000 FT	23000.0000 FT

Figure 1. Current Attribute Column Heading Options

When this third option is selected, an entry panel will be displayed and the user can enter the new desired value. When the new value is entered on the entry panel and the user indicates that the change should be made, a verification box will be displayed. The user must verify that this multiple line entry change is desired.

Once a positive verification is given for this single attribute, each of the highlighted row will get the newly entered attribute value.

- It is possible the at the database builder, using the table filtering capability, has all of the records displayed for which the attribute change is desired. Instead of requiring the user to highlight all of the displayed rows, the DDSC will assume that all rows should be changed if the user selects the “Enter Value” option, when no rows are highlighted.

If this is the case, the DDSC will display a verification box asking whether all records should be changed. If verification box will have to options: “Yes” and “Cancel”. If the user selects “Yes”, then the enter value panel will be displayed. The user can then enter a new value to change the attribute for all records currently displayed on the table panel.

3.3 Multiple SVP Corrections

The DDS has the ability to insure that all entered database parameters meet the requirements of the parameter such as acceptable range of values. It also has the ability to insure through table constraint definitions some simply between parameter checks such as making sure that a minimum range parameter is less than or equal to a maximum range parameter.

For the majority of between parameter checks, the Scenario Verification Program (SVP) is responsible for catching these errors. Once run, the SVP creates an Extended Markup Language (XML) file that can be viewed from the DDSC. The database build can look at the Errors and Warnings and correct the issues as needed.

From with the DDSC, there are available a list of what JTLS calls Automatic Correction Options. The user can select an option, and the automatic correct is implemented. There are three basic types of Automatic Correction Options:

- Find the object on the map. When this option type is selected, the DDSC map is automatically centered on the specified object and the database builder can get a better idea of the situation causing the error.
- Find the appropriate table record. When this option type is selected, the DDSC automatically displays the table in which the error or warning exists, locates the cursor within the table at the correct record and in many cases, the correct field. The database builder can then enter a new value as required to correct the error or warning.
- Automatic data correction. When this option type is selected, the DDSC automatically executes an SQL statement to either insert a record, delete a record or change one of the parameters within a record to fix the reported issue. This process works because the SVP computed an appropriate value and placed this value in the XML file so it can be accessed as part of an executed SQL command.

Under many circumstances there are several errors or warnings of the same type reported by the SVP. If the database builder wants to view the object on the map or bring up the appropriate to

manually fix the problem, there is little the Design Team can do to reduce the work load. Each of the errors and warnings must be analyze separately.

On the other hand, if the database builder wants to execute the same automatic data correction option for several reported errors or warnings of the same type, the user must click on each Error/Warning entry, click on the desired correction option, and verify that it should be done. This means the user must “click” three times to execute each fix. This is not bad if there are 5 or 10 Errors/Warnings of the same type, but is a time consuming nuisance if there are tens or even hundreds of Errors/Warnings of the same type for which the same automatic data correction option is desired.

The purpose of this multiple-line improvement is to make this automatic data correction option easier when the user wants to make the same correction for several entries of the same type. [Figure 2](#) is an typical example of the purpose of this improvement. Warning 1238 indicates that the sensor has a power value but it also indicates that it cannot be jammed. The idea of this warning is that if there is a power value, then the sensor is emitting and that emission could possible be jammed.

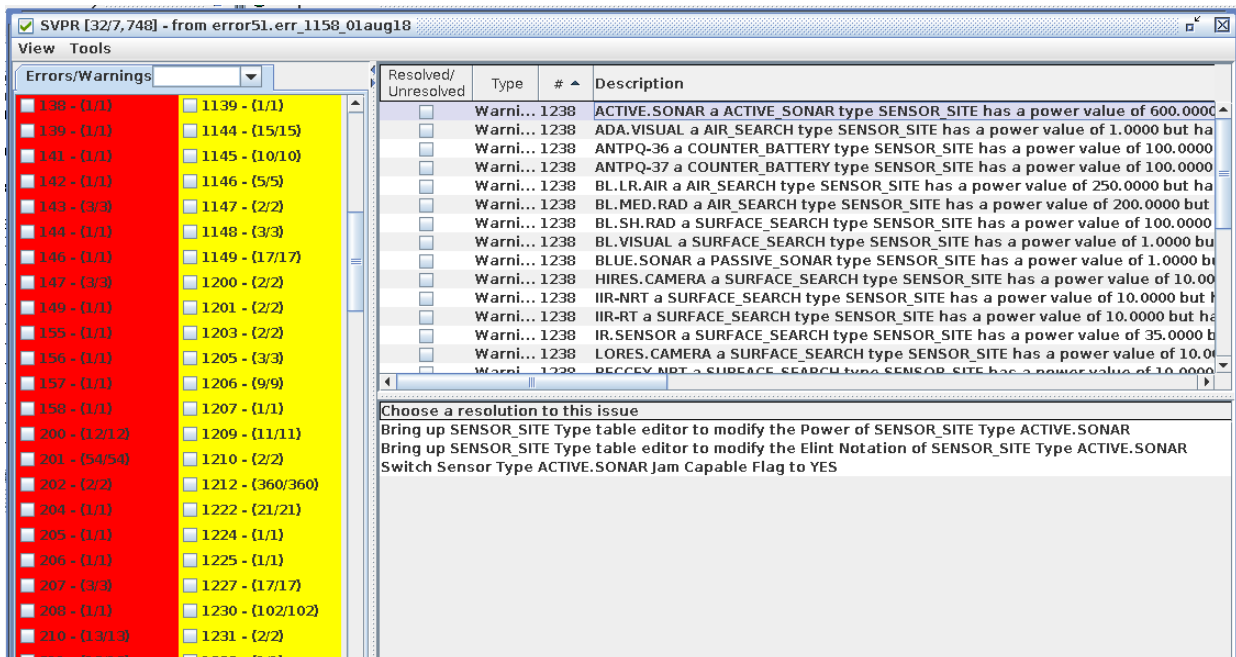


Figure 2. Example SVP Correction Issue

One of the Automatic Correction Options for this warning is to set the sensor Jam Capable Flag to Yes. With the implementation of this capability, the database builder can correct each of these 1238 Warnings simultaneously. The process will work as follows:

- The user will highlight multiple rows of a table, using the same methods described in [Section 3.1](#).

- Once the rows are highlighted, the user can right click on one of the automatic correction options. The options that can legally use the multiple correction capability will be highlighted in Green.
- The right click will cause the DDSC to verify that the multiple automatic correction capability is legal. This means that the following two checks must be passed:
 - a. If the user has several different Errors or Warnings highlighted, the right click will cause a pop-up Error Panel, indicating the multiple automatic correction capability cannot be used across different Warnings and Errors. When the user verifies the error by clicking the “OK” button, all of the highlighted rows on the SVP list will be cleared.
 - b. If the automatic correction option from which the right click was instantiated, is not highlighted in Green, i.e. it is not a legal correction option, a pop-up Error Panel will be displayed, indicating that the selected correction option is not available for the multiple correction capability. When the user verifies the error by clicking the “OK” button, all of the highlighted rows on the SVP list will remain highlighted.
- If the DDSC determines that the multiple option correction is legal, a pop-up Verification Panel will be displayed, asking whether all highlighted Warnings should be corrected.
 - a. An answer of “Yes” will result in the correction being applied and the Resolved box being checked for each highlighted Error/Warning entry.
 - b. An answer of “Cancel” will stop the correction process, leaving the current rows highlighted.

4.0 Data Changes

No data changes are required to implement this design.

5.0 Order Changes

No order changes are required as a result if this design.

6.0 JODA Changes

No JODA Data System parameter, structure, or protocol changes are required to implement this design.

7.0 Test Plan

Text *[Describe the basic test objectives and procedures. This Test Plan section may be published as a separate document.]*

7.1 Test 1 Title

Purpose: *[Describe the specific feature, function, or behavior to be tested or measured.]*

Step 1: Text

Step 2: Text

Expected Results: *[Describe the specific model behavior to be observed.]*

Expected Results:

