

Import Modifications for Cove Systems

This delivery includes specific modifications to the c-treeSQL Import Utility that have been requested by Cove Systems. FairCom is always willing to adapt and customize its technology and to meet specific application needs, and we are dedicated to providing proven, high-performance database technology. Therefore, we appreciate any input that will further enhance our technology and fulfill your needs. Thank you for choosing FairCom and we hope these enhancements will help you in all the ways possible.

1.1 ISSUES RESOLVED FOR COVE SYSTEMS

The following issues were identified by Cove Systems and have been resolved in the latest release of the code.

1.1.1 Support for Precision and Scale Information

Previously, the *ctsqlimp* utility did not provide support for precision and scale information for BCD fields. The precision and scale field information maintained in the system columns dictionary is now updated during table import with *ctsqlimp*.

1.1.2 Null field Handling

Cove stores 0 in CTDATE fields to indicate a field is NULL. When the data is imported using *ctsqlimp* and records are subsequently retrieved using ISQL or the c-treeSQL ODBC driver, errors are returned. Modifications were made to treat zero date values as NULL field values instead of generating an error. This fix applies only for reading date fields, as you will not be able to save zero date values using the c-treeSQL server (for that you need full NULL field support in the table).

Note that this issue required a change to the c-treeSQL Server rather than the import utility. This server is available upon request when Cove completes its current testing cycle.

1.1.3 Hidden Columns

The c-tree Plus ODBC driver allows users to hide columns within a table by prefixing an '_' to the column name. When such a file is imported into SQL using *ctsqlimp*, that capability is lost. To resolve this, when *ctsqlimp* encounters a column name that starts with '_', the user is now prompted as to whether or not they want the column or columns to be imported into SQL.

1.1.4 Default Prompt Option

By adding a switch to the import utility, Cove Systems can now skip fields that do not comply with the conventional identifier rules (i.e., fields that do not begin with a letter or contain letters, digits, or underscores) without being prompted by *ctsqlimp* every time an incompatible field is encountered.

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ctsqlimp already has a 'non-interactive' option (-I) which avoids prompting the user by having a list of pre-defined default answers. The actions taken by default are the most conservative and safe. In case an unconventional field is encountered, the default action is to import the field and inform the user that in SQL statements, the resulting column name must be enclosed in double quotation marks.

A new command line option (-K) can now be used in conjunction with the -I in order to change the default behavior in case an unconventional field is encountered. When both -I and -K are specified on the command line, any field that does not comply with the conventional identifiers rules is automatically skipped.

1.1.5 Invalid Character Checks

The SQL identifiers such as tables, columns, etc. are of two types: conventional and delimited (enclosed in double quotation marks). The conventional identifiers must begin with a letter and contain only letters, digits or underscore.

The *ctsqlimp* utility now checks that a field name complies with SQL syntax and displays a warning if that is not the case. The warning notes that the column resulting after the field importation must be enclosed within double quotation marks ("") when used in SQL statements. Furthermore the user is prompted to skip the field in case he wants to hide the column that does not comply with the conventional identifier rules.