



Purpose: The Import/Export utility enables defining various Import or Export profiles for all Files In TK/TC/BA etc

Activating the profiles can be initiated automatically without requiring any user interaction (i.e. by using scheduling programs such as System Agent or Norton Scheduler).

Environment: TK-SQL

Setup:

Step 1: General Definitions Tab

Profile Number - used whenever running any of the import/export profiles.

For example:

- Import Employee File from HR system.
- Export Daily T&A data
- Export Daily Job Costing data

Profile Description - contains the profile name.

Direction -
(1) Import
(2) Export

File Name (Database) – Primary file to/from which data is imported/exported
example: EMPLOYEE, DAILY, PERIOD, TCDAY, etc.

Sort By – Type of sort (index). Applicable ONLY when exporting data.

ASCII File Name- Default file name to be imported/exported.



ASCII File Type -

Fixed Length, Fixed Number of Fields:
Length = no. of characters in one record.

Fixed Number of Fields: Delimiters:

0 = Blank (" "),
1 = Comma (" , ")
2 = semicolon (" ; ")

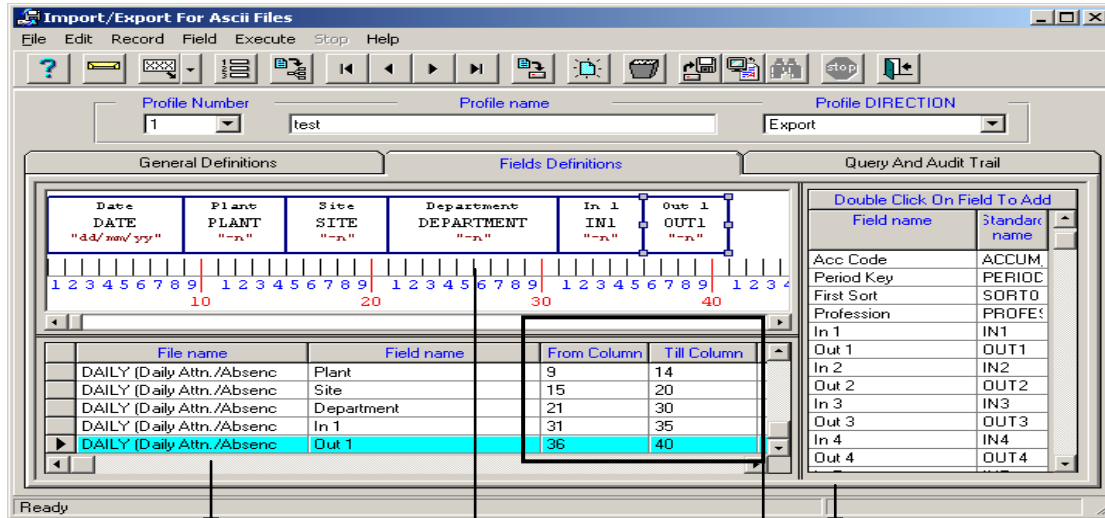
Update Character Indicator – A character-indicator that indicates not to overwrite the value of a field in the input-file if it contains such a character.

Example:

- Assume the Character Indicator is an asterisk (" * ").
- Assume a comma delimited input file with the following structure:
Employee No. (6 characters), Badge No. (6 characters), Employee Name (10 characters).
- Assume a certain input record contains the following values: 000001, *****, John Smith
- For this particular record the Badge No. for Employee #1 (John Smith) will **not** be updated.



Step 2: Field Definitions Tab



A file selected from which fields will be selected

Graphic display of the structure of the record and its fields

Selected fields from the chosen file.

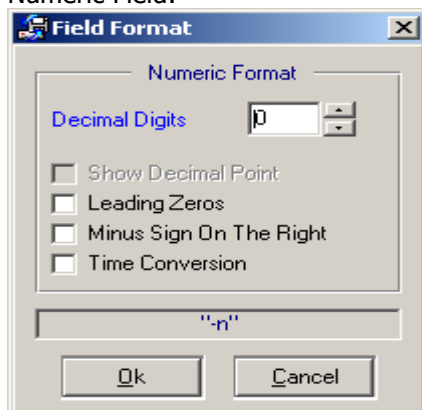
Field Properties:

- Fixed Length, Fixed Number of Fields - field position and size is defined at set-up by user (i.e. From Column / To Column). The user may modify these definitions.
- Fixed Number of Fields – field values are separated by a delimiter. The user cannot define (or modify) field size or specific column position.

From Column to Column – Start column & End column of a field.

Format –

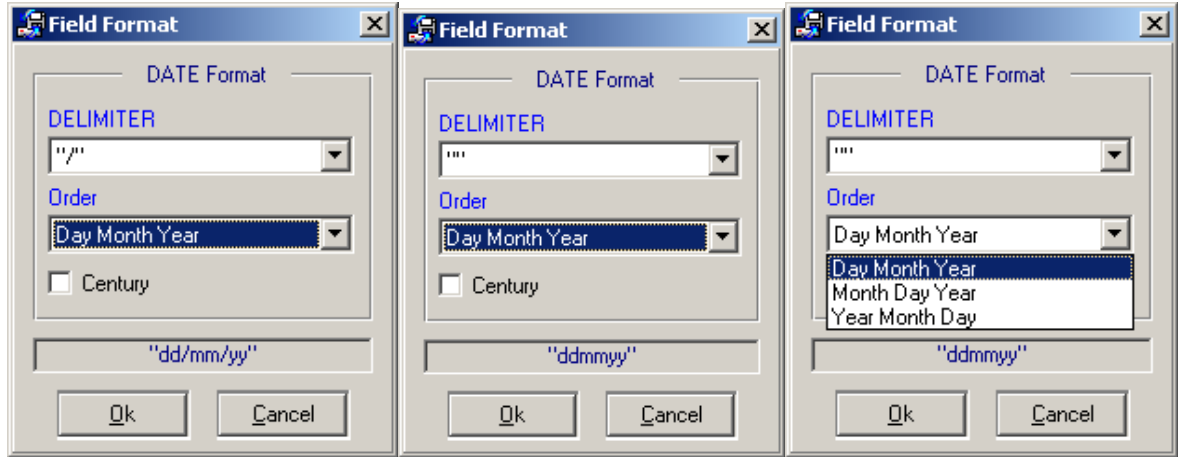
Numeric Field:



Decimal Digits: Number of decimal digits (0-2).
 Show Decimal Point - (Enable/Disable)
 Leading Zeroes - (Enable/Disable)
 Minus Sign on the Right - (Enable/Disable)
 Time Conversion – (Enable/Disable)



Date Field: Delimiter: "/", "-", ".", ":", " ", ""
Order: Day, Month, Year or Month, Day, Year or Year, Month Day
Display Century Yes/No



Export Expression – Used for setting up an export expression if needed.
Example: DAILY->CAT01+DAILY->CAT02

Default Value – Used for import only. If there is no value in the input record, the default value will be imported to this field.

Example:

If the default value of the field "department" is "1", whenever there is no value found in the input record for this field, a value of "1" will be imported as the department no.

Condition Expression – Defining conditional import/export of a certain field in a profile.
If the condition is false, no value will be transferred for this field.

If "Export Expression" field is also defined:

IMPORT:

If the "Condition Expression" is TRUE - The target field will be the value of the expression

If the "Condition Expression" is FALSE -The target field will be updated with the default value.

EXPORT:

If the "Condition Expression" is TRUE - The value of the expression will update the target field. If the "Condition Expression" is FALSE - The target field will get a blank as a value



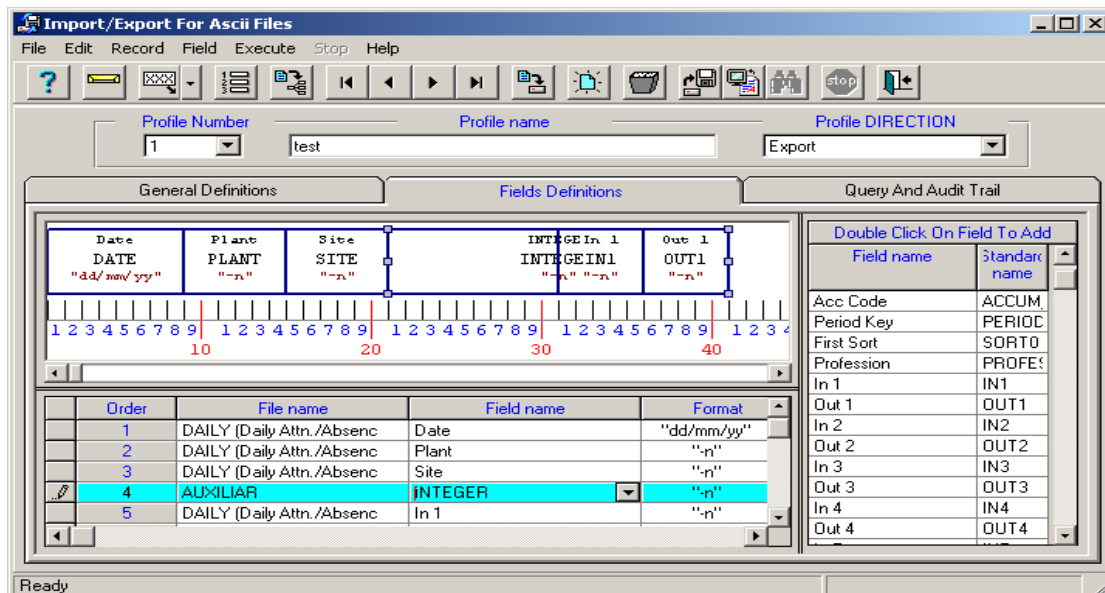
Auxiliary Fields

Often, the value of a field being imported and the internal representation of that field (in the TKSQL database) are different. For example, the Gender field in TK-SQL's Employee Master File, is represented internally by either a "0" for female and a "1" for male (as a politically correct s/w, women always take precedence).

However a typical import file may designate Female with "F" and Male with "M". It is therefore required to update the database with either a "0" or a "1" based on whether "F" or "M" is encountered (respectively).

To address the above situation:

1. Define an Auxiliary type field in the Import Profile. Its position should correspond with the position of the imported field. Also define the type of field which will be imported into the Auxiliary field (i.e. integer, decimal, alphanumeric etc.)
2. Define the Import Target field (at the same position of the Auxiliary field). Using the above example this would be the Gender field in the Employee Master File.
3. In the Import Target field add a Conditional Expression and a Default Value that will be transferred to the Target field should the condition be true. Using the above example the Conditional Expression of the Target field should be AUXILAR->ALPHANUM = "F" and the default value should be 0.
4. To address the second case (i.e. an import record with "M"), simply add another Import Target field (again at the same position of the Auxiliary field and again referring the Gender field in the Employee Master file). This time however, change the Conditional Expression to AUXILAR->ALPHANUM = "M" and the default value to 1.



**Examples:****Example 1:**

Setting an import profile for employee file with the following information:

Employee #, Last Name, First Name, Dept., Contract #, Employment Start Date, Birth Date

General Parameters:

Import/Export For Ascii Files

File Edit Record Field Execute Stop Help

Profile Number: 1 Profile name: Employee details Profile DIRECTION: IMPORT

General Definitions Fields Definitions Query And Audit Trail

File name: EMPLOYEE (Employee Details/Shared) Data Base: Employee# Sort By: Employee#

ASCII File Selection

File name: c:\temp\xx.txt Select length: 80

File Type: Fixed Length. Fixed Number Of Fields

Fields Inclosed By: Number Of Caption Lines: 0

Ready

Field Definitions:

Import/Export For Ascii Files

File Edit Record Field Execute Stop Help

Profile Number: 1 Profile name: Employee details Profile DIRECTION: IMPORT

General Definitions **Fields Definitions** Query And Audit Trail

File name	Field name	From Column	Till Column	Format	C
EMPLOYEE (Employee De	First Name	22	30	"ABC "	
EMPLOYEE (Employee De	Department	31	38	"-"	
EMPLOYEE (Employee De	Contract 0	39	44	"-"	
EMPLOYEE (Employee De	Employment Start	45	52	"dd/mm/yy"	
EMPLOYEE (Extended Emp	Birth Date	53	60	"dd/mm/yy"	

Double Click On

Field name	and am
EMPLOYE	EM
EMPLOYEE	EM
Class	CL
Rank	RA
Marital	MA
Position	PO
Position	PO
Birth Date	BIR
Seniority	SE
Seniority	SE
LifeTime	LIF
Gender	SE

Ready

**Example 2:**

Setting an export profile for DAILY file with the following information:
Employee#, Date, In1, Out1, Total Attn, Total Paid, Regular Hours, Overtime

General Parameters:

The screenshot shows the 'Import/Export For Ascii Files' dialog box with the 'General Definitions' tab selected. The 'Profile Number' is set to 2, 'Profile name' is 'Export Daily File', and 'Profile DIRECTION' is 'Export'. The 'File name' is 'DAILY (Daily Attn./Absence Activity/TK)' and 'Sort By' is 'Date_Plant#_Site#_Dept#_Emp#'. The 'ASCII File Selection' section shows 'File name' as 'c:\temp\wx1.txt', 'File Type' as 'Fixed Number Of Fields. Fields Delimited.', and 'DELIMITER' as ','. The 'Fields Inclosed By' is set to empty and 'Number Of Caption Lines' is 0.

Field Definitions:

The screenshot shows the 'Import/Export For Ascii Files' dialog box with the 'Fields Definitions' tab selected. The 'General Definitions' section is visible in the background. The 'Fields Definitions' section shows a table with columns: Date, In 1, Out 1, Total Attn, Paid Attn, REG HRS, and O.T. Value. The table is populated with the following data:

Order	File name	Field name	Format
4	DAILY (Daily Attn./Absenc	Total Attn	"-n"
5	DAILY (Daily Attn./Absenc	Paid Attn	"-n"
6	DAILY (Daily Attn./Absenc	REG HRS	"-n"
7	DAILY (Daily Attn./Absenc	O.T. Value	"-n"

The 'Field name' column is highlighted in blue. The 'Format' column is highlighted in cyan. The 'Field name' column is also highlighted in cyan. The 'Field name' column is also highlighted in cyan.



Automatic Operation (external to TKSQl):

Running Import/Export profiles can be done automatically without requiring any user interaction.

The automatic operation enables selecting parameters like profile #, selecting input/output files, selecting specific ranges for running profiles, etc.

Programs and files required:

The format of the automatic command is as follows:

..\TKSQLprograms\lvrundll.exe A {TkSQL.ini} dimpexsql.dll 9999 597 11/01/2003 17/01/2003

A -	Indicator for automatic operation
{TKSQL.INI} -	Name of TKSQl.INI file with directions to data base and server
DIMEXSQL.DLL -	Name of Program File
9999 -	User Name according to the USERS definitions in TKSQl
597 -	Profile # - no. of profile for running the import/export utility
11/01/2003 - 17/01/2003	- optional fields

For example: Automatic running of profile #597, for user name 9999, in TKSQl default directory, will produce date range between 11th of January until the 17th of January.

For the DAILY Activity file there can be 2 additional parameters:

1. Selecting specific date range for running the profile to be imported/exported.
The format is From Date, Till Date. The date fields are in DD/MM/CCYY format, as shown in the above example

Or

2. Default date range for running the profile to be imported/exported.
The format is Date Offset (+), Date Offset (-). Offsets are from the current system date.

Example:

..\TKSQLprograms\lvrundll.exe A {TKSQL.ini} dimpexsql.dll 9999 5 -10 -1

Explanation: profile #5, for username 9999, will be run for the last 10 days' data.



For the PAY-PERIOD Summary file there can be 3 additional parameters:

1. Selecting specific range of pay periods for running the profile to be imported/exported.
The format is From Period, Till Period. The pay period field format is CCYYPP.

Example:

```
..\TKSQLprograms\lvrundll.exe A {TKSQL.ini} dimpexsql.dll 9999 6 200501 200502
```

Explanation: profile #6, for username 9999, will be run for pay periods #1-#2.

2. Selecting a default range of pay periods and the pay period type (weekly, monthly etc.) for running the profile to be imported/exported.
The format is Pay Period Offset (+), Pay Period Offset (-), Pay Period Type No.

Where pay-period type no.:

- 1 - Weekly
- 2 - Biweekly
- 3 - Semi-monthly
- 4 - Monthly

Example:

```
..\TKSQLprograms\lvrundll.exe A {TKSQL.ini} dimpexsql.dll 9999 6 -1 +1 1
```

Explanation: profile #6, for username 9999, will be run for the last pay period data for weekly employees only.

Note that the + or – signs must always be present (even if the pay period offset is set to zero).

Example:

```
..\TKSQLprograms\lvrundll.exe A {TKSQL.ini} dimpexsql.dll 9999 6 -1 +0 1
```

If no date or pay periods are indicated, the system will automatically refer to the dates or pay periods indicated in the profile itself.



Writing to a log file:

During the automatic process of the program all messages (i.e. including error messages) will be written into a log file (**IMPEXP.LOG**) which will be created in TK-SQL's application folder. The log will be appended every run (with a date/time stamp)

***Sample 1:
Employee Export
Log***

***Sample 2: Error in
DAILY Export***

Error

```
ImpExp.log - Notepad
File Edit Format View Help

DATE: 21/09/2005  TIME: 11:59:04  USER:
9999
Profile.....: 20
Main File Name.....: EMPLOYEE
Direction.....: Export
Records Read.....: 0
Records Write.....: 0
ATTENDANCE\TRAXIT32\EMPBADGE.TXT

DATE: 21/09/2005  TIME: 12:02:52  USER:
9999
Profile.....: 32
Main File Name.....: DAILY
Direction.....: Export
Records Read.....: 0
Records Write.....: 0
(5) Improper Field Size In Line. 1
```



"Flagging" exported records:

TK-SQL supports the ability to "flag" (or mark) records that were exported. This feature is usually used to prevent records from being exported more than once.

The export process "flags" the records in the relevant data file. As the export process runs, it automatically "flags" all the records that are exported from the data file.

This option is available when exporting data from the TCDAY, TCPER, DAILY and PERIOD files. When exporting from these files, a check box will appear below the export profile's file selection box. The check box is designated **"Don't export record in case manual category's value is 1"**.

Next to this check box, is a selection box which enables the user to choose which MANUAL pay category is to be used in order to "flag" the relevant record.

The setup process is simple. All that needs to be done is the following:

- Define at least one Manual Pay Category in the SYSCNF file. The manual pay categories are the last pay categories that appear in Table A. This manual pay category will be used for the export profile purposes.
- In case data from the TC or DA files is going to be exported, define the manual pay category also in the TCCNF or DACNF files.
- Create the export profile and enable the relevant check box. Also select the manual pay category to be used (through the selection box).

Once the export profile is run, the records being exported will be "flagged" by storing 1 in the designated manual pay category.

This export profile can be activated externally to TK-SQL by issuing the following command:

DIMPEXP D[cat#] C:\TK-SQL user name profile#

With cat# being the number of the designated manual category.

or example - **C:\TK5WIN\DIMPEXP D[49] C:\TK2000 9999 1**

NOTE - Latest improvement include the ability to specify the path & filename (as part of the automatic command line).

The path should appear (in the command line) in parenthesis after the A or D.

Example: **DIMPEX32 A(F:\USERS\TEST.TXT) C:\TK2000 John 6 -1 -1 1**
DIMPEX32 D[49](F:\USERS\TEST.TXT) C:\TK2000 9999 1



Note: Mandatory fields for import of Employee File date into TK-SQL

The mandatory fields are:

1. Employee number.
2. Plant number.
3. Site number.
4. Department number.
5. First sort.
6. First name.
7. Last name.
8. Contract 0
9. Contract 0 from (date field).
10. Status 0.
11. Status 0 from (date field).
12. Status 0 till (date field).
13. Pay period type.
14. Employment start (date field) .
15. Employment end (date field) .
16. Badge number.
17. Badge from (date field).
18. Badge till (date field).
19. Cycle start date.

* All date-type fields are in DDMMCCYY format.