

# Files2Sql - User Manual

## Table of Contents

<b>1</b>	<b><i>What is Files2Sql</i></b>	<b>2</b>
<b>2</b>	<b><i>How Files2sql work</i></b>	<b>3</b>
<b>3</b>	<b><i>System Requirements</i></b>	<b>4</b>
<b>4</b>	<b><i>Download and Instalation</i></b>	<b>5</b>
<b>5</b>	<b><i>Folders After Install:</i></b>	<b>6</b>
<b>6</b>	<b><i>Run Files2Sql</i></b>	<b>7</b>
<b>7</b>	<b><i>Register User</i></b>	<b>8</b>
<b>8</b>	<b><i>Folders Running:</i></b>	<b>9</b>
<b>9</b>	<b><i>Tab “Data Base”</i></b>	<b>10</b>
<b>10</b>	<b><i>Tab “Tables”</i></b>	<b>12</b>
<b>11</b>	<b><i>Tab “Import”</i></b>	<b>13</b>
<b>12</b>	<b><i>Tab “To Migrate”</i></b>	<b>15</b>
<b>13</b>	<b><i>Tab “Setup”</i></b>	<b>17</b>
<b>14</b>	<b><i>Tab “Verify”</i></b>	<b>19</b>
<b>15</b>	<b><i>Tab “DB to DB”</i></b>	<b>20</b>
<b>16</b>	<b><i>Check “Expert”</i></b>	<b>21</b>
<b>17</b>	<b><i>Scenario Example</i></b>	<b>22</b>
<b>18</b>	<b><i>Informations Of Options Disables</i></b>	<b>24</b>
<b>19</b>	<b><i>Support - Contact for Resolve Problems</i></b>	<b>25</b>
<b>20</b>	<b><i>Contatc for Bussiness</i></b>	<b>27</b>
<b>21</b>	<b><i>FAQ</i></b>	<b>28</b>
<b>22</b>	<b><i>User Help Update Informations</i></b>	<b>29</b>
<b>23</b>	<b><i>Versions History</i></b>	<b>30</b>
<b>24</b>	<b><i>Version Update &amp; Upgrade</i></b>	<b>31</b>
<b>25</b>	<b><i>Licences and Refund</i></b>	<b>32</b>

## 1 What is Files2Sql

- Files2sql is a unique software program that can migrate Cobol Files, in minutes..!
  - FROM COBOL FILES:
    - Indexed
    - Relatives
    - Line Sequential
    - Binary Sequential
  - TO
    - Databases Tables
      - ◆ SQL-Server
      - ◆ MS-Access
      - ◆ Oracle
      - ◆ DB2
      - ◆ Sybase
      - ◆ MySql
      - ◆ Informix
- Connect and test databases
- Fast real-time migration in 5 easy steps
- Minimal performance impact the system
- Windows GUI interface
- All developed tools under Microfocus Cobol (nothing other languajes)
- Files2sql.exe are Builided under Microfocos Cobol 5.x
- You can generate source, compile and run, for your Cobol Instaled
- Skip and CONTINUE Insert (COMMIT Records OK)
- Log with Records with Errors, Key Error, Alternate-Key Error
- Change Datatype (Cobol type X Database Datatype)

## 2 How Files2sql work

- You select the target motor Database
- You connect to database
- You test the connection true
  
- You locate Select Structure Cobol Files.
- You locate FD Fields Cobol Files
- You locate the Cobol Data Files
- Files2sql generate one Import Cobol Program
- This program open input, read and close the Cobol Files
- Files2sql compile under your Cobol language selected
- Automatic import Select and FDS into Internal Dictionary
- Automatic import the Sets Record Keys and Split Keys
- Automatic import the Sets Duplicate and Not Duplicates Keys
  
- You select one file from Dictionary
- Files2sql generate one Migrate Cobol File
- Reading Internal Dictionary to construct the Migrate Cobol File
- Automatic migrate the cobol files to Database
- Depending on Index Cobol File:
  - a. If you like, create index into Database
  - b. If you like, continue or interrupt migration when produce duplicate keys

### 3 System Requirements

Operating System:	Windows 95, 98, 2000, Server, XP, Vista
Software	NetExpress 5.1 Free or later (Not included in Files2Sql)
CPU:	Speed: 500 Mhz or more
RAM:	1 Gb or more
MONITOR	Color 800 x 600 or more
NAVIGATOR (one or more)	Internet Explorer, Mozilla Firefox, etc
HD to Install:	Minimun: 3 Mb
HD COBOL (one or more)	Other that Microfocus (*)
HD DATABASE:	Motor target to convert your Cobol Files.

(\*) Cobol one or more (other that Microfocus NetExpress 5.1)

- Rm-Cobol 7.x or latter
- AcuCobol 7.x or latter
- Ms-Cobol 4.x or latter
- Fujitsu Power Cobol 4.x or latter
- IBM PC Cobol 3.x or latter
- Visual Age 3.x or latter

## 4 Download and Instalation

### Trial and Commercial Version

- Download the tool, the latest release from the page <http://www.cobol.com.ar/Files2sql/downloads.html>
- Execute the downloaded file
- Descompress in the path if you want, example C:\FILES2SQL\ ...

**Warning:**

- **If you a have old version of Files2Sql, you need to do backup of the folder \DIC**
- **If you don't do this backup, you will lost informations about tab "To Migrate" field "Select table".**

## 5 Folders After Install:

Folder	Contain
BAT	Bats Invoked from Files2sql
BAT\SET	Bats depending on Cobol Dialect
COBOLDIR	Directives compilation
DIC	Internal Dictionary
DSN	DSN Files Conections
FRONTEND	Grafical Interface
MANUALS	Manuals
MANUALS\ENG	English Manual
MANUALS\IMAGES	Images
PRY	Proyect for debug depending on Cobol
PRY\ACUCOBOL	Acucobol Proyect
PRY\FUJITSU	Fujitsu Proyect
PRY\IBM-COBOL	Ibm-Cobol Project
PRY\MICROFOCUS	Microfocus Project
PRY\MS-COBOL	MsCobol Project
PRY\RM-COBOL	RmCobol Project
RTX	Routines Runing over Windows
SKL	Skeletons
TEST	Testing
TEST\INPUT	Testing input data depending on Cobol
TEST\INPUT\ACUCOBOL	Testing input Acucobol (Sel, Fds, Data)
TEST\INPUT\FUJITSU	Testing input Fujitsu (Sel, Fds, Data)
TEST\INPUT\IBM-COBOL	Testing input IbmCobol (Sel, Fds, Data)
TEST\INPUT\MICROFOCUS	Testing input Microfocus (Sel, Fds, Data)
TEST\INPUT\MS-COBOL	Testing input MsCobol (Sel, Fds, Data)
TEST\INPUT\RM-COBOL	Testing input RmCobol (Sel, Fds, Data)
TEST\OUTPUT	Database Test (ms-access)

## 6 Run Files2Sql

- Before continue, you must be installed NetExpress 5.1 Free or later (Not included in Files2Sql)
- You can download academic version from Microfocus Web Site
  - Click <http://www.microfocus.com/resources/communities/academic/shop/index.asp>
  - Install intructions at <http://www.cobol.com.ar/files2sql/3rd-party-downloads.html>
  - Exclude “Net Express support for .Net” clicking “This feature will not be available”
- To Run:
  - Locate the folder where you installed: Files2sql
  - Search and Click on Files2sql.exe (If you like, create Direct Access Icon on Desktoop)
  - Opened Files2Sql Tools, GUI Interfaces.
  - The first time, you need to get Trial Register User from Internet (look next step)

## 7 Register User

Depending on the KEY is enabled:

- Cobol dialect to use.
  - Engine Database to use.
  - Trial / Commercial – versions, depending on register.
- 
- The first step is obtain the ACTIVATION KEY.
  - Click the button “Get (**From Internet**)”.
  - Complete the form and click “Submit” to generate Licence Key.
  - Wait a few seconds until the end of the generation and you will a receive an e-mail content Licence Key.
  - Copy Licence Key and paste in the Files2sql login dialog.



## 9 Tab “Data Base”

At this Tab, you must connect to any Database, the target of Cobol Files converted.

DB Motor:

Select one (Licenced Trial or Commercial)

DB Connect

Select one:

ODBC Name:

If you have defined one ODBC connected to DB Motor selected.  
Set the ODBC name created by you.

DSN File Name

It must be \*.DSN extention !!!

Database at: Set the database name (when MS-Access)

Load Database Demo:

When you use the demo database (Test\Output\Test.mdb)

Server:

Set the server name (When SQL-Server, Oracle, ....)

When you use sql-server demo; Server=(local)

DATABASE:

Set database (When SQL-Server, Oracle,...)

Load Server Demo: When you use the demo database

When you use sql-server demo; database=PUBS

BY PROMPT

The connection open windows to select the connection.

MY DSN

Search de DSN File to use when test connection.

DB User and Password

When the data base, requyre this values, set both.

When use Test\Output\Test.mdb; user=admin and password=cobol

When use Sql-server database demo; user and password are spaces.

DB Disconnect

Click ALL to disconnect all connection

Click Current to disconnect the current connection

The disconnect enable to you, for other connections.

#### TEST CONNECT

This tools run only connection database

Show Sqlcode, SqlState and SqlErrmc at botton.

You must connect without error to next step (Tables, Import, Migrate)

#### VIEW DSN FILE

When you use DSN File Name option, this tools generate the dsn file at DSN\ Folder.

You can view the dsn file generated

## 10 Tab “Tables”

At this tab Tables you can view:

- the tables,
- system tables
- view tables into the Database Connected before.
- Remember, you must Connected before.

DB

The internal name that USE this tools

Tables

Selected: Show Tables

System Tables

Selected: Show System Tables

View Tables

Selected: Show View Tables

Use last connection and find Tables

On click, show the tables selected to view.

Over view

If you click one line table, the tools open windows with table columns name.  
If the table was generated with this tools, you may to drop it.

## 11 Tab “Import”

At this Tab, you can import one Cobol Files Estructure into Internal Dictionary

When you import a cobol files structure, all select and fd, are sending to internal dictionary.  
Before, the structures will be validated by Files2sql

Cobol File Name:

If you have imported any cobol file structure, can be selected to get it for update.  
When you import a new cobol file structure, this field are ignored  
New imports, at end, will be refresh it.

View Imported Structure into Dictionary

Select one Cobol File Name before

This buton, open windows to view the cobol file structure into internal dictionary

Cobol Select At:

Click this buton, to open Windows Search, and set the Select cobol copy path.

NOTE: At TEST\\* you have demostration for each cobol dialect.

Warning: Each cobol dialect, have each Cobol Select proprieties.

View Select copy File

Open windows to view or edit the copy file.

Data Type (FieldType)

In this Windows, user updates of DataTypes of any fields Cobol to Any DataTypes  
of DB options.

You can change o define optimum FieldType into Database.

If you change datatype in this window, do not run “Compile and Run”, because “Compile  
and Run” generete datatype default.

Cobol FD At:

Click this buton, to open Windows Search, and set the Select cobol copy path.

NOTE: At TEST\\* folder you have demostration for each cobol dialect.

Warning: Each cobol dialect, have each Cobol Select proprieties.

View FD copy File

Open windows to view or edit the copy file.

FD (Record Data Defined) At:

If you are using an independient copy file with picture, use this option.

Click this buton, to open Windows Search, and set the Select cobol copy path.

NOTE: At TEST\\* you have demostration for each cobol dialect.

Warning: Each cobol dialect, have each Cobol Select proprieties.

#### View REC copy File

Open windows to view or edit the copy file.

#### For more One Data File, open Window for Details.

When one structure are defined to more one file that have the same structure, you can define each datafile path, and this tools will generate one programa for each.

#### Cobol Data File At:

Click this buton, to open Windows Search, and set the cobol datafile path.

#### View Cobol File (Binary Format)

To view the datafile under binary format

#### REMEMBER:

The copys and datafile must be relateded, for the datafile  
Other case, you will have errors...

#### Compile and run:

At this time, Files2sql will generate the source test, compile and run.  
At end, show totals: Records read and show the log generated.  
Genereta new datatype default about field of cobol.

#### Debuging:

Click this options, to open debugger tools of your Cobol Instaled.  
Note: Only commercial version can to do debug.

#### View CBL

To view the Cobol Source Generated  
Note: Only commercial version can to do debug.

#### View LST

To view the Postlist Generated after compiled  
Note: Only commercial version can to do debug.

#### Occurs, Renames, Redefines

Files2Sql convert automatic fields with Occurs, Renames and Redefines by FDs structures using this method:

OCCURS :To <field-name>-001, 002, 003 ... (nnn depending on Database)  
RENAMES :Discard  
REDEFINES:Discard

## 12 Tab “To Migrate”

At this tab, this tools migrate one cobol file to database.  
Remember: You must be connected to database before.

Select Table:

Select one table imported structure, that are into the internal dictionary.  
This must be do in "Import" before.

Source CBL at:

The Cobol source will be located at SRC\ folder

CBL Name

This tools define it: [table-name].cbl

Sql Copys Generate to:

The SQL copys will be located at SQL\ folder

Project Name:

Depending on Cobol dialect, this tools use one defined project.

Database:

Information from database connection.  
This connection, say the target data migration.

Drop and Create Table

When the migration are running, use this option to enable drop table before insert.

Drop and Create Index

When the migration are running, use this option to execute drop and create index.

SKIP and CONTINUE Insert (COMMIT only records OK)

Stop When Insert With Error:

When the migration are running, reading input file, the tools can get duplicate error key.  
Sample: LowerCase – UpperCase same value in Cobol File, but only one to Database  
key index UNIQUE send sqlerror error !

At this case Stop Processes: ¿ Yes or No ?

**Warning: Your integrated relational database may be to do corrupted..!!!**

Generate Source, Compile and Run

This buton invoke the compiler, run and debug Program  
At end, show log and totals cobol file record migrated to database

Generate Source, Compile and Run BY BATCH / LOTE

Same Option "Generate Source, Compile and Run"

In This Option/Windows, select 1 or more Tables/Files to run in sequence, to reduce time operation.

**View CBL**

To view the Cobol Source Programa generated  
Only Comercial Version enable this view

**View LST**

To view the Postlist generated  
Only Comercial Version enable this view

## 13 Tab “Setup”

At this tab, you define the Cobol environmet, and set values to run.

Dialect.

Select the Cobol Dialect to use.

And the tools read the bat\set\[compiler]-env.bat to show what to use.

- the compiler
- the runtime
- the debugger to use

You can modify if are necessary, with carefull.

Compiler: from set=cmp value

Run: from set run= value

Debug: from set dbg= value

Path: from set use= value (with comma, and semicolon at last)

Setup SQL Directives

Set SQL (ever) params (optional)

Set ODBCTRACE (optional)

Set NOFORM (optional)

Set CTRACE (optional)

Set PREPROCESS (optional, as Oracle)

Set SOURCEFORMAT (optional)

Write Directives

To write directives defined by you

View:

The Directives defined by you

Before

The manually directives to aplicate, before directives defined

After

The manually directives to aplicate, after directives defined

Setup running program to view final report when exported Cobol Files to Database

Front End

HTML, CHARACTER, SCREEN SECTION, GUI

Log File Write

Yes , No

Log File Show

Before Stop Run, if log file are Yes, with Front End format selected.

Never

Files2Sql – User Manual – Version 2.0.x

Dialect:

Output from Dialect Selected

Motor

Database selected as target

Version:

Files2sql version running

Edit with

Tools that you define to use under Files2sql

Name/s:

Operator Name

Last Name/s

Operator Last Name

Email

Operator e-mail

## 14 Tab “Verify”

At this Tab, you can Verify the Cobol Compiler and Cobol Runtime installed

Dialect:

The Cobol dialect selected in Tab Setup

View BAT:

The Compiler and Runtime Bat to use when compile the cobol source generated by this tools

View SET Values:

Environment Cobol Installed, invoked by Compiler and Runtime Bat.

Test Bat option:

Radio to active the action Test.

Debuging ? :

To enable debug into Compile and Runtime Bat

Execute Test:

Run de Test over simple Cobol Source program

View CBL:

To see the Cobol Source Program that Verify your Cobol Selected.

View LST:

To see the Post-List compiled.

Menu2sql:

Disabled

Dictionary Tools:

Disabled

GUI - HTML:

Disabled

## **15 Tab “DB to DB”**

This option are disabled

## **16 Check “Expert”**

At the top of the screen, click on "Expert" and the messages will only be at the bottom of the screen.

To operate dialogues messages, remove the tick in "Expert" and the messages will be displayed in error window, in addition to those seen at the bottom of the screen.

## 17 Scenario Example

*To run this Scenario, you **not** need any database manager installed in your pc or any network pc. You need native Cobol data file, with select and fd structure. You need NetExpress 5.x installed in your PC.*

- Run Files2Sql
  - Clicking over Files2sql.exe
- Login.
  - Provide Licence Key or Get Key for button “Get (From Internet)”.
  - If you have more one Licence, click “Details” and select one
- In the Tab “Data Base”
  - Select MS-Access
  - In DB Connect, select DSN File Name = DSN \ Test-Access.DSN
  - Click “Load Database Demo” (One time)
  - Ms-Access file used in this example are in TEST\Output folder
  - Click “Test Connect”, display OK or not OK ...
  - If not OK, verify your connect, so you not be continue...
- In the Tab “Tables”,
  - check “Tables”, “System Tables”, “View Tables”
  - click “Use last connection and find Tables” to view tables of de MS-Access data base
- In the Tab “Import”,
  - Use demonstration in the Files2Sql directory
  - Use TEST\Input\Microfocus\demo01 folder
  - In Field “Select At:” (path) demo\_01.SLT
  - In Field “FD At:” (path) demo\_01.FDS
  - In Field “Data File At:” (path) demo\_01.DAT
  - Click in “Compile and run TEST”,
  - Files2Sql will display a web page or/and a text file with the informations of file cobol “demo\_01”.
- In the Tab “To Migrate”
  - Use demonstration in the Files2Sql directory
  - Use TEST\Input\Microfocus\demo01 folder
  - In Field “Select Table”, in this example “demo\_01” generate before in the Tab “Import”
  - Click in “Generate Source, Compile and Run”

- Files2Sql will display a web page or/and a text file with the informations of file cobol “demo\_01” imported to the ms-access data base!.
- In this moment the Scenário TEST its finish OK, testing and running.

## **18 Informations Of Options Disables**

This software will are a many functions, so existing options disables that will be created and enabled.

## 19 Support - Contact for Resolve Problems

Comercial version has Technical support via E-mail.

(and if necessary [www.TeamViewer.com](http://www.TeamViewer.com) and [Skype](#) and MSN contact).

Free Support = date of sale + 6 months.

Support after 6 months: e-mail to [azabala@cobol.com.ar](mailto:azabala@cobol.com.ar) or [agustinza@gmail.com](mailto:agustinza@gmail.com) about more information.

If you have any problem, send us a ticket from the page:

<http://www.cobol.com.ar/Files2sql/ticket.htm>

or email to: [claudio.muller@cobol.com.ar](mailto:claudio.muller@cobol.com.ar) and/or [claudiomiguelmuller@hotmail.com](mailto:claudiomiguelmuller@hotmail.com)

If possible, send image attached in Word document, with error occurred (with PrintScreen in Screen Error, and Ctrl+V in Word document).

Please, the informations about the problem its needed.  
Send the problem the:

- Operating Systems,
  - version, build, SP, etc.
- Path of the Files2Sql,
  - path local, network path, etc.
- What Cobol Dialect and Version:
  - Microfocus Cobol 3.1, 3.2, 4.0, 5.0 ..
  - Ms-Cobol 1.1, 2.0, 3.1, 4.1, 5.0 .....
  - Rm-Cobol 2.1, 5.1, 9.1
  - Acu-Cobol 7.2, 9.0 .....
  - Etc..
- Cobol is accessed:
  - Installed on my PC (indicate path)
  - Installed on a remote network (state route)
- Database and version
  - SQL Server 7.x, 8.x ...
  - MS-Access 2000, 2007, ...

- etc
- ❖ Access to the Database:
  - Installed on my PC (indicate path)
  - Installed remotely on the network (state route).
- ❖ Files2sql:
  - Version installed on the day-month-year
  - Update applied the day-month-year

## 20 Contact for Business

For contact to business about Files2Sql, please contact:

Arq. Agustin Zabala  
azabala@cobol.com.ar  
agustinza@gmail.com  
<http://www.COBOL.com.ar>  
<http://www.cobol.com.ar/Files2sql/>  
Buenos Aires - Argentina  
Telefono: 0054 11 4735-1222  
Celular (movil) 011 - 15-5413-1943  
From other countries: 0054-9-11-5413-1943

## 21 FAQ

This item content the FAQ, about solutions, problems and other informations.

- **Error “EXIT: This tools are Running from this PC”**, in Windows Vista, required level of administrator permissions.

Or this message display because this tools always running in your PC.

- **Error “EXIT: This tools are Running as Server”**, because Files2Sql installed in Server and more 1 user are run it. Verify.

## **22 User Help Update Informations**

The User may be insert or update more extended helps informations.  
After press F1, the system display help system (Admin).  
At this moment click “Update”,  
Will open new windows where you can add other help texts.

## 23 Versions History

Only enabled, last version:

- **Release:**

Only enabled, the last version :

- **2.0.4 To show Key Error and Split Key error founded while migration are running.**
- 2.0.3 Insert Duplicated Cobol Record Errors to Log Error File  
(option: to continue inserting into Database, records without errors)
- 2.0.2 Table Index (Alternate Cobol Keys) Unique / Not Unique
- 2.0.1 Format: Date, Time, Numeric, Redefines, Renames,...
  
- 1.0.17 Manual and Tutorial English
- 1.0.16 Cobol Evolution 2009 Version
- 1.0.15 Fix Connect MyDsn Error
- 1.0.14 Test Files2sql Buildded under MF 3.1 (Static/Dynamic)
- 1.0.13 Help and Update GUI program, to support monitor 800x600
- 1.0.12 Help F1 and the user can insert more helps
- 1.0.11 Update Skeletons (Drop, Create: Table, Index)
- 1.0.10 Connect "My DSN", path dsn file, betwen quotes
- 1.0.9 Connect by PROMPT
- 1.0.8 Update Skeletons (File Type)
- 1.0.7 Files depending on Cobol Dialect
- 1.0.6 More License Active Key, to select one.
- 1.0.5 Next Beta Options, show disabled
- 1.0.4 Directory name with spaces into Path (RTX)
- 1.0.3 License Key to always be enabled: Microfocus 5.1 and Ms-Access
- 1.0.2 Oracle Database Error under Acu-Cobol
- 1.0.1 Enabled "My DSN" when Database are other than Microsoft

## 24 Version Update & Upgrade

Updates Free the same version X.x.x:

- **When bugs detected, patch free unload**
  - X.x.x
  - X.0.1
  - X.1.5

If you bought the X.x.x version, will be download all updates of this version for bugs.

In future, new versions 50% discount for clients who already have the previous version.

## 25 Licences and Refund

**All features must be tested in the trial version**, the commercial version has no difference in work or general rules for the trial version.

Trial Licence:

- Free Trial Licence 30-days download and run Files2Sql with block:
  - 10 Cobol Files into Dictionary
  - 10 Cobol Fields over each Cobol Files
  - 10 Cobol Index over each Cobol Index Files
  - Hidden Cobol Sources.
  - Hidden Cobol Postlist

Commercial Licence:

- Commercial version, after purchase.
  - Maximun Tables of Database Selected
  - Maximun Columns of each Table of Database Selected
  - Maximun Index or each Table of Database Selected
  - Enabled to show Cobol Sources
  - Enabled to show Cobol Postlist

Refund - Money Back Guarantee

- We offer a money back guarantee if within 7 (seven) days from the date of purchase if the product does not run as stated in this manual.
- After these 7 (seven) days, you will receive the definitive license key, without time limits.
- Return Authorization: Before returning the produt to us, you need to obtain a valid return authorization number which you can obtain contacting us to [azabala@cobol.com.ar](mailto:azabala@cobol.com.ar) or [agustinza@gmail.com](mailto:agustinza@gmail.com)

**Run Files2Sql with License after 7 (seven) days, with no refund money:**

- **Files2Sql administrator will send to the user the file licenser.int to be included in the same directory of the Files2sql.exe, so your license will be valid.**