



Purpose

This program Imports into Timekeeper tables from an external sql server database based on XML template files.

While the traditional import Import/Export utility uses ASCII source files, this application builds an XML input files from the source database and uses validity tests before the import takes place.

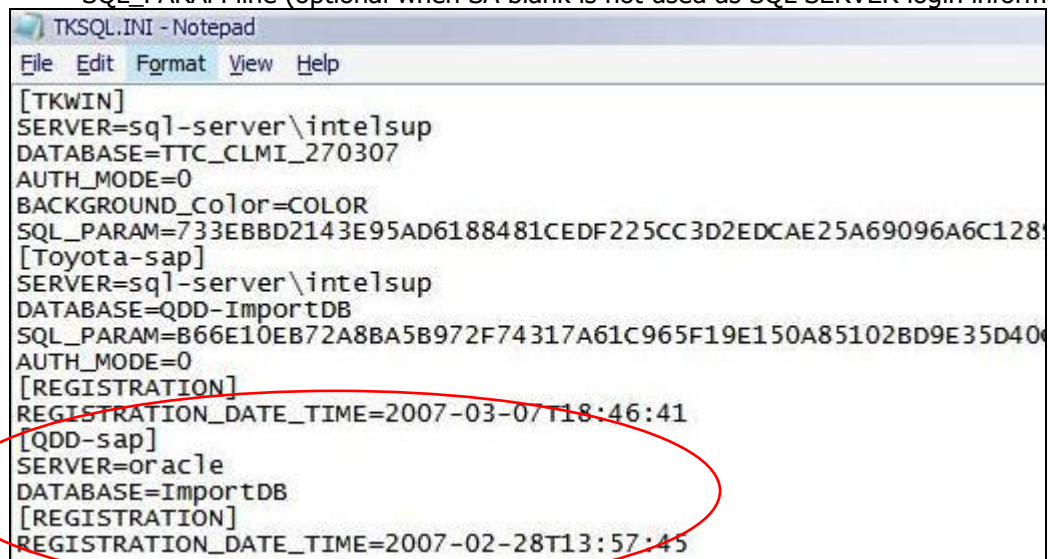
Environment: TK-SQL

Required Program Files:

Qdd_Sap.exe August 8, 2006
Qddsap.dll April 4, 2007
Tk_XML.dll February 15, 2007
Lavlibsql.dll February 02, 2007
Schema files

Setup Steps:

1. In Tksql ini add [QDD-SAP] section with server name, database name and an encryption string for the SQL_PARAM line (optional when SA blank is not used as SQL SERVER login information).

A screenshot of a Notepad window titled 'TKSQL.INI - Notepad'. The window shows the contents of the TKSQL.INI file. The text is as follows:
[TKWIN]
SERVER=sql-server\intelsup
DATABASE=TTC_CLMI_270307
AUTH_MODE=0
BACKGROUND_Color=COLOR
SQL_PARAM=733EBBD2143E95AD6188481CEDF225CC3D2EDCAE25A69096A6C128
[Toyota-sap]
SERVER=sql-server\intelsup
DATABASE=QDD-ImportDB
SQL_PARAM=B66E10EB72A8BA5B972F74317A61C965F19E150A85102BD9E35D40
AUTH_MODE=0
[REGISTRATION]
REGISTRATION_DATE_TIME=2007-03-07T18:46:41
[QDD-sap]
SERVER=oracle
DATABASE=ImportDB
[REGISTRATION]
REGISTRATION_DATE_TIME=2007-02-28T13:57:45
The [QDD-sap] section and its contents are circled in red.



2. On the source database a map table with the name Tk2XMLMAP must exist. This table indicates the required links between the imported database and Timekeeper's database and tables. The structure of this table is as follows:

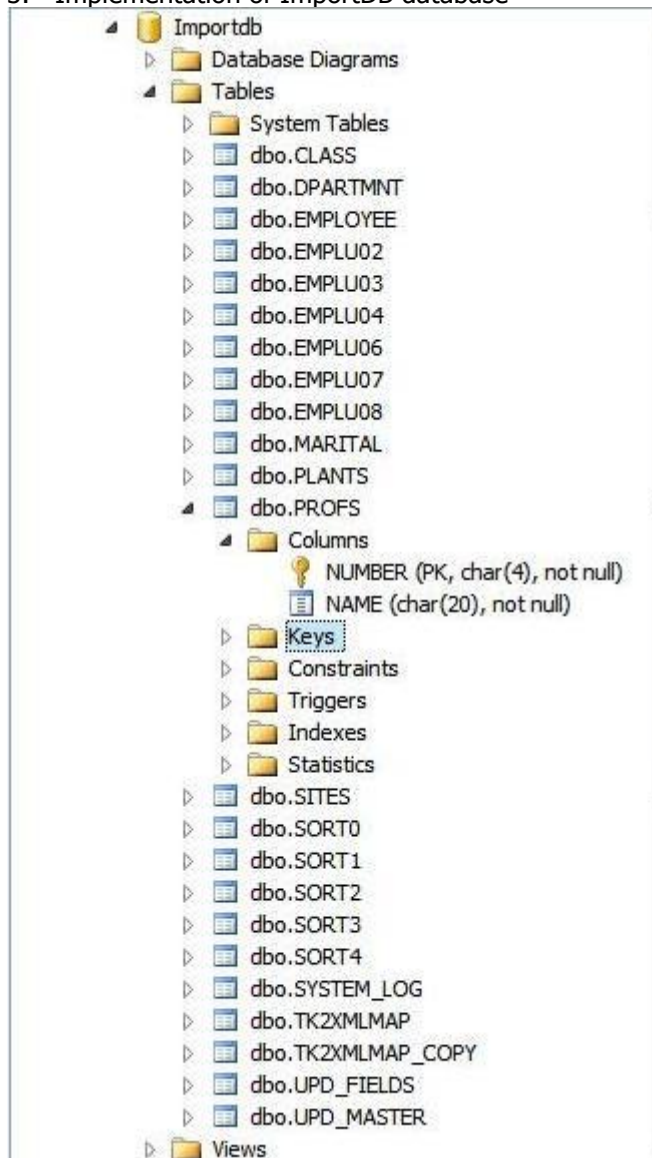
Field Name	Type	PK	Case Sensitive	Description
INTEGRATIONKEY	Char 20	Yes	No	Constant tk_xml
S_TABLETYPE	Int	Yes		Schema identifier taken from Schema's list
S_ELEMENT	Sysname		Yes	TimeKeeper's table name
S_ATTRIBUTE	Sysname		Yes	Timekeeper's field name
DB_TABLE	Sysname		No	ImportDB's table name
DB_COLUMN	Sysname		No	ImportDB's field name
DESCRIPTION	NVARCHAR 1024		No	Element type can have the following values: Lookup for lookup tables, TC for TimeCosting tables, EMP,nn for employees groups and History for records
DB_VALIDITY_DATE_COL	Sysname		No	1 for history support
IS_WHERE_COL	Tinyint			1 for Foreign key type field

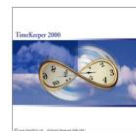
An implementation of the map named TK2XMLMAP should look like the attached screen shot: Values imported into lookup tables must have a line for Number and a line for Name. (each one of the 2 lines per value indicates different information)

INTEGRATIONKEY	S_TABLETYPE	S_ELEMENT	S_ATTRIBUTE	DB_TABLE	DB_COLUMN	DESCRIPTION	DB_VALIDITY_DATE_COL	IS_WHERE_COL
TK_XML	21	profs	NAME	PROFS	NAME	LOOKUP		0
TK_XML	18	marital	NUMBER	MARITAL	NUMBER	LOOKUP		0
TK_XML	18	marital	NAME	MARITAL	NAME	LOOKUP		0
TK_XML	16	class	NUMBER	CLASS	NUMBER	LOOKUP		0
TK_XML	16	class	NAME	CLASS	NAME	LOOKUP		0
TK_XML	1	employee	WORKDAYS	EMPLOYEE	WORKDAYS	EMP,00		0
TK_XML	1	EMPVAR	STREET	EMPLOYEE	STREET	EMP,06		0
TK_XML	1	EMPVAR	CITY	EMPLOYEE	CITY	EMP,06		0
TK_XML	1	EMPVAR	STATE	EMPLOYEE	STATE	EMP,06		0
TK_XML	1	EMPVAR	ZIP	EMPLOYEE	ZIP	EMP,06		0
TK_XML	4	dpartmnt	NUMBER	DPARTMNT	NUMBER	LOOKUP		0
TK_XML	4	dpartmnt	NAME	DPARTMNT	NAME	LOOKUP		0
TK_XML	2	plants	NUMBER	PLANTS	NUMBER	LOOKUP		0
TK_XML	2	plants	NAME	PLANTS	NAME	LOOKUP		0
TK_XML	3	sites	NUMBER	SITES	NUMBER	LOOKUP		0
TK_XML	3	sites	NAME	SITES	NAME	LOOKUP		0
TK_XML	1	employee	RATE	EMPLOYEE	RATE	EMP,00		0
TK_XML	32	emplu01	NUMBER	EMPLU03	NUMBER	LOOKUP		0
TK_XML	32	emplu01	NAME	EMPLU03	NAME	LOOKUP		0
TK_XML	33	emplu01	NUMBER	EMPLU04	NUMBER	LOOKUP		0
TK_XML	33	emplu01	NAME	EMPLU04	NAME	LOOKUP		0
TK_XML	35	emplu01	NUMBER	EMPLU06	NUMBER	LOOKUP		0
TK_XML	35	emplu01	NAME	EMPLU06	NAME	LOOKUP		0
TK_XML	36	emplu01	NUMBER	EMPLU07	NUMBER	LOOKUP		0
TK_XML	36	emplu01	NAME	EMPLU07	NAME	LOOKUP		0
TK_XML	37	emplu01	NUMBER	EMPLU08	NUMBER	LOOKUP		0



3. Implementation of ImportDB database





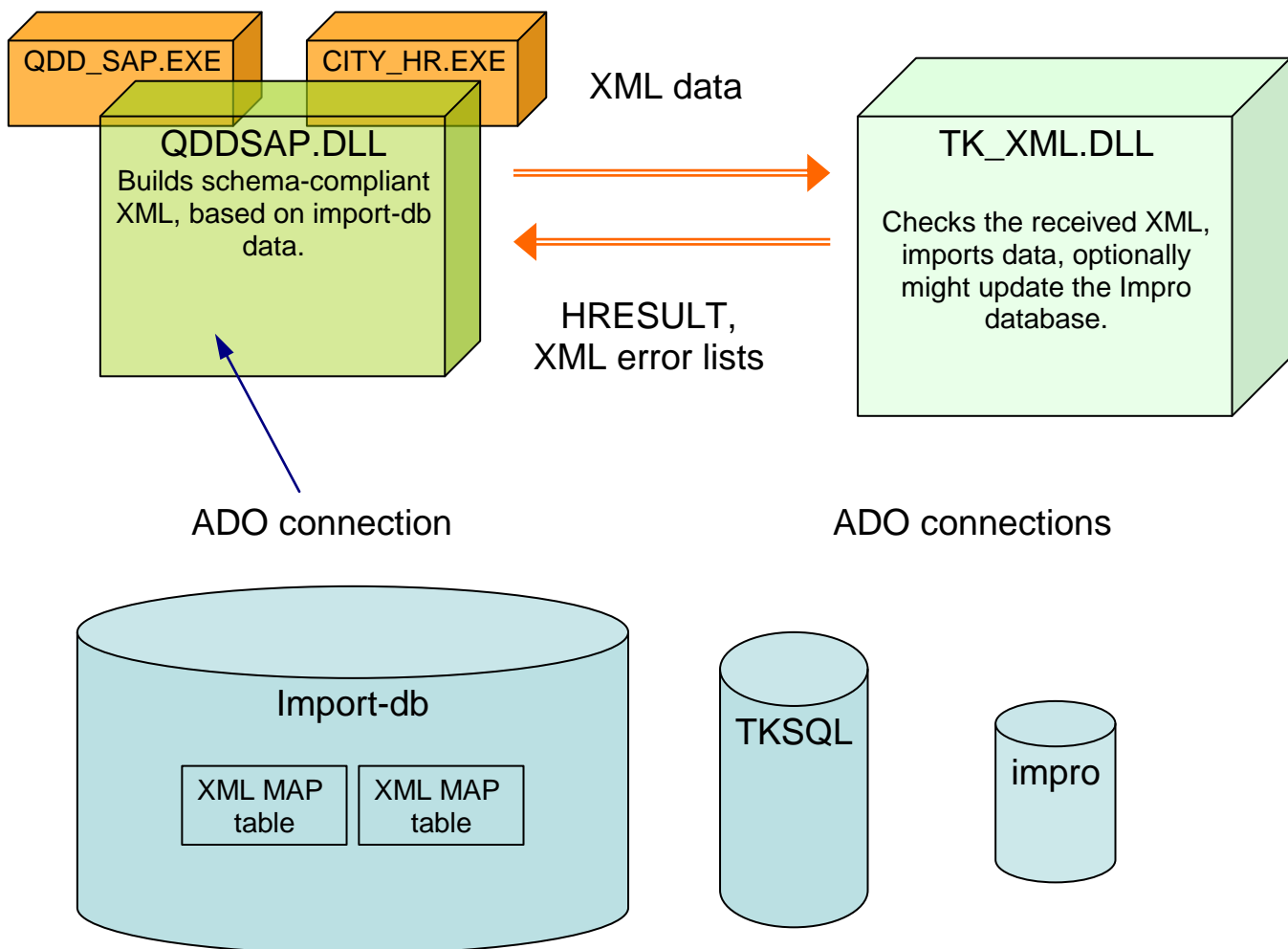
4. Schema's list

TimeKeeper Table	Value
Employees	1
Plants	2
Sites	3
Departments	4
Sort0	5
Sort1	6
Sort2	7
Sort3	8
Sort4	9
Contract	10
Schdgrp	11
Schedule	12
TableQ	13
Dndint	14
Rate	15
Class	16
Ranks	17
Martial	18
Absgroup	19
Daily	20
Profs	21
TableH	22
TableGZ	23
PrdTypes	24
OccupTypes	25
Order	26
Batch	27
Part	28
Proc	29
EmployeeChgKey	1001



4.

How it works





5. Discharging an employee using QDDSAP:

One of the main key advantages of using the QDDSAP utility is its date handling features. I.e. sending a termination date to the hire_till field will update the employee's hire_till field and also changes the employee status to 99. We can also update the employee's badge validity dates on Timekeeper as well as on Impro databases.

Implementation of discharging:

Current Status: the employee has status 0 on his status field.

Employee Number: 4134, Last Name: MOELA, First Name: JAMES, Mid Init: J

Contract: 1, Valid From: 01/01/2000, Contract Name: 5 Day 44hrs

Status: 0, Description: Active

SBU: 4101, T.A.M - NEW YARD

Department: 416000, HOMELANDS

Section: 506, B KWAGGA/MACHIPE

Pay Period Type: Weekly, Payroll Table: 41, TAM PAYROLL

Start date: 01/08/2006 and 31/12/2099 employment end

Title: 0, Gender: Male, Race: B, BLACK, Marital Status: 2, MARRIED, Birth Date: 23/05/1941, Identification #: 4105235352088

Employment Start: 01/08/2006, Employment End: 31/12/2099

On the ImportDB, the end_date is set to 12/04/2007

EMPLOYEE	PLANT_NAME	D	S	FIRST_NAME	HIRE_FROM	END_DATE	STREET	CITY
4134	T.A.M - NEW YA...	B	0	JAMES	1-18/1/2006 12:00:...	12/4/2007 12:00:00 AM		68 BECK



After Running the program: the employee's status changed to 99 with termination start date that is greater by 1 day from employee's end date.

Employee

Employee Number: 4134 Last Name: MOELA First Name: JAMES Mid Init: J

Rate: Other: Spreadover: Personal Info: PRDP:

General Data: Initial Take On: Clocking Area: Benefit Info: Study/Shop Stew: Route Info:

Updated: 12/04/2007 13:45:32

Contract: 1 Valid From: 01/01/2000 Contract Name: 5 Day 44hrs

Status: 99 05/12/2007 - 31/12/2099 Description: Inactive

SBU: 4101 T.A.M - NEW YARD Department: 416000 HOMELANDS Section: 506 B KWAGGA/MACHIPE

Absence Code: 0 Absence Name: Fingerprint ID: Validity: Payroll Table: 41 TAM PAYROLL

Pay Period Type: Weekly

Employee

Employee Number: 4134 Last Name: MOELA First Name: JAMES Mid Init: J

Rate: Other: Spreadover: Personal Info: PRDP:

General Data: Initial Take On: Clocking Area: Benefit Info: Study/Shop Stew: Route Info:

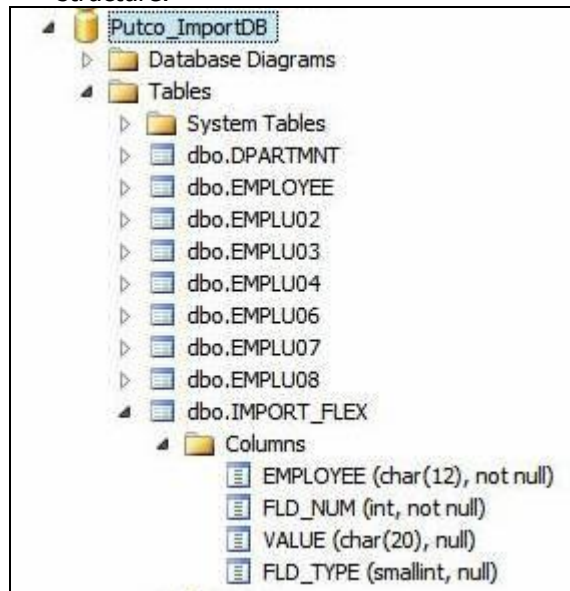
Title: 0 Gender: Male Race: B BLACK Marital Status: 2 MARRIED Birth Date: 23/05/1941 Identification #: 4105235352088 Employment Start: 01/08/2006 Employment End: 04/12/2007



6. Importing into Emplu tables

On the Emplu tables each employee might have several records so importing can be done using the following procedure:

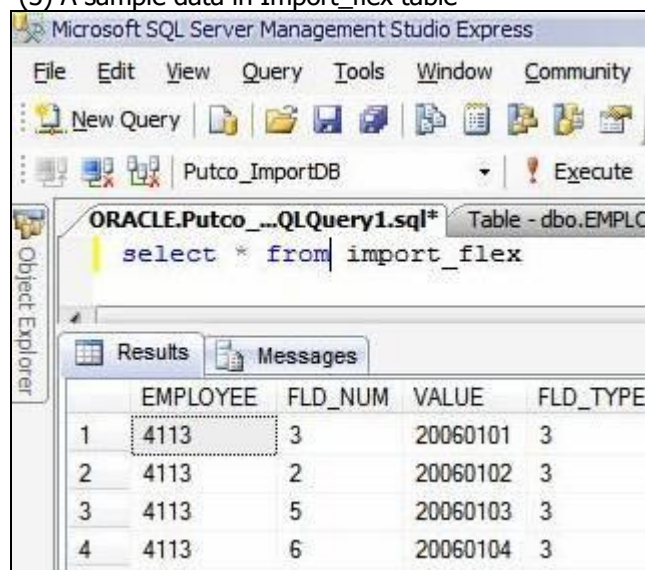
- (1) On the Importdb database add a new table called Import_Flex. The table should have the attached structure.

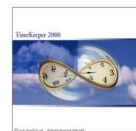


- (2) On the map named tk2xmlmap add the following lines, **note that this table is case sensitive.**

	INTEGRATIONKEY	S_TABLETYPE	S_ELEMENT	S_ATTRIBU...	DB_TABLE	DB_COLUMN	DESCRIPTION	DB_VALIDITY_DATE_COL	IS_WHERE_COL
1	Tk_XML	1	empflex	STAM_SHEM	IMPORT_FLEX	EMPLOYEE	EMP_14		1
2	TK_XML	1	empflex	FLD_NUM	IMPORT_FLEX	Fld_Num	Emp_14		0
3	TK_XML	1	empflex	VALUE	IMPORT_FLEX	Value	Emp_14		0
4	TK_XML	1	empflex	FLD_TYPE	IMPORT_FLEX	Fld_Type	Emp_14		0

- (3) A sample data in Import_flex table





(4) Getting Result:

A screenshot of a software window titled "Employee". It contains a form for entering employee data. At the top, there are four fields: "Employee Number" (4113), "Last Name" (JANSEN VAN RENSBURG), "First Name" (PIETER), and "Mid Init" (P). Below these are several tabs: "General Data", "Initial Take On", "Clocking Area", "Spreadover", "Rate", "Benefit Info", "Personal Info", "Scheduling", "PRDP", "Study", and "Other/BA". The "PRDP" tab is currently selected. It shows a list of dates: "Drivers Licence" (01/01/2006), "PRDP START" (02/01/2006), "PRDP EXPIRY" (03/01/2006), and "PRDP TEMP" (04/01/2006). At the bottom of the window is a toolbar with various icons for navigation and editing.

Note that the data for the employee must reside on the Import_master and on the Import_flex.
So importing only from import_flex is not possible.