

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).

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ГТК	WIN]				
			erver	\intelsup	
DAT	ABAS	E=TTC_	CLMI	270307	
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		oracle	-		
_		E=Impo	Contraction (1997)		
		RATIO			
				_TIME=2007-02-2	28T13:57:45



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:

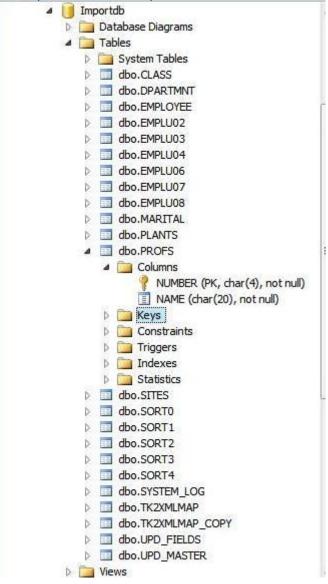
Field Name	Туре	PK	Case Sensitive	Description
INTEGRATIONKEY	Char 20	Yes	No	Constant tk_xml
S_TABLETYPE	Int	Yes		Schema identifier taken from Schema's list
S_ELEMENT	Sysname		Yes	TimeKeeper's table name
S_ATTRIBUTE	Sysname		Yes	Timekeeper's field name
DB_TABLE	Sysname		No	ImportDB's table name
DB_COLUMN	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)

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		- dbo.TK2XMLMAP Sum							Prop
	RATIONKEY S_TABL		S_ATTRIBUTE	DB_TABLE	DB_COLUMN	DESCRIPTION	DB_VALIDITY		[Qry] Q
TK_XM		profs	NAME	PROFS	NAME	LOOKUP		0	₿ 2
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TK_XM		dpartmnt	NAME	DPARTMNT	NAME	LOOKUP		0	
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TK_XM		sites	NUMBER	SITES	NUMBER.	LOOKUP		0	
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TK_XM		emplu01	NAME	EMPLU03	NAME	LOOKUP		0	
TK_XM		emplu01	NUMBER	EMPLU04	NUMBER	LOOKUP		0	
TK_XM		emplu01	NAME	EMPLU04	NAME	LOOKUP		0	
TK_XM		emplu01	NUMBER	EMPLU06	NUMBER	LOOKUP		0	
TK_XM		emplu01	NAME	EMPLU06	NAME	LOOKUP		0	
TK_XM		emplu01	NUMBER	EMPLU07	NUMBER	LOOKUP		0	
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TK_XM	. 37	emplu01	NUMBER	EMPLU08	NUMBER	LOOKUP		• •	(Ident



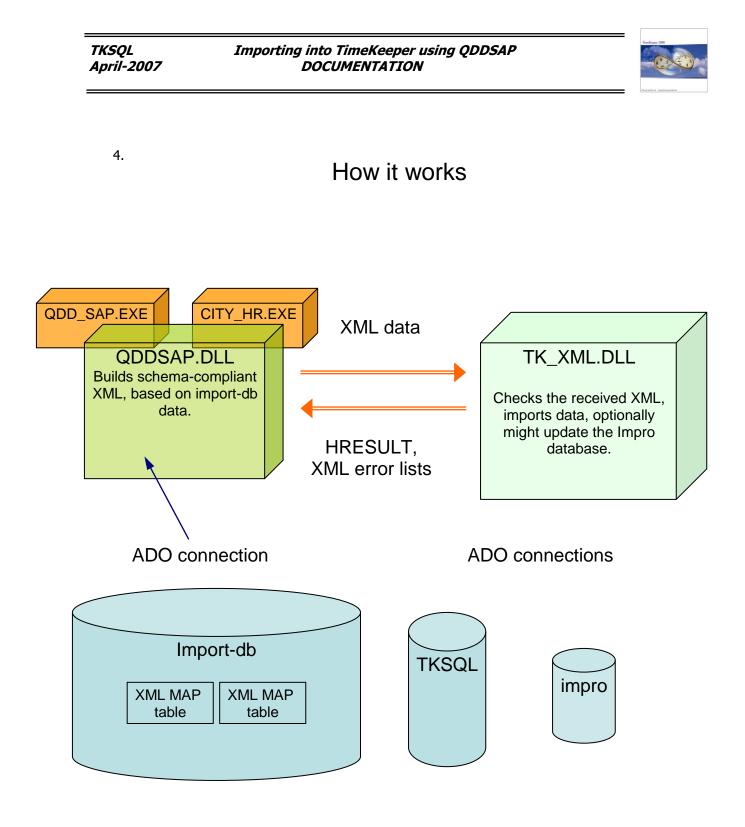
3. Implementation of ImportDB database





4. Schema's list

TimeKeeper TableValueEmployees1Plants2Sites3Departments4Sort05Sort16Sort27Sort38Sort49Contract10Schdgrp11Schedule12TableQ13Dndint14Rate15Class16Ranks17Martial18Absgroup19Daily20Profs21TableGZ23Prdfypes24OccupTypes25Order26Batch27Part28Proc29EmployeeChgKey1001	4. Schema's list	
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Sites3Departments4Sort05Sort16Sort27Sort38Sort49Contract10Schdgrp11Schedule12TableQ13Dndint14Rate15Class16Ranks17Martial18Absgroup19Daily20Profs21TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Employees	1
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 TableGZ 23 PrdTypes 24 OccupTypes 25 Order 26 Batch 27 Part 28 Proc 29	Plants	2
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Sort27Sort38Sort49Contract10Schdgrp11Schedule12TableQ13Dndint14Rate15Class16Ranks17Martial18Absgroup19Daily20Profs21TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Sort0	5
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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	Contract	10
TableQ 13 Dndint 14 Rate 15 Class 16 Ranks 17 Martial 18 Absgroup 19 Daily 20 Profs 21 TableA 22 TableGZ 23 PrdTypes 24 OccupTypes 25 Order 26 Batch 27 Part 28 Proc 29	Schdgrp	11
Dndint14Rate15Class16Ranks17Martial18Absgroup19Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Schedule	12
Rate15Class16Ranks17Martial18Absgroup19Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	TableQ	13
Class16Ranks17Martial18Absgroup19Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Dndint	14
Ranks17Martial18Absgroup19Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Rate	15
Martial18Absgroup19Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Class	16
Absgroup19Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Ranks	17
Daily20Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Martial	18
Profs21TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Absgroup	19
TableH22TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Daily	20
TableGZ23PrdTypes24OccupTypes25Order26Batch27Part28Proc29	Profs	21
PrdTypes24OccupTypes25Order26Batch27Part28Proc29	TableH	22
OccupTypes25Order26Batch27Part28Proc29	TableGZ	23
Order26Batch27Part28Proc29	PrdTypes	24
Batch27Part28Proc29	OccupTypes	25
Part28Proc29	Order	26
Proc 29	Batch	27
	Part	28
EmployeeChgKey 1001	Proc	29
	EmployeeChgKey	1001





5. Discharging an employee using QDDSAP:

One of the main key advantages of using the QDDSAP utility is its date handeling features. I.e. sending a termaination 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				
Employee N		Last Name	First Name	Mid Init
4134	💌 💊 M	IOELA	JAMES	J
Rate	Other Spr	eadover Person	al Info PRDP	
General Data	nitial Take On Clockin	ng Area Benefit I	Info Study/Shop Stew	Route Info
2	1	Contract	1 Valid From	01/01/2000
<u>×</u>	Updated 12/04/2007	Contract Name	5 Day 44hrs	More
X	11:46:26			III
		Status		• 77
SBU	↓ 4101	Description	Active	More
Name	T.A.M - NEW YARD	Absence Code	0 77	· 77
Department	≽ 🛛 🛃 🔽	Absence Name		More
Name	HOMELANDS	Fingerprint ID		
	▶ 506 _	Validity	11 . 11	More
Name Dev Deviad Type	B KWAGGA/MACHIPE		, ,	
Pay Period Type Weekly	•	Payroll Table	TAM PAYROLL	μı
<u><u> </u></u>		1		
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? =				<u>'</u>
Start date: 01/08/20	006 and 31/12/2099	employment enc	1	
Employee				
Employee I		Last Name	First Name	Mid Init
4134	<u> </u>	40ELA	JAMES	IJ
Í Bate Ì	Other Ì Sor	readover 🍸 Persor	nal Info)
		ng Area 🍸 Benefit	Info Study/Shop Stew	Route Info
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General Data II Title Gender Race Marital Status Birth Date	nitial Take On Clockir O Male B 2 23/05/1941	BLACK BLACK MARRIED Identificati Employment	on # 410523535208	

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

(ORACLE.ImportQLQ	uery1.sql* Table -	dbo.EMPLOYEE	Table - dbo.TK2XM	ILMAP Summary			-	×
	EMPLOYEE	PLANT_NAME	D ! S. S	FIRST_NAME	HIRE_FROM	END_DATE	STREET	CITY	~
Þ	4134	T.A.M - NEW YA	•1 B 10 0 0 1	. JAMES	I · I 8/1/2006 12:00:	12/4/2007 12:00:00 AM		68 BEO	KE



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					
Emplo	yee Number	Last	Name	First Name	Mid Init
4134	<u> </u>	MOELA		JAMES	J
Rate	Other	Spreadover	Personal Info	PRDP	<u> </u>
General Data	Initial Take On I (Clocking Area	Benefit Info	Study/Shop Stew	Route Info
	Updated 12/04/200	Contract	1 Name 5 Day	▼ Valid From	01/01/2000 More
	13:45:32	Status	99	▼ 05/12/2007	· 31/12/2099
SBU	> 4101	- Descripti	on Inactiv	0	More
Name	T.A.M - NEW YAP	Absence	Code 0	2 77	• 77
Department	Sec. 416000	Absence	Name		More
Name	HOMELANDS		nt ID		
Section Name	S06 € KWAGGA/MAC	HIPE Validity	77	. 77	More
Pay Period Type Weekly	•	Payroll T 41		YAYROLL	
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🖺 Employee			
Employee Number	Last Name	First Name	Mid Init
4134	💌 📎 MOELA	▼ JAMES	J
Rate Other	Spreadover Personal Info	PRDP	
General Data Initial Take On	Clocking Area Benefit Info	Study/Shop Stew	Route Info
Title 0	•		
Gender	•		
Race B	BLACK		
Marital Status 2	MARRIED		
Birth Date 23/05/194	Identification #	4105235352088	
Employment Start 01/08/200	6 Employment End	04/12/2007	$\supset \parallel$
<u>? = 8 AA</u>		🖪 🚊 💆	<u></u>



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.

Putco_ImportDB Database Diagrams
and the second se
4 🛅 Tables
System Tables
dbo.DPARTMNT
dbo.EMPLOYEE
dbo.EMPLU02
dbo.EMPLU03
dbo.EMPLU04
dbo.EMPLU06
dbo.EMPLU07
dbo.EMPLU08
dbo.IMPORT_FLEX
a 🦲 Columns
EMPLOYEE (char(12), not null)
FLD_NUM (int, not null)
VALUE (char(20), null)
FLD_TYPE (smallint, null)

(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

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: -	9		utco_Im	portDB	•1	Execute
1	/0		CONC. HERON		And a second second second	- dbo.EMPLO
Obje		selec	t * 1	from impo	ort_flex	
Object E		selec	t * 1	from impo	ort_flex	•
Object Explor				from impo	ort_flex	
Object Explorer		Results	ва м	essages		FLD_TYPE
Object Explorer		Results	OYEE	essages		FLD_TYPE
Object Explorer	1 2	Results EMPL	OYEE	essages FLD_NUM	VALUE	FLD_TYPE
Object Explorer		Results EMPL0 4113	OYEE	essages FLD_NUM 3	VALUE 20060101	FLD_TYPE 3 3



(4) Getting Result:

4113 •		JANSEN VAN RENSBURG		✓ PIETER	P
General Data	Initial Take On	Clocking Area	Spreadover	Rate	Benefit Info
Personal Info	Scheduling	PRDP	Study 1	Other/BA	8
rivers Licence	01/01/2006				
RDP START	02/01/2006				
ROP EXPIRY	03/01/2006				
RDP TEMP	04/01/2006				

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.