

## Summary

A fair number of Lawson Insight clients outsource their Payroll processing to ADP. Clients who use Lawson for HR and outsource their payroll to ADP generally require a "round-trip" interface that sends employee data to ADP, and returns payroll transactions back into Lawson HR and Financials. Other companies, typically smaller ones, utilize ADP for both HR and Payroll and just need to interface journal entries back into Lawson Financials. Without an automated interface, these journal entries, reflecting Gross-to-Net, and other transactions, must be prepared manually and entered into Lawson.

This document explores this problem and outlines one particular solution, using an ODBC driver to read data from the local ADP database, which is stored in SQLBase.

## ADP & Lawson Version

Client is using Lawson Financials (Unix v7.0.x) stored in Oracle 7.3 (Unix), and ADP PC/Payroll for Windows (single-user) v3.00-18 using SQLBase Server for Windows 6.1.2-PTF11. The SQLBase Server software and 32-bit ODBC driver are installable from the ADP software CD. Since the SQLBase database is a single-user version, the ADP-to-Lawson Interface must be installed on the same Windows PC as the ADP software.

## Technical Solution: ODBC or ADP-provided Download?

ADP data is primarily processed and stored on ADP's mainframe systems. Some transaction data is then transferred back to the ADP PC and stored in a local PC database (SQLBase for single-user ADP clients) or a server database (Oracle for multi-user ADP clients). This database is used for "Check View" analysis with the ADP software, as well as for reporting via ReportSmith.

Note that there are some transactions that are not stored in the PC database. (This is a common complaint from ADP clients, as they also cannot report from ReportSmith on some of these data elements, particularly SUI accruals.):

- In some cases, such as payments to tax authorities and benefit providers, ADP provides no electronic alternative, and these transactions would have to be created via manual journal entry. It may be possible to "simulate" some of these transactions in the interface (i.e. for each tax withholding, also generate an entry reducing the liability to cash).
- In other cases, such as employer FUTA/SUI expenses, and leave earning/accruals, ADP can provide these transactions via a download file. The cost for this download is \$50-250 for setup, and \$8-24 per payroll run.

So, there are really 3 options:

1. Write interface using the ODBC driver and use manual entry of some transactions.
2. Write interface using the ODBC driver and have ADP create a custom download file for "missing" transactions.
3. Have ADP create a custom download files for both the GL interface and the "missing transactions", and write an interface program that maps these transaction files into Lawson.

The chosen solution (option 1) reads the ADP database stored in the local database and generates journal transactions for Lawson that reflect the gross-to-net equation as well as various other payroll transactions (particularly other liabilities and expenses).

## ADP –to– Lawson Company Mapping

The interface provides for a complex mapping of relationships between ADP and Lawson companies:

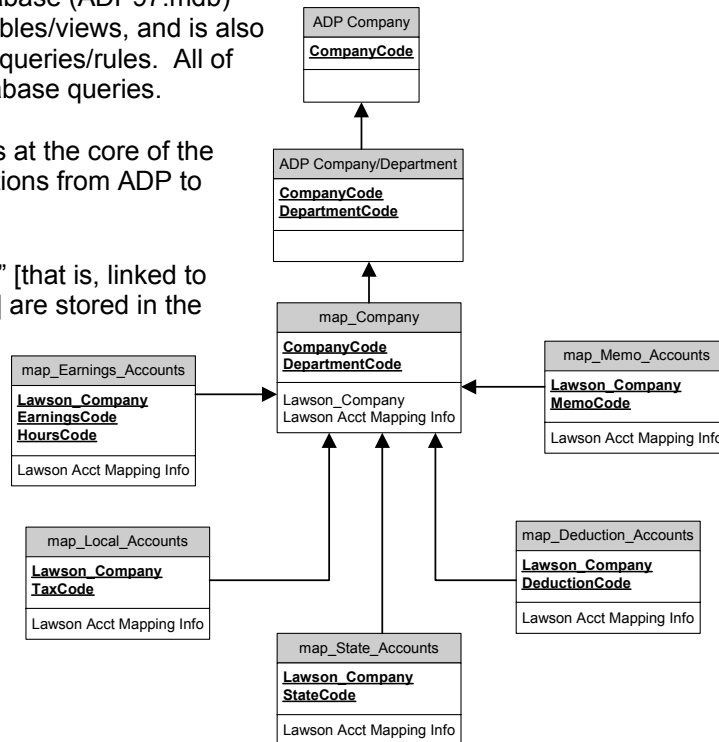
<u>ADP Code</u>	<u>ADP Dept/Lawson A/U</u>	<u>Lawson Company</u>
ABC		50
BAT	25****	60
BAT	20****	70
BAT	30****	80
BAT	(remaining)	10
ZAA		30

## Mapping Database

Direct access to the ADP SQLBase tables/views proved to be very cumbersome and error-prone. Therefore, a Microsoft Access 97 database (ADP97.mdb) was created to link to the SQLBase tables/views, and is also used to store the mapping tables and queries/rules. All of the mapping logic is stored in the database queries.

Conceptually, the Lawson Company is at the core of the data model used for mapping transactions from ADP to Lawson:

In addition, a number of “linked tables” [that is, linked to the underlying SQLBase tables/views] are stored in the ADP97.mdb database. These tables can be re-linked, if needed, by using Access’ “Linked Table Manager”.



## Supported Transaction Types

Note: Client X does not use a Salaries Payable account, so total debits (DR) equals total credits (CR).

### Regular/Overtime Labor Expenses (DR)

Labor expense transactions debit accounting unit/expense account based on (prorated) the allocation department, if used, or the worked department.

### Special Earnings (DR)

Labor expense transactions debit accounting unit/expense account based on the allocation (if used) or worked department and Earnings or Hours Code charged in ADP.

### Tax Withholdings (CR)

Federal Income Tax, State and Local Income Tax, FICA/Medicare, and FICA/Social Security credit one liability account per company/tax combination.

### Tax Expenses/Accruals (DR & CR)

Debit the accounting unit based on allocation department and credit one liability account per company.

### Leave Taken (DR)

These are included in regular earnings amounts, unless final leave payout, in which case they will be in Special Earnings transactions, with 'L' earnings code.

### Deductions Taken (CR)

Depending on mapping rules, credit to one accounting unit/liability account per Lawson company/deduction combination. If the *ExpenseFlag* is True, credits to specified accounting unit and revenue/expense account.

### Direct Deposit & Non-Direct Deposit Payments [Net Checks] (CR)

Credit to one accounting unit/cash account per Lawson company.

### Fringe "Memo" Expenses (DR & CR)

Fringe expenses (e.g. 401k Match) debit the allocation departments (if used) or the department worked (i.e. if an employee's time is allocated between A/U's, their fringes are prorated) and credit one liability account per company/fringe.

### Head Count/Allocation

Shows personnel allocation by ADP Company/Work Department to allocated departments. Using the ADP allocation table, an employee may be "spread" across a number of departments. This information is used in the interface to spread an employee's labor and fringe expenses. It can also be included in the interface journal entry to "book" the headcount figures to statistical accounts for use in Lawson allocations.

### Payments to Tax Authorities and Benefit Providers (DR & CR)

Payments to tax authority and other benefit providers are made by ADP on behalf of the client. However, these are not provided by ADP in any electronic format, ODBC or download. They can be somewhat "simulated" by the ADP-to-Lawson interface based on deductions taken and taxes withheld.

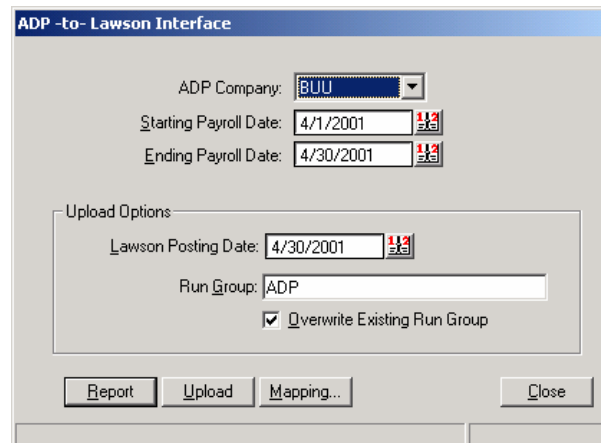
Notes: Leave Earning/Accrual, and Federal and State Unemployment cannot be automated via the ODBC driver, and require a separate ADP report/download.

## Interface Program

An icon is installed on the desktop that opens the ADP-to-Lawson Interface:

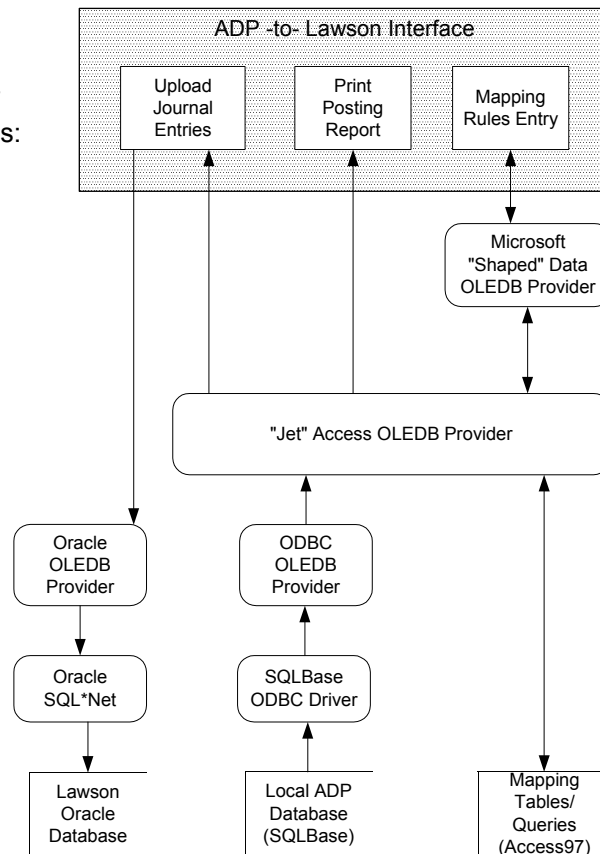
The options are to:

- Select an ADP company, from the list of defined ADP companies
- Specify a payroll date range
- If uploading to Lawson, specify a posting date, a Run Group (i.e. a batch identifier), and whether or not to overwrite any existing data in the Run Group (if any).
- Click on:
  - *Report* to produce a summary posting report
  - *Upload* to generate Lawson journal entries
  - *Mapping...* to maintain mapping rules
  - *Close* to exit the interface program



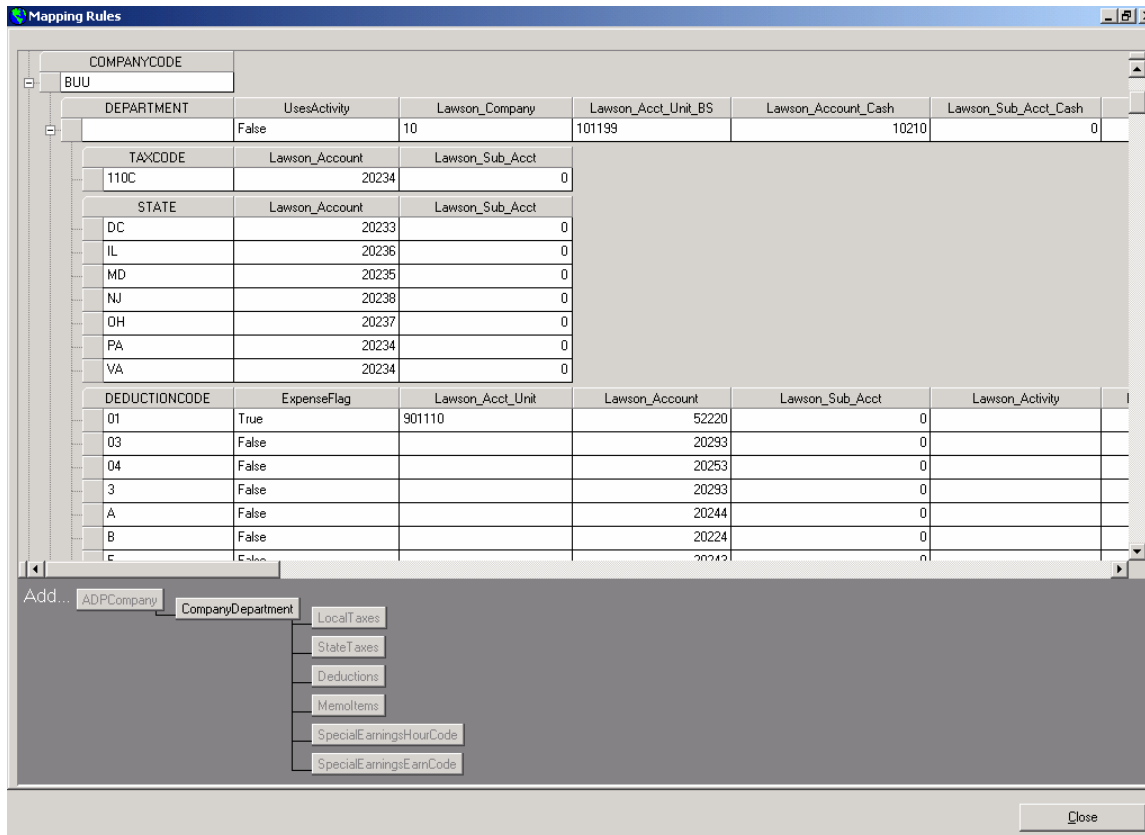
## Technical Model

Behind the signs, a variety of database drivers are used to accomplish the task of mapping and generating the journal entries:



## Maintaining Mapping Rules

This screen is used to maintain the mapping rules for mapping the various types of transactions to Lawson:



COMPANYCODE	DEPARTMENT	UsesActivity	Lawson_Company	Lawson_Acct_Unit_BS	Lawson_Account_Cash	Lawson_Sub_Acct_Cash
BUU		False	10	101199	10210	0
	TAXCODE		Lawson_Account	Lawson_Sub_Acct		
	110C		20234	0		
	STATE		Lawson_Account	Lawson_Sub_Acct		
	DC		20233	0		
	IL		20236	0		
	MD		20235	0		
	NJ		20238	0		
	OH		20237	0		
	PA		20234	0		
	VA		20234	0		
	DEDUCTIONCODE	ExpenseFlag	Lawson_Acct_Unit	Lawson_Account	Lawson_Sub_Acct	Lawson_Activity
	01	True	901110	52220	0	
	03	False		20293	0	
	04	False		20253	0	
	3	False		20293	0	
	A	False		20244	0	
	B	False		20224	0	
	E	False		20243	0	

Add... ADPCompany Company/Department Local Taxes State Taxes Deductions Memotems SpecialEarningsHourCode SpecialEarningsEarnCode

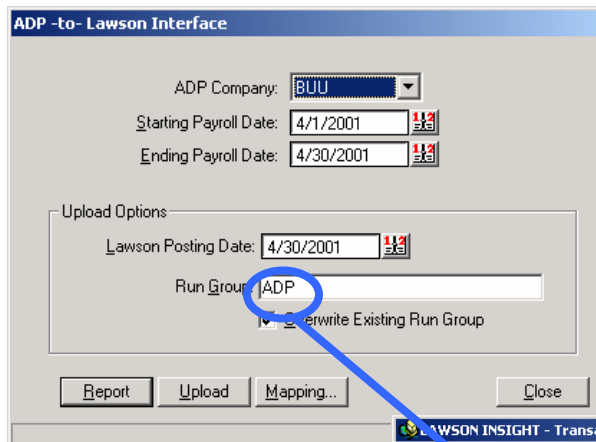
Close

Generally, these mappings are self-explanatory. However, a few notes:

1. ADP companies can not be added from this screen—they must be added in ADP, and will then be available for mapping to Lawson.
2. An *ADP Company/Department* combination is mapped to a Lawson company. A blank Department is used to map the remaining unmapped ADP departments that are not specifically mapped.
3. The *UsesActivity* company mapping field (True/False) specifies whether or not a Lawson company uses Activity Management.
4. The *TemporaryLaborPool* company mapping field (True/False) specifies if this department contains temporary labor expense, which is mapped to a specific account, rather than pooled with regular labor.
5. The *ExpenseFlag* deduction mapping field specifies that a particular deduction is an income/expense transaction rather than a balance sheet item.
6. Accesses to all elements of the Lawson account structure are provided: Company, Accounting Unit, Account/Sub Account, Activity, and Account Category.

## Creating Journal Entries in Lawson

When the *Upload* button is clicked, the corresponding journal entries are written to the Lawson GLTRANSREL table. GLTRANSREL is the Lawson interface point for external systems, with the key field being *Run Group*. Once the transactions are posted by the interface to the Lawson GLTRANSREL table, use Lawson form GL165 to interface/convert them into the Lawson GL and AC systems:



ADP -to- Lawson Interface

ADP Company: BUU

Starting Payroll Date: 4/1/2001

Ending Payroll Date: 4/30/2001

Upload Options:

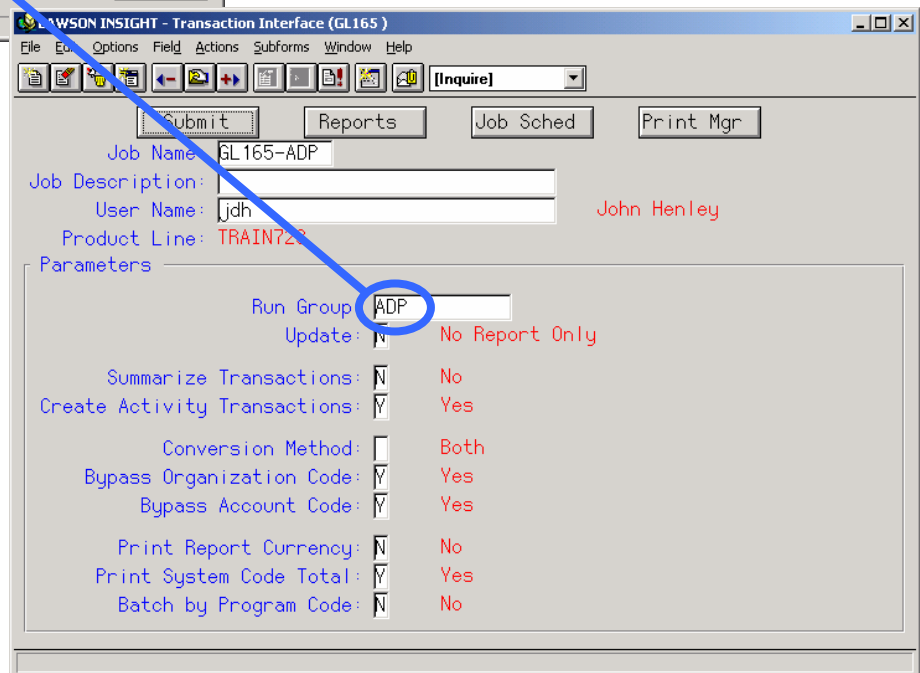
Lawson Posting Date: 4/30/2001

Run Group: ADP

Overwrite Existing Run Group

Report Upload Mapping... Close

Note that the *Run Group* specified on GL165 should match the *Run Group* specified in the Upload Options on the ADP-to-Lawson interface screen.



LAWSON INSIGHT - Transaction Interface (GL165)

File Edit Options Field Actions Subforms Window Help

[Inquire]

Submit Reports Job Sched Print Mgr

Job Name: GL165-ADP

Job Description:

User Name: jdh John Henley

Product Line: TRAIN72

Parameters

Run Group: ADP

Update: N No Report Only

Summarize Transactions: N No

Create Activity Transactions: Y Yes

Conversion Method: Both

Bypass Organization Code: Y Yes

Bypass Account Code: Y Yes

Print Report Currency: N No

Print System Code Total: Y Yes

Batch by Program Code: N No



## Interfacing ADP Payroll Transactions into Lawson Financials

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*John Henley has over 15 years of consulting experience in the IT industry--spanning multiple industries, including healthcare, government contracting and professional services. He holds an undergraduate Business Administration degree from James Madison University and a Masters in Information Systems from George Mason University. He worked for one of the largest software companies in the world before founding Decision Analytics in 1990. Decision Analytics, based in Arlington, Virginia, provides technology consulting and software development services, with a primary focus on Lawson Insight products. Reach John via email at [john.henley@danalytics.com](mailto:john.henley@danalytics.com)*



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