

# Introduction to Logic Table Technology (LTT)

## Problem of the daily organizer

Here is an alphabetical list of tasks in order of importance: get cash, buy gasoline, buy lunch, and eat lunch. Given this list to do in a day, how is it mapped into a database?

## Solution by flat database

One solution is to group the tasks according to type of task such as get, buy, and eat: get cash; buy gasoline, buy lunch; and eat lunch. These tasks form three flat database lists.

## Better solution by LTT

A better solution sets up a database of two logic tables, each related by Type of Task.

Type of Task	Day of Week:	Saturday	Sunday
1		do	
2		do	
3		do	do

On Saturday, do task types 1, 2, and 3. (Other days as Sunday may also be specified.)

Object	Type of Task:	1	2	3
cash		get		
gasoline			buy	
lunch			buy	eat

When task 1 is specified, then get cash. When task 2 is specified, then buy gasoline and buy lunch. When task 3 is specified, then eat lunch. Logic switches are get, buy, and eat.

## LTT is the best solution for complex processes

Multiple chained logic tables capture any level of complexity of tasks. LTT is ideal for the real-time processing of enormous amounts of incoming data in cellular telephone billing systems. LTT is ideal for managing the push operations in extremely complex manufacturing systems. LTT is ideal for computing the accounting arithmetic of very large networks in high definition television.

## Importance of LTT

Over 25-years ago, IBM invented relational databases and the SQL language. Since then LTT is the most significant advance in database technology. LTT is the 100% portable solution with real-time performance for the most complicated database problems.

## Who perfected LTT

Colin James III invented LTT and develops and applies it to large and complex projects in artificial intelligence, accounting, banking, finance, government, high definition television, manufacturing, scheduling, scientific research, and workflow management.

# Logic Table Technology with DB2

Since the invention of SQL in 1973 by IBM over 25-years ago, the most significant advance in RDBMS is Logic Table Technology [LTT].

## DB2 runs logic tables fastest

DB2 UDB v 5.2 runs LTT at least six times faster than ORACLE 7.2 and 12-times faster than MS SQLServer 7.0. (The DB2 test was also on a CPU twice as slow as the others.)

## Importance of this performance

LTT is ideally suited for the real-time processing of enormous amounts of incoming data. TPC benchmarks do not stress-test with the complex internal subqueries of the new LTT.

## Who perfected logic table technology

CEC Services, LLC is a partner in development with IBM. Colin James III, Principal Scientist, invented and develops LTT for finance, HDTV, and manufacturing. He says, "The industry-leading support provided by IBM for Partners In Development made possible the implementation of our technology within the first 30-days of partnership."

## What is a logic table

A logic table looks like this for a manufacturing application:

Type of task	Time of day:	7 AM	8 AM
1		start	
2			start

At the time of 7 AM, task 1 starts; at the time of 8 AM, task 2 starts.

A logic table looks like this for an accounting application:

Account number	Type of task:	1	2
1011		debit	credit
1021			debit
1031		credit	

When task 1 is specified, then account 1011 is debited, and 1031 is credited.

When task 2 is specified, then account 1011 is credited, and 1021 is debited.

Logic tables are chained so that for a certain time of day a logic table for manufacturing is read to start tasks from a logic table for accounting which in turn is read to credit and debit accounts. Multiple, chained logic tables capture any level of process complexity.