



## Success Story: ASI Financial Services

### ASI Financial Services Stages Data for Data Marts 60% Faster Using SyncSort

#### Organizational Profile

- Provider of business measurement and management solutions

#### Business Need

- Speed up data staging for initial data mart build and monthly processing for data mart reloads

#### Environment

- HP-UX

#### Benefits

- Reduced elapsed time of monthly processing by 60%
- Accelerated monthly processing of 20 to 40 million records
- SyncSort easily integrated into monthly data staging and data mart processing application

*"SyncSort's speed and efficiency let us process 300 gigabyte files easily on UNIX"*

Michael Wacey  
Partner  
ASI Financial Services

#### The Challenge:

Recently, ASI Financial Services created several targeted data marts on HP-UX for a major international bank. The primary goal of the project is to mine data from the bank's day-to-day operations with a view to improving customer relations. With the knowledge gleaned from its suite of data marts, the bank's management aims to deliver superior customer service through a banking operation that is one of the most cost-effective in the world. ASI is currently adding two data marts to the three they have put into production for the bank. The data marts already in place are designed for financial profitability, customer profitability, and balance scorecard studies. The new data marts concentrate on activity-based costing and the efficient use of the bank's human resources. In order to do this processing effectively, both to prepare data for the new data marts and to maintain those already in place, they chose SyncSort.

#### The Solution:

Data is normally delivered to ASI in flat files extracted from multiple systems. At this bank, 27 different systems provide data for each data mart. Initially, the extracted data is prepared for the data mart by "grooming" and then formatting it to conform to a data model. In the "grooming" step, ASI studies the data from each system, and designs a custom filter, which is used to make the data syntactically uniform. Next, the records in the syntactically clean files are divided up to be formatted according to the data model for the data mart. For example, the model may require that each record represent a specific transaction, while the records delivered to ASI are organized as customer records, each of which contains multiple transactions. For such intensive data processing, ASI uses SyncSort to divide the customer records vertically into individual transaction records. "From some systems," says Michael Wacey, a partner at ASI, "we receive files in which each record contains all the transactions for one customer over a specific time period. A record may have information for, say, 20 withdrawals, 30 deposits, and 10 account inquiries. SyncSort divides that one record into 60 different transaction records because that is the way the data mart is designed to store the data. We need SyncSort's robust functionality because some of these records may be as long as 2000 bytes."

SyncSort is used very heavily in the next two staging steps: key generation and key assignment. First, ASI assigns each record an "external" four-byte integer date-based key, which is used for housekeeping purposes. During the initial load, this date-based key is not a factor. However, it is critical during re-loads because it is used to keep the data mart current. At ASI's client banks, the data marts are generally re-loaded every month. "Fast processing is critical in this step," says Wacey. "We have SyncSort add this month's key and sort all the data on that key. We then compare the previous month's files to the new files, all of which have been prepared by SyncSort. This is how we find out what's new, and must be loaded."

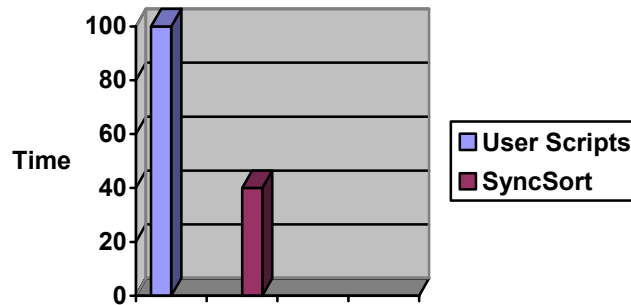
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ASI next looks at the dimensions in each type of record to be loaded, and decides which keys will be assigned. SyncSort is used for the processing in this step because each file must be sorted once for each key. "Usually we have about 10 keys in each record, so that means 10 passes through the data," explains Wacey. "SyncSort is very important to us in this step because we are sorting files of 20 to 40 million records repeatedly, and this must be done every month. SyncSort's speed and efficiency let us process 300 gigabyte files easily on UNIX." Using SyncSort in this stage reduced the elapsed time of the monthly processing by almost 60%. Once the data has been thoroughly prepared and keys assigned to all the records, a final consolidation step insures that the data mart will run as efficiently as possible. In this step, SyncSort again processes the data so that records with matching keys can be concatenated. SyncSort also aggregates the data in a variety of ways before elaborate calculations are done to insure optimal efficiency when a bank's decision makers access the data in the data marts.

### The Benefits

Because a high-performance data processing tool is so important when building data marts, ASI tried other alternatives before selecting SyncSort. Other solutions "just don't have the functionality we need," reports Wacey. "SyncSort has all the functionality we need built-in, and we can perform multiple functions in one job. Also, SyncSort had no memory limitations like other solutions did. It was obvious that SyncSort had the mainframe strength we needed, and it was able to fully utilize a powerful server with a lot of memory."



SyncSort cuts monthly processing by 60%

### About SyncSort

SyncSort is a high-performance application accelerator that improves the performance of multiple applications and reduces elapsed time for a broad range of applications. It speeds ETL transactions by up to 90% and facilitates data mining and click-stream processing. SyncSort merges, aggregates, cleanses, and converts data. Other features include filtering, pattern matching, and partitioning. SyncSort will save you time in operations like data warehousing, data mining, data marts, CRM, ERP, DSS, BI, Oracle Financials, and legacy migration. Using Visual SyncSort, SyncSort applications can be created through a Windows-like GUI. For more information or to arrange for a free trial, call Syncsort at (201)930-8200 or visit [www.syncsort.com](http://www.syncsort.com).