

## **+1Copybook Overview**

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+1Copybook helps load mainframe data into Oracle, SQL Server, Teradata, and DB2 databases.

A mainframe can generate a data set (i.e., a file) to be loaded into a database. The file layout is defined by a COBOL copybook.

To load mainframe data, DBAs must convert the COBOL copybook definitions into CREATE TABLE scripts. This is a very time consuming, manual, and error prone process, which if done incorrectly, may load erroneous data into a database without any error messages.

+1Copybook converts COBOL copybooks into CREATE TABLE scripts and generates the load scripts to load the data. +1Copybook generates HTML documentation to map which COBOL copybook column loaded which column in a database. And +1Copybook optimizes this process by ensuring the minimal amount of disk space is used by assigning the smallest data type to hold the maximum value (e.g., using a smallint versus an integer data type).

For Oracle, +1Copybook generates the CREATE TABLE scripts and SQL\*Loader commands. For SQL Server, +1Copybook generates the CREATE TABLE scripts and the bulk insert scripts. For DB2, +1Copybook generates the CREATE TABLE scripts and DB2 LOAD scripts. And for Teradata, +1Copybook generates the CREATE TABLE scripts.

Under a fixed price contract, +1 Software Engineering worked with BSI Financial to load FISERV EBCDIC data into a SQL Server database. Before contacting +1, BSI planned to use offshore help 24/7 for 3-4 months to convert COBOL copybooks into CREATE TABLE scripts, convert EBCDIC data into ASCII, and load the data into SQL Server.

+1 was able to shorten this time to 6 weeks. This shortened BSI's planned schedule by 2 full months and at significantly reduced costs.

Today, +1 can do this same task in one week. On our website, you can watch our Youtube demonstration on how we convert 20 FISERV COBOL copybooks into CREATE TABLE scripts, convert FISERV EBCDIC data into ASCII, create the SQL Server tables, and load the data all in less than 12 minutes. Visit <http://plus1se.com>.

Past +1Copybook clients include Bank of the West (Oracle and Teradata), Wells Fargo Bank (Oracle for 2,500 COBOL copybooks), Prudential (Oracle), BSI Financial (SQL Server), and other companies worldwide.

IBM, Microsoft, Oracle, and Teradata are database vendors.  
FISERV is an American provider of financial services technology.  
All of the above companies are independent of +1 Software Engineering LLC.