

How To Convert A SAS® Data Set Into A Quicken® QIF Format File

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ABSTRACT

Registration activities for the NorthEast SAS® Users Group (NESUG) annual conference make use of Quicken® and SAS software on personal computers. Quicken® software is very useful for managing financial data for home and small business applications. SAS/FSP® and Base SAS software are very effective for validated data entry, data management, and report production. The difficulty lies in transferring data from SAS data sets to Quicken files. In order to import transaction data from software other than Quicken, the data must be available as an ASCII file in Quicken Interchange Format (QIF). The QIF file format is not one of the standard data conversion formats for SAS software at this time. This paper demonstrates how to write SAS program code to create an ASCII file in QIF file format from a SAS data set.

INTRODUCTION

Registration activities for the NorthEast SAS® Users Group (NESUG) annual conference make use of SAS and Quicken® software on personal computers. The registration process begins with validated data entry using SAS/FSP® software. Information entered in this SAS/FSP data entry system provides data to track the number of registered attendees, prepare confirmation letters and invoices, produce name badges, and track the fees received through checks and purchase orders for conference registrations and workshops. Base SAS software is used extensively for data management and report production.

Quicken software is very useful for managing financial data for home and small business applications. The NESUG conference chairs use Quicken software to track the financial aspects related to the conference, keeping a balance between the expenses for hotel, food, and conference materials and the income received from conference and workshop fees.

Prior to 1996, NESUG deposits of registration fees were tracked in Quicken as total deposit amounts rather than as individual checks. For the most part this approach was satisfactory but difficulties arose when individual checks within a deposit did not clear the bank. It appeared that the best solution would be to transfer information related to deposits of individual checks directly from the SAS/FSP data entry system to Quicken. The difficulty lay in transferring data from SAS data sets to Quicken files. In order to import transaction data from software other than Quicken, the data must be available as an ASCII file in Quicken Interchange Format (QIF). The QIF file format is not one of the standard data conversion formats for SAS software at this time.

The purpose of this paper is to demonstrate how to write SAS program code to create an ASCII file in QIF file format from a SAS data set. Since this solution uses Base SAS software to produce an ASCII file, the version of SAS is unimportant. This approach works successfully for Quicken versions 5 and 6 for

Windows, but Quicken version 4 for Windows did not import the resulting file properly.

QUICKEN QIF FORMAT FILE

Quicken Interchange Format (QIF) is the only format that Quicken can use to import data. To understand QIF format, it is important to understand the contents of Quicken registers.

Quicken files contain financial information similar to a checkbook. The data entry screen for Quicken even looks like a checkbook register. Different Quicken registers are created to track asset, bank, cash, credit or charge card, and liability accounts. Although these registers are used for different purposes, they contain very similar data fields corresponding to date, number of check or reference code, payee, money-out (amount of check, cash spent, amount charged, etc.), cleared status indicator, money-in (amount of deposit, cash received, decrease in liability), memo, and transaction category.

Transaction categories allow you to identify the type of expense and income items. Examples are salary, utilities, and groceries. These categories are especially useful to summarize transactions for reports and graphs. You may use the standard Quicken categories or you can create customized categories to meet specific needs. Categories can be further divided into subcategories.

Quicken also allows you to "split" a payment or deposit to more than one category or account. An example is to split a payment for a credit card bill into the portions related to clothing, food, household items, gasoline and automotive items, travel, and entertainment.

QIF format files have the following general structure. Each transaction must end with a ^ symbol. Each item within the transaction must appear on a separate line. The first line (header) of the file has one of the following codes to identify the type of account:

```
!Type:Bank
!Type:Cash
!Type:CCard
!Type:Invst
!Type:Oth A
!Type:Oth L
```

Letter codes are used at the beginning of each item line to identify the type of item. D is used for date, T is used for the amount of the transaction, N is used for the check number, P is used for the payee, A is used for the address, L is used for the category or class, S is used for split categories, C is used for the cleared column, M is used for memo, \$ is used for split amounts, and E is used for memos in splits.

For example let's examine the appearance of a QIF format file containing data for the following two checks: (1) on 9/20/96 for \$200.00 from Mary Smith, registration number 96R327, to pay the regular conference registration fee, and (2) on 9/15/96 for \$260 from John Brown, registration number 96R494 to pay \$200 for the regular conference registration fee and \$60 for the workshop.

```

!Type:Bank
D9/20/96
T200.00
NDEP
PMary Smith
M96R327
LConference:Regist. Regular
^
D9/15/96
T260.00
NDEP
PJohn Brown
M96R494
LConference:Regist. Regular
SConference:Regist. Regular
$200
SConference:Workshop#1
$60.00
^

```

SAS CODE TO CREATE ASCII FILE IN QIF FORMAT

The following example demonstrates how to create an ASCII file in QIF format (c:\deposits\dep0928.qif) from a SAS data set (c:\deposits\checks.sd2). The SAS data set contains the following variables:

-Alphabetic List of Variables-

Variable	Type	Len
CHKAMT	Num	8
CONFAMT	Num	8
FEECAT	Char	26
FULLNAME	Char	48
RNUMBER	Char	7
WSAMT	Num	8
WSCAT	Char	26

There is only one observation for each check to be deposited. CHKAMT is the amount of the check in US dollars. CONFAMT is the portion of the check allocated to pay for conference registration. FEECAT is the subcategory to identify the type of conference registration fee. These subcategories include:

```

Conference:Regist.Author2
Conference:Regist.Early
Conference:Regist.Guest
Conference:Regist.Half
Conference:Regist.On-site
Conference:Regist.Regular

```

Within Quicken parent category for these subcategories is the category "Conference Inc." representing conference income. FULLNAME is the name of the conference attendee. RNUMBER is the registration number assigned to the conference attendee. WSAMT if the portion of the check allocated to pay for special workshops offered at the

conference for an additional fee. WSCAT is the subcategory to identify which workshop the person is paying for:

```

Conference:Workshop#1
Conference:Workshop#2

```

The following SAS program produces an ASCII file in QIF format from the SAS data set. When the resulting file is imported into Quicken, it will show how much the check is for and whether the amount is split between conference and workshop fees, in addition to the name of the attendee, registration number, type of conference registration, and name of workshop. Not all attendees sign up for workshops, so there is a provision in the SAS code to write data regarding workshops only when needed. All other SAS variables are expected to have valid data present. All of the entrees are treated as bank deposits and the deposit date is set to the date that the program is run.

```

libname in1 'c:\deposits';

data _null_;
  file 'c:\deposits\dep0928.qif';
  set in1.checks;

  if _n_=1 then put '!Type:Bank';

  qdate='D' || left(put(date(),mmdyy8.));
  qtotal='T' || left(put(chkamt,7.2));
  qtype='NDEP';
  qname='P' || left(fullname);
  qregno='M' || rnumber;
  qmaincat='L' || feecat;
  qspt1cat='S' || feecat;
  qspt1amt='$' || left(put(confamt,7.2));
  if wscat ne ' ' then
    qspt2cat='S' || wscat;
  if wsamt ne . then
    qspt2amt='$' || left(put(wsamt,7.2));
  qend='^';

  put qdate;
  put qtotal;
  put qtype;
  put qname;
  put qregno;
  put qmaincat;
  put qspt1cat;
  put qspt1amt;
  if wscat ne ' ' then put qspt2cat;
  if wsamt ne . then put qspt2amt;
  put qend;

run;

```

The resulting ASCII file appears similar to the example presented at the end of the previous section of this paper.

To import the QIF format ASCII file into Quicken version 6, use the following steps:

1. Open Quicken account
2. Select File --> File Operations --> Import
3. Within the QIF Import Window specify the location of the QIF file to import
4. Select OK

CONCLUSIONS

This paper demonstrates how to write a SAS program to create QIF format ASCII files from SAS data sets, which can be used for direct import into Quicken software versions 5 and 6. The approach works successfully for transferring detailed deposit information to Quicken from a SAS/FSP data entry system used to register attendees for the NorthEast SAS User Group annual conference. This solution is very fast, avoids errors, and avoids rekeying data.

REFERENCES

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ACKNOWLEDGMENTS

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