Creating Map files for eBanking statement formats

# Introduction

If a bank statement is in csv format or fixed-length format, then it is possible to include it in eBanking with no need to change the Exchequer code. This is done be creating a file which maps the values in the statement file to the appropriate values in Exchequer. This document explains how to create a map file.

# Identifiers

The following values can be used to identify the content of fields in statement files:

### Value Date

### Entry Date

The import procedure will use Value Date as the date for the statement line in Exchequer. If Value Date is not included or is blank, then it will use Entry Date.

### Bank Reference

This field contains the reference to identify the transaction.

### Bank Reference 2

This field contains a second reference for the transaction. It is not currently used in Exchequer.

### Dr/Cr Amount

This field is used where there is only one field for the value in the csv file; to indicate whether it is a payment or receipt, there should be a minus sign to indicate negative values (payments) ; alternatively, there may be a transaction type field which indicates payment/receipt.

### Trans Type

Not imported into Exchequer - this is used only when it is needed to indicate whether a value is a payment or a receipt.

### Payment Amount

### Receipt Amount

These are used where the file has separate fields for payments and receipts - any sign in these fields is ignored.

# Format of a map file

The map file format is the same as that of an ini file, with sections indicated by a header in square brackets, and key/value pairs in each section. The possible sections are:

### [Version]

*Version=Integer* (e.g. Version=1)

This field is not currently used by Exchequer but has been set to 1 in all internally created map files.

### [Header]

*Header=Integer* (e.g. Header=3)

This field indicates how many header lines there are in the file. If omitted, zero is assumed.

*Footer=Integer* (e.g. Footer= 1)

This field indicates how many footer lines there are in the file. If omitted, zero is assumed.

### [Date]

*Format=string* (e.g. Format=dd-mm-yyyy)

This field defines the date format, with dashes ('-') serving as placeholders for separator characters

*Separator=Character* (e.g. Separator=/)

This character replaces the dashes in the date format to give the correct format for dates (e.g. dd/mm/yyyy)

### [File]

*Type=Integer* (e.g.Type= 1)

This indicates whether the file is csv (0) or fixed length (1). If omitted, csv is assumed

### [Value]

*Divisor=Integer* (e.g. Divisor=100)

The divisor is used if the values in the file are in pence rather than pounds (or equivalents.) It should indicate the amount that the value needs to be divided by to convert it to pounds. If omitted, 1 is assumed.

*UseTransTypeForSign=Integer* (e.g. UseTransTypeForSign=1)

This indicates whether the sign of a value in the file is specified by the transaction type. 0 is no, 1 is Yes. If omitted, 0 is assumed.

*CreditTypes=List of strings* (separated by commas: e.g. CreditTypes= DEB,CRED)

This lists the transaction types (as specified in the Trans Type field in the file) which credit the account (i.e. they are receipts.)

### [FixedLength]

*FieldCount=Integer* (e.g. FieldCount=13)

This is the number of fields in a fixed-length statement file.

*Length0=Integer*

*Length1=Integer*

*Length2=Integer*

*…..*

*LengthN=Integer*

These indicate the length of each field in a fixed-length file. (Note: numbering starts at 0, so for a file with 13 fields, this section would be Length0 to Length12.)

*Ignore=List of strings* (separated by commas: e.g. Ignore= UTL,HDR,VOL,UHL)

The import will ignore any lines which being with these strings (fixed-length files only.)

### [Fields]

This is the only section which does not use key/value pairs. Instead there is a list which corresponds to the order of the fields in the file and identifies the contents of that field; if the field doesn't correspond to any of the recognised fields, then the item in the list at that point should begin with Ignored Field. (It is not essential to put a number after 'Ignored Field', but it helps with accuracy when designing the map.)

E.g.

*[Fields]*

*Ignored Field 1*

*Ignored Field 2*

*Ignored Field 3*

*Trans Type*

*Ignored Field 4*

*Ignored Field 5*

*Ignored Field 6*

*Dr/Cr Amount*

*Reference 2*

*Bank Reference*

*Ignored Field 7*

*Value Date*

*Ignored Field 8*

# Map Filename

The map file should be given a name which allows Exchequer to know which BACS format it relates to. The names which Exchequer recognises are given in the following table. (The map file should obviously be given an extension of .map.)

|  |  |
| --- | --- |
| BACS Format | Map File Name |
| Allied Irish Bank | AIB |
| Bank of Ireland | BankIRE |
| DBS IDEAL | DBSIDEAL |
| HSBC Hexagon | Hexagon |
| Barclays Bacstel | Barclays |
| Natwest Autopay | Natwest |
| Lloyds TSB PcPay CSV | Lloyds |
| Lloyds TSB PcPay ASCII | Lloyds |
| Coutts BACS format | Coutts |
| Barclays BusinessMaster | Barclays |
| Natwest PayAway | Payaway |
| ABN-Amro | ABN |
| Bank of Scotland HOBS | BoSHobs |
| Royal Bank of Scotland | RBS |
| BBM (Int) | BBMInt |
| Co-op Bank | Co-op |
| Yorkshire Bank | Yorks |
| Royline Cash Management | Royline |
| Ulster Bank Anytime | Ulster |
| Den Danske Bank | DenDansk |
| RBS Bulk Format | RBSBulk |
| Unity Bank | Unity |
| BACSess | BacSess |
| SHB BACS | ShbBacs |
| SHB Intl | ShbIntl |
| HSBC 18 | HSBC18 |
| Natwest Payment Manager | Natwest |
| Northern Bank | Northern |
| First National Bank | FirstNat |
| Bankline Internet | Bankline |
| Bank of Ireland Extended | BankIEx |
| Clydesdale Bank | Clyddale |
| National Irish Bank | NIB |
| Acc Bank | AccBank |
| First Trust | 1stTrust |
| HypoVereinsbank | HypoV |
| Bankline Bulk | Bankline |
| J P Morgan BACS | JPMorgan |
| HSBC USA NACHA | NACHA |
| Northern Bank CSF | NBCSF |
| SogeCash | SogeCash |
| RaboBank | RaboBank |
| Lloyds TSB | Lloyds |
| Santander | Santnder |
| Clydesdale Bank New | Clyddale |
| Den Danske Bank UK | DanskeUK |
| ANZ ABA | ANZABA |
| Barclays Internet Banking | BarcInet |
| E Hoare | Hoare |
| HSBC Canada | HSBCCAN |
| HSBC Ireland | HSBCIre |
| HSBC New Zealand | HSBCNZ |
| HSBC Australia | HSBCAus |
| Clydesdale 2013 | Clyde13 |
| HSBC MT03 Eurozone | HSBC18 |
| HSBC MT03 Priority Pay | HSBC18 |
| Bankline Ad Hoc | Natwest |

# Example Map File

Below is the map file for the Bank of Ireland fixed-length statement format which illustrates most of the possible values for statements:

*[Version]*

*Version=1*

*[Header]*

*Header=2*

*Footer=3*

*[Value]*

*Divisor=100*

*UseTransTypeForSign=1*

*CreditTypes=54,79,93,99*

*[Date]*

*Format=yyddd*

*[File]*

*Type=1*

*[Fixed Length]*

*FieldCount = 13*

*Length0=6*

*Length1=8*

*Length2=1*

*Length3=2*

*Length4=6*

*Length5=8*

*Length6=4*

*Length7=11*

*Length8=18*

*Length9=18*

*Length10=1*

*Length11=18*

*Length12=5*

*[Fields]*

*Ignored Field 1*

*Ignored Field 2*

*Ignored Field 3*

*Trans Type*

*Ignored Field 4*

*Ignored Field 5*

*Ignored Field 6*

*Dr/Cr Amount*

*Reference 2*

*Bank Reference*

*Ignored Field 7*

*Ignored Field 8*

*Value Date*

# Document History

|  |  |  |  |
| --- | --- | --- | --- |
| Date | Author | Version | Change |
| 25/06/2013 | Paul Rutherford | 1.0 | Initial Draft |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |