U.S. Bank eBill Service
Batch File Overview

Contents

Chapter 1: Introduction

This document is intended to provide an overview of the batch files supported by U.S. Bank eBill Service.

The document is aimed at business owners who need to get an understanding of the available batch file options, as well as software developers and technical personnel developing files to interface with the system.

Within the document, all setup variants will be documented, that may or may not apply to your specific setup or product version.

The following will be used in the document to call out areas of interest or where care is needed.

Note. An item to take note of.

Important Note. An item to take special note of, as it could affect you or your customers.

!!! Warning !!! An item to pay special attention to.

Please note: References to "Customer" throughout this user guide refers to your bill-paying consumers.

Chapter 2:   Quick Start Guide

The following Batch Files are supported in eBill Service.

Import Files

The following import files are available:

- **Account Master File**. Imports customer, customer account, and billing data.
- **Bill Image & Invoice Data File**. Imports details of bill images and/or invoice level data.
- **Transaction Load File**. Imports details of transactions processed outside the system or full details of payment instructions for fulfillment or payment enrollment.
- **Migration File**. Imports details of customer, funding source, and payment details being migrated from an external system.

Export Files

The following export files are available:

- **Payment Remittance File**. Sends details of standard Payments, Refunds, and Returns processed.
- **Invoice Remittance File**. Sends details of Invoice Payments and Returns processed.
- **Daily Activity File**. Sends details of all activities (payment or otherwise) recorded in the system in the last 24 hours.

Chapter 3: Account Master File

The Account Master File (AMF) is used to load Customer & Account Data (Billing Data) into the system. This includes details of new accounts as well as updates to existing accounts.

> **Note**. The AMF processor requires explicit update records to mark accounts as Closed. The absence of a record in a file will NOT cause it to be flagged as Closed, cancel Pending Payments, etc. This allows you to send in partial or delta files, avoiding the need to send records for all of your customer accounts each day.

Frequency and Timing

You can create an Account Master File as often as you want (daily, weekly, or at some other frequency). Bear in mind the data on our side will only be as up to date as the last file received.

We recommend generating and sending the file overnight for processing, so the system is not processing updates to customer accounts during times when lots of customers and agents are accessing the system to create payments.

File Layout and Content

Both Import File and Acknowledgement (ACK) File are supported for the AMF.

Details of the supported data elements and layout for the fixed width file can be found in the Excel Workbook entitled eBill Service Fixed AMF.xls. Delimited files can be found in the Excel Workbook entitled eBill Service Dynamic AMF.xls.

Import File

The import file uses fixed width or delimited structure or for data elements. The layout of the standard elements is static, and dynamic for the Client Defined Fields.

The fixed width file consists of header record, batch header record, detail record, batch trailer record and file trailer record. The delimited file only has detail records.

The length of the header and trailer records differs from the detail records. The length of the detail record is fixed, but the actual size of each record will depend on your usage of Client Defined Fields.

The format of the file is as follows:

- File Header Record [One per file]
- Batch Header Record [One per Partner for which data is being sent]
- Detail Records [One to Many per Partner]
- Batch Trailer Record [One per Partner for which data is being sent]
- File Trailer Record [One per file]

Acknowledgement (ACK) File

The ACK file uses a Pipe | delimited layout, to make it easier to be read by support staff.

The format of the file is as follows:

- File Header Record [One per file]
- Reject Detail Record [Zero to Many per file]

The Reject Detail Records will contain full details of the record from the Import File that was rejected, along with a Reject Reason Code and Description. Details of the Reject Reason Codes and Description are shown in the file layout.

Chapter 4: Bill Image and Invoice Data File

The Bill Image & Invoice Data File (BIF) is used to load details of Bill Images (for paperless billing) and/or Invoice Data if you are set up for Invoice Payments. This includes details of new images or invoices as well as updates to existing images or invoices.

> **Note**. The system can only load this data against existing Customer/Account records. It cannot create a customer/account from this file. Records will be rejected if no customer/account record is found.

Frequency and Timing

You can create a Bill Image & Invoice Data File as often as you want (daily, weekly, or at some other frequency). Bear in mind the data on our side will only be as up to date as the last file received.

File Layout and Content

Both Import File and Acknowledgement (ACK) File are supported for the BIF. Details of the supported data elements and layout can be found in the Excel Workbook entitled eBill Service Fixed BIF.xls.

Import File

The import file uses fixed width structure for data elements. The layout of the standard element is static, and dynamic for the Client Defined Fields.

The length of the header and trailer records differs from the detail records. The length of the detail records is fixed, but the actual size of each record will depend on your usage of Client Defined Fields.

The format of the file is as follows:

- File Header Record [One per file]
- Batch Header Record [One per Partner for which data is being sent]
- Detail Record [One to Many per Partner]
- Batch Trailer Record [One per Partner for which data is being sent]
- File Trailer Record [One per file]

Acknowledgement (ACK) File

The ACK file uses a Pipe | delimited layout, to make it easier to be read by support staff.

The format of the file is as follows:

- File Header Record [One per file]
- Reject Detail Records [Zero to Many per file]

The Reject Detail Records will contain full details of the records from the Import File that was rejected, along with a Reject Reason Code and Description. Details of the Reject Reason Codes and Descriptions are shown in the file layout.

Chapter 5: Transaction Load File

The Transaction Load File (TLF) is used to load details of Transactions into the system. This includes details of new transactions as well as updates to existing transactions. You have three processing options.

- **Load, Fulfill & Report**. The system will load and fully process the transaction, reporting online and in the posting files. For new payments, this will require full details of the funding source.

- **Load & Report**. The system will load and report the transaction online and in the posting files.

- **Load Only**. The system will load the transaction, such that it appears in the customer's payment history.

  Note. The system can only load this data against existing Customer/Account records. It cannot create a customer/account from this file. Records will be rejected if no customer/account record is found.

Frequency and Timing

You can create a Transaction Load File as often as you want (daily, weekly, or at some other frequency).

We recommend generating and sending the file overnight for processing, so the transactions can be processed before the next End of Day. If they are to be sent during the day, you will need to send the file sufficiently ahead of the End of Day for the transactions to be processed, which will be based on the volume of transactions in the file.

File Layout and Content

Both Import File and Acknowledgement (ACK) File are supported for the TLF. Details of the supported data elements and layout can be found in the Excel Workbook entitled eBill Service Fixed TLF.xls.

Import File

The import file uses fixed width structure for data elements. The layout of the standard elements is static, and dynamic for the Client Defined Fields.

The length of the header and trailer records differs from the detail records. The length of the detail records is fixed, but the actual size of each record will depend on your usage of Client Defined Fields.

The format of the file is as follows:

- File Header Record [One per file]

- Batch Header Record [One per Partner for which data is being sent]

- Detail Records [One to Many per Partner]

- Batch Trailer Record [One per Partner for which data is being sent]

- File Trailer Record [One per file]

Acknowledgement (ACK) File

The ACK file uses a Pipe | delimited layout to make it easier to be read by support staff.

The format of the file is as follows:

- File Header Record [One per file]

- Reject Detail Records [Zero to Many per file]

The Reject Detail Records will contain full details of the records from the Import File that was rejected along with a Reject Reason Code and Description.

Chapter 6:   Migration File

The Migration File (MF) is used to load details of customers, funding sources, and payment into the system during the migration from an existing provider. You have three layout options:

- **Customer Data**. This layout is used to load details of a customer's account (Paperless Billing preferences, etc.) from the existing provider.
- **Funding Sources**. This layout is used to load in details of Funding sources (Bank and Card) that are not currently being used for Payments.
- **Payments**. This layout is used to load in details of processed and pending payments, along with the Funding Source. This requires full details of the Funding Source.

    Note. The system can only load this data against existing Customer/Account records. It cannot create a customer/account from this file. Records will be rejected if no customer/account record is found.

Frequency and Timing

The migration process is typically a one-off event that occurs just prior to going live with our system. Dependent on the size of the migration, and the data being migrated this may be accomplished in several phases.

The timing of the files needs to be such that processing within the current provider has ceased, and it usually takes place during a defined migration window, as part of the transition from the old provider.

File Layouts and Content

Both Import File and Acknowledgement (ACK) File are supported for the MF. Details of the supported data elements and layout can be found in the Excel Workbook entitled eBill Service Fixed MF.xls.

    Note. As these are one off files, any exceptions or rejects will be dealt with manually, as part of the post migration review.

Import File

The import file uses fixed width structure for data elements. The layout of the standard elements is static, and dynamic for the Client Defined Fields.

The length of the header and trailer records differs from the detail records. The length of the detail records is fixed, but the actual size of each record will depend on your usage of Client Defined Fields.

The format of a file is as follows:

- File Header Record [One per file]
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- File Trailer Record [One per file]

Acknowledgement (ACK) File

The ACK file uses a Pipe | delimited layout to make it easier to be read by support staff.

The format of the file is as follows:

- File Header Record [One per file]
- Reject Detail Records [Zero to Many per file]

The Reject Detail Records will contain full details of the records from the Import File that was rejected along with a Reject Reason Code and Description.

Chapter 7:   Payment Remittance File

The Payment Remittance File (PRF) is used to send you details of transactions that have been processed that day so they can be applied to the customer's account. You have three layout options:

- **Payment Data**. This layout is used to details of payments that have been processed that day.
- **Refund Data**. This layout is used to send details of refunds that have been processed that day.
- **Return Data**. This layout is used to send details of returns that have been processed that day.

  Note. For each layout, you can further specify whether you want the file to contain details of all transactions, or whether you want separate files for Bank (ACH), Card and Cash payments.

Frequency and Timing

These files are generated and sent daily. The time they are generated is set by the time you have chosen as your End of Day in the system.

File Layouts and Content

Only an Export File is supported for the PRF.

Details of the supported data elements and the layout for the fixed width file can be found in the Excel Workbook entitled eBill Service Fixed PRF.xls. Delimited files can be found in the Excel Workbook entitled eBill Service Dynamic PRF.xls.

Export File

The export file uses fixed width or delimited structure for data elements. The layout of the standard elements is static, and dynamic for the Client Defined Fields.

The fixed width file consists of header record, batch header record, detail record, batch trailer record and file trailer record. The delimited file only has detail records.

The length of the header and trailer records differs from the detail records. The length of the detail record is fixed, but the actual size of each record will depend on your usage of Client Defined Fields.

The format of a file is as follows:

- File Header Record [One per file]
- Batch Header Record [One per Partner for which data is being sent]
- Detail Records [One to Many per Partner]
- Batch Trailer Record [One per Partner for which data is being sent]
- File Trailer Record [One per file]

Chapter 8:   Invoice Payment Remittance File

The Invoice Payment Remittance File (IPRF) is used to send you details of invoice level transactions that have been processed that day so they can be applied to the customer's account and invoice. You have two layout options:

- **Payment Data**. This layout is used to send details of payments that have been processed that day.

- **Return Data**. This layout is used to send details of returns that have been processed that day.

    Note. For each layout, you can further specify whether you want the file to contain details of all transactions, or whether you want separate files for Bank (ACH), Card and Cash payments.

Frequency and Timing

These files are generated and sent daily. The time they are generated is set by the time you have chosen as your End of Day in the system.

File Layouts and Content

Only an Export File is supported for the PRF.

Details of the supported data elements and the layout for the fixed width file can be found in the Excel Workbook entitled eBill Service Fixed IPRF.xls. Delimited files can be found in the Excel Workbook entitled eBill Service Dynamic IPRF.xls.

Export File

The export file uses fixed width or delimited structure for data elements. The layout of the standard elements is static, and dynamic for the Client Defined Fields.

The fixed width file consists of header record, batch header record, detail record, batch trailer record and file trailer record. The delimited file only has detail records.

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The format of a file is as follows:

- File Header Record [One per file]

- Batch Header Record [One per Partner for which data is being sent]

- Detail Records [One to Many per Partner]

- Batch Trailer Record [One per Partner for which data is being sent]

- File Trailer Record [One per file]

Chapter 9:   Daily Activity File

The Daily Activity File (DAF) is used to send you details of all activities within the system in the last 24 hours, so you can update customer records or use it for analysis. You have four layout options:

- Customer Data. This layout is used to advise you of updates to customer's account (Email Address added, Enrolled Online, Paperless Billing preferences, etc.) captured by the system.

- Funding Sources. This layout is used to advise you of activity related to Funding Sources (Add, Edit & Delete) captured by the system.

- Payment Data. This layout is used to advise you of all activities related payments (scheduled, cancelled, processed & returned) captured by the system.

- Invoice Payment Data. This layout is used to advise you of all activities related to invoice payments (scheduled, cancelled, processed & returned) captured by the system.

   Note. The Payment and Invoice Payment layouts should not be used for applying payments to a customer's account.

Frequency and Timing

These files are generated and sent daily. They are typically generated overnight, after midnight, such that their contents reflect the last 24 hours of activity in the system.

File Layouts and Content

Only an Export File is supported for the DAF. Details of the supported data elements and the layout can be found in the Excel Workbook entitled eBill Service Fixed DAF.xls.

Export File

The export file uses fixed width structure for data elements. The layout of the standard elements is static, and dynamic for the Client Defined Fields.

The length of the header and trailer records differs from the detail records. The length of the detail records is fixed, but the actual size of each record will depend on your usage of Client Defined Fields.

The format of a file is as follows:

- File Header Record [One per file]

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- Detail Records [One to Many per Partner]

- Batch Trailer Record [One per Partner for which data is being sent]

- File Trailer Record [One per file]