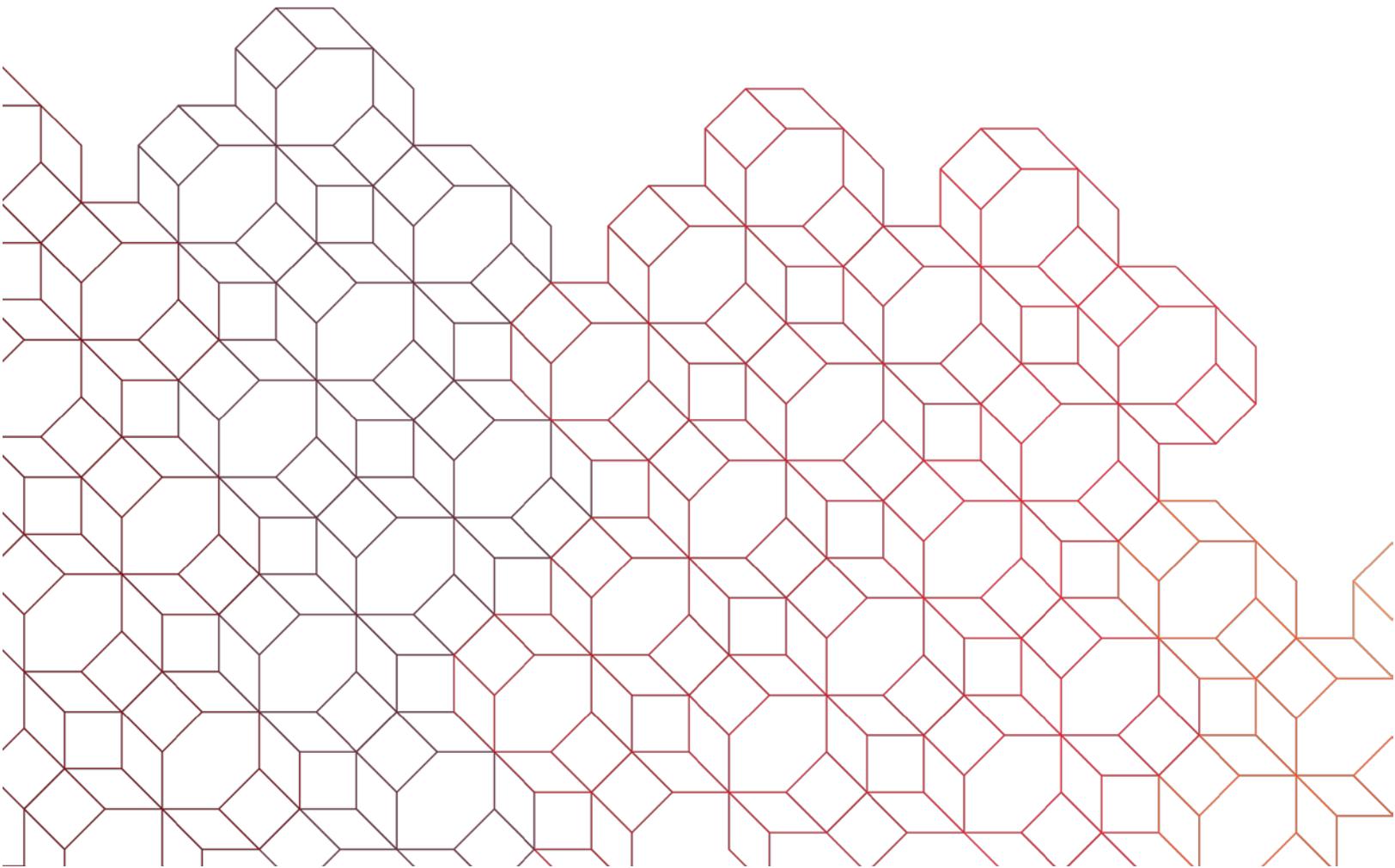




# Business Invoicing

Bill File Creation, Mapping and Importing



## Bill File

A bill file is utilized to import consumer data to the system. The bill file, created by the Biller, could be imported using Import Files or transmitted through SFTP (by the Reseller or Biller).

Bill files could only be in UTF-8 or ASCII formats.

### File Characteristics and Structure

The bill file must be in .CSV format, with a header record, and include the following **required** fields:

Field Name	Type	Max Length	Description
AmountDue	Numeric	N/A	Amount Due
CompanyName	Text	256	Business or First and Last Name
dtDue	Date	N/A	Billing Due Date
OtherData	Text	50	Second Authentication Value Example: Pin, Zip Code
ReferenceNumber	Text	100	First Authentication Value Example: Account Number

1	Account Number	otherdata	FirstName	LastName	Address	City	State	Zip Code	Amount Due	Due Date	Pay this Amount	Previous Balance	Payment Received	Bill ID	FDI	Message
2	1001	Smith	April	Smith	11 South St	Springfield	MO	65619	500.5	2/1/2014	100	200	200	200	Rent 2/1	111 Rent
3	1001	Smith	April	Smith	11 South St	Springfield	MO	65619	200.2	2/1/2014	100	200	200	200	Boat 2/1	222 Boat
4	1002	Johnson	Ethan	Johnson	22 South St	Springfield	MO	65620	500.5	2/1/2014	100	200	200	200	Rent 2/1	111 Rent
5	1002	Johnson	Ethan	Johnson	22 South St	Springfield	MO	65620	200.2	2/1/2014	100	200	200	200	Boat 2/1	222 Boat
6	1003	Williams	Ryan	Williams	33 South St	Springfield	MO	65621	500.5	2/1/2014	100	200	200	200	Rent 2/1	111 Rent
7	1003	Williams	Ryan	Williams	33 South St	Springfield	MO	65621	200.2	2/1/2014	100	200	200	200	Boat 2/1	222 Boat

Figure: Bill File Load

### Bill File Available Fields

The file importer provides a mapping tool to facilitate the mapping and ingestion of data into the system, but the file layout of the bill file is at the Biller's discretion.

Refer to [Appendix 1](#) for further details regarding the available bill mapping fields. The Bill File mapping tool groups the data fields according to the groupings in Appendix 1.

### Presentment Options

The following three invoice presentment options are available:

Field Name	Field Description
Summary Presentment	A consolidated total of the amount due
Detailed Presentment	Line item detail and amount due
PDF Presentment	A consolidated total and/or line item detail of the amount due in custom PDF format



## Summary Presentation

Summary presentation allows an invoice to be displayed as a consolidated total or with line items that make up the entire amount due. This option displays basic bill information including due date, amount due, account number, customer name and address.

Level II Credit Card processing information fields are presented in the summary if the feature is enabled for the Biller and the fields are included in the bill file.

### Sample Summary Bill File Layout

Source Field	Destination Field	Description
Amount Due	AmountDue	Required Field
Company Name	CompanyName	Required Field
Due Date	dtDue	Required Field
Zip Code	OtherData	Required Field Second Authentication Field
Account Number	ReferenceNumber	Required Field First Authentication Field
Address	Address	
City	City	
State	State	
Zip	Zip	
Statement Date	dtStatement	
Previous Balance	PreviousBalance	
Current Payments	PaymentReceived	
Current Charges	CurrentCharges	
Amount to Pay	PayThisAmount	
Tax Amount	InvTaxAmount	Level II CC
Customer Code	InvCustomerCode	Level II CC
Purchase ID	InvPurchaseID	Level II CC
Dest Zip	InvDestZipCode	Level II CC



## Summary Presentment Example

Summary Presentment will create an invoice for each data row in the delimited file, if rows within the file have not been loaded previously or duplicated.

Mainway Billing 555 Green Road Naples, FL 33333	Mainway DBA Address Line 1 sample Address Line 2 sample City sample, NY 28211
<b>Account Number</b> **1222	<b>Previous Balance</b> \$850.00
<b>Customer Code</b> 55555	<b>Payment Received</b> \$200.00
<b>Purchase ID</b> 77777	<b>Current Charges</b> \$0.00
<b>Destination Zip Code</b> 44444	<b>Tax Amount</b> \$36.00
<b>Biller Invoice No</b> 11111	<b>Amount Due</b> \$650.00
<b>Statement Date</b> 2/01/2019	
<b>Due Date</b> Due Date Mask	

Please Pay This Amount \$650.00

[Print](#) [Close](#)

Figure: Summary Presentment Example

## Detail Presentment

Detailed invoices can have multiple detail line items within a single invoice. This option displays detailed bill information including individual line items and account information, reproducing all information available on paper bills, invoices and statements. The Bill File must be set up to allocate the charges to the correct account, with repeating summary 'invoice' level data on every row, once for every line item.

Level II credit card processing information fields will be presented in this detail presentment if enabled for the Biller and these fields are included in the bill file.



### Sample Detailed Bill File Layout

The following file layout represents a sample detailed bill file for upload to the system. The detail Bill File requires one record per detail line to be shown on the detailed bill containing all fields in each record.

Source Field	Destination Field	Description
Amount Due	AmountDue	Required Field
Company Name	CompanyName	Required Field
Due Date	dtDue	Required Field
Zip Code	OtherData	Required Field Second Authentication Field
Account Number	ReferenceNumber	Required Field First Authentication Field
Address	Address	
City	City	
State	State	
Zip	Zip	
Statement Date	dtStatement	
Previous Balance	PreviousBalance	
Current Payments	PaymentReceived	
Current Charges	CurrentCharges	
Amount to Pay	PayThisAmount	
Item Number	ItemNum	
Item Description	ItemDesc	
Quantity Ordered	ItemOrderQty	
Shipped	ItemQtyShipped	
Unit Price	ItemUnitPrice	
Net Amount	ItemNetAmount	
Tax Amount	InvTaxAmount	Level II Credit Card
Customer Code	InvCustomerCode	Level II Credit Card
Purchase ID	InvPurchaseID	Level II Credit Card
Dest Zip	InvDestZipCode	Level II Credit Card



### Simplified Detailed Presentment

The following example would produce two bills:

- The first bill for Account Number 1001 has two lines of detail.
- The second bill for Account Number 1002 has three lines of detail.

Defines Summary Invoice Level				Details Individual Level	
Account Number (ReferenceNumber)	Pin Number (OtherData)	Last Name	First Name	Product	Quantity
1001	88888	Smith	Andrew	Hangers	15
1001	88888	Smith	Andrew	Plates	12
1002	89999	Jones	Reggie	Hangers	5
1002	89999	Jones	Reggie	Plates	8
1002	89999	Jones	Reggie	Cups	4

The following illustrates a .CSV file for detailed invoices:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Account	Other Data	ReportDate	Last Name	First Name	Address1	Address2	City	St	Zip	Phone	BalDueDate	AcctBal	PayThisAmount	LineDescription	LineAmount
100001	926822	9/1/2011	Smith	Andrew	116 ASHBY ST NW		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	13082.09	13082.09	Gross Revenue	\$126,401.47
100001	926822	9/1/2011	Smith	Andrew	116 ASHBY ST NW		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	13082.09	13082.09	Number of employees	2
100001	926822	9/1/2011	Smith	Andrew	116 ASHBY ST NW		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	13082.09	13082.09	Classification	5
100001	926822	9/1/2011	Smith	Andrew	116 ASHBY ST NW		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	13082.09	13082.09		
100002	947368	9/1/2011	Jones	Reggie	235 E PACES FERRY RD NE		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	265.87	265.87	Gross Revenue	\$98,340.00
100002	947368	9/1/2011	Jones	Reggie	235 E PACES FERRY RD NE		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	265.87	265.87	Number of employees	1
100002	947368	9/1/2011	Jones	Reggie	235 E PACES FERRY RD NE		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	265.87	265.87	Classification	4
100002	947368	9/1/2011	Jones	Reggie	235 E PACES FERRY RD NE		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	265.87	265.87		
100003	171177	9/1/2011	Lewis	Steven	713 RALPH D ABERNATHY BV		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	18259.68	18259.68	Gross Revenue	\$87,539,679.00
100003	171177	9/1/2011	Lewis	Steven	713 RALPH D ABERNATHY BV		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	18259.68	18259.68	Number of employees	245
100003	171177	9/1/2011	Lewis	Steven	713 RALPH D ABERNATHY BV		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	18259.68	18259.68	Classification	6
100003	171177	9/1/2011	Lewis	Steven	713 RALPH D ABERNATHY BV		SAN FRANCISCO	CA	94108	415-222-2222	9/15/2014	18259.68	18259.68		

Figure: CSV file for Detailed Invoices

The following illustration reflects a Detailed Presentment:

FridayClone ✕

Mainway Electric FridayClone  
1 Winner's Circle  
Suite A  
Jupiter, FL 33458

---

**Reference Number** 111222 **Amount Due** \$650.00

**Statement Date** 2/25/2019

**Due Date** 2/28/2019

---

Line Number	Line Description
125.00	Parts
225.00	Labor
300.00	Other Services

[Print](#) [Close](#)

Figure: Detailed Presentment Example



## Summary Plus PDF File Presentation

PDF Bill Files display an exact replica of a customer's paper bill via PDF or other image format. File mapping is performed in the same manner as a .csv or .txt file. However, the user will select either pipe or comma delimited. There are two ways to setup a PDF file:

- PDF Image with Embedded Meta Data (mapping will use the comma delimited selection)
- A Zip File with the PDF and the Bill Summary Information File (mapping will use the pipe or comma delimited selection)

## PDF Image with Embedded Meta Data

### Overall File Organization

The file is comprised of repeating blocks that contain the following:

- PDF Image
  - PDF image(s) of the statement images
- Billing Data
  - Standard Billing data required for this biller configuration (delimited as detailed below)
- EOF Marker

### Specific File Section Information

All PDF files must contain the following information:

- Actual PDF Image
  - The PDF image should be based on the statement images and follow the same pagination as the original PDF images.
- Billing Data
  - For Billing Data rows only.
  - The following format is used to embed the data in the PDF file:
    - <</Field 1 Name(field 1 value)/Field 2 Name (field 2 value).../Field n name(field n value)>>
    - Example: <</Account Number(12345678)/Zip Code(76248)/Due Date(04/01/2010)/Amount Due(115.80)/Name(Bob Smith)>>

## Field Requirements

The same data fields for .csv or .txt files are available for Summary Plus PDF presentment. Refer to Appendix 1 for the Bill File Mapping Fields table. The following are requirements for the fields on the PDF bill file:

- All amounts must be numeric only (no commas or dollar signs)
- Indicate negative amounts with a minus sign (rather than enclosed in parentheses).
- If a field has a comma, the field information must be enclosed in quotes
  - Example: "Smith, Jr" or "Acme Feed Company, Inc".
- Actual PDF Image: Use the %%EOF in the file
- Special Considerations: PDF size and density is up to the biller.



## Creating a Delimited File

A Biller could create a delimited data file using one of the below methods:

- Manually via a text editor or Excel
- Export data from another system in the proper format
  - Refer to the 'Create a Bill File from QuickBooks' document for more details.

The following table contains the acceptable delimiters:

File Type	Acceptable Delimiters
.csv, .txt	Comma, Tilde, Pipe, Tab
.PDF, .zip	Pipe, Comma

Column header values / field names must be included in row 1 of the file to signal the field information contained in the column.

1	Account Number	otherdata	FirstName	LastName	Address	City	State	Zip Code	Amount Due	Due Date	Pay this Amount	Previous Balance	Payment Received	Bill ID	FDI	Message
2	1001	Smith	April	Smith	11 South St	Springfield	MO	65619	500.5	2/1/2014	100	200	200	Rent 2/1	111	Rent
3	1001	Smith	April	Smith	11 South St	Springfield	MO	65619	200.2	2/1/2014	100	200	200	Boat 2/1	222	Boat
4	1002	Johnson	Ethan	Johnson	22 South St	Springfield	MO	65620	500.5	2/1/2014	100	200	200	Rent 2/1	111	Rent
5	1002	Johnson	Ethan	Johnson	22 South St	Springfield	MO	65620	200.2	2/1/2014	100	200	200	Boat 2/1	222	Boat
6	1003	Williams	Ryan	Williams	33 South St	Springfield	MO	65621	500.5	2/1/2014	100	200	200	Rent 2/1	111	Rent
7	1003	Williams	Ryan	Williams	33 South St	Springfield	MO	65621	200.2	2/1/2014	100	200	200	Boat 2/1	222	Boat

Figure: Delimited File Example



## Appendix 1: Bill File Mapping Fields

The following table contains further details regarding the mapping fields available for Bill Files:

Column	Type	Max Length	Description
<b>Required Fields</b>			
AmountDue	Numeric	N/A	Required Field <ul style="list-style-type: none"> <li>Required Format: 1000.00</li> </ul>
CompanyName	Text	256	Required Field
dtDue	Date		Required Field <ul style="list-style-type: none"> <li>Required Format: MM/DD/YYYY</li> </ul>
OtherData	Text	50	Required Field <ul style="list-style-type: none"> <li>There are minimum and maximum length partner settings.</li> <li>The min/max settings are generally defaulted to a 4 minimum and 18 maximum.</li> </ul>
ReferenceNumber	Text	100	Required Field <ul style="list-style-type: none"> <li>There are minimum and maximum length partner settings.</li> <li>The min/max settings are generally defaulted to a 4 minimum and 18 maximum.</li> </ul>

<b>Summary Invoice Level Fields</b>			
Address	Text	256	
Address2	Text	100	
AlternativeReferenceNumber			
BillerInvoiceNo	Text	50	
City	Text	50	
Country	Text	3	
CurrentCharges	Numeric	N/A	Required Format: 1000.00
DisplayField1	Text	350	
DisplayField2	Text	350	
DisplayField3	Text	350	
DisplayField4	Text	350	
DisplayField5	Text	350	
dtDueOverride	Text	50	
dtStatement	Date		Required Format: MM/DD/YYYY
Email	Text	128	
EntryField1	Text	350	
EntryField2	Text	350	
EntryField3	Text	350	
EntryField4	Text	350	



Column	Type	Max Length	Description
EntryField5	Text	350	
ExternalAccountID	Text	255	External Document Retrieval ID
ExternalID	Text	2048	
Fax	Text	20	Required Format: 123-456-7890
FDICode	Text	20	Passed to Standard AR File
FirstName	Text	32	Required when using separate name fields.
InvoiceMinimumPaymentAmount	Numeric	N/A	
LastName	Text	32	Required when using separate name fields.
MerchantDescriptor	Text	50	
MerchantDescriptorAlt	Text	50	
MerchantDescriptorCity	Text	50	
MerchantDescriptorContact	Text	20	
MerchantDescriptorCountry	Text	3	
MerchantDescriptorState	Text	20	
MerchantDescriptorStreet	Text	60	
MerchantDescriptorZip	Text	14	
Message_OutstandingBalance	Text	1024	
MiddleName	Text	32	
MinimumAmountDue	Numeric	N/A	
PaymentInstrumentBlock	Text	50	
PaymentReceived	Numeric	N/A	Required Format: 1000.00
PayThisAmount	Numeric	N/A	Required Format: 1000.00
Phone	Text	20	Required Format: 123-456-7890
StartDate	Date		Required Format: MM/DD/YYYY
State	Text	2	USPS State Abbreviations must be used
TotalAccountBalance	Numeric	N/A	Required Format: 1000.00
Zip	Text	14	Zip Code or Zip Plus 4: 19333-1234
<b>Detail Level Fields</b>			
ItemDesc	Text	2000	
ItemFromDate	Text	20	
ItemNetAmount	Text	255	Recommended Format: \$1,000.00
ItemNum	Text	255	
ItemOrderQty	Text	255	Recommended Format: 1,000
ItemQtyShipped	Text	255	Recommended Format: 1,000



Column	Type	Max Length	Description
ItemToDate	Text	20	
ItemUnitPrice	Text	255	Recommended Format: \$1,000.00
Prev_0to30Days	Numeric	N/A	Required Format: 1000.00
Prev_30to60Days	Numeric	N/A	Required Format: 1000.00
Prev_60to90Days	Numeric	N/A	Required Format: 1000.00
Prev_90DaysPlus	Numeric	N/A	Required Format: 1000.00
PreviousBalance	Numeric	N/A	Required Format: 1000.00
<b>Special Fields</b>			
BillerRemittanceField1	Text	50	Passed to Standard AR File
BillerRemittanceField2	Text	50	Passed to Standard AR File
BillerRemittanceField3	Text	50	Passed to Standard AR File
BillerRemittanceField4	Text	50	Passed to Standard AR File
BillerRemittanceField5	Text	50	Passed to Standard AR File
DataFileName	Varchar	N/A	
DataFileOffset	Numeric	N/A	
<b>Level II and III Fields – B2B Support</b>			
InvAltTaxAmount	Numeric		
InvAltTaxAmtItmLevel	Numeric		
InvAltTaxIdItmLevel	Text	15	
InvAltTaxIDOrdLevel	Text	2	
InvAltTaxRate	Numeric		
InvAltTaxType	Text	2	
InvAltTaxTypeApp	Text	4	
InvCommodityCode	Text	12	
InvCustomerCode	Text	16	
InvDestCountryCode	Text	3	
InvDestStateCode	Text	2	
InvDestZipCode	Text	10	
InvDiscountPerItem	Numeric		
InvDutyAmount	Numeric		
InvFreightAmount	Numeric		
InvLineItemTotal	Numeric		
InvLocalTaxItmLevel	Numeric		
InvNationalTaxItmLevel	Numeric		
InvNetGrossIndicator	Text	1	



Column	Type	Max Length	Description
InvOrderDisAmtOrdLevel	Text	11	
InvProductCode	Text	12	
InvProductName	Text	35	
InvProductSKU	Text	30	
InvPurchaseID	Text	25	
InvPurchaseIDitmLevel	Text	23	
InvQuantity	Numeric		
InvShipFromZipCode	Text	10	
InvSupplierOrdRef	Text	25	
InvTaxAmount	Numeric		
InvTaxRate	Numeric		
InvUnitCost	Numeric		
InvUnitMeasure	Text	12	
InvVatRefNumber	Text	15	
InvVatRegNumber	Text	13	
InvVatTaxAmount	Numeric		
InvVatTaxRate	Text	5	

**Other Fields**

BillerID	Numeric	Fixed value. Refer to description.	The value in this field must match one of the Biller ID's in the system. If the value is not a match, the file load will fail.
Status	Text	Fixed value. Refer to description.	Valid values are not case sensitive and include: Active Expire or Expired Paid, PaidOther, or Paid Other If the value is blank or empty, the record will be skipped with regard to the status change. If this field includes a value not mentioned above, the file load will fail.



## Appendix 2: Summary Invoice with Mapped Fields

The following illustration reflects a sample summary invoice:

The screenshot shows a summary invoice window titled "Mainway DBA". On the left, a list of external labels is mapped to fields in the invoice:

- Company Name: Mainway Billing
- Address: 555 Green Road, Naples, FL 33333
- Reference Number: \*\*1222
- Invoice Number: 11111
- Statement Date: 2/01/2019
- Due Date: 2/02/2019

On the right, another set of external labels is mapped to fields in the invoice summary:

- Name and Address from Biller's Profile: Mainway DBA, Address Line 1 sample, Address Line 2 sample, City sample, NY 28211
- Previous Balance: \$850.00
- Payment Received: \$200.00
- Current Charges: \$0.00
- Amount Due: \$650.00

At the bottom, it says "Please Pay This Amount \$650.00" and includes "Print" and "Close" buttons.

Figure: Summary Invoice with Mapped Fields

## Appendix 3: Detailed Invoice with Mapped Fields

The following illustration reflects a sample detailed invoice:

The screenshot shows a detailed invoice window titled "FridayClone". On the left, external labels are mapped to fields:

- Company Name: Mainway Electric
- Reference Number: 111222
- Statement Date: 2/25/2019
- Due Date: 2/28/2019
- Item Num: Line Number

On the right, external labels are mapped to fields in the invoice summary:

- Name and Address from Biller's Profile: FridayClone, 1 Winner's Circle, Suite A, Jupiter, FL 33458
- Amount Due: \$650.00
- Item Desc: Line Description

The detailed line items are:

Line Number	Line Description	Amount
125.00	Parts	
225.00	Labor	
300.00	Other Services	

At the bottom, it includes "Print" and "Close" buttons.

Figure: Detailed Invoice with Mapped Fields



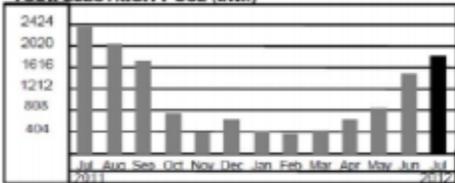
## Appendix 4: PDF Invoice with Mapped Fields

The following illustration reflects a sample PDF invoice:

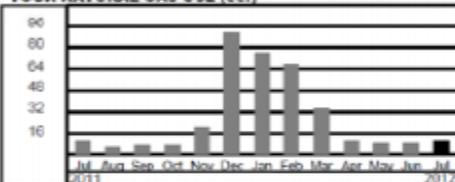
Statement of Account



**YOUR ELECTRICITY USE (kWh)**



**YOUR NATURAL GAS USE (ccf)**



**ACCOUNT COMPARISON SUMMARY**

	Current Month	Previous Month	Last Year
<b>ELECTRICITY</b>			
Days on Bill	31	31	33
kWh Used	1,887	1,545	2,424
Avg. kWh/Day	60.9	49.8	73.5
Cost per Day	\$6.04	\$4.88	\$7.32
Days on Bill	31	31	33
<b>GAS</b>			
ccf Used	11	9	11
Avg. ccf/Day	0.4	0.3	0.3
Cost per Day	\$0.52	\$0.47	\$0.53

Billing Date: 07/27/12  
Customer Number:

**Balance Due**  
On or Before Aug 13, 2012 Pay **\$224.40**  
After Aug 13, 2012 Pay **\$227.82**

**BILLING SUMMARY**  
*(see reverse for detail)*

Previous Bill 06/26/2012 \$187.03  
Payments/Adjustments Thank You -\$187.03  
**Balance \$0.00**

Current Electricity Charge \$187.26  
Current Natural Gas Charge \$16.13  
**Total Current Energy Charge \$203.39**

City Services \$19.43  
State & Local Sales Taxes \$1.58  
**Total Account Balance \$224.40**

Customer Service (210) 353-2222  
Gas or Electric Trouble (210) 353-4357  
Pay-By-Phone 1-877-257-1172  
Pay Online [www.cpsenergy.com](http://www.cpsenergy.com)  
"So Habla Español"

\*\*\* LOOK UP AND LIVE \*\*\*

When trimming trees, doing yard work or cleaning your pool, be aware of overhead power lines. People are injured every year while doing everyday tasks, because their tools come in contact with electricity. For more safety information, call (210) 353-2970 or visit [cpsenergy.com](http://cpsenergy.com).

PLEASE PRESENT BOTH PORTIONS IF PAYING IN PERSON

Help your neighbors in need of utility assistance.  
Enclosed donation for REAP, Inc. \$

Check here if your address or phone number has changed. Make changes on the reverse side.

**CUSTOMER NUMBER**  
Balance Due \$224.40  
On or Before Aug 13, 2012 Pay  
After Aug 13, 2012 Pay \$227.82

Total Amount Enclosed \$

DO NOT WRITE BELOW THIS LINE

1 2 000000000000 0000000022782 0000000022440 01 0 0

**Mainway Utility**  
386 Park Avenue, South  
New York, NY 10016




Figure: PDF Invoice with Mapped Fields

