Introduction

Credit Management Association (CMA) has partnered with Ansonia Credit Data, a leading commercial credit reporting company. We are dedicated to providing our customers with the accurate and affordable business credit reports you have come to count on from us for your critical decisions. A wide variety of domestic companies share their current A/R activity with CMA on a regular basis. This information is updated continuously in a global database consisting of millions of customers of every size, industry and market segment.

CMA's customers provide business information in the form of daily (or at least monthly) data contributions that are then aggregated to obtain financial indicators of a debtor's ability to repay debt. Your company's participation in the data contribution process is fundamental to the production of these indicators. In return for contributing data, not only does your company receive a substantial discount on the credit reports you purchase, you will experience the long-term benefits that come with being able to compare data within your industry and market segment.

A/R Contributions

Companies submit their trade payment experiences to CMA (on a daily, or at least, monthly basis). Contributors typically accomplish this by using an existing file export feature in their billing software to automatically and conveniently transmit a file to CMA using FTP, email or an integrated automatic upload feature in your accounting package.

Financial software suites often use different methods to export this A/R data. Many financial software packages will allow the export of A/R data as text files. In other cases, software packages use database applications such as Microsoft Access or SQL Server for storage of the financial data. In these cases, an Information Technology (IT) person can write a simple query to extract the required data to a text file. In addition, some software packages allow exports to other agency formats, such as Experian, which then can be used to import onto CMA customer portal anscers.com.

When to Make A/R Contributions

A/R contributions ideally are sent daily and at the invoice level so that we can accurately calculate days to pay and leading trends. At a minimum, we require you send a monthly contribution during the first few days of each month and reflect the state of your A/R at the close of business on the last business day of the previous month. For example, your December contribution representing close of business on December 31 would be sent on the 31st of December or the 1st of January or as soon after as practicable.

When sending in your first contribution, it might be possible to generate accurate contributions for previous months, or you may have those files on hand because you've created them for other purposes. If so, consider sending those to us so that we can immediately establish a history for your customers in our system.

While our default (and minimum requirement) is for a monthly transmission, we prefer daily contributions. We also encourage sharing of invoice-level (detail AR) data. Obviously, larger or more frequent contributions are more appropriate in situations where the generation and transmission of exports / reports are fully automated.

More frequent and more detailed contributions allow us to more precisely determine days beyond terms and other data points that can be subjected to trend analysis and provide more predictive, proactive alerts that can more readily expose unfavorable creditworthiness trends before theyimpact your bottom line. These transmissions also allow us to develop custom products for those clients who desire them.

File Formats Used by Other Credit Agencies

If you have been contributing data to one of CMA's partners, we may be able to use the same file layout you created for them. Send us a sample and we'll confirm if we can use it with no or only minor changes, thus saving you time and effort.

Each data file provided to CMA is subjected to a battery of automated validation tests provided by Ansonia Credit Data — involving comparing current and older data, flagging large changes in total A/R and more. This is complemented by manual checks on critical data points to ensure correct matching and hygiene. The bottom line is where many of our competitors accept information inaccuracies and data matching failures, CMA catches and corrects them. This is in your interest as well as ours; you want to report accurately on your customers!

A/R Invoice Detail File

This is our preferred format for receiving trade experiences. The most basic possible form of an invoice detail file is illustrated below:

Account Number	Transaction Number	Customer Name	Open Invoice Amount	Invoice Date
556755	12345	ACE MFG	$1000.00	7/1/2018
556755	12346	ACE MFG	$524.00	7/3/2018
345454	12347	ACME CORP	$250.00	7/5/2018
233434	12348	ABC TRUCKING	$2356.65	8/15/2018

Typically, this would be provided with a separate customer listing showing account number, address, phone number, credit limit and other fields.

Note from the above example that all invoices are listed for each account number. In the example, ACE MFG has two invoices (12345 and 12346) while the other companies each have one.

Note that CMA needs the open invoice amount, which is not necessarily the same as the total invoice amount. The open invoice amount is the amount currently owed after any partial payments or other credits have been applied. We are only interested in open invoices and unapplied credits, so invoices with a zero balance (completely paid) should be omitted from the file if possible. One exception is that your first contribution can include closed / paid invoices up to two years old, which allows us to immediately establish clear payment trends.

A/R Aging Summary Data Contribution File

If an open invoice or transaction listing is not available, we can accept a file containing a row or

record for each of your customers that currently have a non-zero A/R balance. Each record includes, at minimum, your customer's account number, name address, and aged balance owing. (As noted later, this can also be split into two files, with customer info in one and aging info in the other, provided the account number appears in both reports).

The aging consists of five "buckets" in 30-day increments (assuming net 30 terms; the first bucket will actually contain all the current AR, which may represent a different time span). The following is an example of aging for three customers, omitting everything but the actual aging plus account number and name:

Account Number	Customer Name	Current A/R	A/R 1- 30 Days past due	A/R 31- 60 Days past due	A/R 61- 90 Days past due	A/R Over 90 Days past due
556755	ACE MFG	$2,456	$5,435	$434	$300	$0
345454	ACME CORP	$843	$2,323	$0	$0	$0

Account Number	Customer Name	Current A/R	A/R 1- 30 Days past due	A/R 31- 60 Days past due	A/R 61- 90 Days past due	A/R Over 90 Days past due
233434	ABC TRUCKING	$0	$7,667	$734	-$120	$324

If an A/R aging summary cannot be produced from your accounting package, or cannot be produced in a single file, alternate formats are available. These formats are discussed later in this document.

CMA prefers that data contributors provide their A/R aging summary data as a comma delimited format file with a column header as the first record. However, it is acceptable for data contributors to provide A/R summary files in other formats such as fixed width and Microsoft Excel files. **The most important thing is consistency: the same report, with the same report options, in the same file format, each time you transmit.**

Required/Optional Fields

Ansonia Credit Data requires specific data fields be provided. The following tables describe the required and optional fields that are present in the data contribution data files:

Customer / AR file(s)

The following fields would all be required for an AR summary contribution; the aging columns would be omitted if invoice data is provided or if this is a collections placement contribution.

Field Name	Description	Optional/Required
Account Number	The internal account number for your client.	Required
Company Name	The business name of the debtor.	Required
DBA/Alternate Name	The "Doing Business As" or alternate name for the debtor.	Optional
Address1	The address of the debtor's business.	Required
Address2	The second address line.	Optional
City	The name of the city where the debtor's business is located.	Required
State or Province	When providing account information for companies in the U.S., Canada, Mexico or Australia, please provide state / province codes. They can be blank or set to the same value as the Country field, for all other countries. In the US, Canada and Australia use standard postal codes per each country's postal service (2 character codes for US and Canada, 2 or 3 character codes for Australia). In Mexico there do not appear to be federally standardized state codes, but please be consistent and provide us with a legend for the codes you're using.	Required
Country	The country code of the debtor's business. Please provide a two-character country code for this field. The following link shows the ISO 3166-1 alpha-2 standardized country codes: http://en.wikipedia.org/wiki/ISO_3166-1_alpha-2	Required unless contributing only U.S. accounts.
Postal Code	The postal code of the debtor's business.	Required
Phone Number	The phone number of the debtor's business.	Optional
Fax Number	The fax number of the debtor's business.	Optional
Email address	One or more known email addresses for the debtor, separated by semicolons or commas. In general these should be the address to which you send invoices (the AP email address) but can also be other relevant known addresses.	Optional; required if no mailing address provided
A/R Balance Current	The A/R balance that is current. For common Net 30 terms this would be amounts within 1-30 days of invoice; for Net 60 terms this would be amounts within 1-60 days of invoice, and so on.	Required for AR summary contributions *
A/R Balance 1 – 30 Days past due	The A/R balance that is 1 to 30 days past due.	Required for AR summary contributions *

A/R Balance 31 – 60 Days past due	The A/R balance that is 31 to 60 days past due.	Required for AR summary contributions *
A/R Balance 61 - 90 Days past due	The A/R balance that is 61 to 90 days past due.	Required for AR summary contributions *
A/R Balance Over 91 Days past due	The A/R balance that is over 90 days past due.	Required for AR summary contributions *
Terms	The credit terms granted this customer. Some form of "net" terms is preferred (e.g., "Net 30" or "N30" for net 30 days). If you have revoked or denied credit to a particular customer, this field should contain a distinct value such as "CSH". See the table "Ansonia Terms Codes" below for more information.	Required for AR contributions **
Credit Limit	The maximum open credit allowed for this customer. If you use "magic numbers" in this field such as zero for credit revoked, etc., please provide a legend of what these values mean. Otherwise, any value less than $100 in this field is ignored. Note that we assume credit limits are provided in the same currency as A/R amounts (see notes under Currency Code below).	Optional (AR contributions only)
High Credit	High Credit / High Balance is the highest balance this account has had in the past two years. If you can only provide life-to-date or other time frames, please indicate the time frame used.	Optional (AR contributions only)
First Sale Date	The date of the earliest sale or a "customer since" date. Please document the date format used (e.g., ISO, YYYY-MM-DD, MM/DD/YYYY, etc). Please use 4 digit years.	Optional (AR contributions only)
Last Sale Date	The date of the most recent sale to this customer. If omitted, it will be estimated when possible based on the contents of the aging buckets, but an explicit value is generally more accurate. Please document the date format used (e.g., ISO, YYYY-MM-DD, MM/DD/YYYY, etc). Please use 4 digit years.	Optional (AR contributions only) Note, this value is inferred from invoice contributions.
Currency Code	Unless all the dollar amounts in your contribution file are expressed in the same currency (you must specify if that currency is other than U.S. Dollars), you must provide the three-character ISO currency code in which the amounts in each record are expressed. See the link below for the appropriate codes. Note that currency codes are *not* always the same as ISO three-character country codes and should not be confused with each other. For example, the currency code for U.S. Dollars is USD, rather than USA for the country code.	Required unless all currency amounts are expressed in the same currency or can be reliably understood by some other means †

	https://www.currency-iso.org/en/home/tables/table-a1.html If your system cannot export a base currency code for each account, but another hard and fast rule exists such as "accounts with Canadian addresses are always expressed in Canadian Dollars, all other accounts are in U.S. Dollars regardless of country of address" then we can follow such rules — but you must inform us of them.	
Referral Amount	For collections contributions this is the amount referred for collection. It's assumed to be in U.S. Dollars unless otherwise specified (see "Currency Code" above for more information).	Required for collections contributions only

* Some accounting systems use different numbers or divisions of "buckets". A common variation is the use of four buckets instead of five, and the last one would be "A/R over 60 days past due" Others may extend out for 12 months, or may have larger numbers of buckets in 15-day increments instead of 30-day increments. We can generally map these to our system if you accurately document what each "bucket" means.

** This field can be omitted if provided at the invoice level – in fact, if you grant different terms per purchase rather than per customer, you MUST provide it at the invoice level. Please provide us with a legend explaining any terms codes that are not human-readable. For example, "Net 30 Days" and "1% 10 Net 30" are human-readable. "STD" is not, as it could mean any number of things. "1% 30" is ambiguous. It is important that we are clear on the meaning of terms like "Cash Only," "Cash," "COD," "Prepaid" and the like. Different companies use these terms in different ways. It's important that we know which terms *always* mean "credit denied or revoked."

† We convert all contributed dollar amounts into U.S. dollars for purposes of storage in our system and then recalculate and display in other currencies per user preference — for instance, expressing A/R as Canadian dollars for users in Canada. Because currency conversions can introduce rounding issues, it's particularly desirable for contributed A/R to be expressed to the penny (rather than as whole numbers) when it is not contributed as U.S. dollars.

What Accounts to Include

At a minimum, include all accounts with a balance greater than zero, plus all accounts that have first or last sale date, high credit, credit limit, or have been flagged as "credit denied or revoked". If you are contributing invoice-level data, include all invoices with an open amount, including credit amounts. It is better to include too many accounts or all accounts, than to omit some that are usable per the above criteria. We can filter out what we don't need.

When providing invoice-level detail, it is very desirable for us to obtain, along with your first contribution of open invoices, a listing of all closed invoices for the past two years. This may be a separate report, or an expanded version of the report you'll normally provide. To be useful, this report should include the date paid and/or the age of the invoice when paid, and preferably the due date. This allows us to establish a history of payment practices for your portfolio.

Invoice File

Field Name	Description	Optional/Required
Account Number	The internal account number for your client.	Required
Transaction Id	A unique transaction ID, typically an invoice number.	Required
Alternate Transaction Id	Any other identification that might be helpful with dispute resolution such as Pro #, PO #, Sales order #	Optional
Transaction Type	If the file contains non-invoice documents such as credit / debit memos, payments, a document type indicator is needed. Examples would be IN, CM, DM, PM for invoice, credit memo, debit memo, payment. Please provide a legend explaining the codes used.	Required if file contains documents other than invoices
Apply-to Transaction Id	If providing multiple document types, this indicates what invoice a payment or memo is applied to. If this field is left blank, it signifies an "unapplied credit".	Required if file contains documents other than invoices
Transaction Date	Invoice date in a consistent format	Required
Transaction Amount	The original invoice amount	Preferred but optional
Open Amount	The currently open balance of the invoice	Required
Currency Code	If the currency used for Transaction Amount and Open Amount vary by invoice, you must report the ISO currency code here.	Required if you invoice in different currencies.
Due Date	Due date in a consistent format	Required if Terms code and/or Terms Days are unavailable.
Terms	If you grant different terms to customers at the invoice level, you must report them here. If you don't use complex terms like those offering early payment discounts or "prox" terms, as an alternative, you can provide the Terms Days column listed next.	Preferred; required if terms vary by sale, otherwise can be reported in the customer file.
Terms Days	The number of days of credit granted; for example, for Net 30 terms this would 30. This can be used in place of due date (we will calculate the Transaction Date plus the Terms Days to be the Due Date) or to clarify ambiguous terms codes. If you don't use complex terms like those offering early payment discounts or "prox" terms, Terms Days can also substitute for a terms code as well as due date.	Optional
Ship Date	The date of shipment pickup	Optional
Delivery Date	The date of shipment delivery	Optional
Last Payment Date	The date the last partial or final payment was received.	Optional if transmitting only invoices with

		open balances; required if transmitting paid invoices.

File Format

CMA and Ansonia Credit Data prefer a text file with a delimited format but fixed-width files are also acceptable.

If possible, dollar value fields should be expressed to the nearest penny. When dollar value fields contain a "cents" portion, then a period must be included between the dollar and cents portion (i.e. 3256**.**55) or you must explain to us that there is an implicit decimal point. We prefer that formatting information such as currency symbols and thousands separators be omitted. Negative numbers should be indicated either with a leading minus sign or by enclosing the number in parentheses.

If your company uses a mainframe or minicomputer, in most cases we can accept EBCDIC-encoded data and/or numeric data that has been "packed" as is common with such systems. However, it is preferable for numeric data to be formatted correctly by you in text format. If we have to decode data that is not in plaintext then we will need your accounting and possibly your IT staff to spend a bit of time working with us to verify the accuracy of our decoding and to make sure that binary data is not corrupted during FTP transmission or by being inadvertently converted from one character set to another.

Consistency of File Formats

One of the biggest challenges we experience with data contributions is that many contributors have not completely automated how they generate the contribution file(s). As a result, various aspects of the file can change seemingly at random: Column heading names will change, the order of columns may change, columns may be dropped or added, or the file format itself may change — for example, from comma-separated (CSV) to Excel (XLS).

We understand that human nature and the real-world environment employees operate in can make consistency difficult. As a result, Ansonia has built much resilience and flexibility into our contribution processing to help correct some of these variations. Still, it is far safer to be as consistent as possible; often it is just a matter of making the responsible employee(s) aware of this need.

If your company can completely automate the export of your contribution into a push-button operation, it is very worthwhile to do so. For one, we would not need to contact you with questions or clarifications. Sometimes a change in format requires significant programming labor on our end and we need to check to be sure a change is deliberate and ongoing and not the result of a mistake.

If it is not possible to completely automate the export, we recommend you attempt to simplify the procedure and thus reduce the opportunity for human error. Writing up a short procedure document or checklist for the responsible employees also is useful, particularly when there are personnel changes or someone needs to fill in for a vacationing or ill employee.

If you change software versions or platforms or need to alter your export for any other reason, please notify your CMA representative before sending the file. We will make sure our IT staff is aware of the change so that they can allocate resources to address it.

Delimited Text File Formats

We prefer a comma delimited file, or some other common delimiter such as a tab, with a header row. If your file does not contain a header row, you must provide a separate file that specifies a description of the fields by position.

When choosing a file delimiter, please be careful to select a delimiter that is not contained in your data or make sure that any such values are properly quoted. Also, make sure that quoted field values don't themselves contain quotes. If you have any questions about this, please contact us; our technical staff will be happy to assist you.

Below is an example of a comma delimited format file *with* a header row:

Account,Name,Address,City,State,Country,PostalCode,ARCurrent,AR1To30PD,AR31To60PD,AR61To90PD,AROver90PD 556746,ACME CORPORATION,123 GATEWAY DR,ELGIN,IL,US,60123,134.54,0.00,0.00,0.00,0.00

546784,ABC CONSTRUCTION,P O BOX 33400,ST PAUL,MN,US,55133,1452.38,168.88,0.00,0.00,0.00

234545,"ACME TRUCKING, INC",567 EAST 78TH ST,BLOOMINGTON,MN,US,55420,1139.76,0.00,0.00,0.00,0.00

865678,ACE MANUFACTURING,4567 109TH STREET,URBANDALE,IA,US,50322,2919.23,0.00,0.00,0.00,0.00

Please note in the above example that a comma is used as delimiter to separate the fields. Also, note the company name in the third record; since it contains a comma, the value is quoted.

Fixed Width Format

Many contributors submit their A/R contributions as a fixed-width file format. This format relies on the requirement that each field starts at a specific character position. If a fixed-width file is provided, you also will be required to submit a file layout, which specifies the width of each field in order.

Below is an example of such a layout. This can be in any readable, self-evident format. This particular example is in the OLE-DB shema.ini format common on PCs:

[ARSummary.txt] ColNameHeader =
False Format = FixedLength
MaxScanRows = 0 CharacterSet =
OEM Col1=ACCOUNT Char Width 10
Col2=NAME Char Width 19
Col3=ADDRESS Char Width 18
Col4=CITY Char Width 10 Col5=STATE
Char Width 2

Col6=POSTALCODE Char Width 5
Col8=ARCurrent Decimal Width 9
Col8=AR1TO30PD Decimal Width 9
Col9=AR31TO90PD Char Width 9
Col10=AR61TO90PD Char Width 9
Col11=AROVER90PD Char Width 9

Below is an example of a fixed-width file format corresponding to the above schema:

```
556746      ACME CORPORATION   123 GATEWAY DR    ELGIN      IL60123   134.54     0.00     0.00     0.00     0.00
546784      ACME CONSTRUCTION  P O BOX 33400     ST PAUL    MN55133   145.38   168.88     0.00   100.00    80.00
234545      ACME TRUCKING      567 EAST 78TH ST  HARRIS     MN55420   119.76     0.00   250.00     0.00     0.00
865678      ACE MANUFACTURING  4567 109TH ST     PLAINS     IA50322   299.23     0.00     0.00     0.00   500.00
```

Note that in the above example, all of the fields start at a specific character position. This particular schema is a bit contrived for formatting purposes of this document; in the real world, you need to provide for the longest possible value that will appear in any one field. This prevents the truncation of long values. In the above example, more space would typically be allowed for fields, particularly the name and address fields.

Separate A/R Data and Customer Files

At times, it is necessary for the data contributor to provide their A/R info (whether summary or invoice detail) and customer information as separate data files. If this is the case, both the A/R and customer data files must contain a common primary key. This primary key should be the customer's account number.

Below is an example of a comma-delimited A/R summary file *without* customer information:

```
ACCOUNT,ARCURRENT,AR1TO30PD,AR31TO60PD,AR61TO90PD,AROVER90
556746,134.54,0.00,0.00,0.00,0.00

546784,1452.38,168.88,0.00,0.00,50.00

234545,1139.76,0.00,0.00,0.00,0.00

865678,2919.23,0.00,0.00,560.00,200.00
```

Below is an example of the associated customer information data file

```
ACCOUNT,NAME,ADDRESS,CITY,STATE,COUNTRY,POSTALCODE 556746,ACME
CORPORATION,123 GATEWAY DR,ELGIN,IL,US,60123

546784,ACME CONSTRUCTION,P O BOX 33400,ST PAUL,MN,US,55133

234545,ACME TRUCKING,567 EAST 78TH ST,BLOOMINGTON,MN,US,55420

865678,ACE MANUFACTURING,4567 109TH STREET,URBANDALE,IA,US,50322
```

Please note in the above examples that the account number is the primary key and is present in both of the files.

When sending a separate customer information file, the files should be consistently named so that Ansonia can detect which file contains customer data and which contains summary data. It is not necessary for the file names to be the same each month, as long as they follow the same pattern. For example:

MyCompanyCustomerData-2017-06.csv
MyCompanyARData-2017-06.csv

We can easily tell from the file name which company contributed the file, whether it is customer or A/R data, and which year and month the contribution is for. If you are contributing more frequently than monthly, you would simply add the day:

MyCompanyCustomerData-2017-06-12.csv
MyCompanyARData-2017-06-12.csv

A variation on separate files is possible with Excel spreadsheet format. An Excel spreadsheet, or

workbook, can contain multiple tabs, or worksheets, and the customer and A/R data can be contributed in one physical Excel workbook file but on separate worksheets.

How to Transmit Data to Ansonia

Creation of your data contributions should be as automated as possible. If your IT department can automate all of it via a pushbutton operation with as few opportunities for human error as possible, this is in everyone's best interest. To the extent generation of your data contribution files requires manual steps, document the steps and procedures. This helps when you have personnel changes or someone needs to fill in for a vacationing or sick employee or contractor.

FTP Client Software

FTP clients are widely available and easy to use. They make transmittal of files a drag and drop operation. Free FTP clients for Windows include Free FTP, Go FTP, and FileZilla. Popular low-cost commercial programs include Cute FTP, WS-FTP and WinSCP. On the Mac, try Cyberduck or Transmit.

It's important to send all your files in "Binary mode". FTP programs usually default to "ASCII mode" or "Text mode" which is intended for text files and may corrupt binary formats like Excel, or ZIP archives. When you set up the connection to CMA/Ansonia, it's best to specify that all files will be transferred in binary mode.

CMA Upload Page

CMA provides an upload page on anscers.com. Log into your account, select Web Submit. (You must log in as an anscers.com user to see this option). You simply select the file(s) you want to upload and they are placed on the Ansonia FTP server for you.

naming of the worksheets must be consistent from month-to-month so that our system can properly identify which worksheet contains customer rather than A/R data.

Other Formats

Some accounting systems cannot export columnar files, and the accounting database is proprietary and cannot be queried for such information. However, reports that are ordinarily printed can be captured to a file, and we can "scrape" those reports for the necessary information. This also needs to be evaluated on a case-by-case basis. If your accounting system cannot export text data files, but can send reports to a file (or reports can be intercepted and sent to a file by your operating system), Ansonia can evaluate such reports to determine if they are usable by us. Sometimes it is possible for us to reliably extract data from a report saved as a PDF, although success depends on exactly how optional values are formatted and whether the PDF is generated as