



Design Criteria

CUSoon was designed with these criteria in mind:

- Very simple to operate
- Essentially maintenance-free
- Readily interfaceable to the oldest, most rigid "legacy" databases and operating systems with ease
- No sensitive data leaves your organization's secure perimeter.
- Your host(s) not be exposed to the internet
- Either plain text or HTML emails of extraordinary quality can be created and merged with ease with the data derived from your host database(s)
- Costs of daily operation be made as close to zero as possible

System Requirements

CUSoon requires a 32-bit, Pentium-class PC, running Windows 95, 98, NT, 2000 or XP, connected to (i) your several host(s) by an internal LAN and (ii) an internet connection to your ISP. Processor speed and memory requirements are generally unimportant. The PC may be used for other work while running CUSoon, but if that's to be done, a larger PC would be better than a very small one.

The requirements for the host are that it only support the basic FTP standard. Any common host operating system (MPE/iX, Unix, Linux, NT, etc.) should suffice.

Setup

The configuration of CUSoon requires only these entries:

- A manager's password
- The address and password of your mail server
- The IP addresses or domain names of your hosts, along with their FTP passwords and target directories
- The interval at which CUSoon will query your local host(s). This period is selectable in varying increments from 5 minutes to 1 day

CUSoon Corporate Mailer

AICS Research, Inc.
University Park, NM 88003

Price: US\$2495.00

Maintenance: \$500/annum

An Example of Merging Data

The expectation underlying the design of CUSoon is that your server(s) will only have minimal text formatting capabilities. Virtually any machine running any sort of query language can produce an extract file such as this:

```
>>>
To: atmar@aics-research.com
Document: welcomeletter
name=TUTHILL/JANE
address1=PO BOX 4691
address2=
city=UNIVERSITY PARK
state=NM
zip=88003
balance=49342
amount=167834
>>>
```

The typical record segment shown above is perhaps just one of 10,000 similar records that might exist in the extracted file. The ">>>"s are the separators of one email's record from another. Within this record, the lines that have a colon in them are the signals to CUSoon as to what is to be done with this record's data. In this instance, the "To:" email address is specified, as is the text document that the data is to be merged with.

Rows with an equal sign define the variables, the data extracted from your database(s). Although you may define one thousand variables in one record, probably no more than 20 or 30 variables would be used in one emailing.

CUSoon possesses the capacity to take this raw data and process it into an email of exquisite appearance. If your database query language has the capacity to perform elaborate text formatting, you may either format the data on your host or in CUSoon itself, although the presumption is that you will want to format the data at the time of merge on the PC that's running CUSoon.

Standard HTML tags are the basic formatting structure of CUSoon template documents, for both plain text and full-HTML emails. To these standard tags, CUSoon adds a new tag, "<cu>." Before each record's email is transmitted, the document is (i) scanned for the <cu> tags, (ii) the requested text or numeric processing is performed, and (iii) the resulting values are substituted for each of the tags.

A typical template document will look something like this:

```
<cu def last:name(sub(name,1,pos(name,"/")+1))>
<cu def first:name(sub(name,pos(name,"/")+1))>
<cu def first:if(pos(first," ")>0,
sub(first,1,pos(first," ") -1),first)>
<cu def total:amount+balance>

<cu first&" "&last><br>
<cu name(address1)><br>
<cu name(address2)><br>
<cu name(city)&" "&state)&" "&sub(zip,1,5)>
<p>
Dear <cu first>,
<p>
I just wanted to write you a short note and welcome you to
our organization. Your contribution of <cu format
(total/100,dec2,commas,dollars)>, along with those of
your co-workers, will substantially strengthen our reach
in the community.
<p>
Sincerely,
<p>
Robert Jackson<br>
Vice-President,<br>
Customer Relations<br>
<p>
```

Supported Functions

\wedge	<i>exponentiation</i>
$*$, $/$	<i>multiplication and division</i>
$+$, $-$	<i>addition and subtraction</i>
$\&$	<i>text concatenation</i>
int(x)	<i>returns integer of x</i>
frc(x)	<i>returns fractional component of x</i>
abs(x)	<i>returns absolute value of x</i>
rnd(x)	<i>returns a random number</i>
sgn(x)	<i>returns the sign of x</i>
sqr(x)	<i>returns the square root of x</i>
exp(x)	<i>raises x to the power e</i>
log(x)	<i>returns the base 10 log of x</i>
ln(x)	<i>returns the natural log of x</i>
cap()	<i>capitalizes first letter of text string</i>
dns()	<i>downshifts text string</i>
ups()	<i>upshifts text string</i>
name()	<i>capitalizes each word of text string</i>
sub()	<i>returns substring of text string</i>
right()	<i>returns rightmost part of text string</i>
deb()	<i>deblanks text string</i>
english()	<i>converts numeric value to english</i>
pos()	<i>finds one string within another</i>
date()	<i>returns date in specified format</i>
time()	<i>returns time in specified format</i>
day()	<i>returns day of week in specified format</i>
month()	<i>returns month in specified format</i>
if()	<i>allows conditional statements</i>
format()	<i>formats numeric values as specified</i>

The end result, the document that your customer will see, will look like this:

```
Jane Tuthill
PO Box 4691
University Park, NM 88003
```

Dear Jane,

I just wanted to write you a short note and welcome you to our organization. Your contribution of \$2,071.76, along with those of your co-workers, will substantially strengthen our reach in the community.

Sincerely,

```
Robert Jackson
Vice-President,
Customer Relations
```

When logos, signatures, images and tables are added, your imagination becomes your only limit as to what can be accomplished in CUSoon.

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