CoSTa Manual

Version 1.40 (c)1995,96 Gary A. Priest

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Introduction

CoSTa was written almost as soon as I got myself a modem and got on-line to the internet.

I immediately realised that there was no way of knowing how much time I spend on line

and hence have no idea of what my telephone bill is going to be. Using CoSTa this problem is solved.

Each time you connect to the internet using the supported programs a log file is created/appended with the current start date and time, plus an awful lot of other information. This file quickly becomes very large, with no apparent use. Until now!! CoSTa runs over this log file and extracts all the information it requires about each call made, it then calculates the length of the call and the cost.

Each call can easily be seen in the main window, along with a current phone bill total. When the phone bill arrives, you can tell CoSTa to flag all calls up to the date of the bill as paid, the current total is reset and ready for your next month's/quarter's phone calls.

CoSTa currently works in conjunction with Atari NOS, ICE, MiNTnet, CoNnect, and CixComm.

Hardware required

This program should run on all TOS based computers from an ST to a Falcon. It was developed on a Falcon and hence looks best running on this machine.

Getting Started

Installing CoSTa

CoSTa is installed and run like any other normal Gem Application. It does not run as an accessory.

On-Line Help

CoSTa comes complete with it's own on-line help system. Position the mouse cursor over whichever window help is required on and press Help.

Setting Up CoSTa

After installing CoSTa, it is necessary to set up certain information for CoSTa to function correctly.

BEFORE performing an extract, the costs, paths and preferences must be configured in order that the program knows where to find the log files, and how much a call is going to cost.

See the relevant sections in this manual on how to do this.

CoSTa comes with the costs for a British Telecom local call already set up.

Paths

CoSTa currently works with the log files created by NOS, ICE, MiNTnet, CoNnect, and CixComm.

It is important to tell CoSTa where to find the log files.

Click on either the text or on the path beside it. Use the file selector to locate the relevant log files, that you use.

Click on the check box beside the path to tell CoSTa that this file is to be used during extraction.

The log files are normally named as follows:

NOS - NOS.LOG

ICE - ICE.LOG

MiNTnet - messages Connect - CONNECT.LOG

CixComm - CIXCOMM.LOG

Preferences

Backup NOS Log File To History

After CoSTa has extracted call details from the NOS.LOG file, this file is renamed to NOS.HST to prevent further processing. N.B. this only applies to NOS because the log file contains vast amounts of information and quickly becomes very large. All other log files are processed using a timestamp (see Timestamp in the Extracting Calls section).

This can happen in two ways (which option you choose depends on whether you feel the need to keep a history or not):

Append

The contents of the current .LOG file are appended on to the end of any existing .HST, hence it can get very large but does contain ALL details.

This file should be deleted/archived on a regular basis.

Overwrite

Any existing .HST file is deleted, and the current .LOG file is renamed to .HST.

This keeps the size of the .HST down, but of course, all details prior to the last extraction are lost.

Auto Extract on Startup

If this option is set to 'Yes', then CoSTa will automatically perform an extraction whenever it is called ie. on program startup.

This makes the process of call extraction completely transparent to the user. Simply run CoSTa and it will automatically know about all your calls.

GMT Adjustment

This applies only for extractions from NOS and ICE.

All times written to NOS.LOG and ICE.LOG are in Greenwich Mean Time. This obviously causes a problem if your local time zone is not GMT, as your telephone company costs calls based on your local time.

CoSTa needs to know how to convert the GMT times into local ones.

The Time Adjustment field can contain a number of hours between 0 and 23. The sign is set by selecting the relevant box beside it.

Hence, if your local time zone is 1 hour ahead of GMT (British Summer Time or France, for example) set this field to 1 + ...

Now CoSTa will convert the GMT date/time into local and your call will be costed correctly.

Show Costs Including VAT

This sets the default display of costs to either include VAT or exclude it.

This can be overriden from the menu option.

Duration Offsets

Most log files do not accurately record a call duration. They miss out the modem negotiation time which means the call tends to be 10-20 seconds shorter in CoSTa than appears on the bill.

This window allows you to define a number of seconds that will be added or subtracted to the length of each call when recorded in CoSTa, thus making CoSTa more accurate.

The actual number of seconds can be determined by comparing several telephone bill entries with the corresponding entries logged in CoSTa and using the average difference, so that subsequent calls will be logged more accurately.

All of the supported communications software has differing degrees of accuracy hence it may be necessary to 'adjust' NOS calls by a different number of seconds from ICE calls etc.

Costs

When CoSTa extracts call details, it costs the call. To achieve this it must know how much a telephone call costs. British Telecom currently have different costs for local, regional and national calls. Earlier versions of CoSTa did not support this. Until Now.

CoSTa will cost a call by using the telephone number, thus calls to different costing regions are fully supported, as are calls to 0891 numbers etc.

CoSTa currently costs calls in the same manner as British Telecom. ie. it calculates using the cost per minute, to the nearest second. Therefore if the call is 2minutes 30seconds, the call is NOT rounded up to 3minutes.

Costs are held in pence and to 3 decimal places.

Peak Hours

Most telephone companies charge at a higher rate during 'their' peak hours. British Telecom's peak hours are 08:00:00 to 18:00:00. Other telephone companies' hours may differ. Enter the hours applicable here.

VAT Rate

If costs are set up as excluding VAT, then the current VAT rate should be set up here. It is recommended that this facility is used and all costs are keyed in excluding VAT.

Minimum Cost

Although British Telecom now charge by the second, the still impose a minimum cost to each call. ie. if the cost of your call is below this minimum then it is rounded up to the minimum. This is currently approximately 5 pence. Therefore every call you make will cost at least 5 pence.

This is the minimum cost of a telephone call.

List of Telephone Numbers

A list of telephone numbers and associated costs can be maintained here.

It is NOT necessary to define every number used, as CoSTa uses a default which will be used if the telephone number is not found in the list. The default supplied with CoSTa is for a local BT call exc. VAT. The default is indicated by having a telephone number of '*'.

Other telephone numbers can be maintained, such as BBS's etc. CoSTa only uses the default it the actual telephone number cannot be found.

Entries can be added, deleted and edited by double clicking or clicking on Edit.

The default '*' cannot be deleted.

MiNTnet

Extraction of MiNTnet calls will always use the default cost. This is because MiNTnet does not make the telephone number available in it's log file, so CoSTa doesn't know the number.

CixComm

The CixComm log does not include any Mercury or ACC access codes in the log. Only the Cix telephone number is recorded.

Thus ensure that you exclude these access codes from the telephone number defined to CoSTa.

Adding/Editing an Entry

Each entry has the following fields:

Telephone Number

This should be '*' for the default costs, but can be any telephone number for specific costs.

Blanks do not matter as CoSTa strips them out during use. Thus 01234 5678 is the same as 012345678.

Description

The description of the phone number. ie. Fred's BBS.

Peak Cost

This is the cost per minute of a telephone call during the above peak hours.

Offpeak Cost

This is the cost per minute of a telephone call outside of the peak hours.

Weekend Cost

Peak/Offpeak hours normally only apply Monday to Friday. Weekend rates then apply from midnight Friday to midnight Sunday. This is the cost per minute of a telephone call at the weekend.

Main Window

The main window display lists all calls known to CoSTa.

The day, date, time, duration, cost, telephone number and origin of each call is displayed, along with a flag to indicate if the call has been paid for.

At the bottom of the window are totals. These are the total number of calls, total length of time and the total cost in pounds.

Include Paid Calls

The display will either list all calls known to CoSTa, or will just display current unpaid calls.

This can be changed by use of the 'Include Paid Calls' menu option.

The default is to only show current unpaid calls.

Show Costs Including VAT

The display will show all costs with or without VAT applied. This only makes a difference if a VAT rate is defined within the COSTS window. The default is set in the Preferences window.

Filter Calls

The filter allows you to only display calls that match specific criteria. ie. you can see just the calls made via CoNnect, or just calls over 10p made with ICE etc, etc.

The filter works in conjunction with the 'Include Paid Calls' menu setting and the 'Show VAT' setting.

The filter also determines which calls are output via the 'Output' menu option. It does NOT affect which calls are flagged as paid via the 'Pay Bill' function.

If the filter is active then a check mark appears against the 'Filter Calls' menu option.

Extracting Calls

For CoSTa to be able to display call details, it is necessary to tell it to extract the information from the relevant log files. This should only be performed after preferences and cost details have been maintained and is achieved by selecting 'Extract' from the menu.

CoSTa processes the log files, extracts call details and costs them, and stores each call in CALLS.DTA.

The log file is then backed up in the manner chosen in Preferences or a timestamp file created.

NOS Specific Problems

Unfortunately NOS does not output actual 'connection made'/'connection stopped' messages and as such this causes the following problems in calculating the length of a call:

- a) CoSTa has to approximate the connection start time, by scanning the log file for a specific string that will only occur after a connection has been made. Start times may be a second or two out, but at least it does handle number busy and redials correctly.
- b) CoSTa also has to approximate the end time. It looks for the 'NOS stopped' message in the log file.

Thus it is essential that after you have ended the connection with 'ppp sl0 lcp close', you immediately exit NOS by typing 'exit'.

MiNTnet Specific Problems

MiNTnet does not put the telephone number into the log file. Thus CoSTa puts blanks into it's database and uses the 'default' costs entry to cost the call.

Timestamps

All log files except the one created by NOS are either relatively small containing only basic information or in the case of CoNnect and CixComm they are actually used for later analysis and thus should not be renamed/deleted.

The way CoSTa gets around this problem is by keeping a note of the date/time of the last call it has extracted. Then when extraction is performed again, only calls after the stored date are processed. These date/time's are stored in files called COSTA.??? (where ??? is MNT for MiNTnet, ICE for ICE etc.) and should not be deleted.

The log files should be cleared down/backed up manually on a regular basis, to keep the size down.

It is important to note that CixComm uses it's log file to calculate Cix charges, thus any archiving should be done with careful consideration.

Editing/Deleting a Call

Occasionally it might be necessary to edit or delete details of a particular call. One reason for this is that your Atari's clock was wrong when you logged onto the internet, and hence the date or time of the call once extracted into CoSTa is wrong, which could in turn lead to the call being costed incorrectly.

To edit a call, simply double click on it from the main window with the left mouse button, and the edit window will be displayed.

You can amend the date, time, duration, cost, and telephone number. The only item you cannot amend is the origin of the call ie. NOS or ICE.

You can also override a particular day/time to be Peak, Offpeak, or Weekend.

This is useful because some telephone companies treat Bank Holidays as a Weekend rate. CoSTa does not know about Bank Holidays and thus would treat a Monday as a Weekday(peak or offpeak).

To correct this, edit each call and override it to Weekend. The cost is automatically recalculated for you.

Re-cost

If you change the date or time of the call, it could well fall into a different cost category ie. if you change the time peak to off-peak, or the date from midweek to weekend.

You can either manually alter the cost or you can have CoSTa re-cost the call for you using the new date time, and duration.

If you would like CoSTa to re-cost the call, it is important to click on 'Recost' BEFORE clicking on 'Ok' to update the call details.

Note: The cost here is excluding VAT (regardless of the display setting).

Delete

To actually delete this call, click on 'Delete'.

Paying The Bill

When the telephone bill arrives, you need to flag all the calls up to the date of the bill as paid.

In this way they will then be excluded from the current unpaid totals.

Select 'Pay Bill' from the main menu and you will be presented with the 'Pay Bill' window.

This window displays a history of all previous paid bills and their totals, as well as allowing you to pay a new bill.

Enter the date of the bill, and all calls up to and including that date will be flagged as paid.

The totals paid will then be added to a list of previous paid bills. This list is displayed in this window and shows date of bill, total number of calls, total time, and total cost. The list allows a history of paid bills to be examined at a glance.

Output

It is possible to output a list of calls and the totals to either a printer or the clipboard. Either all calls can be listed or just the unpaid ones.

Recost Unpaid Calls

This option processes all 'Unpaid' calls and recalculates their costs. This could be useful if you need to change cost details (or if upgrading from a previous CoSTa version that didn't support VAT).

Purging Old Calls/Bills

After a while, the number of calls/bills will start to grow, and it may be a good idea to get rid of very old calls/bill details that are of no further use. This will help keep CoSTa performing at maximum speed also, because the more call details stored, the more work it has to do.

Only calls that have been flagged as 'Paid' are eligible for purging.

Select 'Purge Calls' from the 'File' menu, to display the 'Purge' window.

A date must be entered, up to and including which all 'Paid' calls will be deleted.

To delete old 'Bill' details (as shown in the Pay Bill window), it is also necessary to click on the 'Bills Too' radio button.

Bill details will probably want to be purged much less frequently than Call details, as Bill details are a nice history log of your internet usage.

It is IMPORTANT to note that once call or bill details have been Purged, they are gone for good. The only way to undo a Purge is to go back to a backup.

Registering

CoSTa is a Shareware product. If you use it regularly you should do the right thing and register it.

Registration costs 6 UK Pounds and includes the following benefits:

- a) A unique key to enter into CoSTa. Future versions will have increased functionality which will be disabled unless you have the key.
- b) The latest version on disk or by e-mail if you supply an e-mail address.
- c) e-mail or snail mail support.

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Disclaimer

All costings calculated by CoSTa are approximate and no guarantee to their accuracy is given.

Any damage caused by use of this program, either directly or indirectly, is not my responsibility.

This software is used at your own risk.

Credits

Atari NOS is the work of Demon and David Nash.

Oasis and ICE are the creation of Phil Yeadon and Dave Levi. Thanks guys for a brilliant program.

STiK is the creation of Steve Adam.

Thanks also to the following people who have helped me by testing and supplying their views and suggestions:

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