

# Intra

Bart Vanhaeren

**COLLABORATORS**

	<i>TITLE :</i> Intra		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY	Bart Vanhaeren	July 1, 2022	

**REVISION HISTORY**

NUMBER	DATE	DESCRIPTION	NAME

# Contents

<b>1</b>	<b>Intra</b>	<b>1</b>
1.1	Intra Help . . . . .	1
1.2	Intra Introduction . . . . .	1
1.3	Intra menus . . . . .	3
1.4	Intra Project menu . . . . .	3
1.5	Intra Invoice menu . . . . .	4
1.6	Intra Output menu . . . . .	4
1.7	Intra Options menu . . . . .	4
1.8	Intra New menu-item . . . . .	4
1.9	Intra Open menu-item . . . . .	5
1.10	Intra Delete menu-item . . . . .	6
1.11	Intra Close menu-item . . . . .	6
1.12	Intra About menu-item . . . . .	6
1.13	Intra Quit menu-item . . . . .	6
1.14	Intra Add menu-item . . . . .	6
1.15	Intra Remove menu-item . . . . .	7
1.16	Intra Table Form menu-item . . . . .	7
1.17	Intra Import menu-item . . . . .	7
1.18	Intra Analyze menu-item . . . . .	7
1.19	Intra History menu-item . . . . .	7
1.20	Intra Print menu-item . . . . .	8
1.21	Intra Print Settings menu-item . . . . .	8
1.22	Intra Save As ASCII menu-item . . . . .	8
1.23	Intra Program Settings menu-item . . . . .	8
1.24	Intra KeyMacros menu-item . . . . .	8
1.25	Intra Close Workbench menu-item . . . . .	9
1.26	Intra Execute Script menu-item . . . . .	9
1.27	Intra Assign Script menu-item . . . . .	10
1.28	Intra ARexx script menu-items (10) . . . . .	10
1.29	Intra Save Scripts menu-item . . . . .	11

---

---

1.30	Intra Screen and windows . . . . .	11
1.31	Intra Main Screen . . . . .	11
1.32	Intra About Window . . . . .	12
1.33	Intra Import Window . . . . .	13
1.34	Intra Analyze Window . . . . .	14
1.35	Intra History Window . . . . .	14
1.36	Intra Print Window . . . . .	15
1.37	Intra Printer Prefs Window . . . . .	16
1.38	Intra Program Preferences Window . . . . .	16
1.39	Intra F-Key Macros . . . . .	17
1.40	Intra ARexx Port . . . . .	18
1.41	Intra ARexx command ABOUT . . . . .	19
1.42	Intra ARexx command ADD . . . . .	19
1.43	rx_analyze . . . . .	19
1.44	Intra ARexx command CLOSE . . . . .	20
1.45	Intra ARexx command CURRENCY . . . . .	20
1.46	Intra ARexx command CURRENTFILE . . . . .	20
1.47	Intra ARexx command DELETE . . . . .	20
1.48	Intra ARexx command GETDATA . . . . .	21
1.49	Intra ARexx command INVOICES . . . . .	21
1.50	Intra ARexx command KEYMACRO . . . . .	21
1.51	Intra ARexx command LOCKGUI . . . . .	22
1.52	Intra ARexx command NEW . . . . .	22
1.53	Intra ARexx command NEXT . . . . .	22
1.54	Intra ARexx command OPEN . . . . .	23
1.55	Intra ARexx command POSITION . . . . .	23
1.56	Intra ARexx command PREVIOUS . . . . .	24
1.57	Intra ARexx command PRINT . . . . .	24
1.58	Intra ARexx command QUIT . . . . .	24
1.59	Intra ARexx command READ . . . . .	25
1.60	Intra ARexx command REMOVE . . . . .	25
1.61	Intra ARexx command REQUESTFILE . . . . .	25
1.62	Intra ARexx command REQUESTNO . . . . .	26
1.63	Intra ARexx command REQUES . . . . .	26
1.64	Intra ARexx command REQUEST . . . . .	27
1.65	Intra ARexx command REWRITE . . . . .	27
1.66	Intra ARexx command SAVEASCII . . . . .	27
1.67	Intra ARexx command SCREENTO . . . . .	28
1.68	Intra ARexx command SCREENTO . . . . .	28

---

---

1.69 Intra ARexx command SETDATA . . . . .	28
1.70 Intra ARexx command SETFILTER . . . . .	29
1.71 Intra ARexx command UNLOCKGUI . . . . .	30
1.72 Intra ARexx command VERSION . . . . .	30
1.73 Intra Credits . . . . .	30
1.74 Intra Technical Information . . . . .	31
1.75 Intra Technical Information: the file format . . . . .	33
1.76 AmigaDOS pattern matching . . . . .	34

---

# Chapter 1

## Intra

### 1.1 Intra Help

Welcome to the INTRA AmigaGuide® !

This convenient database doc is the electronic version of the paper-manual.

Chapters in this guide:

[Introduction](#)

[Menus](#)

[Intra Screen and windows](#)

[ARexx](#)

[Tech Info](#)

[Credits](#)

### 1.2 Intra Introduction

INTRA Invoice Database, version 2.17

©1993-95 Quadra Development. Written by Bart Vanhaeren.

DISTRIBUTION

Intra is ©1993-95 Quadra Development and it is freely distributable as long as all files within the package are included and remain in their original form. Intra was released under the "SHAREWARE" conditions, this means that if you are using this program -and you like it- then please send 500 BEF (Belgian francs) in cash or Eurocheque to:

Quadra Development, t.a.v. Bart Vanhaeren

Weg naar Zwartberg 248

B-3660 Oplabbeek.

This way, you actually support the author and you will encourage him to write better and more (low-cost) Amiga-software. Finally, you will

---

benefit from it! Also, if you register (pay the shareware), I will send you the latest version of the program; so don't forget to mention your current version.

#### DISCLAIMER

No warranties are implied or expressed with regard to the fitness or merchantability of INTRA for any particular purpose. All risks and damages, incidental or otherwise, arising through the use or misuse of INTRA are entirely at the responsibility of the user.

While considerable effort has been made to provide you with a reliable product, there is no guarantee that this program is 100% "bug-free". Any problems that do arise will be corrected when and if feasible. Maintenance releases will be made available in order to correct potentially hazardous malfunctions within the program. Fixes for benign problems, usually cosmetic in nature, will most likely be deferred until the next major release of INTRA. This disclaimer does not guarantee future versions of this product, only a prescribed method of dealing with possible errors, and their corrections, to this program.

\* \* \*

INTRA, The Invoice database.

Intra is a rather simple, but therefore easy-to-use database program that was especially designed to deal with invoice information. Everybody, as we like it or not, gets invoices now and then. For people who want to know how their money "flows" (in the "outdoor direction"!), Intra can be a very useful application for their Amiga.

Intra not only stores the most important data of an invoice, offering a quick way to access any invoice you wish to re-examine for any reason, but also analyses a complete invoice database by using ARexx scripts.

This ARexx support brings us to one of the most powerful features of the Intra package. Anyone who understands the ARexx scripting language (it is a rather easy language, so anyone can learn it) can extend Intra and provide it with its own functions. ARexx also supports the use of other applications within the processing of Intra-databases (ARexx is an IPC-language).

Intra only handles a basic subset of database manipulations, accessible to the user through the Intra GUI or ARexx commands. By leaving the more complex algorithms out of the program, in the form of ARexx scripts, the user can write it's own analyses-programs or adapt existing scripts to customize it for its own needs.

FEATURES:

---

- 65536 invoices in one file possible.
- Import filtering with powerfull AmigaDOS pattern matching.
- Fast and easy analyze function. Statistics with a mouseclick...
- Automatic storage of history information.
- ARexx support with large command set.
- Simple and easy to use Style Guide conform intuition GUI.
- Full AmigaOS 2.04 support and 3.0 support.
- Intra uses AppIcons, Commodities and public screens.
- Programmable F-keys + Macro's in ARexx
- Database export to pref-printer and ASCII.
- Reqtools support (©Nico François).
- IFF settings file.
- Future compatible design...

### 1.3 Intra menus

Intras' menus provide a good overview and quick access to the build in functions. Here follows a description of all the menus and their meaning:

**Project** basic program functions.

**Invoice** invoice-record operations.

**Output** outputting Intra-files.

**Options** misc. functions and **ARexx** support.

### 1.4 Intra Project menu

The Project menu groups all the basic operations you can do with Intra.

**New...**

**Open...**

**Delete...**

**Close**

**About...**

**Quit...**



## 1.5 Intra Invoice menu

The Invoice menu groups the operations and functions concerning the invoice handling by Intra.

Note that these items cannot be accessed when there is no opened database file (you can open one using the **New** or **Open** items from the **Project menu** ).

**Add**

**Remove**

**Table Form?**

**Import...**

**Analyze...**

**History...**

## 1.6 Intra Output menu

The Output menu groups the outputting operations other than saving invoice-files in the INTRA file-format.

**Print...**

**Print Settings...**

**Save As ASCII...**

## 1.7 Intra Options menu

The Options menu groups the miscellaneous functions of Intra.

**Program Settings...**

**Key Macros...**

**Close Workbench?**

**ARexx >> Execute Script...**

**Assign Script...**

**<Assign entries (10)>**

**Save Scripts...**

## 1.8 Intra New menu-item

This item is selected to create a new Intra invoice database file.

A file requester lets you choose a path and a filename for the new file. An Intra file has no specific extension, but you are encouraged to choose one, just to quickly identify it in every day life.

---

You can cancel the requester if you change your mind. Please note that the selected file will be replaced by a new Intra-file and therefore you will lose all data already in an existing file.

There is no problem if the new filename is unique.

After you selected the filename, Intra fills this file with a standard header and adds a single invoice to it. You can immediately start entering the data of the first invoice. From this moment on, Intra is switched in "editing-mode" which means that the program will keep adding records as long as no other function is invoked.

Problems that can occur: It is possible that Intra can't create the file you selected. There are a few explanations for this problem:

- The path you selected doesn't exist (wrong drive, directory?)
- The already existing file is used by another application (wait until the application has finished, or disable it)
- The drive is write-protected (remove it!)
- The drive is full (choose another one, or make space)

Keyboard shortcut: Right-Amiga + N

## 1.9 Intra Open menu-item

This item is selected to open existing Intra invoice database files.

A file requester lets you choose the path and filename for the requested file. If you change your mind about opening a file you can always cancel the requester.

The file will be read and is ready to access. Now you can add, change, remove or simply read the invoices in the file.

Because Intra must be able to write to the file, make sure that your disk is write-enabled.

Problems that can occur: It is possible that Intra can't open the file you selected. There are a few explanations for this problem:

- The file you selected doesn't exist (wrong drive, directory or file?)
- The drive is write-protected (remove it!)
- The file is not an Intra file, so you can't read it

Keyboard shortcut: Right-Amiga + O

---

## 1.10 Intra Delete menu-item

This item is selected to delete files, from every type.

A file requester lets you choose the path and filename from the to delete. If you change your mind about deleting a file you can always cancel the requester.

Problems that can occur: It is possible that Intra can't delete the file you selected. There are a few explanations for this problem:

- The file you selected doesn't exist (wrong drive, directory or file?)
- The drive is write-protected (remove it!)
- The file is used by another application (wait until the application has finished, or disable it)

Keyboard shortcut: Right-Amiga + D

## 1.11 Intra Close menu-item

This item is selected to close already opened files.

After closing the file, Intra returns to its "dead" mode waiting for you to create, open or delete a file or to do any other allowed operation.

Keyboard shortcut: Right-Amiga + C

## 1.12 Intra About menu-item

This item opens the **About window** . Program control returns after you have closed this window.

## 1.13 Intra Quit menu-item

This item is selected to quit the Intra program.

A requester asks you for a confirmation, for safety. When confirmed the opened file will be closed and control is returned to the system.

## 1.14 Intra Add menu-item

This item is selected add an invoice to the current file.

The added invoice is always the last invoice of the file. When adding invoices, Intra is switched in "editing-mode" which means the program will keep adding invoices until you select another function. After filling the Amount-textbox and pressing RETURN or ENTER, Intra will store the entered invoice on the file.

The remove mistyped invoices, simply overwrite it with another or select the **Invoices/Remove** item.

---

## 1.15 Intra Remove menu-item

This item is selected to remove (delete) an invoice from the current file.

A requester asks you for a confirmation, for safety. When confirmed the current invoice will be removed from the file, you can't get it back.

The add a new invoice, select the **Invoices/Add** item.

## 1.16 Intra Table Form menu-item

This item is selected to switch the display mode between Table and record mode.

The Table Form mode displays 22 invoices at once, provides a better overview, and is faster to walk through. A checkmark before this item indicates that Intra is in Table Form mode.

The Record Form mode, on the other hand, is the only way to edit the invoice-information.

Keyboard shortcut: Right-Amiga + F

## 1.17 Intra Import menu-item

This item opens the **Import window** . Program control returns after you have closed this window.

Keyboard shortcut: Right-Amiga + I

## 1.18 Intra Analyze menu-item

This item opens the **Analyze window** . Program control returns after you have closed this window.

Keyboard shortcut: Right-Amiga + A

## 1.19 Intra History menu-item

This item opens the **History window** . Program control returns after you have closed this window.

---

## 1.20 Intra Print menu-item

This item opens the **Print window** . Program control returns after you have closed this window.

Keyboard shortcut: Right-Amiga + P

## 1.21 Intra Print Settings menu-item

This item opens the **Printer prefs window** . Program control returns after you have closed this window.

## 1.22 Intra Save As ASCII menu-item

This item is selected to convert an Intra database file to a standard ASCII text-file. This way, you can use the text contained in a database file in an ASCII-compatible word processor (they all are).

After you have selected this item, Intra will prompt you with a file requester. Now you have to choose the path and the filename of the new ASCII text file to be created. If you decide to give up this operation, you always can select the cancel-gadget.

When this is done properly, Intra will start creating the text file.

Every invoice in the current database will be represented by a single line in the text file (cfr. Table-form mode). No header titles or footers will be generated. You can use the text file to include it in budget reports you create with advanced word-processors or DTP packages.

Notes:-This function is "filter sensitive", so it will only convert those invoice-records that match with the filter strings, if filtering is on.

-You cannot select this function when there is no database file opened.

## 1.23 Intra Program Settings menu-item

This item opens the **Program Settings window** .

Program control

returns after you have closed this window.

## 1.24 Intra KeyMacros menu-item

This item opens the **Key Macros window** . Program control returns after you have closed this window.

Keyboard shortcut: Right-Amiga + M

---

## 1.25 Intra Close Workbench menu-item

This item is selected to close the Workbench screen. A checkmark sign before this item indicates that the Workbench is currently closed. Note that this is not always correct; the Close Workbench function can fail because there are some opened windows on the WB screen.

Closing the Workbench Screen saves a little memory, in case you need those last extra bytes of RAM (we strongly advise you to invest in extra memory chips if this happens often).

## 1.26 Intra Execute Script menu-item

This item is selected to run an **ARexx** script.

Intra will prompt you with a file-requester that shows you all the Intra rexx scripts in the REXX: directory or in the REXX directory of the Intra program directory. Only the files ending with ".irx" will be showed because these scripts are especially written for Intra.

If you change your mind about running a rexx script you can always select the cancel gadget.

If your script name is correct, Intra will request the ARexx handler to run the selected script. From that moment, Intra is remote controlled by the script. We strongly advise you to not take any action while the script is active. Although this is perfectly possible, it can interfere with the script's actions and so causing unwanted results or errors. Nice written rexx scripts will inform you when they are ready.

When an ARexx script uses the standard input/output channels, Intra will open a standard CON:-window on the Intra screen to display the I/O. You can leave or close this window (with the close gadget) at any time as it will not bother Intra in any way.

Note that with this item you can also execute ARexx scripts that have nothing to do with Intra. In particular, this item behaves exactly the same way as the RX-command used in CLI/Shell to execute rexx commands.

Keyboard shortcut: Right-Amiga + E

See also [Assign Script menu item](#) and [ARexx script menu entries](#) .

## 1.27 Intra Assign Script menu-item

This item is selected to assign an **ARexx** script file to one of the ten ARexx script menu entries.

First, Intra will prompt you with a number-requester, asking for the entry to be assigned. Type in a number from 1 to 10. Then press return or select the OK gadget. The cancel gadget will stop the assign procedure.

After selecting an entry number, a filerequester will come up to select the rexx script file to be assigned. If you change your mind about assigning a rexx script you can always select the cancel gadget.

If you select the OK gadget, the script's filename will be displayed in the selected menu item. Note that previously assigned scripts to this particular item will be overwritten by the new selected one.

To erase an entry (make it "not assigned"), you must also select this item, enter the number of the item you want to clear and then enter an empty path and filename in the filerequester (clear the stringgadgets with right-Amiga-X). Now select the OK gadget. The item will now display a ghosted "not assigned" message.

You can use the assign function to quickly access important rexx scripts.

The assigned scripts/entries can be stored permanently with the **Save Scripts** item.

See also **Execute Script menu item** , Save Scripts menu item

LINK IT\_SaveScripts} and

**ARexx script menu entries** .

## 1.28 Intra ARexx script menu-items (10)

These ten (10) menu items are user-definable. You can assign an **ARexx** script to each of them with the **Assign Script** item.

This way, you can extend Intra with your own features by writing rexx scripts for it.

Non-assigned entries will display a "not assigned" message. Assigned entries will contain the filename of the assigned rexx script.

By selecting one of these items, Intra will request the ARexx dispatcher to start the assigned script. Please refer to **Execute Script** for more details.

There seems to be a bug in the ARexx dispatcher that makes it impossible to run scripts from a devicename that contains spaces (e.g.. "Ram Disk:").

As this doesn't fall into the range of Intra, there's nothing we can do about this, sorry...

Keyboard shortcut: Right-Amiga + <entry no.>

See also **Execute Script menu item** .

## 1.29 Intra Save Scripts menu-item

This item is selected to store the assigned entries in the Intra.prefs file. Please note that all other unsaved settings will be stored as well (Program Settings and Printer Settings).

See also [Assign Script menu item](#) and [ARexx script menu entries](#) .

## 1.30 Intra Screen and windows

Intra communicates with the user via a graphical interface. In the previous section, we already discribed the menus and their items. In this section, all of Intras windows and screens are described.

**Main Screen** main input/output channel.

**About** program version and screen/portnames.

**Import** import filtering settings.

**Analyze** file analyses & statistics.

**History** file history.

**Print** printer control.

**Printer Prefs** printer settings.

**Program Prefs** various program settings.

**KeyMacro** key macro editing.

## 1.31 Intra Main Screen

The Intra main screen is divided into two sections: a large edit/display section at the top and a smaller control section at the bottom.

The edit/display section is used to display and edit the invoice data, as well as F-Key macro's. This section has two modes: a record mode and a table mode (see: [Table Form?](#) menu item).

In record mode, there are 4 input (string) gadgets and one number display at the top.

Invoice :

Displays the invoice number to be entered/showed. Write this number down on the paper invoice! This is the unique code for your invoice.

Later, you can easely (and quickly) find your document back if you store them sorted by this invoice number.

Date :

Enter here the invoice date. Dates are entered as DD-MM-YY. Don't forget to enter the seperate ('-') marks.

---



Trader :

Enter here the trader that send you the invoice. Use consistent names. E.g. if you enter an invoice from 'FooCorp Inc.', the next time you receive an invoice from this firm, you should use again the same name 'FooCorp Inc.' (mind spelling and spaces!). The **Keymacro** function can help you using consistent names.

Description :

Enter here a description of the invoice. What did you order? Which item(s) did you buy? Again, use consistent names. This is very important when you want to use an **Import Filter** .

Amount :

Enter here the total amount (inc. VAT ?) you have to pay for the items on the invoice. The gadget is in replace mode, this means that old numbers in the gadget will be overwritten.

The control section contains 6 gadgets and a display bar. The VCR-like gadgets may be familiar from other ('big') database programs.

|<< :

Jump to the first invoice record. Key-shortcut: ALT+LEFT or UP

< :

Jump to the previous invoice record. Key-shortcut: LEFT or UP

> :

Jump to the next invoice record. Key-shortcut: RIGHT or DOWN

>>| :

Jump to the last invoice record. Key-shortcut: ALT+RIGHT or DOWN

Save Invoice:

Write current invoice to disk, to save any change. Key-shortcut: 'S'

Edit Invoice:

Switch to record mode and activate date-gadget to edit current invoice.

This gadget only works in table form mode. Key-shortcut: 'E'

Display bar (at bottom):

shows from left to right:

<free memory> - <current date> - Import Filter (if on)

## 1.32 Intra About Window

The About Window displays some information about the running program:

- A version code. This number contains two numbers, a release number (before .) and a revision number (after .). Do not consider the revision number as a decimal. Version 14.111 is higher than 14.13 !

- The ARexx portname. This portname must be used by ARexx programmers who want to use Intra-commands. The portname has a numeric extension. This is because of the multi-tasking feature of the Amiga Operating System. It is possible to run more than one Intra-program at the time, so we have to give every ARexx port a unique name.
- The Public Screen name. Intra's screen is of the public type. This means that other applications can open their window on the Intra screen. These applications need a screen name to find the screen. Use this name if you want a public-screen compatible application to open on the Intra screen. The PubScreenName also has a numeric extension, for the same reasons as described above.
- Some copyright notices and credits. Remember that Intra is not a public domain software package. All the rights remain with the programmer (Quadra Development/Bart Vanhaeren).

### 1.33 Intra Import Window

The import window allows the user to install a filter on a certain invoice-field. The import filter will only output the invoice-records that match the filter-string. After installing a filter, all other Intra functions will use the filter (including analyzing and printing). A notice in the bottom display-bar reminds you that the filter is on.

Filter Field:

This cycle-gadget lets the user select the field to filter on. There are three possible fields: Date, Trader and Description. The 'I'-Key is the keyboard equivalent for this gadget. With 'SHIFT+I' you can cycle in backwards direction.

Filter String:

In this string gadget the user must type the filter string. Filter strings support standard **AmigaDOS pattern matching**. For each invoice field, the Import Window can store one filter string.

Filter:

The Filter check box is used to switch the import filter on and off. It is automatically switched on when the user presses the ENTER or RETURN key in the Filter String gadget. The 'F'-Key is the keyboard equivalent for this gadget.

Use:

When selected, the current import settings will be used.

Cancel:

When selected, all changes made in the import window will NOT be used.

Note that you cannot open this window when no file is open.

---

## 1.34 Intra Analyze Window

The analyze window displays some analyzing options for the current file.

There are five options, each one can be toggled on or off. Pick the analyzing-functions you want and select the Use gadget. Intra will scan your file and display all requested figures in a simple window.

Compute total year expense:

This option will turn total year expense calculation on when selected.

Search highest amount:

This option will search for the highest invoice amount when selected.

Calculate month expenses:

This option will calculate the total expense for each month when selected.

Search for biggest cost on subject trader:

This option will search for the trader with the highest expense amount.

**SORRY -- NOT IMPLEMENTED YET.**

Search for biggest cost on subject description:

This option will search for the description with the highest expense amount.

**SORRY -- NOT IMPLEMENTED YET.**

Note that you cannot open this window when no file is open.

## 1.35 Intra History Window

The history window displays some information about the current file. This information includes size and history data.

Filename:

The path + filename of the current file.

Size in bytes:

Displays the file size in bytes.

Size in blocks:

Displays the file size in blocks. One block is 512 bytes. A file always occupies complete blocks, even if the last block isn't completely full.

Records in file:

Displays the number of invoice records in the file.

Last read:

Displays the date and time of the last opening of the current file. This is the time before the current opening.

Last write:

---

Displays the date and time of the last change to the current file. This includes all changes made during the current session.

Last printout:

Displays the date and time of the last printing of the file. This includes all printouts made during the current session.

OK:

Closes the history window.

Note that you cannot open this window when no file is open.

## 1.36 Intra Print Window

The print window allows you to make printouts of the current file.

Intra supports every Workbench-compatible printer (if a driver is installed in the DEVS:printers directory). Specific printer settings can be made in the **Printer Prefs** window.

Title:

Here, you can enter a title string which is printed at the top of the printout. A default text is already present. Maximum text length is 80 characters.

Subtitle:

Here, you can enter a title string which is printed under the Title text. Maximum text length is 80 characters.

First invoice:

This number-gadget allows you to choose the first invoice to print. Note that when the import filter is on the filter starts searching from the first invoice you entered in this gadget. All invoice records before this one are not printed.

This gadget checks if the number you entered exists.

First invoice:

This number-gadget allows you to choose the last invoice to print. Note that when the import filter is on the filter stops searching after the last invoice you entered in this gadget. All invoice records after this one are not printed.

This gadget checks if the number you entered exists.

Print:

Starts the actual printing. See to it that the printer is on line and that there is enough paper. You cannot cancel while printing.

Cancel:

Closes the print window. You cannot use this gadget to cancel the printing.

---

## 1.37 Intra Printer Prefs Window

The printer prefs window is used to set some printer settings for the printouts.

Lines/Page:

This gadget allows you to change the number of lines to be printed on one page. The know the right length of your paper, you will have to do some printing tests with different Lines/Page-values.

Auto Feed or Manual Feed:

Select auto feed if you use fanfold paper or if your printer has automatic sheet feeding.

Select manual feed if you use single sheets or if you want to be asked to insert a new sheet of paper every time a page is printed.

Draft of NLQ/LQ:

Sets the print quality of the printout. Select draft for fast, test printouts or NLQ/LQ for (slower) letter quality printouts.

Use:

Closes printer prefs window and uses all settings.

Save:

Saves all Intra-settings, including the settings in the program prefs window.

Cancel:

Closes the printer prefs window, without using the settings made in the window.

## 1.38 Intra Program Preferences Window

The program prefs window is used to set some global program settings.

Create Icons?:

If this box is checked, then an icon is created for each new file. The icon is copied from the 'ENV:Intra/def\_intra.info' icon.

Def.Currency:

Enter here your national currency. Please use a 4 byte ISO 4217 currency code. The first three characters are the actual symbol (eg. DEM USD BEF HGL), the 4th character is the character used to separate the symbol from the figures. The currency symbol will be used for the next file you create.

Every file has its currency symbol stored within it.

Requester Type:

Select 'Commodore' if you want Intra to use the standard ASL and Intuition

requesters.

Select 'Reqtools' if you want Intra to use the Reqtools requesters by Nico François. You must have the reqtools.library installed in your LIBS: directory.

Screen Palette:

Use the palette gadget and the sliders to alter the screen colours.

Use:

Closes program prefs window and uses all settings.

Save:

Saves all Intra-settings, including the settings in the print prefs window.

Cancel:

Closes the program prefs window, without using the settings made in the window.

### 1.39 Intra F-Key Macros

The keymacro window is used to set ten (10) f-key macros. The macros can be used in the invoice editing gadgets to simplify invoice input.

Program the 10 function keys with the ten string gadgets.

F 1 - F10:

Enter here a frequently used string in invoice records.

Use:

Closes key macro window and uses all settings.

Clear:

Clears all key macros.

Save:

Saves the key macros to the current file. Every file has 10 f-key macro strings stored within it.

Cancel:

Closes the key macro window, without using the settings made in the window.

Note that this window can only be opened when Intra has control over the key macros (normally the first started Intra proces). This is only important when you are running more then one Intra proces (multitasking).

## 1.40 Intra ARexx Port

One of the most powerful features of Intra is its ARexx port. ARexx is an IPC-language (Inter Process Communication) that allows you to remote control one or more programs and, optionally let them work together. This way, you can let one program (e.g. Intra) benefit from the features that another application has to offer (e.g. An ARexx-compatible spreadsheet).

The Intra ARexx-port (the message-box for ARexx environments) you will have to address is "INTRAREXX.1" (note the upper-case type style).

The number-extension is the id of the program. Don't let your scripts look for a particular number, but use an "intelligent" way of finding a usable Intra port. You can also let the user decide which Intra should be addressed.

At the time of writing, these ARexx-commands are supported by Intra:

ABOUT

ADD

ANALYZE

CLOSE

CURRENCY

CURRENTFILE

DELETE

GETDATA

INVOICES

KEYMACRO

LOCKGUI

NEW

NEXT

OPEN

POSITION

PREVIOUS

PRINT

QUIT

READ

REMOVE

REQUESTFILE

REQUESTNOTIFY

REQUESTRESPONSE

REQUESTSTRING

REWRITE  
SAVEASCII  
SCREENTOBACK  
SCREENTOFRONT  
SETDATA  
SETFILTER  
UNLOCKGUI  
VERSION

## 1.41 Intra ARexx command ABOUT

SYNTAX: ABOUT

FUNCTION: Pops up a nice requester. ARexx gets control back immediately after the window has opened. (This means that other ARexx commands can run \*under\* the **About window** -which is not such a good idea...)

RC: FATAL if window failed to open, otherwise OK.

KNOW BUGS: none

## 1.42 Intra ARexx command ADD

SYNTAX: ADD

FUNCTION: Add's a record to an open file. The added record is always the last record. File size is automatically changed.

RC: ERROR if adding failed (e.g. when no file is open), otherwise OK.

KNOWN BUGS: None

SEE ALSO: **REMOVE**

## 1.43 rx\_analyze

SYNTAX: ANALYZE TOTAL/S HIGHEST/S MONTHS/S

FUNCTION: Analyzes the current file.

INPUTS: TOTAL = provide this keyword if you want to obtain the total expense

HIGHEST = idem, but for the highest amount

MONTHS = idem, but for the 12 month expenses

RESULT: String with values in the following order (if keyword provided) :

total highest month1 month2 ... month12

RC: ERROR when analyzing failed (e.g. when no file is open), otherwise OK.

KNOWN BUGS: None

---



## 1.44 Intra ARexx command CLOSE

SYNTAX: CLOSE

FUNCTION: Closes the current opened file and clears the display.

KNOWN BUGS: None

## 1.45 Intra ARexx command CURRENCY

SYNTAX: CURRENCY

FUNCTION: Returns - if a file is open - the currency string of the current file, otherwise it will return the default currency-string.

You can NOT set this currency sign, because it is unfriendly to mess with the users preferences!!

RESULT: Currency string of current file, or default currency string when no file is opened.

KNOWN BUGS: None

## 1.46 Intra ARexx command CURRENTFILE

SYNTAX: CURRENTFILE

FUNCTION: Returns the name of the current opened file.

RESULT: String with filename.

RC: If no file is open, ERROR is returned, otherwise OK.

KNOW BUGS: None

## 1.47 Intra ARexx command DELETE

SYNTAX: DELETE FILENAME/K FORCE/S

FUNCTION: Deletes a (optionally selected) file. When the FORCE keyword is provided, no requester will come up for a confirmation.

INPUTS: FILENAME = the path+filename to delete (keyword required)

FORCE = provide this keyword if you do not want a confirmation

RC: If Intra couldn't delete file, or user aborted, WARN is returned, otherwise OK.

KNOWN BUGS: None

---

## 1.48 Intra ARexx command GETDATA

SYNTAX: GETDATA DATE/S TRADER/S DESCRIPTION/S AMOUNT/S

FUNCTION: Returns the containing string of a selected field from the current invoice.

If more than one keyword is provided, Intra puts all the data in logical order in a single string, each field is quoted and separated by a space. It is then up to you to parse the different fields.

INPUTS: DATE = provide this keyword if you want to obtain the date-value

TRADER = idem, but for the trader-value

DESCRIPTION = idem, but for the description-value

AMOUNT = idem, but for the amount-value

RESULT: String composed of requested fields, each field quoted and separated by a space.

RC: ERROR if GETDATA failed (e.g. when no file is opened), OK otherwise.

KNOWN BUGS: None

SEE ALSO: [SETDATA](#)

## 1.49 Intra ARexx command INVOICES

SYNTAX: INVOICES

FUNCTION: Returns the number of invoices in the current file.

RESULT: Number of invoices in current file.

RC: If no file is open, ERROR is returned, otherwise OK.

KNOWN BUGS: None

## 1.50 Intra ARexx command KEYMACRO

SYNTAX: KEYMACRO NUMBER/N MACRO

FUNCTION: Return and/or set the keymacro-string from F-Key<NUMBER>.

If you do not provide a macro string, only the current string will be returned (without changing anything).

INPUTS: NUMBER = the fkey number you want the macro-string of (numeric value, valid from 1 to 10, but safe with other numbers)

MACRO = if provided, this is the new macro string for F-Key<NUMBER>.

RESULT: Keymacrostring.

RC: If NUMBER is incorrect ERROR is returned, otherwise OK.

KNOWN BUGS: None

---

## 1.51 Intra ARexx command LOCKGUI

SYNTAX: LOCKGUI NORENDER/S

FUNCTION: Locks Intras Graphic User Interface. This way, the user cannot interfere with your script by (incidentally) clicking or selecting a gadget or menu-item. If you specify the NORENDER option, Intra will also stop updating the main window. This will speed up ARexx scripts considerably.

We strongly suggest you use this command at the beginning of the script when it is very time-consuming.

LOCKGUI closes all currently opened window, except for the Intra main window. All unsaved settings will be lost, so preserve all changed settings before starting a script that uses LOCKGUI. Also, the menubar will be removed to make a menu selection impossible. Last but not least, the pointer will appear in "busy"-mode to prevent every other selection.

Make sure that, if you use this command, a matching UNLOCKGUI command removes the lock again !! Otherwise, the user can't even leave the program without using another ARexx script !

KNOWN BUGS: None

SEE ALSO: [UNLOCKGUI](#)

## 1.52 Intra ARexx command NEW

SYNTAX: NEW FILENAME/K

FUNCTION: Creates a new Intra database file.

If no filename is given, Intra prompts the user with a file-requester.

KNOWN BUGS: None

INPUTS: FILENAME = path+file of the new invoice database.

RC: ERROR if NEW failed or user aborted, OK otherwise.

SEE ALSO: [OPEN](#)

## 1.53 Intra ARexx command NEXT

SYNTAX: NEXT

FUNCTION: Reads the next record in the file. When import filtering is on, Intra skips records until it finds a record that matches the filter. So don't trust on being the next

---

record = last record + 1.

KNOWN BUGS: None

RC: ERROR if no file open, WARN if NEXT failed (end of file?),

OK otherwise.

SEE ALSO: [PREVIOUS](#)

## 1.54 Intra ARexx command OPEN

SYNTAX: OPEN FILENAME/K

FUNCTION: Opens a new Intra database file.

If no filename is given, Intra prompts the user with a file-requester.

INPUTS: FILENAME = path+file of the invoice database to open.

RC: ERROR if OPEN failed (file doesn't exist, user canceled), OK if successful.

KNOWN BUGS: none

SEE ALSO: [NEW](#)

## 1.55 Intra ARexx command POSITION

SYNTAX: POSITION EOF/S BOF/S

FUNCTION: Jumps (reads) to an extreme record, i.e. to the beginning of the file (keyword BOF) or to the end of the file (keyword EOF).

Also returns current record number (only makes sense when no keyword is provided).

When import filtering is on, POSITION BOF jumps to the first record that matches the filter, POSITION EOF jumps, oh wonder, to the last record that matches the filter. You could check the RETURN value to know where this record is.

It is safe to provide both EOF and BOF. In this case EOF will be selected (do not rely on this!!!!).

INPUTS: EOF = provide this keyword to read the first record

BOF = provide this keyword to read the last record

RESULT: The actual position, i.e. the invoice number.

RC: ERROR if no file open, WARN if POSITION failed (record does not exist with current import filter?), OK otherwise.

KNOWN BUGS: None

SEE ALSO: [READ](#)

---

## 1.56 Intra ARexx command PREVIOUS

SYNTAX: PREVIOUS

FUNCTION: Reads the previous record in the file. When import filtering is on, Intra skips records until it finds a record that matches the filter. So don't trust on being the previous record = last record - 1.

RC: ERROR if no file open, WARN if PREVIOUS failed (end of file?), OK otherwise.

KNOWN BUGS: None

SEE ALSO: [NEXT](#)

## 1.57 Intra ARexx command PRINT

SYNTAX: PRINT PROMPT/S

FUNCTION: Activates the Intra print function. When keyword PROMPT is provided, Intra prompts the user with a print-options requester.

If the PROMPT-keyword is omitted, Intra prints with the current settings, an English title "Intra invoice print-out", an English subtitle "(call from ARexx)" and the first and last invoice to print will be set to 1 and the last record.

INPUTS: PROMPT = provide this keyword to let the user change some settings before the printing commences.

RC: FATAL if out of memory, OK otherwise.

KNOWN BUGS: You can't check if user cancelled print window. No control over title and start/end parameters.

## 1.58 Intra ARexx command QUIT

SYNTAX: QUIT FORCE/S

FUNCTION: Quits the Intra program. With FORCE keyword, no confirmation requester will be displayed (this is not friendly to the user, though...).

INPUTS: QUIT = provide this keyword if you want to quit without confirmation

RC: WARN if user aborted QUIT, OK if Intra has left the scene...

KNOWN BUGS: None

---

## 1.59 Intra ARexx command READ

SYNTAX: READ RECORD/N

FUNCTION: Reads the invoice on position <RECORD>. When import filtering is on, READ searches the first matching record beginning with RECORD. So don't trust on the record being actually read = RECORD. You can query the actual position via the **POSITION** command.

KNOWN BUGS: None

INPUTS: RECORD = invoice to read (numeric value)

RC: ERROR if no file open, WARN if READ failed, OK otherwise.

SEE ALSO: **REWRITE** , POSITION

RX\_POSITION }

## 1.60 Intra ARexx command REMOVE

SYNTAX: REMOVE FORCE/S

FUNCTION: Removes the current record from the file. The file size is automatically changed. When FORCE keyword is provided, Intra doesn't prompts the user for a confirmation.

INPUTS: FORCE = provide this keyword if you don't want a confirmation

RC: WARN is user aborted REMOVE, OK otherwise.

KNOWN BUGS: None

SEE ALSO: **ADD**

## 1.61 Intra ARexx command REQUESTFILE

SYNTAX: REQUESTFILE TITLE/K PATH/K FILE/K PATTERN/K SAVEMODE/S

FUNCTION: Opens a filerequester on the Intra-screen (ASL/ReqTools, as specified in the Intra-Preferences menu).

You can specify some default items with the keywords. The command returns the selected path in RESULT (in one string) or WARN in RC if the user canceled (Test this!!!).

It is strongly advised to use the SAVEMODE switch if the path is going to be used for write-operations !

INPUTS: TITLE = string to display in dragbar of requester (keyword required)

PATH = string with default path (keyword required)

FILE = string with default filename (keyword required)

PATTERN = string with default pattern (keyword required,

not implemented yet)

SAVEMODE = provide this keyword if you want the requester to appear in a "save-safe" mode.

RESULT: path which the user selected via the requester.

RC: WARN if user aborted requester, OK otherwise

KNOWN BUGS: None.

SEE ALSO: [REQUESTNOTIFY](#) , [REQUESTRESPONSE](#) , [REQUESTSTRING](#)

## 1.62 Intra ARexx command REQUESTNO

TIFY"

SYNTAX: REQUESTNOTIFY PROMPT/K

FUNCTION: Shows a simple requester on the Intra-screen with text specified by the PROMPT-keystring. The user only can satisfy this requester by selecting the single "OK" gadget. Nothing is returned.

Used for passing information to the user.

INPUTS: PROMPT = string with text to display in requester (keyword required)

KNOWN BUGS: None

SEE ALSO: [REQUESTFILE](#) , [REQUESTRESPONSE](#) , [REQUESTSTRING](#)

## 1.63 Intra ARexx command REQUES

TRESPONSE"

SYNTAX: REQUESTRESPONSE PROMPT/K GADGETS/K

FUNCTION: Shows a simple requester on the Intra-screen with text specified by the PROMPT-keystring. With the optional keyword GADGETS, you can specify the names of the gadgets to display. You specify the gadgets in a string format where the gadgetnames are separated by a '|' -character, e.g. OK|Cancel or Yes|Maybe|No.

The user only can satisfy this requester by selecting one of the gadgets. The rightmost requester (The 'Cancel' or 'Abort' gadget) always returns 0 in RESULT and WARN in RC. All other gadget return a number that equals their absolute position in the gadget string from left to right.

Used for confirmations or queries.

INPUTS: PROMPT = string with text to display in requester (keyword required)

RESULT: 1 for leftmost (positive) response, then each consecutive response will return 1 more, the rightmost (false) response will return 0, so 1,2,3,...,num-1,0.

RC: WARN if rightmost gadget was selected, otherwise OK.

KNOWN BUGS: None

SEE ALSO: [REQUESTNOTIFY](#) , [REQUESTFILE](#) , [REQUESTSTRING](#)

---

## 1.64 Intra ARexx command REQUEST

STRING"

SYNTAX: REQUESTSTRING PROMPT/K DEFAULT/K

FUNCTION: Shows a string requester which should be filled by the user.

The PROMPT-string should contain some guidelines for the user.

The DEFAULT-string is placed in the string-gadget when opened.

Returns the string in RESULT.

\* WARNING \* This command is ONLY available when the ReqTools

library (©Nico François) is installed. If this library is

not available, 10 (ERROR) is returned in RC (Test this!!!).

INPUTS: PROMPT = string with text to display in requester (keyword required)

DEFAULT = default string to display in requester (keyword required)

RESULT: string which user entered via the requester.

RC: ERROR if ReqTools is not available, WARN if user aborted requester,

OK otherwise.

KNOWN BUGS: Dependance from ReqTools???

SEE ALSO: [REQUESTNOTIFY](#) , [REQUESTRESPONSE](#) , [REQUESTFILE](#)

## 1.65 Intra ARexx command REWRITE

SYNTAX: REWRITE RECORD/N

FUNCTION: (Re)writes the record on position <RECORD> to the opened file.

Use this command after you've changed some data-fields

with SETDATA, or if you want to copy the data from one record

to another (first READ <source\_rec> , then REWRITE <target\_rec>)

After a REWRITE, the current record position is changed to <RECORD>

INPUTS: RECORD = record-number to be written to (numeric value)

RC: ERROR if no file open, WARN if REWRITE failed, OK otherwise.

KNOWN BUGS: None

SEE ALSO: [READ](#)

## 1.66 Intra ARexx command SAVEASCII

SYNTAX: SAVEASCII FILENAME/K

FUNCTION: Saves the current file to a new file (FILENAME) in ASCII format.

Intra will prompt the user with a file requester if the

FILENAME keyword is not provided.

INPUTS: FILENAME = path+filename of the new ASCII file (keyword required)

RC: ERROR if SAVEASCII failed or user aborted, OK otherwise.

BUGS: None.

---



## 1.67 Intra ARexx command SCREENTO

BACK"

SYNTAX: SCREENTOBACK

FUNCTION: Pushes the Intra screen to the background.

KNOWN BUGS: None

SEE ALSO: [SCREENTOFRONT](#)

## 1.68 Intra ARexx command SCREENTO

FRONT"

SYNTAX: SCREENTOFRONT

FUNCTION: Opposite of SCREENTOBACK, pushes Intra screen to front and activates it.

KNOWN BUGS: None

SEE ALSO: [SCREENTOBACK](#)

## 1.69 Intra ARexx command SETDATA

SYNTAX: SETDATA DATE/K TRADER/K DESCRIPTION/K AMOUNT/K/N

FUNCTION: Sets the selected field of the current record to the provided string. The changed record is not yet written to the file, so this command is not permanent.

When you haven't rewritten (see [REWRITE](#)) this record and you try to read another invoice, Intra prompts the user with a requester asking to write (or ignore) the changes.

You can set more fields at once by using more keywords (do this for the sake of speed!)

INPUTS: DATE = string with a date in the format DD-MM-YY (keyword required)

TRADER = string with the trader, Max 19 chars (keyword required)

DESCRIPTION = string with the description, Max 19 chars (keyword required)

AMOUNT = the amount of the invoice (keyword required, numeric value)

RC: ERROR if no file open, OK otherwise.

KNOWN BUGS: AMOUNT can't handle fractionated numbers (yet).

SEE ALSO: [GETDATA](#)

---

## 1.70 Intra ARexx command SETFILTER

SYNTAX: SETFILTER DATE/K TRADER/K DESCRIPTION/K FILTERON/S

FUNCTION: Sets an import filtering string for the selected field. Intra has a powerful filter function that supports standard

**AmigaDOS pattern matching** . This way you can build queries.

When filtering is switched on, all READ-functions return a record that matches the filter strings you set.

It is important to remember that your internal record indexing will not stroke with Intra's record index because the filtering function 'filter' out certain records which become invisible for you and the user. Never read records in a loop with absolute indexing:

```
INVOICES
```

```
DO i=1 TO RESULT
```

```
READ i /* record i will probably not be read */
```

```
...
```

```
END
```

Instead you should loop with a DO-loop that queries the real position in the file via the POSITION command or use the NEXT or PREVIOUS commands:

```
POSITION BOF /* goto first matching record */
```

```
DO WHILE RC=0
```

```
...
```

```
NEXT /* of RC>0, there is another matching record */
```

```
END.
```

You should not specify more then one field with a filter string because Intra currently filters on one field.

INPUTS: DATE = filter string for the date field. (keyword required)

TRADER = filter string for the trader field. (keyword required)

DESCRIPTION = filter string for the description field. (keyword required)

FILTERON = Provide this keyword to switch Intra import filtering ON.

If you don't set this keyword, filtering will be switched

OFF.

RC: ERROR if no file open, OK otherwise.

KNOWN BUGS: None.

## 1.71 Intra ARexx command UNLOCKGUI

SYNTAX: UNLOCKGUI

FUNCTION: Unlocks Intras Graphic User Interface. The user can re-access the gadgets and menu-items. Also switches on the updating of the main window (if this was switched off with the NORENDER option).

Only use this command to unlock the GUI when you previously used LOCKGUI to prevent the user to interfere with your script.

KNOWN BUGS: None

SEE ALSO: [LOCKGUI](#)

## 1.72 Intra ARexx command VERSION

SYNTAX: VERSION VERSION/N REVISION/N

FUNCTION: Returns a standard formatted version string.

When a version number (and a revision number) is provided, Intra will test the program version for at least the same or a higher version.

When the version string says "2.0" then "2" is the version number and "0" is the revision.

INPUTS: VERSION = a version number to check (numeric value)

REVISION = a revision number to check (numeric value)

RESULT: standard formatted version string.

RC: WARN if Intra-version/revision is lower then VERSION/REVISION, OK otherwise.

KNOWN BUGS: None

## 1.73 Intra Credits

The Team:

Bart Vanhaeren - Programming and development.

Frank Maesen - ARexx scripts and development.

Contact us at:

Quadra Development

Weg naar Zwartberg 248

B-3660 Opglabbeek

Tel. 089-855603 (ask for Bart)

Thanks to:

---

Frank Maesen,  
Yves Damiaens,  
Michel Smets,  
Dirk Vangestel - The Beta testers.  
Nico François - Responsible for the ReqTools library.  
Michael Balzer - Responsible for "ARexxBox"  
which was used for ARexx implementation.  
Jan van den Baard - Responsible for "GadToolsBox"  
which was used for interface design.  
Commodore-Amiga - For building the best computer ever !

## 1.74 Intra Technical Information

Intra has been programmed following the rules in the "Amiga User Interface Style Guide" from Commodore-Amiga. This means that Intra uses the standards concerning user-interface design/feeling and ARexx-handling.

Also, programming was done as much as possible in a system-conform and future compatible way.

Intra was developed using Lattice/SAS C v5.x and 6.2, ARexxBox and GadToolsBox on an Amiga 2500/20 with 5Mb RAM under Kickstart 37.210, Workbench 38.35.

Intra requires Kickstart Release 2.04 or higher (it doesn't run on Kick 2.02 Version 36 in the early A3000's) and should also work fine on future releases of the Amiga Operating System (4.xx).

For some purposes, the ReqTools.library V38+ from Nico François is required, but the program will run without. Note that without ReqTools you cannot use all the features of Intra.

The program has been tested successful with both the Enforcer and Mungwall debugging tools. This should guarantee a system-safe program-run.

Beta testing was done under Kickstart 37.175, 37.210 and 39.115.

You are encouraged to support Intra in three ways:

- Write ARexx scripts that use Intra-features or extend them.  
(e.g. scripts to control other programs from within Intra)
- Develop applications that support the **INTRA file format**
- Come up with useful suggestions to improve the package.

Please send me your work! Off course, I will respect any copyrights you put on the material. We can have license agreements for distribution.

For extra info, you can always **contact me** .

Program History

---

The history of Intra already begins in 1987 when a first attempt was made to program a simple database in C-64 BASIC, for personal use only. In 1988, I bought my first Amiga and one year later I decided to port Intra in an Amiga version, again in BASIC (AmigaBasic), again for personal use only. All these versions carried version number 1.x. Then, in 1992 I began to program a 2.0 version with some extra features and a better user interface. The first five versions were written in BASIC, but then I began learning the wonderful language C! Intra was now a C-case for me, and while programming Intra I learned C together with the internal depths of the Amiga Operating System! In the 2 year development of the C-version I also programmed a few other applications and tools, but Intra is my biggest project so far...

1.x Old, Ugly & Bad BASIC-coded versions of INTRA. Never released (fortunately!) but a good basis for ideas and algorithm experiments.

2.0-2.5 Unreleased BASIC en C-coded versions.

2.6-2.13  $\beta$ -versions

2.14 First release of Intra. Only supports Kickstart 2.04 (v37) and upwards. Much more powerful, faster and smaller than 1.x versions.

This is just the beginning !

2.15 Finally implemented the Analyze function, well most of it anyway...

3 of 5 analyse functions are working (total, highest and mostly expenses). The results are displayed in a simple requester. This is a rather "raw" way of displaying, but the figures are there...

To keep the ARexx-interface up to date, the ANALYZE command was added to the command set.

When you leave the Import window via the Use button, the record view is updated now. This was done to reflect the effect of the new filter immediately. It is still not 100% when it comes to correct rendering in table form mode and I think it will never be (it's too complicated!)... In normal form mode, rendering is 100% correct now!

Removed a small bug in the "Close all visiting windows"-requester when iconifying the screen. The "Cancel" gadget was gone because of changes in the previous release.

2.16 Fixed a minor bug in the Intra prefs file. The CMAP chunk wasn't saved according to the IFF-ILBM specs. If one chooses for an existing chunk-type, one should implement it right! OK now.

Changed render-colors of active invoice string-gadgets. Now you can see better which field is active. The Amount integer gadget

edits now in replace-mode. This was done to get rid of that stupid '0'.

Fixed small bug in Analyze window, June expenses did not show up...

Everything was recompiled with SAS/C 6.50. Also used optimized PowerTools (©Quadra) routines for requesters, busypointer.

2.17 Changed ARexx KEYMACRO command. Now you can also SET the macros from ARexx scripts. Made a "copy\_macros" script to demonstrate the use for this...

ARexx menus now only show the scriptname, not the whole path. Looks much nicer, doesn't it? Whole pathname is still used internally.

## 1.75 Intra Technical Information: the file format

This file description is for those who want to write their own programs to process Intra invoice database files.

There are no copyrights on the file format, so you are free to implement it in your products. The only thing I ask: send me your work, in change for that, I will keep you informed about the latest Intra developments.

Bytes Type Contents

(first a 288 byte header block)

5 5xUBYTE "INTRA" 5-byte identifier string.

2 UWORD Versioncode used for internal (and future) purposes.

12 3xLONG DateStamp of last open of file.

12 3xLONG DateStamp of last print-out of file.

4 4xUBYTE 4-byte ISO 4217 currency string.

200 200xUBYTE Ten 20-byte keymacro strings.

53 53xBYTE Unused for now, but for future extensions.

(after the header block the actual invoice data is placed)

4 LONG A DateStamp.ds\_Days code for date-calculations.

20 20xUBYTE 20-byte "trader" string, spaces filled with NULLs.

20 20xUBYTE 20-byte "description" string, spaces filled with NULLs.

4 LONG The "amount" integer.

.

. (n number of these records will follow)

.

So briefly : 288 header bytes followed by  $n \cdot 48$  data bytes ( $n = \text{positive integer}$ ). This means the file size is always a multiple of 48.

To calculate the number of invoices, simply subtract the file size with 288 and divide it by 48.

The File.VersionCode (byte 6-7) is 200 for this version.

The 53 unused bytes are for future purposes, if you have a good reason to use these bytes PLEASE LET ME KNOW. I will let you know if these bytes are still free to use and maybe I will support your extension.

Still an open issue is the numeric-type of the amount-field. As you can see this currently is a LONG-typed number, so we can't process fractionated amounts. In future releases this number could be FLOAT-typed (32-bits).

LONG-amount typed files are guaranteed to have an EVEN File.Versioncode.

## 1.76 AmigaDOS pattern matching

AmigaDOS' pattern matching feature allows you to build filter strings for search or read operations. Every input string will be compared with the filter string and only if it matches with the tokens you placed, it will be accepted. Currently, AmigaDOS accepts the following tokens:

? Matches a single character.

# Matches the following expression 0 or more times.

(abcd) Matches any one of the items separated by '|'.

~ Negates the following expression. It matches all strings that do not match the expression (aka ~(foo) matches all strings that are not exactly "foo").

[abc] Character class: matches any of the characters in the class.

[~bc] Character class: matches any of the characters not in the class.

a-z Character range (only within character classes).

% Matches 0 characters always (useful in "(foobar%)").

\* Synonym for "#?", not available by default in 2.0. Available as an option that can be turned on.

"Expression" in the above table means either a single character (ex: "#?"), or an alternation (ex: "#(abcd|ef)"), or a character class (ex: "#[a-zA-Z]").

---