Iris

<u>Iris</u> <u>ii</u>

COLLABORATORS						
	TITLE :					
	Iris					
ACTION	NAME	DATE	SIGNATURE			
WRITTEN BY		October 9, 2022				

REVISION HISTORY					
DATE	DESCRIPTION	NAME			

Iris iii

Contents

Iris		1
1.1	Iris documentation	1
1.2	Introduction	2
1.3	Prerequisites	3
1.4	Disclaimer	4
1.5	Installation	4
1.6	Quick start	4
1.7	Composing mail	5
1.8	Reading mail	5
1.9	EDITOR environment variable	6
1.10	Mail checking	7
1.11	SMTP daemon received mail	7
1.12	Configuration: Network page	7
1.13	Configuration: Composing page	8
1.14	Configuration: GUI page	8
1.15	Configuration: Folders page	9
1.16	Configuration: Filters page	9
1.17	.mailcap file	10
1.18	Button design	11
1.19	Iris and browsing the Web	11
1.20	X-Priority and Importance header fields	12
1.21	Disposition-Notification-To and Return-Receipt-To header fields	12
1.22	About BGUI	12
1.23	AsyncIO	14
1.24	The ARexx interface	14
1.25	REXX examples	17
1.26	CLI interface	18
1.27	Shareware	18
1.28	Backgrounds	19
1.29	History	19
1.30	The Future	23
	1.2 1.3 1.4 1.5 1.6 1.7 1.8 1.9 1.10 1.11 1.12 1.13 1.14 1.15 1.16 1.17 1.18 1.19 1.20 1.21 1.22 1.23 1.24 1.25 1.26 1.27 1.28 1.29	1.1 Iris documentation 1.2 Introduction 1.3 Prerequisites 1.4 Disclaimer 1.5 Installation 1.6 Quick start 1.7 Composing mail 1.8 Reading mail 1.9 EDITOR environment variable 1.10 Mail checking 1.11 SMTP daemon received mail 1.12 Configuration: Network page 1.13 Configuration: Composing page 1.14 Configuration: GUI page 1.15 Configuration: Folders page 1.16 Configuration: Filters page 1.17 .mailcap file 1.18 Button design 1.19 Iris and browsing the Web 1.20 X-Priority and Importance header fields 1.21 Disposition-Notification-To and Return-Receipt-To header fields 1.22 About BGUI 1.23 AsyncIO 1.24 The ARexx interface 1.25 REXX examples

Iris 1 / 24

Chapter 1

Iris

1.1 Iris documentation

```
_$\mathrm{\mu}$$\mathrm{\mu}$$\mathrm{\ ↔
                                                                                                                                       mu}$$\mathrm{\mu}$$\mathrm{\mu}$$\mathrm \leftarrow
                                                                                                                                        {\mu} $\mu\$\mu\$\mu\$\\ \\ \
                                                                                                                                       mathrm{\mu}$w$\mathrm{\mu}$
                                                          _æææØØØØØØØØØØØØØØØØØØØØØØØØØØ
                                                                                                                                                                                                              ^{--}"\textdegree{}\ \leftrightarrow
                                    textdegree{}¶ÑÑØØØØÑm___
                          _$\mathrm{\mu}$æ\emptyset\emptyset\emptysetÑP\textdegree{}__a$\mathrm{\mu}$ææE\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset\emptyset#Ñæww__ \longleftrightarrow
                                               \verb|\ensuremath{\lnot}\textdegree{|} \P \tilde{N} \emptyset \emptyset \emptyset \ddot{N} m\_|
                                                                                                                                                                                                 ^{-}\ensuremath{\lnot}"\ ←
                    aæØØØ@"_$\mathrm{\mu}$æÆØØØØÑ@P\textdegree{}"--
                              textdegree { } ¶@ÑØØØØæw___
             $\mathrm{\mu}$\00000"_\00000000\textdegree{}^
                                                                                                                                                            __$\mathrm{\mu}$$\mathrm{\mu} ↔
                        \ensuremath{\lnot}¶ØØØm_
      _E\emptyset\emptysetP_{\mathrm{mathrm}}\ __$\mathrm{mu}\ __$\mathrm{mu}\ __$\mathrm{mu}\
                  {\left\{ \ \right\} }\P\emptyset\emptyset\emptyset m
   æØØ@"$\mathrm{\mu}$ØØØØØ@" _æØØØ@\textdegree{}
                                                                                                                                                                                                                          -\textdegree{}* ←
              \emptyset \tilde{N}w_{\text{ensuremath}} \{ \ln t \} \tilde{N}\emptyset\emptyset\emptyset\emptysetm_{\text{ensuremath}} \| \theta \|_{1} \| \theta \|_
æØØP dØØØØØ"
                                               æØØØ\textdegree{}
                                                                                                                                                                              __ \textdegree{}##w \ ←
           textdegree{}ØØØØ#_
                                                                                   ¶ØØ#
ØØ# ÆØØØØØ ´
                                            ÆØØP ØÞ
                                                                             Ø@@@#æ
                                                                                                             0#
                                                                                                                            ,æ@¶¶#m_ ¶Øm \ensuremath{\lnot}@ØØØ#,
                                                                                                                                                                                                                                                                  0øø ↔
ØØ JØØØØØF
                                          ÆØØ#
                                                                 ØÞ
                                                                            ØÞ
                                                                                                  1# 0# 0K
                                                                                                                                                ¶Þ ¶ØL ¶ØØØØQ
                                                                                                                                                                                                           JAQQT.
ØØ 7ØØØØØF
                                          ØØØF
                                                                 ØÞ
                                                                            \emptysetW$\mathrm{\mu}$$\mathrm{\mu}$$\mathrm{\mu}$$\\ \longleftrightarrow
           ensuremath{\ln t} $M\tilde{N}_{x} \mathbb{L} J\emptyset # ]\emptyset\emptyset\emptyset\emptyset\emptyset
                                                                                                                                                                                           ØØØK
ØØ JØØØØØL
                                          0ØØQ
                                                                 ØÞ
                                                                             ØÞ
                                                                                                  Q\mathbb{P}
                                                                                                             0#
                                                                                                                             $\mathrm{\mu}$
                                                                                                                                                                                       \ensuremath{\lnot}¶#
                                                                                                                                                                                                                                                             áØF
           JØØØØ#
                                              ØØØF
                                                                                                  _# 0# ¶&_
                                                                 ØÞ
                                                                              ØÞ
                                                                                                                                               _ÆP
                                                                                                   \ensuremath{\lnot}" \ensuremath{\lnot}"
                                                                            textdegree{}\textdegree{}"

Copyright © Jilles Tjoelker 1998-1999
New things since V1.8 are marked here with a \star.
New things in the guide are marked here with a :.
```

Iris 2/24

> Introduction - What's this? Requirements - What do you need? Disclaimer - No warranty! Installation - Putting it on your disk Quick start - Minimal configuration to start Composing mail - How to send mail Reading mail - How to read mail Mail checking - Get connected Configuration \star Customising the settings About BGUI : A nice system! About AsyncIO - For quicker I/O AREXX interface * Yes, it has ARexx! CLI interface - Supplying arguments Shareware

- Shareware notice

Backgrounds

- RFC's

History

* What's new?

Future

- New features???

1.2 Introduction

Have you ever found a mailer which has everything you want? I don' \hookleftarrow t think

Iris 3 / 24

so. This yet another attempt to create a mailer. I am not satisfied with the mailers which are present for Amiga. Some use MUI (I hate it!), some have the terrible tendency to crash often, some are shareware with much limitations (e.g. a time limit) and high prices, some are very slow, some have poor support for using the same POP account from office and home, and others are not strong in the feature department.

Iris is a figure from Greek mythology. Besides, the word means "rainbow". Iris is a messager of the gods. She comes down as a rainbow. This program belongs in the divine company of Thor, Pegasus and Eudora, and therefore this name was chosen.

Features:

* You can double click on URLs to

browse

them.

- * You can double click on email addresses to mail to them.
- * It does not use MUI.
- * It is stable.
- * It supports Eudora's and Exchange's

Priority

and

Return-Receipt

header

fields.

* It has excellent

filter capabilities

.

- * Extensive use of multitasking.
- * Keyboard shortcuts for most functions.
- * Excellent for using a POP account from more than one location, for instance work and home.
- * It has an

ARexx interface

.

- * Multiple signatures.
- * Multiple selection in

message list

* Search function in message list and message

Iris is written in AmigaE (v3.3a). AmigaE is similar to C, but it has some additional features like exception handling and it compiles incredibly fast. AmigaE is copyright Wouter van Oortmerssen. Iris uses

BGUI

for its

graphical user interface.

1.3 Prerequisites

Required:

- * TCP/IP stack with TCP: handler (AmiTCP compliant; the program has been tested with AmiTCP (V4.0) and Miami (V1.1a and V3.0)
- * AmigaOS 2.04 (V37) or higher

Iris 4 / 24

*

bgui.library
V41 and bgui_popbutton.gadget (included)

Recommended:

- \star A hi-res screen (height 309 pixels for Topaz 8 minimum)
- * A MagicWB-like screen palette
- * AmigaOS 3.5 :-)

1.4 Disclaimer

I am not responsible for any damage this software may cause, including but not limited to lost mail or lost files.

1.5 Installation

An Installer script is provided that takes care of all necessary $\,\,\hookleftarrow\,\,$ installation

steps.

The script performs the following tasks:

- * Installs the program.
- * Installs the guide.
- * Installs the correct script from BrowseWWWscripts
- \star Installs the Poll.irx and DelFolder.irx scripts.
- * Copies icons.
- * Installs the bgui.library (version check).
- \star Installs the bgui_popbutton.gadget class (version check).

If you don't have AmigaOS V38+, the variable TZ must be set in order to enable Iris to include the correct timezone in the Date: header field. Menno Tjoelker's Daylight Saving Time solution is supported: if the DST environment variable contains "DST", 60 minutes are subtracted.

You must do a

minimal configuration

1.6 Quick start

To be able to use Iris, you must at least do a minimal configuration.

- * From the menu Configuration/Config..., choose 'Network'.
- * Fill in all the gadgets.
- * Choose 'Composing'.
- \star Edit your default signature, that will be added to messages you send.
- * Click on the Save button to store the configuration.

Iris 5 / 24

1.7 Composing mail

```
"Reply to all" includes all Cc's from the old message in the new \,\leftrightarrow
When you select "New message", "Reply", "Reply to all" or double-click on
an email address, the
                 will be invoked. It is important that you
save first before exiting. If you don't do this, the operation will be
cancelled. Then a window will pop up, where you can set headers. Watch out:
you cannot type multiple addresses in the "Edit address" gadget! You can
choose a signature too. If you don't want a signature, leave the
"Signature" gadget blank.
The program generates the following headers (in this order):
To: & Cc: Contents of the Recipients listview, each address on a separate line
From: config.emailaddr
Subject: Subject gadget
X-Mailer: Iris V... registered/demo - Amiga mailer by Jilles Tjoelker
Date: for example Tue, 11 Nov 1997 11:32 +0100 <- from Locale & $DST
                                                            or TZ ENV variable
MIME-Version: 1.0
Message-ID: <seconds.micros@iris.processaddress> <- in hex without prefix
if registered: X-Registered-To: keyfile.name (keyfile.regid)
if RR gadget: Return-Receipt-To: <config.emailaddr>
if RR gadget: Disposition-Notification-To: <config.emailaddr>
if HighPri gadget: X-Priority: 1 (Very High)
if HighPri gadget: Importance: high
all headers from the Extra headers list
all other MIME stuff
```

1.8 Reading mail

Examples of searching in the message list:

- 1. Delete all messages except for those that have something to do with RealAudio: Excluding on, case sensitive on, search for 'RA'; case sensitive off, interaction 'and', search for 'realaudio', close; delete
- 2. Select all messages: Excluding on, search for '' (DelFolder.irx is a faster way to delete all messages in a folder.)
- 3. Look for messages from or to Tjoelker: Excluding off, search for 'Tjoelker'. You'll need to do this again when you've read a message.

Controls which may not be immediately clear:

Sort on ID: This effectively means: date. These 32bit IDs are given in numerical order by Iris. They have nothing to do with Message-ID or UIDL!

Multiselect: This can only be used with "Mark...", "Delete" and some ARexx scripts. Other things only use one message.

buttons and hot-keys:

Iris 6 / 24

```
1. You can cancel these keys by pressing SHIFT or ESC while the key is still
  pressed.
2. The texts after the "=" signs are the filenames in the
               Buttons drawer
                  the Check
   icon is set.
(0=Check) c: check for new mail and send mail
(1=NewMsg) n: new message
(2=Reply) r: reply
(3=ReplyAll) t: reply to "Reply-To" and all "Cc" addresses
(4=Forward) m: forward - not yet implemented
(5=Prev) -: previous folder/message
(6=ToList) 1: show list (message text -> message list -> folder list)
(7=Next) +: next folder/message
(8=Sort) o: select sort key
(9=Delete) d: delete message
(10=Save) s: save the contents of the body listview
(11=Print) p: print the contents of the body listview
(12=ToAddrBook) a: add the From: address to the address book
(13=Search) f: search text in the message
(14=ShowHdr) h: show headers yes/no
These keys cannot be cancelled:
DEL: delete message
on the message list page:
left/right: next/previous folder
up/down$^1$: next/previous message; deselect all entries except one
return/enter/double-click: go to the message page
on the message page:
left/right$^1$: next/previous message
up/down$^1$: move up/down the active line
numeric keypad 1/2/3/7/8/9: scroll through the message
return/enter/double-click: do something with a line:
  ...http://...
               Start Web browser
                 \ The first one in
  ...@...
               Send e-mail
                       / the line is used.
 white text
                 save attachment (last line -> no effect)
The Flag column
* means unread, S means unsent, space (the default) means nothing special.
$^1$ with shift is page, with alt is extreme
```

1.9 EDITOR environment variable

This variable should contain a command to call an editor. It is important that the editor runs synchronously, otherwise the program will detect that you had not saved and cancel the operation. Most editors do work

Iris 7 / 24

synchronously. A well-known exception is CygnusEd. You must set \$EDITOR to "ced -sticky" if you want to use CygnusEd.

If the EDITOR ENV variable does not exist, Iris will use Ed (without any options).

1.10 Mail checking

Iris does not have a built-in mechanism to regularly check whether \hookleftarrow new mail

has arrived. This function is realised by an ARexx script, Poll.irx. To enable this function, double-click the icon after starting TCP/IP and Iris. An easier way is

putting it in the user menu

The script will now poll the post office every 3 minutes. You can change this to any value you like. At the same time, queued mail is sent. The script will exit automatically if Iris or TCP/IP stops.

Warning: Some people have reported AWeb crashes just when their mailer (not Iris) was checking for new mail. It is not guaranteed that Iris does not cause this type of problem, as the opening of a window causes extra input.device load and it and the usage of the network take memory.

Receiving via SMTP

1.11 SMTP daemon received mail

On the request of Patrick James, a script has been added that enables you to load mail received by smtpd into Iris.

In "inetd.conf" the following line must be added:

smtp stream tcp nowait root amitcp:serv/in.smtpd smtpd smtp

where <parms> must be:

rmail "rx AmiTCP:Iris/IrisRMail.irx %s"

Any incoming message will be fed to Iris now. Warning: this script has not been tested in real life yet.

1.12 Configuration: Network page

.mailcap file
Network
Composing

GUI

Iris 8 / 24

Folders

Filters

E-Mail address, real name, POP host, SMTP host, Username, Password \hookleftarrow

Fill these in.

Delete mail from server: If checked, the mail will be deleted immediately after downloading.

Only new mail: If checked, only the new mail will be downloaded. This uses the optional UIDL command of POP3. If it generates errors you'll have to turn it off. When this option is off, the UIDLs will not be recorded. When this option is on, a file "PROGDIR:Mail/UIDL" will be created. UIDLs are unique IDs for each message, which are never reused for the same

mailbox. They can be up to 70 characters long.

Expunge deleted: Not yet implemented. Only useful if the above gadget is checked too.

Show comm. windows: If checked, the communication with the server will be visible in a window (one for sending mail, one for receiving mail). If an error occurs, the window will always pop up.

Confirm messages >10K: Asks for confirmation to download messages larger than 10240 bytes. If you reject a message, it will not be asked again.

1.13 Configuration: Composing page

.mailcap file

Network Composing

Folders

Filters

Quote header, quote prefix: These are used to quote in replies.

```
--> ex. 1 "On %d, %a wrote about %b:%n%n"/"> "
--> ex. 2 "+----%n|%n| From: %f%n| Subject: %s%n| Date: %d %t%n|%n"/"| "
```

Edit signature, edit addressbook: These duplicate functions in the Config menu of the main window.

1.14 Configuration: GUI page

.mailcap file

Network Composing GUI Folders

Filters

Column Weights:

With these you can change the relative width of the columns of the message list window.

Iris 9 / 24

Fonts:

With these you can change the fonts used for the message list and the message text. Please note that a change only takes effect after restarting the program. Usage of a proportional font for the message text will ruin tables.

User menu:

Here you can configure the user menu. Keeping the PROGDIR: path will enable Iris to start the scripts even when its current directory is different. Note: this will only work if PROGDIR: is the first in the name. Quotes make it impossible and a second script separated with a semicolon cannot use this feature either. You cannot use spaces in the names of scripts (an ARexx limitation). ARexx commands are processed by the instance of Iris that started the script, unless dictated otherwise. Replace the 'address iris' line with 'if substr(address(),1,4)~="IRIS" then address iris' and store address() if you ever use another address.

Not in the GUI:

How to design your own buttons

1.15 Configuration: Folders page

.mailcap file

Network

Composing

GUI

Folders

Filters

On this page you can create and delete folders. The "Use" button $\ \hookleftarrow$ should not

be used when you have changed this. Deleted folders are deleted immediately after you have pressed the "Save" button. New folders are not created until you have selected them.

1.16 Configuration: Filters page

.mailcap file

Network

Composing

GUI

Folders Filters

On this page you can create and delete filters. You can change the order of the entries in the listview with the drag-and-drop mechanism. The size of

Iris 10 / 24

the columns can be changed by dragging the separating lines. Double-click on a filter to edit it.

The gadgets in the "Edit folder" window:

All these strings except To folder are matched case-insensitively. From: this AmigaDOS pattern is matched against the contents of the From field. If "##" is in it, the address book will be searched for the address instead.

To: this AmigaDOS pattern is matched against the To header field. Again "##" means address book.

Subject: this AmigaDOS pattern is matched against the Subject header field.

Body: the whole body of the message will be searched for this substring. It can be slow for long messages.

To folder: the message will be moved to this folder, if all above conditions meet. Empty fields are ignored. The type of this folder is important: only messages of the correct type will be checked.

Examples: (/ separates fields)

- 1) ##///Inbox -> puts mail from people in the address book into the inbox.
- 2) /friend@public.com///JUNK-MAIL -> puts some spam into JUNK-MAIL
- 3) #?@hotmail.com////JUNK-MAIL -> much spam comes from HotMail
- 5) ///JUNK-MAIL -> this must be located below 1 and puts mail from unknown senders into JUNK-MAIL (always matches, any In-filters below it are ignored!)

Look in the sample configuration file for more examples.

1.17 .mailcap file

The .mailcap file must be located in the same directory as the Iris executable. It is only read at startup.

The general format is: type; command [;opt_params]

type: e.g. image/gif. image/* matches any image type and will cause any following image/#? lines to be ignored.

command: Command to execute for viewing the type; %s is replaced by the file name. You can separate multiple commands with '\n' (this may not work with other programs).

opt_params: not yet used by Iris. It can be "edit=command"

Use '\' (one backslash) to force characters to be taken literally or to break long lines ('\' followed by a linefeed is discarded). The maximum line length is around 1000. Lines beginning with "#" are comments. When a type is not found, the information found for "application/octet-stream" is used.

Iris 11 / 24

```
Example mailcap file:
# mailcap file
text/plain; work:tools/muchmore %s
text/*; work:tools/muchmore %s; edit=work:cygnused/ced %s

# extra types for type requester
image/gif; work:tools/fastview %s
image/jpeg; work:tools/fastview %s
image/png; work:tools/fastview %s
image/*; work:tools/fastview %s; edit=ppaint:ppaint %s

application/octet-stream; sys:utilities/multiview screen %s;\
edit=work:cygnused/ced %s
```

1.18 Button design

The buttons are stored in directories "Storage/..._Buttons" as normal icons, so you can edit them very easily. A few hints are necessary, however:

- * You'd better make them Project icons, even though the type doesn't matter for Iris, because CLI commands, like sort, search and delete, cause software failure \$87000004 if they're started from WB, which can happen if you accidentally double-click on a Tool icon.
- * If you want to see if you have selected a button, you must supply a second image. Complement and backfill are not supported.
- * If Iris fails with "Could not open window", try to set the tooltype "USETWOROWS" in the Check icon of the new button set. If it doesn't even work with that, then your buttons are really too large.
- * The tooltype "SPACING" indicates the spacing between buttons, horizontal as well as vertical in pixels. The negative values -1, -2 and -3 mean BGUI defaults narrow, normal and wide, respectively.
- * If you have forgotten a button, a black rectangle, which will become white on selection, will appear in its place.
- * You can use NewIcons, but it will look horrible on another screen.
- * Send them to me, or upload them to Aminet!

1.19 Iris and browsing the Web

By double-clicking on a line of a message which contains an HTTP $\ \leftarrow$ URL, you

can view the URL with your browser. To use this, you need to copy a REXX script that is specific for your browser.

The Installer script does this for

you. The script should be put in the same directory as Iris and named BrowseWWW.rexx. It has one argument: the URL.

It might be necessary to change the path where your browser can be found in the scripts.

The other way around, a web browser can call Iris to send an email message.

Iris 12 / 24

The general call is: Iris MAILTO <email address>
In AWeb, you must define this under Network settings/Extern/mailto: (watch out: click in the gadget first, and press return when you are ready!)
In other browsers, use a similar method.

1.20 X-Priority and Importance header fields

The fields which are used to mark a message as important:

Eudora:

X-Priority: <number> (description)

The number is in the range 1-5. 1 Means very high, 3 means normal and 5 means very low.

MS Exchange:

Importance: <text>

Possible texts are: high, normal, low.

You can mark a message as important with the checkbox "High Priority" in the

Compose mail window

1.21 Disposition-Notification-To and Return-Receipt-To header fields

The fields which are used to ask for a return-receipt:

Eudora:

Disposition-Notification-To: <emailaddress>

The receipt is not sent until the "unread" flag is removed. The program will ask if you want to send a return-receipt. According to the standards, the receipt contains what you do with the message (delete, move). This is a violation of privacy and is not done by Eudora.

MS Exchange:

Return-Receipt-To: <emailaddress>

The receipt is sent as soon as the message has arrived.

Iris sets both in messages with return-receipt on. Return-Receipt-To is treated as if it were Disposition-Notification-To, as it does not make sense to send two receipts. Iris will always ask if you want to send a receipt.

1.22 About BGUI

I have used the BGUI library for the GUI. As it's hard to get the library, I have included the library (SYS:Libs/bgui.library) and a separate class (SYS:Classes/Gadgets/bgui_popbutton.gadget) in the archive. It is version 41.8. Versions lower than 41 do not suffice due to the extensive use of multi-column listviews.

Iris 13 / 24

NOTE: In the guide of Iris V1.0~I wrote erroneously that I didn't have the Standard version.

Manuel Lemos <mlemos@acm.org> took over the development of BGUI recently, with a team. A (time limited) beta version (41.10) can be found on: http://bgui.e-na.net/.

The preferences program included with it also works on 41.8. Note that the "General" page and many menus don't work. Furthermore, applications written without preferences in mind (like VirusChecker and Select_Host) do not react to the them. Another thing is that bgui.library supports per-application preferences. Currently, you have to copy files in ENV/ENVARC:BGUI yourself to take advantage of this. The name of the prefs file for Iris is "ENV/ENVARC:BGUI/Iris.prefs". BGUI 41.8 (not 41.10) contains a bug that causes the command name to be ignored (so prefs files for applications started from the CLI will be named "Shell Process.prefs" etc.), but this is circumvented in Iris.

BGUI is a graphical user interface library, written by Jan van den Baard and Ian J. Einman, for the Amiga computer which allows for easy, flexible and fast GUI creation. It is based on BOOPSI (Basic Object-Oriented Programming System for Intuition) and consists of a shared library which is easy to install and a few separate files. They are, however, clearly named and limited in number as opposed to ClassAct's and especially MUI's separate files.

- Programmers:

- * BGUI gives you the ability to easily create automatically font sensitive and resizable windows. You won't use gadtools.library again!
- * BGUI handles input and notification; your application can almost run by itself.
- * BGUI interfaces can adapt to user preferences, and localize themselves.
- * BGUI comes with enough object classes to get you going, and third parties have written classes as well. Example source is included to show you how to write your own.
- * BGUI is free! No license or fees required for shareware or commercial usage.

- Users:

- * BGUI interfaces are font sensitive, resizable, often localized, and can adjust to your preferences.
- * BGUI has far smaller memory and disk requirements than other GUI systems, while retaining the most important features.
- * Many BGUI applications include everything you need to get started, there is rarely a need to obtain yet another file.
- * BGUI is free!

Iris 14 / 24

```
- The authors of BGUI:

Original BGUI resources - Jan van den Baard

BGUI C headers and libraries - Ian J. Einman

BGUI AmigaE modules - Dominique Dutoit (ddutoit@arcadis.be)
```

It's difficult to find BGUI stuff on the Internet too. Ian J. Einman thought it was better not to upload the BGUI beta versions to Aminet. Therefore the version included with Iris cannot be found in a separate archive.

1.23 AsynclO

short: AsyncIO library for fast IO. V39.2

uploader: cmh@lls.se (Magnus Holmgren)

type: dev/c

This link library (optionally shared library) provides DOS-like functions for using double buffered asyncronous IO on files. This provides very good performance on DMA devices.

The code was originally written by Martin Taillefer. A few bug fixes and updates were made by Magnus Holmgren, with inspiration from Olaf 'Olsen' Barthel.

News in version 39.2:

Fixed bugs in ReadLineAsync(), ReadCharAsync() and WriteCharAsync().

SeekAsync() is now more DOS-compatible, in that it allows seeks to succeed after seeks past EOF. Thus, it is now possible to seek back to a valid position in the file and continue reading there.

News in version 39.1:

A bugfix in SeekAsync() needed fixing. ;)

Docs cleaned up.

Various other minor changes.

1.24 The ARexx interface

Iris has an ARexx interface. The commands use standard ReadArgs() \hookleftarrow templates.

If there are no arguments listed, everything you put after the command is ignored. However, this can change in future versions, so do not rely on this.

Another thing which you should take care of, is errors. Even commands which are listed in this guide as "cannot return error" could do so in future versions. The GET#? commands that return data can't fail, except as noted. LOCKGUI failures can be ignored too. For the rest, always check for errors and abort if one is encountered.

Iris 15 / 24

Examples

List of commands:

?

Gives the list of commands with their templates.

READMESSAGE FILENAME/A, TYPE/N/A, FLAG, TO/K

This command is used by the asynchronous mail getting. It automatically handles folder selection. If the TYPE parameter is 0, the message is put in an IN folder. If the TYPE parameter is 1, it is put in an OUT folder. The FLAG is the same as the leftmost column of the message list: * means unread, S means unsent, space (the default) means nothing special. Do not supply other flags to prevent collisions with future versions.

New in V1.1 is the TO parameter. This specifies the folder into which the message is put. The command fails with RC=10 if the parameter is wrong. (folder not found or folder of wrong type) The comparison is case-sensitive. Use quotes.

OHIT

Quits the program.

LOADCONFIG FILE/A

Loads a new configuration file.

SAVECONFIG FILE/A

Saves a configuration file.

GETMAIL (strange name!)

Starts checking for new mail.

SENDMAIL IMMED/S

Starts sending mail. If the IMMED switch is on, no window will appear if there is no mail to send.

NEWMSG TO, SUBJECT

Starts the composition of a new message.

REGISTER

Pops up the registration form window.

INFO

Returns the X-Mailer string, including "X-Mailer: ".

LOCKGUI

Locks the GUI. This must be explicitely undone with UNLOCKGUI, as many times as LOCKGUI has been executed. When the GUI is locked, you are sure that the selection in the message list will not change, except because of ARexx commands. The window gets a busypointer. The use of this command is not necessary for requesters that are produced by ARexx commands.

UNLOCKGUI

Unlocks the GUI. Executing UNLOCKGUI when no LOCKGUI has been executed can cause trouble. (The window is not locked though it should be because a subwindow is open. I have, however, never experienced crashes because of it.)

ASKSCREEN SELECTED

Iris 16 / 24

Asks for a public screen. If the user cancels, RC will be 10.

GETSCREEN

Returns the name of the public screen Iris is on. This should be used for requesters that Iris doesn't offer via ARexx (file, directory, string etc.).

ASKCHOICE TITLE/A, BODY/A, GADGETS/A

Pops up a requester. Separate the lines in the body with a linefeed (*N in quotes; '0a'x ends ReadArgs and causes an error: required argument missing) and the gadgets with a vertical bar ('|'). There is an exception to this: %[at the start of the gadgets will create XEN buttons and %] should create fuzz buttons. %] Does not work, however. If you don't use %[or %], the type defined in the BGUI preferences for "Button" will be used. You can use the underscore ('_') to define keyboard shortcuts. An asterisk before a button will add Return as a shortcut key for that button and Esc for the last button. The keyboard shortcuts LAmiga-V for the first button and LAmiga-B for the last button are always present. Examples:

'ASKCHOICE "Start TCP/IP" "The TCP/IP stack is*Nup and running.*NDo you , want to*Ncheck for new*Nmail?" "** Yes| No"'

'ASKCHOICE "DeleteAllMsgs" "Do you want to delete all*Nmessages in this , folder?" " $\{[Yes]_No"'\}$

(In a script, ARexx discards the comma and the newline following it.) Return values:

RC=5: the right button (most of the time: Cancel/No)

RC=0: the other buttons; The number of the button (1...n-1) is in RESULT.

GO L=LIST/S, M=MESSAGE=T=TEXT/S

Sets the active page. Please note that the selected message is not loaded in the window!

FOLDERNAME NUMBER/N/A

Returns the name of folder NUMBER. NUMBER range is 0..N-1. If NUMBER is wrong, RC will be 10.

ASKFOLDER SELECTED

Lets the user select a folder; the name is returned in RESULT. If the user cancels, RC will be 10.

GETFOLDER

Returns the name of the current folder.

SETFOLDER NAME/A, FORCERELOAD/S

Sets a new current folder. The FORCERELOAD switch causes the headers file to be read again even though the folder is already shown. Wrong $name^-->RC=10$

ASKSORTKEY

Puts up the "sortmethod" requester. If the requester is cancelled, RC will be 10. Otherwise, the number of the key is returned. Numbering starts at 0 for the top gadget.

GETSORTKEY

Returns the active sort key.

Iris 17 / 24

SETSORTKEY NUMBER/A

Sets a new sort key. If the number is out of range, RC will be 10.

SELECTMESSAGE NUMBER/A/N

Selects a message in the message list. Counting starts at zero.

GETNUMSELECTED

Returns the number of selected messages in the list.

MESSAGEFILE NUMBER/N

Returns the filename (full path) of the selected message; if there is no selected message, RC will be 10. If the message file is not present (strange error), RC will be 9. New in V1.3 is the NUMBER parameter. It is used to get one file from multiple selection. As always, the first one is 0. If NUMBER is omitted and there are multiple messages selected, an error (RC=10) will be returned.

MESSAGEINFO NUMBER/N

Returns the selected entry in the list; tabs separate fields. Again RC=10 means that there is no selected message. You should not make any assumptions about which fields are in this string. A date field may be added in the future. The NUMBER is the same as that of MESSAGEFILE.

DELETE

Deletes the selected message(s). Error codes:

RC=11 -> no selection

RC=10 -> no messages could be deleted

RC=5 -> not all messages could be deleted

1.25 REXX examples

Poll.irx

This script periodically checks for new mail (only if TCP: and Iris are present). The period is 3 minutes, but this can be changed. Default installed in the

user menu already.

DelFolder.irx

This script deletes all messages in a folder. Before this is done, confirmation is sought. Default installed in the

user menu already.

MoveMsg.irx

This script moves the selected message(s) to another folder. Intended to be included in the

user menu

. Remark: doesn't work with older version of Iris

(before V1.3).

StoreMsg.irx

Iris 18 / 24

This is a version of MoveMsg.irx in which the destination folder is fixed to "Store". "Store" is part of the default configuration.

Install Buttons

This script causes Iris to use a new button set. This is done with hard links.

IrisRMail.irx (not meant to be started from the user menu)

This script simply reads a message into Iris. If Iris isn't running, it will be started first. The path of Iris in the script may need correction. The main use of this script is

smtpd

1.26 CLI interface

POP/S - Get mail

POP/S, PDELALL/S, CURFOL/N, REPLY, MAILTO, SUBJECT, SMTP/S, SMTP-I/S, \leftrightarrow PUBSCREEN/K, FWD/S

```
PDELALL/S - Delete all mail on server
CURFOL/N - Set the current folder. Numbers start at zero.
REPLY - Reply to this message. It needs a
                MESSAGEINFO
                 result.
                 This line must come from the folder indicated by CURFOL!
                 If you supply "", it just specifies that the
                Compose window
                                 must come up.
MAILTO - Set the To: address and the Subject field.
SUBJECT - Override the default subject
SMTP/S - Send mail; an error window will pop up if there is no mail to send.
SMTP-I/S - Send mail without an error window if there is no mail to send.
FWD/S - Use with REPLY to indicate that this is not a reply but a forward.
Inclusion of any of REPLY, MAILTO, SUBJECT will cause the
                Compose window
```

to pop up. This may be combined with SMTP to send the message $\ensuremath{\hookleftarrow}$ immediately.

Usage of any of these options (except CURFOL) will inhibit

mail reading

and

the

ARexx interface

.

1.27 Shareware

Iris 19 / 24

archive is kept complete and no changes are made to the files. For inclusion on CD-ROMs, please contact me.

The differences between the freeware version and the registered version:

*

X-Mailer and X-Registered header fields

- \star Requesters at program start and end
- * Text in "About"
- * A keyfile

If you want to have a keyfile, send me the registration form (the program can generate this for you) and 5 US\$, 10 DM or (preferrably) 10 NLG or a similar amount in another currency. Please send me only notes. In response, I will send a personalised keyfile, by email. If serious bugs show up, I will send all registered users a fixed version. You will also get at least one new version. (If you don't receive the keyfile within a reasonable time or if you lose the keyfile, mail me to ask to send it again.) The keyfile is personal and may not be given to others.

If you don't like to give your (physical) address to me, leave out the name of the street, etc. The E-mail address is essential, however! I promise not to pass either your address or your email address to anyone.

My address is:

E-Mail: M.Tjoelker@nl.cis.philips.com

Snail mail:

Jilles Tjoelker Craterlaan 6 5632 AG Eindhoven THE NETHERLANDS

1.28 Backgrounds

The following RFC's were used in the creation of Iris:

```
821 Simple Mail Transfer Protocol (SMTP)
822 Message format for SMTP
1524 .mailcap file format
1806 Content-Disposition header
1939 Post Office Protocol version 3 (POP3)
2045 and 2049 MIME
```

1.29 History

```
V1.9 31-Mar-1999
```

- * The string gadgets in "Edit attachment" did not respond to BGUI prefs.
- * Added more information about BGUI to the guide.
- * Removed the "preview" for the

column weights

. It was not 100% stable and

Iris 20 / 24

was not accurate.

* Added check for bsdsocket.library V3 in main program before a network process is started.

* MAJOR ADDITION: usage of a

mailcap file

to view attachments directly from

Iris and to select media types for attachments more easily.

* New menu options in the Configuration menu and

ARexx commands

LOADCONFIG

and SAVECONFIG to manage multiple configuration files.

- * New menu option to start the BGUI preferences program.
- * New switch FORCERELOAD for the

SETFOLDER ARexx command

to force a

refresh of the list even though the folder is already displayed.

* If Iris

asks whether to download a message or not

, some headers are shown

now. This feature requires that the POP3 server support the TOP command.

V1.8 07-Feb-1999

- * New feature: optionally confirm messages larger than 10240 bytes.
- * A missing Content-Type header caused that the text was not displayed. Fixed.
- * New quoted printable encoding routine that avoids lines with only a period on them, which may cause trouble.
- * Forwarded messages no longer get an In-Reply-To header.
- * New important messages are now marked in the flags column. Furthermore, messages can be marked important or not with the Message/Mark menu option.
- * Searching in the message list now ignores the flags column.
- * Faster Base64 decoding.

V1.7 24-Oct-1998

- * Some changes in the "Compose message" GUI.
- \star The texts "From" etc. above the message text are now underlined.
- * The "Complete" line now overwrites the last "XX to go" line.
- * ARexx commands not coming from scripts are now recognised.
- * Very long headers caused trouble.
- * Iris now uses asyncio.library V39+ (only for base64 encoding yet).
- * Base64 encoding speed increased (assembly code).
- * Iris now puts "<newline>--<newline>" before the signature instead of just "<newline>".

V1.6 30-Jul-1998

- * Format of version strings corrected (in the program itself, in scripts and in the guide)
- * ARexx scripts corrected: address commands removed, so they also work correctly when started from Iris invocations with port names other than "IRIS"; IrisRMail.irx was buggy.
- \star New tooltype in the Check button: "USELABELS" to show labels under the buttons. The labels are quite wide, so

USETWOROWS

may be necessary.

A click on the label is the same as a click on the button.

* All toolbar buttons now have shortcuts.

Iris 21 / 24

 \star Improved buttons. The old buttons were implemented in a dirty way and as a result the spacing was large. Now the spacing is

configurable

and can

even be 0.

- * New ARexx command "NEWMSG" to compose a new message (requested by Stefan Blixth for use in OnyxBase)
- * Getting mail sometimes failed to read some messages (specifically, from mainframe TCP/IP) for obscure reasons; now there are error messages and checks, but the bug doesn't occur any more.

V1.5 02-Jun-1998

- * Major changes in the ARexx interface.
- * The complete To: is now shown above the message.
- * Improved URL recognition.
- \star Some changes in the GUI: some cycle gadgets changed to MX ('radio button').
- * Content-Disposition is now read and written.
- * BUGFIX: Decoding quoted-printable when replying sometimes crashed.
- * BUGFIX: Quoted-printable was not decoded correctly when saving attachments.
- * BUGFIX: When there was no signature and the message text didn't end on a newline, the first attachment wasn't recognised. Fixed with an extra
- * BUGFIX: The 'ED' button for the user menu ARexx script did not work properly. If you wanted to create a new script and just used "Save" in the editor, the script ended up in the editor's PROGDIR:.

V1.4 30-Apr-1998

- * BUGFIX: "Folded" headers cause less trouble. They are lines that continue a previous header line; a space or a tab at the start of the second line indicates this.
- * BUGFIX: After a deletion the newly selected message wasn't always loaded in the listview.
- * BUGFIX: Finally found a way to circumvent the read/write byte 8 Enforcer hits. They are caused by a BGUI bug related to the titles of the columns. I removed the titles. They will be back when Manuel Lemos will have fixed the bug.
- * The contents of MIME messages which are not multipart can now be saved too, except for text/* and message/*; use the Save button for them. Other types are not very common, but the RFC allows them.
- \star While saving and decoding a busy pointer and a new window title is now added to the window.
- * In new messages read into the message list and in the "%a" in quote

header, the email address is now left out when a real name is $\ensuremath{\hookleftarrow}$ present. The

old "%a" behaviour can be got by using "%f".

- * As I discovered that CygnusEd reacts to the suffix, I changed the name of the temporary file from "Iris.post.xxxxxxxx" to "Iris_xxxxxxxxx.post".
- * Added a

search function in the message list

- * Made it impossible to resize the search windows in the vertical direction.
- * Improved the quoting in replies. Strange types and base64-encoded data are now represented by a special line instead of all strange stuff and

Iris 22 / 24

quoted-printable is now decoded.

* Improved the adding of "Re: ". Iris now changes all "Re: "s and "Re[xx]: "s to a single "Re[xx]: ". Note that the number is not very reliable: some mailers leave the subject unchanged when it already begins with "Re: ".

- * BUGFIX: date and time were sometimes improperly separated (in the creation of the quote header). This bug has been part of Iris since V1.0.
- * Added a new

quote header

field "%b": the subject without "Re: ".

 \star Removed a double key shortcut in the configuration window (Edit signature

button).

Duccon,.

- * The timezone has been corrected: + and reversed.
- * The temporary file "RAM:Iris_xxxxxxxxx.post" (in which you type a new message) is now deleted after use.
- * New menu option "Message/Edit" to edit a message. If necessary, the message is reloaded.

V1.3 04-Apr-1998

- * Changed "Mark unread" to "Mark...". It now works for all types of folders. The keyboard shortcut has not been changed.
- \star Changed "Maximize window" to additionally put the window to the front, like KingCON does.
- * Multiselect in message list! The scripts

'MoveMsg.irx' and 'StoreMsg.irx'

have been adapted in order to support multiselect.

- * The main window is now SmartRefresh. This speeds up refreshing and reduces the read/write byte 8 Enforcer hits caused by BGUI.
- * BUGFIX: Close gadget of registration form didn't work. This bug has been part of Iris since V1.0.
- * BUGFIX: There was some memory corruption when the signature file could not be read. (The part 'PROG' was overwritten with an address.)
- * BUGFIX: Multiple

Compose

processes do no longer interfere. (Temporary mail

composition filename has process address appended.)

* New

ARexx

commands 'LOCKGUI' and 'UNLOCKGUI' to block the GUI, so the user cannot select another message while a script is executing.

V1.2b 18-Mar-1998 (no changes to the program)

- * New scripts for user menu (MoveMsg.irx, StoreMsg.irx)
- * New button set for four colour screens (GT_Buttons)
- * Added version strings to all ARexx scripts
- \star Improved DelFolder.irx script: it no longer asks you to delete no messages.
- * Improved IrisRMail.irx script: it can no longer cause "Please insert..." requesters.
- * Improved guide

V1.2a 07-Mar-1998 (no changes to the program)

- * The V1.2 archive was completely wrong. All files in subdirectories were missing and the Installer script was an old version. This archive is correct.
- * Some more changes to the guide.
- * New button storage system, allowing easy changing of button sets. The

Iris 23 / 24

'Update' script takes care of the change for users of older versions. Old buttons will not be overwritten and will continue to be used.

V1.2 06-Mar-1998

- \star BUGFIX: sometimes the "headers" file got messed up by very long lines.
- * New menu option: Project/Maximize window to make the window as large as it can be.
- * BUGFIX: many Enforcer hits when opening config window removed. This could lead to hangs on some systems. The bug came in in V1.1. I can't fix the read/write byte \$00000008 hits, however. These are caused by the BGUI listviewclass when it handles multi-column listviews.
- * BUGFIX: If you aborted the getting of mail when a message was transferred, a filehandle was closed twice (Software failure \$8700000E). This bug has been part of Iris since V1.0.
- * When mail is received, the new "to go" line replaces the old instead of being added to the listview.
- * New ARexx script

IrisRMail.irx

added to the distribution that enables

loading of messages received by SMTP daemon.

V1.1 14-Feb-1998

* MAJOR ADDITION:

user menu

- * New parameter "TO" for the READMESSAGE command. You can use this to move or copy messages more easily.
- * Implemented

* You can now

Reply to All function.

* Removed some errors in the guide (see

table of contents

).

create

larger buttons by dividing them over two rows. Set the tooltype "USETWOROWS" in the "Check" button to enable this.

- * Added new text-only buttons (created by Karl Schon)
- * BUGFIX: when adding address book an entry to the address book, only one character was compared due to a stupid bug. This could cause unwanted replacement of old entries.
- * New e-mail address: Menno.Tjoelker@nl.origin-it.com. Actually it existed already, but sending mail to M.Tjoelker@nl.cis.philips.com and M.Tjoelker@mpn.cp.philips.com will cause an error message to be sent back and after end May 1998 it won't exist any more.
- * Added script "DelFolder.irx" to delete all messages in a folder.
- * Fixed script "Poll.irx"

V1.0 14-Feb-1998 Initial release

1.30 The Future

The following things may be implemented in the future:

Iris 24 / 24

* Automatic inclusion of attachments with forward/resend function

*

Expunge deleted function

- * Nested MIME and messages
- * Media type 'text/html'
- * Encryption
- * More sophisticated forms of multitasking consuming less memory
- * Communication directly using sockets
- * Group entries in address book
- * Anything you suggest

Known weaknesses and bugs:

- * Possibly due to BGUI bugs, Iris crashes on some machines (68060). On my machine it does never happen.
- * Currently RX must be in SYS:REXXC; this will be fixed.
- * A (BGUI) problem with deletion of the first message in the list has been fixed in a rather inelegant way. The listviewclass does not want to select an entry unless it can draw the list, i.e. the message list must be visible. This is actually done, which produces a flickery effect.
- * Base64-encoded messages of the type text/plain are not shown. Although they can be read by saving the attachment (for example by double clicking on it), this is a fault to be solved.

*

BGUI

has some bugs.