ARBUS

COLLABORATORS			
	TITLE : ARBUS		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		August 27, 2022	

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

ARBUS

1.1   ARexx For Beginners - Using ARexx For Beginners

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS

BY FRANK BUNTON

 COPYRIGHT © FRANK P. BUNTON 1995-1998

This article contains the following topics. I would suggest that you read
them all before starting on the ARexx articles themselves as the comments
in these items will help you in finding your way around the articles and
make your task of learning ARexx a lot easier:-

          Using The DEMO Version

          Formatting Of Text

          The ARB: Assignment

          Amigaguide (AG) or Multiview (MV)

          The AG/MV Window & A Shell/CLI

          The Glossary

          Cross Referencing

          Where To Start

          Window Size & Line Lengths

          Article Design

          Example Programs

          Writing Your Own Example Programs

```
                      A Note On Spelling
                    === End of Text ===
```

1.2   ARexx For Beginners - Using ARexx For Beginners - Using the DEMO Version

```
AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - THE DEMO VERSION


The demo version of ARexx For Beginners has most of the articles and
example scripts encrypted in the file "ARB-Coded".

When you register you will be able to decode these files.

In the meantime you will only be able to access these files:-

   01.GETTING_STARTED
   02.PROGRAM_ELEMENTS
   03.COMMAND_UTILITIES
   04.NUMBERS_&_STRINGS
   05.INFO_TO_WINDOW
   06.CENTRING_TEXT
   07.SYMBOLS_INTRO

   Appendix C - ASCII Codes

   Glossary

Clicking on links to other files will get you nowhere. The title bar of
your Amigaguide or Multiview window should give the message such as:-

   Couldn't open .... (filename) ....

or

   Couldn't locate .... (filename) ....


=== End of Text ===
```

1.3   ARexx For Beginners - Using ARexx For Beginners - Formatting of Text

```
               AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - FORMATTING OF TEXT

The text in these articles has been formatted with some text:-

   In bold text
```

With underlined text

Centred text

If the above three lines are NOT, respectively, in bold underlined
and centred, then you have an early version of the file amigaguide.library.

Bold and underlining is available from Amigaguide version 39 onwards.

Centring is available from Amigaguide version 40 onwards.

If you have an earlier version, then the formatting will not be as
good as it could be. However, I trust that this will not prevent you
from getting the full benefit of the articles.

If you notice that, in some articles, there is a gap between the line
"=== End of Text ===" and the end of the window then DO NOT go into the
file and delete this space!! It is there because some instances of

                cross referencing
                 can be to some of the last lines of a node. If the
space (blank lines) was not there then the cross reference link would go to
a line before the intended line.

=== End of Text ===

1.4   ARexx For Beginners - Using ARexx For Beginners - The ARB: Assignment

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS – THE ARB: ASSIGNMENT

When you double click on the INDEX icon, an AmigaDOS script is activated
which includes this line:-

  ASSIGN >Nil: ARB: ""

This ensures that the assignment to ARB: is made to WHATEVER directory
the INDEX file is in.

All referencing to articles is made using ARB:

Provided that you copied the whole "ARexx_For_Beginners" drawer to your
hard drive without removing or altering any of the files or directories
that are in it then you should have no problems.

=== End of Text ===

1.5   ARexx For Beginners - Using ARexx For Beginners - Amigaguide Or Multiview

                        AREXX FOR BEGINNERS

USING AMIGAGUIDE OR MULTIVIEW

I have NOT included a default tool of either AMIGAGUIDE or MULTIVIEW in
the INDEX icon. If I had then those without the program that I had included
would have had to change the default tool.

In any case, I wanted to use an AmigaDOS script to allow an assignment
of
                ARB:
                , so the same script can decide whether to use AMIGAGUIDE or
MULTIVIEW. Of course, if you have MULTIVIEW then that will be used in
preference to AMIGAGUIDE!

When you double click on the INDEX icon, the following lines from the
AmigaDOS script are activated:-

```
  WHICH >Nil: Multiview
  IF NOT WARN
    RUN >Nil: Multiview ARB:Misc/Index.Text
    SKIP End
  ENDIF

  WHICH >Nil: Amigaguide
  IF NOT WARN
    RUN >Nil: Amigaguide ARB:Misc/Index.Text
    SKIP End
  ENDIF
```

The AmigaDOS command WHICH will return a code of 5 if the program is not
found in the path. If it is found, a return code of 0 is given and the
lines after "IF NOT WARN" are operated.

Thus, it looks for MULTIVIEW first. If it is in the path, then that is
used and the script skips to the end.

If MULTIVIEW is not found, then a test for AMIGAGUIDE is made and that
is used if it is found.

If neither are found then this part of the script is reached:-

```
  ECHO "*nNeither MULTIVIEW nor AMIGAGUIDE have been found in your
        system's path."
  ECHO "Please click on the file *"PATH SETTING*"."

  ASK "*nPRESS THE RETURN KEY TO CONTINUE"
```

The file Path Setting will give an explanation of how to proceed.

=== End of Text ===

1.6   ARexx For Beginners - Using ARexx For Beginners - The AG/MV Window & A Shell/CLI

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS

THE AMIGAGUIDE OR MULTIVIEW WINDOW & A SHELL/CLI WINDOW

I originally arranged for the Amigaguide or Multiview (AG/MV) window to
open in the top two thirds of the screen and for a Shell/CLI window to
open in the bottom third.

However, as different people have different sizes and types of screens,
a window set up that suited one person would not suit another person.

As it is handy to have a Shell/CLI window open to practice ARexx as you
read about it, and to run the example programs, I would suggest that you
follow these steps:-

1. Change the size and position of this window so that it takes up
   the top two thirds of your screen.

   If your version of AG/MV has a menu item:-

        Settings   or   Prefs

   with a sub menu item:-

        Save As Defaults

   then select that sub menu item and the window will always open
   at that size/position.

2. Open a Shell or CLI window and position it in the bottom third
   of the screen

   To have a permanent Shell/CLI window on your workbench screen
   you can alter your "S:User-Startup" file as I have done.

   I use a "MULTISCAN:Productivity" screen size 656 x 480.

   I have a command line in my "User-Startup" file as follows:-

      NEWSHELL "CON:0/320/656/160/AmigaShell OS 3.1/Close"

   which opens a new shell window in the bottom third of the
   screen.

   If you are using a standard "PAL:Hi Res" screen size 640 x 255
   then you could use this command line:-

      NEWSHELL "CON:0/175/640/80/AmigaShell OS 3.1/Close"

```
=== End of Text ===
```

1.7   ARexx For Beginners - Using ARexx For Beginners - The Glossary

```
AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - THE GLOSSARY

I have included a glossary of terms that can be accessed by clicking with
the left mouse button on highlighted words within the text of the articles.
An example of this is the word Format mentioned earlier.

There is also an index to the glossary items so that you can read them
at any time independently of the articles.
```

```
=== End of Text ===
```

1.8   ARexx For Beginners - Using ARexx For Beginners - Cross References

```
AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - CROSS REFERENCING

There is a lot of cross referencing in these articles and glossary notes.
Clicking on a highlighted item could take you to a glossary item or
another article. You might then click on a cross reference in the new
display thus ending up a long way from where you started. You could even
end up with the same article or glossary item that you started off from!

To go back to where you started from just keep clicking on the "Retrace"
gadget until you get there.

OR - you can click on one of the following buttons in the
     Amigaguide or Multiview window (if they are not shaded):-

     INDEX    - to take you straight to the MAIN INDEX

     CONTENTS - to take you to the first page of the document
                currently being read.

                The CONTENTS button can be useful if you have followed a
                cross reference to a node that is not the first page of a
                document. Clicking CONTENTS will then take you to that
                first page.

SPECIAL NOTE ABOUT CROSS REFERENCING

In most cases, the cross referencing will take you to the start of an
Amigaguide "Node", i.e. the first line of that part of the article being
displayed. These cross references usually withstand subsequent corrections
to the text.
```

However, in some cases the cross reference will be to a particular line
within the node, i.e. at some point beyond the first line. This is done
by nominating a line number in the hidden links.

As there are inevitably corrections to be made, the particular line that
I am aiming to jump to may have shifted from where it was when the link
was a created. If this happens, then you will be sent to a part of the
document a bit removed from the intended part.

I have done my best to correct such links. However, not being quite
perfect ;-) I may have slipped up at times. If the cross reference does
not seem correct, then just scroll up or down a few lines.

It would appreciated if you could let me know of any such errors

=== End of Text ===

1.9   ARexx For Beginners - Using ARexx For Beginners - Where To Start

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - WHERE TO START

It is recommended that the new user should start at the beginning and
work through the articles in the order set out in the menu:-

   Part 1 - Contents in Sequence.

In that way, the reader should not often come across instructions, functions
or usages that have not already been explained. If later articles are
read before previous ones then the reader may come across unexplained
concepts.

However, the use of an instruction or function not yet covered is, at
times, unavoidable. On these occasions I have done my best to try to explain
what is going on.

=== End of Text ===

1.10   ARexx For Beginners - Using ARexx For Beginners - Article Design

                     AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - ARTICLE DESIGN

The contents of "ARexx For Beginners" are split into various articles.
Some articles will deal with only one topic, instruction or function.
Other parts will deal with a number of related instructions or functions.
In all cases I have tried to make the individual parts as logical and
as self contained as possible.

The articles are held in directories named for the numbers of the articles
they hold. For example:-

  Directory name:- Articles_01-10
  Holds articles:- 1 to 10

All
                examples programs
                 relating to an article are held in the same directory
as the article.

=== End of Text ===

1.11   ARexx For Beginners - Using ARexx For Beginners - Window Size & Line Lengths

                    AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - WINDOW SIZE & LINE LENGTHS

As not all people use the same versions of Amigaguide or Multiview, I
cannot rely on the Amigaguide command WORDWRAP to properly word wrap
paragraphs. (WORDWRAP only works with amigaguide.library v39 and later).

I have therefore formatted the articles so that each line that appears
in the window has a maximum of 75 characters with a line feed at the end
of each line rather than only at the end of each paragraph. This should
allow each line to be displayed in a window that has the same width as your
screen provided that you are not using a font size bigger than 8.

Of course, if a
                cross reference
                 takes you to read an example program file
that is an actual ARexx script rather than a copy of it within an article
then you could very well have text going beyond the right edge of the
window. If I put line feeds into the scripts to make them fit in the
window then it would corrupt the program and it would not work!

But if lines are extending beyond the right edge of the window when reading
the articles you may have to do one or more of:-

- widen the window to the full width of the screen

- reset your screen preferences to a width of 255 pixels at least

- reset the "Fonts" preferences to set the "system Default Text" font
  to a size of 8 or less.

If you are using the standard preferences that came with your Amiga then
you should not have any problems.

=== End of Text ===

1.12   ARexx For Beginners - Using ARexx For Beginners - Example Programs

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - EXAMPLE PROGRAMS

At times I have example programs in an article. These programs are also
saved to disk as separate files. This is to save you typing in the program
yourself. The program files have the same number as the article number,
followed by a number indicating whether it is example number 1 or number
2, etc., for that article. For example, the article:-

    12.CONDITIONAL_STATEMENTS

has these seven example programs:-

    Example12-1.rexx
    Example12-2.rexx
    Example12-3.rexx
    Example12-4.rexx
    Example12-5.rexx
    Example12-6.rexx
    Example12-7.rexx

The example program files are in the same directories as the articles
to which they belong.

Changing The Current Directory

To use the example programs, go to your Shell/CLI window and use the
AmigaDOS command "CD" to change the current directory to that in which the
examples are held. To do so, use one of these command lines:-

  > CD ARB:Articles_01-10
  > CD ARB:Articles_11-20
  > CD ARB:Articles_21-30
  > CD ARB:Articles_31-40
  > CD ARB:Articles_41-50
  > CD ARB:Articles_51-60

  > CD ARB:Appendices
  > CD ARB:Misc/Glossary

Running The Programs

Provided that you have already used the CD command to change the current
directory, all you need do to run the desired example program is to enter
in the Shell/CLI window:-

  > RX ProgramName

For example, to run Example12-4.rexx you would enter:-

```
  > RX Example12-4
```

As you will soon find out, there is no need to use the ".rexx" suffix, although it does not matter if you do use it.

=== End of Text ===

1.13   ARexx For Beginners - Using ARexx For Beginners - Writing Your Own Programs

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - WRITING YOUR OWN EXAMPLE PROGRAMS

In learning to program, it is far better to try things out for yourself and learn by the mistakes you will inevitably make. I make them too! I have found that seeing why the mistake has occurred is a great way to learn not to make the same mistake again!

So, from time to time, I will suggest that you write a program based on a specification that I will give you, before you look at the way I have handled the task.

When you have got your versions working then compare it to the way I have handled the task.

Can you assume that if you did it differently then you got it wrong? NO!!

There are many ways of doing the same job. It will be inevitable that your program will be different to mine. In fact, if they were identical, it would either be a miracle, or you have cheated and looked at mine!!

Will mine be better than yours? NO!! not necessarily. In fact, yours might well be better than mine! I do not always write a perfect program!

So look at the two ways of doing the same job and see if you can work out the best way and learn by the comparisons. Analysing programs written by other people is another great way to learn programming.

=== End of Text ===

1.14   ARexx For Beginners - Using ARexx For Beginners - A Note On Spelling

AREXX FOR BEGINNERS

USING AREXX FOR BEGINNERS - A NOTE ON SPELLING

This note is for all those who use American spelling.

In Australian we use the British conventions for spelling and so these articles were spell checked using a British dictionary.

So, if this is being read by Americans, you will find things like:-

    analyse   instead of   analyze

    centre   instead of   center

    colour   instead of   color

etc. etc.

After all it is the ENGLISH language ;-)

However, I will not guarantee it is all spelt correctly even in the British conventions. All typographical mistakes will be blamed on "Bee Bee", our Blue Burmese kitten who insists on sitting on my lap or walking over the keyboard while I am typing!

If you find spelling and/or grammatical errors I would appreciate your advice.

=== End of Text ===