

**ARB03**

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# Chapter 1

## ARB03

### 1.1 ARexx For Beginners - Article 3 - Command Utilities

AREXX FOR BEGINNERS

ARTICLE 3 - COMMAND UTILITIES

BY FRANK BUNTON

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The ARexx Command Utilities  
Using The Utilities  
The RXC Utility  
The RX Utility  
    General Usage  
    Argument Usage  
    Suffix Usage  
Program Names and Where RX Looks For Them  
RexxMast Availability When Using RX  
Launching an ARexx Program Without Using RX  
Launching an ARexx Program From an Icon  
RX for Direct Programs  
Stopping An ARexx Program  
The HI Utility

=== End of Text ===

### 1.2 ARexx For Beginners - Article 3 - Command Utilities

THE AREXX COMMAND UTILITIES

In the directory named "RexxC" there are 10 ARexx command utilities. These commands are used at a CLI/Shell prompt rather than in an ARexx program.

The full list of these command utilities, and the articles that deal with

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them, is as follows:-

HI	This article
RX	This article
RXC	This article
RXLIB	Article 38
RXSET	Article 37
TCC	Article 47
TCO	Article 47
TE	Article 48
TS	Article 48
WaitForPort	Article 40

At this stage we will look only at only three of them, RXC, RX and HI as it is better to learn a lot more about ARexx before looking at the others.

Please also read Using The Utilities.

=== End of Text ===

## 1.3 ARexx For Beginners - Article 3 - Using The Command Utilities

### USING THE COMMAND UTILITIES

All these command utilities are used in the same way as AmigaDOS commands or any other program that can be run from Shell/CLI. That is, they are used at a CLI/Shell prompt, as in:-

```
> RXC
```

or they can be used in AmigaDOS Command Scripts.

They are not used in ARexx program scripts in the way that ARexx instructions are used, although, as we will come to see, you can send them from an ARexx script to AmigaDOS in the same way that you would send an AmigaDOS command from an ARexx script to AmigaDOS. This may all sound very confusing at this stage but do not worry about it yet. It will become clearer as we advance further into these articles.

For the time being, just think about them as small independent programs (just as AmigaDOS commands are small independent programs) instead of as ARexx instructions.

=== End of Text ===

## 1.4 ARexx For Beginners - Article 3 - The RXC Command Utility

### THE RXC UTILITY

RXC is used to terminate the resident REXXMAST process. This means that

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it looks for the REXXMAST program that is residing in the Amiga's memory and attempts to shut it down.

It is used on its own as in:-

```
> RXC
```

(Click on CLI/Shell prompt if you do not know what the ">" means.)

I said above that RXC attempts to shut down REXXMAST. When used, RXC will only be shut down the REXXMAST process immediately if there are no AREXX programs running that are using it. If such programs are running, then REXXMAST will continue running after RXC is used until such time as the last AREXX program finishes, at which stage REXXMAST will shut down.

=== End of Text ===

## 1.5 AREXX For Beginners - Article 3 - The RX Command Utility

THE RX UTILITY

General Usage  
Argument Usage  
Suffix Usage

=== End of Text ===

## 1.6 AREXX For Beginners - Article 3 - The RX Command Utility - General Usage

THE RX UTILITY - GENERAL USAGE

RX is the utility used to launch an AREXX program. It is used as follows at a Shell/CLI prompt:-

```
> RX ProgramName
```

Try it out now by going to your Shell/CLI window (which should have been opened at the bottom of your screen when you started up "AREXX For Beginners") and enter at the CLI prompt:-

```
> CD ARB:Articles_01-10
```

```
> RX Example3-1
```

As this is your first example program, I would suggest that you reread the notes on using example programs. In future I will assume that you know how to do it all.

This program should give this display in your window:-

---

```
Hi there - I am your first example ARexx Program - Count = 1
Hold down the CTRL key and press C to stop me.
```

```
Hi there - I am your first example ARexx Program - count = 2
Hold down the CTRL key and press C to stop me.
```

```
... and so on until you stop it
```

If you wish to temporarily stop the program display without stopping the program itself, just press any key (except a function key or a qualifier key such as shift, ctrl, amiga, alt). To restart the program display press the back arrow (back space) key to delete the character(s) that you typed in.

To stop the program completely and go back to AmigaDOS just hold down the "CTRL" key and press the "C" key. (See Stopping An ARexx Program.)

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

## 1.7 ARexx For Beginners - Article 3 - The RX Command Utility - Argument Usage

### THE RX UTILITY - PROGRAM ARGUMENTS

If the ARexx program will accept arguments, then you use:-

```
> RX ProgramName Argument
```

or, if there is more than one argument, they can be separated by commas, as in:-

```
> RX ProgramName Argument,Argument,Argument .....
```

Note - Some programs may require different argument separators than a comma. You should check any instructions that come with a program or, if you are writing one, make sure that you tell the program user which separators to use. We will cover this in the articles about Parsing and Templates.

For example, if you enter:-

```
> RX Example3-2 Fred,55
```

(or whatever your first name and age are) then the program should display:-

```
Hi there Fred. You say you are 55 years old.
```

But if you just enter:-

```
> RX Example3-2 or > RX Example3-2 Fred
```

the program will display:-

---

You should have put your name and age after the RX Example3-2

=== End of Text ===

## 1.8 ARexx For Beginners - Article 3 - The RX Command Utility - Suffix Usage

THE RX UTILITY - USING THE .REXX SUFFIX

Although you could use:-

```
> RX ProgramName.rexx
```

it is not necessary as RX will look for "ProgramName.rexx" when just "ProgramName" is entered EXCEPT in cases where the root "ProgramName" includes a full stop (.). In these cases the ".rexx" suffix MUST be included when using RX.

For example, the program name "Test-2.1.rexx" can NOT be used without the ".rexx" suffix. This is because ARexx searches through the file name looking for a stop (.) and when it finds the first one it considers everything after the stop to be the suffix.

So, it is best not to use the stop anywhere in the file name except at the start of the suffix ".rexx". (I hope you remember all I said about Program Names in the last article!)

=== End of Text ===

## 1.9 ARexx For Beginners - Article 3 - Program Names & Where RX Looks For Them

PROGRAM NAMES AND WHERE RX LOOKS FOR THEM

I will spend a bit of time on this as it is important to know where RX looks for programs and how it treats programs with similar names. If you do not understand this, you may become rather confused when you use RX and it loads a program that you did not expect it to load.

When you use an RX command with a program name, and you don't use the path to that program name, as in:-

```
> RX Program_Name
```

then ARexx will only look in these directories:-

- first in the current directory
- then in the assigned REXX: directory

If there are two programs each with the same file name, one in the current directory and one in the REXX: directory, then only the one in the current directory will be used.

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If there are two files in the same directory with the names:-

```
ProgramName
ProgramName.rexx
```

then RX will always load the one with the ".rexx" suffix. The one without the suffix will never be loaded.

However, it will load a name without the suffix if there is no equivalent name with a suffix.

If there are two files in different directories called:-

```
ProgramName          in the current directory
ProgramName.rexx     in the REXX: directory
```

then the one without the suffix in the current directory will be loaded.

Provided your program is in the current directory or the REXX: directory, RX will find it without you having to specify the full path to the program. However, if the program is not in one of these directories then you must specify the full path to the program. For example:-

```
> RX df1:Programs/Phonebook.rexx
```

Using this command line, RX will go to whatever disk is in df1: and look in the directory on it called "Programs" and load from there the program called "Phonebook.rexx".

If you will be using the same disk and directory a lot in the one session, then you will find it simpler to use the AmigaDOS command "CD" to change the current directory:-

```
> CD df1:Programs
```

and then simply use:-

```
> RX Phonebook.rexx
```

=== End of Text ===

## 1.10 ARexx For Beginners - Article 3 - REXXmast Availability When Using RX

### REXXMAST AVAILABILITY WHEN USING RX

If REXXmast is not resident (i.e. it has not yet been activated and loaded into computer memory), RX first launches REXXmast then loads the program. However, this results in a window display of the REXXmast startup message:-

```
ARexx Version 1.15
```

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To avoid this message, make sure that REXXMAST is resident before launching a program with RX.

=== End of Text ===

## 1.11 without

### Launching an ARexx Program Without Using RX

The notes under this heading are mainly for academic interest only so skip over them and go to Launching an ARexx Program From an Icon if you like.

This feature is, as far as I can ascertain, undocumented. I came across it completely by accident. It does NOT work in Workbench 1.3 and earlier.

If you are accustomed to using AmigaDOS script files then you will know that, if you set the "S" protection bit with:-

```
> Protect filename +s
```

then, instead of having to use the execute command, as in:-

```
> execute filename
```

you can launch the script by entering only its name at the CLI prompt, as in:-

```
> filename
```

as the "S" bit tells AmigaDOS to automatically use the execute command.

A similar thing happens with ARexx programs if you set the "S" bit for the program file. Entering the program name at the CLI prompt, as in:-

```
> programname.rexx
```

will cause the RX command utility to be automatically called and the program will be launched. However, there are a few provisos to this.

In Workbench2.0 the program file must be located in either the current directory or in the assigned REXX: directory, or you must specify the full path to the file, as in:-

```
> disk:directory/programname.rexx
```

In Workbench2.1 and higher the program file, if used without its full path name, can be in any directory that is included in the search path that AmigaDOS uses to search for commands and as is set up with the AmigaDOS

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PATH command.

In all Workbench versions, if the file has the prefix ".rexx" then this prefix must be included in the file name.

You may find this feature useful if you want to save typing in the RX all the time.

=== End of Text ===

## 1.12 ARexx For Beginners - Article 3 - Launching an ARexx Program From an Icon

### LAUNCHING AN AREXX PROGRAM FROM AN ICON

RX can also be used by creating a project icon for your ARexx program and inserting in the default tool:-

```
Sys:RexxC/RX
```

However, in this case, RexxMast MUST already be resident. If you think that it might not be resident, you could create a small AmigaDOS script file to first launch RexxMast then the program. Let's say the ARexx program is called "XYZ". First of all you should create an AmigaDOS script file as follows:-

```
Sys:System/RexxMast >nil:  
Sys:RexxC/RX xyz
```

Now create the project icon for xyz (not for xyz.rexx) and enter as its default tool:-

```
c:IconX
```

Now, when the icon is double clicked, it will launch RexxMast then xyz.rexx. If RexxMast is already launched, all it does is give a message that it is already active which is sent to nil: so that you will not see it.

If you open the drawer called "Articles\_01-10" in this disk's main window, you will see an icon called "Example3-3". This example program has been set up in the way described above to demonstrate how to do it. Double click on the icon to see it working. It should display:-

```
Hi there - I am an AREXX program started from an Icon!  
This window will go away by itself in 10 seconds.
```

and then the window will close after 10 seconds.

If you want to copy this icon for your own purposes, then you can do so with this AmigaDOS command line:-

```
> Copy ARB:Articles_01-10/Example3-3.info df1:MyIcon.info
```

This will copy it from the "ARexx For Beginners" disk (which has the name

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"ARB") to the root directory of the disk in df1:. Substitute your own drive and/or disk names instead of "df1:" if you like.

=== End of Text ===

## 1.13 ARexx For Beginners - Article 3 - RX for Direct Programs

### RX FOR DIRECT PROGRAMS

RX can be used on an AmigaDOS command line to launch a one line ARexx program. As an example, try entering this at a CLI/Shell prompt. It should all be in the one command line. Press return at the end.

```
> RX "DO x = 1 TO 12 ; SAY '5 Times' x '=' x * 5 ; END"
```

To use this feature, all of the ARexx program following the RX must be enclosed in inverted commas (") and individual instruction clauses must be separated by semi colons. Quotes inside the inverted commas should be the apostrophe (') not the double quote (").

=== End of Text ===

## 1.14 ARexx For Beginners - Article 3 - Stopping An ARexx Program

### STOPPING AN AREXX PROGRAM

Having learned above how to start an ARexx program, we should learn how to stop one!

One method uses the HI command utility to stop ARexx programs.

The other method, which we used in Example3-1 above, is not really a Command Utility but this is the logical place to discuss it. It is the CTRL-C method.

Example3-1 told you to:-

```
"Hold down the CTRL key and press C to stop me"
```

This key combination (i.e. pressing the "C" key while the "CTRL" key is being held down) will stop the execution of most ARexx programs and return control to AmigaDOS (or to any other program from which the ARexx program has been started). You will see this method described in these articles and other texts as "Press CTRL-C".

However, CTRL-C will not stop a program in which the SIGNAL instruction has been used to divert the CTRL-C key press to another part of the program.

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=== End of Text ===

## 1.15 ARexx For Beginners - Article 3 - The HI Command Utility

### THE HI COMMAND UTILITY

As with any other command utility, HI can be used at a Shell/CLI prompt, as in:-

```
> HI
```

Before trying it out, make sure that there are no other ARexx programs running that you do not want to stop as HI will stop all active ARexx programs!

To try it out, open up a second Shell/CLI window and position it so that you can see both it and the one that should already be open.

Start Example3-1 in one window.

In the other window enter:-

```
>HI
```

The program will probably go on displaying a few more of the sets of lines but it will eventually stop with an error message. Don't worry about this message at this stage.

When "HI" is run, it sets the "Global HALT Flag". "Global" means that it applies to all ARexx programs that are currently running. We will discuss this further when we come to talk about interrupts.

"HI" does not shut down the RexxMast process which will remain running even after all ARexx programs have been halted. You need to use the RXC command utility to do this.

=== End of Text ===

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