

SqOpal

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SqOpal

# **Contents**

1	SqO	pal	1
	1.1	Introduction	1
	1.2	Shareware	2
	1.3	Authors Address	3
	1.4	Requirements	3
	1.5	Installation	3
	1.6	What does SqOpal do?	4
	1.7	Tooltype Usage	4
	1.8	CLI Usage	8
	1.9	On Screen Menu	8
	1.10	Image Positioning	10
	1.11	Oscan	11
	1.12	Res	11
	1.13	Lace	11
	1.14	Latch	12
	1.15	Load	12
	1.16	Save	13
	1.17	Prev	14
	1.18	Next	14
	1.19	Scale	14
	1.20	Clear	14
	1.21	Info	15
	1.22	About	15
	1.23	Iconify	15
	1.24	Wake-up	16
	1.25	Image Positioning	16
		List	16
	1.27	Exit	16
	1.28	Menu	17
	1.29	Show	17

SqOpal

1.30	Quit	17
1.31	Configure	17
1.32	Update	18
1.33	Operators	18
1.34	Prog Info	19
1.35	Drop Icons	19
1.36	Commodity	20
1.37	Credits	20
1.38	Superview.library	20
1.39	Sampling Hints	21
1.40	Voice Recognition	21
1.41	Known Bugs	24
1.42	Online Help	25
1.43	History	25
1 11	Futura Plane	27

SqOpal 1/27

# **Chapter 1**

# **SqOpal**

# 1.1 Introduction

```
{\tt SqOpal\ Version\ 2.0} written by Steve Quartly and Paul Huxham
```

The ultimate image viewer for OpalVision!

\*\*News Flash - SqOpal made it to Aminet's list of highest rated programs up to the week of the 3rd of September 1995... What a BONUS!

Shareware

Authors Address

Requirements

Installation

Voice Recognition

What does SqOpal do?

Tooltypes

CLI Usage

On Screen Menu

Online Help

Drop Icon

Commodity/Hotkey

Credits

Superview.library

Known Bugs

SqOpal 2 / 27

History

Future Plans

## 1.2 Shareware

Shareware

SqOpal is shareware but is not crippled in any way. The program may be freely distributed and copied, as long as the following conditions are fulfilled:

- \* The sales price must not be higher than the cost of an (empty) disk plus a nominal copying fee plus costs for shipping.
- \* All parts of the program and the documentation must be complete. The distribution of single parts or incomplete subsets of the original distribution is NOT ALLOWED.
- \* SqOpal or parts of it may not be sold in combination with or as part of commercial software without the authors permission.
- \* Program and documentation may not be changed in any way.

SqOpal is shareware, this means I request those users, who use SqOpal, to send me the shareware fee of 20 \$US to the following address:

Postal: Steve Quartly
1280 Stevens St
Mundaring,
Western Australia, 6073

Internet: steveq@sndcrft.DIALix.oz.au

Please include the following information in your registration:

- $\star$  your name, address (including any electronic mail addresses you might have) and telephone number
- \* your Amiga model(s)
- \* Kickstart and Workbench versions
- \* the SqOpal version number
- I assure you that the information you send me will be treated confidentially.
- I will try and inform everybody, who has registered with me as described above, when a new version of SqOpal becomes available.

Thanks!

SqOpal 3 / 27

## 1.3 Authors Address

```
Where to send bug reports, comments

The authors can be reached at the following Internet addresses:

Steve Quartly - steveq@sndcrft.DIALix.oz.au

Paul Huxham - paulh@perth.DIALix.oz.au
```

# 1.4 Requirements

```
To use SqOpal you will need at least Kickstart 2.0 and an Opal ← card.

opal.library will also need to be in LIBS:

If you wish to use superview, then you will need superview.library.

SqOpal will run without superview.library , however it can only load files that OpalPaint can load and saving is disabled.

If you wish to use voice recognition, then you will need voice.library.
```

## 1.5 Installation

```
Step 1
Create a directory for SqOpal.
Step 2
Make the assign SqOpal: point to that directory. You will probably have to
store this assign in S:user-startup.
Use the assign command to do this, eg:
assign SqOpal: Graphics:SqOpal (or wherever you have put SqOpal)
Step 3
Copy:
     Sq0pal
     SqOpal.guide
     SqOpal.info
     VoiceSqOpal
into your SqOpal directory.
Step 4
If you want to use
                superview.library
```

SqOpal 4 / 27

follow the superview installation instructions.

Step 5
If you want to use

voice recognition
you will need to download the file pub/aminet/util/misc/VLib86.lha from Aminet and copy voice.library into LIBS:.

Step 6
Run SqOpal!

# 1.6 What does SqOpal do?

SqOpal can display any of the file formats supported by ← OpalPaint. If superview is installed, any of its file formats can be loaded and or saved.

This is all done thanks to superview.library

At the time of SqOpal's release not all the formats support writing.

FEATURES

- Loads over 20 different image formats (superview required)
- Images can be re-saved into another image format (superview required)
- Full image scrolling
- Proportional image positioning
- Automatic image centering on loading
- Scaling of images to fit the screen
- Full control of screen format (High Res/Interlace/Overscan)
- SqOpal is a commodity
- SqOpal has a appicon
- Workbench/CLI interface
- Multi-select images from ASL requester
- Use Opal OR ASL requester
- Slide-Show mode with delay time for multi selected images
- Fully configurable
- Latch the Opal display for Workbench backdrops
- Full mouse and/or keyboard support
- SqOpal can load files that contain lists of files!
- Voice recognition to control SqOpal
- Full editing of superview controlpads

# 1.7 Tooltype Usage

From a WorkBench Icon

SqOpal 5 / 27

Tooltypes/CLI flags are used to override the stored configuration. For example if your normal configuration is such that SqOpal starts up straight away, but this time you want it to open iconified. Set the ICONIFY Tooltype. This will now override the currently stored configuration parameter and start SqOpal iconified.

The following Tooltypes are currently supported in SqOpal:

#### LOADDIR

This sets the default load directory for SqOpal. example: LOADDIR=Graffix:Images/

#### SAVEDIR

This sets the default save directory for SqOpal. example: LOADDIR=Graffix:NewImages/

#### DELAY

This sets the default delay time (in seconds) between images when in slide show mode. This is called Hold (sec) in the configuration requester. example: DELAY=5

#### ICONIFY

If this Tooltype is present then SqOpal will start in iconified mode.

#### NOICONIFY

If this Tooltype is present then SqOpal will not start in iconified mode.

#### FREEMEM

If this Tooltype is present then whenever SqOpal is iconified all the image memory will be freed and the current image will be lost.

#### NOFREEMEM

If this Tooltype is present then whenever SqOpal is iconified none of the image memory will be freed, when you return the image will be re-displayed.

#### HIDEMENU

If this Tooltype is present then the menu will be hidden immediately after loading an image.

#### NOHIDEMENU

If this Tooltype is present then the menu will not be hidden immediately after loading an image.

#### USEPROP

If this Tooltype is present the image positioning gadgets are replaced by a slider gadget. Moving the slider gadget horizontally or vertically will scroll the image. The size of the knob will reflect the visible portion of the image.

#### NOUSEPROP

If this Tooltype is present 9 gadgets will replace the slider

SqOpal 6 / 27

gadgets. These position the image to: Top Left, Top Center, Top Right Middle Left, Middle Center, Middle Right Bottom Left, Bottom Center, Bottom Right

#### USEOPALREO

If this Tooltype is present the opal requester will be used to load files instead of the ASL requester.

NOTE: The Opal requester does not support multiple file selection so only one file at a time can be selected.

#### NOUSEASLREO

If this Tooltype is present the ASL requester will be used to load files instead of the opel requester.

#### SLIDESHOW

If this Tooltype is present images will automatically be loaded one after the other. At this stage there is no way to control the speed. As the load time is generally slow, there is enough time to view an image before going onto the next. SqOpal starts loading the next image immediately after successfully completing the previous load.

To use slide show mode make sure it is active by using the Tooltype or selecting it from the configuration menu, multi select your files and click the <OK> gadget.

If an error occurs, the slide show will be aborted.

You can re-start the slide show from any image by using the < or > keys or the << or >> gadgets to select the starting image and then pressing <RETURN> or clicking on the eye gadget.

You can toggle the menu on and off during a slide show sequence by using the right mouse button. The menu will be displayed after the next successful load.

To abort a slide show sequence use the left mouse button. The slide show will abort after the next successful load.

If you press F8 during a slide show sequence, you will abort the sequence and turn slideshow mode off.

Whilst an image is loading the mouse pointer is turned into a busy bee. If it is red/pink then the image is being loaded, if it is light blue/dark blue the image is being converted in memory. If it is yellow/brown then SqOpal is waiting the specified delay time before displaying the image.

#### NOSLIDESHOW

If this Tooltype is present you will need to press <RETURN> or click on the eye gadget to go to the next image.

#### CENTERIMAGE

If this Tooltype is present the image will be centered on the screen automatically after loading.

#### NOCENTERIMAGE

If this Tooltype is present the image will not be centered on

SqOpal 7 / 27

the screen after loading. It will be displayed from the top left hand corner of the image.

SUPER

If this Tooltype is present Opal AND SuperView will be used to try and load images.

NOSUPER

If this Tooltype is present only Opal will be used to load images. SuperView will be disabled. This has two advantages. Firstly, no buffer conversion is required, meaning faster loading. Secondly, only half the memory is needed meaning that you will be able to load bigger images. There are two disadvantages however. Firstly, only images recognised by Opal will be loaded. Secondly, saving is not possible.

#### VOICERECOG

If this Tooltype is present voice recognition will be enabled. (Only if

voice.library

is installed and the file VoiceSamples is present in SqOpal:).

#### NOVOICERECOG

If this Tooltype is present voice recognition will be disabled.

FORCEUSCAN FORCEUSCAN FORCEHIRES FORCELORES FORCEILACE

FORCENONLACE

These Tooltypes force the Opal screen to the selected mode after loading an image. If none of these are set then SqOpal decides on the resolution of the screen based on the size of the image. NOTE: Only one of each type can be set, eg: do not set FORCEOSCAN and FORCEUSCAN together.

#### CX PRIORITY

This Tooltype sets the priority of the hotkey commodity

example: CX\_PRIORITY=2

#### CX\_POPKEY

This Tooltype sets the
hotkey
to be used by SqOpal. If this
Tooltype is not present the default
hotkey
(lamiga lshift tab)
is used.
example: CX\_POPKEY=lamiga lshift tab

SqOpal 8 / 27

CX POPUP

This Tooltype will start SqOpal up in hidden mode. This is identical to iconify mode however no icon will appear on the workbench. The only way to bring SqOpal to the front is to use the

hotkey

example: CX\_POPUP=hidden

# 1.8 CLI Usage

From a CLI:

SqOpal's CLI interface supports all of the

Tooltypes

. The usage is as

follows:

Usage: SqOpal [options] path:filename(s)

SqOpal options and filenames need not be present in the above order they can be freely mixed.

Options

The options are identical to the

Tooltypes

however there is one small

difference. All option strings should be enclosed in quotes. Eg:

Correct: SqOpal cx\_popkey="lamiga lshift q"

Incorrect: SqOpal cx\_popkey=lamiga lshift q

If the quotes were left out, then SqOpal would think the above line meant

that the

hotkey

is lamiga and there are 2 files to load lshift and q!

FileNames

Several path:filename(s) can be entered, they should be separated by a space. Use quotes if the file name conatins a space, eg:

SqOpal data:pic1.iff data:pic2.pcx "data:pic 3.tiff"

#### 1.9 On Screen Menu

SqOpal's on screen menu:

SqOpal 9 / 27

++		+	+	+	+	++		+·	++
Con>FMIHPCUSVGORL									1
++	Oscan	Lace	L	S	Sca	Con	?	A	Image
TL   TC   TR									Information
++		++		+	+	+			i I
CL   C   CR									
++	Res	Lat Opr	< <	Upd	>>	Clr	Ζ	I Q	i I
BL   BC   BR		_		_					
++		++		+	++				++

SqOpal's on screen menu contains the following options:

Image Positioning

Oscan

Resolution

Interlace

Latch

Load

Save

Previous

Next

Scale

Configure

Clear

Info

Iconify

About

Quit

Update

Operate

The Right Mouse Button will toggle this menu on and off.

A note about the menu positioning

If the menu is not centered on your screen then you will need to adjust the Overscan settings on your Amiga. The position of the menu is based on this setting. To do this go to your Workbench partition and go into your prefs draw. In there you should find 'Overscan', a program for setting your Overscan settings. Run this and select 'Edit Graphics Size...', now use the

SqOpal 10 / 27

knobs to center your overscan screen on your monitor. Click on OK when it is done. You can now click either Save or Use depending on whether you want this setting to be used permanently on your Amiga.

SqOpal's menu should now be positioned in the center of your screen.

```
The Con> string displays your current SqOpal
                configuration
                , that is, not
what is stored in your config file, but what is currently set.
This explains what each letter means and the keyboard equivalent:
F - Free memory on iconify. (F1)
M - Hide menu after load. (F2)
I - Start SqOpal iconified. (F3)
H - Start SqOpal hidden. (F4)
P - Use porportional image positioning. (F5)
C - Center image on load. (F6)
U - Use opal requester. (F7)
S - Slide show mode enabled. (F8)
V - Use SuperView. (F9)
G -
                Voice recognition
                 enabled. (F10)
```

```
O/o/<space> - Force Overscan/Underscan/No Force on load. (Shift F6) R/r/<space> - Force Hires/Lores/No Force on load. (Shift F7) L/l/<space> - Force Interlace/Nonlaced/No Force on load. (Shift F8)
```

# 1.10 Image Positioning

Proportional Mode

In proportional mode, you can scroll around the current image using the proportional gadget. The blue box defines the currently visible area. The white box behind it defines the entire image. Simply grab the blue box (the knob) and move it within the white area to re-position the displayable portion of the image.

Non-Proportional Mode

These buttons will position the image to its extremities:

Keyboard Equivalents -

These keyboard equivalents are available in both proportional and non-proportional modes.

The numeric digits on the keypad are used to scroll around the image:

SqOpal 11 / 27

+		L+
7     Top     Left	8 Center Top	9     Top     Right
4     Center     Left	5 Center Image	6     Center     Right
1     Bottom     Left	2 Center Bottom	3     Bottom     Right   

The arrow keys will scroll image 16 pixels.

Alt + arrow scrolls 48 pixels.

Shift + arrow scrolls 96 pixels.

Control + arrow scrolls to image limits.

#### Mouse mode

In this mode you can position the image by pointing at the area of the image you want centered on the screen and press  $'{\rm N}'$  on the keyboard.

## 1.11 Oscan

Oscan

This button toggles the Opal display between Overscan and Underscan.

Keyboard Equivalent: 0
Voice Equivalent: Scan

## 1.12 Res

Res

This button toggles the  $\mbox{\rm Opal}$  display between  $\mbox{\rm High Resolution}$  and  $\mbox{\rm Low Resolution.}$ 

Keyboard Equivalent: R

Voice Equivalent: Resolution

## 1.13 Lace

SqOpal 12 / 27

Lace

This button toggles the Opal display between Interlaced and Non-Interlaced.

Keyboard Equivalent: I
Voice Equivalent: Lace

### 1.14 Latch

Latch

This button will latch the Opal display. If the program is now exited, the Opal display will remain. This so people that use an Opal backdrop on their Workbench can easily reset back their system to normal after viewing images. Pressing this gadget again will unlatch the display.

Keyboard Equivalent: ~
Voice Equivalent: Latch

### 1.15 Load

Load

This button is used to bring up a ASL requester to load a new image. If shift is held down while selecting files, multiple files can be selected for viewing. NOTE: The Opal requester does not support multi file selection.

Whilst an image is loading the mouse pointer is turned into a busy bee. If it is red/pink then the image is being loaded, if it is light blue/dark blue the image is being converted in memory. If it is yellow/brown then SqOpal is waiting the specified delay time before displaying the image.

The load will always try and use the superview.library first. If this is unsucessful it will automatically try to use opal.library.

If superview is used the buffer has to be converted to the OpalVision data format. Because of this you could run out of memory. By using opal.library the data is already in the correct format, so no more memory overheads a needed. It is also a lot faster!

Why not use opal.library all the time then? Well you would not be able to save the image as the data is in the wrong format for superview!!!

If you do not wish to do saving you can use the NOSUPER ToolType/CLI command, this will give you more speed and memory.

For a complete list of ToolTypes/CLI instructions see  ${\tt Tooltypes}$ 

New in version 1.4:

SqOpal will now load a file that contains a list of files. For example you might have a file called my\_selection.txt that contains the following:

SqOpal 13 / 27

```
DH0:Graphics/Images/image1.jpg
DH0:LogFire.iff
QH1:3D/Pics/raytraced7.tiff
Work:goodpic.pcx
```

SqOpal would load this file and extract all the filenames into its list. The only criteria for this file are:

- 2) \*\*\*\* The first line of the file MUST be a valid path:file/name. If it is not the file will be rejected and SqOpal will try to load it as an image.
- 3) Comments can be placed anywhere within the file, except for the first line.
- 4) Comment lines cannot contain the ':' or the '/' characters. However anything else is acceptable.

SqOpal is even intelligent enough for you to be able to multi-select a file list in with images. The list will be parsed correctly and the other images will be added to the list.

You can use the DOS command list with the lformat option to create these lists for you. See your manual for more information.

Keyboard Equivalent: L
Voice Equivalent: Load

#### 1.16 Save

Save

This button is used to save the current Opal image.

Firstly a requester is display giving you a choice of file types to save the image under. Select the file type and click on OK. If JPEG is selected, you can adjust the compression amount using the slider.

Now enter the file name to save the image as using the ASL requester.

Note: At the time of release, not all image formats supported saving. This is not a limit of SqOpal, but

superview.library

. As later releases of

superview become available, more save support will be added.

Keyboard Equivalent: S
Voice Equivalent: Save

SqOpal 14 / 27

## 1.17 Prev

Previous

This button is used to step backwards to the previous image in the selected load list. Consecutive clicking on this button will scroll through the list. To load the image click on the

update button.

Keyboard Equivalent: < or ,
Voice Equivalent: Previous</pre>

## 1.18 **Next**

Next

This button is used to step forward to the next image in the selected load list. Consecutive clicking on this button will scroll through the list. To load the image click on the

update button.

Keyboard Equivalent: > or .
Voice Equivalent: Next

## 1.19 **Scale**

Scale

This button is used to scale the image to fit the screen.

NOTE: This routine is optimized for speed, not quality. Some images can look 'jerky' after being scaled. This is a preview function only, press the left mouse button to exit the scaled image. Scaled images cannot be saved.

Keyboard Equivalent: D
Voice Equivalent: Scale

#### 1.20 Clear

Clear

This button is used to clear the current Opal display. Effectively turning it off and on.

When the gadget is selected the display is turned off. This can be done by

SqOpal 15 / 27

clicking on it or by pressing the Space Bar. Clicking on it again turns the display back on however the keyboard equivalent is Control Space Bar.

With the display turned off, the screen will never be updated. You can load a new image, change resolution or even scroll the image and the display will never be updated! If you do load an image or change resolution etc with the display turned off simply turn it back on and everything will be updated correctly.

Keyboard Equivalent: Off - Space Bar, On - Control Space Bar Voice Equivalent: Off - Clear, On - Show

### 1.21 Info

Information

This button is used to get information about the image.

Clicking this button once gives image information. Clicking again gives a display of the files remaining in the load list. The last file to view is printed in highlighted text. The file that is currently being displayed is marked with a  $^\prime\!>^\prime$  at the start of the file name.

You can scroll through this list using the

<< & >> gadgets.

Keyboard Equivalent: ?
Voice Equivalent: Info

## 1.22 About

About

This button is used to give information about SqOpal.

Keyboard Equivalent: A
Voice Equivalent: About

# 1.23 Iconify

Iconify

This button will iconify SqOpal onto the workbench.

SqOpal can be woken up again by either:

SqOpal 16 / 27

```
1) Hitting the
```

hotkey

2) Double click on the workbench icon

3) Selecting Show Interface from

exchange

4)

Dropping

an image or a drawer on the workbench icon.

5) Saying the command for Wake-up if

voice recognition

is enabled.

Keyboard Equivalent: Z
Voice Equivalent: Iconify

# 1.24 Wake-up

Wake-up (voice recognition only)

This voice command will uniconify SqOpal, or bring its screen to the front.

# 1.25 Image Positioning

These commands are voice recognition only

Left, Right, Top, Bottom, Center.

Left - Scroll to the images left edge.

Right - Scroll to the images right edge.

Top - Scroll to the images top edge.

Bottom - Scroll to the images bottom edge.

Center - Center the image on the screen.

## 1.26 List

List (voice recognition only)

This will list the voice recognition commands and the words to be spoken to execute the commands. (In case you forget!)

### 1.27 Exit

Exit (voice recognition only)

This will exit the voice recognition command list

SqOpal 17 / 27

.

## 1.28 Menu

Menu (voice recognition only)

This will toggle the menu on and off.

## 1.29 Show

Show (voice recognition only)

This will turn on the display after it has been cleared  $% \left( 1\right) =\left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left( 1\right) +\left( 1\right) \left( 1\right) \left($ 

С.

## 1.30 Quit

Quit

This button will exit SqOpal.

Keyboard Equivalent: Q or ESC
Voice Equivalent: Terminate

# 1.31 Configure

Configure

This button brings up the configuration menu. Use this to configure SqOpal to run the way you like it. The configure parameters are exactly the same as the

Tooltypes

The 2 buttons next to Loaddir and Savedir will bring up a directory requester allowing you to select the appropriate directory.

The 4 buttons at the bottom are:

SAVE - This saves the current settings to a file. Every time you start SqOpal this file is loaded SqOpal is configured accordingly. (Shift F10)

USE - This will use the current settings in this session of SqOpal. The

SqOpal 18 / 27

settings will be reset to the stored configuration next time  ${\it Sq0pal}$  is run.

LOAD - This loads the currently stored configuration. (Shift F9)

 ${\tt CANCEL}$  - This cancels the requester ignoring and changes that may have been made.

The config file is stored in SqOpal: and is called SqOpal.prefs.

Keyboard Equivalent: C
Voice Equivalent: Configure

# 1.32 Update

Update

This button will load and display the file marked as next in the file list.

Keyboard Equivalent: <RETURN>
Voice Equivalent: Display

# 1.33 Operators

Operators

An operator is a image manipulation tool eg. contrast adjustments, effects, sizing etc.

This button will bring up a requester giving you a choice of operations to do on the current image. Simply select the operation you want and it will be applied to the image.

This function can be very memory intensive, in fact there are two copies of the image in memory while the operation is taking place. If the image had been loaded by opal.library, it will be erased from memory and then reloaded using superview.library. Consequently, if the operator runs out of memory, the image will no longer be in memory and the operator will return with an error and a black screen.

For example, a standard PAL high res interlaced display is  $736 \times 576$  (for Opal). That is 423926 bytes. Multiply that by 3, one for each colour channel, R, G, B and you get 1271808 bytes. Now multiply that by 2 for the two copies in memory and you have 2543616 bytes. That's 2 and a half meg purely for the images!

The various parameters that are required for the operators are controlled by small files called control pads. These control pads contain all the information the operator needs to operate. They are stored in ENVARC: and ENV:. Please refer to the

superview.library

SqOpal 19 / 27

documentation about these.

When you click on Operate you will get a listview containing all the operators available to use. Click on any one of these to select it. The three buttons in the listview are APPLY, CONTROLPAD, CANCEL. APPLY applies the selected operator to the image. CANCEL aborts the operator function. CONTROLPAD allows you to modify the settings for the currently selected operator.

Clicking on CONTROLPAD will give you another listview, listing all of the controlpads available for the selected operator. Click on one of these to select it. This also has three buttons, SAVE, USE, CANCEL. SAVE saves the settings of the currently displayed controlpads so that every time you use this controlpad these will automatically be loaded. USE merely uses these current settings for this session only. CANCEL aborts the requester. Selecting a controlpad brings up one more requester which allows you to modify the individual controlpad. This has an OK and a CANCEL button, some operators also have a REGION button. This allows you to draw a rectangular box around the area of the image that you want the operator applied to. This region button will effect the LEFTEDGE, TOPEDGE, WIDTH & HEIGHT controlpads.

All operator controlpads are now supported by SqOpal.

Note

1) The operate function is only available if superview has been installed.

Keyboard Equivalent: P
Voice Equivalent: Operate

## 1.34 Prog Info

Program Information

This is where SqOpal will display messages on various aspects of the program.

## 1.35 Drop Icons

Drop Icons

When SqOpal is running you can at any time drop one or more images onto the icon on the Workbench. SqOpal will then pop to the front and load the first image.

If you drop a draw onto the drop icon, SqOpal will pop to the front and you will be presented with a file requester set to that directory.

When SqOpal is iconified, images can also be dropped onto the iconified

SqOpal 20 / 27

icon in the same way.

# 1.36 Commodity

Commodity

SqOpal installs a commodity into the Amiga. This is for the handling of the hotkey. Exchange is a program which displays current commodities available on your Amiga. It has 4 buttons:

Show Interface - This will bring the SqOpal interface to the front most screen.

Hide Interface - This will send SqOpal into hidden mode. The only way to get it back is with the hotkey.

Active/Inactive - This will turn the hotkey facility on and off.

Remove - This will remove the hotkey facility altogether.

#### 1.37 Credits

Thanks must go to the following people for their help with SqOpal:

Martin Boyd

Thanks also go to Martin Boyd for all his help with his opal.library. Also for beta testing SqOpal and for his ChunkytoOV routine which halved SqOpal's memory requirements and sped it up heaps.

Thanks very much Martin!

Andreas R. Kleinert

SqOpal makes extensive use of superview.library

written by Andreas R. Thanks Andreas! without this SqOpal would be nothing.

Robert Byrne

Kleinert.

Robert also beta tested SqOpal and helped out with a few good suggestions. Thanks Bob!

Carmen Rizzolo

Thanks to Carmen for being our NTSC beta tester and for his excellent AREXX scripts for OpalPaint!

# 1.38 Superview.library

SqOpal 21 / 27

If you wish to get the entire superview distribution, you can obtain it from any Aminet site in the directory pub/aminet/gfx/show.

Thanks must go to Andreas for producing such a flexible and useful library for the Amiga.

# 1.39 Sampling Hints

This voice recognition is NOT perfect, you will get wrong commands appearing from time to time. You may also have to repeat yourself occasionally. However I have played and worked out a few tips to help minimise this happening.

- 1) Use long (no longer than 3/4 of a second) commands. For example don't just say 'Lace' say 'Interlace'. Don't say 'Load' say 'Load Image'. It's much easier for the recognition to get confused between 'Lace and 'Load' than it is for 'Interlace' and 'Load Image'.
- 2) I have found that when sampling commands don't make them all the same volume, try to say the first one loud, the second one medium, and the third one soft. This seems to increase the acceptable range for a sample to match.
- 3) Use a headset with a microphone right next to your mouth if possible. This reduces outside noises from triggering the sampler. The recognition function runs at a VERY high priority so that recognition time is quick. If you move the mouse around the screen and make a noise the mouse will freeze for an instant while the recognition is taking place. This gives you an idea of just how high the priority is set. So it is important that outside noise does not keep triggering the recognition. If an outside noise happens just as you say a command, there is a good chance it will not be recognised. Wait for a moment and then try again, ensuring there is silence while you say the command. A microphone next to your mouth will mean the gain can be kept right down, ensuring that most external noises will not be heard.

This works for me. You may find something that works better for you.

## 1.40 Voice Recognition

SqOpal now supports voice recognition. It uses voice.library  $\ensuremath{\hookleftarrow}$  available from

Aminet (pub/aminet/util/misc/VLib86.lha).

Credit must go to the authors of voice.library  ${\tt Tom\ Blinnikka}$  and  ${\tt Richard\ Horne}$ , it's great for its size!

I spent a while deciding whether or not to include voice recognition into SqOpal, given that a limited number of people would use it and it would increase the size of the code. I reached a compromise, I have made a separate program (VoiceSqOpal, included in this archive) for setting up the

SqOpal 22 / 27

voice recognition and minimised the amount of code increase in SqOpal itself.

Before you can use the voice recognition you will need:

- 1) A sound digitiser, either a Perfect Sound 3, Sound Master or Generic.
- 2) A microphone.
- 3) Connect the microphone to your digitiser. If you don't get enough level you may need to go from the microphone, through a pre-amp and then into the digitiser, this was the case for me.
- 4) Connect the digitiser to your parallel port.
- 5) Run VoiceSqOpal from a shell on WorkBench.

Creating your voice samples

When you first run VoiceSqOpal you will be asked if you want to start a new voice file or modify an existing one. If this is the first time set-up for you, start a new file.

Now you will be asked what type of digitiser you are using. When I first started with mine it was unlabelled so I didn't know. If this is the case for you then pick one, read on, and try to sample something, you will soon see if anything is coming through, if not, try again with another sampler selection.

You should now see a list of commands. These commands are the commands supported by SqOpal. In version 2.0 there are 27 of them:

1.

2. Lace 3. Load Scale 5. Save 6. Info 7. Configure 8. About. 9. Resolution 10. Lat.ch 11. Operate 12. Previous 13.

Scan

SqOpal 23 / 27

```
Display
   14.
Next
        15.
Clear
16.
Iconify
  17.
Wake-up
   18.
Terminate
  19.
List
        20.
Exit
21.
Left
     22.
Right
     23.
Top
        24.
Bottom
      25.
Menu
26.
Show
     27.
Center
                97. Test samples 98. Save and exit 99. \leftarrow
96. Sample ALL
   Abort
```

To use voice recognition you need to sample your voice saying the commands for SqOpal. You will need to say them 3 times each, each sample is 3/4 of a second long. The voice library then creates a frequency map of your voice for that command and stores it. See

Sampling Hints

If you are creating a new file you should select 96 then <RETURN>. You will now be taken through each command one at a time.

If you are modifying an existing file just select the command you wish to change.

Once your selection is made the name of the command will be displayed and you will be asked to type in the words you will say to execute that command. Remember you only have 3/4 of a second.

For example you select 1 <RETURN>.

Type in the word to use for the command 'Scan':
 (<RETURN> = 'Scan')

I say 'Toggle Scan' so that is what I type in here. The advantage of doing it this way is that you can use your own language to control SqOpal.

SqOpal 24 / 27

A window will now open on the screen. Click on the Sample gadget and say your command. You will be told whether the sample is good or not. If it is good, then click on the Accept gadget. Repeat this 3 times and your command will be stored.

Once your commands are stored you can select either:

- 97) This saves the samples to disk. You can then say your commands and what you have said will be displayed on the screen. It is a good way of testing your commands.
- 98) This saves the samples to disk and exits.
- 99) This aborts everything you have done!

Once you have completed the setup, run SqOpal with the voice recognition turned on. Do this from the

Tooltypes
or the
CLI
or from the
configuration

menu. Now say your commands and it should automatically work.

## 1.41 Known Bugs

Known Bugs

 The JPEG save module does not seem to function properly when the compression amount is 20 or below, or exactly 100. I think this is definately a bug in

superview.library
and have informed the author.

- 2) If you do a Hide Interface and then do a Show Interface from Exchange with an image loaded and displayed the system will crash! I have been looking for this bug for ages and I just can't find it. Bear with me.... I'll get the little sucker eventually!
- 3) Whilst loading an image the Opal display will not be blanked if you use the lamiga M or N keys to jump between screens. I hope to have this solved soon.
- 4) Palette mapped images of certain sizes will load incorrectly when superview is used. The author of superview has been informed.
- 5) Certain types of JPEG images will not load with opal.library, however superview.library will load them. If you experience problems like this then install superview.library and all should be ok!

Not Really a Bug But....

 Saving to and from different formats is supported but only to the limit of the SqOpal 25 / 27

superview.library
, currently not all of the image types support
saving, so not all will work. As
superview.library
is updated, more

save support will be introduced. You will not need to upgrade SqOpal to use the new formats they should just work!

# 1.42 Online Help

Online Help Facility

Online help is available at any time.

Simply point the mouse on anything on the menu and press the HELP key.

This AmigaGuide file will then appear on SqOpal's screen.

To end help, close the AmigaGuide window.

# 1.43 History

History

Ver 2.0

Mouse mode positioning, center the image under the mouse by pressing 'N'.

Full superview controlpad interface now on-line.

SqOpal now supports voice recognition. Tell SqOpal what to do just by saying it!

I have added full support of SuperView's progress indicator function. If an image was loaded by SuperView, a progress indicator is displayed in the menu.

I have disabled the disabling (got that?) of the update gadget (the eye). In the past, if you tried to load an image with, lets say, Opal and it was unsuccessful the gadget was disabled signifying a bad load file. You didn't have a chance to try loading it with SuperView. This is now fixed.

 ${\tt SqOpal.prefs}$  is no longer stored in the program directory. It must now be stored in  ${\tt SqOpal:.}$ 

Bug Fix - If an image was loaded by Opal and then SuperView was turned on and the crop operator applied, the operator failed. Now ok.

Bug Fix - Images of a certain size would confuse SqOpal's screen size and scrolling would not be possible, even though it should be. Now ok.

Bug Fix - If you aborted a crop and the image had been reloaded

SqOpal 26 / 27

automatically by SuperView the image would be lost from memory. Now ok.

Bug Fix - The menu was incorrectly updated after a crop operation. Now  $\operatorname{ok}$ .

Bug Fix - The Opal Requester's icon images were not lined up properly with its boxes. Now ok.

Bug Fix - A stack overflow occured on certain occasions. Now ok.

Ver 1.4

Bug Fix - when SqOpal was started iconified or  $cx_popup=hidden$ , it would crash the machine. Now ok.

Bug Fix - Scrolling palette mapped pictures when loaded with superview would crash the machine. Now ok.

Bug Fix - Changing resolution of palette mapped images when loaded with superview would change the image to grey scale. Now ok.

Bug Fix - The mouse pointer was the incorrect colour when scaling an image. Now  ${\rm ok}\,.$ 

Bug Fix - If a load error occured when the menu was turned off during slideshow mode, SqOpal would not recover properly. Now ok.

A grey border has been placed around the menu information box.

Percentage displays have been changed to progress indicators.

There is now a progress indicator for buffer conversion.

You can now force a screenmode when Opal is used to load an image. However this does take slightly longer and need more memory.

Added the CENTERIMAGE/NOCENTERIMAGE

Tooltype/CLI

documentation to the

SqOpal.guide file. I missed it originally.

I have changed the operation of the clear screen gadget. See the documentation on

Clear

for details.

A file containing a list of files can now be loaded. See the documentation on

Load

for details.

Added

Online Help facility.

SqOpal.prefs is no longer stored in ENV: and ENVARC:. It must now be stored in the program directory of SqOpal.

SqOpal 27 / 27

Superview

Operators

have now been implemented.

I have changed the operation of the latch display gadget. Latch display is now a toggle and will unlatch a display as well. See the documentation on

Latch

for more details.

Ver 1.3

Initial release!

## 1.44 Future Plans

Future Plans

- An AREXX port for automation of image manipulation.
- An UNDO buffer..... (maybe)

Got any suggestions, then write to me and suggest them!