ScreenSelect

by Markus Aalto

1 Introduction

In version 2 of `Amiga` operating system was introduced a concept of Public Screens. These screens can be shared by application programs just like Workbench screen has been in previous OS versions. Although they bring a great addition to Amiga they also introduce a problem to users which have Workbench, several Public and propably a few custom screens open at the same time. And the problem is - "How to get that xxx screen to front quickly without traversing through 5 other screens with `left-amiga m`?". Well, `ScreenSelect` is answer to that question because it opens a small window to the active screen after hotkey selection where you can select the new frontmost screen with just a click of the mouse. Also you can make hotkey bindings to any screens (not just Public ones as in older versions) and for example get Workbench screen frontmost with only one key press. And the only requirement is that you have `Kickstart 2.04` (V37) or greater.

2 Installation

I have provided a script for Commodore's `Installer` program so if you have it then you should propably use it. Otherwise you can do following actions.

- Move `ScreenSelect` to `WBStartup` directory.
- Move `ScreenSelectPrefs` to `Prefs` directory.
- Move one of the doc files anywhere you normally store document files.

3 ToolTypes and CLI usage

`ScreenSelect` recognizes normal commodity tooltypes and one of its own.

'`CX_POPUP`'

This switch enables `ScreenSelect` to open its window when it's started. Default is no popup.

'`CX_PRIORITY=xxx`'

This is `ScreenSelect`'s priority as commodity. Here xxx is decimal number. Default is 0.

'`CX_POPKEY=HOTKEY`'

>   Default is `shift esc`. For example you could use `CX_POPKEY=alt shift del` to change
>   hotkey. If you specify popkey here you override the settings you have made with
>   `ScreenSelectPrefs` program.

'`PREFSPROGRAM=PATH`'

>   This is the path where preferences program is to be found. This name must include the
>   name of the preferences program. Default PATH is `SYS:Prefs/ScreenSelectPrefs`.
>   see Chapter 6 [Preferences], page 4.

4 Main Window

You can see the main selection window for `ScreenSelect` by pressing the user configurable
hotkey. This brings you a small window with few buttons and a listview with names of open screens.
Public screens all have identifiable names but there are programs which use custom screens and
doesn't specify any name for it. Screens like that are shown as `(Nameless Screen)`.

'`Quit`'   By pressing button (or `Q`) you can remove `ScreenSelect` and any patches it has in-
            stalled.

'`About`'   This gives you a small info about this program and its author (that's me :^).

'`Prefs`'   This one opens the separate preferences program you can use to modify `ScreenSelect`'s
            behaviour. All changes come active instantly after you have exited preferences program
            with pressing either `Save` or `Use` buttons.

'`Update`'   This one updates the listview and default pubscreen texts to reflect current system
            state. This is only usefull if you haven't installed `Auto Update` patches. You can install
            the patches with `ScreenSelectPrefs` program. see Chapter 6 [Preferences], page 4.

'`Listview gadget`'

>   Click any of the names to get that screen to front. Single click just activates the name
>   which you can then activate with `Activate` gadget. Double click makes an instant
>   activation.

'`Default PubScreen`'

>   This one shows the name of the default pubscreen. If you have installed the `Change`
>   `Default PubScreen` hotkey you can use it to select active public screen as your default
>   public screen.

'`Activate`'

>   Activates the current listview selection and closes the window.

'`Cancel`'   Closes the window and returns back to the screen where hotkey selection was made.

5 General Info

There are few special options you can change with preferences program. Here are brief explanations about them. see Chapter 6 [Preferences], page 4

‘`Screen Types`’

> Currently `ScreenSelect` can show only Public screens or all screens.

‘`AutoUpdate Patches`’

> This patches 4 Intuition functions to achieve automatic update in listview and in Default PubScreen textgadget. It also pretty much makes possible the use of QuickKeys because they automatically recognizes when screens are opened or closed. Patched functions are: OpenScreen, OpenScreenTagList, CloseScreen and SetDefaultPubScreen.

‘`Window Position Modes`’

> You can control the position of `ScreenSelect`'s main window with three possible options: `Fixed`, `Relative` and `SmartPointer`.
>
> `Fixed` mode forces window to always open to some predefined coordinates.
>
> `Relative` always tries to position the window so that pointer is over the `Activate` gadget.
>
> `SmartPointer` first tries to position the window so that pointer is over the last selected screen name. If this isn't possible it then forces pointer to move there.

‘`Window Autoactivation`’

> You can set few options to control `ScreenSelect`'s behaviour with window activation.
>
> If you have `Window AutoActivation` mode ON, it tries to activate window from screen you are changing to. It doesn't work most of the times because it just examines the windows and tries to be smart when deciding which window to activate.
>
> If also `InputHandler` is ON, then `ScreenSelect` 'hears' all the changes with window actications. This helps you only with changes through `ScreenSelect`. If you change screen with `left-amiga m` `ScreenSelect` has no way of knowing that you have switched to new screen except if you have added `LoadView` patch.
>
> If `LoadView` patch is active then `ScreenSelect` can hear all the screen changes and can always change new active window. As this one says it installs a patch to `LoadView` function in graphics.library. It's a very time critical place and while I haven't confronted

any problems, it might be a source of problem for users with heavy animation needs. If you encounter any problems with animations you should first try to take this off before starting to look problems elsewhere.

So lets go all modes through one more time. `Window AutoActivation` activates autoactivation mode. `InputHandler` option enables `ScreenSelect` to remember all changes with screens active windows and `LoadView Patch` enables to hear all the frontmost screen changes. For best possible operation I suggest you to select them all.

6 Preferences

6.1 Main Prefs

After you have started `ScreenSelectPrefs` you get a window very similar to the system preferences program. All the actions from menus and `Save`, `Use` and `Cancel` buttons are exactly the same as in system programs so they are not explained here. Please consult your AmigaDOS manual for more info.

However there are two buttons labeled as Section 6.2 [Options], page 4 and Section 6.3 [Hotkeys], page 5. These are the buttons you should press to get one of the real preferences change windows.

6.2 Options

In this window are all the options settings.

'`Screen Types`'

Selects one of the operation modes. In `Public Only` mode `ScreenSelect` uses only Public screens. In `All` mode all screens are used.

'`Add AutoUpdate Patches`'

>Toggles the state of AutoUpdate patches.

'`Window Position`'

>Changes window position mode. Possible modes are `Fixed`, `Relative` and `SmartPointer`.▮ In `Fixed` mode you can set the coordinate values to `Left` and `top` numeric gadgets.

'`Window AutoActive Options`'

>You can select which level of AutoActivation you want. If you specify all three of them you get complete automatic window activation in your system. If Window AutoActivation is OFF then you can't select either `Add InputHandler` or `Add LoadView Patch`.

'`OK`'   This ones confirms all the changes and returns back to Preferences main window. Note that these changes are not used yet. You have to make global confirm with `Save` or `Use` buttons.

'`Cancel`'   This one cancels all the changes.

6.3 Hotkeys

In this window are all the hotkey settings.

'`PopUp Key`'

>Used as hotkey for `ScreenSelect`. You can override this setting with CX_POPKEY tooltype.

'`Use Default PubScreen Key`'

>Use the CheckBox gadget to toggle whether you want to use Default PubScreen key. If you do then write the hotkey to string gadget in right.

'`Add`'   Used to add new Screen Quickkey.

'`Delete`'   Used to delete selected Screen QuickKey.

'`Screen QuickKeys`'

>List of screens you have set a Screen QuickKey for. Names can contain AmigaDOS patterns. For example `TERM?` can mean `TERM1` or possibly `TERM2`. All standard AmigaDOS patterns are accepted. This is great help when trying to make a QuickKey for some old programs using custom screens.

'`QuickKey`'

>Hotkey for selected Screen QuickKey.

'`OK`'   Confirm changes.

'`Cancel`'   Cancel changes.

7 StickySelect

I have had several requests to enchange the interface to do some operations differently. Because some of these have been contradictory or in my opinion not something I like to add to `ScreenSelect` I have made it possible for external programs to use `ScreenSelect's` selection mechanism. Now everybody can write a replacement for ScreenSelect's interface.

The first program to utilize this possiblity is `StickySelect` which opens a small window to any public screen with a list of selectable names - just like the one in `ScreenSelect's` interface. However this window doesn't go away when you make a selection. Instead it just sits there and wait's for new selection. You can open as many as you like to different public screens as long as `ScreenSelect` is started before `StickySelect`. Here are the parameters.

'`PUBSCREEN=<>`'

> Name of the Public screen you want `StickySelect` to open.

'`LEFT=<>`'   Window left edge position.

'`TOP=<>`'   Window top edge position.

'`WIDTH=<>`'

> Window width.

'`HEIGHT=<>`'

> Window height.

If you would like to implement your own interface to communicate with `ScreenSelect` you can contact me to obtain programming info and C source for `StickySelect`. see Appendix C [Contact address], page 12.

8 Misc

This is a common procedure `ScreenSelect` makes when it hears about hotkey selection.

```
if hotkey pressed then
    if active screen is public screen then
        lock it and open ScreenSelect window into it.
    else
        lock default public screen and open window to it.
```

So this means that `ScreenSelect` window isn't opened to foreign applications screen. It's only opened to public screens. This may annoy some users but I made this decision to make `ScreenSelect` more system friendly. Remember that if you select new frontmost screen then there really isn't much harm done. And even if you just press `Cancel` gadget you get always back to your old frontmost screen.

`ScreenSelect` also tries to make sure that all screen pointers passed back to OS, are always valid. This is easy with public screens but requires little more work with normal screens. I hope I got it right!

Appendix A History

A.1 Version 1.0

First release 07-Sep-1992.

A.2 Version 1.1

This version was not released. Compilation date was 14-Sep-1992.

- Changed `Workbench` tooltypes `CX_POPUP` and `ALLSCREENS` to simple switches. They are normally OFF, but if you specify one of them then that option comes ON.
- Added `SMARTPOINTER` option. When this one is active `ScreenSelect` always tries to position mouse pointer over previous screen selection. This makes it very easy to bounch between two screens.

  [Suggested by Sfefan Boberg]
- Added `QUICKKEYS`. Now you can bind own hotkey to every public screen. This should be used only with public screens. Although it might work with all screens I don't support it.

  [Suggested by Stefan Boberg]
- Now if `ScreenSelect's` window is active (open) when hotkey is pressed then that window's screen is brought to front.
- Added menus to `ScreenSelect's` window. Now most of the features are selectable with Menu command keys.
- Added `About` window to show some information.
- Now previous screen's name is shown in listview gadgets selection area automatically. This makes screen bounching very easy as `SMARTPOINTER` option does.
- Now `Activate` and `Cancel` gadgets have keyboard shortcuts.

  [Keyboard shortcuts were suggested by David Corn]

A.3 Version 1.1a

Compilation date was 23-Sep-1992.

- Fixed a bug which happened when `SMARTPOINTER` option was ON and screen font was too big to be used in `ScreenSelect's` window and we had to use topaz80. This caused pointer to be moved to wrong position.

A.4 Version 1.1b

Compilation date was 13-Oct-1992.

- Just changed a initial window height from 94 pixels to 96. Now normal topaz80 font shouldn't cause window resizing when only Workbench (or screen names of similar lenght) is in a list.

A.5 Version 1.2

Compilation date was 07-Dec-1992.

- Previously `ScreenSelect` exited when it couldn't find screens. This made it impossible to put it in `Startup-Sequence` or `User-Startup` file before `Workbench` screen is opened.

  [Reported by Andreas M. Kirchwitz]
- From now on, version number format should be Amiga Style Guide compliant.
- Added `AUTOACTIVATE` option.
- Added `SCREENKEY` option which allows easy default public screen selection with hotkey.
- Added `Default PubScreen` text gadget.
- First version compiled with SAS/C V6.1. Size reduced almost 2k compared to V1.1b.

A.6 Version 1.3

Compilation date was 27-Jan-1993. Not a public release.

- Now listview is opened as wide as widest screen name. This works correctly with proportional fonts too.

A.7 Version 1.4

Compilation date was 02-Feb-1993. Not released.

- Now gadget sizes are calculated before window is opened. So now `ScreenSelect` window opens to the correct size initially.
- Added `LEFT` and `TOP` tooltypes and CLI-parameters.
- Now if `SMARTPOINTER` option is ON then `ScreenSelect` tries to position window according to the mouse pointer. And only if it fails to properly do so it moves mouse pointer to the correct position.
- Now `ScreenSelect` installs a input-handler to watch for WINDOWACTIVE messages, and we can properly activate right window when new screen is brought to front by `ScreenSelect`.

A.8 Version 2.0

Compilation date was 08-Aug-1993. Major update.

- Whole interface code rewritten.
- Moved settings to separate preferences program.
- Added support for AmigaDOS patterns in QuickKey screen names.
- Added Relative Window Position mode.
- Moved all the patches to main program. Now patches are removable.
- Added LoadView patch.
- Added support for StickySelect.
- Possibly forgotten something, but changes were too big to describe them fully in here.

Appendix B Contents of ScreenSelect distribution

Here are listed all files and directories in current version 2.0 distribution. These files should always be present when `ScreenSelect` is distributed.

```
ScreenSelect (dir)
    Docs (dir)
        ScreenSelect.doc

        ScreenSelect.doc.info

        ScreenSelect.dvi

        ScreenSelect.dvi.info

        ScreenSelect.guide

        ScreenSelect.guide.info

    StickySelect (dir)
        StickySelect

        StickySelect.info

    Docs.info

    StickySelect.info

    ScreenSelect

    ScreenSelect.info

    ScreenSelectPrefs

    ScreenSelectPrefs.info

    Read_Me

    Read_Me.info

    Install.info

    ScreenSelect.Install


ScreenSelect.info
```

Appendix C Contact address

If you really think that this program is great and you use it extensively then you can make me very happy by sending me something for a return. If you are for example a author of some software package (Commercial, Shareware, Giftware or anything) you could send me a free program as an exchange of this program. If you don't feel like it, it doesn't really matter. It would just make me more enthusiastic as I continue to implement new versions. Then again if you feel like sending a donation in US$, Deutch Marks or Finnish Marks I even might have afford to join Commodore's official developer program someday and you might get Localisation, Online-help support etc... implemented to `ScreenSelect` much faster that otherwise. Anyway, thank you for using this program!

For suggestions, bug reports etc... You can reach me at

- Internet

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