FastRAD

COLLABORATORS			
	TITLE : FastRAD		
ACTION	*NAME*	*DATE*	*SIGNATURE*
WRITTEN BY		December 31, 2022	

REVISION HISTORY			
NUMBER	DATE	DESCRIPTION	NAME

Contents

Chapter 1

FastRAD

1.1 FastRAD.guide

```
                ============================================================
                       July 27, 1997

                     Torbjörn Andersson
                          presents
                       FastRAD 1.1

                          Freeware
============================================================
```

```
1. Contents
------------------------------------------------------------
```

1.2 introduction

```
2. Introduction
-----------------------------------------------------------
```

FastRAD will fool the recoverable RAM disk (RAD) to use fast memory instead of chip memory. Three things are done to accomplish this:

1. exec.library/AllocMem() is patched. When RAD tries to allocate memory for the disk data, it asks for memory of type MEMF_KICK (which means chip memory on most systems). The patch simply clears this flag, so the best memory available will be allocated and returned to RAD instead of chip memory.

This will make RAD use fast memory happily, but it won't survive a reboot.

2. exec.library/SumKickData() is patched. It will be called right after RAD has added the memory previously allocated to the KickMem list. The patch changes the specified number of memory references by RAD, so Exec won't try to allocate the fast memory on a reboot. Since the memory isn't added at that time, the allocation would fail if this isn't done, and thus RAD (actually everything in the KickTag list) would be ignored.

Now the problem is that the memory is free for anyone to allocate and use.

3. A resident tag is also installed. When it's run at reboot it looks for all structures in the KickMem list that was added by different RAD units, and tries to allocate the memory that Exec couldn't allocate. If this fails, an alert is displayed.

This should do it.

1.3 requirements

```
3. Requirements
-----------------------------------------------------------
```

FastRAD requires AmigaOS 3.0 or higher.

1.4 usage

4. Usage

FastRAD cannot be used from Workbench. Note that FastRAD must run before the RAD disk(s) it should patch are added to the system. Early in S:Startup-Sequence is probably the best place to start FastRAD. The CLI usage is:

NAME/A/M,KILL/S,PRI/N

Example:

FastRAD RAD:

Explanation of options:

NAME
The name(s) of the RAD disk(s) you will mount and use, and want to have in fast memory. The case of the characters doesn't matter. The colon (:) character can be left out.

KILL
The SumKickData() patch will remove RAD from the KickMem and KickTag lists. Thus, RAD will not survive a reboot.

PRI
Priority of the resident tag FastRAD installs. It allocates the memory RAD uses at reboot. If the allocation fails, an alert will be displayed to inform about this.
By default the priority is two less than the priority of intuition.library. If it for some reason is necessary to do the allocation earlier the priority can be raised. But if intuition.library isn't initialized you will not see any alert if the allocation still fails.
After an alert, the variables in ExecBase that hold information about resident things are cleared (i.e. ColdCapture, CoolCapture, WarmCapture, KickTagPtr and KickMemPtr), and then the machine is rebooted again.
If the KILL option is used, no resident tag will be installed, and this option is ignored.
This option has no effect if FastRAD has run earlier and already installed its resident tag.

1.5 history

5. History

1.0 (16.7.97)
· First release.

1.1 (27.7.97)
· Added KILL option.

1.6 distribution

6. Distribution

No commercial usage of FastRAD is allowed without written permission from the author. Other distribution is allowed if no files in the original distribution are removed or modified.

1.7 author

7. Author

Snail mail:
Torbjörn Andersson
Knöppletorp 4379
S-380 31 LÄCKEBY
SWEDEN

Email:
d95ta@efd.lth.se

Home page:
http://www.efd.lth.se/~d95ta

I love you - AMIGA