Introduction

The DRERefr is a command-line program which takes the assembled object file output of the DREAsm program, calculates an efficient set of refresh instructions, and generates an output object file with the refresh instructions appended to the end.

The refresh instructions are generated by calculating the gaps between the addresses used in the program in the object code, then utilizing the remaining unused instructions to divide down the gaps such that the maximum gap-size post-refresh is minimized. The DRERefr also prints out a summary of its calculations, listing the number of refresh instructions added, the maximum gap size after the addition, as well as a detailed list of the gap sections found in the object code program, the size of the gap, and the number of refresh instructions dividing the gap.

The refresh instruction used is 0x00030???, where ??? is the calculated address. This is the assembly instruction RAP $??? K=0.

Invoking the Refresh Generator

To invoke the refresh generator from the command line, type:

DRERefr object_filename output_filename

where **object_filename** is the name of the DRE Object file to download, and **output_filename** is the name of the output object file with the appended refresh instructions.

For example, if you wish to append refresh instructions to a DRE object file named filter.obj and output the result to filtrefr.obj, type:

DRERefr filter.obj filtrefr.obj

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