
From the Edge: R:BASE Startup Options (-H, -K, -Z)
Section: Memory Management
Chapter: Running R:BASE Your Way!
Platform: R:BASE (version 6.1a) and Higher for DOS

-H Startup Option:

The -H startup option was first introduced for R:BASE 4.0A 286 version of only. By default, R:BASE uses 300 memory handles in the 286 version.

There are situations when this is not enough. Two of the most common are reports with lookups (each lookup takes on average 6 memory handles) and rules (each rule takes on average 6 memory handles).

If you get the error message "Out of dynamic memory handles. Check application complexity.", you may want to try starting R:BASE with the -H option. This lets you increase the number of memory handles R:BASE can use. For example, RBASE -H320, starts R:BASE and allows use of 320 memory handles.

The number of additional memory handles is limited by the size of the memory area where the memory handle entries are allocated. You cannot allocate more than 460 memory handles. If you need more than this, you should examine your application and use of features requiring the memory handles.

-K Startup Option:

The -K startup option was first available in the 386/486 version of 4.0A. In prior versions of R:BASE, R:BASE would grab 64K of memory for its data area (processing expressions, while loops, sorts etc.), then when it needed more memory it would grab another 64K chunk.

With R:BASE for DOS 4.0A and higher versions, the default has changed to 128K; but the -K option gives you the opportunity to increase that amount. You can tell R:BASE to grab 1024K (1 MB) of memory right off the bat for processing, and memory continues to be allocated in 1 MB pieces. For example, RBASE -K1024, allocates memory in 1 MB chunks. Use this option ONLY if you consistently have "Out of dynamic space" errors.

-Z Startup Option:

The -Z startup option was also first available in the 386/486 version of R:BASE 4.0A. By default, R:BASE (386/486) does not use any conventional memory for processing. When it needs additional memory, it allocates it from extended memory only. All available conventional memory can thus be used by other programs for ZIPPING. This conventional memory is also used by CodeLock and Gateway (Import/export).

If R:BASE runs out of extended memory to allocate, you can tell R:BASE to use conventional memory, if needed, by using the -Z startup option. With the -Z option you specify an amount of memory (in Kb) to reserve, i.e. you specify the amount of conventional memory R:BASE will not attempt to use. For example, RBASE -Z10 allows R:BASE to use all but 10 Kb of available conventional memory. RBASE -Z200 uses all but 200 Kb of conventional memory.