Speeding up R by using ISM-like calls

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R sometimes analyzes huge amount of data and requires huge size of memory operation for them. Many operating system have calls to help handling such huge memory. For example, Solaris has 'ISM (Intimate Shared Memory)' mechanism, Linux has 'Huge TLB (Translation Look aside Buffer)' and AIX has 'Large Page'. OS usually translates 4-8 KB logical addresses to physical addresses at a time. These ISM-like mechanisms can change this size to much larger, such as 2-256 MB to speed up handling large memory. However, the cost of translation between logical addresses and physical addresses is called 'TLB miss' and sometimes becomes a bottle-neck. We introduce the use of ISM-like mechanisms in R by adding a wrapper program on the memory allocation function of R and investigate the performance of them.