**Virtual paging**

Virtual paging refers to a memory management technique used by an operating system to manage data in computer systems with limited physical memory. It involves dividing the logical or virtual memory into fixed-size blocks called pages, which are then mapped to physical memory blocks called frames.

When a program needs to access a specific page of memory, the operating system checks if that page is currently residing in physical memory. If it is not, a page fault occurs, and the operating system retrieves the required page from secondary storage (such as a hard disk) and maps it to a free frame in physical memory. The operating system then updates the page table to reflect this mapping.

Virtual paging allows for more efficient memory utilization, as programs can be loaded into physical memory only when needed, and less frequently used pages can be swapped out to secondary storage. It also provides memory protection, as each program has its own virtual memory space that is isolated from other programs.

Overall, virtual paging helps in managing the limited physical memory resources effectively, leading to better performance and multitasking capabilities in computer systems.