

R/3 SYSTEM

Release 3.0 introduces innovations in the use of main memory to enhance performance of the R/3 System. The focus is on the utilization of extended memory management to optimize access to user contexts in main memory and eliminate overhead-heavy roll-in/roll-out activities. Result: Substantially enhanced performance.

INNOVATIVE MEMORY CONCEPT LEVERAGES VIRTUAL ADDRESS SPACE

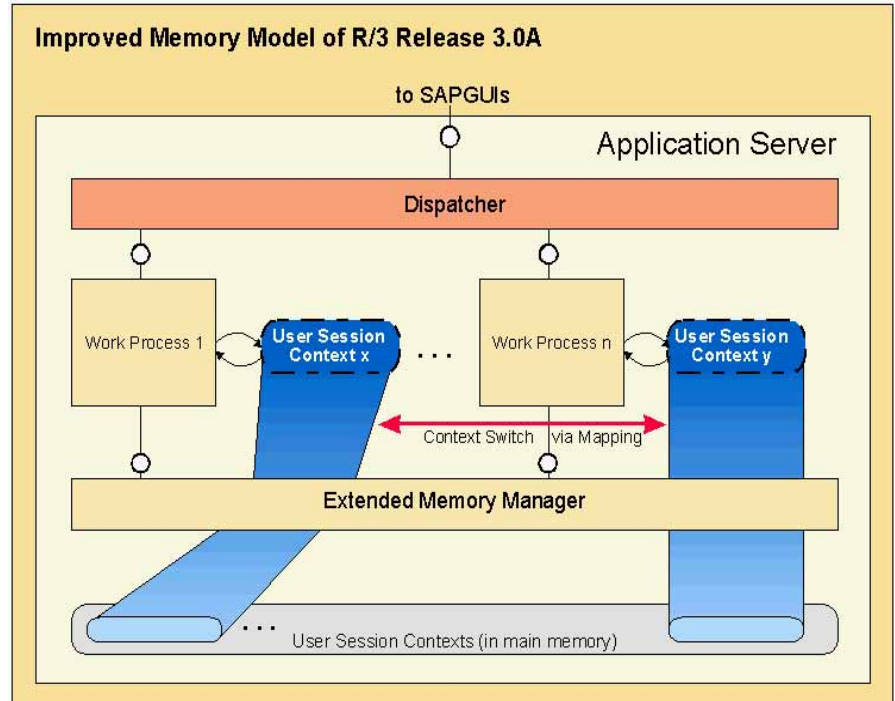
Release 3.0 provides an extended memory management capability. Intensified use of virtual address space replaces the roll-out functions used in previous R/3 releases. User contexts -R/3 user session contexts- are shared in the available address space of all the work processes on an application server.

Gone are the overhead-heavy copy functions associated with transaction processing. The system can perform context switching via faster mapping operations. Context switching no longer requires overhead-intensive copy actions.

IN FOCUS...

MEMORY MANAGEMENT

IMPROVED MEMORY MANAGEMENT PROVIDES ENHANCED PERFORMANCE



POINTER MANAGEMENT REPLACES COPY OPERATIONS

Reassignment of pointers replaces copy functions for entire main memory areas. This provides direct, time-optimized access of work processes to user contexts. The operating system handles any swapping that is necessary.

ENHANCED PERFORMANCE

Initial measurements demonstrate a substantial performance enhancement. These results are expected to be confirmed by the benchmark tests currently being run. This new memory management facility, based on the use of extended memory, will be available to our customers with R/3 Release 3.0A.

Already indications are that customers will be able to use the significantly expanded functionality of the R/3 System Release 3.0 without any loss of performance. In many cases, we can expect a real improvement in performance.

OPTIMIZATION BREAKTHROUGH

Previously response times could not be reduced below a certain level - for example, because of context switching. Now, with the use of extended memory, we can be confident that available main memory capacity will have a direct effect on the response time behavior of the transactions. That allows us to perform targeted tuning while avoiding unused capacity overhead.



MEMORY MANAGEMENT

FASTER RESPONSE TIMES

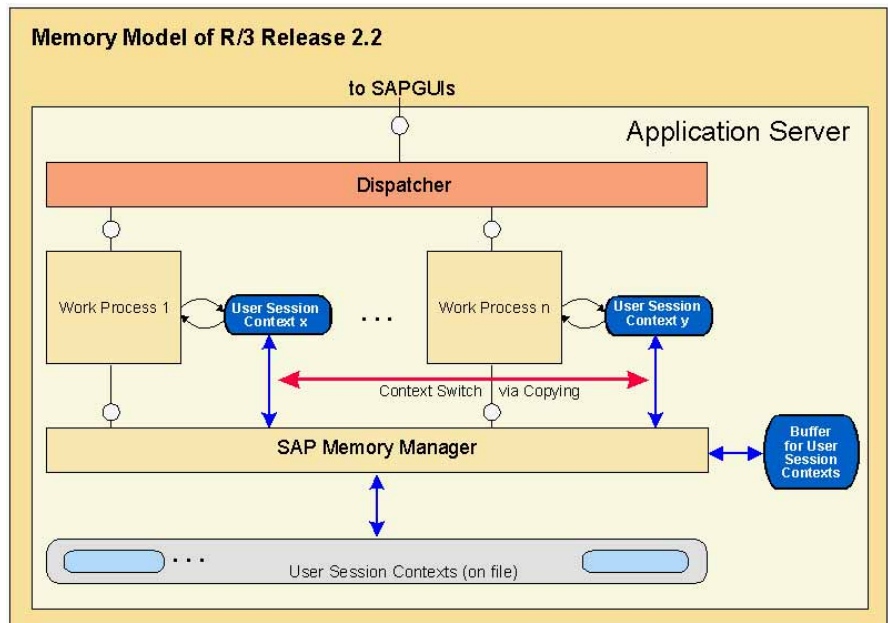
Measured against previous releases, individual transactions are executed faster, resulting in reduced parallel processing. Consequence: A reduction in the average time a transaction resides in a work process on an application server. This could have exciting implications for long-running processes - for example, dispatching or rescheduling of a make-to-order producer's complex orders - but it is too early to assess the potential effects.

STRATEGIC ALIGNMENTS

The impact of this new technology extends as far as the strategic dimensions of IT decisions. We recommend aligning future hardware acquisitions to the expansion capabilities of main memory; customers can then keep open the option of expanding memory. For example, this option could eliminate the need for additional application servers.

OPTIMUM USE OF 64-BIT ARCHITECTURES

The new memory management capability in Release 3.0A will enable R/3 to make optimum use of the upcoming 64-bit architectures. Used in conjunction with the virtual memory available with 64-bit architectures - which goes well beyond the limit in the giga range of the 32-bit architectures - SAP's extended memory concept provides an extremely high level of performance.



TECHNOLOGY AND SERVICE

R/3 software is based on Client/Server Architecture. R/3 is designed as an open system for use on operating systems from a variety of vendors. Along with the software, SAP offers you a complete spectrum of services: professional consulting in organizational and technical issues ranging from project planning to system implementation; qualified staff training, and 24-hour hotline support. SAP's quality management system for software development meets the international ISO 9001 standards.

Find out more. Just call or write us.