

U registers

Various CPU registers where process need to be stored for execution for running state.

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CPU Scheduling Information

Process priority and other scheduling information which is required to schedule the process.

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Memory management information

This includes the information of page table, memory limits, Segment table depending on memory used by the operating system.

9

Accounting information

This includes the amount of CPU used for process execution, time limits, execution ID etc.

10

IO status information

This includes a list of I/O devices allocated to the process.

Process

A process is basically a program in execution. The execution of a process must progress in a sequential fashion.

A process is defined as an entity which represents the basic unit of work to be implemented in the system.

To put it in simple terms, we write our computer programs in a text file and when we execute this program, it becomes a process which performs all the tasks mentioned in the program.

When a program is loaded into the memory and it becomes a process, it can be divided into four sections – stack, heap, text and data. The following image shows a simplified layout of a process inside main memory –

Process Components

S.N. Component & Description

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Stack

The process Stack co