## Swap Memory:

If you run out of physical memory, you use virtual memory, which stores the data in memory on disk. Reading from disk is several orders of magnitude slower than reading from memory, so this slows everything way down. (Exchanging data between real memory and virtual memory is "swapping". The space on disk is "swap space".)

## Context Switching:

Context Switching involves storing the context or state of a process so that it can be reloaded when required and execution can be resumed from the same point as earlier. This is a feature of a multitasking operating system and allows a single CPU to be shared by multiple processes.

## IPv4 address:

IPv4 addresses are 32-bit numbers that are typically displayed in dotted decimal notation and contains two primary parts: the network prefix and the host number. The topics below describes the IPv4 Classful Addressing, IPv4 Dotted Decimal Notation, IPv4 Subnetting, IPv4 Variable-Length Subnet Masks, understanding IP Version 6, IPv6 address types and use of them in Junos OS RX Series Services Gateway, and configuration of inet6 IPv6 Protocol Family.

## IPv6 address:

An IPv6 address is a 128-bit alphanumeric value that identifies an endpoint device in an Internet Protocol Version 6 (IPv6) network. IPv6 is the successor to a previous addressing infrastructure, IPv4, which had limitations IPv6 was designed to overcome. Notably, IPv6 has drastically increased address space compared to IPv4.