Symmetric Multiprocessing (SMP)

Return to Glossary

Symmetric Multiprocessing (SMP) is the processing of programs by multiple processors that share a common operating system and memory. In symmetric (or “tightly coupled”) multiprocessing, the processors share memory and the I/O bus or data path. A single copy of the operating system is in charge of all the processors. SMP, also known as a “shared everything” system, does not usually exceed 16 processors.

SMP systems are considered better than Massively Parallel Processing (MPP) systems for online transaction processing (OTP) in which many users access the same database in a relatively simple set of transactions. An advantage of SMP for this purpose is the ability to dynamically balance the workload among computers (and as a result serve more users faster).[1)]

Source:
https://searchdatacenter.techtarget.com/definition/SMP?_ga=2.233172572.392289681.1607438816-2133032675.1592258365

1)
Rouse, Margret; Definition of symmetric multiprocessing, WhatIs.com, Accessed 8 December 2020, https://searchdatacenter.techtarget.com/definition/SMP?_ga=2.233172572.392289681.1607438816-2133032675.1592258365