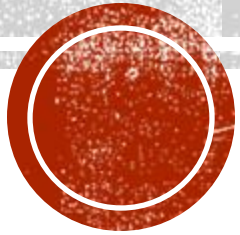
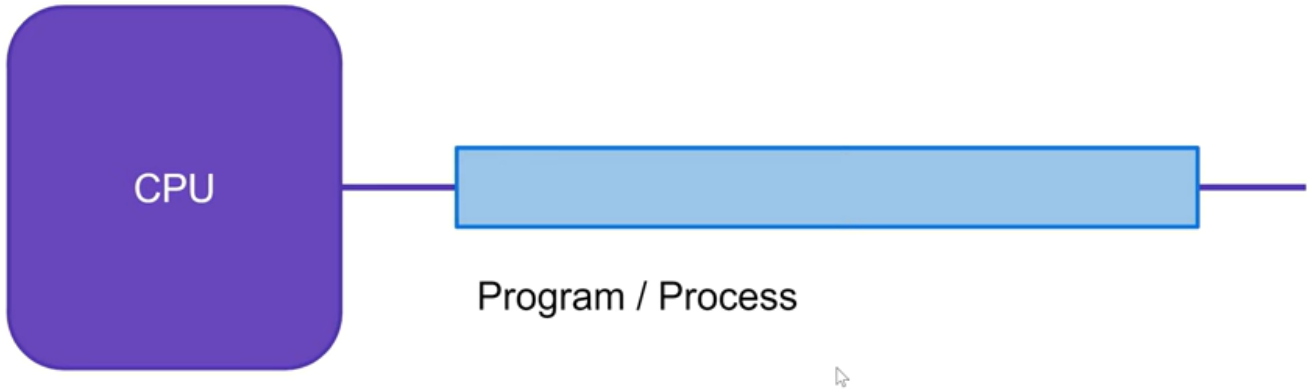
JAVA CONCURRENCY AND MULTİTHREADING

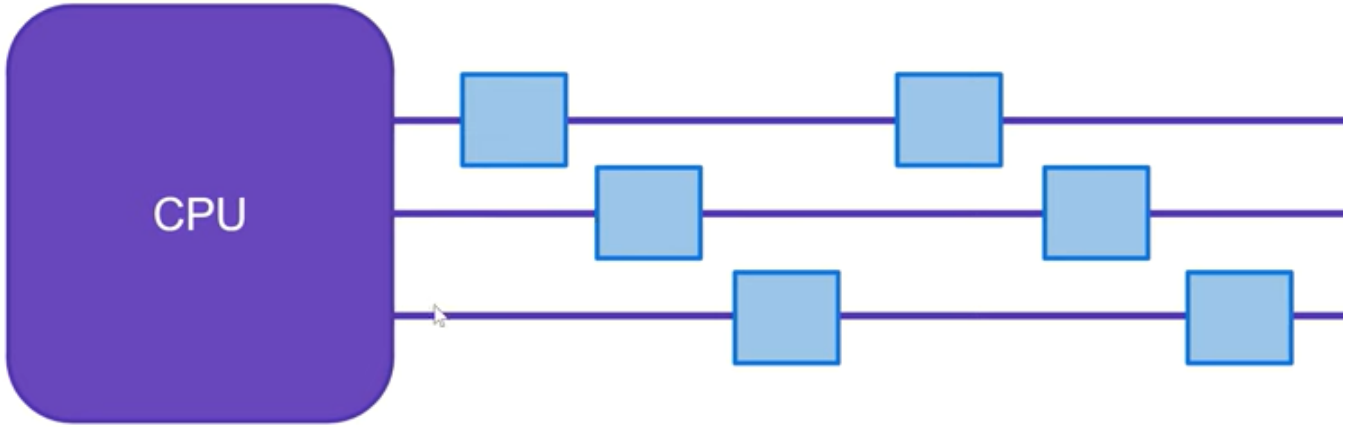


THREAD



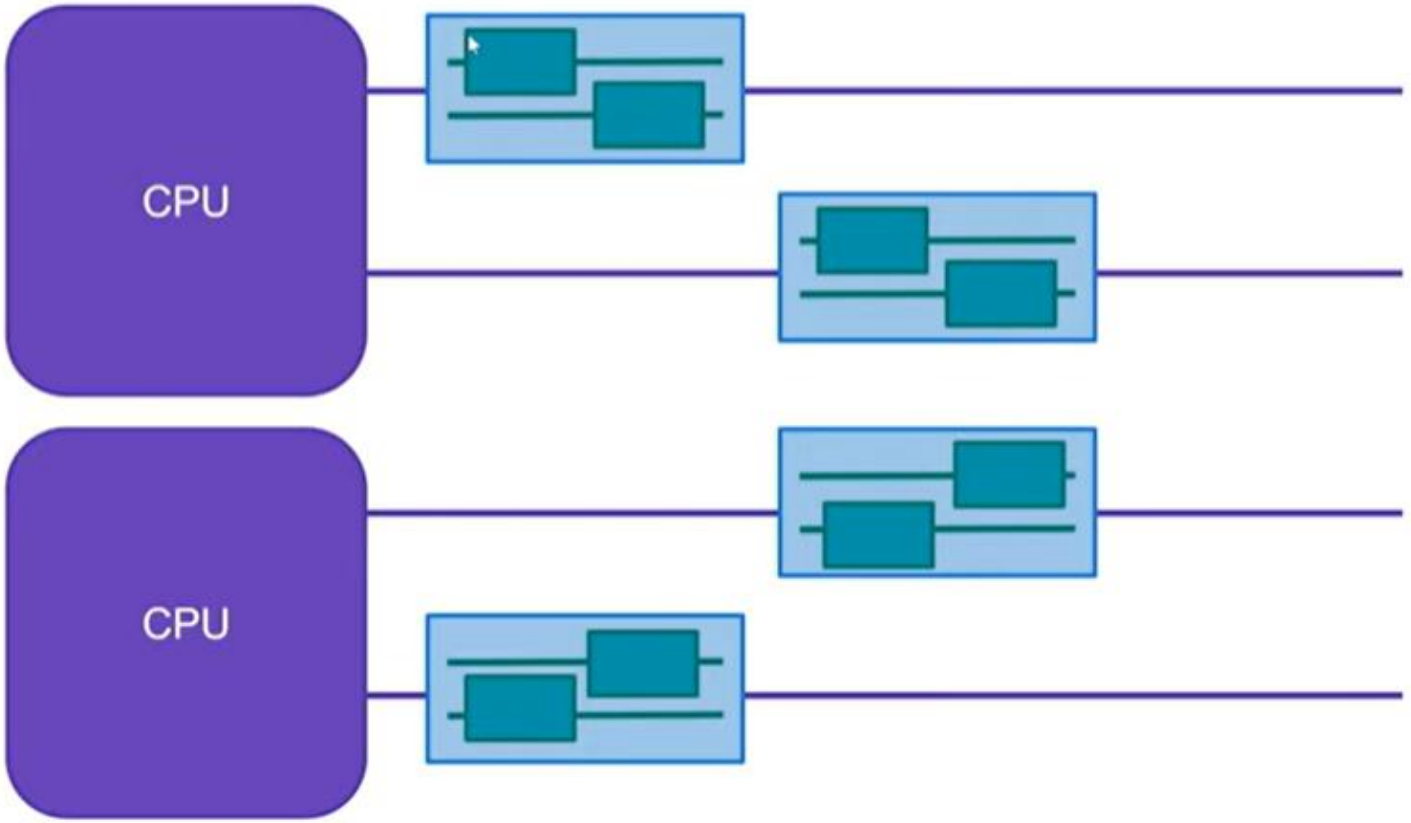
One CPU / Computer can run
one program (process)
at a time.

MULTİTHREAD

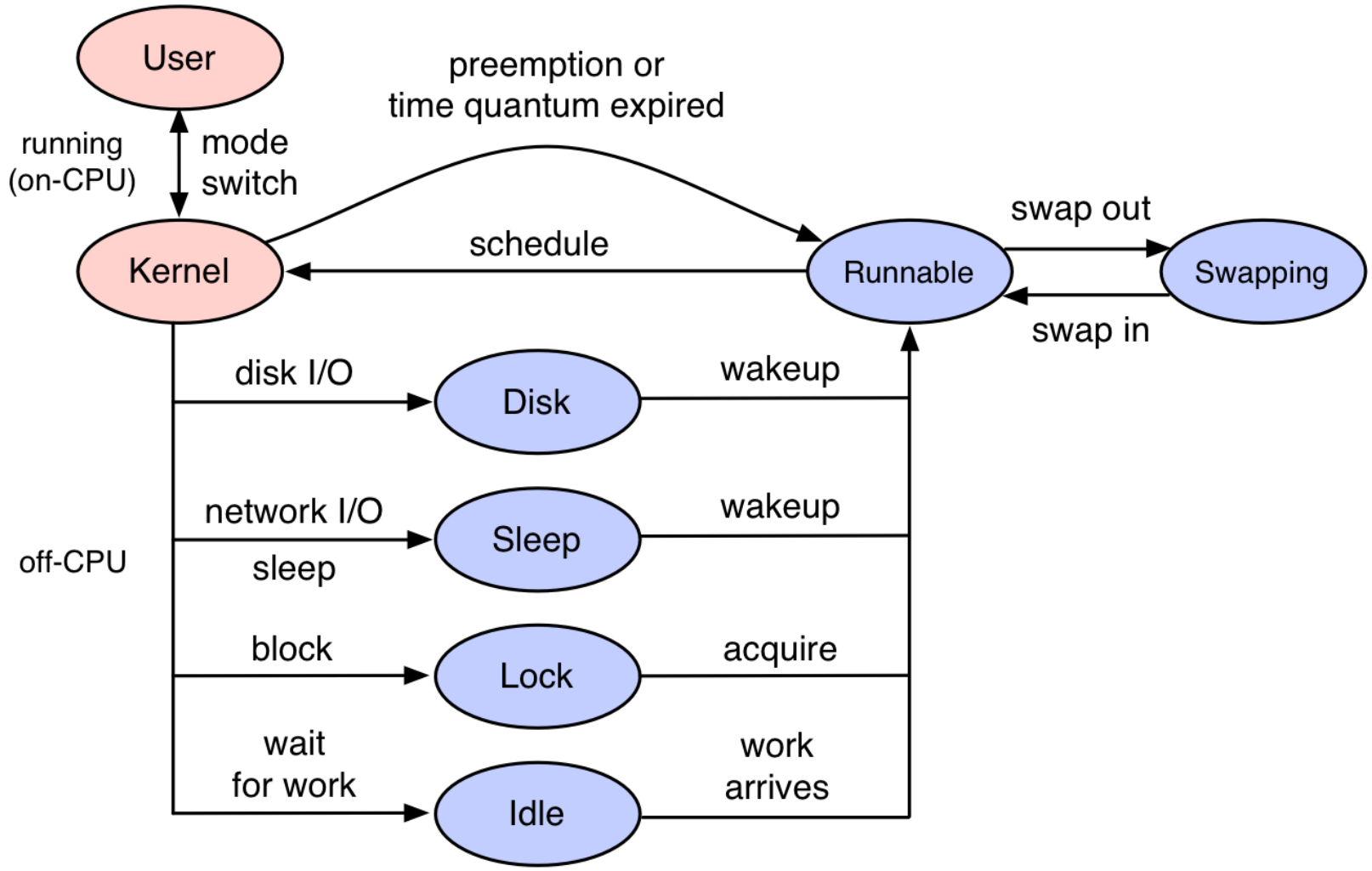


One CPU / Computer can run
Multiple programs (process)
at a time - by switching between
executing one program at a time for a
little time, and then switch to the next.

In Time…



Thread Build



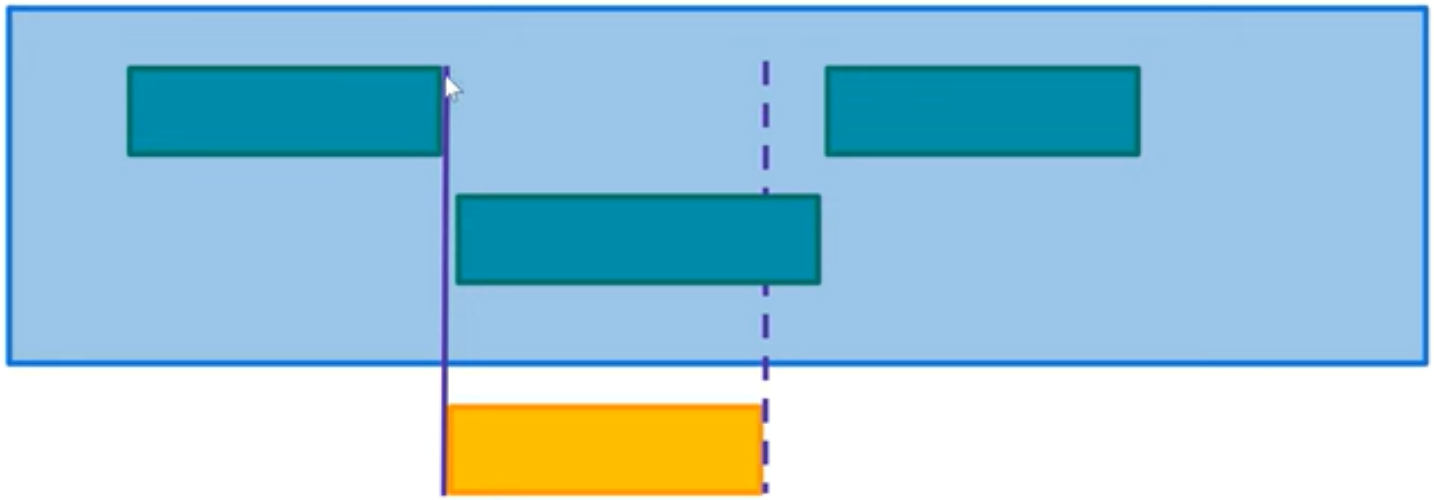
Why MultiThreading?

-Better CPU Utilization

-Better IO Utilization

-Higher Application Responses

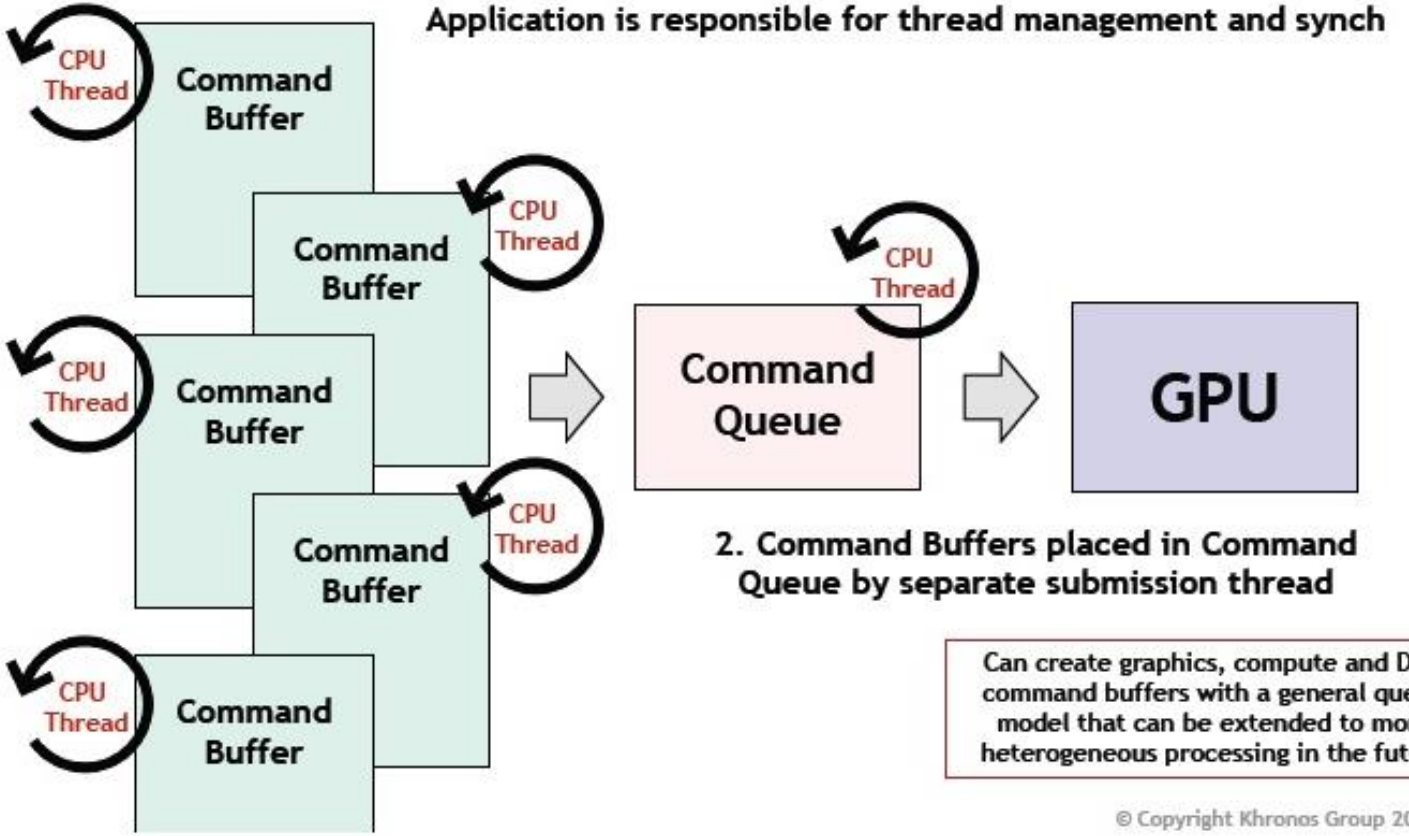
Compile Issue



Read from disk
or network

Vulkan Multi-threading Efficiency

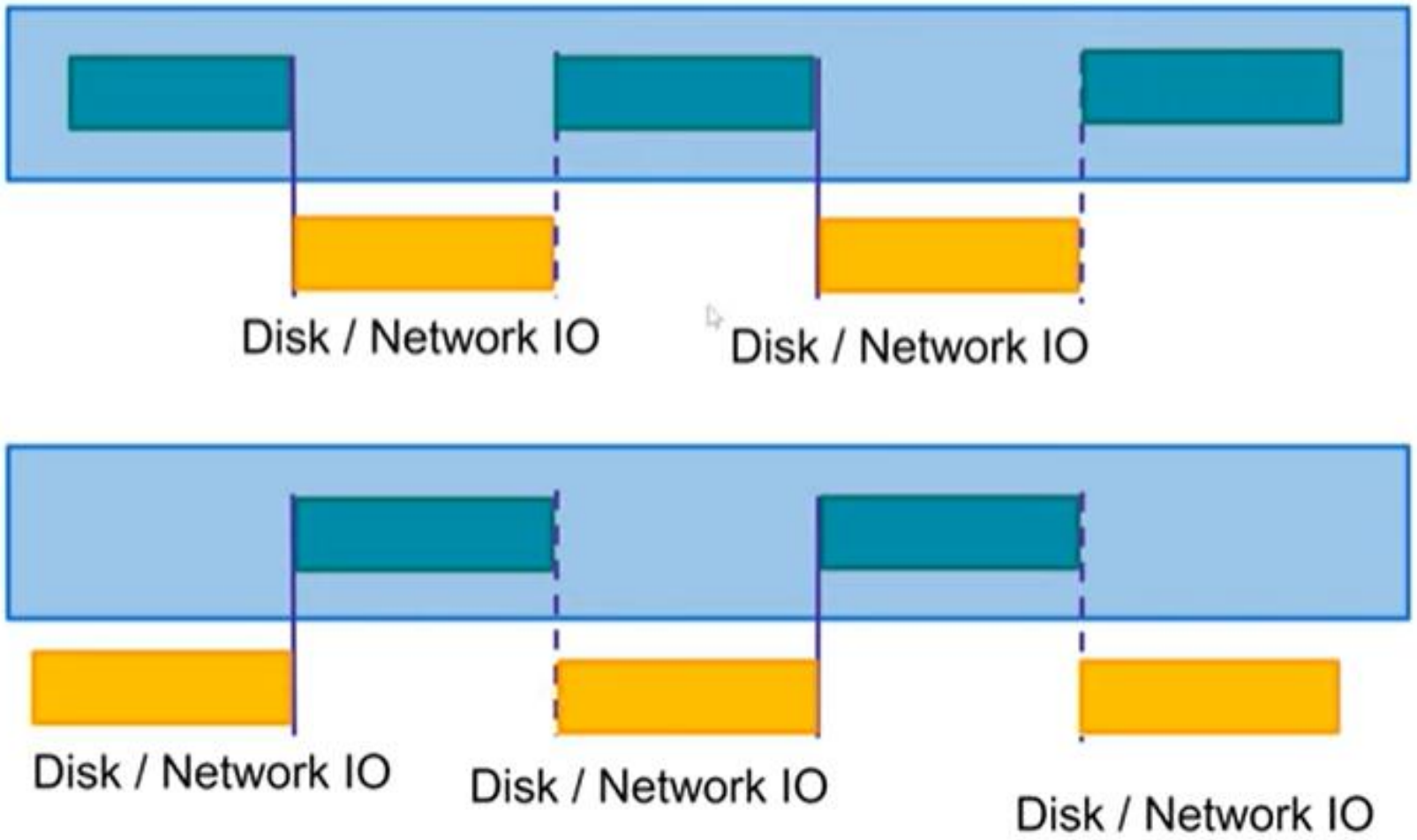
1. Multiple threads can construct Command Buffers in parallel
Application is responsible for thread management and synch



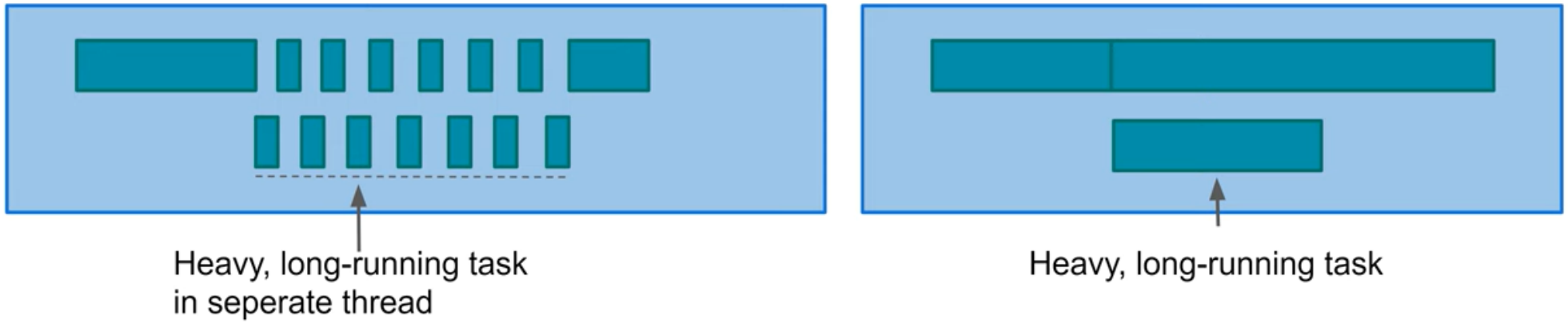
2. Command Buffers placed in Command Queue by separate submission thread

Can create graphics, compute and DMA command buffers with a general queue model that can be extended to more heterogeneous processing in the future

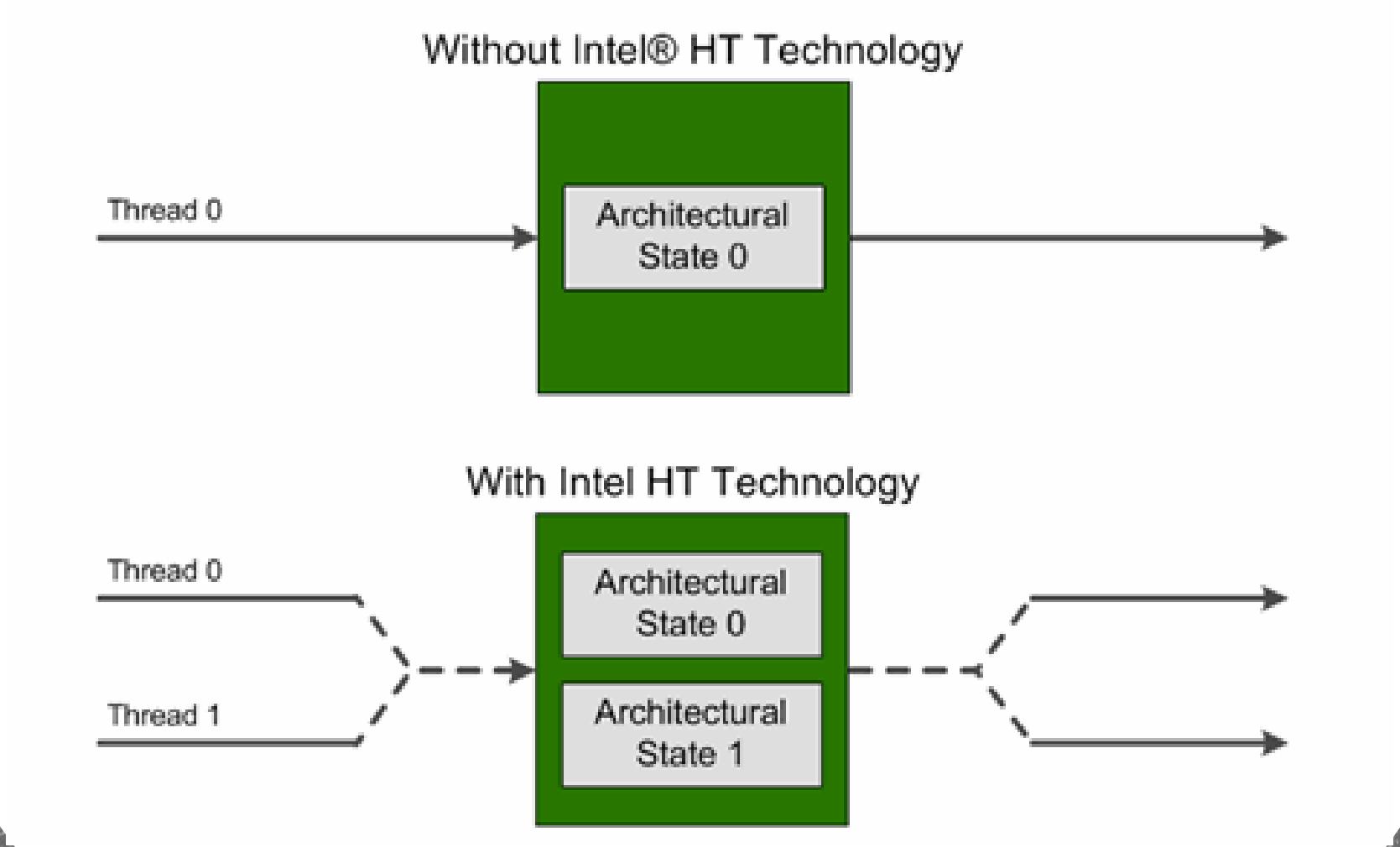
Expectation



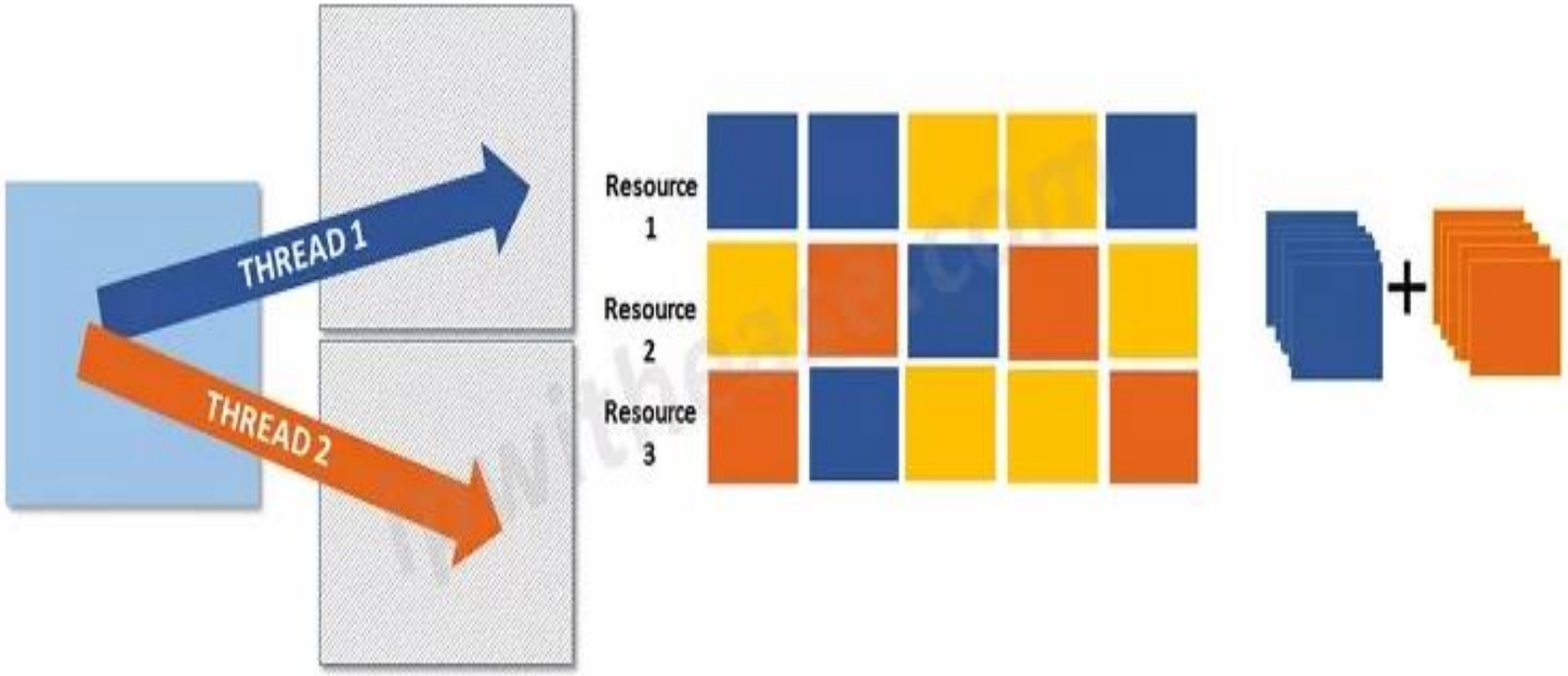
Imagination

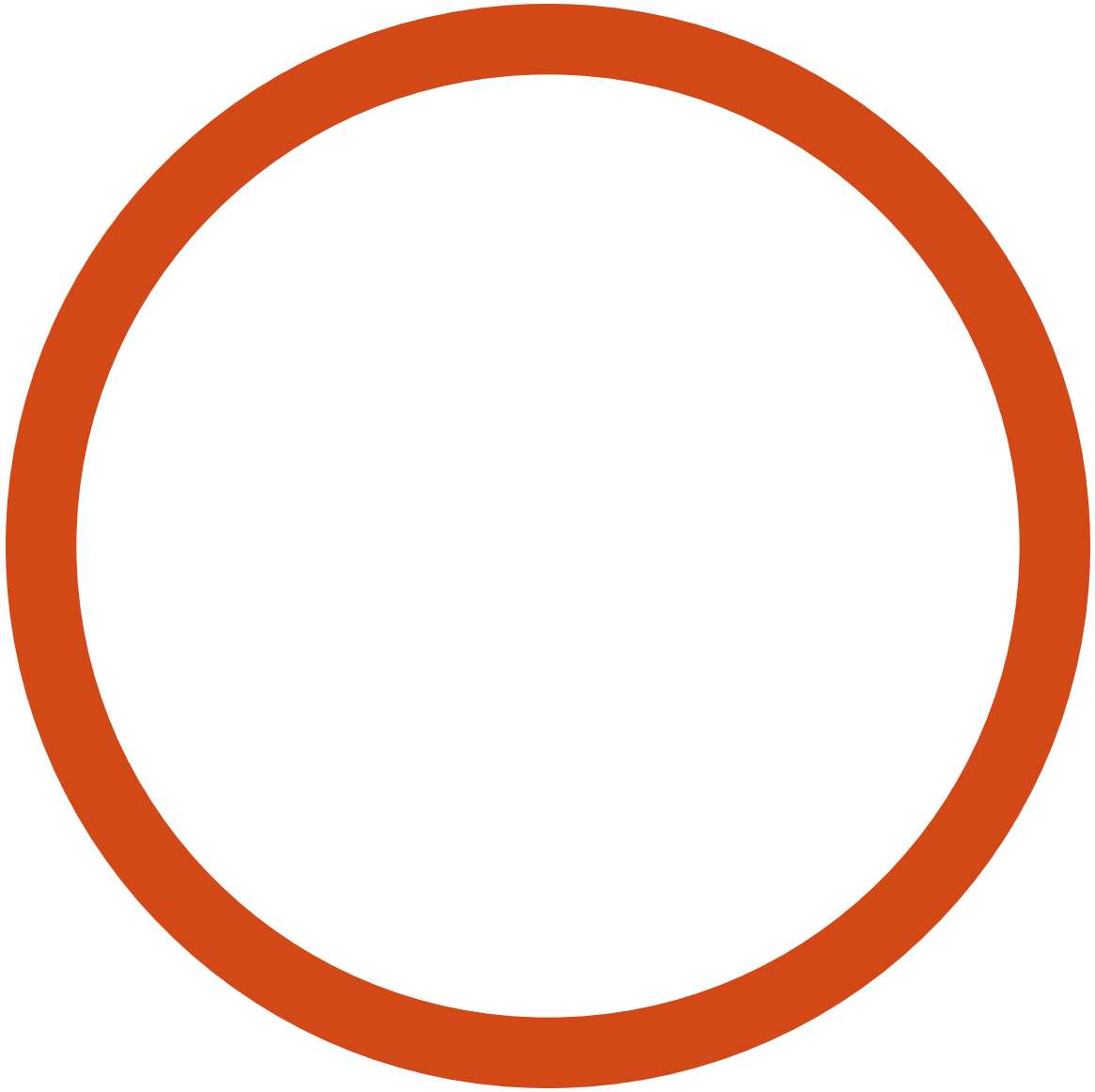


HYPERTHREAD (Creation)



How Hyper-Threading works?





THANK YOU