



EL CAPITAN FUN FACTS



EL CAPITAN

ADVANCED SIMULATION & COMPUTING

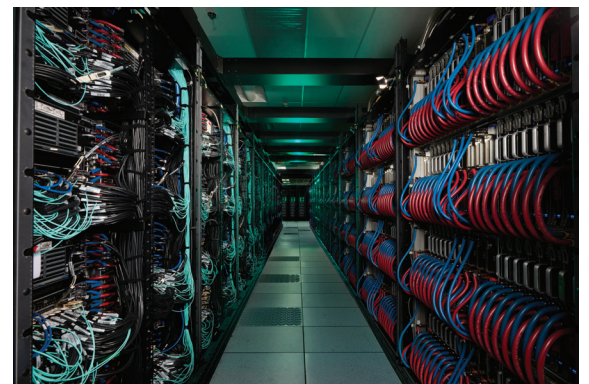
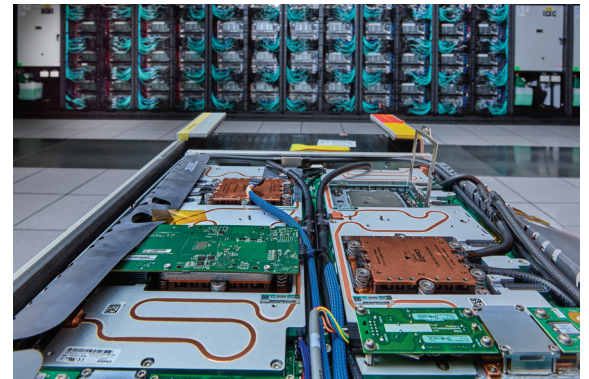
EL CAPITAN'S PEAK PERFORMANCE is 2.79 exaFLOPs or 2.79 QUINTILLION calculations per second – written out, that's 2,790,000,000,000,000,000.

IF YOU WENT BACK IN TIME 2.7 quintillion seconds, you'd arrive over 70 billion years before the Big Bang.

IF EVERY ONE OF THE WORLD'S 8 BILLION PEOPLE WORKED ON A CALCULATION, every second of every day, around the clock, it would take 8 years to do what El Capitan can do in one second.

THE PROCESSING POWER of El Capitan is equal to one million of today's fastest smartphones working on a calculation simultaneously. If you stacked all those smartphones, it would create a tower more than 5 miles high.

EL CAPITAN'S 87 COMPUTE RACKS, FILE SYSTEM AND INFRASTRUCTURE weigh 1.3 million pounds, as much as 4 blue whales or about 100 African elephants.





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EL CAPITAN REQUIRED THE INSTALLATION OF 32 MILES OF POWER/ELECTRICAL CABLES. Laid end-to-end, they would stretch from the Livermore Computing Center to downtown Oakland (as the crow flies).

FULLY LIQUID-COOLED, El Capitan requires circulating from 5 to 9 million gallons of water — between 8 and 14 Olympic-size swimming pools worth—every 24-hours of operation.

THE COOLING TOWERS needed to support El Capitan and future exascale computers can provide 28,000 tons of cooling, the equivalent to 9,300 home air-conditioning units.

THE MACHINE'S ELECTRICAL AND COOLING INFRASTRUCTURE took 28,000 construction person-hours to build, roughly about the time it would take for a crew of 20 to build three average-size homes.

LLNL-MI-2001763