

Adding Intel Optane memory vs. doubling the RAM:¹

Which upgrade to the HP EliteDesk 800 G4 delivered more bang for the buck?

Intel® Optane™ memory can boost system responsiveness more than adding extra RAM

Better performance doesn't have to come with a higher price tag

We performed tasks using two HP EliteDesk 800 G4 desktops:²



EliteDesk 800 G4
with 32GB RAM



EliteDesk 800 G4 with 16GB RAM +
16GB Intel Optane memory

The model with Intel Optane...

Took up to
87% less time
to perform
everyday tasks

Opening Adobe® Photoshop®
and launching a project:

16GB RAM +
16GB Intel Optane
configuration



32GB RAM
configuration



Had a
15% lower
purchase price³

\$2,012



\$

32GB RAM
configuration

\$1,706



\$

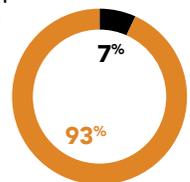
16GB RAM +
16GB Intel
Optane
configuration

Could deliver savings of
over \$4 million
across 1,000 users
over three years



Estimated desktop
hardware savings
\$306,000

Estimated staff
productivity
savings
\$3,990,348



\$4,296,348

Dive into the details of our research at <http://facts.pt/pqv8ua2>

1 Intel Optane memory (cache) is sold separately. Intel Optane memory system acceleration does not replace or increase the DRAM in your system. Available for HP commercial desktops and notebooks and for select HP workstations (HP Z240 Tower/SFF, Z2 Mini, ZBook Studio, 15 G5, and 17 G5) and requires a SATA HDD, 7th Gen or higher Intel Core® processor or Intel Xeon® processor E3-1200 V6 product family or higher, BIOS version with Intel Optane supported, Microsoft® Windows 10 version 1703 or higher, M.2 type 2280-S1-B-M connector on a PCH Remapped PCIe Controller and Lanes in a x2 or x4 configuration with B-M keys that meet NVMe Spec 1.1, and an Intel Rapid Storage Technology (Intel RST) 15.5 driver.

2 Complete configurations for both systems appear in the science addendum to the test report available at <http://facts.pt/mq0buag>.

3 HP online store, accessed October 25, 2018, <https://store.hp.com/us/en>.

DISCLAIMER: The January 2019 Principled Technologies reports were commissioned by HP. We have based the results of the calculations on a combination of a variety of features and functionalities under comparison and use industry figures and/or costs to determine the potential ROI savings customers may derive from the use of the HP products. We present these values not to represent actual savings a customer may expect to see but solely to illustrate potential savings. Many factors and variables may affect whether any customer sees any potential savings.