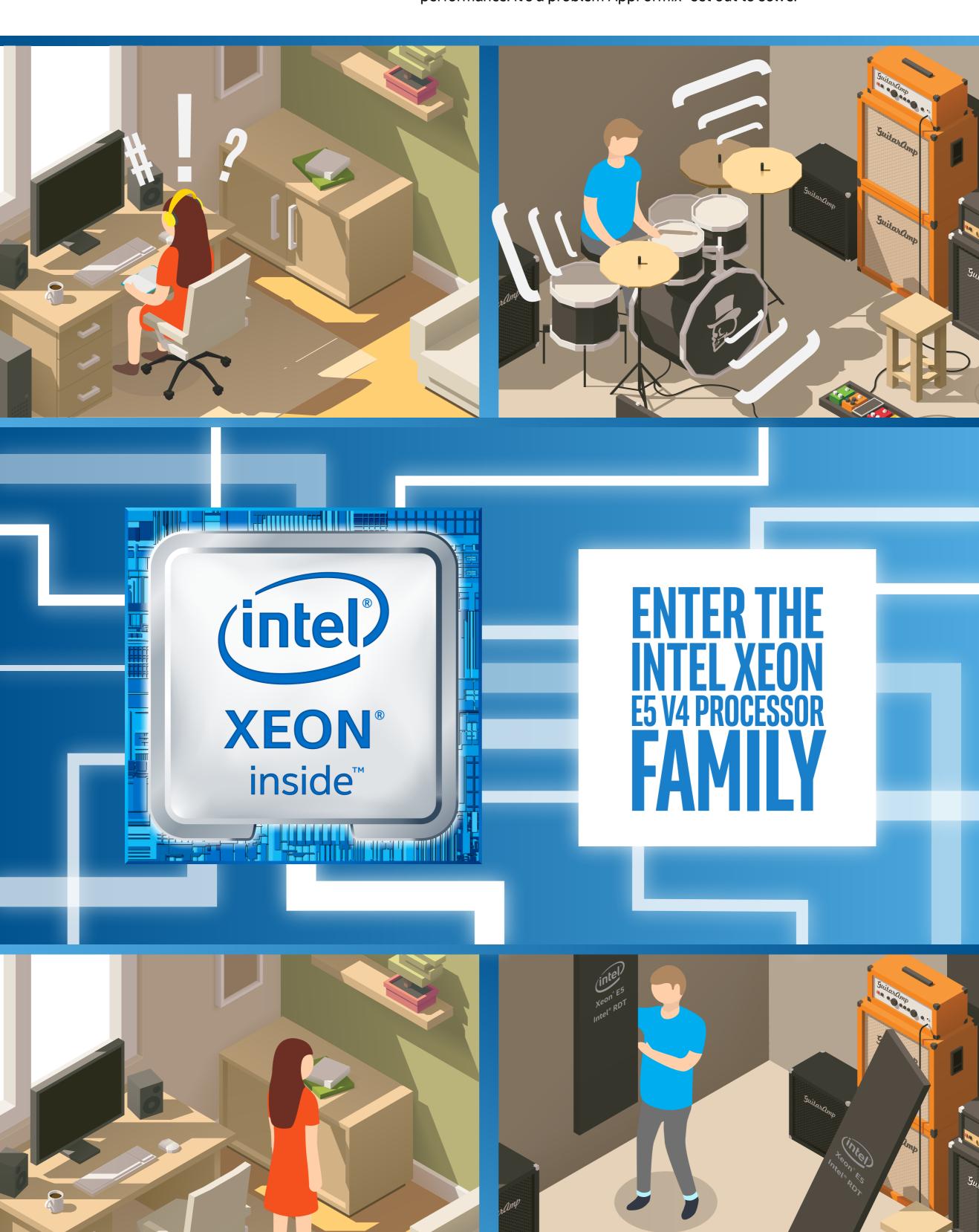


# NOISY NEIGHBORS IN THE CLOUD WITH INTEL® XEON® E5 V4 FAMILY AND CACHE ALLOCATION TECHNOLOGY

## THE PROBLEM:

#### **DEALING WITH** "NOISY NEIGHBORS"

We all know a garage band practicing next door can be a nuisance. Noisy neighbors in cloud computing are no different. In this sense, though, a "noisy neighbor" is a co-tenant that gobbles up bandwidth and other resources, slowing down and negatively affecting performance. It's a problem AppFormix\* set out to solve.



# THE SOLUTION:

### GET SILENCE SO YOU CAN FOCUS WITH INTEL® XEON® E5 V4 FAMILY AND INTEL® RESOURCE DIRECTOR TECHNOLOGY

By using elements of the Intel® Resource Director Technology (Intel® RDT), introduced in the Intel® Xeon®E5 v4 family, AppFormix was able to increase visibility, control, and performance isolation between applications — effectively cutting out all the "noise."

Neutralizing noisy neighbors thanks to Intel® RDT in its software and server platforms, AppFormix enhanced enforcement of priority levels, provided advanced provisioning capabilities, and mitigated noisy neighbor effects.







# THE RESULT:

#### THE INTEL® XEON® E5 V4 FAMILY'S CACHE **ALLOCATION TECHNOLOGY INSULATES AGAINST NOISE TO BOOST PERFORMANCE**

Xeon® E5 v4 processor family, insulates against noise to boost performance for improved throughput results and prioritized NGINX\* web server yields to contain "noisy neighbors."

Cache Allocation Technology, part of the Intel®



Intel® Xeon® Processor E5-2600 v4 Product Family EAMG http://intel.ly/2ntWKkl

Cloud and data center orchestration perfor-

mance improved up to 27%1.

to reduce latency, improving the experience for end users.

The AppFormix software suite leveraged Intel® CAT



Web server response time improved up to 51%<sup>2</sup>.

**Sources:** 

Software and workloads used in performance tests may have been optimized for performance only on Intel microprocessors. Performance

Intel® Solution Brief "AppFormix: Realize The Performance Of Your Cloud Infrastructure" http://intel.ly/2ne74f7