

# Enterprise Workloads Infrastructure Stacks and Deployments

#### AN IDC CONTINUOUS INTELLIGENCE SERVICE

IDC's *Enterprise Workloads Infrastructure Stacks and Deployments* program provides insights into compute and storage infrastructure adoption, trends, and usage by enterprise workloads as defined in IDC's taxonomy. (IDC defines a "workload" to be an application along with its data set.) This program serves as a companion program to IDC's Worldwide Semiannual Enterprise Infrastructure Tracker: Workloads. It delivers the quantitative analysis and the qualitative color related to the consumption of compute and storage infrastructure for serving a broad variety of enterprise workloads. The program also analyzes workload movement across various deployment environments, including corporate datacenters, public cloud, and edge, along with infrastructure trends related to cloud-native workloads and containers.

#### **Markets and Subjects Analyzed**

- Qualitative and quantitative overview of workloads as defined in IDC's enterprise infrastructure workloads taxonomy
- Qualitative and quantitative overview of workloads as deployed on bare metal, virtualized, and containerized environments
- Traditional (legacy and current generation) and newer (cloud native and next generation) workloads
- Structured and unstructured (SQL, NoSQL, and NewSQL databases) workloads
- Infrastructure for edge workloads

- Use of various storage systems architectures for current and nextgen workloads (e.g., file, block, object, flash, and hybrid storage)
- Infrastructure stacks for next-gen workloads (e.g., Kubernetes, Docker, GKE, and PKS)
- Cloud migration tools and development methodologies and paradigms
- Emerging workloads for specific outcomes (e.g., AI training and inferencing and Big Data and analytics)

#### **Core Research**

- Worldwide Enterprise Infrastructure Workloads Taxonomy
- Worldwide Enterprise Infrastructure Workloads Forecast
- Compute and Storage Infrastructure Trends for Cloud-Native Workloads and Containers
- Compute and Storage Infrastructure Trends for Edge Workloads
- Workloads in Public Cloud IaaS and PaaS
- Cloud Migration and Repatriation Trends

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: <u>Enterprise</u> <u>Workloads Infrastructure Stacks and Deployments</u>.

## **Key Questions Answered**

- How are workload deployments shifting in terms of supporting infrastructure on premises, in the public cloud, and at the edge? What changes do they go through when they shift?
- 2. What kind of enabling infrastructure stacks are used when workloads get refactored, repackaged, or replatformed?
- 3. What best practices are other organizations using to evaluate, modernize, and transform their infrastructure for containerized and cloud-native workloads?
- 4. What compute and storage functionality is needed for various workloads?
- 5. What consumption models and deployment location should be employed for superior business outcomes?

### **Companies Analyzed**

This service reviews the strategies, market positioning, and future direction of major providers in the server and storage market, including: Amazon Web Services, Cisco, Dell, Google, HPE, IBM, Intel, Lenovo, Microsoft, NetApp, Pure Storage, and VMware.