

Infrastructure Trends and Strategies: Enterprise Workloads

AN IDC CONTINUOUS INTELLIGENCE SERVICE

IDC's *Infrastructure Trends and Strategies: Enterprise Workloads* program takes a top-down approach of 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 dataset). This program serves as a companion program to the *Server and Storage Workloads Tracker*® and will carry the qualitative color (via primary research) that guides data in the trackers.

Markets and Subjects Analyzed

- Qualitative and quantitative overview of workloads as defined in IDC's storage and server workloads taxonomy
- Qualitative and quantitative overview of workloads as deployed on bare metal, virtualized, and containerized environments
- Traditional (legacy, current-gen) and newer (cloud-native, next-gen) workloads
- Structured and unstructured (SQL, NoSQL, and NewSQL databases) workloads
- Service mesh, microservice, and FaaS/serverless architectures
- Use of various storage systems architectures for current and next-gen workloads (e.g., file, block, object, flash, and hybrid storage)
- Infrastructure stacks for next-gen workloads (e.g., Kubernetes, Docker, GKE, PKS)
- Cloud migration tools and development methodologies and paradigms
- Emerging workloads for specific outcomes (e.g., AI training and inferencing, Big Data and analytics)

Core Research

- Worldwide Server and Storage Workloads Taxonomy
- Worldwide Server and Storage Workloads Forecast, 2020–2024
- Public Cloud On-Premises (Anthos, IBM Cloud Private, and Azure Stack) Value Proposition for Current and Next-Gen Workloads
- Best Practices for Workload Deployments: Choosing Location and Deployment Type
- Pathways to the Cloud — Application Transformation Options and Implications for Choice of Infrastructure
- 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: [Infrastructure Trends and Strategies: Enterprise Workloads](#).

Key Questions Answered

1. How are workload deployments shifting in terms of on premises, cloud, and 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 new/next-gen/cloud-native workloads?
4. How should organizations embrace algorithm shifts (e.g., AI/ML workloads) that require the introduction of new hardware in their datacenters?
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 several providers in the server and storage market, including: Amazon Web Services, Cisco, Dell, Google, HPE, IBM, Intel, Lenovo, Microsoft, NetApp, Pure Storage, Rackspace, and VMware.