



# HPE DL360 Reference Architecture

## FEATURES



**PRECONFIGURED AND FULLY TESTED**  
Best-in-class components engineered to work together



**INDUSTRY LEADING PERFORMANCE**  
World's fastest file system with native NVMe supports CPU and GPU workloads



**INTEGRATED STORAGE TIERING**  
Tier to multiple S3 targets for infinite capacity scaling and lowest cost



**BREAKTHROUGH ECONOMICS**  
High rack density and low power and cooling consumption



**EXASCALE CAPACITY**  
Scale to petabytes of NVMe and exabytes of Object storage



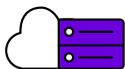
**UNIFIED ACCESS**  
POSIX compliant with support for NFS and SMB



**ADVANCED DATA PROTECTION**  
Distributed data protection and end-to-end data integrity



**TRANSPARENT SNAPSHOT CAPABILITY**  
Integrated backup and disaster recovery



**HYBRID CLOUD INTEGRATION**  
Backup or burst to the cloud for near unlimited resources



**WORLD-CLASS HPE SUPPORT**  
Designed in reliability backed by HPE's award winning service and support



## WekaFS™

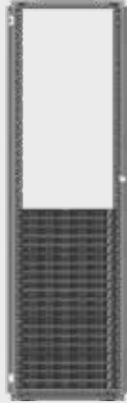
WekaFS is the world's fastest and most scalable file system ideal for today's data-intensive applications in AI and technical computing. It has proven scalable performance, delivering over 6x more performance than blade-based all flash scale-out NAS and 2x more than locally attached NVMe SSDs.

WekaFS uses a clean-sheet design with an optimized network stack that runs Ethernet (10Gbit and above) or InfiniBand, so data locality is no longer a necessary factor for performance. The software presents a POSIX file system that distributes both data and metadata across the entire storage cluster to ensure massively parallel access. Using NVMe flash technology ensures the highest performance and lowest latency.

## AN ENGINEERED SOLUTION

Based on the WekaFS software, HPE's DL360 Gen 10 server, and Mellanox's network adapters, the engineered solution provides industry-leading performance, scale, and value. The HPE Proliant DL360 Gen10 Server delivers excellent NVMe density per RU to provide a storage-dense high-performance package with fast NVMe storage, low-latency interconnects and easy datacenter compliance. Mellanox ConnectX-4 adapters provide the choice of either Infiniband or Ethernet to deliver 100Gb/s bandwidth in a single port, the lowest available latency, and application hardware offloads, satisfying even the most demanding application requirements.

For more information, contact us at [Info@Weka.io](mailto:Info@Weka.io).

WekaIO ENGINEERED SOLUTIONS	8 SYSTEMS	20 SYSTEMS	40 SYSTEMS
<ul style="list-style-type: none"> <li>• HIGHEST PERFORMANCE</li> <li>• LOWEST LATENCY</li> <li>• MASSIVELY SCALABLE</li> <li>• SPACE AND ENERGY EFFICIENT</li> <li>• FULLY PRECONFIGURED</li> <li>• WORLD-CLASS HPE SUPPORT</li> </ul>			
HPE DL360 Gen 10 Servers	8*	20	40
Total Rack Space	8U	20U	40U
NVMe per Server	4	8	10
NVMe Count	32	160	400
Raw Capacity** (TB)	102	512	1280
Usable Capacity** (TB)	55	364	910
IOPS Performance (millions)	2.5M	8.7M	17.4M
Bandwidth (GB/sec)	30	160	320

\* - Minimum configuration      \*\* - Rounded to nearest number with N+2 data protection

### Storage Server Configuration (Single Node Per Server Chassis)

COMPONENTS	SPECIFICATIONS	QUANTITY
Chassis	HPE DL360 Gen10 Premium 10NVMe CTO Server	1
CPU(s)	HPE DL360 Gen10 Intel® Xeon-Gold 6126 (2.6GHz/12-core/125W)	2
RAM	HPE 16GB (1x16GB) Single Rank x8 DDR4-2666 CAS-19-19-19 Registered Smart Memory Kit	12
Networking	HPE InfiniBand EDR/Ethernet 100Gb 1-port 840QSFP28 Adapter*	1
SSD(s)	HPE 3.2TB NVMe x4 Lanes Mixed Use SFF (2.5in) SCN 3yr Wty Digitally Signed Firmware SSD**	4†
Boot Drive	HPE 480GB SATA 6G Mixed Use M.2 2280 3yr Wty Digitally Signed Firmware SSD	2
1GbE Mgmt. NIC	HPE 1 Gb 331i Ethernet adapter 4-ports per controller (embedded, standard)	1

\* Recommend Quantity 2 adapters for Midrange and High-end configurations to meet performance estimates

\*\* Other Mixed-use Performance NVMe options include 1.6TB

† Midrange configuration contains quantity 8 per server, high-end quantity 10

Configuration details subject to change without notice. Please contact WekaIO for custom configuration details



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