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Atrium

Building Blocks of HPE SMB Solutions

A break down

Start with complete, validated hardware and software stacks

Software-defined storage	Windows Server + StorMagic	Windows Server Datacenter (Storage Spaces Direct)	VMware vSAN VMware vSphere
Operating system (OS) / Hypervisor	Windows Server	Windows Server (Hyper-V)	Windows Server IoT

VMware vSphere appears in the Operating system row under the rightmost column.

Hardware management	iLO Standard	iLO Advanced	iLO Standard/iLO Advanced Instant On Mobile App

Hardware

Servers
Storage
Networking
Backup

HPE SMB Solutions
HPE SMB Solutions
HPE SMB Solutions

Flex Offers

Purchase with confidence

Security you can count on

Fast delivery

Extensive enablement

HPE SMB Solutions

General Purpose

Small Office Deployment
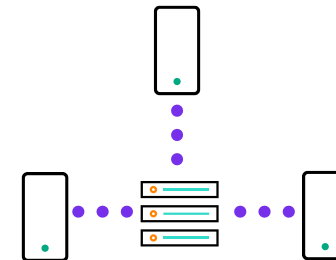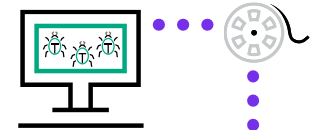
Virtualization

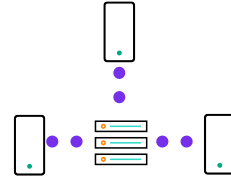Database & Applications

Remote Workers

Shared Storage

Hyperconverged Infrastructure (HCI)

Backup & Recovery

Virtualization

a HPE SMB Solution

Virtualization – Run multiple applications on a single server
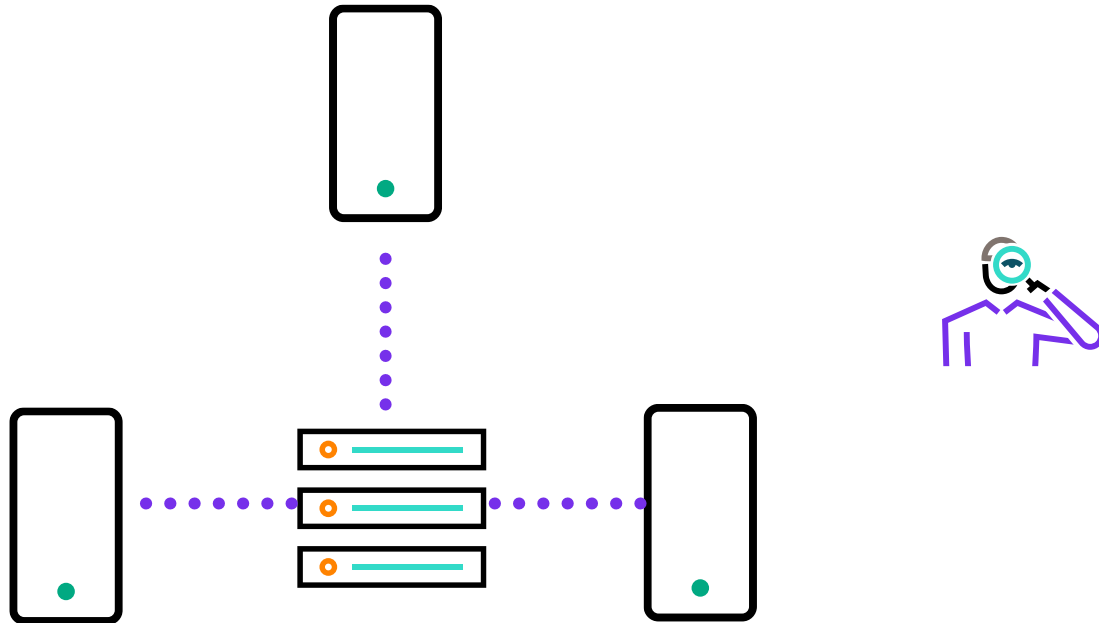
Challenges

- Supporting an increasing number of workloads
- Limited budget
- Limited in-house IT skills
- Decrease server sprawl and power costs

Virtualization – Run multiple applications on a single server
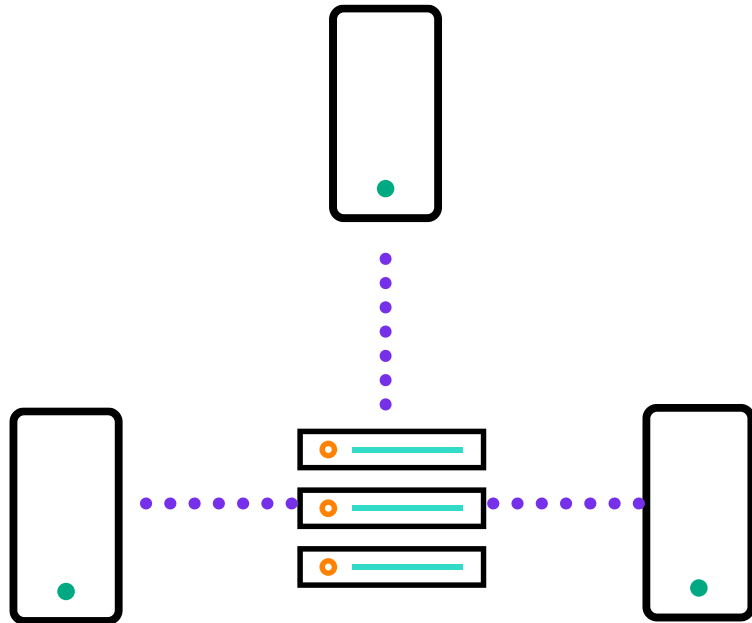
Benefits

- Run multiple applications on a single server
- Solves the underutilized server issue
- Space and budget of a single server
- Reduce unexpected interruptions or unavailability

HPE Small Business Solutions for Virtualization
Run multiple applications on a single server

HPE ProLiant Gen10 Plus

Support up to 33 vCPUs

Micro to large solutions, starting with
HPE ProLiant MicroServer Gen10 Plus v2
to DL380 Gen10 Plus

HPE ProLiant Gen11

Support up to 92 vCPUs

Small to extra large solutions, starting with
HPE ProLiant ML110 Gen11
to DL385 Gen11

Microsoft Hyper-V or VMware® vSphere®

Choice of hypervisor

Optional Veeam® Enterprise Backup &
Replication™
HPE Cloud Volumes Backup

Database & Applications

a HPE SMB Solution

Database & Applications – Host line-of-business apps and data on-site

Challenges

- Keep pace with growing database sizes
- High costs of hosting databases and applications in the cloud
- Slow application performance
- Security of data and applications is out of business' control

Database & Applications – Host line-of-business apps and data on-site

Benefits

- On-site solution
- Greater control and security over database and applications
- Improve application performance
- Avoiding frequent internet outages or slowdowns
- Avoiding costly cloud-based services

HPE Small Business Solutions for Database & Applications
Host line-of-business apps and data on-site

Database

Database optimized configurations feature
Low core-count / high frequency CPU's with
mixed-use solid-state drives (SSDs)

Choice of HPE ProLiant Gen10 Plus servers
from micro (2X 960GB **SATA MU SSD** and **4c**)
to extra-large Gen11 (6 X960GB **SATA MU SSD** and **16c**)
configurations

Applications

Application optimized configurations feature
Mid core-count / Mid-frequency CPU with
lower cost **read-intensive** SSDs

Choice of HPE ProLiant Gen10 Plus servers
small (2X 960GB SATA **RI SSD** and **4c**)
and Large (3 X 960GB **RI SSD** and **32c**) configurations

Hybrid cloud ready: Microsoft® Azure® and partner cloud services

HPE SMB Solutions for Database & Applications

Host line-of-business apps and data on-site

Database

- **High-frequency financial applications**

- **Online digital** marketing / **warehouse stock management**

- Enterprise resource planning **(ERP)** and customer relationship management **(CRM) data storage**

- Applications that have **integrated databases** or store the application data within the application file system

- **Highly dynamic OLTP databases** for applications that use an external database

Applications

- **Small business accounting/tax apps**

- Industrial **warehouse inventory**

- Small retail / **point of sale** (POS)

- Web app front end

- **Light to medium** graphical applications (media, geoscience, architectural)

- **Small** manufacturing Internet of Things (IoT)

Configuration guide

HPE Small Business Solutions for Virtualization

Contents

Table 1. Sizing for HPE Small Business Solutions for VM

Platform	Solution Capacity*
Standard Virtualization Solutions—featuring hard disk drive storage media and 2nd generation processors	
HPE ProLiant MicroServer Gen10 Plus	Starting at 4 vCPU/4 TB HDD
HPE ProLiant ML30 Gen10	Starting at 4 vCPU/4.8 TB HDD
HPE ProLiant ML110 Gen10	Starting at 10 vCPU/6 TB HDD
HPE ProLiant ML350 Gen10	Starting at 13 vCPU/6 TB HDD
HPE ProLiant DL20 Gen10	Starting at 7 vCPU/4.8 TB HDD
HPE ProLiant DL160 Gen10	Starting at 10 vCPU/4.8 TB HDD
HPE ProLiant DL180 Gen10	Starting at 13 vCPU/4.8 TB HDD
HPE ProLiant DL360 Gen10	Starting at 13 vCPU/4.8 TB HDD
HPE ProLiant DL380 Gen10	Starting at 32 vCPU/12 TB HDD
Performance Virtualization Solutions—featuring solid-state drive storage media and 3rd generation processors	
HPE ProLiant DL325 Gen10 Plus v2	Starting at 22 vCPU/3.84 TB SSD
HPE ProLiant DL325 Gen10 Plus v2	Starting at 33 vCPU/4.8 TB SSD
HPE ProLiant DL365 Gen10 Plus	Starting at 22 vCPU/3.84 TB SSD
HPE ProLiant DL365 Gen10 Plus	Starting at 45 vCPU/7.68 TB SSD
HPE ProLiant DL385 Gen10 Plus v2	Starting at 45 vCPU/7.68 TB SSD
See also highly available HPE SMB Solutions	
Shared Storage Virtualization Solutions	
HPE MSA 1060 iSCSI/HPE ProLiant DL360 Gen10	Starting at 13 vCPU (per node)/14.4 TB HDD
HPE MSA 2060 iSCSI/HPE ProLiant DL360 Gen10	Starting at 16 vCPU (per node)/7.2 TB HDD
Hyperconverged Infrastructure Virtualization Solutions	
HPE ProLiant DL180 Gen10	Starting at 13 vCPU/4.8 TB (per node—minimum 2 nodes)
HPE ProLiant DL360 Gen10	Starting at 13 vCPU/4.8 TB (per node—minimum 2 nodes)
HPE ProLiant DL380 Gen10	Starting at 33 vCPU/9.6 TB (per node—minimum 2 nodes)
HPE ProLiant ML350 Gen10	Starting at 13 vCPU/4.8 TB (per node—minimum 2 nodes)

Note:
* vCPUs are available for guest VMs after reserving physical cores. Storage capacity is the raw total data storage before configuring RAID

Table 3. HPE Small Business Standard Solutions for Virtualization technical specifications (continued)

Platform	DL20 Gen10 Plus	DL160 Gen10	DL180 Gen10	DL360 Gen10	DL380 Gen10
Solution Capacity*	7 vCPU/3.88 TB	10 vCPU/4.8 TB	13 vCPU/4.8 TB	13 vCPU/4.8 TB	32 vCPU/12 TB
Form Factor	1U Rack Server 4 x SFF Hot-Plug bays	1U Rack Server 8 x SFF Hot-Plug bays	2U Rack Server 8 x SFF Hot-Plug bays	1U Rack Server 8 x SFF Hot-Plug bays	2U Rack Server 8 x SFF Hot-Plug bays
Processor	Intel Xeon E-2336 (6-core/3.4 GHz)	Intel Xeon Scalable 4208 (8-core/2.1 GHz)	Intel Xeon Scalable 4210 (10-core/2.4 GHz)	Intel Xeon Scalable 4210R (10-core/2.4 GHz)	2 x Intel Xeon Scalable 4214 (12-core/2.2 GHz)
Memory	4 x 16 GB	6 x 16 GB	6 x 16 GB	6 x 16 GB	12 x 16 GB
OS Storage	2 x 300 GB SAS HDD	2 x 240 GB RI SATA SSD	2 x 240 GB RI SATA SSD	2 x 240 GB RI SATA SSD	2 x 240 GB RI SATA SSD
Data Storage	2 x 2.4 TB SAS HDD	4 x 1.2 TB SAS HDD	4 x 1.2 TB SAS HDD	4 x 1.2 TB SAS HDD	5 x 2.4 TB SAS HDD
Disk Controller	HPE MR216i-a Gen10	HPE P408i-a Gen10	HPE P408i-a Gen10	HPE P408i-a Gen10	HPE P408i-a Gen10
Network Ports	2 x 1GbE Embedded (HPE iLO port shared)	2 x 1GbE Embedded 1 x 1GbE HPE iLO Embedded	2 x 1GbE Embedded 1 x 1GbE HPE iLO Embedded	4 x 1GbE FlexLOM 1 x 1GbE HPE iLO Embedded	4 x 1GbE FlexLOM 1 x 1GbE HPE iLO Embedded
Power Supply	2 x 500W	2 x 500W	2 x 500W	2 x 500W	2 x 800W
Operating System	Microsoft Windows Server 2022/2019 Standard*** VMware vSphere Essentials	Microsoft Windows Server 2022/2019 Datacenter VMware vSphere Essentials	Microsoft Windows Server 2022/2019 Datacenter VMware vSphere Essentials	Microsoft Windows Server 2022/2019 Datacenter VMware vSphere Essentials	Microsoft Windows Server 2022/2019 Datacenter VMware vSphere Essentials
Optional Software	HPE iLO Advanced HPE Secure Encryption	HPE iLO Advanced HPE Secure Encryption HPE SmartCache	HPE iLO Advanced HPE Secure Encryption HPE SmartCache	HPE iLO Advanced HPE Secure Encryption HPE SmartCache	HPE iLO Advanced HPE Secure Encryption HPE SmartCache
Solution Options	N/A	Scale-up Bundle (CPU, Memory, Disk) SmartCache Bundle (SATA MU SSD + HPE SmartCache)	Scale-up Bundle (CPU, Memory, Disk) SmartCache Bundle (SATA MU SSD + HPE SmartCache)	Scale-up Bundle (CPU, Memory, Disk) SmartCache Bundle (SATA MU SSD + HPE SmartCache)	SmartCache Bundle (SATA MU SSD + HPE SmartCache)
Archival/DR	HPE RDX External USB 3.0 Backup System 4TB Bundle Veeam Backup	HPE StoreEver MSL 1/8 Tape Autoloader Veeam Backup	HPE StoreEver MSL 1/8 Tape Autoloader Veeam Backup	HPE StoreEver MSL 1/8 Tape Autoloader Veeam Backup	HPE StoreEver MSL2024 Tape Library Veeam Backup

Configuration guide

HPE Small Business Solutions for Database and Application

Contents

Step 2: Choose your solution

Now that you know your solution type, you can easily select an HPE SMB Solution for Database and A selecting the configuration with the appropriate amount of storage. Note that solution capacity is a fu for storage.

Table 2 provides an overview of the current database solution portfolio, and Tables 3 and 4 provide solution portfolio.

Table 2. HPE SMB Solutions for Database (rack and tower)

	HPE ProLiant ML30 Gen10 Plus	HPE ProLiant ML110 Gen10	HPE ProLiant ML350 Gen10	HPE ProLiant DL20 Gen10 Plus	HPE ProLiant DL360 Gen10
Solution capacity	1.44 TB	2.4 TB	2.88 TB	1.92 TB	2.88 TB
Form factor	4U tower server 4 x LFF	4.5U tower server 8 x SFF	1U rack server 8 x SFF	1U rack server 4 x SFF	1U rack server 8 x SFF
Processor	Intel® Xeon® E-2314 (4 core / 2.8 GHz)	Intel Xeon Scalable 4208 (8 core / 2.1 GHz)	Intel Xeon Scalable 4210R (10 core / 2.4 GHz)	Intel Xeon E-2314 4 core / 2.8 GHz	Intel Xeon Scalab 4215R (8 core / 3.2 GHz
Memory	4 x 16 GB	6 x 16 GB	6 x 16 GB	4 x 16 GB	6 x 32 GB
Disk controller	Intel® VROC	HPE P408i-p	HPE P408i-a	Intel VROC	HPE P408i-a
OS disk	4 x 480 GB SATA RI SSD	2 x 240 GB SATA RI SSD	2 x 240 GB SATA RI SSD	2 x 480 GB SATA RI SSD	2 x 240 GB SAT/ RI SSD
Data disk	Data on boot volume	6 x 480 GB SATA MU SSD	4 x 960 GB SATA MU SSD	2 x 1.92 TB SATA MU SSD	4 x 960 GB SAT/ MU SSD
Network	2 x 1GbE	2 x 1GbE	4 x 1GbE	2 x 1GbE	4 x 1GbE
Power supply	1 x 350W	2 x 800W	2 x 800W	2 x 500W	2 x 800W
OS software				Microsoft Windows Server 2022 Stand Microsoft Windows Server 2019 Stand	

* Except HPE ProLiant ML30 Gen10 Plus and HPE ProLiant DL20 Gen10 Plus

Table 3. HPE SMB Solutions for Applications (rack)

	HPE ProLiant DL180 Gen10	HPE ProLiant DL20 Gen10 Plus	HPE ProLiant DL325 Gen10 Plus v2	HPE ProLiant DL360 Gen10	HPE ProLiant DL365 Gen10 Plus	HPE ProLiant DL380 Gen10
Solution capacity	1.44 TB	1.92 TB	2.88 TB	2.88 TB	2.88 TB	4.8 TB
Form factor	2U rack server 8 x SFF	1U rack server 4 x SFF	1U rack server 8 x SFF	1U rack server 8 x SFF	1U rack server 8 x SFF	2U rack server 8 x SFF
Processor	Intel Xeon Scalable 4210R (10 core / 2.4 GHz)	Intel Xeon E-2314 4 core / 2.8 GHz	AMD EPYC 7313P (16 core / 3.0 GHz)	Intel Xeon Scalable 4214R (12 core / 2.4 GHz)	AMD EPYC 7313 (16 core / 3.0 GHz)	Intel Xeon Scalable 6226R (16 core / 2.9 GHz)
Memory	2 x 16 GB	4 x 16 GB	2 x 32 GB	2 x 32 GB	4 x 32 GB	6 x 32 GB
Disk controller	HPE P408i-a	Intel VROC	HPE P408i-a	HPE P408i-a	HPE P408i-a	HPE P408i-a
OS disk	2 x 240 GB SATA RI SSD	2 x 480 GB SATA RI SSD	2 x 480 GB SATA RI SSD	2 x 240 GB SATA RI SSD	2 x 480 GB SATA RI SSD	2 x 240 GB SATA RI SSD
Data disk	4 x 480 GB SATA RI SSD	2 x 1.92 TB SATA RI SSD	4 x 960 GB SATA RI SSD	4 x 960 GB SATA RI SSD	4 x 960 GB SATA RI SSD	6 x 960 GB SATA RI SSD
Network	2 x 1GbE	2 x 1GbE	4 x 1GbE	4 x 1GbE	4 x 1GbE	4 x 1GbE
Power supply	2 x 500W	2 x 500W	2 x 500W	2 x 500W	2 x 800W	2 x 800W
OS software			Microsoft Windows Server 2022 Standard Microsoft Windows Server 2019 Standard*			

* Except HPE ProLiant DL20 Gen10 Plus

Table 4. HPE SMB Solutions for Applications (tower)

	HPE ProLiant ML30 Gen10 Plus	HPE ProLiant ML110 Gen10	HPE ProLiant ML350 Gen10
Solution capacity	1.44 TB	1.92 TB	2.88 TB
Form factor	4U tower server 4 x LFF	4.5U tower server 8 x SFF	4U tower server 8 x SFF
Processor	Intel Xeon E-2314 (4 core / 3.4 GHz)	Intel Xeon Scalable 4208 (8 core / 2.1 GHz)	Intel Xeon Scalable 4210R (10 core / 2.4 GHz)
Memory	2 x 16 GB	2 x 16 GB	4 x 16 GB
Disk controller	Intel VROC (embedded)	HPE P408i-a	HPE P408i-a
OS disk	4 x 480 GB SATA RI SSD	2 x 240 GB SATA RI SSD	2 x 240 GB SATA RI SSD
Data disk	Data on boot volume	5 x 480 GB SATA RI SSD	4 x 960 GB SATA RI SSD
Network	2 x 1GbE	2 x 1GbE	4 x 1GbE
Power supply	1 x 350W	2 x 800W	2 x 800W
OS software		Microsoft Windows Server 2022 Standard Microsoft Windows Server 2019 Standard*	

* Except HPE ProLiant ML30 Gen10 Plus