



HPE SMALL BUSINESS SOLUTIONS FOR SMALL OFFICE DEPLOYMENT

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USE THE IQQUOTE SOLUTIONS TILE

iQuote is an online sales enablement program that simplifies the process of configuring, quoting, and purchasing HPE products and solutions from a single location. You can access the universal version via iquote.hpe.com/ or contact your preferred HPE Authorized Partner or Distributor for live pricing.

BUILD YOUR SOLUTION

Step 1: Size your solution

HPE Small Business Solutions for Small Office Deployment are sized by the number of users and/or devices they will support. The following table shows the available configurations, with guidance on which base configuration to select based on the number of users/devices you need to support.

TABLE 1. HPE Small Business Solutions for Small Office Deployment

Users/devices supported	Server used for base configuration	Switches and access points
Up to 10 on-premises users (two devices per user)	HPE ProLiant MicroServer Gen10 Plus	1 x Aruba Instant On AP11 Wireless Access Points
Up to 25 on-premises users (two devices per user) or Up to 15 on-premises users and 10 remote users	HPE ProLiant ML30 Gen10	1 x Aruba Instant On 1930 24 port PoE switch 2 x Aruba Instant On AP12 Wireless Access Points
Up to 100 users (two devices per user) or Up to 80 on-premises users and 20 remote users	HPE ProLiant DL20 Gen10	1 x Aruba 2530 8 port PoE switch 2 x Aruba 2530 48 port (non-PoE) switches 1 x Aruba Instant On AP15 Wireless Access Points 4 x Aruba Instant On AP12 Wireless Access Points

Step 2: Choose the right configuration and recommended options

Select the solution offer and elements for your business outcome and sizing needs

HPE Small Business Solutions consist of a base system plus offer elements. These combinations are the foundation for special pricing and are the starting point for building your solution configuration. After selecting the appropriate HPE Small Business Solution configuration for your business outcome and sizing requirements, you may also wish to expand its capabilities by adding recommended options.

The configurations for HPE Small Business Solutions were designed for cost-effectiveness and structured as building blocks for easy expandability. They are equipped with redundant HPE enterprise or midline drives for boot and data volumes for protection against disk failure. SAS drives provide faster data transfers for better performance and low latency and can be used for storage when database deployment on a guest virtual machine (VM) is expected. SATA drives provide economical storage capacity. HPE recommends combining multiple drives in hardware or software RAID for increased availability and data protection. And HPE Small Business Solutions using the HPE ProLiant ML30 and DL20 Gen10 Server are equipped with redundant power supplies for additional availability protection.

Step 3: Configure HPE Small Business Solutions for Small Office Deployment

The HPE Small Office Deployment server is equipped with sufficient CPU, memory, and storage resources to provide services up to the stated solution capacity.

Operating system and storage considerations

The Windows Server operating system (OS) and data volumes are intended to be installed on RAID-protected volumes.

The MicroServer has four identical 1 TB SATA HDDs so you have the option of configuring them all together as a single RAID 5 volume, or splitting them into two RAID 1 volumes.

The ML30 should be configured using the two 300 GB SAS drives in RAID 1 for the OS volume and the four 1.2 TB SAS drives in a RAID 5 volume for data storage.

The DL20 should be configured with the two 240 GB SSDs in a RAID 1 configuration for the OS volume and the two 2.4 TB SAS drives in a RAID 1 volume for data storage. The DL20 Small Office Deployment solution is also available with an optional expanded storage configuration which includes an HPE StoreEasy 1460 network attached storage appliance with 8 TB (6 TB usable) of fast, RAID-protected storage incorporating advanced file management features that are typically unavailable in low-cost appliances like deduplication and complete Microsoft Windows Server infrastructure integration, including Microsoft Azure.



[HPE RDX Removable Disk Backup System](#) is a recommended “Best Practice” option for all HPE Small Office Deployment solutions. Ransomware and other cyberattacks frequently target cloud and local disk backups as well as main data. The HPE RDX features removable storage media, which can be “air-gapped” to prevent backup corruption, and in-turn save your business from having to pay a nasty ransom to get your data back. The HPE RDX provides reliable disk-based backup and recovery with unmatched portability, fast recovery, and easy integration.¹ The HPE RDX Removable Disk Backup System is a simple, cost-effective way to back up and protect critical data. And you can complement local RDX backups with a cloud backup strategy so you can recover quickly, even if you lose your entire site or local backup copies.

TABLE 2. Base system plus offer elements

	MicroServer Gen10 Plus	ML30	DL20
Solution capacity	Up to 10 on-premises users (two devices per user)	Up to 25 on-premises users (two devices per user) or 15 on-premises users and 10 remote users	Up to 100 on-premises users (two devices per user) or 80 on-premises users and 20 remote users
System	Micro Tower 4 LFF NHP drive bays	4U Tower 8 SFF Hot plug drive bays	1U Rack 4 SFF Hot Plug drive bays
Processor	1 x Intel® Xeon® E-series 3.4 GHz/4-core	1 x Intel Xeon E-series 3.4 GHz/4-core	1 x Intel Xeon E-series 3.4 GHz/6-core
Memory	1 x 16 GB PC4-2666	2 x 16 PC4-2666	2 x 16 PC4-2666
HDDs	4 x 1 TB 6G 7.2K SATA HDDs	4 x 1.2 TB 12G 10K SAS HDDs 2 x 300 GB 12G 10K SAS HDDs	2 x 2.4 TB 12G 10K SAS HDDs 2 x 240 GB 6G SATA SSDs
Disk controller	HPE Smart Array E208i-p Gen10	HPE Smart Array P408i-p Gen10	HPE Smart Array E208i-a Gen10
Network	4 x ports at 1GbE 1 x port iLO Enablement Kit	2 x ports at 1GbE	2 x ports at 1GbE
Power supply	1 x 180W external power supply	2 x 500W Redundant PSU	2 x 500W Redundant PSU
Expanded storage	N/A	N/A	(Optional) HPE StoreEasy 1460 8 TB SATA NAS
Archival and disaster recovery	1 x RDX Removable Disk Backup System w/2 TB cartridge (USB 3.0 connectivity) HPE Cloud Volumes Backup	1 x RDX Removable Disk Backup System w/2 TB cartridge (USB 3.0 connectivity) HPE Cloud Volumes Backup	1 x RDX Removable Disk Backup System w/4 TB cartridge (USB 3.0 connectivity) HPE Cloud Volumes Backup
Switch	(Optional) 1 x Aruba Instant On 1930 8 port PoE 1GbE Switch	1 x Aruba Instant On 1930 24 port PoE 1GbE Switch	1 x Aruba 2530 8 port PoE 1GbE switch 2 x Aruba 2530 48 port non-PoE 1GbE switches
Access point	1 x Aruba Instant On AP11 Wireless Access Points (Optional) 1 x Aruba Instant On AP11D Desktop Wireless Access Point	2 x Aruba Instant On AP12 Wireless Access Points (Optional) 1 x Aruba Instant On AP15 Wireless Access Point	1 x Aruba Instant On AP15 Wireless Access Point 4 x Aruba Instant On AP12 Wireless Access Points
Software*	Aruba Instant On mobile app HPE Cloud Volumes Backup and Veeam Backup and Recovery**	Aruba Instant On mobile app HPE Cloud Volumes Backup and Veeam Backup and Recovery**	Aruba Instant On mobile app Aruba Central HPE Cloud Volumes Backup and Veeam Backup and Recovery**
iLO Advanced (recommended)			
Windows Server 2019 Standard ROK, Windows Server RDS CALs (sold separately)			
ClearOS™ Silver subscription, ClearOS Marketplace apps (can be used in a Microsoft Hyper-V instance as a gateway appliance).			

* ClearOS is downloaded from ClearCenter™, and ClearOS Marketplace apps are optional and may either be free or be fee-based. Refer to the [ClearOS Marketplace](#) for details. ClearOS subscriptions can be purchased from either ClearCenter or HPE; all ClearOS software support is delivered by ClearCenter. Microsoft Windows Server is installed from your media or media purchased from HPE.

** Not supported on ClearOS.

NOTE

These configurations represent the solution offers and recommended options.

¹ HPE RDX is supported only on solution configurations with Windows Server. RDX is not supported in ClearOS.



Network installation considerations

The ML30 and DL20 HPE Small Business Solution for Small Office Deployment includes a wired Ethernet switch with PoE and two or more wireless access points. The access points require power that can be supplied via the Ethernet cable connected to one of the PoE ports on the Small Office Deployment switch, or via optional external power supply (ordered separately). The MicroServer Small Office Deployment includes a single wireless access point with external power supply that can be connected to existing ISP equipment, or you can add an optional switch with PoE to provide additional wired connectivity and provide power to the wireless access point.

A simple deployment of the HPE Small Office Deployment network components would be to connect the switch to the customer's internet router, the Small Office Deployment server, the Small Office Deployment wireless access points, and all the PCs, and other network devices.

A more secure—but complex—deployment is also possible. The HPE Small Office Deployment switch can support multiple network segments, called virtual LANs (VLANs). In this mode, the internet router (as well as any public facing hosts such as email or VDI gateways) is connected to the VLAN designated for unsecure external network traffic, such as a DMZ. Internal PCs and other network devices to be protected are connected to the VLAN designated for secure internal network traffic. The Small Office Deployment server could be configured to host a ClearOS VM running a secure gateway application that acts as a firewall between the secure VLAN segment and the unsecure VLAN segment.

Server configuration considerations

The HPE Small Business Solution for Small Office Deployment is intended to be deployed as a single server that provides all of the services typically used by a small office, which could include the following:

- Network infrastructure services such as Active Directory, domain name services (DNS), and dynamic host configuration protocol (DHCP) services
- Network file and print services
- Line of Business (LoB) application hosting
- Remote desktop services (RDS) (Note: Requires additional licensing)
- Disaster recovery and network security

NOTE

Remote desktop services (RDS) provide remote users access to virtual desktops running on IT-controlled operating systems. You can run a single Windows Server RDS instance and users access it from a supported terminal client or their Windows PC using Windows Remote Desktop client. Or you can deploy a multi-server instance to enable Remote Desktop access from virtually any device anywhere. All processing takes place on the server itself and not on the local user machine, and multiple user instances run simultaneously on the server.

Each of the services below can impact, or be dependent on, the other services, and can be configured in a variety of ways to meet the needs of the business environment. One possible strategy would be to deploy some or all of these services in one or more Microsoft Hyper-V VMs. For example, the HPE Small Office Deployment server running Windows Server Standard would host:

- Either on the bare-metal Windows OS, or in a Hyper-V VM:
 - Network infrastructure services (Active Directory, DNS, and DHCP)
 - File and print services
 - LoB application or database (Note: Some apps or databases may not be able to run in a VM)
- Windows Hyper-V to host the following VMs:
 - Gateway application (ClearOS)
 - Windows RDS (running RDS in a VM helps prevent main system crash if a remote user happens to crash their RDS instance)
 - LoB application or database (Note: Some apps or databases may not be able to run in a VM)

NOTE

Windows Server Standard allows for up to two VMs. If more VMs are required to meet a complex deployment need, additional Windows licensing is required. For every two VMs needed above the initial two, you must purchase Windows "Additional Cores" licensing equivalent to the number of all cores in the system. However, the HPE Small Office Deployment servers should not be configured with more than four VMs as this will likely result in poor performance depending on the VM workloads. Consider an HPE Small Business Solution for Virtualization if more than four VMs are needed. The additional Small Office Deployment networking and storage components are building blocks and can be added to a virtualization solution just as easily.



Storage considerations

HPE StoreEasy 1460 models come with Microsoft Windows Storage Server 2016 Standard Edition preinstalled from the factory on the four internal large form factor (LFF) drives. The HPE StoreEasy 1460 is built on an HPE ProLiant DL360 Gen10 Server and includes a rail kit.

HPE RDX integrates easily into HPE Small Business Solutions for Small Office Deployment. Compatibility across various operating systems and virtualization platforms makes RDX simple to adapt into any small business environment. You can also use Fixed Disk mode for automated backups via the native Windows Server OS.

Hybrid cloud considerations

Extend native HPE Cloud Volumes Backup capabilities to enable cloud-based recovery, DR on demand, and instant migration: VM to VM format, cloud to cloud, and to/from on-premises and back. If you have an existing backup ISV like Veeam/Commvault, this service is plug-and-play enabling you to instantly start backing to cloud simply by pointing your backup target to HPE Cloud Volumes Backup.

The HPE Small Office Deployment solution can be easily extended a hybrid cloud with cloud services from Microsoft Azure or a managed service provider.

Step 4: Don't forget services**HPE Pointnext Services**

A services partner built for your business today and tomorrow, HPE Pointnext Services enables you to meet availability commitments with a variety of coverage levels and response times, and easily connect to HPE for faster problem resolution. HPE Pointnext Services offers comprehensive hardware and software services to help increase the availability of IT infrastructure and extend in-house IT staff with HPE expertise. You can do more with less by leveraging service tools with built-in simplification and remote management tools.

Service offerings include:

- HPE Foundation Care
- HPE Proactive Care
- HPE Proactive Care Advanced
- HPE Installation and Deployment Services

NOTE

HPE recommends Foundation Care 24x7 as the minimum recommended service level for HPE Small Business Solutions.

Step 5: Choose your flexible monthly payment option**HPE Financial Services**

Optimize your IT investment strategy with new ways to acquire, pay for, and use technology, in lock-step with your business and transformation goals. hpe.com/solutions/hpefinancialservices

HPE Subscription Services allows SMBs to select a complete solution from predefined options that include best-in-class compute, storage, and networking hardware; software; accessories; and worry-free support services for a predictable monthly subscription fee. No large, up-front purchase to make—just subscribe, use, return, and renew. No worries about what to do with old equipment. Need to expand? Simply add more hardware or services. HPE Channel Partners can offer hardware, software, and support services in a single solution and deliver it in one simplified subscription contract.

The HPE Technology Refresh program replaces ownership with predictable monthly or quarterly payments, and provides for a shorter, routine refresh cycle every 24 to 48 months. SMBs don't have to be locked into holding on to aging IT equipment and delaying upgrades. With HPE Technology Refresh, SMBs can have the IT they need to meet business goals and pay overtime to conserve cash, saving 10% to 15% over three or four years.



GET READY TO CONNECT MORE

HPE Small Business Solutions lowers the cost of accessing easy-to-use solutions without sacrificing security. To learn more about HPE Small Business Solutions, visit the resources included in this document, or contact your HPE or authorized partner representative.

RESOURCES

- [HPE Small Business Solutions Deployment guide—Windows-based solutions](#)
- [ProLiant Server QuickSpecs](#)
- [ProLiant Server Options](#)
- [IT Support Services](#)
- [HPE Operational Support Services](#)
- [iQuote](#)

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