

# HPE Small Business Solutions for Small Office Deployment

Simple, secure, and affordable solutions designed just for SMB use cases

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## HPE point of view

### Small business IT should be simple, secure, and affordable

A digital transformation is taking place, fueled by Big Data, mobility, the [Internet of Things \(IoT\)](#), social media, and cloud technologies. Applications are at the heart of this transformation—and for small to midsize businesses (SMBs) to be successful, speeding time to value with the new generation of applications and data will require on-premises IT that is easy to manage and delivers greater performance and security at an acceptable cost.

### HPE Small Business Solutions for Small Office Deployment

[HPE Small Business Solutions](#) are based on HPE ProLiant servers, powered by Intel® Xeon® processors, and preconfigured for SMB use cases. They are designed to be a one-stop shop for packaged solutions including hardware, software, services, and top-selling HPE ProLiant options, ready-to-go for foundational SMB use cases. With HPE Small Business Solutions, you can easily adopt a modern infrastructure that is simple, secure, and affordable.

## Building a solution using iQuote

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](https://iquote.hpe.com) or contact your preferred HPE Authorized Partner or distributor for live pricing.

HPE Small Business Solutions will be available in iQuote in Q3 2019. A set of custom filters enables you to quickly find the HPE SMB Solution Offer that best meets your needs. HPE Small Business Solutions can be customized by adding recommended options and HPE value-added services for an optimal experience.

HPE Small Business Solutions are part of the HPE SMB Offers portfolio, which come in three key groupings to maximize choice:

- **Entry offer** = A simple entry-level server solution with the lowest cost
- **Performance offer** = More power and features with top-selling configurations at a competitive price
- **Solution offer** = Powerful and integrated solution driven by workload demands

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HPE Small Business Solution offers are regionally released as “Smart Buy Express Offers” in the U.S. and Canada, “Top Value Offers” in Europe, and “Intelligent Buy Offers” in Asia Pacific and Japan.

HPE Small Business Solution Elements are regionally released as “Smart Buy Express Offer Elements” in the U.S. and Canada, “Top Value Offer Elements” in Europe, and “Intelligent Buy Offer Elements” in Asia Pacific and Japan.



## 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.

#### HPE Small Business Solutions for Small Office Deployment

Users/devices supported	Server used for base configuration	Switches and access points
Up to 25 users (2 devices per user)	HPE ProLiant ML30 Gen10	1 x OfficeConnect 1920s 24 port (12 PoE) Switch 2 x OfficeConnect OC20 Wireless Access Points
Up to 100 users (2 devices per user)	HPE ProLiant DL20 Gen10 with HPE StoreEasy 1660	2 x Aruba 2530 48 port (24 PoE) Switches 5 x Aruba AP-303 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 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 volume 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 DL20 Gen10 can be equipped with redundant power supplies for additional availability protection.

#### 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 Microsoft® Windows Server® operating system (OS) is intended to be installed on a RAID-protected volume.

The DL20 Small Office Deployment server can be configured with two drives in a RAID 1 configuration for the OS volume and two drives in a RAID 1 array for data storage. Additionally, the DL20 Small Office Deployment solution is also available with an expanded storage configuration which includes an HPE StoreEasy 1660 network storage appliance with 16 TB of fast, redundant storage incorporating advanced file management features like deduplication and complete Windows® infrastructure integration that is not typically available in low-cost appliances.

The ML30 Small Office Deployment server can be configured using two of the four drives in RAID 1 for the OS volume and two drives in a RAID 1 volume for data storage, or by combining all four drives in a single RAID 5 array for more efficient drive utilization but at a small decrease in performance.



## Base system plus offer elements

	ML30 Gen10	DL20 Gen10 with StoreEasy 1660
<b>Solution capacity</b>	Up to 25 users (2 devices per employee)	Up to 100 users (2 devices per employee)
<b>System</b>	4U tower 4 x LFF hot-plug bays	1U rack 4 x SFF hot-plug bays
<b>Processor</b>	1 x Intel Xeon E-2124 (4 core)	1 x Intel Xeon E-2136 (6 core)
<b>Memory</b>	1 x 16 GB PC4-2666	1 x 16 GB PC4-2666
<b>HDDs</b>	4 x 1 TB 6G 7.2K SATA	2 x 2.4 TB 12G 10K SAS 2 x 300 GB 12G 10K SAS
<b>Disk controller</b>	HPE Smart Array E208i-p Gen10	HPE Smart Array E208i-a Gen10
<b>Network</b>	2 x ports at 1GbE	2 x ports at 1GbE
<b>Power supply</b>	1 x 350W non-redundant	2 x 500W
<b>Expanded storage</b>	N/A	HPE StoreEasy 1660 16 TB SAS Storage
<b>Switch</b>	HPE OfficeConnect 1920S 24G 2SFP PoE+ 185W	2 x Aruba 2530 48G Power over Ethernet (PoE)+
<b>Access point</b>	2 x HPE OfficeConnect OC20 2x2 Dual Radio 802.11ac (U.S.) OfficeConnect mobile app	5 x Aruba AP-303 Dual 2x2:2 MU-MIMO Radio Internal Antennas Unified Campus Aruba Central
<b>Software</b>	Microsoft Windows Server 2019 Standard—16-Core License (includes RDS software but clients access licenses are sold separately) ClearOS™ Silver subscription, ClearOS Marketplace apps (in a Microsoft Hyper-V® instance as a gateway appliance)* HPE iLO Advanced	

**Note:** These configurations represent the solution offers and recommended options.

\* 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.

## Network Installation considerations

The 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, which can be supplied by a single cable connected to one of the PoE ports on the Small Office Deployment switch.

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

A more secure—but complex—deployment is also possible. The Small Office Deployment switch can support multiple network segments, called virtual LANs (VLANs). In this mode, the internet router is connected to the VLANs designated for unsecure external network traffic, while the PCs and other network devices to be protected are connected to the VLAN designated for secure internal network traffic. The Small Office Deployment server would 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 application hosting
- Remote desktop services (RDS)
- Disaster recovery and network security



Each of these services 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 of these services in one or more Windows Hyper-V VMs. For example, the Small Office Deployment server running Windows Server Standard would host:

- Network infrastructure services (Active Directory, DNS, and DHCP)
- File and print services
- Line of business 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)
  - Line of business application or database (Note: Some apps or databases may not be able to run in a VM)

### Storage considerations

HPE StoreEasy 1660 models come with Microsoft Windows Storage Server 2016 Standard Edition preinstalled from the factory on two M.2 SSDs. The HPE StoreEasy 1660 is built on an HPE ProLiant DL380 Gen10 server and includes a rail kit.

## Step 3: Don't forget services

### HPE Pointnext

A services partner built for your business today and tomorrow, HPE Pointnext 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 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

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### Note

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

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## Step 4: Choose your flexible monthly payment option

### HPE Financial Services

Purchasing new IT and keeping it current can be financially daunting. HPE is offering a better way for you to acquire and pay for the IT infrastructure you need.

**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 onto 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.



### Simple, secure, affordable

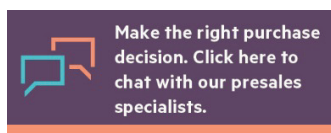
HPE Small Business Solutions lower the cost of accessing easy-to-use solutions without sacrificing security. To learn more about HPE Small Business Solutions, visit the resources included in this document, or contact your HPE or authorized Partner representative.

### Resources

- Solution brief: [HPE Small Business Solutions for Small Office Deployment](#)
- [Small Office Deployment Living Lab Demo](#)
- [ProLiant Server QuickSpecs](#)
- [ProLiant Server Options](#)
- [IT Support Services](#)
- [Get connected](#)
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[hpe.com/info/smb](https://hpe.com/info/smb)

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