



Installing the HP ProLiant DL360 G9 Server

Release 3.0
Issue 1
November 2015

Notice

While reasonable efforts have been made to ensure that the information in this document is complete and accurate at the time of printing, Avaya assumes no liability for any errors. Avaya reserves the right to make changes and corrections to the information in this document without the obligation to notify any person or organization of such changes.

Documentation disclaimer

"Documentation" means information published by Avaya in varying mediums which may include product information, operating instructions and performance specifications that Avaya may generally make available to users of its products and Hosted Services. Documentation does not include marketing materials. Avaya shall not be responsible for any modifications, additions, or deletions to the original published version of documentation unless such modifications, additions, or deletions were performed by Avaya. End User agrees to indemnify and hold harmless Avaya, Avaya's agents, servants and employees against all claims, lawsuits, demands and judgments arising out of, or in connection with, subsequent modifications, additions or deletions to this documentation, to the extent made by End User.

Link disclaimer

Avaya is not responsible for the contents or reliability of any linked websites referenced within this site or documentation provided by Avaya. Avaya is not responsible for the accuracy of any information, statement or content provided on these sites and does not necessarily endorse the products, services, or information described or offered within them. Avaya does not guarantee that these links will work all the time and has no control over the availability of the linked pages.

Warranty

Avaya provides a limited warranty on Avaya hardware and software. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language, as well as information regarding support for this product while under warranty is available to Avaya customers and other parties through the Avaya Support website: <https://support.avaya.com/helpcenter/getGenericDetails?detailId=C20091120112456651010> under the link "Warranty & Product Lifecycle" or such successor site as designated by Avaya. Please note that if You acquired the product(s) from an authorized Avaya Channel Partner outside of the United States and Canada, the warranty is provided to You by said Avaya Channel Partner and not by Avaya.

"Hosted Service" means a hosted service subscription that You acquire from either Avaya or an authorized Avaya Channel Partner (as applicable) and which is described further in Hosted SAS or other service description documentation regarding the applicable hosted service. If You purchase a Hosted Service subscription, the foregoing limited warranty may not apply but You may be entitled to support services in connection with the Hosted Service as described further in your service description documents for the applicable Hosted Service. Contact Avaya or Avaya Channel Partner (as applicable) for more information.

Hosted Service

THE FOLLOWING APPLIES IF YOU PURCHASE A HOSTED SERVICE SUBSCRIPTION FROM AVAYA OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE), THE TERMS OF USE FOR HOSTED SERVICES ARE AVAILABLE ON THE AVAYA WEBSITE, <https://support.avaya.com/LICENSEINFO> UNDER THE LINK "Avaya Terms of Use for Hosted Services" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, AND ARE APPLICABLE TO ANYONE WHO ACCESSES OR USES THE HOSTED SERVICE, BY ACCESSING OR USING THE HOSTED SERVICE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE DOING SO (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THE TERMS OF USE. IF YOU ARE ACCEPTING THE TERMS OF USE ON BEHALF A COMPANY OR OTHER LEGAL ENTITY, YOU REPRESENT THAT YOU HAVE THE AUTHORITY TO BIND SUCH ENTITY TO THESE

TERMS OF USE. IF YOU DO NOT HAVE SUCH AUTHORITY, OR IF YOU DO NOT WISH TO ACCEPT THESE TERMS OF USE, YOU MUST NOT ACCESS OR USE THE HOSTED SERVICE OR AUTHORIZE ANYONE TO ACCESS OR USE THE HOSTED SERVICE. YOUR USE OF THE HOSTED SERVICE SHALL BE LIMITED BY THE NUMBER AND TYPE OF LICENSES PURCHASED UNDER YOUR CONTRACT FOR THE HOSTED SERVICE, PROVIDED, HOWEVER, THAT FOR CERTAIN HOSTED SERVICES IF APPLICABLE, YOU MAY HAVE THE OPPORTUNITY TO USE FLEX LICENSES, WHICH WILL BE INVOICED ACCORDING TO ACTUAL USAGE ABOVE THE CONTRACT LICENSE LEVEL. CONTACT AVAYA OR AVAYA'S CHANNEL PARTNER FOR MORE INFORMATION ABOUT THE LICENSES FOR THE APPLICABLE HOSTED SERVICE, THE AVAILABILITY OF ANY FLEX LICENSES (IF APPLICABLE), PRICING AND BILLING INFORMATION, AND OTHER IMPORTANT INFORMATION REGARDING THE HOSTED SERVICE.

Licenses

THE SOFTWARE LICENSE TERMS AVAILABLE ON THE AVAYA WEBSITE, <https://support.avaya.com/LICENSEINFO>, UNDER THE LINK "AVAYA SOFTWARE LICENSE TERMS (Avaya Products)" OR SUCH SUCCESSOR SITE AS DESIGNATED BY AVAYA, ARE APPLICABLE TO ANYONE WHO DOWNLOADS, USES AND/OR INSTALLS AVAYA SOFTWARE, PURCHASED FROM AVAYA INC., ANY AVAYA AFFILIATE, OR AN AVAYA CHANNEL PARTNER (AS APPLICABLE) UNDER A COMMERCIAL AGREEMENT WITH AVAYA OR AN AVAYA CHANNEL PARTNER. UNLESS OTHERWISE AGREED TO BY AVAYA IN WRITING, AVAYA DOES NOT EXTEND THIS LICENSE IF THE SOFTWARE WAS OBTAINED FROM ANYONE OTHER THAN AVAYA, AN AVAYA AFFILIATE OR AN AVAYA CHANNEL PARTNER; AVAYA RESERVES THE RIGHT TO TAKE LEGAL ACTION AGAINST YOU AND ANYONE ELSE USING OR SELLING THE SOFTWARE WITHOUT A LICENSE. BY INSTALLING, DOWNLOADING OR USING THE SOFTWARE, OR AUTHORIZING OTHERS TO DO SO, YOU, ON BEHALF OF YOURSELF AND THE ENTITY FOR WHOM YOU ARE INSTALLING, DOWNLOADING OR USING THE SOFTWARE (HEREINAFTER REFERRED TO INTERCHANGEABLY AS "YOU" AND "END USER"), AGREE TO THESE TERMS AND CONDITIONS AND CREATE A BINDING CONTRACT BETWEEN YOU AND AVAYA INC. OR THE APPLICABLE AVAYA AFFILIATE ("AVAYA").

Avaya grants You a license within the scope of the license types described below, with the exception of Heritage Nortel Software, for which the scope of the license is detailed below. Where the order documentation does not expressly identify a license type, the applicable license will be a Designated System License. The applicable number of licenses and units of capacity for which the license is granted will be one (1), unless a different number of licenses or units of capacity is specified in the documentation or other materials available to You. "Software" means computer programs in object code, provided by Avaya or an Avaya Channel Partner, whether as stand-alone products, pre-installed on hardware products, and any upgrades, updates, patches, bug fixes, or modified versions thereto. "Designated Processor" means a single stand-alone computing device. "Server" means a Designated Processor that hosts a software application to be accessed by multiple users. "Instance" means a single copy of the Software executing at a particular time: (i) on one physical machine; or (ii) on one deployed software virtual machine ("VM") or similar deployment.

License type(s)

Designated System(s) License (DS). End User may install and use each copy or an Instance of the Software only on a number of Designated Processors up to the number indicated in the order. Avaya may require the Designated Processor(s) to be identified in the order by type, serial number, feature key, Instance, location or other specific designation, or to be provided by End User to Avaya through electronic means established by Avaya specifically for this purpose.

Concurrent User License (CU). End User may install and use the Software on multiple Designated Processors or one or more Servers, so long as only the licensed number of Units are accessing and using the Software at any given time. A "Unit" means the unit on which Avaya, at its sole discretion, bases the pricing of its licenses and can be, without limitation, an agent, port or user, an e-mail or voice mail

account in the name of a person or corporate function (e.g., webmaster or helpdesk), or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software. Units may be linked to a specific, identified Server or an Instance of the Software.

Database License (DL). End User may install and use each copy or an Instance of the Software on one Server or on multiple Servers provided that each of the Servers on which the Software is installed communicates with no more than one Instance of the same database.

CPU License (CP). End User may install and use each copy or Instance of the Software on a number of Servers up to the number indicated in the order provided that the performance capacity of the Server(s) does not exceed the performance capacity specified for the Software. End User may not re-install or operate the Software on Server(s) with a larger performance capacity without Avaya's prior consent and payment of an upgrade fee.

Named User License (NU). You may: (i) install and use each copy or Instance of the Software on a single Designated Processor or Server per authorized Named User (defined below); or (ii) install and use each copy or Instance of the Software on a Server so long as only authorized Named Users access and use the Software. "Named User", means a user or device that has been expressly authorized by Avaya to access and use the Software. At Avaya's sole discretion, a "Named User" may be, without limitation, designated by name, corporate function (e.g., webmaster or helpdesk), an e-mail or voice mail account in the name of a person or corporate function, or a directory entry in the administrative database utilized by the Software that permits one user to interface with the Software.

Shrinkwrap License (SR). You may install and use the Software in accordance with the terms and conditions of the applicable license agreements, such as "shrinkwrap" or "clickthrough" license accompanying or applicable to the Software ("Shrinkwrap License").

Heritage Nortel Software

"Heritage Nortel Software" means the software that was acquired by Avaya as part of its purchase of the Nortel Enterprise Solutions Business in December 2009. The Heritage Nortel Software is the software contained within the list of Heritage Nortel Products located at <https://support.avaya.com/LicenseInfo> under the link "Heritage Nortel Products" or such successor site as designated by Avaya. For Heritage Nortel Software, Avaya grants Customer a license to use Heritage Nortel Software provided hereunder solely to the extent of the authorized activation or authorized usage level, solely for the purpose specified in the Documentation, and solely as embedded in, for execution on, or for communication with Avaya equipment. Charges for Heritage Nortel Software may be based on extent of activation or use authorized as specified in an order or invoice.

Copyright

Except where expressly stated otherwise, no use should be made of materials on this site, the Documentation, Software, Hosted Service, or hardware provided by Avaya. All content on this site, the documentation, Hosted Service, and the product provided by Avaya including the selection, arrangement and design of the content is owned either by Avaya or its licensors and is protected by copyright and other intellectual property laws including the sui generis rights relating to the protection of databases. You may not modify, copy, reproduce, republish, upload, post, transmit or distribute in any way any content, in whole or in part, including any code and software unless expressly authorized by Avaya. Unauthorized reproduction, transmission, dissemination, storage, and or use without the express written consent of Avaya can be a criminal, as well as a civil offense under the applicable law.

Third Party Components

"Third Party Components" mean certain software programs or portions thereof included in the Software or Hosted Service may contain software (including open source software) distributed under third party agreements ("Third Party Components"), which contain terms regarding the rights to use certain portions of the Software ("Third Party Terms"). As required, information regarding distributed Linux OS source code (for those products that have distributed Linux OS source code) and identifying the copyright holders of the Third Party Components and the Third Party Terms that apply is available in the products, Documentation or on Avaya's website at: <https://support.avaya.com/Copyright>

or such successor site as designated by Avaya. The open source software license terms provided as Third Party Terms are consistent with the license rights granted in these Software License Terms, and may contain additional rights benefiting You, such as modification and distribution of the open source software. The Third Party Terms shall take precedence over these Software License Terms, solely with respect to the applicable Third Party Components to the extent that these Software License Terms impose greater restrictions on You than the applicable Third Party Terms.

The following applies if the H.264 (AVC) codec is distributed with the product. THIS PRODUCT IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO (i) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (ii) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com).

Service Provider

THE FOLLOWING APPLIES TO AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS OR SERVICES. THE PRODUCT OR HOSTED SERVICE MAY USE THIRD PARTY COMPONENTS SUBJECT TO THIRD PARTY TERMS AND REQUIRE A SERVICE PROVIDER TO BE INDEPENDENTLY LICENSED DIRECTLY FROM THE THIRD PARTY SUPPLIER. AN AVAYA CHANNEL PARTNER'S HOSTING OF AVAYA PRODUCTS MUST BE AUTHORIZED IN WRITING BY AVAYA AND IF THOSE HOSTED PRODUCTS USE OR EMBED CERTAIN THIRD PARTY SOFTWARE, INCLUDING BUT NOT LIMITED TO MICROSOFT SOFTWARE OR CODECS, THE AVAYA CHANNEL PARTNER IS REQUIRED TO INDEPENDENTLY OBTAIN ANY APPLICABLE LICENSE AGREEMENTS, AT THE AVAYA CHANNEL PARTNER'S EXPENSE, DIRECTLY FROM THE APPLICABLE THIRD PARTY SUPPLIER.

WITH RESPECT TO CODECS, IF THE AVAYA CHANNEL PARTNER IS HOSTING ANY PRODUCTS THAT USE OR EMBED THE G.729 CODEC, H.264 CODEC, OR H.265 CODEC, THE AVAYA CHANNEL PARTNER ACKNOWLEDGES AND AGREES THE AVAYA CHANNEL PARTNER IS RESPONSIBLE FOR ANY AND ALL RELATED FEES AND/OR ROYALTIES. THE G.729 CODEC IS LICENSED BY SIPRO LAB TELECOM INC. SEE [WWW.SIPRO.COM/CONTACT.HTML](http://www.sipro.com/contact.html). THE H.264 (AVC) CODEC IS LICENSED UNDER THE AVC PATENT PORTFOLIO LICENSE FOR THE PERSONAL USE OF A CONSUMER OR OTHER USES IN WHICH IT DOES NOT RECEIVE REMUNERATION TO: (I) ENCODE VIDEO IN COMPLIANCE WITH THE AVC STANDARD ("AVC VIDEO") AND/OR (II) DECODE AVC VIDEO THAT WAS ENCODED BY A CONSUMER ENGAGED IN A PERSONAL ACTIVITY AND/OR WAS OBTAINED FROM A VIDEO PROVIDER LICENSED TO PROVIDE AVC VIDEO. NO LICENSE IS GRANTED OR SHALL BE IMPLIED FOR ANY OTHER USE. ADDITIONAL INFORMATION FOR H.264 (AVC) AND H.265 (HEVC) CODECS MAY BE OBTAINED FROM MPEG LA, L.L.C. SEE [HTTP://WWW.MPEGLA.COM](http://www.mpegla.com).

Compliance with Laws

Customer acknowledges and agrees that it is responsible for complying with any applicable laws and regulations, including, but not limited to laws and regulations related to call recording, data privacy, intellectual property, trade secret, fraud, and music performance rights, in the country or territory where the Avaya product is used.

Preventing Toll Fraud

"Toll Fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there can be a risk of Toll Fraud associated with your system and that, if Toll Fraud occurs, it can result in substantial additional charges for your telecommunications services.

Avaya Toll Fraud intervention

If You suspect that You are being victimized by Toll Fraud and You need technical assistance or support, call Technical Service Center Toll Fraud Intervention Hotline at +1-800-643-2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Support website: <https://support.avaya.com> or such successor site as designated by Avaya.

Security Vulnerabilities

Information about Avaya's security support policies can be found in the Security Policies and Support section of <https://support.avaya.com/security>.

Suspected Avaya product security vulnerabilities are handled per the Avaya Product Security Support Flow (<https://support.avaya.com/css/P8/documents/100161515>).

Trademarks

The trademarks, logos and service marks ("Marks") displayed in this site, the Documentation, Hosted Service(s), and product(s) provided by Avaya are the registered or unregistered Marks of Avaya, its affiliates, or other third parties. Users are not permitted to use such Marks without prior written consent from Avaya or such third party which may own the Mark. Nothing contained in this site, the Documentation, Hosted Service(s) and product(s) should be construed as granting, by implication, estoppel, or otherwise, any license or right in and to the Marks without the express written permission of Avaya or the applicable third party.

Avaya is a registered trademark of Avaya Inc.

All non-Avaya trademarks are the property of their respective owners. Linux[®] is the registered trademark of Linus Torvalds in the U.S. and other countries.

Downloading Documentation

For the most current versions of Documentation, see the Avaya Support website: <https://support.avaya.com>, or such successor site as designated by Avaya.

Contact Avaya Support

See the Avaya Support website: <https://support.avaya.com> for product or Hosted Service notices and articles, or to report a problem with your Avaya product or Hosted Service. For a list of support telephone numbers and contact addresses, go to the Avaya Support website: <https://support.avaya.com> (or such successor site as designated by Avaya), scroll to the bottom of the page, and select Contact Avaya Support.

Contents

Chapter 1: Installing the HP ProLiant DL360 G9 Server	6
HP Server overview	6
Registration	7
How to use this document	7
Downloading HP documentation	8
HP ProLiant DL360 G9 document set	8
Front view of HP ProLiant DL360 G9 Server	9
Rear view of HP ProLiant DL360 G9 Server	10
HP ProLiant DL360 G9 Server specifications	10
Altitude and air pressure requirements	12
Hardware dimensions and clearance requirements	12
Temperature and humidity requirements	12
Power requirements	13
Physical system protection requirements	14
Checklist for installing the server in the rack	14
Setting an administrator password	16
Appendix A: Differences between HP ProLiant DL360 G9 and HP ProLiant DL380 G9	17

Chapter 1: Installing the HP ProLiant DL360 G9 Server

HP Server overview

The Avaya Common Servers category includes HP servers that support several Avaya software solutions, some requiring more hardware, and memory requirements beyond the standard configuration. This document covers the standard configuration only—consult specific Avaya product documentation for application-specific or solution-specific server configurations.

- Avaya Common Servers are supplied under an OEM relationship and Avaya servers are treated differently than other commercially available servers from the vendors.
- Avaya Common Servers are turnkey appliances. No server designed for a particular application can be repurposed for use with another application. The only exception to this is when an application has provided an upgrade or migration path from one server state to a different server state with the appropriate kits, tools, documentation, and training materials. For example, System Platform is providing a kit plus documentation for migrating a server running System Platform to Appliance Virtualization Platform.
- Neither customers, business partners, distributors, nor Avaya Associates interacting with customers and business partners, should get BIOS or other firmware updates for any third-party OEM servers forming part of Avaya's turnkey appliance offers. Only consult Avaya-provided downloads, information and support. All BIOS or firmware updates are provided through Avaya. Go to the Avaya Support website at <http://support.avaya.com> for additional information.
- Remote access and use of HP iLO hardware management tools for the HP servers are employed by a limited number of Avaya applications. If HP iLO is supported, that application's documentation will define its configuration and use. Please check with the Avaya application product manager or appropriate documentation to confirm support.
- Do not contact HP for Service; all support, warranty, repair, and maintenance are through the Avaya processes. If the server is purchased from Avaya, customer first point of contact is Avaya to troubleshoot hardware issues.

Service and repair of consumable accessories and cables are not covered under maintenance. Customers must purchase these items.

- Avaya strongly recommends that all servers are protected with an Uninterruptable Power Supply for power surge and interruption protection. Avaya is not responsible for servers damaged by power surges, brown outs, black outs etc.

- Substitution of a DC power supply for a server must be approved by the Application Product Manager before substitution. If there is a significant demand for a turnkey solution with a DC power supply, an Avaya GRIP (Global Requirements Integration Process) request must be submitted. Partners registered to use this process can submit a GRIP request at <https://portal.avaya.com/apps/grip/partner.asp>. Avaya Associates may assist and can find information about this process at <http://spark4.avaya.com/grip>. Note, a GRIP request must be made for the Avaya application product, not the server model. The decision on whether to include a turnkey offer with a DC power supply is the responsibility of each Avaya application Product Manager. The name of the Product Managers for each application is at the bottom of the application page on the Avaya Global Sales portal.
- Product labels on the servers themselves have the 9-digit base server codes and a base server description for Avaya Services in service and support. These 9-digit codes differ from the 6-digit orderable codes under which servers are ordered. On every server package, there is a Packing Label and a Hierarchy Label. The Hierarchy Label itemizes the stock list in the box of the 6-digit orderable code and Avaya recommends retaining them for reference.
- Quality assurance – product integrity testing and environmental international restrictions were completed by HP and verified with Avaya using Design for Environmental Checklists. The list includes: batteries, printed wiring boards, plastic parts, product packaging, RoHS, green requirements, and energy efficiency.

Related links

[Registration](#) on page 7

Registration

- Registration is mandatory to receive support from Avaya, as described in the Avaya's SFAP or SAP policy. Avaya SFAP policy is available at <http://support.avaya.com> <https://downloads.avaya.com/css/P8/documents/100075395>. Also, you can go to the Avaya Support website at <http://support.avaya.com> under **Help & Policies > Policies & Legal > Intellectual Property Policy**.
- Avaya direct customers and Global Business Partners registration must go through the Global Registration Tool (GRT) process through <http://support.avaya.com>, directly accessed by: <https://grt.avaya.com/grt/> - **Create A New Registration**.

Related links

[HP Server overview](#) on page 6

How to use this document

This guide contains information for installing the HP ProLiant DL360 G9 server as part of an Avaya deployment and provides:

- Instructions for how to find the appropriate online server documentation from HP.

- References to specific topics in standard HP documentation
- Suggested changes, details, and notes to assist the user in interpreting the manufacturer's documentation and to clarify Avaya's recommended implementation of the equipment
- Topics not covered in standard HP documentation, but which are necessary for successful installation and maintenance of Avaya products

Downloading HP documentation

Use this procedure to find and download the HP ProLiant DL360 G9 server documentation.

Procedure

1. Use a browser to navigate to the Avaya Support website at <http://support.avaya.com/>.
2. At the top of the screen, enter your username and password and click **Login**.
3. Put your cursor over **Support by Product**.
4. Click **Documents**.
5. In the **Enter Your Product Here** search box, type `Common Servers` and then select 3.0.x from the drop-down list.

If there is more than one release, select the appropriate release number from the **Choose Release** drop-down list.
6. Use the **Content Type** filter on the left to select the type of document you are looking for, or click **Select All** to see a list of all available documents.

For example, if you are looking for user guides, select **User Guides** in the **Content Type** filter. Only documents in the selected category will appear in the list of documents.
7. Click **Enter**.

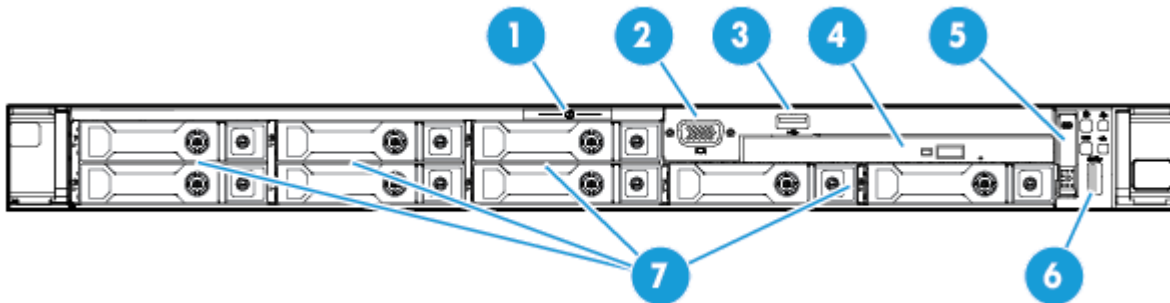
HP ProLiant DL360 G9 document set

Documents

- HP ProLiant DL360 G9 Server User Guide
- HP ProLiant DL360 G9 Server Maintenance and Service Guide
- HP ProLiant DL360 G9 Troubleshooting Guide, Volume I: Troubleshooting
- HP ProLiant DL360 G9 Troubleshooting Guide, Volume II: Error Messages
- HP Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products

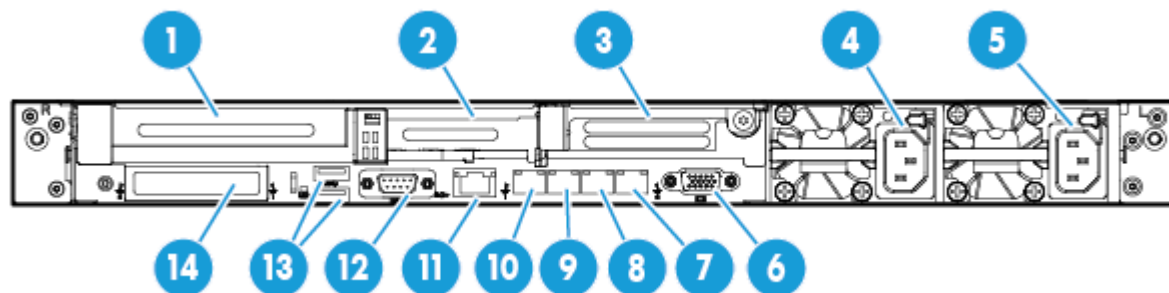
Documents included in the shipping container

Title	Part number
Safety, Compliance, and Warranty Information	703828 - 023
Quick Deploy Rail System Installation Instructions (located in rail kit box)	740122-002

Front view of HP ProLiant DL360 G9 Server

No.	Description
1	Serial label pull tab
2	Front video connector
3	USB 2.0 connector
4	Optical drive
5	Systems Insight Display (Not used in Avaya configurations)
6	USB 3.0 connector
7	Hard Drive bays* * The HDDs read starting with top left, then bottom left, and continues to the right.

Rear view of HP ProLiant DL360 G9 Server



No.	Description
1	Slot 1 PCIe3 x16 (16, 8, 4, 1)
2	Slot 2 PCIe 3 x8 (8, 4, 1)
3	Slot 3 PCIe 3 x16 (16, 8, 4, 1) (Not used in Avaya configurations)
4	Power supply 2
5	Power supply 1
6	Video connector
7	NIC connector 4
8	NIC connector 3
9	NIC connector 2
10	NIC connector 1
11	iLO 4 connector
12	Serial connector
13	USB 3.0 connectors
14	FlexibleLOM bay (Not used in Avaya configurations)

HP ProLiant DL360 G9 Server specifications

Base unit	Baseline	Options
DL360 G9	1U Chassis, Dual Socket	DL380p G9 2U Chassis, Dual Socket
Processor	Intel E5-2620v3, Six Core 2.3 GHz (Haswell) 4 memory channels per CPU with up to 3 DIMMs per channel (most applications use 1 or 2 DIMMs per channel to optimize memory speed)	<ul style="list-style-type: none"> Intel E5-2640v3 Eight Core/2.6 GHz (Haswell) Intel E5-2680v3 Twelve Core/2.5 GHz (Haswell)

Table continues...

Base unit	Baseline	Options
Memory	4 GB DDR4 RDIMMs	Max Capacity for memory (4 GB RDIMM): <ul style="list-style-type: none"> • 48 GB, 12 x 4 GB (1 proc) • 96 GB, 24 x 4 GB (2 proc)
HW RAID	P440ar RAID controller with 2 GB Cache and battery backup. Optioned as RAID 1, 5, or 10.	Other RAID configurations available
Hot-Plug disk drive cage	8 Small Form Factor 2.5" hot-plug hard drive bays are available when an optical drive is installed.	N/A
Disk drive	300 GB SAS 2.5" 10K RPM 6G DP Hard Drive. Two base configurations: <ul style="list-style-type: none"> • 279 GiB total: RAID 1, 2 x 300 GB drives • 559 GiB total: RAID 5, 3 x 300 GB drives • 838 GiB total: RAID 5, 4 x 300 GB drives • 559 GiB total: RAID 10, 4 x 300 GB drives <p> Note:</p> <ul style="list-style-type: none"> • 1 GB = 10⁹ Bytes • 1 GiB = 2³⁰ Bytes 	<ul style="list-style-type: none"> • Additional 300 GB 10K RPM SAS drive • High performance 300 GB 15K SAS drives • High capacity 600 GB 10K SAS drives • High performance 900 GB 10K SAS drives • High capacity 1.2 TB 10K SAS drives <p> Note:</p> <p>For each application, the system displays the hard drive capacities that are specified for the application.</p>
NICs	4 or 6 integrated ENET Gigabit NIC ports with TCP offload engine (included on motherboard)	Two additional dual NIC slots may be populated for certain applications.
PCIe slots	Three PCI-Express Gen 3 expansion slots: (1) full-height, 3/4-length slot and (1) low-profile slots	Slot 1 is full height / 3/4-length x16 Slot 1 is low profile / half length x8
Removable media	Slim line SATA DVD-RW optical drive (used in all Avaya configurations)	No additional options supported.
Power supply	500 W or 800 W hotplug AC power supply	<ul style="list-style-type: none"> • 800 W DC power supply • Single and dual power supply configurations
Fans	5 Fan modules in 1 processor model	7 fan modules hot-swappable (fan redundancy standard)
Additional items	2 front USB (1–2.0, 1–3.0), 2 back USB (3.0), 1 internal USB port, and front video connector	

Altitude and air pressure requirements

The following table lists the altitude and air pressure requirements for the HP ProLiant DL360 G9 server.

Specification	Value
Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).

Hardware dimensions and clearance requirements

The following table lists the dimensions and clearance requirements for the HP ProLiant DL360 G9 server.

Type	Description
Dimensions	Height: 4.29 cm (1.69 in)
	Width: 43.46 cm (17.11 in)
	Depth: 69.90 cm (27.50 in)
Weight (maximum: 10 drives, two processors, two power supplies, two heatsinks, one Smart Array controller, seven fans)	15.31 kg (33.36 lb)

Temperature and humidity requirements

The following table lists the temperature and humidity requirements for the HP ProLiant DL360 G9 server.

Specification	Value
Temperature range	<p> Note:</p> <p>All temperature ratings shown are for sea level. An altitude derating of 1°C per 304.8 m (1.8° per 1,000 ft.) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight.</p>
Operating	10° to 35°C (50° to 95°F) Maximum rate of change is 20°C/hr (36°F/hr). The upper limit might be limited by the type and number of options installed.

Table continues...

Specification	Value
	System performance may be reduced if operating with a fan fault or above 30°C (86°F).
Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
Relative humidity (non-condensing)	
Operating	8 to 90% relative humidity (Rh), 24°C (75.2°F) maximum wet bulb temperature, non-condensing.
Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

Power requirements

The following table lists the power requirements for the HP ProLiant DL360 G9 server.

Table 1: HP 800 W CS power supply (92% efficiency)

Specification	Value
BTU	917 BTU/hr
Voltage	100V — 240V
Plug Type	NEMA — 15
Circuit Breaker	15 Amp
Pole	1
AMP Draw	2.7 @ 100VAC
Total Watts	269 W

*** Note:**

These numbers are based on the following typical Avaya configuration:

- qty=2 – E5-2620v3 six core processors
- qty=8x4 GB – Memory (1Rx4 PC4-2133P –R Kit)
- qty=3 – 2.5” SFF SAS HDDs
- qty=1 – Ethernet 1Gb 2-port 332T adaptor
- qty=2 – 800W power supplies

Physical system protection requirements

To properly ventilate the system, you must provide a minimum clearance of:

- 63.5 cm (25 in) in front of the rack
- 76.2 cm (30 in) behind the rack

*** Note:**

You must ensure that no environmental hazards, such as, excessive heat, excessive humidity, improper ventilation, or electromagnetic interference from proximate equipment interfere with the operation of the HP ProLiant DL360 G9 server.

Checklist for installing the server in the rack

This installation checklist contains the principle steps that are necessary to install the server in the rack. The notation in the *Reference* column is a section in the appropriate HP document that contains the step-by-step procedures. Where applicable, additional information and clarifications appear in the *Avaya recommendation* column. Perform each task in the order specified.

*** Note:**

Avaya customers are required to have a monitor and USB keyboard available for server maintenance.

No.	Task	Reference	Avaya recommendation
1	Observe safety warnings.	User Guide: Installing the server into the rack.	
2	Examine contents of shipping container (Avaya provided equipment).	User Guide: Identifying the contents of the server shipping carton	<ul style="list-style-type: none"> • Server • Rail Kit • Printed setup documentation • Rack mounting hardware kit and documentation
3	Examine installation environment (customer provided equipment).	User Guide: Optimum Environment	When installing the server in a rack, select a location that meets the environmental standards.
4	Verify that the rack is installed according to the manufacturer's	User Guide: Installing the server into the rack	To install the server into a rack with square, round, or threaded holes, refer to the instructions that ship with the rack hardware kit.

Table continues...

No.	Task	Reference	Avaya recommendation
	instructions and in accordance with all local codes and laws.		
5	Verify that the rack is grounded in accordance with local electrical code.	User Guide: Electrical grounding requirements	The server must be grounded for proper operation and safety.
6	Determine and plan the vertical spacing of the servers in the frame.	User Guide: Space and Airflow Requirements	Servers draw in cool air through the front and expel warm air through the rear. Therefore, the front rack doors must be adequately ventilated to allow ambient room air to enter the cabinet, and the rear door must be adequately ventilated to allow the warm air to escape from the cabinet.
7	Attach the rails to the rack.	User Guide: Installing the server into the rack	To install the server into a rack with square, round, or threaded holes, refer to the instructions that ship with the rack hardware kit. If these rails do not fit the rack the customer must provide rails or a shelf for rack installation. Also the rails included with the server might not work with round hole racks, in which case the customer can obtain rails and/or a shelf from a distributor. (RackSolutions.com)
8	Attach the server to the rack.	User Guide: Installing the server into the rack	 Warning: This server is very heavy. To reduce the risk of personal injury or damage to the equipment: <ul style="list-style-type: none"> • Get help lifting and stabilizing the product during installation or removal, especially when the product is not fastened to the rails. HP recommends that a minimum of two people are required for all rack server installations. A third person may be required to help align the server if the server is installed higher than chest level. • Use caution when installing the server in or removing the server from the rack; it is unstable when not fastened to the rails.
9	Connect the peripheral devices to the server.	User Guide: Setup <ul style="list-style-type: none"> • Connecting peripheral devices to the server • Connecting the power cord to 	Network connections, power cords See Avaya application installation documentation.

Table continues...

No.	Task	Reference	Avaya recommendation
		the power supply	
10	Power up the server.	User Guide: Power up the server	Once the server is powered on, see Avaya application installation instructions. Server comes pre-installed with Avaya approved firmware, settings and RAID configuration. Do not go to the HP website for any updates unless instructed by Avaya.

Setting an administrator password

About this task

You can set a password to protect the server from changes to the BIOS settings. In addition, the password protects against configuration changes such as updates to the Boot order, iLO configuration, and Boot enable or disable.

If you add password for BIOS, you must protect, retain, and provide the password when changes to the server are required.

Before you begin

Ensure that a monitor and USB keyboard are connected to the server.

Procedure

1. While restarting or turning on the server, at the HP splash screen press **F9** to select **System Utilities**.
2. Select **System Configuration > BIOS Platform Configuration (RBSU) > Server Security**.
3. Move the cursor to the **Set Admin Password** field, and press **Enter**.
4. Type a password and press **Enter**.
The system displays a message to confirm the password.
5. Press **Esc** to go back to **System Utilities** in the menu.
6. Press **Enter** to exit.

Appendix A: Differences between HP ProLiant DL360 G9 and HP ProLiant DL380 G9

The HP DL380 G9 server is a 2u server, whereas the HP DL360 G9 is one server. The functionality and performance of an equally equipped HP DL380 G9 and HP DL360 G9 is the same. The main reason a HP DL380 G9 is used is to accommodate a unique PCIe card that requires the 2u configuration. The HP DL380 G9 server can consists of 2 HDDs Bays (8 HDDs each) supporting a total of 16 HDDs. The HP DL380 G9 server can consists of 6 full length PCIe slots. The only Field Replaceable Unit that is unique to the HP DL380 G9 server is the Fan Tray.

Index

A

administrator password setting	16
altitude requirements	12

B

baseline specifications	10
-------------------------------	--------------------

C

clearance requirements	12
------------------------------	--------------------

D

documentation	
downloading	8
how to use this document	7
HP document set	8

E

electrical specifications	13
environmental specifications	12

F

front panel	9
-------------------	-------------------

H

hardware dimensions	12
HP ProLiant Server	
DL360 G9	17
DL380 G9	17
humidity requirements	12

I

installation checklist	14
------------------------------	--------------------

P

physical system protection	14
power specifications	13

R

rear panel	10
------------------	--------------------

S

Server	
registration	7
server front view	9
server overview	6
server rear view	10
server specifications	10
setting	
administrator password	16

T

temperature requirements	12
--------------------------------	--------------------